TABLE 1. Acreage Summary, Valencia and Souther Bernalillo Counties,
Projected 2019

Projected 2019	
BUDGET AREA	V.ALENCIA & 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 ESTABLISHME ALFALFA SMALL GRAIN HAY SORGHUM HAY CORN SILAGE ROADS, HOMESTEAD	NT	12.00 * 71.00 10.00 10.00 * 10.00 *	12 44 24 24 42	144 3,124 240 240 420		
	TOTAL	100.00		4,168		
ACRE FEET PER ACRE OF WATER RIGHTS						

^{*} DOUBLE-CROPPED

TABLE 2. Basic cost information for Valencia and Southern Bernalillo Counties, Projected 2019

Item				
Labor Wage Rate:		\$/hour		\$8.95
Purchased Inputs: Fertilizer:				
Nitrogen (N)		\$/pound		\$0.42
Phosphate (P205)		\$/pound		\$0.49
Anhydrous Ammonia (NH	l3)	\$/ton		\$745.00
Seed:				
Alfalfa		\$/pound		\$3.05
Oats		\$/pound		\$0.34
Corn		\$/bag		\$245.00
Sorghum		\$/pound		\$2.05
Baling Wire		\$/pound		\$1.32
Canal water		\$/acre		\$48.00
Energy:				
Butane		\$/gallon		\$2.45
Diesel fuel		\$/gallon		\$2.65
Gasoline		\$/gallon		\$2.35
Electricity		Cents/KwHr	•	12.67
Natural Gas		\$/MCF		\$4.01
Employee Liability Insurance		\$/\$1,000 wa	ages	\$20.00
Employee Benefits		percent/wag	ges	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 va	alue)	\$4.98
Personal Property Tax Rate	- NR	\$/\$1,000	(Assessed	\$30.92
	- R		Value)	\$27.03
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 2019

Item					
Electricity (Domestic & S	ihop)		\$140.80	per month	\$1,690
Telephone			\$102.40	per month	\$1,229
Accounting & Legal				•	\$614
Misc. Supplies & Hand T	ools				\$621
Pickup and Auto					
miles	13,184	@	\$0.500 per mile		\$6,592
Insurance					
- general liability (non-e	mployee)				\$1,299
- fire/theft					\$870
Property Taxes					
 non-planted land 					\$0
- other than land & mad					\$6,010
Building repairs and main	ntenance				\$653
Dues, fees, publications					\$346
Farmstead Equipment					\$211
				Total	\$20,135
			Total per planted acre		\$221.26

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 2019

Planting dates: August 15 - September 15 PURCHASED ITEM PRICE QUANTITY TOTAL INPUTS PURCHASED INPUTS SEED PHOSPHATE (P2O5) NITROGEN (N) CANAL WATER 20 LBS 90 LBS 35 LBS 12 AC. IN. \$3.05 \$0.49 \$0.42 \$61.00 \$44.10 \$14.70 \$61.00 \$44.10 \$14.70 SUBTOTAL \$119.80 \$119.80 POWER UNIT ACCOMPLISHMENT PURCHASED INPUTS FUEL & LUBE FIXED COST TOTAL LABOR REPAIRS PREHARVEST OPERATIONS RATE 0.17 HR 0.67 HR 0.17 HR 96 HP \$11.32 DISC \$1.52 \$2.43 \$0.63 \$6.73 DISC PLOW DISC LASER PLANE (CUSTOM) BORDER DISC \$43.33 \$11.32 \$70.71 \$6.47 96 HP 96 HP \$6.00 \$1.52 \$9.59 \$2.43 \$3.39 \$0.63 \$24.36 \$6.73 \$70.71 0.05 HR 0.25 HR 1.00 HR \$0.45 \$2.24 \$8.95 50 HP \$0.44 \$2.20 \$0.10 \$0.47 \$5.48 \$14.77 DRILL 50 HP \$19.67 IRRIGATE (2X) \$8.95 \$171.76 SUBTOTAL 2.31 HR \$70.71 \$20.67 \$17.09 \$5.21 \$58.08 OVERHEAD EXPENSES DOWNTIME 0.33 HR \$2.93 \$3.72 \$2.93 EMPLOYEE BENEFITS
INSURANCE
SUPERVISION AND MANAGEMENT \$3.72 \$0.41 \$0.41 \$22.06 \$22.06 SUBTOTAL 0.33 HR \$0.41 \$28.72 \$29.13 TOTAL OPERATING EXPENSES \$320.69 2.64 HR \$190.92 \$49.39 \$17.09

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 2019

Harvesting dates: June 1 - October 15 PRICE YIELD TOTAL GROSS RETURNS \$185.00 5.00 TONS (STACKED) 1.00 ACRE \$925.00 ALFALFA HAY GRAZING \$10.00 \$10.00 \$935.00 TOTAL PURCHASED INPUTS FIXED TOTAL PURCHASED INPUTS PRICE QUANTITY COST PHOSPHATE (P2O5)
INSECTICIDE (CUSTOM) \$0.49 \$21.71 90 LBS 1 X/ACRE 43 LBS \$44.10 \$21.71 \$44.10 \$21.71 \$15.39 \$15.39 \$0.36 ESTABLISHMENT: Principal 6 YEARS \$53.45 \$53.45 \$8.80 \$8.80 : Interest CANAL WATER 44 AC IN \$48.00 \$48.00 SUBTOTAL \$129.20 \$62.25 \$191.45 POWER ACCOMPLISHMENT PURCHASED FUEL & FIXED REPAIRS PREHARVEST OPERATIONS UNIT RATE **INPUTS** LABOR LUBE TOTAL IRRIGATE (8X) 4.00 HR \$35.80 \$35.80 HARVEST OPERATIONS SWATHER (4X) BALER, PTO (4X) 14 FT. 50 HP 0.64 HR \$0.35 \$19.32 \$5.73 \$6.35 0.84 HR \$7.52 \$7.38 \$0.98 \$15.28 \$31.16 BALE WAGON (CUSTOM) (2X) \$23.40 \$23.40 SUBTOTAL \$86.31 1.48 HR \$23.40 \$13.25 \$13.73 \$1.33 \$34.60 OVERHEAD EXPENSES DOWNTIME EMPLOYEE BENEFITS INSURANCE LAND TAXES \$3.31 \$8.83 \$0.98 \$4.98 \$3.31 \$8.83 0.37 HR \$0.98 \$4.98 SUPERVISION AND MANAGEMENT \$70.19 \$70.19 OTHER EXPENSES \$221.26 \$221.26 SUBTOTAL 0.37 HR \$222.24 \$309.55 \$374.85 \$623.11 TOTAL OPERATING EXPENSES 5.85 HR \$131.38 \$13.73 \$1.33 \$101.83 NET OPERATING PROFIT \$311.89 INTEREST ON OPERATING CAPITAL \$3.73 \$67.81 @ 5.50%) INTEREST ON EQUIPMENT INVESTMENT \$17.25 RETURN TO LAND AND RISK \$290.90 BUDGET SUMMARY GROSS RETURN VARIABLE OPERATING EXPENSES \$935.00 \$389.91 RETURN OVER VARIABLE EXPENSES FIXED EXPENSES NET FARM INCOME \$545.09 (GROSS MARGIN) \$101.83 (RETURN TO CAPITAL, LABOR, LAND & RISK) \$443.26 LABOR AND MANAGEMENT COST NET OPERATING PROFIT \$131.38 (RETURN TO CAPITAL, LAND & RISK) CAPITAL COSTS \$20.98 RETURN TO LAND AND RISK

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 2019

Projected 2019 Planting dates: March 1 - May Harvesting dates: June 15 - J										
ITEM	PRICE		YIEL	_D						TOTA
GROSS RETURNS SMALL GRAIN HAY	\$160.00		2.50	TONS (S	STACKED)					\$400.00
TOTAL									-	\$400.00
PURCHASED INPUTS	PRICE		QUAN [*]	TITY	PURCHASED INPUTS				FIXED COST	TOTA
SEED WIRE CANAL WATER	\$0.34 \$0.36		26	LBS LBS AC. IN.	\$27.20 \$9.31 \$48.00					\$27.20 \$9.31 \$48.00
SUBTOTAL					\$84.51				•	\$84.51
PREHARVEST OPERATIONS	POWER UNIT		ACCOMPLI RAT		PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTA
PLOW DISC (2X) PLANE BORDER DISC DRILL IRRIGATE (4X)	96 HP 96 HP 96 HP 50 HP 50 HP		0.67 0.34 0.24 0.05 0.25 2.00	HR HR HR HR		\$6.00 \$3.04 \$2.15 \$0.45 \$2.24 \$17.90	\$9.59 \$4.87 \$3.43 \$0.44 \$2.20	\$3.39 \$1.25 \$0.24 \$0.10 \$0.47	\$24.36 \$13.47 \$21.30 \$5.48 \$14.77	\$43.33 \$22.63 \$27.12 \$6.47 \$19.67 \$17.90
SUBTOTAL		•	3.55	HR		\$31.77	\$20.52	\$5.45	\$79.38	\$137.12
HARVEST OPERATIONS										
SWATHER BALER, PTO BALEWAGON	14 FT. 50 HP		0.16 0.21		\$27.30	\$1.43 \$1.88	\$1.59 \$1.85	\$0.09 \$0.25	\$4.83 \$3.82	\$7.94 \$7.79 \$27.30
SUBTOTAL		•	0.37	HR		\$3.31	\$3.43	\$0.33	\$8.65	\$43.03
OVERHEAD EXPENSES										
DOWNTIME EMPLOYEE BENEFITS INSURANCE LAND TAXES SUPERVISION AND MANAGEMENT OTHER EXPENSES			0.48	HR	\$0.70 \$110.63	\$4.30 \$6.32 \$30.96			\$2.49	\$4.30 \$6.32 \$0.70 \$2.49 \$30.96 \$110.63
SUBTOTAL			0.48	HR	\$111.33	\$41.57			\$2.49	\$155.39
TOTAL OPERATING EXPENSES			4.40		\$195.84	\$76.66	\$23.96	\$5.78	\$90.52	\$420.05
NET OPERATING PROFIT										(\$20.05
INTEREST ON OPERATING CAPITAL INTEREST ON EQUIPMENT INVESTMEN	т	(\$49.06	@	5.50%)				\$2.70 \$16.55
RETURN TO LAND AND RISK										(\$39.29
		BUDGET	SUMMARY							
GROSS RETURN VARIABLE OPERATING EXPENSES RETURN OVER VARIABLE EXPENSES FIXED EXPENSES		\$225.58 \$90.52	\$400.00 \$174.42	(GROS	SS MARGIN)					
NET FARM INCOME LABOR AND MANAGEMENT COST NET OPERATING PROFIT		\$76.66	\$83.91 \$7.25		RN TO CAPITAL,		-			
CAPITAL COSTS RETURN TO LAND AND RISK		\$19.25	(\$11.99)							

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 Countie Projected 2019

Planting dates: July 1 - July 31

Planting dates: July 1 Harvesting dates: Augus		30								
ITEM	PRICE		YIELI	D						TOTAI
GROSS RETURNS SORGHUM HAY GRAZING	\$170.00 \$5.00			TONS (S ACRE	TACKED)					\$340.00 \$5.00
TOTAL									•	\$345.00
PURCHASED INPUTS	PRICE		QUANT	TTY	PURCHASED INPUTS				FIXED COST	TOTAI
SEED WIRE CANAL WATER	\$2.05 \$0.36		17	LBS LBS AC. IN.	\$71.75 \$6.09 \$48.00					\$71.75 \$6.09 \$48.00
SUBTOTAL					\$125.84				-	\$125.84
PREHARVEST OPERATIONS	POWER UNIT		ACCOMPLIS RATE		PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTA
DISC DRILL IRRIGATE (4X)	96 HP 50 HP		0.17 0.25 2.00	HR		\$1.52 \$2.24 \$17.90	\$2.43 \$2.20	\$0.63 \$0.47	\$6.73 \$14.77	\$11.32 \$19.67 \$17.90
SUBTOTAL		-	2.42	HR		\$21.66	\$4.63	\$1.10	\$21.50	\$48.89
HARVEST OPERATIONS										
SWATHER (2X) BALER, PTO (2X) BALEWAGON	14 FT. 50 HP		0.32 0.42		\$23.40	\$2.86 \$3.76	\$3.17 \$3.69	\$0.18 \$0.49	\$9.66 \$7.64	\$15.88 \$15.58 \$23.40
SUBTOTAL		-	0.74	HR		\$6.62	\$6.87	\$0.67	\$17.30	\$54.86
OVERHEAD EXPENSES										
DOWNTIME EMPLOYEE BENEFITS INSURANCE LAND TAXES SUPERVISION AND MANAGEMEN' OTHER EXPENSES	г		0.29	HR	\$0.57 \$110.63	\$2.60 \$5.09 \$26.73			\$2.49	\$2.60 \$5.09 \$0.57 \$2.49 \$26.73 \$110.63
SUBTOTAL		-	0.29	HR	\$111.20	\$34.42			\$2.49	\$148.10
TOTAL OPERATING EXPENSES		-	3.45	HR	\$237.03	\$62.70	\$11.50	\$1.76	\$41.29	\$377.68
NET OPERATING PROFIT										(\$32.68
INTEREST ON OPERATING CAPIT. INTEREST ON EQUIPMENT INVES		(\$64.98	@	5.50%)				\$3.57 \$16.55
RETURN TO LAND AND RISK										(\$52.80
		BUDGET	SUMMARY							
GROSS RETURN VARIABLE OPERATING EXPENSES RETURN OVER VARIABLE EXPENSE FIXED EXPENSES NET FARM INCOME LABOR AND MANAGEMENT COST		\$250.29 \$41.29 \$62.70	\$345.00 \$94.71 \$53.42		S MARGIN) RN TO CAPITAL,	LABOR, LAN	D & RISK)			
NET OPERATING PROFIT CAPITAL COSTS RETURN TO LAND AND RISK		\$20.12	(\$9.28) (\$29.40)	(RETU	RN TO CAPITAL,	LAND & RISH	<)			

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 2019

Planting dates: May 1 - June 15

Harvesting dates: August 15 - Sep	PRICE		YIEL	.D						TOTAL
GROSS RETURNS	111102									101712
CORN SILAGE	\$28.00		20.00	TONS (ST	ANDING)					\$560.00
TOTAL										\$560.00
PURCHASED INPUTS	PRICE		QUAN	ПТҮ	PURCHASED INPUTS				FIXED COST	TOTAL
SEED ANHYDROUS AMMONIA (NH3) HERBICIDE (GRANULAR) INSECTICIDE (GRANULAR) CANAL WATER	\$3.06 \$0.37 \$6.85 \$34.24		125 1 1	000 LBS ACRE ACRE AC. IN.	\$91.88 \$46.56 \$6.85 \$34.24 \$48.00					\$91.88 \$46.56 \$6.85 \$34.24 \$48.00
SUBTOTAL					\$227.53				-	\$227.53
PREHARVEST OPERATIONS	POWER UNIT		ACCOMPLI RAT		PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
PLOW DISC (2X) LAND PLANE LISTER/PLANTER CULTIVATOR (2X) IRRIGATE (8X)	96 HP 96 HP 96 HP 96 HP 50 HP		0.67 0.34 0.24 0.26 0.42 4.00	HR HR HR HR		\$6.00 \$3.04 \$2.15 \$2.33 \$3.76 \$35.80	\$9.59 \$4.87 \$3.43 \$3.72 \$3.69	\$3.39 \$1.25 \$0.24 \$0.86 \$1.21	\$24.36 \$13.47 \$21.30 \$108.77 \$26.48	\$43.33 \$22.63 \$27.12 \$115.68 \$35.14 \$35.80
SUBTOTAL		-	5.93	HR		\$53.07	\$25.30	\$6.94	\$194.38	\$279.70
OVERHEAD EXPENSES										
DOWNTIME EMPLOYEE BENEFITS INSURANCE LAND TAXES SUPERVISION AND MANAGEMENT OTHER EXPENSES			0.48	HR	\$1.06 \$221.26	\$4.32 \$9.55 \$44.17			\$4.98	\$4.32 \$9.55 \$1.06 \$4.98 \$44.17 \$221.26
SUBTOTAL		-	0.48	HR	\$222.32	\$58.04			\$4.98	\$285.34
TOTAL OPERATING EXPENSES		-	6.41	HR	\$449.85	\$111.11	\$25.30	\$6.94	\$199.36	\$792.56
NET OPERATING PROFIT										(\$232.56)
INTEREST ON OPERATING CAPITAL INTEREST ON EQUIPMENT INVESTMENT		(\$121.82	@	5.50%)				\$6.70 \$69.21
RETURN TO LAND AND RISK										(\$308.47)
		BUDGET	SUMMARY							
GROSS RETURN VARIABLE OPERATING EXPENSES RETURN OVER VARIABLE EXPENSES FIXED EXPENSES		\$482.09 \$199.36	\$560.00 \$77.91	(GROSS	MARGIN)					
NET FARM INCOME LABOR AND MANAGEMENT COST NET OPERATING PROFIT CAPITAL COSTS RETURN TO LAND AND RISK		\$111.11 \$75.91	(\$121.45) (\$232.56)		N TO CAPITAL, LA N TO CAPITAL, LA		k RISK)			

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

Projected 2019					
	ALFALFA	ALFALFA	SMALL	SORGHUM	CORN FOR
	ESTABLISHMENT	HAY	GRAIN HAY	HAY	SILAGE
		TONS	TONS	TONS	TONS
PRIMARY YIELD		5.00	2.50	2.00	20.00
PRIMARY PRICE		\$185.00	\$160.00	\$170.00	\$28.00
GOVERNMENT PAYMENTS		\$0.00	\$0.00	\$0.00	\$0.00
SECOND INCOME		\$10.00	\$0.00	\$5.00	\$0.00
GROSS RETURN		\$935.00	\$400.00	\$345.00	\$560.00
CASH OPERATING EXPENSES					
SEED	\$61.00		\$27.20	\$71.75	\$91.88
FERTILIZER	\$58.80	\$44.10			\$46.56
CHEMICALS		\$21.71			\$41.09
CROP INSURANCE		045.00	CO 04	#C 00	
OTHER PURCHASED INPUTS CANAL WATER		\$15.39 \$48.00	\$9.31 \$48.00	\$6.09 \$48.00	\$48.00
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$17.09	\$46.00 \$13.73	\$23.96	\$46.00 \$11.50	\$46.00 \$25.30
FUEL-IRRIGATION	Ψ17.09	ψ13.73	Ψ23.90	ψ11.50	Ψ25.50
REPAIRS	\$5.21	\$1.33	\$5.78	\$1.76	\$6.94
CUSTOM CHARGES	\$70.71	\$23.40			
LAND TAXES		\$4.98	\$2.49	\$2.49	\$4.98
OTHER EXPENSES	\$0.41	\$222.24	\$111.33	\$111.20	\$222.32
TOTAL CASH EXPENSES	\$213.22	\$394.89	\$228.07	\$252.78	\$487.07
RETURN OVER CASH EXPENSES	(\$213.22)	\$540.11	\$171.93	\$92.22	\$72.93
FIXED EXPENSES	\$58.08	\$96.85	\$88.03	\$38.80	\$194.38
TOTAL EXPENSES	\$271.30	\$491.74	\$316.09	\$291.58	\$681.45
NET FARM INCOME	(\$271.30)	\$443.26	\$83.91	\$53.42	(\$121.45)
LABOR AND MANAGEMENT COSTS	\$49.39	\$131.38	\$76.66	\$62.70	\$111.11
NET OPERATING PROFIT	(\$320.69)	\$311.89	\$7.25	(\$9.28)	(\$232.56)
CAPITAL COSTS					
INTEREST ON OPERATING CAPITAL		\$3.73	\$2.70	\$3.57	\$6.70
INTEREST ON EQUIPMENT INVESTMENT		\$17.25	\$16.55	\$16.55	\$69.21
TOTAL CAPITAL COSTS	\$0.00	\$20.98	\$19.25	\$20.12	\$75.91
DETURN TO LAND AND DIOK	(0000 00)	# 000 00	(044.00)	(000 40)	(0000 17)
RETURN TO LAND AND RISK	(\$320.69)	\$290.90	(\$11.99)	(\$29.40)	(\$308.47)

TABLE 11. Whole farm summary, Valencia and Southern Bernalillo Counties, Projected 2019

Projected 201	9			
GROSS RETURNS ALFALFA HAY CROP	71.00 ACRES	\$ 65,675		
GRAZING	40.00 40050	\$710		
SMALL GRAIN HAY CROP	10.00 ACRES	\$4,000		
SORGHUM HAY CROP	10.00 ACRES	\$3,400		
GRAZING CORN FOR SILAGE	10.00 ACRES	\$50		
CROP	10.00 ACRES	\$5,600		
GROSS RETURN			_	\$79,435
CASH OPERATING EXPE	NSES			
SEED	NOLO	\$2,640		
FERTILIZER CHEMICALS		\$4,302 \$1,952		
CROP INSURANCE		\$0		
OTHER PURCHASED I CANAL WATER	NPUTS	\$1,247 \$4,848		
FUEL, OIL & LUBRICAN	NTS-EQUIPMENT	\$1,788		
FUEL-IRRIGATION REPAIRS		\$0 \$302		
CUSTOM CHARGES		\$2,510		
LAND TAXES OTHER EXPENSES		\$453 \$20,233		
OTHER EXPENSES		φ20,233 		
TOTAL CASH	I EXPENSES	\$	40,275	
RETURN OVER CASH EX	PENSES			\$39,160
FIXED EXPENSES		\$6,991		
TOTAL EXPE	NSES	\$	47,265	
NET FARM INCOME				\$32,170
LABOR AND MANAGEMEN	NT COSTS	\$12,425		
NET OPERATING PROFIT				\$19,745
CAPITAL COSTS INTEREST ON OPERA INTEREST ON EQUIPM		\$395 \$2,248		
TOTAL CAPI	TAL COSTS		\$2,642	
RETURN TO LAND AND R	ISK		-	\$17,102

	RETURN	RETURN ON
LAND VALUE	TO RISK*	INVESTMENT**
\$5,000 /ACRE	\$2,102	3.61%
\$6,500 /ACRE	(\$2,398)	2.83%
\$8,000 /ACRE	(\$6,898)	2.33%
\$9,500 /ACRE	(\$11,398)	1.98%
\$11,000 /ACRE	(\$15,898)	1.72%
\$12,500 /ACRE	(\$20,398)	1.52%

 $^{^{\}star}$ 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)