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TRADER RES.

JIM-

THIS MIGHT BE OF 93A?
INTROD ONE DAY

perhaps Jim could gather up
the assessment work reports
refer to and we could
discuss further.



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Mar 25/81

PORPHYRY GOLD EXPLORATION IN THE QUESNEL TROUGH

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~~TO: [unclear]~~

INTRODUCTION

Recent exploration in the Quesnel Lake area of British Columbia has resulted in the discovery of a significant low grade-bulk tonnage gold deposit. This deposit is found to be localized proximal to a syenitic complex of lower Jurassic-upper Triassic age. The host rocks are propylitized sedimentary and co-eval volcanic rocks that flank the syenitic complex. The geological setting of this gold deposit is similar to that of the porphyry copper deposits of the alkaline suite. Mineralization associated with the gold deposit consists of epidote-pyrite-magnetite developed in a copper poor; silica deficient system.

Several porphyry gold occurrences have been recognized in the Quesnel Lake area, indicating that this type of deposit is perhaps a widely developed and distinct deposit type.

Dimac Resource Corp. has acquired several prospects within the Quesnel Trough that warrant a re-evaluation for their possible porphyry gold potential. These prospects display similar geological characteristics as the porphyry gold deposits and a program to evaluate these prospects for their gold content is proposed.

THE QR PORPHYRY GOLD DEPOSIT

Recent exploration carried out by Dome Exploration (Canada) Limited and Newconex Canadian Exploration Ltd. has established the presence of a

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porphyry gold deposit in the Quesnel Lake area of British Columbia. During the period of 1973 to 1979, Newconex located and established the presence of 1.2×10^6 tons of .07 oz/ton gold (A. Gambardella; personal communication). During the period of 1979 to 1980, Dome Exploration established further reserves which upgraded the overall gold content to greater than .09 oz/ton (R. Visagie; personal communication). Dome Exploration is carrying out a diamond drilling program field to further delineate the deposit.

The QR claim group was located on a volcanic center that was identified using regional aeromagnetic data and reconnaissance geological mapping. A ground magnetometer survey, geological mapping, a gold-copper soil and rock geochemical survey and an induced polarization survey delineated a target area. This target area consisted of a magnetic anomaly in part coincident with a weak to moderate gold-copper geochemical anomaly and a coincident induced polarization anomaly. This area was subsequently drill tested and the deposit partially delineated.

GENERAL GEOLOGY OF THE QR PORPHYRY GOLD DEPOSIT

The QR property is situated in the eastern part of the Quesnel Trough not far from the Trough's eastern boundary with the metamorphosed rocks of the Cariboo mountains. Rocks in the region consist of a thick succession of submarine volcanics composed of pillowandesite, agglomerate, pillow breccia, heterolithologic volcanic breccias as well as discontinuous carbonate horizons and volcanic conglomerate, sandstone, tuff, laharc breccia and limestone pebble conglomerate.

Synvolcanic stocks of diorite, syenodiorite and syenite occur within the submarine sequence and represent eroded conduit zones from which much of the flows and breccias were erupted. On the QR claims the Triassic submarine volcanic rocks have been intruded by a small diorite-syenite stock. Small amounts of pyrite and chalcopyrite occur in

highly fractured, altered and brecciated rocks that flank the stock. This material is typical of mineralized rocks associated with many syenitic porphyry deposits in the Quesnel trough.

Gold mineralization in this type of deposit is found to be developed in areas of weak copper mineralization and is associated with areas that may have accessory magnetite; gypsum or anhydrite. Alteration associated with the gold mineralized zones is found to be predominately epidote-carbonate-pyrite.

SUMMARY

Gold mineralization is found to be developed in a quartz deficient, copper poor, alteration assemblage. The alteration assemblage consists of 1% and greater epidote with accompanying pyrite, carbonate and magnetite. This alteration assemblage has been developed as fracture fillings and host rock replacement.

Mineralization is genetically and spatially related to the Upper Triassic Nicola/Takla volcanic assemblages and the comagmatic alkalic plutons. It appears that economically significant amounts of gold can be developed in zones peripheral to areas of potassic alteration. The mechanism for gold enrichment is not clear, however, there appears to be evidence that high oxygen fugacities may have been conducive to the enrichment of gold.

PROPOSAL

Dimac Resource Corp. has acquired six properties in the Quesnel Trough area. These properties were previously explored for their porphyry copper potential and have had little appraisal of their gold potential. Two of the properties (WC and MAC) have been previously drilled and large altered and mineralized areas have been established. Another property (WELL) has a gold geochemical anomaly located on the flank of an alkali syenite intrusive complex. The other three properties have been located on areas of copper geochemical anomalies that have accompanying magnetic highs and EM trends.

It is proposed that a comprehensive sampling program be conducted on the WC and MAC properties. Previously collected drill cores should be analysed for their precious metal content. On all properties a reconnaissance soil and rock geochemical sampling program for precious metals should be undertaken. In particular, the eastern flank of the syenite complex exposed on the WELL property should be more closely examined. If encouraging results are obtained from the initial sampling programs then a more thorough appraisal of the properties would be warranted.

PROPERTY SUMMARIES

WC

The property occurs within a belt of Nicola Group rocks that have been intruded by several bodies of syenite. The Nicola Group rocks have been altered to epidote-potash feldspar-biotite-tourmaline with accompanying chalcopryrite and magnetite. In addition to disseminated copper mineralization in syenitic rocks, 'skarn' type replacement bodies of magnetite-chalcopryrite-pyrite with associated tourmaline, calcite and lime silicates has developed. The best mineralization occurs in a north-south trending zone up to 1,000 feet wide and 2,200 feet long. A grab sample of a magnetite rich section of core yielded .01 oz/ton gold.

*grab sample
- sample by MAA
- drilled by
assignment*

WELL

A gold geochemical anomaly was established peripheral to a syenite intrusive complex. The syenite complex was well outlined by a regional magnetic anomaly. The eastern flank of the syenite complex was not covered by previous soil and rock geochemical sampling.

MAC

Approximately 2 - 3% pyrite in a chlorite-calcite alteration assemblage was drilled to a depth of 600 feet. Host rocks are porphyritic andesite volcanics that are located peripheral to a regional aeromagnetic anomaly.

ASSESSMENT REPORT REFERENCES

- Report WELL N. side Carlin Lk. * A.R.#5807 - 92P/5E, 1975 Geol, Soils
Cu & Au soils * Soil report * Au anomaly
- Cite MAC epif, LL, GY. A.R.#6T83 - 93A/3W, 1976 DDE Location??
- WC → Detector Resources
Spout Lake. syen, dike, skarns.
Cu soil anom + Mag. Geol. map.
- A.R.#3883 - 1972 IP
#3882 - 1972 Mag
#5010 - 1974 Mag
* #5488 - 1974 DDE - v. poor - some Cu in skarn. (0.1-3%)
#4490 - 1973 IP no Au/Ag assays.
#4029 - 1972 IP
* #3690 - 92P/14W, 1971 Soils, Mag
#3881 - 1972 Geol, Geodesy.
- SL/CLEO A.R.#3387 - 93A/3W, 1971 Mag, Soils - Immed. West of Murphy Lk.
#2378 - No, Hg soils. - v. poor report.
- GROVE A.R.#1858 - 92P/14E, 1969 Mag
- Immed NE of Forest Grove - good air mag anom.
- WI (Bullion) A.R.#2271 - 93A/12E, 1969 Soils
#1223 - ?
(between Little Lk. & Prior Lk.) Poor report - weak anom.

Skullion - good Cu