

State Department of Geology and Mineral Industries

1069 State Office Building
Portland 1, Oregon

Table Top Nickel Deposit

Morman Basin District
Baker County

Claims have from time to time been filed upon the occurrences herein described, and the name here given to the deposit is that used for claims taken by Messrs. R. A. Griffeth and Lester Hice in September 1944.

Location: T. 13 S., R. 43 E., SW $\frac{1}{4}$ section 26, SE corner of section 27, and sections 34 and 35. This is in Baker County between the headwaters of Beaver Creek which drains into Dixie Creek and the headwaters of Birch and Durbin Creeks.

It is possible to drive to within $\frac{1}{4}$ of a mile of the deposit, but 4.9 miles of the distance is on a very old and indistinct road through the sagebrush. This road takes off to the left from the Durbin Creek road at a point exactly 1.0 miles from where the Durbin Creek road joins the Rye Valley-Bridgeport road. Another old road is to be seen on the property. It comes from the direction of the Snake River, apparently following Birch Creek.

History: There are three test pits on this property. One is about 15 x 15 feet square and about the same deep. The others are much smaller. All were dug during the early decades of this century, but by whom, and with what objective, is not currently known. In any event, the above named claimants report that when they first became interested in the property, they assumed they were dealing with a gold, silver and copper prospect. However, after selected samples of the best appearing material from the pits consistently assayed "nil" in gold, silver and copper, they conducted qualitative tests which indicated nickel was present; hence the name given to the claims when they were taken.

The writer visited the property September, 1944 and again, briefly, in August, 1948. As there was no evidence of new work having been done between visitations, it is presumed that the claimants had abandoned the property during the interim.

Geology: The general setting can be described as an exposure of sheared ultra-basic rock occupying an area estimated as about 3000 feet long by 300 to 500 feet wide. This is bounded on the north by a belt of comparatively clean, fresh serpentine separated by a fairly sharp contact. Where exposed, this serpentine appears devoid of mineralization comparable to that present in the test pit area but it does contain occasional seams of chrysotile asbestos and small lenses of magnesite.

A schist and quartzite formation is situated on part, at least, of the south margin of the test pit area and on the east end as well. To the west the hills are capped by Tertiary basalt and the host formation of the test pit area extends to, and perhaps under, this basalt.

The mineralized material on which the test pitting has been done probably occurs in shear zones in the host formation. However, the exact relationship in this respect is obscured by an overburden of residual rock rubble and soil over most of the claim area. In any event, the surface indications of mineralization are small and widely separated and comparatively few in number.

Where exposed by the digging, the mineralized material consists of an abundance of limonite and hematite, a brown, cherty breccia and

a stockwork of thin, white quartz stringers through which a pale green nickle (?) mineral is erratically and sparcely distributed. This green mineral is classed as garnierite by the claimants.

That a prospector should consider this stockwork quartz and its associated limonite as a possible host to pocket gold occurrences is entirely understandable as it is most attractive in appearance and altogether similar in character to occurrences in the Greenhorn mountains from which pocket gold has been recovered. In fact, this has almost certainly been the motivation factor by virtue of which the test pitting was originally done. It also explains the continued interest that subsequent generations of prospectors have shown towards the occurrences ever since.

With respect to the green mineral in the occurrence being the nickel silicate garnierite, the analytical tests performed to date indicate that while this is possible, it is instead more likely a case of mis-classification. In short, spectographic and chemical analysis of a selected sample (EB 125) of the best looking green material from the main pit showed a high silica content, but only 0.10% nickel and a trace of cobalt. Likewise, other select specimens (IB 160 - 162) taken from other locations elsewhere on the property carried nickel contents of only 0.16, 0.11 and 0.14 percent.

These results confirm the validity of the qualitative testing reported by the 1944 claimants in that they do indeed demonstrate the existence of a nickle content in the material sampled. However, considering that the testing was done in all instances on carefully selected specimens containing the unknown green mineral in

considerable abundance, it is to be expected that a higher nickel content would have been found if the green mineral was actually garnierite. There is room, therefore, to suspect that the indicated nickel content of the tested samples can be an associate of the contained gouge rather than a basic component of the green mineral. In short, even though it is confirmed that nickel is present in association with select pit run specimens of the green mineral, more elaborate investigation of carefully separated crystals should be made before the green mineral can be formally identified as being garnierite.

Report by N. S. W. --- June 5, 1951

Original exam, 1944, followed up again in 1948.

Table Top Nickel

Ni

NAME

OLD NAMES

PRINCIPAL ORE

MINOR MINERALS

13 43E 26-27-34-35
T R S

PUBLISHED REFERENCES

Baker

COUNTY

Mormon Basin

AREA

4500

ELEVATION

ROAD OR HIGHWAY

DISTANCE TO SHIPPING POINT

MISCELLANEOUS RECORDS

PRESENT LEGAL OWNER (S)

RAGriffith
Lester Hice

Address

Humboldt Mine Huntington, Ore
" " "

OPERATOR

none

Name of claims

Area

Pat.

Unpat.

Table Top #1

✓

#2

✓

#3

✓

Name of claims

Area

Pat.

Unpat.

EQUIPMENT ON PROPERTY

none

REPORTS

Table Top Nickel Report

NSW Oct 30, 1944

✓ ✓ ✓

SHIPMENT AND ASSAY RECORDS

MAPS

State Department of Geology and Mineral Industries

Table Top Nickel Deposit, Mormon Basin District

702 Woodlark Building
Portland, Oregon
Examined by N. S. Wagner
October 30, 1944

This report, while officially turned in on green paper, is none the less tentative as I plan to re-examine the deposit for several reasons. One reason is that I would like to get a representative sample of the barren looking limonite and similar earthy material which occurs there, and also a representative sample of some of the serpentine which occurs along the contact. I want both of these samples for assay for nickel and cobalt because Lindgren in his description of the New Caledonia deposits points out that the barren looking earthy material there usually carries fair values in nickel. Also that any cobalt which might have been associated with the nickel in the primary serpentine, is most likely to be found concentrated in this earthy part of the gossan during the process of weathering. Also that a certain "green silicate rock" there assays 7 to 9% nickel. In this latter connection I was impressed by the off standard look of some of the serpentine adjoining the mineralized area, but took no sample of it for assay. Therefore, and in view of these considerations, I plan to study the occurrence more thoroughly in order to make certain I haven't overlooked a bet or two. In other words, had I read Lindgren and Ries before making this examination instead of afterwards I would have conducted it differently than I did. You can chalk an error up to yours truly on this one, but I guess it's live and learn.