

PROSPECTING REPORT

JUDI 1 TO 6 MINERAL CLAIMS

NEW HAZELTON, OMINECA M.D., B.C.

MAP 93M/4E, LAT. 55°14'N, LONG. 127°33'W

OWNED BY: A. L'ORSA

ANTHONY L'ORSA

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SUMMARY

Prospecting and preliminary geological mapping were carried out on the Judí 1 to 6 mineral claims during the 1980 field season.

Small amounts of chalcopyrite and molybdenite were found in fracture fillings in a porphyritic phase of the quartz monzonite facies of the Rocher Deboule stock.

The claims also cover part of the old Daley West prospect where arsenopyrite and lesser amounts of chalcopyrite, pyrite, scheelite, sphalerite, galena, etc., occur in sheared porphyritic quartz monzonite.

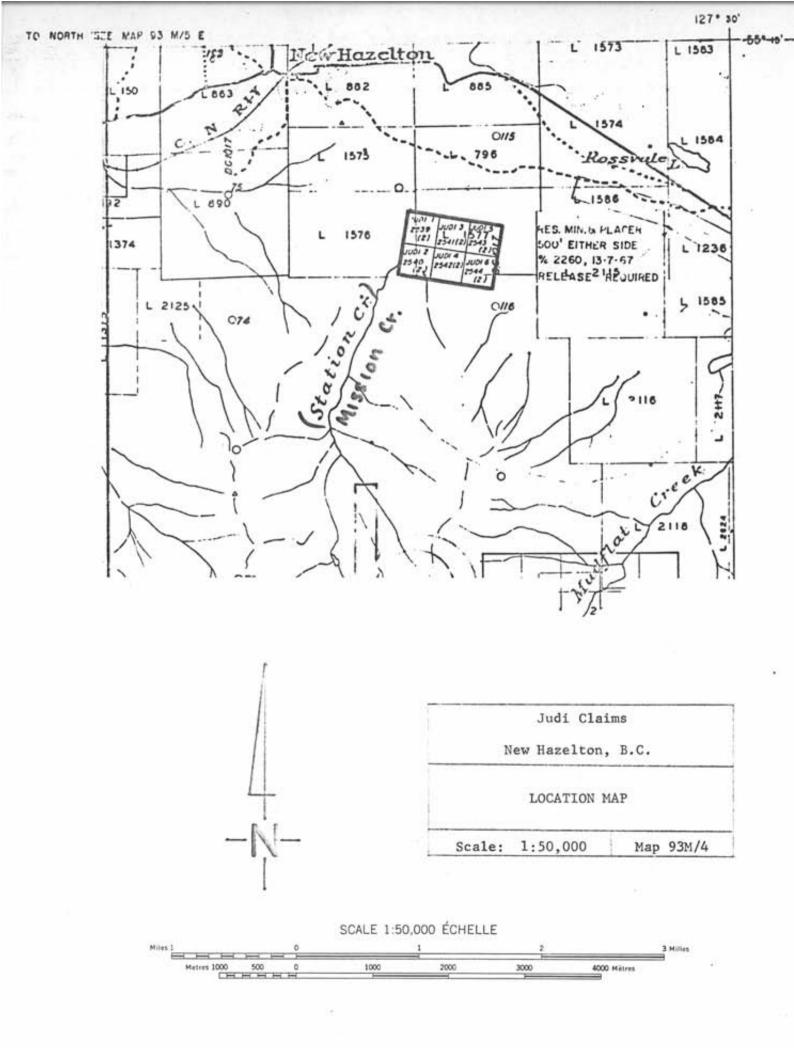
There are few outcrops. Most of the claims area is forested and covered by talus or till with local occurrences of sand and gravel.

INTRODUCTION

Prospecting and preliminary geological mapping were conducted on the Judi 1 to Judi 6 mineral claims during May and September, 1980.

The western quarter of the claims group is steep and outcrops are locally common. In much of this area the overburden is moss covered boulder talus. The remainder of the claims group occupies a gentle, northeast facing slope with no known outcrops. In this area overburden comprises mostly till with local deposits of sand and gravel. Judging from cutbanks on Mission Creek, overburden exceeds six metres in places.

I wish to thank Dr. W. Johnson, Ministry of Energy, Mines and Petroleum Resources, Victoria, for two spectrographic analyses. I also wish to



thank Mrs. S. Brand and Mr. M. Leahey, Noranda Exploration Company, Ltd., Smithers, for help in the preparation of this report.

LOCATION AND ACCESS

The Judi mineral claims are centred at approximately 500 metres elevation about three kilometres southeast of New Hazelton, Omineca Mining Division, B.C.

Access was provided by a long-abandoned logging road which leads south from New Hazelton through the claims. It is possible to drive as far as a washed-out culvert some 500 metres from the north edge of the property.

HISTORY AND DEVELOPMENT

I staked the Judi claims on 24 February 1980 to cover a small outcrop carrying Cu-Mo mineralization that I discovered in 1975.

Part of the old Daley West prospect is on the Judi 4 mineral claim. The Spokane Rocher Deboule Mining and Copper Company drove two adits (235 ft. and 155 ft. in length) on this prospect in 1916. The portals of the adits are now caved in but several open cuts are in good condition. The concrete foundations constructed for the compressor and engine can still be seen.

As far as I know, the only work done on the prospect in recent years was the surveying of a flagged grid by John Sargent of New Hazelton in 1972.

GEOLOGY AND MINERALIZATION

The claims are underlain by a quartz monzonite phase of the Rocher Deboule stock (Sutherland Brown, 1960). A biotite sample collected by Dr. N. Carter from the main granodiorite body of the stock yielded an age of 72 m.y. (Richards, 1980).

A porphyritic facies of the quartz monzonite is exposed in the south-western sector of the claims. The rock is light grey to buff in colour and contains abundant accessory quartz. In some outcrops quartz may exceed 50%. However, quartz veins are rare. The porphyritic quartz monzonite hosts most of the known copper and molybdenum occurrences on the claims.

Alteration was observed in the porphyritic quartz monzonite. Locally the intrusion has been altered to a quartz-sericite rock with approximately 80% quartz. Carbonatization, kaolinization and chloritization are present in various places. Minor tourmaline was found in a rusty, sericitized outcrop. The alteration is mostly centred around small, northerly-trending shear zones. In general the porphyritic quartz monzonite is only lightly altered, if at all.

A few outcrops of medium grey aplite were found on the Judi 6 claim. Locally the rock is a porphyry with feldspar phenocrysts approximately 4 mm in length set in a fine-grained matrix with about 50% quartz. Some of the aplite contains small (less than 0.7 mm diameter) biotite flakes. Small amounts of molybdenite, chalcopyrite and arsenopyrite occur in a pegmatitic aplite dyke about 130 m uphill from the aplite outcrops.

A northwest-trending hornblende-biotite-feldspar porphyry dyke about 2 m (?) in width was noted on the Judi 4 claim. The dyke contains minor disseminated chalcopyrite.

At the old Daley West workings a northerly-striking shear zone in the porphyritic quartz monzonite carries arsenopyrite with lesser amounts of chalcopyrite, pyrite, pyrrhotite, scheelite, sphalerite, galena, tetrahedrite (?), quartz and calcite. Spectrographic analyses by the Ministry of Energy, Mines and Petroleum Resources of two grab samples collected by me in this zone

assayed as follows:

	Co	W	Cu	Ag	Au	Lab.
	%	%	%	oz/t	oz/t	Number
± 15% arsenopyrite	0.10	0.66	1.06	0.5	0.07	3600
±80% arsenopyrite	0.44		0.59	0.5	0.13	3601

Small amounts of Sb, Pb and Bi were also reported.

The width of exposed mineralization within the shear zone probably does not exceed 15 cm. The shear zone locally exceeds 1.5 m in width.

North, east and west of the Daley West workings, small amounts of chalcopyrite and molybdenite occur in porphyritic quartz monzonite in widely scattered fracture fillings with little quartz. The mineralized fracture fillings are generally joints and they are generally less than 1 cm in diameter. Locally arsenopyrite is present.

REFERENCES

- Kindle, E.D., 1954, Mineral Resources, Hazelton and Smithers Areas, Cassiar and Coast Districts, British Columbia: Geol. Surv. Canada, Mem. 223. Minister of Mines, B.C., Ann. Repts. 1916 and 1972.
- Richards, T.A., 1980, Geology of Hazelton (93M) Map Area: Geol. Surv. Canada, O.F. 720, Map.
- Sutherland Brown, A., 1960, Geology of the Rocher Deboule Range: B.C. Dept. of Mines and Petroleum Resources, Bull. No. 43.

ITEMIZED COST STATEMENT

WORK:

A. L'Orsa, geologist, 6 days at \$150.00/day (5 & 10 May; 8, 10, 12 & 15 Sept.)	\$	900.00						
A. L'Orsa, report, 20 February at \$150.00/day		150.00						
Typing and copying		15.00						
FOOD & LODGING:								
6 days at \$30.00/day		180.00						
TRANSPORTATION:								
Datsun pickup, 6 days at \$19.00/day		114.00						
173 km at 9¢/km (one return trip to prospect)	_	15.57						
	\$ 1	,374.57						

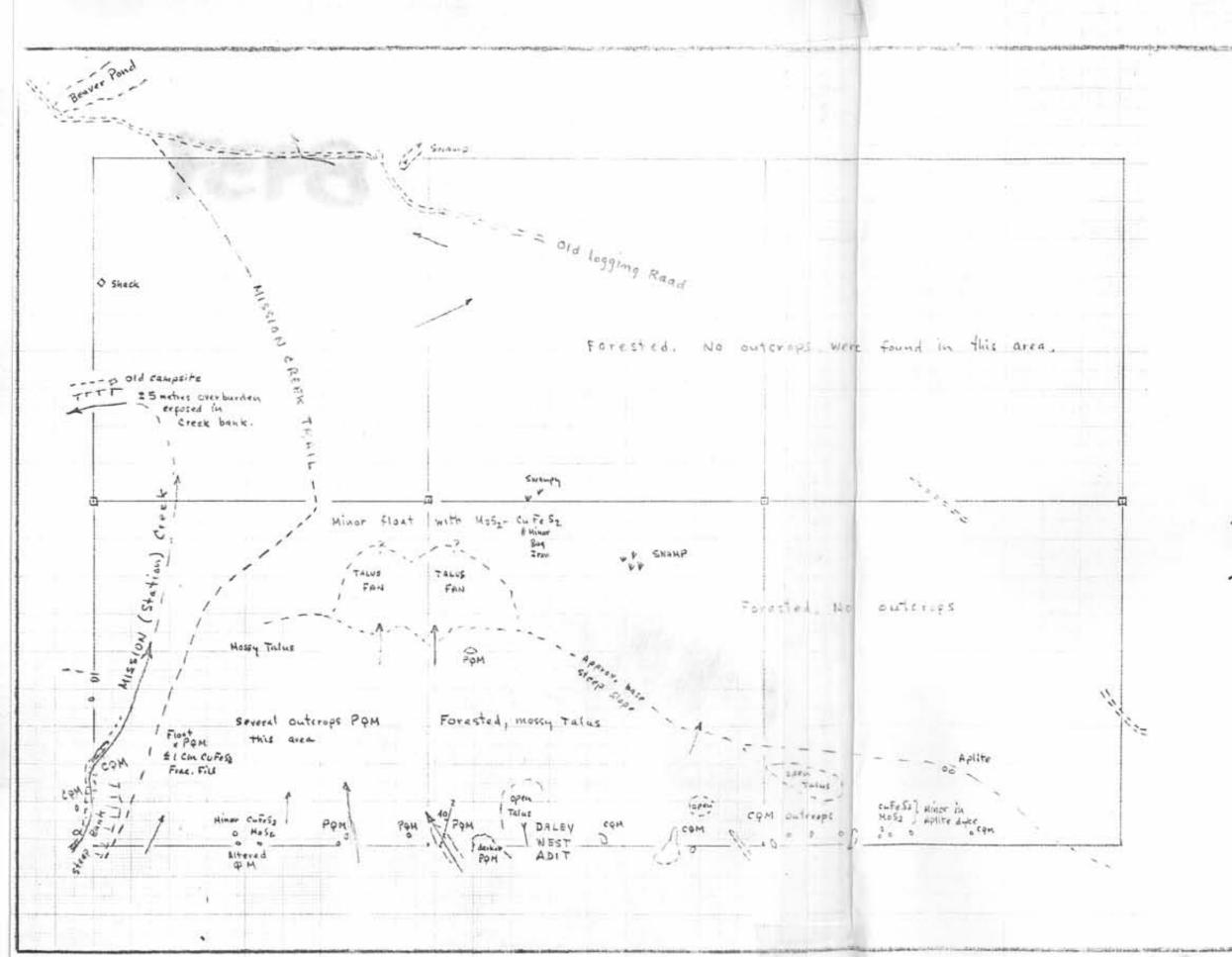
QUALIFICATIONS

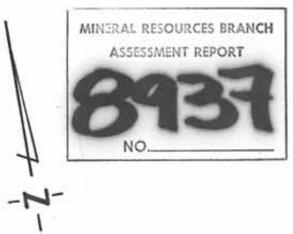
- I, Anthony L'Orsa of Smithers, B.C., hereby certify that:
 - 1. I am a graduate of Tulane University, New Orleans, La., U.S.A. with the degrees of B.Sc. (1961) and M.Sc. (1964) in geology.
 - I am a Fellow of the Geological Association of Canada and a member of the Society for Geology Applied to Mineral Deposits.
 - I have practiced my profession since 1962 in western Canada,
 Mexico and Australia.

Dated at Smithers this 21st day of February, 1981

A. L'Orsa

Geologist





LEGEND

POM porphyritic quartz monzonite

COM coarse-grained quartz monzonite

shearing attitude

stream

Judi Mineral Claims

New Hazelton, B.C.

PROSPECTING SKETCH MAP

A. L'Orsa 21 Feb. 1981