

PANAMA

By Gerald M. Ellis

The Directorate General of Mineral Resources of the Republic of Panama reported a minimum amount of activity during 2001. For PanaCobre SA's Cerro Colorado project, activities were confined to the maintenance of the camp, roads and other facilities. A production start is dependent on higher copper prices, or a reduction in projected operating costs. The project has now been dormant since 1988 although the contract with the government remains valid and the project has been fully evaluated for both the sulphide ore and the oxide ore reserves.

At the end of February 2001, Tiomin Resources reported that it had elected to transfer the ownership of PanaCobre SA, its wholly-owned subsidiary, to Aur Resources Inc. in full satisfaction of a US\$2.3 million loan made by Aur to Tiomin. This ended Tiomin's involvement with PanaCobre SA and the Cerro Colorado project.

A study for the Cerro Colorado project by Tiomin envisages the construction of a US\$200 million heap-leach operation that would gradually be replaced by a high-capacity conventional milling operation. Cerro Colorado has been explored for decades, originally by Canadian Javelin, and subsequently by the Government of Panama, Texasgulf, Rio Tinto and Tiomin. Using a cut-off grade of 0.4% Cu it has been estimated that the primary copper sulphide resource amounts to some 1,750 Mt averaging 0.64% Cu, with silver and molybdenum.

Empresa Minera Petaquilla SA's Cerro Petaquilla project and Empresa Minera Cerro Quema SA's Cerro Quema gold project remained on hold during 2001, with the principal activities devoted to the maintenance of camp facilities, roads, and reforestation plans whilst awaiting improved

metal prices. Cerro Quema is located in the south of Los Santos Province, and was repurchased from Campbell Resources by the former owners.

The Romance project, owned by Transworld Exploration SA, is also under maintenance activities and development of reforestation plans. This property was also recovered by its original owners, from Empresa Minera Romance SA. Romance is a gold-silver vein-type deposit and was mined during the years 1990-1998. Reserves have subsequently been re-evaluated.

The Santa Rosa project, owned by Empresa Minas de Santa Rosa SA, produced gold and silver between 1995 and 2000 but was abandoned owing to bankruptcy and the operation is now being prepared for environmental rehabilitation and shutdown.

The Darien Cana mines, Espiritu Santo de Cana, are in an area declared as 'Mineral Reserve' and the former concessions have been cancelled. The area is part of the National Park of Darien on the border with Colombia.

The Cana mines and workings were relocated, sampled and studied by Mauricio Hochschild's interests in 1964 and 1965, but were not conclusive. Later, the areas between the North and South mines were drilled by Freeport de Panama during the mid-1980s.

Cerro Colorado, Cerro Petaquilla and Cerro Quema remain as very important deposits to be developed and mined in the future, and should continue to maintain Panama on the list of highly attractive countries in Latin America for mineral exploration. Panama has no mining history and the development of these huge deposits would help to establish a mining industry. This, however, is dependent on the prices of copper and gold.

The exploration company Glamis Gold Ltd drilled the Viento Frio property in September 2001, but the level of gold mineralisation was deemed insufficient and the company has dropped its concessions and closed its Panama office. Viento Frio, a gold-silver deposit, was originally discovered by Rayrock Resources and was adjudged to have potential for large, bulk mining potential.

Panama granted its first petroleum exploration permit since 1987 to Houston-based Harken Energy in September 2001. Harken signed a two-year technical evaluation agreement that gives the company the right to conduct geological, geophysical and geochemical

studies in the provinces of Colon, Bocas del Toro and Panama. At the end of two years, Harken has the option to negotiate a five-year exploration contract and a 25-year production period. This was the only hydrocarbon exploration and production activity to take place in Panama during 2001. Panama has no identified oil and gas reserves, all oil is imported and the country neither produces nor consumes natural gas.

The Directorate General of Mineral Resources is presently modernising its mining laws to promote investments in the mining industry. This is being carried out in co-operation with Interamerican Development Bank.