By Harold R. Newman

The mineral industry, which consisted of the sectors that mine and process metallic and nonmetallic minerals, was a small but important part of the national economy. Mineral concentrates of lead and zinc were produced from processing base-metal massive sulfide ores from northern Greece, alumina and aluminum from karstic bauxite resources, and ferronickel alloy from laterite-derived sedimentary nickeliferous iron ores. These were the main products of metal mining and processing. Steel production was from imported scrap.

Greece has a land area of 130,800 square kilometers; borders the Aegean, Ionian, and Mediterranean Seas; and is located between Albania and Turkey. In 2003, the gross domestic product (GDP) at purchasing power parity was \$205.5 billion, and per capita income was \$18,733. The annual growth rate was estimated to be 3.7%; the inflation rate, 3.6%, and the unemployment rate, 9.8% (International Monetary Fund, 2004§¹).

Government Policies and Programs

Greece's economic growth was being driven in part by infrastructure construction for the August 2004 Olympic Games. In spite of Olympic-related investment, Greece has not attracted as much foreign direct investment as was anticipated by Government planners. This was due, in part, to security concerns related to the left-wing terror group called November 17, which has carried out numerous attacks on foreign-owned businesses. In addition, a relatively small industrial base, the lack of adequate investment in an underdeveloped communications and transport infrastructure, a relatively high tax burden, and the distance from other European Union (EU) markets has affected investments (U.S. Energy Information Administration, 2003§).

Environmental Issues

Environmental concern is the responsibility of the Ministry of Environment, Town Planning, and Public Works. The Government takes an active role in environmental protection. The general laws that have been enacted by the Government include law 1360/76 (Site Arrangement and Environment), Presidential Executive Order 1180/81, and law 1650/86 (Environmental Protection) form the basis of the active legislative framework. To comply with EU Order 88/609 concerning emission limitations, the Government executed Ministry Decision 58751/2370/15.4.93, which included the limits of the main pollutants from electricity-generating plants. Because northern Greece was thought to contain a significant amount of exploitable mineral resources, it received the most attention in exploration activities. In 2003, most activities continued to be directed toward gold.

Production

In terms of value of production, bauxite was the most important of Greece's mineral commodities. Greece was the leading producer of bauxite, magnesium, nickel, and perlite in the EU (table 1). Indices of production for the minerals sector are listed in table 3. The country's mineral-processing industry was relatively small as was the demand for and consumption of mineral products. Major commodities and companies are listed in table 2.

Trade

Exports in the first 9 months of 2003 totaled 8.8 billion euros (\notin) (\$9.9 billion). This was an increase of 6.2% compared with the same period in 2002. Imports totaled \notin 29.5 billion (\$33.1 billion); this was an increase of 23% compared with the same period in 2002. The higher imports probably reflected increased needs because of the 2004 Olympic Games (Embassy of Greece, Washington, DC, 2004§).

Commodity Review

Metals

Aluminum.—Aluminium de Grèce S.A. established its plant in 1960 at Agios Nikolaos on the northern coast of the Gulf of Corinth to take advantage of the important bauxite deposits for the production of alumina and aluminum. The site combines proximity to the large bauxite deposits of Beotia and Phokifda, which were mined by Delphi-Distomon S.A. (a subsidiary of Aluminium de Grèce), and sea transportation facilities. The company produced bauxite, hydrated and calcined alumina, and aluminum metal produced through electrolysis. Aluminium de Grèce's finished aluminum was marketed to automobile manufacturers and makers of building materials and packaging. The alumina and primary aluminum was marketed locally and to countries in the EU, primarily France and Germany (Yahoo, 2003§).

Bauxite.—Bauxite mining and processing continued through 2003. Delphi-Distomon produced about 1 million metric tons per year (Mt/yr), which was sold to Aluminium de Grèce's operation at Boeotia. Although the bauxite ore had an average alumina content of 53%, it also had a high silica content that made it hard to process. The company maintained its refinery's production of 750,000 metric tons per year by mixing the local ore with other bauxite.

Gold.—In May 2003, TVX Hellas S.A. filed for bankruptcy and closed its mines in Halkidiki. This move followed a court ruling that gold could not be mined at the site on environmental grounds. The Kassandra Mines S.A.'s assets were bought by TVX Hellas in 1996 to exploit the refractory gold ores in the arsenopyrite stockpiles and the surface tailings by incorporating pressure oxidation technology into the ore-processing stage. TVX installed a processing unit for the gold deposit,

THE MINERAL INDUSTRY OF GREECE

¹References that include a section mark (§) are found in the Internet References Cited section.

modernized the mines and enrichment plant, and initiated a broad program for restoration and protection of the environment. Parallel objectives included continuing and modernizing the existing lead and zinc mining activities. This was one of the most important private investments made in recent decades in Greece (EIRO, 2003§).

A feasibility study, which incorporated a comprehensive financial model, to develop the Sappes gold mining project was completed and Greenwich Resources plc was going forward with the development of an underground mine in the highgrade Viper ore deposit and also an open pit mine on the St. Demetrious ore deposit. Estimated mineral reserves were 1.3 million metric tons (Mt) of ore at a grade of 16.3 grams per metric ton gold. As a reflection of the political climate in 2003 regarding the environment in Greece, cyanidation has been excluded from the project. A copper concentrate with very high grades of gold will be recovered by gravity and flotation techniques only. Gravity techniques will recover 15% of the gold that occurs as free gold, and 66% of the gold associated mainly with enargite will be recovered to a copper-gold concentrate by using flotation techniques. The concentrate will be exported to a foreign smelter where copper and gold would be recovered (Greenwich Resources plc, 2003§).

Nickel.—Larco G.M.M. S.A. was the only producer of nickel in Europe that used only domestic nickel ores. Larco had three main mining areas—Agios Ioannis (underground), Evia (open pit), and Kastoria (open pit). The ore is from a lateritic type of deposit and is part of a belt of mineralization that extends from Turkey to Albania. The ore grade ranges from 1.0% to 1.5% nickel. Around 80% to 85% of the ore was mined from open pit operations. Reserves have been estimated to last 40 more years at the current (2003) rated production (Larco G.M.M.S.A., 2003§).

Steel.—Corinth Pipeworks S.A. (CPW) was initially established to produce spiral-welded pipe for water transport. The oil and gas sector, however, has become its prime focus. CPW's plant at Corinth produced and coated, externally and/or internally with anticorrosive materials, medium-and largediameter welded steel pipes and hollow sections. Its products were mainly intended for liquid or gaseous pipelines (Corinth Pipeworks S.A., 2003§).

CPW was the low bidder for Oman Gas Company's contract to supply 45 kilometers (km) of 24-inch X65 steel pipe for the Oman-United Arab Emirates natural gas link. The contract, which was worth \$6.1 million, was awarded in February (MEsteel, 2003§).

Industrial Minerals

Bentonite.—On September 9, 2003, Silver & Baryte Ores Mining Co. S.A. announced that its new name— S&B Industrial Minerals S.A.—was officially in effect. The change in name marked a new era and strategic focus on industrial minerals. S&B was the leading bentonite and perlite producer in Europe and the leading graded perlite supplier internationally (Capital Link Inc., 2003§).

Cement.—In August 2003, Titan Cement Co. S.A.'s new Rotary Kiln 4 clinker production plant came on line at the Efkarpia Tessaloniki plant. It was a 3,500 metric-ton-per-day (t/d) single preheater-kiln system that replaced the three 40-year-old long dry process kilns. The company was expecting a 30% reduction in fuel consumption while burning 100% petcoke, a 25% reduction in power consumption, and a drop in maintenance costs (World Cement, 2003).

Gypsum.—Lava Mining & Quarrying Co. S.A. specialized in extracting gypsum from the island of Crete, pozzolan from Milos, and pumice from the island of Yali.

Magnesium Compounds.—Grecian Magnesite S.A. was one of the leading magnesite producers in the western world. Its open pit mine was at Yerakini in northern Greece. After mining, the material was processed, beneficiated, and fed into rotary or shaft kilns for conversion to caustic or dead-burned magnesia.

Grecian Magnesite was adding two new mineral processing lines that were intended to increase productivity, to reduce production costs, and to improve the company's environmental protection efforts. As part of Grecian Magnesite's modifications, Bateman Project Holdings Ltd. supplied a new 30-metric-tonper-hour dense-media separation plant that was designed to separate waste rock and to produce a high-grade magnesite at the Yerakini Mine (Grecian Magnesite S.A., 2003§).

Stone, Dimension.—In 2003, the Greek marble industry continued to play a leading role in the international dimension stone market as a result of continued marble production in almost all areas of the country, the variety of uses of the marble, and its many colors (ash, black, brown, green, pink, red, and multicolored). The marble industry was active in the quarrying, processing, and sale of blocks and finished products.

Zeolites.—S&B continued production of natural zeolite in northern Greece. The operation produced five grain sizes of clinoptilolite, which has a high cation-exchange capacity owing to its honeycomb crystalline structure.

Mineral Fuels

Coal.—Public Power Corporation (PPC) was the major producer of lignite, which was the predominant fuel in electricity generation in Greece. Most PPC lignite was produced from the Ptolemais-Amyntaion Basin; lesser amounts were produced from the Megalopolis Basin. Lignite reserves were estimated to be about 2,900 Mt (U.S. Energy Information Administration, 2003§).

Natural Gas and Petroleum.—Greece had limited natural gas and petroleum resources, but its Mediterranean location makes it conveniently close to several important producing regions, such as the Caspian area, the Middle East, and North Africa.

Turkey and Greece signed an agreement on interconnection of a natural gas network through a 280-km-long pipeline. Under the agreement, 209 km of the pipeline would be constructed in Turkey at an estimated cost of \$80 million and the rest of the pipeline would be constructed in Greece at an estimated cost of \$15 million. Transportation of natural gas through the pipeline was planned to start in 2006. Greece would receive 750 million cubic meters per year initially (Turkish Press, 2003§).

Motor Oil (Hellas) Corinth Refineries S.A. embarked on a \$334 million project to upgrade its 100,000-barrel-perday (bbl/d) refinery to meet required EU fuel specifications starting January 2005. The project, which will be carried out by Technip-Coflexip S.A., included a new 37,000 bbl/d mild hydro cracker (30% conversion) integrated with a new 32,000 bbl/d gas oil-polishing unit, a 3-normal-cubic-meter-per-hour hydrogen plant and a 70-t/d sulfur recovery unit. Technip-Coflex will also revamp several process units that included a vacuum distillation unit and a diesel hydrodesulfurisation unit (Alexander's Gas & Oil Connections, 2003§).

Greece's largest company, Hellenic Petroleum SA., operated three refineries—Aspropyrgos and Thessaloniki in Greece and at Skopje in Macedonia. The company had a dominant market share (56%) of the Greek oil refining industry. It also operated 1,400 gas stations (Yahoo, 2003§).

Greek waters were opened to foreign ferries in November 2003 as deregulation of coastal shipping continued to break domestic monopolies in accordance with EU directives. EU-flagged vessels may now bid to operate on Greek ferry routes. The new legislation was the first real step towards full deregulation required by the EU. Greece was the last of the EU nations to liberalize its coastal shipping regime (GreeceNow, 2004§).

Outlook

Greece is expected to remain a major supplier in the international market of certain industrial minerals. The economic impetus of the activities pertaining to the Olympics 2004 is expected to continue, albeit on a smaller scale.

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Major Sources of Information

Institute of Geology and Mineral Exploration 70 Messoghion Street 11527 Athens, Greece Ministry of Development Directorate of Raw Materials Mineral Policy, Section A 80 Michalakopoulou Street 10192 Athens, Greece

TABLE 1 GREECE: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons unless otherwise specified)

Commodity ²	1000	2000	2001	2002	2002°
	1999	2000	2001	2002	2003
Aluminum					
Aluminum.	1 992 505	1 0 (5 5 (1	1 021 407	2 4(9 9(5 I	$2,418,000^{-3}$
Alumine Al O	1,882,505	1,905,501	1,931,497	2,408,805	2,418,000
Alumina, Al ₂ O ₃	625,590	667,141	678,934	/49,500 *	/50,000
Metal:	150.000	1 (7 5)7	162 501 5	165.060.5	165.000
Primary	159,000	167,507	163,581	165,262	165,000
Secondary	3,000	3,000	3,000	2,000	2,000
Chromite, run-of-mine	2,273				
Iron and steel:					
Iron ore and concentrate, nickeliferous:				_	
Fe content ^e	600,000	575,000	575,000	600,000 ¹	600,000
Ni content	16,050	19,535	20,830	22,670 r	22,000
Metal:					
Steel, crude	951,000	1,088,000	1,281,000	1,835,000	1,800,000
Ferroalloys, ferronickel, gross weight	59,545	81,662	84,200 ^r	91,600 ^r	90,000
Ni content	12,964	17,470	17,675	19,230 ^r	19,000
Lead, mine out, Pb content	22,001	18,235	28,619	29,300 °	29,000
Manganese:					
Ore, crude: ^e					
Gross weight	990	330	90	100	100
Mn content	353	63	17	16	15
Concentrate:					
Gross weight ^e	345	60	20	20	20
Mn content	149	49	9 r	15	15
Nickel:					
Mine output, Ni content of laterite ore	16,050	19,535	20,830	22,670	$21,410^{-3}$
Metal. Ni content of ferronickel	13.462	17.126	20.573 r	19.500 r	18,000
Silver, mine output. Ag content	45,771	37,145	61,500	74,800	79.200^{-3}
Zinc mine output Zn content by analysis	19 619	20,336	20 461	33 000 ^r	$30,400^{-3}$
INDUSTRIAL MINERALS	17,017	20,000	20,101	22,000	50,100
Abrasives natural emery ^e	8 000	8 000	8 000	8 000	8 000
Parita: ^e	0,000	0,000	0,000	0,000	0,000
Ore crude	r	r	r	r	
Concentrate	200 r	100 r	100 r	10 r	
Coment hydraulia thousand tons	14 265	15 462	15 500 °	15 500 °	15 000
Cleve:	14,505	15,405	15,500	15,500	15,000
Dantanita:					
	1 0 40 (57	1 149 604	1 250 072 I	1.05(500 I	1 100 000
	1,049,037	1,146,094	1,238,872	1,030,398	1,100,000
	180,/10	41,307	26,297	15,806	16,000
Kaolin:	(4.021	54.000	(0.075 I	57 005 I	(0.000
Crude	64,931	54,226	60,075	57,885	60,000
Processed	300	300	300	300	300
Feldspar	78,500	94,700	126,400	124,100	125,000
Gypsum and anhydrite	686,416	801,025	808,890 ^r	850,786 ^r	850,000
Magnesite:					
Crude	495,144	442,785	483,296	558,057 ^r	500,000
Dead-burned	39,965	33,945	30,113	48,220 ^r	40,000
Caustic-calcined	117,817	109,730	113,355	105,234 ^r	115,000
Huntite, crude ^e	18,000	19,451 ³	18,000	18,000	18,000
Nitrogen, N content of ammonia	119,697	121,200	56,500 ^r	66,100 ^r	123,300 ³
Perlite:					
Crude	777,898	817,825	840,660 r	838,997 r	850,000
Screened	435,431	503,929	449,139 ^r	515,715 ^r	550,000
Pozzolan, Santorin earth	934,933	935,450	1,308,131 ^r	950,000	950,000
Pumice	885,000	852,000	802,000 r	850,000	850,000
Salt, all types	176,867	244,709	208,776 r	126,118 ^r	150,000

See footnotes at end of table.

TABLE 1--Continued GREECE: PRODUCTION OF MINERAL COMMODITIES¹

(Metric tons unless otherwise specified)

Commodity ²	1999	2000	2001	2002	2003 ^e
INDUSTRIAL MINERALSContinued					
Silica ^e	126,000 ³	125,000	125,000	125,000	125,000
Sodium compounds: ^e					
Carbonate	750	750	750	750	750
Sulfate	5,000	5,000	5,000	5,000	5,000
Stone:					
Dolomite ^e	90,000	90,000	90,000	90,000	90,000
Marble cubic meters	178,199	191,130	202,069 r	200,000 e	200,000
Flysch ^e	80,000	80,000	80,000	80,000	80,000
Ouartz, processed ^e	6,500	6,500	6,500	6,500	6,500
Sulfur: ^e					
S content of pyrites	9,500	9,600	9,500	9,500	9,500
Byproduct, natural gas and petroleum thousand tons	148 ^r	150 ^r	153 ^r	157 ^r	162
Talc and steatite	2,860	2,300	2,073	670	1,000
Zeolites ^e	r	r	r	r	
MINERAL FUELS AND RELATED MATERIALS					
Coal:					
Lignite thousand tons	61,861	64,026	66,987	71,074 ^r	72,000
Lignite briquets ^e	34,000	34,000	34,000	35,000 r	35,000
Gas:e					
Manufactured, gasworks million cubic meters	15	15	15	15	15
Natural do.	21 3	36	36	36	36
Natural gas plant liquids thousand 42-gallon barrels	140 ^r	140 ^r	140 ^r	140 ^r	140
Petroleum:					
Crude do.	1,200 ^e	2,093	1,435	1,417 ^r	1,400
Refinery products:					
Liquefied petroleum gas do.	6,415	8,886	8,839 ^r	8,909 r	9,000
Gasoline do.	27,243	31,943	32,045 ^r	32,300 ^r	30,000
Naphtha do.	7,480	8,806	7,489 ^r	8,075 ^r	9,000
Mineral jelly and wax do.	14	28	20 ^r	20 ^{e, r}	20
Jet fuel do.	15,152	16,696	14,168 ^r	14,725 ^r	17,000
Kerosene do.	62	70	93 ^r	100 ^r	70
Distillate fuel oil do.	36,300	42,127	40,672 ^r	41,000 r	42,000
Refinery gas do.	2,891	3,416	3,612 r	3,640 r	3,500
Lubricants do.	1,239	1,120	1,190 ^r	1,225 ^r	1,200
Residual fuel oil do.	41,532	50,017	50,000 ^e	49,280 ^r	50,000
Bitumen do.	2,491	3,133	3,066 r	3,091 r	3,200
Petroleum coke do.	721	897	886 ^r	900 e	900
Other do.	154	462	707 ^r	770 ^r	500
Refinery fuel and losses do.	5,922	7,126	7,434 ^r	7,455 ^r	7,000
Total do.	147,616	174,727	170,221 r	171,490 r	173,000

^eEstimated; estimated data are rounded to no more than three significant digits; may not add to totals shown. ^rRevised. -- Zero.

¹Table includes data available through May 2004.

²In addition to the commodities listed, other crude construction materials are produced, but no basis exists for estimation of production.

³Reported figure.

TABLE 2 GREECE: STRUCTURE OF THE MINERAL INDUSTRY IN 2003

(Thousand metric tons unless otherwise specified)

Commodity major equity owners Location of main facilities equation Aturninum 6.0 400 500 Autonum 6.0 6.0 6.0 Aberion Hellenic Kinneral Mining (Gs. S.A. Mines at Ziloani, near Kozani 100 Barrie, BaSO, Silver & Barry Crox Mining (Gs. S.A. (SBR) Mines at Phonics, Partia Phonics and Iten 2000 Do. 6.0 Plansis in Again Santa, Derma, und Iten 400 Do. Delphi-Distormou S.A., Hellenic Bauxites of Open east mines at Delphi-Distormou are 500 Do. Delphi-Distormou S.A. (Munatium de Gree S.A.) Open east mines at Delphi-Distormou are 500 Do. Delphi-Distormou S.A. (Munatium de Gree S.A.) Mines ta Adamas, Milos Island 200 Do. Delphi-Distormou S.A. (Munatium de Gree S.A.) Mines ta Adamas, Milos Island 200 Do. Open east mines at Delphi-Distormou are 500 0 0 Do. Open east mines at Maines Milos Island 200 0 0 Do. S&B Industrial Minerals, S.A. Mines at Adamas, Milos Island 400		Major operating companies and		Annual
Atumina Aluminium Agios Nitolotos, Rocotta area Parace, 69%). 350 Atuminum do. 150 Abetaros Miles at Zidani, next Kozani 100 Baricis, BaSOq Silver & Baryte Ore Mining Co. S. A. (S&B) Miles Island. 101 Bauxite do. Miles island 100 Do. Elecissi Bauxites Mines, S.A. Miles at Phorics plants at Phoreis and Item 2,000 Do. do. 100 400 Do. do. Delecissi Bauxites Mines, S.A. Miles at Phoreis and Item 2,000 Do. do. Delecissi Bauxites Mines, S.A. Miles at Delphi-Disonon area 500 Do. do. Delecissi Bauxites Minegro.S.A. (Industrin Minegro.S.A. (Industrin Minegro.S.A. (Singuinarium de Grees A.J.) 300 Do. do. Prestex S.A. (Industrin Minegro.S.A. (Industrin Minegro.S.A. (Matrinus Atlantas, Milos Island 200 Do. do. Planta at Vadatinas, Milos Island 200 Do. do. Planta at Vadatinas, Milos Island 400 Do. do. Plantat Vadatinas, Milos Island 400 <td>Commodity</td> <td>major equity owners</td> <td>Location of main facilities</td> <td>capacity</td>	Commodity	major equity owners	Location of main facilities	capacity
France, 60%) 750 Aubrainum do. do. 160 Abectos Hellenix Mineral Mining Co. S.A. Mines at Alcanis, next Xoami. 100 Bartie, BaSO, Shire & Barye Crox Mining Co. S.A. (S&B) Mines in Phoris, plants at Phoris, plants and Phoris, plants at Phoris, plants and Phoris, Daran, and Itea 400 Do. do. Phoris, Plants and Phoris, Daran, and Itea 400 Do. Delphi-Distomon S.A. (Aluminium & Grice S.A.) Open cast mines at Delphi-Distomon area 500 Do. Delphing Co. S.A., (Billy) Mines at Adamas, Milos Island 200 Do. Open and Mining Co. S.A., (Dalay) Mines at Adamas, Milos Island 200 Do. Mining Co. S.A., (Dalay) Mines at Adamas, Milos Island 200 Do. Open askin binderind Minerals, S.A. Mines at Adamas, Milos Island 400 Do. S&B Industrial Minerals, S.A. Mines at Adamas, Milos Island 400 Creater Halkis Cenest Co. S.A. (Bluc Crick Mires at Adamas, Milos Island 400 Creater Halkis Cenest Co. S.A. Bar	Alumina	Aluminium de Grèce S.A. (Pechiney of	Agios Nikolaos, Boeotia area	
Alaminum do. 160 Abestos Hellenic Mineral Mining Co S.A. (SkB) Mines at 74ain, near Korzani 100 Bartie, HaSQ, Silver & Baryte Ores Mining Cos S.A. (SkB) Mines at 74ain, near Korzani 100 Buxite do. Mines at 74ain, near Korzani 2000 Do. Flexistis Barkitis Mines, S.A. Mines ard Proma, Itea, and Phthoisti-Phois 400 Do. Do blyhi-Distomon S.A., (Haulinand G. Gree S.A.) Open cast mines at Dalphi-Distomon area 500 Do. Dataman S.A., (Maurinand G. Gree S.A.) Chemica Mineartin's S.D.A. (Industria Surface mines on Milos Island 20 Do. Mydowt Mining Co. S.A. Plants at Adamas, Milos Island 200 Do. do. Plants at Adamas, Milos Island 200 Do. Mining Co. S.A. Plants at Adamas, Milos Island 300 Do. do. Plants at Adamas, Milos Island 200 Cement Halkis Cement Co. S.A. (Bluc Circle Mines at Adamas, Milos Island 400 Do. Halkis Cement Co. S.A. (Bluc Circle Mines at Adamas, Milos Island 400 Do.		France, 60%)		750
Asbeatos Hellenic Mineral Mining Co. SA. (SM) Mine sat Zdani, near Kozani 100 Burito, BaSQ, Silver & Baryto Core, Mining Co. SA. (S&R) Milos Island 7 Burstin do. Mines at Phosis, plants at Phosis and Iten 2,000 Do. Delphi-Distomon S.A.; Hellenic Bauxites of Open cast mines at Delphi-Distomon area 500 Do. Delphi-Distomon S.A.; Hellenic Bauxites of Open cast mines at Delphi-Distomon area 500 Bentonile: Chemica Mineraris S.A. (Aluminian de Gréces S.A.) Mines at Admass, Milos Island 20 Chemica Mineraris S.A. (Aluminian de Gréces S.A.) Do. Mylobart Mining Co. S.A. (Silver & Baryte Mines at Adamas, Milos Island 200 Do. Mylobart Mining Co. S.A. (Silver & Baryte Mines at Adamas, Milos Island 200 Do. Mylobart Mining Co. S.A. (Silver & Baryte Mines at Adamas, Milos Island 200 Do. S&B Industrial Minerial, S.A. Mines at Adamas, Milos Island 200 Do. S&B Industrial Minerial, S.A. Mines at Adamas, Milos Island 400 Processed do. Plant at Youfia Bay, Milos Island 400 Processed do. Plant at Youfia Bay, Milos Island 400 Do. Harber Ser, 200 Encose S.A. (Blue Cricle Miner At Admas, Milos Island 10	Aluminum	do.	do.	160
Barile, BaSQ, Silver & Baryte Ores, Mining Ca, S.A. (S&B), Mines land 1 IBarxite de. Mines and Phoris and Ihea 2,000 Do. Elevasis Bauxites Mines, S.A. Plants in Aghine Marina, Drama, and Itea 400 Do. do. Plants in Aghine Marina, Drama, and Itea 400 Do. Do. Distormon S.A. (Heiltenic Bauxites of Distormon S.A. (Munimum G Genes CA.) Open cast mines an Delphi-Distormon area 500 Entonite: Crade Meetiterranean Bentonite Co. S.A. (Industria Crade Co. S.A.) Surface mines on Milos Island 200 Do. do. Ores Mining Co. S.A. (Silver & Baryte Mines at Adamas, Milos Island 300 Do. do. Plants at Adamas, Milos Island 200 Do. do. Plants at Adamas, Milos Island 400 Cennert Halkis Cennert Co. S.A. (Blue Cricel More-Varbit plant, west-central 3,000 Do. Halkis Cennert Co. S.A. (Blue Cricel More-Varbit plant, west-central 3,000 Central Halkis Cennert Co. S.A. (Blue Plant at Voadia Bay, Milos Island 400 Do. Halkis Cennert	Asbestos	Hellenic Mineral Mining Co. S.A.	Mines at Zidani, near Kozani	100
IEliopudes-Kyriakopoluos Group) Mines at Phocis, plants at Phocis, plants, plant	Barite, BaSO ₄	Silver & Baryte Ores Mining Co. S.A. (S&B)	Milos Island	1
Bauxie do. Mines art Phocis, and Phoisinot-Phoces, and Phoisinot-Phoisinot-Phoisinot-Phoces, and Phoisinot-Phoisinot-Phoces, and Phoisinot-Phoces, and Phoisinot-Phoisinot-Phoces, and Phoisinot-Phoces, and Phoisinot-Phoces, and Phoisinot-Phoces, and Phoisinot-Phoces, and Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinot-Phoisinote-Phoisinot-Phoisinot-Phoisinote-Phoisinot-Phoisinot-Phoisinot-		(Eliopoulos-Kyriakopoulos Group)		
Do. Eleusis Baaxies Mines, S.A. Mines neur Dram, Ileu, and Phihoiste-Phocis 300 Do. do. Planst in Aghia Marina, Drama, and Itea 400 Do. Delphi-Distomon S.A.; Hellenic Buaxites of Distomon S.A. (Aluminum de Grèce S.A.) Open cast mines at Delphi-Distomon area 500 Bentonile:	Bauxite	do.	Mines at Phocis, plants at Phocis and Itea	2,000
Do. do. Plants in Aghia Marina, Darma, and Itea 400 Do. Dephi-Distomon S.A.; Hellenie Baurities of Open cast mines at Delphi-Distomon area 500 Denomite: Crude Mediterranean Bentoniic Co. S.A. (Industria Surface mines on Milos Island 20 Crude Chemica Mineraria S.p.A., Italy) Mines at Adamas, Milos Island 300 Do. Mykobar Mining Co. S.A. (Silver & Baryte Mines at Adamas, Milos Island 200 Do. do Plants at Adamas, Milos Island 200 Do. StaB Industrial Minerals, S.A. Mines at Adamas, Milos Island 600 Cement Halkis Cement Co. S.A. (Blue Circle Nicro-Varin Iplant, West-central 3,000 Cement Halys Cement S.A. (Cluents Frainçais, Paraita Aspropyrgos plant, Athens 800 France) France) France 400 Do. Hardes General Cement Co. S.A. (Blue Plant at Volos 4,600 Do. Titaa Cement Co. S.A. Beltis plant, Aberosa 4,600 Do. Go Plant at Volos 2,600 Do. Go Plant at Volos </td <td>Do.</td> <td>Eleusis Bauxites Mines, S.A.</td> <td>Mines near Drama, Itea, and Phthiotis-Phocis</td> <td>300</td>	Do.	Eleusis Bauxites Mines, S.A.	Mines near Drama, Itea, and Phthiotis-Phocis	300
Do. Delphi-Distomon S.A.: Hellenic Bauxites of Doutomon S.A. (Aluminium de Greece S.A.) Open cast mines at Delphi-Distomon area 500 Bentonite: Mediterranean Bentonite Co. S.A. (Industria Surface mines on Milos Island 20 Chude Chemica Mineraria S p.A., Italy) Mines at Adamas, Milos Island 300 Do. Ores Skill Industrial Minerals, S.A. Mines at Adamas, Milos Island 200 Do. Skill Industrial Minerals, S.A. Mines at Adamas, Milos Island 400 Processed do. Plants at Adamas, Milos Island 400 Cenent Halkis Cennent Co. S.A. (Blue Circle Micro-Vathi plant, west-central 3,000 Do. Halkis Cennent Co. S.A. (Blue Circle Micro-Vathi plant, Athens 800 Do. Halkis Cennent Co. S.A. (Blue Circle Industris Ple., 54.48%) Do. 4600 Do. Haraita ASproprygon plant, Athens 800 Do. Trance 400 Do. Haraita ASproprygon plant, Athens 800 Do. Haraita Sproprygon plant, Athens 400 Do. Haraita Sproprygon plant, Athens 2,600	Do.	do.	Plants in Aghia Marina, Drama, and Itea	400
Bentonite: Mediterranean Bentonite Co. S.A. (Industria Surface mines on Milos Island 20 Do. Mykobar Mining Co. S.A. (Slver & Baryte Mines at Adamas, Milos Island 300 Do. do. Plants at Adamas, Milos Island 200 Do. do. Plants at Adamas, Milos Island 200 Do. S&B Industrial Mineralo, S.A. Mines at Adamas, Milos Island 600 Cement Italis Cement Co. S.A. (Blue Crice) Mineralo, S.A. 400 Cement Italis Cement Co. S.A. (Blue Crice) Mines at Adamas, Milos Island 400 Do. Healys Cement S.A. (Ciments Frainçais) Paralia Aspropyrgos plant, Athens 800 Franceio Grante Co. S.A. Plant at Volos 460 Do. Heracles General Conent Co. S.A. (Blue Plant at Volos 4600 Do. do. Plant at Volos 4600 Do. do. Plant at Volos 250 Do. do. Plant at Volos 250 Do. do. Plant at Volos 250 Do. do. Plant p	Do.	Delphi-Distomon S.A.; Hellenic Bauxites of Distomon S.A. (Aluminium de Grèce S.A.)	Open cast mines at Delphi-Distomon area	500
Crude Mediterraneal Bentonic Co. S.A. (Industria Chemica Minernia S.p.A., Italy) Surface mines on Milos Island 20 Do. Mykobar Mining Co. S.A. (Silver & Baryte Mines at Adamas, Milos Island 300 Do. do. Plants at Adamas, Milos Island 200 Do. do. Plants at Adamas, Milos Island 600 Do. do. Plants at Adamas, Milos Island 600 Cremet Halkis Cement Co. S.A. (Blue Crucle Mines at Adamas, Milos Island 400 Cement Halkis Cement Co. S.A. (Blue Crucle Mero-Vahip Jani, west-central 3,000 Do. Halkis Cement Co. S.A. (Blue Crucle Mero-Vahip Jani, west-central 3,000 Do. Haraceles General Cement Co. S.A. (Blue Plant at Volos 4,600 Do. Heracles General Cement Co. S.A. (Blue Plant at Volos 4,600 Do. do. Plant at Volos 4,600 Do. do. Ramacia-Mining-Industria and Shipping Tsingeli Mines and plant near Volos 25 Core, rEfMISSOV (RO) Salonica plant, Salonica 1,650 2600 260	Bentonite:			
Do. Mykobar Mining Co. S.A. (Silver & Baryte Ores Mining Co. S.A.) Mines at Adamas, Milos Island 300 Do. do. Plants at Adamas, Milos Island 200 Do. do. Plants at Adamas, Milos Island 200 Do. S&B Industrial Minerals, S.A. Mines at Adamas, Milos Island 400 Cement Halkis Cement Co. S.A. (Blue Circle Micro-Vatir plant west-central 3,000 Cement Halkis Cement S.A. (Ciments Frainçais, France) Paralia Aspropyrgos plant, Athens 800 Do. Halyps Cement S.A. (Ciments Frainçais, France) Paralia Aspropyrgos plant, Athens 800 Do. Halyps Cement S.A. Blant et Volos 4,600 Do. do. Plant at Volos 4,600 Do. do. Plant at Volos 4,600 Do. do. Plant at Volos 2,6000 Do. do. Salonica plant, Athens area 400 Do. do. Salonica plant, Borotia 2,600 Do. do. Salonica plant, Borotia 2,600 Do. do. <td< td=""><td>Crude</td><td>Mediterranean Bentonite Co. S.A. (Industria Chemica Mineraria S.p.A., Italy)</td><td>Surface mines on Milos Island</td><td>20</td></td<>	Crude	Mediterranean Bentonite Co. S.A. (Industria Chemica Mineraria S.p.A., Italy)	Surface mines on Milos Island	20
Do. do Plants at Adamas, Milos Island 200 Do. S&B Industrial Minerals, S.A. Mines at Adamas, Milos Island 600 Processed do. Plant at Voudia Bay, Milos Island 400 Cement Halkis Cement Co. S.A. (Blue Circle Micro-Vahi plant, west-central 3,000 Do. Halyps Cement S.A. (Ciments Frainçais, France) Paralia Aspropyrgos plant, Athens 800 Do. Heracles General Cement Co. S.A. (Blue Plant at Volos 4,600 Do. Heracles General Cement Co. S.A. Elefsis plant, Athens area 400 Do. do. Plant at Volos 4,600 Do. do. Plant at Volos 4,600 Do. do. Kamarri plant, Bocotia 2,600 Do. do. Kamarri plant, Bocotia 2,600 Do. do. Salonica plant, Salonica 1,650 Do. do. Salonica plant, Salonica 1,650 Chromite Financial-Mining-Industrial and Shipping Tringeli Mines and plant tear Volos 255 Corp. (FIMISCO) (IRO) Car	Do.	Mykobar Mining Co. S.A. (Silver & Baryte	Mines at Adamas, Milos Island	300
Do. 300. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100. 100.	Da	de	Planta at Adamag Milag Jaland	200
Do. State in instant minering, S.A. Mines at Availants, Minos Island 000 Processed do. Plant at Voudia Bay, Milos Island 400 Cement Halkis Cement Co. S.A. (Blue Circle Micro-Vathi plant, west-central 3,000 Do. Halyps Cement S.A. (Ciments Frainçais, France) Paralia Aspropyrgos plant, Athens 800 Do. Heracles General Cement Co. S.A. (Blue Plant at Volos 4,600 Do. do. Plant at Volos 2,600 Do. do. Plant at Volos 2,600 Do. do. Salonica plant, aortherm Peloponnesus 1,900 Do. do. Salonica plant, antherm Peloponnesus 1,650 Chromite <t< td=""><td> </td><td>00. S&P. Industrial Minorals, S.A.</td><td>Minos at Adamas, Milos Island</td><td>200</td></t<>	 	00. S&P. Industrial Minorals, S.A.	Minos at Adamas, Milos Island	200
Processed do. Plant at Voudia Bay, Milos Island 400 Cement Halkis Cement Co. S.A. (Blue Circle Micro-Vatip plant, west-central 3,000 Do. Halyps Cement S.A. (Ciments Frainçais, Paralia Aspropyrgos plant, Athens 800 France) France) 50. Heracles General Cement Co. S.A. (Blue Plant at Milaki 1,900 Do. Heracles General Cement Co. S.A. (Blue Plant at Volos 4,600 Do. do. Plant at Volos 4,600 Do. do. Plant at Volos 4,600 Do. do. Kamari Plant, Boeotia 2,600 Do. do. Patras plant, Dorhern Peloponnesus 1,900 Do. do. Salonica plant, Salonica 1,650 Chromite Financial-Mining-Industrial and Shipping Tisngeli Mines and plant near Volos 25 Gold, Au in concentrate Kilograms TXY Hellas (TVX Gold Inc., Canada) Kassandra Mines, Olympias 5,000 Gysum Lava Mining & Quarrying Co. S.A. Altsi, Crete Island 500 Gold, Au in concentrate TVX Hellas (TVX Gold Inc., Canada) Kassandra Mines, Olympias, Stratoni) 30 Do. <	D0.	(Eliopoulos Kyriakopoulos Group)	Willes at Adamas, Willos Island	000
Tocksoci Halkis Cement Co. S.A. (Blue Circle Haira Volum Fay, "Mixes Linking" 3,000 Industries Plc., 72.65%) Euboea Island 3000 Do. Halkys Cement S.A. (Ciments Frainçais, France) Paralia Aspropyrgos plant, Athens 800 Do. Heracles General Cement Co. S.A. (Blue Plant at Milaki 1.900 Do. do. Plant at Volos 4,600 Do. do. Elefsis plant, Athens area 400 Do. do. Kamari plant, Boeotia 2,600 Do. do. Kamari plant, Boeotia 2,600 Do. do. Salonica 1,650 Do. do. Salonica 2,500 Corp. (FIMISCO) (IRO) Salonica 2,500 Gold, Au in concentrate kilograms TVX Hellas (TVX Gold Inc., Canada) Kassandra Mines, Olympias 5,000<	Processed	do	Plant at Voudia Bay, Milos Island	400
Chrint Industrice Ple, 72.65%) Euboen Island Do. Halyps Cement S.A. (Ciments Frainçais, France) Paralia Aspropyrgos plant, Athens 800 Do. Heracles General Coment Co. S.A. (Blue Circle Industries Ple, 54.48%) Plant at Milaki 1,900 Do. do. Plant at Volos 4,600 Do. do. Plant at Volos 4,600 Do. do. Ramari plant, Bocotia 2,600 Do. do. Ramari plant, Bocotia 2,600 Do. do. Ramari plant, Bocotia 2,600 Do. do. Plant at Volos 2,600 Do. do. Salonica plant, Athens area 400 Do. do. Plant at Volos 2,600 Do. do. Salonica plant, Salonica 1,650 Chromite Financial-Mining-Industrial and Shipping Tsingeli Mines and plant near Volos 25 Corp. (FIMISCO) (IRO) General Mining & Quarrying Co. S.A. Larymna metallurgical plant 25 God, Au in concentrate kilogarams TVX Hellas (TVX Gold Inc., Canada) Kassandra Mines, Olympias, Stratoni) 30 Do.	Cement	Halkis Cement Co. S. A. (Blue Circle	Micro-Vathi plant west-central	3 000
Do. Halyps Cernent S.A. (Ciments Frainçais, France) Paralia Aspropyrgos plant, Athens 800 Do. Heracles General Cement Co. S.A. (Blue Circle Industries Plc., 54.48%) Plant at Milaki 1,900 Do. do. Plant at Volos 4,600 Do. do. Plant at Volos 4,600 Do. do. Plant at Volos 4,600 Do. do. Ramari plant, Boeotia 2,600 Do. do. Ramari plant, Boeotia 2,600 Do. do. Salonica plant, Salonica 1,650 Do. do. Salonica plant, Salonica 1,650 Corp. (FIMISCO) (IRO) Torx Hellas (TVX Gold Inc., Canada) Kassandra Mines, Olympias 5,000 Gold, Au in concentrate kilograms TVX Hellas (TVX Gold Inc., Canada) Kassandra Mines, Olympias 5,000 Do. Titan Cement Co. S.A. Alsi, Crete Island 500 Do. Titan Cement Co. S.A. Alsis, Crete Island 500 Do. Titan Cement Co. S.A. Mines in Kozani Basin 100 Lead, mine, Pb in conc	Comon	Industries Plc 72 65%)	Fuboea Island	5,000
Do. HeracleS General Cement Co. S.A. (Blue Circle Industries Plc., 54.48%) Plant at Volos 4,600 Do. do. Plant at Volos 4,600 Do. Titan Cement Co. S.A. Elefsis plant, Athens area 400 Do. do. Kamari plant, Boeotia 2,600 Do. do. Ramari plant, Boeotia 2,600 Do. do. Salonica plant, northern Peloponnesus 1,900 Do. do. Salonica plant, salonica 1,650 Chromite Financial-Mining-Industrial and Shipping Corp. (FIMISCO) (IRO) Tsingeli Mines and plant near Volos 25 Gold, Au in concentrate Kilograms TVX Hellas (TVX Gold Inc., Canada) Kassandra Mines, Olympias 5,000 Gypsum Lava Mining & Quarrying Co. S.A. do. 288 100 Lead, mine, Pb in concentrate Microfine S.A. do. 288 100 Lead, mine, Pb in concentrate TVX Hellas (TVX Gold Inc., Canada) Kassandra Mines (Olympias, Stratoni) 30 Do. do. Orteneastern Chalkidhi 100 Lead, mine, Pb in concentrate	Do.	Halyps Cement S.A. (Ciments Frainçais, França)	Paralia Aspropyrgos plant, Athens	800
Do. do. Plant at Volos 4,600 Do. Titan Cement Co. S.A. Elefsis plant, Athens area 400 Do. do. Ramari plant, Bocotia 2,600 Do. do. Patras plant, northern Peloponnesus 1,900 Do. do. Salonica plant, northern Peloponnesus 1,900 Do. do. Salonica plant, solonica 1,650 Chromite Financial-Mining-Industrial and Shipping Tsingeli Mines and plant near Volos 25 Ferroalloys, ferronickel, Ni content General Mining & Metallurgical Co. S.A. Larymna metallurgical plant 25 Gold, Au in concentrate kilograms TVX Hellas (TVX Gold Inc., Canada) Kassandra Mines, Olympias 5,000 Gypsum Lava Mining & Quarying Co. S.A. Altis, Crete Island 500 Do. 280 Hunite/hydromagnesite Microfine S.A. do. 280 280 Hunite/hydromagnesite Microfine S.A. Mines in Kozani Basin 100 Lead Mining & Metallurgical Inc., Canada) Nassandra Mines (Olympias, Stratoni) 30 Do.	Do.	Heracles General Cement Co. S.A. (Blue	Plant at Milaki	1,900
Do. Titan Cement Co. S.A. Elefsis plant, Athens area 400 Do. Titan Cement Co. S.A. Elefsis plant, Athens area 400 Do. do. Ramari plant, Boeotia 2,600 Do. do. Patras plant, northern Peloponnesus 1,900 Do. do. Salonica plant, Salonica 1,650 Chromite Financial-Mining-Industrial and Shipping Tsingeli Mines and plant near Volos 25 Corp. (FIMISCO) (IRO) E E 25 Gold, Au in concentrate kilograms TVX Hellas (TVX Gold Inc., Canada) Kassandra Mines, Olympias 5,000 Gypsum Lava Mining & Quarying Co. S.A. Altsi, Crete Island 500 500 Do. Titan Cement Co. S.A. Mo 28 28 Hunite/hydromagnesite Microfine S.A. Mines in Kozani Basin 100 Lead, mine, Pb in concentrate TVX Hellas (TVX Gold Inc., Canada) Kassandra Mines (Olympias, Stratoni) 30 Do. do. Microfine S.A. Mines in Kozani Basin 100 Lead, mine, Pb in concentrate TVX Hellas (TVX Gold Inc., Canada) Kassandra Mines (Olympias, Stratoni) 30 </td <td>Do</td> <td>do</td> <td>Plant at Volos</td> <td>4 600</td>	Do	do	Plant at Volos	4 600
Do. Intal Celletic Co. S.A. Letists plant, Aufens area 400 Do. do. Kamari plant, Boeotia 2,600 Do. do. Salonica plant, Salonica 1,650 Chromite Financial-Mining-Industrial and Shipping Corp. (FIMISCO) (IRO) Tsingeli Mines and plant near Volos 25 Ferroalloys, ferronickel, Ni content General Mining & Metallurgical Co. S.A. Larymna metallurgical plant 25 Gold, Au in concentrate kilograms TVX Hellas (TVX Gold Inc., Canada) Kassandra Mines, Olympias 5,000 Gypsum Lava Mining & Quarrying Co. S.A. Altsi, Crete Island 500 Do. TXX Hellas (TVX Gold Inc., Canada) Kassandra Mines, Olympias 5,000 Do. Titan Cement Co. S.A. do. 280 Hunite/hydromagnesite Microfine S.A. Mines in Kozani Basin 100 Lead, mine, Pb in concentrate TVX Hellas (TVX Gold Inc., Canada) Kassandra Mines (Olympias, Stratoni) 30 Do. do. Microfine S.A. Mine, central Peloponnesus 7,000 Do. do. Moregapolis Mine, central Peloponnesus 7,000 Do. do. Metallyna Ventures,	 	d0. Titan Comont Co. S. A	Flaftis plant Athans area	4,000
D0. d0. Partas plant, beedua 2,000 Do. do. Partas plant, northern Peloponnesus 1,900 Do. do. Salonica plant, Salonica 1,650 Chromite Financial-Mining-Industrial and Shipping Tsingeli Mines and plant near Volos 25 Corp. (FIMISCO) (IRO) Corp. (FIMISCO) (IRO) 25 Gold, Au in concentrate Kilograms TVX Hellas (TVX Gold Inc., Canada) Kassandra Mines, Olympias 5,000 Gypsum Lava Mining & Quarrying Co. S.A. Altsi, Crete Island 500 500 Do. Titan Cement Co. SA. do. 286 Hunite/hydromagnesite Microfine S.A. Mines in Kozani Basin 100 Lead, mine, Pb in concentrate TVX Hellas (TVX Gold Inc., Canada) Kassandra Mines (Olympias, Stratoni) 30 Lignite Public Power Corporation (Government) Aliveri Mine, Euboea Island 4200 Do. do. Ptolemais Mine, near Kozani 28,000 Magnesite, concentrate Viomagn-Fimisco Ltd. (Violignit S.A.,65%, Mines at Gerorema, Kakavos, and 250 Do. Go. Goereain Magnesite S.A. Mine and plant at Yerakini, Chalkidiki	 	do	Kamari plant, Athens area	2 600
Do. do. Falsa plan, induction Coponestas 1,560 Do. do. Salonica plant, induction Coponestas 1,650 Chromite Financial-Mining-Industrial and Shipping Tsingeli Mines and plant near Volos 25 Corp. (FIMISCO) (IRO) Erroalloys, ferronickel, Ni content General Mining & Metallurgical Co. S.A. Larymna metallurgical plant 25 Gold, Au in concentrate kilograms TVX Hellas (TVX Gold Inc., Canada) Kassandra Mines, Olympias 5,000 Gypsum Lava Mining & Quarrying Co. S.A. Altsi, Crete Island 500 Do. Titan Cement Co. S.A. do. 280 Hunite/hydromagnesite Microfine S.A. do. 280 Hunite/hydromesite TVX Hellas (TVX Gold Inc., Canada) Kassandra Mines (Olympias, Stratoni) 30 Lignite Public Power Corporation (Government) Aliveri Mine, Euboea Island 420 Do. do. Ptolemais Mine, near Kozani 28,000 Magnesite, concentrate Viomagn-Finisco Ltd. (Violignit S.A., 65%, Mines at Gerorema, Kakavos, and 250 Do. Go. Greecain Magnesite S.A. Mine and plant at Yerakini, Chalkidiki 200 Mangne	 	do.	Patras plant, porthern Pelopoppesus	2,000
Do. Do. Tsingeli Mines and plant, Journa pl	 	do	Salonica plant, Salonica	1,500
Cincinite Financial-Mining-Industrial and Shipping Finigen Mines and Plan Red Volos 2.5 Corp. (FINIRSCO) (IRO) Ferroalloys, ferronickel, Ni content General Mining & Metallurgical Co. S.A. (Larco) (IRO) Lava Mining & Metallurgical Co. S.A. Larymna metallurgical plant 2.5 Gold, Au in concentrate kilograms TVX Hellas (TVX Gold Inc., Canada) Kassandra Mines, Olympias 5,000 Do. Titan Cement Co. S.A. do. 286 Hunite/hydromagnesite Microfine S.A. Mines in Kozani Basin 100 Lead, mine, Pb in concentrate TVX Hellas (TVX Gold Inc., Canada) Kassandra Mines (Olympias, Stratoni) 30 northeastern Chalkidiki 100 0. 0 100 Lignite Public Power Corporation (Government) Aliveri Mine, eartal Peloponnesus 7,000 Do. do. Ptolemais Mine, near Kozani 28,000 Magnesite, concentrate Viomagn-Fimisco Ltd. (Violignit S.A., 65%, and Alpha Ventures, 35%) Mine and plant at Yerakini, Chalkidiki 200 Do. Grecian Magnesite S.A. Mine and plant at Yerakini, Chalkidiki 200 Manganese, battery-grade MnO2 Eleusis Bauxite Mines Mining, Industrial Nevrokopi, Drama 10	Chromite	Financial-Mining-Industrial and Shinning	Tsingeli Mines and plant near Volos	1,030
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Do. Grecian Magnesite S.A. Mine and plant at Yerakini, Chalkidiki 200 Manganese, battery-grade MnO2 Eleusis Bauxite Mines Mining, Industrial and Shipping S.A. [National Bank of Greece (OAE)] Nevrokopi, Drama 10 Marble, slab cubic meters Aghia Marina Marble Ltd. Pallini 100,000 Do. do. Chris G. Karantanis & Sons Co. Korinthos 60,000 Natural gas million cubic meters Public Petroleum Corporation (Government) Prinos offshore gasfield and oilfield, east 125 per day of Thasos Island 10 Nickel, ore Larco (IRO) Agios Ioannis Mines near Larymna 500	hughesite, concentrate	and Alpha Ventures 35%)	Mantoudhi northern Euboea Island	250
Manganese, battery-grade MnO2 Eleusis Bauxite Mines Mining, Industrial and Shipping S.A. [National Bank of Greece (OAE)] Nevrokopi, Drama 10 Marble, slab cubic meters Aghia Marina Marble Ltd. Pallini 100,000 Do. do. Chris G. Karantanis & Sons Co. Korinthos 60,000 Natural gas million cubic meters Public Petroleum Corporation (Government) Prinos offshore gasfield and oilfield, east 125 per day of Thasos Island 10 Nickel, ore Larco (IRO) Agios Ioannis Mines near Larymna 500	Do	Grecian Magnesite S.A.	Mine and plant at Yerakini, Chalkidiki	200
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Natural gas million cubic meters Public Petroleum Corporation (Government) Prinos offshore gasfield and oilfield, east 125 per day of Thasos Island Nickel, ore Larco (IRO) Agios Ioannis Mines near Larymna 500	Do. do	Chris G. Karantanis & Sons Co	Korinthos	60,000
Nickel, ore Larco (IRO) Agios Ioannis Mines near Larymna 500	Natural gas million cubic meters	Public Petroleum Corporation (Government)	Prinos offshore gasfield and oilfield, east	125
Therei, or Lato (110) Agios Ioannis Mines near Latynilla 300	Nickel ore	Larco (IRO)	Agios Ioannis Mines near Larumna	500
Do. do. Mines at Euboea Island 2 500	Do.	do.	Mines at Euboea Island	2 500

TABLE 2--Continued GREECE: STRUCTURE OF THE MINERAL INDUSTRY IN 2003

(Thousand metric tons unless otherwise specified)

		Major operating companies and		Annual
Commod	ity	major equity owners	Location of main facilities	capacity
Nitrogen, N content of am	imonia	Phosphoric Fertilizers S.A.	Nea Karvall	150
Perlite		S&B Industrial Minerals, S.A.	Mines on Kos and Milos Islands; plant	300
		(Eliopoulos-Kyriakopoulos Group)	at Pireaus	
Do.		Otavi Minen Hellas S.A. (Otavi Minen AG,	Milos Island	150
		Germany)		
Do.		Bouras Co.	Kos Island	50
Petroleum, refined	42-gallon barrels	Hellenic Aspropyrgos Refinery S.A.	Aspropyrgos	95,000
	per day			
Do.	do.	Motor Oil (Hellas) Corinth Refineries S.A.	Aghii Theodori, Corinth	140,000
Do.	do.	Petrola Hellas S.A.	Eleusis	100,000
Do.	do.	Thessaloniki Refining Co. A.E.	Thessaloniki	76,000
Pozzolan (Santorin earth)		Lava Mining & Quarrying Co. (Heracles	Xylokeratia, Milos Island	600
		General Cement Co. S.A.)		
Do.		Titan Cement Co. S.A.	do.	300
Pumice		Lava Mining & Quarrying Co. (Heracles	Yali Island	100
		General Cement Co. S.A.)		
Quartz		do.	Adamas, Milos Island	150
Steel, crude		Halyvourgia Thessalias S.A. (Manessis	Steelworks at Volos	1,500
		Bros. and Voyatzis S.A., 65%; National		
		Investment Bank for Industrial		
		Development, 35%)		
Do.		Halyvourgiki, Inc.	Steelworks at Eleusis	1,200
Do.		Hellenic Steel Co.	Steelworks at Thessaloniki	1,000
Do.		Corinth Pipeworks	Steelworks at Thisvi	680
Do.		Sidenor S.A. (also known as Halivourgia	Steelworks at Volos	600
		Voriou Ellados S.A.)		
Do.		do.	Steelworks at Corinth	245
Zeolite		S&B (Eliopoulos-Kyriakopoulos Group)	Mine at Pendalofos; plant at Ritsona	100
Zinc, mine, Zn in concent	rate	TVX Hellas S.A. (TVX Gold Inc., Canada)	Kassandra Mines (Olympias and Stratoni), northeastern Chalkidiki	30

TABLE 3

GREECE: SELECTED INDICES OF PRODUCTION FOR MINES

(1995 = 100)

Sector	2000	2001	2002	2003
Mining and quarrying	109.3	107.7	117.5	111.9
Mining of coal and lignite	113.1	118.1	125.4	121
Extraction of crude petroleum and natural gas	62.9	47.7	44.9	34.1
Mining of metal ores	100.5	116	138.4	100.4
Other mining and quarrying	115.1	104	114.2	118.1

Source: National Statistical Service of Greece, 2004, Production Index for Mines, table B, p. 1.