

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

COUNTY: Maricopa                      FARM: Maricopa County Farm                      WATER SOURCE: SRP                      TILLAGE: Conventional  
 CROP: Alfalfa Hay w/Graze              ACRES: 1.0                      IRRIGATION SYSTEM: Flood Basin              SOIL: Sandy-Loam  
 AREA: Salt River Project              YIELD: 7.7 Tn/Acre                      PREVIOUS CROP: Alfalfa Hay              DATE: 09/23/96

Item	Unit	Quantity	Price /Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Alfalfa	Ton	7.70	\$82.0000	\$631.40	\$631.40	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					31.54	_____
Irrigation				31.54		_____
Chemicals & Custom Applications					54.71	_____
Insecticides				25.96		_____
Herbicides				28.75		_____
Farm Machinery and Vehicles					0.00	_____
Irrigation Water (excluding labor)					112.50	_____
Water Assessment (See Note Below) **					**	_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					198.75	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					31.54	_____
Tractor/Self Propelled				18.25		_____
Other/Contract				13.29		_____
Farm Machinery and Vehicles					56.80	_____
Diesel Fuel				14.63		_____
Repairs & Maint.				42.17		_____
Other Materials					12.97	_____
TOTAL HARVEST AND POST HARVEST EXPENSE					101.31	_____
OPERATING OVERHEAD->PICKUP USE					9.91	_____
OPERATING INTEREST AT 8.0%					0.48	_____
TOTAL CASH OPERATING EXPENSES					\$310.44	=====
RETURNS OVER CASH OPERATING EXPENSES					\$320.96	=====

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

\*\* A water assessment charge of \$20.34/Acre is included in the ownership costs of Table 5B.

Table 5B. Allocation of Ownership Costs; Alfalfa Hay Production, 1996

COUNTY: Maricopa                      FARM: Maricopa County Farm                      WATER SOURCE: SRP                      TILLAGE: Conventional  
 CROP: Alfalfa Hay w/Graze          ACRES: 1.0                      IRRIGATION SYSTEM: Flood Basin          SOIL: Sandy-Loam  
 AREA: Salt River Project          YIELD: 7.7 Tn/Acre              PREVIOUS CROP: Alfalfa Hay              DATE: 09/23/96

Item	- CASH COST BASIS (\$/ACRE) -		- TOTAL COST BASIS (\$/ACRE) -	
	Income & Costs	Net Returns	Income & Costs	Net Returns
TOTAL INCOME at \$ 82.0000/Tn	\$631.40		\$631.40	
TOTAL OPERATING EXPENSES	310.44		310.44	
RETURN OVER CASH OPERATING EXPENSES		\$320.95		\$320.95
CASH OVERHEAD EXPENSES				
Taxes, Housing & Insur., Farm Machinery	8.11		8.11	
Gen. & Off. Overhead ( 5% of Tot. Oper. Exp.)	15.52		15.52	
General Farm Maint. ( 3% of Tot. Oper. Exp.)	9.31		9.31	
Total Cash Overhead Expenses	<u>32.94</u>		<u>32.94</u>	
Total Cash Oper. & Over. Cost	343.38		343.38	
RETURNS OVER CASH OPER. & OVER. EXPENSES.		288.01		288.01
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery & Vehicles			55.55	
Interest on Equity, Machinery & Vehicles			3.48	
Stand Establishment ( 3 Year Crop)	106.44		106.44	
Total Capital Allocations	<u>106.44</u>		<u>165.46</u>	
RETURNS TO LAND, CAPITAL, MANAGEMENT & RISK		181.57		
RETURNS TO LAND, MANAGEMENT & RISK				122.54
LAND COSTS / OWNERSHIP (100% Equity)				
Property Taxes (\$702 X 16% X .12601)	14.15		14.15	
Opport. Inter. on Land (100% X 6.0% X \$702)			42.12	
Water Assessment **	20.34		20.34	
Total Land Costs	<u>34.49</u>		<u>76.61</u>	
RETURNS TO MANAGEMENT, CAPITAL & RISK		147.08		
RETURNS TO MANAGEMENT & RISK				45.93
Management Services ( 8% of Tot. Oper. Exp.)			24.83	
TOTAL OWNERSHIP COST	<u>173.87</u>		<u>299.85</u>	
TOTAL COST	<u>\$484.31</u>		<u>\$610.30</u>	
RETURN TO MANAGEMENT, CAPITAL & RISK		\$147.08		
RETURN TO RISK (PROFITS)				\$21.09
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Tn)		\$40.31		\$40.31
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$22.58		\$38.94
BREAK-EVEN PRICE TO COVER TOTAL COST		\$62.89		\$79.25

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

COUNTY: Maricopa FARM: Maricopa County Farm WATER SOURCE: SRP TILLAGE: Conventional  
 CROP: Alfalfa Hay w/Graze ACRES: 1.0 IRRIGATION SYSTEM: Flood Basin SOIL: Sandy-Loam  
 AREA: Salt River Project YIELD: 7.7 Tn/Acre PREVIOUS CROP: Alfalfa Hay DATE: 09/23/96

No.	First Month	Operation	— Hours * —		Operating Costs (\$/Acre*)				Total	Times	Tot. Cash Expense	Class
			Machine	Labor	Fuel/Rps.	Labor	Cust/Ser.	Materials				
1	Jan	Apply Insecticide/Air					6.00	7.51	13.51	1.0	13.51	G
2	Feb	Irrigate		0.300		2.10		2.78	4.88	9.0	43.92	G
3	Mar	Irrigate/Run Herbicide		0.300		2.10		19.37	21.47	6.0	128.82	G
4	Apr	Apply Insecticide/Air					6.00	6.45	12.45	1.0	12.45	G
5	Apr	Swathing	0.180	0.200	2.41	1.40			3.81	7.0	26.68	H
6	Apr	Raking	0.150	0.167	1.47	1.40			2.87	7.0	20.08	H
7	Apr	Baling	0.129	0.143	3.16	1.20		1.85	6.21	7.0	43.46	H
8	Apr	Roadsiding	0.064	0.071	1.08	0.50			1.58	7.0	11.03	H
		Pickup Use 40 Mi/Ac	1.330		9.90						9.90	O
		Operating Interest at 8.00%					0.48				0.48	O
TOTAL CASH OPERATING EXPENSES:					\$66.71	\$63.00	\$12.48	\$168.15			\$310.34	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 \$20.34/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)	\$0.00								
Growing (G)	198.70								
Harvest (H)	101.25	Yields		\$61.50	\$73.80	\$82.00	\$90.20	\$102.50	Break-even
Post Harvest (P)	0.00								
Marketing (M)	0.00	-25%	5.7	70.13	141.17	188.52	235.88	306.91	49.35
Operating Overhead (O)	10.38	-10%	6.9	125.98	211.22	268.04	324.87	410.11	43.32
		Budgeted	7.7	163.21	257.92	321.06	384.20	478.91	40.30
Total (T)	\$310.33	+10%	8.4	200.44	304.62	374.07	443.53	547.71	37.83
		+25%	9.6	256.28	374.67	453.59	532.52	650.91	34.87
		Break-even Yield		4.32	3.44	3.03	2.71	2.34	

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

COUNTY: Maricopa FARM: Maricopa County Farm WATER SOURCE: SRP TILLAGE: Conventional  
 CROP: Alfalfa Hay w/Graze ACRES: 1.0 IRRIGATION SYSTEM: Flood Basin SOIL: Sandy-Loam  
 AREA: Salt River Project YIELD: 7.7 Tn/Acre PREVIOUS CROP: Alfalfa Hay DATE: 09/23/96

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							7.51		6.00	13.51
FEB C	1.0	6.0	0.30			2.10				2.10
MAR C	1.0	6.0	0.30			2.10	4.79			6.89
APR C	2.0	12.0	1.18		8.11	8.71	11.24	1.85	6.00	35.92
MAY C	1.0	6.0	0.88	5.00	8.11	6.61		1.85		21.58
JUN C	2.0	12.0	1.18	10.00	8.11	8.71	4.79	1.85		33.47
JUL C	2.0	12.0	1.18	10.00	8.11	8.71	4.79	1.85		33.47
AUG C	1.0	6.0	0.88	5.00	8.11	6.61		1.85		21.58
SEP C	2.0	12.0	1.18	33.00	8.11	8.71	4.79	1.85		56.47
OCT C	2.0	12.0	1.18	33.00	8.11	8.71	4.79	1.85		56.47
NOV C	1.0	6.0	0.30	16.50		2.10				18.60
Pickup Use 40 Mi/Ac					9.90					9.90
Operating Interest at 8.0%									0.34	0.34
Water Assessment				**						
<b>Total</b>	<b>15.0</b>	<b>90.0</b>	<b>8.56</b>	<b>112.50</b>	<b>66.71</b>	<b>63.08</b>	<b>42.70</b>	<b>12.97</b>	<b>12.34</b>	<b>310.30</b>
<b>%</b>				<b>36.25</b>	<b>21.49</b>	<b>20.32</b>	<b>13.76</b>	<b>4.17</b>	<b>3.97</b>	<b>100.00</b>
<b>TOTAL RESOURCES REQUIREMENTS (/Acre)</b>			<b>TOTAL ENERGY REQUIREMENTS (/Acre)</b>							
Total N	0.0 lbs		Diesel Fuel		16.7	Gal				
Total P	0.0 lbs		Regular Gas		0.0	Gal				
Total K	0.0 lbs		NonLead Gas		4.0	Gal				
Total Labor	8.5 Hrs		All Direct Energy		2.8	M BTU				
Total Water	90.0 AI									
<b>EQUIPMENT REQUIREMENTS (/Acre)</b>										
Windrower, 14.0', HS, SC			1.26 Hrs	Tractor, 80 PTO HP, MFWD	1.95 Hrs		Rake, 9.5' LH AND RH	1.05 Hrs		
Baler, 3 wire w/motor			0.90 Hrs	Bale Wagon, SP PRC	0.45 Hrs		Pickup Truck, 1/2 Ton	1.33 Hrs		
<b>MATERIALS REQUIREMENTS (/Acre)</b>										
Disulfoton			1.00 Pt	Water, District	90.00 AI		EPTC	8.40 Pt		
Dimethoate			1.50 Pt	Twine, Plastic, 6500 '	3.43 TF					
<b>LABOR REQUIREMENTS (/Acre)</b>										
Irrigators			4.50 Hrs	Harvest	1.90 Hrs		Tractor	2.17 Hrs		

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

\*\* A water assessment charge of \$20.34/Acre included as ownership cost in Table 5B.

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

COUNTY: Maricopa FARM: Maricopa County Farm WATER SOURCE: SRP TILLAGE: Conventional  
 CROP: Alfalfa Hay w/Graze ACRES: 1.0 IRRIGATION SYSTEM: Flood Basin SOIL: Sandy-Loam  
 AREA: Salt River Project YIELD: 7.7 Tn/Acre PREVIOUS CROP: Alfalfa Hay DATE: 09/23/96

No.	First Month	Times	Operation	Equipment/Custom Oper.		Job Rate Acres/Hr	Material Use & Cost			Service Cost \$/Unit	Labor Type
				HP	Self-Prop./Implem.		Name	Appl. Rate	\$/Unit		
1	Jan	1.0	Apply Insecticide/Air	CST	Air Spray, 3 Gal Mi		Disulfoton	1.00 Pt	57.21 Ga	6.00 Ac	
2	Feb	9.0	Irrigate			3.33	Water, District	6.00 AI	0.00 AF		Irrigator
3	Mar	6.0	Irrigate/Run Herbicid			3.33	Water, District	6.00 AI	0.00 AF		Irrigator
							EPTC	1.40 Pt	26.08 Ga		
4	Apr	1.0	Apply Insecticide/Air	CST	Air Spray, 3 Gal Mi		Dimethoate	1.50 Pt	32.75 Ga	6.00 Ac	
5	Apr	7.0	Swathing		Windrower, 14.0', HS, S	5.00					Harvest
6	Apr	7.0	Raking	80	Rake, 9.5' LH AND RH	6.00					Tractor
7	Apr	7.0	Baling	80	Baler, 3 wire w/motor	7.00	Twine, Plastic, 65	0.49 TF	3.60 TF		Tractor
8	Apr	7.0	Roadsiding		Bale Wagon, SP PRC	14.10					Harvest
			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 \$20.34/Acre included as ownership cost in Table 5B.

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