

## COSTA RICA

*By Michael Seaward and Tim Coates*

Costa Rica's attractiveness as a place for mining investment took a decided turn for the worse with the election of anti open-pit mining candidate Abel Pacheco as head of state in February. One of the first actions of President Pacheco's new government was to issue a decree placing a moratorium on new projects involving the use of open-pit extraction and cyanide processing, clearly aimed at the modern gold-mining industry. Notably, underground mining was excluded. The decree was appealed but allowed to stand after clarification that it excluded projects where permits had already been approved (Bellavista) or those where applications were in process (Cerro Crucitas). The message was clear, however, much to the delight of countries like El Salvador, Nicaragua and Honduras, who have all seen an increase in exploration activity.

In spite of this negative backdrop, the Bellavista project, dormant for most of the year because of the gold price, underwent a change of ownership. Wheaton River Minerals Ltd, which itself underwent considerable management changes, sold the property in November to Glencairn Gold Corp. whose management had formerly been part of Wheaton River. A feasibility study by Wheaton River Minerals Ltd indicated a US\$28 million capital cost for an operation producing an average of 60,000 oz/y of gold over a 7.3 year mine life, with total cash operating costs, including royalties, of US\$179/oz. A gold price of US\$325/oz would produce a pretax IRR of 19% according to the study; at US\$350/oz this increases to 33.2%.

Prior to the sale, the Costa Rican Environmental Minister, who also happens to have energy and mining in his portfolio, presented a letter to Compañía Río Minerales – the local subsidiary which has title to the project – reiterating the government's respect for the legal rights of projects provided those rights were granted prior to the execution of the decree. The purchase price was US\$250,000 plus 750,000 common shares of Glencairn.

Glencairn was seeking financing from Standard Bank of London of up to US\$19 million (limited recourse) subject to due diligence. A further US\$12 million would be raised by new equity and US\$5 million with equipment leases. A strong community relations effort has reportedly resulted in broad local support for the project. In May this year, the negotiations with Standard Bank were terminated and Glencairn said that it would pursue other financing alternatives. The company was hoping to commence project construction in the next dry season.

Vanessa Ventures' Crucitas gold project is a bulk-tonnage, multi-million ounce gold deposit, and over US\$32 million has already been spent on exploration and development (primarily by Placer Dome). The deposit is situated in

northeastern Costa Rica and is accessible by road, being 105 km north of the capital, San Jose, and 16 km northeast of the small town of Coopevega.

In January 2002, Vannessa obtained an exploitation permit from the Government of Costa Rica, and the required Environmental Impact Study (EIS) was submitted to the environmental authority, SETENA, in March 2002. Apparently influenced by anti-mining policy statements by President Pacheco and, coincidentally, by negative comments to the press by Environmental Minister Carlos Rodriguez, SETENA demurred for a year and finally turned down the EIS in its totality. Vannessa has appealed the ruling, arguing that of the 36 deficiencies mentioned 45% were without technical or scientific merit; 25% were either false or incorrect; and 30% related to themes outside the original guidelines and terms of reference set by SETENA.

The Crucitas deposit comprises a gold-bearing saprolite (weathered oxidised soil) and a gold-bearing hard-rock resource. The most recent independent estimate of the entire deposit was completed by Independent Mining Consultants Inc., which calculated a total measured and indicated gold resource of 1.44 Moz consisting of 29.6 Mt averaging 1.51 g/t Au and 3.41 g/t Ag, based on a 0.8 g/t Au cut-off grade. Inferred resources are 10.1 Mt at 1.56 g/t Au and 2.93 g/t Ag. Additional inferred resources at the nearby Conchudita concession are 3.2 Mt averaging 4.56 g/t Au. The combined resource estimate of 2.37 Moz of contained gold is based on exploration and development work completed by Vannessa and previous owners. The database includes more than 31,000 gold assays from 385 diamond and auger drill holes totalling over 36,000 m.

Inversiones Valle Columbia, owned by Luis Cantu, continued as the only formal, operating underground mine in Costa Rica. From its La Luz concession 2 km north of Las Juntas de Abangares in the heart of Costa Rica's historic gold district, mill-feed is transported to the plant by truck. The 50 t/d carbon-in-leach (CIL) plant has been recently expanded to 80 t/d.

Most of the feed is coming from the Olga vein where the winze is being deepened by 40 m. An exploration crosscut, which can be used for production later, has been started to intersect the Villalobos vein at depth. Upper zones of the vein reportedly indicated grades of between 10 and 15 g/t Au. Mina La Luz, produced 2,658 oz of gold from 11,875 t of ore milled during the period March 2002 – February 2003. Average daily throughput was 38 t, with an average diluted grade of 8.2 g/t Au and 89% recovery.

Mina Rio Chiquito (Corporacion Minerales Laguna SA) was purchased in its entirety by Luis Cantu. A tunnel, collared in the existing open pit, is being driven along the vein with the objective of developing mineralisation seen in drillholes in the main zone (1999). The intention is to extract high-grade, vein-type mineralisation (18-21 g/t Au). Development ore will be trucked and processed at La Luz. The underground geological resource currently being developed, using a 5 g/t Au cut-off grade is 176,871 t at 11.18 g/t Au and 21.1 g/t Ag. Luis Cantu is looking for a partner to participate in development of the

Rio Chiquito project and an expansion of Mina La Luz, or outright purchase of his mining interests as a “going concern”.

With the rising gold price, owners of mining rights at Tres Hermanos (Exp.96) and El Recio (Exp. 878) in the Juntas de Abangares District, represented by Giovanni Sosto, leased the properties to a US/Costa Rica investor group. The most recent in situ geological resource estimate for Tres Hermanos, prepared by TC & A Geological Consultants in November 1997, totalled 177,000 t averaging 6.8 g/t Au.

The most recent undiluted geological mineral reserves estimate for El Recio (Exp.878), prepared by Strathcona Mineral Services Ltd in 1990, gave open-pit reserves of 241,100 t at 2.7 g/t Au, and underground reserves, above drift level, at 144,200 t averaging 7.5 g/t Au. Below drift level an additional 82,200 t at 9.0 g/t Au were reported. Exploration targets, which could increase the resources, exist in the northern part of the Tres Hermanos property on the extension of the Ramal Oeste and Tres Hermanos veins and in the Palo Negro sector of El Recio.

Tierra Colorada SA's Santa Rosa property is located 19 km southeast of Juntas de Abangares. In the Envidia vein, which strikes northwest and dips 65° northeast, some 206 m of development on three levels have outlined a measured resource of 4,150 t at 12.0 g/t Au. An exploitation permit has been applied for and is currently under review by the government.

At its Lilas property, located 50 km northeast of Liberia, Tierra Colorada has outlined measured resources of 3 Mt averaging 0.53 g/t Au in a silica cap, and 700,000 t averaging 5.42 g/t Au in a steeply-dipping quartz-stockwork structure. A feasibility study has been prepared and submitted to the government as part of the normal Exploitation Permit application process. Of seven diamond drillholes drilled between October 2001 and January 2003 by Consolidated Serena Resources, all encountered mineralisation. These drillholes tested the eastern extension of the structure, established the depth continuity of higher grade mineralisation (with best grades over 30 g/t Au) and obtained core samples for geotechnical studies. The zone remains open to the east and at depth.

The plant at the Chassoul mine, 4 km east of Miramar, is operating at 25 t/d processing old mill tailings averaging 8 g/t Au while evaluation of the six known veins continues. A 200 m-long crosscut is planned to intersect two of the veins where bonanza gold grades of up to 100 g/t Au have been found. The Inversiones Valle Columbia group is supervising and financing this work.