

Agness

NAME: COLLIER CREEK NICKEL PROSPECTS

OWNER: Unknown. A portion of the area near Hurt Cabin may be on claims of the Copper City Group.

LOCATION: A central point is 42°24'12" N. latitude and 124°3'31" W. longitude.

Several small patches of soil are scattered about the area north of Hurt Cabin and extending into the corner of four townships (T. 36 & 37 S., R. 11 & 12 W.) Soil patches are mapped photogeologically in secs. 20, 30 and 31, T. 36 S., R. 11 W; the south edge sec. 36, T. 36 S., R. 12 W.; sec. 1, T. 37 S., R. 12 W., and minor patches in sec. 6, T. 37 S., R. 11 W. The best areas are in sec. 1, T. 37 S., R. 12 W. Mainly between 690 and 740 meters elevation.

The area may be reached via Hunter Creek, Snow Camp, Game Lake, and North Fork Collier Creek roads, U.S.F.S. Nos. 368, 370, 3698, and 3795. A very steep "jeep" trail branches from road no. 3795 and goes down to Hurt Cabin site; and a steep bulldozer trail leads down the ridge between Collier Creek and N. Fork Collier Creek to about 670 meters elevation in the SE $\frac{1}{4}$ of the NW $\frac{1}{4}$ sec. 1. The total distance by road and trail to the area is about 52 kilometers from a point on U. S. 101 about 3 km south of Gold Beach. The nearest electrical power is about 18 km at ~~Powers~~^{Agness}.

There is adequate water in the immediate vicinity.

CLIMATE AND VEGETATION: The average annual rainfall is about 180 cm. The average summer temperature is about 15° C and winter about 7° C.

Vegetative cover over the Dothan Formation is thick with a good variety both conifer and deciduous trees and thick underbrush. On the ultramafic areas the brush is less thick and there is sparse conifer growth consisting mainly of Pine, including Jeffery, Knob-cone, and ponderosa. Shrubs include azalea,

live oak, ceanothus, cascara, myrtle, etc. Conditions for regeneration of vegetation disturbed by a mining or logging operation appear to be good.

HISTORY, EXPLORATION AND DEVELOPMENT: Very minimal exploration of the area has been done for nickel. Prospecting has been mainly for copper and chromite. No evidence of active claims was noticed in the area of the soil patches. The present exploration consisted of reconnaissance photo-geology using color infra red photos taken in 1973 and loaned by the U.S. Forest Service. Parts of 3 days were spent on the ground by the writer assisted by Bruce McNeal and Tom Hillman in July and August 1975.

A total of 9 auger samples were taken. *The area was previously examined by Appleby (1955).*

GENERAL GEOLOGY:

The patches of soil are on a body of partly serpentized harzburgite which overlies late Jurassic marine sediments and volcanics of the Dothan-Otter Point Formation ^{due to thrusting} ~~to the west~~ and underlies a klippe of gneissic metagabbro of the Big Craggies to the east. The formation contacts are part of a major thrust fault system (Coleman, 1972).

Sliding is common in this area of rapidly down-cutting streams and over-steepened slopes. Lateritic soils may never have been very well developed in the area. Age of the ultramafic rocks is uncertain. Both the ultramafics and metabasals have been intruded by dikes and stocks of diabase to dacite and gabbro to diorite in composition and texture. Age of these intrusives ranges from mid Jurassic to mid Tertiary. The age of soil development is probably Pleistocene to present.

DESCRIPTION OF DEPOSITS: The deposits consist of accumulations and residual patches

of dark redish-brown lateritic soil. Greatest thickness of soil is probably in areas of slumping or sliding of near surface debris. The soil is always mixed with varying amounts of relatively unweathered rock. Rock in the areas observed varies from 40 to 90 percent of the area and will average

AREA:

about 65 percent. Total area of soil patches between North Fork Collier Creek and Hurt Cabin is about 40 hectares and will lie within a circle having a 1 kilometer radius. The soil patches outside this area are judged

to be of less importance, and not included in the tonnage calculations.

DEPTH:

The estimated maximum depth of soil and saprolite development is estimated to be about 10 meters and the estimated average depth used for tonnage calculations is 2 meters.

TONNAGE:

Gross tonnage (soil and rock, using 1.9 mt/cu.m.) = 1,520,000 tonnes.

Net tonnage (soil and saprolite minus rock, using 1.6 mt/cu.m. = n
448,660 tonnes.

GRADE:

An unweighted average of 9 auger samples in the areas assayed 0.71 percent Ni, 0.08 percent Co, 1.4 percent Cr, 29 percent Fe, and 0.02 percent Cu.

A calculated weighted average grade for the gross tonnage gives 0.40 percent Ni, 0.03 Co. and 0.44 percent Cr.

References:

Applying, R. N., 1955, A Reconnaissance of Nickel Deposits off southwest Oregon and Northwest California, U.S. Bu. Mines Open file report,

Coleman, R. G., 1972, The Colebrook Schist of Southwestern Oregon and its relation to the tectonic evolution of the Region. US Geol. Survey Bull 1339

Ramp, Len, 1961, Chromite in southwestern Oregon, Dep. Geol. & Min. Ind. Bull. 52

Wolf, H. D., 1952, Memo Report on Copper, Nickel, Cobalt prospects in the vicinity of Hurt Cabin. unpub. Dept. Mine file report.

Report by: Len Ramp 12-3-75