

TABLE 1. Acreage Summary, Valencia and Souther Bernalillo Counties, Projected 2017

BUDGET AREA..... VALENCIA & SOUTHERN BERNALILLO COUNTIES			
FARM SIZE..... 100 ACRES			
IRRIGATION TYPE..... FLOOD			
NUMBER OF CROPS... 4			
WATER USE			
ACREAGE SUMMARY:	LAND USE (ACRES)	AC.IN. PER AC.	TOTAL AC.IN.
ALFALFA ESTABLISHMENT	12.00 *	12	144
ALFALFA	71.00	44	3,124
SMALL GRAIN HAY	10.00	24	240
SORGHUM HAY	10.00 *	24	240
CORN SILAGE	10.00	42	420
ROADS, HOMESTEAD	9.00		
TOTAL	100.00		4,168
ACRE FEET PER ACRE OF WATER RIGHTS			3.47

* DOUBLE-CROPPED

TABLE 2. Basic cost information for Valencia and Southern Bernalillo Counties, Projected 2017

Item			
Labor Wage Rate:		\$/hour	\$7.50
Purchased Inputs:			
Fertilizer:			
Nitrogen (N)		\$/pound	\$0.22
Phosphate (P205)		\$/pound	\$0.27
Anhydrous Ammonia (NH3)		\$/ton	\$717.00
Seed:			
Alfalfa		\$/pound	\$3.05
Oats		\$/pound	\$0.34
Corn		\$/bag	\$300.00
Sorghum		\$/pound	\$1.70
Baling Wire		\$/pound	\$1.32
Canal water		\$/acre	\$28.00
Energy:			
Butane		\$/gallon	\$2.60
Diesel fuel		\$/gallon	\$2.35
Gasoline		\$/gallon	\$2.10
Electricity		Cents/KwHr	12.67
Natural Gas		\$/MCF	\$4.01
Employee Liability Insurance		\$/ \$1,000 wages	\$20.00
Employee Benefits		percent/wages	18.00%
Labor Downtime		percent	25.00%
Financial Rates:			
Operating Capital Interest Rate		percent	5.50%
Land Interest Rate		percent	5.00%
Equipment Interest Rate		percent	5.50%
Real Interest Rate		percent	3.00%
Land Taxes		\$483.00 /acre (full value)	\$4.97
Personal Property Tax Rate	- NR - R	\$/ \$1,000 (Assessed Value)	\$30.90 \$27.00
Supervision Factors			
Irrigation		\$/labor hour	\$1.00
Equipment & General		\$/labor hour	\$0.50
Management Rate		percent	7.00%

TABLE 3. Overhead cost information for Valencia and Southern Bernalillo Counties, Projected 2017

Item			
Electricity (Domestic & Shop)		\$133.10 per month	\$1,597
Telephone		\$96.80 per month	\$1,162
Accounting & Legal			\$581
Misc. Supplies & Hand Tools			\$587
Pickup and Auto			
miles	12,463	@ \$0.500 per mile	\$6,232
Insurance			
- general liability (non-employee)			\$1,228
- fire/theft			\$823
Property Taxes			
- non-planted land			\$0
- other than land & machinery			\$6,010
Building repairs and maintenance			\$617
Dues, fees, publications			\$327
Farmstead Equipment			\$200
Total			\$19,362
Total per planted acre			\$212.77

TABLE 4. Equipment summary for a 100-acre farm with above average management, Veneta and Southern Demolition Counties, Proposed 2017

EQUIPMENT ITEM & SIZE	ANNUAL HOURS OF USE	NUMBER	TOTAL VALUE	VISIBLE COSTS				FIXED COSTS		
				FUEL, OIL, LUBRICANT	REPAIR PER HR	FUEL, OIL, LUBRICANT PER HR	REPAIR PER HR	DEPRECIATION	TAXES	TOTAL PER HR
TRACTOR 50 HP	79	1	\$7,200	\$62	\$6	\$7.85	\$1.08	\$89	\$3	\$12.51
TRACTOR 95 HP	41	1	\$17,300	\$200	\$20	\$12.79	\$3.04	\$25	\$81	\$24.62
BALER, PTD	2	WIRE	66	1	\$1,000	\$10	\$0.15	\$305	\$40	\$6.44
CULTIVATOR	4	ROW	4	1	\$1,000	\$0	\$0	\$200	\$15	\$1.20
LAND PLANE	12	FT	1	\$2,200	\$0	\$0.10	\$0.10	\$133	\$26	\$14.83
DISC	12	FT	13	1	\$2,200	\$35	\$2.79	\$330	\$43	\$25.49
LETTER/LAYER	4	ROW	13	25,000	\$0	\$0	\$0	\$1,000	\$25	\$44.44
PLow (2-WAY)	3	BOTTOM	21	1	\$3,200	\$80	\$4.15	\$447	\$35	\$22.41
DRILL	10	FT	8	1	\$1,200	\$7	\$0.58	\$90	\$10	\$6.22
SWATHER	14	FT	50	1	\$3,800	\$42	\$3.80	\$1,400	\$149	\$31.83
BORDER DISC	6	DISC	1	1	\$700	\$1	\$0.01	\$100	\$6	\$9.25
			\$46,200	\$1,084	\$210			\$4,206	\$200	

EQUIPMENT LIST

ITEM	NEW VALUE	USED VALUE	YEARS LIFE	EQUIP CODE	MAX HOURS	FUEL LBS/HR	LUBE COEF	ACCUM HOURS	INTEREST AGE EXPENSE
TRACTOR 50 HP	1975.00	7000.00	20.00	1.00	800.00	3.40	0.10	1186.00	15.00 494.31
TRACTOR 95 HP	1975.00	17300.00	20.00	1.00	800.00	5.54	0.10	922.66	23.00 423.71
BALER, PTD	7000.00	16000.00	20.00	2.00	500.00	0.00	0.00	1186.30	18.00 211.75
CULTIVATOR	2000.00	1000.00	15.00	2.00	300.00	0.00	0.00	67.20	15.00 63.50
LAND PLANE	12 FT	2200.00	15.00	4.00	300.00	0.00	0.00	76.80	16.00 137.00
DISC	4000.00	2200.00	15.00	3.00	300.00	0.00	0.00	201.28	16.00 123.75
LETTER/LAYER	4 ROW	60000.00	20.00	8.00	400.00	0.00	0.00	36.40	14.00 271.00
PLow (2-WAY)	3 BOTTOM	6700.00	3300.00	15.00	3.00	300.00	0.00	343.04	16.00 164.25
DRILL	10 FT	300.00	1800.00	15.00	8.00	180.00	0.00	104.40	13.00 98.00
SWATHER	14 FT	28000.00	3800.00	20.00	800.00	3.12	0.20	703.36	14.00 797.00
BORDER DISC	6 DISC	7000.00	700.00	15.00	3.00	300.00	0.00	17.00	15.00 47.25

USAGE LIST

ALPHA EST	ALPHA GRN	ALPHA SORGH	SMALL CORN		TOTAL PER ACRE
			ACRES	PUMP WATER	
0.00	0.84	0.51	0.67	0.42	2.74
0.01	0.00	1.20	0.17	1.51	3.84
0.00	0.84	0.21	0.42	0.50	1.47
0.00	0.00	0.00	0.00	0.42	0.42
0.00	0.00	0.24	0.00	0.24	0.48
0.34	0.00	0.34	0.17	0.34	1.19
0.00	0.00	0.00	0.00	0.24	0.24
0.67	0.00	0.67	0.00	0.67	2.01
0.25	0.00	0.25	0.00	0.25	0.75
0.00	0.64	0.16	0.32	0.00	1.12
0.00	0.00	0.00	0.00	0.00	0.10

INTEREST PROGNOSIS

ALPHA EST	ALPHA GRN	ALPHA SORGH	SMALL CORN
0.24	3.16	4.16	2.62
0.00	13.06	1.78	11.77
2.70	0.67	1.36	0.00
0.00	0.00	8.25	0.00
0.00	6.88	0.00	6.88
0.00	5.34	1.67	3.34
0.00	0.00	0.00	27.50
0.00	5.76	0.00	5.76
0.00	3.99	3.99	0.00
10.16	2.54	3.98	0.00
0.00	1.88	0.00	0.00
16.12	40.40	17.19	70.11

ALPHA ESTABLISHMENT

MACHINE	POWER UNIT	TIMES OVER	RATE	TOTAL	CUSTOM
DISC	95HP	1.00	0.67	0.67	
DISC	95HP	1.00	0.67	0.67	
DISC	95HP	1.00	0.17	0.17	
LANDER PLANE (CUSTOM)	95HP	1.00	0.00	0.00	70.71
BORDER DISC	95HP	1.00	0.25	0.25	
DRILL	95HP	1.00	0.25	0.25	
BRIGADE (2X)	2.00	0.50	1.00		

ALPHA HAY

MACHINE	POWER UNIT	TIMES OVER	RATE	TOTAL	CUSTOM
BRIGADE (2X)	8.00	0.50	4.00		
SWATHER (4X)	14 FT.	4.00	0.16	0.64	
BALER, PTD (4X)	50HP	4.00	0.21	0.84	0.39
SALE WAGON (CUSTOM) (2X)					

SMALL GRASS HAY

MACHINE	POWER UNIT	TIMES OVER	RATE	TOTAL	CUSTOM
FLOW	95HP	1.00	0.67	0.67	
DISC (2X)	95HP	1.00	0.17	0.34	
PLANE	95HP	1.00	0.24	0.24	
BORDER DISC	95HP	1.00	0.25	0.25	
DRILL	95HP	1.00	0.25	0.25	
BRIGATE (4X)	4.00	0.50	2.00		
SWATHER	14 FT.	1.00	0.16	0.16	
BALER, PTD	50HP	1.00	0.21	0.21	0.39
SALE WAGON					

SORGHUM HAY

MACHINE	POWER UNIT	TIMES OVER	RATE	TOTAL	CUSTOM
DISC	95HP	1.00	0.17	0.17	
DRILL	95HP	1.00	0.25	0.25	
BRIGATE (4X)	4.00	0.50	2.00		
SWATHER (2X)	14 FT.	2.00	0.16	0.32	
BALER, PTD (2X)	50HP	2.00	0.21	0.42	0.39
SALE WAGON					

CORN SLAGE

MACHINE	POWER UNIT	TIMES OVER	RATE	TOTAL	CUSTOM
FLOW	95HP	1.00	0.67	0.67	
DISC (2X)	95HP	2.00	0.17	0.34	
LAND PLANE	95HP	1.00	0.24	0.24	
LETTER/LAYER	95HP	1.00	0.25	0.25	
CULTIVATOR (2X)	50HP	2.00	0.21	0.42	
BRIGATE (2X)	8.00	0.50	4.00		

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	0.000120	0.000140	0.000160
100	0.000060	0.000100	0.000140	0.000180	0.000220	0.000260	0.000300	0.000340	0.000380
200	0.000120	0.000200	0.000280	0.000360	0.000440	0.000520	0.000600	0.000680	0.000760
300	0.000180	0.000300	0.000420	0.000540	0.000660	0.000780	0.000900	0.001020	0.001140
400	0.000240	0.000400	0.000560	0.000720	0.000880	0.001040	0.001200	0.001360	0.001520
500	0.000300	0.000500	0.000700	0.000900	0.001100	0.001300	0.001500	0.001700	0.001900
600	0.000360	0.000600	0.000840	0.001080	0.001320	0.001560	0.001800	0.002040	0.002280
700	0.000420	0.000700	0.000980	0.001260	0.001540	0.001820	0.002100	0.002380	0.002660
800	0.000480	0.000800	0.001120	0.001440	0.001760	0.002080	0.002400	0.002720	0.003040
900	0.000540	0.000900	0.001260	0.001620	0.001980	0.002340	0.002700	0.003060	0.003420
1000	0.000600	0.001000	0.001400	0.001800	0.002200	0.002600	0.003000	0.003400	0.003800
1200	0.000680	0.001120	0.001560	0.002000	0.002440	0.002880	0.003320	0.003760	0.004200
1400	0.000760	0.001260	0.001740	0.002220	0.002700	0.003180	0.003660	0.004140	0.004620
1500	0.000780	0.001300	0.001800	0.002300	0.002800	0.003300	0.003800	0.004300	0.004800
1600	0.000800	0.001340	0.001860	0.002380	0.002920	0.003460	0.004000	0.004540	0.005080
1800	0.000840	0.001400	0.001940	0.002480	0.003020	0.003560	0.004100	0.004640	0.005180
2000	0.000880	0.001460	0.002020	0.002580	0.003120	0.003660	0.004200	0.004740	0.005280
2500	0.001000	0.001660	0.002240	0.002820	0.003400	0.003980	0.004560	0.005140	0.005720
3000	0.001120	0.001860	0.002480	0.003060	0.003640	0.004220	0.004800	0.005380	0.005960
4000	0.001320	0.002220	0.002920	0.003620	0.004320	0.005020	0.005720	0.006420	0.007120
5000	0.001520	0.002520	0.003320	0.004120	0.004920	0.005720	0.006520	0.007320	0.008120
6000	0.001720	0.002820	0.003720	0.004620	0.005520	0.006420	0.007320	0.008220	0.009120
7000	0.001920	0.003120	0.004120	0.005120	0.006120	0.007120	0.008120	0.009120	0.010120
8000	0.002120	0.003420	0.004520	0.005620	0.006720	0.007820	0.008920	0.010020	0.011120

* 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, windrower, choker
- 3 rotary hoe, disk, moldboard plow, chisel, field cultivator
- 4 harrow, weeder, disk, tillage, drag, roller, water, furrow, seed drill
- 5 tillage, combine, cotton picker, cotton stripper, corn picker
- 6 corn head, forage equipment, rotary mower, disk chaper, feed wagon, farm truck
- 7 silage, custom haul
- 8 harrow, disk, leveling equipment, mounted sprayer
- 9 fertilizer distributing equipment

TABLE 5. Alfalfa establishment, flood-irrigated, budgeted per acre costs and returns for a 100 acre farm with above average management, Valencia and Southern Bernalillo Counties, Projected 2017
Planting dates: August 15 - September 15

ITEM	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
PURCHASED INPUTS								
SEED	\$3.05	20 LBS	\$61.00					\$61.00
PHOSPHATE (P2O5)	\$0.27	90 LBS	\$24.30					\$24.30
NITROGEN (N)	\$0.22	35 LBS	\$7.70					\$7.70
CANAL WATER		12 AC. IN.						
SUBTOTAL			\$93.00					\$93.00
PREHARVEST OPERATIONS								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DISC	96 HP	0.17 HR		\$1.28	\$2.17	\$0.63	\$6.85	\$10.94
PLOW	96 HP	0.67 HR		\$5.03	\$8.57	\$3.42	\$24.83	\$41.84
DISC	96 HP	0.17 HR		\$1.28	\$2.17	\$0.63	\$6.85	\$10.94
LASER PLANE (CUSTOM)			\$70.71					\$70.71
BORDER DISC	50 HP	0.05 HR		\$0.38	\$0.39	\$0.10	\$5.52	\$6.39
DRILL	50 HP	0.25 HR		\$1.88	\$1.96	\$0.49	\$14.96	\$19.28
IRRIGATE (2X)		1.00 HR		\$7.50				\$7.50
SUBTOTAL		2.31 HR	\$70.71	\$17.33	\$15.27	\$5.27	\$59.02	\$167.59
OVERHEAD EXPENSES								
DOWNTIME		0.33 HR		\$2.46				\$2.46
EMPLOYEE BENEFITS				\$3.12				\$3.12
INSURANCE			\$0.35					\$0.35
SUPERVISION AND MANAGEMENT				\$19.90				\$19.90
SUBTOTAL		0.33 HR	\$0.35	\$25.47				\$25.82
TOTAL OPERATING EXPENSES		2.64 HR	\$164.06	\$42.80	\$15.27	\$5.27	\$59.02	\$286.41

TABLE 6. Alfalfa hay, flood-irrigated, budgeted per acre costs and returns for a 100 acre farm with above average management, Valencia and Southern Bernalillo Counties, Projected 2017
Harvesting dates: June 1 - October 15

ITEM	PRICE	YIELD						TOTAL	
GROSS RETURNS									
ALFALFA HAY	\$175.00	5.00 TONS (STACKED)						\$875.00	
GRAZING	\$10.00	1.00 ACRE						\$10.00	
TOTAL							\$885.00		
PURCHASED INPUTS									
	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL	
PHOSPHATE (P2O5)	\$0.27	90 LBS	\$24.30					\$24.30	
INSECTICIDE (CUSTOM)	\$21.71	1 X/ACRE	\$21.71					\$21.71	
WIRE	\$0.36	43 LBS	\$15.39					\$15.39	
ESTABLISHMENT: Principal		6 YEARS					\$47.74	\$47.74	
: Interest							\$7.62	\$7.62	
CANAL WATER		44 AC. IN.	\$28.00					\$28.00	
SUBTOTAL			\$89.40				\$55.36	\$144.76	
PREHARVEST OPERATIONS									
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
IRRIGATE (8X)		4.00 HR		\$30.00				\$30.00	
HARVEST OPERATIONS									
SWATHER (4X)	14 FT.	0.64 HR		\$4.80	\$5.63	\$0.37	\$20.37	\$31.18	
BALER, PTO (4X)	50 HP	0.84 HR		\$6.30	\$6.60	\$1.04	\$15.92	\$29.85	
BALE WAGON (CUSTOM) (2X)			\$23.40					\$23.40	
SUBTOTAL		1.48 HR	\$23.40	\$11.10	\$12.23	\$1.41	\$36.29	\$84.43	
OVERHEAD EXPENSES									
DOWNTIME		0.37 HR		\$2.78				\$2.78	
EMPLOYEE BENEFITS				\$7.40				\$7.40	
INSURANCE			\$0.82					\$0.82	
LAND TAXES								\$4.97	
SUPERVISION AND MANAGEMENT				\$66.69				\$66.69	
OTHER EXPENSES			\$212.77					\$212.77	
SUBTOTAL		0.37 HR	\$213.60	\$76.86				\$4.97	\$295.43
TOTAL OPERATING EXPENSES		5.85 HR	\$326.40	\$117.96	\$12.23	\$1.41	\$96.62	\$554.62	
NET OPERATING PROFIT							\$330.38		
INTEREST ON OPERATING CAPITAL		(\$47.79 @ 5.50%)					\$2.63		
INTEREST ON EQUIPMENT INVESTMENT							\$18.10		
RETURN TO LAND AND RISK							\$309.66		
BUDGET SUMMARY									
GROSS RETURN			\$885.00						
VARIABLE OPERATING EXPENSES	\$340.03								
RETURN OVER VARIABLE EXPENSES		\$544.97	(GROSS MARGIN)						
FIXED EXPENSES	\$96.62								
NET FARM INCOME		\$448.34	(RETURN TO CAPITAL, LABOR, LAND & RISK)						
LABOR AND MANAGEMENT COST	\$117.96								
NET OPERATING PROFIT		\$330.38	(RETURN TO CAPITAL, LAND & RISK)						
CAPITAL COSTS	\$20.73								
RETURN TO LAND AND RISK			\$309.66						

TABLE 7. Small grain hay, flood-irrigated, budgeted per acre costs and returns for a 100 acre farm with above average management, Valencia and Southern Bernalillo Counties, Projected 2017
 Planting dates: March 1 - May 1
 Harvesting dates: June 15 - July 15

ITEM	PRICE	YIELD							TOTAL
GROSS RETURNS									
SMALL GRAIN HAY	\$150.00	2.50 TONS (STACKED)							\$375.00
TOTAL									\$375.00
PURCHASED INPUTS									
	PRICE	QUANTITY	PURCHASED INPUTS					FIXED COST	TOTAL
SEED	\$0.34	80 LBS	\$27.20						\$27.20
WIRE	\$0.36	26 LBS	\$9.31						\$9.31
CANAL WATER		24 AC. IN.	\$28.00						\$28.00
SUBTOTAL			\$64.51						\$64.51
PREHARVEST OPERATIONS									
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
PLOW	96 HP	0.67 HR		\$5.03	\$8.57	\$3.42	\$24.83	\$41.84	
DISC (2X)	96 HP	0.34 HR		\$2.55	\$4.35	\$1.27	\$13.71	\$21.87	
PLANE	96 HP	0.24 HR		\$1.80	\$3.07	\$0.25	\$21.46	\$26.58	
BORDER DISC	50 HP	0.05 HR		\$0.38	\$0.39	\$0.10	\$5.52	\$6.39	
DRILL	50 HP	0.25 HR		\$1.88	\$1.96	\$0.49	\$14.96	\$19.28	
IRRIGATE (4X)		2.00 HR		\$15.00				\$15.00	
SUBTOTAL		3.55 HR		\$26.63	\$18.34	\$5.52	\$80.48	\$130.97	
HARVEST OPERATIONS									
SWATHER	14 FT.	0.16 HR		\$1.20	\$1.41	\$0.09	\$5.09	\$7.79	
BALER, PTO	50 HP	0.21 HR		\$1.58	\$1.65	\$0.26	\$3.98	\$7.46	
BALEWAGON			\$27.30						\$27.30
SUBTOTAL		0.37 HR		\$2.78	\$3.06	\$0.35	\$9.07	\$42.56	
OVERHEAD EXPENSES									
DOWNTIME		0.48 HR		\$3.60				\$3.60	
EMPLOYEE BENEFITS				\$5.29				\$5.29	
INSURANCE			\$0.59				\$0.59		
LAND TAXES							\$2.49	\$2.49	
SUPERVISION AND MANAGEMENT				\$29.21				\$29.21	
OTHER EXPENSES			\$106.39				\$106.39		
SUBTOTAL		0.48 HR	\$106.97	\$38.10			\$2.49	\$147.56	
TOTAL OPERATING EXPENSES		4.40 HR	\$171.48	\$67.50	\$21.40	\$5.87	\$92.04	\$385.60	
NET OPERATING PROFIT									(\$10.60)
INTEREST ON OPERATING CAPITAL		(\$38.50	@	5.50%)			\$2.12
INTEREST ON EQUIPMENT INVESTMENT									\$17.15
RETURN TO LAND AND RISK									(\$29.86)

BUDGET SUMMARY		
GROSS RETURN		\$375.00
VARIABLE OPERATING EXPENSES	\$198.75	
RETURN OVER VARIABLE EXPENSES	\$176.25	(GROSS MARGIN)
FIXED EXPENSES	\$92.04	
NET FARM INCOME	\$84.21	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$67.50	
NET OPERATING PROFIT	\$16.70	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$19.27	
RETURN TO LAND AND RISK		(\$2.56)

TABLE 8. Sorghum hay, flood-irrigated, budgeted per acre costs and returns for a 100 acre farm with above average management, Valencia and Southern Bernalillo Counties
 Projected 2017
 Planting dates: July 1 - July 31
 Harvesting dates: August 10 - September 30

ITEM	PRICE	YIELD						TOTAL	
GROSS RETURNS									
SORGHUM HAY	\$160.00	2.00	TONS (STACKED)					\$320.00	
GRAZING	\$5.00	1.00	ACRE					\$5.00	
TOTAL								\$325.00	
PURCHASED INPUTS									
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS					FIXED COST	TOTAL
SEED	\$1.70	35 LBS	\$59.50						\$59.50
WIRE	\$0.36	17 LBS	\$6.09						\$6.09
CANAL WATER		24 AC. IN.	\$28.00						\$28.00
SUBTOTAL			\$93.59						\$93.59
PREHARVEST OPERATIONS									
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
DISC	96 HP	0.17 HR		\$1.28	\$2.17	\$0.63	\$6.85	\$10.94	
DRILL	50 HP	0.25 HR		\$1.88	\$1.96	\$0.49	\$14.96	\$19.28	
IRRIGATE (4X)		2.00 HR		\$15.00				\$15.00	
SUBTOTAL		2.42 HR		\$18.15	\$4.14	\$1.12	\$21.81	\$45.22	
HARVEST OPERATIONS									
SWATHER (2X)	14 FT.	0.32 HR		\$2.40	\$2.82	\$0.19	\$10.19	\$15.59	
BALER, PTO (2X)	50 HP	0.42 HR		\$3.15	\$3.30	\$0.52	\$7.96	\$14.93	
BALEWAGON			\$23.40					\$23.40	
SUBTOTAL		0.74 HR		\$5.55	\$6.11	\$0.70	\$18.15	\$53.91	
OVERHEAD EXPENSES									
DOWNTIME		0.29 HR		\$2.18				\$2.18	
EMPLOYEE BENEFITS				\$4.27				\$4.27	
INSURANCE			\$0.47					\$0.47	
LAND TAXES							\$2.49	\$2.49	
SUPERVISION AND MANAGEMENT				\$25.33				\$25.33	
OTHER EXPENSES			\$106.39					\$106.39	
SUBTOTAL		0.29 HR		\$106.86	\$31.77		\$2.49	\$141.12	
TOTAL OPERATING EXPENSES		3.45 HR		\$200.45	\$55.47	\$10.25	\$1.82	\$42.44	\$333.84
NET OPERATING PROFIT								(\$8.84)	
INTEREST ON OPERATING CAPITAL		(\$48.68	@	5.50%)		\$2.68	
INTEREST ON EQUIPMENT INVESTMENT								\$17.15	
RETURN TO LAND AND RISK								(\$28.66)	

BUDGET SUMMARY		
GROSS RETURN		\$325.00
VARIABLE OPERATING EXPENSES	\$212.52	
RETURN OVER VARIABLE EXPENSES	\$112.48	(GROSS MARGIN)
FIXED EXPENSES	\$42.44	
NET FARM INCOME	\$70.04	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$55.47	
NET OPERATING PROFIT	\$14.56	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$19.83	
RETURN TO LAND AND RISK		(\$5.26)

TABLE 9. Corn silage, flood-irrigated, budgeted per acre costs and returns for a 100 acre farm with above average management, Valencia and Southern Bernalillo Counties, Projected 2017
 Planting dates: May 1 - June 15
 Harvesting dates: August 15 - September 30

ITEM	PRICE	YIELD	TOTAL
GROSS RETURNS			
CORN SILAGE	\$28.00	20.00 TONS (STANDING)	\$560.00
TOTAL			\$560.00

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$3.75	30 000	\$112.50		\$112.50
ANHYDROUS AMMONIA (NH3)	\$0.36	125 LBS	\$44.81		\$44.81
HERBICIDE (GRANULAR)	\$6.85	1 ACRE	\$6.85		\$6.85
INSECTICIDE (GRANULAR)	\$34.24	1 ACRE	\$34.24		\$34.24
CANAL WATER		42 AC. IN.	\$28.00		\$28.00
SUBTOTAL			\$226.40		\$226.40

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW	96 HP	0.67 HR		\$5.03	\$8.57	\$3.42	\$24.83	\$41.84
DISC (2X)	96 HP	0.34 HR		\$2.55	\$4.35	\$1.27	\$13.71	\$21.87
LAND PLANE	96 HP	0.24 HR		\$1.80	\$3.07	\$0.25	\$21.46	\$26.58
LISTER/PLANTER	96 HP	0.26 HR		\$1.95	\$3.32	\$0.87	\$108.95	\$115.10
CULTIVATOR (2X)	50 HP	0.42 HR		\$3.15	\$3.30	\$1.23	\$26.80	\$34.48
IRRIGATE (8X)		4.00 HR		\$30.00				\$30.00
SUBTOTAL		5.93 HR		\$44.48	\$22.61	\$7.04	\$195.75	\$269.87

OVERHEAD EXPENSES	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DOWNTIME	0.48 HR		\$3.62				\$3.62
EMPLOYEE BENEFITS			\$8.01				\$8.01
INSURANCE			\$0.89				\$0.89
LAND TAXES						\$4.97	\$4.97
SUPERVISION AND MANAGEMENT			\$44.17				\$44.17
OTHER EXPENSES			\$212.77				\$212.77
SUBTOTAL	0.48 HR		\$213.66	\$55.79		\$4.97	\$274.43

TOTAL OPERATING EXPENSES 6.41 HR \$440.06 \$100.26 \$22.61 \$7.04 \$200.72 \$770.70

NET OPERATING PROFIT (\$210.70)

INTEREST ON OPERATING CAPITAL (\$120.61 @ 5.50%) \$6.63
 INTEREST ON EQUIPMENT INVESTMENT \$70.12

RETURN TO LAND AND RISK (\$287.46)

BUDGET SUMMARY			
GROSS RETURN	\$560.00		
VARIABLE OPERATING EXPENSES	\$469.71		
RETURN OVER VARIABLE EXPENSES	\$90.29	(GROSS MARGIN)	
FIXED EXPENSES	\$200.72		
NET FARM INCOME	(\$110.44)	(RETURN TO CAPITAL, LABOR, LAND & RISK)	
LABOR AND MANAGEMENT COST	\$100.26		
NET OPERATING PROFIT	(\$210.70)	(RETURN TO CAPITAL, LAND & RISK)	
CAPITAL COSTS	\$76.76		
RETURN TO LAND AND RISK	(\$287.46)		

TABLE 10. Summary of per acre costs and returns for a 100 acre farm with above average average management,
Projected 2017

	ALFALFA ESTABLISHMENT	ALFALFA HAY	SMALL GRAIN HAY	SORGHUM HAY	CORN FOR SILAGE
		TONS	TONS	TONS	TONS
PRIMARY YIELD		5.00	2.50	2.00	20.00
PRIMARY PRICE		\$175.00	\$150.00	\$160.00	\$28.00
GOVERNMENT PAYMENTS		\$0.00	\$0.00	\$0.00	\$0.00
SECOND INCOME		\$10.00	\$0.00	\$5.00	\$0.00
GROSS RETURN		\$885.00	\$375.00	\$325.00	\$560.00
CASH OPERATING EXPENSES					
SEED	\$61.00		\$27.20	\$59.50	\$112.50
FERTILIZER	\$32.00	\$24.30			\$44.81
CHEMICALS		\$21.71			\$41.09
CROP INSURANCE					
OTHER PURCHASED INPUTS		\$15.39	\$9.31	\$6.09	
CANAL WATER		\$28.00	\$28.00	\$28.00	\$28.00
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$15.27	\$12.23	\$21.40	\$10.25	\$22.61
FUEL-IRRIGATION					
REPAIRS	\$5.27	\$1.41	\$5.87	\$1.82	\$7.04
CUSTOM CHARGES	\$70.71	\$23.40			
LAND TAXES		\$4.97	\$2.49	\$2.49	\$4.97
OTHER EXPENSES	\$0.35	\$213.60	\$106.97	\$106.86	\$213.66
TOTAL CASH EXPENSES	\$184.60	\$345.01	\$201.24	\$215.01	\$474.69
RETURN OVER CASH EXPENSES	(\$184.60)	\$539.99	\$173.76	\$109.99	\$85.31
FIXED EXPENSES	\$59.02	\$91.65	\$89.55	\$39.96	\$195.75
TOTAL EXPENSES	\$243.62	\$436.66	\$290.79	\$254.96	\$670.44
NET FARM INCOME	(\$243.62)	\$448.34	\$84.21	\$70.04	(\$110.44)
LABOR AND MANAGEMENT COSTS	\$42.80	\$117.96	\$67.50	\$55.47	\$100.26
NET OPERATING PROFIT	(\$286.41)	\$330.38	\$16.70	\$14.56	(\$210.70)
CAPITAL COSTS					
INTEREST ON OPERATING CAPITAL		\$2.63	\$2.12	\$2.68	\$6.63
INTEREST ON EQUIPMENT INVESTMENT		\$18.10	\$17.15	\$17.15	\$70.12
TOTAL CAPITAL COSTS	\$0.00	\$20.73	\$19.27	\$19.83	\$76.76
RETURN TO LAND AND RISK	(\$286.41)	\$309.66	(\$2.56)	(\$5.26)	(\$287.46)

TABLE 11. Whole farm summary, Valencia and Southern Bernalillo Counties,
Projected 2017

GROSS RETURNS		
ALFALFA HAY	71.00 ACRES	
CROP		\$62,125
GRAZING		\$710
SMALL GRAIN HAY	10.00 ACRES	
CROP		\$3,750
SORGHUM HAY	10.00 ACRES	
CROP		\$3,200
GRAZING		\$50
CORN FOR SILAGE	10.00 ACRES	
CROP		\$5,600
GROSS RETURN		<u>\$75,435</u>
CASH OPERATING EXPENSES		
SEED		\$2,724
FERTILIZER		\$2,557
CHEMICALS		\$1,952
CROP INSURANCE		\$0
OTHER PURCHASED INPUTS		\$1,247
CANAL WATER		\$2,828
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$1,594
FUEL-IRRIGATION		\$0
REPAIRS		\$310
CUSTOM CHARGES		\$2,510
LAND TAXES		\$453
OTHER EXPENSES		\$19,444
TOTAL CASH EXPENSES		<u>\$35,620</u>
RETURN OVER CASH EXPENSES		\$39,815
FIXED EXPENSES		\$7,079
TOTAL EXPENSES		\$42,699
NET FARM INCOME		\$32,736
LABOR AND MANAGEMENT COSTS		\$11,121
NET OPERATING PROFIT		\$21,615
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$301
INTEREST ON EQUIPMENT INVESTMENT		\$2,329
TOTAL CAPITAL COSTS		<u>\$2,630</u>
RETURN TO LAND AND RISK		<u>\$18,985</u>

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$5,000 /ACRE	\$3,985	3.95%
\$6,500 /ACRE	(\$515)	3.10%
\$8,000 /ACRE	(\$5,015)	2.55%
\$9,500 /ACRE	(\$9,515)	2.17%
\$11,000 /ACRE	(\$14,015)	1.88%
\$12,500 /ACRE	(\$18,515)	1.67%

* 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)