Large Resource, Small Pools: The Lower Cretaceous of the Western Canada Sedimentary Basin

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The Lower Cretaceous Play Group, estimated to contain 65.6 Tcf of Undiscovered Natural Gas Potential, is the most significant play group within the Western Canada Sedimentary Basin. It represents approximately half of the basin's total Undiscovered Natural Gas Potential of 133.4 Tcf. As a comparison, this play group's undiscovered potential is approximately equal the resource endowment of the Eastern Canada basins and is 22% greater then the resource endowment of the NWT and Beaufort Sea basins combined.

As of year-end 1998, approximately 58% (59.7 Tcf) of the Nominal Initial Marketable Gas Potential has been discovered in 20,716 pools. The remaining 43.2 Tcf is expected to be found in over 169,000 new pools from eleven established exploration plays. Approximately 50% of the undiscovered potential is expected to be found in 13,300 pools ranging in size from 1 Bcf to 64 Bcf. The remainder is expected to be discovered in approximately 155,700 pools smaller than 1 Bcf gas in place.

A "Play Life Index" has been calculated based on the discovery history for the ten-year period ending 1997. Assuming consistent drilling rates and discovery rates, individual play life indices range from 15 to 119 years. A significant resource exists within the backyard of our industry but we must become more efficient and significantly increase our exploration drilling activity efforts for these smaller targets. The 'Natural Gas Potential of Canada, 2001 Report' forms the basis of this presentation.