

Jan 19/1977

NO

093N001

840034

PROPERTY: MISTY - BELL MAP LOCATION NO. 7

COMMODITY: COPPER

LOCATION: 55° 55'N 125° 32' W - Omineca Mining Division. About 40 miles west-northwest of Germansen Landing, B.C., near the head of Duckling Creek.

ACCESS: By helicopter from Germansen Landing or by road - 45 miles from Germansen Landing. A rough 4-wheel drive road extends 19 miles west to the property from mile 26 on the Germansen Landing - Aiken Lake road.

TOPOGRAPHY: The property extends from the broad flat Duckling Creek Valley at 4000 feet elevation to the ridge tops to the north at elevations of 5500 to 6000 feet. Most of the property is near or above timberline.

PROPERTY: 36 Misty Claims and 11 Bell Claims all in good standing until 1986.

HISTORY: The property was first staked in 1948 by G. T. Warren for Kennco Explorations Limited. The claims were again staked in 1960 by A. D. Wilmot and G. T. Warren for Fort Reliance Minerals Limited and this company completed a ground magnetometer survey, a geochemical soil survey and limited surface trenching in 1962 and 1963. The claims were allowed to lapse until 1968 when they were staked by A. D. Wilmot for El Paso Mining and Milling Company. The Bell Claims were staked by F. Onucki in 1972 for El Paso Mining and Milling Company to cover the ground between the Misty Property and Kennco's Lorraine Property three miles to the east.

Fieldwork by El Paso on the property consisted of: limited geological mapping, magnetometer surveying and geochemical soil surveying in 1970; more extensive geological mapping, soil sampling, magnetometer surveying and bulldozer trenching in 1971; further bulldozer trenching, detailed mapping and sampling in 1972; an I. P. Survey followed by diamond and rotary percussion drilling and an airborne magnetic and radiometric survey in 1973.

GEOLOGY: The Misty-Bell property is located within the Hogem batholith in rocks of the Duckling Creek syenite complex. This intrusive complex shows great variations in texture and mafic and K-feldspar content but has been subdivided into three main rock types: hornblende monzonite, orthosyenite and pegmatite. The hornblende monzonite is the most abundant phase and consists of hornblende, biotite, and potash and plagioclase feldspars in which the content of orthoclase feldspar and mafics and the texture, are extremely variable. Thus the rock grades from syenite to diorite and from a medium grained intrusive to a pegmatite. The orthosyenite varies from fine grained to pegmatitic in texture and is composed mainly of potash feldspar with relatively little mafic material. The pegmatite consists of feldspar (85%) and biotite and/or hornblende (15%). Fine grained, brown felsite dikes cut all of these rocks, which are extremely variable and grade from one type to another. Most of the rocks are more-or-less foliated and in extreme cases exhibit gneissic to schistose textures. The highly

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GEOLOGY:

gneissic and schistose sections probably represent included meta-sediments and metavolcanics. The foliation varies from N10°W to N60°W with steep dips.

Chalcopyrite, pyrite and in places, a little bornite occur in minor amounts through most of the altered and foliated rocks. The better mineralized sections occur in areas of notable K-feldspar alteration with strong foliation, fracturing and faulting. The massive unfoliated rocks are generally unmineralized.

A mineralized zone trending northwesterly along the northeast side of the valley on Misty #6 and 7 claims, about 1600 feet long, averaging 35 feet wide and 550 feet deep was roughly outlined. This zone coincides with a rather weak I.P. anomaly and a copper soil anomaly and contains about 3,000,000 tons of altered syenite grading 0.63% copper.

GEOPHYSICS:

A) Magnetics - Both magnetic lows and highs coincide with soil anomalies. A strong magnetic high on Misty No. 12 claim, 4000 feet SE of the main mineralized zone on Misty 6 and 7 claims was tested by one diamond drill hole. This hole intersected magnetite with considerable chlorite in strongly altered syenite from 22 to 210 feet, with a little chalcopyrite from 22 to 40 feet. The section showed an average grade of 21% iron from 22 to 210 feet.

B) I. P. Survey - The I.P. Survey was run over an area 7800 feet long (NW-SE) by 3000 feet wide using 200-foot electrode spacing on lines 400 feet apart. The survey covered most of Misty 1 - 12 Claims and outlined three chargeability anomalies:

1. A rather weak anomaly coincident with a copper soil anomaly was defined by the six millisecond contour as 400 feet long (N60°W) by 300 feet wide on Misty 6 and 7 claims. This anomaly coincides with the mineralized zone.
2. About 2400 feet N70°W of the above anomaly on Misty No. 3 claim, a more sharply defined anomaly trends N60°W for 1000 feet by 550 feet wide as defined by the seven-millisecond contour. This anomaly also coincides with a copper soil anomaly and was tested by one drill hole which cut finely disseminated pyrite and very minor chalcopyrite from 435 to 545 feet and 615 to 650 feet. The overall sulfide content was estimated at one percent by volume.

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GEOPHYSICS:

B) I.P. Survey

3. About 4000 feet S40°E of Anomaly 1 on Misty No. 12 claim, this anomaly is 1800 feet long (N70°W) by 1000 feet wide as defined by the five millisecond contour. This anomaly roughly coincides with a ground magnetic anomaly which showed fair magnetite in a drill hole, as previously indicated.

C) Airborne Magnetic & Radiometric Survey: Radiometric anomalies are believed due to differences in terrain clearance since the spectrometer was not sufficiently sensitive for qualitative interpretation. The aeromagnetic results show a small well-defined magnetic anomaly on the flank of a major magnetic anomaly located about 5000 feet southeast of the drill-defined copper mineralization on Misty 6 and 7 claims. The anomalies seem to terminate against an inferred north-striking fault defined by a weak lenticular magnetic high. The two dominant magnetic trends are north-south and northwest-southeast and the intersection of these two trends occurs near the intersection of the north and west forks of Duckling Creek south of the Bell claims. Magnetic lows also could be related to alteration and mineralization and may be of real significance.

GEOCHEMISTRY: The large geochemical soil anomaly (Cu) on Misty No. 3, which extends northwest into Misty No. 1 claim has not been adequately explained or tested. Otherwise, trenching and/or drilling has covered most of the soil anomalies.

RECOMMENDATIONS: Extend coverage to southeast and east over Misty and Bell claims on lower ground to include: I.P. Survey; Geochemical Soil Survey; Magnetometer Survey; geology and topography. Detailed re-assessment of I.P. anomaly #2 and associated geochemical anomaly since this anomaly was not satisfactorily explained by the one hole drilled in 1973.