

# THE MINERAL INDUSTRY OF

# FIJI

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The economy of the Republic of Fiji, a volcanic archipelago consisting of about 320 islands in the southwestern Pacific Ocean, is agricultural, dominated by the sugar cane industry but also having a large subsistence sector. The mineral industry is of only minor importance to the economy, contributing approximately 3% to the country's gross domestic product (GDP) (George R.L. Niumataivalu, Principal Mining Engineer, Department of Mineral Resources, written commun., May 7, 1997). Gold is the mainstay of the minerals industry in Fiji, accounting for virtually all the contribution from the mining and quarrying sector to the country's GDP. Unrefined gold mined in Fiji is the country's third-largest contributor to export earnings (Mineral Resources Department, 1997, *Gold in Fiji*, accessed March 3, 1998, at URL <http://www.mrd.gov.fj/geology/gold/goldfiji.htm/>).

Metallic mineralization, as polymetallic base metal sulfide deposits, disseminated porphyry copper deposits, epithermal precious metal deposits, residual bauxite deposits, and manganese and heavy mineral sands deposits, is widespread in Fiji. Gold, as well as associated silver, however, were the only mineral commodities mined during 1997. Fiji's mineral industry also consists of a cement plant next to the harbor at Suva, the capital, and several quarries for the production of crushed gravel and stone, limestone, and coral and river sands. The cement plant has been operated by Fiji Industries Ltd. since it was commissioned in 1961.

Mining legislation in Fiji dates back to 1908 when the first mining ordinance was enacted to facilitate and regulate mineral sector developments. This first ordinance granted prospectors and miners security of tenure and exclusive exploration and exploitation rights while simultaneously protecting the property rights of the landowners and the interests of the public and ensuring that mineral lands were not tied up in the hands of speculators. The mining act currently in use was enacted in 1978, with revisions to the regulations made in 1985; the regulations, however, were under scrutiny in 1997 by the Mineral Resources Department, the responsible Government agency, to ensure compatibility with more-recent Government policies (Mineral Resources Department, 1997, *Exploration and Mining*, accessed March 4, 1998, at URL <http://www.mrd.gov.fj/mining/invstgd/explmine.htm/>).

Although gold has been produced in Fiji since shortly after its discovery, until recently, the only significant mine has been the Emperor, or Vatukoula, Mine owned and operated by Emperor Gold Mining Co. Ltd. (EGM). The Emperor Mine is adjacent to the town of Vatukoula, meaning "Rock of Gold," about 100 kilometers (km) northwest of Suva and 8 km inland from the coast, in the Nakauvadra Mountains at the northern tip of the main island of Viti Levu. The Vatukoula deposit is located within the rim of the Tavua caldera, a volcanic depression. The Emperor Mine has been in continuous

production since 1935. Vatukoula ores contain gold and silver, commonly in the form of telluride minerals, resulting in production of byproduct silver. Until 1980, the Emperor Mine also recovered significant amounts of selenium and tellurium oxides from the ore. Since 1993, operations at the Emperor have been redirected away from low-grade, open-pit resources to the higher grade reserves underground (Mining Journal, 1998, p. 7).

In late 1995, Mount Kasi Ltd., a wholly owned subsidiary of Australia's Pacific Islands Gold NL, reopened the Mount Kasi Mine, which had been unworked for 50 years; gold production began in the June quarter of 1996 (South Sea Digest, 1997). The mine is at Savusavu near the Yanawai River on the southern coast of Vanua Levu, Fiji's second-largest island. Mount Kasi was the site of the first major gold discovery in Fiji. The original Mount Kasi open pit was begun in 1932; epithermal vein deposits were mined in the Yanawai gold field until 1946. Operations at that time centered on eluvial resources from a large open cut with associated underground workings (Mining Journal, 1998, p. 6). Hard-rock gold production began at the renewed operation toward yearend 1996. A blend of primary and eluvial ores was processed during 1997 (Mining Journal, 1998, p. 6).

During 1997, major and junior companies were actively prospecting in Fiji for gold and copper. At yearend 1997, nearly 40 valid prospecting licenses covered areas totaling more than 450,000 hectares. Exploration spending commitments for fiscal year 1997-98 (July-June) were almost \$6 million. Exploration during 1997 was dominated by the Tuvatu gold project that EGM acquired from the previous license holder, Geopacific Ltd. Tuvatu is in western Viti Levu, about 25 km from the coastal city of Nadi. Geopacific discovered the property in 1987; EGM acquired an option on the property in 1995, subsequently converting this to full ownership in June 1997 (Mining Journal, 1998, p. 7). EGM's wholly owned subsidiary, Tuvatu Gold Mining Co., planned to complete a feasibility study on the property early in 1998 (Mining Journal, 1997b).

Early in 1997, Placer Pacific Namosi Ltd., the local subsidiary of Placer Pacific Ltd. of Sydney, Australia, transferred its mineral licenses for the Namosi prospect, consisting of low-grade porphyry copper-gold mineral tenements, and the Waisoi copper-gold-molybdenum porphyry deposit, to Royal Oak Mines Inc. of the United States. In return, Royal Oak was to grant Placer Pacific a 5% net-profits interest up to \$15 million. The Namosi and the Waisoi tenements are about 30 km northwest of Suva and 20 km from the coast on Viti Levu. Royal Oak also was granted a special prospecting license for epithermal gold deposits over the western portion of Kadavu Island, located about 60 km south of Viti Levu (Mining Journal, 1997a).

## References Cited

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- 1997b, Tuvatu boosts Fiji's gold potential: Mining Journal, v. 329, no. 8457, November 28, 1997, p. 439.
- 1998, Fiji—A leading light in Pacific mining: Mining Journal Country Supplement, v. 330, no. 8466, February 6, 12 p.
- South Sea Digest, 1997, Mining: South Sea Digest, v. 17, no. 14, September 26, 1997, p. 3.

## Major Sources of Information

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TABLE 1  
 FIJI: PRODUCTION OF MINERAL COMMODITIES 1/

(Metric tons unless otherwise specified)

Commodity 2/		1993	1994	1995	1996	1997 e/
Cement, hydraulic		79,500	93,600	91,200	83,500 r/	84,000
Gold, mine output, Au content	kilograms	3,784 r/	3,535 r/	3,496 r/	4,452 r/	4,500
Silver, mine output, Ag content	do.	1,112	1,498 r/	2,083 r/	1,882 r/	2,500

e/ Estimated. r/ Revised.

1/ Table includes data available through April 8, 1998.

2/ In addition to the commodities listed, crushed and dimension stone, sand and gravel, and sand for cement manufacture are produced, but there is insufficient data to make reliable estimates of quantities.