

January 6, 2006

CHIPEUR ADVOCATES
Ernst & Young Tower
2380, 440 – 2nd Avenue S.W.
Calgary, AB T2P 5E9

Attention: Mr. Gerald D. Chipeur

Dear Sir:

RE: PROFITABILITY OF ALBERTA GRAIN FARMS

1 Introduction

In this letter, we project the profitability of grain and oilseed farms in Alberta for the crop year 2006-2007.¹ As the primary grain and oilseeds produced in Alberta are wheat, barley, and canola, we concentrate our analysis on those three crops.² Furthermore, we divide wheat production between Canada Prairie Spring Red (#1 CPSR) and Canadian Western Red Spring (#2 CWRS 11.5)³; and we divide barley production between feed and malt barley. Our canola figures are based on Argentine canola.

Our general approach is as follows: First, for each crop, we base our estimate of revenue per acre on projections of the price of the crop per bushel and the number of bushels produced per acre. Second, based on data for Alberta's "black soil"

1. Note: As grains planted in 2006 are harvested in the Fall of 2006 and sold over the Fall of 2006 and Winter of 2006-2007, the forthcoming crop year is referred to as 2006-2007.

2. In 2004, Alberta produced approximately 7.8 billion tonnes of wheat, 5.8 billion tonnes of barley, and 2.9 billion tonnes of canola. Production of all other grains (oats, rye, mixed grains, and flaxseed) combined amounted to approximately 1 billion tonnes. (Source: Alberta Agriculture, Food and Rural Development, "Alberta 2004 Crop Season in Review with Feed Availability Report," Table 1.)

3. We chose these grades of wheat following Alberta Agriculture, Food and Rural Development in their publication: "2005 Production Costs and Returns." We did not include durum wheat in our projections as it accounts for less than 15 percent of Alberta's wheat crop.

regions⁴, we estimate (i) the costs of each of fourteen variable inputs (per acre) and (ii) the costs of land, capital, and machinery (per acre). We multiply the price by the number of bushels per acre to obtain a revenue figure, and deduct from that the total costs per acre, to obtain a projected profit (or loss) per acre. These calculations are summarised in Tables 1 – 5 in the Appendix to this letter (see page 5). In the remainder of the letter, we discuss the assumptions we used to obtain each line in Tables 1 – 5.

2 Revenue Per Acre

2.1 PRICE PER BUSHEL

For the 2006-2007 prices per bushel of #1 CPSR and #2 CWRS 11.5, we use the December “average pool return” figures for Alberta, provided on the Canadian Wheat Board webpage “Farmer Contracts & Payments.” These prices are \$2.90 and \$3.53, respectively. For malt and feed barley we rely on the Alberta Agriculture, Food and Rural Development (AAFRD) webpage: “Closing Grain Prices for Wednesday, January 4, 2006.” They report prices of \$2.97 per bushel for malt and \$2.27 for feed (at Lethbridge). The same source reports a canola price of approximately \$5.11 per bushel.⁵

2.2 BUSHEL PER ACRE

The AAFRD report, “Alberta Crop Season in Review,” Table 2, provides average yields per acre for the ten year period ended 2004. These are, for: spring wheat, 37.3 bu./A., barley, 56.7 bu./A., and canola, 25.4 bu./A. We assume that the spring wheat figure applies to CWRS and estimate the yield for CPSR by increasing the CWRS data by 30 percent⁶ – following AAFRD’s publication “2005 Production Costs and Returns (\$/Acre)” – resulting in a figure of 48.5 bu./A. With respect to barley, we again rely on “2005 Production Costs and Returns (\$/Acre)” to estimate that feed

4. We use data for the “black soils” region both because that region is generally considered to be representative of most of the province and because excellent data are available for that region.

5. Note: Due to a recent increase in production of oilseeds (including soybeans), prices of canola have fallen dramatically from the \$7.00 - \$8.00 range that had applied in the last four or five years. It is anticipated that production, and prices, will remain at their current levels for the next few years.

6. In that report, AAFRD estimated that each acre will yield 50 bushels of spring wheat in black soil regions, and 65 bushels of CPS wheat.

barley yields are 7 percent higher than malt – thereby producing an estimate for feed barley of 60.75 bu./A.

3 Costs per Acre

3.1 VARIABLE COSTS

We base our variable cost estimates on AAFRD's "2003 Crop Enterprise Analysis," for the black soil district. That report summarises actual costs from a sample of Alberta farms for fourteen separate items. We use AAFRD's "2004/05 Average Farm Input Prices for Alberta" to estimate inflation on ten of the variable costs between May 2003 and November 2005. By applying those inflation estimates to the 2003 costs, we obtain (conservative) estimates of 2006 prices in each of the ten categories. For the remaining four categories – crop insurance, trucking and marketing, building repairs, and custom work, we were unable to obtain inflation estimates. Instead, we assumed that inflation will be six percent between 2003 and 2006, (approximately two percent per year).

3.2 CAPITAL COSTS

Our capital cost estimates are taken from AAFRD's "2003 Crop Enterprise Analysis" for "all farms."⁷ We increase the 2003 figures by six percent to obtain estimates for 2006.

7. That is, the estimates include rent as well as costs of land, buildings, and machinery. If we were to use data for "owner" operated farms only, total capital costs would have been approximately \$15 - \$30 per acre less than the figures we have reported. However, if rents are excluded, owner-operators are not compensated for the investment in their land.

4 Estimated Profits or Losses per Acre

Profits or losses per acre are obtained by subtracting variable and capital costs from revenues. It is seen in Tables 1 – 5 that substantial losses can be expected in 2006 for each of the five crops considered there. What is particularly noteworthy is that with respect to two of these crops – canola and CPSR – *variable* costs exceed projected revenues.

* * *

Yours truly,

Christopher J. Bruce, PhD

Mohamed Amery, BA

APPENDIX

Table 1: Spring Wheat - #2 CWRS 11.5%
 Black – Dryland
 Unit: Bushel

		Inflation from May 2003 to		2006 Estimated
	2003	Nov 2005		
REVENUE				
Yield per Acre				\$ 37.30
Expected Market Price (\$/Unit)				3.53
Crop Sales per Acre				\$ 131.67
COSTS				
Seed	\$ 14.36	-13.70%	\$	12.39
Fertilizer	28.20	11.20		31.36
Chemical	22.03	3.81		22.87
Hail/Crop Insurance Premium	7.99	6.00		8.47
Trucking and Marketing	0.92	6.00		0.98
Fuel	6.89	56.90		10.81
Irrigation Fuel and Electricity	-	19.40		-
Repairs-Machinery	8.04	18.20		9.50
Repairs-Buildings	1.51	6.00		1.60
Utilities and Misc	9.46	40.70		13.31
Custom Work	3.17	6.00		3.36
Operating Interest Paid	1.55	6.00		1.64
Paid Labour	2.84	6.60		3.03
Unpaid Labour	9.42	6.60		10.04
Total Variable costs	\$ 116.38		\$	129.36
Capital Costs	\$ 71.60	6.00%	\$	75.90
Total Production Costs			\$	205.26
ESTIMATED PROFIT (LOSS) PER ACRE			\$	(73.59)

Table 2: CPS Wheat - #1 CPSR

Black – Dryland

Unit: Bushel

	2003	Inflation from May 2003 to		2006 Estimated
		Nov 2005		
REVENUE				
Yield per Acre				\$ 48.50
Expected Market Price (\$/Unit)				2.90
Crop Sales				\$ 140.65
Costs				
Seed	\$ 19.04	-13.70%		\$ 16.43
Fertilizer	21.37	11.20		23.76
Chemical	23.02	3.81		23.90
Hail/Crop Insurance Premium	18.84	6.00		19.97
Trucking and Marketing	0.43	6.00		0.46
Fuel	5.98	56.90		9.38
Irrigation Fuel and Electricity	-	19.40		-
Repairs-Machinery	8.03	18.20		9.49
Repairs-Buildings	3.06	6.00		3.24
Utilities and Misc	5.58	40.70		7.85
Custom Work	16.34	6.00		17.32
Operating Interest Paid	3.44	6.00		3.65
Paid Labour	2.33	6.60		2.48
Unpaid Labour	10.47	6.60		11.16
Total Variable Costs	\$ 137.93			\$ 149.10
Capital Costs	\$ 64.66	6.00%		\$ 68.54
Total Production Costs				\$ 217.64
ESTIMATED PROFIT (LOSS) PER ACRE				\$ (76.99)

Table 3: Malt Barley
 Black – Dryland
 Unit: Bushel

		Inflation from May 2003 to		2006 Estimated
	2003	Nov 2005		
REVENUE				
Yield per Acre				\$ 56.70
Expected Market Price (\$/Unit)				2.97
Crop Sales				\$ 168.40
Costs				
Seed	\$ 13.94	-17.80%	\$	11.46
Fertilizer	31.82	11.00		35.32
Chemical	21.94	3.81		22.78
Hail/Crop Insurance Premium	9.36	6.00		9.92
Trucking and Marketing	5.54	6.00		5.87
Fuel	8.99	56.90		14.11
Irrigation Fuel and Electricity	-	19.40		-
Repairs-Machinery	13.12	18.20		15.51
Repairs-Buildings	0.21	6.00		0.22
Utilities and Misc	15.58	40.70		21.92
Custom Work	3.21	6.00		3.40
Operating Interest Paid	1.28	6.00		1.36
Paid Labour	2.39	6.60		2.55
Unpaid Labour	12.57	6.60		13.40
Total Variable Costs	\$ 139.95		\$	157.81
Capital Costs	\$ 61.67	6.00%	\$	65.37
Total Production Costs			\$	223.18
ESTIMATED PROFIT (LOSS) PER ACRE			\$	(54.78)

Table 4: Feed Barley
 Black – Dryland
 Unit: Bushel

	2003	Inflation from May 2003 to		2006 Estimated
		Nov 2005		
REVENUE				
Yield per Acre				\$ 60.75
Expected Market Price (\$/Unit)				2.27
Crop Sales				\$ 137.90
Costs				
Seed	\$ 12.00	-17.80%		\$ 9.86
Fertilizer	33.39	11.00		37.06
Chemical	22.23	3.81		23.08
Hail/Crop Insurance Premium	7.50	6.00		7.95
Trucking and Marketing	0.65	6.00		0.69
Fuel	6.94	56.90		10.89
Irrigation Fuel and Electricity	-	19.40		-
Repairs-Machinery	8.88	18.20		10.50
Repairs-Buildings	1.45	6.00		1.54
Utilities and Misc	10.28	40.70		14.46
Custom Work	2.48	6.00		2.63
Operating Interest Paid	1.24	6.00		1.31
Paid Labour	3.55	6.60		3.78
Unpaid Labour	8.82	6.60		9.40
Total Variable Costs	\$ 119.41			\$ 133.16
Capital Costs	\$ 57.68	6.00%		\$ 61.14
Total Production Costs				\$ 194.30
ESTIMATED PROFIT (LOSS) PER ACRE				\$ (56.40)

Table 5: Argentine Canola
 Black – Dryland
 Unit: Bushel

	2003	Inflation from May 2003 to		2006 Estimated
		Nov 2005		
REVENUE				
Yield per Acre				\$ 25.40
Expected Market Price (\$/Unit)				5.11
Crop Sales				\$ 129.79
COSTS				
Seed	\$ 16.33	14.30%	\$	18.67
Fertilizer	32.44	11.10		36.04
Chemical	17.19	3.81		17.84
Hail/Crop Insurance Premium	9.57	6.00		10.14
Trucking and Marketing	1.73	6.00		1.83
Fuel	9.44	56.90		14.81
Irrigation Fuel and Electricity	-	19.40		-
Repairs-Machinery	8.34	18.20		9.86
Repairs-Buildings	1.07	6.00		1.13
Utilities and Misc	9.38	40.70		13.20
Custom Work	1.75	6.00		1.86
Operating Interest Paid	1.32	6.00		1.40
Paid Labour	1.12	6.60		1.19
Unpaid Labour	10.27	6.60		10.95
Total Variable Costs	\$ 119.95		\$	138.93
Capital Costs	\$ 50.13	6.00%	\$	53.14
Total Production Costs			\$	192.06
ESTIMATED PROFIT (LOSS) PER ACRE			\$	(62.27)