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W. H. White
C. D. S. 1

SUMMARY

On August 11 and 12, 1964, the W.H. White Cu-Fe Prospect was examined and sampled by the writer. The property comprises 10 mining claims at the junction of Kliyul and Croyden Creeks, in the Omineca Mining Division of Northern British Columbia.

The showing lies near the crest of a prominent ridge, at 7,000 ft. The area is underlain by undifferentiated Mesozoic volcanic rocks (Takla group?), which have been intruded by granite related to the Omineca (Cretaceous) intrusions. A limy tuff layer within steeply-dipping, northwest-striking andesite flows has been in part converted to diopside-magnetite skarn, with minor amounts of chalcopyrite and pyrite.

Four chip samples were taken across the mineralized zone.

CONCLUSIONS

(1) Significant copper mineralization is confined to a segment of the skarn zone which lies south of the main fault shown in fig. 1. This northwest-trending segment is approximately 1500 feet long, and varies in outcrop width from 20 to 75 feet. The dip is not known with certainty, but

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seems to be southwesterly at 65°. As the slopes in the vicinity are from 30° to 50°, the outcrop widths observed (20 to 75 feet) probably represent true thicknesses of 10 to 38 feet.

(2) The 1500-ft.-long mineralized zone was tested by three chip samples taken at sites 1, 2 and 3 (see fig. 1).

The best sections are:

Site 1	20'	(outcrop width)	averaging	Cu 0.91%	Au 0.09 oz/ton
Site 2	35'	"	"	"	Cu 0.46% Au 0.06
Site 3	30'	"	"	"	Cu 0.44% Au 0.10

The copper results at site 3 may be low, as the material sampled was highly weathered.

It is likely that narrower, higher-grade sections exist along the showing. Considering the remote location of the property, the above grades are not considered to be economic at present.

RECOMMENDATION

No further action should be taken on this property.

INTRODUCTION

On August 11 and 12, 1964, the writer and H. Buczko made a preliminary examination of the W.H. White property (Soup claims 1-10). The claims cover a magnetite-chalcopyrite showing. Geological work and chip sampling were done. The results will be appended to this report when received.

LOCATION AND ACCESS

The property is 12 miles northwest of Aiken Lake, at latitude $56^{\circ} 27' N$ and longitude $126^{\circ} 03' W$. It can be reached by pack trail and foot from Aiken Lake, via the valley of Kliyul Creek. Helicopter landings on the claim group are few, and can be used only when the wind is slight. The location of the property with respect to the nearest heads of road and rail transportation is shown in the insert on the accompanying map.

PHYSIOGRAPHY

The showing is on the southwest slope, near the crest, of a NW-trending prominent ridge in the elbow formed by Kliyul (Miller) and Croyden Creeks, at an elevation of 7,000 feet. Local relief is 4,000 feet. Slopes on the claim group range from 25° to 60° , and the area is about

50% outcrop. Treeline is at 5,000 feet. Permanent water is scarce.

PROPERTY AND HISTORY

The ten Soup claims are part of the original Shell group, staked for Leitch Gold Mines in 1947 by P.E. Olson. This part of the claim group was later allowed to expire, although six claims one mile to the NE have been retained. There is little evidence that any considerable amount of work was done on the area and showing now covered by the Soup claims, but two home-made stadia rods were found, suggesting that some form of accurate survey was made. The property of current interest consists of ten mining claims staked by W.H. White, July 13, 1964. No work has been done on the claims since they were staked.

Although the claims retained by Leitch Mines are at some distance from the White property, they cover a Cu-magnetite-Au prospect, and there is no doubt that an examination of the assessment data filed at Victoria would be of value in arriving at a decision on the White property.

GENERAL GEOLOGY

The area is covered by two published geologic

maps; the McConnell Creek Sheet, 962A; and the Aiken Lake Sheet, 1030A (both G.S.C.). The insert on map 1 gives a generalized picture of the areal geology. Undifferentiated (?) Takla group Mesozoic volcanic rocks underlie most of the claim group. These rocks, which are predominantly andesite, are cut by late Cretaceous Omineca intrusive rocks related to the nearby Hogem granodiorite batholith. The area is part of a Cu-Au-Fe metallogenic province. A Cu-Au-Mo prospect on nearby Croyden Creek is currently being drilled by Rio Tinto Canadian Exploration.

THE MINERALIZED ZONE

A thin limy tuff layer within steeply dipping, northwest-striking Takla andesites has been converted to garnet-magnetite-diopside skarn with minor amounts of pyrite and chalcopyrite. The chalcopyrite is concentrated in the marginal parts of the magnetite-rich skarn layer, and extends irregularly for a few tens of feet into the adjacent andesite. The dip of the mineralized zone cannot be determined with assurance due to the structureless nature of the enclosing andesite and the broken, stained condition of the outcrops. What evidence was seen suggests a south-westerly dip of 65°, but there is contradictory evidence

65 N E ?

in the northwesterly part of the claim group. The best part of the zone is 1500 feet long, and varies in outcrop width from 20 to 75 feet. This segment becomes irregular, thin and difficult to trace to the southeast. To the northwest, it is cut off sharply by a fault. The displaced part of the zone can be seen to the left and 500 feet lower in elevation (see map 1). Small irregular bodies of leucocratic hornblende diorite are found in contact with the downslope side of the zone. A large mass of biotite granite outcrops 1000 feet lower in elevation, and has no observed connection with the mineralized zone.

As shown on the accompanying map, the part of the mineralized zone which lies northwest of the large fault is discontinuous, and the magnetite-bearing outcrops cannot be correlated with any degree of assurance. There is a distinct lack of copper in the displaced part of the zone, as compared to the continuous, 1500-ft. segment.

SAMPLING

Sample locations are shown on figure 1. The continuous segment of the zone was sampled in three places. At sample sites 1 and 2, advantage was taken of good exposures in actively eroding gullies, enabling the testing

of relatively unweathered material. At site 3 the outcrop surface is deeply weathered and limonitic. The three samples taken are continuous chip samples across the entire width of the mineralized zone.

The faulted segment was tested at one site (4) by a series of chips taken at 6-inch intervals across a 15-foot massive magnetite section which represents only the central three-fifths of the zone.

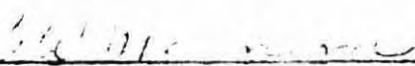
All samples were sent on Aug. 13 to Coast Eldridge, to be assayed for Cu, Au and Fe.

DISCUSSION

It is pointless to arrive at any conclusions concerning this property until the assay results have been received. Visual estimates are made difficult by the intimate association of tarnished pyrite and chalcopyrite, and by the degree of weathering which has affected the copper minerals. There is no doubt that ore-grade material (in this situation, taken to be 2% Cu) is present in patches, but the overall tenor of the magnetite-rich band seems to be 1% Cu or less. The gold content is an unknown quantity. The magnetite content is of minimal significance due to the sulphide content and the remote location.

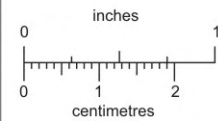
Assuming that a substantial copper content is indicated by the assay results, the next step should be a detailed ground magnetometer survey of the claim group, with the objectives of determining (1) the dip direction and amount and (2) the structure of the northwest displaced mineralized zone(s). An attempt to initiate magnetic work during the preliminary examination failed due to malfunction of the instrument. A logical follow-up of encouraging magnetometer results would be trenching in bedrock, or packsack diamond drilling, to obtain unweathered samples.

Conclusions and recommendations will be added to this report when the assay results have been evaluated.



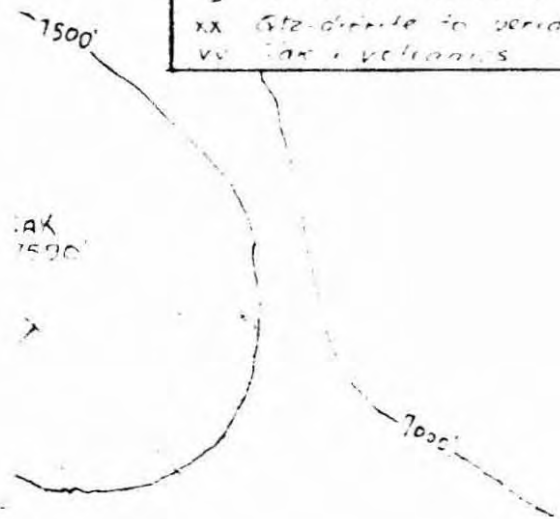
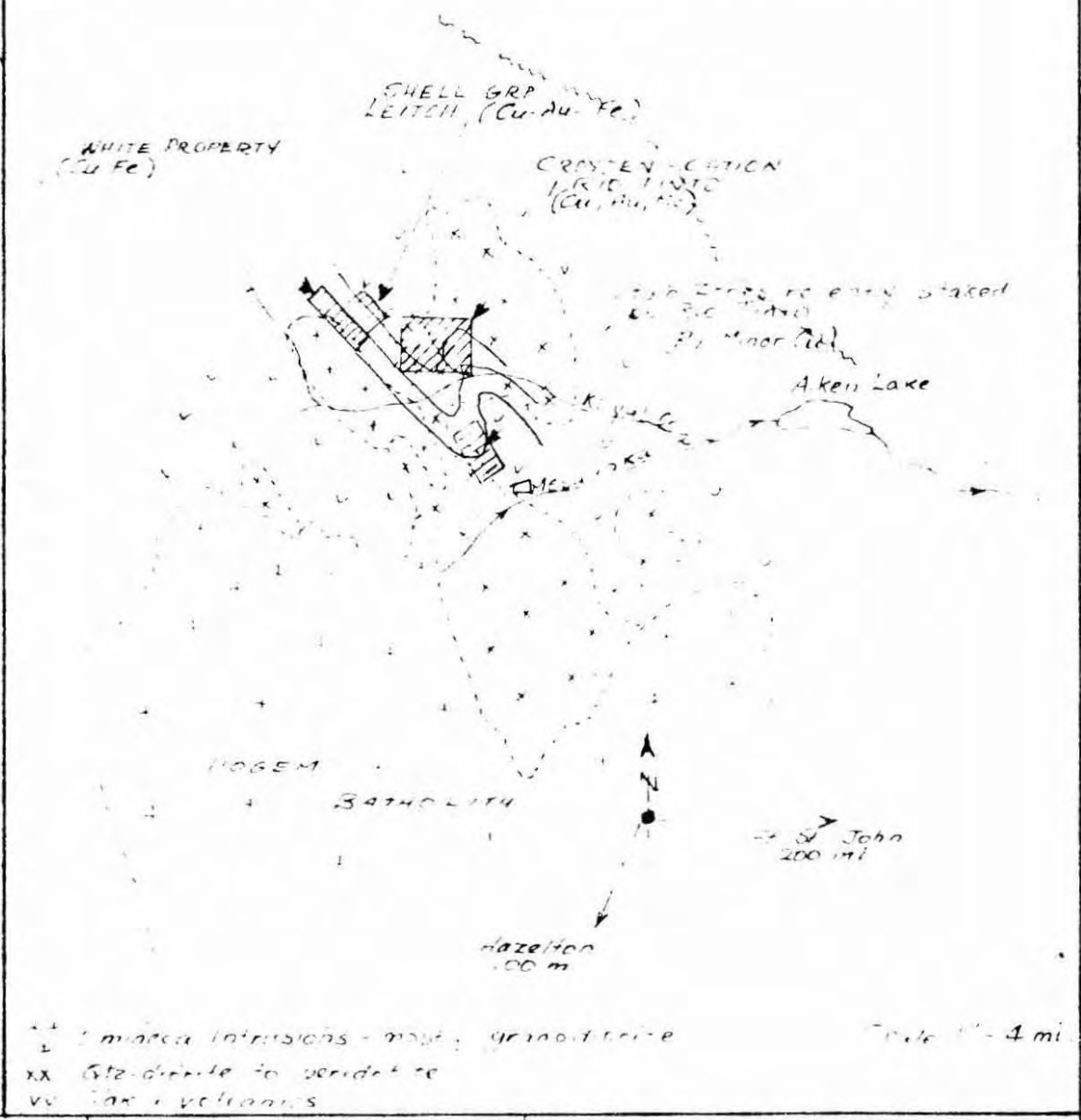
G.W. Mannard

Vancouver Office
September 21, 1964.



This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.

LOCATION AND GENERAL GEOLOGY



ASSAY DATA		(To be completed)		
Length	N	Cu %	Au oz	Fe %
Site ①	0-31	0.98	0.00	23.4
	0-20	0.83	0.00	27.19
	20-30	0.5	0.00	15.80
Site ②	0-15	0.31	0.02	31.00
	15-25	0.31	0.02	20.67
	25-41	1.65	0.02	23.11
	41-60	0.31	0.10	21.87
Site ③	0-30	0.44	0.10	42.86
	30-55	0.15	0.02	26.83