WHITING MINING SERVICES INTERNATIONAL LTD.

(604) 926 - 5270

1035 GREENWOOD PLACE, WEST VANCOUVER, B.C. CANADA.

PERCUSSION DRILLING REPORT

<u>Richfield #1, #2, #3, #4, #5, #6, CDF #1, #2, & #3</u> Mineral Claims. Omineca M.D.

Latitude : N 54°34'; Longitude W 126° 14' NTS : 93 L 9 E & 9 W.

Work Program Carried out by Cobre Exploration Ltd. Consultants : Whiting Mining Services International Ltd.

Author: F.B. Whiting, Geological Engineer,

Ph.D, P.Eng.

Date of Work : Nov. 28 - Dec. 7 , 1980

Date of Report : May 19, 1981.

Claims: Richfield #1, Record # 1780 (5) Richfield #2, ** 1781 (5) .. Richfield #3, 2050 (9) Ħ Richfield #4, 2051 (9) Richfield #5, 11 2397 (12) ** Richfield #6, 3480 (12) CDF #1 . 1727 (4) CDF #2 " 1728 (4) .. CDF #3 1729 (4)



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Fig. 1 : Location Map

Fig. 2 : Claim Map

Fig. 3 : Surface Plan . In pocket.

Fig. 4 : Cross Section, Holes 80-21 & 80-27. In pocket.

A. INTRODUCTION

PROPERTY & LOCATION

The Richfield claims are situated from 4 to 13 km north of Topley, B.C., in the Omineca M.D., on NTS maps 93 L 9E and 9W, at elevations of 1000-1400 m, at Latitude N 54°34', Longitude W 126° 14'. Access is by a dirt road that branches from the Topley-Granisle Highway 10 km north of Topley & thence 3 km east to the work site.

1.

HISTORY

The showings were discovered in 1927, and work was carried out on surface and on two underground levels from 1928 to 1929. The workings were de-watered and sampled by Silver standard Mines in 1954-57. Four holes were drilled by Canadian Superior Explorations in 1975. Geophysical surveys were made by Cobre Exploration Ltd in late 1979, and that company drilled many holes in the period April-December 1980 . This report covers the final hole drilled after November 27, 1980, and the road work for access to the drilling site, plus reclamation. A report filed earlier covered the previously-drilled holes.

ECONOMIC POTENTIAL

Reserves indicated by the old mine workings and the





1980 drilling amount to 200,000 tons grading 3.8 grams of gold per ton and 174 gms silver per ton, with minor lead, zinc, copper, and cadmium. The deposit is of the volcanogenic type and offers the potential for finding much larger tonnages.

WORK SUMMARY

The work covered by this report includes the drilling of Hole # 80-27 to a depth of 151.48 metres, road construction to the drilling site, and reclamation work in cutting fallen trees into short lengths as required by the Mines Inspector. Logging and report preparation and map drafting costs are included. The hole diameter was 5 1/2 inches. The road is 300 m long, 6 m wide.

The work was done on the Richfield #2 M.C., record # 1781 (5). Some of the road construction was on Richfield #1 M.C., # 1780 (5).

B. TECHNICAL DATA & INTERPRETATION

Purpose of Drilling, and Result

Earlier drillholes had found good-grade goldsilver mineralization as beds within a sequence of acidic pyroclastic rocks belonging to the Jurassic Hazelton formation.

2.

The host beds strike north and dip west at about 45°. Hole 80-27 was drilled as a step-out to the south to follow the host unit and test it for repetitions of the mineralized layers. The hole was drilled with a combined rotary and down-the-hole percussion rig; it was planned to stop this type of drilling once the beds overlying the ore-host unit had been penetrated and to then move a coring drill on to the site to extend the hole by coring through the potential ore layer.

The hole encountered 54.86 m of overburden and then entered the overlying formation which consists of chloritized andesite with some layers of ultrabasic rock. It penetrated into the acidic pyroclastic host unit for a length of 2.14 m, showing cuttings with strong alteration and considerable pyrite. The rotary/percussion drill was then moved off. Owing to technical problems and the onset of extremely cold weather the coring drill was not put on the hole in December, 1980; it is planned to complete the hole through the ore-host unit in 1981.

Conclusions:

The presence of strong alteration in the tuffaceous beds, plus the presence of pyrite right at the top of that unit, are considered to suggest that mineralization can be expected to occur some tens of metres below the point

3.

reached. Continuation of the hole is strongly recommended. Other holes should also be drilled farther to the south, following the same formation.

Respectfully submitted,

F.B. Whiting, Ph.D., F.Eng. President, Whiting Mining Services International Etd:

Core Storage:

The cuttings from this hole were bagged and labelled and are stored in the core storage building on the property. C. ITEMIZED COST STATEMENT

Item	Dates	Rate	<u>Total \$</u>					
Personnel:								
A. Danbert - field helper	Dec.7-8/80	\$ 8.00/hr for 20 hrs +CPP,UI	\$ 168.00					
crew	Nov.28- Dec.6 /80	\$ 7.50 /hr for 8 days, 8 hrs per day	\$ 480.00					
L. Merrill - slashing crew	Nov.28- Dec.5 /80	\$ 7.50/hr, 8 hr per day, 7 days	s \$ 420.00					
K. Critch - Slashing crew	Nov.28- Dec.4 & 6	\$ 7.50/hr, 8 hr per day, 7 days	s \$ 420.00					
L. Halfe - slashing crew	Nov. 28- Dec.5 /80	\$ 7.50 /hr, 8 h per day, days	rs \$ 420.00					
Equipment Rental								
Bulldozer : road to Nov.28,29 \$ 60/hr,15 hrs \$ 900.0 drilling site & site preparation								
Rotary & Percussion Drilling								
Long Drilling Co.	Nov.30 - Dec.3 /80	\$ 38.00/metre for 151.48 m	\$ 5,756.24					
Drafting & Report Preparation								
F.Whiting - geol.engineer May 14-17 \$ 200/day for \$ 800.00 1981 4 days								
Xeroxing, report covers		:	\$ 8.00					

TOTAL EXPENDITURES...... \$ 9,372.24

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D. STATEMENT OF QUALIFICATIONS

<u>NAME</u>: WHITING, Francis B., P.Eng. PROFESSION: Geological Engineer.

EDUCATION: B. App. Sci. in Geological Engineering, University of British Columbia.

M.Sc. in Geology, McGill University.

Ph.D. in Geology and Economics, Massachusetts Institute of Technology.

PROFESSIONAL ASSOCIATIONS:

Registered Professional Engineer, Province of British Columbia.

Registered Professional Engineer, Yukon Terr. Member, Society of Economic Geologists.

EXPERIENCE:

Pre-graduate experience in Geology with Geological Survey of Canada and International Mining Corporation.

One and One-half years Field Geologist for Hedley Mascot Gold Mines, Placer Development, and New Jersey Zinc Explorations, in B.C.

Three years as Mine Geologist, Missouri, for St. Joseph Lead Co.

Six years as Chief Geologist, Aguilar Mine, for Compania Minera Aguilar, S.A., Argentina.

Seven years as Exploration Chief in Argentina for Compania Minera Aguilar S.A.

Five years as Exploration Manager, later General Manager, for Arrow Inter-America Corporation, in western and eastern Canada.

Three years as Regional Manager for Western

North America for Brascan Resources Limited. Three years as Consulting Geologist, as President of Whiting Mining Services International Ltd.

Active experience in Canada, U.S.A., Mexico, Honduras, Brazil, Chile, Peru, Argentina, Australia, Bolivia.

E. LOG SHEET

Commenc	ed : <u>Nov</u>	30/80 Completed: Dec. 3 /80 . Core	Size:_	Percussion
Collar	Coords:	N: 4460.0 E: 4822.00 . Coll.	Elev.	073.8 M
Logged	by:L.Nie	olls - F.Whilmy . Date: Dec 8 /80.	Page	of
From .	То	. Description	. Assa	ivs
m.	m.	Argb of Hole; Vertical 90°	Au	Ag .
0.00	54.86	OVERBURDEN		
		Gravel & brown mud,		
54.86	149.34	ANDESITE & ULTRABASICS		
		54.86-101.42 : Typical H.W. Anderite, gray	·	
·		matrix, very slightly magnetic:		
		101.42 - 110.60 : Dark green ultrabasic,	:	
		moderately magnetic.		
		110.60 - 124.90 : Reddith (hematitic ?)-		
		speckled andesite.		
		124.00 - 149. 0 : Green Andrite & anor		
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149.34	151.48	FRAGMENTAL BOCK : Ten purchastic		• <u>····</u>
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¢ 1100 m EAST 1000 m ۰. <u>LEGEND</u> •• •• ++ × × glacial drift overlying andesite basic (and ultrabasic ?) rocks fragmental tuffaceous rocks variably altered to ankerite & dolomite [±] quartz *** <<u>`</u>< argillite andesite (middle and footwall) gouge • breccia layering or banding sulfide mineralization silicification and/or quartz stringers bleaching 900m mineralized horizon • .76m/262/10.92/ sample width (metres)/Au(oz t)/Ag(oz t)/ 4.96/3.35 Pb (%)/Zn (%) sampled portion of drill hole MINERAL RESOURCES BRANCH COBRE EXPLORATION LTD. • RICHFIELD PROPERTY Omineca M.D. FIG. 4. SECTION 27-21 50 m SCALE I:500 (metres) Jan, 1981 Min-Ex Services Ltd.

