THE MINERAL INDUSTRY OF

THE SOLOMON ISLANDS

By Travis Q. Lyday

The economy of the Solomon Islands, which is an archipelago in the southwest Pacific Ocean about 1,900 kilometers (km) northeast of Australia, was small and agrarian, with the majority of the population dependant upon agricultural, fishing, or forestry endeavors for sustenance. Most manufactured goods and petroleum products were imported. The mineral resources of the Solomons included bauxite, gold-silver, lead-zinc, nickel, and phosphate (U.S. Central Intelligence Agency, 1999, World factbook—Solomon Islands, accessed July 12, 2000, at URL http://www.odci.gov/cia/publications/factbook/geos/bp.html). Mineral production during 1999, however, included only gold, with minor amounts of associated silver, and small quantities of clays, crushed stone, and sand and gravel.

Gold and silver were mined by Australia's Ross Mining NL's subsidiary Gold Ridge Mining Ltd. at the Gold Ridge open cut, the first large-scale mine ever to be developed in the country. First gold was poured in August 1998, and the mine, which is 26 km east-southeast of the capital city of Honiara on Guadalcanal Island, was officially opened the following month. Initial production of gold at Gold Ridge was to be 3,100 kilograms per year (kg/yr) from a 2-million-metric-ton-per-year (Mt/yr) carbon-in-leach processing plant, with the potential to expand production to 4,700 kg/yr of gold. Mine life was expected to be about 13 years, reducing to 10 years as a full upgrade progressed (Resource Information Unit, 2000, p. 76). The doré produced from Gold Ridge was refined by Metal Refining Operations in Port Moresby, Papua New Guinea (South Sea Digest, 1998).

During the first quarter, Ross Mining approved upgrading the treatment plant to 3.4 Mt/yr at a cost of about \$6 million for another ball mill, three new leach tanks, and other material handling items, plus \$3 million for extra power-generation capacity. The increased throughput rate was estimated to increase gold production to approximately 5,000 kg/yr. Pending full commitment following appropriate Government approvals, the target date for commissioning of the plant was January 2000 (Ross Mining NL, 1999, Quarterly report for the period ending 31 March 1999, accessed July 12, 2000, at URL http://www.rossmining.com.au/March99quarter.html).

Although detailed engineering design for upgrading the treatment plant by 40% was progressing well, the ordering of long lead-time items was placed on hold in the second quarter owing to civil unrest caused by ethnic tensions between the peoples of the islands of Guadalcanal and Malaita (Ross Mining NL, 1999, Quarterly report for the period ending 30 June 1999, accessed at URL http://www.rossmining.com.au/June99quarter. html).

An armed clash occurred in early August between police and

Guadalcanal Revolutionary Army rebels, which were mostly disenchanted and unemployed citizens of Guadalcanal, on the Gold Ridge mining lease, although the mine was not a target in the conflict and operations were not affected (Mining Journal, 1999). The central Government, the provincial government, and the local communities continued to support Ross Mining (Ross Mining NL, 1999, Quarterly report for the period ending 30 September 1999, accessed July 12, 2000, at URL http://www.rossmining.com.au/Sep99quarter.html).

In the third quarter, Ross Mining decided to increase plant throughput in measured steps. The first step was to make modifications and improvements to the conveying and slurry handling systems that would increase mill throughput by 50% to 3 Mt/yr at a cost of about \$900,000 (Ross Mining NL, 1999, Quarterly report for the period ending 30 September 1999, accessed July 12, 2000, at URL http://www.rossmining.com.au/ Sep99quarter.html). Although the work was scheduled to be completed during the first quarter of 2000, the mill throughput rate was increased by 45% from the original design to 2.9 Mt/yr by the end of December 1999 (Ross Mining NL, 1999, Quarterly report for the period ending 31 December 1999, accessed July 12, 2000, at URL http://www.rossmining.com.au/ Dec99quarter.html).

After several years of litigation, the last remaining court case against Ross Mining's Gold Ridge operation appeared to have collapsed following the withdrawal of the principal plaintiff, a paramount chief, who had made a series of environmental allegations seeking closure of the mine (South Sea Digest, 1999).

References Cited

Mining Journal, 1999, Industry in action—Gun battle at Gold Ridge: Mining Journal, v. 333, no. 8545, August 20, p. 143.

Resource Information Unit 2000, Register of Pacific mining 2000: Resource

Resource Information Unit, 2000, Register of Pacific mining 2000: Resource Information Unit, 144 p.

South Sea Digest, 1998, Ross Mining tipped to expand: South Sea Digest, v. 18, no. 15, October 9, p. 4.

———1999, Ross Mining NL: South Sea Digest, v. 19, no. 12, August 27, p. 2.

Major Source of Information

Director, Ministry of Lands, Energy & Natural Resources Box G24

Honiara, Solomon Islands Telephone: +677 2 2944

Fax: +677 1 1245

The Geological Survey is part of the Ministry of Lands, Energy & Natural Resources.

${\bf TABLE~1}\\ {\bf SOLOMON~ISLANDS:~PRODUCTION~OF~MINERAL~COMMODITIES~1/}$

(Kilograms)

Commodity 2/	1995	1996	1997	1998 r/	1999
Gold, mine output, Au content	25	25	25	1,565	3,456
Silver, mine output, Ag content	10	10	10	1,714	2,138

r/ Revised.

^{1/} Table includes data available through July 13, 2000.

^{2/} In addition to the commodities listed, crude construction materials (common clays, sand and gravel, and stone) were produced, but output was not reported quantitatively, and available general information was inadequate to make reliable estimates of output levels.