PRELIMINARY REPORT

on

NICOLA PROJECT

Nicola M. D.

92 I 2/E

by

M. R. Wolfhard Feb. 1977

NICOLA

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NICOLA PROJECT

SUMMARY:

A target of porphyry copper aspect, in a covered area at least 1200 m by 900 m, bounded on two sides by altered, copper mineralized outcrops, exists on the Nicola claim. This target should be tested by percussion drilling, with a budget of \$20,000.

INTRODUCTION:

PROPERTY: One claim, Nicola # 1, 20 units, Nicola M.D., Record # 102, 20 May, 1976, owned by C. J. Robertson. The owner of Lot 572 (see fig. 3) probably owns base metal rights to his land.

LOCATION: 15 km east north east of Merritt, B. C. in NTS 92 I 2/E, on the southeast side of Clapperton Creek. Relief is moderate, sloping up to the southeast at 15°, from 800 m to 1100 m. Vegetation is open pinefir forest. Exploration and drilling season is 8 to 9 months.

ACCESS: Exploration access is by auto from Merritt, about 4 hours from Vancouver by auto. Production access would be by road to Vancouver, or via the C. P. R. branch line at Merritt.

HISTORY: Two copper bearing veins, one known as Peacock, 700 m north of the north center of the Nicola claim, and another known on the Turlight, 1000 m south, south east of the south east corner of the Nicola claim, have attracted some prospecting attention for many years. A zone containing chalcopyrite, minor pyrite in a chloritized foliate granodiorite near the southeast corner of the Nicola claim was bulldozer trenched and diamond drilled by furlight in 1961. 1976, Quintana geologists compiled available information, mapped the outcrops, and staked

the ground.

GEOLOGY:

REGIONAL: The Nicola property lies within a narrow north trending belt of Upper Triassic to Lower Jurassic, basic to intermediate, volcanics. These Nicola group volcanics are intruded by co-eval plutons associated with porphyry copper mines at Copper Mountain - Ingerbelle, Highland Valley, and Afton-Iron Mask. A host of other porphyry copper prospects are known within this 60 km by 300 km belt stretching from the U. S. border north to Kamloops and beyond.

To the north east of the Nicola claim is a large body of quartz monzonite. The west contact of this body trends north west across the northeast corner of the Nicola claim. West of this body is a mass of foliate granodiorite, at least 850 m wide in plan, trending north-The quartz monzonite apparently intrudes the granodiorite. West of the granodiorite, along the south boundary of the Nicola claim, are scattered exposures of foliate and massive andesite, and one occurrence of limestone with volcaniclastics. The center and west side of the claim is covered by varying thicknesses of glaciofluvial deposits. Locally, on benches near Clapperton Creek, these deposits are probably thicker than 60 m.

(cont'd)

Chalcopyrite, minor pyrite in quartz veinlets paralled to and cutting foliation occur over a large area in foliate granodiorite and andesite north east, east, and south east of this covered area.

Veinlets are reticulate, spaced every 0.3 to 1 m and are accompanied by pervasive chlorite, epidote alteration. The only difference between this zone and a classic porphyry propylitic zone is that the py/cpy ratio here is 1/10 instead of 10/1 or 20/1.

CONCLUSIONS AND RECOMMENDATIONS:

A covered area, at least 900 m by 1200 m, oriented north west, exists on the Nicola claim. On the northeast, east, and southeast sides this covered area is limited by exposures of propyliticly altered foliate granodiorite and andesite, mineralized by chalcopyrite, minor pyrite in a wide spaced quartz stockwork.

This zone should be tested by about 10 percussion holes drilled to an average depth of 45 m.

BUDGET:

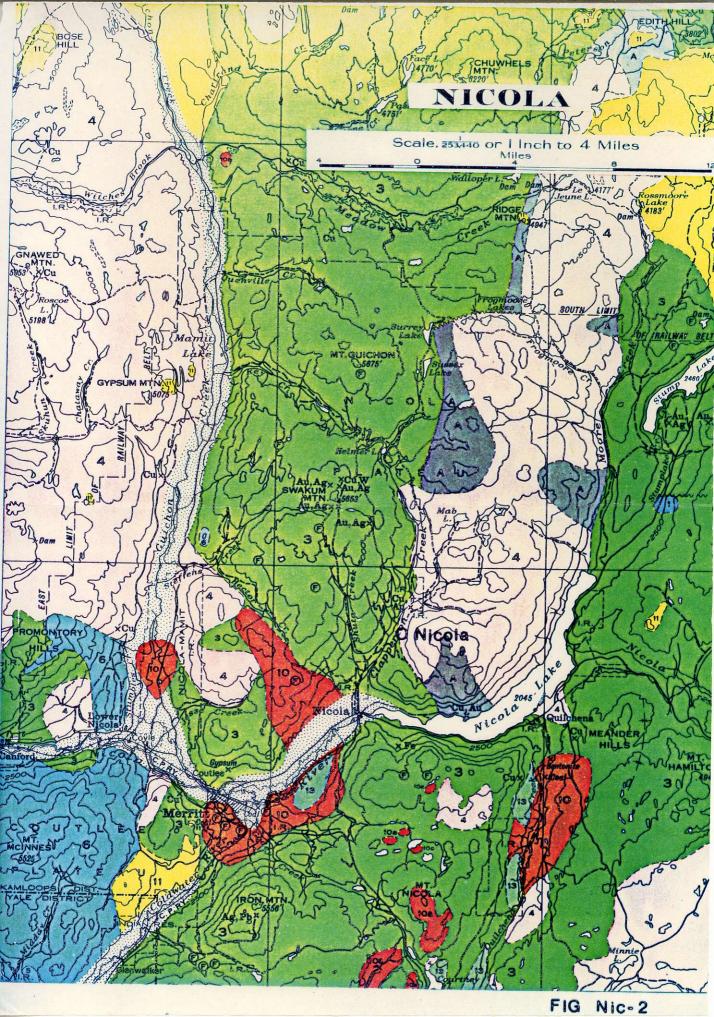
1000 m percussion drilling @ \$17/m \$1700

Contingency \$3000

\$20000

REFERENCES:

Field Maps of K. W. Livingstone



LEGEND

TERTIARY MIOCENE OR LATER

13

CENOZOIC

MESOZOIC OR CENOZOIC

MESOZOIC

PALÆOZOIC

Valley basalt: mainly vesicular basalt

MIOCENE OR EARLIER

11 12

NAMLOOPS GROUP

11. Rhyolite, andesite, and basalt: associated tuffs, breccias and agglomerates. May include some younger basalts 12. TRANQUILLE BEDS: conglomerate, sandstone, shale, tuff; thin coal seams



COLDWATER BEDS: conglomerate, sandstone, shale, and coal; 10a, similar to 10, but may include younger beds

CRETACEOUS OR TERTIARY



COPPER CREEK INTRUSIONS: granite, granodiorite, granite porphyry



Andesite, basalt; picrite, agglomerate, breccia, and tuff; minor conglomerate and sandstone



Conglomerate, sandstone, and shale

CRETACEOUS

LOWER CRETACEOUS

KINGSVALE GROUP



Rhyolite, andesite, and basalt; associated tuffs, breccias, and agglomerates; arkose, conglomerate

5

SPENCE BRIDGE GROUP

Hard, reddish lava

JURASSIC AND(?) LATER

4

COAST INTRUSIONS: granite, granodiorite, gabbro; 4a, Iron Mask batholith; syenite, monzonite, diorite, gabbro; 4b, pyroxenite and peridotite. Probably not all of the same age, and may be in part post-Lower Cretaceous

TRIASSIC

UPPER TRIASSIC

NICOLA GROUP



Greenstone; andesite, basalt; agglomerate, breccia, tuff; minor arqillite, limestone, and conglomerate

CARBONIFEROUS AND PERMIAN

CACHE CREEK GROUP (?)



Greenstone, generally slightly sheared. May include some Triassic rocks (3)



Argillite, quartzite, hornstone, limestone, sheared conglomerate, breccia, greenstone, and serpentine; 1A, limestone



Chlorite schist, quartz-mica schist, amphibolite, and granitic intrusions; commonly gneissic and largely of Palæozoic age

