

86-930 - 15861

10/87

PETROLOGICAL STUDY
SPING CLAIM

OMINECA MINING DIVISION
NTS 94-D-3/E

LAT: 56° ^{14.7'} 25' N.

LONG: 127° 10' 30" W.

REPORT BY

G. RYZNAR, PENG.

Owner / Operator:

WINDFLOWER MINING LTD.

RECEIVED
JAN 20 1987
VANCOUVER, B.C.

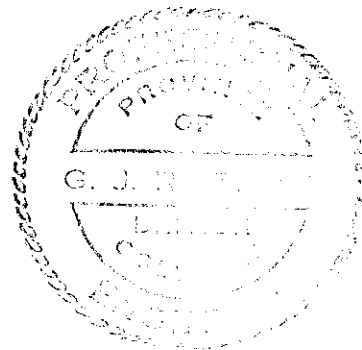
Sample Collection
02/10/85

Report Writing
24,25/10/86

SUB-RECORDER
RECEIVED
JAN 26 1987
M.R. # _____ \$ _____
VANCOUVER, B.C.

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

15,861



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Petrological Study

Sping Claim

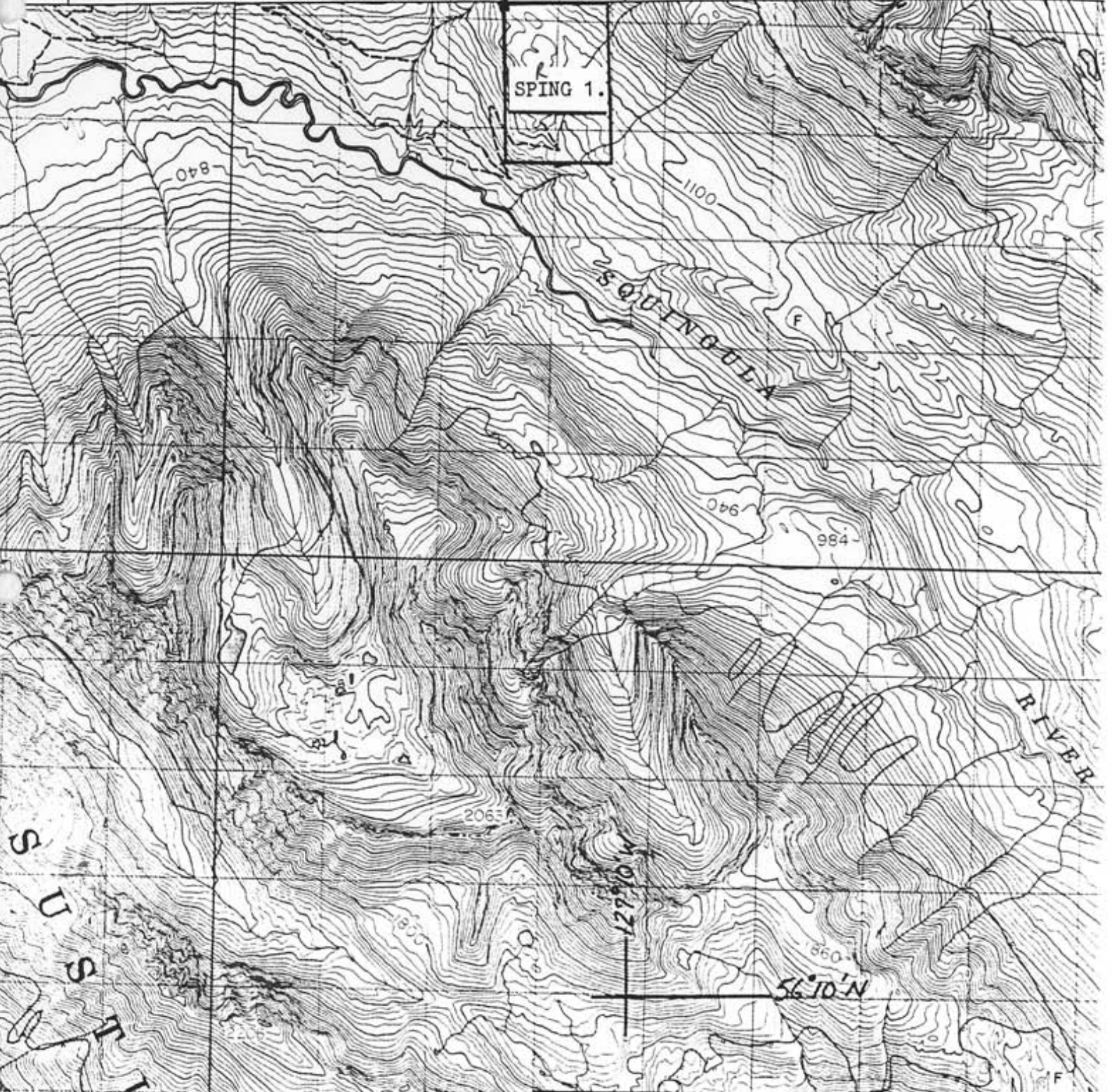
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08 09 10 11 12 LCP 13 14 15 16 17 18

127°10'W

SPING 1.



LOCATION MINERAL CLAIM "SPING 1"

Scale 1:50,000 94-D-3/E

0 m. 1000 m 2,000 m.

Petrological Study

SPING CLAIM

Introduction:

The "Sping" claim, a silver-copper prospect, is located 100 miles north of Smithers, British Columbia, in the Omineca Mining Division. The claim covers silver-copper mineralization occurring in a reefal limestone within the Hazelton volcanics.

This study indicates the nature of the mineralization and reports on other interesting observations.

Property Ownership and Size

The Sping claim is owned 100% by Windflower Mining Ltd. and consists of one located six unit claim, totalling approximately 150 hectares.

Location and Access

Omineca Mining Division

Lat: 56° 15' N: Long: 127° 10' 30" W

The Sping claim is located approximately 100 air miles north of Smithers, British Columbia, on map sheet 94-D-3/E. There is no road access at the present time, however, the property is only about 20 km. west of the Bear Lake airstrip, or 20 km. west of B.C. Rail's partially constructed Dease Lake railroad.

Geology

The Sping claim is underlain by volcanics and volcanoclastics of the Hazelton Group, with intravolcanic dolomitic limestones. The dolomitic limestone is fault bounded to the west. Outcrop is sporadic however occurrences of well mineralized carbonates are obvious because of their green staining (malachite). The samples collected were from a well mineralized exposure of dolomitic limestone near the centre of the property.

Sping claim (cont'd)

Microscopic examination

The host-rock carbonate was found to be a limestone composed of very fine grained carbonate, with irregular patches and lenses of bioclastic material. Trace amounts of impurities consisting principally of feldspar, and less commonly quartz or chert or both were observed in the thin sections. Another trace constituent which was noted is barite, which occurs as rare small, subhedral grains .1 to .2 mm in size intergrown with calcite in some of the sparry veinlets.

The sulphide mineralization noted consists of pyrite, and chalcopryrite, partially oxidized, occurring sparsely disseminated throughout the rock as well as along thin irregular stylolitic seams which traverse the carbonate.

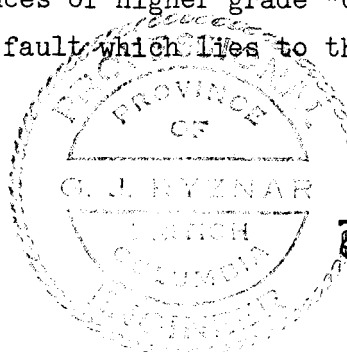
A more detailed description of the thin section observations is attached to this report as Appendix "A"

Conclusions

The mineralization consists predominantly of very fine grained chalcopryrite and pyrite occurring disseminated throughout the carbonate host rock as well as associated with dolomitic veinlets and stylolitic seams which traverse the finer grained carbonate. Trace amounts of bornite are visible in some specimens. It is estimated that the sulphides make up 2 to 5% of the rock by volume.

The host rock appears to be a clastic fine grained limestone, commonly with clasts of biogenic materials (fossiliferous). Much of it appears to have originated from nearby reefs within the intravolcanic sediments.

Considering the nature of the mineralization, i.e. replacement, it may be quite possible that occurrences of higher grade "ore" may be found in proximity to or along the major fault which lies to the west of this copper carbonate.

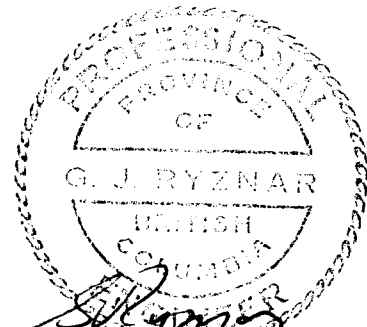


G. J. Ryznar
G. J. Ryznar, P.Eng.

AUTHOR'S QUALIFICATIONS

I, Gerald Ryznar, PEng., of the District of North Vancouver, British Columbia, hereby certify as follows:

- 1.) I am a Geological Engineer residing at 4405 Glencanyon Dr., North Vancouver, B.C. and that I manage Ryznar Geological Services Ltd., a geological consulting firm of the same address.
- 2.) I am a registered Professional Engineer of the Province of British Columbia, Certificate no. 8537. I graduated from the University of Alberta in Edmonton in 1964 with a B. Sc. in Geology and in 1965 with a M. Sc. in Geology.
- 3.) I have practised my profession continuously for the past 22 years, working in mineral exploration primarily in Western Canada, more particularly British Columbia, the Northwest Territories, Yukon, and Saskatchewan, as well some work in New Zealand.



Gerald Ryznar B.Sc., MSc., PEng.
Geological Engineer

Related AR # 4562, 5552, 5946.

TK.

Harris
**EXPLORATION
SERVICES**

MINERALOGY AND GEOCHEMISTRY

534 ELLIS STREET, NORTH VANCOUVER, B.C., CANADA V7H 2G6

TELEPHONE (604) 929-5867

Job #86-68

Report for: G.J. Ryznar,
4405 Glen Canyon Drive,
North Vancouver, B.C.
V7N 4B4

October 25, 1986

Samples:

One hand specimen of limestone with slight Cu staining.

The specimen was broken into several pieces and two areas showing different textural features were selected for thin sectioning.

The resulting two slides are numbered 86-263X and 264X.

Results:

Microscopic examination of the two slides showed no significant differences.

The rock is a limestone consisting of an even, micritic matrix of grain size 5 - 10 microns containing abundant circular, elongate, equant and irregular patches, 0.1 - 5.0mm in size, of coarser granular mosaic or single calcite crystals. These are clearly biogenic forms, and best seen by examination of the thin section under low magnification with a hand lens or stereo microscope.

The biogenic forms sometimes concentrate in irregular patches and lenses (bioclastic accumulations?).

Some of the sparry segregations appear to be more in the nature of pockets or veinlets, probably representing authigenic recrystallization.

Impurities are present in trace amounts only. Disseminated, rather irregular silicate grains up to 0.1mm in size may be of detrital or authigenic origin. They appear to be principally feldspar and, less commonly, quartz or chert.

The rock is traversed by thin, irregular/anastomosing stylolitic seams. In part these follow the outlines of bioclasts and sparry pockets. The seams contain specks of sulfides, 10 - 100 microns in size, and derived alteration products (limonite and malachite). Similar individual, irregular grains or microgranular clusters of sulfides (10 - 200 microns in size) also occur sparsely disseminated through the rock at large. As far as can be ascertained without a polished surface they consist of intergrown pyrite and chalcopyrite, partially oxidized.

- 2 -

Another trace constituent noted in the microscopic examination is barite, which occurs as rare, small, subhedral grains, 0.1 - 0.2mm in size, intergrown with calcite in some of the sparry veinlets.

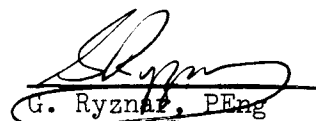
The sulfides show no apparent association with either the silicate impurities or the sparry veinlets, nor do they appear to be accompanied by any introduced non-sulfide phase. Their age relationship vis a vis the sparry veinlets is obscure.

A handwritten signature in cursive script, appearing to read "J.F. Harris". The signature is written in dark ink and is positioned above the printed name.

J.F. Harris Ph.D.

Statement of Expenditures

Sample Collection		
Helicopter Costs - Okanagan Helicopters		
Invoice No. H42107, 02/10/85		\$1,367.00
Miscellaneous		
Travelling Expenses, Accommodation etc.	\$	210.00
Petrographic Examination		
Harris Exploration Services	\$	74.00
Professional Services		
G. Ryznar, PEng. 1 day (2/10/85) Sample coll.	\$	450.00
Report writing 2 days @ \$450/day	\$	900.00
Oct. 24,25/1986		
		<hr/>
Total Expenditures		\$3,001.00


G. Ryznar, PEng

