

State Department of Geology and Mineral Industries

1069 State Office Building
Portland 1, Oregon

FIRST WATER GULCH CHROMITE DEPOSITS

Jackson County
Upper Applegate Dist.

Three separate properties (the Prater, Water Gulch, and Glade View) are covered by this report.

Owners: Mrs. Minerva Prater, Miami, Florida, leased the deposit on her private land to R. B. Maddox, Jacksonville, Oregon in 1955, who sub-leased to the Waldo Milling Company, Cave Junction. The Water Gulch claim was located by Terrence Maddox, (son of R. B. Maddox) Sept. 1955. The Glade View claim was relocated January 1957 by Arthur Goss, Jacksonville, Oregon. The locations of the Glade View claim are on record in vol. 60, p. 171 and vol. 63, p. 432 of Jackson County. Locations of the Water Gulch and Glade View claims appear to overlap.

Location: The discovery on the Prater deposit is near the E. edge of the SE $\frac{1}{4}$ of sec. 30, T. 39 S., R. 1 W., at about 3,300 feet elevation. The Water Gulch claim discovery cut is 150 feet east and about 80 feet lower in the west edge of the SW $\frac{1}{4}$ of sec. 29, T. 39 S., R. 1 W. The cut on Glade View claim is located across First Water Gulch, on the trail just above the Sterling ditch, about 1,600 feet (airline) in a S. 70° E. direction from the Water Gulch cut.

Development: The discovery cuts are the extent of the workings. The Glade View claim cut has been enlarged to 20 feet long, 7 feet wide, and 10 feet deep. A Jeep road had been built to the discovery on Mrs. Prater's land by the Waldo Milling Company in 1955-56. Early in 1957, a logging road which widened the previous road was built to a landing 200 feet above the deposit.

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Geology: Near the landing and the Prater deposit some of the peridotite country rock has been altered to a talc-carbonate schist. Partial alteration of olivine to magnesite could be the result of surface weathering. The Prater deposit consisted of a 6-foot thick and 20(?) foot long lens of banded-disseminated chromite in the light-colored altered dunite. Banding in the chromite appears to conform roughly to the margin of the lens. It strikes N. 30° W. and dips 50° NE. The lens appeared to contain approximately 100 tons of low grade ore. Foliation in the serpentine 20 feet north of the lens strikes N. 85° W. and dips 30° N.

Considerable float of the banded disseminated chromite ore was seen lying in the mantle rock on the bare grassy slope between the 1 (s) 1 the discovery cut on Water Gulch claim which lies approximately 160 feet S. 60° E. An 18-inch thick lens of banded disseminated chromite in altered dunite exposed in the southwest wall of the discovery cut strikes N. 10° W. and dips 55° W. The lens pinches and curves west into a fault striking N. 15° W. and dipping 80° W. which forms the west wall of the cut near the face and lies behind the small lens of chromite. A 4-inch stringer of chromite exposed in the face of the cut pinches down into the west side of the fault. About 1 ton of low grade ore was piled alongside the cut.

The open cut at Glade View claim runs 20 feet eastward into the west slope of the first ridge east of First Water Gulch. The country rock is a blocky, partly-altered dunite. The prominent jointing pattern strikes N. 25° W. and dips 32° W. Several 1/2 inch to 3/4 inch seams of cross-fiber anthophyllite exposed in the face of the cut occur in vertical joints which strike N. 75° W. and joints striking N. 45° W. and dipping 80° NE. Narrow

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stringers and small pods of chromite were seen at various places in the walls and face of the cut. Some of the small chromite bodies appear rod-shaped and irregular along with the usual lens and tabular shapes. No good showing of chromite was seen in the cut but large chunks in the ore pile indicate that a 12 to 16-inch thick pod of fairly massive ore was mined out. The ore is largely a disseminated variety but contains up to 90 plus percent chromite. Some shows a definite banded texture. The grain size varies from $\frac{1}{2}$ to 3 mm in diameter. About $\frac{1}{2}$ ton of chromite remained in the ore pile alongside the trail.

Two samples of the ore were submitted to the Department for assay by Art Goss (1/14/57). The samples (RG-33, P-20778 and RG-34, P-20779) assayed 41.00 percent Cr_2O_3 , 13.88 percent Fe; and 42.50 percent Cr_2O_3 , 15.67 percent Fe, and 6.18 percent SiO_2 respectively.

Assays of the more massive ore from the Prater prop^{erty} submitted by R. B. Maddox vary from 26.61 percent Cr_2O_3 and 7.61 percent Fe (OG-262, P-16754) to 44.76 percent Cr_2O_3 and 10.33 percent Fe (NO-232, P-14703). Average grade of the ore is somewhat lower. Ore from the nearby Water Gulch claim is of similar grade.

Visited: June 26, 1957 by L.R. & N.V.P.

Report: By L.R.

Informant: Jack W. Eggers, Cave Junction, (Waldo Milling Co.) reported mining out the orebody on the Prater property, August, 1957. The lens reportedly bottomed abruptly leaving no trace. Only about 30 tons of low grade ore were mined. The ore was milled at the Waldo Milling Company mill at Cave Junction where about 8 tons of concentrate assaying 51.96 percent Cr_2O_3 and 2.61 Cr:Fe ratio were recovered.

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Portland 4, Oregon

Accessibility: The road to the Prater deposit branches left (east) from Glade Creek Road .4 mile from the junction with the Talent Road, crosses the river and winds around the lower end of Bull Pine Ridge and is about 1 1/2 miles to the landing situated on the knoll above First Water Gulch and the chromite prospects. Cass Ranch is 12 miles from the main Applegate road, and about 40 miles from Grants Pass. The deposits are accessible only during the dry season.

RECORD IDENTIFICATION
 RECORD NO..... M061618
 RECORD TYPE..... XIM
 COUNTRY/ORGANIZATION. USGS

NAME AND LOCATION

DEPOSIT NAME..... PRATER DEPOSIT
 COUNTRY CODE..... US *First Water*
 COUNTRY NAME: UNITED STATES

STATE CODE..... OR
 STATE NAME: OREGON

COUNTY..... JACKSON

QUAD SCALE QUAD NO OR NAME
 1: 62500 TALENT

LATITUDE LONGITUDE
 42-08-44N 122-51-13W

UTM NORTHING UTM EASTING UTM ZONE NO
 4665750. 512100. +10

TWP..... 039S
 RANGE..... 001W
 SECTION.. 30
 MERIDIAN. W.M.

ALTITUDE.. 3300

COMMODITY INFORMATION

COMMODITIES PRESENT..... CR

PRODUCER(PAST OR PRESENT):
 MAJOR PRODUCTS.. CR

DRE MATERIALS (MINERALS,ROCKS,ETC.):
 BANDED - DISSEMINATED

ANALYTICAL DATA(GENERAL)

ASSAYS RANGE FROM 26.61% CR2O3 & 7.61% FE TO 44.76% CR2O3 & 10.33% FE; AVERAGE GRADE IS LOWER

EXPLORATION AND DEVELOPMENT

STATUS OF EXPLOR. OR DEV. 2

FORM/SHAPE OF DEPOSIT: LENS

SIZE/DIRECTIONAL DATA

MAX LENGTH..... 20 FT
 MAX WIDTH..... 6 FT
 STRIKE OF OREBODY.... N 30 W
 DIP OF OREBODY..... 50 NE

COMMENTS(DESCRIPTION OF DEPOSIT):
 MINED OUT ORE BOTTOMED ABRUPTLY

PRODUCTION

YES
 SMALL PRODUCTION

ANNUAL PRODUCTION (ORE, COMMOD., CONC., OVERBURD.)

ITEM	ACC	AMOUNT	THOUS. UNITS	YEAR	GRADE, REMARKS
1 ORE EST		0000.030	TONS	1957	LOW GRADE SEE D2
2 ORE EST		0000.008	TONS		51.96 % CR2O3 (CONC), 2.61:1 CR:FE
21 TOTAL		.008	TONS		51.96 % CR2O3 (WEIGHTED AVERAGE GRADE)

GEOLOGY AND MINERALOGY

HOST ROCK TYPES..... DUNITE

GEOLOGICAL DESCRIPTIVE NOTES. PERIDOTITE COUNTRY ROCK ALTERED TO A TALC - CARBONATE SCHIST

GENERAL REFERENCES

1) RAMP, LEN, 1961, CHROMITE IN SOUTHWESTERN OREGON: OREGON DEPT. GEOLOGY AND MINERAL IND. BULL. 52, 169 P.

CRIB MINERAL RESOURCES FILE 12

RECORD IDENTIFICATION

RECORD NO..... M061179
 RECORD TYPE..... X1M
 COUNTRY/ORGANIZATION. USGS
 MAP CODE NO. OF REC..

REPORTER

UPDATED..... 81 02
 BY..... FERNS, MARK L.; (BROOKS, HOWARD C.)

NAME AND LOCATION

DEPOSIT NAME..... WATER GULCH CLAIM
 SYNONYM NAME..... MEDFORD #34?

MINING DISTRICT/AREA/SUBDIST. RED MOUNTAIN (1961)

COUNTRY CODE..... US
 COUNTRY NAME: UNITED STATES

STATE CODE..... OR
 STATE NAME: OREGON

COUNTY..... JACKSON
 DRAINAGE AREA..... 17 APPELEGATE RIVER
 PHYSIOGRAPHIC PROV..... 13 KLAMATH MOUNTAINS
 LAND CLASSIFICATION..... 00

QUAD SCALE QUAD NO OR NAME
 1: 62500 TALENT

LATITUDE LONGITUDE
 42-08-38N 122-50-57W

UTM NORTHING UTM EASTING UTM ZONE NO
 4665553.9 512459.2 +10

TWP..... 039S
 RANGE..... 001W
 SECTION.. 29
 MERIDIAN. N.M.

ALTITUDE.. 2840

COMMODITY INFORMATION

COMMODITIES PRESENT..... CR

ORE MATERIALS (MINERALS, ROCKS, ETC.):
CHROMITE

EXPLORATION AND DEVELOPMENT

STATUS OF EXPLOR. OR DEV. 2

PRESENT/LAST OWNER..... TERRANCE MADDOX, JACKSONVILLE OREGON (1955)

DESCRIPTION OF DEPOSIT

DEPOSIT TYPES:

DISSEMINATED

FORM/SHAPE OF DEPOSIT: LENS, STRINGER

SIZE/DIRECTIONAL DATA

SIZE OF DEPOSIT..... SMALL

MAX WIDTH..... 1.5 FT

STRIKE OF DREBODY.... N 10 W

DIP OF DREBODY..... 55 W

DESCRIPTION OF WORKINGS

SURFACE

PRODUCTION

NO PRODUCTION

PRODUCTION COMMENTS..... 1 TON OF LOW GRADE PILED ALONG CUT

GEOLOGY AND MINERALOGY

HOST ROCK TYPES..... METADUNITE

LOCAL GEOLOGY

SIGNIFICANT LOCAL STRUCTURES:

FAULT IN WEST WALL OF OPEN CUT

GENERAL REFERENCES

1) RAMP, LEN, 1961, CHROMITE IN SOUTHWESTERN OREGON: OREGON DEPT. GEOLOGY AND MINERAL IND. BULL. 52, 169 P.