THE MINERAL INDUSTRY OF

PANAMA

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Mining accounted for less than 0.5% of Panama's gross domestic product (GDP). The Panama Canal dominated the economy, generating about 30% of its GDP. However, gold and silver were mined in Panama, as were industrial minerals such as cement, clays, limestone, salt, and sand and gravel for domestic use. (See table 1.)

The Panamanian constitution specifies that all mineral deposits are the property of the State. Panama's mining law, updated in 1988 to modernize the code and stimulate investment, provides the following: (1) foreign companies are allowed a 4-year exploration concession to prospect for minerals, with two 2-year extensions; (2) extraction concessions are granted for specific mineral classes for a period of 10 years (alluvial precious minerals), 20 years (nonalluvial precious minerals), and 25 years for all other minerals, and all are extendable; (3) extraction concessions normally are granted if exploration is successful; (4) mine production royalties have been reduced to 2% of gross production for base metals and 4% for placer precious metals; (5) import duties on capital equipment are waived; and (6) minerals produced may be exported freely, exempt from duties. No restrictions are placed on foreign ownership or repatriation of capital, other than a 10% tax on dividends or interest payable to foreign shareholders. Mining companies pay an income tax that is reduced by operating expenses, depletion allowance, and depreciation, which can be accelerated (Latin American Mining Institute, 1993, p.17-24).

Private companies operated most of the mineral industries in Panama, although the Government held 40% of Petroterminal de Panama, S.A., the crude oil transshipment and pipeline activity associated with the canal. (*See table 2*.)

The United States was Panama's largest trading partner, and Panama was the third largest site of U.S. investment in Latin America, after Mexico and Brazil. Mineral-related exports consisted primarily of scrap metal and petroleum products.

Three large copper deposits in the Botija, Cerro Colorado, and Petaquilla Districts attracted increasing attention. Petaquilla, among the world's five largest undeveloped copper-gold porphyry deposits, with the nearby and somewhat smaller Botija deposit, had reserves estimated at 495 million metric tons (Mt) grading 0.53% copper and 0.124 grams per ton gold, at a 0.19% copper-equivalent cutoff. Owned 52% by Adrian Resources Ltd. and 48% by Inmet Mining Corporation (of Canada), Petaquilla and Botija, combined with eight other prospects in the concession, were projected by Adrian to include 3,840 Mt containing 31.8 billion pounds of copper, 9.8 million ounces of gold, and 962 million pounds of molybdenum. Teck

Corporation (also Canadian) worked on a feasibility study through most of 1996 with the object of buying half of Adrian's 52% ownership at the point of an expected mining decision in March 1997 (Rose Davidson, Adrian Resources Ltd., oral commun. 1997). Meanwhile in 1966, Tiomin Resources Inc. continued drilling its Cerro Colorado copper property and projected a sulfide body comprising 24 billion pounds of contained copper (Tiomin Resources Inc., 1996, p. 1).

Greenstone Resources Ltd. (Canada) brought its Santa Rosa gold concession, 1 kilometer south of Canazas, Veraguas Province, into production in 1996 and produced more than 17,000 ounces, but had temporary difficulty with rainwater dilution of its leach pad. (Greenstone Resources Ltd. 1997, p. 6).

Manganese deposits were known in several areas in Panama. Caribbean Mining Company Inc. (U.S.) had a 25-year mining concession to mine at La Soledad in Colon, where reserves were estimated at 1 million tons. The company had been interested in negotiating a like concession at the Cerro Viejo mine, northeast of Colon, containing an estimated 600,000 tons of reserves (U.S. Embassy, Panama, 1993, p. 1) but no production has been reported in either case.

Panama produced cement, clays, lime, limestone, marine salt, and sand and gravel in small operations. Cement was produced by Empresa Estatal de Cemento "Bayano" at Calzada Larga and by Cemento Panama, S.A. at Quebrancha. In 1994, the Government sold its 95% share in the Cemento "Bayano" to Mexico's Cementos Mexicanos S.A. A 5% share was sold to employees as part of the country's new pension plan (Journal of Commerce, 1994, p. 2A).

In Panama, all crude oil for its refineries was imported from Ecuador, Mexico, Saudi Arabia, and Venezuela. Electrical capacity was rated at 848 megawatts (MW) nationally, 65% of which was hydroelectric. Private companies were allowed to bid on a contract to build and operate a new 50 MW plant to supply electricity to the country's grid. A geothermal energy region in southwestern Panama had an estimated potential of 400 MW.

Investment in mining was expected to offer strong opportunities for expansion of capital in Panama. The country was positioned not only to become a major producer of copper but also of gold as a coproduct of the copper. Production of manganese was likewise a reasonable possibility. Meanwhile the country anticipated reversion of the Panama Canal to Panamanian control at the end of 1999.

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Major Sources of Information

Direccion General de Recurssos Minerales Ministerio de Comercio e Industrias P.O. Box 8515, Panama 5, Panama Telephone: (507) 36-1823; Fax: (507) 36-3173 Refineria Panama S.A.

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Major Publications

Direccion de Estadistica y Censo, Panama: Panama en Cifras, annual.

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 ${\bf TABLE~1}\\ {\bf PANAMA:~ESTIMATED~PRODUCTION~OF~MINERAL~COMMODITIES~1/~2/}$

(Metric tons unless otherwise specified)

Commodity		1992	1993	1994	1995	1996
Cement		250,000	571,300 3/	615,000 3/	350,000	350,000
Clays:						
For cement		415,058 3/	420,000	400,000	420,000	420,000
For products		72,849 3/	72,900	72,500	74,000	74,000
Gold	kilograms	250 3/	255	245	1,100	560
Lime		1,500	1,500	1,750	2,000	2,000
Petroleum refinery products	thousand 42-gallon barrels	9,000	9,500	10,000	10,000	10,000
Salt, marine		20,000	20,000	20,000 3/	22,000	22,000
Silver	kilograms	162 3/	165	175	175	175
Stone, sand and gravel:						
Limestone:						
For cement	<u> </u>	665,720 3/	670,000	700,000	700,000	700,000
For other uses		50,000	55,000	57,000	62,000	62,000
Sand and gravel	thousand tons	2,448 3/	2,500	2,700	3,000	3,000
Sand and silica		22,600 3/	22,500	22,500	23,000	23,000
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e/ Estimated.

- $1/\operatorname{Estimated}$ data are rounded to three significant digits.
- 2/ Includes data available through May 1, 1997.
- 3/ Reported figure.

TABLE 2 PANAMA: STRUCTURE OF THE INDUSTRY FOR 1996

(Thousand metric tons unless otherwise specified)

(Commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity
Cement	·	Cementos Mexicanos S.A. (self, 95%) (employees 5%)	Calzada Larga, Panama Province	300
Do.		Cemento Panama, S.A. (private, 100%)	Quebrancha, Panama Province	310
Gold	kilograms	Minas Santa Rosa, S.A. (Greenstone Resources Ltd. Canada, 100%)	Santa Rosa Mine, Veraguas Province	600
Do.	do.	Transworld Exploration, S.A. and Minera Remance (Peru) (100%)	Remance Mine, Veraguas Province	293
Do.	do.	Sociedad de Inversiones IXTAPA, S.A. (private, 100%)	Espíritu Santo de Cana Mine, Darien Province	NA
Petroleum products	million 42-gallon barrels	Refinería Panama, S.A. [Texaco Panama Inc. (U.S.), 100%]	Las Minas, Colon Province	14
Silver	kilograms	Transworld Exploration, S.A. and Minera Remance (Peru) (100%)	Remance Mine, Veraguas Province	200

NA Not available.