

TABLE 5. Alfalfa establishment, dryland, budgeted per acre costs and returns for an 800 acre farm with above average management, San Jon-Nara Visa area, Quay County, Actual 2018
Planting dates: August 1 - August 31

ITEM	PRICE	QUANTITY	PURCHASED INPUTS					TOTAL
<u>PURCHASED INPUTS</u>								
ALFALFA SEED	\$2.95	10 LBS	\$29.50					\$29.50
WHEAT SEED	\$0.37	30 LBS	\$11.10					\$11.10
SUBTOTAL			\$40.60					\$40.60
<u>PREHARVEST OPERATIONS</u>								
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
SWEEP	145 HP	0.10 HR		\$0.86	\$2.73	\$0.84	\$3.79	\$8.23
RODWEEDER	96 HP	0.08 HR		\$0.68	\$1.49	\$0.13	\$0.25	\$2.55
DRILL WHEAT	96 HP	0.09 HR		\$0.77	\$1.67	\$0.17	\$1.50	\$4.12
FLY ON ALFALFA SEED			\$4.50					\$4.50
SUBTOTAL		0.27 HR	\$4.50	\$2.31	\$5.89	\$1.15	\$5.54	\$19.40
<u>OVERHEAD EXPENSES</u>								
DOWNTIME		0.07 HR		\$0.58				\$0.58
EMPLOYEE BENEFITS				\$0.42				\$0.42
INSURANCE			\$0.05					\$0.05
SUPERVISION AND MANAGEMENT				\$4.54				\$4.54
SUBTOTAL		0.07 HR	\$0.05	\$5.53				\$5.58
<u>TOTAL OPERATING EXPENSES</u>		0.34 HR	\$45.15	\$7.84	\$5.89	\$1.15	\$5.54	\$65.57

TABLE 6. Alfalfa hay, dryland, budgeted per acre costs and returns for an 800 acre farm with above average management, San Jon-Nara Visa area, Quay County, Actual 2018
Harvesting dates: June 15 - October 1

ITEM	PRICE	YIELD							TOTAL
GROSS RETURNS									
ALFALF/ FA HAY	\$220.00	1.50 TONS (IN FIELD)							\$330.00
GRAZING	\$12.00	1.00 ACRE							\$12.00
TOTAL									\$342.00
PURCHASED INPUTS									
PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS				FIXED COST	TOTAL	
WIRE ESTABLISHMENT: Principal	\$2.60	13 LBS	\$33.42					\$33.42	
: Interest		6 YEARS					\$10.93	\$10.93	
SUBTOTAL							\$13.04	\$46.46	
HARVEST OPERATIONS									
	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL	
SWATHER (3X)	14 FT SP	0.48 HR		\$4.10	\$5.48	\$0.26	\$25.47	\$35.32	
BALER (3X)	96 HP	0.63 HR		\$5.39	\$11.70	\$0.64	\$4.10	\$21.83	
SUBTOTAL		1.11 HR		\$9.49	\$17.18	\$0.91	\$29.57	\$57.15	
OVERHEAD EXPENSES									
DOWNTIME		0.28 HR		\$2.37				\$2.37	
EMPLOYEE BENEFITS				\$1.71				\$1.71	
INSURANCE			\$0.19					\$0.19	
LAND TAXES							\$0.42	\$0.42	
SUPERVISION AND MANAGEMENT				\$25.05				\$25.05	
OTHER EXPENSES			\$40.07					\$40.07	
SUBTOTAL		0.28 HR	\$40.26	\$29.13				\$0.42	\$69.82
TOTAL OPERATING EXPENSES		1.39 HR	\$73.69	\$38.62	\$17.18	\$0.91	\$43.03	\$173.43	
NET OPERATING PROFIT								\$168.57	
INTEREST ON OPERATING CAPITAL		(\$18.22	@	5.75%)			
INTEREST ON EQUIPMENT INVESTMENT								\$17.76	
RETURN TO LAND AND RISK								\$149.77	
BUDGET SUMMARY									
GROSS RETURN		\$342.00							
VARIABLE OPERATING EXPENSES	\$91.77								
RETURN OVER VARIABLE EXPENSES	\$250.23	(GROSS MARGIN)							
FIXED EXPENSES	\$43.03								
NET FARM INCOME	\$207.19	(RETURN TO CAPITAL, LABOR, LAND & RISK)							
LABOR AND MANAGEMENT COST	\$38.62								
NET OPERATING PROFIT	\$168.57	(RETURN TO CAPITAL, LAND & RISK)							
CAPITAL COSTS	\$18.80								
RETURN TO LAND AND RISK		\$149.77							

TABLE 7. Grain sorghum, dryland, budgeted per acre costs and returns for an 800 acre farm with above average management, San Jon-Nara Visa area, Quay County, Actual 2018
 Planting dates: June 1 - July 4
 Harvesting dates: October 5 - November 15

ITEM	PRICE	YIELD	BASE	TOTAL
GROSS RETURNS				
GRAIN SORGHUM	\$6.65	16.00 CWT		\$106.40
DIRECT PAYMENT	\$0.00	16.00 CWT	0.85	\$0.00
COUNTER CYCLICAL PAYMENT	\$0.00	0.00 CWT		\$0.00
GRAZING	\$5.00	1.00 ACRE		\$5.00
TOTAL				\$111.40

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$2.25	3 LBS	\$5.63		\$5.63
HERBICIDE (CUSTOM)	\$15.07	1 ACRE	\$15.07		\$15.07
CROP INSURANCE	\$0.13		\$0.13		\$0.13
SUBTOTAL			\$20.82		\$20.82

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
SWEEP	145 HP	0.10 HR		\$0.86	\$2.73	\$0.84	\$3.79	\$8.23
ROD WEED	96 HP	0.08 HR		\$0.68	\$1.49	\$0.13	\$0.25	\$2.55
LISTER/PLANTER	96 HP	0.18 HR		\$1.54	\$3.34	\$0.46	\$2.17	\$7.51
CULTIVATOR (2X)	96 HP	0.26 HR		\$2.22	\$4.83	\$0.88	\$1.27	\$9.20
SUBTOTAL		0.62 HR		\$5.30	\$12.39	\$2.31	\$7.48	\$27.49

HARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
COMBINE	22 FT	0.14 HR		\$1.20	\$3.57	\$0.36	\$11.78	\$16.90
HAUL	2 TON	0.14 HR		\$1.20	\$2.71	\$0.90	\$6.56	\$11.37
SUBTOTAL		0.28 HR		\$2.39	\$6.28	\$1.26	\$18.34	\$28.28

OVERHEAD EXPENSES	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DOWNTIME	0.23 HR			\$1.92			\$1.92
EMPLOYEE BENEFITS				\$1.73			\$1.73
INSURANCE			\$0.15				\$0.15
LAND TAXES						\$0.42	\$0.42
SUPERVISION AND MANAGEMENT			\$8.70				\$8.70
OTHER EXPENSES			\$40.07				\$40.07
SUBTOTAL	0.23 HR		\$40.23	\$12.35		\$0.42	\$53.00

TOTAL OPERATING EXPENSES 1.35 HR \$45.85 \$20.05 \$18.67 \$3.57 \$26.25 \$114.39

NET OPERATING PROFIT (\$2.99)

INTEREST ON OPERATING CAPITAL (\$14.71 @ 5.75%) \$0.85
 INTEREST ON EQUIPMENT INVESTMENT \$9.88

RETURN TO LAND AND RISK (\$13.72)

BUDGET SUMMARY

GROSS RETURN		\$111.40	
VARIABLE OPERATING EXPENSES	\$68.10		
RETURN OVER VARIABLE EXPENSES	\$43.30		(GROSS MARGIN)
FIXED EXPENSES	\$26.25		
NET FARM INCOME	\$17.05		(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$20.05		
NET OPERATING PROFIT	(\$2.99)		(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$10.73		
RETURN TO LAND AND RISK		(\$13.72)	

TABLE 8. Wheat, dryland, budgeted per acre costs and returns for an 800 acre farm with above average management, San Jon-Nara Visa area, Quay County, Actual 2018
 Planting dates: September 1 - September 15
 Harvesting dates: June 15 - July 15

ITEM	PRICE	YIELD	BASE	TOTAL
GROSS RETURNS				
WHEAT	\$4.75	29.00 BUSHELS		\$137.75
DIRECT PAYMENT	\$0.00	29.00 BUSHELS	0.85	\$0.00
COUNTER CYCLICAL PAYMENT	\$0.00			\$0.00
GRAZING	\$2.00	1.00 ACRE		\$2.00
TOTAL				\$139.75

PURCHASED INPUTS	PRICE	QUANTITY	PURCHASED INPUTS	FIXED COST	TOTAL
SEED	\$0.37	25 LBS	\$9.25		\$9.25
CROP INSURANCE	\$0.15		\$0.15		\$0.15
SUBTOTAL			\$9.40		\$9.40

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
SWEEP (2X)	145 HP	0.26 HR		\$2.22	\$7.11	\$2.20	\$9.86	\$21.39
RODWEED	145 HP	0.16 HR		\$1.37	\$4.38	\$0.98	\$5.78	\$12.51
DRILL	96 HP	0.09 HR		\$0.77	\$1.67	\$0.17	\$1.50	\$4.12
SUBTOTAL		0.51 HR		\$4.36	\$13.16	\$3.35	\$17.14	\$38.01

HARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
COMBINE	22 FT	0.14 HR		\$1.20	\$3.57	\$0.36	\$12.49	\$17.61
HAUL	2 TON	0.14 HR		\$1.20	\$2.71	\$0.90	\$6.56	\$11.37
SUBTOTAL		0.28 HR		\$2.39	\$6.28	\$1.26	\$19.06	\$28.99

OVERHEAD EXPENSES	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DOWNTIME	0.20 HR		\$0.74				\$0.74
EMPLOYEE BENEFITS			\$1.01				\$1.01
INSURANCE		\$0.14					\$0.14
LAND TAXES						\$0.42	\$0.42
SUPERVISION AND MANAGEMENT			\$6.99				\$6.99
OTHER EXPENSES		\$40.07					\$40.07
SUBTOTAL	0.20 HR	\$40.21	\$8.74			\$0.42	\$49.37

TOTAL OPERATING EXPENSES	0.99 HR	\$49.46	\$15.49	\$19.44	\$4.61	\$36.62	\$125.62
NET OPERATING PROFIT							\$14.13
INTEREST ON OPERATING CAPITAL	(\$9.45	@	5.75%)		\$0.54
INTEREST ON EQUIPMENT INVESTMENT							\$13.48
RETURN TO LAND AND RISK							\$0.11

BUDGET SUMMARY			
GROSS RETURN		\$139.75	
VARIABLE OPERATING EXPENSES	\$73.50		
RETURN OVER VARIABLE EXPENSES	\$66.25		(GROSS MARGIN)
FIXED EXPENSES	\$36.62		
NET FARM INCOME	\$29.63		(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	\$15.49		
NET OPERATING PROFIT	\$14.13		(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	\$14.02		
RETURN TO LAND AND RISK		\$0.11	

TABLE 9. Summary of per acre costs and returns for an 800 acre farm, San Jon-Nara Visa area, Quay County,
Actual 2018

	ALFALFA ESTABLISHMENT	ALFALFA HAY	GRAIN SORGHUM	WHEAT
		TONS	CWT	BU
PRIMARY YIELD		1.50	16.00	29.00
PRIMARY PRICE		\$220.00	\$6.65	\$4.75
GOVERNMENT PAYMENTS		\$0.00	\$0.00	\$0.00
SECOND INCOME		\$12.00	\$5.00	\$2.00
GROSS RETURN		\$342.00	\$111.40	\$139.75
CASH OPERATING EXPENSES				
SEED	\$29.50		\$5.63	\$9.25
FERTILIZER	\$11.10			
CHEMICALS				
CROP INSURANCE			\$0.13	\$0.15
OTHER PURCHASED INPUTS	\$0.05	\$33.61	\$0.15	\$0.14
CANAL WATER				
FUEL, OIL & LUBRICANTS-EQUIPMENT	\$5.89	\$17.18	\$18.67	\$19.44
FUEL-IRRIGATION				
REPAIRS	\$1.15	\$0.91	\$3.57	\$4.61
CUSTOM CHARGES	\$4.50	\$0.00		
LAND TAXES		\$0.42	\$0.42	\$0.42
OTHER EXPENSES		\$40.07	\$40.07	\$40.07
TOTAL CASH EXPENSES	\$52.19	\$92.20	\$68.64	\$74.07
RETURN OVER CASH EXPENSES	(\$52.19)	\$249.80	\$42.76	\$65.68
FIXED EXPENSES	\$5.54	\$42.61	\$25.83	\$36.20
TOTAL EXPENSES	\$57.73	\$134.81	\$94.47	\$110.27
NET FARM INCOME	(\$57.73)	\$207.19	\$16.93	\$29.48
LABOR AND MANAGEMENT COSTS	\$7.84	\$38.62	\$20.05	\$15.49
NET OPERATING PROFIT	(\$65.57)	\$168.57	(\$3.12)	\$13.99
CAPITAL COSTS				
INTEREST ON OPERATING CAPITAL		\$1.05	\$0.85	\$0.54
INTEREST ON EQUIPMENT INVESTMENT		\$17.76	\$9.88	\$13.48
TOTAL CAPITAL COSTS	\$0.00	\$18.80	\$10.73	\$14.02
RETURN TO LAND AND RISK	(\$65.57)	\$149.77	(\$13.85)	(\$0.04)

TABLE 10. Whole farm summary, San Jon-Nara Visa area, Quay County,
Actual 2018

GROSS RETURNS		
ALFALFA HAY	60.00 ACRES	
CROP		\$19,800
GRAZING		\$720
GRAIN SORGHUM	400.00 ACRES	
CROP		\$42,560
GRAZING		\$2,000
DIRECT PAYMENT		\$0
WHEAT	340.00 ACRES	
CROP		\$46,835
GRAZING		\$680
DIRECT PAYMENT		\$0
COUNTER CYCLICAL PAYMENT		\$0
GROSS RETURN		<u>\$112,595</u>
CASH OPERATING EXPENSES		
SEED		\$5,572
FERTILIZER		\$67
CHEMICALS		\$0
CROP INSURANCE		\$100
OTHER PURCHASED INPUTS		\$2,125
CANAL WATER		\$0
FUEL, OIL & LUBRICANTS-EQUIPMENT		\$15,143
FUEL-IRRIGATION		\$0
REPAIRS		\$3,058
CUSTOM CHARGES		\$27
LAND TAXES		\$339
OTHER EXPENSES		\$32,058
TOTAL CASH EXPENSES		<u>\$58,488</u>
RETURN OVER CASH EXPENSES		\$54,107
FIXED EXPENSES		\$24,571
TOTAL EXPENSES		<u>\$83,059</u>
NET FARM INCOME		\$29,536
LABOR AND MANAGEMENT COSTS		\$15,651
NET OPERATING PROFIT		\$13,884
CAPITAL COSTS		
INTEREST ON OPERATING CAPITAL		\$586
INTEREST ON EQUIPMENT INVESTMENT		\$9,602
TOTAL CAPITAL COSTS		<u>\$10,188</u>
RETURN TO LAND AND RISK		<u>\$3,696</u>

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
\$150 /ACRE	\$96	5.44%
\$300 /ACRE	(\$3,504)	3.70%
\$450 /ACRE	(\$7,104)	2.80%
\$600 /ACRE	(\$10,704)	2.26%
\$750 /ACRE	(\$14,304)	1.89%
\$900 /ACRE	(\$17,904)	1.62%

* 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)