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PROGRESS REPORT
1993 GEOLOGICAL PROGRAM
LEO D'OR MINERAL CLAIM
Bonanza Lake
Nanaimo Mining Division
British Columbia

BY

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INTRODUCTION

A geological mapping program at a scale of 1:5000 was undertaken on the Leo D'Or mineral claim between July 5-9 and August 4-11, 1993 by Paul Reynolds under the general supervision of the writer. The objectives of this first phase program were to accurately locate the contact between the marble and granitic rocks in the eastern claim area, to determine the nature and extent of quartz porphyry sills and dykes within the marble sequences and to identify areas of massive marble having a consistency of colour and texture for second phase investigation as potential quarry sites.

PRINCIPAL FINDINGS

Island intrusions granitic rocks underlie the extreme eastern and northeastern claim area. The contact between these granites and marble extends in a north-northwesterly direction from the southeast corner of the claim and passes 200 metres east of the summit of Onyx Hill before assuming a west-northwest direction toward the northern claim boundary.

A 125 - 200 metres thick quartz porphyry sill extends 700 metres northwesterly from the main granite contact and the upper contact forms the base of Onyx Hill. The northern limits of this unit are imprecisely known. Numerous smaller, 0.5 - 1 metre wide quartz porphyry sills, visible in the cliffs bounding Onyx Hill on the south and west, were

intersected during the 1991 drilling program.

A small area underlain by late Triassic andesite was noted immediately above the Bonanza Lake road near the southern claim boundary.

Elsewhere within the claim area, white, grey and buff marble of varying texture and frequency of karsting, fracturing and jointing predominates.

CONCLUSIONS AND RECOMMENDATIONS

Based on work to date, the northern half of the Leo D'Or claim has the best potential for additional quarry sites. Marble in this area is fairly massive and displays uniformity of colour (principally varying shades of white) and texture (fine to medium grained) over significant areas.

Areas identified to date which warrant additional work including detailed geological mapping, diamond drilling and physical testing include:

1. Present Work Area - precise limits of this area require definition.
2. A 200 x 300 metre area 450 metres east of the present work area - detailed geological mapping is required here prior to diamond drilling.
3. Onyx Hill - detailed geological mapping in this area integrated with previous drilling results to determine precise location of quartz porphyry sills.