

RECORD IDENTIFICATION

RECORD NO..... M020045
RECORD TYPE..... XIM
INFORMATION SOURCE... 1
DEPOSIT NO..... DDGMI 93-169
MAP CODE NO. OF REC..

REPORTER

NAME..... FERNS, MARK L. (BROOKS, HOWARD C.)
AFFILIATION..... DDGMI
DATE..... 81 04

NAME AND LOCATION

DEPOSIT NAME..... RED CUB

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

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

COUNTY..... CURRY
DRAINAGE AREA..... 17100310 PACIFIC NORTHWEST
PHYSIOGRAPHIC PROV..... 13 KLAMATH MOUNTAINS
LAND CLASSIFICATION..... 41

QUAD SCALE QUAD NO OR NAME
1: 62500 MARIAL (1954)

LATITUDE LONGITUDE
42-35-05N 123-59-05W

UTM NORTHING UTM EASTING UTM ZONE NO
4714950 419200 +10

TWP..... 034S
RANGE..... 011W
SECTION.. 02
SECTION FRACTIONS: SW 1/4 SW 1/4
MERIDIAN. WILLAMETTE

ACCURACY OF LOCATION
ACCURATE

COMMODITY INFORMATION

COMMODITIES PRESENT..... CU ZN AG AU

ORE MATERIALS (MINERALS, ROCKS, ETC.):

PYRITE, CHALCOPYRITE, SPHALERITE; SECONDARY COPPER MINERALS

ANALYTICAL DATA (GENERAL)

DDGMI SAMPLES OVER A WIDE AREA AVERAGED LESS THAN 1% CU; TRACE AU; 0.20 OZ/TON AG

EXPLORATION AND DEVELOPMENT

STATUS OF EXPLOR. OR DEV. 2

YEAR OF DISCOVERY..... 1906

EXPLOR. AND DEVELOP. COMMENTS:

TWO 100 FOOT DRILLS REPORTEDLY BOTTOMED IN SERPENTINE (1966)

DESCRIPTION OF DEPOSIT

DEPOSIT TYPES:

DISSEMINATED; MASSIVE SULFIDE

FORM/SHAPE OF DEPOSIT:

SIZE/DIRECTIONAL DATA

COMMENTS (DESCRIPTION OF DEPOSIT):

VOLCANOGENIC

DESCRIPTION OF WORKINGS

UNDERGROUND

COMMENTS (DESCRIP. OF WORKINGS):

TWO SHORT ADITS

PRODUCTION

NO PRODUCTION

GEOLOGY AND MINERALOGY

AGE OF HOST ROCKS..... JUR

HOST ROCK TYPES..... METAVOLCANICS

PERTINENT MINERALOGY..... QUARTZ

LOCAL GEOLOGY

NAMES/AGE OF FORMATIONS, UNITS, OR ROCK TYPES

1) NAME: ROGUE VOLCANICS

AGE: JUR

GENERAL REFERENCES

Curry Ag
Agness

April 3, 1953

Red Cub Copper

A Mr. Hallard, who claimed to be working on the Red Cub Copper property (see 3, T355, R11A) about 6 miles up Sleasta ^{from Agness} Creek [^] for a Mr. S. J. Dumond, Sacramento Calif., visited the office. He said a diamond drilling program was going to be started on this property.

Dick Appling says the claims at this property are owned by Al. La Chance and L. Lucas of Agness

Wick says they are
planning to get
a government loan
or subsidy.

The Red Cub Mine is
shown on the Forest
Service map on the
east side of a tributary
to ^{the} south of Shasta
Costa Creek.

UNITED STATES DEPARTMENT OF THE INTERIOR - BUREAU OF MINES

Report of the Bureau of Mines to Hon. Harold L. Ickes, Secretary of the Interior

THE RED CUB COPPER PROSPECT
Curry County, Oregon

- Copper -

Summary

The Red Cub copper prospect is in Secs. 3, 4 and 10 (?), T. 35 S., R. 11 W., Curry County, Oregon, near Red Cub Creek, a branch of Shasta Costa Creek. Agness, Oregon, the nearest town, is between 5 and 6 miles distant by Forest Service trail.

The total development accomplished since 1906, the date of discovery, and up to 1944 consists of two short adits and several open cuts.

The deposit is composed of disseminated chalcopyrite, pyrite and quartz in an altered colorite. An outcrop of this material 100 feet in length and 40 feet in width is the main feature of the prospect. The mineralized zone is obscured by a dense growth of vegetation but is inferred to extend northward towards Shasta Costa Creek.

The copper content of the main outcrop is insufficient to warrant further consideration by the Bureau of Mines in 1944. It is possible that the area would warrant exploratory considerations when a demand becomes imminent for open-cut copper mining on material containing less than 0.5 percent copper or, if upon further prospecting it is shown that there is a good possibility of developing a large deposit of higher grade ore.

1/ These memoranda present the facts reported by Bureau of Mines engineers regarding properties for which no further consideration is recommended. Therefore, they should be treated as confidential, for the sole use of Bureau employees. They should not be given out to the public or to the owners of the properties concerned.

Introduction

Location and Accessibility: -- The Red Cub copper prospect is situated on the northeast side of Red Cub Creek, a branch of Shasta Costa Creek, in Secs. 3, 4 and 10 (?), T. 35 S., R. 11 W., Curry County, Oregon.

From Agness, Oregon the U. S. Forest Service's Burnt Ridge horse trail passes over the prospect at a point between 5 and 6 miles distant by trail route. The direction of the prospect is northeasterly from Agness, a village on the north bank of the Rogue River, 23 miles east of Gold Beach, Oregon. Agness is accessible from Gold Beach by launch up the Rogue River. The launch makes a daily round trip, carrying passengers and mail, between Gold Beach and Agness except Sundays when the trip is made by special arrangement only. Gold Beach on the Pacific Coast Highway is accessible over a bus route from both Marshfield, Oregon and Eureka, California, railroad points on the Southern Pacific railroad.

Agness is 37 miles south of Powers, Oregon, a freight shipping point on the Southern Pacific railroad. A mountain road, passable in dry weather, extends from Powers to Agness, and a paved highway extends northward from Powers to Oregon State Highway 42, which is connected with the National highway system.

Because of the heavy rainfall in the area during all months of the year except July and August, the prospect may be reached with greater ease during these two months.

Topography: -- Relief in the prospect area is sharp with ridges and slopes ranging between an estimated altitude of 1,000 and 2,000 feet. Deep canyons and high ridges are the dominant physical features which form a part of the Coast Range. The dominant mineral outcrop is on a southwest dipping slope about 100 feet above Red Cub Creek which is the major drainage stream for the deposit. Topographic development of the prospect is in the mature stage of erosion.

Climate: -- A moist temperate climate exists in the area with wet, freezing weather during the winter months and hot, dry conditions prevailing in July and August.

The annual precipitation is estimated to exceed an equivalent of 100 inches of rainfall, most of which falls during the winter interspersed with occasional snow storms.

Vegetation: -- The slopes are covered with a dense forest of Douglas fir, Port Orford cedar, and several varieties of hardwood trees including oak and madrone. These afford an adequate timber supply for mining and construction purposes. Between these large trees there is a flourishing growth of smaller trees such as myrtle, manzanita, and other varieties, and a dense undergrowth of shrubs, ferns, vines, and poison oak. The profusion of vegetation forms a jungle which is a serious handicap in surface exploration.

Field Work and Acknowledgments: -- This prospect was called to the attention of a Bureau of Mines engineer 2/ by the owners in July 1943. On August 17, 1943, the prospect was examined by engineers 3/ of the Bureau of Mines who sampled the exposures by cutting 9 samples. A topographic map showing the relative position of the mine workings was also prepared and a brief report of observations was compiled. As this work appeared insufficient for the formulation of conclusions on the merits of the property, another examination was made by an engineer 4/ of the Bureau of Mines, accompanied by Gene Fry of Agness, Oregon.

The objective of the first examination was to determine the merits of the prospect through appraisal of copper concentrations, in the main, confined to shear systems. Results from this study 5/ indicate that high-grade copper material occurs

2/ J. R. Reynolds, mining engineer.

3/ O. H. Metzger, examining engineer; J. R. Reynolds

4/ F. H. Gannell, Mining engineer

in the prospect in small local deposits insufficient in size to warrant exploration.

The second examination was made to determine the quantity and extent of disseminated copper minerals throughout the rocks adjacent to fissures.

This report outlines the combined results from the two reconnaissance examinations.

For further detailed examination of this prospect, it would be necessary to pack camp equipment and surveying instruments into the area. A party of two engineers and two laborers would be required for about 10 days to make a comprehensive examination of the deposits. Such a program is beyond the scope of a preliminary examination.

History and Ownership

This prospect was first located by a Mr. Wooley 6/ about 1906 7/. Under the ownership of Mr. Wooley, several opencuts were excavated and two adits started before 1907 or 1908 8/, when the property was abandoned.

The property then lay idle for several years until it was relocated by Phil Adams and Carl Snedburg of Gold Beach and Al LaChance and Larry Lucas of Agness in about 1929. These locators bonded the property to the Pacific Minerals Company about 1935. This company continued the work started by the original locator for a few months before encountering financial difficulties and abandoning the property.

On April 5, 1943 the Red Cub Claim No. 1 was again relocated by the present owners, Phil Adams and Carl Snedburg of Gold Beach and Larry Lucas and Al LaChance of Agness.

5/ War Minerals Memorandum in Oregon District Office file.

6/ Full name and address unknown.

7/ Personal communication with Gene Fry who was employed as packer by Mr. Wooley.

8/ Personal communication with Gene Fry of Agness, Oregon

Labor and Living Conditions

Labor for conducting an exploration campaign in the area is not available, and would have to be brought to the prospect from elsewhere. The prevailing wage rate in the summer of 1944 was \$0.95 per hour for unskilled labor.

A one room, hemn lumber shack, available on the property, could be made habitable for one or two men for a temporary stay. All supplies for the establishment of a camp on the property could be hauled in by automotive equipment when the road from Powers to Agness was dry, or these could be shipped from Gold Beach to Agness by river launch and then packed on horses approximately 6 miles to the property.

Description of the Deposit

Dolerite that is highly altered to chlorite and iron stained decomposition products, exposed in outcrops, is the main country rock enclosing the mineral deposit. A sandstone conglomerate formation outcrops along the northeast side of the ore zone. The contact between the ore zone and the conglomerate appears irregular with a northwest strike and an easterly dip. It appears that the conglomerate was laid down unconformably on the dolerite. An injection of metalliferous minerals and incident igneous intrusion of quartz and plagioclase apparently followed the deposition of the conglomerate. The metallic minerals appear to be confined to the dolerite and the included altered injection rock, tentatively classified as quartz diorite. The copper minerals are more abundant in veins and veinlets within the quartz diorite than in enclosing dolerite where the metallic minerals are more sparsely disseminated through the country rock. The contact between the dolerite and the quartz diorite is gradational with abundant quartz and metallic minerals near the center of the main outcrop. This outcrop is 100 feet long and 40 feet wide with a northwesterly strike and an undetermined dip. If the conglomerate contact has been impervious to the ascending metalliferous solutions or ore magmas, it is possible that the mineral deposit may extend eastward down the dip immediately under

the conglomerate. On the other hand, it is possible that the main mineral deposit may be controlled by the fissures and a brecciated zone, visible in the outcrop. Under this latter proposition it appears that the dip would range from vertical to about 70° west. Insufficient exposures are available to determine rake.

The grade of material in the outcrop, exclusive of small local shoots as indicated by several representative samples, is from 0.20 to 0.30 percent copper, 0.15 oz. silver per ton, and a trace of gold. If this outcrop represents the better grade of the deposit, then no further consideration is warranted by the Bureau of Mines. However, as the downward extension of the ore zone has not been determined and the lateral extent on the northeast and south is obscured by overburden, the size and character of the deposit is indeterminate.

A microscopic study 9/ of typical specimens selected from the deposit indicates the following relationship of the component minerals in a host of quartz. Pyrite was the first metallic mineral deposited, followed by the deposition of chalcopyrite accompanied by quartz and possibly followed by the deposition of additional pyrite. No marcasite was noted in the sample. The chalcopyrite occurs most abundantly as small disseminated particles ranging in size from 150- to 560- mesh and smaller. Where fractures occur in the pyrite, they are filled and cemented with chalcopyrite.

From this study and observations on the deposit, it is evident that the copper is of primary origin. It is further evident that large amounts of pyrite occur in the existing outcrops. If this pyrite is replaced at depth with chalcopyrite, it is possible that an ore body occurs down the rake of the deposit.

Additional merit for the prospect is further indicated by the extensive distribution of pyrite and quartz in the greenstones to the north and south of the main outcrop. Approximately one mile north of the main outcrop, on the walls of Shasta Costa Creek Canyon, there are exposures of disseminated pyrite across a zone several hundred feet wide. A section one hundred feet wide in this pyrite zone averaged 9/ R. E. Head, Microscopist

0.67 percent copper, occurring largely as chalcopyrite, disseminated in a greenstone country rock. From the location of the outcrops and strike and dip readings, it may be inferred that the pyrite and chalcopyrite zone exposed on the Red Cub Claim No. 1 is continuous with a similar zone on Shasta Costa Creek. However, tracing these outcrops is difficult since the terrain between the two is, in the main, covered with soil and mantle rock which support a dense jungle-like forest.

Although the area does not warrant consideration for exploration in 1944, it certainly will be worthy of consideration in the future when open-cut copper mining is based on ores containing less than 0.5 percent copper, or if upon further prospecting it is shown that there is a good possibility of developing a large deposit of higher grade ore.

Sampling

Sample Nos.		<u>Cu %</u>	<u>Ag Oz.</u>	<u>Au Oz.</u>
52	Face of 90-foot adit	0.05		
53	Fissure in 90-foot adit	0.02		
54	30-foot cut from portal along wall of 90-foot adit	0.23		
55	Face of cut above 90-foot adit	0.11		
56	5-foot cut across back of 20-foot adit	0.72		
57	Fissure in outcrop east of dump	0.13		
58	Selected sulfides from dump	8.52		
59	Country rock 500 feet southeast of outcrop	0.01		
60	Small vein 600 feet southeast of outcrop	13.43		
61	6-foot cut along walls of open-cut 600 feet southeast of outcrop	0.11		
G.1	2-foot horizontal cut across vein of 60 above	1.75	0.31	trace
G.2	Horizontal cut diagonally across 100 feet of the main outcrop	0.06	0.12	trace
G.3	20-foot horizontal cut across face of open-cut near outcrop	0.12	0.17	trace
G.4	Average sample of 50-ton dump near outcrop	3.25	0.20	trace
G.5	Selected sample of sulfide material from dump	4.50	trace	trace

Conclusions

1. Pyrite, quartz and local deposits of chalcopyrite are sparsely disseminated throughout a large area of igneous rock on the Red Cub Claim No. 1 and are inferred to extend northward into Shasta Costa Canyon.

2. The amount of copper in the outcrop on the Red Cub prospect is insufficient to warrant further exploration in 1944.

3. This area may contain undisclosed large disseminated copper deposits that would warrant exploration when a demand becomes imminent for open-cut operations on material containing less than 0.5 percent copper. The prospect would also warrant further consideration by the Bureau of Mines if, upon further prospecting or development by the owners or other interested parties, it is shown that there is a good possibility of developing a large deposit of higher grade ore.

United States Bureau of Mines
REVIEW OF EXAMINATION REPORT

State Oregon County Wheeler Mineral Products Copper

Name of property Shasta Costa copper prospect

Owner not stated, may be even Address examiners were accompanied by Gene Fry of Agness, Ore. and Larry Lucas of Agness, Ore.

Lessee or Operator do. Address _____

Location Sec. 25, T 24 N., R 11 W. on south side of Shasta Costa creek 5 miles northeast of Agness which is 23 miles of Rogue river from Cold Beach, Ore.

Examined by: H. G. Iverson, R. W. Russell, and M. M. Gilkey Date 2 reports dated 9/26/47

Apparent quality of examination and report: good preliminary in view of poor exposures

due to heavy vegetation, except no ore "structure" was described. Vague conclusions indicate inexperience.

Discussion and Review: Practically a raw prospect in remote and heavily forested mountain region. Deposit is in altered basalt country. Zone of weak mineralization trends north-northwest; dip undetermined. Chip sample across 100 feet (presumably across structure, if any) ~~xxxx~~ averaged 0.67% Cu. ^{Small} lens of chalcopyrite is 100 feet east of sampled section. Rock in vicinity contains numerous small quartz veinlets.
Examiners thought there may be possibility of large tonnage of (approximately) 0.5% copper ore. ~~xxxxxxxxxxxxxxxxxxxx~~

Comments: Although sample across 100 feet suggests possible large tonnage of low grade, it seems likely that surrounding indications should have given more evidence if a deposit large enough to be remotely interesting at that grade is there. Reviewer believes that deposit is of no further interest. However, the fact that this is within one mile of Red Cab prospect indicates widespread mineralization in area. Such mineralization is widespread in southwestern Oregon and probably is not very significant but might be of supporting interest if a good prospect is reported from that locality.

Date	Action	By

Reviewed by: G. W. Loring

date: Dec. 18, 1947

12410

Samples from the Red Cub Copper Claim

Residual Samples

Country Rock

Decomposed Sample. This sample is so greatly altered that its original form is a matter for conjecture. It is composed largely of chlorite and iron stained products of rock decomposition.

Fresher Sample. This rock shows evidence of more than superficial alteration. It is notably iron stained and is made up chiefly of plagioclase feldspar and quartz; the remainder of the rock is represented by decomposition products, some of which apparently were formed by the decomposition of ferromagnesium minerals, probably hornblende. The quartz shows evidence of strain in the form of wavy extinction.

Sulfide Ore

*CP.
Py.
Qtz.*

The Red Cub sample represents a fairly heavy sulfide ore in which pyrite is relatively abundant and chalcopyrite occurs in a subordinate quantity. The host rock appears to be in quartz. As indicated by the relationships shown in polished sections, pyrite was the first mineral deposited, although some pyrite may have come in later. The chalcopyrite appears to have been deposited with the quartz where it occurs most abundantly as small, disseminated particles, as a rule ranging in size from 150-mesh to 560-mesh, and smaller. Where fractures occur in the pyrite, they are filled with chalcopyrite. Chalcopyrite occurs filling interstices in the pyrite but is limited to zones adjacent to concentration of chalcopyrite in relatively large areas, 1/4-inch or more in diameter. Areas removed from such zones appear to be barren or relatively low in chalcopyrite. The pyrite grains scattered through the quartz with the chalcopyrite are equally small, the majority of them approaching 200-mesh or smaller.

Nothing suggestive of marcesite was noted in the samples examined but a few particles of sphalerite were found.

R. E. Head

R. E. Head.