Department of the

. 1983 PROPERTY REPORT
TROITSA PEAK PROPERTY
by

N.G. CAWTHORN, C.J. HODGSON, B.E. GOAD

NTS 93E/11E

15 March 1984

681374

SUMMARY

This report presents the results of geological mapping, a soil geochemical survey, trenching and assay sampling conducted in 1983 on the Troitsa Peak property. Work was conducted by Canamax under the Whitesail Joint Venture between Canamax and Union Carbide Canada Ltd.

Troitsa Peak property consists of 15 claims (252 units) and is located in Whitesail Range 135 km south of Smithers in central British Columbia. Access in 1983 was by helicopter from a base camp at Sweeney Lake, 20 km northwest of the property.

Objectives of the 1983 program were to evaluate all gold showings found to date on the property by means of hand trenching, assay sampling and, if warranted drilling, and to systematically explore favourable areas of the property for additional showings.

Work was concentrated in two areas, named the Moraine and Cummins Creek areas after the most important gold showings on the property. Chain and compass grids over these areas encompass a total of 6.5 sq. km, or roughly 10% of the entire property. Geological mapping at 1:2,000 scale and soil sampling at 25 m intervals on lines 100 m apart were conducted on each grid. Veins were hand trenched and channel assayed. The two main veins on Cummins Creek were mapped, trenched and sampled in detail. Work outside the grid areas consisted of (1) prospecting, mapping and resampling all other showings on the property, and (2) silt sampling of creeks and gullies draining the property.

Geologically, the property is underlain mainly by andesite flows and tuffs, greywacke, chert and siltstone of the Hazelton Group of Jurassic age. Near Troitsa Peak this sequence is intruded by the so-called "Troitsa Complex" consisting of a porphyritic monzonite stock, numerous peripheral dykes of feldspar porphyry and quartz-feldspar porphyry, and irregular masses of coarse, heterolithic (diatreme?) breccia around the margins of the stock.

Some twelve mineral showings have been found to date on the property. Ten new showings were found in 1983. All consist of milky and, rarely, amethystine quartz veins, commonly coarsely crystalline and drusy. The veins are irregular to linear, and commonly include wall rock as breccia fragments. Many are localized along shear zones. The veins tend to pinch

and swell, with a maximum observed width of 1.5 metres and maximum strike length of about 150 metres. Wall rocks adjacent to the veins are typically bleached (clay altered) over several metres. Sulphides within the veins consist of very erratically distributed pockets of medium to coarsely crystalline galena, sphalerite, chalcopyrite and, rarely, argentite.

Some 270 rock samples were collected from the twelve named showings and from numerous lesser showings and barren quartz veins on the property. Selected grab samples were collected of the visually best mineralization in all showings. In addition, showings at Cummins Creek, Moraine and Wolverine were systematically channel sampled. The best grab sample assay was 0.33 oz/t Au, 64.9 oz/t Ag in sample 83WNA427 from float in Cummins Creek. The best channel sample was 3,200 ppb Au (0.09 oz/t), 7.2 ppm Ag in sample 83WGT417 from a 0.3 m wide silicified zone near the "Flare" showing. Most channel samples returned values in the range 10-400 ppb Au, 1-30 ppm Ag. In general, gold and silver values obtained in 1983 were substantially below assay values obtained from the same showings in 1982.

Some 2650 soil samples were collected at 25 m spacing on the Moraine and Cummins Creek grids and analysed for Au, Ag, Pb, Pb, Zn, Cu and Mo. In general, the geochemical background for all metals except gold is considerably higher on the Moraine grid, partly as a consequence of thick glacial till present on most of the Cummins Creek grid, and partly as a consequence of elevated base metal content (Pb, Zn, Cu) in soils over the Troitsa Peak Complex on the Moraine grid. Gold content of soils is extremely flat throughout both grids, with only 51 samples containing greater than 10 ppb.

The claims were grouped into three groups in 1983 for assessment purposes. Two years' work was applied to all claims accessible from the Cummins Creek grid, and up to two years' work was applied to all claims accessible from the Moraine grid. One year's payment in lieu of work was made on the Sue and Barb claims.