

Table 4A. Income and Cash Operating Summary; Alfalfa Hay, 1998

COUNTY: Graham FARM: Graham County 98 WATER SOURCE: Surface/Pump TILLAGE: Conventional
 CROP: Alfalfa Hay ACRES: 1.0 IRRIGATION SYSTEM: Flood Basin SOIL: Sandy-Loam
 AREA: Safford Valley YIELD: 6.3 Tn / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/4/99

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME Hay	Ton	6.30	\$96.70	\$609.21	\$609.21	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					45.96	_____
Tractor/Self Propelled				1.64		_____
Irrigation				44.32		_____
Chemicals and Custom Applications					7.76	_____
Insecticide				7.76		_____
Farm Machinery and Vehicles					1.50	_____
Diesel Fuel				0.68		_____
Repairs and Maintenance				0.82		_____
Irrigation Water (excluding labor)					23.36	_____
Pump Energy - Electric				21.59		_____
Repairs and Maintenance				1.77		_____
Water Assessment (See Note Below) **						_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					78.57	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					32.63	_____
Tractor/Self Propelled				15.56		_____
Other/Contract				17.07		_____
Farm Machinery and Vehicles					121.67	_____
Diesel Fuel				13.68		_____
Repairs and Maintenance				107.99		_____
Other Materials					22.46	_____
TOTAL HARVEST AND POST HARVEST EXPENSE					176.76	_____
OPERATING OVERHEAD PICKUP USE					10.09	_____
OPERATING INTEREST AT 10.0%					20.37	_____
TOTAL CASH OPERATING EXPENSES					\$285.79	=====
RETURNS OVER CASH OPERATING EXPENSES					\$323.42	_____

Notes: The above figures do not include ownership costs, see table B for detailed cost allocation.

** A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

Table 4B. Allocations of Ownership Costs; Alfalfa Hay, 1998

COUNTY:Graham FARM: Graham County 98 WATER SOURCE: Surface/Pump TILLAGE: Conventional
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 AREA: Safford Valley YIELD: 6.3 Tn / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/4/99

Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$96.70 / Tn	\$609.21		\$609.21	
TOTAL OPERATING EXPENSES	\$285.79		\$285.79	
RETURN OVER CASH OPERATING EXPENSES		\$323.42		\$323.42
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	10.42		10.42	
Wells and Irrigation System	8.42		8.42	
General and Office Overhead (5.0% of Total Operating Exp.)	14.29		14.29	
General Farm Maintenance (3.0% of Total Operating Exp.)	8.57		8.57	
Total Cash Overhead Expenses	41.70		41.70	
Total Cash Operating and Overhead Cost	327.49		327.49	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$281.72		\$281.72
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			69.38	
Wells and Irrigation System			15.86	
Interest on Equity, Machinery and Vehicles			5.93	
Wells and Irrigation System			5.75	
Stand Establishment (3 year crop)	98.47		98.47	
Total Capital Allocations	98.47		195.40	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$183.25		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$86.32
Land Cost / Ownership (100% Equity)				
Property Taxes (\$600.00 X 16.0% X 0.093)	8.93		8.93	
Opportunity Interest on Land (100% X 6.0 X \$600.00)			36.00	
Water Assessment	25.00		25.00	
Total Land Costs	33.93		69.93	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$149.32		
RETURNS TO MANAGEMENT AND RISK ----->				\$16.39
Management Services (8% of Total Operation Expenses)			22.86	
TOTAL OWNERSHIP COST	174.11		329.89	
TOTAL COST	\$459.89		\$615.68	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$149.32		
RETURNS TO RISK (PROFITS) ----->				(\$6.47)
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb)		\$45.36		\$45.36
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$27.64		\$52.36
BREAK-EVEN PRICE TO COVER TOTAL COST		\$73.00		\$97.73

Table 4C. Variable Operating Costs; Alfalfa Hay, 1998

COUNTY:Graham FARM: Graham County 98 WATER SOURCE: Surface/Pump TILLAGE: Conventional
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 AREA: Safford Valley YIELD: 6.3 Tn / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/4/99

No.	First Month	Operation	---- Hours * ----		---- Operating Costs (\$/ACRE *) Per Operation ----					Tot. Cash Expenses	Class		
			Machine	Labor	Fuel/Rps.	Labor	Cust/Serv.	Materials	Total			Times	
1	Feb	Irrigate		0.403		2.75				2.75	9.8	26.95	G
2	Feb	Irrigate		0.606	5.56	4.14				9.70	4.2	40.73	G
3	Mar	Apply Insect./Ground	0.180	0.200	1.50	1.64		7.76		10.89	1.0	10.89	G
4	May	Swathing	0.225	0.250	3.33	1.71				5.04	6.0	30.23	H
5	Jul	Raking	0.180	0.200	1.49	1.64				3.13	2.0	6.26	H
6	May	Baling	0.225	0.250	3.32	2.05		3.74		9.11	6.0	54.67	H
7	Apr	Roadsiding	0.150	0.167	13.13	1.14				14.27	6.0	85.59	H
		Pickup Use40 Mi/Acre	1.333		10.09							10.09	
		Operating Interest at 10.0						20.37				20.37	
TOTAL CASH OPERATING EXPENSES (includes all times over):											285.79	T	

*NOTES: Machine and labor hours and operating cost are for one time over the designated acreage. The "Tot. Cash Expense" column and the "TOTAL CASH OPERATING EXPENSES" row include all operations, all times over. Classes are defined below. A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY BY CLASS		SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)							
		Prices	- 25%	- 10%	Budgeted	+ 10%	+ 25%		
Land Preparation (L)	0.00								
Growing (G)	78.57	Yields	\$72.52	\$87.03	\$96.70	\$106.37	\$120.88	Break-even Price	
Harvest (H)	176.76								
Post Harvest (P)	0.00	- 25%	4.7	107.62	176.16	221.85	267.54	336.08	49.75
Marketing (M)	0.00	- 10%	5.7	149.65	231.89	286.72	341.55	423.79	46.13
Operating Overhead (O)	30.46	Budgeted	6.3	177.66	269.04	329.96	390.88	482.27	44.32
		+ 10%	6.9	205.68	306.20	373.21	440.22	540.74	42.85
Total (T)	\$285.79	+ 25%	7.9	247.70	361.93	438.08	514.23	628.45	41.07
		Break-even Yield		2.30	1.74	1.49	1.31	1.10	

Table 4D. Resource and Cash Flow Requirements; Alfalfa Hay, 1998

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Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)						
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total
FEB C	1.0	6.0	0.46		1.67	3.17				4.83
MAR C	1.0	6.0	0.66		3.16	4.80	7.76			15.73
APR C	1.0	6.0	0.46		1.67	3.17				4.83
MAY C	2.0	12.0	1.59		23.12	11.22		3.74		38.08
JUN C	2.0	12.0	1.59		23.12	11.22		3.74		38.08
JUL C	2.0	12.0	1.79		24.61	12.86		3.74		41.21
AUG C	2.0	12.0	1.79		24.61	12.86		3.74		41.21
SEP C	2.0	12.0	1.59		23.12	11.22		3.74		38.08
OCT C	1.0	6.0	1.13		21.45	8.06		3.74		33.25
Pickup Use40 Mi/Acre					10.09					10.09
Operating Interest at 10.0									20.37	20.37
Water Assessment				**						
Total	14.0	84.0	11.10		156.62	78.59	7.76	22.46	20.37	285.79
%					54.80	27.50	2.72	7.86	7.13	100.00

TOTAL RESOURCE REQUIREMENTS (per Acre)

Total N 0.0
 Total P 0.0
 Total K 0.0
 Total Labor 11.1
 Total Water 84.0

TOTAL ENERGY REQUIREMENTS (per Acre)

Diesel Fuel 18.8 Gal
 Unleaded Gas 4.0 Gal
 Electric / Pumping 278.8 KWH
 All Direct Energy 4.1 M BTU

EQUIPMENT REQUIREMENTS (per Acre)

Bale Wagon, SP PRC 0.90 Hr
 Rake, 9.5' LH 0.36 Hr
 Windrower, 14.0', HS, SC 1.35 Hr
 Baler, 2 Wire Auto PTO 1.35 Hr
 Saddle Tk Sprayer, 2 Tk 8 0.18 Hr
 Pickup Truck, 1/2 Ton 1.33 Hr
 Tractor, 100 PTO HP, 1.89 Hr

MATERIALS REQUIREMENT (per Acre)

Baling Twine (6500') 3.24 TF
 Water, Pump 25.20 AI
 Malathion 2.00 Pt
 Water, District 58.80 AI

LABOR REQUIREMENT (per Acre)

Harvest 2.50 Hr
 Irrigators 6.49 Hr
 Tractor 2.10 Hr

*NOTE: P = Previous Year C = Current Year N = Next Year

** A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

Table 4E. Schedule of Operations; Alfalfa Hay, 1998

COUNTY:Graham FARM: Graham County 98 WATER SOURCE: Surface/Pump TILLAGE: Conventional
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First No.	Month	Times	Operation	Equipment/ Custom Oper		Job Rate Acres/Hr	Material Use Name	Material Use and Cost			Service Cost \$ / Unit	Labor Type
				HP	Self-Prop./ Implement			Appl. Rate	\$ / Unit	\$ / Unit		
1	Feb	9.8	Irrigate			2.48	Water, District	6.00	Al	0.00	AF	Irrigators
2	Feb	4.2	Irrigate			1.65	Water, Pump	6.00	Al	11.12	AF	Irrigators
3	Mar	1.0	Apply Insect./Ground	100	Saddle Tk Sprayer, 2 Tk 8	5.00	Malathion	2.00	Pt	29.42	Ga	Tractor
4	May	6.0	Swathing		Windrower, 14.0', HS, SC	4.00						Harvest
5	Jul	2.0	Raking		100 Rake, 9.5' LH	5.00						Tractor
6	May	6.0	Baling		100 Baler, 2 Wire Auto PTO	4.00	Baling Twine (6500')	0.54	TF	6.57	TF	Tractor
7	Apr	6.0	Roadsiding		Bale Wagon, SP PRC	6.00						Harvest
			Pickup use 40 Mi/Ac		Pickup Truck, 1/2 Ton	0.75						

*NOTES: Machine times, labor times, and material rates are for one time over the designated acreage.

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