

Table 5A. Income and Cash Operating Cost Summary, Alfalfa Hay Production, 1996

COUNTY: Pinal FARM: Pinal County Farm WATER SOURCE: CAID TILLAGE: Conventional
 CROP: Alfalfa Hay w/Graze ACRES: 1.0 IRRIGATION SYSTEM: Flood Basin SOIL: Sandy-Loam
 AREA: Maricopa YIELD: 7.4 Tn/Acre PREVIOUS CROP: Alfalfa Hay w/Gr DATE: 10/08/96

Item	Unit	Quantity	Price /Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Alfalfa	Ton	7.40	\$82.0000	\$606.80		
Grazing	Head Days	250.00	0.1300	32.50	\$639.30	
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					62.90	
Tractor/Self Propelled				0.38		
Irrigation				62.52		
Chemicals & Custom Applications					14.38	
Herbicides				14.38		
Farm Machinery and Vehicles					8.61	
Diesel Fuel				5.05		
Repairs & Maint.				3.56		
Irrigation Water (excluding labor)					250.13	
Water Assessment (See Note Below) **					**	
Other Purchased Inputs & Services					5.51	
Seed/Transplants				5.51		
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					341.53	
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					37.67	
Tractor/Self Propelled				22.47		
Other/Contract				15.19		
Farm Machinery and Vehicles					69.35	
Diesel Fuel				18.13		
Repairs & Maint.				51.22		
Other Materials					27.59	
TOTAL HARVEST AND POST HARVEST EXPENSE					134.61	
OPERATING OVERHEAD->PICKUP USE					10.25	
OPERATING INTEREST AT 8.0%					0.17	
TOTAL CASH OPERATING EXPENSES					\$486.57	
RETURNS OVER CASH OPERATING EXPENSES					\$152.73	

Notes: The above figures do not include ownership costs, see Table 5B on Next Page for detailed cost allocation.

** A water assessment charge of \$18.75/Acre is included in the ownership costs of Table 5B.

COUNTY: Pinal FARM: Pinal County Farm WATER SOURCE: CAID TILLAGE: Conventional
 CROP: Alfalfa Hay w/Graze ACRES: 1.0 IRRIGATION SYSTEM: Flood Basin SOIL: Sandy-Loam
 AREA: Maricopa YIELD: 7.4 Tn/Acre PREVIOUS CROP: Alfalfa Hay w/Gr DATE: 10/08/96

Item	- CASH COST BASIS (\$/ACRE) -		- TOTAL COST BASIS (\$/ACRE) -	
	Income & Costs	Net Returns	Income & Costs	Net Returns
TOTAL INCOME at \$ 82.0000/Tn + 2nd Crop	\$639.30		\$639.30	
TOTAL OPERATING EXPENSES	486.56		486.56	
RETURN OVER CASH OPERATING EXPENSES		\$152.73		\$152.73
CASH OVERHEAD EXPENSES				
Taxes, Housing & Insur., Farm Machinery	10.45		10.45	
Gen. & Off. Overhead (5% of Tot. Oper. Exp.)	24.32		24.32	
General Farm Maint. (3% of Tot. Oper. Exp.)	14.60		14.60	
Total Cash Overhead Expenses	49.37		49.37	
Total Cash Oper. & Over. Cost	535.94		535.94	
RETURNS OVER CASH OPER. & OVER. EXPENSES.		103.35		103.35
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery & Vehicles			70.75	
Interest on Equity, Machinery & Vehicles			5.57	
Stand Establishment (3 Year Crop)	143.97		143.97	
Total Capital Allocations	143.97		220.28	
RETURNS TO LAND, CAPITAL, MANAGEMENT & RISK		>(40.61)		
RETURNS TO LAND, MANAGEMENT & RISK				>(116.93)
LAND COSTS / OWNERSHIP (100% Equity)				
Property Taxes (\$372 X 16% X .16455)	9.79		9.79	
Opport. Inter. on Land (100% X 6.0% X \$372)			22.32	
Water Assessment **	18.75		18.75	
Total Land Costs	28.54		50.86	
RETURNS TO MANAGEMENT, CAPITAL & RISK		>(69.15)		
RETURNS TO MANAGEMENT & RISK				>(167.79)
Management Services (8% of Tot. Oper. Exp.)			38.92	
TOTAL OWNERSHIP COST	221.89		359.45	
TOTAL COST	\$708.45		\$846.02	
RETURN TO MANAGEMENT, CAPITAL & RISK		>(\$69.15)		
RETURN TO RISK (PROFITS)				>(\$206.72)
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Tn)		\$61.36		\$61.36
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$29.98		\$48.57
BREAK-EVEN PRICE TO COVER TOTAL COST		\$91.34		\$109.93

Table 5C. Variable Operating Costs; Alfalfa Hay Production, 1996

COUNTY: Pinal FARM: Pinal County Farm WATER SOURCE: CAID TILLAGE: Conventional
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 AREA: Maricopa YIELD: 7.4 Tn/Acre PREVIOUS CROP: Alfalfa Hay w/Gr DATE: 10/08/96

No.	First Month	Operation	— Hours * —			Operating Costs (\$/Acre*)				Times	Tot. Cash		
			Machine	Labor	Fuel/Rps.	Labor	Cust/Ser.	Materials	Total		Expense	Class	
1	Feb	Irrigate		0.455		3.19			15.83	19.02	8.0	152.16	G
2	Mar	Irrigate/Run Herbicide		0.455		3.19			20.62	23.81	3.0	71.43	G
3	Feb	Rerun Borders	0.500	0.556	2.76	3.90				6.66	3.0	19.98	G
4	Mar	Swathing	0.180	0.200	2.46	1.40				3.86	8.0	30.89	H
5	Mar	Raking	0.150	0.167	1.41	1.40				2.81	8.0	22.45	H
6	Mar	Baling	0.150	0.167	3.64	1.40		3.45		8.49	8.0	67.92	H
7	Mar	Roadsiding	0.064	0.071	1.16	0.50				1.66	8.0	13.29	H
8	Jun	Irrigate		0.562		3.94			19.00	22.94	4.0	91.76	G
9	Oct	Renovate	0.180	0.200	1.16	1.68				2.84	0.1	0.28	G
10	Oct	Plant	0.225	0.250	2.15	2.10			55.13	59.38	0.1	5.94	L
		Pickup Use 40 Mi/Ac	1.330		10.25							10.25	O
		Operating Interest at 8.00%						0.17				0.17	O
TOTAL CASH OPERATING EXPENSES:						\$88.22	\$100.53	\$0.17	\$297.61			\$486.53	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 \$18.75/Acre included as ownership cost in Table 5B.

OPERATING COST SUMMARY BY CLASS		SENSITIVITY OF NET REVENUES OVER TOTAL CASH EXPENSES (\$/Acre)							
		Prices ->		-25%	-10%	Budgeted	+10%	+25%	
Land Preparation (L)	\$5.93								
Growing (G)	335.61								
Harvest (H)	134.55	Yields		\$61.50	\$73.80	\$82.00	\$90.20	\$102.50	Break-even
Post Harvest (P)	0.00								
Marketing (M)	0.00	-25%	5.5	-111.56	-43.29	2.21	47.72	115.98	81.60
Operating Overhead (O)	10.42	-10%	6.6	-63.48	18.43	73.04	127.65	209.57	71.03
		Budgeted	7.4	-31.42	59.59	120.27	180.95	271.97	65.74
Total (T)	\$486.52	+10%	8.1	0.62	100.74	167.49	234.24	334.36	61.42
		+25%	9.2	48.70	162.48	238.33	314.18	427.95	56.23
		Break-even Yield		8.12	6.32	5.51	4.88	4.17	

Table 5D. Resource and Cash Flow Requirements; Alfalfa Hay Production, 1996

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 AREA: Maricopa YIELD: 7.4 Tn/Acre PREVIOUS CROP: Alfalfa Hay w/Gr DATE: 10/08/96

Month *	Number Irrig.	Water Applied (Inches)	Total Labor (Hrs)	Operating Cost (\$/Acre)						
				Purchased Water	Fuel, Oil & Repairs	Labor	Chemicals	Other Purchases	Services	Total
FEB C	1.0	5.0	1.01	15.83	2.76	7.09				25.68
MAR C	1.0	5.0	1.06	15.83	8.67	7.90	4.79	3.45		40.64
APR C	2.0	10.0	1.51	31.66	8.67	11.09		3.45		54.86
MAY C	3.0	15.0	1.97	47.49	8.67	14.27	4.79	3.45		78.67
JUN C	2.0	12.0	2.28	38.00	11.43	16.48		3.45		69.36
JUL C	2.0	11.0	1.62	34.83	8.67	11.84	4.79	3.45		63.57
AUG C	1.0	6.0	1.16	19.00	8.67	8.65		3.45		39.77
SEP C	1.0	5.0	1.61	15.83	11.43	11.79		3.45		42.50
OCT C	1.0	5.0	1.10	15.83	9.00	8.28		8.96		42.07
NOV C	1.0	5.0	0.45	15.83		3.19				19.02
Pickup Use 40 Mi/Ac					10.25					10.25
Operating Interest at 8.0%									0.17	0.17
Water Assessment				**						
Total	15.0	79.0	13.80	250.13	88.22	100.56	14.37	33.11	0.17	486.56
%				51.40	18.13	20.66	2.95	6.80	0.03	100.00
TOTAL RESOURCES REQUIREMENTS (/Acre)				TOTAL ENERGY REQUIREMENTS (/Acre)						
Total N	0.0 lbs			Diesel Fuel			24.3	Gal		
Total P	0.0 lbs			Regular Gas			0.0	Gal		
Total K	0.0 lbs			NonLead Gas			4.0	Gal		
Total Labor	13.8 Hrs			All Direct Energy			3.8	M BTU		
Total Water	79.0 AI									
EQUIPMENT REQUIREMENTS (/Acre)										
Tractor, 70 PTO HP, MFWD			3.92 Hrs	Border Disk, 6' Disk		1.50 Hrs	Windrower, 14.0', HS, SC		1.44 Hrs	
Rake, 9.5' LH AND RH			1.20 Hrs	Baler, 3 wire w/motor		1.20 Hrs	Bale Wagon, SP PRC W/Squeeze		0.51 Hrs	
Tractor, 50 PTO HP, MFWD			0.02 Hrs	Spring Tooth Renovator, 16'		0.02 Hrs	Grain Drill, 16'		0.02 Hrs	
Pickup Truck, 1/2 Ton			1.33 Hrs							
MATERIALS REQUIREMENTS (/Acre)										
Water, District			79.00 AI	EPTC			4.20 Pt	Baling Wire (6500')		4.00 TF
Alfalfa Sd, Cert			2.50 Lb							
LABOR REQUIREMENTS (/Acre)										
Irrigators			8.92 Hrs	Harvest			2.17 Hrs	Tractor	2.72 Hrs	

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

** A water assessment charge of \$18.75/Acre included as ownership cost in Table 5B.

Table 5E. Schedule of Operations; Alfalfa Hay Production, 1996

COUNTY: Pinal FARM: Pinal County Farm WATER SOURCE: CAID TILLAGE: Conventional
 CROP: Alfalfa Hay w/Graze ACRES: 1.0 IRRIGATION SYSTEM: Flood Basin SOIL: Sandy-Loam
 AREA: Maricopa YIELD: 7.4 Tn/Acre PREVIOUS CROP: Alfalfa Hay w/Gr DATE: 10/08/96

No.	Month	First Times	Operation	Equipment/Custom Oper.		Job Rate Acres/Hr	Material Use & Cost			Service Cost \$/Unit	Labor \$/Unit	Type
				HP	Self-Prop./Implem.		Name	Appl. Rate	\$/Unit			
1	Feb	8.0	Irrigate			2.20	Water, District	5.00 AI	38.00 AF		Irrigator	
2	Mar	3.0	Irrigate/Run Herbicid			2.20	Water, District EPTC	5.00 AI 1.40 Pt	38.00 AF 26.08 Ga		Irrigator	
3	Feb	3.0	Rerun Borders	70	Border Disk, 6' Disk	1.80					Irrigator	
4	Mar	8.0	Swathing		Windrower, 14.0', HS, S	5.00					Harvest	
5	Mar	8.0	Raking	70	Rake, 9.5' LH AND RH	6.00					Tractor	
6	Mar	8.0	Baling	70	Baler, 3 wire w/motor	6.00	Baling Wire (6500)	0.50 TF	6.57 TF		Tractor	
7	Mar	8.0	Roadsiding		Bale Wagon, SP PRC W/Sq	14.00					Harvest	
8	Jun	4.0	Irrigate			1.78	Water, District	6.00 AI	38.00 AF		Irrigator	
9	Oct	0.1	Renovate	50	Spring Tooth Renovator,	5.00					Tractor	
10	Oct	0.1	Plant	70	Grain Drill, 16'	4.00	Alfalfa Sd, Cert	25.00 Lb	210.00 CW		Tractor	
			Pickup Use	40 Mi/Ac	Pickup Truck, 1/2 Ton	0.75						

* NOTE:

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

** A water assessment charge of \$18.75/Acre included as ownership cost in Table 5B.