

ASSESSMENT REPORTS

060525

MAP No. 105-D-11 **TYPE OF WORK:** Geol

REPORT FILED UNDER	Whitehorse Copper Mines Ltd.		
DATE PERFORMED	1973	DATE FILED:	June 1973.
LOCATION -	LAT.	60° 38' N	Whitehorse Area, Yukon
	LONG.	135° 04' W	
CLAIM Nos.	Little Chief+Big Chief+Valerie Zones		
	OHG 1-3 M.L. No. 1527-9		
	PATER 2 M.L. No. 1533 and 1535		
WORK DONE BY	D. Tenney and V.V. Jutronich P.Eng.		
WORK DONE FOR	Whitehorse Copper Ms L		
REMARKS	The geology is magnetite serpentine skarn zones adjacent to a diorite of the Coast Range Intrusive Complex. The skarn strikes NW and dips 70° east.		

WHITEHORSE COPPER MINES LTD.

LITTLE CHIEF -- BIG CHIEF -- VALERIE

Proposed Surface Drill Programme

INTRODUCTION

The Little Chief Mine is located six miles from Whitehorse and is accessible by a good all weather road from mile 912 on the Alaska Highway.

The mine is currently producing 2200 tons/day at a grade of 2% Cu. Ore reserves including the Middle Chief zone are three million tons at 2.2% copper.

GEOLOGY

The area is located approximately in the centre of the Whitehorse Copper belt which extends for a known distance of twenty miles in a north westerly direction.

Copper-iron deposits in this belt are contact ⁵metacomatic or skarn deposits. They occur near the contact of diorite of the coast range intrusive complex and the Triassic Lewes River group of sedimentary rocks.

In the Little and Middle Chief orebodies bornite, chalcocite, malachite, and chalcocite occur in a sequence of quartzite, bornite zone which strikes north westerly and dips 22° or 24°. A mineralized shear occurs between a quartzite and barren skarn on the footwall and limestone and barren skarn in the hanging wall. This skarn and sedimentary sequence is part of an embayment in the diorite.

The Little Chief orebody is faulted at its north end. The Big and Middle Chief deposits are a faulted northward extension of the Little Chief orebody.

PROPOSED EXPLORATION

1. Big Chief

Two diamond drill holes have been layed out to test at depth, Middle and Big Chief deposits.

<u>Hole</u>	<u>Direction</u>	<u>Departure</u>	<u>Dip</u>	<u>AZ</u>	<u>Depth</u>
1	115° N	55° E	-60°	W	300'
2	110° N	55° E	-45°	W	300'
3	116° N	5650° E	-55°	W	300'

2. Valerie

On I.P. anomalies north of the Valerie workings 300' southwest of the Little Chief pit were drilled from surface and revealed low grade copper mineralization in a magnetite-serpentine skarn.

Proposed Surface Drill Programme (cont)

PROPOSED EXPLORATION

2. Valerie (cont)

LCU 115 drilled from the decline passed below this mineralization
(see schematic drawing #1)

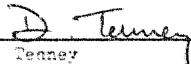
West of the Valerie there is surface evidence of a repetition of
the limestone quartzite sequence.

A 2,000 ft. hole steeply inclined to the east would test possible
limestone, quartzite contacts should the sequence be repeated.
below LCU 115.


These quartzite limestone contacts near the diorite intrusive are
potential zones of mineralization.

<u>Section</u>	<u>Departure</u>	<u>Dip</u>	<u>AZ</u>	<u>Depth</u>
0150	32 E	-80°	E	2000

signed


D. Tenney
Chief Geologist

signed


M. J. Peterson, P. Eng.
General Manager

Date 11th, 1973.

BIG CHIEF claim consists of:

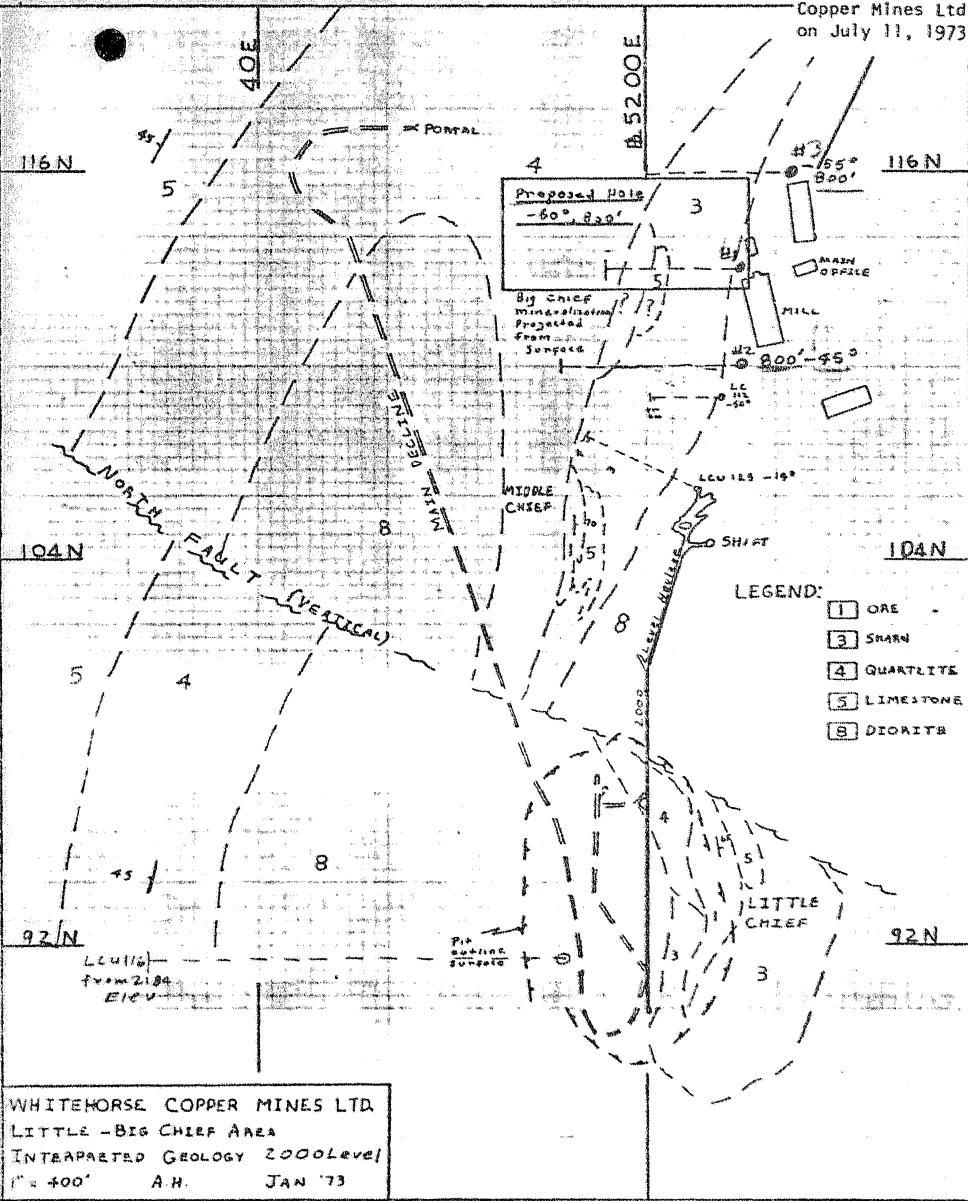
Claims ORO no. 1 QML 1527 (mining lease)
 ORO no. 2 QML 1528 (mining lease)
 Kohler No. 3 Grant No. 76782

VALERIE claim consists of:

Claim Peter No. 2 QML no. 1533 (mining lease)

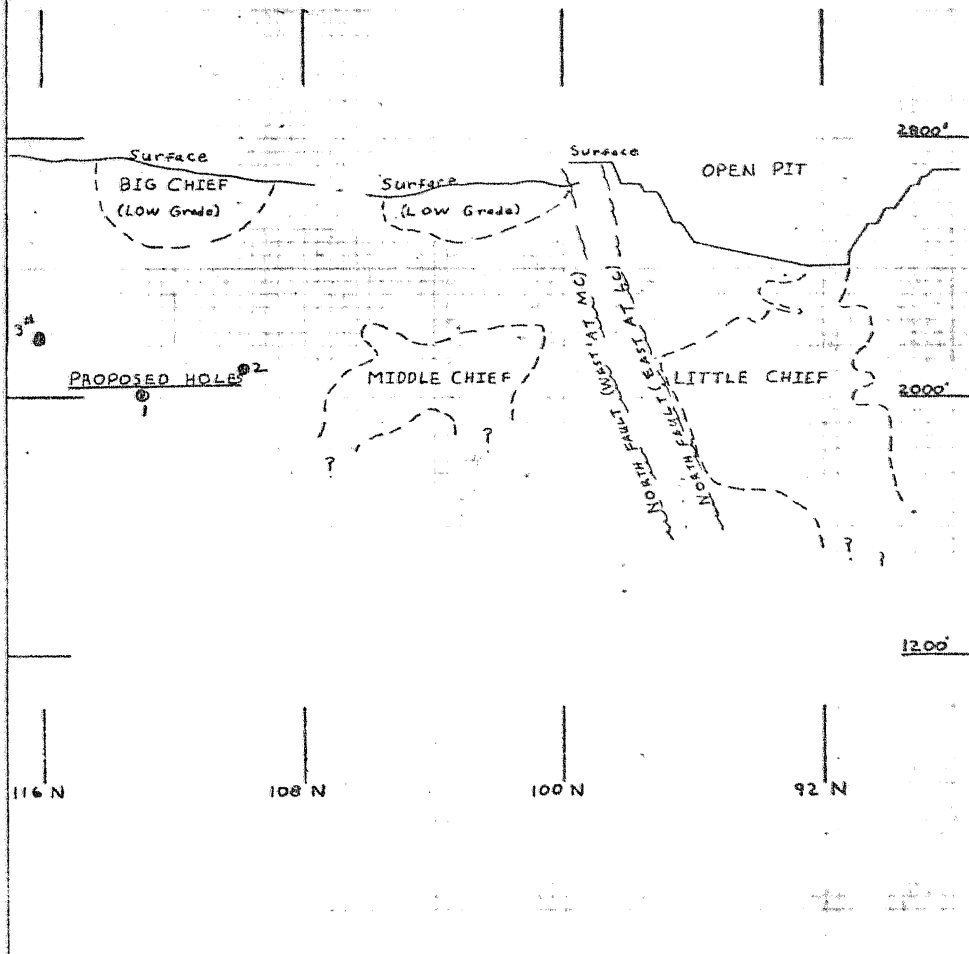
The Company has an undivided 66 2/3% interest in each of
the above claims.

Appendix "A" to the application of Whitehorse Copper Mines Ltd, executed on July 11, 1973



WHITEHORSE COPPER MINES LTD
 LITTLE -BIG CHIEF AREA
 INTERPRETED GEOLOGY 2000 Level
 1" = 400' A.H. JAN '73

N
(Az. 334°)



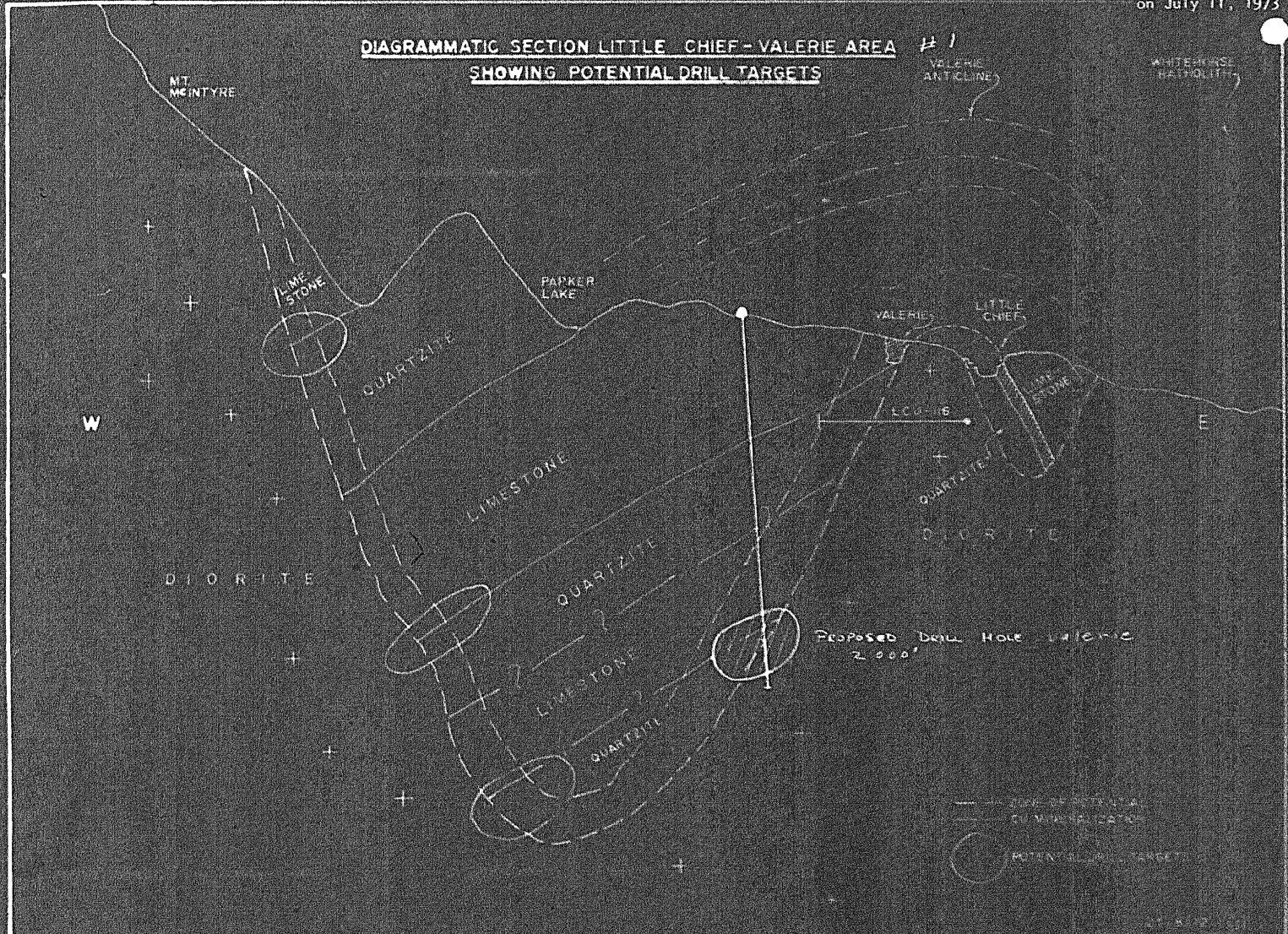
WHITEHORSE COPPER MINES LTD.
LITTLE - MIDDLE - BIG CHIEF ZONES
LONGITUDINAL SECTION
1" = 400' A.M. JAN '73

DIAGRAMMATIC SECTION LITTLE CHIEF - VALERIE AREA
SHOWING POTENTIAL DRILL TARGETS

1

VALERIE ANTICLINE

WHITEHOUSE BATHOLITH



Proposed Drill Hole Valerie
2,000'

--- BASE OF POTENTIAL MINERALIZATION
○ POTENTIAL DRILL TARGETS