AgriProfit\$ 2017 Cost and Return Benchmarks for Crops and Forages: Black Soil Zone



AgriProfit\$ Business Analysis and Research Program



Alberta Agriculture and Forestry, Government of Alberta October 2018 2017 Cost and Return Benchmarks Crops and Forages Black Soil Zone

Manglai

Crop Economist
Economics Section

Economics and Competitiveness Branch

Phone: (780) 422-4056 Fax: (780) 427-5220 ml.manglai@gov.ab.ca

Any questions about the underlying assumptions or interpretation of this report can be addressed to Manglai

Table of Contents

Overview		
Crops	5	
Spring Wheat	5	
Feed Barley	8	
Liberty Link Canola	11	
Roundup Ready Canola	14	
Peas	17	
Forages	20	
Alfalfa/ Grass Hay	20	
Definitions	22	

Overview

2017 Black Soil Zone

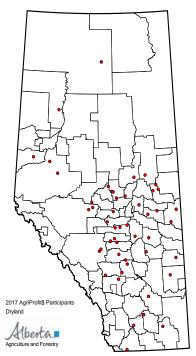
The AgriProfit\$ Business Analysis and Research
Program provides a provincial overview of costs and
returns for field crops and forages. The Economics and
Competitiveness Branch collects cost of production
information annually from Alberta producers to generate
regional benchmarks. Producer participants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

The **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 danger 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 Black Soil Zones 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 2017 participants.





Crop: Spring Wheat Tenure: All Soil: Black Yield units: Bushel

		\$/Acre	2	\$/Bushe	I
		Average	Top 1/3	Average	Top 1/3
(A) 1	Crop Sales	\$287.38	\$442.50	\$6.26	\$6.67
2	Crop Insurance Receipts	\$0.22	\$0.00	\$0.00	\$0.00
3	Misc. Receipts	\$1.54	\$0.01	\$0.03	\$0.00
4	Government Program	\$0.00	\$0.00	\$0.00	\$0.00
5	Additional Revenue From Straw / Grazing	\$0.67	\$0.67	\$0.01	\$0.01
	Gross Return	\$289.80	\$443.18	\$6.32	\$6.68
(B) 1	Seed & Seed Cleaning	\$21.81	\$22.35	\$0.48	\$0.34
2	Fertilizer	\$58.90	\$57.74	\$1.28	\$0.40
3	Chemicals	\$26.50	\$26.47	\$0.58	\$0.40
4	Hail/Crop Insurance Premium	\$2.57	\$3.40	\$0.06	\$0.05
5	Trucking and Marketing	\$0.75	\$0.77	\$0.02	\$0.01
6	Fuel	\$13.61	\$14.46	\$0.30	\$0.22
7	Irrigation Fuel and Electricity	\$0.00	\$0.00	\$0.00	\$0.00
8	Machinery Repairs	\$19.70	\$15.95	\$0.43	\$0.24
9	Buildings Repairs	\$3.40	\$0.52	\$0.07	\$0.01
10	Utilities and Miscellaneous	\$16.36	\$19.64	\$0.36	\$0.30
11	Custom Work	\$0.60	\$0.29	\$0.01	\$0.00
12	Operating Interest Paid	\$1.04	\$0.96	\$0.02	\$0.01
13	Paid Labour & Benefits	\$13.29	\$17.89	\$0.29	\$0.27
14	Unpaid Labour & Benefits	\$19.09	\$16.43	\$0.42	\$0.25
	Variable Costs	\$197.60	\$196.86	\$4.31	\$2.97
(C) 1	Cash/Share Land Rent	\$34.06	\$43.41	\$0.74	\$0.65
2	Taxes, Water Rates, License and Ins.	\$6.77	\$4.41	\$0.15	\$0.07
3	Equipment and Building: a) Depreciation	\$48.07	\$53.28	\$1.05	\$0.80
	b) Lease Payments	\$0.10	\$0.20	\$0.00	\$0.00
4	Paid Capital Interest	\$4.13	\$3.35	\$0.09	\$0.05
	Capital Costs	\$93.13	\$104.63	\$2.03	\$1.58
(D)	Cash Costs (B+C-B14-C3a)	\$223.57	\$231.79	\$4.87	\$3.49
(E)	Total Production Costs (B+C)	\$290.73	\$301.50	\$6.34	\$4.54
	Gross Margin (A-D)	\$66.23	\$211.39	\$1.44	\$3.18
	Return to Unpaid Labour (A-E+B14)	\$18.16	\$158.11	\$0.40	\$2.38
	Return to Investment (A-E+C4)	\$3.19	\$145.03	\$0.07	\$2.18
	Return to Equity (A-E)	(\$0.93)	\$141.68	(\$0.02)	\$2.13
	Investment				
	Land	\$1,351.91	\$839.29		
	Buildings	\$149.80	\$148.26		
	Machinery (excluding Irrigation Machinery)	\$448.88	\$498.48		
	Irrigation Machinery	\$0.00	\$0.00		
	Total	\$1,950.59	\$1,486.03		
	Management				
	Average Yield (Bushel/Acre)	45.88	66.39		
	Expected Price (\$/Bushel)	\$6.26	\$6.67		

Crop: Spring Wheat Tenure: Own Soil: Black Yield units: Bushel

		\$/Acr	e	\$/Bushe	el
		Average	Top 1/3	Average	Top 1/3
(A) 1	Crop Sales	\$224.11	\$402.93	\$6.26	\$6.39
2	Crop Insurance Receipts	\$0.00	\$0.00	\$0.00	\$0.00
3	Misc. Receipts	\$2.89	\$0.01	\$0.08	\$0.00
4	Government Program	\$0.00	\$0.00	\$0.00	\$0.00
5	Additional Revenue From Straw / Grazing	\$1.76	\$2.09	\$0.05	\$0.03
	Gross Return	\$228.76	\$405.03	\$6.39	\$6.42
(B) 1	Seed & Seed Cleaning	\$19.54	\$19.08	\$0.55	\$0.30
2	Fertilizer	\$59.32	\$62.91	\$1.66	\$0.31
3	Chemicals	\$21.43	\$19.68	\$0.60	\$0.31
4	Hail/Crop Insurance Premium	\$3.67	\$6.15	\$0.10	\$0.10
5	Trucking and Marketing	\$1.15	\$0.94	\$0.03	\$0.01
6	Fuel	\$15.68	\$19.38	\$0.44	\$0.31
7	Irrigation Fuel and Electricity	\$0.00	\$0.00	\$0.00	\$0.00
8	Machinery Repairs	\$24.28	\$18.09	\$0.68	\$0.29
9	Buildings Repairs	\$5.89	\$0.57	\$0.16	\$0.01
10	Utilities and Miscellaneous	\$15.92	\$24.93	\$0.44	\$0.40
11	Custom Work	\$1.11	\$0.92	\$0.03	\$0.01
12	Operating Interest Paid	\$1.86	\$2.04	\$0.05	\$0.03
13	Paid Labour & Benefits	\$15.55	\$21.23	\$0.43	\$0.34
14	Unpaid Labour & Benefits	\$24.40	\$22.78	\$0.68	\$0.36
	Variable Costs	\$209.81	\$218.71	\$5.86	\$3.47
(C) 1	Cash/Share Land Rent	\$0.00	\$0.00	\$0.00	\$0.00
2	Taxes, Water Rates, License and Ins.	\$13.56	\$10.55	\$0.38	\$0.17
3	Equipment and Building: a) Depreciation	\$64.28	\$81.49	\$1.80	\$1.29
	b) Lease Payments	\$0.13	\$0.25	\$0.00	\$0.00
4	Paid Capital Interest	\$7.73	\$6.39	\$0.22	\$0.10
	Capital Costs	\$85.69	\$98.67	\$2.39	\$1.56
(D)	Cash Costs (B+C-B14-C3a)	\$206.82	\$213.11	\$5.78	\$3.38
(E)	Total Production Costs (B+C)	\$295.50	\$317.38	\$8.26	\$5.03
	Gross Margin (A-D)	\$21.94	\$191.92	\$0.61	\$3.04
	Return to Unpaid Labour (A-E+B14)	(\$42.33)	\$110.43	(\$1.18)	\$1.75
	Return to Investment (A-E+C4)	(\$59.01)	\$94.04	(\$1.65)	\$1.49
	Return to Equity (A-E)	(\$66.73)	\$87.65	(\$1.86)	\$1.39
	Investment				
	Land	\$3,508.84	\$2,918.98		
	Buildings	\$223.27	\$212.26		
	Machinery (excluding Irrigation Machinery)	\$600.49	\$798.55		
	Irrigation Machinery	\$0.00	\$0.00		
	Total	\$4,332.61	\$3,929.79		
	Management				
	Average Yield (Bushel/Acre)	35.78	63.10		

Crop: Spring Wheat Tenure: Rent Soil: Black Yield units: Bushel

		\$/Acre		\$/Bush	el
		Average	Top 1/3	Average	Top 1/3
(A) 1	Crop Sales	\$326.14	\$458.13	\$6.26	\$6.83
2	Crop Insurance Receipts	\$0.35	\$0.00	\$0.01	\$0.00
3	Misc. Receipts	\$0.71	\$0.01	\$0.01	\$0.00
4	Government Program	\$0.00	\$0.00	\$0.00	\$0.00
5	Additional Revenue From Straw / Grazing	\$0.00	\$0.00	\$0.00	\$0.00
	Gross Return	\$327.20	\$458.14	\$6.28	\$6.83
(B) 1	Seed & Seed Cleaning	\$23.21	\$23.74	\$0.45	\$0.35
2	Fertilizer	\$58.65	\$53.35	\$1.13	\$0.43
3	Chemicals	\$29.60	\$28.72	\$0.57	\$0.43
4	Hail/Crop Insurance Premium	\$1.89	\$1.88	\$0.04	\$0.03
5	Trucking and Marketing	\$0.50	\$0.75	\$0.01	\$0.01
6	Fuel	\$12.33	\$11.15	\$0.24	\$0.17
7	Irrigation Fuel and Electricity	\$0.00	\$0.00	\$0.00	\$0.00
8	Machinery Repairs	\$16.90	\$16.78	\$0.32	\$0.25
9	Buildings Repairs	\$1.87	\$0.38	\$0.04	\$0.01
10	Utilities and Miscellaneous	\$16.63	\$13.15	\$0.32	\$0.20
11	Custom Work	\$0.28	\$0.00	\$0.01	\$0.00
12	Operating Interest Paid	\$0.53	\$0.21	\$0.01	\$0.00
13	Paid Labour & Benefits	\$11.91	\$15.60	\$0.23	\$0.23
14	Unpaid Labour & Benefits	\$15.84	\$14.55	\$0.30	\$0.22
	Variable Costs	\$190.12	\$180.26	\$3.65	\$2.69
(C) 1	Cash/Share Land Rent	\$54.93	\$61.51	\$1.05	\$0.92
2	Taxes, Water Rates, License and Ins.	\$2.62	\$2.43	\$0.05	\$0.04
3	Equipment and Building: a) Depreciation	\$38.15	\$39.92	\$0.73	\$0.59
	b) Lease Payments	\$0.08	\$0.19	\$0.00	\$0.00
4	Paid Capital Interest	\$1.92	\$1.10	\$0.04	\$0.02
	Capital Costs	\$97.70	\$105.15	\$1.88	\$1.57
(D)	Cash Costs (B+C-B14-C3a)	\$233.83	\$230.94	\$4.49	\$3.44
(E)	Total Production Costs (B+C)	\$287.81	\$285.41	\$5.53	\$4.25
	Gross Margin (A-D)	\$93.37	\$227.20	\$1.79	\$3.39
	Return to Unpaid Labour (A-E+B14)	\$55.23	\$187.28	\$1.06	\$2.79
	Return to Investment (A-E+C4)	\$41.31	\$173.83	\$0.79	\$2.59
	Return to Equity (A-E)	\$39.39	\$172.73	\$0.76	\$2.57
	Investment				
	Land	\$30.14	\$56.42		
	Buildings	\$104.79	\$121.08		
	Machinery (excluding Irrigation Machinery)	\$355.98	\$355.91		
	Irrigation Machinery	\$0.00	\$0.00		
	Total	\$490.90	\$533.41		
	Management				
	Management	F2.07	67.44		
	Average Yield (Bushel/Acre)	52.07	67.11		
	Expected Price (\$/Bushel)	\$6.26	\$6.83		

Crop: Feed Barley Tenure: All Soil: Black Yield units: Bushel

		\$/Acr	e	\$/Bushel	
		Average	Top 1/3	Average	Top 1/3
(A) 1	Crop Sales	\$190.10	\$236.00	\$3.76	\$3.76
2	Crop Insurance Receipts	\$119.83	\$108.95	\$2.37	\$1.74
3	Misc. Receipts	\$0.73	\$0.70	\$0.01	\$0.01
4	Government Program	\$0.00	\$0.00	\$0.00	\$0.00
5	Additional Revenue From Straw / Grazing	\$0.00	\$0.00	\$0.00	\$0.00
	Gross Return	\$310.66	\$345.65	\$6.14	\$5.51
(B) 1	Seed & Seed Cleaning	\$16.16	\$17.89	\$0.32	\$0.29
2	Fertilizer	\$51.01	\$48.59	\$1.01	\$0.50
3	Chemicals	\$26.56	\$31.37	\$0.52	\$0.50
4	Hail/Crop Insurance Premium	\$5.73	\$6.02	\$0.11	\$0.10
5	Trucking and Marketing	\$1.87	\$1.76	\$0.04	\$0.03
6	Fuel	\$18.65	\$18.41	\$0.37	\$0.29
7	Irrigation Fuel and Electricity	\$0.00	\$0.00	\$0.00	\$0.00
8	Machinery Repairs	\$14.09	\$17.75	\$0.28	\$0.28
9	Buildings Repairs	\$5.15	\$4.65	\$0.10	\$0.07
10	Utilities and Miscellaneous	\$10.04	\$6.68	\$0.20	\$0.11
11	Custom Work	\$6.68	\$3.74	\$0.13	\$0.06
12	Operating Interest Paid	\$0.63	\$0.00	\$0.01	\$0.00
13	Paid Labour & Benefits	\$0.43	\$0.92	\$0.01	\$0.01
14	Unpaid Labour & Benefits	\$29.74	\$28.25	\$0.59	\$0.45
	Variable Costs	\$186.73	\$186.03	\$3.69	\$2.97
(C) 1	Cash/Share Land Rent	\$35.07	\$28.04	\$0.69	\$0.45
2	Taxes, Water Rates, License and Ins.	\$5.50	\$7.41	\$0.11	\$0.12
3	Equipment and Building: a) Depreciation	\$79.39	\$82.02	\$1.57	\$1.31
	b) Lease Payments	\$0.00	\$0.00	\$0.00	\$0.00
4	Paid Capital Interest	\$1.50	\$2.65	\$0.03	\$0.04
	Capital Costs	\$121.45	\$120.11	\$2.40	\$1.92
(D)	Cash Costs (B+C-B14-C3a)	\$199.05	\$195.87	\$3.93	\$3.12
(E)	Total Production Costs (B+C)	\$308.18	\$306.14	\$6.09	\$4.88
	Gross Margin (A-D)	\$111.60	\$149.78	\$2.21	\$2.39
	Return to Unpaid Labour (A-E+B14)	\$32.22	\$67.76	\$0.64	\$1.08
	Return to Investment (A-E+C4)	\$3.97	\$42.16	\$0.08	\$0.67
	Return to Equity (A-E)	\$2.47	\$39.51	\$0.05	\$0.63
•	Investment				
	Land	\$539.93	\$1,170.01		
	Buildings	\$125.05	\$109.29		
	Machinery (excluding Irrigation Machinery)	\$807.84	\$877.51		
	Irrigation Machinery	\$0.00	\$0.00		
	Total	\$1,472.83	\$2,156.81		
	Management	-00	62 = 1		
	Average Yield (Bushel/Acre)	50.59	62.71		
	Expected Price (\$/Bushel)	\$3.76	\$3.76		

Crop: Feed Barley Tenure: Own Soil: Black Yield units: Bushel

		\$/Acre		\$/Bushe	I
		Average	Top 1/3	Average	Top 1/3
(A) 1	Crop Sales	\$344.57		\$4.00	
2	Crop Insurance Receipts	\$0.00		\$0.00	
3	Misc. Receipts	\$0.00		\$0.00	
4	Government Program	\$0.00		\$0.00	
5	Additional Revenue From Straw / Grazing	\$0.00		\$0.00	
	Gross Return	\$344.57		\$4.00	
B) 1	Seed & Seed Cleaning	\$17.43		\$0.20	
2	Fertilizer	\$47.29		\$0.55	
3	Chemicals	\$13.76		\$0.16	
4	Hail/Crop Insurance Premium	\$5.27		\$0.06	
5	Trucking and Marketing	\$0.00		\$0.00	
6	Fuel	\$20.34		\$0.24	
7	Irrigation Fuel and Electricity	\$0.00		\$0.00	
8	Machinery Repairs	\$33.04		\$0.38	
9	Buildings Repairs	\$0.00		\$0.00	
10	Utilities and Miscellaneous	\$8.97		\$0.10	
11	Custom Work	\$0.00		\$0.00	
12	Operating Interest Paid	\$0.00		\$0.00	
13	Paid Labour & Benefits	\$2.42		\$0.03	
14	Unpaid Labour & Benefits	\$33.79		\$0.39	
	Variable Costs	\$182.31		\$2.12	
(C) 1	Cash/Share Land Rent	\$0.00		\$0.00	
2	Taxes, Water Rates, License and Ins.	\$16.86		\$0.20	
3	Equipment and Building: a) Depreciation	\$95.99		\$1.11	
	b) Lease Payments	\$0.00		\$0.00	
4	Paid Capital Interest	\$5.70		\$0.07	
	Capital Costs	\$118.55		\$1.38	
(D)	Cash Costs (B+C-B14-C3a)	\$171.08		\$1.99	
(E)	Total Production Costs (B+C)	\$300.86		\$3.49	
	Gross Margin (A-D)	\$173.49		\$2.01	
	Return to Unpaid Labour (A-E+B14)	\$77.50		\$0.90	
	Return to Investment (A-E+C4)	\$49.42		\$0.57	
	Return to Equity (A-E)	\$43.72		\$0.51	
	Investment	•			
	Land	\$3,067.33			
	Buildings	\$90.37			
	Machinery (excluding Irrigation Machinery)	\$1,124.85			
	Irrigation Machinery	\$0.00			
	Total	\$4,282.54			
	Managament				
	Management	06.44			
	Average Yield (Bushel/Acre)	86.14			
	Expected Price (\$/Bushel)	\$4.00			

Crop: Feed Barley Tenure: Rent Soil: Black Yield units: Bushel

		\$/Acre		\$/Bushe	el
		Average	Top 1/3	Average	Top 1/3
(A) 1	Crop Sales	\$157.10		\$3.65	
2	Crop Insurance Receipts	\$145.43		\$3.38	
3	Misc. Receipts	\$0.89		\$0.02	
4	Government Program	\$0.00		\$0.00	
5	Additional Revenue From Straw / Grazing	\$0.00		\$0.00	
	Gross Return	\$303.41		\$7.06	
(B) 1	Seed & Seed Cleaning	\$15.89		\$0.37	
2	Fertilizer	\$51.80		\$1.20	
3	Chemicals	\$29.29		\$0.68	
4	Hail/Crop Insurance Premium	\$5.83		\$0.14	
5	Trucking and Marketing	\$2.27		\$0.05	
6	Fuel	\$18.29		\$0.43	
7	Irrigation Fuel and Electricity	\$0.00		\$0.00	
8	Machinery Repairs	\$10.04		\$0.23	
9	Buildings Repairs	\$6.25		\$0.15	
10	Utilities and Miscellaneous	\$10.27		\$0.24	
11	Custom Work	\$8.11		\$0.19	
12	Operating Interest Paid	\$0.77		\$0.02	
13	Paid Labour & Benefits	\$0.00		\$0.00	
14	Unpaid Labour & Benefits	\$28.88		\$0.67	
	Variable Costs	\$187.68		\$4.36	
(C) 1	Cash/Share Land Rent	\$42.56		\$0.99	
2	Taxes, Water Rates, License and Ins.	\$3.08		\$0.07	
3	Equipment and Building: a) Depreciation	\$75.84		\$1.76	
	b) Lease Payments	\$0.00		\$0.00	
4	Paid Capital Interest	\$0.60		\$0.01	
	Capital Costs	\$122.07		\$2.84	
(D)	Cash Costs (B+C-B14-C3a)	\$205.03		\$4.77	
(E)	Total Production Costs (B+C)	\$309.75		\$7.20	
	Gross Margin (A-D)	\$98.38		\$2.29	
	Return to Unpaid Labour (A-E+B14)	\$22.54		\$0.52	
	Return to Investment (A-E+C4)	(\$5.74)		(\$0.13)	
	Return to Equity (A-E)	(\$6.34)		(\$0.15)	
	Investment	(40.0.7		(40.20)	
	Land	\$0.00			
	Buildings	\$132.46			
	Machinery (excluding Irrigation Machinery)	\$740.12			
	Irrigation Machinery	\$0.00			
	Total	\$872.58			
	Management				
	Management				
	Average Yield (Bushel/Acre)	43.00			
	Expected Price (\$/Bushel)	\$3.65			

Crop: Liberty Link Canola Tenure: All Soil: Black Yield units: Bushel

		\$/Acre		\$/Bush	el
		Average	Top 1/3	Average	Top 1/3
(A) 1	Crop Sales	\$386.58	\$543.07	\$11.12	\$11.00
2	Crop Insurance Receipts	\$0.00	\$0.00	\$0.00	\$0.00
3	Misc. Receipts	\$2.89	\$0.00	\$0.08	\$0.00
4	Government Program	\$0.00	\$0.00	\$0.00	\$0.00
5	Additional Revenue From Straw / Grazing	\$0.00	\$0.00	\$0.00	\$0.00
	Gross Return	\$389.46	\$543.07	\$11.21	\$11.00
(B) 1	Seed & Seed Cleaning	\$54.44	\$60.00	\$1.57	\$1.22
2	Fertilizer	\$72.00	\$67.00	\$2.07	\$0.33
3	Chemicals	\$32.16	\$16.42	\$0.93	\$0.33
4	Hail/Crop Insurance Premium	\$1.54	\$0.00	\$0.04	\$0.00
5	Trucking and Marketing	\$1.42	\$0.03	\$0.04	\$0.00
6	Fuel	\$11.30	\$7.98	\$0.33	\$0.16
7	Irrigation Fuel and Electricity	\$0.00	\$0.00	\$0.00	\$0.00
8	Machinery Repairs	\$20.19	\$16.07	\$0.58	\$0.33
9	Buildings Repairs	\$5.76	\$0.42	\$0.17	\$0.01
10	Utilities and Miscellaneous	\$12.63	\$11.47	\$0.36	\$0.23
11	Custom Work	\$3.47	\$0.00	\$0.10	\$0.00
12	Operating Interest Paid	\$0.30	\$0.00	\$0.01	\$0.00
13	Paid Labour & Benefits	\$8.01	\$7.32	\$0.23	\$0.15
14	Unpaid Labour & Benefits	\$16.91	\$15.11	\$0.49	\$0.31
	Variable Costs	\$240.14	\$201.82	\$6.91	\$4.09
(C) 1	Cash/Share Land Rent	\$34.25	\$49.66	\$0.99	\$1.01
2	Taxes, Water Rates, License and Ins.	\$6.31	\$0.64	\$0.18	\$0.01
3	Equipment and Building: a) Depreciation	\$30.44	\$18.76	\$0.88	\$0.38
	b) Lease Payments	\$0.00	\$0.00	\$0.00	\$0.00
4	Paid Capital Interest	\$2.39	\$0.00	\$0.07	\$0.00
	Capital Costs	\$73.35	\$69.06	\$2.11	\$1.40
(D)	Cash Costs (B+C-B14-C3a)	\$266.14	\$237.02	\$7.66	\$4.80
(E)	Total Production Costs (B+C)	\$313.49	\$270.89	\$9.02	\$5.49
	Gross Margin (A-D)	\$123.32	\$306.06	\$3.55	\$6.20
	Return to Unpaid Labour (A-E+B14)	\$92.88	\$287.29	\$2.67	\$5.82
	Return to Investment (A-E+C4)	\$78.36	\$272.19	\$2.26	\$5.51
	Return to Equity (A-E)	\$75.97	\$272.19	\$2.19	\$5.51
	Investment				
	Land	\$1,178.57	\$14.56		
	Buildings	\$134.93	\$67.38		
	Machinery (excluding Irrigation Machinery)	\$260.29	\$156.87		
	Irrigation Machinery	\$0.00	\$0.00		
	Total	\$1,573.79	\$238.81		
	Management				
	Average Yield (Bushel/Acre)	34.75	49.37		
	Expected Price (\$/Bushel)	\$11.12	\$11.00		
	Expected Frice (4) busilers	311.1 Ζ	311.00		

Crop: Liberty Link Canola Tenure: Own Soil: Black Yield units: Bushel

		\$/Acre		\$/Bushe	el
		Average	Top 1/3	Average	Top 1/3
(A) 1	Crop Sales	\$367.91		\$11.20	
2	Crop Insurance Receipts	\$0.00		\$0.00	
3	Misc. Receipts	\$3.46		\$0.11	
4	Government Program	\$0.00		\$0.00	
5	Additional Revenue From Straw / Grazing	\$0.00		\$0.00	
	Gross Return	\$371.37		\$11.31	
(B) 1	Seed & Seed Cleaning	\$50.92		\$1.55	
2	Fertilizer	\$72.53		\$2.21	
3	Chemicals	\$36.46		\$1.11	
4	Hail/Crop Insurance Premium	\$4.78		\$0.15	
5	Trucking and Marketing	\$3.09		\$0.09	
6	Fuel	\$13.36		\$0.41	
7	Irrigation Fuel and Electricity	\$0.00		\$0.00	
8	Machinery Repairs	\$19.06		\$0.58	
9	Buildings Repairs	\$6.63		\$0.20	
10	Utilities and Miscellaneous	\$14.77		\$0.45	
11	Custom Work	\$4.01		\$0.12	
12	Operating Interest Paid	\$0.34		\$0.01	
13	Paid Labour & Benefits	\$6.78		\$0.21	
14	Unpaid Labour & Benefits	\$20.02		\$0.61	
	Variable Costs	\$252.75		\$7.70	
(C) 1	Cash/Share Land Rent	\$0.00		\$0.00	
2	Taxes, Water Rates, License and Ins.	\$12.25		\$0.37	
3	Equipment and Building: a) Depreciation	\$37.75		\$1.15	
	b) Lease Payments	\$0.00		\$0.00	
4	Paid Capital Interest	\$5.59		\$0.17	
	Capital Costs	\$55.58		\$1.69	
(D)	Cash Costs (B+C-B14-C3a)	\$250.57		\$7.63	
(E)	Total Production Costs (B+C)	\$308.33		\$9.39	
	Gross Margin (A-D)	\$120.81		\$3.68	
	Return to Unpaid Labour (A-E+B14)	\$83.06		\$2.53	
	Return to Investment (A-E+C4)	\$68.63		\$2.09	
	Return to Equity (A-E)	\$63.04		\$1.92	
	Investment	,			
	Land	\$3,623.08			
	Buildings	\$205.55			
	Machinery (excluding Irrigation Machinery)	\$308.14			
	Irrigation Machinery	\$0.00			
	Total	\$4,136.77			
	Managamant				
	Management	20.5			
	Average Yield (Bushel/Acre)	32.84			
	Expected Price (\$/Bushel)	\$11.20			

Crop: Liberty Link Canola Tenure: Rent Soil: Black Yield units: Bushel

		\$/Acre		\$/Bush	el
		Average	Top 1/3	Average	Top 1/3
(A) 1	Crop Sales	\$482.31	\$554.28	\$11.01	\$11.00
2	Crop Insurance Receipts	\$0.00	\$0.00	\$0.00	\$0.00
3	Misc. Receipts	\$1.20	\$0.00	\$0.03	\$0.00
4	Government Program	\$0.00	\$0.00	\$0.00	\$0.00
5	Additional Revenue From Straw / Grazing	\$0.00	\$0.00	\$0.00	\$0.00
	Gross Return	\$483.51	\$554.28	\$11.04	\$11.00
(B) 1	Seed & Seed Cleaning	\$57.31	\$60.00	\$1.31	\$1.19
2	Fertilizer	\$65.59	\$67.00	\$1.50	\$0.33
3	Chemicals	\$23.48	\$16.42	\$0.54	\$0.33
4	Hail/Crop Insurance Premium	\$0.00	\$0.00	\$0.00	\$0.00
5	Trucking and Marketing	\$0.31	\$0.03	\$0.01	\$0.00
6	Fuel	\$9.05	\$7.98	\$0.21	\$0.16
7	Irrigation Fuel and Electricity	\$0.00	\$0.00	\$0.00	\$0.00
8	Machinery Repairs	\$18.21	\$16.07	\$0.42	\$0.32
9	Buildings Repairs	\$2.69	\$0.42	\$0.06	\$0.01
10	Utilities and Miscellaneous	\$11.54	\$11.47	\$0.26	\$0.23
11	Custom Work	\$1.47	\$0.00	\$0.03	\$0.00
12	Operating Interest Paid	\$0.13	\$0.00	\$0.00	\$0.00
13	Paid Labour & Benefits	\$7.91	\$7.32	\$0.18	\$0.15
14	Unpaid Labour & Benefits	\$15.26	\$15.11	\$0.35	\$0.30
	Variable Costs	\$212.93	\$201.82	\$4.86	\$4.01
(C) 1	Cash/Share Land Rent	\$65.64	\$49.57	\$1.50	\$0.98
2	Taxes, Water Rates, License and Ins.	\$1.95	\$0.64	\$0.04	\$0.01
3	Equipment and Building: a) Depreciation	\$22.52	\$18.76	\$0.51	\$0.37
	b) Lease Payments	\$0.00	\$0.00	\$0.00	\$0.00
4	Paid Capital Interest	\$0.40	\$0.00	\$0.01	\$0.00
	Capital Costs	\$90.51	\$68.97	\$2.07	\$1.37
(D)	Cash Costs (B+C-B14-C3a)	\$265.66	\$236.93	\$6.06	\$4.70
(E)	Total Production Costs (B+C)	\$303.44	\$270.80	\$6.93	\$5.37
	Gross Margin (A-D)	\$217.85	\$317.35	\$4.97	\$6.30
	Return to Unpaid Labour (A-E+B14)	\$195.32	\$298.58	\$4.46	\$5.93
	Return to Investment (A-E+C4)	\$180.47	\$283.48	\$4.12	\$5.63
	Return to Equity (A-E)	\$180.07	\$283.48	\$ 4.11	\$5.63
	Investment				
	Land	\$14.14	\$14.56		
	Buildings	\$82.95	\$67.38		
	Machinery (excluding Irrigation Machinery)	\$193.89	\$156.87		
	Irrigation Machinery	\$0.00	\$0.00		
	Total	\$290.98	\$238.81		
	Management				
	Average Yield (Bushel/Acre)	AD 01	50.39		
	Expected Price (\$/Bushel)	43.81 \$11.01	\$11.00		
	Expected Price (3/ busilel)	\$11.01	\$11.UU		

Crop: Roundup Ready Canola Tenure: All Soil: Black Yield units: Bushel

		\$/Acro	e	\$/Bush	el
		Average	Top 1/3	Average	Top 1/3
(A) 1	Crop Sales	\$478.50	\$613.90	\$11.06	\$11.12
2	Crop Insurance Receipts	\$0.01	\$0.00	\$0.00	\$0.00
3	Misc. Receipts	\$1.28	\$0.00	\$0.03	\$0.00
4	Government Program	\$0.00	\$0.00	\$0.00	\$0.00
5	Additional Revenue From Straw / Grazing	\$0.09	\$0.36	\$0.00	\$0.01
	Gross Return	\$479.88	\$614.27	\$11.09	\$11.12
(B) 1	Seed & Seed Cleaning	\$47.72	\$43.34	\$1.10	\$0.78
2	Fertilizer	\$101.14	\$116.05	\$2.34	\$0.43
3	Chemicals	\$30.30	\$23.72	\$0.70	\$0.43
4	Hail/Crop Insurance Premium	\$8.44	\$11.23	\$0.20	\$0.20
5	Trucking and Marketing	\$1.45	\$3.27	\$0.03	\$0.06
6	Fuel	\$17.20	\$19.24	\$0.40	\$0.35
7	Irrigation Fuel and Electricity	\$0.00	\$0.00	\$0.00	\$0.00
8	Machinery Repairs	\$17.25	\$14.12	\$0.40	\$0.26
9	Buildings Repairs	\$3.85	\$4.00	\$0.09	\$0.07
10	Utilities and Miscellaneous	\$24.60	\$33.48	\$0.57	\$0.61
11	Custom Work	\$2.84	\$4.86	\$0.07	\$0.09
12	Operating Interest Paid	\$1.81	\$3.53	\$0.04	\$0.06
13	Paid Labour & Benefits	\$15.09	\$14.37	\$0.35	\$0.26
14	Unpaid Labour & Benefits	\$18.97	\$21.81	\$0.44	\$0.40
	Variable Costs	\$290.69	\$313.01	\$6.72	\$5.67
(C) 1	Cash/Share Land Rent	\$29.51	\$2.83	\$0.68	\$0.05
2	Taxes, Water Rates, License and Ins.	\$7.28	\$7.24	\$0.17	\$0.13
3	Equipment and Building: a) Depreciation	\$60.01	\$70.32	\$1.39	\$1.27
J	b) Lease Payments	\$0.10	\$0.00	\$0.00	\$0.00
4	Paid Capital Interest	\$5.27	\$6.96	\$0.12	\$0.13
	Capital Costs	\$102.17	\$87.34	\$2.36	\$1.58
(D)	Cash Costs (B+C-B14-C3a)	\$313.87	\$308.22	\$7.25	\$5.58
(E)	Total Production Costs (B+C)	\$392.86	\$400.36	\$9.08	\$7.25
(=)	Gross Margin (A-D)	\$166.01	\$306.05	\$3.84	\$5.54
	Return to Unpaid Labour (A-E+B14)	\$105.99	\$235.73	\$2.45	\$4.27
	Return to Investment (A-E+C4)	\$92.29	\$220.87	\$2.13	\$4.00
	Return to Equity (A-E) Investment	\$87.02	\$213.91	\$2.01	\$3.87
	Land	¢1 700 02	¢2.742.46		
	Buildings	\$1,798.92 \$176.60	\$2,742.46		
	<u> </u>		\$264.76		
	Machinery (excluding Irrigation Machinery)	\$568.93 \$0.00	\$645.78		
	Irrigation Machinery Total	\$2,544.45	\$0.00 \$3,653.00		
	Total	72,J44.4J	73,033.00		
	Management				
	Average Yield (Bushel/Acre)	43.28	55.22		
	Expected Price (\$/Bushel)	\$11.06	\$11.12		

Crop: Roundup Ready Canola Tenure: Own
Soil: Black Yield units: Bushel

			\$/Acr	e	\$/Bush	el
			Average	Top 1/3	Average	Top 1/3
(A) 1	Crop Sales		\$497.62	\$614.11	\$11.07	\$11.09
2	Crop Insurance Receipts		\$0.00	\$0.00	\$0.00	\$0.00
3	Misc. Receipts		\$0.85	\$0.00	\$0.02	\$0.00
4	Government Program		\$0.00	\$0.00	\$0.00	\$0.00
5	Additional Revenue From	Straw / Grazing	\$0.14	\$0.41	\$0.00	\$0.01
	Gross Return		\$498.60	\$614.52	\$11.09	\$11.10
(B) 1	Seed & Seed Cleaning		\$42.65	\$42.19	\$0.95	\$0.76
2	Fertilizer		\$116.93	\$120.15	\$2.60	\$0.45
3	Chemicals		\$26.68	\$25.15	\$0.59	\$0.45
4	Hail/Crop Insurance Pren	nium	\$11.38	\$11.80	\$0.25	\$0.21
5	Trucking and Marketing		\$1.36	\$2.39	\$0.03	\$0.04
6	Fuel		\$19.78	\$20.09	\$0.44	\$0.36
7	Irrigation Fuel and Electri	city	\$0.00	\$0.00	\$0.00	\$0.00
8	Machinery Repairs		\$15.33	\$13.27	\$0.34	\$0.24
9	Buildings Repairs		\$3.16	\$3.19	\$0.07	\$0.06
10	Utilities and Miscellaneou	ıs	\$31.32	\$35.33	\$0.70	\$0.64
11	Custom Work		\$2.62	\$3.62	\$0.06	\$0.07
12	Operating Interest Paid		\$2.38	\$3.18	\$0.05	\$0.06
13	Paid Labour & Benefits		\$17.29	\$14.54	\$0.38	\$0.26
14	Unpaid Labour & Benefits		\$19.08	\$20.49	\$0.42	\$0.37
	Variable Costs		\$309.96	\$315.39	\$6.89	\$5.70
(C) 1	Cash/Share Land Rent		\$0.00	\$0.00	\$0.00	\$0.00
2	Taxes, Water Rates, Licer	ace and Inc	\$8.81	\$7.20	\$0.20	\$0.13
3	Equipment and Building:		\$68.85	\$69.46	\$1.53	\$1.25
3	Equipment and building.	b) Lease Payments	\$0.09	\$0.00	\$0.00	\$0.00
4	Paid Capital Interest	by Lease Fayinenes	\$8.07	\$7.57	\$0.18	\$0.14
<u> </u>	Capital Costs		\$85.82	\$84.22	\$1.91	\$1.52
(D)	Cash Costs	(P.C P14 C2a)	\$307.85		\$6.85	
(D)	Total Production Costs	(B+C-B14-C3a) (B+C)	\$307.83	\$309.67 \$399.61	\$8.80	\$5.59 \$7.22
(E)	Gross Margin	(A-D)	\$190.76	\$304.86	\$4.24	\$5.50
	=		•			
	Return to Unpaid Labour		\$121.90	\$235.40	\$2.71	\$4.25
	Return to Investment	(A-E+C4)	\$110.89	\$222.48	\$2.47	\$4.02
	Return to Equity	(A-E)	\$102.82	\$214.91	\$2.29	\$3.88
	Investment					
	Land		\$2,911.21	\$2,874.82		
	Buildings		\$188.54	\$221.63		
	Machinery (excluding Irrigation Machinery)		\$672.49	\$664.90		
	Irrigation Machinery		\$0.00	\$0.00		
	Total		\$3,772.25	\$3,761.35		
	Management					
	Average Yield (Bushel/Ac	re)	44.97	55.38		
	AVELAKE HEID IDUSHRIJAL					

Crop: Roundup Ready Canola Tenure: Rent Soil: Black Yield units: Bushel

		\$/Acre		\$/Bushe	\$/Bushel	
		Average	Top 1/3	Average	Top 1/3	
(A) 1	Crop Sales	\$448.31		\$11.04		
2	Crop Insurance Receipts	\$0.04		\$0.00		
3	Misc. Receipts	\$1.97		\$0.05		
4	Government Program	\$0.00		\$0.00		
5	Additional Revenue From Straw / Grazing	\$0.00		\$0.00		
	Gross Return	\$450.32		\$11.09		
(B) 1	Seed & Seed Cleaning	\$55.73		\$1.37		
2	Fertilizer	\$76.22		\$1.88		
3	Chemicals	\$36.02		\$0.89		
4	Hail/Crop Insurance Premium	\$3.80		\$0.09		
5	Trucking and Marketing	\$1.59		\$0.04		
6	Fuel	\$13.13		\$0.32		
7	Irrigation Fuel and Electricity	\$0.00		\$0.00		
8	Machinery Repairs	\$20.28		\$0.50		
9	Buildings Repairs	\$4.94		\$0.12		
10	Utilities and Miscellaneous	\$14.00		\$0.34		
11	Custom Work	\$3.19		\$0.08		
12	Operating Interest Paid	\$0.92		\$0.02		
13	Paid Labour & Benefits	\$11.62		\$0.29		
14	Unpaid Labour & Benefits	\$18.81		\$0.46		
	Variable Costs	\$260.26		\$6.41		
(C) 1	Cash/Share Land Rent	\$76.11		\$1.87		
2	Taxes, Water Rates, License and Ins.	\$4.87		\$0.12		
3	Equipment and Building: a) Depreciation	\$46.06		\$1.13		
_	b) Lease Payments	\$0.10		\$0.00		
4	Paid Capital Interest	\$0.86		\$0.02		
	Capital Costs	\$128.00		\$3.15		
(D)	Cash Costs (B+C-B14-C3a)	\$323.39		\$7.96		
(E)	Total Production Costs (B+C)	\$388.26		\$9.56		
<u>(L)</u>	Gross Margin (A-D)	\$126.93		\$3.12		
	Return to Unpaid Labour (A-E+B14)	\$80.87		\$1.99		
	Return to Investment (A-E+C4)	\$62.92		\$1.55		
	Return to Equity (A-E)	\$62.06		\$1.53		
	Investment					
	Land	\$42.40				
	Buildings	\$157.73				
	Machinery (excluding Irrigation Machinery)	\$405.38				
	Irrigation Machinery	\$0.00				
	Total	\$605.51				
	Management					
	_	40.62				
	Average Yield (Bushel/Acre)	40.62				
	Expected Price (\$/Bushel)	\$11.04				

Crop: Peas Tenure: All Soil: Black Yield units: Bushel

		\$/Acro	e	\$/Bush	el
		Average	Top 1/3	Average	Top 1/3
(A) 1	Crop Sales	\$317.25	\$442.46	\$7.79	\$7.60
2	Crop Insurance Receipts	\$0.00	\$0.00	\$0.00	\$0.00
3	Misc. Receipts	\$3.33	\$0.00	\$0.08	\$0.00
4	Government Program	\$0.00	\$0.00	\$0.00	\$0.00
5	Additional Revenue From Straw / Grazing	\$0.00	\$0.00	\$0.00	\$0.00
	Gross Return	\$320.58	\$442.46	\$7.88	\$7.60
(B) 1	Seed & Seed Cleaning	\$30.15	\$17.73	\$0.74	\$0.30
2	Fertilizer	\$35.27	\$7.84	\$0.87	\$0.95
3	Chemicals	\$43.79	\$55.53	\$1.08	\$0.95
4	Hail/Crop Insurance Premium	\$0.00	\$0.00	\$0.00	\$0.00
5	Trucking and Marketing	\$1.04	\$0.03	\$0.03	\$0.00
6	Fuel	\$13.39	\$9.18	\$0.33	\$0.16
7	Irrigation Fuel and Electricity	\$0.00	\$0.00	\$0.00	\$0.00
8	Machinery Repairs	\$22.38	\$16.07	\$0.55	\$0.28
9	Buildings Repairs	\$6.67	\$0.42	\$0.16	\$0.01
10	Utilities and Miscellaneous	\$11.44	\$11.47	\$0.28	\$0.20
11	Custom Work	\$4.51	\$0.90	\$0.11	\$0.02
12	Operating Interest Paid	\$0.37	\$0.00	\$0.01	\$0.00
13	Paid Labour & Benefits	\$11.59	\$7.32	\$0.28	\$0.13
14	Unpaid Labour & Benefits	\$15.33	\$15.11	\$0.38	\$0.26
	Variable Costs	\$195.90	\$141.60	\$4.81	\$2.43
(C) 1	Cash/Share Land Rent	\$28.24	\$21.24	\$0.69	\$0.36
2	Taxes, Water Rates, License and Ins.	\$7.72	\$0.99	\$0.19	\$0.02
3	Equipment and Building: a) Depreciation	\$35.16	\$18.76	\$0.86	\$0.32
	b) Lease Payments	\$0.07	\$0.00	\$0.00	\$0.00
4	Paid Capital Interest	\$3.94	\$0.00	\$0.10	\$0.00
	Capital Costs	\$75.12	\$41.00	\$1.85	\$0.70
(D)	Cash Costs (B+C-B14-C3a)	\$220.54	\$148.74	\$5.42	\$2.55
(E)	Total Production Costs (B+C)	\$271.02	\$182.61	\$6.66	\$3.14
	Gross Margin (A-D)	\$100.04	\$293.73	\$2.46	\$5.05
	Return to Unpaid Labour (A-E+B14)	\$64.88	\$274.96	\$1.59	\$4.72
	Return to Investment (A-E+C4)	\$53.50	\$259.86	\$1.31	\$4.46
	Return to Equity (A-E)	\$49.56	\$259.86	\$1.22	\$4.46
	Investment	4-3.30	4233.00	71.22	
	Land	\$1,936.66	\$1,691.19		
	Buildings	\$128.41	\$67.38		
	Machinery (excluding Irrigation Machinery)	\$312.63	\$156.87		
	Irrigation Machinery	\$0.00	\$0.00		
	Total	\$2,377.71	\$1,915.45		
	Management				
	Average Yield (Bushel/Acre)	40.70	58.22		
	Expected Price (\$/Bushel)	\$7.79	\$7.60		

Crop: Peas Tenure: Own
Soil: Black Yield units: Bushel

		\$/Acre		\$/Bushel	
		Average	Top 1/3	Average	Top 1/3
(A) 1	Crop Sales	\$284.78		\$7.86	
2	Crop Insurance Receipts	\$0.00		\$0.00	
3	Misc. Receipts	\$4.05		\$0.11	
4	Government Program	\$0.00		\$0.00	
5	Additional Revenue From Straw / Grazing	\$0.00		\$0.00	
	Gross Return	\$288.84		\$7.97	
(B) 1	Seed & Seed Cleaning	\$33.76		\$0.93	
2	Fertilizer	\$40.68		\$1.12	
3	Chemicals	\$39.20		\$1.08	
4	Hail/Crop Insurance Premium	\$0.00		\$0.00	
5	Trucking and Marketing	\$1.41		\$0.04	
6	Fuel	\$14.82		\$0.41	
7	Irrigation Fuel and Electricity	\$0.00		\$0.00	
8	Machinery Repairs	\$24.01		\$0.66	
9	Buildings Repairs	\$8.01		\$0.22	
10	Utilities and Miscellaneous	\$11.29		\$0.31	
11	Custom Work	\$5.25		\$0.15	
12	Operating Interest Paid	\$0.46		\$0.01	
13	Paid Labour & Benefits	\$14.21		\$0.39	
14	Unpaid Labour & Benefits	\$15.25		\$0.42	
	Variable Costs	\$208.34		\$5.75	
(C) 1	Cash/Share Land Rent	\$0.00		\$0.00	
2	Taxes, Water Rates, License and Ins.	\$11.48		\$0.32	
3	Equipment and Building: a) Depreciation	\$42.57		\$1.18	
	b) Lease Payments	\$0.12		\$0.00	
4	Paid Capital Interest	\$6.62		\$0.18	
	Capital Costs	\$60.80		\$1.68	
(D)	Cash Costs (B+C-B14-C3a)	\$211.32		\$5.83	
(E)	Total Production Costs (B+C)	\$269.14		\$7.43	
	Gross Margin (A-D)	\$77.52		\$2.14	
	Return to Unpaid Labour (A-E+B14)	\$34.94		\$ 0. 96	
	Return to Investment (A-E+C4)	\$26.32		\$0.73	
	•	\$19.69		\$0.73	
	Return to Equity (A-E) Investment	\$19.69		\$0.54	
	Land	\$3,592.94			
	Buildings	\$153.21			
	Machinery (excluding Irrigation Machinery)	\$380.74			
	Irrigation Machinery	\$0.00			
	Total	\$4,126.89			
	Management				
	Average Yield (Bushel/Acre)	36.22			
	Expected Price (\$/Bushel)	\$7.86			

Crop: Peas Tenure: Rent Soil: Black Yield units: Bushel

		\$/Acre		\$/Bushel	
		Average	Top 1/3	Average	Top 1/3
(A) 1	Crop Sales	\$354.95	\$463.77	\$7.73	\$7.60
2	Crop Insurance Receipts	\$0.00	\$0.00	\$0.00	\$0.00
3	Misc. Receipts	\$2.48	\$0.00	\$0.05	\$0.00
4	Government Program	\$0.00	\$0.00	\$0.00	\$0.00
5	Additional Revenue From Straw / Grazing	\$0.00	\$0.00	\$0.00	\$0.00
	Gross Return	\$357.43	\$463.77	\$7.79	\$7.60
(B) 1	Seed & Seed Cleaning	\$25.96	\$17.73	\$0.57	\$0.29
2	Fertilizer	\$28.99	\$7.84	\$0.63	\$0.86
3	Chemicals	\$49.11	\$52.36	\$1.07	\$0.86
4	Hail/Crop Insurance Premium	\$0.00	\$0.00	\$0.00	\$0.00
5	Trucking and Marketing	\$0.60	\$0.03	\$0.01	\$0.00
6	Fuel	\$11.73	\$9.18	\$0.26	\$0.15
7	Irrigation Fuel and Electricity	\$0.00	\$0.00	\$0.00	\$0.00
8	Machinery Repairs	\$20.50	\$16.07	\$0.45	\$0.26
9	Buildings Repairs	\$5.11	\$0.42	\$0.11	\$0.01
10	Utilities and Miscellaneous	\$11.60	\$11.47	\$0.25	\$0.19
11	Custom Work	\$3.65	\$0.90	\$0.08	\$0.01
12	Operating Interest Paid	\$0.26	\$0.00	\$0.01	\$0.00
13	Paid Labour & Benefits	\$8.54	\$7.32	\$0.19	\$0.12
14	Unpaid Labour & Benefits	\$15.41	\$15.11	\$0.34	\$0.25
	Variable Costs	\$181.46	\$138.43	\$3.95	\$2.27
(C) 1	Cash/Share Land Rent	\$61.02	\$48.16	\$1.33	\$0.79
2	Taxes, Water Rates, License and Ins.	\$3.35	\$0.64	\$0.07	\$0.01
3	Equipment and Building: a) Depreciation	\$26.55	\$18.76	\$0.58	\$0.31
	b) Lease Payments	\$0.00	\$0.00	\$0.00	\$0.00
4	Paid Capital Interest	\$0.82	\$0.00	\$0.02	\$0.00
	Capital Costs	\$91.75	\$67.56	\$2.00	\$1.11
(D)	Cash Costs (B+C-B14-C3a)	\$231.24	\$172.12	\$5.04	\$2.82
(E)	Total Production Costs (B+C)	\$273.20	\$205.99	\$5.95	\$3.38
	Gross Margin (A-D)	\$126.19	\$291.65	\$2.75	\$4.78
	Return to Unpaid Labour (A-E+B14)	\$99.64	\$272.89	\$2.17	\$4.47
	Return to Investment (A-E+C4)	\$85.05	\$257.78	\$1.85	\$4.22
	Return to Equity (A-E)	\$84.23	\$257.78	\$1.83	\$4.22
	Investment				
	Land	\$13.70	\$14.56		
	Buildings	\$99.62	\$67.38		
	Machinery (excluding Irrigation Machinery)	\$233.56	\$156.87		
	Irrigation Machinery	\$0.00	\$0.00		
	Total	\$346.88	\$238.81		
	Management				
	Average Yield (Bushel/Acre)	4E 01	61.02		
	Expected Price (\$/Bushel)	45.91 \$7.73	\$7.60		
	Expected File (4) busilely	۶۱.۱۵	٧/.٥٥		

Crop: Alfalfa/Grass Hay Tenure: All Soil: Black Yield units: Tonne

		\$/Acre	e	\$/Tonn	ie
		Average	Top 1/3	Average	Top 1/3
(A) 1	Crop Sales	\$224.26	\$386.58	\$112.16	\$121.69
2	Crop Insurance Receipts	\$2.53	\$0.00	\$1.26	\$0.00
3	Misc. Receipts	\$0.14	\$0.44	\$0.07	\$0.14
4	Government Program	\$0.15	\$0.47	\$0.07	\$0.15
5	Additional Revenue From Straw / Grazing	\$3.18	\$10.20	\$1.59	\$3.21
	Gross Return	\$230.25	\$397.70	\$115.16	\$125.19
(B) 1	Seed & Seed Cleaning	\$0.00	\$0.00	\$0.00	\$0.00
2	Fertilizer	\$0.00	\$0.00	\$0.00	\$0.00
3	Chemicals	\$0.00	\$0.00	\$0.00	\$0.00
4	Hail/Crop Insurance Premium	\$1.03	\$0.00	\$0.52	\$0.00
5	Trucking and Marketing	\$0.00	\$0.00	\$0.00	\$0.00
6	Fuel	\$14.63	\$8.48	\$7.32	\$2.67
7	Irrigation Fuel and Electricity	\$0.00	\$0.00	\$0.00	\$0.00
8	Machinery Repairs	\$17.43	\$17.96	\$8.72	\$5.65
9	Buildings Repairs	\$2.87	\$5.79	\$1.44	\$1.82
10	Utilities and Miscellaneous	\$14.02	\$17.91	\$7.01	\$5.64
11	Custom Work	\$0.00	\$0.00	\$0.00	\$0.00
12	Operating Interest Paid	\$0.77	\$0.00	\$0.39	\$0.00
13	Paid Labour & Benefits	\$7.06	\$4.60	\$3.53	\$1.45
14	Unpaid Labour & Benefits	\$19.14	\$21.62	\$9.57	\$6.81
	Variable Costs	\$76.95	\$76.37	\$38.49	\$24.04
(C) 1	Cash/Share Land Rent	\$30.37	\$0.60	\$15.19	\$0.19
2	Taxes, Water Rates, License and Ins.	\$7.27	\$9.63	\$3.64	\$3.03
3	Equipment and Building: a) Depreciation	\$39.77	\$54.19	\$19.89	\$17.06
	b) Lease Payments	\$0.00	\$0.00	\$0.00	\$0.00
4	Paid Capital Interest	\$36.34	\$0.00	\$18.18	\$0.00
	Capital Costs	\$113.57	\$63.82	\$56.80	\$20.09
(D)	Cash Costs (B+C-B14-C3a)	\$131.61	\$64.38	\$65.83	\$20.27
(E)	Total Production Costs (B+C)	\$190.52	\$140.19	\$95.29	\$44.13
	Gross Margin (A-D)	\$98.63	\$333.32	\$49.33	\$104.93
	Return to Unpaid Labour (A-E+B14)	\$58.87	\$279.13	\$29.44	\$87.87
	Return to Investment (A-E+C4)	\$76.07	\$257.51	\$38.05	\$81.06
	Return to Equity (A-E)	\$39.73	\$257.51	\$19.87	\$81.06
	Investment				
	Land	\$2,411.05	\$1,699.53		
	Buildings	\$135.63	\$218.38		
	Machinery (excluding Irrigation Machinery)	\$346.53	\$450.76		
	Irrigation Machinery	\$0.00	\$0.00		
	Total	\$2,222.87	\$216.54		
	Managana				
	Management		2.12		
	Average Yield (Tonne/Acre)	2.00	3.18		
	Expected Price (\$/Tonne)	\$112.16	\$121.69		

Crop: Alfalfa/Grass Hay Tenure: Own Soil: Black Yield units: Tonne

	\$/Acre			\$/Tonne		
		Average	Top 1/3	Average	Top 1/3	
(A) 1	Crop Sales	\$346.11		\$131.89		
2	Crop Insurance Receipts	\$0.00		\$0.00		
3	Misc. Receipts	\$0.45		\$0.17		
4	Government Program	\$0.48		\$0.18		
5	Additional Revenue From Straw / Grazing	\$10.40		\$3.96		
	Gross Return	\$357.44		\$136.21		
(B) 1	Seed & Seed Cleaning	\$0.00		\$0.00		
2	Fertilizer	\$0.00		\$0.00		
3	Chemicals	\$0.00		\$0.00		
4	Hail/Crop Insurance Premium	\$0.00		\$0.00		
5	Trucking and Marketing	\$0.00		\$0.00		
6	Fuel	\$5.35		\$2.04		
7	Irrigation Fuel and Electricity	\$0.00		\$0.00		
8	Machinery Repairs	\$11.65		\$4.44		
9	Buildings Repairs	\$5.93		\$2.26		
10	Utilities and Miscellaneous	\$16.22		\$6.18		
11	Custom Work	\$0.00		\$0.00		
12	Operating Interest Paid	\$0.00		\$0.00		
13	Paid Labour & Benefits	\$10.07		\$3.84		
14	Unpaid Labour & Benefits	\$17.28		\$6.58		
	Variable Costs	\$66.49		\$25.34		
(C) 1	Cash/Share Land Rent	\$0.00		\$0.00		
2	Taxes, Water Rates, License and Ins.	\$12.42		\$4.73		
3	Equipment and Building: a) Depreciation	\$46.36		\$17.67		
	b) Lease Payments	\$0.00		\$0.00		
4	Paid Capital Interest	\$0.00		\$0.00		
	Capital Costs	\$58.78		\$22.40		
(D)	Cash Costs (B+C-B14-C3a)	\$61.63		\$23.49		
(E)	Total Production Costs (B+C)	\$125.27		\$47.74		
	Gross Margin (A-D)	\$295.81		\$112.72		
	Return to Unpaid Labour (A-E+B14)	\$249.45		\$95.05		
	Return to Investment (A-E+C4)	\$232.17		\$88.47		
	Return to Equity (A-E)	\$232.17		\$88.47		
	Investment	•		,		
	Land	\$7,796.41				
	Buildings	\$196.98				
	Machinery (excluding Irrigation Machinery)	\$371.00				
	Irrigation Machinery	\$0.00				
	Total	\$6,170.26				
	Managament					
	Management	2.62				
	Average Yield (Tonne/Acre)	2.62				
	Expected Price (\$/Tonne)	\$131.89				

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 Alberta Agriculture and Forestry
 - 1. Trucking and Marketing allocated to specific cropping acres by producer
 - Fuel Summer fallow allocation of 0.3:1 compared to crop acres; Sugar beets – allocation of 2.96:1 compared to other irrigated crop acres
 - 3. **Irrigation Fuel** allocation based on total pumping hours for each crop
 - 4. Machinery Repairs allocated equally to all acres except summer fallow (0.3:1) and special crops (as specified by producer)
 - **5. Building Repairs** allocated to all acres equally except for special crops buildings
 - 6. Operating Interest interest paid on operating loans allocated equally
 - 7. Paid Labour based on allocations between crops as specified by producer
 - 8. Unpaid and Operator Labour operator \$10/hour, other unpaid labour \$7.50/hour
 - Land Taxes allocated equally to all owned cropped acres
 - **10. Water Rates** allocated equally to all owned irrigated acres
 - **11. Equipment Depreciation** imputed at 8.5% for power equipment, 11% for non-power, based on current market value
 - **12. Insurance and Licenses** allocated to all cropped acres equally
 - **13. Building Depreciation** imputed at 5% on the current market value
 - Paid Capital Interest allocated to all owned cropped acres equally except summer fallow (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
 - General Use allocated to all acres equally, except summer fallow (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
- D 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)
- Return to Equity (amount remaining from operations used to provide a return to individual or shareholder equity) = gross return – total production costs