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## SUMMARY AND CONCLUSIONS

Quintana and Taseko have drilled some 20,000 feet of core hole on this property, in addition to the original 12 Taseko percussion holes which were instrumental in the discovery. A porphyry copper gold deposit of marginal economics has been outlined. Further drilling on the known system may well make small but significant improvements to the economics, but it would be unreasonable to anticipate dramatic changes. Quintana's future actions regarding this deposit must be based on a projection of the future real price of copper and gold and on an assessment of the politicoeconomic future of B.C. and of Canada.

Interesting alteration and weak copper mineralization in a largely overburden covered area east of the known deposit should be tested by percussion drilling in 1975.

Grade and tonnage of rock presently carried in the inferred category should be confirmed.

## INTRODUCTION

This report deals with 1974 work which included $2768^{\prime}$ of H.Q. coring, $2 \mathbf{\delta}^{\prime} 20^{\prime}$ of N.Q. coring, and $902^{\circ}$ of triconing in overburden. For a detailed discussion of the physical and geological setting of the deposit, reference should be made to the 1973 progress report.

Core recovery, a problem in 1973, was good to excellent in 1974. The improvement was due to the use of H.Q. size equipment in difficult ground, and to a keen, skilled, well supervised Longyear crew.

Collar locations and elevations of most 1974 and earlier holes were determined from a transit survey.

RESULT OF 1974 WORK

Trial pits calculated following the 1973 field season contained the following mineral reserves:

|  | Tons | Grade |  | Waste/Ore Ratio |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Cu | Au |  |
| 0.25 Cutoff | $32.9 \times 10^{6}$ | . 304 | . 016 | 2.87 / 1 |
| 0.20 Cutoff | $108.6 \times 10^{6}$ | . 250 | . 013 | 1.62 / 1 |
| 0.15 Cutoff | $320 \times 10^{6}$ | . 209 | . 011 | 1.05 / 1 |
| or |  |  |  |  |
| 0.27 Cutoff | $43.4 \times 10^{6}$ | . 30 | . 017 | 2.08 / 1 |

In 1974 a total of 9 holes from 500 to 600 feet deep were drilled, located so as to confirm and extend the better grade material. Trial pits calculated following the 1974 field season contain the following mineral reserves.

|  |  |  | Tons | Grade |  | Waste/Ore Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Cu | Au |  |
| Measured | . 228 | Cutoff | $48.1 \times 10^{6}$ | . 304 | . 017 | $1.3 / 1$ |
| Measured and indicated | $\cdot .188$ | Cutoff | $105.8 \times 10^{6}$ | . 264 | . 014 | $1.35 / 1$ |
| Measured, indicated and inferred | .18\% | Cutoff | $155.8 \times 10^{6}$ | . 251 | . 014 | 1.59 / 1 |

Cash flows calculated as shown in Appendix IV yields the following DCFPOR's.
Cu price
DCFROR
$\$ 0.80$
$\$ 1.00$
\$1. 20

A separate calculation of grade in the core of the deposit, within the trial pit outlines, using grade assigned for the previous calculations shows the following results.

| Level | Cutoff | Tons | Grade |
| :---: | :---: | :---: | :---: |
| 4100' to 4500' (400') | . 22 | $34 \times 10^{6}$ | . 302 Cu |
| Much drill information | . 18 | $39 \times 10^{6}$ | . 29\% |
| $3700^{\prime}$ to 4100' (400') | . 22 | $30 \times 10^{6}$ | . $25 \%$ |
| Little drill informatio | - . 18 | $37 \times 10^{6}$ | . 24 \% |

These two slabs are geologically similar, stacked one above the other in the core of the deposit. The upper block contains part or all of some 11 core holes. The lower block has only DDH-73-10 within it. The grade of the lower block is derived largely from assigned or estimated grades in the inferred category. It appears that these estimates were probably too conservative. Increasing the grade of the lower slab to equal the grade of the measured slab should increase the DCFROR by about 0.0 percentage points to about 00.0\%.

1 to 1.5 arpals
GEOLOGY, ALTERATIOH AND MINERALIZATION

1974 work served to confirm and refine the geological concepts developed during 1972 and 1973. A porphyry type alteration system is centered on an east or slightly north east trending quartz feldspar (quartz diorite) porphyry dike swarm with steep but uncertain dip. Copper, occurring as chalcopyrite with minor bornite together with accessory gold is concentrated in the strong sericite and/or biotite alteration facies. The system is almost completely closed off in plan, but is still open at depth. DDH-73-10, bottom at 1420' (el 3350') is still in interesting alteration and mineralization although there is some suggestion of decreasing copper grade.

Along strike to the east and west, pervasive sericite facies alteration has not been delimited, but copper grades drop to about 0.2\% in the more easterly and westerly holes. Some 2500' - 3000' further east, Livingstone has iclentified interesting alteration and copper mineralization of a few hurdred
ppm in partly leached outcrop. These exposures, in a largely covered area, could be a lead to a second hydrothermal system on the property.

## RECOMMENDATIONS

Reserves in the lower part of the core zone should be confirmed. This can be done by deepening existing holes. Untested ground, lying north of 74-7, carried in the reserve calculation as inferred waste, should be tested. Both objectives can be met by drilling about $4000^{\circ}$ of NQ hole at. an estimated $\$ 20 / f t$.

Percussion drilling should be used to test a target 2500' east of the known deposit. 8 to 15 holes, at a maximum cost of $\$ 18,000$ will be required.

Provision should be made for the $\$ 100,000$ payment due July, 19 /5.

## DRILL COST SUMMARY, 1974

| Hole | Direct Ovb. |  |  | Direct rock |  |  | Indirect |  |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Feet | \$ | \$/Ft. | Feet | \$ | \$/Ft. | \$ | \$/Ft. | Feet | \$ | \$/Ft. |
| 74-1 | 100 | 2132.12 | 21.32 | 650 | 10343.62 | 15.91 | 2833 | 4.36 | 750 | 15308.74 | 20.41 |
| 74-2 | 230 | 3162.27 | 13.75 | 456 | 8785.22 | 19.27 | 2591 | 5.68 | 686 | 14538.49 | 21.19 |
| 74-3 | 201 | 3755.73 | 18.64 | 299 | 3806:80 | 12.73 | 1889 | 6.32 | 500 | 9451.53 | 18.90 |
| 74-4 | 60 | 779.34 | 12.99 | 741 | 12951.26 | 17.48 | 3044 | 4.11 | 801 | 16774.60 | 20.94 |
| 74-5 | 61 | 1137.39 | 18.65 | 474 | 8695.50 | 18.34 | 2021 | 4.26 | 535 | 11853.89 | . 22.16 |
| 74-6 | 120 | 1818.89 | 15.16 | 681 | 11512.37 | 16.91 | 3025 | 4.44 | 801 | 16356.26 | 20.42 |
| 74-7 | 30 | 862.26 | 28.74 | 767 | 12911.87 | 16.83 | 3010 | 3.92 | 797 | 16784.13 | 21.06 |
| 74-8 | 40 | 685.76 | 17.14 | 362 | 4526.45 | 12.50 | 1517 | 4.19 | 402 | 6729.21 | 16.74 |
| 74-9 | 60 | 769.24 | 12.82 | 347 | 4338.89 | 12.50 | 1537 | 4.43 | 407 | 6645.13 | 16.33 |
| Total | 902 |  |  | 4777 |  |  |  |  | 5679 | 114,442 | 20.15 |

