AgriProfit#

2010 Cost and Return Benchmarks for Crops and Forages

Irrigated Soil Zone



Government of Alberta ■
Agriculture and Rural Development

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OVERVIEW

2010 Irrigated Soil Zone

The AgriProfit# Business Analysis and Research Program provides a provincial overview of costs and returns for field crops and forages. The Economics Branch collects cost of production information annually from Alberta producers to generate regional benchmarks. Producer participants are critical to providing a financial representation of Alberta's cropping industry.

AgriProfit# cropping benchmarks are analyzed by soil zone group, top third producers, and owned land versus rented land where available. Top third averages are calculated from fields that have the highest return to equity. Analyzing crops by owned versus rented also provides insight into differences in management.

Benchmarks allow for comparison of individual crop costs and returns to other farms in a similar production area. Benchmarks should not replace individual cropping and financial records. There is a risk of over or underestimating costs and returns if basing them on regional benchmarks and forecasts. Strategic planning is more effective when individual costs are used. Managing unit costs of production is one of the most significant strategies to ensure profitability in a mature commodity market.

The top map shows the Irrigated Soil Zone in Alberta; this is the grouping method used for this study. Please note that farms highlighted within these zones may contain characteristics of neighbouring soil zones. The map on the bottom shows the distribution of the 2010 participants.

Questions or Comments:

Jason Wood

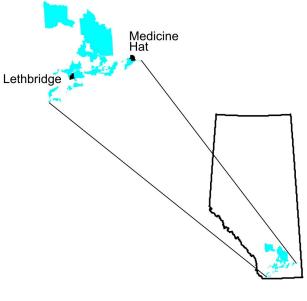
Production Crop Economist

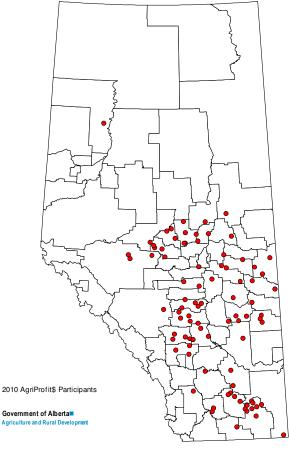
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All Irrigated Spring Wheat

Acres Cropped: 298.57

	'		*	
/A\	1 Cyan Calas Imported Value of Dyadustian	Total \$	\$/Acre	\$/Bushel
(A)	Crop Sales - Imputed Value of Production Crop Insurance Production	101,036.15	338.40	5.42
	2. Crop Insurance Receipts	36,922.74	123.66	
	3. Miscellaneous Receipts	.00	.00	
	4. Government Program	.00	.00	
	5. Additional Revenue from Straw / Aftermath Grazing	.00	.00	7.00
	GROSS RETURN	137,958.90	462.06	7.39
(B)	1. Seed & Seed Cleaning	4,857.04	16.27	
	2. Fertilizer Rates: 102N 37P 5K 1S	25,785.88	86.36	
	3. Chemicals	8,138.65	27.26	
	4. Hail / Crop Insurance & Program Premiums	4,548.59	15.23	
	5. Trucking & Marketing	705.31	2.36	
	6. Fuel	6,879.26	23.04	
	7. Irrigation Fuel & Electricity (Water: 1.91 inches)	4,022.77	13.47	
	8. Repairs - Machine	7,850.74	26.29	
	9. Repairs - Buildings	2,376.02	7.96 22.21	
	10. Utilities & Miscellaneous Expenses11. Custom Work & Specialized Labour	6,631.34 499.29	1.67	
	12. Operating Interest Paid	2,688.87	9.01	
	13. Paid Labour & Benefits (284.64 hours)	5,839.79	19.56	
	14. Unpaid Labour (247.01 hours)	2,470.13	8.27	
	VARIABLE COSTS	83,293.68	278.97	4.46
(0)				4.40
(C)	1. Cash/Share Rent & Land Lease	4,011.00	13.43	
	2. Taxes, Water Rates, Lic. & Insurance	14,001.68	46.90 103.60	
	Equipment & Building a) Depreciation b) Lease Payments	30,932.59 15.01	.05	
	4. Paid Capital Interest	4,084.38	13.68	
	TOTAL CAPITAL COSTS	53,044.66	177.66	2.84
(D)	CASH COSTS (B+C-B14-C3)	102,935.62	344.76	5.52
(E)	TOTAL PRODUCTION COSTS (B+C)	136,338.35	456.64	7.31
(F)	GROSS MARGIN (A-D)	35,023.27	117.30	1.88
(-)	RETURN TO UNPAID LABOUR(A-E+B14)	4,090.68	13.70	.22
	RETURN TO INVESTMENT (A-E+C4) 1.1 %	5,704.92	19.11	.31
	RETURN TO EQUITY (A-E)	1,620.55	5.43	.09
INIV	ESTMENT	,		
114 4	Land	139,285.71	466.51	
	Buildings	70,911.14	237.50	
	Machinery	157,755.66	528.37	
	Irr. Machinery	169,723.60	568.45	
	TOTAL	537,676.12	1,800.83	
		301,010.12	1,000.03	
MA	NAGEMENT		20.12	
	Yield Per Acre (Bushel)		62.49	
	Expected Market Price Per Bushel		5.42	

	All Irrigated Spring Wheat	Group AVG	Top 1/3 AVG
	Acres Cropped:	298.57	114.00
	Enterprises:	7	2
		\$/Acre	\$/Acre
(A)	Crop Sales - Imputed Value of Production	338.40	561.18
	2. Crop Insurance Receipts	123.66	.00
	3. Miscellaneous Receipts	.00	.00
	4. Government Program	.00	.00
	5. Additional Revenue from Straw / Aftermath Grazing	.00	.00
	GROSS RETURN	462.06	561.18
(B)	1. Seed & Seed Cleaning	16.27	20.07
	2. Fertilizer	86.36	39.26
	3. Chemicals	27.26	26.83
	4. Hail / Crop Insurance & Program Premiums	15.23	11.07
	5. Trucking & Marketing	2.36	16.82
	6. Fuel	23.04	22.54
	7. Irrigation Fuel & Electricity	13.47	22.59
	8. Repairs - Machine	26.29	20.69
	9. Repairs - Buildings	7.96	12.06
	10. Utilities & Miscellaneous Expenses	22.21	12.11
	11. Custom Work & Specialized Labour	1.67	9.10
	12. Operating Interest Paid	9.01	.28
	13. Paid Labour & Benefits	19.56	6.16
	14. Unpaid Labour	8.27	5.78
	VARIABLE COSTS	278.97	225.36
(C)		13.43	.00
	2. Taxes, Water Rates, Lic. & Insurance	46.90	31.66
	3. Equipment & Building a) Depreciation	103.60	89.35
	b) Lease Payments	.05	.46
	4. Paid Capital Interest	13.68	8.30
	TOTAL CAPITAL COSTS	177.66	129.77
(D)		344.76	260.01
<u>(E)</u>	TOTAL PRODUCTION COSTS (B+C)	456.64	355.13
(F)	GROSS MARGIN (A-D)	117.30	301.17
	RETURN TO UNPAID LABOUR(A-E+B14)	13.70	211.82
	RETURN TO INVESTMENT (A-E+C4)	19.11	214.35
	RETURN TO EQUITY (A-E)	5.43	206.05
INV	/ESTMENT		
	Land	466.51	3,679.82
	Buildings	237.50	147.16
	Machinery	528.37	284.04
	Irr. Mach.	568.45	693.40
	TOTAL	1,800.83	4,804.42
MA	NAGEMENT		
	Yield Per Acre (Bushel)	62.49	79.16
	Expected Market Price Per Bushel	5.42	7.09

Owned Irrigated Spring Wheat

Acres Cropped: 440.25

	'			
/A\	1 Cron Color Imputed Value of Production	Total \$	\$/Acre	\$/Bushel
(A)	Crop Sales - Imputed Value of Production Crop Insurance Respires	146,153.14	331.98	5.34
	2. Crop Insurance Receipts	56,864.80	129.16	
	3. Miscellaneous Receipts	.00	.00	
	4. Government Program	.00	.00	
	5. Additional Revenue from Straw / Aftermath Grazing	.00	.00	7.40
	GROSS RETURN	203,017.94	461.14	7.42
(B)	1. Seed & Seed Cleaning	7,156.84	16.26	
	2. Fertilizer Rates: 96N 29P 7K 2S	38,568.11	87.61	
	3. Chemicals	11,793.92	26.79	
	4. Hail / Crop Insurance & Program Premiums	6,649.90	15.10	
	5. Trucking & Marketing	995.32	2.26	
	6. Fuel	9,982.93	22.68	
	7. Irrigation Fuel & Electricity (Water: 1.92 inches)	6,266.26	14.23	
	8. Repairs - Machine	11,299.63	25.67	
	9. Repairs - Buildings	3,210.29	7.29	
	10. Utilities & Miscellaneous Expenses	8,922.86 625.13	20.27 1.42	
	11. Custom Work & Specialized Labour12. Operating Interest Paid	4,046.08	9.19	
	13. Paid Labour & Benefits (431.53 hours)	8,910.66	20.24	
	14. Unpaid Labour (338.03 hours)	3,380.34	7.68	
	,			4.45
(0)	VARIABLE COSTS	121,808.26	276.68	4.45
(C)	1. Cash/Share Rent & Land Lease	.00.	.00	
	2. Taxes, Water Rates, Lic. & Insurance	23,607.23	53.62	
	3. Equipment & Building a) Depreciation	49,385.18 26.27	112.18 .06	
	b) Lease Payments 4. Paid Capital Interest	6,573.98	.06 14.93	
	TOTAL CAPITAL COSTS	79,592.67	180.79	2.91
(D)	CASH COSTS (B+C-B14-C3)	148,635.40	337.62	5.43
(E)	TOTAL PRODUCTION COSTS (B+C)	201,400.93	457.47	7.36
(F)	GROSS MARGIN (A-D)	54,382.54	123.53	1.99
(•)	RETURN TO UNPAID LABOUR(A-E+B14)	4,997.35	11.35	.18
	RETURN TO INVESTMENT (A-E+C4) .9 %	8,191.00	18.61	.30
	RETURN TO EQUITY (A-E)	1,617.01	3.67	.06
		.,		
INV	ESTMENT	040.750.00		
	Land	243,750.00	553.66	
	Buildings	102,774.96	233.45	
	Machinery	233,938.56	531.38	
	Irr. Machinery	297,016.31	674.65	
	TOTAL	877,479.83	1,993.14	
MAI	NAGEMENT			
	Yield Per Acre (Bushel)		62.15	
	Expected Market Price Per Bushel		5.34	

Rented Irrigated Spring Wheat

Acres Cropped: 109.67

(4)		Total \$	\$/Acre	\$/Bushel
(A)	Crop Sales - Imputed Value of Production	40,880.17	372.77	5.80
	2. Crop Insurance Receipts	10,333.33	94.22	
	3. Miscellaneous Receipts	.00	.00	
	4. Government Program	.00	.00	
	5. Additional Revenue from Straw / Aftermath Grazing	.00	.00	
	GROSS RETURN	51,213.50	466.99	7.26
(B)	1. Seed & Seed Cleaning	1,790.63	16.33	
	2. Fertilizer Rates: 111N 47P 3K	8,742.91	79.72	
	3. Chemicals	3,264.95	29.77	
	4. Hail / Crop Insurance & Program Premiums	1,746.84	15.93	
	5. Trucking & Marketing	318.64	2.91	
	6. Fuel	2,741.04	24.99	
	7. Irrigation Fuel & Electricity (Water: 1.85 inches)	1,031.46	9.41	
	8. Repairs - Machine	3,252.22	29.66	
	9. Repairs - Buildings	1,263.65	11.52	
	10. Utilities & Miscellaneous Expenses	3,575.99	32.61	
	11. Custom Work & Specialized Labour	331.50 879.25	3.02 8.02	
	12. Operating Interest Paid13. Paid Labour & Benefits (88.79 hours)	1,745.31	15.91	
	14. Unpaid Labour (125.65 hours)	1,256.51	11.46	
	·			4.50
(0)	VARIABLE COSTS	31,940.92	291.25	4.53
(C)	1. Cash/Share Rent & Land Lease	9,359.00	85.34	
	2. Taxes, Water Rates, Lic. & Insurance	1,194.28	10.89	
	Equipment & Building a) Depreciation b) Lease Payments	6,329.14 .00	57.71 .00	
	4. Paid Capital Interest	.00 764.90	6.97	
	TOTAL CAPITAL COSTS	17,647.32	160.92	2.50
(D)	CASH COSTS (B+C-B14-C3)	42,002.58	383.00	5.95
(E)	TOTAL PRODUCTION COSTS (B+C)	49,588.24	452.17	7.03
(F)	GROSS MARGIN (A-D)	9,210.92	83.99	1.31
(-)	RETURN TO UNPAID LABOUR(A-E+B14)	2,881.78	26.28	.41
	RETURN TO INVESTMENT (A-E+C4) 2.8 %	2,390.16	21.79	.34
	RETURN TO EQUITY (A-E)	1,625.26	14.82	.23
INIV	ESTMENT	,		
IIVV	Land	.00	.00	
	Buildings	28,426.05	.00 259.20	
	Machinery	56,178.46	512.27	
	Irr. Machinery	.00	.00	
	TOTAL	84,604.51	771.47	
8.5.4.		0-1,00-1.0 i	111.41	
WAI	NAGEMENT		04.00	
	Yield Per Acre (Bushel)		64.32	
	Expected Market Price Per Bushel		5.80	

All Irrigated Soft Wheat

Acres Cropped: 104.33

	Litterprises. 5			
		Total \$	\$/Acre	\$/Bushel
(A)	Crop Sales - Imputed Value of Production	58,188.87	557.72	5.55
	2. Crop Insurance Receipts	2,969.93	28.47	
	3. Miscellaneous Receipts	.00	.00	
	4. Government Program	.00	.00	
	5. Additional Revenue from Straw / Aftermath Grazing	9,283.00	88.97	
	GROSS RETURN	70,441.80	675.16	6.71
(B)	1. Seed & Seed Cleaning	1,594.07	15.28	
	2. Fertilizer Rates: 103N 19P 3K	5,587.92	53.56	
	3. Chemicals	2,774.81	26.60	
	4. Hail / Crop Insurance & Program Premiums	1,539.10	14.75	
	5. Trucking & Marketing	.00	.00	
	6. Fuel	2,373.03	22.74	
	7. Irrigation Fuel & Electricity (Water: 3.13 inches)	373.35	3.58	
	8. Repairs - Machine	2,726.22	26.13	
	9. Repairs - Buildings	48.75	.47	
	10. Utilities & Miscellaneous Expenses	2,490.19	23.87	
	11. Custom Work & Specialized Labour	3,031.70	29.06	
	12. Operating Interest Paid	151.93	1.46	
	13. Paid Labour & Benefits (92.27 hours)	1,775.71	17.02	
	14. Unpaid Labour (163.90 hours)	1,599.79	15.33	
	VARIABLE COSTS	26,066.57	249.84	2.48
(C)	1. Cash/Share Rent & Land Lease	7,785.00	74.62	
	2. Taxes, Water Rates, Lic. & Insurance	1,787.24	17.13	
	3. Equipment & Building a) Depreciation	5,512.50	52.84	
	b) Lease Payments	.00	.00	
	4. Paid Capital Interest	1,037.13	9.94	
	TOTAL CAPITAL COSTS	16,121.88	154.52	1.54
(D)	CASH COSTS (B+C-B14-C3)	35,076.16	336.19	3.34
<u>(E)</u>	TOTAL PRODUCTION COSTS (B+C)	42,188.45	404.36	4.02
(F)	GROSS MARGIN (A-D)	35,365.64	338.97	3.37
	RETURN TO UNPAID LABOUR(A-E+B14)	29,853.13	286.13	2.85
	RETURN TO INVESTMENT (A-E+C4) 8.6 %	29,290.48	280.74	2.79
	RETURN TO EQUITY (A-E)	28,253.35	270.80	2.69
INV	ESTMENT			
	Land	262,500.00	2,515.97	
	Buildings	26,754.68	256.43	
	Machinery	33,472.27	320.82	
	Irr. Machinery	16,485.61	158.01	
	TOTAL	339,212.57	3,251.24	
MAI	NAGEMENT			
	Yield Per Acre (Bushel)		100.57	
	Expected Market Price Per Bushel		5.55	

	All Irrigated Soft Wheat	Group AVG	Top 1/3 AVG
	Acres Cropped:	104.33	78.00
	Enterprises:	3	1
		\$/Acre	\$/Acre
(A)	Crop Sales - Imputed Value of Production	557.72	603.20
	2. Crop Insurance Receipts	28.47	41.83
	3. Miscellaneous Receipts	.00	.00
	4. Government Program	.00	.00
	5. Additional Revenue from Straw / Aftermath Grazing	88.97	127.88
	GROSS RETURN	675.16	772.91
(B)	1. Seed & Seed Cleaning	15.28	14.94
	2. Fertilizer	53.56	50.00
	3. Chemicals	26.60	37.21
	4. Hail / Crop Insurance & Program Premiums	14.75	17.10
	5. Trucking & Marketing	.00	.00
	6. Fuel	22.74	25.89
	7. Irrigation Fuel & Electricity	3.58	4.19
	8. Repairs - Machine	26.13	24.01
	9. Repairs - Buildings	.47	.31
	10. Utilities & Miscellaneous Expenses	23.87	19.10
	11. Custom Work & Specialized Labour	29.06	42.70
	12. Operating Interest Paid	1.46	2.14
	13. Paid Labour & Benefits	17.02	15.42
	14. Unpaid Labour	15.33	18.57
	VARIABLE COSTS	249.84	271.59
(C)	1. Cash/Share Rent & Land Lease	74.62	.00
	2. Taxes, Water Rates, Lic. & Insurance	17.13	25.95
	3. Equipment & Building a) Depreciation	52.84	100.57
	b) Lease Payments	.00	.00
	4. Paid Capital Interest	9.94	28.61
	TOTAL CAPITAL COSTS	154.52	155.13
(D)	CASH COSTS (B+C-B14-C3)	336.19	307.57
<u>(E)</u>	TOTAL PRODUCTION COSTS (B+C)	404.36	426.72
(F)	GROSS MARGIN (A-D)	338.97	465.34
	RETURN TO UNPAID LABOUR(A-E+B14)	286.13	364.77
	RETURN TO INVESTMENT (A-E+C4)	280.74	374.81
_	RETURN TO EQUITY (A-E)	270.80	346.20
INV	ESTMENT		
	Land	2,515.97	6,250.00
	Buildings	256.43	274.14
	Machinery	320.82	421.89
	Irr. Mach.	158.01	634.06
	TOTAL	3,251.24	7,580.09
MA	NAGEMENT		
	Yield Per Acre (Bushel)	100.57	104.00
	Expected Market Price Per Bushel	5.55	5.80
	•		

All Irrigated Liberty Link Canola

Acres Cropped: 295.60

		Total \$	\$/Acre	\$/Bushel
(A)	Crop Sales - Imputed Value of Production	172,531.20	583.66	11.60
	2. Crop Insurance Receipts	.00	.00	
	3. Miscellaneous Receipts	.00	.00	
	Government Program	.00	.00	
	5. Additional Revenue from Straw / Aftermath Grazing	.00	.00	
	GROSS RETURN	172,531.20	583.66	11.60
(B)	1. Seed & Seed Cleaning	8,785.46	29.72	
	2. Fertilizer Rates: 112N 39P 5K 15S	26,836.36	90.79	
	3. Chemicals	10,875.71	36.79	
	4. Hail / Crop Insurance & Program Premiums	9,183.09	31.07	
	5. Trucking & Marketing	345.83	1.17	
	6. Fuel	6,962.44	23.55	
	7. Irrigation Fuel & Electricity (Water: 2.11 inches)	3,769.64	12.75	
	8. Repairs - Machine	7,941.80	26.87	
	9. Repairs - Buildings	2,589.36	8.76	
	10. Utilities & Miscellaneous Expenses	6,296.63	21.30	
	11. Custom Work & Specialized Labour	318.42	1.08	
	12. Operating Interest Paid	2,801.64	9.48	
	13. Paid Labour & Benefits (291.77 hours)	5,959.18	20.16	
	14. Unpaid Labour (250.73 hours)	2,507.25	8.48	
	VARIABLE COSTS	95,172.81	321.96	6.40
(C)	1. Cash/Share Rent & Land Lease	13,460.00	45.53	
	2. Taxes, Water Rates, Lic. & Insurance	9,869.29	33.39	
	3. Equipment & Building a) Depreciation	27,082.32	91.62	
	b) Lease Payments	.00	.00	
	4. Paid Capital Interest	3,475.38	11.76	
	TOTAL CAPITAL COSTS	53,886.99	182.30	3.62
(D)	CASH COSTS (B+C-B14-C3)	119,470.22	404.16	8.03
(E)	TOTAL PRODUCTION COSTS (B+C)	149,059.80	504.26	10.02
(F)	GROSS MARGIN (A-D)	53,060.98	179.50	3.57
	RETURN TO UNPAID LABOUR(A-E+B14)	25,978.66	87.88	1.75
	RETURN TO INVESTMENT (A-E+C4) 6.4 %	26,946.79	91.16	1.81
	RETURN TO EQUITY (A-E)	23,471.41	79.40	1.58
INV	ESTMENT			
	Land	73,400.00	248.31	
	Buildings	71,538.56	242.01	
	Machinery	157,760.49	533.70	
	Irr. Machinery	119,731.22	405.04	
	TOTAL	422,430.27	1,429.06	
MΔI	NAGEMENT			
	Yield Per Acre (Bushel)		50.32	
	Expected Market Price Per Bushel		11.60	

	All Irrigated Liberty Link Canola	Group AVG	Top 1/3 AVG
	Acres Cropped:	295.60	72.50
	Enterprises:	5	2
		\$/Acre	\$/Acre
(A)	Crop Sales - Imputed Value of Production	583.66	781.37
	2. Crop Insurance Receipts	.00	.00
	3. Miscellaneous Receipts	.00	.00
	4. Government Program	.00	.00
	5. Additional Revenue from Straw / Aftermath Grazing	.00	.00
	GROSS RETURN	583.66	781.37
(B)	1. Seed & Seed Cleaning	29.72	41.16
	2. Fertilizer	90.79	62.38
	3. Chemicals	36.79	50.79
	4. Hail / Crop Insurance & Program Premiums	31.07	45.11
	5. Trucking & Marketing	1.17	6.61
	6. Fuel	23.55	28.27
	7. Irrigation Fuel & Electricity	12.75	7.09
	8. Repairs - Machine	26.87	25.79
	9. Repairs - Buildings	8.76	15.25
	10. Utilities & Miscellaneous Expenses	21.30	15.39
	11. Custom Work & Specialized Labour	1.08	7.13
	12. Operating Interest Paid	9.48	1.01
	13. Paid Labour & Benefits	20.16	2.86
	14. Unpaid Labour	8.48	10.18
	VARIABLE COSTS	321.96	319.04
(C)	1. Cash/Share Rent & Land Lease	45.53	.00
	2. Taxes, Water Rates, Lic. & Insurance	33.39	17.82
	3. Equipment & Building a) Depreciation	91.62	121.44
	b) Lease Payments	.00	.00
	4. Paid Capital Interest	11.76	8.19
	TOTAL CAPITAL COSTS	182.30	147.46
(D)	CASH COSTS (B+C-B14-C3)	404.16	334.87
(E)	TOTAL PRODUCTION COSTS (B+C)	504.26	466.50
(F)	GROSS MARGIN (A-D)	179.50	446.49
	RETURN TO UNPAID LABOUR(A-E+B14)	87.88	325.06
	RETURN TO INVESTMENT (A-E+C4)	91.16	323.07
	RETURN TO EQUITY (A-E)	79.40	314.87
INV	ESTMENT		
	Land	248.31	2,531.03
	Buildings	242.01	170.03
	Machinery	533.70	341.11
	Irr. Mach.	405.04	954.91
	TOTAL	1,429.06	3,997.09
MA	NAGEMENT		
	Yield Per Acre (Bushel)	50.32	66.13
	Expected Market Price Per Bushel	11.60	11.82

Owned Irrigated Liberty Link Canola

Acres Cropped: 268.33

	Enterprises: 6			
		Total \$	\$/Acre	\$/Bushel
(A)	Crop Sales - Imputed Value of Production	159,206.17	593.31	11.57
	2. Crop Insurance Receipts	.00	.00	
	3. Miscellaneous Receipts	.00	.00	
	4. Government Program	.00	.00	
	5. Additional Revenue from Straw / Aftermath Grazing	.00	.00	
	GROSS RETURN	159,206.17	593.31	11.57
(B)	1. Seed & Seed Cleaning	8,149.39	30.37	
	2. Fertilizer Rates: 101N 40P 6K 13S	23,915.16	89.12	
	3. Chemicals	10,155.04	37.84	
	4. Hail / Crop Insurance & Program Premiums	8,560.29	31.90	
	5. Trucking & Marketing	319.50	1.19	
	6. Fuel	6,333.95	23.60	
	7. Irrigation Fuel & Electricity (Water: 2.06 inches)	3,317.74	12.36	
	8. Repairs - Machine	7,126.93	26.56	
	9. Repairs - Buildings	2,249.22	8.38	
	10. Utilities & Miscellaneous Expenses	5,590.66	20.83	
	11. Custom Work & Specialized Labour	344.79	1.28	
	12. Operating Interest Paid	2,457.82	9.16	
	13. Paid Labour & Benefits (257.33 hours)	5,241.73	19.53	
	14. Unpaid Labour (225.55 hours)	2,255.47	8.41	
	VARIABLE COSTS	86,017.69	320.56	6.25
(C)	1. Cash/Share Rent & Land Lease	.00	.00	
	2. Taxes, Water Rates, Lic. & Insurance	13,752.89	51.25	
	3. Equipment & Building a) Depreciation	31,868.61	118.76	
	b) Lease Payments	.00	.00	
	4. Paid Capital Interest	3,911.50	14.58	
	TOTAL CAPITAL COSTS	49,532.99	184.60	3.60
(D)	CASH COSTS (B+C-B14-C3)	101,426.60	377.99	7.37
(E)	TOTAL PRODUCTION COSTS (B+C)	135,550.68	505.16	9.85
(F)	GROSS MARGIN (A-D)	57,779.57	215.33	4.20
	RETURN TO UNPAID LABOUR(A-E+B14)	25,910.96	96.56	1.88
	RETURN TO INVESTMENT (A-E+C4) 5.2 %	27,567.00	102.73	2.00
	RETURN TO EQUITY (A-E)	23,655.50	88.16	1.72
INV	ESTMENT			
	Land	122,333.33	455.90	
	Buildings	63,664.66	237.26	
	Machinery	142,578.42	531.35	
	Irr. Machinery	199,552.04	743.67	
	TOTAL	528,128.46	1,968.18	
MΔI	NAGEMENT			
	Yield Per Acre (Bushel)		51.26	
	Expected Market Price Per Bushel		11.57	

All Irrigated Sugar Beets

Acres Cropped: 82.59

	o.p.1000			
		Total \$	\$/Acre	\$/Tonne
(A)	Crop Sales - Imputed Value of Production	84,403.79	1,022.01	53.12
	2. Crop Insurance Receipts	12,413.57	150.31	
	3. Miscellaneous Receipts	.00	.00	
	4. Government Program	.00	.00	
	5. Additional Revenue from Straw / Aftermath Grazing	.00	.00	
	GROSS RETURN	96,817.36	1,172.32	60.93
(B)	1. Seed & Seed Cleaning	10,580.14	128.11	
	2. Fertilizer Rates: 104N 44P 1K 1S	5,494.93	66.54	
	3. Chemicals	1,449.15	17.55	
	4. Hail / Crop Insurance & Program Premiums	3,366.42	40.76	
	5. Trucking & Marketing	6,994.70	84.70	
	6. Fuel	4,967.32	60.15	
	7. Irrigation Fuel & Electricity (Water: 5.47 inches)	2,241.60	27.14	
	8. Repairs - Machine	4,903.97	59.38	
	9. Repairs - Buildings	204.12	2.47	
	10. Utilities & Miscellaneous Expenses	2,213.62	26.80	
	11. Custom Work & Specialized Labour	2,468.19	29.89	
	12. Operating Interest Paid	628.67	7.61	
	13. Paid Labour & Benefits (174.18 hours)	3,036.70	36.77	
	14. Unpaid Labour (238.41 hours)	2,384.09	28.87	
	VARIABLE COSTS	50,933.63	616.73	32.06
(C)	1. Cash/Share Rent & Land Lease	4,514.20	54.66	
	2. Taxes, Water Rates, Lic. & Insurance	2,290.52	27.73	
	3. Equipment & Building a) Depreciation	9,673.38	117.13	
	b) Lease Payments	.00	.00	
	4. Paid Capital Interest	3,656.22	44.27	
	TOTAL CAPITAL COSTS	20,134.32	243.80	12.67
(D)	CASH COSTS (B+C-B14-C3)	59,010.48	714.53	37.14
(E)	TOTAL PRODUCTION COSTS (B+C)	71,067.95	860.53	44.73
(F)	GROSS MARGIN (A-D)	37,806.87	457.79	23.79
	RETURN TO UNPAID LABOUR(A-E+B14)	28,133.50	340.66	17.71
	RETURN TO INVESTMENT (A-E+C4) 8.5 %	29,405.63	356.06	18.51
	RETURN TO EQUITY (A-E)	25,749.41	311.79	16.21
INV	ESTMENT			
	Land	230,712.91	2,793.60	
	Buildings	12,512.77	151.51	
	Machinery	76,852.59	930.57	
	Irr. Machinery	24,546.42	297.22	
	TOTAL	344,624.69	4,172.90	
MAI	NAGEMENT			
	Yield Per Acre (Tonne)		19.24	
	Expected Market Price Per Tonne		53.12	
			-	

	All Irrigated Sugar Beets	Group AVG	Top 1/3 AVG
	Acres Cropped:	82.59	105.64
	Enterprises:	22	7
	·	\$/Acre	\$/Acre
(A)	Crop Sales - Imputed Value of Production	1,022.01	1,048.42
` ,	2. Crop Insurance Receipts	150.31	196.93
	3. Miscellaneous Receipts	.00	.00
	4. Government Program	.00	.00
	5. Additional Revenue from Straw / Aftermath Grazing	.00	.00
	GROSS RETURN	1,172.32	1,245.35
(B)	1. Seed & Seed Cleaning	128.11	128.11
` ,	2. Fertilizer	66.54	66.69
	3. Chemicals	17.55	20.21
	4. Hail / Crop Insurance & Program Premiums	40.76	43.14
	5. Trucking & Marketing	84.70	80.60
	6. Fuel	60.15	60.17
	7. Irrigation Fuel & Electricity	27.14	16.53
	8. Repairs - Machine	59.38	58.54
	9. Repairs - Buildings	2.47	3.40
	10. Utilities & Miscellaneous Expenses	26.80	25.07
	11. Custom Work & Specialized Labour	29.89	39.01
	12. Operating Interest Paid	7.61	2.47
	13. Paid Labour & Benefits	36.77	29.13
	14. Unpaid Labour	28.87	23.05
	VARIABLE COSTS	616.73	596.13
(C)	1. Cash/Share Rent & Land Lease	54.66	75.08
	2. Taxes, Water Rates, Lic. & Insurance	27.73	16.12
	3. Equipment & Building a) Depreciation	117.13	76.14
	b) Lease Payments	.00	.00
	4. Paid Capital Interest	44.27	23.68
	TOTAL CAPITAL COSTS	243.80	191.02
(D)	CASH COSTS (B+C-B14-C3)	714.53	687.96
<u>(E)</u>	TOTAL PRODUCTION COSTS (B+C)	860.53	787.15
(F)	GROSS MARGIN (A-D)	457.79	557.39
	RETURN TO UNPAID LABOUR(A-E+B14)	340.66	481.25
	RETURN TO INVESTMENT (A-E+C4)	356.06	481.88
_	RETURN TO EQUITY (A-E)	311.79	458.20
INV	ESTMENT		
	Land	2,793.60	2,275.73
	Buildings	151.51	139.88
	Machinery	930.57	695.48
	Irr. Mach.	297.22	61.05
	TOTAL	4,172.90	3,172.14
MAI	NAGEMENT		
	Yield Per Acre (Tonne)	19.24	19.74
	Expected Market Price Per Tonne	53.12	53.12

Owned Irrigated Sugar Beets

Acres Cropped: 79.97

		Total \$	\$/Acre	\$/Tonne
(A)	1. Crop Sales - Imputed Value of Production	79,038.60	988.37	53.12
	2. Crop Insurance Receipts	13,128.67	164.17	
	3. Miscellaneous Receipts	.00	.00	
	4. Government Program	.00	.00	
	5. Additional Revenue from Straw / Aftermath Grazing	.00	.00	
-	GROSS RETURN	92,167.27	1,152.54	61.94
(B)	1. Seed & Seed Cleaning	10,244.80	128.11	
` '	2. Fertilizer Rates: 110N 50P 0K 2S	5,186.43	64.86	
	3. Chemicals	1,480.72	18.52	
	4. Hail / Crop Insurance & Program Premiums	3,050.58	38.15	
	5. Trucking & Marketing	6,678.39	83.51	
	6. Fuel	5,146.19	64.35	
	7. Irrigation Fuel & Electricity (Water: 4.80 inches)	2,538.72	31.75	
	8. Repairs - Machine	5,522.82	69.06	
	9. Repairs - Buildings	240.18	3.00	
	10. Utilities & Miscellaneous Expenses	2,001.35	25.03	
	11. Custom Work & Specialized Labour	2,014.85	25.20	
	12. Operating Interest Paid	650.06	8.13	
	13. Paid Labour & Benefits (177.73 hours)	3,076.32	38.47	
	14. Unpaid Labour (220.29 hours)	2,202.88	27.55	
	VARIABLE COSTS	50,034.29	625.67	33.63
(C)	1. Cash/Share Rent & Land Lease	.00	.00	
	2. Taxes, Water Rates, Lic. & Insurance	3,003.49	37.56	
	3. Equipment & Building a) Depreciation	10,438.92	130.54	
	b) Lease Payments	.00	.00	
	4. Paid Capital Interest	4,964.61	62.08	
	TOTAL CAPITAL COSTS	18,407.03	230.18	12.37
(D)	CASH COSTS (B+C-B14-C3)	55,799.51	697.77	37.50
<u>(E)</u>	TOTAL PRODUCTION COSTS (B+C)	68,441.32	855.85	46.00
(F)	GROSS MARGIN (A-D)	36,367.76	454.77	24.44
	RETURN TO UNPAID LABOUR(A-E+B14)	25,928.83	324.24	17.43
	RETURN TO INVESTMENT (A-E+C4) 6.5 %	28,690.57	358.77	19.28
_	RETURN TO EQUITY (A-E)	23,725.95	296.69	15.95
INV	ESTMENT			
	Land	317,230.25	3,966.93	
	Buildings	9,913.94	123.97	
	Machinery	77,683.50	971.42	
	Irr. Machinery	33,751.32	422.06	
	TOTAL	438,579.00	5,484.38	
MA	NAGEMENT			
	Yield Per Acre (Tonne)		18.61	
	Expected Market Price Per Tonne		53.12	

Rented Irrigated Sugar Beets

Acres Cropped: 89.57

		Total \$	\$/Acre	\$/Tonne
(A)	Crop Sales - Imputed Value of Production	98,710.94	1,102.09	53.12
	2. Crop Insurance Receipts	10,506.65	117.31	
	3. Miscellaneous Receipts	.00	.00	
	4. Government Program	.00	.00	
	5. Additional Revenue from Straw / Aftermath Grazing	.00	.00	
	GROSS RETURN	109,217.58	1,219.40	58.78
(B)	1. Seed & Seed Cleaning	11,474.39	128.11	
	2. Fertilizer Rates: 86N 29P 3K 0S	6,317.60	70.54	
	3. Chemicals	1,364.96	15.24	
	4. Hail / Crop Insurance & Program Premiums	4,208.67	46.99	
	5. Trucking & Marketing	7,838.19	87.51	
	6. Fuel	4,490.33	50.13	
	7. Irrigation Fuel & Electricity (Water: 7.04 inches)	1,449.29	16.18	
	8. Repairs - Machine	3,253.72	36.33	
	9. Repairs - Buildings	107.96	1.21	
	10. Utilities & Miscellaneous Expenses	2,779.67	31.03	
	11. Custom Work & Specialized Labour	3,677.09	41.05	
	12. Operating Interest Paid	571.63	6.38	
	13. Paid Labour & Benefits (164.73 hours)14. Unpaid Labour (286.73 hours)	2,931.06 2,867.32	32.72 32.01	
	·			
	VARIABLE COSTS	53,331.87	595.44	28.70
(C)	1. Cash/Share Rent & Land Lease	16,552.05	184.80	
	2. Taxes, Water Rates, Lic. & Insurance	389.28	4.35	
	3. Equipment & Building a) Depreciation	7,631.92	85.21	
	b) Lease Payments	.00 167.19	.00 1.87	
	Paid Capital Interest TOTAL CAPITAL COSTS	24,740.44	276.22	13.31
<u></u>		·		
(D)	CASH COSTS (B+C-B14-C3)	67,573.07	754.44 971.67	36.36
(E)	TOTAL PRODUCTION COSTS (B+C)	78,072.31	871.67	42.01
(F)	GROSS MARGIN (A-D)	41,644.51	464.96	22.41
	RETURN TO UNPAID LABOUR(A-E+B14)	34,012.60	379.75	18.30
	RETURN TO INVESTMENT (A-E+C4) 33.3 %	31,312.47	349.60	16.85
_	RETURN TO EQUITY (A-E)	31,145.27	347.73	16.76
INV	ESTMENT			
	Land	.00	.00	
	Buildings	19,443.00	217.08	
	Machinery	74,636.85	833.31	
	Irr. Machinery	.00	.00	
	TOTAL	94,079.85	1,050.39	
MA	NAGEMENT			
	Yield Per Acre (Tonne)		20.75	
	Expected Market Price Per Tonne		53.12	

All Irrigated Alfalfa Seed

Acres Cropped: 57.50

				A /D
(A)	1. Crop Salas, Imputed Value of Production	Total \$ 27,323.33	\$/Acre 475.19	\$/Pound 1.42
(A)	 Crop Sales - Imputed Value of Production Crop Insurance Receipts 	6,079.75	105.73	1.42
	S. Miscellaneous Receipts	.00	.00	
	Wiscerial redus neceipts Government Program	.00	.00	
	5. Additional Revenue from Straw / Aftermath Grazing	.00 405.64	7.05	
	GROSS RETURN	33,808.72	587.98	1.76
(D)		,		1.70
(B)	1. Seed & Seed Cleaning	.00	.00	
	Fertilizer Rates: 41N 25P 8K Chemicals	1,575.00	27.39	
	Griefficals Hail / Crop Insurance & Program Premiums	5,802.55 1,787.13	100.91 31.08	
	5. Trucking & Marketing	131.96	2.30	
	6. Fuel	1,109.20	19.29	
	7. Irrigation Fuel & Electricity	.00	.00	
	8. Repairs - Machine	1,770.92	30.80	
	9. Repairs - Buildings	391.82	6.81	
	10. Utilities & Miscellaneous Expenses	1,766.28	30.72	
	11. Custom Work & Specialized Labour	447.18	7.78	
	12. Operating Interest Paid	11.12	.19	
	13. Paid Labour & Benefits (54.89 hours)	945.19	16.44	
	14. Unpaid Labour (59.69 hours)	543.97	9.46	
	VARIABLE COSTS	16,282.31	283.17	.85
(C)	1. Cash/Share Rent & Land Lease	2,075.82	36.10	
	2. Taxes, Water Rates, Lic. & Insurance	990.42	17.22	
	3. Equipment & Building a) Depreciation	1,321.62	22.98	
	b) Lease Payments	.00	.00	
	4. Paid Capital Interest	195.46	3.40	
	TOTAL CAPITAL COSTS	4,583.33	79.71	.24
(D)	CASH COSTS (B+C-B14-C3)	19,000.05	330.44	.99
<u>(E)</u>	TOTAL PRODUCTION COSTS (B+C)	20,865.64	362.88	1.08
(F)	GROSS MARGIN (A-D)	14,808.67	257.54	.77
	RETURN TO UNPAID LABOUR(A-E+B14)	13,487.05	234.56	.70
	RETURN TO INVESTMENT (A-E+C4) 12.3 %	13,138.55	228.50	.68
	RETURN TO EQUITY (A-E)	12,943.09	225.10	.67
INV	ESTMENT			
	Land	86,500.00	1,504.35	
	Buildings	12,493.57	217.28	
	Machinery	7,691.04	133.76	
	Irr. Machinery	.00	.00	
	TOTAL	106,684.61	1,855.38	
MAI	NAGEMENT			
	Yield Per Acre (Pound)		334.91	
	Expected Market Price Per Pound		1.42	

	All Irrigated Alfalfa Seed	Group AVG	Top 1/3 AVG
	Acres Cropped:	57.50	71.50
	Enterprises:	6	2
		\$/Acre	\$/Acre
(A)	Crop Sales - Imputed Value of Production	475.19	639.83
	2. Crop Insurance Receipts	105.73	255.09
	3. Miscellaneous Receipts	.00	.00
	4. Government Program	.00	.00
	5. Additional Revenue from Straw / Aftermath Grazing	7.05	4.08
	GROSS RETURN	587.98	899.01
(B)	1. Seed & Seed Cleaning	.00	.00
	2. Fertilizer	27.39	16.64
	3. Chemicals	100.91	110.34
	4. Hail / Crop Insurance & Program Premiums	31.08	39.46
	5. Trucking & Marketing	2.30	5.54
	6. Fuel	19.29	23.88
	7. Irrigation Fuel & Electricity	.00	.00
	8. Repairs - Machine	30.80	31.03
	9. Repairs - Buildings	6.81	15.29
	10. Utilities & Miscellaneous Expenses	30.72	26.69
	11. Custom Work & Specialized Labour	7.78	12.42
	12. Operating Interest Paid	.19	.47
	13. Paid Labour & Benefits	16.44	10.81
	14. Unpaid Labour	9.46	10.91
	VARIABLE COSTS	283.17	303.48
(C)	1. Cash/Share Rent & Land Lease	36.10	34.09
	2. Taxes, Water Rates, Lic. & Insurance	17.22	18.66
	3. Equipment & Building a) Depreciation	22.98	26.69
	b) Lease Payments	.00	.00
	4. Paid Capital Interest	3.40	4.02
	TOTAL CAPITAL COSTS	79.71	83.47
(D)	CASH COSTS (B+C-B14-C3)	330.44	349.34
<u>(E)</u>	TOTAL PRODUCTION COSTS (B+C)	362.88	386.95
(F)	GROSS MARGIN (A-D)	257.54	549.67
	RETURN TO UNPAID LABOUR(A-E+B14)	234.56	522.98
	RETURN TO INVESTMENT (A-E+C4)	228.50	516.09
_	RETURN TO EQUITY (A-E)	225.10	512.06
INV	ESTMENT		
	Land	1,504.35	1,426.57
	Buildings	217.28	215.24
	Machinery	133.76	173.62
	Irr. Mach.	.00	.00
	TOTAL	1,855.38	1,815.43
MA	NAGEMENT		
	Yield Per Acre (Pound)	334.91	399.90
	Expected Market Price Per Pound	1.42	1.60

Owned Irrigated Alfalfa Seed

Acres Cropped: 57.67

	Enterprises: 6			
		Total \$	\$/Acre	\$/Pound
(A)	Crop Sales - Imputed Value of Production	25,480.67	441.86	1.51
	2. Crop Insurance Receipts	.00	.00	
	3. Miscellaneous Receipts	.00	.00	
	4. Government Program	.00	.00	
	5. Additional Revenue from Straw / Aftermath Grazing	486.56	8.44	
	GROSS RETURN	25,967.22	450.30	1.54
(B)	1. Seed & Seed Cleaning	.00	.00	
	2. Fertilizer Rates: 50N 30P 10K	2,018.33	35.00	
	3. Chemicals	5,434.51	94.24	
	4. Hail / Crop Insurance & Program Premiums	1,770.54	30.70	
	5. Trucking & Marketing	.00	.00	
	6. Fuel	924.91	16.04	
	7. Irrigation Fuel & Electricity	.00	.00	
	8. Repairs - Machine	1,766.77	30.64	
	9. Repairs - Buildings	46.75	.81	
	10. Utilities & Miscellaneous Expenses	1,935.81	33.57	
	11. Custom Work & Specialized Labour	258.92	4.49	
	12. Operating Interest Paid	.00	.00	
	13. Paid Labour & Benefits (67.84 hours)	1,177.81	20.42	
	14. Unpaid Labour (55.41 hours)	486.21	8.43	
	VARIABLE COSTS	15,820.57	274.35	.94
(C)	1. Cash/Share Rent & Land Lease	.00	.00	
	2. Taxes, Water Rates, Lic. & Insurance	1,706.34	29.59	
	3. Equipment & Building a) Depreciation	1,174.04	20.36	
	b) Lease Payments	.00	.00	
	4. Paid Capital Interest	328.04	5.69	
	TOTAL CAPITAL COSTS	3,208.41	55.64	.19
(D)	CASH COSTS (B+C-B14-C3)	17,368.73	301.19	1.03
(E)	TOTAL PRODUCTION COSTS (B+C)	19,028.98	329.98	1.13
(F)	GROSS MARGIN (A-D)	8,598.49	149.11	.51
	RETURN TO UNPAID LABOUR(A-E+B14)	7,424.45	128.75	.44
	RETURN TO INVESTMENT (A-E+C4) 3.8 %	7,266.28	126.00	.43
	RETURN TO EQUITY (A-E)	6,938.25	120.32	.41
INV	ESTMENT			
	Land	173,000.00	3,000.00	
	Buildings	12,613.17	218.73	
	Machinery	6,085.81	105.53	
	Irr. Machinery	.00	.00	
	TOTAL	191,698.98	3,324.26	
MΔN	NAGEMENT		,	
	Yield Per Acre (Pound)		293.01	
	Expected Market Price Per Pound		1.51	

Rented Irrigated Alfalfa Seed

Acres Cropped: 57.33

	Litterprises. 5			
		Total \$	\$/Acre	\$/Pound
(A)	1. Crop Sales - Imputed Value of Production	29,166.00	508.71	1.35
	2. Crop Insurance Receipts	12,159.50	212.08	
	3. Miscellaneous Receipts	.00	.00	
	4. Government Program	.00	.00	
	5. Additional Revenue from Straw / Aftermath Grazing	324.72	5.66	
	GROSS RETURN	41,650.22	726.46	1.93
(B)	1. Seed & Seed Cleaning	.00	.00	
	2. Fertilizer Rates: 33N 20P 6K	1,131.67	19.74	
	3. Chemicals	6,170.59	107.63	
	4. Hail / Crop Insurance & Program Premiums	1,803.71	31.46	
	5. Trucking & Marketing	263.93	4.60	
	6. Fuel	1,293.49	22.56	
	7. Irrigation Fuel & Electricity	.00	.00	
	8. Repairs - Machine	1,775.07	30.96	
	9. Repairs - Buildings	736.89	12.85	
	10. Utilities & Miscellaneous Expenses	1,596.74	27.85	
	11. Custom Work & Specialized Labour	635.43	11.08	
	12. Operating Interest Paid	22.25	.39	
	13. Paid Labour & Benefits (41.94 hours)	712.57 601.72	12.43 10.50	
	14. Unpaid Labour (63.98 hours)			
	VARIABLE COSTS	16,744.05	292.05	.77
(C)	1. Cash/Share Rent & Land Lease	4,151.63	72.41	
	2. Taxes, Water Rates, Lic. & Insurance	274.51	4.79	
	3. Equipment & Building a) Depreciation	1,469.21	25.63	
	b) Lease Payments	.00 62.89	.00	
	Paid Capital Interest TOTAL CAPITAL COSTS		1.10 103.92	20
<u>(D)</u>		5,958.24		.28
(D)	CASH COSTS (B+C-B14-C3)	20,631.37	359.85	.95
(E)	TOTAL PRODUCTION COSTS (B+C)	22,702.30	395.97	1.05
(F)	GROSS MARGIN (A-D)	21,018.85	366.61	.97
	RETURN TO UNPAID LABOUR(A-E+B14)	19,549.65	340.98	.90
	RETURN TO INVESTMENT (A-E+C4) 87.7 %	19,010.82	331.58	.88
	RETURN TO EQUITY (A-E)	18,947.93	330.49	.88
INV	ESTMENT			
	Land	.00	.00	
	Buildings	12,373.97	215.83	
	Machinery	9,296.27	162.14	
	Irr. Machinery	.00	.00	
	TOTAL	21,670.24	377.97	
MAI	NAGEMENT			
	Yield Per Acre (Pound)		377.06	
	Expected Market Price Per Pound		1.35	

All Irrigated Alfalfa Hay

Acres Cropped: 107.67

	- P			
		Total \$	\$/Acre	\$/Tonne
(A)	Crop Sales - Imputed Value of Production	15,449.22	143.49	68.08
	2. Crop Insurance Receipts	.00	.00	
	3. Miscellaneous Receipts	.00	.00	
	Government Program	.00	.00	
	5. Additional Revenue from Straw / Aftermath Grazing	.00	.00	
	GROSS RETURN	15,449.22	143.49	68.08
(B)	1. Seed & Seed Cleaning	3,691.32	34.28	
	2. Fertilizer Rates: 31N 51P	2,819.73	26.19	
	3. Chemicals	.00	.00	
	4. Hail / Crop Insurance & Program Premiums	.00	.00	
	5. Trucking & Marketing	223.60	2.08	
	6. Fuel	4,809.81	44.67	
	7. Irrigation Fuel & Electricity (Water: 3.00 inches)	286.80	2.66	
	8. Repairs - Machine	3,625.76	33.68	
	9. Repairs - Buildings	30.17	.28	
	10. Utilities & Miscellaneous Expenses	5,579.06	51.82	
	11. Custom Work & Specialized Labour12. Operating Interest Paid	.00 386.84	.00 3.59	
	13. Paid Labour & Benefits (55.60 hours)	833.96	7.75	
	14. Unpaid Labour (327.13 hours)	3,271.27	30.38	
	. , ,			440.00
(0)	VARIABLE COSTS	25,558.31	237.38	112.63
(C)	1. Cash/Share Rent & Land Lease	3,686.00	34.24	
	2. Taxes, Water Rates, Lic. & Insurance	992.81	9.22 71.92	
	Equipment & Building a) Depreciation b) Lease Payments	7,742.87 .00	.00	
	4. Paid Capital Interest	249.40	2.32	
	TOTAL CAPITAL COSTS	12,671.08	117.69	55.84
(D)	CASH COSTS (B+C-B14-C3)	27,215.25	252.77	119.93
(E)	TOTAL PRODUCTION COSTS (B+C)	38,229.39	355.07	168.47
(F)	GROSS MARGIN (A-D)	(11,766.03)	(109.28)	(51.85)
(- /	RETURN TO UNPAID LABOUR(A-E+B14)	(19,508.90)	(181.20)	(85.97)
	RETURN TO INVESTMENT (A-E+C4) -14.9 %	(22,530.77)	(209.26)	(99.29)
	RETURN TO EQUITY (A-E)	(22,780.17)	(211.58)	(100.39)
INIV	ESTMENT		, ,	
1144	Land	63,333.33	588.24	
	Buildings	17,298.78	160.67	
	Machinery	46,555.37	432.40	
	Irr. Machinery	23,694.97	220.08	
	TOTAL	150,882.45	1,401.39	
R# A !			., 101.00	
IVIAI	Viold Por Acro (Toppo)		0.11	
	Yield Per Acre (Tonne)		2.11 68.08	
	Expected Market Price Per Tonne		00.00	

	All Irrigated Alfalfa Hay	Group AVG	Top 1/3 AVG
	Acres Cropped:	107.67	95.00
	Enterprises:	3	1
	·	\$/Acre	\$/Acre
(A)	Crop Sales - Imputed Value of Production	143.49	178.75
` '	2. Crop Insurance Receipts	.00	.00
	3. Miscellaneous Receipts	.00	.00
	4. Government Program	.00	.00
	5. Additional Revenue from Straw / Aftermath Grazing	.00	.00
	GROSS RETURN	143.49	178.75
(B)	1. Seed & Seed Cleaning	34.28	.00
(-)	2. Fertilizer	26.19	19.78
	3. Chemicals	.00	.00
	4. Hail / Crop Insurance & Program Premiums	.00	.00
	5. Trucking & Marketing	2.08	.00
	6. Fuel	44.67	22.56
	7. Irrigation Fuel & Electricity	2.66	9.06
	8. Repairs - Machine	33.68	24.64
	9. Repairs - Buildings	.28	.95
	10. Utilities & Miscellaneous Expenses	51.82	11.39
	11. Custom Work & Specialized Labour	.00	.00
	12. Operating Interest Paid	3.59	1.00
	13. Paid Labour & Benefits	7.75	7.39
	14. Unpaid Labour	30.38	8.57
	VARIABLE COSTS	237.38	105.33
(C)	1. Cash/Share Rent & Land Lease	34.24	.00
	2. Taxes, Water Rates, Lic. & Insurance	9.22	20.61
	3. Equipment & Building a) Depreciation	71.92	114.21
	b) Lease Payments	.00	.00
	4. Paid Capital Interest	2.32	.00
	TOTAL CAPITAL COSTS	117.69	134.82
(D)	CASH COSTS (B+C-B14-C3)	252.77	117.38
<u>(E)</u>	TOTAL PRODUCTION COSTS (B+C)	355.07	240.15
(F)	GROSS MARGIN (A-D)	(109.28)	61.37
	RETURN TO UNPAID LABOUR(A-E+B14)	(181.20)	(52.83)
	RETURN TO INVESTMENT (A-E+C4)	(209.26)	(61.40)
	RETURN TO EQUITY (A-E)	(211.58)	(61.40)
INV	ESTMENT		
	Land	588.24	2,000.00
	Buildings	160.67	186.28
	Machinery	432.40	363.03
	Irr. Mach.	220.08	748.26
	TOTAL	1,401.39	3,297.57
MA	NAGEMENT		
	Yield Per Acre (Tonne)	2.11	2.75
	Expected Market Price Per Tonne	68.08	65.00

All Irrigated Mixed Grass Hay

Acres Cropped: 52.67

		Total \$	\$/Acre	\$/Tonne
(A)	1. Crop Sales - Imputed Value of Production	5,843.35	110.95	55.33
	2. Crop Insurance Receipts	.00	.00	
	3. Miscellaneous Receipts	.00	.00	
	4. Government Program	.00	.00	
	5. Additional Revenue from Straw / Aftermath Grazing	.00	.00	
	GROSS RETURN	5,843.35	110.95	55.33
(B)	1. Seed & Seed Cleaning	.00	.00	
	2. Fertilizer Rates: 81N 35P 3K	2,510.41	47.67	
	3. Chemicals	260.00	4.94	
	4. Hail / Crop Insurance & Program Premiums	.00	.00	
	5. Trucking & Marketing	.00	.00	
	6. Fuel	838.78	15.93	
	7. Irrigation Fuel & Electricity (Water: 1.73 inches)	162.02	3.08	
	8. Repairs - Machine	1,240.31	23.55	
	9. Repairs - Buildings	58.44	1.11	
	10. Utilities & Miscellaneous Expenses	902.84	17.14	
	11. Custom Work & Specialized Labour	.00	.00	
	12. Operating Interest Paid	30.91	.59	
	13. Paid Labour & Benefits (78.17 hours)	1,321.08	25.08	
	14. Unpaid Labour (39.14 hours)	359.91	6.83	
	VARIABLE COSTS	7,684.68	145.91	72.77
(C)	1. Cash/Share Rent & Land Lease	.00	.00	
	2. Taxes, Water Rates, Lic. & Insurance	1,093.70	20.77	
	3. Equipment & Building a) Depreciation	3,279.19	62.26	
	b) Lease Payments	.00	.00	
	4. Paid Capital Interest	67.19	1.28	
	TOTAL CAPITAL COSTS	4,440.08	84.31	42.05
(D)	CASH COSTS (B+C-B14-C3)	8,485.67	161.12	80.36
(E)	TOTAL PRODUCTION COSTS (B+C)	12,124.77	230.22	114.82
(F)	GROSS MARGIN (A-D)	(2,642.31)	(50.17)	(25.02)
	RETURN TO UNPAID LABOUR(A-E+B14)	(5,921.50)	(112.43)	(56.07)
	RETURN TO INVESTMENT (A-E+C4) -3.7 %	(6,214.22)	(117.99)	(58.85)
	RETURN TO EQUITY (A-E)	(6,281.41)	(119.27)	(59.48)
INV	ESTMENT			
	Land	127,000.00	2,411.39	
	Buildings	10,111.42	191.99	
	Machinery	15,382.98	292.08	
	Irr. Machinery	13,385.58	254.16	
	TOTAL	165,879.98	3,149.62	
MΔI	NAGEMENT		•	
	Yield Per Acre (Tonne)		2.01	
	Expected Market Price Per Tonne		55.33	

	All Irrigated Mixed Grass Hay	Group AVG	Top 1/3 AVG
	Acres Cropped:	52.67	25.00
	Enterprises:	3	1
		\$/Acre	\$/Acre
(A)	Crop Sales - Imputed Value of Production	110.95	98.00
` ,	2. Crop Insurance Receipts	.00	.00
	3. Miscellaneous Receipts	.00	.00
	4. Government Program	.00	.00
	5. Additional Revenue from Straw / Aftermath Grazing	.00	.00
	GROSS RETURN	110.95	98.00
(B)	1. Seed & Seed Cleaning	.00	.00
` ,	2. Fertilizer	47.67	20.62
	3. Chemicals	4.94	.00
	4. Hail / Crop Insurance & Program Premiums	.00	.00
	5. Trucking & Marketing	.00	.00
	6. Fuel	15.93	22.56
	7. Irrigation Fuel & Electricity	3.08	3.02
	8. Repairs - Machine	23.55	24.64
	9. Repairs - Buildings	1.11	.95
	10. Utilities & Miscellaneous Expenses	17.14	8.66
	11. Custom Work & Specialized Labour	.00	.00
	12. Operating Interest Paid	.59	1.00
	13. Paid Labour & Benefits	25.08	7.39
	14. Unpaid Labour	6.83	8.57
	VARIABLE COSTS	145.91	97.40
(C)	1. Cash/Share Rent & Land Lease	.00	.00
	2. Taxes, Water Rates, Lic. & Insurance	20.77	20.61
	3. Equipment & Building a) Depreciation	62.26	68.43
	b) Lease Payments	.00	.00
	4. Paid Capital Interest	1.28	.00
	TOTAL CAPITAL COSTS	84.31	89.04
(D)	CASH COSTS (B+C-B14-C3)	161.12	109.45
(E)	TOTAL PRODUCTION COSTS (B+C)	230.22	186.44
(F)	GROSS MARGIN (A-D)	(50.17)	(11.45)
	RETURN TO UNPAID LABOUR(A-E+B14)	(112.43)	(79.88)
	RETURN TO INVESTMENT (A-E+C4)	(117.99)	(88.44)
	RETURN TO EQUITY (A-E)	(119.27)	(88.44)
INV	ZESTMENT CONTRACTOR OF THE PROPERTY OF THE PRO		
	Land	2,411.39	2,000.00
	Buildings	191.99	186.28
	Machinery	292.08	363.03
_	Irr. Mach.	254.16	249.42
	TOTAL	3,149.62	2,798.73
МΔ	NAGEMENT		•
	Yield Per Acre (Tonne)	2.01	1.40
	Expected Market Price Per Tonne	55.33	70.00
	France manners may be beautiful.	20.00	. 0.00



I INCOME

- A Imputed Value of Production total of estimated yields/acre X estimated final prices
- **B** Crop Insurance Receipts added regardless of when payment is received
- C Miscellaneous Receipts such as patronage dividends or input rebates
- **D** Government Program Receipts allocated to all cropped acres equally
- E Straw/Aftermath Grazing Revenue value of straw + imputed value of grazing

II EXPENSES

- A Crop Specific Inputs allocated by producer to each crop as documented on the survey form
 - 1. Seed
 - 2. Fertilizer
 - 3. Chemical
 - 4. Hail and Crop Insurance
 - 5. Custom Work and Specialized Labour
 - **6. Land Rent** cash rent or crop share (converted to a cash basis)
- **B** Allocated Crop Inputs allocation ratios based on research from AAFRD
 - **1. Irrigation to Dryland Ratio** allocated to crops at a 3:1 ratio
 - **2. Trucking and Marketing** allocated to specific cropping acres by producer
 - **3. Fuel** Summerfallow allocation of 0.3:1 compared to crop acres; Sugar beets allocation of 2.96:1 compared to other irrigated crop acres
 - **4. Irrigation Fuel** allocation based on total pumping hours for each crop
 - **5. Machinery Repairs** allocated equally to all acres except summerfallow (0.3:1) and special crops (as specified by producer)
 - **6. Building Repairs** allocated to all acres equally except for special crops buildings
 - 7. **Operating Interest** interest paid on operating loans allocated equally
 - **8. Paid Labour** based on allocations between crops as specified by producer
 - **9. Unpaid and Operator Labour** operator \$10/hour, other unpaid labour \$7.50/hour
 - **10.** Land Taxes allocated equally to all owned cropped acres
 - **11.** Water Rates allocated equally to all owned irrigated acres
 - **12.** Water Rates allocated equally to all owned irrigated acres
 - **13. Equipment Depreciation** imputed at 8.5% for power equipment, 11% for non-power, based on current market value

- **14. Insurance and Licenses** allocated to all cropped acres equally
- **15. Building Depreciation** imputed at 5% on the current market value
- **16.** Paid Capital Interest allocated to all owned cropped acres equally except summerfallow (0.25:1)

III CAPITAL INVESTMENT

- A Land producer estimate of bare land value for both irrigated and dryland owned acreage
- **B Buildings** allocated equally to all acreage except special crops buildings (allocated to the crop)
- C Equipment
 - **1.** General Use allocated to all acres equally, except summerfallow (0.3:1)
 - **2. Crop Specific** allocated by producer to each crop based on percentage of use
 - **3. Irrigation** allocated according to pumping hours as specified by producer

IV SUMMARY CALCULATION

- A Gross Return = imputed value of production + crop insurance receipts + miscellaneous receipts + government program payments + straw/grazing revenue
- B Variable Costs = seed + fertilizer + chemicals + crop insurance + trucking and marketing + fuel + machinery and building repairs + utilities + miscellaneous overhead + custom work + operating interest + paid and unpaid labour
- C Total Capital Costs = land rent + land taxes + water rates + insurance + depreciation + paid capital interest
- Cash Costs = variable costs + capital costs unpaid labour depreciation
- E Total Production Costs = variable costs + total capital costs
- F Gross Margin (returns left to cover total capital costs and operator equity) = gross return total cash costs
- G Return to Unpaid Labour (funds remaining after all expenses have been paid except unpaid labour) = gross return total production costs + unpaid labour
- H Return to Investment (shows the operation's ability to earn a return on its total assets) = gross return total production costs + paid capital interest
- I Return to Equity (amount remaining from operations used to provide a return to individual or shareholder equity) = gross return total production costs