

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		

	WATER USE		
	LAND USE (ACRES)	AC.IN. PER AC.	TOTAL AC.IN.
ACREAGE SUMMARY:			
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 - R	\$/ \$1,000 (Assessed Value)	\$22.57 \$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
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 A 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
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NET OPERATING PROFIT								\$545.61
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INTEREST ON OPERATING CAPITAL	\$53.94	@	9.25%)				\$4.99
INTEREST ON EQUIPMENT INVESTMENT								\$2.63

RETURN TO LAND AND RISK								\$538.00
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* 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		<u>\$75,316</u>
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		<u>\$36,764</u>
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		<u>\$1,418</u>
RETURN TO LAND AND RISK		<u>\$8,418</u>

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)