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.


Location: The discovery on the Prater deposit is near the E. edge of the SE1/4 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 SW1/4 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. 78° 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.
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 serpentine has been noted at the contact between the peridotite and the altered country rock. 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 discovery cut on Water Gulch claim which lies approximately 180 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 1/16 inch to 3/4 inch seams of cross-fiber amphibolite 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
...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 18-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 1 to 3 mm in diameter. About 3 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 Gess (1/14/57). The samples (RG-33, P-20778 and RG-34, P-20779) assayed 41.00 percent Cr₂O₃, 13.88 percent Fe; and 42.50 percent Cr₂O₃, 15.67 percent Fe, and 6.18 percent SiO₂ respectively.

Assays of the more massive ore from the Prater property submitted by R. B. Maddox vary from 26.61 percent Cr₂O₃ and 7.61 percent Cr₂O₃ to 44.76 percent Cr₂O₃ and 20.33 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 Cr₂O₃ and 2.61 Cr:Fe ratio were recovered.

* * * * * *
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 Ball Pine Ridge and is about 1.5 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.

* * * * *
CRIB MINERAL RESOURCES FILE 12

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

NAME AND LOCATION
DEPOSIT NAME ............... PRATER DEPOSIT
COUNTRY CODE ............... US
COUNTRY NAME: UNITED STATES
STATE CODE ............... OR
STATE NAME: OREGON
COUNTY ............... JACKSON

QUAD SCALE
1: 62500

LATITUDE
42-08-44N

LONGITUDE
122-51-13W

UTM NORTING
4665750

UTM EASTING
512100

UTM ZONE NO
+10

TWP. .......... 039S
RANGE ...... 001W
SECTION .... 30
MERIDIAN. W.M.
ALTITUDE.. 3300

COMMODITY INFORMATION
COMMODITIES PRESENT ........... CR

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

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

ANALYTICAL DATA (GENERAL)
ASSAYS RANGE FROM 25.61% CR2O3 & 7.61% FE TO 49.76% 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, COMM., CONC., OVERBURD.)

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

GEOLOGY AND MINERALOGY
HOST ROCK TYPES.............. DUNITE

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

GENERAL REFERENCES
NAME AND LOCATION
DEPOSIT NAME: WATER GULCH CLAIM
SYNONYM NAME: MEDFORD #347
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 APPLEGATE RIVER
PHYSIOGRAPHIC PROV: 13 KLAMATH MOUNTAINS
LAND CLASSIFICATION: 00
QUAD SCALE: "QUAD NO OR NAME
1: 62500 TALENT"
LATITUDE: 42-08-38N
LONGITUDE: 122-50-57W
UTM NORTHING: 4665553.9
UTM EASTING: 512459.2
UTM ZONE NO: +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 DEBBODY..... N 10 W
DIP OF DEBBODY ......... 55 W

DESCRIPTION OF WORKINGS
SURFACE

PRODUCTION
NO PRODUCTION

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

GEOL OGY 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.