2.3 Exploration History

The platinum potential of the Tulameen ultramafic complex has long been recognized, with the first evidence of placer gold and platinum exploration in Britton Creek and the Tulameen River dating back to the 1860's (Rice, 1947). The Tulameen complex is the largest producer of placer platinum in British Columbia, with over 680,000 grams of platinum reported during the period 1885 - 1932 (Nixon, 1990) and Rice (1947) reports that during the late 1800's the Tulameen district was the most important producer of platinum in North America. Placer platinum and gold explpration and productibn has continued through to the present.

Findlay (1963) identified the presence of in-situ platinum in the Tulameen ultramafic complex, and recognized the association between chromite and platinum values. The Grasshopper claims were staked by Leslie Allen in 1982. The history of the prpperty since this time is described by McDougall (1996), and the following is taken largely from this account. The claims were optioned to Newmont in 1986-87. Newmont carried out a geochemical and geophysical program, and discovered the occurrence of in-situ platinum in five areas, Zones A - E, as summarized in Minfile 092HNE011 and Assessment Report 15516. One particular zone, "Zone G" was tested by detailed chip and channel samples, and returned values up to 0.32 oz/t Pt across 6 feet, and averaged 0.09 oz/t Pt over about 10 feet. A second area of interest, "Zone D", returned values up to 0.45 oz/t Pt across 5.9 feet (McDougall, 1996). Longreach Resources subsequently optioned the claims, built roads to access some of the platinum occurrences discovered by Newmont, and then completerl a 32 hole percussion drill program in 1988 to partially test these occurrenoes. The percussion drill program had little success due to very difficult topography, particularly in Zones C and D, and to the unsuitability of percussion drilling for this type of target. One hole did return a 5 feet of 0.18 oz/t Pt at a shallow depth (hole 34), while another returned 0.27 oz/t Pt over 10 feet, as summarized by MoDougall (1996) and detailed in Assesemsnt Report 19825. Zone D was not tested by the Longreach work. A number of diamond drill holes were also completed by previous operators. Previous drill hole locations in the area of interest are included on Figure 5 in this report.

The olaims were optioned by Phoenix Gold Resources in 1996, and the company has an option to earn up to a 70% interest in the property. During 1997 access roads were refurbished, surface rock and soil sampling was completed, and the core drilling program described in this report was completed.

2.4 Summary of Current Work Program

Nine diamond drill holes were drilled during August and September, 1997, for a total of 2,276 feet. Initially six BX size holes (1344 feet) were drilled by Joe Gabbs and Rick Bennett. The final three NQ sized holes (932 feet) were completed by Adam Diamond Drilling Ltd. of Princeton, B.C. Core was logged, sawn and sampled at Phoenix Gold's field office in Rock Creek, B.C. and then transported to Grand Forks for storage in their core storage facility. Drill hole set-up and overall program supervision was by J. Carson. Additional drill supervision was by J. Gabbs. Logging was by J. McDougall and L. Caron, with core sawing by K. Anschetz, B. Smith and R. Hummel. Sampling of drill core was by J. McDougall, J. Carson, L. Caron, K. Anschetz, and J. Gabbs, while soil sampling was completed by K. Anschetz. A total of 62 core samples were collected and sent to Acme Analytical Labs in Vancouver for preparation and analysis for 30 element ICP plus Au, Pt, and Pd. Twenty two soil samples were collected by K. Anschetz and analysed for 30 element ICP plus Au, Pt, and Pd. The report was prepared by L. Caron, based on a review of literature, information provided by J. Carson, J. McDougall and K. Anschetz and that gained from logging core. The author has not visited the property nor been involved with the planning or carrying out of the exploration program.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Regional mapping has shown that the dunite core of the ultramafic complex is most prospective for elevated platinum values, and that platinum occurs with chromite. Massive chromite occurs as discrete layers, discontinuous pods and schlieren, up to 1 metre by 6 cm within the dunite core. These chromite schlieren are randomly distributed and represent the product of deformation of previously more extensive cumulate chromite layers. The main structural control to the schlieren is parallel to the regional foliation, generally NW trending and steeply dipping. The zone on known platinum bearing chromite on Grasshopper Mountain is 800 metres long by 300 metres wide, within which 5 main areas of elevated platinum in surface chip samples have been defined.

As discussed in the previous section, it is important to recognize that the steep topography makes drill testing surface showings in the Cliff Zone difficult. It can be stated, however, that the lack of encouraging results from the current drill program shows that continuity of platiniferous chromite zones cannot be expected over any significant distance and it would be hard to justify further drilling in this area based on these results. In the writer's opinion, further surface work should concentrate on areas within the dunite core which have been less thoroughly tested. McDougall (1996) has recommended a short exploratory adit to more adequately test the Cliff Zone.

Soil sampling is an effective method of testing areas of till cover with minimal rock exposure. Because of the discontinuous nature of the chromite mineralization, close spaced lines are necessitated, and a northeast-southwest orientation to lines is preferable to cross the regional structural trend. An earlier survey by Newmont was well oriented, although line spacing was too coarse to be considered to have thoroughly tested the property. Even single station anomalies from this earlier survey should be considered important and should be followed up with infill soil sampling.

INTRODUCTION

Pursuant to a request by the directors of Monica Resources Ltd., Suite 100 - 450 West Georgia Street, Vancouver, British Columbia, grid surveying, geological, geophysical and geochemical surveys were performed within the Grasshopper 1 and Grasshopper 2 mineral claims. Field work was conducted from October 24 to November 2, 1985.

The Grasshopper Mountain property is located 25 kilometers northwest of Princeton, British Columbia. The property contains 52 claim units and is accessible by gravel road from Tulameen, B. C.

The intent of the present work was to perform an evaluation of the Grasshopper claims. The results of grid surveying, geological, geophysical and geochemical surveys are presented in this report along with recommendations for further exploration of the Rabbitt gold vein system.

LOCATION, ACCESS AND TOPOGRAPHY

Monica Resources Ltd.'s Grasshopper Mountain property is 25 kilometers northwest of Princeton, British Columbia (Figure 1). The property lies within NTS map-sheet 92 H/10W at approximately 49 degrees 33' north latitude and 120 degrees 53' west longitude.

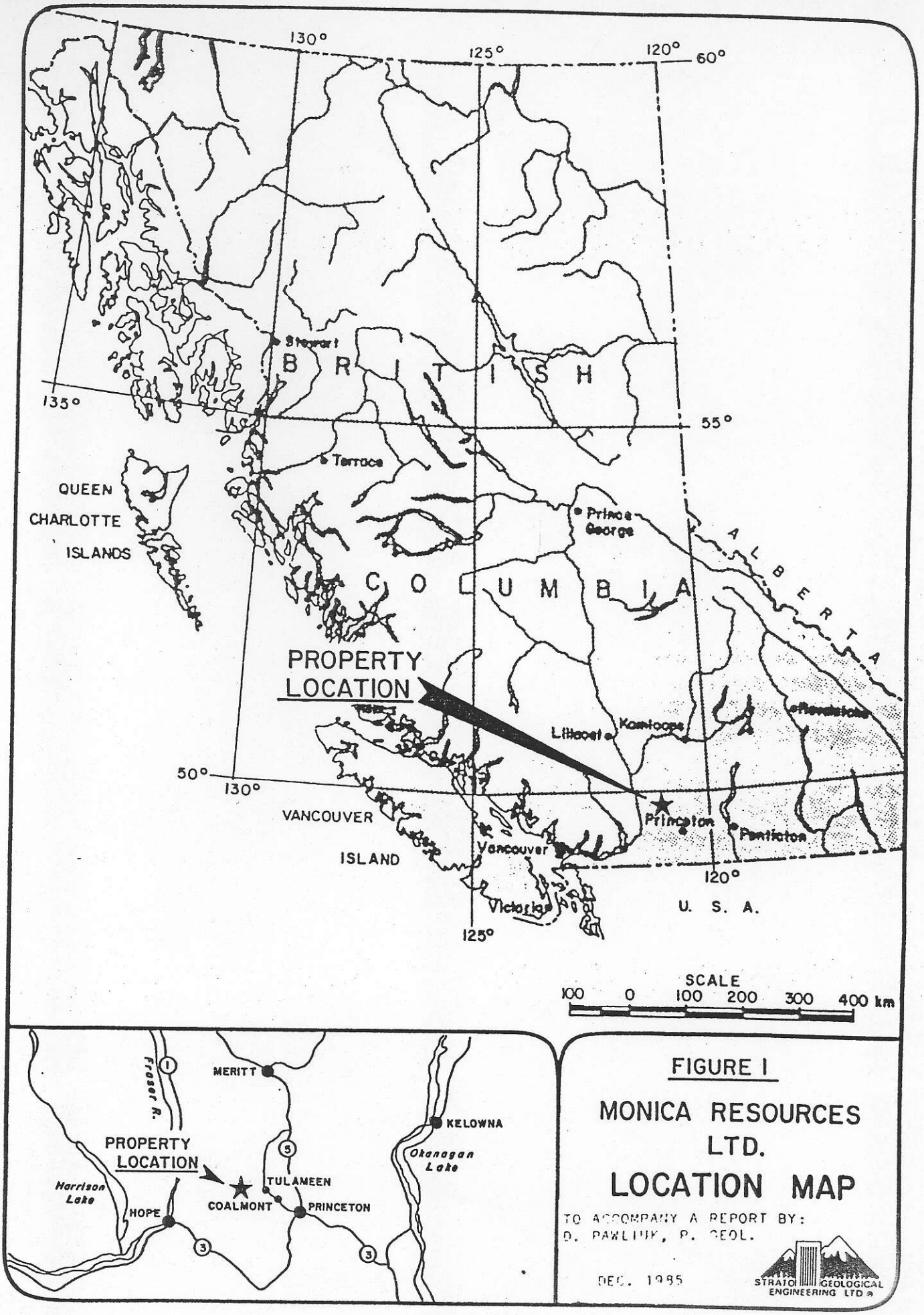

FIGURE I

MONICA RESOURCES LTD.

LOCATION MAP

TO ACCOMPANY A REPORT BY:
D. PAWLUK, P. GEOL.

DEC. 1985

STRATOS GEOLOGICAL ENGINEERING LTD.

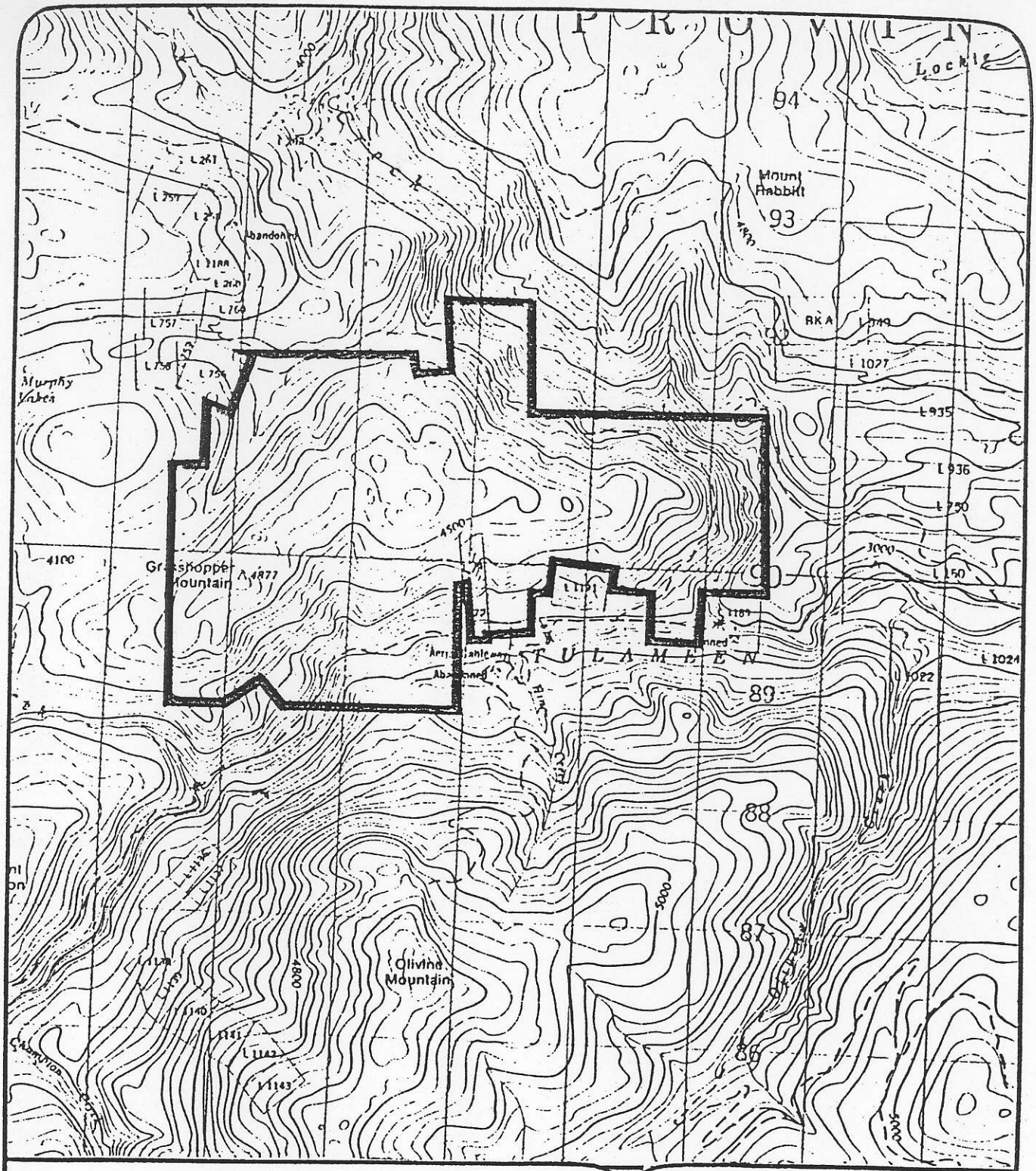

FIGURE 2

MONICA RESOURCES LTD.

SIMILKAMEEN M.D. N.T.S. 92H/10

TO ACCOMPANY A REPORT BY: D. PAWLIUK, P. GEOL.

TOPOGRAPHIC MAP

0 1000 m

DEC. 1985

STRATO GEOLOGICAL ENGINEERING LTD.

GEOCHEMICAL SOIL SURVEY

One hundred seventy-nine geochemical soil samples were collected from "B" horizon soils at depths of between 20 and 30 centimeters. The soils were analyzed for gold, silver, chromium, nickel, cobalt and copper by Acme Analytical Laboratories Ltd., Vancouver, British Columbia.

All analyses were performed using the inductively coupled argon plasma (ICP) method with the exception of gold which was analyzed by the atomic absorption (AA) method. The soils were collected at 50 meter intervals along grid lines. Laboratory certificates of analytical results form Appendix A.

ANALYTICAL RESULTS

The soils contain up to 2,200 parts per billion (ppb) gold, 5.6 parts per million (ppm) silver, 873 ppm chromium, 587 ppm nickel, 82 ppm cobalt and 695 ppm copper (Appendix A). The locations of soils which contain high concentrations of gold, silver and copper are plotted on Figure 6. Histograms for gold, silver and copper in the soils were plotted (Figure 10); histograms for nickel, cobalt and chromium comprise Figure 11. The locations of soils which contain high concentrations of nickel, cobalt and chromium are plotted in Figure 7.

DISCUSSION

An area of high chromium concentrations within soil exists in the western portion of the sampled area at the Grasshopper Mountain property (Figure 7). This area is near the presumed location of the contact between Nicola Group metavolcanic rocks and Tulameen complex ultramafic rocks. Other soils containing high metal values are scattered over the Grasshopper Mountain property, and are not concentrated near the surface trace of VLF-EM conductors (Figures 6 and 9).

GEOCHEMICAL ROCK SURVEY

Forty-six rock samples from the Grasshopper Mountain property were geochemically analyzed for gold, silver, chromium, nickel, cobalt and copper by Acme Analytical Laboratories Ltd., Vancouver, British Columbia. All analyses were performed using the Inductively Coupled Argon Plasma (ICP) method with the exception of gold which was analyzed by the atomic absorption (AA) method. Six rocks with chromium values of 99 ppm or greater were also analyzed for platinum and palladium by Acme Analytical Laboratories Ltd. using the fire assay/atomic absorption (FA/AA) method. The rock samples were collected at about 200 meter intervals along grid lines. Laboratory certificates of analytical results form Appendix A.

ANALYTICAL RESULTS

The 46 rocks contain up to 345 ppb gold, 1.0 ppm silver, 414 ppm chromium, 703 ppm nickel, 50 ppm cobalt and 327 ppm copper (Appendix A). The six rocks with chromium values of 99 ppm or greater contain up to 94 ppb platinum and 111 ppb palladium. Histograms were plotted for gold, silver and copper values (Figure 12) and nickel, cobalt and chromium values (Figure 13) within the rocks. The locations of rocks containing high metal concentrations are plotted on Figures 6 and 7. All platinum and palladium values are plotted on Figure 7.

DISCUSSION

An area of high chromium concentrations within rock exists in the western portion of the area sampled at Grasshopper Mountain property (Figure 7). Rocks from this area also contain concentrations of platinum and palladium. The area of high chromium concentrations is near the presumed location of the contact between Nicola Group metavolcanic rocks and Tulameen complex ultramafic rocks; soils in this area contain generally high chromium concentrations.

CONCLUSIONS

The intrusive contact between Tulameen Ultramafic Complex rocks and Late Triassic Nicola Group metavolcanics and metasediments exists within western and southern Grasshopper Mountain property.

In the Grasshopper claims area rock and soils geochemical sampling indicates high concentrations of chromium exist within the Tulameen Ultramafic Complex rocks. High chromium concentrations within Tulameen Ultramafic Complex rocks are associated with platinum and palladium concentrations.

A 600 meter long VLF-EM conductor in the east-central Grasshopper Mountain property is probably due to the presence of a fault or shear zone in the underlying bedrock. This zone trends north-northwesterly and may be the southern extension of a shear zone mapped west of the Rabbitt mine in 1984 (Wares).

A review of previous work on the property, as well as a cursory examination of the mine area, was also carried out. Results of previous exploration have indicated a good potential for defining additional ore zones and a two-stage program of mineral target definition is recommended.

RECOMMENDATIONS

Further detailed geochemical sampling, geological mapping, and geophysical surveying should be performed in the western and southern property areas. This work should define the area of high chromium, platinum and palladium concentrations within Tulameen Ultramafic Complex rocks and also delineate the contact between the ultramafic rocks and the Nicola Group rocks.

Mineral targets in the Rabbitt Mine area should be tested and further developed by an initial program of detail geological and geophysical surveys, backhoe/bulldozer trenching of known geochemical anomalies, diamond drilling of the Rabbitt and S.W. vein system, rehabilitation and geological mapping of the Rabbitt mine tunnel.

Contingent upon the results of a phase one program and an engineering recommendation to continue exploration it is proposed to further delineate mineral reserves with a program of surface and underground diamond drilling.

ESTIMATED COST OF THE PROPOSED WORK PROGRAM

PHASE 1

Diamond drilling - S.W. extension of Rabbitt vein zone, NQ wireline - 1500 feet @ $35.00/foot	$ 52,500.00