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BRENDA MINES LIMITED

Art Soregaroli
Westmin Resources Limited

Garston Blackwell
Brenda Mines Limited

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BRENDA MINES LIMITED

Stop 1: Viewpoint (north end of pit)

Pit development mimics asymmetric grade distribution of ore in deposit. Core of higher grade ore extends into deepest part of pit. Steep western walls reflect rapid gradation of ore zone as approach border phase of the "Brenda Stock". Eastern side the ore extends to coarser porphyritic phase. Sub-ore grade in porphyritic phase. Extensions of ore zone parallel contact with porphyritic phase to northeast.

Stop 2: Northeast Extension

Surface outcrops of low grade mineralization. Limonite-stained fractures and quartz veins. Malachite where fractures have been broken open. Sulphides can be seen in quartz veins.

Stop 3: Porphyritic Granodiorite

The difference between the porphyritic and speckled phases are subtle. The distinguishing features in the porphyritic phase are:

- a) subhedral to euhedral quartz "eyes",
- b) fewer mafic minerals, and
- c) coarse biotite books.

Stop 4: North Wall

Typical average grade ore. Most ore confined to northeast trending fractures. Crosscutting relation of various stages of veins can be observed. Perhaps some aplite dykes cut by mineralized fractures. Fracture density reflects grade. Alteration envelopes along veins. "Fresh" rock between alteration envelopes.

Stop 5: Pit Bottom (if accessible)

"High grade" core. Note increase in the number of quartz-sulphide veins per unit area. More intense biotite alteration of host rock. Many good examples of crosscutting stages of mineralization.

A.E. Soregaroli

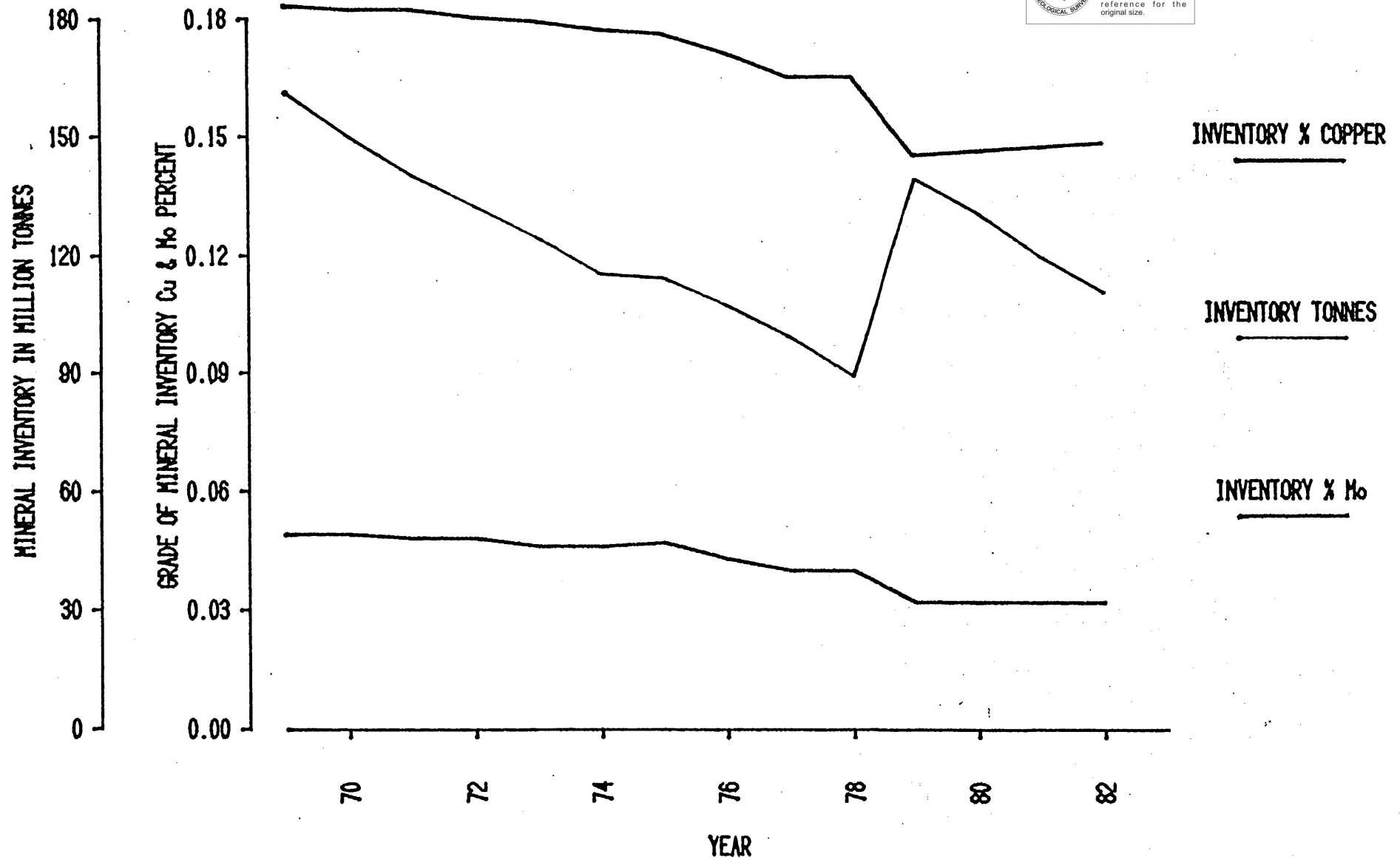
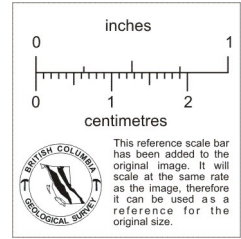
The attached figures summarize the production history of Brenda Mines for the period 1970 through 1982.

Figure 1 provides documentation of the annual mineral inventory of the Brenda Mine's deposit. The graph demonstrates the steady decline in inventory for the period 1970 through 1978, at which time inventory grades were lowered accompanied by a disproportionately large increase in inventory tonnes. Such a relationship reflects the gradational nature of the mineralization.

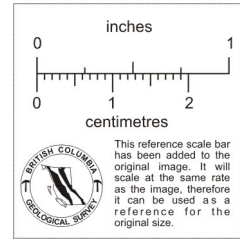
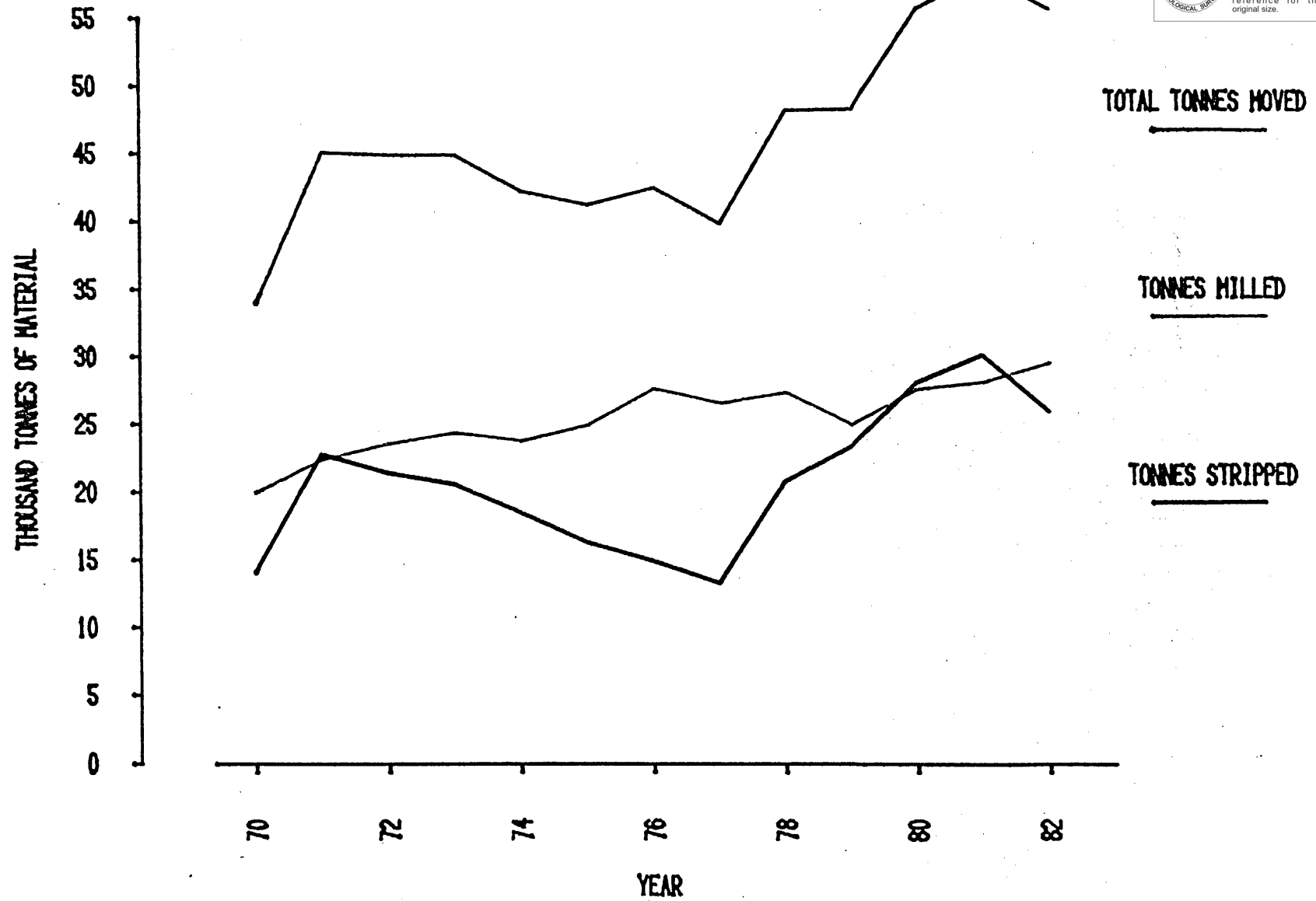
Figure 2 demonstrates a steady increase in daily mill throughput for 20,000 tonnes per day in 1970 to 30,000 tonnes per day in 1982. A steady decline in tonnes waste removed from 1971 - 1977, resulted in expanded waste removal during the ensuing 1978 - 82 period.

Figure 3 documents the steady decline in head grades (Cu and Mo) and clearly shows the extraordinary cost escalation during the same period.

1. BRENDA MINES MINERAL INVENTORY



2. AVERAGE DAILY PRODUCTIVITY

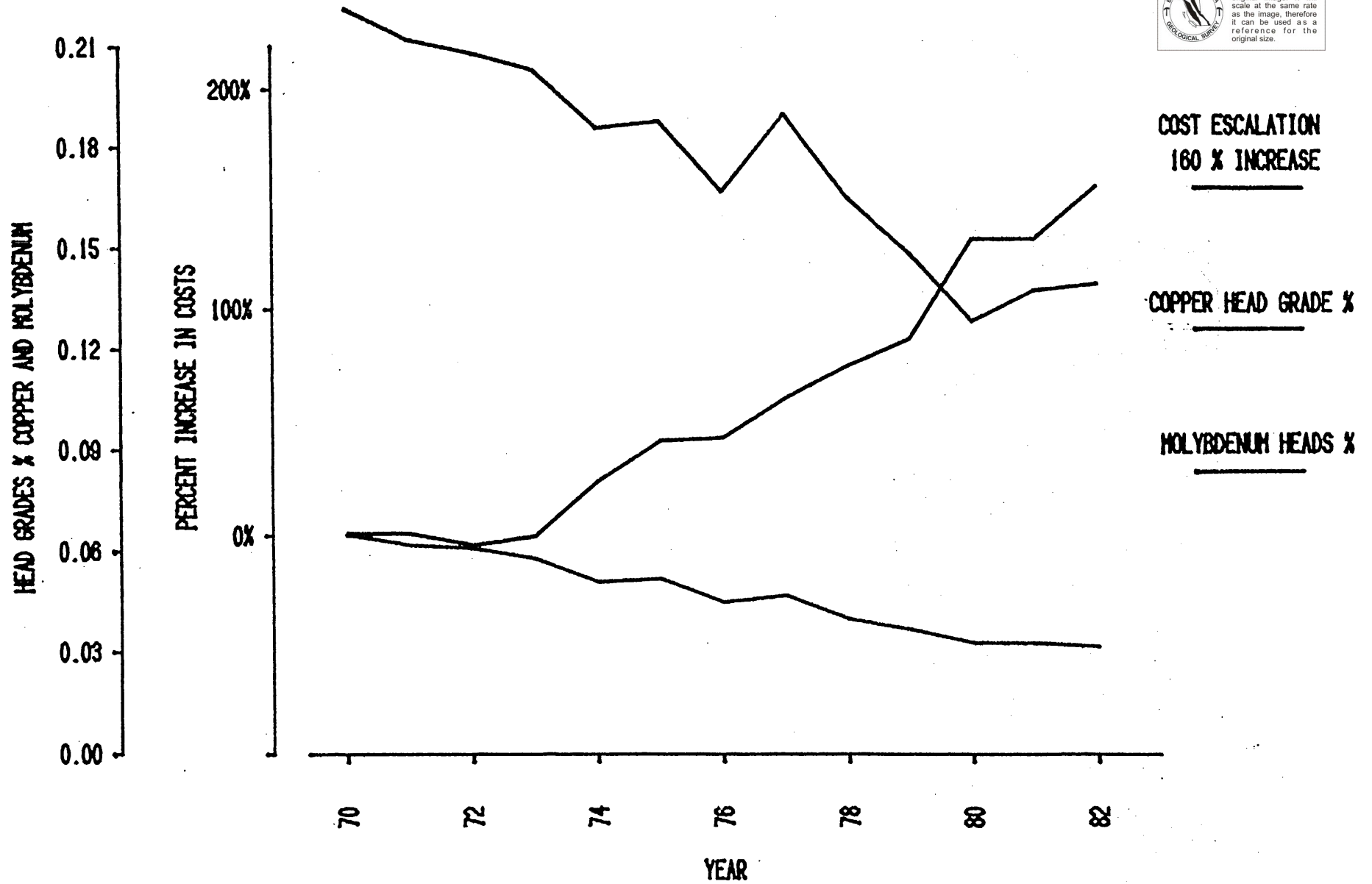
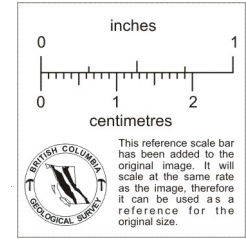


TOTAL TONNES MOVED

TONNES MILLED

TONNES STRIPPED

3. OPERATING COST ONLY ESCALATION AND HEAD GRADES % Cu & Mo



**COST ESCALATION
160 % INCREASE**

COPPER HEAD GRADE %

MOLYBDENUM HEADS %

GEOLOGY & STOPS - BRENDA DEPOSIT



1 overlook

2 ● outcrop with
Cu, Mo
limonite-
malachite
(low grade
extension)

4 ● cross-
cutting
veins

waste
dump

5 ● 'high grade'
alteration
cross-
cutting

3 ● porphyritic
granodiorite

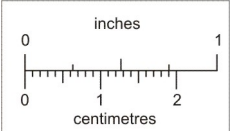
'low grade'

stockpile

water

6 (opt.)
dykes

crusher



This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

