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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: YELLOW HAMMER

ALTERNATE NAMES:

PIMA COUNTY MILS NUMBER: 597

LOCATION: TOWNSHIP 15 S RANGE 7 W SECTION 36 QUARTER SE
LATITUDE: N 32DEG 10MIN 41SEC LONGITUDE: W 112DEG 49MIN 34SEC
TOPO MAP NAME: KINO PEAK - 15 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:

GOLD LODE

COPPER OXIDE

BIBLIOGRAPHY:

ADMMR YELLOW HAMMER FILE

CHARLES H. DUNNING

MINING ENGINEER
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March 29, 1956.

Mr. James M. Eden, Superintendent,
Organ Pipe Cactus National Monument,
Ajo, Arizona.

Dear Mr. Eden:

Subject: Appraisal of 4 patented
mining claims on the
Monument.

Pursuant to your request, contract agreement, and
Purchase Order #33-219 I have examined four patented mining
claims situated in the Monument, West of Ajo, Ariz.

The purpose of the examination was to establish a
fair cash value for the four claims.

These four claims are part of a general group of
26 claims. The other 22 claims are under separate
ownership from these four, but were examined and
appraised by me under date of October 16, 1955. For
some aspects of the general situation reference should
be made to that appraisal report.

Location.

A print of the original patent map is attached to
this report. While this map also covers other claims,
the four claims now being considered are designated
in red and are as follows: COPPER HILL; YELLOW HAMMER;
COPPER FLAT; and DAISY.

History.

The four claims were located in October, 1909, and
patented in May, 1910. Title has passed through
several ownerships since then but is generally
understood to now rest with Mr. Burt Long of Ajo.

Some small production of high grade copper ore
was made from the Yellow Hammer, but there has been
no commercial production from any of the others.

Physical Aspects.

Most of the terrain is typically desert-mountainous.
There is very little flat or arable land. Scenic

characteristics are unusually good, and from spots on the four claims the view may equal or exceed that from anywhere on the Monument. A considerable flow of water was encountered in mine shafts on both the Copper Hill and Yellow Hammer claims. Geology and mineral characteristics vary regarding each claim and will be discussed under a sub-heading for each claim.

Individual Claim Descriptions.

Copper Hill. While the general terrain consists of a basement of porphyritic quartz-diorite on the Copper Hill Claim, there is a basin-like deposit - a remnant of the ancient Permian Formation. This basin - or formation - is about 650 feet long, 270 feet wide, and 120 feet deep at its center. It has been mineralized with copper, probably at some time when it was a receptive host to outwash and solutions from nearby igneous mineralizations. It has become silicified, and resisted erosion somewhat more than the surrounding country. Therefore it stands today as a mound above ground, and a rather small shallow basin below ground.

The average copper content is said to be about 1.0%, and from appearance that would be my estimate. However this copper content is in the form of both sulphides, carbonates, and oxides, and the iron content is very high.

While it may contain $\frac{1}{4}$ million tons of 1.0% ore the above mineralogical features preclude profitable operation, even at the present high price of copper.

Mining development on this claim has consisted of a vertical shaft 268 feet deep in which water was encountered at 117 feet. There is 300 feet of cross-cutting at the 100 foot level. The above data was obtained from Mr. Long as the work is now in bad repair and inaccessible.

According to Mr. Long there was a very heavy flow of water encountered at 117 feet - probably 300 gallons per minute. It is unlikely however that any such flow would continue after the basin was once drained. And it is highly probable that just as good a flow could be obtained from wells drilled at selected spots within the general group.

Certainly the purity of the water from the old mine workings would be questionable. It probably has a small copper content which might be mildly poisonous, as well as the essence of rotting mine timbers and perhaps of the bodies of a few smugglers and bootleggers who have long used such mountain fastnesses along the Mexican border.

So I can give no great value to the water resources on the Copper Hill, but consideration must be given to the possibility that the ore might have value at some future date.

Yellow Hammer: This claim contains a mineralized fault vein - the only one of any size observed on the entire group. This vein is 1 - 5 feet wide, dips about 45° to the east, and is step-faulted as it proceeds downward.

The surface and upper zone showed leached copper ore. It is developed by an inclined shaft about 250ft deep, and drifts along the vein. Water was encountered at 228 ft on the incline, and also a lense of high grade copper ore. According to Mr. Long 43 tons of 50% copper ore were shipped. This ore was a secondary enrichment resulting from the precipitation of copper at the water level which had been leached from the vein above. On further development the lense pinched out in all directions, and no further workable lenses were found. Probably some cross fault condition localized the precipitation at that spot. The underground conditions could not be examined to determine if a study might indicate other lenses, but Mr. Long was frank to state that he thought they had exhausted the possibilities and further efforts were not justified.

Here again there is water but probably not usable as it would come from the mine. Some credit should be given to the fact that the work has proved that wells in the vicinity would be practicle.

Mr. Long has a neat pile of 3 or 4 tons of high grade, and about 50 tons of low grade ore, on the dump. It is surprising that some promoter hasn't already taken him over. For a little change in the story of what is underground would sell a lot of stock - especially considering the proximity of Ajo and the present urge for copper. Mr. Long is to be commended, but consideration must be given here to a market value, even though founded on false premises.

Copper Flat: This claim contains no mineralization. It was taken up for "protection" and the terrain is entirely alluvial.

Mr. Long's house is located on this claim. It is small and old, but well constructed of adobe and could be revamped into a useful building. It should be given some value for that but otherwise the claim has nominal value only.

Daisy: There has been some prospecting work on the Daisy, but possibilities for ore have seemingly been exhausted. It has nominal value only.

Appraisal Values.

In a present day appraisal we cannot give any consideration to the amount of money that may have been spent in the exploration of a claim. Mr. Long and/or previous owners may have spent \$100,000 in mining exploration on these claims. But such expenditures have merely proved them to be practically worthless for mining purposes. Therefore they are actually worth less than before any expenditures were made.

The cost of patenting, however, is always some permanent asset. Consideration must be given to the remote possibility that the orebody on the Copper Hill may some day be of value; some features of the Yellow Hammer lend a tangible cash value; the house on the Copper Flat is an improvement of value; and the Daisy has nominal or "patent" value.

Considering all of these factors I place the following valuations on these claims:

COPPER HILL	\$5000.00
YELLOW HAMMER	3000.00
COPPER FLAT	1700.00
DAISY	700.00
TOTAL	<u>\$10400.00</u>



Respectfully Submitted,

Charles H. Dunning

March 29, 1956.

Yellow Hammer Shaft:

The Yellow Hammer Shaft is about 1/2 mile easterly from the Copper Hill workings. It inclines on a fissure with some gouge at angles ranging from 30 to 50 degrees. This shaft is reported to be 330 feet deep with levels at incline depth at 85, 190, 280, and 300 feet. The drifts on these levels are short, the maximum length north and south being about 80 feet on the 85 ft level. The fissure zone strikes a little east of north and varies from pinch to 4 feet in width. The assay section by Small gives the following averages for the vein- no widths given but evidently taken over very narrow widths.

85 level north for 80 feet:

Walls:	Gold	0.02,	silver	0.11,	copper	0.90%
Main orebody:	"	tr	"	0.16	"	15.42%

85 level south for 85 feet:

Average -	Gold	0.09,	silver	0.17,	copper	7.45%
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190 level south for 25 feet:

"	0.65	"	0.65	"	3.42%
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500 ton dump:

Gold	0.005,	"	0.2,	"	1.75
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The dump samples taken do not support the high gold assays of the lower level though such ore may have been shipped. It seems a little unusual that high gold assays are shown by Small in only the bottom workings of both the Copper Hill and Yellow Hammer shafts.

April 1947.

E. S. Small

B. M. Stone

Harnon and Stone

1. Growler Mine
2. Pima County, Arizona
- 3.
4. Messrs. Harnon and Stone
5. Sometime in April 1947
6. Copper, gold, and silver
7. "The dump samples taken do not support the high gold assays of the lower level though such ore may have been shipped. It seems a little unusual that high gold assays are shown by Small in only the bottom workings of both the Copper Hill and Yellow Hammer shafts."
8. _____

280 level north for 25 feet				
Average	Gold 0.02,	silver 0.41,	copper 5.54%	
300 level north for 57 feet				
Average	" 1.02,	" 0.35,	" 2.47%	
300 level south for 24 feet				
Average	0.39	" 0.58	# 3.65%	

The shaft was not in condition to permit entry below the 190 level to check the high gold assays indicated by Small.

The vein is in metamorphic rock so far as could be observed. Dump samples taken assay as follows:

80 ton dump above general level north of shaft.
gold 0.005, silver 0.2, lead 0.1, zinc 0.1
copper 1.10%

150 tons copper stained dump NW of shaft
gold 0.005, silver 0.2, copper 1.02%

100 ton dump continuation of 150 ton dump:
gold 0.01, silver 0.4, copper 0.80%

500 ton dump:
Gold 0.005, " 0.2, " 1.75

The dump samples taken do not support the high gold assays of the lower level though such ore may have been shipped. It seems a little unusual that high gold assays are shown by Small in only the bottom workings of both the Copper Hill and Yellow Hammer shafts.

April 1947.

EW

PM

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DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

FIELD ENGINEERS REPORT

Mine ✓ Yellow Hammer

Date 3-10-59

District Ajo, Pima County

Engineer Lewis A. Smith

FILED

Subject: Reported by Bert Long of Ajo

MAR 24 1959

Owner: ✓ Malone (deceased) and ✓ Bert Long of Ajo.

Location: The property lies in Growler Pass, 1/2 mile south of Bates well (Sec. 36, T. 15S, R. 7 W.) It is 19 miles by dirt road south of Ajo.

Property: 3 unpatented claims.

Minerals: ✓ Gold and some oxidized copper.

Work: According to Long, the property has a 170' vertical shaft from which 2 levels were driven at 70' and 150' respectively below the collar. Water has filled the workings to a point immediately below the 70' level. 220' of drifts are reported and some stoping occurred above the 70' level. An attempt to pump the mine out in the 1930's failed because of inadequate pumping facilities. The Bates well, 1/2 mile to the north, is reported by Al Barr, General Manager of New Cornelia, to have tested 500 gallons per minute, at the peak flow. New Cornelia was interested in the Yellow Hammer for flux and water, especially water, but was deterred by the 19 mile pumping distance to Ajo.

Geology: The vein lies east of a major fault which has offset other similar veins in the district, especially the La Victoria to the south. This vein occupies a shear in schist and granite and is transverse in trend to the schistosity. The strike is N 70° E and the dip ranges from N 25° W to N 35° W. The filling is spongy white crystalline quartz with considerable included schist and granite fragments. The vein is lenticular varying greatly in width. The strike tends to swing on the south toward parallelism with the major fault, but according to Long it does not appear to intersect with it. However the swing in strike may indicate that the vein may have been dragged by the major fault. Further south the La Victoria vein system is transverse to the same major fault and has been offset both vertically and horizontally by the fault. There the mineralization is pre-fault. The fault also tilts the tertiary volcanics towards the west. The vein at the Yellow Hammer varies considerably in tenor or from a few dollars per ton up to several hundred dollars per ton in pockets. Several shipments by Harry Prentice and Jack Allison in 1916 and 1917 were reported by Mr. Malone, but he did not know what they ran in value. (Long stated that considerable fair ore was left between the two levels.)

The specimens of schist observed by Lewis Smith indicated that the schist is a hornblende rich type and shows considerable alteration to chlorite and epidote. The biotite granite is typical of the area and is more or less graphic in texture. Both rocks had quartz stringers in them.

The Williams mine adjoins the Yellow Hammer to the north and west. The Ricks property in the Agua Dulce mountains lies to the southwest several miles, or 6 miles from the Mexican border. (It is in the game refuge.)