

Agnes

Name: GRAY BUTTE PROSPECT (Nickel)

Owner: This area is unclaimed.

Location: A central point is at 42°28'33" N. Lat. and 124°3'12" W. Long.; mainly in the SE $\frac{1}{4}$ sec. 12, T. 36 S., R. 12 W.; between (1,700 and 1,850 feet elevation) 520 and 570 meters elevation. The area is reached via the trail between Horse Sign and Lawson Creeks and is about 7 $\frac{1}{4}$ kilometers (4 $\frac{1}{2}$ miles) north of Game Lake. One can drive about 1/3 of this distance to Pine Flat. (1926).

Climate & Vegetation: Average annual rainfall is about 180 cm; average summer temperature is about 15° C., and winter about 7° C. Vegetation is fairly dense shrubbery with a few old growth sugar pines. The brush includes manzanita, buch bush, cascara, live oak, poison oak, azalea, etc.

History, exploration and development: This is a new, previously unknown prospect discovered by color infra red aerial photo inspection. It was visited and sampled on July 3, 1975 and found to be a much smaller area than the original photogeology target. There has been no development and exploration is limited to minor reconnaissance geologic mapping and auger sampling (3 holes).

General Geology: Float seen along the trail indicates that much of Gray Butte ridge may be a dike swarm of diabase - gabbro dikes overlying serpentized harzburgite. Landsliding is apparent in the area of the occurrence. Somewhat jumbled-appearing Dothan sediments were seen on the west side of the slump pond. Fossiliferous Cretaceous marine sediments belonging to the Myrtle Group are mapped to the north and east a short distance (Coleman, 1972). Drawing accurate contacts between formations in the area would be difficult.

Description of deposit: The area appears to have a fairly typical lateritic soil; but without the iron oxide shot accumulation. Some residual pyroxene crystals can be seen in the soil as well as some clinopyroxenite float and diabase float. In auger hole No. 3 which went to 12 feet, the upper 7 feet is dark redish brown soil, then it cut a green sheared serpentinite-saprolite for 1 foot; then the remainder of the hole is in dark olive green to brown talcy saprolite. (We ran out of drill rod at this depth).

Area: Average length is about 500 meters and the average width is about 160 meters. The area appears to be no larger than 8 hectares.

Depth: Maximum depth is estimated to be about 10 meters. Average depth is estimated to be about 3 meters.

Grade: An average of assays from the three holes is 0.41 percent Ni and 0.10 percent Co. No Cr or Fe analyses were made. Estimated soil to rock ratio in the area is 60:40.

Tonnage: Calculated gross tonnage (using 1.86 mt/cu.m.) is 446,000 tonnes. Net tonnage of soil and saprolite minus rock (using 1.60 mt/cu. m.) = 231,000 tonnes.

Reference: Coleman, R. G., 1972, The Colebrooke Schist of Southwestern Oregon and its relation to the tectonic evolution of the region, U. S. Geological Survey Bull. 1339.

Report by Ken Ramp Jan 1978 (?)

RECORD IDENTIFICATION

RECORD NO..... M015584
RECORD TYPE..... XIM
COUNTRY/ORGANIZATION. USGS
DEPOSIT NO..... DDGM1 93-198
MAP CODE NO. OF REC..

REPORTER

NAME..... BRADLEY, ROBIN; WALKER, GEORGE W.
DATE..... 79 03
UPDATED..... 81 04
BY..... FERNS, MARK L. (BROOKS, HOWARD C.)

NAME AND LOCATION

DEPOSIT NAME..... GRAY BUTTE

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

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

Agnese

COUNTY..... CURRY
DRAINAGE AREA..... 17100311 PACIFIC NORTHWEST
PHYSIOGRAPHIC PROV..... 13 KLAMATH MOUNTAINS
LAND CLASSIFICATION..... 41

QUAD SCALE QUAD NO OR NAME
1: 62500 COLLIER BUTTE (1954)

LATITUDE LONGITUDE
42-28-27N 124-03-19W

UTM NORTHING UTM EASTING UTM ZONE NO
4702750. 413250. +10

TWP..... 036S
RANGE..... 012W
SECTION.. 12 13 24
MERIDIAN. WILLAMETTE

POSITION FROM NEAREST PROMINENT LOCALITY: 4.5 MI NORTH OF GAME LAKE.

LOCATION COMMENTS: NW 1/4 SEC 24 ; SOUTH EDGE OF SEC. 13

COMMODITY INFORMATION

COMMODITIES PRESENT..... NI CO

ORE MATERIALS (MINERALS, ROCKS, ETC.)

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..... 30 FT

COMMENTS(DESCRIPTION OF DEPOSIT):

UNWEATHERED ROCK IN SOIL IS ESTIMATED TO BE 35 % BY VOLUME.

PRODUCTION

UNDETERMINED

GEOLOGY AND MINERALOGY

HOST ROCK TYPES..... LATERITES

IGNEOUS ROCK TYPES..... DIABASE AND GABBRO DIKES

LOCAL GEOLOGY

SIGNIFICANT LOCAL STRUCTURES:

THRUST FAULT

SIGNIFICANT ALTERATION:

SERPENTINIZATION

COMMENTS (GEOLOGY AND MINERALOGY):

ULTRAMAFICS (HARZBURGITE) IN CONTACT WITH YOUNGER SEDIMENTARY UNITS. HIGH ANGLE FAULTING AND LANDSLIDING SERVE COMPLICATE AND CONFUSE GEOLOGIC INTERPRETATION

GENERAL REFERENCES

1) RAMP, LEN, 1978 , INVESTIGATIONS OF NICKEL IN OREGON: ODGMI MISC. PAPER NO. 20 , P. 47 - 49

2) RAMP, L. AND OTHERS, 1977, GEOLOGY, MINERAL RESOURCES AND ROCK MATERIAL OF CURRY COUNTY, OREGON; ODGMI BULL. P.48