

Table 5A. Income and Cash Operating Cost Summary, Alfalfa Hay w/ Sheep, 1996

COUNTY: Mohave FARM: Mohave County Farm WATER SOURCE: ColPum TILLAGE: Conventional
 CROP: Alfalfa Hay w/Graze ACRES: 1.0 IRRIGATION SYSTEM: Flood Basin SOIL: Sandy-Loam
 AREA: Mohave Valley YIELD: 7.0 Tn/Acre PREVIOUS CROP: Alfalfa Hay DATE: 10/03/96

Item	Unit	Quantity	Price /Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Alfalfa	Ton	7.00	\$82.0000	\$574.00		
Grazing	Head Days	200.00	0.0900	18.00	\$592.00	
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					21.37	
Tractor/Self Propelled				2.19		
Irrigation				19.18		
Chemicals & Custom Applications					196.21	
Fertilizers				86.98		
Insecticides				43.85		
Herbicides				65.38		
Farm Machinery and Vehicles					2.15	
Diesel Fuel				1.25		
Repairs & Maint.				0.91		
Irrigation (excluding labor)					21.33	
Pump Energy - Elect.				19.20		
Repairs & Maint.				2.13		
Other Purchased Inputs & Services					9.92	
Seed/Transplants				9.92		
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					250.98	
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					32.00	
Tractor/Self Propelled				5.36		
Other/Contract				26.64		
Farm Machinery and Vehicles					73.79	
Diesel Fuel				22.95		
Repairs & Maint.				50.84		
Other Materials					12.97	
TOTAL HARVEST AND POST HARVEST EXPENSE					118.75	
OPERATING OVERHEAD->PICKUP USE					15.27	
OPERATING INTEREST AT 8.0%					0.11	
TOTAL CASH OPERATING EXPENSES					\$385.11	
RETURNS OVER CASH OPERATING EXPENSES					\$206.89	

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

COUNTY: Mohave FARM: Mohave County Farm WATER SOURCE: ColPum TILLAGE: Conventional
 CROP: Alfalfa Hay w/Graze ACRES: 1.0 IRRIGATION SYSTEM: Flood Basin SOIL: Sandy-Loam
 AREA: Mohave Valley YIELD: 7.0 Tn/Acre PREVIOUS CROP: Alfalfa Hay DATE: 10/03/96

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	\$592.00		\$592.00	
TOTAL OPERATING EXPENSES	385.10		385.10	
RETURN OVER CASH OPERATING EXPENSES		\$206.89		\$206.89
CASH OVERHEAD EXPENSES				
Taxes, Housing & Insur., Farm Machinery	9.74		9.74	
Wells & Irrig. System	0.94		0.94	
Gen. & Off. Overhead (5% of Tot. Oper. Exp.)	19.25		19.25	
General Farm Maint. (3% of Tot. Oper. Exp.)	11.55		11.55	
Total Cash Overhead Expenses	<u>41.48</u>		<u>41.48</u>	
Total Cash Oper. & Over. Cost	426.59		426.59	
RETURN OVER CASH OPER. & OVER. EXPENSES.		165.40		165.40
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery & Vehicles			66.36	
Wells & Irrig. System			5.76	
Interest on Equity, Machinery & Vehicles			5.68	
Wells & Irrig. System			2.23	
Stand Establishment (3 Year Crop)	91.23		91.23	
Total Capital Allocations	91.23		<u>171.25</u>	
RETURN TO LAND, CAPITAL, MANAGEMENT & RISK		74.17		
RETURN TO LAND, MANAGEMENT & RISK				>(5.85)
LAND COSTS / OWNERSHIP (100% Equity)				
Property Taxes (\$510 X 16% X .10038)	8.19		8.19	
Opport. Inter. on Land (100% X 6.0% X \$510)			30.60	
Total Land Costs	<u>8.19</u>		<u>38.79</u>	
RETURN TO MANAGEMENT, CAPITAL & RISK		65.98		
RETURN TO MANAGEMENT & RISK				>(44.64)
Management Services (8% of Tot. Oper. Exp.)			30.80	
TOTAL OWNERSHIP COST	<u>140.90</u>		<u>282.34</u>	
TOTAL COST	<u>\$526.01</u>		<u>\$667.45</u>	
RETURN TO MANAGEMENT, CAPITAL & RISK		\$65.98		
RETURN TO RISK (PROFITS)				>(\$75.45)
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Tn)		\$52.44		\$52.44
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$20.12		\$40.33
BREAK-EVEN PRICE TO COVER TOTAL COST		\$72.57		\$92.77

Table 5C. Variable Operating Costs; Alfalfa Hay w/ Sheep, 1996

COUNTY: Mohave FARM: Mohave County Farm WATER SOURCE: ColPum TILLAGE: Conventional
 CROP: Alfalfa Hay w/Graze ACRES: 1.0 IRRIGATION SYSTEM: Flood Basin SOIL: Sandy-Loam
 AREA: Mohave Valley YIELD: 7.0 Tn/Acre PREVIOUS CROP: Alfalfa Hay DATE: 10/03/96

No.	First Month	Operation	— Hours * —		Operating Costs (\$/Acre*)				Total	Times	Tot. Cash Expense	Class
			Machine	Labor	Fuel/Rps.	Labor	Cust/Ser.	Materials				
1	Jan	Irrigate		0.161	1.25	1.13			2.38	10.0	23.80	G
2	Feb	Irrigate/Run Fertilizer		0.161	1.25	1.13		11.90	14.28	6.0	85.68	G
3	Apr	Swathing	0.180	0.200	2.54	1.40			3.94	7.0	27.59	H
4	Apr	Raking	0.129	0.143	1.58	1.00			2.58	7.0	18.09	H
5	Apr	Baling	0.180	0.200	4.95	1.40		1.85	8.20	7.0	57.39	H
6	Apr	Roadsiding	0.082	0.091	1.47	0.77			2.24	7.0	15.66	H
7	Apr	Apply Herbicide/Air						5.90	20.79	2.0	65.38	G
8	Apr	Apply Insecticide/Air						6.00	15.02	1.0	21.02	G
9	Jun	Irrigate/Run Fertilizer		0.161	1.25	1.13		15.56	17.94	1.0	17.94	G
10	Jul	Rerun Borders	0.090	0.100	0.76	0.84			1.60	1.0	1.60	G
11	Sep	Apply Insecticide/Air						8.32	3.09	2.0	22.82	G
12	Oct	Renovate	0.180	0.200	2.14	1.68			3.82	0.3	1.15	G
13	Oct	Plant	0.300	0.333	2.50	2.80		33.08	38.38	0.3	11.52	L
		Pickup Use 60 Mi/Ac	2.000		15.26						15.26	O
		Operating Interest at 8.00%						0.15			0.15	O
TOTAL CASH OPERATING EXPENSES:					\$112.46	\$53.38	\$46.59	\$172.61			\$385.05	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.

OPERATING COST SUMMARY BY CLASS		SENSITIVITY OF NET REVENUES OVER TOTAL CASH EXPENSES (\$/Acre)							
		Prices ->		-25%	-10%	Budgeted	+10%	+25%	
Land Preparation (L)	\$11.51								
Growing (G)	239.38								
Harvest (H)	118.73	Yields		\$61.50	\$73.80	\$82.00	\$90.20	\$102.50	Break-even
Post Harvest (P)	0.00								
Marketing (M)	0.00	-25%	5.2	-32.49	32.08	75.13	118.18	182.75	67.68
Operating Overhead (O)	15.41	-10%	6.3	14.27	91.76	143.42	195.08	272.57	59.23
		Budgeted	7.0	45.45	131.55	188.95	246.35	332.45	55.00
Total (T)	\$385.04	+10%	7.7	76.62	171.33	234.47	297.61	392.32	51.54
		+25%	8.7	123.39	231.01	302.76	374.51	482.14	47.39
		Break-even Yield		5.97	4.68	4.09	3.63	3.11	

Table 5D. Resource and Cash Flow Requirements; Alfalfa Hay w/ Sheep, 1996

COUNTY: Mohave FARM: Mohave County Farm WATER SOURCE: ColPum TILLAGE: Conventional
 CROP: Alfalfa Hay w/Graze ACRES: 1.0 IRRIGATION SYSTEM: Flood Basin SOIL: Sandy-Loam
 AREA: Mohave Valley YIELD: 7.0 Tn/Acre PREVIOUS CROP: Alfalfa Hay DATE: 10/03/96

Month *	Number Irrig.	Water Applied (Inches)	Total Labor (Hrs)	Operating Cost (\$/Acre)							
				Purchased Water	Fuel, Oil & Repairs	Labor	Chemicals	Other Purchases	Services	Total	
JAN C	1.0	5.0	0.16		1.25	1.13					2.38
FEB C	2.0	10.0	0.32		2.50	2.26	11.90				16.66
MAR C	1.0	5.0	0.16		1.25	1.13					2.38
APR C	2.0	10.0	0.95		13.04	6.83	35.81	1.85		11.50	69.03
MAY C	2.0	10.0	0.95		13.04	6.83		1.85			21.72
JUN C	2.0	10.0	0.95		13.04	6.83	48.25	1.85		5.50	75.47
JUL C	1.0	5.0	0.89		12.55	6.54	11.90	1.85			32.84
AUG C	2.0	10.0	0.95		13.04	6.83	23.81	1.85			45.53
SEP C	2.0	10.0	0.95		13.04	6.83	18.09	1.85		16.64	56.45
OCT C	1.0	5.0	0.95		13.19	7.04		11.77			32.00
NOV C	1.0	5.0	0.16		1.25	1.13					2.38
Pickup Use 60 Mi/Ac					15.26						15.26
Operating Interest at 8.0%										0.14	0.14
Total	17.0	85.0	7.43		112.46	53.36	149.76	22.89		33.78	372.25
%					30.21	14.33	40.23	6.14		9.07	100.00

TOTAL RESOURCES REQUIREMENTS (/Acre)		TOTAL ENERGY REQUIREMENTS (/Acre)	
Total N	223.8 lbs	Diesel Fuel	22.4 Gal
Total P	38.8 lbs	Regular Gas	0.0 Gal
Total K	0.0 lbs	NonLead Gas	6.0 Gal
Total Labor	7.4 Hrs	Electricity/Pumping	309.9 KWH
Total Water	85.0 AI	All Direct Energy	4.9 M BTU

EQUIPMENT REQUIREMENTS (/Acre)			
Windrower, 14.0', HS, SC	1.26 Hrs	Tractor, 100 PTO HP, MFWD	2.40 Hrs Rake, 9.5' LH AND RH 0.90 Hrs
Baler, 3 wire w/motor	1.26 Hrs	Bale Wagon, SP PRC	0.57 Hrs Border Disk, 6' Disk 0.09 Hrs
Offset Disk, 13.5'	0.05 Hrs	Seeder, Broadcast	0.09 Hrs Pickup Truck, 1/2 Ton 2.00 Hrs

MATERIALS REQUIREMENTS (/Acre)			
Water, Pump	85.00 AI	32-00-00, URAN 32, Lqd	60.00 Ga Twine, Plastic, 6500 ` 3.43 TF
Trifluralin	40.00 Lb	Disulfoton	2.00 Pt 10-34-00, Lqd 10.00 Ga
Methomyl	1.00 Pt	Alfalfa Sd, Cert	4.50 Lb

LABOR REQUIREMENTS (/Acre)			
Irrigators	2.74 Hrs	Harvest	3.80 Hrs Tractor 0.90 Hrs

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

Table 5E Schedule of Operations; Alfalfa Hay w/ Sheep, 1996

COUNTY: Mohave	FARM: Mohave County Farm	WATER SOURCE: ColPum	TILLAGE: Conventional
CROP: Alfalfa Hay w/Graze	ACRES: 1.0	IRRIGATION SYSTEM: Flood Basin	SOIL: Sandy-Loam
AREA: Mohave Valley	YIELD: 7.0 Tn/Acre	PREVIOUS CROP: Alfalfa Hay	DATE: 10/03/96

No.	First Month	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	Jan	10.0	Irrigate			6.20	Water, Pump	5.00 AI	3.01 AF		Irrigator	
2	Feb	6.0	Irrigate/Run Fertiliz			6.20	Water, Pump	5.00 AI	3.01 AF		Irrigator	
							32-00-00, URAN 32,	10.00 Ga	205.00 Tn			
3	Apr	7.0	Swathing		Windrower, 14.0', HS, S	5.00					Harvest	
4	Apr	7.0	Raking	100	Rake, 9.5' LH AND RH	7.00					Harvest	
5	Apr	7.0	Baling	100	Baler, 3 wire w/motor	5.00	Twine, Plastic, 65	0.49 TF	3.60 TF		Harvest	
6	Apr	7.0	Roadsiding		Bale Wagon, SP PRC	11.00					Tractor	
7	Apr	2.0	Apply Herbicide/Air		CST Air Apply Granules		Trifluralin	20.00 Lb	0.99 Lb	5.50 Ac		
8	Apr	1.0	Apply Insecticide/Air		CST Air Spray, 3 Gal Mi		Disulfoton	2.00 Pt	57.21 Ga	6.00 Ac		
9	Jun	1.0	Irrigate/Run Fertiliz			6.20	Water, Pump	5.00 AI	3.01 AF		Irrigator	
							10-34-00, Lqd	10.00 Ga	260.00 Tn			
10	Jul	1.0	Rerun Borders	100	Border Disk, 6' Disk	10.00					Tractor	
11	Sep	2.0	Apply Insecticide/Air		CST Air Spray, 5 Gal Mi		Methomyl	0.50 Pt	47.16 Ga	8.32 Ac		
12	Oct	0.3	Renovate	100	Offset Disk, 13.5'	5.00					Tractor	
13	Oct	0.3	Plant	100	Seeder, Broadcast	3.00	Alfalfa Sd, Cert	15.00 Lb	210.00 CW		Tractor	
			Pickup Use 60 Mi/Ac		Pickup Truck, 1/2 Ton	0.50						

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