

## PANAMA

*By Gerald M. Ellis*

For many years in past decades there was some sort of gold exploration in parts of Panama, chiefly in the Darien district, at the site of the old Cana mines (operated at the turn of the century by the combined English-French-American company, Darien Gold Mining). The Mauricio Hochschild interests spent two years in preliminary exploration during 1964-1965, followed by Falconbridge in 1969, and later by Freeport, which undertook a rather extensive drilling programme. Later, a junior company based in Panama continued exploration. The Government of Panama will not authorise any type of open-pit mining for fear of environmental risks, should commercial quantities of ore be established, in the Darien District, particularly the Cana area. Past mining activity was limited to alluvial gold in Darien and in the Province of Veraguas, at the Tuquesa River and Remance Districts, respectively.

At year end it was reported that Calais Resources had finalised an option agreement with Golden Cycle of Panama on a 16,200 ha concession in Veraguas where, during the colonial period, historic records indicate that some 200,000 oz of gold had been produced from alluvial deposits in several stream and river drainages. Calais is interested in undertaking gold exploration on the hard rock present in the area. A number of veins are exposed in the terrain which may have been the source of the alluvial gold deposits. Calais Resources had a 90-day cash-free option period to hold and evaluate the property. Calais can exercise the option at any time during this period by issuing 100,000 common shares of Calais common stock to Golden Cycle. Upon exercising the option the company must develop an exploration plan, including an environmental protection programme acceptable to the government. Calais can explore for five years with renewal options, and with an option to purchase the

property for US\$5 million. Production would require a 2% NSR payment to Golden Cycle. The royalty would be terminated upon purchase of the property.

Adrian Resources, of Vancouver, reported no exploration work at the Petaquilla property during 2000. Teck Corp., manager of Adrian's Petaquilla property, has deferred for one year its decision whether or not to place the Petaquilla property into production and thereby complete its acquisition of one half of Adrian's 52% interest in Petaquilla. Teck cited continuing low copper prices as the reason for its deferral decision. Teck, which presently holds no interest in the Petaquilla property, can acquire an effective 26% interest in Petaquilla by funding Adrian's share of the cost of placing Petaquilla into production.

Teck has updated the final bankable feasibility study prepared by H.A. Simons on behalf of Teck (completed in January of last year) to address the current outlook for copper prices. The study clearly indicated the feasibility of the Petaquilla project. It concluded that the project's total after-tax cash flow would be US\$2.1 billion, with a net present value of US\$364.4 million (The study assumed Teck's long-term metals prices of US\$1.10/lb. copper, US\$375/oz gold and US\$3.50/lb molybdenum, plus a 10% discount rate and a throughput rate of 120,000 t/d on a 100% debt basis). Using these assumptions, the project would have an internal rate of return of 14.2% and a payback period of 4.8 years. The price of copper is presently approximately 50% below the long-term price assumed in the study. In one year's time Teck must again update the study and make a decision whether or not to proceed with the development of Petaquilla. In the event that Teck asserts its deferral right, Adrian can elect to proceed with development, whereupon Teck must either fund 52% of the costs of placing Petaquilla

into production or its right to acquire one half of Adrian's interest will terminate. In anticipation of an eventual production decision, Minera Petaquilla, the joint operating company owned by Adrian, Teck and Inmet, has continued to undertake social programmes and infrastructure acquisitions in the Petaquilla area at a cost of approximately US\$150,000 per year.

Elsewhere, a number of junior companies, particularly Canadian, held concessions or were in joint venture exploration, although during most of 2000 exploration activity was limited. Some juniors withdrew from Panama. Among these was Western Keltic which had been interested in undertaking exploration in the Kuna Yala areas.

There was no progress reported on the Cerro Colorado property, other than the previously reported news that Tiomin Resources had granted Aur Resources (both Toronto-based firms) an option to purchase the copper porphyry project. The option period was to

last 26 months, beginning in the year 1999. The deposit is one of the largest in the world and various studies have estimated preliminary capital costs at US\$1 billion for several stages that would yield 25,000-27,000 t/y from a heap leach SX-EW operation and a conventional 100,000 t/d milling operation that would recover between 182,000 t and 227,000 t/y of copper in concentrate.

Minamerica Corp., based in Panama, continued exploration and considered acquisition of potential areas. This company has been responsible in the past for recommending potential properties, among them Santa Rosa.

There was no hydrocarbon production in Panama and no significant exploration in 2000. The M Group of Independence, Ohio, ceased negotiations with the Ministry of Energy for the 4994 km<sup>2</sup> Block 1 in the Darien Area.