

## RECORD IDENTIFICATION

RECORD NO..... M015605  
 RECORD TYPE..... X1M  
 COUNTRY/ORGANIZATION. USGS  
 DEPOSIT NO..... DDGMI 93-88  
 MAP CODE NO. OF REC..

## REPORTER

NAME..... BRADLEY, ROBIN; WALKER, GEORGE W.  
 DATE..... 79 03  
 UPDATED..... 81 03  
 BY..... FERNS, MARK L. (BROOKS, HOWARD C.)

## NAME AND LOCATION

DEPOSIT NAME..... DIAMOND FLAT

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

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

COUNTY..... CURRY  
 DRAINAGE AREA..... 18010101 CALIFORNIA  
 PHYSIOGRAPHIC PRDV..... 13 KLAMATH MOUNTAINS  
 LAND CLASSIFICATION..... 41

QUAD SCALE            QUAD NO OR NAME  
 1: 62500            CHETCO PEAK ( 1954 )

LATITUDE            LONGITUDE  
 42-01-25N            123-52-11W

UTM NORTHING        UTM EASTING        UTM ZONE NO  
 4652550.            428000.            +10

TWP..... 041S  
 RANGE..... 010W  
 SECTION.. 02 03 04 09 10  
 MERIDIAN. WILLAMETTE

POSITION FROM NEAREST PROMINENT LOCALITY: IN HEADWATERS OF N. FORK OF DIAMOND CREEK

## COMMODITY INFORMATION

COMMODITIES PRESENT..... NI CR

MAIN COMMOD..... NI

LATERIZED ULTRAMAFIC ROCK

MAIN ORE MINERALS:  
CHROMITE, CINNABAR

ANALYTICAL DATA (GENERAL)  
SIX SAMPLES AVERAGED 0.75 PERCENT NI

EXPLORATION AND DEVELOPMENT  
STATUS OF EXPLOR. OR DEV. 2

DESCRIPTION OF DEPOSIT

DEPOSIT TYPES:

LATERITES

FORM/SHAPE OF DEPOSIT:

SIZE/DIRECTIONAL DATA

SIZE OF DEPOSIT..... SMALL

MAX THICKNESS..... 40 FT

COMMENTS (DESCRIPTION OF DEPOSIT):

ESTIMATED AVERAGE UNWEATHERED ROCK CONTENT IN SOIL IS 50 % BY VOLUME

PRODUCTION

UNDETERMINED

GEOLOGY AND MINERALOGY

HOST ROCK TYPES..... SERPENTINIZED HARZBURGITE WITH A FEW PATCHES OF DUNITE CONTAINING CHROMITE BANDS  
LENSES

IGNEOUS ROCK TYPES..... DIABASE AND DACITE DIKES AND LARGE COMPLEX DIORITE DIKE

LOCAL GEOLOGY

NAMES/AGE OF FORMATIONS, UNITS, OR ROCK TYPES

1) NAME: PART OF JOSEPHINE ULTRAMAFIC SHEET

COMMENTS (GEOLOGY AND MINERALOGY):

LATERITES APPEAR TO BE EROSIONAL REMNANTS OF AN EXTENSIVE WEATHERED SURFACE ON THE PERIDOTITE

GENERAL REFERENCES

- 1) RAMP, LEN, 1978, INVESTIGATIONS OF NICKEL IN OREGON: ODGMI MISC. PAPER NO. 20, P. 26
- 2) RAMP, L. AND OTHERS, 1977, GEOLOGY, MINERAL RESOURCES AND ROCK MATERIAL OF CURRY COUNTY, OREGON; ODGMI BULL. P.48

Chutes

## DIAMOND NICKEL PROSPECTS

Location: Mainly in the western portion of sections 3 and 10, T. 41 S., R. 10 W., with minor extensions into sections 4 and 9, and a small unexplored potential patch in SW $\frac{1}{4}$  of SW $\frac{1}{4}$  sec. 2. Situated between about 2,300 and 3,600 feet elevation largely in the drainage area of North Fork Diamond Creek. The area may be reached by the Wimer road and McGrew Wagon road and is about 17 miles from O'Brien on U. S. 199.

Area: Six small and apparently thin patches of soil are plotted (Photogeologically) on the accompanying map. Four have been visited briefly and a total of 6 auger samples taken. The southern patch of soil is an apparent slump bench at about 2,400 feet elevation in the SW corner of sec. 10 and SE Corner of sec. 9 contains about 3 $\frac{1}{2}$  hectares of soil. The next patch progressing north up the slope lies in the SW $\frac{1}{4}$  sec. 10 between 2,700 and 3,040 feet elevation and contains about 8 hectares. The largest patch in the NW $\frac{1}{4}$  of sec. 10 between about 3,120 and 3,300 feet elevation contains about 21 hectares. The next patch progressing northward is crossed by the old McGrew Wagon road in the SW $\frac{1}{4}$  sec. 3 at about 3,300 feet elevation. It is about 5 $\frac{1}{2}$  hectares in size. Two other patches seen on the photos, but not visited are a 3-hectare patch in the NW $\frac{1}{4}$  sec. 3 at about 3,250 feet elevation and a 5 $\frac{1}{2}$ -hectare patch in the SW $\frac{1}{4}$  of the SW $\frac{1}{4}$  sec. 2 between about 3,500 and 3,650 feet elevation. The total area is about 46 hectares.

Ownership: Claims posted in the area by Inspiration Mining Company in 1971 and 1972 have reportedly since been dropped.

General Geology: Like other deposits in the area these small patches of soil appear, at least in part, to be erosional remnants of an old upland surface developed between 3,000 and 4,000 feet elevation on the Josephine peridotite sheet. Most of the laterite that may have at one time been developed appears to have been eroded away. Fairly abundant silica boxwork rubble and outcrop occur in the patches in the NW $\frac{1}{4}$  of sec. 10 and the SW $\frac{1}{4}$  of sec. 3. The peridotite has been intruded by small stocks and dikes of basic to intermediate igneous rock. A stock of diorite containing areas rich in hornblend and with occasional cinnabar mineralization lies a short distance southwest of the prospects and a small area of gabbro is mapped to the southeast in the area around dBain Station. A chromite prospect is situated between the two northern patches (Ramp, 1961, p. 115).

Grade: Assay results of auger samples taken in the area are tabulated below:

Map No.	Assay No.	Depth	%Ni	%Co	%Cr	Fe
1	AFG-56	6 inches	0.56	trace		
2	AFG-57	22 inches	0.27	trace		
3	AJG-40	5 feet	0.86	----		
4	AJG-41	6 feet	0.62	0.12	1.16	23.3
5	AJG-39	12 feet	0.85	----		
6	AJG-38	50 inches	0.86	----		

The average grade of soil and saprolite in the area is probably about 0.75% Ni.

The grade of the gross tonnage of rock and soil is estimated to be about 0.47 %.

This is a weighted average of typical peridotite and the soil and saprolite.

Depth: Maximum depth in a few spots may be 15 meters but an average depth over the aggregate of 46 hectares will probably not exceed 2 meters. The soil to rock ratio to this depth is estimated to be about 40-60.

Tonnage: Gross tonnage of the combined patches to 2 meters depth using a factor of 1.9 metric ton per cubic meter = 1,748,000 metric tons. Net tonnage of soil and saprolite using a factor of 1.60 m.t./cu.m. = 588,800 metric tons.

References:

Ramp, Len, 1961, Chromite in southwestern Oregon, Oregon Dept. Geol and Min. Indus. Bulletin 52.

Wells, F. G., Hotz, P. E., and Cater, F. W., Jr., Preliminary description of the geology of the Kerby quadrangle, Oregon. Oregon Dept. of Geol. and Min. Indus. Bulletin 40.

Report by: Len Ramp, 10-16-75