

# THE MINERAL INDUSTRY OF

# FIJI

By Travis Q. Lyday

The Republic of Fiji is an archipelago of more than 320 islands that is located about 3,000 kilometers (km) northeast of Sydney, Australia; about 100 of these islands are inhabited (Resource Information Unit, 2002, p. 4). The archipelago is bound on the west by the Yasawa Islands, which are the closest islands of Fiji to the Melanesian islands of Vanuatu. Along the eastern boundary of Fiji lie the numerous islands of the Lau group, which border the islands of Tonga in western Polynesia. Near the center of the Yasawas and the Laus lie the four main islands of Fiji—Viti Levu, Vanua Levu, Taveuni, and Kandavu—which roughly straddle the dividing line between Melanesia and Polynesia (Fowler, [undated]<sup>1</sup>). The indigenous Fijians are a mixture of Melanesians and Polynesians (U.S. Department of State, 2001§).

The economy was largely based on garment manufacturing, mining, agriculture, and tourism. Fishing and forestry also were important. Fiji is richly endowed in mineral deposits of copper, gold, lead, and zinc. Gold, which has been mined and exported continuously since about 1933, was the country's most valuable mineral resource. Other mineral resources included polymetallic mineral deposits, crushed and dimension stone, sand and gravel, and sand used for manufacturing cement.

Polymetallic deposits in Fiji typically have high precious- and base-metal grades. A number of base-metal sulfide deposits, disseminated porphyry copper deposits, epithermal precious-metal deposits, residual bauxite deposits, and manganese and heavy-mineral sand deposits previously have been identified and evaluated. Because none have been shown to have sufficient tonnage to be economically viable, gold and associated silver have been the only metal commodities mined to date. Fiji's mineral industry also consisted of a cement plant for manufacturing portland cement next to the harbor at Suva (Fiji Industries Ltd., [undated]§).

In 2001, the real gross domestic product increased by a modest 1.5% to about \$2 billion after falling by 2.8% in 2000. Although the mining and quarrying sector increased by 2% from that of 2000 owing to increased quarrying activity for construction aggregate, gold production remained static (Emperor Mines Ltd., 2002; Asian Development Bank, 2002§; Emperor Mines Ltd., 2001a§, b§, c§). Gold was the only metallic mineral recovered in Fiji in 2001 and was produced solely at Emperor Mines Ltd.'s Vatukoula Mine, which is often referred to as the Emperor Mine. Nevertheless, Emperor's gold production generated approximately 6% of Fiji's foreign exchange (Emperor Mines Ltd., 2001a§). The mine is on the northwestern coast of the main island of Viti Levu, approximately 380 km by road from the capital at Suva. Between the mine opening in 1933 and June 2001, the

Vatukoula Mine produced more than 179,000 kilograms (kg) of gold from 21 million metric tons of ore (Resource Information Unit, 2002, p. 63a). The gold is found as native gold, auriferous pyrite, and gold tellurides (Gold Gazette, 2002). Gold production during the quarter that ended September 30, 2001, was almost 1,100 kg. This was the highest quarterly production in seven quarters and the third best quarter on record (Emperor Mines Ltd., 2001b). Gold production declined somewhat during the quarter that ended December 31, 2001; production was slightly more than 1,000 kg. Gold recovery, however, for the quarter increased to 88.92%, which surpassed the all-time record of 88.79% set the previous quarter (Emperor Mines Ltd., 2002).

Emperor Mines, which was the country's largest private employer with more than 1,600 employees, introduced a productivity-based remuneration system under which the workforce receives a reward equivalent to the percentage of production more than that budgeted (Emperor Mines Ltd., 2001a§). The agreement, although not put into practice until September 4, 2001, was backdated to be effective from July 1, 2001 (the start of the company's fiscal year) and will continue through June 30, 2003 (Emperor Mines Ltd., 2001a). Output during the first month of the agreement exceeded the budgeted target by 5.6%, and this was paid out to the employees as a bonus. Additionally, Emperor Mines repaid employees the 20% of their pay that had been deferred from September through November 2000 as part of measures taken to ensure sufficient working capital to maintain production during the period of difficult operating conditions (Mining Journal, 2001).

In October, Emperor Mines restarted exploration drilling at its Tavua Basin and reconnaissance mapping and rock chip sampling at its Tuvatu properties northeast of Nadi on Viti Levu Island. In November, Burdekin Pacific Ltd. announced plans to reopen its Mount Kasi Mine, 40 km west of Savusavu on Vanua Island. The mine was placed on care and maintenance in 1998, but Burdekin Pacific had been planning to bring it back into production in late 2000 prior to its forced deferment caused by the May 2000 coup attempt and to spin off the project into a new company to be called Audesso Mining Ltd. (Resource Information Unit, 2002, p. 6).

## References Cited

- Emperor Mines Ltd., 2001a, Finalization of negotiation of new productivity based pay agreement: Douglas, United Kingdom, Emperor Mines Ltd. press release, September 27, 2 p.
- Emperor Mines Ltd., 2001b, Quarterly report: Douglas, United Kingdom, Emperor Mines Ltd., September, 10 p.
- Emperor Mines Ltd., 2002, Quarterly report: Douglas, United Kingdom, Emperor Mines Ltd., December, 10 p.
- Gold Gazette, 2002, Vatukoula steeped in history: Gold Gazette, v. 5, no. 46, April, p. 36.
- Mining Journal, 2001, Industry in action—Pay agreement for Emperor: Mining

<sup>1</sup>References that include a section twist (§) are found in the Internet References Cited section.

Journal, v. 337, no. 8655, October 12, p. 284.  
Resource Information Unit, 2002, Register of Indo-Pacific mining 2002:  
Resource Information Unit, 260 p.

### **Internet References Cited**

Asian Development Bank, 2002, Asian development outlook 2002—Fiji Islands, accessed May 21, 2002, at URL <http://www.adb.org/Documents/Books/ADO/2002/FIJ.asp>.  
Emperor Mines Ltd., 2001a, Gold mining in Fiji, accessed January 9, 2002, at URL <http://www.com.emperor.com.au/>.  
Emperor Mines Ltd., 2001b, Quarterly report March 2001, accessed March 20, 2002, at URL <http://www.emperor.com.au/QtlyAnnualReport/quarterMarch01/overview.htm>.  
Emperor Mines Ltd., 2001c, Quarterly report June 2001, accessed March 20, 2002, at URL <http://www.emperor.com.au/QtlyAnnualReport/quarterJune01/overview.htm>.  
Fiji Industries Ltd., [undated], Fiji industry—Fiji Industries Ltd., accessed May

22, 2002, at URL [http://www.fijianholdings.com.fj/subsidiary/fiji\\_industry/index.shtml](http://www.fijianholdings.com.fj/subsidiary/fiji_industry/index.shtml).  
Fowler, John, [undated], Fiji—The warrior archipelago—Fiji geography, accessed May 20, 2002, at URL <http://www.tribesite.com/articles/fiji.htm>.  
U.S. Department of State, 2001, Fiji, Background Note, accessed May 28, 2002, at URL <http://www.state.gov/r/pa/ei/bgn/1834.htm>.

### **Major Source of Information**

Mineral Resources Department  
Private Mail Bag, GPO  
Suva, Fiji  
(Street address: Mead Road, Nabua, Suva)  
Telephone: +679 381 611  
Fax: +679 370 039  
E-mail: [webmaster@mrd.gov.fj](mailto:webmaster@mrd.gov.fj)

TABLE 1  
 FIJI: PRODUCTION OF MINERAL COMMODITIES 1/

(Metric tons unless otherwise specified)

Commodity 2/	1997	1998	1999	2000	2001
Cement, hydraulic e/	95,800 3/	90,000	95,000	95,000	95,000
Gold, mine output, Au content kilograms	4,671	3,690 e/	4,428	3,842	3,858
Silver, mine output, Ag content do.	2,594	1,780 e/	2,129	1,475	-- e/

e/ Estimated. -- Zero.

1/ Table includes data available through July 25, 2002.

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

3/ Reported figure.