

Table 12A. Income and Cash Operating Summary; Solum Barley, 1998

COUNTY: Pinal FARM: Pinal County 98 WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional
 CROP: Solum Barley ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Maricopa YIELD: 3,000.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/18/99

Item	Unit	Quantity	Price/ Unit	Budgeted /Acre	Total /Acre	Your Farm Budget
INCOME Grain	Pound	3,000.00	\$0.06	\$189.00	\$189.00	_____
CASH LAND PREPARATION AND GROWING EXPENSES (including sales tax)						
Paid Labor (including benefits)					19.45	_____
Tractor/Self Propelled				9.18		_____
Irrigation				10.26		_____
Chemicals and Custom Applications					14.85	_____
Fertilizer				14.85		_____
Farm Machinery and Vehicles					12.77	_____
Diesel Fuel				4.57		_____
Repairs and Maintenance				8.20		_____
Irrigation Water (excluding labor)					44.67	_____
Water Assessment (See Note Below) **						_____
Other Purchased Inputs & Seed/Transplants				8.06	8.06	_____
					-----	_____
					99.79	_____
CASH HARVEST AND POST HARVEST EXPENSES						
Paid Labor (including benefits)					0.20	_____
Tractor/Self Propelled				0.20		_____
Farm Machinery and Vehicles					0.23	_____
Diesel Fuel				0.08		_____
Repairs and Maintenance				0.15		_____
Custom Harvest/Post Harvest					38.10	_____
					-----	_____
					38.54	_____
OPERATING OVERHEAD PICKUP USE						
					7.71	_____
OPERATING INTEREST AT 10.0%						
					1.88	_____
					=====	=====
					\$147.91	_____
TOTAL CASH OPERATING EXPENSES						
					=====	=====
RETURNS OVER CASH OPERATING EXPENSES						
					\$41.09	_____

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

** A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

Table 12B. Allocations of Ownership Costs; Solum Barley, 1998

COUNTY: Pinal FARM: Pinal County 98 WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional
 CROP: Solum Barley ACRES: 1.0 IRRIGATION SYSTEM: Flood Furrow SOIL: Sandy-Loam
 AREA: Maricopa YIELD: 3,000.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/18/99

Item	-- CASH COST BASIS (\$/ACRE) --		-- TOTAL COST BASIS (\$/ACRE) --	
	Income and Costs	Net Returns	Income and Costs	Net Returns
TOTAL INCOME at \$0.06 / Lb	\$189.00		\$189.00	
TOTAL OPERATING EXPENSES	\$147.91		\$147.91	
RETURN OVER CASH OPERATING EXPENSES		\$41.09		\$41.09
CASH OVERHEAD EXPENSES				
Taxes, Housing and Insurance, Farm Machinery	1.48		1.48	
General and Office Overhead (5.0% of Total Operating Exp.)	7.40		7.40	
General Farm Maintenance (3.0% of Total Operating Exp.)	4.44		4.44	
Total Cash Overhead Expenses	13.31		13.31	
Total Cash Operating and Overhead Cost	161.22		161.22	
RETURNS OVER CASH OPER. AND OVER. EXPENSES		\$27.78		\$27.78
CAPITAL ALLOCATIONS (100% Equity)				
Capital Replacement, Machinery and Vehicles			8.44	
Interest on Equity, Machinery and Vehicles			4.44	
Total Capital Allocations			12.88	
RETURNS TO LAND, CAPITAL, MANAGEMENT AND RISK ----->		\$27.78		
RETURNS TO LAND, MANAGEMENT AND RISK ----->				\$14.90
Land Cost / Ownership (100% Equity)				
Property Taxes (\$447.00 X 16.0% X 0.169)	12.15		12.15	
Opportunity Interest on Land (100% X 6.0 X \$447.00)			26.82	
Water Assessment	25.00		25.00	
Total Land Costs	37.15		63.97	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		(\$9.37)		
RETURNS TO MANAGEMENT AND RISK ----->				(\$49.07)
Management Services (8% of Total Operation Expenses)			11.83	
TOTAL OWNERSHIP COST	50.46		102.00	
TOTAL COST	\$198.37		\$249.91	
RETURNS TO CAPITAL, MANAGEMENT AND RISK ----->		(\$9.37)		
RETURNS TO RISK (PROFITS) ----->				(\$60.91)
BREAK-EVEN PRICE TO COVER OPERATING COST (PER Lb)		\$0.05		\$0.05
BREAK-EVEN PRICE TO COVER OWNERSHIP COST		\$0.02		\$0.03
BREAK-EVEN PRICE TO COVER TOTAL COST		\$0.07		\$0.08

Table 12C. Variable Operating Costs; Solum Barley, 1998

COUNTY: Pinal FARM: Pinal County 98 WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional
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 AREA: Maricopa YIELD: 3,000.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/18/99

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	Nov	Apply Fert/Ground	0.075	0.083	0.56	0.68		14.85	16.09	1.0	16.09	G
2	Nov	Disk	0.225	0.250	3.92	2.05			5.97	1.0	5.97	L
3	Nov	List	0.237	0.263	2.02	2.15			4.17	1.0	4.17	L
4	Dec	Plant	0.225	0.250	2.22	2.05	8.06		12.32	1.0	12.32	L
5	Dec	Buck Rows	0.023	0.025	0.12	0.20			0.33	1.0	0.33	G
6	Dec	Irrigate		0.752		5.13	22.33		27.46	2.0	54.93	G
7	Apr	Prepare Ends	0.023	0.025	0.23	0.20			0.44	1.0	0.44	H
8	May	Harvest					37.85		37.85	1.0	37.85	H
9	May	Haul 0					0.25		0.25	1.0	0.25	H
10	May	Disk Residue 1 CW	0.225	0.250	3.92	2.05			5.97	1.0	5.97	L
		Pickup Use30 Mi/Acre	1.000		7.71				7.71		7.71	
		Operating Interest at 10.0					1.88				1.88	
TOTAL CASH OPERATING EXPENSES (includes all times over):											147.91	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 \$25.00 per Acre is included as an ownership cost in Table B.

OPERATING COST SUMMARY BY CLASS

Land Preparation (L)	28.44
Growing (G)	71.34
Harvest (H)	38.54
Post Harvest (P)	0.00
Marketing (M)	0.00
Operating Overhead (O)	9.58
Total (T)	\$147.91

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

Prices	- 25%	- 10%	Budgeted	+ 10%	+ 25%	Break-even Price
Yields	\$0.05	\$0.06	\$0.06	\$0.07	\$0.08	
- 25%	2,250.0	-33.04	-11.78	2.39	16.57	37.83
- 10%	2,700.0	-17.56	7.95	24.96	41.97	67.49
Budgeted	3,000.0	-7.24	21.11	40.01	58.91	87.26
+ 10%	3,300.0	3.08	34.27	55.06	75.85	107.03
+ 25%	3,750.0	18.56	54.00	77.63	101.25	136.69
Break-even Yield		3,210.42	2,518.62	2,202.25	1,956.49	1,675.95

Table 12D. Resource and Cash Flow Requirements; Solum Barley, 1998

COUNTY: Pinal FARM: Pinal County 98 WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional
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 AREA: Maricopa YIELD: 3,000.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/18/99

Month *	Number Irrigations	Water Applied (inches)	Total Labor (Hrs)	Operating Costs (\$/ACRE *)						
				Purchased Water	Fuel, Oil and Repairs	Labor	Chemicals	Other Purchases	Services	Total
NOV P			0.60		6.51	4.88	14.85			26.24
DEC P	1.0	8.0	1.03	22.33	2.34	7.38		8.06		40.11
MAR C	1.0	8.0	0.75	22.33		5.13				27.46
APR C			0.03		0.23	0.20				0.44
MAY C			0.25		3.92	2.05			38.10	43.72
Pickup Use30 Mi/Acre					7.71					7.71
Operating Interest at 10.0									1.88	1.88
Water Assessment				**						
Total	2.0	16.0	2.65	44.67	20.71	19.65	14.85	8.06	39.98	147.91
%				30.20	14.00	13.28	10.04	5.45	27.03	100.00

TOTAL RESOURCE REQUIREMENTS (per Acre)		TOTAL ENERGY REQUIREMENTS (per Acre)	
Total N	50.1	Diesel Fuel	6.1 Gal
Total P	0.0	Unleaded Gas	3.0 Gal
Total K	0.0	All Direct Energy	1.2 M BTU
Total Labor	2.7		
Total Water	16.0		

EQUIPMENT REQUIREMENTS (per Acre)			
Fertilizer Broadcaster,	0.08 Hr	Grain Drill, 14'	0.22 Hr
Offset Disk, 13.5'	0.02 Hr	Offset Disk, 16.5'	0.45 Hr
Rowbuck, 10'	0.02 Hr	Tractor, 70 PTO HP,	0.25 Hr
Tractor, 150 PTO HP	0.45 Hr	Lister, 5 Bottom	0.24 Hr
		Pickup Truck, 1/2 Ton	1.00 Hr
		Tractor, 100 PTO HP,	0.33 Hr

MATERIALS REQUIREMENT (per Acre)			
46-00-00, Urea 46	109.00 Lb	Solum Barley	40.00 Lb
		Water, District	16.00 Al

LABOR REQUIREMENT (per Acre)			
Irrigators	1.50 Hr	Tractor	1.15 Hr

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

** A water assessment charge of \$25.00 per Acre is included as an ownership cost in Table B.

Table 12E. Schedule of Operations; Solum Barley, 1998

COUNTY: Pinal FARM: Pinal County 98 WATER SOURCE: Maricopa-Stanfield Irrig. TILLAGE: Conventional
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 AREA: Maricopa YIELD: 3,000.0 Lb / Acre PREVIOUS CROP: Cotton, Upland DATE: 2/18/99

First No.	Month	Times	Operation	Equipment/ Custom Oper HP Self-Prop./ Implement	Job Rate Acres/Hr	Material Use and Cost			Service Cost \$ / Unit	Labor Type
						Name	Appl. Rate	\$ / Unit		
1	Nov	1.0	Apply Fert/Ground	100 Fertilizer Broadcaster,	12.00	46-00-00, Urea 46	109.00 Lb	257.00 Tn		Tractor
2	Nov	1.0	Disk	150 Offset Disk, 16.5'	4.00					Tractor
3	Nov	1.0	List	100 Lister, 5 Bottom	3.80					Tractor
4	Dec	1.0	Plant	70 Grain Drill, 14'	4.00	Solum Barley	40.00 Lb	19.00 CW		Tractor
5	Dec	1.0	Buck Rows	70 Rowbuck, 10'	40.00					Tractor
6	Dec	2.0	Irrigate		1.33	Water, District	8.00 Al	33.50 AF		Irrigators
7	Apr	1.0	Prepare Ends	100 Offset Disk, 13.5'	40.00					Tractor
8	May	1.0	Harvest	CST Combine Barley					37.50 Ac	
9	May	1.0	Haul	CST Haul Grain					0.25 C	
10	May	1.0	Disk Residue	150 Offset Disk, 16.5'	4.00					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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