Diesel Fuel Repairs & Maint.   15.62	COUNTY: CROP: AREA:	Mohave Sudan Hay Mohave Valley	FARM: Mohav ACRES: YIELD:	re County Farm 1.0 5.0 Tn/Acre		WATER SOURCE: IRRIGATION SYSTEM: PREVIOUS CROP:	ColPum Flood Basin Wheat, Winter	SOIL:	Conventional Sandy-Loam 10/03/96
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)  Paid Labor (including benefits)	It	em		Unit	Quantity		-		
Paid Labor (including benefits)	INCOME	-> Hay		Ton	5.00	\$115.0000	\$575.00	\$591.20	
Tractor/Self Propelled 20.39				(including sal	es tax)				
Trrigation	Pai							38.43	
Chemicals & Custom Applications			opelled						
Fertilizers Farm Machinery and Vehicles Diesel Fuel Repairs & Maint. 15.62 Repairs & Maint. 17rigation (excluding labor) Pump Energy - Elect. Repairs & Maint. 0.90  Other Purchased Inputs & Services Seed/Transplants 13.70  TOTAL CASH LAND PREPARATION AND GROWING EXPENSES  Paid Labor (including benefits) Tractor/Self Propelled Other/Contract 12.61 Farm Machinery and Vehicles Diesel Fuel Repairs & Maint. Other Materials  TOTAL HARVEST AND POST HARVEST EXPENSE  OPERATING OVERHEAD->PICKUP USE OPERATING INTEREST AT 8.0%  TOTAL CASH OPERATING EXPENSES  \$335.36							18.04		
Farm Machinery and Vehicles	Che		lications					215.26	
Diesel Fuel Repairs & Maint.							215.26		
Repairs & Maint.  Irrigation (excluding labor)  Pump Energy - Elect.  Repairs & Maint.  Other Purchased Inputs & Services  Seed/Transplants  TOTAL CASH LAND PREPARATION AND GROWING EXPENSES  Paid Labor (including benefits)  Tractor/Self Propelled  Other/Contract  Diesel Fuel  Repairs & Maint.  Other Materials  TOTAL HARVEST AND POST HARVEST EXPENSE  PAID Labor (including benefits)  Tractor/Self Propelled  Other/Contract  Diesel Fuel  Repairs & Maint.  Other Materials  TOTAL HARVEST AND POST HARVEST EXPENSE  Farm Machinery and Vehicles  Other Materials  TOTAL LASH OPERATING EXPENSE  TOTAL HARVEST AND POST HARVEST EXPENSE  TOTAL CASH OPERATING EXPENSES  Farm Machinery and Vehicles  Seed/Transplants  13.70  21.55  307.06  21.55  43.70  21.55  21.55  22.55  307.06  21.55  307.06  21.55  307.06  21.55  307.06  21.55  307.06  21.55  70.63  70.63  POPERATING OVERHEAD->PICKUP USE  OPERATING INTEREST AT 8.0%  TOTAL CASH OPERATING EXPENSES  S395.36	Far		icles					30.63	
Irrigation (excluding labor)									
Pump Energy - Elect. Repairs & Maint.  O.90  Other Purchased Inputs & Services Seed/Transplants  TOTAL CASH LAND PREPARATION AND GROWING EXPENSES  Paid Labor (including benefits) Tractor/Self Propelled Other/Contract Farm Machinery and Vehicles Diesel Fuel Repairs & Maint. Other Materials  TOTAL HARVEST AND POST HARVEST EXPENSE  13.70  14.72 Repairs & Maint. Other Materials  TOTAL HARVEST AND POST HARVEST EXPENSE  78.77  OPERATING OVERHEAD->PICKUP USE TOTAL CASH OPERATING EXPENSES  TOTAL CASH OPERATING EXPENSES  13.52  TOTAL CASH OPERATING EXPENSES  \$395.36							15.01		
Repairs & Maint.	Irr							9.03	
Other Purchased Inputs & Services Seed/Transplants  TOTAL CASH LAND PREPARATION AND GROWING EXPENSES  TOTAL CASH HARVEST EXPENSES  Paid Labor (including benefits) Tractor/Self Propelled Other/Contract Farm Machinery and Vehicles Diesel Fuel Repairs & Maint. Other Materials  TOTAL HARVEST AND POST HARVEST EXPENSE  TOTAL HARVEST AND POST HARVEST EXPENSE  13.70  14.72  Repairs & Maint. Other Materials  TOTAL HARVEST AND POST HARVEST EXPENSE  78.77  OPERATING OVERHEAD->PICKUP USE TOTAL CASH OPERATING EXPENSES  \$395.36									
Seed/Transplants		Repairs & Maint	•				0.90		
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES  CASH HARVEST AND POST HARVEST EXPENSES  Paid Labor (including benefits) 21.55  Tractor/Self Propelled 8.94  Other/Contract 12.61  Farm Machinery and Vehicles 43.70  Diesel Fuel 14.72  Repairs & Maint. 28.98  Other Materials 13.52  TOTAL HARVEST AND POST HARVEST EXPENSE 78.77  OPERATING OVERHEAD->PICKUP USE 7.63  OPERATING INTEREST AT 8.0% 1.89  TOTAL CASH OPERATING EXPENSES \$395.36	Oth	er Purchased Inputs	& Services					13.70	
CASH HARVEST AND POST HARVEST EXPENSES  Paid Labor (including benefits) 21.55		Seed/Transplant	s				13.70		
Paid Labor (including benefits) 21.55		T	OTAL CASH LAND I	PREPARATION AND	GROWING EX	KPENSES		307.06	
Tractor/Self Propelled 8.94 Other/Contract 12.61  Farm Machinery and Vehicles 43.70 Diesel Fuel 14.72 Repairs & Maint. 28.98 Other Materials 13.52  TOTAL HARVEST AND POST HARVEST EXPENSE 78.77  OPERATING OVERHEAD->PICKUP USE 7.63 OPERATING INTEREST AT 8.0%  TOTAL CASH OPERATING EXPENSE \$395.36	CASH HA	RVEST AND POST HARV	EST EXPENSES						
Other/Contract Farm Machinery and Vehicles Diesel Fuel Repairs & Maint. Other Materials  TOTAL HARVEST AND POST HARVEST EXPENSE  TOTAL CASH OPERATING EXPENSE  12.61 43.70 14.72 28.98  71.52  78.77  78.77  79.77  70.63 70.6	Pai	d Labor (including )	benefits)					21.55	
### Farm Machinery and Vehicles   Diesel Fuel		Tractor/Self Pr	opelled				8.94		
Diesel Fuel Repairs & Maint.  Other Materials  TOTAL HARVEST AND POST HARVEST EXPENSE  TOTAL HARVEST AND POST HARVEST EXPENSE  OPERATING OVERHEAD->PICKUP USE OPERATING INTEREST AT 8.0%  TOTAL CASH OPERATING EXPENSES  14.72 28.98  78.77  78.77  78.77  7.63 1.89		Other/Contract					12.61		
Repairs & Maint.  Other Materials  TOTAL HARVEST AND POST HARVEST EXPENSE  TOTAL HARVEST AND POST HARVEST EXPENSE  OPERATING OVERHEAD->PICKUP USE OPERATING INTEREST AT 8.0%  TOTAL CASH OPERATING EXPENSES  \$395.36	Far	m Machinery and Veh	icles					43.70	
Other Materials  TOTAL HARVEST AND POST HARVEST EXPENSE  78.77  OPERATING OVERHEAD->PICKUP USE OPERATING INTEREST AT 8.0%  TOTAL CASH OPERATING EXPENSES  13.52  78.77  1.89		Diesel Fuel							
TOTAL HARVEST AND POST HARVEST EXPENSE  78.77  OPERATING OVERHEAD->PICKUP USE OPERATING INTEREST AT 8.0%  TOTAL CASH OPERATING EXPENSES  78.77  1.89		Repairs & Maint	•				28.98		
OPERATING OVERHEAD->PICKUP USE OPERATING INTEREST AT 8.0%  TOTAL CASH OPERATING EXPENSES  7.63  1.89  ===================================	Oth	er Materials						13.52	
OPERATING INTEREST AT 8.0%		T	OTAL HARVEST ANI	POST HARVEST E	XPENSE		_	78.77	
OPERATING INTEREST AT 8.0% 1.89 TOTAL CASH OPERATING EXPENSES \$395.36	OPERATI	NG OVERHEAD->PICKUP	USE					7.63	
TOTAL CASH OPERATING EXPENSES \$395.36	OPERATI	NG INTEREST AT 8.	0%						
·		т	OTAL CASH OPERAT	ING EXPENSES			==		========
		-			PENSES			\$195.84	

Notes: The above figures do not include ownership costs, see Table 6B on Next Page for detailed cost allocation.

COUNTY: Mohave FARM: Mohave County Farm WATER SOURCE: ColPum TILLAGE: Conventional CROP: Sudan Hay ACRES: 1.0 IRRIGATION SYSTEM: Flood Basin SOIL: Sandy-Loam AREA: Mohave Valley YIELD: 5.0 Tn/Acre Wheat, Winter DATE: 10/03/96 PREVIOUS CROP:

AREA: Monave valley YIELD: 5.0 Th/ACI	re PREVIOUS CROP: wheat	t, winter DATE: 10/03/96
	- CASH COST BASIS (\$/ACRE) -	- TOTAL COST BASIS (\$/ACRE) -
Item	Income & Costs Net Returns	Income & Costs Net Returns
TOTAL INCOME at \$ 115.0000/Tn + 2nd Crop	\$591.20	\$591.20
TOTAL OPERATING EXPENSES	395.35	395.35
RETURN OVER CASH OPERATING EXPENSES	\$195.84	\$195.84
CASH OVERHEAD EXPENSES		i
Taxes, Housing & Insur., Farm Machinery	8.77	8.77
Wells & Irrig. System	0.40	0.40
Gen. & Off. Overhead ( 5% of Tot. Oper. Exp.)	19.76	19.76
General Farm Maint. ( 3% of Tot. Oper. Exp.)	11.86	11.86
Total Cash Overhead Expenses	40.79	40.79
Total Cash Oper. & Over. Cost	436.15	436.15
RETURNS OVER CASH OPER. & OVER. EXPENSES.	155.04	155.04
CAPITAL ALLOCATIONS (100% Equity)		<b>\</b>
Capital Replacement, Machinery & Vehicles		54.44
Wells & Irrig. System		2.44
Interest on Equity, Machinery & Vehicles		13.13
Wells & Irrig. System		0.95
Total Capital Allocations		70.96
RETURNS TO LAND, CAPITAL, MANAGEMENT & RISK	<b>&gt;</b> 155.04	i
RETURNS TO LAND, MANAGEMENT & RISK -		> 84.07
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
••		i —
Total Land Costs	8.19	38.79
RETURNS TO MANAGEMENT, CAPITAL & RISK	<b>———&gt;</b> 146.85	
RETURNS TO MANAGEMENT & RISK		<del></del>
Management Services ( 8% of Tot. Oper. Exp.)		31.62
TOTAL OWNERSHIP COST	48.98	182.18
	========	=======
TOTAL COST	\$444.34	\$577.54
RETURN TO MANAGEMENT, CAPITAL & RISK	<b>&gt;</b> \$146.85	1
RETURN TO RISK (PROFITS)		> \$13.65
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Tn)	\$75.83	\$75.83
BREAK-EVEN PRICE TO COVER OWNERSHIP COST	\$9.79	\$36.43
BREAK-EVEN PRICE TO COVER TOTAL COST	\$85.62	\$112.26

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Table 6C. Variable Operating Costs; Sudan Hay, 1996

0.113

0.225

0.180

0.125 |

0.200 |

0.286 I

0.250 |

Apply Fert/Ground

6 Apr

8 Apr

9 May

Apr

Disk

Plant

Irrigate

COUN CROP AREA	: s	ohave udan Hay lohave Valley	ACRES: 1	ounty Farm .0 .0 Tn/Acm		IRRIGA	SOURCE: TION SYSTEM US CROP:	ColPum M: Flood Bas Wheat, Wi		TILLAC SOIL: DATE:	GE: Conven Sandy- 10/03/	Loam
	First Month		— E Machin	ours * - e Labor		-	-	(\$/Acre*) — Materials	Total	Times	Tot. Cash Expense	Class
1	Mar	Disk	0.360			3.36			9.41	2.0	18.82	L
2	Apr	Landplane	0.900	1.000	12.57	8.41			20.98	1.0	20.98	L
3	Apr	Disk Ends	0.011	0.013	0.12	0.11			0.23	1.0	0.23	G
4	Apr	Make Borders	0.023	0.024	0.20	0.20			0.40	1.0	0.40	G
5	Apr	Block Borders	0.011	0.013	0.10	0.11			0.21	1.0	0.21	G

0.83 1.05

2.75 2.10

1.95 1.68

2.00

		TOTAL CASH OPERATING EXPENSE	S:		\$90.96	\$59.91	\$1.91	\$242.47			\$395.25	T
		Operating Interest at 8.00%					1.91				1.91	0
		Pickup Use 30 Mi/Ac	1.000		7.63						7.63	0
15	Oct	Residue Disposal	0.237	0.263	3.98	2.21			6.19	1.0	6.19	P
14	Aug	Roadsiding	0.075	0.083	1.34	0.58			1.92	4.0	7.69	H
13	Aug	Baling	0.180	0.200	4.95	1.68		3.38	10.01	4.0	40.04	Н
12	Aug	Crimping	0.180	0.200	1.52	1.40			2.92	4.0	11.68	Н
11	Aug	Swathing	0.150	0.167	2.12	1.17			3.29	4.0	13.15	Н
10	Jul	Irrigate/Run Fertilizer		0.286	1.00	2.00		47.61	50.61	4.0	202.44	G
-	1											_

1.00

<sup>\*</sup> 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		1		SENSIT	IVITY			ER TOTAL CA		• • • •	
Land Preparation (L)	\$61.99	1	Prices ->			-25%	-10%	Budgeted	+10%	+25%	
Growing (G)	244.96										
Harvest (H)	72.55	1	Yields		- 1	\$86.25	\$103.50	\$115.00	\$126.50	\$143.75	Break-even
Post Harvest (P)	6.19				I						
Marketing (M)	0.00		-25%	3.7	- 1	-52.12	12.55	55.68	98.80	163.49	100.15
Operating Overhead (O)	9.54		-10%	4.5	- 1	0.74	78.37	130.12	181.87	259.49	86.08
-		1	Budgeted	5.0	- 1	35.99	122.24	179.74	237.24	323.49	79.05
Total (T)	\$395.25	Ĺ	+10%	5.5	Ĺ	71.24	166.12	229.37	292.62	387.49	73.29
		Ĺ	+25%	6.2	Ĺ	124.12	231.93	303.81	375.68	483.49	66.39
		İ	Break-even	Yield	ĺ	4.48	3.60	3.18	2.85	2.47	

24.81

13.70

26.69

4.85

17.33

3.00

1.0

1.0

1.0

5.0

26.69

4.85

17.33

15.00

COUNTY: CROP: AREA:	Mohave Sudan Hay Mohave Va		FARM: Mohav ACRES: YIELD:	1	county Farm00 Tn/Acre	I	ATER SC RRIGATI REVIOUS	ON SY	STEM	ColPum : Flood B Wheat,			onvent andy-I 0/03/9	oam
		Water		1				Opera	ting	Cost (\$/	Acre) —			
Month *	Number Irrig.	Applied (Inches)	Total Labor (Hrs)	İ	Purchased Water	Fuel, Oil & Repairs		bor	_	emicals	Other Purchases	Service	s I	otal
MAR C			0.40	ı		6.05	3	3.36						9.42
APR C			2.02	1		24.58	17	.03		24.81	13.70			80.12
MAY C	1.0	4.0	0.28	1		1.00	2	.00						3.00
JUN C	1.0	4.0	0.28	İ		1.00	2	.00						3.00
JUL C	3.0	12.0	0.85	İ		3.00	6	.01		95.23			1	.04.24
AUG C	2.0	8.0	1.87	Ĺ		21.86	13	. 68		47.61	6.76			89.91
SEP C	2.0	8.0	1.22	i		11.93	8	.84		47.61	3.38			71.76
OCT C			0.91	i		13.91	7	.05			3.38			24.34
Pickup U	Jse 30 Mi	/Ac		•		7.63								7.63
		t at 8.0%	i									1.91		1.91
Total	9.0	36.0	7.86	ı		90.96	59	. 99		215.26	27.22	1.91	3	95.35
용				İ		23.00	15	.17		54.45	6.88	0.48	1	.00.00
TOTAL RE	SOURCES R	EQUIREMENTS	S(/Acre)	TC	TAL ENERGY R	EOUTREMENTS	(/Acre)							
Total		582.8 lbs	,(,11010)		Diesel Fuel	12011CHILLIO	28.1		1					
Total		78.0 lbs			Regular Gas		0.0							
Total		0.0 lbs			NonLead Gas		3.0							
Total		7.8 Hrs			Electricity/	Pumping	131.3							
Total		36.0 AI			All Direct E		4.7		BTU					
EOUT DWEN	III. DECUIDE	MENTS (/Acre	. \											
-	-	MENIS(/ACTE O HP, MFWD	1.86 Hi		Offset Disk,	16 5!		0	06 11-	ra Tandn	lane 12'X 45	<b>.</b> '	0.0	0 Hrs
		O HP, MFWD	1.00 H		Dbl. Offset				24 H		or, 100 PTO			8 Hrs
	Scraper,		0.03 Hi		Fertilizer B		morrod				r, Brillion	HP, MEWD		.8 Hrs
			0.60 Hi			roadcaster,	Towed				r, Brillion , 3 wire w/n			o nrs
	wer, 14.0				Hay Crimper	1 /2 mam					, 3 wire w/n	notor	0.7	Z HIS
вате и	Magon, SP	PRC	0.30 Hi	:s	Pickup Truck	, 1/2 Ton		1.	00 Hı	rs				
	-	MENTS (/Acre												
	-00, Dry -00, URAN	32 . Lad	150.00 Lk 160.00 Ga		Sudan Grass Baling Wire				00 Li		, Pump		36.0	IA O
LABOR RE	QUIREMENT	S(/Acre)	3.49 Hi	°s	Irrigators			2	57 H1	rs Harve	st.		1 8	0 Hrs
	-		J. 15 111	_					J					

<sup>\*</sup> NOTE: P = Previous Year C = Current Year N = Next Year

COUNTY: Mohave FARM: Mohave County Farm WATER SOURCE: ColPum TILLAGE: Conventional CROP: 1.0 IRRIGATION SYSTEM: Flood Basin Sandy-Loam Sudan Hay ACRES: SOIL: AREA: Mohave Valley YIELD: 5.0 Tn/Acre Wheat, Winter DATE: 10/03/96 PREVIOUS CROP:

	First			E	quipment/Custom Oper.	Job Rat	e — Mater	ial Use	e & Co	st —	Service Cost	Labor
No.	Month	Times	Operation	HP	Self-Prop./Implem.	Acres/F	Ir Name	Appl.	Rate	\$/Unit	\$/Unit	Type
1	Mar	2.0 Dis	k	150	Offset Disk, 16.5'	2.50						Tractor
2	Apr	1.0 Lan	dplane	150	Landplane 12'X 45'	1.00						Tractor
3	Apr	1.0 Dis	k Ends	80	Dbl. Offset Disk, 13'	80.00						Tractor
4	Apr	1.0 Mak	e Borders	100	Blade Scraper, 10'	40.00						Tractor
5	Apr	1.0 Blo	ck Borders	100	Blade Scraper, 10'	80.00						Tractor
6	Apr	1.0 App	ly Fert/Ground	80	Fertilizer Broadcaster,	8.00	11-52-00, Dry	150.0	00 Lb	315.00	Tn	Tractor
7	Apr	1.0 Dis	k _	100	Dbl. Offset Disk, 13'	4.00	_					Tractor
8	Apr	1.0 Pla	nt	80	Seeder, Brillion	5.00	Sudan Grass Sd	30.0	00 Lb	43.50	CW	Tractor
9	May	5.0 Irr	igate			3.50	Water, Pump	4.0	00 AI	3.01	AF	Irrigator
10	Jul	4.0 Irr	igate/Run Fertil:	iz		3.50	Water, Pump	4.0	00 AI	3.01	AF	Irrigator
			_				32-00-00, URAN 32	, 40.0	00 Ga	205.00	Tn	_
11	Aug	4.0 Swa	thing		Windrower, 14.0', HS, S	6.00						Harvest
12	Aug	4.0 Cri	mping	80	Hay Crimper	5.00						Harvest
13	Aug	4.0 Bal	ing	100	Baler, 3 wire w/motor	5.00	Baling Wire (650	0 0.4	49 TF	6.57	TF	Tractor
14	Aug	4.0 Roa	dsiding		Bale Wagon, SP PRC	12.00	_					Harvest
15	Oct	1.0 Res	idue Disposal	150	Offset Disk, 16.5'	3.80						Tractor
		Pic	kup Use <sup>30</sup> Mi/Ad	2	Pickup Truck, 1/2 Ton	1.00						

<sup>\*</sup> NOTE: Machine times, labor times, and material rates are for one time over the designated acreage.

ARIZONA COOPERATIVE EXTENSION
Department of Ag & Resource Economics
The University of Arizona F 4/11