

TABLE 1. Acreage Summary, Otero County, Actual 2014

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, Actual 2014

Item		
<b>Labor Wage Rate:</b>		
Equipment operators	\$/hour	\$7.50
General & Irrigators	\$/hour	\$7.50
<b>Purchased Inputs:</b>		
<b>Fertilizer:</b>		
Nitrogen (N)	\$/pound	\$0.50
<b>Seed:</b>		
Alfalfa	\$/pound	\$6.00
Oats for Hay	\$/pound	\$0.64
<b>Natural Gas (Gas NM) (service charge)</b>		
	\$/MCF	\$4.01
	\$/month	\$10.00
Diesel fuel	\$/gallon	\$3.83
Gasoline	\$/gallon	\$2.55
Electricity (Otero Coop)	cents/KwHr	7.34
Employee Liability Insurance	\$/ \$1,000 wages	\$12.00
Employee Benefits	percent/wages	12.00%
Labor Downtime	percent	25.00%
<b>Financial Rates:</b>		
Operating Capital Interest Rate	percent	5.50%
Land Interest Rate	percent	5.00%
Equipment Interest Rate	percent	5.50%
Expected Inflation Rate	percent	3.00%
Land Taxes	\$300.00 /acre (full value)	\$2.66
Personal Property Tax Rate	- NR \$/\$1,000 (Assessed Value)	\$26.58
	- R	\$20.68
<b>Supervision Factors</b>		
Field Crop-Irrigation	\$/acre	\$1.00
Field Crop-Equipment & General	\$/acre	\$0.50
<b>Management Rate</b>	percent	4.00%

TABLE 3. Overhead cost information for Tularosa Basin, Otero County, Actual 2014

Item			
Electricity (Domestic & Shop)		\$78.65 per month	\$944
Telephone		\$84.70 per month	\$1,016
Accounting & Legal			\$182
Misc. Supplies & Hand Tools			\$629
Pickup and Auto			
miles	6,232 @	\$0.500 per mile	\$3,116
<b>Insurance</b>			
- general liability (non-employee)			\$290
- fire/theft			\$194
<b>Property Taxes</b>			
- non-planted land			\$0
- other than land & machinery			\$6,010
Building repairs and maintenance			\$290
Dues, fees, publications			\$157
Farmstead Equipment			\$194
Total			\$13,022
Total per planted acre			\$289.38

TABLE 4. Equipment costs and data for irrigation wells, Tazewell Basin, Ohio County, West Virginia

INPUT DATA	
DEPTH CHARACTERISTICS	
DELIVERY PIP	145
SPRINKLER	40
STATIC _____	
DRAW DOWN _____	
TOTAL HEAD _____	
CASING _____	
275	
GALLONS PER MINUTE (GPM)	
300	
WORK HORSEPOWER	
21	
EFFICIENCY FACTOR	
ELECTRICITY	0.290
NATURAL GAS	0.151
LP GAS	0.151
DIESEL	0.180
FUEL COST PER HOUR	
ELECTRICITY	7.34 CENTS/kWh
NATURAL GAS	\$4.01 BCU
LP GAS	\$2.62 GAL
DIESEL	\$3.83 GAL
PUMPING COSTS	
ELECTRICAL WELL	
COST PER HOUR	\$3.93
COST PER ACRE INCH	\$5.93
NATURAL GAS WELL	
COST PER HOUR	\$1.56
COST PER ACRE INCH	\$2.35
BUTANE WELL	
COST PER HOUR	\$2.38
COST PER ACRE INCH	\$3.59
DIESEL WELL	
COST PER HOUR	\$7.91
COST PER ACRE INCH	\$11.91

TABLE 5. Equipment summary for a 50-acre pasture farm, Tazewell Basin, Ohio County, West Virginia

EQUIPMENT	ITEM & SIZE	ANNUAL HOURS OF USE	NUMBER	TOTAL VALUE	VARIABLE COSTS				FIXED COSTS		
					FUEL, OIL, LUBRICANT	REPAIR	FUEL, OIL, PER HR	REPAIR PER HR	DEPRECIATION	TAXES	TOTAL PER HR
TRACTOR	50 HP	122	1	\$7,000	\$1.163	\$132	\$9.54	\$1.08	\$899	\$90	\$8.02
BALERS/PTO	2 WBE	45	1	\$1,800	\$0.37	\$7	\$0.28	\$0.28	\$609	\$71	\$33.26
BALER	2 WBE	45	1	\$1,800	\$0.37	\$7	\$0.28	\$0.28	\$305	\$34	\$9.28
PLow	2 WBE	4	1	\$300	\$0.12	\$1	\$0.12	\$0.12	\$53	\$2	\$8.46
PLow	4 FT	9	1	\$400	\$0.20	\$2	\$0.20	\$0.20	\$40	\$3	\$4.76
DISC	8 FT	12	1	\$700	\$0.11	\$1	\$0.11	\$0.11	\$53	\$2	\$7.66
SPRINKLER	13 FT	3.00	1	\$2,300	\$0.50	\$3	\$1.00	\$0.50	\$333	\$32	\$6.12
DWELL	13 FT	3	1	\$2,300	\$0.50	\$3	\$1.00	\$0.50	\$440	\$13	\$163.20
SWATHER	14 FT	34	1	\$2,100	\$0.32	\$10	\$0.28	\$0.28	\$700	\$62	\$22.15
NATURAL GAS WELL	3.00	1	\$13,000	\$4.700	\$0	\$1.56	\$0.00	\$1,042	\$115	\$6.43	
				\$31,275	\$8.072	\$719			\$4,706	\$415	

EQUIPMENT LIST

ITEM	NEW VALUE	USED VALUE	YEARS LEFT	EQUIP CODE	WKS HELD	FUEL LBS/HR	LUBE ACRES	ACUM ACRES	INTEREST \$/ACRE
TRACTOR	50 HP	17975.00	7000.00	20.00	1.00	800.00	3.40	0.10	1652.70
BALERS/PTO	2 WBE	7500.00	1600.00	20.00	2.00	500.00			15.00
BALER	2 WBE	7500.00	1600.00	20.00	2.00	500.00			15.00
PLow	2 WBE	300.00	100.00	15.00	3.00	200.00			16.75
PLow	4 FT	400.00	150.00	15.00	4.00	300.00			16.50
DISC	8 FT	1400.00	700.00	15.00	3.00	200.00			16.50
SPRINKLER	13 FT	5000.00	2500.00	15.00	0.00	8742.00			4936.26
DWELL	13 FT	4400.00	2200.00	10.00	8.00	150.00			78.52
SWATHER	14 FT	14000.00	2100.00	20.00	2.00	800.00			447.20
NATURAL GAS WELL	3.00	30000.00	13000.00	20.00	0.00	6742.00			4635.26

USAGE LIST

ITEM	NEW VALUE	USED VALUE	YEARS LEFT	EQUIP CODE	WKS HELD	FUEL LBS/HR	LUBE ACRES	ACUM ACRES	INTEREST \$/ACRE	GATS SORGHUM FOR SUDAN PER ACRE						
										ALFALFA \$/AC	ALFALFA \$/AC	FOR SUDAN \$/AC	PER ACRE TOTAL			
TRACTOR	50 HP	17975.00	7000.00	20.00	1.00	800.00	3.40	0.10	1652.70	15.00	494.31	3.07	2.25	2.48	2.06	10.86
BALERS/PTO	2 WBE	7500.00	1600.00	20.00	2.00	500.00			15.00	288.80	0.00	1.00	0.20	0.4	1.68	
BALER	2 WBE	7500.00	1600.00	20.00	2.00	500.00			15.00	812.70	0.00	1.05	0.21	0.42	1.68	
PLow	2 WBE	300.00	100.00	15.00	3.00	200.00			16.75	16.00	13.75	1.00	0.00	0.00	1.00	
PLow	4 FT	400.00	150.00	15.00	4.00	300.00			16.50	134.40	15.00	0.64	0.00	0.64	0.64	1.92
DISC	8 FT	1400.00	700.00	15.00	3.00	200.00			16.50	169.68	16.00	1.17	0.00	1.17	0.30	2.73
SPRINKLER	13 FT	5000.00	2500.00	15.00	0.00	8742.00			4936.26	15.00	137.50	12.07	67.88	27.15	24.138889	131.24
DWELL	13 FT	4400.00	2200.00	10.00	8.00	150.00			78.52	13.00	129.00	0.21	0.00	0.21	0.21	0.63
SWATHER	14 FT	14000.00	2100.00	20.00	2.00	800.00			447.20	13.00	385.00	0.00	0.80	0.16	0.32	1.28
NATURAL GAS WELL	3.00	30000.00	13000.00	20.00	0.00	6742.00			4635.26	15.00	718.38	12.07	67.88	27.15	24.138889	131.24

INTEREST PROPORTION

ALFALFA FOR SUDAN \$/AC	SORGHUM \$/AC	TOTAL \$/AC
10.21	14.10	8.35
10.21	2.05	4.09
4.02	0.08	1.87
0.00	0.00	0.00
0.00	1.18	1.18
0.00	3.81	1.20
3.09	1.24	1.10
0.00	1.84	1.64
8.55	1.79	3.58
16.12	8.44	17.1

ALFALFA ESTABLISHMENT

MACHINE	POWER UNIT	TIMES OVER	RATE	TOTAL	CUSTOM
DISC	50 HP	1.00	0.39	0.39	
PLow	50 HP	1.00	1.25	1.25	
DISC (2)	50 HP	2.00	0.39	0.78	
PLow (2)	50 HP	2.00	1.25	2.50	
DWELL (4)	50 HP	4.00	1.01	4.04	
IRRGATE (1)	50 HP	1.00	0.21	0.21	
					12.07

ALFALFA HAY

MACHINE	POWER UNIT	TIMES OVER	RATE	TOTAL	CUSTOM
IRRGATE (1)	50 HP	1.00	1.51	67.89	

SUDAN HAY

MACHINE	POWER UNIT	TIMES OVER	RATE	TOTAL	CUSTOM
DISC	50 HP	1.00	0.39	0.39	
PLow	50 HP	1.00	1.25	1.25	
DISC (2)	50 HP	2.00	0.39	0.78	
PLow (2)	50 HP	2.00	1.25	2.50	
DWELL (4)	50 HP	4.00	1.01	4.04	
IRRGATE (1)	50 HP	1.00	1.51	27.15	

ANNUAL REPAIR COSTS AS A PERCENT OF NEW VALUE

Hours of Use	1	2	3	4	5	6	7	8	9
0	0.000000	0.000020	0.000040	0.000060	0.000080	0.000100	0.000140	0.000180	0.000240
50	0.000050	0.000100	0.000150	0.000200	0.000250	0.000300	0.000400	0.000500	0.000600
100	0.000100	0.000200	0.000300	0.000400	0.000500	0.000600	0.000800	0.001000	0.001200
150	0.000150	0.000300	0.000450	0.000600	0.000750	0.000900	0.001200	0.001500	0.001800
200	0.000200	0.000400	0.000600	0.000800	0.001000	0.001200	0.001600	0.002000	0.002400
250	0.000250	0.000500	0.000750	0.001000	0.001200	0.001500	0.002000	0.002500	0.003000
300	0.000300	0.000600	0.000900	0.001200	0.001500	0.001800	0.002400	0.003000	0.003600
350	0.000350	0.000700	0.001050	0.001400	0.001700	0.002100	0.002800	0.003500	0.004200
400	0.000400	0.000800	0.001200	0.001600	0.002000	0.002400	0.003200	0.004000	0.004800
450	0.000450	0.000900	0.001350	0.001800	0.002200	0.002700	0.003600	0.004500	0.005400
500	0.000500	0.001000	0.001500	0.002000	0.002500	0.003000	0.004000	0.005000	0.006000
550	0.000550	0.001100	0.001650	0.002200	0.002800	0.003400	0.004500	0.005600	0.006600
600	0.000600	0.001200	0.001800	0.002400	0.003000	0.003600	0.004800	0.006000	0.007200
650	0.000650	0.001300	0.001950	0.002600	0.003200	0.003800	0.005000	0.006200	0.007400
700	0.000700	0.001400	0.002100	0.002800	0.003400	0.004000	0.005200	0.006400	0.007600
750	0.000750	0.001500	0.002250	0.003000	0.003600	0.004200	0.005400	0.006600	0.007800
800	0.000800	0.001600	0.002400	0.003200	0.003800	0.004400	0.005600	0.006800	0.008000
850	0.000850	0.001700	0.002550	0.003400	0.004000	0.004600	0.005800	0.007000	0.008200
900	0.000900	0.001800	0.002700	0.003600	0.004200	0.004800	0.006000	0.007200	0.008400
950	0.000950	0.001900	0.002850	0.003800	0.004400	0.005000	0.006200	0.007400	0.008600
1000	0.001000	0.002000	0.003000	0.004000	0.004600	0.005200	0.006400	0.007600	0.008800
1050	0.001050	0.002100	0.003150	0.004200	0.004800	0.005400	0.006600	0.007800	0.009000
1100	0.001100	0.002200	0.003300	0.004400	0.005000	0.005600	0.006800	0.008000	0.009200
1150	0.001150	0.002300	0.003450	0.004600	0.005200	0.005800	0.007000	0.008200	0.009400
1200	0.001200	0.002400	0.003600	0.004800	0.005400	0.006000	0.007200	0.008400	0.009600
1250	0.001250	0.002500	0.003750	0.005000	0.005600	0.006200	0.007400	0.008600	0.009800
1300	0.001300	0.002600	0.003900	0.005200	0.005800	0.006400	0.007600	0.008800	0.010000
1350	0.001350	0.002700	0.004050	0.005400	0.006000	0.006600	0.007800	0.009000	0.010200
1400	0.001400	0.002800	0.004200	0.005600	0.006200	0.006800	0.008000	0.009200	0.010400
1450	0.001450	0.002900	0.004350	0.005800	0.006400	0.007000	0.008200	0.009400	0.010600
1500	0.001500	0.003000	0.004500	0.006000	0.006600	0.007200	0.008400	0.009600	0.010800
1550	0.001550	0.003100	0.004650	0.006200	0.006800	0.007400	0.008600	0.009800	0.011000
1600	0.001600	0.003200							

TABLE 6. Alfalfa establishment, sprinkler-irrigated, budgeted per acre costs and returns for a 50 acre part-time farm, Tularosa Basin, Otero County, Actual 2014  
Planting dates: September 1 - November 1

ITEM	PRICE	QUANTITY	PURCHASED INPUTS						TOTAL
<u>PURCHASED INPUTS</u>									
ALFALFA SEED	\$6.00	30 LBS	\$180.00						\$180.00
PUMP WATER*		8 AC. IN.							
SUBTOTAL			\$180.00						\$180.00
<u>PREHARVEST OPERATIONS</u>									
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
DISC	50 HP	0.39 HR		\$2.93	\$3.72	\$0.42	\$3.17	\$10.24	
PLOW	50 HP	1.05 HR		\$7.88	\$10.01	\$1.46	\$17.31	\$36.66	
DISC (2X)	50 HP	0.78 HR		\$5.85	\$7.44	\$1.52	\$12.48	\$27.28	
FLOAT (2X)	50 HP	0.64 HR		\$4.80	\$6.10	\$0.70	\$8.18	\$19.78	
DRILL	50 HP	0.21 HR		\$1.58	\$2.00	\$0.45	\$34.51	\$38.53	
IRRIGATE (4X)		2.00 HR		\$15.00	\$18.81	\$0.00	\$6.52	\$40.34	
SUBTOTAL		5.07 HR		\$38.03	\$48.09	\$4.54	\$82.17	\$172.83	
<u>OVERHEAD EXPENSES</u>									
DOWNTIME		0.77 HR		\$5.76					\$5.76
EMPLOYEE BENEFITS				\$4.56					\$4.56
FARM INSURANCE			\$0.46					\$0.46	
SUPERVISION AND MANAGEMENT				\$17.65					\$17.65
SUBTOTAL		0.77 HR	\$0.46	\$27.97					\$28.42
<u>TOTAL OPERATING EXPENSES</u>		5.84 HR	\$180.46	\$65.99	\$48.09	\$4.54	\$82.17	\$381.26	

TABLE 7. Alfalfa hay, sprinkler-irrigated, budgeted per acre costs and returns for a 50 acre part-time farm, Tularosa Basin, Otero County, Actual 2014  
Harvesting dates: May 10 - October 15

ITEM	PRICE	YIELD						TOTAL
<b>GROSS RETURNS</b>								
ALFALFA HAY	\$245.00	6.00 TONS (STACKED)						\$1,470.00
<b>TOTAL</b>								<b>\$1,470.00</b>
<b>PURCHASED INPUTS</b>								
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					\$38.13	\$38.13
: Interest							\$9.77	\$9.77
PUMP WATER*		45 AC. IN.						
<b>SUBTOTAL</b>			<b>\$84.13</b>				<b>\$47.90</b>	<b>\$132.03</b>
<b>PREHARVEST OPERATIONS</b>								
PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
IRRIGATE (11X)		5.50 HR		\$41.25	\$105.83	\$0.00	\$36.70	\$183.78
<b>SUBTOTAL</b>		<b>5.50 HR</b>		<b>\$41.25</b>	<b>\$105.83</b>	<b>\$0.00</b>	<b>\$36.70</b>	<b>\$183.78</b>
<b>HARVEST OPERATIONS</b>								
SWATHER (5X)	14 FT	0.80 HR		\$6.00	\$0.00	\$0.22	\$17.72	\$23.95
BALER, PTO (5X)	50 HP	1.05 HR		\$7.88	\$10.01	\$1.29	\$18.17	\$37.35
BALEWAGON, PTO (5X)	50 HP	1.00 HR		\$7.50	\$9.54	\$2.36	\$28.27	\$47.67
<b>SUBTOTAL</b>		<b>2.85 HR</b>		<b>\$21.38</b>	<b>\$19.55</b>	<b>\$3.88</b>	<b>\$64.16</b>	<b>\$108.97</b>
<b>OVERHEAD EXPENSES</b>								
DOWNTIME		0.71 HR		\$5.34				\$5.34
EMPLOYEE BENEFITS				\$7.52				\$7.52
FARM INSURANCE			\$0.75					\$0.75
LAND TAXES							\$2.66	\$2.66
SUPERVISION AND MANAGEMENT				\$65.73				\$65.73
OTHER EXPENSES			\$289.38					\$289.38
<b>SUBTOTAL</b>		<b>0.71 HR</b>		<b>\$290.13</b>	<b>\$78.58</b>		<b>\$2.66</b>	<b>\$371.37</b>
<b>TOTAL OPERATING EXPENSES</b>		<b>9.06 HR</b>		<b>\$374.26</b>	<b>\$141.21</b>	<b>\$125.38</b>	<b>\$3.88</b>	<b>\$796.15</b>
<b>NET OPERATING PROFIT</b>								<b>\$673.85</b>
INTEREST ON OPERATING CAPITAL		( \$70.48 @	5.50%	)				\$3.88
INTEREST ON EQUIPMENT INVESTMENT								\$51.61
<b>RETURN TO LAND AND RISK</b>								<b>\$618.36</b>

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

**BUDGET SUMMARY**

GROSS RETURN		\$1,470.00	
VARIABLE OPERATING EXPENSES	\$507.40		
RETURN OVER VARIABLE EXPENSES		\$962.60	(GROSS MARGINS)
FIXED EXPENSES	\$151.42		
NET FARM INCOME		\$811.18	(RETURNS TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$141.21		
NET OPERATING PROFIT		\$669.97	(RETURNS TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$51.61		
RETURN TO LAND AND RISK		\$618.36	

TABLE 8. Oats for hay, sprinkler-irrigated, budgeted per acre costs and returns for a 50 acre part-time farm, Tularosa Basin, Otero County,  
 Actual 2014  
 Planting dates: September 1 - November 1  
 Harvesting dates: April 15 - May 15

ITEM	PRICE	YIELD						TOTAL
GROSS RETURNS								
OATS FOR HAY	\$195.00	3.00	TONS (STACKED)					\$585.00
TOTAL								\$585.00

  

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL
OAT SEED	\$0.64	100 LBS	\$64.00					\$64.00
NITROGEN (N)	\$0.50	100 LBS	\$50.00					\$50.00
PUMP WATER*		18 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		\$2.93	\$3.72	\$0.76	\$6.24	\$13.64
FLOW	50 HP	1.05 HR		\$7.88	\$10.01	\$1.46	\$17.31	\$36.66
DISC (2X)	50 HP	0.78 HR		\$5.85	\$7.44	\$1.52	\$12.48	\$27.28
FLOAT (2X)	50 HP	0.64 HR		\$4.80	\$6.10	\$0.70	\$8.18	\$19.78
DRILL	50 HP	0.21 HR		\$1.58	\$2.00	\$0.45	\$3.51	\$38.53
IRRIGATE (4X)		2.00 HR		\$15.00	\$42.33	\$0.00	\$14.68	\$72.01
SUBTOTAL		5.07 HR		\$38.03	\$71.61	\$4.88	\$93.39	\$207.91

  

HARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
SWATHER	14 FT	0.16 HR		\$1.20	\$0.00	\$0.04	\$3.54	\$4.79
BALER, PTO	50 HP	0.21 HR		\$1.58	\$2.00	\$0.26	\$3.63	\$7.47
BALE WAGON	50 HP	0.20 HR		\$1.50	\$1.91	\$0.47	\$5.65	\$9.53
SUBTOTAL		0.57 HR		\$4.28	\$3.91	\$0.78	\$12.83	\$21.79

  

OVERHEAD EXPENSES	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DOWNTIME	0.91 HR		\$6.83				\$6.83
EMPLOYEE BENEFITS			\$5.08				\$5.08
FARM INSURANCE		\$0.51					\$0.51
LAND TAXES						\$1.33	\$1.33
SUPERVISION AND MANAGEMENT			\$27.22				\$27.22
OTHER EXPENSES		\$144.69					\$144.69
SUBTOTAL	0.91 HR	\$145.20	\$39.12			\$1.33	\$185.65

  

TOTAL OPERATING EXPENSES	6.55 HR	\$259.20	\$81.42	\$75.52	\$5.66	\$107.55	\$529.35
NET OPERATING PROFIT							\$55.65
INTEREST ON OPERATING CAPITAL	(	\$76.51	@	5.50%	)		\$4.21
INTEREST ON EQUIPMENT INVESTMENT							\$40.03
RETURN TO LAND AND RISK							\$11.41

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

BUDGET SUMMARY

GROSS RETURN		\$585.00	
VARIABLE OPERATING EXPENSES	\$344.58		
RETURN OVER VARIABLE EXPENSES	\$240.42		(GROSS MARGINS)
FIXED EXPENSES	\$107.55		
NET FARM INCOME	\$132.86		(RETURNS TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$81.42		
NET OPERATING PROFIT	\$51.44		(RETURNS TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$40.03		
RETURN TO LAND AND RISK		\$11.41	

TABLE 9. Sorghum-sudan hay, sprinkler-irrigated, budgeted per acre costs and returns for a 50 acre part-time farm, Tularosa Basin, Otero County,  
 Actual 2014  
 Planting dates: May 1 - June 1  
 Harvesting dates: June 1 - August 1

ITEM	PRICE	YIELD						TOTAL	
<b>GROSS RETURNS</b>									
SORGHUM/SUDAN HAY	\$215.00	5.00	TONS (STACKED)						\$1,075.00
<b>TOTAL</b>								<b>\$1,075.00</b>	
<b>PURCHASED INPUTS</b>									
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL	
SEED	\$1.04	50 LBS	\$52.00					\$52.00	
NITROGEN (N)	\$0.50	100 LBS	\$50.00					\$50.00	
PUMP WATER*		16 AC. IN.							
<b>SUBTOTAL</b>								<b>\$102.00</b>	
<b>PREHARVEST OPERATIONS</b>									
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
DISC	50 HP	0.39 HR		\$2.93	\$3.72	\$0.76	\$6.24	\$13.64	
FLOAT (2X)	50 HP	0.64 HR		\$4.80	\$6.10	\$0.70	\$8.18	\$19.78	
DRILL	50 HP	0.21 HR		\$1.58	\$2.00	\$0.45	\$34.51	\$38.53	
IRRIGATE (4X)		2.00 HR		\$15.00	\$37.63	\$0.00	\$13.05	\$65.68	
<b>SUBTOTAL</b>								<b>\$137.63</b>	
<b>HARVEST OPERATIONS</b>									
SWATHER (2X)	14 FT	0.32 HR		\$2.40	\$0.00	\$0.09	\$7.09	\$9.58	
BALER, PTO (2X)	50 HP	0.42 HR		\$3.15	\$4.01	\$0.52	\$7.27	\$14.94	
BALE WAGON (2X)	50 HP	0.40 HR		\$3.00	\$3.81	\$0.94	\$11.31	\$19.07	
<b>SUBTOTAL</b>								<b>\$43.59</b>	
<b>OVERHEAD EXPENSES</b>									
DOWNTIME		0.60 HR		\$4.46				\$4.46	
EMPLOYEE BENEFITS				\$3.94				\$3.94	
FARM INSURANCE			\$0.39					\$0.39	
LAND TAXES						\$1.33		\$1.33	
SUPERVISION AND MANAGEMENT				\$46.19				\$46.19	
OTHER EXPENSES			\$144.69					\$144.69	
<b>SUBTOTAL</b>								<b>\$201.01</b>	
<b>TOTAL OPERATING EXPENSES</b>								<b>\$484.23</b>	
<b>NET OPERATING PROFIT</b>								<b>\$590.77</b>	
INTEREST ON OPERATING CAPITAL		( \$64.62 @	5.50%	)				\$3.55	
INTEREST ON EQUIPMENT INVESTMENT								\$35.84	
<b>RETURN TO LAND AND RISK</b>								<b>\$551.38</b>	

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

**BUDGET SUMMARY**

GROSS RETURN		\$1,075.00	
VARIABLE OPERATING EXPENSES	\$311.37		
RETURN OVER VARIABLE EXPENSES	\$763.63		(GROSS MARGINS)
FIXED EXPENSES	\$88.97		
NET FARM INCOME	\$674.66		(RETURNS TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$87.44		
NET OPERATING PROFIT	\$587.22		(RETURNS TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$35.84		
RETURN TO LAND AND RISK		\$551.38	

TABLE 10. Summary of per acre costs and returns, 50-acre part-time farm, Tularosa Basin, Otero County,  
Actual 2014

	ALFALFA ESTABLISHMENT	ALFALFA HAY	OATS FOR HAY	SORGHUM SUDAY HAY
		TONS	TONS	TONS
PRIMARY YIELD		6.00	3.00	5.00
PRIMARY PRICE		\$245.00	\$195.00	\$215.00
GOVERNMENT PAYMENTS		\$0.00	\$0.00	\$0.00
SECOND INCOME		\$0.00	\$0.00	\$0.00
GROSS RETURN		\$1,470.00	\$585.00	\$1,075.00
CASH OPERATING EXPENSES				
SEED	\$180.00		\$64.00	\$52.00
FERTILIZER		\$40.00	\$50.00	\$50.00
CHEMICALS		\$23.97		
CROP INSURANCE				
OTHER PURCHASED INPUTS		\$20.16		
CANAL WATER				
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$29.28	\$19.55	\$33.19	\$19.65
FUEL-IRRIGATION	\$18.81	\$105.83	\$42.33	\$37.63
REPAIRS	\$4.54	\$3.88	\$5.66	\$3.46
CUSTOM CHARGES				
LAND TAXES		\$2.66	\$1.33	\$1.33
OTHER EXPENSES	\$0.46	\$290.13	\$145.20	\$145.08
TOTAL CASH EXPENSES	\$233.09	\$506.18	\$341.70	\$309.14
RETURN OVER CASH EXPENSES	(\$233.09)	\$963.82	\$243.30	\$765.86
FIXED EXPENSES	\$82.17	\$148.76	\$106.22	\$87.64
TOTAL EXPENSES	\$315.26	\$654.94	\$447.93	\$396.78
NET FARM INCOME	(\$315.26)	\$815.06	\$137.07	\$678.22
LABOR AND MANAGEMENT COSTS	\$65.99	\$141.21	\$81.42	\$87.44
NET OPERATING PROFIT	(\$381.26)	\$673.85	\$55.65	\$590.77
CAPITAL COSTS				
INTEREST ON OPERATING CAPITAL		\$3.88	\$4.21	\$3.55
INTEREST ON EQUIPMENT INVESTMENT		\$51.61	\$40.03	\$35.84
TOTAL CAPITAL COSTS	\$0.00	\$55.49	\$44.24	\$39.39
RETURN TO LAND AND RISK	(\$381.26)	\$618.36	\$11.41	\$551.38

TABLE 11. Whole farm summary, Tularosa Basin, Otero County,  
Actual 2014

GROSS RETURNS		
ALFALFA HAY	40.00 ACRES	
CROP		\$58,800
OATS FOR HAY	5.00 ACRES	
CROP		\$2,925
SORGHUM/SUDAN	5.00 ACRES	
CROP		\$5,375
GROSS RETURN		<u>\$67,100</u>
CASH OPERATING EXPENSES		
SEED		\$1,300
FERTILIZER		\$2,100
CHEMICALS		\$959
CROP INSURANCE		\$0
OTHER PURCHASED INPUTS		\$806
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$1,163
FUEL-IRRIGATION		\$4,708
REPAIRS		\$219
CUSTOM CHARGES		\$0
LAND TAXES		\$120
OTHER EXPENSES		\$13,058
TOTAL CASH EXPENSES		<u>\$24,434</u>
RETURN OVER CASH EXPENSES		\$42,666
FIXED EXPENSES		\$5,285
TOTAL EXPENSES		\$29,719
NET FARM INCOME		\$37,381
LABOR AND MANAGEMENT COSTS		\$6,757
NET OPERATING PROFIT		\$30,624
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$194
INTEREST ON EQUIPMENT INVESTMENT		\$2,444
TOTAL CAPITAL COSTS		<u>\$2,638</u>
RETURN TO LAND AND RISK		<u>\$27,987</u>

LAND VALUE	RETURNS TO RISK*	RETURN ON INVESTMENT**
\$700 /ACRE	\$26,937	46.21%
\$900 /ACRE	\$26,637	40.15%
\$1,100 /ACRE	\$26,337	35.50%
\$1,300 /ACRE	\$26,037	31.81%
\$1,500 /ACRE	\$25,737	28.82%
\$1,700 /ACRE	\$25,437	26.34%
\$1,900 /ACRE	\$25,137	24.25%
\$2,100 /ACRE	\$24,837	22.47%

\* 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)