

CORPORATION FALCONBRIDGE COPPER

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MEMORANDUM

DATE: February 5, 1986
À TO: A. J. Davidson
COPIES À COPIES TO: D. Patterson
DE FROM: D. V. Lefebure
SUJET SUBJECT: Evaluation of Patterson Lake Property, Vancouver Island, 92F/7W + 92F/6E

file

Introduction

On November 9, 1985 Alex Davidson and I visited the Patterson Lake Property with the three Port Alberni prospectors who own it. During the Property examination the showings on the eastern half of the Property were examined and sampled.

Target

Precious metals in quartz veins and altered volcanic wallrock.

Location

This Property is located on Vancouver Island in the Alberni Mining Division, approximately 15km northwest of Port Alberni. The claims extending along the northeast side of Great Central Lake and are easily accessible by paved and gravel roads. Strathcona Provincial Park adjoins the Property on the northwest.

Ownership

The claims are owned by four prospectors from Port Alberni. We have dealt with:

Doug Patterson
2886 6th Avenue
Port Alberni, B. C.
V9Y 2H3

and

Herb McMaster
Port Alberni, B. C.
723-7027

The property encompasses the following claims (see Figure 1):

<u>Name</u>	<u>Record No.</u>	<u>Units</u>
Paterson	1993(3)	20
Paterson 1	2000(3)	15
Paterson Lake 3	2207(4)	8
Paterson Lake 4	2208(4)	8
Paterson Lake 6	2209(4)	20
Central 1	2319(7)	15
Central 2	2320(7)	15
Central 3	2321(7)	16
Central 4	2322(7)	18
Central 5	2323(7)	18
Central 6	2462(12)	6
Central 7	2463(12)	6
Ash #1	2552(7)	18
Ash #2	2553(5)	18

Previous Work

Exploration on the Property has been limited to trenching and adits on various showings. No assessment reports have been filed from this area. The current owners have been blasting and digging on some of the known quartz veins and shear zones to find more mineralization.

Geology

The area is underlain by Karmutsen basalts, Island intrusions and Nanaimo sediments (Figure 2) which are cut by NE-, NW- and E-trending faults. Paul Wilton, B.C.M.E.M.P.R. district geologist, has identified a feldspar porphyry dyke on the claims of possible Tertiary age which may be related to the precious metal mineralization.

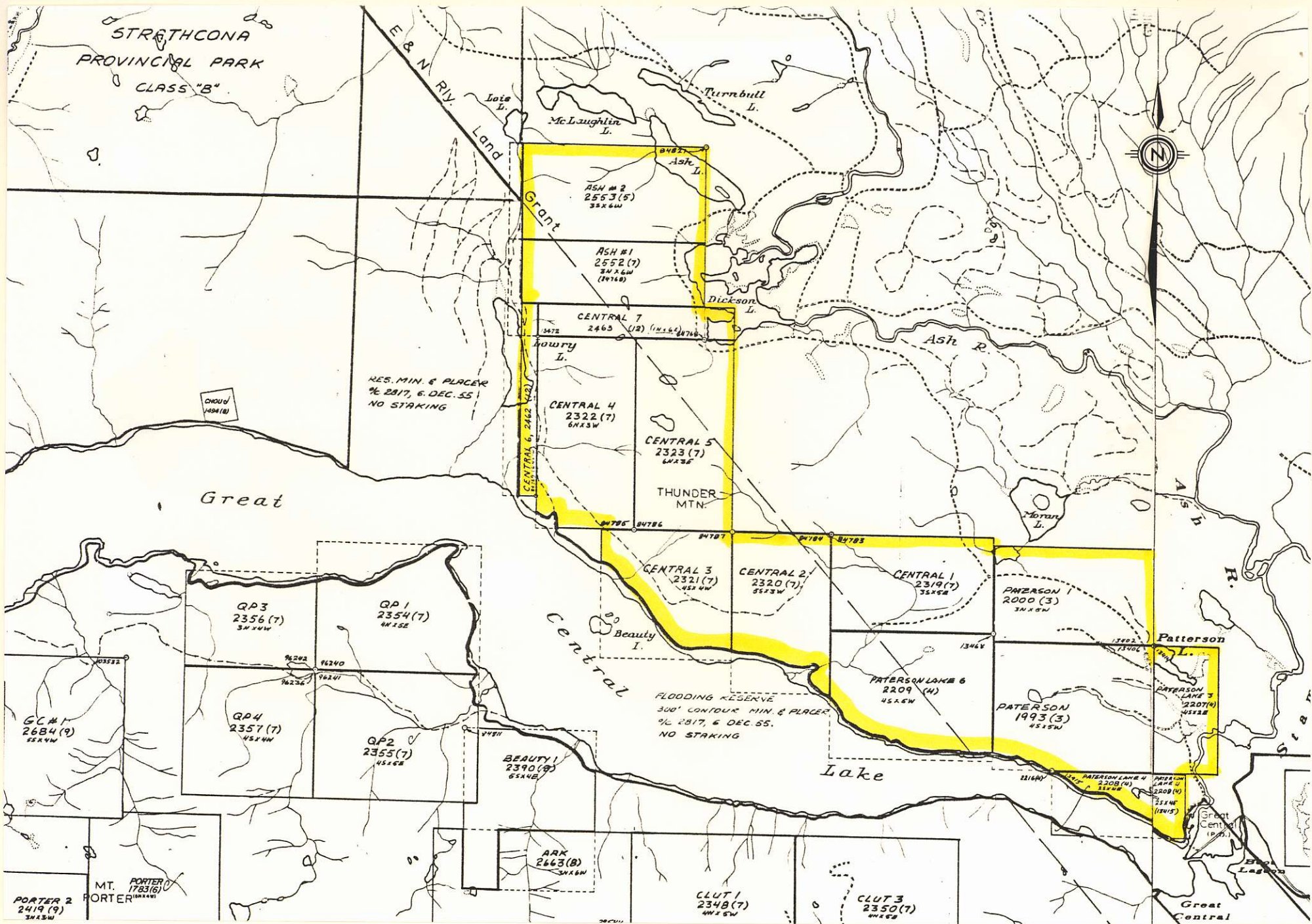
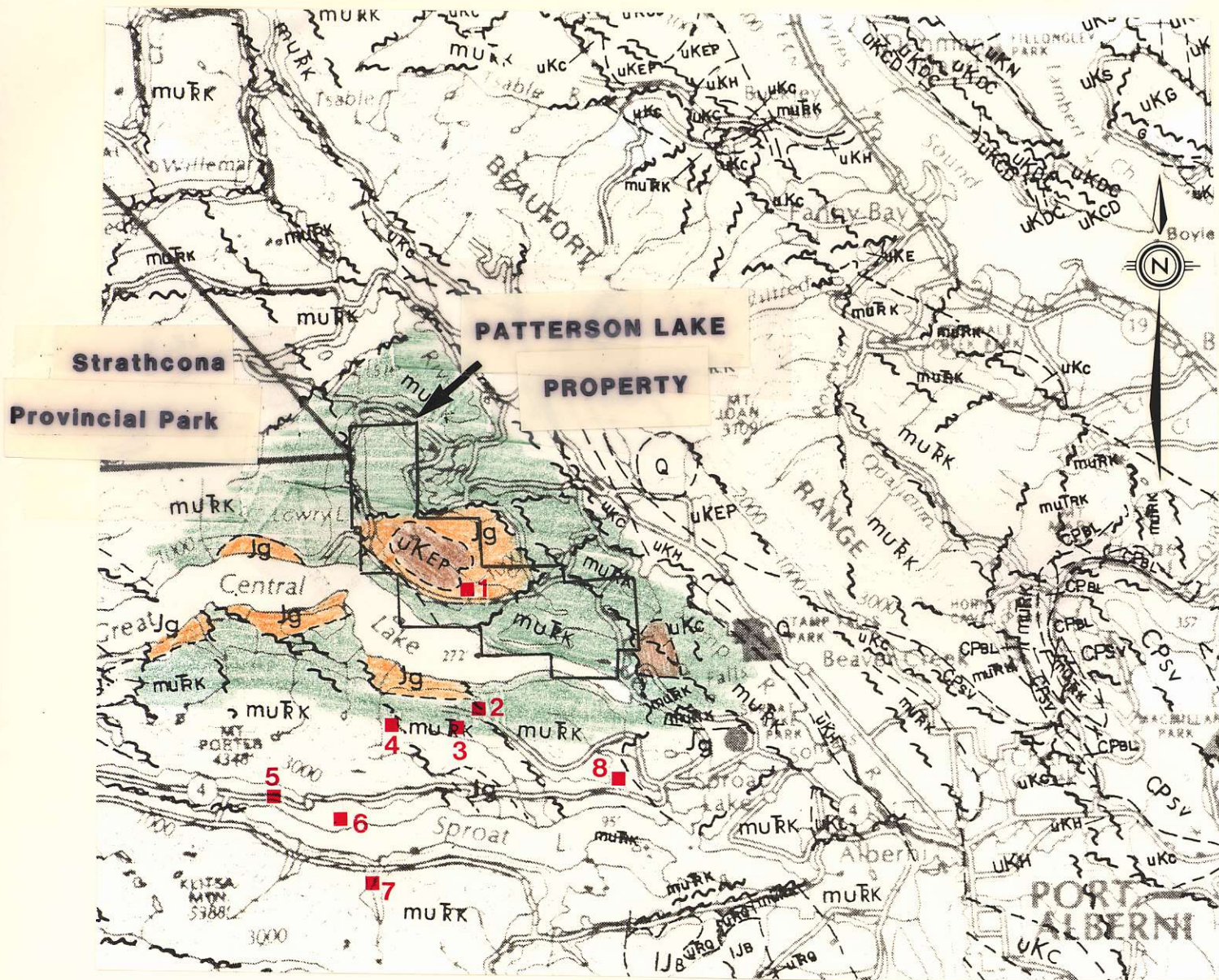


Figure 1 Location of Patterson Lake Property claims.



Legend

■ Minfile Listing

1 - Centennial (Roseanne) - Fe, Cu #293

2,3,4 - Hm - Cu or Cu, Sb, Hg, #306, 307, 230

5,6 - Herb - Cu #232, 362

7 - Murphy - Johnson - Cu #249

8 - R - Cu #341

UK - Nanaimo sediments

Jg - Island intrusions

MuRK - Karmutsen volcanics

Figure 2 Geology of the Great Central Lake area (from Muller, 1977)

Mineralization

Three types of mineralization occur on the Property:

- 1) copper in shear zones
- 2) gold in quartz veins + carbonate
- 3) gold and copper in altered volcanics.

Shear zones containing bornite, chalcopyrite, pyrite and magnetite are present with good copper values over narrow widths (5.6% Cu, BCS 2392, Table 1)). Centennial, the only showing on the claims listed in Minfile, is a shear zone in amygdaloidal Karmutsen basalt containing chalcopyrite, pyrite and magnetite in a quartz gangue.

Several quartz veins sometimes with carbonate, were examined which reportedly carry gold values. Some carry minor amounts of pyrite. The single CFC analysis of a quartz vein contains only 5 ppb Au. Both the quartz veins and shear zones trend north and east.

The most promising type of mineralization consists of chalcopyrite and bornite with associated gold and possibly silver (reportedly 0.35 to 2.5 oz/ton silver) in altered Karmutsen volcanics. Both epidote alteration and silicification of volcanics, sometimes with associated sulphides, is found in a number of outcrops. One exposure of amygdaloidal basalt with chalcopyrite and bornite adjacent to a Tertiary (?) feldspar porphyry dyke contains high gold (95 and 5500 ppb Au) and copper (25,500 and 81,000 ppm) values. Further sampling is required to establish the extent of mineralization in the altered volcanics.

Conclusions

1. There is potential for gold mineralization in the Karmutsen volcanics in the Great Central Lake area, which has not been investigated. The style of mineralization may be similar to that found in the Kennedy River belt where considerable gold exploration is in progress.
2. The Patterson Lake Property is at a "grass roots" exploration stage and requires further evaluation to determine its potential.

Table 1. Grab sample analyses from Patterson Lake Property

MIN-EN Laboratories Ltd.
Specialists in Mineral Environments
 705 WEST 15th STREET NORTH VANCOUVER, B.C. CANADA V7M 1T2

PHONE: (604)980-5814 OR (604)988-4524

TELEX: 04-352828

GEOCHEMICAL ANALYSIS CERTIFICATE

COMPANY: CORP. FALCONBRIDGE COPPER
 PROJECT: 302/305
 ATTENTION: D. LEFEBURE/A. DAVIDSON

FILE: 5-924
 DATE: NOV. 27/85.
 TYPE: ROCK GEOCHEM

We hereby certify that the following are the results of the geochemical analysis made on 6 samples submitted.

SAMPLE NUMBER	AG PPM	CU PPM	AU PPB	
BCS-2390	1.2	450	5	Outcrop #1, quartz vein
2391	0.8	90	5	Outcrop #3, silicified Karmutsen volcanic
2392	36.9	56000	45	Outcrop #5, malachite-bornite shear zone
2393	20.1	25500	95	Outcrop #6, altered Karmutsen adjacent to dyk
2394	24.0	81000	5500	Outcrop #6, disseminate chalcopyrite on fract and in amygdules in Karmutsen lava.
BCS-2397	5.1	7900	80	Outcrop #7, chalcopyrite and malachite with quartz gangue in altered Karmutsen.

*SOME OF THESE SAMPLES SHOULD HAVE BEEN REQUESTED FOR ASSAY.

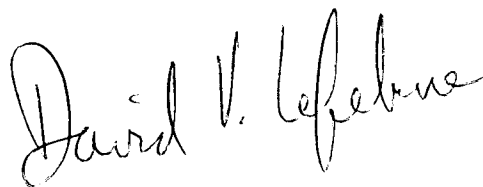
Certified by



3. CFC requires a better understanding of the nature of mineralization and host lithologies before investing much more effort in the Great Central Lake area.

Recommendations

1. Follow up sampling of altered Karmutsen volcanics on the Patterson Lake Property.
2. Research potential of Kennedy River Belt gold showings.

A handwritten signature in cursive script that reads "David V. Lefebvre". The signature is written in black ink and is positioned to the right of the recommendations list.

D. V. Lefebvre

DVL/ik