Western Canadian Exploration Highlights for 2000: “A Year of Expansion”

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2000 was a year of expansion for oil and gas explorers operating in the Western Canadian Sedimentary Basin. Oil and gas prices remained high throughout the year (Figure 1), substantially improving cash flows, which caused a corresponding increase in drilling activity. Exploratory drilling, however, did not increase as much as total drilling as companies concentrated on expanding production from previously discovered pools to take advantage of the favourable prices.

Figure 1: Alberta gas and oil prices for 1999 and 2000.
Western Canada saw a total of 3,997 exploratory (NFW/NPW/OUT/DPT/EXP) wells drilled in 2000, a 36% increase over 1999 and an increase of 33% over the ten-year average. Total well completions for 2000 were 16,468, a 55% increase over 1999 and an increase of 58% over the ten-year average (see Figure 2).

The year 2000 also saw significant increases in Crown land sale revenues. The total land sale bonus for Western Canada was over $1.4 billion, up 77% from 1999 and 63% above the ten-year average (Figure 3). It is interesting to note that the total number of hectares purchased was up only 17% over 1999, while the price per hectare increased by a 51%, perhaps a sign of a maturing basin. Land sale activity was spread throughout the basin (Figure 4), with concentrations in the foothills of Western Canada (Ojay, Copton, Cabin Creek, Hinton, and Basing), the far north of Alberta and British Columbia (Swat, Sousa and Boyer), heavy oil producing areas (McMurray, Steepbank and
Figure 3: Crown land sale results.

Figure 4: Significant land sale areas.
Leismer), along with the Suffield military range sale which brought in over $102 million into the Alberta government’s coffers on April 3rd, 2000. Alberta Energy Company Ltd. (AEC) was the top spender at the Suffield sale laying out over $63 million at that sale alone.

A number of significant oil and gas discoveries were either made or brought on stream in 2000 in the Western Canadian Sedimentary Basin.

At Hay River, British Columbia, Nexen Inc. (formerly Canadian Occidental Petroleum Ltd.) has undertaken a substantial development of its 1997 Bluesky oil discovery, yielding production and reserves additions that make it one the most significant discoveries of the last 20 years with total reserves of “at least 135 million barrels”. Also in British Columbia, the Ladyfern and Chinchaga areas have seen continued activity directed towards Slave Point gas. Recent publicity over efforts to construct a 159 MMcf/day pipeline attest to the prolific nature of these Slave Point reservoirs.

In Alberta, activity was also focused on Slave Point potential around the Peace River Arch in the Dawson, Hamburg and Chinchaga areas. At Dawson, Berkley Petroleum Corp. announced they had drilled seven successful oilwells during the third quarter with test rates ranging from 450 to 2,000 barrels of oil per day. Berkley also stated that they had identified a total of 97 additional locations on 3-D seismic. Exploration drilling has also continued at a brisk pace in the Alberta foothills region. A significant new well was placed on production in the Fenn West area by Gulf Canada Resources Ltd. in July, 2000 at 14-35-36-21W4. This D-2/D-3 oilwell was producing at rates up to 2,500 barrels of oil per day combined from the Nisku and Leduc intervals.

Exploration activity was less brisk in Saskatchewan during 2000. However, Berkley Petroleum Corp. did continue their Red River exploration activities with a New Field Wildcat discovery at Hardy South (41/10-30-4-21W2) which went on production in February at an initial rate of over 600 barrels of oil per day.