

# Appreciation in the Western Canada Sedimentary Basin

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During the life of a pool, regulatory authorities in charge of maintaining resource information may modify estimates of the pool's reserves. Conservatism in preparing initial reserve estimates insures that, over time and on average, pools will be seen to contain more gas than their initial bookings: pool reserves appreciate.

The degree of appreciation is heavily dependent on the methodology and practices of the regulatory authorities, which change over time. Thus an analysis of appreciation is dependent on jurisdiction and extrapolation from one jurisdiction to another is dangerous. Further, what appreciation factors apply to a jurisdiction at one point in time may not be applicable at another.

This paper discusses most of the important considerations required in the preparation of appreciation analyses. These considerations are applied to recent (1993 through 1998) appreciation in Alberta gas pools as recorded by the Alberta Energy and Utilities Board. The analysis suggests that reserves as booked at year-end 1998 will appreciate by about 15%. This compares with reserve appreciation estimates of about 800% reported in the 1960s.

The paper draws heavily from a study prepared by the author for use in the publication of 'Natural Gas Potential in Canada – 2001' by the Canadian Gas Potential Committee, (CGPC-2001).