MINERAL ASSESSMENT REPORT FOR
AXEL 1 CLAIM (4 UNITS)
KAMLOOPS MINING DIVISION
JULY 11, 1991

21,515

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INTRODUCTION

Prospecting and geological mapping was carried out on the Axel 1 claim (Kamloops mining district), roughly 12 km south of Clearwater and 5 km to the east of the North Thompson River. Pyritized intraformational conglomerate exposed near the McCarthy Mountain microwave station contains reported clasts of pyrite-chalcopyrite mineralization, similar to that at the Chu Chua massive sulfide deposit 18 km to the south. This provides an indicator for the possibility of further volcanogenic massive sulfide occurences in the region.

GENERAL

The Axel 1 claim (record #9560 -anniversary date July 20, 1990, held by Martin Peter) consists of 4 units, 1 km square, and is readily accessible by paved road on the east side of the North Thompson River and subsequently up along the McCarthy Mountain microwave service road to the station at the top of the mountain. The claim itself lies over the north-western slope of McCarthy Mountain (see fig. 1). Elevation on the claim varies from 4500 ft at the north-western corner to 5700 ft at the south-eastern corner. Snow persists at the higher elevations well into the end of June.

The area is forested by a moderately dense assemblage of first growth fir, spruce, cedar and pine. Scrub willow underbrush growth is extremely heavy on the steep north-facing slope

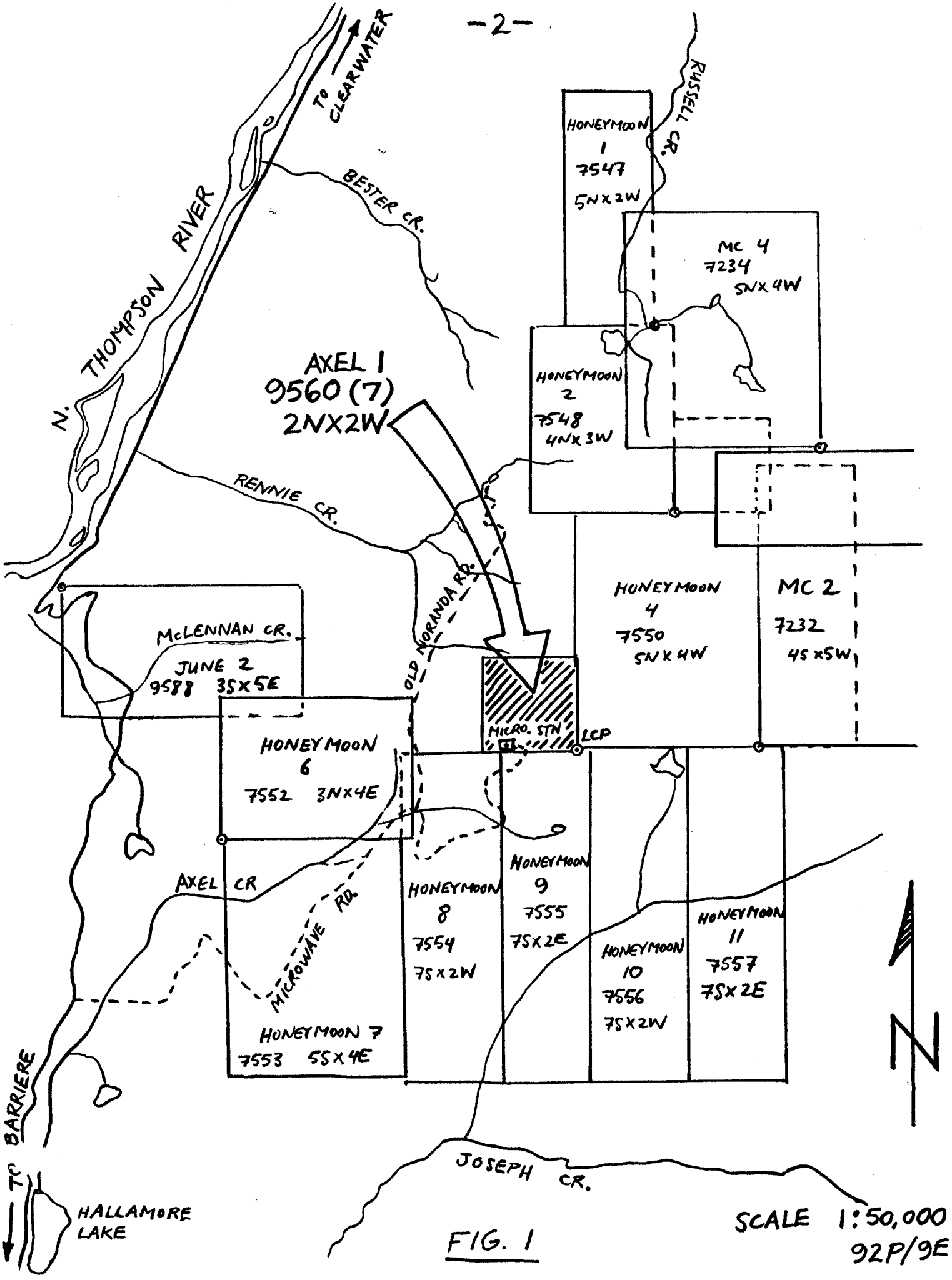


FIG. 1

SCALE 1:50,000

92P/9E

of the south-eastern part of the claim. Although no logging activity has taken place on the claim as yet, Weyerhaeuser Canada Ltd. has plans to construct a logging road across the north-western corner in the near future.

PROPERTY HISTORY

A large portion of the Fennell Formation south of Clearwater and including the area of the Axel 1 claim was covered by an airborne DIGHEM geophysical survey flown for Craigmont Mines Ltd. in 1979.

In 1988, Covenant Resources Ltd. took several rock samples at the microwave station and conducted two soil lines to the north-west of the Axel 1 claim. Anomalous Barium and Zinc values were reported for the conglomerate rock samples and some anomalous Copper values in the soils. Besides this, no other recorded work programs have been carried out on the area of the property, and no signs of exploration activity were noted during this survey.

LOCAL GEOLOGY AND MINERALIZATION

According to Schiarizza and Preto (1987), the Axel 1 claim is underlain by rocks of the lower Fennell Formation which are Devonian-Permian in age. These include bedded chert, gabbro, diabase, pillowed basalt, clastic metasediments, quartz-feldspar porphry and intraformational conglomerate.

The most extensive exposure of bedrock on the property is located on the peak of McCarthy Mountain close to the micro-

wave station:

"...two separate conglomerate lenses are intercalated with bedded chert and fine grained greenstone within the third lower Fennell fault slice...the conglomerate consists of angular clasts of chert, cherty argillite and greenstone in a moderately foliated, dark grey siliceous phyllite matrix. The clasts comprise from 40 to 90 per cent of the rock. They range up to 20 cm in longest dimension, although most are 6 cm or less in length, and are flattened in the plane of the phyllitic cleavage. Fine-grained greenstone occurs within the conglomerate as more or less concordant lenses with complex and irregular interfingering contacts. Locally the greenstone contains clasts of both greenstone and chert."(Schiarizza and Preto, 1987)

Rocks mapped during the course of this program included massive basalt, in the western part of the claim, along with some attendant diorite, mildly metamorphosed like the basalt and perhaps representing feeder systems to the basalt. The only other rock type present within the massive basalt is the occasional small quartz vein, some with minor pyrite but mostly barren. In the eastern part of the claim, intraformational conglomerate predominates with varying composition. The tuffaceous matrix contains fragments of chert, basalt and argillite in variable amounts, sizes and orientations. Mostly, the fragments are flattened along one plane (NNW) although sometimes there is a random orientation. As Schiarizza and Preto (1987) also noticed, lenses of basalt (some quite large) occur within the conglomerate. Occa sionally, greenstone and chert fragments are present within these lenses. As well, a bed of argillitic tuff striking 320° and dipping to the east was noted in the

south-eastern corner of the claim.

None of the clasts of massive sulphide mineralization (pyrite and chalcopyrite) that were seen by Paul Schiarizza during his 1980 fieldwork in the area, were found during the course of this program. However, the conglomerate unit near the microwave tower is in places heavily pyritized and chalcopyrite was noted on some fracture surfaces of silicified greenstone clasts within the conglomerate.

A total of 5 east-west traverses were made over the Axel 1 claim in order to map the geology and prospect for any mineralization. Each traverse was 1 km long, extending from one side of the claim to the other, starting from the southern claim line (0N), then 250mN, 500N, 750N and finally 1000N.

Distances along each traverse were measured with a Hip-Chain and topofil thread. Any exposed bedrock encountered along each line, was identified as were creek channels and other pertinent features. Bedrock exposure is extremely variable, ranging from an abundance at the southern part of the claim to a paucity at the northern (downslope) part, where only one outcrop was seen on line 1000N.

CONCLUSIONS AND RECOMMENDATIONS

Although no new mineralization or alteration features were uncovered during this survey, the area still holds good potential for the occurence of massive sulphide mineralization.

The next logical step would be to undertake a VLF-EM and magnetometer survey, again covering the entire property.

STATEMENT OF EXPENDITURES

All work performed by Martin C. Peter:

Geological mapping and prospecting and grid chaining - 2 days @ $175/day	$350
Report preparation 1.5 days @ $175/day	$262.50
Vehicle expense - 1000 km @ $0.20/km	$200
Food expense -	$40
TOTAL	$852.50

STATEMENT OF QUALIFICATIONS

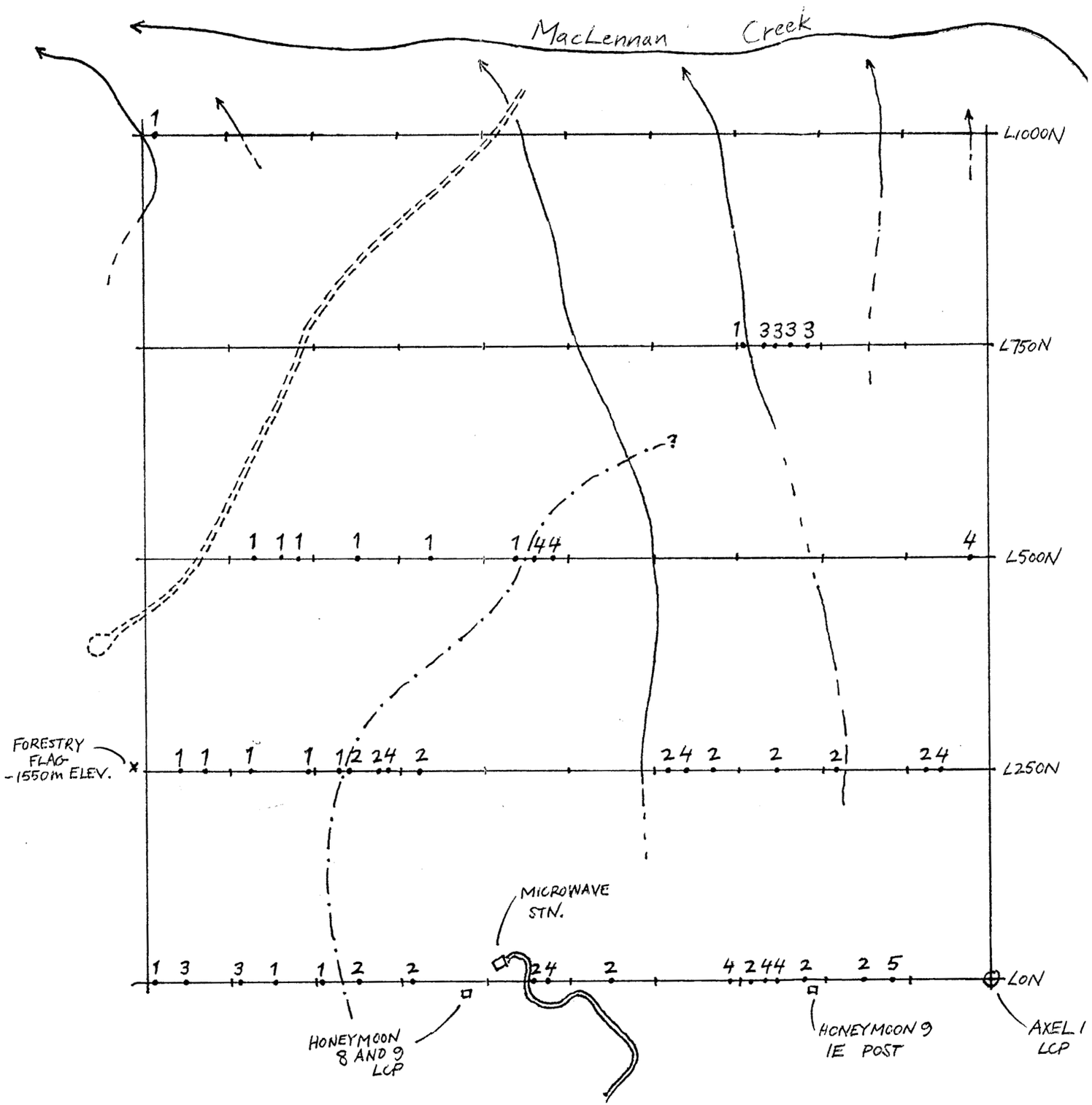
I, Martin C. Peter, of the District of North Vancouver, British Columbia do hereby state that:

1. I am a graduate of the University of British Columbia with a B.Sc. degree (Zoology) obtained in 1985;
2. I have worked a total of 8 field seasons in mineral exploration throughout B.C. as a Geologist's Assistant for: Lacana Mining Corp., Newmont Mines Ltd., Brinco Mining Ltd., Corporation Falconbridge Copper Ltd. (now Minnova) and the Hughes-Lang Group.
3. Since 1988, I have actively carried out mineral exploration in the Fennell Formation south of Clearwater and north-east of Barriere.

REFERENCES

1. Schiarizza, P. (1981): Clearwater Area, B.C. Ministry of Energy, Mines and Petroleum Resources, Geological Fieldwork, 1980, Paper 1981-1

2. Schiarizza, P. and Preto,V.A. (1987): Geology of the Adams Plateau - Clearwater-Vavenby Area, B.C. Ministry of Energy, Mines and Petroleum Resources, Paper 1987-2



GEOLOGY

1 Massive Basalt

2 Intraformational Conglomerate

3 Diorite - Diabase

4 Concordant lenses of Basalt containing some fragments of Basalt and Chert

5 Black, graphitic tuffite bed

Geological contact

GEOGRAPHICAL FEATURES

CREEK

CREEK SEEPAGE

PROPOSED LOGGING ROAD

EXISTING ROAD

GEOLOGICAL BRANCH
ASSESSMENT REPORT

21,522

Geology and Geographical features of the Axel 1 claim - Kamloops Mining District	
NTS 92P/9E	0 100 200m
Drawn by M. Peter	
Date: July 10/91	
Scale: 1:5000	