1973

010081

TECHNICAL INFORMATION

RELATING TO THE CURRENT

OPERATIONS OF

BETHLEHEM COPPER CORPORATION LTD.

HIGHLAND VALLEY B.C.

March 29, 1974

CONTENTS

A. GENERAL LOCATION

- on the north side of the Highland Valley approximately 20 miles S 40° E of Ashcroft and 30 miles S 67° W of Kamloops
- Kamloops Mining Division
- Latitude 50° 30'
- Longitude 121° 00'
- N.T.S. Map Nos. 92 I / 6E, 7W, 10W, 11E
- Elevation A.S.L. - 4,830' at plant site

B. DESCRIPTION OF THE CLAIMS ON WHICH MINING OCCURS:-

Mineral Claims: The three deposits currently being mined are located on portions of the following Crown-granted mineral claims (see accompanying drawings):-

1)	Huestis Pit	JC 46	L.5497
		JC 48	L.5498
		SJ 45	L.5501
		SJ 109 Fr.	L.5502
		SJ 35	L.5510
		SJ 34	L.5513
		SJ 20	L.5514
		SJ 18	L.5515
2)	Jersey Pit	SJ 16	L.5507
		SJ 116 Fr.	L.5509
		SJ 18	L.5515
		SJ 15	L.5517
		SJ 102 Fr.	L.5518
		SJ 17	L.5519
3)	Iona Pit	SJ 6	L.5531
		SJ 4	L.5532
		SJ 3	L.5539
		SJ 5	L.5540

C. DESCRIPTION OF THE MINERAL DEPOSITS

1) Huestis Pit

Ore Reserves at December 31, 1973

19,800,000 tons @ 0.46% Cu

Geology of Deposit

The Huestis orebody occurs along the contact between the Bethlehem and Guichon quartz diorites. The majority of the orebody occurs in the Bethlehem quartz diorite with only minor mineralization being in the Guichon quartz diorite to the west and northwest.

This is a true crackle-breccia type porphyry copper deposit where the host rock has been highly fractured and mineralization has been widespread and of fairly even content. The orebody is circular in shape and exhibits the usual peripheral propylitic alteration along with the inner zone of sericite alteration.

Unlike the Iona Zone this deposit has a distinct, though of restricted size, pyrite halo that surrounds the orebody. The main copper mineral is chalcopyrite with lesser amounts of bornite. The majority of the deposit's oxide capping has been removed by glaciation.

2) Jersey Pit

Ore Reserves at December 31, 1973

31,100,000 tons @ 0.46% Cu

Geology of Deposit

The Jersey orebody occurs in three rock types, Bethlehem quartz diorite, Guichon quartz diorite, and breccia. The deposit roughly falls on the irregular contact between the Guichon and Bethlehem quartz diorite.

The deposit is roughly circular and exhibits many features of a typical porphyry copper deposit. It contains a weak pyrite halo, peripheral propylitic alteration and an inner zone of quartz - sericite alteration.

The main copper minerals are chalcopyrite and to a lesser extent bornite. Molybdenite also occurs in minor amounts in the Jersey orebody.

3) Iona Zone

Ore Reserves at December 31, 1973

10,000,000 tons @ 0.50% Cu

Geology of Deposit

The deposit is mostly continued to a northerly trending pear-shaped breccia zone. This is a true breccia pipe deposit, as it exhibits vugs, mushrooms near the surface and narrows with depth, and contains fragments of most major rock types found on the property.

The mineralization mainly consists of bornite and chalcopyrite in varying ratios along with minor amounts of moly and chalcocite. The deposit also contains a very extensive oxide zone which reaches depths of over 200'.

The irregular occurrence of the breccia zone is reflected by the erratic outline of the orebody, which, as previously mentioned is confined mostly to the breccia.

D. Current Production Data

- All figures represent a 1974 average accumulated to March 26, 1974.

Milling Statistics

Wet Tons Milled	-	17,859 tons per day
Dry Tons Milled	-	17,213 " " "
% Cu Heads	-	0.520
% Cu in Concentrates	-	31.21
% Cu in Tails	-	0.076
% Recovery	-	85.48
lbs. Cu produced	-	154,220 per day

Mining Statistics

Mining rate	-	Ore 500,000 tons per month Waste 1,500,000 tons per month Total 2,000,000 tons per month
Source of Ore	-	All current ore production is scheduled from the Huestis Pit.
Source of Waste	-	Huestis - 500,000 tons per month
	-	Jersey - 1,000,000 " " "
	-	Iona - none currently scheduled

E. DRAWINGS

1. Highland Valley:-

   Crown-granted Mineral Claims

   Scale 1" = 200'

   Outlines of current mining areas are shown on plan

2. Topographical Plan

   Scale 1" = 200'