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Land Value Trends

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July, 2012

Second Quarter 2012

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We have now prepared the sale information to complete our general market analysis for the Second Quarter of 2012 (April - June). The following map illustrates the locations where data has been obtained. The Q2, 2012 sales are summarized individually in the tables on the following page. Our Regional Analysis and Cultivation Comparison are also included on the following pages. We have also included an article looking at additional considerations when making land purchase decisions.

In Q2, 2012 the average value for all regions was lower than in the previous quarter (Graphs 1-4). The provincial average and Central Alberta average value for cultivated land was also lower this quarter (Graphs 5 and 8). Although the provincial average difference between cultivated and non cultivated land was lower than previous quarters, Central Alberta maintained a difference of approximately 30% between cultivated and non cultivated land (Graph 6 and 8).

Despite lower average values, the sale: list price was higher this quarter than previous quarters, especially for Northern Alberta (Graph 9). Therefore, it is expected that the market for agriculture land remains strong. The lower average land values for this quarter is expected to be attributed to both the location of the sales and also a greater proportion of non cultivated (bush, pasture) sales.

completed during Q2, 2012.

Indicates municipalities in which we have obtained

information on at least one sale that occurred during Q2, 2012.

Map of Area Divisions 0 Northern Centra Indicates municipalities in which appraisal work was Southern

Regional Analysis

Serecon Valuations Inc.

SALE SUMMARY

Second Quarter (April - June) 2012 Bareland Sales

Northern Alberta – Q2					
Municipality	Sale Price	Acres	\$/acre	Primary Land Use	
Barrhead	\$310,000	156.00	\$1,987	Bush	
Beaver County	\$132,000	157.96	\$836	Cultivated, Bush	
Beaver County	\$158,000	158.48	\$997	Cultivated, Pasture	
Beaver County	\$168,000	160.00	\$1,050	Hay	
Beaver County	\$285,000	116.96	\$2,437	Cultivated, Hay, Bush	
Big Lakes	\$500,000	530.00	\$943	Cultivated	
Grande Prairie	\$160,000	159.00	\$1,006	Hay, Bush	
Grande Prairie	\$250,000	160.00	\$1,563	Cultivated	
Grande Prairie	\$257,000	150.00	\$1,713	Bush, Cultivated	
Grande Prairie	\$500,000	320.00	\$1,563	Cultivated, Bush	
Grande Prairie	\$150,000	80.00	\$1,875	Bush	
Grande Prairie	\$615,000	437.79	\$1,405	Cultivated	
Greenview	\$135,000	320.00	\$422	Pasture	
Greenview	\$55,000	160.00	\$344	Pasture, Bush	
Lac Ste. Anne	\$117,500	148.60	\$791	Cultivated, Pasture	
Lac Ste. Anne	\$129,000	138.00	\$935	Cultivated	
Lac Ste. Anne	\$140,000	167.00	\$838	Bush	
Lac Ste. Anne	\$150,000	161.00	\$932	Cultivated, Bush	
Lac Ste. Anne	\$295,000	160.00	\$1,844	Hay	
Lac Ste. Anne	\$320,000	161.00	\$1,988	Pasture, Bush	
Northern Lights	\$108,000	160.00	\$675	Hay	
Northern Lights	\$400,000	640.00	\$625	Cultivated, Bush	
Northern Lights	\$75,000	160.00	\$469	Cultivated, Bush	
Northern Lights	\$55,500	160.00	\$347	Bush	
Northern Lights	\$68,000	160.00	\$425	Cultivated, Bush	
Northern Lights	\$79,000	138.98	\$568	Bush, Cultivated	
Northern Lights	\$240,000	320.00	\$750	Cultivated	
Northern Lights	\$142,500	160.00	\$891	Cultivated	
Parkland	\$770,000	153.89	\$5,004	Cultivated, Bush	
Smoky Lake	\$56,000	80.00	\$700	Bush	
Smoky Lake	\$230,000	108.10	\$2,128	Cultivated	
St. Paul	\$153,300	146.00	\$1,050	Pasture, Bush	
Sturgeon	\$187,500	75.06	\$2,498	Pasture, Bush	
Thorhild	\$160,000	159.00	\$1,006	Bush, Cultivated	
Westlock	\$269,000	282.55	\$952	Bush, Pasture	

Central Alberta – Q2					
Municipality	Sale Price	Acres	\$/acre	Primary Land Use	
Brazeau	\$145,000	80.00	\$1,813	Pasture, Cultivated	
Brazeau	\$206,000	160.00	\$1,288	Bush	
Brazeau	\$165,000	136.12	\$1,212	Hay, Bush	
Camrose	\$121,000	138.90	\$871	Pasture	
Camrose	\$501,000	143.00	\$3,503	Cultivated	
Camrose	\$501,000	143.49	\$3,492	Cultivated	
Clearwater	\$269,900	153.00	\$1,764	Pasture	
Clearwater	\$250,000	126.00	\$1,984	Pasture, Hay	
Clearwater	\$310,000	158.00	\$1,962	Cultivated	
Clearwater	\$300,000	153.00	\$1,961	Bush, Hay	
Clearwater	\$650,000	324.00	\$2,006	Bush	
Kneehill	\$285,000	158.25	\$1,801	Cultivated, Pasture	
Lacombe	\$295,000	168.28	\$1,753	Hay	
Lacombe	\$269,000	89.20	\$3,016	Hay, Bush	
Lacombe	\$504,750	156.00	\$3,236	Cultivated	
Lacombe	\$410,000	70.40	\$5,824	Cultivated	

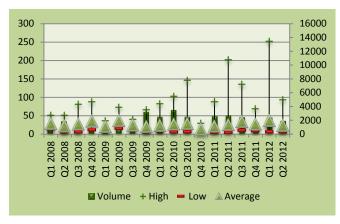
Central Alberta – Q2 (continued)					
Municipality	Sale Price	Acres	\$/acre	Primary Land Use	
Lamont	\$76,000	80.00	\$950	Bush	
Lamont	\$88,000	80.00	\$1,100	Cultivated, Bush	
Lamont	\$100,000	79.94	\$1,251	Pasture	
Lamont	\$130,000	80.00	\$1,625	Bush, Hay	
Lamont	\$150,000	75.00	\$2,000	Hay	
Lamont	\$215,000	160.00	\$1,344	Bush, Pasture	
Leduc	\$200,000	157.10	\$1,273	Bush	
Leduc	\$325,000	78.08	\$4,162	Pasture	
Leduc	\$310,000	70.29	\$4,410	Bush, Pasture	
Leduc	\$335,000	110.00	\$3,045	Hay, Cultivated	
Leduc	\$595,000	153.10	\$3,886	Cultivated	
Mountain View	\$349,000	160.00	\$2,181	Bush, Cultivated	
Mountain View	\$350,000	140.00	\$2,500	Hay, Cultivated	
Mountain View	\$510,000	151.00	\$3,377	Cultivated	
Mountain View	\$349,000	160.00	\$2,181	Bush, Cultivated	
Mountain View	\$460,000	80.08	\$5,744	Hay, Bush	
Ponoka	\$220,000	160.00	\$1,375	Pasture	
Ponoka	\$220,000	160.00	\$1,375	Pasture, Bush	
Ponoka	\$255,000	150.54	\$1,694	Cultivated, Pasture	
Red Deer	\$345,000	160.00	\$2,156	Hay	
Red Deer	\$550,000	160.00	\$3,438	Pasture	
Red Deer	\$355,000	100.00	\$3,550	Hay, Pasture	
Red Deer	\$575,000	160.00	\$3,594	Pasture, Bush	
Red Deer	\$335,000	137.00	\$2,445	Cultivated	
Red Deer	\$310,000	160.00	\$1,938	Hay	
Red Deer	\$290,000	160.00	\$1,813	Pasture, Bush	
Special Areas	\$41,000	160.00	\$256	Pasture	
Special Areas	\$760,000	1183.00	\$642	Hay	
Stettler	\$215,000	322.00	\$668	Pasture, Hay	
Stettler	\$550,000	454.27	\$1,211	Hay, Pasture	
Wetaskiwin	\$180,000	160.00	\$1,125	Hay, Pasture	
Wetaskiwin	\$230,000	150.10	\$1,532	Pasture	
Wetaskiwin	\$230,000	148.81	\$1,546	Pasture	
Wetaskiwin	\$115,000	137.76	\$835	Pasture, Bush	
Wetaskiwin	\$170,000	150.00	\$1,133	Hay, Pasture	
Wetaskiwin	\$190,000	80.00	\$2,375	Cultivated	
Wetaskiwin	\$230,000	148.81	\$1,546	Pasture	
Wetaskiwin	\$230,000	150.10	\$1,532	Pasture, Hay	

Southern Alberta – Q2						
Municipality	Sale Price	Acres	\$/acre	Primary Land Use		
Cardston	\$182,000	160.00	\$1,138	Pasture, Cultivated		
Cardston	\$205,000	160.00	\$1,281	Pasture		
Foothills	\$850,000	73.19	\$11,614	Urban Influence		
Foothills	\$1,450,000	123.90	\$11,703	Urban Influence		
Foothills	\$1,150,000	160.00	\$7,188	River Frontage		
Newell	\$242,500	76.64	\$3,164	Hay		
Pincher Creek	\$300,000	102.00	\$2,941	Pasture		
Rocky View	\$4,400,000	77.44	\$56,818	Industrial		
Rocky View	\$815,000	158.97	\$5,127	Pasture		
Rocky View	\$2,200,000	127.54	\$17,249	Urban Influence		
Rocky View	\$2,815,000	360.00	\$7,819	Pasture		
Taber	\$717,000	140.47	\$5,104	Irrigated		
Vulcan	\$305,000	158.94	\$1,919	Cultivated		
Vulcan	\$405,000	270.00	\$1,500	Hay, Pasture		
Vulcan	\$220,000	160.00	\$1,375	Pasture		
Vulcan	\$305,000	158.94	\$1,919	Cultivated		
Vulcan	\$295,000	123.87	\$2,382	Hay		
Vulcan	\$144,000	160.00	\$900	Hay		
Vulcan	\$160,000	160.00	\$1,000	Hay		

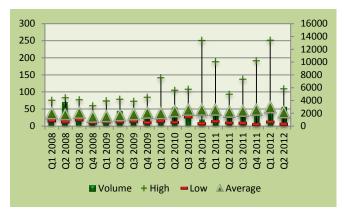
REGIONAL ANALYSIS

In the following graphs we have excluded sales that we believe are expected to have significant urban influence.

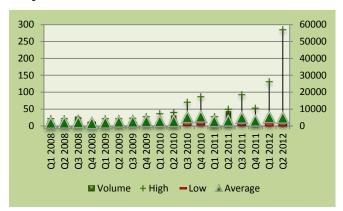
Graph 1: Northern Alberta



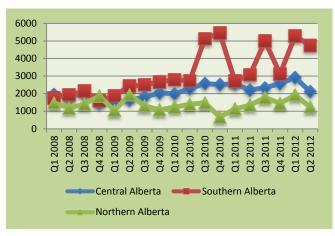
Graph 2: Central Alberta



Graph 3: Southern Alberta



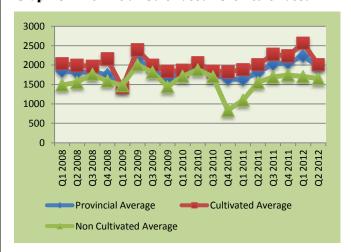
Graph 4: Average Value of Each Region



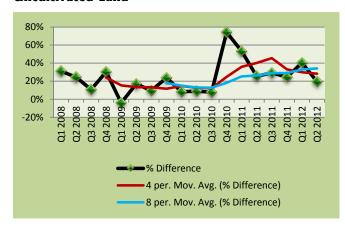
Within each of the above regions, there are areas with different agricultural productivity. There is also variation with respect to regional population, urban development, or demand for country residential properties. Therefore, there is frequently a wide difference between the range of high and low values per acre.

CULTIVATED VS UNCULTIVATED COMPARISON

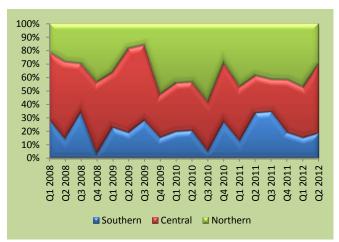
Graph 5: Provincial Cultivated vs Uncultivated



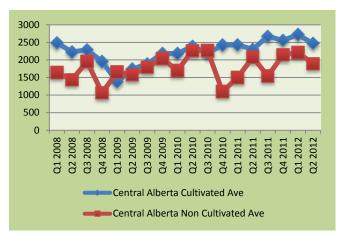
Graph 6: Percent Difference Cultivated vs Uncultivated Land



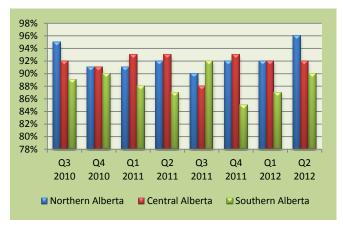
Graph 7: Proportion of Sales by Region



Graph 8: Central Alberta - Cultivated vs Uncultivated



Graph 9: Sale Price : List Price



Given the limited arm's-length sales data and variable information available in the rural real estate market, it is often difficult to determine trends and quantify time adjustments in the market for agricultural properties. Therefore, the information contained in this newsletter should not be relied upon solely for purchasing or financing decisions. It is prepared with the intent of providing a general indication of the activity in the rural real estate market. If an estimate of value is required for specific properties, it is recommended that an appraisal be obtained. Benchmark studies can also be completed if approximate land values are required for a specific area.

DOES LESS EXPENSIVE LAND COST MORE? (PART 2)

In a previous newsletter article we compared two potential investments in agriculture land and the expected returns from farming the land. The following is a summary of some of the values estimated for the previous newsletter.

	Farmer Green	Farmer Brown
Land Purchase Price	\$2,000	\$1,000
Expected Yield	60 bushels per acre	35 bushels per acre
Average Gross Income	\$502	\$295
Total Operating Expenses ¹	<u>\$187</u>	<u>\$137</u>
Net Operating Income (Gross Margin)	\$315	\$158
Fixed Equipment Costs	\$70	\$60
Net Margin	\$245	\$98

¹ In this table, interest has not been included as an expense

The above values show that the net margin favours Farmer Green's land investment. However, the financial analysis above does not consider that Farmer Green would have more capital invested in the same acreage. Therefore, we have considered alternative analyses for the land investment, including a Ratio Analysis and Cost per Bushel Analysis.

For the purpose of this analysis, land payments are based on:

- **→** 20% Down Payment
- **→** 6% Interest Rate
- ⇒ 20 Year Mortgage Term

Ratio Analysis

The following analysis compares the two land investments based on financial ratios that focus only on the aspect of land investment.

	Farmer Green	Farmer Brown	Favoured Investment
Asset Turnover			
(Gross Revenue/Purchase Price)	0.25	0.30	Farmer Brown
Gross Margin (as % Gross Revenue)	63%	54%	Farmer Green
Payment Coverage			
(Gross Margin/Mortgage Payment)	2.26	2.26	Similar
Net Margin (as % Gross Revenue)	49%	33%	Farmer Green
Payment Coverage			
(Net Margin/Mortgage Payment)	1.76	1.41	Farmer Green
Return on Investment (Net Margin/Purchase Price)	14.8%	11.8%	Farmer Green

Except for Asset Turnover, most of the financial ratios favour Farmer Green.

Cost per Bushel Analysis

Crop prices are considered to be reasonably consistent between different areas and the preceding analyses have been based on the same commodity prices for each investment. Therefore, the profitability in the analysis is primarily dependent on the level of output (i.e. bushels per acre). Therefore, we have also compared the costs based on different yields.

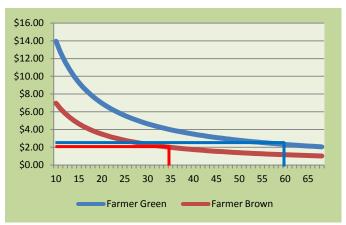
For this analysis three costs have been considered:

- 1. Land Payment principal and interest on mortgage
- 2. Operating Costs seed, fertilizer, chemical, etc, but excludes interest
- 3. Fixed Equipment Costs depreciation

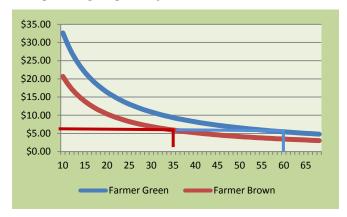
The following graph shows how the costs for Farmer Brown and Farmer Green relate to the level of output (yield).

The vertical lines on the graphs below show the average expected yield for both land investments.

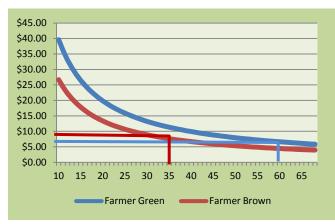
Cost per Bushel Relative to Yield (Land Payment only)



Cost per Bushel Relative to Yield (Land Payment + Operating Expenses)



Cost per Bushel Relative to Yield (Land Payment + Operating Expenses + Fixed Equipment Costs)



Cost per Bushel Summary

	Cost per Bushel (At Average Expected Yield)			
	Farmer Green (60 bu per ac)	Farmer Brown (35 bu per ac)		
Land Payment	\$2.32	\$1.99		
Land Payment + Operating Expenses	\$5.44	\$5.91		
Land Payment + Operating Expenses + Fixed Equipment Costs	\$6.61	\$7.62		

The graphs and table above show that Farmer Brown's land payments erode a smaller portion of the commodity price. However, when operating costs and fixed equipment costs are considered the cost per bushel are lower for Farmer Green.

The following table shows how the cost per bushel would change if production dropped below the expected yield.

	Cost per Bushel (10% Yield Reduction)		Cost per Bushel (20% Yield Reduction)		
	Farmer Green (54 bu/ac)	Farmer Brown (31.5 bu/ac)	Farmer Green (48 bu/ac)	Farmer Brown (28 bu/ac)	
Land Payment	\$2.58	\$2.22	\$2.91	\$2.49	
Land Payment + Operating Expenses	\$6.05	\$6.57	\$6.80	\$7.38	
Land Payment + Operating Expenses + Fixed Equipment Costs	\$7.34	\$8.47	\$8.26	\$9.53	

	Cost Increase from Expected Yield (10% Yield Reduction)		Cost Increase from Expected Yield (20% Yield Reduction)		
	Farmer Green	Farmer Brown	Farmer Green	Farmer Brown	
Land Payment	\$0.26	\$0.23	\$0.59	\$0.50	
Land Payment + Operating Expenses	\$0.61	\$0.66	\$1.36	\$1.47	
Land Payment + Operating Expenses + Fixed Equipment Costs	\$0.73	\$0.85	\$1.65	\$1.91	

Because Farmer Brown is operating at a steeper position on the Cost Curves, the tables above show that Farmer Brown is more sensitive to higher operating and fixed costs if yields drop below the expected average. As a result, the following table shows that Farmer Green is able to absorb a proportionately greater loss in yield.

	Farmer Green	Farmer Brown
Break Even Yield (Land Payment and Operating Costs only)	39	24
Safety Margin (Land Payment and Operating Costs only) <u>Expected Yield – Break Even Yield</u> Expected Yield	35%	31%
Break Even Yield (including Fixed Equipment Costs)	45	30
Safety Margin (including Fixed Equipment Costs)	25%	14%

Summary

Based on the analyses above, Farmer Brown has a higher Asset Turnover and the land payment has a lower cost per bushel. However, these analyses do not consider operating costs or fixed equipment costs. When these costs are considered, the financial ratios and cost per bushel favour Farmer Green. Therefore, it is considered that operating efficiencies favour Farmer Green, and due to the position on the cost curve, a change in yield is expected to have a relatively lower impact on profitability for Farmer Green.