VENEZUELA

By Gerald M Ellis

In spite of the difficult political situation in Venezuela that has prevailed since the failed attempt to overthrow President Hugo Chavez in 2002, the country's mineral resources sector remains strong: Venezuela remains among the world's leading oil producers and exporters, a significant producer of iron ore, aluminium and coal, and has substantial potential to increase its production of base and precious metals.

During 2003, the value of minerals produced increased by 18%, largely as a result of higher world commodity prices. Metals were among Venezuela's principal exports, accounting for US$2 billion or 38% of export revenues. The number of people employed in the minerals sector totalled almost 107,000, a 6% increase on the preceding year. It has been estimated that for the year 2004 there will be a significant increase in the production of gold, coal, nickel, industrial minerals and iron ore.

Investments in the mining sector fell by 9% in 2003, to US$822 million. The Ministry of Mines and Energy estimates that for the period 2004-08 total investments in the mining sector will be of the order of US$4.56 billion, or an annual investment of US$912 million.

Iron ore
In 2003, Venezuela's iron ore output reached 21.7 Mt, the highest production for a decade. State-owned Corporacion Venezolana de Guyana (CVG) is the only iron-ore producer in the country through its subsidiary Ferrominera del Orinoco, which operates three open-pit mines in Bolivar State. Pellet production in 2003 was down by 4.2% to 8.3 Mt according to UNCTAD. Ferrominera produced 2.5 Mt, with the balance produced by privately owned Sidor, which purchases ore from Ferrominera to produce pellets. Iron-ore exports in 2003, totalled 7.4 Mt, an increase of 11% compared with 2002. Exports to China rose by 400%, to reach 0.9 Mt.

Met-Chem Canada Inc and Spanish engineering and construction company, Duro Felguera SA, have been awarded a US$5 million engineering contract by Ferrominera to construct a new 8 Mt/y capacity concentrator in the Piar iron-ore district. The concentrator will enable Ferrominera to develop lower-grade reserves of iron ore at its various operations in the region. Construction of the US$230 million project is scheduled for completion in the latter part of 2005.

Bauxite/aluminium
Venezuela ranks as the sixth-largest Western producer of bauxite, and all output comes from CVG Bauxilum's Los Pijiguaos mining complex. A project is in hand to expand production of bauxite at Los Pijiguaos from 6 Mt/y to 8 Mt/y. An investment of US$42.6 investment will be required over a three year

period, 2004-06. The bauxite is refined at CVG Bauxilum's Cuidad Guyana refinery. Output reached 1.85 Mt in 2003 and capacity is being expanded to reach 2.0 Mt/y by the end of 2004. A further expansion to 3 Mt/y by 2009 is under consideration. This could involve a total investment of some US$600 million

Venezuela's two aluminium smelters produced a combined 605,502 t in 2003, slightly higher than the 605,230 t produced in 2002. Alcasa produced 172,157 t and Venalum 433,345 t. It was reported that Alcasa received US$185 million to finance the construction of a long-awaited fifth potline, which will increase capacity from 210,000 t/y to 450,000 t/y and should take three years to complete. The total investment is likely to be of the order of US$500 million.

At year end, CVG met with the KDO group of Iran to discuss possible bauxite and aluminium joint ventures.

Coal

Venezuela is the second-largest coal producer in Latin America. National production in 2002 was 8.1 Mt and exports were recorded as 7.7 Mt. Independent assessments have indicated that exports for 2003 were approximately 8 Mt.

There are only two large-scale mining operations and both are joint ventures, with important participation by Carbozulia, a subsidiary of the state-owned petroleum company PDVSA. In 2004, it is reported that the shareholdings held by Carbozulia will be transferred to Corpozulia, responsible for regional development on behalf of the State of Zulia. The mines are both truck-and-shovel surface mines in adjacent blocks in the Guajira Peninsula, Zulia State.

Carbones del Guasare is the largest producer and operates the Paso Diablo mine, which produced some 5.7 Mt in 2003 (2002: 6.4 Mt). Anglo American and RAG Coal International, each hold 24.9%, and Carbozulia just over 50%. In late 2003 it was announced that RAG would sell its participation to Peabody Energy of the US. Carbones de la Guajira is the second-largest coal producer and operates Mina Norte with production capacity of around 1.5 Mt (2002: 1.4 Mt). It is a JV between Carbozulia and Interamerican Coal Inc.

There are a number of additional coal blocks in the Zulia region reported to be under evaluation and permitting. Of these, the most imminent for development and production is Las Carmelitas, situated in the Guajira coal area, west of Maracaibo, which will be operated by Complejo Siderúrgico del Lago CA (Cosila), a subsidiary of Tomen America> Initial production will be 1 Mt/y.

Other than in Zulia State, there is a small level of production from the Andes region (2002: 150,000 t), generally comprising small underground mines producing coking coal for local consumption, and also in the northeastern region (2002: 80,000 t).

Gold

Hecla Mining Co of the US expects to invest US$65 million at its La Camorra property in Bolivar State, of which US$30 million will be for the opening of the Isidora Mine, Block B El Callao, and US$35 million for La Camorra over five years. This should generate 1,000 direct jobs and 2,000 indirect jobs.

During 2003, the government announced that it was reviewing gold and diamond contracts that had been granted by the state holding company CVG. Rafael Ramirez, Mines and Energy Minister, said that the purpose was to ensure that outdated and unlawful contracts were no longer in effect. This review would not affect Hecla Mining because the mining operation at La Camorra is not covered by a CVG contract, although there are some exploration properties that could be subject to the decree.

Hecla produced 126,567 oz of gold in 2003, including 123,567 oz from La Camorra mine and from ore purchased from small miners and processed through the mill at La Camorra. The average grade of ore was about 23.3 g/t Au. La Camorra is an underground operation. Through a drilling programme, Hecla was able to add some 327,000 oz of gold at Mina Isadora, formerly known as Block B, located some 100 km from La Camorra. Another possible ore body, Canaima, some 10 km east of La Camorra is under study. The ore would be processed at La Camorra mill, and at year end a prefeasibility study was under way.

At Gold Reserve Inc’s Las Brisas project in the Sifontes district of Bolivar, an investment of US$402 million is planned between 2005 and 2008, which should generate 700 direct jobs and 4,200 indirect jobs. An open pit operation has been considered, along with a traditional smelter using Cominco Engineering Services Ltd (CESL) hydrometallurgical techniques. A reserve ranging from 256.6 Mt at 0.81 g/t Au and 0.14% Cu, up to 328.5 Mt at 0.71 g/t Au and 0.15% Cu is estimated.

At Gold Reserve’s Choco 5 exploration project in El Callao, Bolivar, an investment of US$25 million is planned subject to granting of the concessions. The project should generate 80 direct jobs and 400 indirect jobs. Gold Reserve is in an exploration joint venture with Bolivar Gold Corp at the Choco 5 gold property, which is adjacent to Bolivar Gold`s Choco 4 and Choco 10 properties. Bolivar Gold will fund the initial exploration programme and earn a 50% interest in the JV. After the initial phases of exploration, each party will contribute equally towards the exploration and development costs.

Bolivar Gold Corp and Gold Fields Ltd have signed a letter of intent for gold exploration in Proterozoic greenstones in El Callao district (excluding Bolivar`s Choco 4 and Choco 10 properties). The two parties will fund acquisition costs, and Gold Fields will be responsible for funding exploration costs to completion of a bankable feasibility study. Bolivar`s 50% share will be covered as a loan from Gold Fields, to be repaid from Bolivar`s share of future cash flows. Gold Fields has earmarked a budget of US$4 million in 2004 for acquisition costs, exploration and drilling.

At Bolivar Gold's Choco 10 property, there are indicated resources of 13.7 Mt at 2.5 g/t Au, plus inferred resources of 2.3 Mt at 1.9 g/t Au, using a 0.5 g/t Au cut-off grade. This resource estimate was raised in November 2003, following exploration drilling results. Seven diamond drill results gave assays ranging from 2.8 g/t Au up to 12.4 g/t Au. A feasibility study by Micon International envisaged site preparation with initial production for the middle of 2004. The previous reserve estimate had been based on drill results showing gold grades of 2.5 g/t Au up to 3.2 g/t Au.

In September 2003, Crystallex International Corp presented a feasibility study to the Venezuelan authorities for its gold project at Las Cristinas in Bolivar State. The corporation planned to raise C$100 million through a share issue to fund pre-development costs. At year-end it was expected that the Venezuelan government would approve the Crystallex proposal presented in the feasibility study and expected this approval to be announced in 2004. Las Cristinas is estimated to contain 10.2 Moz of gold and would produce some 270,000 oz/y. The first gold production is forecast in early 2006. Based on the most recent drilling, the company has recently increased the resource estimate to 12.8 Moz.

In October, 2003, SNC-Lavalin Engineers & Constructors Inc (SNC-Lavalin) submitted a proposal to prepare a feasibility study for a 40,000 t/d production rate for Las Cristinas. Contractually this work is considered as an extension of the 20,000 t/d feasibility study completed by SNC-Lavalin in September, 2003.

Although Vannessa Ventures Ltd was not able to retain its claim of ownership of the Cristinas property it continues to be active in Venezuelan gold exploration.

Diamonds

In the Guaniamo area of Bolivar State, Canteras El Toco CA will reportedly invest US$50 million over the period late 2003 to end 2007. Primary kimberlites were first identified in the Guaniamo area in 1978, and the area has produced in excess of 15 Mct since the first diamonds were found in the late 1960s. To date, mining activity has been confined to semi-mechanised artisanal operations. The kimberlite mantos measure some 15 km in length and 5 km in width, and are said to be among the most extensive in the world. The Toco group is aiming to produce 180,000 ct/y. The group is said to include private US and Venezuelan investors.

Separately, Canadian-based Kansai Mining Co holds two diamond concessions, Natal 1 and Natal 2, within the Guaniamo diamond province in contract with state-owned CVG. The contracts are valid for 13 years. In April and May 2003 the company constructed an access road to the Metro and Belmudez target areas, and undertook a limited, 1,300 m 15-hole diamond drilling programme over a previously identified magnetic anomaly and within the general area of artisanal mining activity at Belmudez.

The drilling indicated a relatively thick saprolite zone of 25 m, overlying ultramafic schists and breccias intermixed with thin granite and gabbro dykes, over a zone at least 800 m north-south and 200 m east-west to an average depth of 76 m. During 2004, the company plans to undertake bulk sampling and to process about 24,000 t of material through a treatment plant, incorporating a 10 t/h dense media separation (DMS) plant and an X-ray recovery unit.

Nickel

Loma de Niquel is a lateritic open-pit nickel mine owned 91% by Anglo American and located some 80 km southwest of Caracas. Reserves are of the order of 41 Mt at an average grade of 1.6% Ni, and the operation is designed to produce 17,200 t of nickel. Ore processing capacity is 1.2 Mt/y and reserves are sufficient to sustain operations for 30 years. The mine commenced operations in 2001, and the capital investment was some US$500 million. Minority interests are held by Jordex Resources Inc, Grupo Federal of Venezuela, and IFC.

Oil and gas

In 2003, Venezuela is estimated to have produced 153.4 Mt of oil, a 7% decline compared with 2002. According to BP's Statistical Review of World Energy, the country's proven reserves amount to 11,200 Mt. Natural gas production in 2003 amounted to 29.4 billion m^3, and proven reserves at year end totalled some 4,150 billion m^3.

During the year, ChevronTexaco announced further development of the Hamaca field, Petrobras announced that it plans to spend some US$1.3 billion to increase production to 120,000 bbl/d in Venezuela over the next 10 to 12 years, and Lundin Petroleum announced plans to drill one exploration well during 2004.

The Venezuelan Ministry of Energy and Mines confirmed the news that earlier in the year it had suspended temporarily crude shipments to the Dominican Republic. These were later resumed in November, 2003. The new Opec quota for Venezuela was reduced to 2.8 Mbbl/d from a previous 2.9 Mbbl/d, effective November 1, 2003.

On September 27, 2003, the Foreign Affairs Ministers of Venezuela and Guyana, met with the Secretary General of the United Nations, to try to solve the territorial dispute in the Essequibo region.

In late December 2003, ChevronTexaco was still waiting for approval by the Venezuelan government of its application for an exploration licence in offshore Venezuela. ChevronTexaco bid US$5 million for Block 3 of the Plataforma Deltana. No bids were received for Block 5. State-owned PDVSA is already in negotiations with BP for Block 1 to carry out a cross-border reservoir study of the Kapok and Dorado fields.

The Ministry of Energy and Mines is planning to invite 15 private oil companies to bid for exploration and development of the Ceuta-Tomoporo Oil

Field. The Ministry invited also Russian oil companies to participate in the development of the Tomoporo Oil Field. Spain's Repsol-YPF, Norway's Statoil, France's Total, Anglo-Dutch major Shell and US ExxonMobil and ChevronTexaco, have all expressed interest.

The Ministry was also considering a plan to re-offer five onshore natural gas blocks that were not previously awarded in the 2001 non-associated gas bid round. ConocoPhillips Venezuela and its partners, Eni Venezuela BV and Opic, acquired a 75% interest in the Golfo de Paria Este (GPE) from Inelectra.

Venezuelan Vice Minister of Hydrocarbons and PDVSA's director, Luis Vierma, promoted future upstream opportunities for private investment in Venezuela`s offshore areas of the Atlantic and Caribbean continental shelf, onshore Maracaibo Basin, Eastern Venezuela, and opportunities in the downstream sector. Also, in 2003, the government announced its intention to offer opportunities to develop the Cretaceous carbonate reservoirs of Lake Maracaibo, in areas believed to be under-exploited. So far, areas Sur del Lago, Centro Lago (Block VII), Lagomedio, Lagocinco, Bachaquero (Blocks IV, VII; XI), Tia Juana and Urdaneta Norte have been mentioned.

Local Venezuelan sources reported that Shell and the Ministry were in the advanced stages of negotiating a development contract for Cretaceous carbonate reservoirs over a large area in western Lake Maracaibo, north of Shell`s Urdaneta West Field. According to previous announcements, other development projects on Lake Maracaibo may also be available.

