

State Department of Geology and Mineral Industries

RECEIVED
FEB 16 1945

STATE DEPT OF GEOLOGY
& MINERAL INDS.

702 Woodlark Building
Portland, Oregon

Compiled by: N. S. Wagner
Informant: Hazeltine and
Mullennex

Date: February 9, 1945

Canyon Area - Grant County

Name: Celebration Mine (Chrome)

Foreward: No examination of this property was made and the following report on ownership and production is intended only as a supplement to existing Departmental records.

Owners: I. B. Hazeltine and Ward Mullennex.

Location: T. 14 S., R. 33 E., N. W. $\frac{1}{2}$ S. 30.

History: Hazeltine, Byram and Davis worked this property during 1942. In 1943 Hazeltine and Mullennex acquired it. Total production during this period was 587 tons*. This ranged between 36.27 and 40.13% Cr₂O₃ and the Cr:Fe ratio varied between 1.93:1 and 2.06:1. The property is inactive at the present time.

* From records of ores purchased at Seneca depot of the Metals Reserve.

Celebration Mine

Chromite

646

NAME

OLD NAMES

PRINCIPAL ORE

MINOR MINERALS

145

33E

NW 1/4 30

T

R

S

PUBLISHED REFERENCES

Shayer 40:104-5
Ozama Bull 9 page 59
" 143 " 21

Grant

COUNTY

Canyon

AREA

6500

ELEVATION

MISCELLANEOUS RECORDS

ROAD OR HIGHWAY

DISTANCE TO SHIPPING POINT

PRESENT LEGAL OWNER (S)

1 B. Hazeltine
Ward Mullennex

Address

Canyon City, Oregon

OPERATOR

none

Name of claims

Area Pat. Unpat.

Name of claims

Area Pat. Unpat.

EQUIPMENT ON PROPERTY

none

CELEBRATION MINE

CANYON AREA

The Celebration mine is about 500 feet south of the East Fork of Pine Creek, in the northwest corner of sec. 30, T. 14 S., R. 33 E. The workings and exposures of chromite are shown in figure 17. The country rock is dunite, largely altered to serpentine, which a short distance to the west is intimately mixed with banded gabbro. The ore is high-grade nodular chromite in which equidimensional $\frac{1}{2}$ -inch nodules of chromite occur in a matrix of fresh green monoclinic pyroxene. The ore averages about 5 feet in thickness and is considerably broken; the tunnel follows a shatter zone that dips about 20° S. parallel to the ore body.

Reference: Thayer 40:104-105

"Located on the east fork of Big Pine Creek, 500 feet south of the creek and trail, at the three-mile trail marker, in NW $\frac{1}{2}$ sec.30, T.14 S., R.33 E., Grant County.

"The country rock is a yellow-weathering dunite, varying locally to a pyroxenite, gabbro, or, more commonly, serpentine.

"The orebody is from 5 to 8 feet thick, possibly thicker in places, and extends for at least 50 feet in length, dipping 25° SE into the hillside, and striking N.65° E. It is rather irregular in outline, being considerably jointed and faulted in blocks up to 4-5 feet across. Often the ore is infaulted with blocks of serpentine and dunite.

"Two large open cuts about 20 feet apart expose the ore-face and one incline goes down into the ore for 35 feet.

"The ore is of the nodular type, consisting of round aggregates averaging 5mm. in diameter, in a matrix of green pyroxene. It is quite uniform in grade. An average of 60 chip samples from the piled ore and from the exposed faces of the orebody assayed 40 percent chromic oxide.

"This deposit is now relatively inaccessible. The nearest roads are three miles distant along a gently graded trail down Big Pine Creek, or one and a half miles by steep trail over the ridge to the Chambers mine.

"From the end of the present road it is another three miles out by a third-class road which joins the highway, at a point midway between John Day and Prairie City".

According to Clint Haight, a survey for a proposed road to the property has been made. This road will be a continuation of the present one. It will be three miles long, have a maximum grade of 8 percent, and will cost approximately \$1500.

About 200 tons of 38 to 40 percent chrome ore have been stock piled.
H.K.L. 11/13/40.

References: Allen 38:59 (quoted)
Thayer 40:104-5.

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland, Oregon

Celebration Mine (Chrome)

Canyon Area

Grant County

The celebration mine consists of one unpatented claim and is located at the head of Big Pine Creek in the N.W. $\frac{1}{2}$ Section 30 T. 14 N. R. 33 E., WM in Grant Co. It is situated at 6500 feet in moderately rugged, heavily timbered country. Water is plentiful. Low grade chrome ore 30 to 40 percent is exposed by a 35 foot tunnel and an open cut. Mine run chrome may be sorted to approximately 40 per cent as is indicated by the stock pile samples. The chrome-iron ratio in all sample was less than 2.0 : 1.

Owner and Operators:

I.B. Hazeltine, Canyon City; Alma Davis, Prairie City and H.F. Byram, Grants Pass.

Area:

One unpatented claim.

Location:

This claim is located on the east fork of Big Pine Creek in the N. W. $\frac{1}{2}$, Section 30, T. 14 S., R. 33 E., W.M. The claim is accessible from the Praire City-John Day highway by three miles of third class dirt trail and three miles of gently graded trail. During the winter months this mine is practically inaccessible.

The mine is located at an elevation of 6500 feet and it is snow covered during the late fall, winter and early spring. At the time the property was visited there was four and one-half feet of snow. Topography is moderately rugged. Timber is abundant.

Development:

Development consists of a 35 foot tunnel and open cut (see sketch). Snow prevented any surface examination.

Geology:

The tunnel appears to be on the east edge of the ore body and cuts a low grade chrome bearing rock. Part of the ore is of the nodular type in which the chrome content varies with the spacing of the chrome nodules. Chrome nodules are about 5 mm in diameter.

In the cut and in the tunnel the chrome is overlain with a broken serpentine. At the end of the tunnel the serpentine dips and curves 25° to the southeast, as if it were in contact with a large kidney. Snow prevented any surface examination.

Samples were taken at various places in the tunnel and cut and on the ore which is stockpiled. Samples underground were disappointingly low, but may be sorted to bring the ore to 39 or 40 per cent as is indicated by ore pile samples.

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland, Oregon

According to Allen, Bulletin 14 B, page 21;

"The country rock is a yellow-weathering dunite, varying locally to a pyroxenite, gabbro, or, more commonly, serpentine,

"The orebody is from 5 to 8 feet thick, possibly thicker in places, and extends for at least 50 feet in length, dipping 25° SE into the hillside, and striking N. 65° E. It is rather irregular in outline, being considerably jointed and faulted in blocks up to 4-5 feet across. Often the ore is infaulted with blocks of serpentine and dunite.


"Two large open cuts about 20 feet apart expose the ore-face and one incline goes down into the ore for 35 feet.

"The ore is of the nodular type, consisting of round aggregates averaging 5 mm. in diameter, in a matrix of green pyroxene. It is quite uniform in grade. An average of 60 chip samples from the piled ore and from the exposed faces of the orebody assayed 40 percent chromic oxide.

"This deposit is now relatively inaccessible. The nearest roads are three miles distant along a gently graded trail down Big Pine Creek, or one and a half miles by steep trail over the ridge of the Chambers mine.

"From the end of the present road it is another three miles out by a thirdclass road which joins the highway, at a point midway between John Day and Prairie City."

Remarks: At present Metals Reserve Co. specifications this property will ship very little ore,


Hugh G. Lancaster,
Field Engineer

March 9, 1942