TECK EXPLORATIONS LIMITED

PROSPECTING REPORT

BY

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ON THE

BOOT CLAIMS

SITUATED ON THE SOUTH SIDE OF QUASH CREEK

IN THE

LIARD MINING DIVISION

57⁰ 45'N 130⁰ 23'W

NTS: 104G/16W

October 28, 1981

INTRODUCTION

This report summarizes the work completed by Teck Explorations Limited on the Boot Claims. The claims cover areas containing copper mineralization in Triassic volcanic and sedimentary rocks intruded by dykes and small stocks of porphyritic hornblende diorite.

Prospecting on the claims took place from June 17 to 21, 1981. A total of 14 geochemical samples were taken and the geology mapped during that time.

LOCATION AND ACCESS

The Boot Claims consist of 9 units located on the south side of Quash Creek in the Liard Mining division. It is accessible by helicopter from Iskut which is approximately 20 km. N.E. from the claim area.

HISTORY

In 1964, prospectors for Conwest Explorations Co. Ltd. staked 72 claims in the Quash Creek area. By 1968, all but 16 claims were allowed to lapse. Mapping and geophysical programs were completed in 1969 and the claims optioned to Amoco Canada Petroleum Company Ltd. in 1970. Amoco drilled a total of 1,900 metres on the property and subsequently relinquished their option. In 1976, Texasgulf Canada restaked and later mapped the area. As of June 1980, all of the claims had been forfeited. On June 4, 1981, a small portion of the original showing was restaked and prospected by Teck Explorations Limited.

TRAVERSES

The traverses were controlled by using an altimeter, hipchain and air photographs. The rugged terraine limited the traverses to cliff tops and bottoms. The prospecting began at the Quash Creek lower camp and proceeded up slope towards the gossanous cliffs. On the second day of prospecting, the camp was moved above the cliffs to enable the remaining area to be traversed.

The enclosed traverse map only indicates the main routes and camps.

GEOLOGY

The field geology has been simplified into three basic rock units; green to grey altered andesite, porphyritic hornblende diorite, and a volcanic agglomerate. The weathered green to grey andesite is highly fractured and pyritized. Within the claim area the andesites are moderately to strongly altered and contain minor amounts of malachite along fracture surfaces. It is the altered andesite that forms the bright red limonitic gossans within the claims.



The hornblende diorite appears in various locations on the property but is most predominant in the east central portion of the claim block. Small amounts of chalcopyrite and malachite are found within the diorite which is believed to be the major copper source in the area.

The third rock unit, a volcanic agglomerate, contains clasts of andesite and epidote. The rock unit overlies the mineralized andesite but is totally devoid of mineralization itself. The clast size range from 1 cm. to 30 cm. in diameter and are subangular to rounded in shape.

STRUCTURE

The claim area has been highly fractured and cut by faults. It is speculated that the Boot Claims are part of a downthrusted block (footwall). Judging from Amoco's previous drill results, the metasediment encountered below the andesite on the Boot Claims probably correlates to the sediments on the northeast side of Quash Creek, thus making the northeast side of the creek the hanging wall or the thrusted block.

The sedimentary rock unit occurs in outcrop just outside of the claim block. These sediments have undergone at least two phases of deformation; tilting of beds, and foliation. The geology and observed faults have been plotted on the enclosed map.

SAMPLES

Two stream sediment samples and 12 rock chip samples were taken from the property to determine the approximate grade of the mineralization present. The stream sediment samples were multi-element analysed by ICP; and the rock chip samples assayed by normal assay techniques for Cu, Ag, Au, Mo. The assay results and methods have been compiled in Appendix IV and V and were supplied by Acme Analytical Laboratories of Vancouver. The sample locations and lengths have been plotted on the enclosed map.

The following is a summary of the field notes that accompany the sample location map. Basic rock types, descriptions and sample lengths are included.

Sample No.	Description
R81GS24	 Sample taken over 44 m. Rock type: Porphyritic hornblende diorite. Minor fault is in close proximity. Moderately fractured.
R81GS25	 Sample taken over 40 m. Rock type: Porphyritic diorite. Malachite abundant. Rock is very iron stained. Highly fractured rock.

CONCLUSION

Prospecting and sampling of the Boot Claims shows potential as a low grade porphyry copper deposit. The majority of the copper values were obtained from the hornblende diorite intrusive which is found throughout the property. Copper mineralization is also found along fractures in the altered andesites but is of low grade. The highest copper value obtained on the claims was .45% over 40 metres but the average grade is believed to be closer to .25% copper. Most of the mineralized zones are highly fractured and cut off by faults. Therefore, more detailed structural analysis is required in the area before a more accurate evaluation can be made.

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