

DOMINICAN REPUBLIC

By Gerald M. Ellis

Minerals and petroleum exploration continued to be an important activity in the Dominican Republic during 2000. A new government was sworn into office on August 16, headed by President Hipolito Mejia, of the Partido Revolucionario Dominicano (PRD), and Dr Milagros Ortiz Bosch, Senator of the National District, and the first woman in Dominican history, became Vice-President.

President Mejia is interested in developing the country's mineral potential and has invited mining and oil companies to examine into the potential. During the celebration of the millennium at the United Nations in New York, President Mejia held a 'mining breakfast' to which representatives of major mining companies were invited. Those who participated were invited to visit the Dominican Republic and look into the possibilities for investing in the mineral sector. Particular emphasis was placed by President Mejia on the importance of developing and operating the Pueblo Viejo gold mine where the sulphide ore reserves constitute a major gold resource.

On his return to the Dominican Republic President Mejia created the National Council for Mineral Development for the purpose of inviting mining companies to bid on the sulphide zone reserves at the Pueblo Viejo mine and on four Fiscal Reserves located in central and northwestern regions. At the sulphide zone there are reported to be some 34 Moz of precious metals in 545 Mt of ore. The contained gold has a grade of 2.22 g/t, plus 12.42 g/t Ag and 0.55% Zn. The government is highly interested in reviving mining operations at Pueblo Viejo, which were suspended after a period of mining from 1975 – 1996. During the first ten years of operation production ran at over 300,000 oz/y gold. This decreased gradually to 200,000 oz/y and eventually to insignificant amounts.

Operating costs rose and new equipment is required. In addition to the sulphide zone development there is gold contained in the tailings as a result of poor recovery.

The Fiscal Reserves, originally created for the purpose of evaluation by government agencies, were never adequately evaluated for lack of financial resources. La Cuaba in central Dominican Republic covers 6,030 ha and contains a number of veins, some of which reported gold values in the past. Ampliacion Pueblo Viejo, north of the Ampliacion Pueblo Viejo mine, covers 5,400 ha. Neita, in northwest Dominican Republic, also on the Haitian-Dominican border, covers 25,221 ha, and Sabaneta, also in the northwest, covers 55,720 ha. Sabaneta had been studied in the past by a joint Dominican-German co-operation programme; Neita has been studied by UNDP, Rosario Dominicana, and BRGM who conducted exploration under a Sysmin programme (European-financed). Pueblo Viejo has been explored by Rosario Dominicana as has La Cuaba. Also interested in La Cuaba have been a joint Dominican-Japanese co-operation programme and Mitsubishi.

At the end of 2000 a number of companies had purchased Terms of Reference on the four Fiscal Reserves, and a Memorandum on the sulphide reserves at Pueblo Viejo, or had expressed the intention of visiting the Directorate General of Mines. These included MIM, Newmont Mining, Goldfields, Franco Nevada, Peñoles, Energold Resources, Barrick and Placer Dome. A date was established for the presentation of bids, set originally for December, then extended to February 2001 and later to March 2001. The bidding process is considered to be the most important activity in the Dominican Republic's mineral sector in 2000. President Mejia created a Mining Cooperative unit within the National Council for Mineral Development for

the sole purpose of guiding the bidding process to a successful conclusion. This unit was entrusted, along with the Directorate General of Mines, to distribute available information to the interested mining companies, as well as setting up schedules for the various phases.

Elsewhere the mining scene was similar to 1999; at the Rosario Dominicana mine, during the last reported period of production, from January to September 1999, output totalled 20,943 oz gold and 100,951 oz silver. The monetary board of the Central Bank ordered the suspension of the operation in 1999.

At the operations of Falconbridge Dominicana, production of nickel contained in ferronickel in 2000 totalled 27,850 t (61.4 Mlb). Output was 7.6% below target owing to a number of factors including an overrun in scheduled maintenance at the power plant which meant that production was reduced to 80% of capacity for 143 days instead of the budgeted 80 days, a poor melting rate of the calcine for long periods as a result of low iron and silica content of the ore, plus a number of other operational problems.

However, ferronickel shipments during the year totalled 27,226 t, which represents a 13% increase over 1999, and the average price received for nickel in ferronickel was US\$4.00/lb compared with US\$2.97/lb in 1999. Under the provisions of an agreement with Falconbridge Ltd, the latter purchases and markets all ferronickel production and shipments in 2000 were broken down as follows: Europe (48%), the US (29%), Korea (19%) and Japan (4%). After allowing for depreciation, amortisation and taxes, Falconbridge Dominicana realised full year net income of US\$34.5 million.

During 2000, the company acquired the necessary equipment for the new treatment plant to process stockpiled ore. This project is expected to increase nickel recovery by 4% and extend reserves by four years. As at

December 30, 2000, proven and probable reserves amounted to 65.1 Mt at an average grade of 1.16% Ni.

Exploration concentrated on several concessions in central and central-eastern areas. On the San Antonio exploration concession, the Energold-Atna joint venture continued a drilling and geophysical programme with values in some intersections assaying 1.14% Cu, 10.15% Zn, 53.27 g/t Ag and 2.03 g/t Au. At the Longyear exploration concession, which adjoins the Pueblo Viejo concession on the west, mapping and sampling continued. Previous drilling by Energold had outlined an oxide zone extending from surface to 24 m. Sulphides are indicated at depth and future drilling is programmed. At the Majagual exploration concession, Energold and joint venture partner Impact Minerals continued exploration over a leached cap overlying a porphyry copper deposit at El Cinco zone, where a 600 x 800 m soil anomaly was under investigation.

At El Higo the Centenario gold deposit had been explored and evaluated in the past by joint-venture partners Canyon Resources and Battle Mountain, and also by Energold; no further work was undertaken. A 150,000 oz gold deposit has been proven by drilling. The concession is located west of Bonao. At the Managua concession, where joint-venture partners Falconbridge and Sarmin had explored, results showed the presence of a 5 Mt prospect with values of 0.81% Cu, 5.67 g/t Ag and 2.22 g/t Au. Falconbridge assigned the concession to Sarmin, retaining a 20% interest, but discontinuing exploration. Corp. Minera Dominicana, together with the above joint venture, undertook geological activity on all the Falconbridge exploration concessions. After Falconbridge withdrew Sarmin joined forces with Boreal and continued exploration. Sarmin also acquired the exploration concessions of Recursos del Caribe (Falconbridge), which had explored in northwest Dominican Republic at the Anon concession where a vein deposit has been

explored within a highly-altered formation showing zinc-silver values. The relinquished exploration concessions also include Rincon Abajo, and Trinidad (formerly Ceja de Coco and Cuaimarote exploration concessions), and Loma de Payago.

At Los Pedregones a silver-gold low sulphide epithermal system occurs in an area of 4 x 7 km. Gold-silver-zinc mineralisation has been encountered with values of 165 g/t Ag and 2.9 g/t Au. Work is planned on other exploration concessions at Rey Croesus, Helen, La Comadreja and Baritina (where Energold is in joint venture with Impact Minerals, Jade Oil and Minaterra Mining).

MIM continued exploration and geological mapping, sampling and related work on several exploration concessions in the Bayaguana-Maimon-Los Hojanchos area along the Los Ranchos Formation where impressive gossans and silicification are present. At Los Cumani, MIM had drilled five holes and detailed investigations were undertaken to evaluate the results. At Loma

El Mate, Loma Lovaton, East Cumani and Agua Santa exploration was also undertaken by MIM.

In hydrocarbon exploration Petrolera Once Once, exploring in the eastern Cibao Basin in the northeast, drilled a fourth exploratory well, Cano Azul wildcat, encountering gas shows, but this was not a commercial discovery. In the meantime the company is studying seismic data and planning the location of a fifth well. In the southwest, Murfin Dominicana and Maleno Oil reviewed seismic data and planned the location of three wells to be drilled in the Azua-Bani Basin, where in the past there was limited production of crude oil. In the Enriquillo Basin, Maleno Oil, as sole concessionaire, was preparing the location of a first well to test a possible gas potential.

All indications are that the year 2001 may see increased mining activity with the reactivation of the Pueblo Viejo mine (development of the sulphide ore reserves), and exploration in the Fiscal Reserves by major mining companies.