

Table 5A. Income and Cash Operating Summary; Sudan Hay, 1998

COUNTY: Mohave FARM: Mohave County 98 WATER SOURCE: Colorado River Pump, TILLAGE: Conventional
 CROP: Sudan Hay ACRES: 1.0 IRRIGATION SYSTEM: Flood Basin SOIL: Sandy-Loam
 AREA: Mohave Valley YIELD: 5.0 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 2/3/99

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME Hay	Ton	5.00	\$115.00	\$575.00	\$575.00	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					38.75	_____
Tractor/Self Propelled				20.55		_____
Irrigation				18.20		_____
Chemicals and Custom Applications					183.09	_____
Fertilizer				183.09		_____
Farm Machinery and Vehicles					27.72	_____
Diesel Fuel				12.11		_____
Repairs and Maintenance				15.61		_____
Irrigation Water (excluding labor)					8.38	_____
Pump Energy - Electric				7.48		_____
Repairs and Maintenance				0.90		_____
Other Purchased Inputs & Seed/Transplants				15.75	15.75	_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					273.69	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					21.74	_____
Tractor/Self Propelled				9.01		_____
Other/Contract				12.73		_____
Farm Machinery and Vehicles					66.29	_____
Diesel Fuel				11.11		_____
Repairs and Maintenance				55.19		_____
Other Materials					13.52	_____
TOTAL HARVEST AND POST HARVEST EXPENSE					101.55	_____
OPERATING OVERHEAD PICKUP USE					7.56	_____
OPERATING INTEREST AT 10.0%					40.79	_____
TOTAL CASH OPERATING EXPENSES					\$423.59	_____
RETURNS OVER CASH OPERATING EXPENSES					\$151.41	_____

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

Table 5B. Allocations of Ownership Costs; Sudan Hay, 1998

COUNTY: Mohave FARM: Mohave County 98 WATER SOURCE: Colorado River Pump, TILLAGE: Conventional
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Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$115.00 / Tn	\$575.00		\$575.00	
TOTAL OPERATING EXPENSES	\$423.59		\$423.59	
RETURN OVER CASH OPERATING EXPENSES		\$151.41		\$151.41
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	9.82		9.82	
Wells and Irrigation System	0.41		0.41	
General and Office Overhead (5.0% of Total Operating Exp.)	21.18		21.18	
General Farm Maintenance (3.0% of Total Operating Exp.)	12.71		12.71	
Total Cash Overhead Expenses	44.12		44.12	
Total Cash Operating and Overhead Cost	467.71		467.71	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$107.29		\$107.29
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			61.52	
Wells and Irrigation System			2.49	
Interest on Equity, Machinery and Vehicles			14.21	
Wells and Irrigation System			0.96	
Total Capital Allocations			79.18	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$107.29		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$28.11
Land Cost / Ownership (100% Equity)				
Property Taxes (\$510.00 X 16.0% X 0.102)	8.37		8.37	
Opportunity Interest on Land (100% X 6.0 X \$510.00)			30.60	
Total Land Costs	8.37		38.97	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$98.92		
RETURNS TO MANAGEMENT AND RISK ----->				(\$10.86)
Management Services (8% of Total Operation Expenses)			33.89	
TOTAL OWNERSHIP COST	52.49		196.15	
TOTAL COST	\$476.08		\$619.75	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		\$98.92		
RETURNS TO RISK (PROFITS) ----->				(\$44.75)
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb)		\$84.72		\$84.72
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$10.50		\$39.23
BREAK-EVEN PRICE TO COVER TOTAL COST		\$95.22		\$123.95

Table 5C. Variable Operating Costs; Sudan Hay, 1998

COUNTY: Mohave FARM: Mohave County 98 WATER SOURCE: Colorado River Pump, TILLAGE: Conventional
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 AREA: Mohave Valley YIELD: 5.0 Tn / Acre PREVIOUS CROP: Wheat, Winter DATE: 2/3/99

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	Mar	Disk	0.360	0.400	5.44	3.39			8.83	2.0	17.66	L
2	Apr	Landplane	0.900	1.000	11.46	8.47			19.93	1.0	19.93	L
3	Apr	Disk Ends	0.011	0.013	0.11	0.11			0.22	1.0	0.22	G
4	Apr	Make Borders	0.023	0.024	0.18	0.20			0.38	1.0	0.38	G
5	Apr	Block Borders	0.011	0.013	0.08	0.11			0.19	1.0	0.19	G
6	Apr	Apply Fert/Ground	0.113	0.125	0.73	1.06	22.36		24.15	1.0	24.15	G
7	Apr	Disk	0.225	0.250	2.51	2.12			4.63	1.0	4.63	L
8	Apr	Plant	0.180	0.200	1.77	1.69	15.75		19.22	1.0	19.22	L
9	May	Irrigate		0.286	0.93	2.02			2.95	5.0	14.77	G
10	Jul	Irrigate/Run Fertilizer		0.286	0.93	2.02	40.18		43.13	4.0	172.54	G
11	Aug	Swathing	0.150	0.167	2.26	1.18			3.44	4.0	13.77	H
12	Aug	Crimping	0.180	0.200	1.36	1.41			2.78	4.0	11.12	H
13	Aug	Baling	0.180	0.200	5.46	1.69	3.38		10.54	4.0	42.14	H
14	Aug	Roadsiding	0.075	0.083	6.59	0.59			7.18	4.0	28.72	H
15	Oct	Residue Disposal	0.237	0.263	3.58	2.23			5.81	1.0	5.81	P
		Pickup Use30 Mi/Acre	1.000		7.56						7.56	
		Operating Interest at 10.0					40.79				40.79	
TOTAL CASH OPERATING EXPENSES (includes all times over):											423.59	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

Land Preparation (L)	61.44
Growing (G)	212.25
Harvest (H)	95.74
Post Harvest (P)	5.81
Marketing (M)	0.00
Operating Overhead (O)	48.35
Total (T)	423.59

SENSITIVITY OF THE NET REVENUES OVER TOTAL CASH EXPENSES (\$/ACRE)

		Prices	- 25%	- 10%	Budgeted	+ 10%	+ 25%	
Yields			\$86.25	\$103.50	\$115.00	\$126.50	\$143.75	Break-even Price
- 25%	3.8		-51.57	13.12	56.24	99.37	164.05	100.00
- 10%	4.5		-2.12	75.51	127.26	179.01	256.63	86.72
Budgeted	5.0		30.85	117.10	174.60	232.10	318.35	80.08
+ 10%	5.5		63.82	158.70	221.95	285.20	380.07	74.65
+ 25%	6.3		113.28	221.09	292.97	364.84	472.65	68.13
Break-even Yield			4.53	3.59	3.16	2.81	2.42	

Table 5D. Resource and Cash Flow Requirements; Sudan Hay, 1998

COUNTY: Mohave FARM: Mohave County 98 WATER SOURCE: Colorado River Pump, TILLAGE: Conventional
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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
MAR C			0.40		5.44	3.39				8.83
APR C			2.03		22.28	17.16	22.36	15.75		77.55
MAY C	1.0	4.0	0.29		0.93	2.02				2.95
JUN C	1.0	4.0	0.29		0.93	2.02				2.95
JUL C	3.0	12.0	0.86		2.79	6.07	80.36			89.22
AUG C	2.0	8.0	1.87		33.22	13.80	40.18	6.76		93.96
SEP C	2.0	8.0	1.22		17.54	8.92	40.18	3.38		70.02
OCT C			0.91		19.26	7.11		3.38		29.75
Pickup Use30 Mi/Acre					7.56					7.56
Operating Interest at 10.0								40.79		40.79
Total	9.0	36.0	7.86		109.96	60.49	183.09	29.27	40.79	423.59
%					25.96	14.28	43.22	6.91	9.63	100.00

TOTAL RESOURCE REQUIREMENTS (per Acre)

Total N 582.8
 Total P 78.0
 Total K 0.0
 Total Labor 7.9
 Total Water 36.0

TOTAL ENERGY REQUIREMENTS (per Acre)

Diesel Fuel 27.8 Gal
 Unleaded Gas 3.0 Gal
 Electric / Pumping 131.3 KWH
 All Direct Energy 4.7 M BTU

EQUIPMENT REQUIREMENTS (per Acre)

Bale Wagon, SP PRC 0.30 Hr	Baler, 3 wire w/motor 0.72 Hr	Blade Scraper, 10' 0.03 Hr
Dbl. Offset Disk, 13' 0.24 Hr	Fertilizer Broadcaster, 0.11 Hr	Hay Crimper 0.72 Hr
Landplane 12'X 45' 0.90 Hr	Offset Disk, 16.5' 0.96 Hr	Pickup Truck, 1/2 Ton 1.00 Hr
Seeder, Brillion 0.18 Hr	Tractor, 80 PTO HP, 1.02 Hr	Tractor, 100 PTO HP, 0.98 Hr
Tractor, 150 PTO HP, 1.86 Hr	Windrower, 14.0', HS, SC 0.60 Hr	

MATERIALS REQUIREMENT (per Acre)

11-52-00, Dry 150.00 Lb	32-00-00, URAN 32, Lqd 160.00 Ga	Baling Twine (6500') 1.96 TF
Sudan Grass Sd 30.00 Lb	Water, Pump 36.00 AI	

LABOR REQUIREMENT (per Acre)

Harvest 1.80 Hr	Irrigators 2.57 Hr	Tractor 3.49 Hr
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*NOTE: P = Previous Year C = Current Year N = Next Year

Table 5E. Schedule of Operations; Sudan Hay, 1998

COUNTY: Mohave FARM: Mohave County 98 WATER SOURCE: Colorado River Pump, TILLAGE: Conventional
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First No.	Month	Times	Operation	Equipment/ Custom Oper		Job Rate Acres/Hr	Material Use and Cost				Service Cost \$ / Unit	Labor Type
				HP	Self-Prop./ Implement		Name	Appl. Rate	\$ / Unit			
1	Mar	2.0	Disk	150	Offset Disk, 16.5'	2.50						Tractor
2	Apr	1.0	Landplane	150	Landplane 12'X 45'	1.00						Tractor
3	Apr	1.0	Disk Ends	80	Dbl. Offset Disk, 13'	80.00						Tractor
4	Apr	1.0	Make Borders	100	Blade Scraper, 10'	40.00						Tractor
5	Apr	1.0	Block Borders	100	Blade Scraper, 10'	80.00						Tractor
6	Apr	1.0	Apply Fert/Ground	80	Fertilizer Broadcaster,	8.00	11-52-00, Dry	150.00	Lb	284.00	Tn	Tractor
7	Apr	1.0	Disk	100	Dbl. Offset Disk, 13'	4.00						Tractor
8	Apr	1.0	Plant	80	Seeder, Brillion	5.00	Sudan Grass Sd	30.00	Lb	50.00	CW	Tractor
9	May	5.0	Irrigate			3.50	Water, Pump	4.00	Al	2.79	AF	Irrigators
10	Jul	4.0	Irrigate/Run Fertilizer			3.50	Water, Pump	4.00	Al	2.79	AF	Irrigators
							32-00-00, URAN 32,	40.00	Ga	173.00	Tn	
11	Aug	4.0	Swathing		Windrower, 14.0', HS, SC	6.00						Harvest
12	Aug	4.0	Crimping	80	Hay Crimper	5.00						Harvest
13	Aug	4.0	Baling	100	Baler, 3 wire w/motor	5.00	Baling Twine (6500')	0.49	TF	6.57	TF	Tractor
14	Aug	4.0	Roadsiding		Bale Wagon, SP PRC	12.00						Harvest
15	Oct	1.0	Residue Disposal	150	Offset Disk, 16.5'	3.80						Tractor
			Pickup use 30 Mi/Ac		Pickup Truck, 1/2 Ton	1.00						

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

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