GEOLOGICAL REPORT ON THE RICKY CLAIM (6 Units), NANAIMO MINING DIVISION,

B.C., for

MINAS DE CERRO DORADO LTD. (NPL)

Vancouver, B.C. April 15, 1979

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R.H.D. Philp, P. Eng.



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Scale 1:50,000 Scale 1:500 GEOLOGICAL REPORT ON THE RICKY GLAIM, NANAIMO MINING DIVISION, B.C. FOR MINAS DE CERRO DORADO LTD. (N.P.L.)

Introduction:

The Ricky mineral claim consists of 6 units straddling Storey Creek approximately 3/4 mile east of Nimpkish Lake.

Staked to cover previously known zinc-copper-lead mineralization the claim is underlain by volcanic and sedimentary units of the Vancouver Group intruded by granodiorite.

The writer and an assistant conducted a program of gridding and geological mapping of a portion of the group in late March, 1979 to determine what approach should be taken in further exploring the mineral occurrences.

General:

The property lies east of Nimpkish Lake, straddling southwesterly flowing Storey Creek. Coordinates near the center of the group are approximately 126°55' west longitude, 50°21' north latitude.

Access is by foot along a good trail leaving an old logging road a short distance northwest of Kinman Creek.

Relief is moderate to steep with elevations varying from 700 to 2,000 feet above sea level within the claim area.

The region is forested with fir, balsam, hemlock and cedar. Underbrush is light but considerable windfalls along Storey Creek make travel difficult.

Property:

The property consists of the Ricky Mineral Claim, record number 76(3), consisting of 6 units, recorded on March 25, 1976.

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Work Completed:

A north-south base-line was established for 1,400 meters and cross-lines run at 100 meter intervals. All lines were established by chain and compass, flagged and stations marked at 40 meter intervals on cross-lines. A total of 5,500 meters of base and cross-lines were established in this manner.

Geological mapping at a scale of 1:500 was carried out over the gridded area. Outcrop between cross-lines was tied in either by chain or pace and compass traverses.

It had been planned to conduct a magnetometer survey as well but time did not permit this. However, a traverse was run along one line to determine its applicability.

Geology:

General:

Regional mapping has been completed by the Geological Survey of Canada and published as Map 1029A at a scale of 1 inch = 1 mile.

This indicates that the area occupied by the Ricky claim is underlain by Upper Triassic-Jurassic volcanic and sedimentary units in the west intruded by Upper Jurassic and/or Lower Cretaceous rocks in the east.

The volcanic-sedimentary series, referred to as the Vancouver Group is divided in order of decreasing age into the Karmutsen Group, predominantly basaltic and andesitic volcanic flows; the Quatsino Formation consisting of crystalline limestone; and the Bonanza Group consisting of both sedimentary and volcanic units.

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Numerous contact metamorphic and replacement deposits are found in and along the contacts of the Quatsino limestone in association with granitic intrusives throughout northern Vancouver Island. A lead-zinc-copper prospect previously referred to as the Smith Group occurs on the Ricky Claim.

Local Geology:

Within the mapped area granodiorite occupies the eastern boundary, forming abundant outcrop and steep cliffs in the southeast portion and scattered smaller outcrops in the northeast. The western boundary is northerly trending although irregular and cannot be accurately plotted in the northern portion where outcrop is less abundant. This is a light grey hornblende granodiorite, generally medium grained but varying in places from fine to coarse. Main jointing directions are north to northeast, dipping moderately to steeply west.

In places the granodiorite is cut by felsite dikes and in one area near line 23 abundant quartz is present in granodiorite float.

Andesite outcrop and rubble occur in the northern por-

tion of the property and would correspond to units of the Karmutsen Formation. Except for in the vicinity of lines 8 N to 10 N this rock is highly altered and hornfelsed containing some calc-silicate minerals and chlorite. Pyrrhotite, pyrite, sphalerite and occasionally chalcopyrite were noted in some of this material but are very spotty and erratic.

Continuing south this unit tends to contain more skarn minerals consisting mainly of epidote, actinolite and pyroxene with some garnet. This is an extremely dense, hard rock. Tron and zinc-copper-lead sulphides are again very erratically distributed and no definite zones were outlined. However, all old workings are very badly sloughed.

Lead-zinc mineralization occurs in patches of skarn within limestone in a natural sink on line 1 N immediately east of the base line and in old pits and outcrop to the east of this in an embayment in the granodiorite. This was the strongest mineralization noted by the writer, but again, the workings are badly sloughed.

West of the base line limestone occupies the central portion of the mapped area. This varies from a light grey, fine to medium crystalline rock to medium to coarse crystalline white limestone. Small patches of skarn are occasionally present but are erratically distributed and discontinuous. Sphalerite and pyrite are the most common sulphides.

Limestone also reappears in the extreme northwest corner of the mapped area.

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The limestone is overlain to the southwest by argillaceous sediments, commonly containing pyrite. A felsite dike(?) occurs near 1 S, 1 W and granodiorite extends west as far as 0+60 W on line 0+00.

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Magnetometer traverse:

Magnetometer readings were taken along a single traverse line (1+00 S) to determine the magnetic variation over the different rock types. The instrument used was an MF2 Fluxgate Magnetometer.

Readings varied from +665 to +1,500 gammas and showed the granodiorite to have a higher magnetic susceptibility than the sediments. The erratically high reading of 1,500 gammas occurred in the region of a skarn zone.

Conclusions:

Geological mapping has shown an irregular but northerly trending contact between granodiorite to the east and sedimentary-volcanic units to the west.

Near the granodiorite the volcanics have been altered to hornfels containing weak and erratically scattered zinc-copper sulphides. To the south of this, erratic skarn zones have developed in crystalline limestone in the vicinity of the granodiorite contact. Zinc-lead-copper mineralization occurs in places in the skarn.

Mineralization appears very erratic but all old workings

are badly sloughed and should be cleaned to determine the extent of the mineralized areas.

A magnetometer survey should be useful as an aid in geological mapping and possibly in tracing the skarn zones.

Geochemical soil sampling should also be carried out in the favorable contact area.

Respectfully submitted,

R.H.D. Philp, P. Eng.

Vancouver, B.C.

April 15, 1979

CERTIFICATE

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I, RONALD H.D. PHILP, of Waspam, Rio Coco, Depto de Zelaya, Nicaragua, do hereby certify that:

- 1. I am a graduate of the University of British Columbia (B.A. Sc. 1961).
- Since graduation I have been engaged in mining exploration in North America, Central America, Australia and Fiji.
- 3. I am a registered member in good standing of the Association of Professional Engineers of British Columbia.
- 4. I carried out the work described in this report during . March, 1979.

Ronald H.D. Philp, P. Eng.

Vancouver, B.C. April 15, 1979 DOMINION OF CANADA.

PROVINCE OF BRITISH COLUMBIA

Fo Wir

In fir flatter of the geological survey conducted on the Ricky Claim, Nanaimo M.D.

I. Ronald Philp

of c/o 107-325 Howe St., Vancouver, B.C,

in the Province of British Columbia, do solemnly declare that the following persons were employed and costs incurred in conducting the survey during the period March 20 - 24, 1979

Personnel:

R. Philp, geologist - field, 4 days @ \$200.00/day R. Philp, geologist - office, 2 days @ \$200.00/day Z. Watler, assistant - field, 4 days @ \$70.00/day	\$800.00 400.00 280.00
	\$1,480.00
Disbursements:	
Automobile - 656 miles @ 20¢/mile\$131.20Meals & accomodation268.65Gas43.04Supplies202.76Ferry28.00Miscellaneous12.50	
+ 15% Service charge	686.15 102.90
Total Costs	\$2,269.05

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the " Canada Evidence Act."

Declared before me at the Ce Varcouver , in the the

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Province of British Columbia, this a

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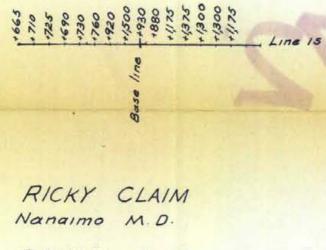
, A.D.

SUB-RECORDER

LEGEND

Granodiorite - gran. -Andesite Argillite - argil. Felsite - fels. Limestone - 1.s. Hornfels - hfls. Skarn - sk. Zinc - Zn Jointing A. Bedding A. Outcrop C. Magnetic reading +665

Scale 1:500



GEOLOGY PLAN



