

Name: Lake Zone orebody (Valley Copper)

802052

Location: NTS Area 92 I/6
Lat. 50° 29' 15" Long. 121° 02' 35"
Mining Division: Kamloops

Owner: Valley Copper Mines Ltd. (80% of orebody)
Bethlehem Copper Corp. (20% of orebody)

Description: copper-molybdenum deposit in porphyritic granodiorites/
copper mineralization associated with areas of abundant
sericitic alteration and quartz veinlets

Reserves: (dependent on cutoff grade used)
800 million tons avg. .46% Cu, 1 billion tons
avg. .42% Cu (Bethlehem Copper Corp. A.R., 1978)
no mention of grade of molybdenum

Development:

- 1956-64 - Bethsarde Copper Mines Ltd. acquire some claims covering deposit, other claims were held by Bethlehem Copper
- 1964 - Valley Copper Mines Ltd. incorporated to amalgamate the holdings of a number of companies and individuals, Cominco becomes operator and could earn a greater interest in return for exploration expenditures
- 1967-70 - geochemical and geophysical surveys, bulk sampling, decline, drilling (percussion, u/g, dd) 121 holes, 102,526'
- 1970-79 - continued discussions between Bethlehem and Valley Copper to bring deposit into production - see Bethlehem Copper Corp. A.R. 1978 for various proposals of joint development proposed over the years, feasibility studies

Potential
Operation:

- open pit
- 56,000 - 60,000 tpd mill
- 50 year life
- see Bethlehem Copper Corp. A.R. 1978 for various proposals of joint development
- cost of putting property into production between \$400-\$500 million (Northern Miner, June 28/79)

Impediments:

- agreement between Valley Copper and Bethlehem Copper
- market price of copper; Rothman (Pres. of Valley Copper: " ... that copper prices in the 90¢ to \$1.00 range are needed to make the project viable ..." (Northern Miner, June 14/79)
- Cominco corporate policy
- Cominco has a wait-and-see attitude for the proposed changes of Bill C-37/changes are the result of the federal budget in the fall of 1978 - faster write-off of costs for new mining ventures, an extension of earned depletion provisions to a mining company's social assets such as housing, and the indefinite extension of the federal investment tax credit together with increases in investment tax credit rates/changes died on the order paper/legislating into law these proposals would have to be effected before Cominco is prepared to make any financial commitments/Conservatives promised to go slow with changes. (Northern Miner, April 19/79)

Comments:

- Cominco indicates a production decision is to be made within 5 years (Globe and Mail, June 21/79)
- separate development of orebody impractical
- overburden is 100' thick over much of the deposit but at the NE edge 500'
- Valley Copper Mines Ltd. - Cominco has an 81.35% interest
 - Bethlehem has a 5.1% interest
- Bethlehem Copper Corp. - Cominco has a 38% interest