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Alberta Surface Compensation: Fair and Equitable?

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Background

While the recent changes to the royalty regime were the most welcomed result of Alberta Energy’s Competitiveness Review, the government has also promised to further reduce regulatory burden by reducing unnecessary delays and costs. A key regulatory barrier for the oil industry in Alberta are the increasing costs and delays surrounding freehold surface access. There are three problem areas in Alberta surface access; (i) delays due to a slow and cumbersome regulatory process, (ii) costs of regulatory compliance and in attending a Surface Rights Board hearing, (iii) the ever escalating payments for access. This paper examines the ever increasing surface access payments in Alberta.

Surface access payments in Alberta have increased dramatically in recent years. Despite the lowest drilling levels in nearly 20 years and despite a 25% reduction in overall industry costs in 2009¹, surface access payments reached all-time highs in 2009. In this lower commodity price environment, a 15-20% per acre increase in annual rental budgets is not acceptable. Increasingly, corporate management is concerned with these ever increasing costs. The question is: What is causing costs to increase so rapidly and can anything be done about it?

How big is the issue?

Those who are active in the Surface Access area are well aware of the increasing surface payments for the areas in which they work. When all these areas are aggregated we can see the extent to which the province as a whole is experiencing a serious cost escalation². In aggregate, first year (initial consideration) \$ per acre payments have increased 63% over the 5 year period (mid 2004 to mid 2009) while \$ per acre rentals increased 44% . All of the component parts (e.g. land value, loss of use, general disturbance, adverse effect, etc.) of the first year payment and annual rental increased, although at different rates. Further, the worst performing years were 2008 and 2009, both with increases in excess of 15%. To put some perspective on this, the following table shows a comparison of changes to other key indicators over the same period.

Table 1

Five year changes - key indicators				
	Mid 2004	Mid 2009	Change	% change
Alberta Drilling *	18279	4555	-13724	-75.08
P&NG Bonuses (\$/ac.)	398.46	136.08	-262	-65.85
Natural Gas Price (\$/m3)	225.62	136.68	-89	-39.42
Alberta CPI (2002 = 100)	105.9	121.5	16	14.73
Adverse Effect per site	1668	1974	306	18.35
General Disturbance per site	1357	1685	328	24.17
Loss of Use (\$/ac.)	242	345	103	42.56
Surface Rentals (\$/ac.)	635	915	280	44.09
Agricultural Real Estate (\$/ac.)	832	1201	369	44.35
First Year (\$/ac.)	2066	3362	1296	62.73
Oil Price (\$/bbl)	38.02	69.68	32	83.27
Land Value (\$/ac.)	1061	1983	922	86.90

* full year 2005 and 2009

While the major indicators (except oil price) show an industry in decline, the cost of surface access is increasing dramatically, outstripping the CPI and agricultural real estate prices. In 2009, the estimated 125,000³ freehold wells and facilities in Alberta, paid approximately \$400 million per year in rentals. In 2004 aggregate rentals were only \$280 million. The recent double digit percentage increases in rentals mean that industry rental payments are increasing \$50-60 million per year on existing leases.

To put it in more operational terms, the surface costs on a 100 well drilling program with an average 4 acre lease have increased about \$500,000 over the last five years. The annual rental budget for 1000 wells has increased by about \$1.1 million. If we extrapolate this over the entire province then we are talking about tens of millions of dollars in yearly increases.

What is causing the excessive cost escalation?

Generally, any annual double-digit percentage unit cost increase over an extended period is a cause for concern, unless there is a valid and excusable explanation. The most common explanation attributes the large increases to high levels of industry activity. Simply put, when the industry is in hurry to drill then a premium is paid to get on the land quickly. Thus, the exceptionally large increases in recent years are a direct result of higher activity levels. The only problem with this argument is that conventional drilling has been in secular decline for the past five years. According to the ERCB⁴, conventional (non oil sands) drilling actually peaked in 2005 at 18,279 wells. 2006 had 16,319 wells followed by 12,444, 10,656 and 4,555 in 2007, 2008, and 2009 respectively. This represents an astounding 75% decline in drilling and yet industry paid nearly 65% more for surface access. There does appear to be a relationship between activity levels and surface costs but it is exactly the opposite of the one used to explain increasing costs – the lower the activity levels the higher the costs. Clearly, activity levels, by themselves, are not the main force driving the escalation in access costs. The explanation is far more complicated.

What is adequate compensation for surface access?

Although recent surface payments have increased far above anything experienced in the last two decades, are they too high? This is a difficult question as there is no market for surface rights where willing buyers and willing sellers can meet to competitively determine 'fair market value'. It is also difficult because we need to make some sort of moral or ethical judgement as to what is right, or just or fair. Such a judgement cannot be made in a vacuum but rather needs some sort of a valuation framework or set of principles. Luckily, the Surface Rights legislation⁵ in all four western provinces provides that framework. All four provinces have decided that it is in the public interest to develop their oil and gas resources. At the same time they have set out the principles for 'fair and equitable' compensation for the rights that must be surrendered by surface owners. (In fact, the Saskatchewan and Manitoba legislation explicitly state that the purpose of the legislation is to ensure 'just and equitable' compensation). While the four Acts have different categories in their frameworks, they all try to do the same thing; attach a monetary value to the right given up by the land owner. In all four cases, the monetary value of the right is related to two factors; (1) the underlying real estate value of the land, and, (2) the value of the unique impacts of the extraction project on the surface owner. So, while there is no competitive market to objectively determine fair compensation, the legislation points explicitly to the factors that should attract compensation (e.g. land value, nuisance, inconvenience, noise, etc.) and to objective proxy markets (e.g. real estate, agricultural production) that can be used to value these factors. Finally, it is significant that none of the governments have set overall statutory compensation rates. Rather, they acknowledge that it is better for the two parties concerned to sit down and negotiate a mutually advantageous amount based on the variability of the factors affecting the land owner and the variability in the proxy markets. The question remains; has following the principles and framework in the Alberta Surface Rights Act resulted in the recent extraordinary surface payments? In other words, have changes in the proxy markets been driving prices? Or have the factors affecting the land owners become more onerous (e.g. has visiting with land agents become more of a nuisance) or is there some other cause?

Alberta Compensation Categories

While the Act is likely intentionally vague on the weighting or even the use of the compensation factors, the industry has come up with standard categories usually referred to as the 'heads of compensation' and an approach that is used in virtually all lease negotiations. The government through the Surface Rights Board has acknowledged the validity of the framework which it uses in its decisions. Further, other Alberta government agencies describe the framework in documents advising the agricultural community how to negotiate with land agents. The following summary is taken directly from the Alberta Government website in the document call [`Negotiating Surface Rights`](#).

"Determining Compensation - Your negotiations will include the issue of compensation paid to you for inconvenience and losses due to the well site. If you and the company cannot agree on compensation, the company can apply to the Surface Rights Board for a Right-of-Entry Order (see "If Lease Negotiations Fail: Right-of-Entry Process" below).

The compensation payment considers the following aspects when using the Surface Rights Board as an arbitrator:

1. **Entry Fee:** *The entry fee is equal to \$500 per acre of land granted to the company, to a maximum of \$5,000. For example, if the company needs a 4.25-acre site, the entry fee would be: 4.25 acres x \$500 = \$2,125. The \$5,000 maximum applies when the area is 10 acres or larger. If the area is less than one acre, then the fee is that fraction of one acre x \$500. The minimum entry fee is \$250, paid when the area is half an acre or less.*
2. **Land Value:** *Usually the value of the land leased to the company is determined by the price expected if the land were sold on the open market by a willing seller to a willing buyer at the time when the lease was prepared or the Right-of-Entry Order issued. The value is also based on the highest approved use (agricultural, industrial, residential) for the land. The per acre value for the well site is determined by dividing the value of the titled unit by the number of acres required.*
3. **General Disturbance (Initial Nuisance, Inconvenience and Noise):** *This payment is for nuisance during the first year of the lease. For example, in the first year you will likely have to spend time dealing with the company's representatives and surveyors, preparing documentation, negotiating with the company and/or seeking advice from government agencies or lawyers. There may also be noise and inconvenience related to construction. The company should pay reasonable compensation to you for nuisance. Keep a record of all time spent, phone calls made and expenses incurred.*
4. **Loss of Use of the Land:** *The company pays an annual compensation for your loss of the normal use of the well site area during the well site's life. The amount should approximate the value of the gross annual production reasonably expected from the area. To calculate the amount, you can use the greater of yield and price averages from the past five years, or today's street price. For example, assuming canola production at 35 bushels per acre on a well site and access road occupying four acres, the loss would be 4 x 35 = 140 bushels. At \$8.50 per bushel, the total annual loss would be \$1,190. Because you are asked to agree on losses for the next five years (see "Five-year Review" below), consideration should be given to future prices.*
5. **Adverse Effect:** *This payment is related to your inconvenience, nuisance and extra costs on the rest of the quarter section where the well site is located. For instance, farming around the well site may require constantly turning corners, which can cause overlaps, extra strain on machinery, soil compaction, loss of seed and grain, and extra field and labour costs. Other factors related to adverse effect can be noise, dust, odour, additional traffic on the land, and proximity to a residence or farm site.*
6. **Other Relevant Factors:** *If there are other considerations specific to your situation, include them when negotiating compensation.*

The company must pay the first-year compensation – the total for the above six considerations – before doing any work on your land. Every year after the first year, the company pays compensation for the loss of use of the land and adverse effect (items 4 and 5)."

Editorial Comment on the Framework

Even if we accept the underlying principles of this framework and before looking at the application of it, this approach to compensation is clearly very generous for the land owner because industry traditionally has made all these components additive. First, the Entry Fee is a statutory payment made only in Alberta and is absent in the other three provinces. Second, additional compensation is paid in an amount equal to an outright purchase of the land. Third, the land owner is paid additional compensation merely for engaging in the negotiations (an odd definition of nuisance). Forth, in addition to essentially purchasing the land outright, more compensation is paid equal to any forgone gross revenues of the surrendered land. Fifth, if the remaining agricultural activities are impacted in any way, further additional payments are made. Finally, after the site is reclaimed the land is returned to the original owner. In practice, this approach leads to surface lease term payments anywhere from 5 to 7 times the agricultural real estate value of the land.

‘Land Value’ vs. Real Estate Prices

Land Value is the fastest growing of the four compensation categories, rising 136% over the past ten years and 87% over the past five. Table 2 shows the changes over five years in the \$/ac. data on the Land Value component paid in surface compensation versus prices in the proxy market - agricultural real estate prices⁶. The first and most alarming observation on this data is the premium that the industry pays over real estate prices. The second alarming feature is that this premium is growing larger over time. In 2004, the premium for Land Value over real estate prices was \$229/ac. or 28%. Five years later in 2009, this premium had grown to \$782 or 65% (it is probably more since real estate prices declined in 2009). The premium has grown an astounding 242% in five years. What is clear from this analysis is that there appears to be a complete disconnect between what is paid for Land Value in a surface lease and the corresponding real estate prices. What is especially worrisome is that this disconnect is growing over time.

Table 2

Land Value vs. Real Estate Prices (\$/ac.)							
Mid Year	2004	2005	2006	2007	2008	2009	% change
Land Value	1061	1142	1322	1417	1699	1983	87
Real Estate *	832	923	982	1151	1201	1201	44
Premium	229	219	340	266	498	782	242
% Premium	28	24	35	23	41	65	

* 2009 estimated

‘Loss of Use’ vs. Gross Farm Receipts

Loss of Use is the second fastest growing of the four compensation categories, rising 83% over the past ten years and 42% over the past five. Table 3 shows a comparison of the Loss of Use component paid in surface compensation versus prices in the proxy market – gross farm receipts⁷. Once again, as for Land Value, there is a premium paid over actual farm receipts that has not been below about 55%. In 2008, when grain prices spiked upward, Loss of Use kept pace, but in 2009 when grain prices fell the Loss of Use just kept going upward. So the premium now is over 100%.

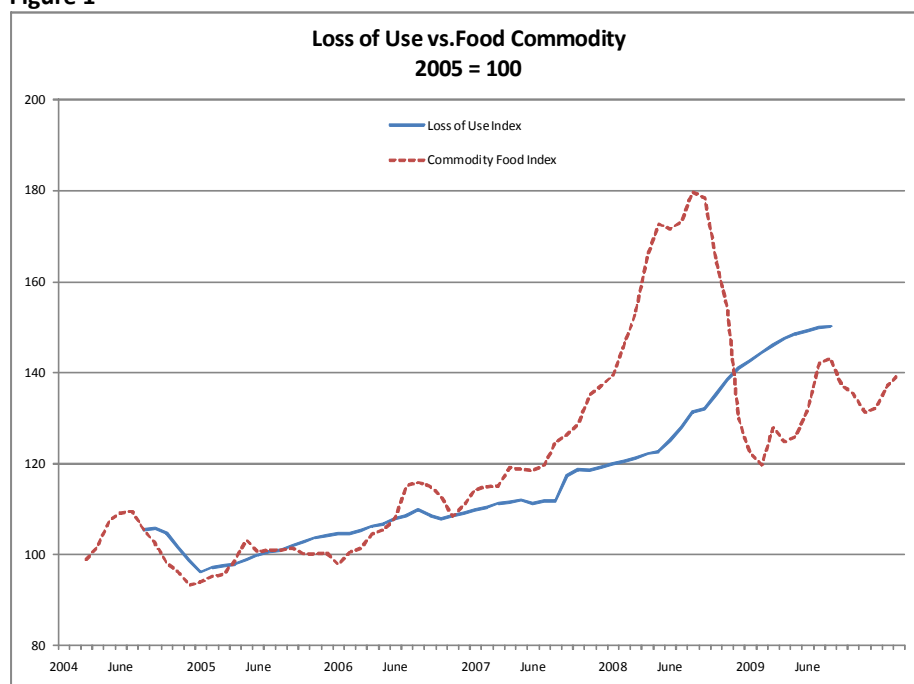
Table 3

Loss of Use vs. Gross Farm Receipts (\$/ac.)							
Mid Year	2004	2005	2006	2007	2008	2009	% change
Loss of Use	242	232	252	257	302	345	42
Gross Receipts *	154	151	149	166	195	166	8
Premium	89	81	104	91	107	179	101
% Premium	58	54	70	55	55	107	

* 2009 estimated

To better understand what is happening over time, Figure 1 shows a comparison of the Loss of Use \$/ac. payments presented as an index versus a commodity food price index⁸. The latter index captures changes to agricultural production values. The first observation is how closely the two indices track in the early part of the period. Loss of Use lags the more volatile swings of the food index but eventually they come closer together. In the latter part of the period the wild fluctuations in food commodity prices are not closely matched by the Loss of Use. Nonetheless, at the end of the period the Loss of Use index appears to be heading down.

Figure 1



‘General Disturbance’ vs. Industry Consultation Costs

General Disturbance is the third fastest growing of the four compensation categories rising 44% over the past ten years and 24% over the past five. This category along with Adverse Effect are the most subjective and do not have any real world proxy markets to value the components. Presumably, there are objective units to measure the amount of nuisance and inconvenience that each well uniquely attracts. These units of measure can then be multiplied by the price of nuisance to come up with the appropriate dollars to be

paid in each case. But seriously, the government document cited above seems to indicate that the landowner should be compensated for the number of hours spent inconvenienced by the negotiations. However, no rate of pay is specified. With the 2009 average of \$1650 General Disturbance per well site and the average Alberta wage rate of \$25/hr., 66 hours to negotiate a lease seems somewhat excessive. Even at \$100/hr., two full days of negotiating seems like a lot.

What is more relevant is the amount of time and expense the industry spends consulting with the community and ensuring that impacts to both the surface owner and the surrounding communities are kept to a minimum. Industry consultation efforts to obtain 'non-objection' plus the increasing use of directional and pad drilling, continue to reduce the noise and inconvenience to landowners. Based on this alone, the payments to landowners for General Disturbance should be decreasing not increasing.

'Adverse Effect' vs. Land Usage

Adverse Effect is the slowest growing of the four compensation categories rising 34% over the past ten years and 18% over the past five. As with General Disturbance, directional and pad drilling has virtually ensured that all locations cause the least physical disruption on any attendant agricultural activities. Thus it is especially confusing why the industry continues to pay Adverse Effect even when there is no agricultural activities (e.g. Bush) on the remaining land. Table 4 contrasts the payments for Adverse Effect with the agricultural usage of the land⁹. The next surprise is that there is so little variation in the payments between Pasture, and Cultivated, when surely, the disruption costs on grazing are much lower than those for cultivation.

Table 4

<u>Adverse Effect vs. Land Usage (\$/site)</u>				
Land Usage	Bush	Pasture	Cultivated	Irrigated
Mid Year 2004	1607	1643	1654	1949
Premium		36	11	295
% Premium		2.2	0.7	17.8
Mid Year 2009	1830	1964	1978	2176
Premium		134	14	198
% Premium		7.3	0.7	10.0
5 Year Growth	223	321	324	227
% Growth	13.9	19.5	19.6	11.6

Why are Alberta Surface costs out of control?

The preceding analysis allows us to conclude that it is not the principles and framework in the Alberta Surface Rights Act that have resulted in the recent extraordinary surface payments. In fact, if actual agricultural real estate prices were consistently used for Land Value, this alone would reduce the cost per (4 ac.) well site by over \$3000 or nearly 25%. The following is my best guess at an explanation.

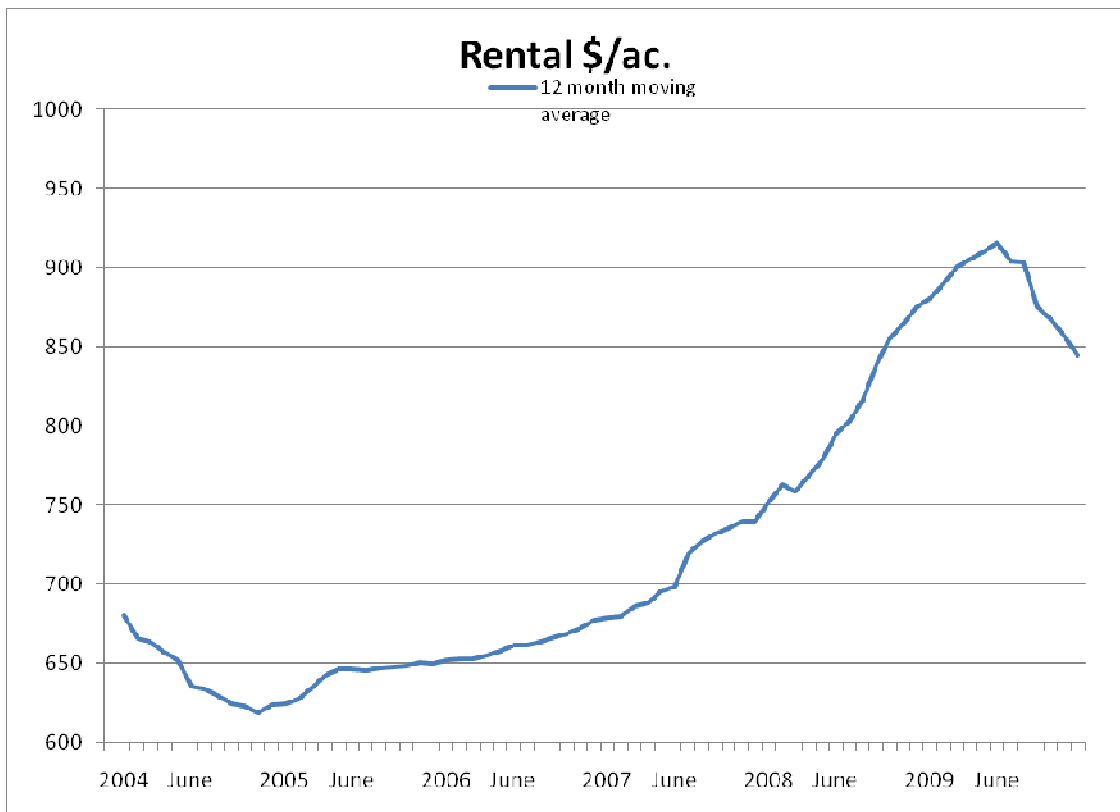
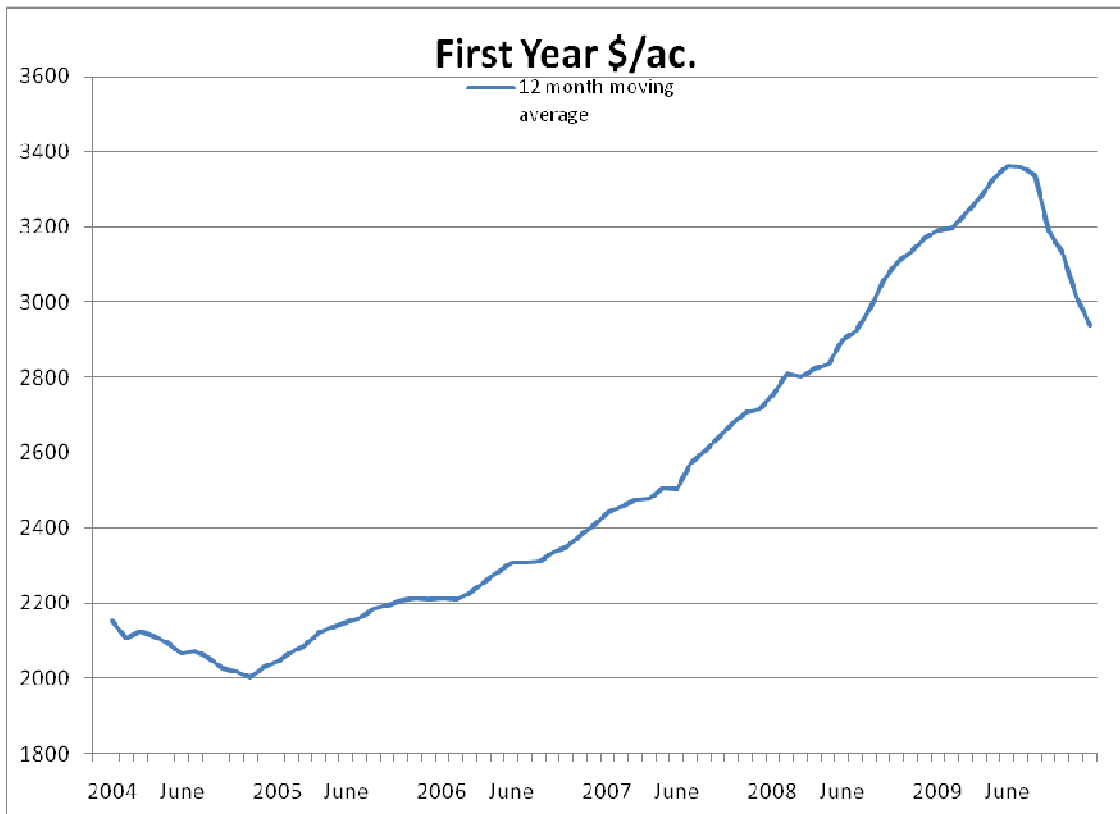
It appears that a parallel 'market' has evolved in which the values in the framework are determined not by the proxy markets implicit in the Act, but rather by what the values were for the last lease that was negotiated. Thus the marginal lease determines the value of the next lease. This gives rise to appeals to 'comparables' as the mechanism for determining what is 'fair and equitable'. Indeed, comparables and the 'pattern of dealings' are the primary mechanisms that the Surface Rights Board uses to pronounce its compensation decisions 'fair and reasonable'. However, this still doesn't explain why values are increasing so dramatically. Clearly, not everyone is using comparables to set compensation; someone is leading these payments upwards.

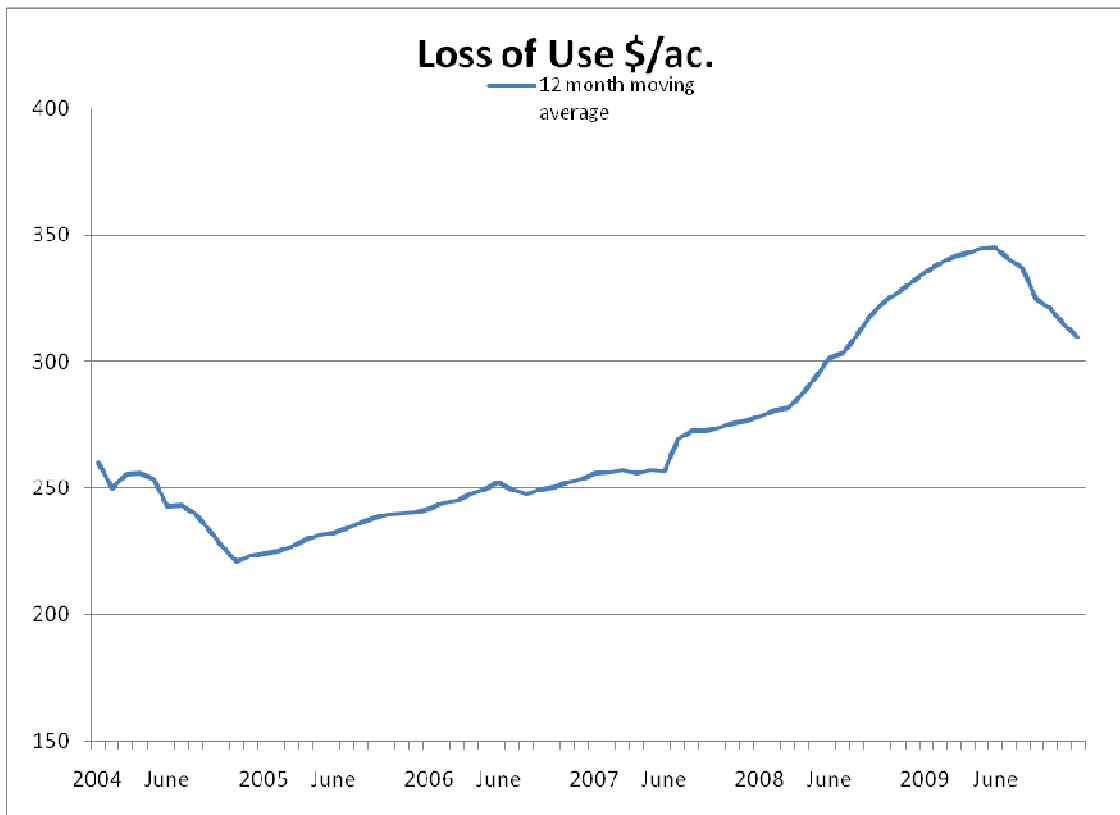
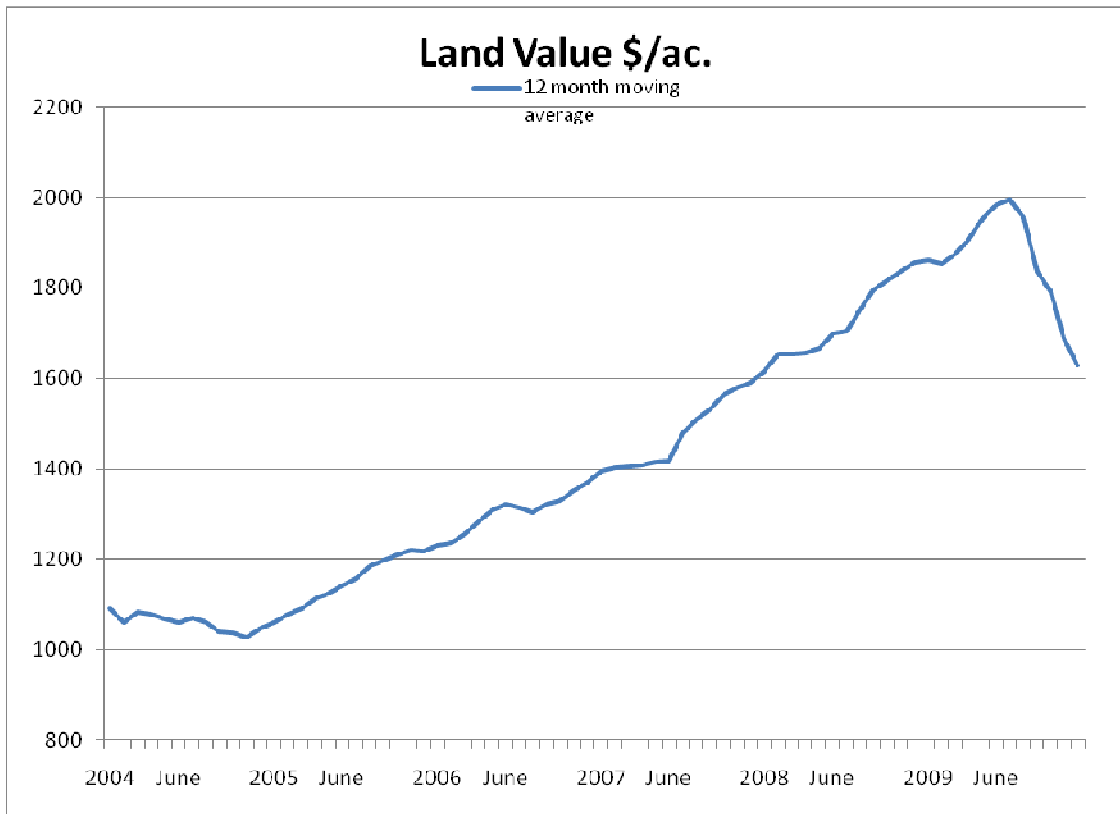
This brings us back to the expediency argument. While the overall pace of drilling has slowed, there is still a limit to how long companies will wait to drill. In Alberta, obtaining an Entry Order from the Surface Rights Board is time consuming and expensive process. It is often easier and cheaper to simply raise the offer and then average the increase over the heads of compensation categories. Thus, “last year’s exception is this year’s minimum” becomes a common complaint amongst land agents. While that single rogue payment may seem like an exception within the company, it then becomes the benchmark for the next lease taken in the area, and will no doubt show up at the next Surface Rights Board hearing. And of course, the land owner just down the lane who is negotiating his rentals will also appeal to this new ‘accepted’ level of compensation. While land agents gamely make the argument that a single exception doesn’t set a new precedent it nonetheless exerts an upward and inexorable force in all future negotiations.

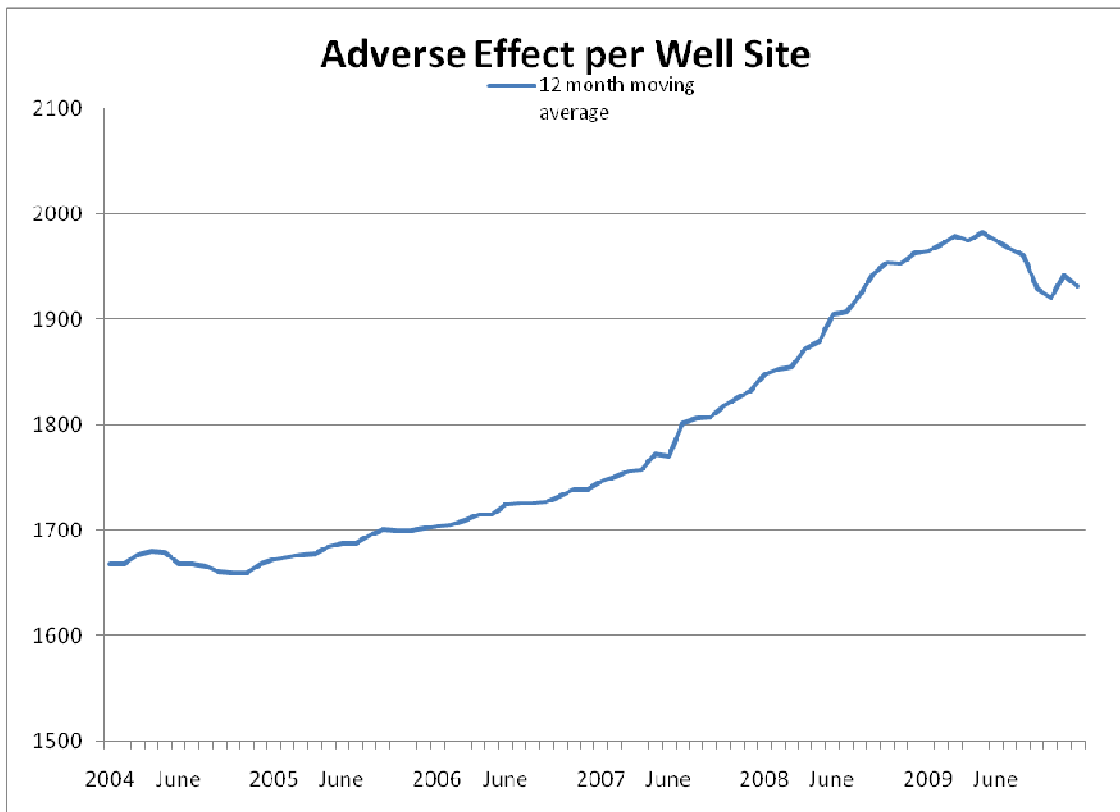
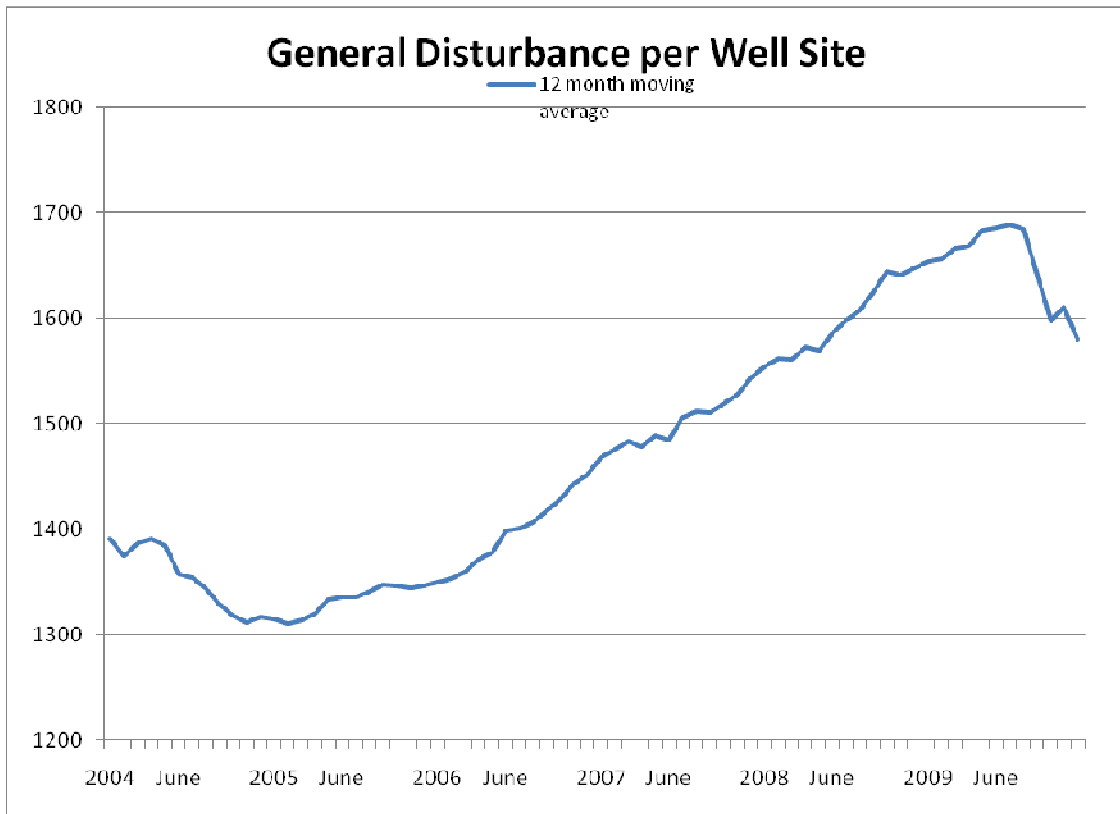
Can anything be done?

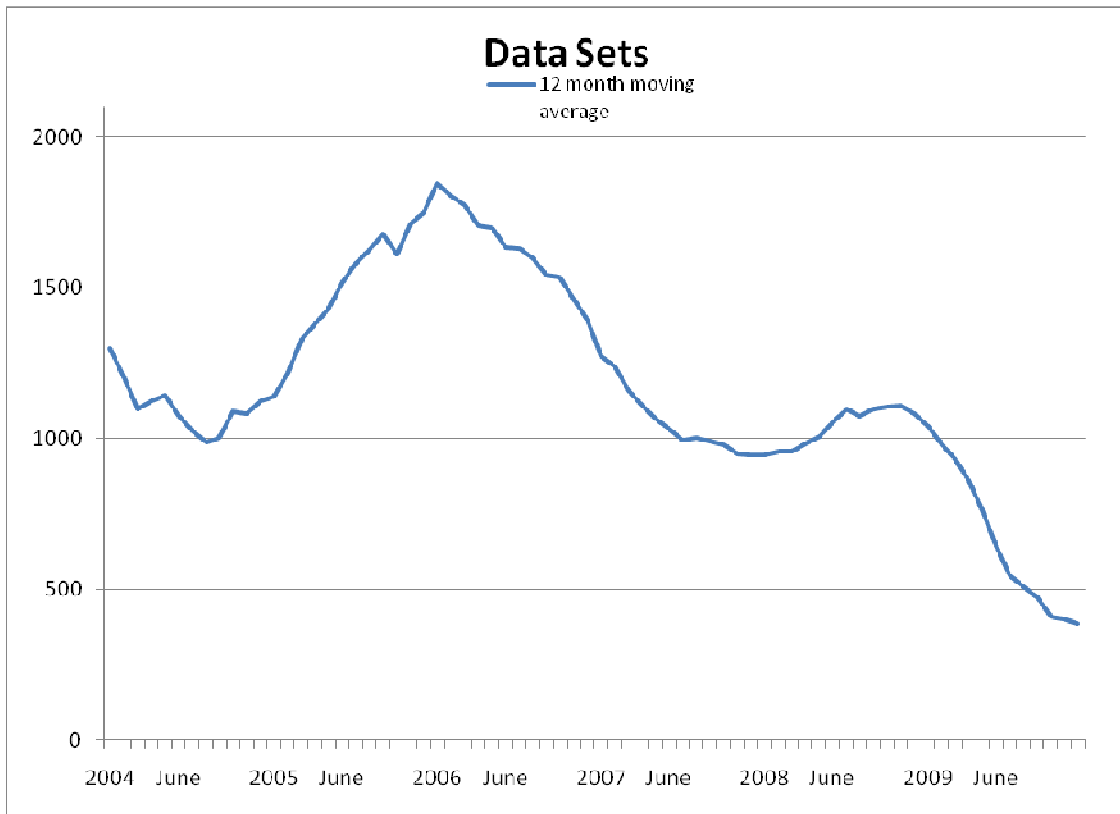
While the situation seems to be a bit bleak, analysis of the data over the last ten years shows many areas where the industry has returned to the fundamental principles inherent in the Act and historically practiced by land agents. However, it will take a clear policy statement on compensation by corporate management and the will to carry out that policy once the going gets tough.

As the graphs on the following pages show, it appears that values are declining as 2009 came to a close. However, there is a concern on the robustness of the data as total data sets have been declining over time as shown on the last graph.









End Notes

¹ Conference Board of Canada, Todd A. Crawford, *Canada's Oil Extraction Industry: Industrial Outlook Winter 2010*

² The data source for this article is the Surface Land Compensation Database (www.wdmarriott.com), which contains information on over 32,000 Alberta surface leases. Over 5,800 new takings on well sites are included in the analysis spanning mid 2004 to mid 2009 (at the time of writing complete data for the latter part of 2009 has not been received).

³ According the ERCB statistics (ST102) there are 25,000 non-gas plant facilities in the province and 224,355 capable oil, gas and service wells (ST59). If we assume half of these are on freehold surface lands then there are approximately 125,000 surface leases paying rentals.

⁴ The drilling numbers are taken from the Alberta Energy website monthly Industry Activity Reports. See [Industry Activity Reports](#).

⁵ [Alberta Surface Rights Act](#), [Saskatchewan Surface Rights Acquisition and Compensation Act](#), [BC Petroleum and Natural Gas Act](#), [Manitoba The Surface Rights Act](#)

⁶ Alberta Agricultural Real Estate Prices are taken from the Alberta Agriculture and Rural Development website. See [Provincial Average Agricultural Real Estate Values by C.L.I. Class](#).

⁷ Gross Farm receipts and area taken from Statistics Canada. [Net Farm Income, Alberta](#). [Total Farm Area](#).

⁸ [Commodity Food Price index](#).

⁹ The Surface Land Compensation Database identifies the land usage for each lease.