

KEG '97

888722

## TSACHA PROPERTY SUMMARY

93FOSS

Jean Pautler

### **LOCATION and ACCESS:**

Teck's Tsacha property, NTS map sheet 93F/3E,2W, is located 125 km southwest of Vanderhoof, B.C., in the Omineca Mining Division. Latitude and longitude of the property are 53°02'N, 125°02'W. Access is by road via the Kluskus-Ootsa Forest Service Road from Vanderhoof to 162 km, where a branch road accesses the property.

### **LEGAL:**

The 84 unit Tsacha property, covering an area of approximately 2100 hectares, is 100% owned by Teck Corporation.

### **HISTORY:**

The Tsacha property was staked by Teck in 1994 to cover the Tommy epithermal Au, Ag showing, discovered by the B.C. Geological Survey Branch in 1993. The BCGS reported values up to 3.7 g/t Au and 41.8 g/t Ag from outcropping quartz veins. Over the past 3 years, Teck has completed a total of 40 trenches and 8300 m of diamond drilling in 58 holes. Almost half of the drilling concentrated on the Tommy Vein and the remainder tested other veins and silicified zones on the property.

### **GEOLOGY:**

The property occurs in a regionally uplifted area (Nechako Uplift) characterized by volcano-sedimentary rocks of the Jurassic Hazelton Group. The Jurassic succession is intruded by quartz monzonite of the Cretaceous Capoose Batholith and overlain by volcanic rocks of the Eocene Ootsa Lake Group and younger basaltic flows.

On the property, the Jurassic succession primarily consists of quartz phytic felsic crystal lithic and ash flow tuffs that are commonly welded. Lesser augite porphyritic basaltic andesite flows and minor volcanoclastic sedimentary rocks occur in the southern property area. An augite porphyry plug, probably cogenetic with the basaltic flows, is also exposed in the south. The above units are intruded by late Cretaceous aged diorite dykes and sills.

The southern boundary of the Nechako Uplift follows the Blackwater River, just south of the property. Similar east-northeasterly faults are evident on the property through Carter Lake and another north of Tommy Lake. This fault set appears to post date mineralization. A north to north-northwest fault set, that is associated with widespread clay-sericite alteration ± silicification, appears to slightly predate or is coeval with mineralization.

## **MINERALIZATION:**

Numerous north to northeast trending veins and silicified stockwork zones, all hosted by the felsic tuff unit, are evident within a two km wide zone that may represent a graben feature. Seven significant veins were discovered, with the Tommy Vein being the most consistent and continuous. The Tommy Vein trends north, dips vertically, averages 4 m wide, has been traced for 640 m along strike and is continuous down to a diorite sill that cuts the vein at an average depth of 120 m. An easterly directed thrust fault appears to offset the Tommy Vein beneath the sill. A preliminary resource estimate for the Tommy Vein is 440,000 tonnes of 8.5 g/t Au using a 5 g/t Au cut off. The Tommy Vein generally has sharp margins and is exposed along a knoll, which would facilitate mining of the vein.

The Tommy Vein primarily consists of bull quartz grading to chalcedonic quartz, sparry calcite and ankerite and lesser banded chalcedony and adularia. At least three stages of veining and several episodes of brecciation occur. Classic epithermal textures include druses, cockscomb structures and colloform bands. Bladed silica after calcite is evident, indicating boiling. Sulfide minerals only occur in trace amounts and include pyrite, chalcopyrite, sphalerite and galena. Native Au and electrum as well as stephanite and argentite have been identified in the grey chalcedony bands. Amethyst, specularite, hematite and magnetite also occur within the vein.

## **POTENTIAL:**

The best potential on the property lies with the continuation of the Tommy Vein below the sill. Only three holes have been drilled beneath the sill and did not intersect the Tommy Vein, probably due to offset along the thrust. Three other veins with significant results still have potential but have proven difficult to trace due to faulting. The Larry Vein has been traced for over 300 m with results up to 7.1 g/t Au over 5.1 m, including 16.1 g/t Au over 1.8 m. The Johnny Vein has been traced for over 100m along strike and over 100m down dip with values up to 6.2 g/t Au over 2.7m. The Barney Vein contains 14.1 g/t Au over 0.6m, appears to increase in width with depth but has not been traced along strike due to faults.