THE MINERAL INDUSTRY OF

EQUATORIAL GUINEA

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The Republic of Equatorial Guinea consisted of a number of islands and islets, which include the volcanic island of Bioko in the Gulf of Guinea; the islands of Corisco, Elobey Chico, Elobey Grande, and Mbañe in Corisco Bay; the volcanic island of Annobón in the South Atlantic Ocean; and the Rio Muni enclave on the African mainland. In 1999 (the last year for which financial data were available), the gross domestic product of Equatorial Guinea was estimated to be about $696 million, and the population was estimated to be 442,700 (World Bank, July 2000, World development indicators database, accessed September 24, 2000, via URL http://www.worldbank.org/data/countrydata/countrydata.html). The petroleum sector has dominated the country's economy since 1996.

Mineral resources are the property of the state. Nonfuel minerals exploration and exploitation are carried out under mineral development agreements. Decree Law No. 9/1981 regulates mining activity except aggregate and radioactive minerals. The Government issues 5-year exploration licenses and allows two 1-year extensions. In 2000, surface rents were $0.25 per hectare. The royalty on gold production was 3%, and other nonfuel mineral production was subject to royalty rates of up to 5%. Petroleum exploration and production is regulated by Decree Law No. 7/1981, as amended. The model petroleum-production-sharing contract was revised in 1998. Initial exploration contracts can be drawn up for 5-year periods with two 1-year extensions; 40% of the concession area is to be relinquished at the end of the initial exploration term. In 2000, the annual surface rental during exploration was $0.50 per hectare in water depths of greater than 200 meters (m) and $1.00 per hectare for concessions in less than 200 m of water. The minimum royalty on petroleum production was 10%, and the Government reserved the right to participate in exploration and production ventures. The income tax rate started at 25%, with a maximum of 45% (Ministerio de Minas y Energia, 2000, p. 16, 18).

BoMc G-E Ltd. of the British Virgin Islands and UMC Equatorial Guinea Corp. continued to evaluate the mineral resources of Rio Muni. Previous mineral and geologic surveys of Rio Muni had identified occurrences of gold and titanium-bearing sands (Ministerio de Minas y Energia, 2000, p. 19-20). Gold was being produced by artisanal miners.

The joint venture of CMS Oil & Gas Ltd. of Equatorial Guinea (52.38 % interest), Samedan of North Africa, Inc. (33.75%), Globex International (10.87%), and the Government (3%) produced natural gas from the Alba Field in the Gulf of Guinea. In 2000, the Alba Field's natural gas production capacity was raised to 2.3 billion cubic meters per year from 930 million cubic meters per year. Alba Field will supply about 1.3 billion cubic meters per year of natural gas to Atlantic Methanol Production Co.'s (AMPCO) 2,500-metric-ton-per-day-capacity methanol plant that was projected to be operating in early 2001 (Noble Affiliates Inc., 2001, p. 10). About 21 million cubic meters per year of natural gas was used by the 10.4-megawatt Punta Europa electricity generating plant. As Alba Field production is ramped up in 2001, gas not used by AMPCO, the Punta Europa powerplant, or the Punta Europa condensate plant will be reinjected offshore. In 2000, surplus gas was flared.

On block B, the joint venture of Mobil Equatorial Guinea Inc. (71.25% working interest) (a subsidiary of Exxon Mobil Corp. of the United States), Ocean Energy Inc. of the United States (23.75%), and the Government (5%) continued development of the Zafiro Field. Crude oil production was increased to more than 112,000 barrels per day (bbl/d) in June when production from the 40-slot, 60,000-bbl/d-production-capacity Jade Platform began to be piped to processing facilities on the floating production, storage, and offloading vessel (FPSO) *Zafiro Producer* (Ocean Energy Inc., 2000). Gas lift and reinjection facilities with a capacity of about 568 million cubic meters per year were installed on the platform. In 1999, a 393-million-cubic-meter-per-year-capacity gas lift module was installed on the *Zafiro Producer* (Ministerio de Minas y Energia, 2000, p. 4). On block C, the drilling of the Oreja Marina exploration well was proposed for 2001 by the joint venture of Mobil (47%), Ocean Energy (37.6%), SK Corp. of the Republic of Korea (9.4%), and the Government (6%).

On block G, Triton Energy Ltd. of the United States (85% working interest) and Energy Africa Ltd. of South Africa (15%) began production from the Ceiba Field in November, about 13 months after the initial discovery was announced. The joint venture drilled five wells in 2000. Crude oil was delivered to the 60,000-bbl/d-of-liquid-production-capacity, 2-million-barrel-storage-capacity FPSO *Sendje Berge*, which was anchored in about 100 meters of water (U.S. Securities and Exchange Commission, March 15, 2001,Triton Energy Ltd.—Form 10-K—Fiscal year 2000, accessed May 2, 2001, at URL http://www.sec.gov/Archives/edgar/data/1009404/000100940401500010/0001009404-01-500010.txt).

During 2000, block H was leased to Atlas Petroleum International Ltd. of Nigeria. Roc Oil Co. Ltd. of Australia subsequently acquired 60% working interest in the block. Atlas also acquired blocks I and J. Corisco Deep (block K) was leased to Vanco International Ltd. (a subsidiary of Vanco Energy Co. of the United States). Chevron Overseas Petroleum Inc. acquired 100% working interest in block L. The deepwater turbidite area south and southwest of Bioko offers significant potential for additional hydrocarbon discoveries.

Additional oilfield support port facilities were being developing at Luba. Petroleum production has resulted in a significant economic expansion in Equatorial Guinea and has severely strained the nation's infrastructure (Farah, 2001). The financial stimulus, however, has allowed the Government to consider diversification of the national economy.

References Cited

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Major Source of Information

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TABLE 1
EQUATORIAL GUINEA: ESTIMATED PRODUCTION OF MINERAL COMMODITIES 1/

(Thousand 42-gallon barrels unless otherwise specified)

Commodity 2/		1996	1997	1998	1999	2000
Crude oil and condensate		6,300	21,000	30,000	33,000 r/	39,000
Liquified petroleum gases		--	450	660	800	800
Natural gas 3/	million cubic meters	--	44	78	83	98

r/ Revised. -- Zero.
1/ Includes data available through May 1, 2001.
2/ In addition to the commodities listed, Equatorial Guinea presumably produced a variety of crude construction materials (clay, gravel, and sand). There also is artisanal production of gold, but output is not reported, and available information is inadequate to make reliable estimates of output levels.
3/ Total natural gas production was estimated to be about 800 million cubic meters in 2000. Prior to January 1997, most produced natural gas was flared. Since January 1997, produced natural gas has been processed to recover liquified petroleum gases, and since 1999, natural gas also has been used to fuel the Punta Europa electricity generating plant. About 22 million cubic meters per year of natural gas was used to power the Zafiro Producer.