

Corn, Irrigated

Prepared October 2016 for 2017 Growing Season by Ray Massey

	Units	Yield	Price	Business total
Income per acre				
Primary crop	bushels	185	3.40	629.00
By product crop	bushels	0	0.00	0.00
Net payments (fixed)				0.00
Other income				0.00
Total income per acre				\$629.00
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Operating costs per acre				
Seed				106.00
Fertilizer				109.05
Nitrogen			55.50	
Phosphorus			27.75	
Potassium			15.00	
Other soil amendments			10.80	
Crop protection				42.00
Herbicide			42.00	
Insect-fungicide, none			0.00	
Crop supplies, storage, and marketing				1.00
Crop consulting and insurance				23.00
Custom hire and rental				6.00
Machinery fuel, drying, and irrigation energy				79.45
Machinery repairs and maintenance				48.76
Operator and hired labor				21.05
Other expense				0.00
Operating interest				12.00
Operating costs per acre				\$448.31
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Ownership costs per acre ¹				
Farm business overhead				4.80
Machinery overhead				49.33
Machinery depreciation				52.92
Real estate charge				165.00
Ownership costs per acre				\$272.06
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Total costs per acre				\$720.37
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Income over operating costs per acre				180.69
Income over total costs per acre				-91.37
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	Operating costs per bushel			2.42
	Ownership costs per bushel			1.47
	Total costs per bushel			3.89

Detailed Report

Corn, grain

Irrigated 2017

10/24/2016

Selected input quantities	per acre	Selected input prices	\$ per unit
Yield, bushels	185.0	Farm diesel, per gallon	2.35
Seeding rate, count	32,000	Operating interest, %	5.50
Nitrogen rate, lbs	185	Nitrogen, per lb	0.30
Phosphorus rate, lbs	75	Phosphorus, per lb	0.37
Potassium rate, lbs	60	Potassium, per lb	0.25
Lime rate, tons	0.6	Lime, per ton	18.00
Sum of allocated labor, hours	1.46	Skilled labor, per hour	18.00
Irrigation, inches	6	Land value, per acre	5,000

Machine activity (not custom)	Labor Hours per acre	Fuel Gallons per acre	Operating Costs ² \$ per acre	Ownership Costs ³ \$ per acre	Total Costs \$ per acre	Trips per acre
Field cultivator (35 ft); 360 4WD	0.04	0.63	2.99	4.64	7.63	1
V-Ripper 30" O.C., (17 ft); 360 4WD	0.03	0.45	1.86	5.72	7.58	0.3
Split row no-till planter (16/31 row 30/15"); 225 MFWD	0.05	0.53	4.41	11.78	16.19	1
Boom sprayer (90 ft); 130 MFWD	0.04	0.25	2.35	3.90	6.24	2
Anhydrous applicator (21 ft); 225 MFWD	0.09	0.88	4.68	6.83	11.51	1
Combine, corn head (8 row); 275 HP Comb.	0.11	1.36	11.11	15.11	26.22	1
Grain cart (500 bushel); 225 MFWD	0.06	0.56	2.69	3.95	6.64	
Grain auger 10 in- 5000 bu/hr (70 ft); 130 MFWD	0.04	0.21	1.25	1.30	2.56	
Irrigation;	0.50		59.85	44.00	103.85	1
Semi, tractor and trailer		1.07	4.79	3.25	8.04	
Pickup truck		0.38	1.32	1.78	3.10	
Total	0.96	6.33	97.30	102.26	199.55	7.3

¹ Farm business overhead includes liability insurance, utilities, accounting, etc. Machinery overhead is the sum of opportunity interest, property taxes, insurance, and housing. Machinery depreciation is a market value decline due to aging and usage. Thus, a portion of depreciation should be considered an operating costs for some decisions. Real estate charge includes land, improvements, taxes. Economic costs may differ from rental rates.

² Machinery operating cost is the sum of fuel, repairs, maintenance, and the value of labor.

³ Machinery ownership cost is the sum of machinery overhead and depreciation (see page 1).