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Gibraltar
1991 Ann. Rpt.

MOLYBDENUM PRODUCTION AND RESERVE STATISTICS

MINE	% Ownership	Year	PRODUCTION				RESERVES ⁽¹⁾⁽²⁾	
			Production (thousand lbs.) ⁽¹⁾	Millfeed (million tons)	Grade (%)	Recovery (%)	Ore (million tons)	Grade (%)
Endako Mine	100%	1991	14,289	10.5	0.082	82.3	142.3	0.092
		1990	14,312	10.7	0.080	83.0	147.4	0.083
		1989	12,859	10.2	0.076	82.9	153.8	0.088
Gibraltar Mine ⁽³⁾	68.1%	1991	808	*	*	*	165.8	0.009
		1990	1,463	*	*	*	180.4	0.009
		1989	1,196	*	*	*	184.1	0.009
Total		1991	15,097	*	*	*	*	*
		1990	15,775	*	*	*	*	*
		1989	14,055	*	*	*	*	*
The Corporation's Share		1991	14,840	*	*	*	*	*
		1990	15,309	*	*	*	*	*
		1989	13,674	*	*	*	*	*

(1) Figures represent 100% of results of mines.

(2) The Corporation's share of molybdenum contained in proven and probable reserves of operating mines, at year-end (thousands of pounds):
1991 - 253,700; 1990 - 267,300; 1989 - 293,700.

(3) Molybdenum is a by-product at the Gibraltar Mine.

The **Gibraltar Mine** (68.1% owned) in British Columbia produces copper and molybdenum in concentrate as well as refined copper from dump leaching and electrowinning. In 1992 it celebrates its 20th year in production.

Production of copper in concentrate was at the same level as in 1990. Higher throughput and head grade were offset by lower recoveries as a result of a higher proportion of oxide

ore in the millfeed. Production of refined copper from leaching waste dumps, at 7.3 million lbs., was lower due to lower grade solutions. Trenching of dumps to evaluate solution percolation problems and testing of methods are being undertaken to improve productivity. Molybdenum production was sharply reduced because a combination of low prices and low head grades made production uneconomic for a period.

The introduction during the year of larger mining equipment, namely a 40 cubic-yard shovel and six 240-ton trucks, will have a significant long-term beneficial impact on future mining costs.

As part of environmental reclamation permitting required by the Government of British Columbia, a comprehensive closure plan was submitted to the Ministry of the Environment.

COPPER PRODUCTION AND RESERVE STATISTICS

MINE	% Ownership	PRODUCTION					RESERVES ⁽¹⁾⁽²⁾			
		Year	Production (thousand lbs. yr)	Millfeed (million tons)	Grade (%)	Recovery (%)	Cash production cost (\$/lb. yr)	Total production cost (\$/lb. yr)	Ore (million tons)	Grade (%)
Equity Silver Mine ⁽³⁾	58.8%		10.870		0.22		*		2.5	
			13,786		0.28		*		6.5	
			13,921		0.29		*		9.0	
Gibraltar Mine ⁽⁴⁾	68.1%		70,736		0.31		\$0.87		165.8	
			72,609		0.30		\$0.85		180.4	
			70,475		0.29		\$0.81		184.1	
Marcopper Mine ⁽⁵⁾	39.9%		*		*	*		198.0		
Total			81,606		*		*	*	*	
			86,395		*		*	*	*	
			84,396		*		*	*	*	
The Corporation's Share			54,596		*		*	*	*	
			57,588		*		*	*	*	
			56,213		*		*	*	*	

(1) Figures represent 100% of results of mines.

(2) The Corporation's share of copper contained in proven and probable reserves of operating mines, at year-end (thousands of pounds): 1991 — 1,404,000; 1990 — 800,000; 1989 — 824,800.

(3) Copper is a by-product at the Equity Silver Mine.

(4) Molybdenum is a by-product at the Gibraltar Mine. Cash and total production costs per ounce include smelter charges but are net of by-product credits.

(5) Commercial production from the San Antonio deposit is expected to commence in the second quarter of 1992. The deposit also contains minor amounts of gold and silver mineralization. The reserves related to these by-products, however, have not been included in the gold and silver production and reserves statistics tables.