

CHAMBERS GROUP

CANYON MT.
REGION,
CANYON DIST.

(See Canyon Gold Quartz Veins)

"The Chambers Group and the Will Cleaver Group" have been abandoned for some time because of their inaccessibility and the base nature of the ore.

Canyon City District: The Chambers Mine is being diamond drilled by a crew of ten men under the direction of O.F.Metzger, U.S.Bureau of Mines, and a detailed study of this and other chromite deposits in the vicinity is being made by Dr. T.P.Thayer and four assistants, of the U.S.G.S. A new road 5.2 miles long has been built to the Chambers, tents, equipment, and 2 drills are on the ground.

The Miller Mountain Mine has closed down.

J. Callan

Chambers Mine

Quartz

4/46

NAME

OLD NAMES

PRINCIPAL ORE

MINOR MINERALS

145

32 E

SE cor 13

T

R

S

PUBLISHED REFERENCES

Shayer 40:96-98
Westgate 20:47-48
Oregonian Bull 9 page 60-62
143 " 21-22

Grant

COUNTY

Oregon

AREA

6500

ELEVATION

MISCELLANEOUS RECORDS

ROAD OR HIGHWAY

DISTANCE TO
SHIPPING POINT

PRESENT LEGAL OWNER (S)

Address

OPERATOR

Name of claims Area Pat. Unpat.

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EQUIPMENT ON PROPERTY

The Chambers mine is at an altitude of about 6,500 feet on the northwest end of Bald Mountain, in the southeast corner of sec. 13, T. 14 S., R. 32 E. The mine is 13 miles by road from John Day, 8 miles of which is dirt road. Mining operations began in June 1918, and total production was probably about 6,000 tons. The ore shipped averaged 30 to 33 percent of chromic oxide. All ore under 28 percent, which included about one-fourth of the total ore mined, was discarded. Practically all ore shipped was mined from the glory hole shown on plate 14. The sample trenches and diamond drill holes were made by the Bureau of Mines.

The ore is mainly coarse spotted chromite in dunite that grades into massive chromite. In places it shows rude planar banding, best shown in the southwest ore body, where the bands dip about 70° SE. The matrix of the ore is serpentized dunite, and, as shown in the cross sections, the ore bodies are almost surrounded by a shell of serpentized dunite. The ore grades abruptly into the dunite where the contacts are not faulted, and the dunite grades outward into olivinite. Even where the chromite is in frozen contact with olivinite the matrix, between the chromite grains, is dunite. Small veins or dikes of green pyroxene from one-eighth of an inch to $1\frac{1}{2}$ inches wide are common. They are probably genetically related to the larger gabbro and gabbro pegmatite dikes that cut the chromite in the glory hole. The pegmatite contains angular blocks of spotted chromite, and diamond drill hole No. 13 passed through about 10 feet of gabbro that cuts good ore. The gabbro is readily removed by hand sorting during mining. Many small faults cut the ore but thus far have not seriously interfered with mining operations.

Three major ore bodies and some smaller unworkable lenses are known on the Chambers ground. The size and general relations of the ore bodies are shown on plate 14. The southwest ore body is a lenticular mass dipping steeply southward and plunging northeastward. Most of the central ore body, which appears to be in

the form of a short kidney, probably has been mined out. A tunnel, now caved, under the western edge of the glory hole was reported by Westgate to be in barren serpentine. Diamond drill holes Nos. 6 and 10 were barren, which indicates that the ore body does not extend to any great depth. The northeast ore body may consist of two overlapping lenses, but it seems more probably to be one large lens that has been faulted, for faulting at the edge of the ore is evident in cores from drill holes Nos. 12 and 16. Between drill holes Nos. 13 and 17 the ore either pinches out or is dropped along a fault parallel to the one indicated on plate 14. The average tenor of the ore, judged on the basis of past production and Bureau of Mines assays, is between 20 and 30 percent of chromic oxide.

Reference: Thayer 40:96-98

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Reference: Thayer 40:96-98 (quoted)

Allen 38:60-62

Westgate 20:47-48