

State Department of **RECEIVED** ~~Geology and~~ Mineral Industries

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STATE DEPT. OF GEOLOGY
& MINERAL INDS.

702 Woodlark Building
Portland 5, Oregon

NICKEL EXPLORATION

Josephine County
Waldo Area

MB
RS

Field work was done by Max Schafer, August 16, with Louie Chichester and Ernest Kinney, U.S.B.M. An area in sections 21, 22, 27 and 28, T. 40 S., R. 9 W. was sampled for nickel.

The location was made with the aid of an aneroid barometer. The two readings were made at 5 and 6 P.M. and should be pretty close.

The prospect is reached by turning right at O'Brien, going about 2 miles along Whiskey Creek road and then right up a very poor mining road which goes for about 3 miles to the top of the ridge. The condition of the road necessitated using the winch on a Willys Station-wagon several times.

The area prospected is a ridge running NE-SW, and is south of Rough and Ready Creek. The ridge is underlain by peridotite and weathering has lateritized the rock near and on top of the ridge. The laterite area is circular or ovate, following the direction of the ridge, in shape.

The laterite grades from dark red to light rust to "limonite" tan. The width of the laterite is variable along the ridge and often narrows to around 50 feet. The maximum is probably around 300-500 feet. About 12-15 feet seems to be the maximum depth of the laterite. In places "roots" will probably extend to a greater depth. Hole #2 bottomed at 12 feet in serpentine. The appearance of the ground as it neared this depth changed from lateritic soil to brown to blue-green. Near the bottom relict structure in the serpentine got stronger down to the depth of 12 feet. There the serpentine was solid. This appeared to be bedrock and not a boulder.

Very little boxwork float was seen. No good garnierite was identified.

Three samples were taken -- two cores near the N or NW extremity of the deposit and a grab soil sample about a mile to the SE.

The samples were taken by U.S.B.M. and the results are as follows:

<u>DOGAMI No.</u>	<u>U.S.B.M. No.</u>	<u>Type</u>	<u>% Ni</u>
1 a	C-11-19	0-3' core	0.49
1 b	C-11-20	3-6' "	0.43
1 c	C-12-21	6-7.5' "	0.36
2 a	C-11-25	0-3' core	0.41
2 b	C-12- 1	3-6' "	0.66
2 c	C-12- 2	6-9' "	0.86
2 d	C-12- 3	9-12' "	0.88
3	C-12- 4	Grab soil sample	0.43

The whole first hole was in red then lighter red soil. It is suspected that this hole hit a boulder.

The second hole was drilled about 500 feet to the S. The first 3 feet was in granular hematitic soil. The 3-6 foot portion changed to a clayey soil which became blue-green near the 6 foot point. This blue-green stain could be ferrous iron. At 7.5 feet rotten serpentine was entered where serpentine structure became evident. The serpentine got more solid down to 12 feet where bedrock (?) was encountered.

All drilling was done with a hand-auger.

Conclusions & Recommendations:

The low nickel content of the laterite, the relatively small size of the deposit, and the difficulty of access would seem to preclude this deposit from any further consideration at this time. If, at any time,

the price of nickel becomes more favorable, this deposit should be fully explored. The examination done at this time was incomplete as to grade and tonnage.

Report by: Max Schafer, ^{SEPT.} 1954.

Note: See Rough and Ready Mt. Nickel Deposits - Dave White, May 24, 1954
Localities 13, 14, 15, 16.

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