

Box 11

103-G-4



FALCONBRIDGE METALLURGICAL LABORATORIES

Mineralogical Examination of a
Sample of Rhyolite Breccia from
the Mickle Property, Queen Charlotte
Islands, B.C.

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MICKLE PROPERTY Mineralogy No. 1138 Mineralogical 103-G-4
Examination of a Sample of Rhyolite Breccia from Q.E.I.
the Mickle Property. J. Muir Feb. 14, 1980.
B.C.

MR#1138

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FALCONBRIDGE METALLURGICAL LABORATORIES

Mineralogical Examination of a
Sample of Rhyolite Breccia from
the Mickle Property, Queen Charlotte
Islands, B.C.

by
J.E. Muir
February 14, 1980

KEYWORDS: Gold, Silver, Arsenic, Cinola

COPIES TO: AMC/WH/JCC/SAC, RAB, RB/Min

PROJECT: 302

FALCONBRIDGE METALLURGICAL LABORATORIES

MINERALOGICAL REPORT #1138

TO: J.J. McDougall

PROJECT No. 302-800214
(JO#2656)

FROM: J.E. Muir

SAMPLE No. L#80-105

DATE: February 14, 1980

SUBJECT: Mineralogical Examination of a Sample of Rhyolite Breccia from the Mickle Property, Queen Charlotte Islands, B.C.

KEYWORDS: Gold, Silver, Arsenic, Cinola

DISTRIBUTION: AMC/WDH/JCC/SNC, RAB, RB/Min File

DESCRIPTION OF SAMPLE: INFORMATION REQUESTED

A sample of "opalized rhyolite breccia" from the Mickle property was received on Feb. 11th for examination. Of particular interest was the presence of any visible (i.e. microscopically) gold and how this sample compares petrographically with samples previously examined and described from the Cinola (= Babe Gold) deposit (see MR#1089, Sept. 5, 1978).

PROCEDURES:

Spectrochem. Analysis

Chemical Analysis

X.R.D.

Optical Microscopy

Electron Probe

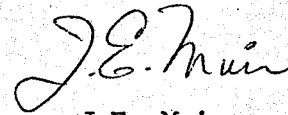
PTS5596

RESULTS:

In pol-thin section this rhyolite breccia is observed to consist of angular fragments of fine grained rhyolite (essentially microcrystalline quartz, sericite and clay minerals) entrained within a medium to coarse grained pegmatoid-like quartz ground mass. Euhedral pyrite (\pm marcasite) and arsenopyrite grains are abundant with chalcocite/covellite and tetrahedrite found only rarely. Sulphides/arsenides are particularly, but not exclusively, concentrated within the rhyolite fragments. Although not identical to rhyolite breccia samples previously examined from the Cinola property, this sample is however, somewhat comparable to the sample from Cinola's DDH 78-3 @ 384'. The most striking difference being,

of course, the presence of considerable arsenopyrite in the Mickle sample. A careful microscopic examination of the pol-thin section failed to reveal any discreet Au-bearing minerals. A qualitative spectrographic analysis (see Table I attached) indicates the presence of significant As, Ag and perhaps Mo contents.

JEM:dek
Attch.



J.E. Muir

Table I

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QUALITATIVE SPECTROGRAPHIC ANALYSIS

DISTRIBUTION: _____ REPORT No. _____

ANALYTICAL METHOD: _____

REQUESTED BY: _____ DATE: Feb. 12/80

RECEIVED FROM: _____ CHARGE: J0#2656

SAMPLE No.: L#80-105 No. of SAMPLES: 1

SAMPLE DESCRIPTION: Mickle Property, B.C.

10	— 100%	Si
3	— 30%	
1	— 10%	Fe, Al
0.3	— 3%	Mg
0.1	— 1%	Ti
0.03	— 0.3%	Co, As
0.01	— 0.1%	Ca, Cr, Ni
0.003	— 0.03%	V, Mo
0.001	— 0.01%	Mn, Cu
0.0003	— 0.003%	
0.0001	— 0.001%	Ba, Ag
< 0.0003%		
I		K, Sr, Zr
S		

I = Interference prevents positive identification.

S = Strong spectral lines, unable to estimate amount.

Unless specified above, the following were not detected at the approx. ppm
 lower limits of 0.5 Cu, Ag; 1 Mn; 5 Mg, Cr; 10 Ba, Be, Bi, Ca, Co, Ni, V;
 25 Ge, Fe, Pb, Mo, Si, Sr, Sn, Ti, Zr, Tl, Pd; 50 Al, Sb, B, Cd, Ga, In, Li, Zn;
 100 As, Au, Na; 200 Rh, Re, Ir, Pt, Ru, Sc; 300 Te, Os; 1000 K, U, Th; 2000 P.