

**521490**

**TECK CORPORATION**

**QUASH CREEK PROPERTY**

**LIARD MINING DIVISION**

**EXECUTIVE SUMMARY**

**VANCOUVER, B.C.  
FEBRUARY 1999**

# **QUASH CREEK PROPERTY**

## **PROPERTY**

The Quash Creek property was acquired by Teck Corporation in 1988 to cover a porphyry copper-gold occurrence and peripheral precious metal mineralization near the headwaters of Quash Creek in the Liard Mining Division, north-western B.C.. Staking was carried out as follow-up to anomalous geochemical results from a regional stream silt sampling program. The property has subsequently been reduced to 100 claim units to include only precious metal veins peripheral to the porphyry system. The main vein showing has been tested by two diamond drill holes, with economic grades of precious and base metals intersected in both holes. Additional drilling is recommended along strike and down dip on the main showing, as well as more detailed evaluation of other known veins on the property.

## **LOCATION AND ACCESS**

The property is located approximately 75 kilometres south of Dease Lake and 400 kilometres northwest of Smithers in the Liard Mining Division, B.C.. Access to the property is by helicopter from Dease Lake or Iskut. Dease Lake has a permanent helicopter base, whereas helicopters are seasonably based at Iskut.

## **PROPERTY STATUS**

The 100 claim units of the Quash Creek property are contiguous and cover an area of about 2,130 hectares. The property is owned 75.58% by Teck Corporation and 24.42% by Leicester Diamond Mines Ltd. Jerico Resources Ltd. Holds a 4.5% NPR Interest and Silver Standard Resources Inc. holds a 0.5% NPR interest.

## **PROPERTY GEOLOGY**

The property is located in the Klastline Plateau in the north-eastern part of the Stikine Arch. It is underlain by Upper Triassic Stuhini Group volcanic lapilli tuffs and mafic tuffs interbedded with wacke and siltstone sediments. Irregular, diorite dykes and stocks of Jurassic age have intruded the volcanics and sediments. The volcanics exhibit pervasive chlorite alteration and contain both epidote and calcite as fracture fillings.

The precious metal rich vein systems are located approximately 5 kilometres north of the Quash Creek porphyry system. The porphyry has been well tested by drilling, and to-date has returned only sub-economic copper and gold values.

Six gold-silver rich veins within brittle fracture zones have been discovered on the property. The veins also return significant zinc and copper values. Veins consist of a quartz-carbonate matrix with pyrite, arsenopyrite, sphalerite, chalcopyrite and barite. To-date only one of the veins, the Upper Gordon, has been drill tested and mineralization was found to consist of semi-massive sulphides.

## **HISTORY OF EXPLORATION**

The Quash Creek porphyry copper system has been explored by Conwest, Amoco, Texas Gulf, Triumph Resources Ltd., and Dryden Resource Corporation.

The precious metal rich veins north of, and adjacent to, the porphyry system were discovered in 1988 when Teck Corporation followed up anomalous gold, silver and copper values from their recent stream sediment sampling program. Subsequent silt and soil sampling followed by hand trenching led to the discovery of the Top, Main, Gordon's, and Upper Gordon zones within a 200 by 600 metre area.

Teck optioned the property to Triumph Resources Ltd. in 1990. Triumph concentrated their exploration efforts on the porphyry system; however, the vein showings were also resampled.

In late 1990 the property was optioned to Dryden Resource Corporation. Additional geochemical sampling was completed and two diamond drill holes tested the copper-gold porphyry system. In 1991, three additional core holes were drilled on the porphyry system and two diamond drill holes tested the Upper Gordon vein showing. In 1992, all exploration work focused on the precious metal rich vein systems. Anomalous silt, soil and rock samples and mineralized float were discovered at several locations. Two additional veins, Ankerite and Oz, were discovered, extending the mineralized trend to a length of 1000 metres.

In 1993 Dryden amalgamated with Stow Resources Ltd. to form Leicester Diamond Mines Ltd. Since 1993 no exploration work has been completed on the property.

## **MINERAL SHOWINGS**

The mineral showings consist of auriferous, polymetallic veins occupying brittle fractures, and to a lesser extent shear zones, within tuffaceous volcanics. The six main vein occurrences are; Upper Gordon, Gordon's, Main, Top, Ankerite and Oz. The showings are found within a 200 metre wide by 1000 metre long, 070° trending zone and within this zone individual veins have an average strike of 125°. Individually the zones occur as one or more fracture controlled, semi-massive to massive sulphide veins within locally carbonate altered volcanics. Vein

mineralogy includes quartz, pyrite, carbonate, arsenopyrite, sphalerite, chalcopyrite and barite.

Significant assay values from the main showings are tabulated below.

| SHOWING             | TYPE     | g/t Au | g/t Ag | % Cu | % Zn | WIDTH (m) |
|---------------------|----------|--------|--------|------|------|-----------|
| <b>UPPER GORDON</b> | DDH 91-4 | 19.9   | 202.3  | 3.1  | 5.3  | 3.5       |
|                     | Trench   | 8.2    | 84.9   | 0.4  | 0.6  | 3.0       |
|                     | Trench   | 57.8   | 192.2  | 2.7  | 15.7 | 0.6       |
|                     | Trench   | 89.5   | 194.8  | 0.4  | 0.6  | 1.0       |
| <b>GORDON'S</b>     | Trench   | 14.7   | 61.4   | 0.8  | 2.6  | 1.6       |
|                     | Trench   | 23.3   | 233.5  | 1.1  | 4.1  | 1.4       |
| <b>MAIN</b>         | Trench   | 13.1   | 100.1  |      |      | 1.3       |
|                     | Trench   | 8.1    | 533.3  |      |      | 0.7       |
|                     | Trench   | 24.6   | 88.5   |      |      | 0.7       |
| <b>TOP</b>          | Trench   | 2.9    |        |      |      | 1.0       |
| <b>ANKERITE</b>     | Chips    | 3.8    | 50.1   |      |      | 0.5       |
| <b>OZ</b>           | Trench   | 4.5    | 82.4   | 0.1  |      | 0.4       |
|                     | Trench   | 1.4    | 16.6   | 0.1  |      | 1.0       |

The Upper Gordon zone, which appeared most prospective, was trenched over a strike length of 75 metres and tested by two diamond drill holes. Both drill holes intersected the vein with the following highlighted values:

DDH 91-4: 19.9 g/t Au, 202.3 g/t Ag, 3.1% Cu, 5.3% Zn over 3.5 metres

DDH 91-5: 9.9 g/t Au, 79.6 g/t Ag, 0.8% Cu, 3.5% Zn over 0.5 metres

The Upper Gordon vein is open along strike and down dip.

In the vicinity of the mineralized trend a number of high grade rock and float samples have been collected, many of which have not been followed up. Results from these samples have returned assay values up to:

8.1 g/t Au and 148.5 g/t Ag;  
 2.1 g/t Au and 66.5 g/t Ag;  
 12.0 g/t Au and 151.0 g/t Ag;  
 9.6 g/t Au and 51.0 g/t Ag.

## EXPLORATION POTENTIAL

The sulphide vein occurrences at Quash Creek carry high grade gold and silver as well as significant base metal mineralization. The Upper Gordon Zone has demonstrated the best initial potential having received the bulk of the past exploration efforts. The remaining vein occurrences are at an earlier stage of development but appear to have comparable gold and silver values to the Upper Gordon Zone. These veins warrant additional work which is recommended to include geophysical surveys to identify the zones of high sulphide concentrations followed by drill testing of the geophysical anomalies.

In addition several peripheral high grade surface samples have not been followed up and additional work is recommended to define the size and nature of this observed mineralization.











