

State Department of Geology and Mineral Industries

Report by: L. C. Richards
Date of Visit: Aug. 31, 1942

1069 State Office Building
Portland 1, Oregon

HILLER CHROME PROPERTY, Upper Burnt River District, Baker County
Oregon.

OPERATOR: Anthony Brandenthaler, Baker, Oregon.

OWNER: Ed. Hiller, Unity, Oregon

LOCATION: Sec. 16, T. 14S, R36E, 11 miles by road SW of Unity,

Oregon. (*Probably same as Lyons mine in sec. 9*
see letter from

HISTORY: It is reported that this property produced approxima-

Wagner 5-12-66

tely 80 tons of high grade chrome during the period 1917-1918. The rock was hauled over an old wagon road that due to its steep grades and narrowness was not suitable for truck transportation. Inasmuch as this area has been inaccessible except by trail since then, little prospecting work has been done. This summer the Oregon Lumber Company has undertaken a project of building logging roads into the area preparatory to logging operations. These new roads make the area quite accessible.

TOPOGRAPHY: The property lies on Barney Creek near the headwaters of the South Fork of the Burnt River in a mountainous area. The elevation of the surrounding peaks is 7000 feet. The property itself is located at 5400 feet. No data is available on the rain or snow fall. However, from the elevation and vegetation, it may be assumed that the winter snows are moderately heavy. Barney Creek itself, which cuts across one corner of the property, has enough flow even in late August,

to supply a 50 ton concentrating plant.

DEVELOPMENT: Mr. Brandenthaler has recently taken over the property.

Most of the surface trenches and cuts on the property have been made since that time. As can be seen by the accompanying sketch, the work consists of one glory hole connected to a 100 foot crosscut by a raise of approximately 30 feet; two short crosscuts in the serpentine; and surface cuts and trenches made by RD-8 Caterpillar under Mr. Brandenthaler's direction for two eight hour shifts.

GEOLOGY: The chrome occurs in irregular shaped masses in the serpentine close to the quartzite contact, striking N 55° E with a 60° dip SE. The quartzite itself forms an axis of a small spur ridge, and schist was noted on the north side of the quartzite. At the present time irregular shaped bodies of chromite were noted in the west wall of the glory hole. These occur in thicknesses up to three feet. To the NE along the contact, where surface cuts made with the bulldozer have taken off the overburden, what appears to be a fairly continuous body of chrome is exposed for approximately 60 feet. The average width is 1½ feet. Samples of the chromite from this property show a high chrome oxide content, and a favorable chromium to iron ratio. For example, one sample assayed by the Department gave the following results: Chrome

oxide - 47%. Chromium to iron ratio 2.8 - 1.

MINING AND
METALLURGY:

The mining operation has just begun on the property. At the time of my visit two tons of chromite ore were piled on the loading platform. All of the mining was being done at the glory hole. The rock is drilled and blasted, pulled from the chute at the bottom of the raise, and trammed to the dump where the larger pieces of chromite are handpicked and transferred by chute to the loading platform. Mr. Brandenthaler expects to do additional work on the chrome showings NE of the glory hole. He has installed a portable compressor and expects soon to be drilling by air.

RECOMMENDATIONS:

I believe that an inexpensive way could be devised to save the small pieces of chromite which are now wasted, inasmuch as they are too small to hand sort. Some of the chromite is quite fragile and gives a considerable percentage of fines in blasting. Perhaps the possibility of installing shaking screens and pulsating jigs should be investigated. Thus the coarse chromite could still be hand sorted, and the rest of the rock dumped over shaking screens and sized. Particles of chromite could then be recovered by jigs. There is ample water available in Barney Creek for the operation of jigs which can be obtained by gravity flow with approximately

500 feet of pipe. My idea would be to save the chrome fragments from sizes below hand sorting size to 10 mesh.

Heller Chrome Property

Chromite

6/46

NAME

OLD NAMES

PRINCIPAL ORE

MINOR MINERALS

145

36E

16

T

R

S

PUBLISHED REFERENCES

Baker

COUNTY

Upper Band River

AREA

5400

ELEVATION

MISCELLANEOUS RECORDS

ROAD OR HIGHWAY

DISTANCE TO SHIPPING POINT

PRESENT LEGAL OWNER (S)

Ed. Heller

Address

Unity, Oregon

OPERATOR

Name of claims

Area

Pat.

Unpat.

Name of claims

Area

Pat.

Unpat.

EQUIPMENT ON PROPERTY