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Kommer fra ..arkiv Hydro	Ekstern rapport nr	Oversendt fra	Fortrolig pga	Fortrolig fra dato:
Tittel Kolsvik (Bindal) Gold Property				
Forfatter S.O. Fekete		Dato År 01.09 1983	Bedrift	
Kommune Bindal	Fylke Nordland	Bergdistrikt	1: 50 000 kartblad 18252	1: 250 000 kartblad Mosjøen
Fagområde Kjemiske analyser	Dokument type		Forekomster Kolsvik	
Råstoffgruppe Malm/metall	Råstofftype Au			
Sammendrag / innholdsfortegnelse Rapporten er et memorandum som omhandler testresultater fra to prøver tatt henholdsvis fra malmsone C og malmsone Z.				

FALCONBRIDGE

Memorandum

Date: September 1, 1983

To: F.G.T. Pickard ✓

Copies to: CMHJ, LCK, WDH, AMC, HMB, LAW,
F.Nixon (Norway), E.Wigstøl (Kristiansand)

From: S.O. Fekete

Subject: Kolsvik (Bindal) Gold Property

I obtained copies of the Lakefield reports issued over the last couple of years detailing the test results on samples from Zone C and Zone F. Preliminary metallurgical amenability tests were done and reported in Progress Reports No.1 and No.2. Progress Report No.3 deals with procedures to assess ore grades with more reliability.

Based on the results of Progress Reports No.1 and No.2, the following comments can be made on the metallurgy.

1. The composition of the two samples was reported by Lakefield as follows:

	<u>Zone C Sample</u>	<u>Zone F Sample</u>
Composition:		
Au g/ton	39.1	7.77
Ag g/ton	3.3	2.3
As wt %	7.71	10.9
Fe wt %	6.13	9.26
S wt %	3.39	5.05

2. The Lakefield tests indicated that the gold is associated with arsenopyrite but only about 4% in Sample C and 10% in Sample F, was locked and unavailable for cyanide extraction.
3. Standard cyanidation tests showed 94% recovery on Sample C and 80% on Sample F. Cyanide consumption was high, about 3.0 kg/ton, but was significantly reduced with preareation of the pulp.
4. Flotation was also explored, indicating the possibility of producing a virtually pure arsenopyrite concentrate which contained about 90% of the gold in Sample C, and 80% of the gold in Sample F.

Based on the foregoing, the ore appears to be amenable to treatment by either cyanidation or flotation. Considering the head grades, recoveries are moderate, but no insurmountable difficulties are evident.

F.G.T. Pickard
September 1, 1983
Page 2

If the ore reserves and other factors become sufficiently encouraging a detailed metallurgical test program will be needed to determine the most appropriate flowsheet. However, this work should only be undertaken after the reserves are delineated so that proper samples can be obtained for further tests.

S.O. Fekete

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