

= Table p 2. letter 16 Nov

Gives magnetite content of mill
tailings and Tailings to pond
as 5.3%

Assume 75% recovery is approx 4 units
per ton of tailings

Assume concentrate at 65% Fe grade
Freight & Loading \$4.80/Ton

Value FOB ship = Texada \$100
= 1645 per unit

1963 product 1,787,000 tons remitted
say 1,600,000 tons, conc.

Freight and Loading \$6.00/Ton

Net value per ton conc = 10.70 - 6.00 = 4.70

" " short ton approx \$4.23

Net value per ton of tailings =

$$\left(\frac{4}{65} \right) (4.23) = 26¢$$

010443

The Hon D M Broth

re Used Craigmont Tailings as Backfill.

The ore at the Craigmont mine contains a considerable amount of iron as the minerals magnetite and specular hematite. In the early phase of the operation the tailings containing this iron were all accumulated in a tailings pond.

The principal value in the ore is copper, mainly in the mineral chalcocite, which is recovered in the flotation concentrate. The tailings from the mill contain the iron minerals. In the early phase of the operation the entire tailings were accumulated in a tailings pond.

The iron content of the ore is subject to O-I-C. 2304. In their studies regarding mining the deeper parts of the ore by underground methods, the Company proposed to use mill tailings for fill and demonstrated that use of the tailings was substantially cheaper than using any other material. The company also demonstrated that it would not then be profitable to separate an iron concentrate of marketable grade from the tailings.

Permission to use tailings for fill underground, ~~was~~ to October first 1964 was granted subject to the company.

(1) continuing research on the problem of iron recovery and (2) supplying information to the Department on the research and on the practice in separating from the rest of the tailings, the sands used for backfill in the mine.

A letter from Craigmont Mines Limited, signed by R. B. Dushie, and dated 16 November 1964, gives the
PTC

information requested

It shows that in 1992, 419 tons of tailings produced, 28,414 tons were used in backfilling underground, and 1,964,009 tons went to the tailings pond.

The report also indicates that recovery of the magnetite is considered uneconomic and that Kaiser Engineering, Montreal, have been engaged to study the economics of treatment, and the value of pelletizing iron concentrates, and that ~~the~~ ^{a copy of the} report of these studies will be submitted when it has been received from Kaiser Engineering.