



Highland Valley Copper

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G E N E R A L F A C T S H E E T

1.0 SCOPE OF OPERATION

Highland Valley Copper is one of the larger copper-mining operations in the world, ranking third on the basis of tonnage milled. The ore bodies average 0.4% copper, low grade by world comparisons.

The mine life is estimated to be in the order of thirteen years.

2.0 OWNERSHIP

Highland Valley Copper is a partnership between three major Canadian mining companies.

Their participation in the cash flow is:

50%	Cominco Ltd.
33.6%	Rio Algom Limited
13.9%	Teck Corporation (including 2.5% from Highmont)
2.5%	Highmont Mining Company (excluding Teck's 2.5%)

3.0 PRODUCTION STATISTICS

3.1 TONNAGE MINED

Approximately 260,000 metric tonnes per day, of which 124,000 tonnes is ore and the balance overburden and waste rock. Mining activity is carried out using 4 drills, 9 shovels, 2 front end loaders, 33 haulage trucks supported by 5 large water/sand trucks, 8 road graders, 10 track dozers, and 3 rubber-tired dozers.

3.2 TONNES MILLED

124,000 metric tonnes per day are treated in the Highland Mill. This results in an annual total of approximately 45,260,000 metric tonnes.



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GENERAL FACT SHEET

3.3 ANNUAL CONCENTRATE PRODUCTION

397,779 dry metric tonnes of concentrate containing 355,000,000 lbs. of copper and minor precious metals, and

- 3,095 dry metric tonnes of concentrate containing 3,600,000 lbs. of molybdenum.

4.0 SIGNIFICANT OPERATIONAL INNOVATIONS

4.1 IN-PIT CRUSHING AND CONVEYING SYSTEMS

In 1987, Highland Valley Copper completed the installation of its two semi-mobile in-pit crushers and two-line conveyor system. Since that time the crusher has been moved deeper into the pit to facilitate mining operations.

The conveyor system consists of five main overland conveyors. The first conveyor, 0.86 kms long, fed by an in-pit crusher near the bottom of the Valley pit, lifts the ore 108 m and feeds a second conveyor 1.09 kms long which in turn discharges to an intermediate surge pile. The other crusher located near the lower rim of the Valley pit feeds an 0.85 km long conveyor discharging to the same surge pile. The third flight of conveyors consisting of two parallel 1.25 km conveyors lifts the ore 121 m from the reclaim tunnels under the surge pile to conveyors feeding the Highland mill. Each conveyor is designed to carry 6,000 tonnes per hour.

The entire system is electronically operated by a fibre optic data highway which can also detect trouble spots such as overheating of motors, metal pieces in the ore and conveyor-belt rips.

This new system is currently one of the highest-capacity, hard rock, in-pit crushing and conveying systems in existence.

4.2 TAILINGS DISPOSAL

The tailings pond is situated on the valley floor, west of the Valley pit. Two tailings dams approximately 10 kms apart by the pond centreline contain the tailings.

Three 7.3 km pipelines feed the tailings pond. The tailings pond is a closed system with 140,000 litres/minute of water recycled to the Highland milling complex.

4.3 RECLAMATION

Land reclamation is being carried out on areas of the property where no further activities are planned. As of December 1994, approximately 270 hectares of tailings ponds and dams have been revegetated in the Highmont and Bethlehem areas. Approximately 470 hectares of waste dumps have been revegetated as well as 330 hectares of roads, plant sites, and rights-of way.

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4.3 RECLAMATION (CON'T)

Care of the land is an important aspect of the mining operation. High standards are part of the environmental policy.

Water management plays an important role both in the operation and in the decommissioning phase. Mine personnel work closely with regulatory agencies to ensure that requirements are met.

5.0 MARKETING

Highland Valley Copper has long-term contracts for over 90% of its copper-concentrate production, most of which involves annual or biennial re-negotiation of smelter terms to reflect the current market. The principal market is Japan, but production is also sold to other Far Eastern countries and Europe. Molybdenum production is sold as concentrate to roasters and trading companies worldwide.

6.0 FINANCIAL STATISTICS

6.1 REVENUE

Approximately \$400 million per annum.

6.2 WAGES

Including the costs of fringe benefits, the cost of labour is approximately \$85,000,000 per year, or roughly 38% of total operating costs.

The average wage of bargaining-unit employees is \$22.31 per hour, or \$46,000 per year. Including benefit costs, this figure rises to \$64,000 per year.

6.3 ENERGY COSTS

Including the cost of diesel fuel/gasoline, natural gas and electricity, the cost of energy is approximately \$40,000,000 per year, or 18% of the operating costs. The electricity costs alone are approximately \$33 million, making Highland Valley Copper the third largest customer of B.C. Hydro.

7.0 PERSONNEL

The total employment is about 1,100. Except for nine people in Vancouver, all employees are located at the Logan Lake mine site.