THE MINERAL INDUSTRY OF

COLOMBIA

By Ivette E. Torres

The economy of Colombia continued to grow in 1995. In the last 3 years, the gross domestic product (GDP) has increased by at least 5% per year. Growth in 1995 was 5.2%. Inflation was 19%, a decrease from that of 1994. In 1995, mining and quarrying and construction contributed to 5.5% and 6.5% of the GDP, respectively. Colombia's total exports increased to \$9.7 billion during the year. Coal, ferronickel, and petroleum and its refinery products were part of Colombia's traditional exports sector. According to statistics of the Banco de la República, in 1995, foreign investment in Colombia, excluding the petroleum sector, totaled \$7.3 billion, a 27% increase from that of 1994. Foreign investment in the mining sector was almost 24% of the total. The United States was the largest foreign investor, with about 56% of the total, followed by the European Union with 13% of the total. Although the country's economic growth is one of the highest in Latin America and interest by foreign investment has increased significantly, violence, security, and drug-related issues continue to be of domestic and international concern. In 1995, Colombia was ranked as Latin America's least stable country because of political and social risk factors.1

The Government of Colombia announced plans to privatize 28 companies by 1998. It planned to sell its share of two mineral-producing companies, the coal producer Carbones de Colombia S.A. (CARBOCOL) and the nickel producer Cerro Matoso S.A.² The Government, however, agreed not to sell major parts of the oil producing company Empresa Colombiana de Petróleos S.A. (Ecopetrol).³ This was decided after negotiations among Ecopetrol, the Ministry of Mines and Energy, and the National Oil Workers Union. Refining operations, where the Government maintains a monopoly through Ecopetrol, and gas pipelines were parts of Ecopetrol that the Government still was planning to privatize at yearend 1995. Eight gas distribution and electricity generating companies were scheduled for sale with an approximate value of \$250 million.⁴ The companies are Promigas, Gas Natural, Colgas, Invercolsa, El Terpel de Antioquía, and three thermal generating plants.

Colombia is a major producer of a selected group of minerals. In 1995, the country continued to be one of the dominant producers of emeralds. It was the fourth largest producer of platinum, with about 1% of the world total. To a lesser extent, it was also a significant producer of coal, gold, nickel, natural gas, petroleum, and refinery products.

A variety of other metal and industrial minerals were produced in Colombia although in modest amounts by world standards. In general, minerals were produced by both the public and the private sectors.

In terms of value, coal, nickel, and petroleum and refinery products together accounted for almost 30% of Colombia's total exports, with petroleum and its refinery products being by far the most significant of its mineral exports. The value of metals and nonmetals accounted only for about 4% of the total, while that of mineral ores and concentrates was less than 1%.

Colombia's production of gold increased slightly in 1995 to 21,160 kilograms, but it was still almost 40% below the level achieved in 1990. In world context, this level of production ranked Colombia among the top 20 producers (16th). In Latin America, Colombia was the fourth leading producer of gold in 1995 after Brazil, Peru, and Chile. In August, Greenstone Resources Ltd., of Toronto, Canada, announced that it had sold its interest in the Oronorte project in Colombia to Fisher-Watt Gold Co., United States.

Cerro Matoso S.A. is the only producer of nickel in Colombia. The company, in production since 1982, is owned by Billiton Overseas Ltd., a subsidiary of GENCOR Ltd., South Africa (52.3%), and the Government of Colombia through Instituto de Fomento Industrial (IFI) (47.7%). In 1995, Cerro Matoso produced 24,565 metric tons (tons) of nickel in ferronickel, about 3% of the world total primary nickel. In terms of mine production in the Western Hemisphere, only Canada, Cuba, and the Dominican Republic produced more nickel than Colombia. Nickel mine production from Colombia represented about 2% of the total world production. Almost all of the ferronickel produced in Colombia is exported to Europe, India, Japan, and the United States. Cerro Matoso planned to expand production in 1996 to about 27,000 tons, with longer term plans for an output of more than 35,000 tons.

Production of steel in Colombia is very modest by world standards. In 1995, it ranked sixth in Latin America behind Brazil, Mexico, Argentina, Venezuela, and Chile and only produced about 1.5% of the crude steel output in the area. Output increased by about 15% from that of 1994 to 792,000 tons. The largest individual producer was Acerías Paz del Río S.A. in Boyacá Department was created in 1947 and privatized in 1954. It is the only integrated facility in the country, with almost 40% of the national output.⁵

In addition to Acerías Paz del Río, Colombia has five semi-integrated plants. Production from the semi-integrated sector is controlled by the Mayagüez Group, the largest collective producer with about 45% of the market, with three plants, Siderúrgica del Caribe, Siderúrgica del Muña, and Siderúrgica del Pacífico. Steel production in Colombia is oriented toward the domestic market, although small amounts of steel products have been exported in the past. Production in Colombia is not large enough to meet domestic demand. In recent years, apparent consumption of rolled steel products has averaged about 1 million tons while imports of iron and steel products have fluctuated between 368,000 tons and 812,000 tons.

Colombia's cement production increased slightly in 1995 to 9.6 million tons. Production capacity from 17 plants owned by 6 entities was 10.955 million tons. The largest producer is the Argos group, which owns more than 50% of the cement capacity with eight cement companies and a grinding facility, followed by the Diamante group with about 18% of total capacity through four plants. Production in Colombia should continue to increase in the next few years to support Government plans to develop the country's infrastructure, including two dams, an expansion of the Bogotá airport, and an impressive plan for private (toll) roads. Accordingly, several companies have been investing to increase their production capacity. By 1997, production capacity should reach 14.470 million tons, a 32% increase from the existing capacity in 1995.

Colombia is a premier producer of emeralds, producing a large proportion of the world's finest emeralds. Most of the emeralds were produced in the Boyacá Department. Official production in 1995 decreased about 13% to 6.3 million carats. Japan and the United States were the largest importers of Colombian emeralds. The U.S. imports of Colombian emeralds totaled 1.1 million carats in 1995, almost 18% of the official output.

Colombia is a small producer of coal with an output of less than 1% of the world production, but it exports about 80% of its production making it one of the leading exporters of coal in the world. Production in 1995 reached 26 million tons, a 15% increase from that of 1994. Exports increased in value and represented the third largest source of foreign exchange after coffee and petroleum.

The Government company Empresa Colombiana de Carbón Ltda. responsible for administering Colombia's coal sector since 1993, planned to increase Colombia's relevance in the world coal industry. With the largest resources in Latin America, and already having a significant position in trade, in particular to Europe, the United States, and other Latin American countries, Colombia directed its plans to maintaining existing markets, to expanding to new export markets, and to increasing its domestic market, while increasing production capacity and investing in infrastructure to achieve those goals.

The largest producer and exporter of Colombian coal, with

a design capacity of 15 million tons per year, is El Cerrejón Norte project, a joint venture between CARBOCOL and Exxon Coal and Minerals Co.--through International Colombia Resources Corp.⁸ The company plans to expand production capacity to 21 million tons per year were still being considered without a final decision being made by yearend.

In mid-1995, production began at the Mina Pribbennow (formerly La Loma mine) by Drummond Ltd. Plans for the mine, scheduled to produce less than 2 million tons for the year, called for a significant expansion of facilities to become the second largest coal producer in Colombia by the end of the century, with an anticipated capacity of 10 million tons. The mine's recoverable reserves exceed 485 million tons.

At yearend 1995, RTZ Corp. (RTZ) and Carbones del Caribe S.A., a subsidiary of Cementos del Caribe S.A., completed negotiations for a \$36 million investment in Oreganal S.A., a small coal producer in the Cerrejón Central Zone. The agreement would give RTZ a 75% interest in Oreganal, with Carbones del Caribe retaining the remaining 25%. Production at the mine was about 500,000 tons in 1995. RTZ planned to increase the production to about 6 to 7 million tons per year. A feasibility study was planned for 1996.

Prodeco, also in Cerrejón Central Zone, also had plans for expansion. The company planned to double its production and exports to 6 million tons per year and 4 million tons per year by yearend 1996, respectively. The company's investment in 1995 included opening of new mining areas and upgrading equipment. The company also planned to upgrade infrastructure and improve port facilities to increase capacity to 5 million tons per year.

The Government company responsible for the petroleum sector in Colombia is Ecopetrol. Production of crude and natural gas is carried out by Ecopetrol individually or in association with the private sector, while the production of refinery products is reserved for Ecopetrol. In 1995, these associations, with participation from Ecopetrol, dominated the reserves, exploration, production, and investment of crude oil and natural gas. However, exports of crude oil were distributed almost equally between Ecopetrol and the associations.

Production of crude oil increased by almost 30% to 213.4 million barrels in 1995. The increase, mainly due to the new production from wells in the Cusiana and Cupiagua fields, is in tone with Colombia's plans to become a major world oil producer and exporter in the near future. In 1995, Colombia was the fifth largest producer of crude oil in Latin America after Mexico, Venezuela, Brazil, and Argentina. At yearend, Colombia's reserves of crude oil totaled 2,952 million barrels. Exports of crude more than doubled during the year, representing an increase of more than 30% from the previous record-high level achieved in 1990. Investment in production was \$775 million. Of this, Ecopetrol's contribution in its 50% share of established associations and

in direct investment totaled \$400 million. Investment in exploration was \$308.1 million, 90% of which was from companies in association. The remainder was direct investment by Ecopetrol.

During the year, several changes were made to the petroleum contract policies. The changes were aimed at making exploration and production of oil and natural gas more attractive to foreign investors while giving more flexibility to Ecopetrol in doing business in association contracts. Among them were (1) the reimbursement of 50% of the direct costs in perforation and seismic exploration prior to each discovery, (2) the possibility of extending the terms of association contracts effective after September 1995 if request is submitted 5 years prior to their expiration date, (3) the chance for Ecopetrol to negotiate its participation in existing fields determined to be marginal, (4) a new model of shared-risk contract applicable in some areas assigned for the direct involvement of Ecopetrol that merit sharing the costs and risks of investment, and (5) the elimination of war taxes for fields discovered or declared commercial on or after January 1995.

In July, British Petroleum Exploration Co. Colombia Ltd. (BP Colombia) announced the discovery of two new oilfields and gasfields, the Floreña and Pauto Sur, near the Cusiana field.¹³ The fields reserves were being evaluated at yearend. The Cusiana-Cupiagua project, in the Santiago de Las Atalayas, Tauramena, and Río Chitamena association contract areas, which began production in 1994 and are being rapidly developed, is central to Colombia's plans to expand its oil sector. Ecopetrol holds 50% interest in the project, with BP Colombia (19%), TOTAL (19%) Triton Colombia Inc. (12%) holding the remainder. In 1995, work began on the second stage of development (phase 2), which plans to increase the production level of Cusiana-Cupiagua to more than 500,000 barrels per day by yearend 1997.¹⁴ Therefore, production from this area would represent almost the same level of the total country production achieved in 1995. Almost 80% of Ecopetrol's investment in production in 1995 went to the Cusiana field, which reached a production level of 128,000 barrels per day. In 1997, when full development in the Cusiana-Cupiagua area is achieved, Cusiana is expected to produce 320,000 barrels per day; and Cupiagua, which is expected to be in production during that year, should reach a production level of 200,000 barrels per day.

³OGJ Newsletter. Oil and Gas Journal, June 5, 1995, p. 4.

⁴Latino Noticias. Latinominería. Colombia: Ventas de Ecopetrol. Feb. 1996, p. 37.

⁵Siderurgia Latinoamericana. El Sector Siderúrgico Colombiano Frente al Panorama Internacional. No. 425, Sept. 17-21, 1995, p. 10.

International Cement Review. Cemento en Colombia. Apr. 1996, pp. 68-

Work cited in footnote 4.

⁸Gaved, A. New Investment Is Key to Colombia's Future. World Coal, Colombian Update, Jan. 1996, pp. 38-44.

⁹International Coal Report. Drummonds Loads Colombian Cape. ICR 379/16, Aug. 7, 1995.

¹⁰Mining Journal, London. RTZ Plans Colombian Coal. V. 325, No. 8358, Dec. 22-29, 1995, pp. 473-474.

¹¹Mining Magazine. Prodeco and RTZ in Cerrejón. V. 174, No. 2, p. 120. ¹²Empresa Colombiana de Petróleos. El año en Cifras., pub. data accessed 18, 1996, on the World Wide Web http://www.ecp.com/Homepage/indicad.htm.

¹³U.S./Latin Trade. Oct. 1995, pp. 69-70.

¹⁴Koen, A.D. Colombia Pins Hope for Oil Export Hike on BP Group's Cusiana-Cupiagua Project. Oil and Gas J., Nov. 20, 1995, pp. 27-30.

Major Sources of Information

Carbones de Colombia S.A.

Carrera 7, No. 31-10, Santa Fé de Bogotá, Colombia Telephone: (571) 612-2262; Fax: (571) 287-3278

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¹Latin American Special Reports. Latin American Newsletters. Factors of Stability and Risk in Latin America. SR-95-05, Oct. 1995, pp. 1, 3.

²Latin American Economy & Business. Plans: To Sell 28 Companies. LAEB-95-07, July 1995, p. 16.

$\label{table 1} \textbf{TABLE 1} \\ \textbf{COLOMBIA: PRODUCTION OF MINERAL COMMODITIES 1/} \\$

(Metric tons unless otherwise specified)

Commodity	1991	1992	1993	1994	1995
METALS					
Bauxite e/	1,720 2/	1,750	1,700	1,700	1,700
Copper, mine output, Cu content	3,640	3,940	r/	11,894 r/	11,398
Gold kilograms	34,730 r/	32,117	27,471	20,762 r/	21,160
Iron and steel:					
Iron ore and concentrate thousand tons	450	674	545	610	734
Pig iron do.	305	308 r/	238 r/	244	282
Steel, crude do.	652	657	687	691 r/	792
Semimanufactures, hot-rolled do.	581	590 e/	636	642	692
Lead:					
Mine output, Pb content	611	620	447	290 r/	300 e
Refined (secondary) e/	3,600	3,600	3,600	3,500	3,500
Manganese, mine output, Mn content	552	600 e/	800	220 r/	1,000
Nickel:					
Mine output, Ni content	23,048 r/	23,347 r/	22,831 r/	26,141 r/	24,194
Ferronickel, Ni content	20,194	20,195	20,181 r/	20,833	24,565
Platinum-group metals kilograms	1,603	1,956	1,722	1,084	973
Silver do.	8,037	8,292	7,328	5,899 r/	5,913
Zinc, mine output, Zn content	266	277	279	275 e/	275 e/
INDUSTRIAL MINERALS					
Asbestos:					
Mine output	160,000	170,000			
Fiber	7,830	7,900			
Barite	9,290	9,380	4,840	7,000	21,300
Cement, hydraulic thousand tons	6,300	6,810	7,930 r/	9,322 r/	9,624
Clays:					
Bentonite	3,180	3,260	r/	1,018 r/	9,000
Common clay and kaolin thousand tons	1,980	2,050	2,097	6,700 r/	7,300
Diatomite	3,890	4,360	4,400 e/	4,000 e/	4,000 e.
Feldspar	45,600	78,400	60,458	76,188 r/	58,100
Fluorite	894	959	1,800	800 r/	720
Gemstones: Emerald 3/ thousand carats	1,080	2,310	5,150	7,202	6,304
Gypsum thousand tons	639	671	439	450	450 e/
Lime, hydrated and quicklime e/ do.	1,300	1,300 r/	1,300 r/	1,300 r/	1,300
Magnesite	18,768	18,840	8,816 r/	10,747 r/	10,500
Mica	50	54	55 e/	55 e/	55 e/
Nitrogen, N content of ammonia e/	91,900	86,300	98,500	90,000	90,000 e
Phosphate rock	31,500	31,500	44,994 r/	48,107 r/	50,000
Salt:					
Rock thousand tons	219	230	231	315 e/	315 e/
Marine do.	482	317	169	250 e/	250 e/
Total do.	701	547	400	565 e/	565 e/
Sodium compounds, n.e.s., sodium carbonate e/	121,000 2/	121,000	121,000	121,000	121,000
Stone and sand:					
Calcite	5,760	6,320	6,500 e/	6,500 e/	6,500 e/
Dolomite thousand tons	46	46 r/	45 e/	45 e/	45 e
Limestone do.	15,700	16,000 e/	15,701 r/	14,000	19,248
Marble	33,400	34,600	34,500 e/	35,000 e/	35,000 e/
Sand excluding metal-bearing e/	859,000 2/	860,000	850,000	850,000	900,000
Sulfur:	·	·	·		·
Native (from ore)	37,600	39,200	51,396	53,357	60,000
Byproduct, from petroleum e/	9,000	9,200	12,200	12,200	15,000
Total	46,600	48,400	63,596	65,557	75,000
Talc, soapstone, pyrophyllite	11,100	13,300	19,550	18,000 r/	19,248
MINERAL FUELS AND RELATED MATERIALS	11,100	10,000	15,550	10,000 1/	17,2.0
Carbon black e/	20,000	23,600 2/	23,800	24,000	24,000
Coal:	20,000	23,000 2/	23,000	27,000	27,000
Metallurgical e/ thousand tons	800	900	1,800	2,000	2,000
Steam do.	19,200	22,900	19,423 r/	2,000 20,665 r/	24,020 e
Total do.	20,000	23,800	21,223 r/	20,665 r/	24,020 e 26,020
		23,800 450			26,020 600
	400	430	632 2/	562 2/	600
Gas, natural:	E 200	£ 200 . /	E 224 /	E 400 -/	7.77
Gross million cubic meters	5,200	5,200 e/	5,334 r/	5,423 r/	7,674
Marketed do.	4,250	4,450 e/	4,360 r/	4,430 r/	5,000 e
Natural gas liquids e/ thousand 42-gallon barrels	2,240 2/	2,300	2,300	2,500	2,500

See footnotes at end of table.

TABLE 1--Continued COLOMBIA: PRODUCTION OF MINERAL COMMODITIES 1/

(Metric tons unless otherwise specified)

Commodity		1991	1992	1993	1994	1995
MINERAL FUELS AND RELATED MATERIALSC	Continued					
Petroleum:						
Crude	do.	155,329	160,600	165,762 r/	166,096	213,397
Refinery products:						
Liquefied petroleum gas	do.	4,264 r/	4,373 r/	4,080	6,203 r/	7,010
Gasoline:						
Aviation	do.	296 r/	288 r/	209	182 r/	250
Motor	do.	30,722 r/	31,245 r/	30,703	30,072 r/	26,459
Jet fuel	do.	4,136 r/	4,660 r/	4,835	5,328 r/	5,662
Kerosene	do.	1,812 r/	2,025 r/	1,746	1,437 r/	1,342
Distillate fuel oil	do.	17,206 r/	17,042 r/	19,207	20,612 r/	21,969
Lubricants	do.	350 r/e/	438 r/	329 r/	372 r/	372
Residual fuel oil	do.	27,000 r/	24,461 r/	21,049 r/	19,886 r/	20,039
Asphalt and bitumen	do.	1,500 r/e/	1,559 r/	1,852 r/	2,865 r/	2,964
Refinery fuel and losses and unspecified products e/	do.	2,264 r/	1,282 r/	4,279 r/	3,017 r/	7,476
Total	do.	89,550 r/	87,373 r/	88,289 r/	89,974 r/	93,543

e/ Estimated. r/ Revised.

TABLE 2 COLOMBIA: STRUCTURE OF THE MINERAL INDUSTRY FOR 1995

(Thousand metric tons unless otherwise specified)

ommodity	and major equity owners Cabot Colombiana S.A. (private, 100%) Productos Petroquímicos S.A.	main facilities Cartagena, Bolívar Department (plant)	capacity NA
	* '		NA
	Productos Petroquímicos S.A.	Cali Valla dal Cassas Danasterani	
		Cali, Valle del Cauca Department	12
	(private, 100%)	(two plants)	
	Cía. Colombia de Clinker S.A.	Cartagena, Bolívar Department (plant)	1,100
	(Colclinker) (private, 100%)		
	Cementos del Caribe S.A. (private, 100%)	Barranquilla, Atlántico Department	1,000
	Cementos del Valle S.A. (private, 100%)	Yumbo, Valle del Cauca Department	1,200
	Cementos Río Claro S.A. (private, 100%)	Puerto Trifuno, Antioquía Department	1,000
	Carbones de Colombia S.A.	El Cerrejón Norte Mine, La Guajra	15,000
Coal	(CARBOCOL) (Government, 50%) and	Department	
	International Colombia Resources Corp.	•	
	(Intercor) (Exxon, 50%)		
	Drummond, Ltd. (Drummond Co., 100%)	La Loma Mine, César Department	2,000
	Prodeco (Private, 100%)	A number of mines in Central Colombia	1,000
	Acerías Paz del Río S.A. (private, 100%)	Paz del Río, Boyacá Department (mine)	600
Copper	El Roble Exploración y Explotación S.A.	El Roble Mine, El Carmen, Chocó	4
	(Minas El Roble, 51%; Nittetsu		
		•	
	Minerales de Colombia S.A.	Chivor, Coscuez, Muzó, and Quípama	NA
	(Government, 100%)	Mines, Boyacá Department	
kilograms	Frontino Gold Mines Ltd. (private, 100%)		1,500
	4,		,
do.	Fisher-Watt Gold Co. (private, 100%)	*	500
	4,		
Do. do.	Mineros de Antioquía S.A. (private, 100%)		2,000
	1		,
Do. do.	Small miners (Cooperatives and		NA
	* * '	. ,	800
			NA
	, ,		
million cubic meters	Empresa Colombiana de Petróleos	. ,	3,500
			- ,
Do. do.	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	1,200
40.			-,200
			23
	,		23
	kilograms do. do. do. do. million cubic meters do.	Cementos Río Claro S.A. (private, 100%) Carbones de Colombia S.A. (CARBOCOL) (Government, 50%) and International Colombia Resources Corp. (Intercor) (Exxon, 50%) Drummond, Ltd. (Drummond Co., 100%) Prodeco (Private, 100%) Acerías Paz del Río S.A. (private, 100%) El Roble Exploración y Explotación S.A. (Minas El Roble, 51%; Nittetsu Mining, 44.1%; and C Itoh, 4.9%) Minerales de Colombia S.A. (Government, 100%) kilograms Frontino Gold Mines Ltd. (private, 100%) do. Fisher-Watt Gold Co. (private, 100%) do. Mineros de Antioquía S.A. (private, 100%) do. Small miners (Cooperatives and individual prospectors) Acerías Paz del Río S.A. Cerámicas del Valle Ltda., (private, 100%) million cubic meters Empresa Colombiana de Petróleos (Ecopetrol) (Government, 100%) do. International Petroleum Colombia, Ltd. (International Petroleum Corp., 100%) Cerro Matoso S.A. (Billiton Overseas Ltd., 52.3 %, Government, 47.7%)	Cementos Río Claro S.A. (private, 100%) Carbones de Colombia S.A. (CARBOCOL) (Government, 50%) and International Colombia Resources Corp. (Intercor) (Exxon, 50%) Drummond, Ltd. (Drummond Co., 100%) Acerías Paz del Río S.A. (private, 100%) El Roble Exploración y Explotación S.A. (Minas El Roble, 51%; Nittetsu Mining, 44.1%; and C Itoh, 4.9%) Minerales de Colombia S.A. (Government, 100%) Kilograms Frontino Gold Mines Ltd. (private, 100%) do. Fisher-Watt Gold Co. (private, 100%) Acerías Paz del Río S.A. (private, 100%) Small miners (Cooperatives and individual prospectors) Acerías Paz del Río S.A. Acerías Paz del Río S.A. (private, 100%) Mineros de Antioquía S.A. (private, 100%) Acerías Paz del Río S.A. Department do. Mineros de Antioquía S.A. (private, 100%) Acerías Paz del Río, Boyacá Department Frontino Gold Mines Ltd. (private, 100%) Acerías Paz del Río, Boyacá Department Frontino Gold Mines Ltd. (private, 100%) Acerías Paz del Río S.A. Paz del Río, Boyacá Department Río Nechí, near El Bagre, Antioquía Department (mines) Acerías Paz del Río S.A. Paz del Río, Boyacá Department (mine) Pepartment Río Nechí, Antioquía Department (mine) Protico Gerámicas del Valle Ltda., (private, 100%) Morth coast, La Guajira Department (mine) North coast, La Guajira Department (mine) North coast, La Guajira Department (mine) North coast, La Guajira Department (mine) Santander Departments Cerro Matoso S.A. (Billiton Overseas Ltd., Cerro Matoso Mine, Montelíbano, Córdoba Department

See footnotes at end of table.

^{1/} Includes data available through Sept. 16, 1996.

^{2/} Reported figure.
3/ Based on registered exports by the Banco de la República.

${\bf TABLE~2--Continued}$ ${\bf COLOMBIA:~STRUCTURE~OF~THE~MINERAL~INDUSTRY~FOR~1995}$

(Thousand metric tons unless otherwise specified)

		Major operating companies	Location of	Annual
Comi	modity	and major equity owners	main facilities	capacity
Nitrogen		Abonos de Colombia (private, 100%)	Cartagena, Bolívar Department (plant)	100
Do.		Monomeros Colombo-Venezolanos S.A.	Barranquilla, Atlántico Department	85
		(private, 100%)	(plant)	
Petroleum	thousand 42-gallon barrels	Ecopetrol	16 fields in various departments	70,000
Do.	do.	Houston Oil Colombiana S.A. (HOCOL)	14 fields in various departments	36,500
		(Royal Dutch Shell, 100%)		
Petroleum products	do.	Ecopetrol	Barrancabermeja Refinery, Santander	71,400
			Department	
Do.	do.	Do.	Cartegena Refinery, Bolívar Department	25,806
Do.	do.	Do.	Tibú, Norte de Santander Department	1,825
Petroleum products	do.	Ecopetrol	Orito, Putumayo Department	875
Phosphate		Fosfatos de Colombia S.A. (private, 100%)	Neiva, Huila Department	30
Do.		Fosfatos Boyacá, S.A	Iza, Boyacá Department	20
	(Government, 100%)			
Platinum		Small miners (Cooperatives and	Río San Juan, Chocó Department	NA
		individual prospectors)		
Salt: marine		Instituto de Fomento Industrial (IFI)	Manaure Salina, La Guajira Department	700
		(Government, 100%)		
Rock		Concesión Salinas (Government, 100%)	Zipaquira, Cundinamarca Department	500
Silver	kilograms	Frontino Gold Mines Ltd.	Segovia, Antioquía Department (mine)	2,500
Do.	do.	Small miners (Individual prospectors	Río Nechí, Antioquía Department	2,000
		and cooperatives)	(mines)	
Steel: Intergrated plant		Acerías Paz del Río S.A.	Belencito, Boyacá Department	400
Semi-intergrated plants		Siderúrgica del Caribe (private, 100%)	Cartagena, Bolívar Department	NA
Do.		Siderúrgica del Boyacá S.A. (private, 100%)	Bogotá, Federal District	NA
Do.		Siderúrgica del Medellín S.A. (private, 100%)	Medellín, Antioquía Department	NA
Do.		Siderúrgica del Muña S.A. (private, 100%) (Private, 100%)	Chusacá, Federal District	NA
Do.		Siderúrgica del Pacífico S.A. (private, 100%)	Cali, Valle del Cauca Department	NA
Sulfur		Industrias Purace S.A. (private, 100%)	El Vinagre Mine, Cauca Department	60
Do.		Ecopetrol	Barrancabermeja, Santander Department	29

NA Not available.

1/ Under development.