

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

COUNTY: Yuma FARM: Yuma County Farm WATER SOURCE: YCWUA TILLAGE: Conventional  
 CROP: Alfalfa Hay w/Graze ACRES: 1.0 IRRIGATION SYSTEM: Flood Basin SOIL: Sandy-Loam  
 AREA: Yuma Valley North YIELD: 8.6 Tn/Acre PREVIOUS CROP: Wheat, Winter DATE: 09/25/96

Item	Unit	Quantity	Price /Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Alfalfa	Ton	8.60	\$82.0000	\$705.20		
Grazing	Head Days	200.00	0.0900	18.00	\$723.20	
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					38.08	
Tractor/Self Propelled				6.25		
Irrigation				31.83		
Chemicals & Custom Applications					48.87	
Fertilizers				14.96		
Insecticides				23.51		
Herbicides				10.40		
Farm Machinery and Vehicles					4.90	
Diesel Fuel				2.15		
Repairs & Maint.				2.74		
Irrigation Water (excluding labor)					25.81	
Water Assessment (See Note Below) **					**	
Other Purchased Inputs & Services					13.23	
Seed/Transplants				13.23		
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					130.88	
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					33.74	
Tractor/Self Propelled				16.65		
Other/Contract				17.09		
Farm Machinery and Vehicles					64.11	
Diesel Fuel				15.51		
Repairs & Maint.				48.60		
Other Materials					27.32	
TOTAL HARVEST AND POST HARVEST EXPENSE					125.17	
OPERATING OVERHEAD->PICKUP USE					10.41	
OPERATING INTEREST AT 8.0%					1.32	
TOTAL CASH OPERATING EXPENSES					\$267.78	
RETURNS OVER CASH OPERATING EXPENSES					\$455.42	

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

\*\* A water assessment charge of \$62.00/Acre is included in the ownership costs of Table 5B.

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

COUNTY: Yuma FARM: Yuma County Farm WATER SOURCE: YCWUA TILLAGE: Conventional  
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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	\$723.20		\$723.20	
TOTAL OPERATING EXPENSES	267.78		267.78	
RETURN OVER CASH OPERATING EXPENSES		\$455.41		\$455.41
CASH OVERHEAD EXPENSES				
Taxes, Housing & Insur., Farm Machinery	9.84		9.84	
Gen. & Off. Overhead ( 5% of Tot. Oper. Exp.)	13.38		13.38	
General Farm Maint. ( 3% of Tot. Oper. Exp.)	8.03		8.03	
Total Cash Overhead Expenses	31.25		31.25	
Total Cash Oper. & Over. Cost	299.04		299.04	
RETURNS OVER CASH OPER. & OVER. EXPENSES.		424.15		424.15
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery & Vehicles			67.79	
Interest on Equity, Machinery & Vehicles			5.31	
Stand Establishment ( 3 Year Crop)	135.24		135.24	
Total Capital Allocations	135.24		208.33	
RETURNS TO LAND, CAPITAL, MANAGEMENT & RISK ----->		288.91		
RETURNS TO LAND, MANAGEMENT & RISK ----->				215.82
LAND COSTS / OWNERSHIP (100% Equity)				
Property Taxes (\$780 X 16% X .13076)	16.31		16.31	
Opport. Inter. on Land (100% X 6.0% X \$780)			46.80	
Water Assessment **	62.00		62.00	
Total Land Costs	78.31		125.11	
RETURNS TO MANAGEMENT, CAPITAL & RISK ----->		210.59		
RETURNS TO MANAGEMENT & RISK ----->				90.70
Management Services ( 8% of Tot. Oper. Exp.)			21.42	
TOTAL OWNERSHIP COST	244.81		386.13	
TOTAL COST	\$512.60		\$653.91	
RETURN TO MANAGEMENT, CAPITAL & RISK ----->		\$210.59		
RETURN TO RISK (PROFITS) ----->				\$69.28
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Tn)		\$29.04		\$29.04
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$28.46		\$44.89
BREAK-EVEN PRICE TO COVER TOTAL COST		\$57.51		\$73.94

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No.	First Month	Operation	Hours * --		Operating Costs (\$/Acre*)					Tot. Cash Expense	Class	
			Machine	Labor	Fuel/Rps.	Labor	Cust/Ser.	Materials	Total			Times
1	Jan	Irrigate		0.267		1.87		1.29	3.16	16.0	50.56	G
2	Feb	Rerun Borders	0.090	0.100	0.51	0.84			1.35	4.0	5.41	G
3	Jan	Swathing	0.180	0.200	2.45	1.40			3.85	9.0	34.64	H
4	Jan	Raking	0.069	0.077	0.64	0.65			1.29	9.0	11.63	H
5	Jan	Baling	0.129	0.143	2.94	1.20		3.04	7.18	9.0	64.59	H
6	Jan	Roadsiding	0.064	0.071	1.10	0.50			1.60	9.0	14.36	H
7	Feb	Apply Herbicide/Ground	0.150	0.167	1.50	1.40		10.40	13.30	1.0	13.30	G
8	Feb	Apply Insecticide/Air						6.00	2.70	1.0	8.70	G
9	Aug	Apply Insecticide/Air						6.00	8.81	1.0	14.81	G
10	Sep	Irrigate/Run Fertilizer		0.270		1.89		20.13	22.02	1.0	22.02	G
11	Oct	Renovate	0.196	0.219	1.52	1.84			3.36	0.3	1.01	G
12	Oct	Plant	0.330	0.367	2.95	3.09		44.10	50.14	0.3	15.04	L
		Pickup Use 40 Mi/Ac	1.330		10.40						10.40	O
		Operating Interest at 8.00%						1.32			1.32	O
TOTAL CASH OPERATING EXPENSES:					\$79.42	\$71.80	\$13.32	\$103.27			\$267.80	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 \$62.00/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)	\$15.04							
Growing (G)	115.81							
Harvest (H)	125.21	Yields	\$61.50	\$73.80	\$82.00	\$90.20	\$102.50	Break-even
Post Harvest (P)	0.00							
Marketing (M)	0.00	-25%	6.4	160.17	239.51	292.40	345.29	424.62
Operating Overhead (O)	11.72	-10%	7.7	220.72	315.92	379.39	442.86	538.06
Total (T)	\$267.80	Budgeted	8.6	261.09	366.87	437.39	507.91	613.69
		+10%	9.4	301.46	417.82	495.39	572.96	689.32
		+25%	10.7	362.01	494.24	582.39	670.54	802.76
		Break-even Yield		3.03	2.40	2.11	1.88	1.62

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

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Month *	Number Irrig.	Water Applied (Inches)	Total Labor (Hrs)	Operating Cost (\$/Acre)						Total
				Purchased Water	Fuel, Oil & Repairs	Labor	Chemicals	Other Purchases	Services	
JAN C	1.0	5.0	0.75		7.12	5.62		3.04		15.78
FEB C	1.0	5.0	0.53		2.02	4.12	11.75		3.00	20.88
MAR C	1.0	5.0	0.75		7.12	5.62	1.35	3.04	3.00	20.13
APR C	2.0	10.0	1.02		7.12	7.49		3.04		17.65
MAY C	2.0	10.0	1.12		7.64	8.33		3.04		19.00
JUN C	2.0	10.0	1.02		7.12	7.49		3.04		17.65
JUL C	2.0	10.0	1.12		7.64	8.33		3.04		19.00
AUG C	1.0	5.0	0.75		7.12	5.62	8.81	3.04	6.00	30.59
SEP C	2.0	10.0	1.12	10.34	7.64	8.35	14.96	3.04		44.33
OCT C	1.0	5.0	0.26	5.17		1.87				7.04
NOV C	1.0	5.0	0.93	5.17	8.47	7.10		16.27		37.00
DEC C	1.0	5.0	0.26	5.17		1.87				7.04
Pickup Use 40 Mi/Ac					10.40					10.40
Operating Interest at 8.0%									1.22	1.22
Water Assessment				**						
<b>Total</b>	<b>17.0</b>	<b>85.0</b>	<b>9.70</b>	<b>25.85</b>	<b>79.42</b>	<b>71.82</b>	<b>36.87</b>	<b>40.55</b>	<b>13.22</b>	<b>267.73</b>
<b>%</b>				<b>9.65</b>	<b>29.66</b>	<b>26.82</b>	<b>13.77</b>	<b>15.14</b>	<b>4.93</b>	<b>100.00</b>
<b>TOTAL RESOURCES REQUIREMENTS(/Acre)</b>				<b>TOTAL ENERGY REQUIREMENTS(/Acre)</b>						
Total N	5.0 lbs			Diesel Fuel	18.9	Gal				
Total P	26.0 lbs			Regular Gas	0.0	Gal				
Total K	0.0 lbs			NonLead Gas	4.0	Gal				
Total Labor	9.7 Hrs									
Total Water	85.0 AI			All Direct Energy	3.1	M BTU				
<b>EQUIPMENT REQUIREMENTS(/Acre)</b>										
Windrower, 14.0', HS, SC			1.62 Hrs	Tractor, 70 PTO HP, MFWD		1.29 Hrs	Rake, 9.5' LH AND RH			0.62 Hrs
Tractor, 50 PTO HP, MFWD			1.16 Hrs	Baler, 3 wire w/motor		1.16 Hrs	Bale Wagon, SP PRC			0.58 Hrs
Border Disk, Heavy Duty			0.36 Hrs	Fertilizer Spreader, 18'		0.15 Hrs	Spring Tooth Revovator, 16'			0.06 Hrs
Grain Drill, 12'			0.10 Hrs	Pickup Truck, 1/2 Ton		1.33 Hrs				
<b>MATERIALS REQUIREMENTS(/Acre)</b>										
Water, District			85.00 AI	Baling Wire (6500')		3.96 TF	Trifluralin			10.00 Lb
Malathion			1.00 Pt	Chlorpyrifos		1.50 Pt	05-26-00-08, Phosfuric			10.00 Ga
Alfalfa Sd, Cert			6.00 Lb							
<b>LABOR REQUIREMENTS(/Acre)</b>										
Irrigators			4.54 Hrs	Harvest		2.44 Hrs	Tractor			2.72 Hrs

\* NOTE: P = Previous Year C = Current Year N = Next Year  
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No.	Month	First 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	16.0	Irrigate			3.70	Water, District	5.00 AI	0.00 AF		Irrigator
2	Feb	4.0	Rerun Borders	70	Border Disk, Heavy Duty	10.00					Tractor
3	Jan	9.0	Swathing		Windrower, 14.0', HS, S	5.00					Harvest
4	Jan	9.0	Raking	70	Rake, 9.5' LH AND RH	13.00					Tractor
5	Jan	9.0	Baling	50	Baler, 3 wire w/motor	7.00	Baling Wire (6500	0.44 TF	6.57 TF		Tractor
6	Jan	9.0	Roadsiding		Bale Wagon, SP PRC	14.10					Harvest
7	Feb	1.0	Apply Herbicide/Groun	70	Fertilizer Spreader, 18	6.00	Trifluralin	10.00 Lb	0.99 Lb		Tractor
8	Feb	1.0	Apply Insecticide/Air		CST Air Spray, 3 Gal Mi		Malathion	1.00 Pt	20.60 Ga	6.00 Ac	
9	Aug	1.0	Apply Insecticide/Air		CST Air Spray, 3 Gal Mi		Chlorpyrifos	1.50 Pt	44.73 Ga	6.00 Ac	
10	Sep	1.0	Irrigate/Run Fertiliz			3.70	05-26-00-08, Phosf	10.00 Ga	285.00 Tn		Irrigator
							Water, District	5.00 AI	0.00 AF		
11	Oct	0.3	Renovate	70	Spring Tooth Revovator,	4.60					Tractor
12	Oct	0.3	Plant	70	Grain Drill, 12'	2.70	Alfalfa Sd, Cert	20.00 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.

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