Firestone Ventures Inc. featured in the Mining Journal- London, Dec. 07, 2007

# Other crops in Guatemala

Although best known for its coffee and bananas, Guatemala also produces gold, silver, antimony and a number of other mineral products **BY MARK HARBEN\*** 

HE Marlin gold-silver mine is producing gold and silver from a typical epithermal, low-sulphidation or quartz-adularia-type gold deposit within a newly-discovered gold district located in the western highlands of Guatemala, 48 km southwest of

MEXICO GUATEMALA HONDURAS EL SALVADOR

the city of Huehuetenango, and about 300 km northwest of Guatemala City.

The mine is 100%-owned by Montana Explorada de Guatemala SA, a wholly-owned subsidiary of Goldcorp Inc, and embraces a combination of open pit and underground operations and conventional milling.

The project area lies within a highly prospective land package of approximately 100,000 ha that encompasses the main Marlin deposit and other important mineralised

> in the fourth quarter of 2005, and Marlin milled 1.09 Mt of

zones. Commercial pro-

duction commenced

ore last year, averaging 4.92 g/t Au and 75 g/t Aq to produce 161,000 oz of gold and 1.6 Moz of silver. Production is expected to continue through to 2015.

Goldcorp also controls the Cerro Blanco project near the town of Asuncion Mita in southwestern Guatemala. It is considered to be a classic hot springs gold deposit with typical bonanza type gold mineralisation. The project focus has changed to a potential development as an underground deposit, with possible operating synergies with the Marlin mine.

The gold resource at Cerro Blanco more than doubled after exploration in 2005, and amounted to 1.93 Moz at an average grade of 8.0 g/t Au and 67 g/t Ag, using a 5.0 g/t Au cut-off grade. About 18,000 m of exploration drilling was carried out in 2006 and work on a revised environmental impact assessment is under way. Just over US\$5 million was spent on project development and about US\$3 million on exploration in 2006.

Work on an internal feasibility study will be completed in the first half of 2007. The concept for the Cerro Blanco project is an underground mine with conventional milling to provide a gold/silver doré product.

In central Guatemala, Radius Gold Inc discovered the

Alvaro Colom, right, Guatemala's president elect with the National Unity of Hope (UNE) party, stands with Jose Rafael Esapada, vice president elect during a celebration in Guatemala City, Guatemala, on November 4



# from exploration to development

London, Beijing, New York and Chicago, have been involved in transactions on every continent involving a wide range of commodities. Our client base spans the spectrum from major multinationals to junior exploration companies. We act for mining companies and the banks and underwriters that finance them on mergers and acquisitions, joint ventures, listings, equity and debt financings and project finance. The team has carried out numerous secondary listings,

Tambor lode gold belt in 2000. The properties were explored by Gold Fields Ltd under joint venture until 2004. Gold Fields drill-tested the Guapinol, La Laguna, Poza del Coyote and Cliff zones and outlined a 43-101 compliant inferred resource 2.55 Mt at 2.64 g/t Au, and an indicated resource of 456,000 t at 3.94 g/t Au. Radius launched a reevaluation of the site in 2007, with the results announced in September, Sampling was taken at the Guapinol vein on both sidewalls, which yielded 74.5 g/t Au over 3.4 m from the east tunnel, and 77.7 g/t Au over 2.4 m from the vein in the west tunnel

Elsewhere, in eastern Guatemala, a classic low sulphidation epithermal gold-silver vein system has been identified at Banderas. Trench sampling of banded quartz veins has returned values up to 28 g/t Au and 553 g/t Ag. A twophase programme of core drilling, totalling 2,545 m, was completed in early 2004. Best results from core included 18 g/t Au over 1.5 m and 332 g/t Ag over 1.6 m.

Castle Gold Corp, formed as a result of the amalgamation of Aurogin Resources Ltd and Mworgain Minerals Inc in August 2007, has four main gold exploration properties in Guatemala, including El Sastre Main Zone (the most advanced of the four zones comprising the company's El Sastre project).

El Sastre Main Zone is a high-grade, near-surface oxide gold deposit. Indicated resources currently stand at 370,000 t averaging 4.14 g/t Au, and inferred resources at 1.16 Mt at 3.13 g/t Au. The company has completed detail engineering and begun construction of a heapleaching pad and metallurgical plant designed to bring the deposit into commercial production.

Some 2 km to the southeast, at El Arenal, where there is an inferred resource of 1.83 Mt averaging 1.3 g/t Au, the gold is fine grained and similar metallurgically, and supports the theory that El Arenal and El Sastre Main Zone may be connected.

# ZINC PROSPECTS

At the Torlon Hill zinc project, in western Guatemala, Firestone Ventures Inc completed the first 14 core drill holes at the end of 2006 of its 2,200 m, 25-30 hole winter drill campaign.

The core mineralogy indicates the zinc mineralisation defined in the previous drill campaign extends for 150 m. Zinc mineralization (smithsonite) extends over a 100 m x 700 m area, and Zone N-1 has returned average grades of 20.3% Zn over true widths of 1.0-9.0 m. A high-grade 'bulge' averages 28.4% Zn over 9.0 m. Drilling at Zone N-2 has returned grades of 11.2% Zn over true widths of

The company discovered a new zone of mineralisation during its March 2007 drilling programme, and

Jaguar Nickel Inc completed the sale of its whollyowned Guatemalan subsidiary, Jaguar Nickel SA, to BHP Billiton for C\$19 million in January 2006.

Canadian nickel junior Skye Resources is scheduled to begin construction in early 2008 on its 50 Mlb/y nickel project in the Izabal Department of northeastern Guatemala. The Fenix project will use conventional smelting technology and is projected for commissioning and initial production in late 2009.

The brownfield project was acquired from CVRDinco in 2004, and encompasses a 248 km2 mining license. Some long-lead orders have been placed and site preparation is underway for upgrading and modernising a facility that will produce ferro-nickel over an estimated 30-year mine life. An EPCM contract was signed recently with Hatch, and a power supply agreement was signed with Duke Energy for

plans to spend up to US\$1.8 million on the project from December 2007, extending drilling to the west and south. Firestone holds an option to acquire 100% of the Torlon property through a private deal with the current owner, La Cooperativa de Produccion Industrial Juventad Minera SA.

## **OIL RESOURCES**

Central America relies on importing oil, largely from Venezuela and Mexico (under agreements such as the San Jose Pact and the Caracas Energy Accord), but, uniquely in Central America, Guatemala does have a petroleum production of 22,300 bbl/d, of which 3.104 bbl/d are exported.

Perenco UK Ltd has controlled oil production in Guatemala since 2001 following the purchase of Basic Resources International. The sale included all of the country's existing oil fields, a 440 km crude oil pipeline, a

### **ANTIMONY**

Guatemala is the third-largest producer of antimony in Latin America after Bolivia and Mexico. Antimony ore and concentrates have been produced by Minas de Guatemala SA from several mines at Ixtahuacan in the west. The country produced 1,000 t of antimony in 2006.

2,000 bbl/d mini-refinery, as well as storage and loading facilities. The group operates the only pipeline connecting the Xan and Rubelsanto oil fields to the Piedras Negras terminal on the Atlantic coast.

With oil prices rising, interest in expanding petroleum production has increased, especially by state-owned Chinese Petroleum Corp. Efforts are also underway to explore and exploit potential reserves near Lake Izabal, Guatemala's largest lake, in eastern Guatemala near the Gulf of Honduras.

\*Peter W Harben Inc, Industrial Mineral Consultants, Las Cruces, New Mexico 88011, US (www.peterharben.com)

