



1966 PRELIMINARY

REPORT

ON

H. V. WARREN PROSPECT

TCHAIKAZAN RIVER, TASEKO LAK

B. C.

N.T.S. 92-0-A

CLINTON

MINING DIVISION

Vancouver 3.5. J.J. McDougall Geologist

RESULTS, ASSAYS & RESERVES FROM SOME TO THE ARM THE TRUE SERVES FOR LONG Of the three rock cuts attempted on the west bank of the river, one on the south end and another some 500 feet to the north were completed. An excessive amount of "gouge-like" material was encountered and considerable sloughing occurred. Unfortunately, the unmistakingly fresh bedrock desired was not obtained and assay results may be low. On the other hand, the gouge-like material - a very small amount of which was reportedly included in the 30 foot sample taken of each cut - is somewhat enriched so that the two agencies may cancel. 1 500 fee In the five foot sections, channel-type sampling of the southernmost cut, taken as deeply as possible, ran (a) in copper: 0.23, 0.22, 0.17, 0.18, 0.21, and 0.15% for an average of 0.193%, and (b) in molybdenum: 0.03, 0.01, 0.01, 0.04, 0.02, and 0.02 respectively for an average of 0.021%. Seven similar sections representing 35 feet of the second cut ran (a) 0.12, 0.17, 0.28, 0.19, 0.12, 0.14, and 0.15% copper for an average of 0.16% Copper and (b) 0.01, 0.05, 0.02, 0.02, 0.08, 0.02, and 0.01 for an average 0.03% Molybdenum respectively. Overall average is then approximately 0.18% Copper, 0.025% Molybdenum. The gouge-like material referred in the first (southernmost) cut ran 0.21% copper, 0.88% molybdenum. Whether or not this indicates a higher grade shear zone in the immediate vicinity is not known due to relatively poor exposures even in the cut. Earlier sampling by Warren over presumably lesser widths returned 0.15% copper, 0.19% total molybdenum on the "East" (downstream) showing and 0.32 copper, 0.09 molybdenum on the "West" showing.

On a gravel bar several hundred feet south of the most southerly exposure, at least one rounded granitic boulder containing molybdenite-filled fractures was picked up by Christiansen, indicating

inaction of the court territors in the court in their

possible upstream continuance. On the mountainside west of camp, granitic float containing weakly disseminated chalcopyrite is not uncommon. Horeover, prespecting of sill-like bodies of similar but less perphyritic and less silicified rock outcropping about two-thirds of the way up the mountain failed to show mineralization similar to that seen along the river bank.

Near the base of the mountain but 1,000 feet or so across the swampy flat west of camp, earlier sampling by Warren of a number of springs emerging from the hillside showed an abnormally high copper-molybdenum content, as did some streams and silts tested 1,500 feet southwest of camp and a couple streams a mile or two upstream and southeast of the river.

Likewise bio-geochemical results from work on the flats (spruce and lodgepole pine) possibly indicate metal concentrations as values for molybdenum ranged between 2 and 300 ppm. A dozen soil samples from a line on relatively dry ground in the camp area ranged from 12 to 205 ppm copper (hot X traction) and 1 to 15 ppm molybdenum (hot X traction).

Although not closely related geologically and not reported on because far better descriptions are probably available if required, the gold-silver prospects were sampled and results should be noted. Chips of a poorly defined and narrow tetrahedrite vein with erratic widths up to four inches but traceable for 900 feet, ran 0.12 gold, 174.6 oz. silver, while some of the "poorer" chips of the gold vein (containing hessite and altaite) (silver and lead tellurides) returned 1.20 oz. gold, 13.6 oz. silver. These deposits are somewhat complicated structurally with definite fault terminations reported.

the river should not be too

### CONCLUSIONS AND RECOMMENDATIONS

The Tchaikazan copper-molybdenum deposits, as presently known, are of considerably lower grade than anything destined for production in British Columbia. However, quite possibly only a fraction of the total favorable intrusive mass is exposed and there

thus remains the chance that the present exposures are lower grade fringes of a better mineralized body. Evidence that such exists is flimsy but includes, besides ample room for its occurrence, a favorable regional geological environment and erratic but anomalous-geochemical data as well as meagre float picked up along proposed extensions. The well fractured quartz monzonite is an excellent host rock and the accompanying siliceous alteration is similar to that occurring around many porphyry-type deposits. Such combinations are not found "every day". Surface leaching has been effective but to what degree to the depths sampled is not known.

The somewhat remote prospect thus, due mainly to lack of positive information, is of only "third or fourth order interest". However, it is not in as hostile a physical environment as similar occurrences we have encountered elsewhere and this is definitely in its favor.

It is suggested that we re-negotiate an option with the owners; this would involve a low down payment but would commit us to doing a certain amount of work before the fall of 1967. This work, which fortunately can be done earlier in the spring than that involved in other snow-covered projects, should include a soil geochemical survey utilizing an extended sample tube capable of penetrating a few feet of bog in order to obtain soil adjacent to bedrock. Rio has such a rig attached to a cobra drill which they have offered to loan to us for evaluation purposes when repaired. Coincidental to the geochemical survey, several steep packsack drill holes (60 - 80 feet) would determine, assuming reasonable recovery, whether a grade increase is possible at shallow depth near the present working area.

Diamond drilling west of the river should not be too difficult despite the bog. The depth of overburden east of the river is not known but should not be too great.

Any success from the preliminary stages could be followed up in early fall using our wireline drill.

# MINERAL OCCURRENCES WITHIN THE PROPOSED CHILCO - TASEKO LAKE PARK

The following mineral occurrence and unexplained geochemically anomalous regions within the proposed Chilco-Taseko Lake Park are of continued interest. Five areas are mentioned of which two, Lord River and Deschamps Showing warrant follow-up work.

#### Lord River

Reconnaissance geochemistry has defined a region underlain by altered monzonite and granodiorite anomalous for both copper and molybdenite. Follow-up work is justified.

#### Deschamps Showing

Chalcopyrite and molybdenite occur in brecciated volcanic rocks at the south end of Franklyn Arm. Grab samples taken from separate localities assayed 0.35%, 0.1% Copper and 0.01 and 0.086% molybdenite. (Attachment 1 to 3). To date work has been confined to several small hand dug trenches made prior to 1963. This area is of continuing interest.

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#### Chilco Lake Breccia

Showing is a tectonic breccia exposed on the east and west flank of Mount Kese. A description of the breccia is provided on Attachment 4. Outcrops of showings have not been sampled due to inaccessability, however numerous samples of the breccia found in talus slopes have been analysed and the results are listed in Attachments 5 through 8.

#### Tchaikazan Option

Well documented porphyry copper-molybdenite occurrence. Chalcopyrite and molybdenite occur along dry fractures and quartz veins in andesitic volcanic rocks and porphyritic diorite. Work to date includes soil sampling, induced polarization and approximately 13 diamond drill holes. Copper grades indicated by drilling suggest a copper grade of 0.15% or less, however, several untested areas with potential for improved copper grades remain. (Drawing 2).

## Pellaire Gold Mine = Hi Do

Showing occurs in coast range granodiorite adjacent to upper Triassic sediments. Quartz veins carrying gold mineralization are in irregular branching faults of small displacement. There

are five known veins of importance striking NE and dipping 45° NW. Veins are mainly in the granodiorite although two veins do penetrate the sediments for a short distance. Average width of veins are from 3 to 5 feet.

On reserves from surface sampling are given as:

- #1 vein no ore
- #2 vein 500 tons
- #3 vein 12,000 tons averaging 0.25 to 0.50 oz/ton gold
- #4 vein 15,000 tons averaging 1.00 oz/ton gold
- #5 vein 6,000 tons averaging 0.70 oz/ton gold

Total 34,000 tons averaging 0.67 oz/ton.

#### CONFIDENTIAL

April 22, 1977.

Dr. D. McCartney,
Senior Geologist,
Geological Division,
Mineral Resources Branch,
B.C. Department of Petroleum Resources,
VICTORIA, B.C.

Dear Doug:

Following our meeting of the Parks Committee of the B. C. & Yukon Chamber of Mines and also the request by the Chamber, we enclose some notes and maps that will hopefully be of some use in your case arguing against parks in the Chilco - Taseko Area.

We have worked in the area and may well do so again. In the past our efforts were mostly concentrated on the Tchaikazan property of Harry Warren's. He has, I gather, supplied your department with all results of this.

Other than this we believe that some of the prospects or anomalies on the attached notes remain as attractive targets and work on them should not be prohibited by making the area a park.

Yours sincerely,

RIO TINTO CANADIAN EXPLORATION LIMITED

Colin D. Spence

Western Regional Manager

CDS:laf
c.c. J. McDougall
Attachment

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