

COUNTY: Pinal                      FARM: Pinal County Farm                      WATER SOURCE: CAID                      TILLAGE: Conventional  
 CROP: Barley                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Maricopa                      YIELD: 5,100.0 Lb/Acre                      PREVIOUS CROP: Cotton, Upland                      DATE: 10/08/96

Item	Unit	Quantity	Price /Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME -> Grain	Pound	5,100.00	\$0.0567	\$289.17	\$289.17	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					27.30	_____
Tractor/Self Propelled				9.43		_____
Irrigation				17.87		_____
Chemicals & Custom Applications					69.77	_____
Fertilizers				69.77		_____
Farm Machinery and Vehicles					10.12	_____
Diesel Fuel				4.29		_____
Repairs & Maint.				5.83		_____
Irrigation Water (excluding labor)					101.33	_____
Water Assessment (See Note Below) **					**	_____
Other Purchased Inputs & Services					25.20	_____
Seed/Transplants				25.20		_____
TOTAL CASH LAND PREPARATION AND GROWING EXPENSES					233.72	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					0.21	_____
Tractor/Self Propelled				0.21		_____
Farm Machinery and Vehicles					0.25	_____
Diesel Fuel				0.10		_____
Repairs & Maint.				0.14		_____
Custom Harvest/Post Harvest					48.10	_____
TOTAL HARVEST AND POST HARVEST EXPENSE					48.56	_____
OPERATING OVERHEAD->PICKUP USE					7.69	_____
OPERATING INTEREST AT 8.0%					5.11	_____
TOTAL CASH OPERATING EXPENSES					\$295.08	=====
RETURNS OVER CASH OPERATING EXPENSES					( \$5.91)	=====

Notes: The above figures do not include ownership costs, see Table 9B on Next Page for detailed cost allocation.

\*\* A water assessment charge of \$18.75/Acre is included in the ownership costs of Table 9B.

Table 9B. Allocation of Ownership Costs; Barley, 1996

COUNTY: Pinal	FARM: Pinal County Farm	WATER SOURCE: CAID	TILLAGE: Conventional
CROP: Barley	ACRES: 1.0	IRRIGATION SYSTEM: Flood Furrow	SOIL: Sandy-Loam
AREA: Maricopa	YIELD: 5,100.0 Lb/Acre	PREVIOUS CROP: Cotton, Upland	DATE: 10/08/96

Item	- CASH COST BASIS (\$/ACRE) -		- TOTAL COST BASIS (\$/ACRE) -	
	Income & Costs	Net Returns	Income & Costs	Net Returns
TOTAL INCOME at \$ 0.0567/Lb	\$289.17		\$289.17	
TOTAL OPERATING EXPENSES	295.07		295.07	
RETURN OVER CASH OPERATING EXPENSES		( \$5.90)		( \$5.90)
CASH OVERHEAD EXPENSES				
Taxes, Housing & Insur., Farm Machinery	1.22		1.22	
Gen. & Off. Overhead ( 5% of Tot. Oper. Exp.)	14.75		14.75	
General Farm Maint. ( 3% of Tot. Oper. Exp.)	8.85		8.85	
Total Cash Overhead Expenses	24.82		24.82	
Total Cash Oper. & Over. Cost	319.90		319.90	
RETURNS OVER CASH OPER. & OVER. EXPENSES.		( 30.73)		( 30.73)
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery & Vehicles			6.92	
Interest on Equity, Machinery & Vehicles			3.68	
Total Capital Allocations			10.60	
RETURNS TO LAND, CAPITAL, MANAGEMENT & RISK		( 30.73)		
RETURNS TO LAND, MANAGEMENT & RISK				( 41.33)
LAND COSTS / OWNERSHIP (100% Equity)				
Property Taxes (\$372 X 16% X .16455)	9.79		9.79	
Opport. Inter. on Land (100% X 6.0% X \$372)			22.32	
Water Assessment **	18.75		18.75	
Total Land Costs	28.54		50.86	
RETURNS TO MANAGEMENT, CAPITAL & RISK		( 59.27)		
RETURNS TO MANAGEMENT & RISK				( 92.19)
Management Services ( 8% of Tot. Oper. Exp.)			23.60	
TOTAL OWNERSHIP COST	53.36		109.89	
TOTAL COST	\$348.44		\$404.97	
RETURN TO MANAGEMENT, CAPITAL & RISK		( \$59.27)		
RETURN TO RISK (PROFITS)				( \$115.80)
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb)		\$0.0578		\$0.0578
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.0104		\$0.0215
BREAK-EVEN PRICE TO COVER TOTAL COST		\$0.0683		\$0.0794

Table 9C. Variable Operating Costs; Barley, 1996

COUNTY: Pinal FARM: Pinal County Farm WATER SOURCE: CAID TILLAGE: Conventional  
 CROP: Barley ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 5,100.0 Lb/Acre PREVIOUS CROP: Cotton, Upland DATE: 10/08/96

No.	First Month	Operation	— Hours * —		Operating Costs (\$/Acre*)				Tot. Cash Expense	Times	Class
			Machine	Labor	Fuel/Rps.	Labor	Cust/Ser.	Materials			
1	Nov	Apply Fert/Ground	0.075	0.083	0.46	0.70		33.55	34.71	1.0	G
2	Nov	Disk	0.225	0.250	2.54	2.10			4.64	1.0	L
3	Nov	List	0.237	0.263	2.31	2.21			4.52	1.0	L
4	Dec	Plant	0.225	0.250	2.15	2.10		25.20	29.45	1.0	L
5	Dec	Buck Rows	0.022	0.025	0.13	0.21			0.34	1.0	G
6	Dec	Irrigate		0.750		5.26		25.33	30.59	1.0	G
7	Feb	Irrigate/Run Fertilizer		0.450		3.15		37.11	40.26	2.0	G
8	Mar	Irrigate		0.450		3.15		19.00	22.15	2.0	G
9	May	Prepare Ends	0.022	0.025	0.25	0.21			0.46	1.0	H
10	May	Combine Harvest						35.35	35.35	1.0	H
11	May	Haul, Custom 51.0 CW						12.75	12.75	1.0	H
12	Jun	Disk Residue	0.225	0.250	2.54	2.10			4.64	1.0	L
		Pickup Use 30 Mi/Ac	1.000		7.68						O
		Operating Interest at 8.00%						5.10			O
TOTAL CASH OPERATING EXPENSES:					\$18.06	\$27.49	\$53.20	\$196.30		\$295.05	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. A water assessment charge of \$18.75/Acre included as ownership cost in Table 9B.

OPERATING COST SUMMARY BY CLASS		SENSITIVITY OF NET REVENUES OVER TOTAL CASH EXPENSES (\$/Acre)							
		Prices ->		-25%	-10%	Budgeted	+10%	+25%	
Land Preparation (L)	\$43.25								
Growing (G)	190.45								
Harvest (H)	48.55	Yields		\$0.04	\$0.05	\$0.05	\$0.06	\$0.07	Break-even
Post Harvest (P)	0.00								
Marketing (M)	0.00	-25%	3,825.0	-120.25	-87.72	-66.03	-44.34	-11.81	0.07
Operating Overhead (O)	12.78	-10%	4,590.0	-95.00	-55.96	-29.94	-3.91	35.12	0.06
		Budgeted	5,100.0	-78.17	-34.79	-5.88	23.03	66.41	0.05
Total (T)	\$295.05	+10%	5,610.0	-61.34	-13.62	18.18	49.98	97.70	0.05
		+25%	6,375.0	-36.09	18.12	54.27	90.41	144.63	0.04
		Break-even Yield		7,468.59	5,938.30	5,224.63	4,664.10	4,017.55	

Table 9D. Resource and Cash Flow Requirements; Barley, 1996

COUNTY: Pinal                      FARM: Pinal County Farm                      WATER SOURCE: CAID                      TILLAGE: Conventional  
 CROP: Barley                      ACRES: 1.0                      IRRIGATION SYSTEM: Flood Furrow                      SOIL: Sandy-Loam  
 AREA: Maricopa                      YIELD: 5,100.0 Lb/Acre                      PREVIOUS CROP: Cotton, Upland                      DATE: 10/08/96

Month *	Number Irrig.	Water Applied (Inches)	Total Labor (Hrs)	Operating Cost (\$/Acre)						
				Purchased Water	Fuel, Oil & Repairs	Labor	Chemicals	Other Purchases	Services	Total
NOV P			0.29		2.65	2.51	16.77			21.93
DEC P	0.4	3.2	0.72	10.13	3.73	5.66	16.77	12.60		48.89
JAN C	0.6	4.8	0.58	15.20	1.14	4.31		12.60		33.25
FEB C	1.0	6.0	0.45	19.00		3.15	18.11			40.26
MAR C	1.5	9.0	0.67	28.50		4.73	18.11			51.34
APR C	1.5	9.0	0.67	28.50		4.73				33.23
MAY C			0.02		0.25	0.21			5.00	5.46
JUN C			0.25		2.54	2.10			25.25	29.89
DEC C			0.01		0.06	0.11				0.17
Pickup Use 30 Mi/Ac					7.68					7.68
Operating Interest at 8.0% Water Assessment				**					5.10	5.10
<b>Total</b>	<b>5.0</b>	<b>32.0</b>	<b>3.69</b>	<b>101.33</b>	<b>18.06</b>	<b>27.51</b>	<b>69.76</b>	<b>25.20</b>	<b>35.35</b>	<b>277.21</b>
<b>%</b>				<b>36.55</b>	<b>6.51</b>	<b>9.92</b>	<b>25.17</b>	<b>9.09</b>	<b>12.75</b>	<b>100.00</b>

## TOTAL RESOURCES REQUIREMENTS (/Acre)

Total N 183.8 lbs  
 Total P 95.4 lbs  
 Total K 0.0 lbs  
 Total Labor 3.6 Hrs  
 Total Water 32.0 AI

## TOTAL ENERGY REQUIREMENTS (/Acre)

Diesel Fuel 4.6 Gal  
 Regular Gas 0.0 Gal  
 NonLead Gas 3.0 Gal  
 All Direct Energy 1.0 M BTU

## EQUIPMENT REQUIREMENTS (/Acre)

Tractor, 70 PTO HP, MFWD	0.32 Hrs	Fertilizer Broadcaster, Towed	0.08 Hrs	Tractor, 100 PTO HP, MFWD	0.71 Hrs
Offset Disk, 13.5'	0.47 Hrs	Lister, 5 Bottom	0.24 Hrs	Grain Drill, 16'	0.23 Hrs
Rowbuck, 10'	0.02 Hrs	Pickup Truck, 1/2 Ton	1.00 Hrs		

## MATERIALS REQUIREMENTS (/Acre)

11-53-00, Dry	180.00 Lb	Barley Sd, Cert	100.00 Lb	Water, District	32.00 AI
82-00-00, Anhyd. Ammonia	200.00 Lb				

## LABOR REQUIREMENTS (/Acre)

Tractor	1.15 Hrs	Irrigators	2.55 Hrs
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\* NOTE: P = Previous Year C = Current Year N = Next Year

\*\* A water assessment charge of \$18.75/Acre included as ownership cost in Table 9B.

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Table 9E. Schedule of Operations; Barley, 1996

COUNTY: Pinal FARM: Pinal County Farm WATER SOURCE: CAID TILLAGE: Conventional  
 CROP: Barley ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam  
 AREA: Maricopa YIELD: 5,100.0 Lb/Acre PREVIOUS CROP: Cotton, Upland DATE: 10/08/96

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	Nov	1.0	Apply Fert/Ground	70	Fertilizer Broadcaster,	12.00	11-53-00, Dry	180.00 Lb	355.00 Tn		Tractor
2	Nov	1.0	Disk	100	Offset Disk, 13.5'	4.00					Tractor
3	Nov	1.0	List	100	Lister, 5 Bottom	3.80					Tractor
4	Dec	1.0	Plant	70	Grain Drill, 16'	4.00	Barley Sd, Cert	100.00 Lb	24.00 CW		Tractor
5	Dec	1.0	Buck Rows	70	Rowbuck, 10'	40.00					Tractor
6	Dec	1.0	Irrigate			1.33	Water, District	8.00 AI	38.00 AF		Irrigator
7	Feb	2.0	Irrigate/Run Fertiliz			2.22	Water, District	6.00 AI	38.00 AF		Irrigator
							82-00-00, Anhyd. A	100.00 Lb	345.00 Tn		
8	Mar	2.0	Irrigate			2.22	Water, District	6.00 AI	38.00 AF		Irrigator
9	May	1.0	Prepare Ends	100	Offset Disk, 13.5'	40.00					Tractor
10	May	1.0	Combine Harvest		CST Combine Barley					17.50 Ac	
11	May	1.0	Haul, Custom		CST Haul Grain					0.25 CW	
12	Jun	1.0	Disk Residue	100	Offset Disk, 13.5'	4.00					Tractor
			Pickup Use 30 Mi/Ac		Pickup Truck, 1/2 Ton	1.00					

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

\*\* A water assessment charge of \$18.75/Acre included as ownership cost in Table 9B.

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