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ZIFF ENERGY REPORT

ROYAL DELUSIONS:

Fallout from the royalty review's "unintended consequences"

Contrary to a popular misconception, the conventional industry in Alberta is now natural gas, not oil. A perfect storm of negative factors may be buffeting this mainstay industry with high labour and material costs, a strong dollar and low gas prices. However – as **Paul Ziff,** CEO of Ziff Energy Group, points out – the most significant cause for dramatically declining natural gas drilling activity is "Made in Alberta" and warns against the adoption of the new royalty review regime while gas prices are low.

Nineteen ninety-seven was the last year in which more oil wells than gas wells were drilled in Alberta. Since 1998 gas drilling has surpassed oil drilling activity, with gas wells outnumbering oil wells by two to one in 2007. For the past 10 years, drilling for natural gas – and not oil – has driven Alberta's massive service industry, as is evident from drilling statistics (Figure 1).

The cost of finding new gas reserves has escalated dramatically over the past several years. As a result, since 2006 the price of natural gas is no longer high enough for new gas exploration for many drillers. The Western Canada gas price versus full cycle gas cost highlights the predicament faced by gas drillers today (Figure 2).

Oil is an internationally fungible commodity, so oil prices – even in petroleum-rich Alberta – are set in the international market. A motorist may grumble that these have recently "gone through the roof," but his anger is directed in part at geopolitical causes that lie far beyond the influence of his local government. By contrast, the price of natural gas is still largely determined in the North American marketplace. Many are unaware of how these differing marketplace dynamics have resulted in natural gas selling for roughly half the price of oil in terms of energy content (Figure 3).

It's wrong to assume that current conventional gas royalties, based on today's costs and gas prices, are too low. The Alberta royalty review made that assumption and much of its confusion stems from its reliance on dated and erroneous information from an American consulting firm, and on incomplete cost models. The new royalty regime may now actually be too high to generate and maintain strong activity.

In ratcheting royalties upward in the proposed fashion, drilling activity is forced downward by sheer economics. Ziff Energy Group also anticipates the negative effects of an inevitable decrease in natural gas drilling to spread beyond service sector employment towards other related and local industries.

The effects are already being felt. Following the royalty panel's late-October announcement, industry spending has dropped sharply. Crown land sales are the lowest in nine years and statistics show that Alberta gas exploration drilling for January 2008 is 51 percent lower than the previous January. Tragically, the new royalty program will reduce future natural gas production and royalties, the exact opposite of its true purpose.

Today the price of natural gas is continental, making it fairly similar right across North America. So we don't

Figure 1:
Shifting the Focus to Natural Gas

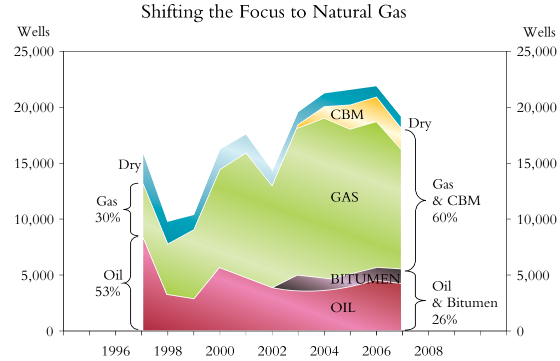


Figure 2:
Western Canada Gas Price
vs. Full Cycle Gas Cost (Before Tax)

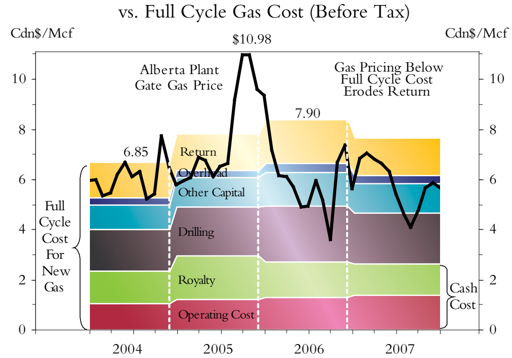


Figure 3:
Alberta Natural Gas Price Discount vs. Oil Price

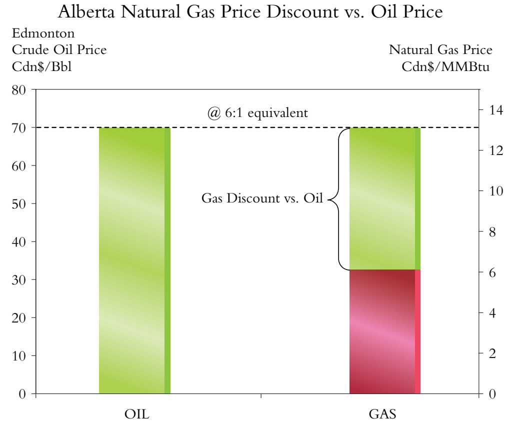
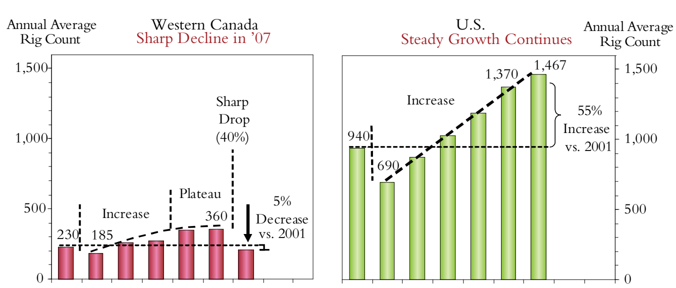


Figure 4:
North American Gas Drilling Rig Trend 2001-2007



2006: Average Depth 3,850 ft, Gas Footage 59 Million ft
Source: Baker Hughes; Ziff Energy Estimates, EIA, Nickles mainly Alberta

2005: Average Depth 5,700 ft, Gas Footage 157 Million ft
Source: Total Gas Rigs, onshore and offshore

look to gas price differentials to explain the fact that gas drilling has plummeted in Alberta while increasing in the United States. The factors beyond the erosion of gas economics in Alberta are numerous: sharply rising costs, especially labour, which is influenced by ultra-strong oilsands activity; the strong Canadian dollar, which has cut about $3/Mcf from the Canadian gas price; and the aforementioned weak average gas price (relative to oil). To put this in perspective, Figure 4 contrasts Western Canada and the United States with respect to onshore gas drilling rig trends.

Most impacted by the downturn is deep gas in western Alberta, as well as shallow and coalbed methane (CBM). The euphemism for this "made in Alberta" downturn is "unintended consequences." The soon-to-be enacted new royalty regime with its ambiguous intentions but dire results is clearly a further economic encumbrance on an already beleaguered natural gas industry.

Ziff Energy regards this sharp downturn as "made in Alberta" quite simply because, during the same time, gas-related drilling has soared in the U.S. In early February 2008, authoritative *World Oil* magazine projected that gas wells drilled in Texas will reach a decade high this year. Alberta's neighbouring jurisdictions of Montana, Colorado and British Columbia are actively courting Alberta gas producers. Specialized equipment is being sent abroad, to the U.S., Russia and even Algeria. One questions why these producers and service companies with their high-tech equipment and jobs would return to Alberta – and its murky outlook – once they had profitably ensconced themselves elsewhere?

Oil and gas companies such as Apache, ARC, CNRL, EnCana and Talisman have all lent credence to this unwelcome development by announcing large 2008 spending cutbacks in Alberta as well as shifts in spending outside the province. Many more companies are doing the same – but without fanfare so as not to upset the Alberta political apple cart. Ziff Energy Group estimates that at least 80 percent of companies active in Alberta have reduced their planned conventional spending in the three months subsequent to the new royalty announcement.

The royalty review panel sought to increase annual conventional royalties by $1.8 billion. The Alberta government's goal was a slightly more moderate $1.4 billion. Sadly, downward revisions in conventional industry spending on crown lands erase any planned royalty gains. Both the government and its appointed royalty review panel did not predict this "unintended consequence" that gas producers had vainly warned of from the outset. In short, the projected $1.4 billion increase in provincial revenues has been exposed as a pipe dream.

The huge loss in provincial revenues is not the end of the debacle. Unless the proposed royalty program is changed, conventional gas activity will continue to decline sharply, creating a "made in Alberta" recession. In this scenario, Alberta government revenues from the conventional industry will fall far short of the imaginary $1.4 billion projection. AO