TABLE 1. Acreage Summary, Union County, Actual 2024

BUDGET AREA.....	DRY CIMARRON AREA, UNION COUNTY
FARM SIZE.....	80 ACRES
IRRIGATION TYPE.....	FLOOD
NUMBER OF CROPS...	2

ACREAGE SUMMARY:	LAND USE (ACRES)	WATER USE AC.IN. PER AC.	WATER USE TOTAL AC.IN.
ALFALFA ESTABLISHMENT	4	4.5	18
ALFALFA	40	24	960
NATIVE GRASS	40	18	720
TOTAL	84		1,698
ACRE FEET PER ACRE OF WATER RIGHTS			1.68

TABLE 2. Basic cost information for Dry Cimarron area, Union County, Actual 2024

Item				
Labor Wage Rate:				
Equipment operators		$/hour		$20.00
General & Irrigators		$/hour		$16.77
Purchased Inputs:				
Seed:				
Alfalfa		$/pound		$4.12
Natural gas		$/TCF		$4.05
Diesel fuel		$/gallon		$3.46
Gasoline		$/gallon		$2.98
Electricity		cents/KwHr		12.08
LP Gas		$/gallon		$2.45
Baling Wire		$/pound		$1.32
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		9.25%
Land Interest Rate		percent		8.15%
Equipment Interest Rate		percent		7.15%
Real Interest Rate		percent		1.82%
Land Taxes	$27.00	/acre (full value)		$0.20
Personal Property Tax Rate	-NR	$/$1,000	(Assessed	$22.57
	- R		Value)	$18.57
Supervision Factors				
Field Crop-Irrigation		$/labor hour		$1.00
Field Crop-Equipment & General		$/labor hour		$0.50
Management Rate		percent		7.00%

TABLE 3. Overhead cost information for the Dry Cimarron area, Actual 2024

Item					
Electricity (Domestic & Shop)			$128.00	per month	$1,536
Telephone			$102.40	per month	$1,229
Accounting & Legal					$576
Misc. Supplies & Hand Tools					$947
Pickup and Auto					
miles	13,184	@	$0.670	per mile	$8,833
Insurance					
- general liability (non-employee)					$1,229
- fire/theft					$800
Property Taxes					
- other than land & machinery					$6,010
Building repairs and maintenance					$608
Dues, fees, publications					$307
Farmstead Equipment					$96
				Total	$22,171
			Total per planted acre		$277.14

TABLE 6. Alfalfa establishment, flood-irrigated, budgeted per acre costs and returns for an 80 acre part-time farm, Dry Cimarron area, Union County, Actual 2024

Planting dates: August 15 - September 15

ITEM	PRICE	QUANTITY	PURCHASED INPUTS	TOTAL
PURCHASED INPUTS				
SEED	$4.12	18 LBS	$74.16	$74.16
CANAL WATER		5 AC. IN.		
SUBTOTAL			$74.16	$74.16

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE	PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
CHISEL	40 HP	0.20 HR		$4.00	$2.59	$0.20	$0.56	$7.35
DISC	40 HP	0.17 HR		$3.40	$2.20	$0.17	$0.48	$6.25
DRILL	40 HP	0.25 HR		$5.00	$3.24	$0.25	$0.70	$9.19
DITCH MAINTENANCE		0.50 HR		$10.00				$10.00
IRRIGATE (1X)		0.75 HR		$12.58				$12.58
SUBTOTAL		1.87 HR		$34.98	$8.02	$0.63	$1.75	$45.37
OVERHEAD EXPENSES								
DOWNTIME		0.16 HR		$3.10				$3.10
EMPLOYEE BENEFITS				$6.30				$6.30
INSURANCE			$0.70					$0.70
SUPERVISION AND MANAGEMENT				$9.43				$9.43
SUBTOTAL		0.16 HR	$0.70	$18.82				$19.52
TOTAL OPERATING EXPENSES		2.03 HR	$74.86	$53.80	$8.02	$0.63	$1.75	$139.06

TABLE 7. Alfalfa hay, flood-irrigated, budgeted per acre costs and returns for an 80 acre part-time farm, Dry Cimarron area, Union County, Actual 2024
Harvesting dates: May 15 - September 15

ITEM	PRICE	YIELD		TOTAL
GROSS RETURNS				
ALFALF FA HAY	$252.00	6.20	TONS (STACKED)	$1,562.40
GRAZING	$20.00	1.00	ACRE	$20.00
TOTAL				$1,582.40

PURCHASED INPUTS	PRICE	QUANTITY		PURCHASED INPUTS	FIXED COST	TOTAL
LIVESTOCK FAC & EQUIP					$4.00	$4.00
ESTABLISHMENT: Principal		10.00	YEARS		$13.91	$13.91
: Interest					$7.90	$7.90
BALING WIRE	$1.32	53.13	LBS	$70.14		$70.14
CANAL WATER		16.00	AC. IN.	$5.00		$5.00
PUMP WATER*		8.00	AC. IN.			
SUBTOTAL				$75.14	$25.81	$100.94

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DITCH MAINTENANCE		0.50	HR		$10.00				$10.00
IRRIGATE (8X)		4.00	HR		$67.08	$10.04	$0.00	$14.38	$91.50
SUBTOTAL		4.50	HR		$77.08	$10.04	$0.00	$14.38	$101.50
HARVEST OPERATIONS									
MOWER (3X)	40 HP	1.11	HR		$22.20	$14.36	$1.53	$5.22	$43.31
RAKE (3X)	40 HP	0.36	HR		$7.20	$4.66	$0.52	$3.51	$15.89
BALER (3X)	40 HP	0.63	HR		$12.60	$8.15	$0.74	$7.98	$29.47
HAUL (3X)	1 TON TRUCK	4.50	HR		$90.00	$98.91	$37.46	$49.07	$275.44
SUBTOTAL		6.60	HR		$132.00	$126.08	$40.24	$65.79	$364.12
OVERHEAD EXPENSES									
DOWNTIME		1.65	HR		$33.00				$33.00
EMPLOYEE BENEFITS					$37.63				$37.63
INSURANCE				$4.18					$4.18
LAND TAXES								$0.20	$0.20
SUPERVISION AND MANAGEMENT					$118.07				$118.07
OTHER EXPENSES				$277.14					$277.14
SUBTOTAL		1.65	HR	$281.32	$188.70			$0.20	$470.23
TOTAL OPERATING EXPENSES		12.75	HR	$356.46	$397.78	$136.13	$40.24	$106.18	$1,036.79
NET OPERATING PROFIT									$545.61
INTEREST ON OPERATING CAPITAL		$53.94	@	9.25%	)				$4.99
INTEREST ON EQUIPMENT INVESTMENT									$2.63
RETURN TO LAND AND RISK									$538.00

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

BUDGET SUMMARY

GROSS RETURN		$1,582.40	
VARIABLE OPERATING EXPENSES	$532.83		
RETURN OVER VARIABLE EXPENSES		$1,049.57	(GROSS MARGIN)
FIXED EXPENSES	$106.18		
NET FARM INCOME		$943.39	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	$397.78		
NET OPERATING PROFIT		$545.61	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	$7.62		
RETURN TO LAND AND RISK		$538.00	

TABLE 8. Native grass hay, flood-irrigated, budgeted per acre costs and returns for an 80 acre part-time farm, Dry Cimarron area, Union County, Actual 2024
Harvesting dates: July 20 - September 15

ITEM	PRICE	YIELD		TOTAL
GROSS RETURNS				
HAY	$187.00	1.50	TONS (STACKED)	$280.50
GRAZING	$20.00	1.00	ACRE	$20.00
TOTAL				$300.50

PURCHASED INPUTS	PRICE	QUANTITY		PURCHASED INPUTS	FIXED COST	TOTAL
LIVESTOCK FAC & EQUIP					$4.00	$4.00
BALING WIRE	$1.32	13	LBS	$16.97		$16.97
CANAL WATER		12	AC. IN.	$5.00		$5.00
PUMP WATER*		6	AC. IN.			
SUBTOTAL				$21.97	$4.00	$25.97

PREHARVEST OPERATIONS	POWER UNIT	ACCOMPLISHMENT RATE		PURCHASED INPUTS	LABOR	FUEL & LUBE	REPAIRS	FIXED COST	TOTAL
DITCH MAINTENANCE		0.50	HR		$10.00				$10.00
IRRIGATE (5X)		2.50	HR		$50.00	$7.53	$0.00	$10.78	$68.32
SUBTOTAL		3.00	HR		$60.00	$7.53	$0.00	$10.78	$78.32
HARVEST OPERATIONS									
MOWER (2X)	40 HP	0.74	HR		$14.80	$9.58	$1.02	$3.48	$28.88
RAKE (2X)	40 HP	0.24	HR		$4.80	$3.11	$0.35	$2.34	$10.60
BALER, 1-TON (2X)	40 HP	0.42	HR		$8.40	$5.43	$0.49	$5.32	$19.65
HAUL (2X)	TRUCK	1.60	HR		$32.00	$35.17	$13.32	$17.45	$97.93
SUBTOTAL		3.00	HR	$0.00	$60.00	$53.28	$15.18	$28.59	$157.05
OVERHEAD EXPENSES									
DOWNTIME		0.75	HR		$15.00				$15.00
EMPLOYEE BENEFITS					$21.60				$21.60
INSURANCE				$2.40					$2.40
LAND TAXES								$0.20	$0.20
SUPERVISION AND MANAGEMENT					$22.54				$22.54
OTHER EXPENSES				$277.14					$277.14
SUBTOTAL		0.75	HR	$279.54	$59.14			$0.20	$338.88
TOTAL OPERATING EXPENSES		3.75	HR	$301.51	$179.14	$60.82	$15.18	$43.58	$600.22
NET OPERATING PROFIT									($299.72)
INTEREST ON OPERATING CAPITAL		($18.57	@	9.25%)					$1.72
INTEREST ON EQUIPMENT INVESTMENT									$26.12
RETURN TO LAND AND RISK									($327.55)

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

BUDGET SUMMARY

GROSS RETURN		$300.50	
VARIABLE OPERATING EXPENSES	$377.50		
RETURN OVER VARIABLE EXPENSES		($77.00)	(GROSS MARGIN)
FIXED EXPENSES	$43.58		
NET FARM INCOME		($120.58)	(RETURN TO CAPITAL, LABOR, LAND & RISK)
LABOR AND MANAGEMENT COST	$179.14		
NET OPERATING PROFIT		($299.72)	(RETURN TO CAPITAL, LAND & RISK)
CAPITAL COSTS	$27.83		
RETURN TO LAND AND RISK		($327.55)	

TABLE 9. Summary of per acre costs and returns for an 80 acre part-time farm, Dry Cimarron area, Union County, Actual 2024

	ALFALFA ESTABLISHMENT	ALFALFA HAY	NATIVE GRASS HAY
		TONS	TONS
PRIMARY YIELD		6.20	1.50
PRIMARY PRICE		$252.00	$187.00
GOVERNMENT PAYMENTS		$0.00	$0.00
SECOND INCOME		$20.00	$20.00
GROSS RETURN		$1,582.40	$300.50
CASH OPERATING EXPENSES			
SEED	$74.16		
FERTILIZER			
CHEMICALS			
CROP INSURANCE			
OTHER PURCHASED INPUTS		$70.14	$16.97
CANAL WATER		$5.00	$5.00
FUEL, OIL & LUBRICANTS-EQUIPMENT	$8.02	$126.08	$53.28
FUEL-IRRIGATION		$10.04	$7.53
REPAIRS	$0.63	$40.24	$15.18
CUSTOM CHARGES			
LAND TAXES		$0.20	$0.20
OTHER EXPENSES	$0.70	$281.32	$279.54
TOTAL CASH EXPENSES	$83.51	$533.03	$377.71
RETURN OVER CASH EXPENSES	($83.51)	$1,049.37	($77.21)
FIXED EXPENSES	$1.75	$105.97	$43.38
TOTAL EXPENSES	$85.26	$639.01	$421.08
NET FARM INCOME	($85.26)	$943.39	($120.58)
LABOR AND MANAGEMENT COSTS	$53.80	$397.78	$179.14
NET OPERATING PROFIT	($139.06)	$545.61	($299.72)
CAPITAL COSTS			
INTEREST ON OPERATING CAPITAL		$4.99	$1.72
INTEREST ON EQUIPMENT INVESTMENT		$2.63	$26.12
TOTAL CAPITAL COSTS	$0.00	$7.62	$27.83
RETURN TO LAND AND RISK	($139.06)	$538.00	($327.55)

TABLE 10. Whole farm summary, Union County, Actual 2024

GROSS RETURNS			
ALFALFA HAY	40 ACRES		
CROP		$62,496	
GRAZING		$800	
NATIVE GRASS HAY	40 ACRES		
CROP		$11,220	
GRAZING		$800	
GROSS RETURN			$75,316
CASH OPERATING EXPENSES			
SEED		$297	
FERTILIZER		$0	
CHEMICALS		$0	
CROP INSURANCE		$0	
OTHER PURCHASED INPUTS		$3,484	
CANAL WATER		$400	
FUEL, OIL & LUBRICANTS-EQUIPMENT		$7,207	
FUEL-IRRIGATION		$703	
REPAIRS		$2,219	
CUSTOM CHARGES		$0	
LAND TAXES		$16	
OTHER EXPENSES		$22,437	
TOTAL CASH EXPENSES			$36,764
RETURN OVER CASH EXPENSES			$38,552
FIXED EXPENSES		$5,425	
TOTAL EXPENSES			$42,188
NET FARM INCOME			$33,128
LABOR AND MANAGEMENT COSTS		$23,292	
NET OPERATING PROFIT			$9,836
CAPITAL COSTS			
INTEREST ON OPERATING CAPITAL		$268	
INTEREST ON EQUIPMENT INVESTMENT		$1,150	
TOTAL CAPITAL COSTS			$1,418
RETURN TO LAND AND RISK			$8,418

LAND VALUE	RETURN TO RISK*	RETURN ON INVESTMENT**
$200 /ACRE	$8,127	18.56%
$350 /ACRE	$7,909	15.13%
$500 /ACRE	$7,691	12.77%

* 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)