

FALCONBRIDGE NICKEL MINES LIMITED  
METALLURGICAL LABORATORIES  
THORNHILL, ONTARIO

FALCONBRIDGE METALLURGICAL LABORATORIES

Mineralogical Examination of 4 Samples  
from the Babe Gold Deposit, B.C.

by  
J.E. Muir

September 6, 1978

PROJECT NO.: JO#2468, 302

SAMPLE NO. : L#78-307

KEYWORDS : Exploration, Rhyolite

COPIES TO: HTB/PGT, RAB, AMC/JCC/WDH/GPM/WBGW, JJMcD/BDS, RB/Min. File,  
S.N. Charteris

# FALCONBRIDGE METALLURGICAL LABORATORIES

MINERALOGICAL REPORT NO. 1089 -

TO: S.N. Charteris PROJECT No. JO#2468-780906  
(302)  
FROM: J.E. Muir SAMPLE No. L#78-307  
DATE: September 6, 1978  
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DISTRIBUTION: HTB/PGT, RAB, AMC/JCC/WDH/GPM/WBGW, JMcD/BDS, RB/Min. File

## DESCRIPTION OF SAMPLE: INFORMATION REQUESTED

Four samples of diamond drill core labelled 78-2 @ 51', 173', 280' and 78-3 @ 384' from the Babe Gold deposit located on Graham Island in the Queen Charlotte Islands were received on July 17th for a reconnaissance examination.

PROCEDURES:  Spectrochem. Analysis  Chemical Analysis  X.R.D.  
 Optical Microscopy  Electron Probe

## RESULTS:

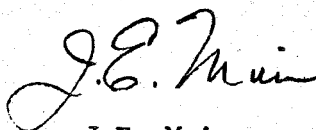
Pol-thin sections PTS-5321, -5322, -5323 and -5324 were prepared from portions of the 4 samples and briefly examined. The 3 samples of "rhyolite breccia" from DDH 78-2 consist of variable proportions of subangular to rounded fragments of the following:

1. Silicified rhyolite porphyry;
2. Chloritized porphyritic andesite;
3. Equigranular silicified rhyolite;
4. Coarse quartz grains;
5. Brownish, devitrified basalt(?).

The matrix to the fragments is invariably finer grained, occasionally tuffaceous and consists predominantly of quartz ( $\pm$  chlorite, sericite). Minor to trace amounts of pyrite and marcasite are disseminated throughout the fragments and the matrix. The habit of the pyrite/marcasite grains varies from euhedral to spheroidal to acicular. These grains have a maximum grain size of  $\sim 0.10$  mm and average  $\sim 0.01-0.02$  mm. Due to the intense silicification, it is not possible to determine with a high degree of certainty whether the matrix material has been derived through fragment abrasion or from another source. However, the tuffaceous nature of the matrix in the sample from 173' suggests that this particular sample is most likely a pyroclastic.

The sample from DDH 78-3 consists of chalcedonic quartz penetrating a highly silicified, sericite-bearing porphyritic rhyolite.

Assays are given in Table I attached, together with the corresponding section assays as reported by Consolidated Cinola Mines Ltd.



J.E. Muir

JEM/cat  
Attach.

TABLE I: Assays (troy oz/ton)

<u>Sample</u>	<u>FML</u>		<u>Consolidated Cinola</u>
	<u>Au</u>	<u>Ag</u>	<u>Au</u>
78-2 @ 51'	0.017	0.040	0.06/400 ft
@ 173'	0.030	0.053	0.06/400 ft
@ 280'	0.031	0.068	0.10/153 ft
78-3 @ 384'	0.023	0.098	Not Reported

Note: FML assays are averages of 2 assay beads for each sample.