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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: HARTMAN - HOMESTAKE MINES

ALTERNATE NAMES:
CATALINA CAMP

PIMA COUNTY MILS NUMBER: 199

LOCATION: TOWNSHIP 11 S RANGE 16 E SECTION 18 QUARTER C
LATITUDE: N 32DEG 28MIN 55SEC LONGITUDE: W 110DEG 45MIN 34SEC
TOPO MAP NAME: MOUNT LEMMON - 15 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
LEAD SULFIDE
ZINC SULFIDE
COPPER SULFIDE
SILVER SULFIDE

BIBLIOGRAPHY:
ADMMR HARTMAN-HOMESTAKE FILE
S.B. KEITH, AZBM BULL. 189, P. 130, 1974
PROD POSS OF MARGINAL CU MINES OF AZ, P 71
USGS OFR OLD HAT MNG DIST, P 9, GEOLOGY FILE
SEE: ADMMR ORACLE RIDGE FILE
ADMMR MAPS, 2ND DRAWER-CONTROL MINE
RYAN, G.S. MLA OFR 118-82 P. 12
ADMMR "U" FILE CU 59

QUESTIONNAIRE

Relating to survey of potential copper production from Arizona small and marginal mines for national defense purposes;

Name of mining property..HARTMAN.-.HOMESTAKE MINE...Six Patented Claims..

Location..1 1/2 mile from Mt Lemmon Highway (Lower Control) Catalina Mountains, Old Hat Mining District, Pima County, Arizona.

Ownership.....FRANCIS M. HARTMAN.....

Name of Manager.....

Post Office address...705 Valley National Bldg., P.O.Box 710, Tucson, Arizona.....

Copper production (pounds) during each of the past five years:

1936..... 1937..... 1938.....

1939..... 1940.....

1941 rate of copper production based upon first four months.....

How much copper could this property produce annually

on a 14 cent price? ..Estimated, - 3,000 Tons

on a 16 cent price?

on an 18 cent price?.....

on a 20 cent price?.....

What price copper is necessary for this property? cents per pound?

What plant facilities would be required and how much is the estimated cost in the

Build road about 2 miles, - \$5,000.

event a 14 cent price could be assured? Flotation mill, - \$25,000.

a 16 cent price could be assured? 60,000

18 cent price?

20 cent price?

For what length of time would assurance of price and sale of full production be necessary?

(Over)

How long would it take, after financing has been provided for, before production on the above basis could be reached? Thirty to sixty days 6 months

Does your organization have the facilities for raising the necessary capital to increase production to the amount stated? No

If not, do you believe that your company would be amenable and agreeable to government financing? Yes

Do you believe that you could finance the capital investment yourself on some such basis as a guarantee of sale of output at a fixed price and for a definite period, with damages to cover unamortized portion of capital investment in the event the government failed to take the output for the agreed upon time - or some similar arrangement? No

Please let us have your comments on the probability or possibility of your organization participating in such a program for national defense purposes

What would be your ideas on financing and carrying out such a plan as is indicated by these questions?

Kindly list names and addresses of other potential copper producers in Arizona whose operations should be included within this survey

Date May 28, 1941

Signed

Francis M. Hartman
Francis M. Hartman

HARTMAN - HOMESTAKE MINE. Pima County, Arizona.

Six patented claims, situated in Catalina Mountains, Pima County, Arizona, $1\frac{1}{2}$ miles from the Lower Control of the Mt. Lemmon Highway.

The property,- 3 claims in length and 2 claims in width, covers about 4500 feet of the contact vein between quartzite and lime. The ore crops out and has been opened up by numerous workings for the entire length of the property.

DEVELOPMENT WORK: About 2500 feet of work,-cross-cut tunnels, drifts, raises, winz, shafts, etc.

Two large bodies of ore have been developed on two connecting levels on the west end of the property.

100 Foot Level:

A large body of high grade and milling ore (estimated by Engineer at 18,000 tons) averaging over \$25.00 per ton at present price of metals, of a gross value of \$450,000.00, opened up and available on the 100 foot level, by 150' cross-cut tunnel; drift along on the ore 265'; and 125 feet of raises in the ore. This ore body is six totwelve feet in width; and averages about 6% lead; 7.6% zinc; 3% copper; 2.5 ounces silver; with smaller widths that will average higher grade.

Two shipments gave smelter returns as follows:

14 Tons,- 14.2% lead; 4.0 ounces silver; 3.8% copper.

6 Tons,- 23.0% lead; 23.92 ounces silver; 10.0% copper.

200 Foot Level:

Cross-cut tunnel 300'; and drift 350' along on the ore on the contact; winz 53'; and raise 150' to surface, connecting with 100' level. This ore body is a garnetized bed of low-grade copper, with varying dip of 30 degrees or steeper, southerly into the mountain, and a strike roughly paralleling the upper contact. Of this ore, there may be 40,000 to 50,000 tons indicated, according to Engineer's estimate. This ore will average about 3.5% copper; 2 to 4 ounces silver, and \$1.00 to \$3.00 gold.

WATER: Large spring of water (finest in the mountains) on the property; and also water in the mine; sufficient for milling purposes.

TIMBER: Good stand of yellow pine, oak, juniper and pinions, on the property. Many of the pines have girths of 3 to 10 feet.

POTENTIAL ORE:

The above described cross-cut tunnels and drifts on the ore are on the west end of the property; with the faces of the drifts in ore. By extending either of the drifts easterly along on the ore for 500' will gain a depth from the surface of about 750 feet. By cross-cutting 500' from either of these drifts, southerly from the contact will also gain a depth of 750' to 1000 feet.

There is now in operation on the adjoining property, about $1\frac{1}{2}$ miles from the Hartman-Homestake Mine, a 100 ton flotation mill.

Tucson, Arizona, November 25, 1939.

Francis M. Hartman,
P O Box 710,
705 Valley National Building,
Tucson, Arizona.

This property for sale or lease upon reasonable terms.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Hartman-Homestake

Date Sept. 25, 1942

District Old Hat

Engineer George A. Ballam

Subject: Production Possibilities Survey

Supplementing the report on this property contained in the Henderson report:

Mr. Hartman is the only one from whom I can receive any information re plans for this property. I have endeavored to contact him for some time and have had evasive replies from his office and home. Just found that he has been desperately ill and is in a sanitarium in Tucson. His wife, when she learned my purpose, informed me that he cannot see anyone for some time.

Opening this operation depends largely upon construction of the Oracle Ridge road, without which any production would have to be pretty much via jackass or other slow means. I was just informed by the U.S. Forest Service that there is little hope for the road, parts of which would run up to \$20,000 per mile. The Oracle delegation was in again yesterday, but the Service, in view of limited equipment on hand and excessive costs of construction, could give them little encouragement.

Geo A Ballam

6 MH13
DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

Date July 19, 1939

Mine Hartman Homestake Mine

District Old Hat Mining District
Pima County, Arizona

Former name

Owner Francis M. Hartman ✓

Operator

President

Mine Supt.

Principal Metals ✓ ✓ ✓ ✓
Lead, silver, zinc, copper and
some gold

Production Rate

Power: Amt. & Type

Operations: Present

About 2 miles westerly from Lower
Location Control of Mt. Lemmon Road, and about
1 mile southwesterly from Marble Peak, and
near headwaters of main fork of Canada del
Oro. (within Forest Reserve)
Address 705 Valley National Building
Tucson, Arizona

Address

Gen. Mgr.

Mill Supt.

Men Employed

Mill: Type & Cap.

Operations Planned

Number Claims, Title, etc. Six patented claims

Description: Topog. & Geog. Contact veins between quartzite and lime and deposits in lime

Mine Workings: Amt. & Condition

2500 feet of development work - 2 crosscut tunnels,
drifts, raises, winze, shafts, etc.

(over)

Geology & Mineralization

Quartzite and lime

Ore: Positive & Probable, Ore Dumps, Tailings On 100' level, 18,000 tons ore opened up, averaging 6% lead, 7.6% zinc, 2.35 oz. silver, 3% copper. On 200' level, large body of (garnet) copper sulphide ore, opened up, by drift from crosscut tunnel (estimated by Engineer at 40,000 to 50,000 tons, averaging about 3.5% copper, 2.5 oz. silver, and some gold.

Mine, Mill Equipment & Flow Sheet

Road Conditions, Route At present, reached by trail about 2 miles from lower control of Mt. Lemmon road from Oracle.

Water Supply Water in mine workings, and Big Spring on one of the claims. Part of ground heavily timbered.

Brief History

Special Problems, Reports Filed

Remarks

SMEILTER RETURNS FROM ORE SHIPMENTS:

	Silver	Lead	Copper	Zinc
14 tons	4.0 oz.	14.2%	3.8%	8.7%
6 tons	23.92 oz.	23.0%	10.0%	

If property for sale: Price, terms and address to negotiate.

Property for sale. Owner open to negotiations from intending purchasers

Signed Francis M. Hartman,
P.O.Box 710,
705 Valley National Building, Tucson, Ariz.

Use additional sheets if necessary.

FRANCIS M. HARTMAN
ATTORNEY AND COUNSELOR AT LAW
VALLEY NATIONAL BUILDING
TUCSON, ARIZONA

May 31, 1941.

Mr. Charles F. Willis,
Chairman, Board of Governors,
Arizona Department of Mineral Resources,
Capitol Building,
Phoenix, Arizona.

Dear Mr. Willis:-- HARTMAN - HOMESTAKE MINE.

I have your letter of 29th inst.

My estimate in answer to your questionnaire, that this mine could produce 3,000 tons of copper annually was based upon milling and concentrating 300 tons per day of $3\frac{1}{2}\%$ copper ore.

I have filled out the other questionnaire which you sent me with your letter of 29th inst, which questionnaire I am returning to you herewith.

With a 100 ton flotation mill, this mine ought to produce around 1,000 tons of copper annually. Some of the ore runs much higher than $3\frac{1}{2}\%$ copper; and also carries other values in addition to the copper.

Very truly yours,

Francis M. Hartman
Francis M. Hartman.

FMH-FW

HARTMAN-HOMESTAKE MINE, Pima County, Arizona. Francis Hartmen, Owner.
Tucson, Arizona.

In spite of it's isolation this mine has been developed to the extent that 68,000 tons of lead and copper ore are exposed. The ore on one vein, of which there is reported to be 18,000 tons immediately available, assays as follows:

6.0% Pb., 7.6% Zn., 3.0% Cu., 2.5 ozs. Ag. A second vein, on which there is 50,000 tons of ore probable, assays as follows:

3.5% Cu., 2-4 ozs. Ag., 0.03 ozs. Au.

A 100 ton selective flotation mill would, based on above figures, produce monthly, for 22 months, 160,000 pounds of copper in addition to lead and zinc. Further development should extend the productive period materially.

Some two miles of road would be required to make the mine accessible, the cost of which would be extremely high, possibly \$15,000 per mile. This condition, coupled with the fact that the owner is desperately ill at this writing, tends toward the belief that it is extremely unlikely private capital would become interested in this project.

Report by Earl F. Hastings, October 9, 1942, to Copper Branch,
War Production Board.

Positive ore reserves:
Probable " " "

Tons
18000
?

cu. ft.
3.0
?

Lbs Cu
1,080,000
?

Past production: { Year
? ?

Tons
14
6

Pb%
14.2
23.0

Aq. ozs
4.00
23.92

cu. ft.
3.8
10.0

Lbs Cu
1064
1200
3264

Production Possibilities - lbs Cu: -

14 t

16 t

18 t

20 t

300-ton mill:
100 " " :

6,000,000
20,000,000

Capital investment required: -

14 t

16 t

18 t

20 t

Road: -
Mill: -

\$5,000
60,000
\$65,000

Time required to start production: -

14 t

16 t

18 t

20 t

6 months(?)

It will be noted that Hartman's figures are "hay-wire", as he has 18000 tons of positive ore, assaying 3% Cu = 1,080,000 lbs Cu, or enough to run a 100-ton mill about 6 months. Also, he could not build a 100-ton mill for \$25,000.

No other data in hand books.

Ore occurrence. See attached memorandum taken from Engineer's Reports.

HARTMAN - HOMESTAKE MINE.

Pima County, Arizona.

Six patented claims, situated in Catalina Mountains, Pima County, Arizona, $1\frac{1}{2}$ miles from Lower Control of Mt. Lemmon Highway.

The property, - 3 claims in length and 2 claims in width, covers about 4500 feet of heavily mineralized contact vein or deposit between quartzite-diorite and lime. The ore crops out and has been opened up by numerous workings for the entire length of the property.

DEVELOPMENT WORK: About 2500 feet of work, - cross-cut tunnels, drifts, raises, winz, shafts, etc.

Two large bodies of ore have been developed on two connecting levels on the west end of the property.

100 FOOT LEVEL:

A large body of high grade and milling ore estimated by Engineer at 18,000 tons, averaging about 6% lead; 7.6% zinc; 3% copper; 2.5 ounces silver, with smaller widths that will average higher grade, opened up and available on this 100 foot level, by 150' cross-cut tunnel; drift along on the ore 265'; and 125 feet of raises in the ore. This ore is six to twelve feet in width.

Two shipments gave smelter returns as follows:

Devel 14 Tons, - 14.2% lead; 42.00 ounces silver; 3.8% copper. cross-cut
6 Tons, - 23.0% lead; 23.92 ounces silver; 10.00% copper &c.

200 FOOT LEVEL:

Cross-cut tunnel 300'; and drift along on the ore on the contact 350'; winz 53'; and raise to surface 150' to surface, connecting with the 100' level. This ore is a garnetized bed of low-grade copper, with varying dip of 30 degrees or steeper, southerly into the mountain under the lime, and a strike roughly parallelling the upper contact. Of this ore there may be 40,000 to 50,000 tons indicated, according to Engineer's estimate. This ore body will average about 3.5% copper; 2 to 4 ounces in silver; and \$1.00 in gold.

WATER: Large spring of water (finest in the mountains) on the property; and also water in the mine sufficient for milling purposes. Flotation

TIMBER: Good stand of yellow pine, oak and juniper on the property.

Many of the pines have girths of three to ten feet.

POTENTIAL ORE:

The above described cross-cut tunnels, and drifts on the ore, are on the west end of the property; with the faces of the drifts in ore. By extending either of the drifts easterly along on the ore for 500' will gain a depth from the surface of about 750 feet. By cross-cutting 500' from either of these drifts, southerly from the contact into the lime will also gain a depth of 750 to 1000 feet.

There is now in operation on the adjoining property, a 100 ton flotation mill, which mill is about one mile from the Hartman-Homestake Mine.

Tucson, Arizona, March 31, 1941.

Francis M. Hartman, Owner.

P. O. Box 710,

Signed Francis M. Hartman
705 Valley National Bank,

Tucson, Arizona.

Date May 24, 1941

ARIZONA DEPARTMENT OF MINERAL RESOURCES
Capitol Building, Phoenix, Arizona.

Name of property. HARTMAN - HOMESTAKE MINE. Six Patented Claims.

Location and accessibility of property.

Catalina Mountains, Pima County, Arizona; $1\frac{1}{2}$ mile from Lower
Control of Mt. Lemmon Highway.

History of ownership. Francis M. Hartman, Tucson, Arizona, owner for
twenty years.

Production history.

Only record I have are of two shipments to smelter as follows:

14 Tons,- 14.2% lead; 4.00 ounces silver; 3.8% copper.

6 Tons,- 23.0% lead; 23.92 ounces silver; 10.00% copper.

General geology (brief)

Contact vein or deposit between quartzite-diorite and lime.

June 2, 1941

Mr. Francis M. Hartman
Valley National Building
Tucson, Arizona

Dear Mr. Hartman:

I want to thank you for yours of the 31st and the return of the second questionnaire. We greatly appreciate having this complete information and I think that this now gives us all that we need to know regarding your property. I only wish others were as prompt to send them in.

Thanking you again, and with kindest personal regards, I am

Yours very truly,

Chairman, Board of Governors
Arizona Department of Mineral Resources

CFW:LP

C O P Y

May 29, 1941

Mr. Francis M. Hartman
P. O. Box 710
Tucson, Arizona

Dear Mr. Hartman:

I have received the questionnaire that you sent us regarding the Hartman-Homestake Mine. I understand from your answer to the question "How much copper could this property produce annually on a 14¢ price" that you estimate that it can produce 3,000 tons of copper. If I am wrong and you mean 3,000 tons of ore I would appreciate your advice. If you meant 3,000 tons of ore, we would appreciate knowing the average copper content so that we can convert it into pounds of copper.

It would appear that this property will qualify as a potential copper producer, and with each of these that we include in the report as possibilities we desire to carry a short statement describing the essential features of the property listed. We have, therefore, gotten up another questionnaire which tells the essential facts that we would like to get to cover this short statement. We would like to have the information regarding the Hartman-Homestake Mine on this questionnaire.

We believe that we have a splendid chance of getting the small copper producers of Arizona into operation with government cooperation. Thanking you, and with kindest personal regards, I am

Yours very truly,

Chairman, Board of Governors
Arizona Department of Mineral Resources

CFW:LP
Enc.



Blacksmith Shop

Dump

ENGINE

Compressor

Receivers

Cross Cut No. 1

Gulch

Cross Cut No. 2

Dump

SURFACE

SHAFT

40' RAISE

RAISE

15' RAISE

15' RAISE

15' RAISE

15' RAISE

15' RAISE

15' RAISE

15' RAISE

15' RAISE

15' RAISE

15' RAISE

15' RAISE

15' RAISE

15' RAISE

HARTMAN HOMESTAKE MINE

OLD HAT MNG. DIST. - PINAL CO. - ARIZ.

Scale: 1" = 30'

Sept. 1935
T.N.S.

From T. Plan files