THE MINERAL INDUSTRY OF

NICARAGUA

By David B. Doan

Mineral production in Nicaragua accounted for less than 1% of the country's gross domestic product in spite of its history as the world's 14th or 15th largest gold producer in the 1940's and 1950's. The Nicaraguan Mining Corp., or Corporación Nicaraguense de Minas (INMINE), was established in 1988 to organize, administer, direct, and promote the country's mining industry as well as to control permits and licenses for mining concessions. Since 1990, the Government of Nicaragua has devoted increasing attention to modernizing its legal framework. A new mining law was being drafted that would bring both the awarding of concessions and the tax structure into closer accord with common practice in the rest of the world. Besides encouraging private investment, the law would be updated and simplified in the context of current mining technology. The country had no environmental regulations, but environmental remediation was a growing priority, given that Nicaragua had a poor history of responsibility by past mining operations.

Nicaragua operated several small metal mines, producing gold and silver, mostly in sparsely populated areas in the northwest. Most bentonite, gold, gypsum, lime, and silver were exported. Other industrial minerals, such as cement, sand and gravel, and salt were consumed domestically. (See table 1.) The Central Bank of Nicaragua controlled the export of gold and silver. INMINE controlled most of the country's mineral exploration and production operations. Corporaciones Nacionales del Sector Publico's role included returning firms to former owners, selling them to private investors, and closing unprofitable companies.

Nicaragua's largest producer of gold was the El Limon Mine, operated by INMINE's Empresa Francisco Meza Rojas, including two open pits with an adjacent cyanide processing plant and the underground Talavera Mine, 4 kilometers (km) to the west. The mill was expanded to treat 1,000 metric tons per day (t/d).

Following 2 years of negotiations, Canada-based Greenstone Resources Ltd. acquired, in 1994, a 75% interest in the La Libertad gold mine from the Nicaraguan Government. The 120-square-kilometer concession surrounded a small open pit mine. Upon completion of nearly 6,000 meters of reverse-circulation drilling, Greenstone projected reserves of 9.3 million tons containing 2.12 grams per ton of gold at La Libertad. After producing about 155 kilograms in 1994, increases were expected as

part of a large-scale mine expansion.

Cement was produced by the State-owned Compania Nacional Productora de Cemento. Empresa Nicaraguense de Minerales No Metalicos controlled several of the state's industrial mineral companies, including bentonite (Empresa Rotowa S.A.), gypsum (Yesera Centroamericana S.A.), and limestone (Empresa Piedra Cal S.A. and Empresa Cal El Pueblo). The Inversiones Mineras A.S. (IMISA) functioned as a holding company to promote and expand its affiliated production companies. IMISA incorporated Arenas S.A. (sand and gravel), Canteras S.A. (dimension stone), and Calizas S.A. (limestone). Salt was produced by private companies. Nicaragua relied on imports for mineral fuel, especially crude from Venezuela. Esso Standard Oil S.A. Ltd. supplied most of the country's petroleum products. Geothermal energy was an important energy resource, having an estimated potential of 1,200 megawatts (MW). The 70 MW Momotombo geothermal plant on the north shore of Lake Managua accounted for 20% of Nicaragua's installed

Mining in Nicaragua had great potential for expansion; ; the Government planned to revive the industry with financial and technical aid from abroad.

Major Sources of Information

Banco Central de Nicaragua

Km. 7 Carretera Sur

Managua, Nicaragua

Telephone: (505)2-650460 or 2-652051 Corporacion Nicaragüense de Minas (INMINE)

Apartado Postal No. 195 Managua, Nicaragua Telephone: (505)2-52071 Fax: (505)2-51043

Corporaciones Nacionales del Sector Publico (CORNAP)

Km. 7-1/2 Carretera Norte Managua, Nicaragua Telephone: (505)2-31289 Fax: (505)2-31193

Instituto Nicaraguense de Energia Contiguo a plaza 19 de Julio

¹Greenstone Resources Ltd. (Toronto): Annual Report, 1995.

Managua, Nicaragua

Telephone: (505)2-674103 or 2-672688

Fax: (505)2-672686 or 2-674377

Instituto Nicaraguense de Recursos Naturales del Ambiente

Km. 12 1/2 Carretera Norte Managua, Nicaragua

Telephone: (505)2-631273 or 2-631848

Inversiones Mineras, S.A. Cine Cabrera, 4c.al Sur. 1/2 Oeste

Managua, Nicaragua Telephone: (505)2-668602

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Apartado Postal No. 8 Frente al Camino de Oriente

Managua, Nicaragua Telephone: (505)2-670051 Fax: (505)2-670095

Nicaraguan Mining Chamber

Del Porton El Retiro, 2C. Al Lago

Managua, Nicaragua Telephone: (505)2-669623 Fax: (505)2-669627

Major Publications

Banco Central de Nicaragua, Gerencia de Estudios Economicos: Indicadores de Actividad Economica, 1993, Managua, Nicaragua, annual.

Corporacion Nicaraguense de Minas (INMINE):

Balance Anual, 1993, Managua, Nicaragua, annual. Empresa Nicaraguense de Minerales No Metalicos (COMNOMET, S.A.): Balance Anual, 1993,

Managua, Nicaragua, annual.

Instituto Nacional de Estadisticas y Censos: Annuario Estadisticoo de Nicaragua, Managua, Nicaragua, annual.

Latin American Mining Institute, Washington, DC:Mexico and Central America Investment and Mining Guide, annual

Nicaragua Export Directory, 1993-94, Managua, Nicaragua, annual.

U.S. Department of Commerce, International Trade Administration: Foreign Economic Trends and Their Implications for the United States, annual.

TABLE 1 NICARAGUA: PRODUCTION OF MINERAL COMMODITIES 1/2/

(Metric tons unless otherwise specified)

Commodities 3/		1991	1992	1993	1994 e/	1995 e/
Bentonite		5,070	2,816	2,161	2,200	3,000
Cement		239,300	277,400	255,000 r/	308,800 r/4.	350,000
Gold, mine output, Au content	kilograms	1,154	1,322	1,240	1,073 4/	1,600
Gypsum and anhydrite, crude		16,200	9,115	11,078	11,000	12,500
Lime		2,120	2,003	3,630	3,500	3,600
Petroleum refinery products	housand 42-gallon barrels	4,543	4,810	4,630	4,700	4,800
Salt, marine e/		15,000	15,000	15,000	15,000	15,000
Sand and gravel	thousand tons	1,170	1,288	1,100	1,200	1,300
Silver, mine output, Ag content	kilograms	1,014	2,240	2,237	2,235 r/4	2,400
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e/ Estimated. r/ Revised.

 ${\it TABLE~2} \\ {\it NICARAGUA:~STRUCTURE~OF~THE~INDUSTRY~FOR~1995} \\$

(Thousand metric tons unless otherwise specified)

		Major operating companies		Annual
Commodity		and major equity ownership	Location of main facilities	capacity
Bentonite		Empresa Rotowa S.A. (Corporación	South of Sébaco, Matagalpa Department	4
		Nicaragüense de Minas (INMINE),		
		(Government, 100%)		
Cement		Compañía Nacional Productora de	San Rafael del Sur, Managua Department	700
		Cemento (Government, 100%)		
Gold	kilograms	INMINE, 100%	El Limón Mine, León Department; Bonanza	12,000
			mining complex, Zelaya Department; Siuna	
			mining complex, 1/ Zelaya Department	
Do.		Mining of Nicaragua S.A. (Greenstone	La Libertad Mine, Chontales Department	350
		Resources Ltd., 75%; Inversiones		
		Mineras S.A., - Grupo IMISA, 25%)		
Gypsum		Yesera Centroamericana S.A.	Santa Rosa del Peñón, León Department	17
		(INMINE, 100%)		
Petroleum products	thousand 42-gallon barrels	Esso Standard Oil S.A. Ltd. (100%)	Managua, Managua Department	5,400
Silver	kilograms	INMINE, 100%	Bonanza and Siuna 1/ mining complexes,	3,000
			Zelaya Department; El Limón Mine,	
			León Department	

^{1/} The Siuna Mine is inactive.

 $^{1/\}operatorname{Estimated}$ data are rounded to three significant digits.

^{2/} Includes data available through May 1, 1996.

^{3/} In addition to the commodities listed, Nicaragua produced a variety of industrial minerals to meet domestic needs. Output of these materials was not reported, and there was insufficient information for projecting estimates.

^{4/} Reported figure.