THE MINERAL INDUSTRY OF

CONGO (BRAZZAVILLE)

By George J. Coakley

The Republic of Congo [Congo (Brazzaville)] is located in equatorial central Africa between the Democratic Republic of the Congo [Congo (Kinshasa)] and Gabon and has an area of 342,000 square kilometers. The area supported a population of about 2.7 million in 1998 with a gross domestic product per capita of $1,500 based on purchasing power parity data. The civil war in 1997 did significant damage to the economy and land-based infrastructure. The renewed outbreak of fighting in December 1998 was a further setback to the country.

The economy of Congo (Brazzaville) was based largely on crude oil, with oil exports, valued at $1.3 billion, accounting for 85% of total exports in 1997, the last year for which data were available. The country has major reserves of natural gas; however, all gas output is vented or flared owing to a lack of extraction and distribution infrastructure. Minor amounts of cement, gold, and lime were produced. The country has significant resources of magnesium that currently being evaluated for development.

Investment was governed by the Investment Code of 1992 and Hydrocarbon Law 24/94 of August 23, 1994, which dictates the terms of production sharing agreements. The Hydrocarbon Law reduced taxes on crude oil production from 17.5% to 12%, with the state-owned Hydro-Congo participating in a 31% profit sharing on all production. Mining legislation is based on Decree No. 29-62 of June 1962, as amended by Decree No. 23/82 of July 7, 1982, and Decree No. 86/814 of June 11, 1986. In general, mining has been carried out by the state or through state-owned joint ventures. Prior to the breakout of the civil war in 1997, a new mining code was presented to the National Assembly and Senate for consideration, but apparently was not acted on. The new code would have opened up mining to private investment (Ngot Kongolo, 1997). In April 1998, the Congolese Government established a new national petroleum company, the Société Nationale des Pétroles du Congo (SNPC). SNPC is to market Congo’s crude oil and to assume all upstream functions of the formerly state-owned Hydro-Congo. The process of privatizing Hydro-Congo’s downstream operations has been underway since 1997.

The Ministry of Hydrocarbons and Mines has identified exploitable deposits of base metals (copper, lead, and zinc), diamond, gold, and platinum. Coastal deposits of phosphate and potash have yet to be exploited fully. Additionally, deposits of bentonite, granite, gypsum, kaolin, marble, and talc also have been found in the country. On May 27, 1997, the Government granted two exploration permits covering the Makola and the Youbi magnesium salt evaporite deposits in the Kouilou region to Congo Minerals, Inc., of Canada, which subsequently changed its name to Magnesium Alloy Corp. (MAC). A subsequent May 28, 1997, agreement called for MAC to expend a minimum of $10 million on exploration and on preparation of a technical and bankable feasibility study within 4 years. The new Government reratified exploration and development agreements with MAC in January 1998. MAC reported the successful completion of a 12-month technical feasibility study by Salzgitter Anlagenbau GmbH of Germany. The study proposed the solution mining of the large magnesium salt deposits, primarily carnallite (8.8% magnesium) and tachyhydrite (9.4% magnesium), and the use of a proven magnesium-extraction technology developed by the Russian National Aluminum and Magnesium Institute and the Ukrainian Titanium Institute. A solution-mining wellfield approximately 5 square kilometers would be sufficient to supply the magnesium extraction plant for 20 to 25 years. The $514 million Kouilou project would produce 60,000 metric tons per year (t/yr) of primary magnesium and magnesium alloys, with a 2003 startup planned. As a byproduct of the magnesium operation salt, potash, and possible chlorine would also be produced. The energy intensive extraction process will require approximately 120 megawatts of electrical power and up to 120 million cubic meters of natural gas per year. MAC has an option to develop a hydroelectric dam on the Koulilou River, 75 kilometers (km) north of the proposed plant, or could draw on excess power from the Inga Dam in Congo (Kinshasa). Discussions were also underway on developing local gas reserves for the project (Magnesium Alloy Corp., June 21, 1999, Annual report of Magnesium Alloy Corp. for 1999, accessed December 22, 1999, at URL http://www.magnesium alloy.ca/finan/finan.htm).

Several junior exploration companies were actively looking for gold or base metals during 1997 but, with the renewal of the civil war, were forced to pull back on operations by yearend 1998. AfriOre Limited of Canada announced a high-grade core resource estimate on the Yanga Koubanza lead-zinc deposit of 5.5 million metric tons grading 7.95% zinc, 6.97% lead, and 1.87% copper. Development plans for the project were delayed because of political uncertainties in the region (AfriOre Ltd., 1999, Projects—Congo—Yanga Koubanza, accessed January 21, 2000, at URL http://www.afriore.com/). SAMAX Gold Inc. of Canada, which was bought out by Ashanti Goldfields Corp. of Ghana during 1998, held a concessions in the Dimonika, the Kakamoeka, and the Ngongo districts within the Mayombe gold belt. During 1998, Samax discovered primary gold mineralization at its Mougongo prospect in an area worked only for alluvial gold in the past.

Cement was produced by one company, Société des Ciments du Congo, in which Scancem International of Norway held a minority interest. Nominal capacity was 250,000 t/yr with operating levels estimated at 40% for 1998 (International Cement Review, 1998)

The Elf Aquitaine Group of France was the major operator in the petroleum sector and had a 65% share in total crude production. Most of the national production of around 265,000 barrels per day (bbl/d) of oil was from offshore wells. Elf brought the major N'Kossa field into production in 1996, increasing output at N'Kossa to 67,000 bbl/d in 1998, lower than the planned production level of 100,000 bbl/d to 110,000 bbl/d. Italy's Eni-Azienda Generali Italiana Petroli S.p.A. (Agip), which operated through its subsidiary Agip Recherches Congo, produced 67,000 bbl/d from its offshore operations in Congo (Brazzaville) during 1998. Elf continued development of the N'Kossa Sud field and of the Moho field in the Haute Mer area, in which Chevron Corp. of the United States held an interest. The U.S. Energy Information Agency reported total proven oil reserves of 1.5 billion barrels and natural gas reserves of about 90.6 billion cubic meters of natural gas reserves. A more detailed discussion of recent developments in the Congo (Brazzaville) oil industry is available through the U.S. Department of Energy, Energy Information Administration web site (U.S. Energy Information Agency, November 1999, Country analysis brief—Congo (Brazzaville), accessed December 12, 1999, at URL http://eia.doe.gov/emeu/cabs/congo.html).

Economic and political disruptions caused by the civil wars in 1997 and 1998 and the increased political risk associated with investing in Congo (Brazzaville) will likely delay or discourage new petroleum and mining development in the country, although the primarily offshore oil industry is somewhat sheltered from the extensive damage to onshore infrastructure inflicted during the war.

References Cited

International Cement Review, 1998, Congo: The Global Cement Report, p. 107.
Ngot Kongolo, J.C., 1997, Description sommaire du secteur minier Congolais: Multilateral Investment Guarantee Agency African Investment Symposium, 4th, June 3-5, 1997, Denver, Colorado., 6 p.

Major Source of Information

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TABLE 1
CONGO (BRAZZAVILLE): PRODUCTION OF MINERAL COMMODITIES 1/

Commodity 2/		1994	1995	1996	1997	1998
Cement, hydraulic e/	thousand metric tons	87 r/ 3/	96 r/	50 r/	--	10
Gold, mine output, Au content e/	kilograms	12 3/	10 r/	10	10	10
Lime e/	metric tons	390 3/	390	390	390	390
Liquid petroleun gas e/	thousand 42-gallon barrels	--	--	3,650 e/	4,380 3/	4,380 3/
Petroleum, crude	do.	67,525 r/	63,875	80,300 r/	98,550 3/	98,550 3/

e/ Estimated. r/ Revised.
1/ Includes data available through December 1999.
2/ Natural gas is also produced, but all of it is vented or flared.
3/ Reported figure.