

State Department of Geology and Mineral Industries

RECEIVED
NOV 15 1947
STATE DEPT. OF GEOLOGY
& MINERAL IND. 1069 State Office Building
Portland 1, Oregon

Memorandum

ARNOLD MINE (Au)

Walde District
Josephine County

Owners: H. J. and M. L. Arnold, Jacksonville, Oregon.

Location: North center of NE $\frac{1}{4}$ of sec. 16, T. 41 S., R. 5 W., at 5680 feet elevation. The mine is reached via the Cougar Creek-Whiskey Peak road. From Carberry Creek it is approximately 8 miles to Low Gap junction. The road to the right through Low Gap is 1 mile to a second junction, from which it is .8 mile via the left-hand road to the mine.

History: Five claims were located by Esra Arnold in 1915. A tunnel was driven since 1934. (See report by Treasher, 1941).

Development: The 1.8 miles of road from Low Gap was extended from the new road to Cynthia Chrome Mine in summer of 1957. The tunnel encounters a quartz vein at 130 feet and drifts 90 feet on the vein (60 feet NW and 30 feet SE). North and east of the portal the vein has been exposed by a trench 130-foot long, 3 feet wide, and 3 feet deep. A partly caved cut (probably the original discovery) is located north of the portal. A two stamp mill and cabin are located at the end of the road below the tunnel.

Geology: The deposit is in metasedimentary rocks of the Applegate formation. Argillite exposed at the portal strikes N. 30° E. and dips 45° SE. A fractured zone containing quartz is cut by the tunnel at 70 feet. At this point the tunnel bends northwest (left) for a short distance then continues on 60 feet more in a northeast direction to the main quartz vein. The vein strikes N. 45° W. and dips 43° NE. It varies from 10 inches up to approximately 2 $\frac{1}{2}$ feet with an average thickness of about 20 inches. In places it consists of two or more closely-spaced, parallel

quartz veins separated by altered rock.

About 50 tons of broken quartz are stacked beside the portal. A representative sample of this pile (RG-441, P-21967) assayed 0.60 oz./ton Au and 0.70 oz./ton Ag. The quartz contains minor amounts of pyrite, galena, sphalerite (?) and chalcopyrite. Average tenor of the ore is reported to be \$20.

Visited: 9/12/57.

Report by: Len Ramp 11/7/57.

Reference: Treasher, R. C., Jos. Co. Metal Mines Handbook, Bull. 14-C, vol. 2, sec. 1, p. 180, 1941.

* * * * *

State Department of Geology and Mineral Industries

702 Woodlark Building
Portland, Oregon

ARNOLD MINE (gold)

WALDO AREA

Owners: H. J., & M. L. Arnold, Jacksonville, Oregon.

Location: center sec. 16, T. 41 S., R. 5 W., elev. 5500 feet; #132 on Grants Pass geologic map; southwest of Whiskey Pk., and south-east of Lake Peak.

Area: Five claims, staked in 1914-1915 by E. Arnold.

Development: At least two tunnels. Lower tunnel driven since 1934. 500-500 tons removed before 1934; 100 tons since then. There is a small mill having two stamps and amalgamation plates.

Geology: The mine is located in metasediment near a serpentine contact. The ore is quartz with gold and a small amount of sulfides. Average tenor of ore is \$20. Ratio of gold to silver is 6-8 oz. gold to 1 oz. silver.

General: The property is operated by Arnold Brothers, who mine and mill the ore in a small way. It is reported that this is one of the best little high-grade prospects in the area.

~~Informant: FGW, 1941 (Francis G. Wells)~~
~~Report by: RCT, 1941. (not visited?)~~

Arnold Mine

Gold and Silver

NAME

OLD NAMES

PRINCIPAL ORE

MINOR MINERALS

41 South 5 West 16
T R S

PUBLISHED REFERENCES

Ore. M. M. Handbk. 14-C Vol.II Sec.1

..... **Josephine** COUNTY
..... **Naldo** AREA
..... **5500** ELEVATION
..... ROAD OR HIGHWAY
..... DISTANCE TO SHIPPING POINT

MISCELLANEOUS RECORDS

PRESENT LEGAL OWNER (S) .. **H.J. and M.L. Arnold** ..

Address **Jacksonville, Oregon**

OPERATOR

Name of claims Area Pat. Unpat.

Name of claims Area Pat. Unpat.

Five unpatented claims.

EQUIPMENT ON PROPERTY

Two stamp mill and amalgamation plates.

CRIB MINERAL RESOURCES FILE 12

RECORD IDENTIFICATION

RECORD NO..... M061140
 RECORD TYPE..... X1M
 COUNTRY/ORGANIZATION. USGS
 DEPOSIT NO..... DDGM1 100-466
 MAP CODE NO. OF REC..

REPORTER

NAME..... JOHNSON, MAUREEN G.
 UPDATED..... 81 02
 BY..... FERNS, MARK L. (BROOKS, HOWARD C.)

NAME AND LOCATION

DEPOSIT NAME..... ARNOLD MINE
 MINING DISTRICT/AREA/SUBDIST. WALDO
 COUNTRY CODE..... JS
 COUNTRY NAME: UNITED STATES
 STATE CODE..... OR
 STATE NAME: OREGON
 COUNTY..... JOSEPHINE
 DRAINAGE AREA..... 1801209 CALIFORNIA
 PHYSIOGRAPHIC PRDV..... 13 KLAMATH MOUNTAINS
 LAND CLASSIFICATION..... 41

QUAD SCALE
 1: 62500

QUAD NO OR NAME
OREGON CAVES

LATITUDE
 42-00-20N

LONGITUDE
 123-17-26W

UTM NORTHING
 4650229.8

UTM EASTING
 475946.3

UTM ZONE NO
 +10

TWP..... 41S
 RANGE..... 05W
 SECTION.. 15
 MERIDIAN. W.M.

LOCATION COMMENTS: N 1/2 NE 1/4

OCCURRENCE(S) OR POTENTIAL PRODUCT(S):
POTENTIAL.....
OCCURRENCE..... PB CU ZN

ORE MATERIALS (MINERALS, ROCKS, ETC.):
PYRITE; GALENA; SPHALERITE, CHALCOPYRITE

COMMODITY SUBTYPES OR USE CATEGORIES:
3.61 AU:AG

COMMODITY COMMENTS:
RATIO AU:AG=6-3 OZ AU:1 OZ AG

ANALYTICAL DATA (GENERAL)
ODGMI SAMPLE ASSAYED 0.60 OZ/TON AU; 0.70 OZ/TON AG

EXPLORATION AND DEVELOPMENT
STATUS OF EXPLOR. OR DEV. B

DESCRIPTION OF DEPOSIT

DEPOSIT TYPES:
QUARTZ VEIN *
FORM/SHAPE OF DEPOSIT:

SIZE/DIRECTIONAL DATA
SIZE OF DEPOSIT..... SMALL
MAX WIDTH..... 20 INCH
STRIKE OF DREBODY.... NW
DIP OF DREBODY..... NE

DESCRIPTION OF WORKINGS
SURFACE AND UNDERGROUND

COMMENTS (DESCRIP. OF WORKINGS):
TRENCH 130, ADIT 220

PRODUCTION
YES
SMALL PRODUCTION

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

ITEM	ACC	AMOUNT	THOUS. UNITS	YEAR	GRADE, REMARKS
1 ORE EST		.600 TONS			AVERAGE \$20/TON AU
2 ORE SML		.056 TONS			.967 OZ/T
		.056 OZ			.268 OZ/T

SOURCE OF INFORMATION (PRODUCTION) .. USBM

GEOLOGY AND MINERALOGY

AGE OF HOST ROCKS..... PERM-TRI
HOST ROCK TYPES..... METASEDIMENTS
IGNEOUS ROCK TYPES..... SERPENTINE

IMPORTANT ORE CONTROL/LOCUS.. NEAR CONTACT

LOCAL GEOLOGY

NAMES/AGE OF FORMATIONS, UNITS, OR ROCK TYPES

- 1) NAME: APPLGATE GROUP
AGE: PERM-TRI

GENERAL COMMENTS

RECORD NUMBER (M013345) HAS BEEN MERGED WITH THIS RECORD AND DELETED FROM THE OREGON FILE

GENERAL REFERENCES

- 1) RAMP, L. AND PETERSON, N.V., 1979, GEOLOGY AND MINERAL RESOURCES OF JOSEPHINE COUNTY, OREGON; ODGMI BULL. 100, 45P
- 2) BROOKS, H.C. AND RAMP, L., 1968, GOLD AND SILVER IN OREGON, ODGMI BULL. 61, P.246
- 3) OREGON METAL MINES HANDBOOK, 1942, ODGMI BULL. 14-C, VOL. 2, SEC. 1, P.180

STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES
2033 First Street Baker, Oregon
1069 State Office Building Portland 1, Oregon
239 S.E. "H" Street Grants Pass, Oregon

REQUEST FOR SAMPLE INFORMATION

The State law governing analysis of samples by the State assay laboratory is given on the back of this blank. Please supply the information requested herein as fully as possible and submit this blank filled out along with the sample.

Your name in full Len Ramp (DOGAMI)

Post office address P.O. Box 417 Grants Pass, Oregon

Are you a citizen of Oregon? Yes Date on which sample is sent 9-17-57

Name (or names) of owners of the property M. L. & H. D. Arnold

Are you hiring labor? No Are you milling or shipping ore? No

Name of claim sample obtained from Arnold Mine

Location of property or source of sample (If legal description is not known, give location with reference to known geographical point.)

County Josephine Mining District Waldo

Township 41 S Range 5 W Section 16 Quarter section N center

How far from passable road? End extension of Low Gap road Name of road _____

	Channel (length)	Grab	Assay for	Description
Sample no. 1	<u>20', 18" interval</u>	<u>x</u>	<u>Au, Ag</u>	<u>Picked across ore pile of about 50</u>

Sample no. 2 _____
(Samples for assay should be at least 1 pound in weight)

(Signed) L.R.

DO NOT WRITE BELOW THIS LINE - FOR OFFICE USE ONLY - USE OTHER SIDE IF DESIRED

Sample Description Fractured quartz with minor disseminated sulphides (pyrite, galena, sphalerite (?), and chalcopyrite.)

Sample number	GOLD		SILVER					
	oz./T.	Value	oz./T.	Value				
RG-441 P-21967	0.60	\$21.00	0.70	\$0.64	---	---	---	---

Report issued _____ Card filed _____ Report mailed 9-25-57 Called for _____