

CONTACT INFORMATION

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08/18/86

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: DAILY MINE

ALTERNATE NAMES:

PIMA COUNTY MILS NUMBER: 197

LOCATION: TOWNSHIP 11 S RANGE 16 E SECTION 17 QUARTER SE LATITUDE: N 32DEG 28MIN 19SEC LONGITUDE: W 110DEG 43MIN 47SEC TOPO MAP NAME: BELLOTA RANCH - 15 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:

COPPER SULFIDE SILVER SULFIDE GOLD LODE TUNGSTEN

BIBLIOGRAPHY:

ADMMR DAILY MINES FILE S.B. KEITH, AZBM BULL. 189, P. 130, 1974 USBM RI 5650, P. 116-118 PRODUCTION POSSIBILITIES OF THE MARGINAL CU MINES IN AZ. P. 63 USGS OPEN-FILE REPORT OLD HAT MINING DIST,P.8 AZ. MINING JOURNAL JUNE 1918, P. 39 MINERAL RESOURCES INVESTIGATIONS OF THE PUSCH RIDGE WILDERNESS - G.S. RYAN, P. 12 August 14, 1942

Mr. John W. Daily, General Manager Daily Mines Company Box 2086 Tucson, Arizona

Dear Mr. Daily:

Your letter of August 7 to Charles F. Willis and his reply to you have been called to my attention.

I believe the Control Mines, Incorporated are milling to about the capacity of their mill and it may be advisable to call the attention of the War Production Board to your problem. However, if the Control Mines, Incorporated are holding your property under lease, it may be very difficult to get any action without close cooperation with the Control Mines, Incorporated.

The next time George A. Ballam is in that district I suggest that he discuss with the Control Mines, Incorporated, and work with you to see just what can be done. I am sending a copy of this letter to Mr. Ballam.

Yours very truly,

J. S. Coupel, Director

JSC:LP

l

CC: George A. Ballam

TELEPHONE 194

DAILY MINES COMPANY

X399 VALLER MATIONAL BUIEDIN BOX 2086

TUCSON, ARIZONA

November 28, 1943

Mr. J. S. Coupal, Director Department of Mineral Resources, State of Arizona, 413 Home Builders Building. Phoenix, Arizona.

Dear Mr. Soupal :-

Am just in receipt of your letter of November 26th, relative to the visit of Mr. Schwartz and I certainly wish to meet the gentleman because there are various matters which we need to discuss. As you probably know, we are now in operation and producing and we had no trouble whatever in getting all the men we need. We are surprised to find that there are many more available who are unemployed and can be hired. The labor situation has eased considerably.

I expect to be at the mine most of the time during the coming week and will appreciate it, in case you wire or telephone the time Mr. Schwartz can meet me yto communicate with She Secretary & Treasurer of our Company and he will get in touch with me. Mr. Hellerstedt is connected with one of the Draft Boards here and can be reached by wire c/o Pima County Local Board No. 2, Federal Building, Tucson, Arizona any time during the day. Or his phone number is 5728 Tucson. His house phone is 539-W, residence 1134 East Tenth St., Tucson. Name is C. J. Hellerstedt.

Expecting to hear from you, J am,

Yours truly, Whanky' hangen.

P. O. Box 2086 Tucson, Ariz. December 1, 1943

Nr. John W. Duily P. O. Box 2086 Tucson, Arizona

Dear John:

I have just today returned to the Phoenix office and note your letter of November 28.

Mr. Schwartz has not yet arrived here due to illness. As soon as he comes we are arranging to have him meet the copper producers in the various parts of the state. Contingent upon his plans we hope to bring him to Tucson when you and Carl will have a chance to state your case before him. We will notify you relative to his itinerary in the southern part of the state.

Yours very truly,

George A. Ballum Assistant to the Director

G.J.S.LF

ARIZONA DEPARTMENT OF MINERAL RESOURCES MINERAL BUILDING, FAIRGROUNDS PHOENIX, ARIZONA

December-10,-1957

February 11, 1958

To the Owner or Operator of the Arizona Mining Property named below:



We have an old listing of the above property which we would like to have brought up to date.

Please fill out the enclosed Mine Owner's Report form with as complete detail as possible and attach copies of reports, maps, assay returns, shipment returns or other data which you have not sent us before and which might interest a prospective buyer in looking at the property.

> FRANK P. KNIGHT, Director.

Enc: Mine Owner's Report

ADDITIONAL REFERENCES

See: Production Possibilities of the Marginal Copper Mines in Arizona, p. 63 - Control Mines.

See: USBM 5650 1960 pp-116-118

See: USGS OFR - Old Hat Minfing Dist. (Geology File) - P. 8

Ariz. Mng. Journal June, 1918, p. 39

MAPS unstairs in the flat storage area, second drawer under CONTROL MINES

ABM Bul. 189, p. 130

Mineral Resources Investigations of the Pusch Ridge Wilderness - G. S. Ryan, p. 12

MILS Sheet sequence number 0040190190

9-4-58

John W. Daily, deceased, according to letter from Richard W. Daily, Group & Pension Department Aetna Life Insurance Co. 810 South Spring Street Los Angeles 14, California,

who is evidently son of deceased.

No information obtainable, on this property.

see CONTROL MINES, INC. - Now active file - Continental

DEPARTMENT OF MINERAL RESOURCES STATE OF ARIZONA FIELD ENGINEERS REPORT

Mine Daily Mines Co.

Date Sept. 29, 1942

Engineer George A. Ballam

1991 - per dilatera

District Old Hat

Subject: Production Possibilities Survey

Daily Mines Co., John Daily, Vice-Pres. & Gen. Mgr., Box 2006, Tucson. 18 patented claims, partially surrounded by Control Mines, which has had lease and been in litigation for some time. Settled out of court, Control agreeing to lease Daily mill-site, and mill Daily ore.

Mr. Daily informed me to-night that under the new agreement, whereby based on refinancing of Control whereby Ex-Gov. Thos. Campbell and Jack Mulcahy have option on Control, he will start mining Daily ore within ten days, up to 25 tons $3\frac{1}{2} - 4\%$ Cu daily to be milled at Control mill. He asserts that he can if necessary keep Control mill up to capacity with ore from stopes in tunnel behind mill.

Ore occurs as chalcopyrite in contact between limestone and diorite ma with some values in Au and Ag. About \$150,000 in production is reported from operations from time to time, although no production has been made during 1941. Daily has obtained a zero quota for copper, and will start work at once.

Settlement of the dispute between these companies was expedited by interest of Mr. Shanklin at instance of this department. Mr. Shanklin is negotiating with principals with view to possible purchase.

DEPARTMENT OF MINERAL RESOURCES STATE OF ARIZONA FIELD ENGINEERS REPORT

Mine DAILY MINES COMPANY

Date November 28, 1942

District Old Hat District

Engineer George A. Ballam

Subject:

16 patented claims, in Old Hat District, about 60 miles northeast Tucson, via Control Road. Address, Box 2086, Tucson. Daily Mines Co., Herman Gumbin, President, Rockford, Michigan. John W. Daily, Vice-President, Box 2086, Tucson.

Operated prior to 1914 by leasors. Acquired by John Daily by location in 1914. Patented 1918.

Major values copper and scheelite, with minor values in silver and gold. During World War and to date, 25,000 tons ore produced. 5000 tons averaging 7% copper shipped to PD at Douglas and AS&R, El Paso. Remainder milled on Property by Catalina Cons. Copper Co. and its successor, Control Mines. In 1939 Control milled 15,000 tons.

Mine developed by Princess tunnel, portal just west of Control mill. Runs 500 feet in westerly direction. 2 winzes about 45 feet deep each stoped both sides. 6000 tons ore extracted here, 3% to 8% copper. Considerable stoping along tunnel level about 35 feet wide. Water at tunnel level. Daily estimates that another 25,000 tons can be safely extracted from present workings, and plans on opening Daily winze #1 to get under ore hitherto undeveloped. Also develop ore above tunnel level by raise started in scheelite which runs about 2% WO₃.

Diorite footwall, ore in epidote gangue with marbleized lime in hanging.

Plans on mining 25 to 30 tons daily, maintaining mill head of 4%. Has agreement with Control to mill at \$2.25 rate. Needs unwatering loan, for which he has applied.

Equipment on property consists of 2 stage IR type 10 compressor, about 500 cf. Hoist house, blacksmith shop, powder magazine, 9 camp buildings, considerable track, laid from portal to mill. Needs pump to unwater.

Dump contains several thousand tons of .28% WO in mill tailings. Also plans on milling these.

Good road in to property Control road to Mt. Lemmon.

(Signed: George A. Ballam)

EXHIBIT "B"

912

The map attached hereto shows the thirteen claims decled by J. W. Daily and W. H. Daily to the Daily Arizona Copper Company in exchange for all the stock of the Company except three shares given to organizers and Director. J. W. Daily and W. H. Daily the gave back to the Treasury of the Company 200,000 shares of the stock to be sold for development purposes.

The names of the claims decied to the Company are as follows: Roskruge, Sphinx, Bull Dog, Daily No.3, Daily Extension, Cave, Wedge No.3, Wedge No.2, Daily No.7, Katherine, Calumet, Edith, and Daily Tunnel Sit.

All the claims are marked on the map with red crosses and the property is bound by a red line.

At Daily Pres.

November 28, 1942

MEMORANDUM

Daily Mines Co PEPT, MINER RFC. NOV 30 1942 CKO . PHOENIX,

To: Director, Dept. Mineral Resources From: George A. Ballam

16 patented claims, in Old Hat District, about 60 miles northeast Tucson, via Control Road. Address, Box 2086, Tucson & Daily Mines Co., Herman Gumbin, Pres. Rockford, Mich. John W. Daily Vice-Pres. Box 2086 Tucson.

Operat d prior to 1914 by leasons. Acquired by John Daily by location in 1914. Patented 1918.

Major values copper and scheelite, with minor values in silver and gold. During World War and to date, 25,000 tons ore produced. 5000 tons averaging 7% copper shipped to PD at Douglas and AS&R El Pasc. Remainder milled on property by Catalina Cons. Copper Co. and its successor, Control Mines. In 1939 Control milled 15,000 tons.

Mine developed by Princess tunnel, portal just west of Control mill. Runs 500 ft. in westerly direction. 2 winzes about 45ft. deep each stoped both sides. 6000 tons ore extracted here, 3% to 8% copper. Considerable stoping along tunnel level about 35 ft. wide. Water at tunnel level. Daily estimates that another 25,000 tons can be safely extracted from present workings, and plans on opening Daily winze #1 to get under ore hitherto undeveloped. Also to develop ore above tunnel level by raise started in scheelite which runs about 2% WO₃

Diorite footwall, ore in epidote gangue with marbleized lime in hanging.

Plans on mining 25 to 30 tons daily, maintaining mill head of 4%. Has agreement with Control to mill at \$2.25 rate. Needs unwatering loan, for which he has applied.

Equipment on property consists of 2 stage IR type 10 compressor, about 500 cf. Hoist house, blacksmith shop, powder magazine, xx 9 camp buildings, considerable track, laid from portal to mill. Needs pump to unwater.

Dump contains several thousand tons of .88% WO3 in mill tailings. Also plans on milling these.

Good road in to property, Control road to Mt. Lemmon.

8-14-42

Daily, John W., General Manager Daily Mines Company Box 2006 173 Tueson, Arizona Mammoth (-3-3-55)

See Daily Mine file

See DAILY MINES - Re "C" loan application12-7-42See D file - Re request for tungsten bulletins1-23-43

See: Porphyry Exploration Co.-Mammoth Dist., Pinal Co. 3-3-55.

			METALS: CU. W	
OPERATO	OR AND ADDRESS:	MINE STA		
DATE:	1. 8	DATE:	540 -	
5/1/44	Robt. Burney, Oracle, Ariz	. 5/1/44	Milling	
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		24 (A) X (A) C (A)	11 /2 //12	
	RFC development granted	\$4000.	11/3/43	
12/43	Milling at Control Mill	i		
4/3/44	Milled 350 tons in March			
	Planning on 500 tons in A	prii.		
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WAR MINERALS REPORT

UNITED STATES DEPARTMENT OF THE INTERIOR - BUREAU OF MINES .

W.M.R. 16 - Copper

November 1942

SANTA CATALINA COPPER DE-OSITS (Control Mines, Inc.)

Pima County, Ariz.

SUMMARY

Operations at the Santa Catalina Copper Deposits, Pima County, Arizona, utilize only two-thirds of the plant capacity. Prospecting in and adjacent to producing mines might increase reserves by 100,000 tons of ore containing at least 3 percent copper. With this quantity of reserves, mine production could increase to the mill capacity of 100 tons of ore a day, corresponding to an output of about 2,000,000 pounds of recoverable copper a year. Should exploratory work in other areas in this vicinity indicate still greater reserves mine production could be increased further and the mill enlarged accordingly.

Copper ore with some scheelite occurs in metamorphosed limestone near a diorite contact that encircles Marble Peak in a great oval nearly 4 miles in circumference. Prospecting has disclosed mineralization at many points along this contact, but these showings lack development except along a half-mile length. The oxidized zone is shallow. The sulfide ore minerals are chiefly chalcopyrite and bornite in a garnet-opidote gangue. In addition to the copper content, one deposit has considerable lead and zinc with some silver.

Production totals over 83,000 tons of ore averaging about 3 percent copper. Of the five groups of claims covering the contact zone, three are owned or leased by the Control Mines, Inc.

The Bureau of Mines will promptly undertake diamond drilling drifting, and surface trenching to explore (1) for downward extensions of known deposits and (2) for other deposits along the contact zone. Metallurgical tests will be initiated with a view to improving the milling practice and to recovering the scheelite. The estimated cost of the exploration and metallurgical work is \$50,000. The time required is 6 months.

INTRODUCTION

The Santa Catalina Copper Deposits, Pima County, Ariz., were visited by a Bureau of Mines engineer* in May 1942. They are about 25 miles by air line

J. H. Hedges, district engineer.

SANTA CATALINA COPPER DEPOSITS, ARIZ.

northeast of Tucson. The area is known as the Old Hat Mining District and is reached from Oracle over the Mount Lemmon road, a distance of 63 miles from Tucson. The road skirts the district on the east and south a short road to the Geesman mine branching off at the Lower Control. A gate is established here for control of traffic on a one-way road to Mount Lemmon. The Geesman and Daily mines are reached by truck. The other prospects are reached only by trails.

The five principal groups consist of the Geesman, Daily, Leatherwood, Stratton, and Hartman-Homestake.

HISTORY

There is no available record of any production previous to 1910. In that year Phelps-Dodge Corporation acquired options on several groups of claims. During the next 3 years over 6,000 feet of development work was done. Most of the work was on the Camp Apache group, now called the Geesman mine, owned by Control Mines, Inc. Development comprised sinking the Geesman shaft to a depth of 280 feet and drifting on the 100-, 200-, and 250-foot levels. This work developed two ore bodies - one on each side of the shaft. These two shoots have since been mined (1937, to date) and yielded about 60,000 tons of 3to 3 1/2-percent copper ore.

Although the ore was too low-grade to be mined profitably at that time, the showing was considered sufficient to justify patenting the five claims of the group. The Leatherwood group of 10 claims, about half a mile south, also was retained by the Corporation, and five of the claims were patented.

The Daily property, situated between the Geesman and Leatherwood groups, has been developed by means of a tunnel and laterals. A tunnel on the Copper Princess claim developed a sizable body of low-grade ore averaging about 2 1/2 percent cop er. Some of the richer streaks were mined previous to 1930, and nearly 500 tons of ore was shipped. The ore was reported to contain 5.5 percent copper, 2 ounces of silver, and 45 cents in gold.

There is no record of production from the Geesman mine until 1937. In that year the Catalina Consolidated Copper Co. leased the Camp Apache group and the adjoining property of the Daily Arizona Consolidated Copper Co., which included the Copper Princess claim. In 1937 the Catalina company built a 100-ton flotation plant on the Daily ground and mined and treated ore from the Geesman and Daily properties.

In the 10 months from August 1937 to May 1938, the company treated about 18,000 tons of ore averaging 2.7 percent copper, derived from the following sources:

Source	Tons	percent		
Daily mine Geesman dump Geesman mine	5,600 1,500 10,900	2.35 1.70 3.00		
Total	18,000	2.69		

SANTA CATALINA COPPER DEPOSITS, ARIZ.

The enterprise proved to be unprofitable at the low price of copper, and in May 1938 operations were suspended.

In October 1939, Control Mines, Inc. bought the Catalina mill and leased the Daily property, treating 1,500 to 2,000 tons a month from the Copper Princess tunnel. In May 1940, Control Mines acquired the Geesman property on bond and lease from Phelps-Dodge Corporation. Since that time production has averaged about 2,000 tons a month, mostly from the Geesman mine. The ore is reported to have averaged between 3 and 4 percent copper, with mill recovery at 90 percent or better. Concentrates are said to average about 26 percent copper, indicating a ratio of concentration of 8 or 10 to 1. Exact data are not available.

From the proceeds of its operations since October 1939, the Control company has completed purchase of the Geesman property and the Leatherwood group of claims. This transaction has been accomplished at the expense of advance development, with the result that ore reserves in the Geesman mine are now small. Reserves in the Daily mine, still under lease, are a matter for conjecture.

Available records and reports indicate the production from the Geesman and Daily mines to be about as follows:

	Geesman	mine	Daily mine		
	Ore mined, tons	Copper, percent	Ore mined, tons	Copper, percent	
Before 1930 1937 1938 Dump 1939	4,800 6,100 1,500	3.0 3.0 1.7	500 2,500 3,100 4,500	5.5 2.35 2.35 2.35	
1940 1941 8 months 1942 Total	14,000 24,000 12,000 62,400	3•3 3•3 <u>3•3</u> 3•25	10,000	2.35 2.48	

PHYSICAL FEATURES

The topography is rugged. The hillsides are cut by deep gullies, which rise at steep angles from an altitude of about 5,700 feet at the Control camp to 7,600 feet at the summit of Marble Peak. The slopes are covered with brush and timber and, except for trails leading to mine workings, are accessible only on foot. A few of the gullies on the north slope have springs that flow throughout the year and furnish enough water for camp use. The main supply of water for milling is pumped from the mines. Deepening the mine workings should increase this flow. It is believed that enough water to mill 200 tons a day could be developed if exploration results justify this scale of operations. A small amount of road construction would enable ore mined from any point to be trucked to the mill on the Daily claims.

OWNERSHIP

The eliptical area of limestone and the limestone-diorite contact encircling Marble Peak are completely covered by five principal groups of claims.

The Geesman group consists of six patented claims on the northeast quadrant of the oval contact. This property, originally developed by Phelps-Dodge, is now owned and operated by Control Mines, Inc. These claims have produced about three quarters of the tonnage from the district.

The Daily Arizona Copper Co. group consists of 16 claims, 8 of which are patented. Although the largest group in acreage, it has the shortest length along the contact - about 2,500 feet. It adjoins the Geesman group on the south and extends westward over the center of the limestone area. This property is under lease to the Control Mines. The Control's mill is on the Daily ground.

The Leatherwood group is owned by Control Mines. This group lies south of the Daily and consists of 10 claims, 5 of which are patented. These claims cover nearly 4,000 feet of the contact.

The Stratton group of 14 claims is owned by Mrs. Keeney of Indianapolis, Ind. The claims lie northwest of the Leatherwood group and cover the southwest quadrant of the contact for alength of about 4,000 feet.

The Hartman-Homestake group of 6 claims occupies the northwest quadrant of the oval. It lies north of the Stratton and west of the Geesman, closing the circle. It covers about 5,000 feet of the contact.

DESCRIPTION OF DEPOSITS

The Old Hat Mining District comprises the contact-metamorphic copper deposits circling Marble Peak. The ore occurs in altered limestone near a diorite contact. The limestone is a remnant, about 7,000 feet from east to west and 4,500 feet from north to south, occurring as a covering over the diorite mass. The limestone-diorite contact encircles Marble Peak in a great oval nearly 4 miles in circumference. Prospecting along the contact has disclosed mineralized ore at many points, but its development has been confined to strip half a mile long in the northeast quadrant.

Structural features that influence localization of ore bodies are obscure but appear to be related to fracturing caused by minor deformation of the limestone beds. Detailed study of the formations may be helpful in directing exploration to the most favorable areas.

Ore bodies have been developed only on the Geesman and Daily groups. These partly developed and partly mined shoots have yielded 15,000 to 40,000 tons each.

On each of the five principal groups of claims, small lots of high-grade ore have been sorted and shipped from time to time. High transportation costs and low metal prices have discouraged general development of the area.

The five groups are described below:

Geesman Group. - The Geesman shaft follows the dip of the contact to the southwest to a depth of approximately 280 feet. Drifts at the 100-, 200-, and

SANTA CATALINA COPPER DEPOSITS, ARIZ.

250-foot levels developed two ore shoots. The stopes are 15 to 20 feet wide, 70 to 80 feet long, and have been carried down to the 250-foot level. About 60,000 tons of ore averaging 3 to 4 percent copper has been mined from these two shoots. The lower limits of the ore have not been reached at the 250-foot level, although there is some evidence of decreasing width of vein and grade of ore. A few thousand tons of ore remain above the 250-foot level, and no ore has been extracted below this bottom level.

Scheelite occurs in the Geesman mine chiefly in thin bands in the white marbleized limestone of the hanging wall immediately above the ore. It is possible that enough scheelite may be found to justify its separation as a byproduct of copper-mining operations.

Daily Arizona Copper Co. Group. - Workings consist of the Copper Princess tunnel, about 390 feet in length, and laterals to stoped areas. About 20,000 tons of 2 1/2-percent ore has been mined from this tunnel since 1937. The product from this tunnel goes to the Control Mines mill, which treats 2,000 tons of ore a month.

Leatherwood Group. - Although considerable work has been done on the property, the workings for the most part are inaccessible. Those accessible are shallow open cuts along steeply dipping veins that carry some copper carbonates and chrysocolla. These veins, averaging about 5 feet in width, follow fractures in the limestone that dip toward the northeast. In recent years leasers have mined some ore from these veins and have also sorted the best ore from the dumps. The dump material does not indicate that sulfide ore was found in the underground workings.

Stratton Group. - The main working is a 20° incline shaft 80 feet deep sunk in a mineralized bed of garnetized limestone. The bottom and sides show 2 1/2 to 3 feet of ore, mainly bornite and chalcopyrite, with a little pyrite. A few cuts and shallow tunnels show some mineralization in the form of copper oxides. Some small shipments totaling probably not more than 100 tons have been made from this property.

Hartman-Homestake Group. - The workings comprise some 1,500 feet of crosscut tunnels and drifts and several winzes and raises following fractures and veins in the limestone. This property is unique in that the ore carries high values in lead and zinc as well as copper. It is reported that one ore body opened for a length of 235 feet and further explored by 90 feet of raises ranges in width from 2 to 12 feet. The average width is about 6 feet, and the average grade is 3 percent copper, 6 percent lead, 7.6 percent zinc, and 2.35 ounces of silver a ton.

THE ORE

The ore minerals are chiefly chalcopyrite and bornite in a garnet-cpidote gangue. The zone of oxidation is very shallow, as sulfides occur close to the surface. The ore is readily concentrated by flotation. With a concentration ratio of 8 or 10 to 1, a recovery above 90 percent is reported. The concentrates run about 26 percent co per.

ORE RESERVES

On each of the five principal groups of claims mineralized areas have been found in the limestone near the igneous contact.

SANTA CATALINA COPPER DEPOSITS, ARIZ.

On the Geesman property, a few thousand tons of ore containing about 3 or 4 percent copper remain above the 250-foot level. These shorts produced some 60,000 tons of 3- or 4-percent ore above the 250-foot level. It is assumed that these shorts continue downward to an undetermined depth, although the minable width of stope and grade of ore appear to be decreasing. Lateral explotation along the contact for other ore bodies and development of downward extensions of known ore shorts offer the best possibilities for additional ore on this property.

Ore from the Copper Frincess tunnel on the Daily Arizona property is now going to the nearby Control Mines mill. The Leatherwood Group underground workings are inaccessible but offer opportunity for developing ore along the 4,000 feet of contact.

The Stratton Group has been developed least. A 20°, 80-foot incline shaft exposed a 2 1/2- to 3-foot bed of bornite and chalcopyrite ore. The Hartmann-Homestake contains a partly developed ore body averaging about 6 feet in width and carrying values in cop er, zinc, lead, and silver. The probable tonnage from this deposit has not yet been estimated.

PROPOSED WORK BY BURFAU OF MINES

A Geological Survey party has been working in the district since August 1942, and geologic mapping of the surface and underground workings was nearly completed by mid-October 1942. This work is expected to reveal features of the mineralization that will aid in locating sites for diamond-drill holes. Drilling from the surface and underground stations will explore favorable geological areas and downward extensions of known ore bodies. Five hundred feet of drifting to develop any one that might be indicated by drilling is included in the estimates of costs that follow.

Short holes will be drilled in the Geesman mine to explore a block along the contact zone west of the stoped area above the 100-foot level. Continuation of the ore below the mine workings will be determined by diamond drilling. A sector of the contact zone as yet unexplored for a distance of 3,000 feet will be trenched and sampled. The most favorable areas will be arilled.

The estimated cost of the Bureau's exploratory work and ore testing is summarized below:

5,000 feet of diamond drilling,	
including sampling and assaying,	
at \$5 a foot	25,000
1,500 feet of trenching and trench	
sampling at \$5 a foot	7,500
500 feet of exploratory headings	
at \$14 a foot	7,000
Surface and underground surveying,	
mapping, and underground sampling	5,000
Metallurgical tests to improve milling	
ractice and to recover scheelite	5.500
	and the second se

Total

50,000

CONCLUSIONS

It is estimated that the exploration program of the Bureau will indicate enough one to increase the present mining and milling operation by 50 percent. This would increase production to 3,000 tons of one a month. Metallurgical tests will be made with a view to improving milling practice and to recovering the scheelite. Should enough one be indicated to warrant enlarging the 100-ton mill, suitable recommendations will be made for development and construction work.

The occurrence of scheelite in the marbleized hanging wall in the Geesman property might be worth investigating. This might lead to a small byproduct of tungsten concentrates. A small quantity of scheelite is now being 'highgraded' and sold to tungsten buyers in Tucson.

The Bureau of Mines will explore the properties of the Control Mines, Inc. at once.

from COPPER REPORT NO DECEMBER 23, 1942, by Earl F stings, for Copper Branch, War Production Board.

DAILY MINES CO. J. W. Daily, President, Tucson, Arizona.

This property is adjacent to the Gentrol Mire mentioned in a previous report.

Some 25,000 tons of shipping ore has been produced from this property, all above the adit level. A loan has been requested to reopen workings below this level in which additional ore is known to exist.

8.

The combination of Control Mines, Hartman-Homestake and Daily Mines if grouped into one operation provide the basis for a most substantial copper and WO₃ production. Daily Mines, through certain complications in its corporate structure has been unable to engage in negotiations with parties able and willing to combine the properties above mentioned.

Daily Mines has an agreement with Control Mines whereby the latter agrees to mill 25 tons daily of the former's ore.

from COPPLE REPORT NO. 2, DECEMBER 23, 1942, by Earl F. Hastings, for COPPER FRANCE, WAR PRODUCTION BOARD.

STATUS OF DORMAN'T MINES Dil, 7 nene MINE NAME: + (32 min south Gracle) 1/410 LOCATION: two thirds owner C. R. Daily one third OWNER AND ADDRESS: 1.34 APPROXIMATE PRODUCTION (Year of 1945): None COPPER Lbs. LEAD Lbs. ZINC Lbs. (OTHER) CHECK THE CHIEF CAUSE OF YOUR DISCONTINUED PRODUCTION: (A) Easily available ore worked out. (B) Increased costs, but have quantity similar to past grade of ore. Too close a margin to develop more ore. (C)Property was leaved up until 1945 when (D) mill. If you have ore ready to mine please give your estimate of the amount of metal (name each metal) that you could produce in one year (after allowing 60 days to get started) if there were premiums above present market prices. Name amount with a low premium, and amount at a high premium; such as: Copper at 222¢ plus 5¢ premium 1,000,000 Lbs. Copper at 221¢ plus 10¢ premium..... 1,500,000 Lbs. If you do not have ore ready to mine please discuss the following: (A) Do you think a reasonable development program would produce a justified tonnage of commercial ore at above mine? (B). With a premium price (guaranteed for one year) could you carry out such a development program yourself? What premium? 20

(C) If you could not do this yourself, would a quick drilling program by some government agency (at government expense) be sufficient?

no

(D) Or would you prefer a loan plan similar to the arrangements during World War II?

How about a combination plan in two stages such as follows?

- Stage 1: Government engineers review project and, if a little drilling appears to be justified and a preliminary key to the situation, such drilling program to be agreed upon by owner and government engineer, paid for by the government, but let by contract.
- Stage 2: If results of drilling (or without drilling) justify underground development and/or production equipment, same to be obtainable via a mortgage loan on property.

Please discuss the above: ______ ivould be wo this property would required Was ne have ALC N 10/ and sur SUGGESTIONS nes les. 1 to 11 one. Pres ma In sure the googmen years. wo verten divels SIGNATURE D.15. DATE _ 1950

DIVIOD OL DOURINI TITUT	STATUS	OF	DORMANT	MINES
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MINE NAME: (Two claims which formerly was part of Daily mine
LOCATION: All Hat minung district 25 miles south & Beach.
OWNER AND/OR LEASEE: C.B. Mules two thirds - CR. Daily one third int
ADDRESS: 10 34 Wind Circle Drive. 7
APPROXIMATE PRODUCTION (Year of 1945): None
COPFERLbs. LEADLbs.
ZINCLbs. (OTHER)
CHECK THE CHIEF CAUSE OF YOUR DISCONTINUED PRODUCTION:
 (A) Easily available ore worked out. (B) Increased costs, but have quantity similar to past grade of ore. (C) Too close a margin to develop more ore. (D)

If you have ore ready to mine please give your estimate of the amount of metal (name each metal) that you could produce in one year (after allowing 60 days to get started) if there were premiums above present market prices. Name amount with a low premium, and amount at a high premium; such as:

Copper at $22\frac{1}{2}$ ¢ plus 5¢ premium..... 1,000,000 Lbs. Copper at $22\frac{1}{2}$ ¢ plus 10¢ premium..... 1,500,000 Lbs.

If you do not have ore ready to mine please discuss the following:

no

(A) Do you think a reasonable development program would produce a justified tonnage of commercial ore at above mine?

111

(B) With a premium price (guaranteed for one year) could you carry out such a development program yourself? What premium? (C) If you could not do this yourself, would a quick drilling program by some government agency (at government expense) be sufficient?

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m polimines the

- Stage 1: Government engineers review project and, if a little drilling appears to be justified and a preliminary key to the situation, such drilling program to be agreed upon by owner and government engineer, paid for by the government, but let by contract.
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Please discuss the above: These plained would require the com restion Aland Augers SUGGESTIONS: me and

\$ 1950 Inu DATE

SIGNATURE 613

purchase three groups of mines stars a par value of \$1.00 per share. It has 1,000,000 shares of treasure stock and 1,000-000 shares will be paid for its mines.

We want and must have a first class road from Oracle to the mines, so we, the Stratton Copper Co., Copper Queen Consolidated Mining Co., and other adjoining mines can haul our ore to Tucson at a reasonable cost and haul supplies, machinery, etc., to the mines at a reasonable cost. We want a first class road from the mines to Soldier Camp so we can haul lumber and timber to the mines.

The people of Tucson want a first class road to their summer resort in the Catalina mountains. You recently voted a bond issue of \$100,000 to build a road to this resort. You found the road could not be built for \$100,000, but by this act you say that a road to the Catalina summer resort is worth \$100,000 to you. Therefore, we make you the following proposition:

On November 1st the treasury stock of the Daily-Arizona Consolidated Copper Co. will be put on the market, in Tucson, Bisbee and other cities, at 50 cents per share. If the people of Tucson will subscribe for 100,000 shares of this stock at 50 cents net per share we will deposit this \$50,000 in the banks of Tucson and use it to build a first class road from Oracle to Apache Camp and from Apache Camp to Soldier Camp. The banks to have charge of the money and pay it out as the road is built.

When this road is completed we will have "killed two birds with one stone." We will have direct and rapid communication between Tucson and a number of the greatest proven mines in Pima County, and we will have a fine road to the wonderful Catalina summer resort that we have wanted for years.

If you buy this \$50,000 worth of Daily-Arizona Consolidated Copper Co. stock, you will get your road and will have an asset which, in our judgment, will return you \$10 for every dollar you invest.

If you issue \$150,000 worth of bonds you will get your road up Sabino to your resort; but instead of having an asset of 100,-000 shares of Daily-Arizona Consolidated Copper Co. stock, you will have a liability of \$150,000, drawing interest.

We have been telling about the great advantages of this proposed road, but REMEMBER we ask you to buy this stock, not alone because we are going to build the road, but because, in our judgment, you cannot find a better mining investment in all Arizona. We have already ped thousands of dollars rth of ore; we have thousands of one now developed, awaiting the completion of this road so it may be hauled to Tucson for \$5 per ton instead of \$17 per ton, and we have three mines, either one or all of which have as good or better chance to make great mines as any new property in Jerome or Miami.

Go to our mines and examine them; investigate our proposition, then place your order for this stock as soon as possible.

If this \$50,000 is subscribed quickly by the people of Tucson, we can get to work on the road at once and have it completed to Soldier Camp by next June so it can be used next summer.

If the road up Sabino Canyon to Soldier Camp was built and the road via Apache Camp to Soldier Camp was built: you could go to Soldier Camp via Apache Camp safer, easier and quicker than you could via Sabino road.

Following are some of the benefits to be derived by building the road to Apache Camp and Soldier Camp.

Hundreds of thousands of dollars worth of supplies and machinery, sold by Tucson merchants, to the mines at Apache Camp and to the people at the Catalina summer resort.

Hundreds of people spending their money in Tucson instead of California each summer.

Hundreds of tourists coming to Tucson each summer to go to the Catalina summer resort.

Millions of dollars worth of taxable property added to Pima County's tax roll.

A greater ad more prosperous Tucson.

Happier, healthier, and more progressive men, women and children in Tucson.

Mr. Wilson of the Stratton Copper Co. has assured us that his company will contribute \$10,000 for the construction of the road, providing Tucson people will subscribe for 100,000 shares of our stock at 50c per share. In this event we will have a road fund of \$60,000.

You can't lose your money; it will be spent on a road for your)enefit.

DAILY-ARIZONA CONSOLIDATED COPPER COMPANY, W. H. DAILY, President.

Daily Arizona Consolidated Copper Company

DOBINTESTINEN

GERRINE

General Offices, 48 W. Pennington Street TUCSON, ARIZONA TELEPHONE 870

Mines: Old Hat District, Pima County, Arizona Tucson, Arizona, November 17th, 1919. TO THE STOCKHOLDERS OF DAILY ARIZONA CONSOLIDATED COPPER COMPANY.

Your company owns twenty-two claims, located in the Old Hat Mining District, in the Santa Catalina Mountains in Pima County, Afizona. Look at any large map of Arizona and locate Tucson, then look northeast of Tucson and you will find Marble Peak in the Santa Catalina Mountains. This peak is on your property.

All of your mines have been surveyed for U.S. patent and are now being patented. The title is good.

Your property is now equipped with a power house, machine shop, store building, boarding house, large house for miners, assay office, superintendent's house, foreman's house, another two-room house, tents, complete water system, mining cars, trackage, air drills, mining tools, 100 h. p. boiler, 500-ft air compressor, machine drill sharpener, automobile, 200 cords of wood, etc.

The property has about 2000 feet of development work, and has over 70,000 tons of copper sulphide ore proven, having an average value per ton of 3% copper and \$2.00 gold and silver. This ore is an ideal oil flotation concentrating ore and you have enough ore proven now to run a hundredton concentrator for two years. The "Princess" ore body on the Princess claim has been proven for 500 feet in depth and at this point it has been crosscut from the footwall to the hanging wall, and is 50 feet wide. This Princess ore body is over three hundred feet long and is richer at the lowest point, opened on it, than at any other point, and there is no doubt but that it will extend on into the mountain for thousands of feet, producing many thousand tons of ore. The ore that has been taken out of development work on the property is nearly all on the dumps and its assay value is greater than the entire cost of doing all of the development work done to date.

The "Road" ore body, which is located on the South end of the property and right along side of the new \$200,000 road, is the largest ore body on the surface in the entire District; we have just struck this ore body with a tunnel at a depth of 150 feet and do not know yet how large it is, but no doubt it is much larger than the Princess ore body. You have four other very large ore occurrences on your property and about fifty smaller ones.

You have a real copper mine now and when we get our new hundred ton concentrator in operation we will soon make it one of the greatest copper mines in Arizona. Nothing has been done toward developing the "Bull Dog" ore body in the last three years, but there is a shaft down on it sixty feet deep, all in commercial sulphide ore. We are doing some work on the "King" ore body, sinking a shaft on it and we are just getting into the sulphide copper in the bottom of the shaft. This ore body is over fifty feet wide on the surface and six hundred feet long and no doubt will make a mine that will produce 500 tons of ore per day.

No attempt will be made to describe the smaller ore bodies on your property, some of which will develop into large producers.

The "Precious Metals" ore body, on group No. 4, has been opened up along the surface to some extent but no deep mining has been done there yet. The ore body is from forty to eighty feet wide and about seven hundred feet long on the surface. This ore body on the surface is a great body of gossan or leached ore running about 40% oxide of iron and \$1.00 gold and 1% copper. There are 200,000 tons of this material that can be quarried from the surface. It has no commercial value at this time but will have a value as flux for smelting purposes. There is no question but that there is a great body of rich ore beneath this body of gossan, as the copper that was formerly in it has been leached out and precipitated below. This ore body can be opened up three hundred feet deep by a tunnel four hundred feet long, and it is the intention of your management to drive this tunnel as soon as funds are available.

Since your company was organized it has purchased groups No. 4 and 5 for \$24,000.00 cash. See the map attached hereto.

The management of the company has been working for the last three years trying to get a new road built into the mines from the town of Oracle. The distance is twenty miles. It gives us pleasure to report to you that we finally succeeded in getting this road built. It will cost \$160,000.00 from our mines to Oracle. Your company gave \$8,000.00 of the money and the U. S. Government and Pima and Pinal counties gave the rest. The contract for building the road has just been let and it is to be completed about the last of April, 1920. When this road is completed, we can haul ore and concentrates direct to the Hayden smelter, over one of the finest roads in the country. It will cost us about \$12.00 per ton to haul our ore and concentrates fifty-two miles to Hayden. We will have no rail haul.

In as much as we have over 70,000 tons of 3% copper sulphide ore proven and will soon have a fine new road, your Board of Directors has decided to build a hundred ton oil flotation concentrator at the mines as soon as possible so as to have it ready for operation when the new road is completed. In addition to our concentrates, we have several thousand tons of high grade ore that will be hauled direct to the smelter, but it is commercially impossible to haul 3% copper ore so far and, therefore, we must have a concentrator. We will concentrate about eight tons of 3% copper ore into one of concentrates which will assay between 19 and 20% copper and \$12.00 to \$13.00 gold and silver per ton. This concentrate will bring us about \$90.00 per ton.

It is estimated that we will be able to take fifty tons of ore per day from new development work and, therefore, we will only have to stope 50 tons per day from our 70,000 ton ore reserve, and that inside of one year after we start the mill and new development work we will have enough ore proven to justify us in building a 500-ton concentrator, or possibly a smelter of 500 tons capacity. Let us call your attention here to this fact: The ore that has come out of development work so far is worth more than it cost to do the development work. This is unusual in mining. The ore that will come out of future development work will more than pay for the cost of doing the development work when the mill is built and, therefore, the money made from ore stoped will be available for dividends. Estimated Earnings of the Proposed Hundred Ton Concentrator.

Average assay value per ton of milling ore, copper 3% or 60 lbs. Gold and silver, \$2.00.

Mill extraction 80%, which is 48 lbs. of copper and \$1.60 gold and silver, per ton of ore.

Total value of metal extracted per ton of ore, figuring copper at 20c per pound is

			\$
Gold and	silver	 	 1.60

Total\$11.20 per ton It will take 8 tons of ore to produce one ton of concentrate. Each ton of concentrate will be worth 8 times \$11.20 or \$89.60,

Costs per Ton of Concentrate.

Mining 8 tons of ore @ \$1.25 per ton	- and a second
Overhead 8 tons of ore @ 50c per ton 4.00 Hauling per ton concentrate to smelter 12.00	N
Smelting per ton concentrate to smelter	
Smelter deduction 5% gold and silver	
Smelter deduction 14 lbs. copper @ 20c lb 2.80	
Total costs	
Value of concentrate per ton\$89.60	
Less costs per ton of concentrate	
Net per ton concentrate\$40.16	
\$40.16 divided by 8 gives net per ton ore\$ 5.02	
100 tons per day @ \$5.02 gives net per day\$ 502.00	
350 days per annum, net per annum\$175,700.00	

The function of a concentrator is to separate the sulphides of copper and the gold and silver from the rock, so as to reduce the cost of hauling and smelting. For instance, in our ore we will separate about one ton of concentrates from eight tons of ore and the other seven tons are rock and will be thrown over the dump at the mine.

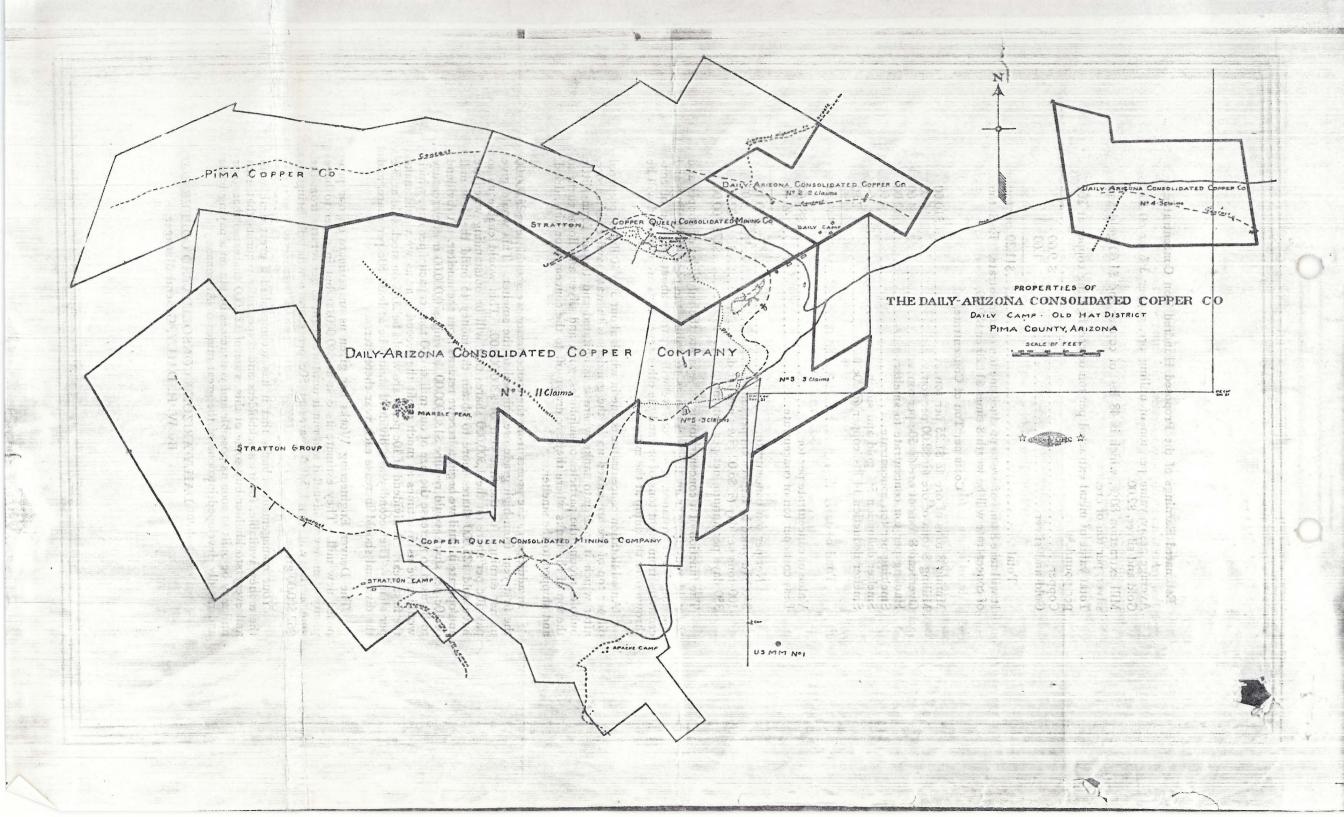
An oil flotation concentrator is one in which about 5 to 10 lbs. of prepared oil per ton of ore are mixed up in the grinders with water and crushed ore, after which it goes into tanks where it is agitated and the oil forms little bubbles around the particles of sulphides, gold, and silver and floats them to the top of the tanks where they are drawn off to the concentrator bins, dried, and shipped to the smelter.

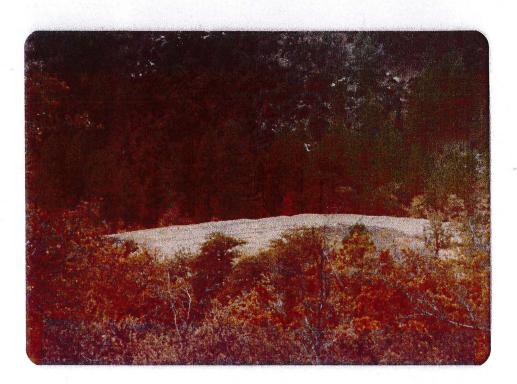
In addition to the profits from the concentrator we should net \$25,000.00 the first year from high grade ore shipped to the smelter. This would give us net earnings for the first year of \$200,000.00. This would enable us to pay 10c per share on the 1,300,000 shares that will be outstanding when we have sold 125,000 shares more to obtain the money to build the new mill and operate it until we begin to receive returns from the smelter. A dividend of 10c per share would require \$130,000.00, leaving \$70,000.00 in the treasury to be used to increase the size of our mill to 500 tons capacity per day, which would give us five times as much profit the second year as we would make the first year. A dividend of 10c per share would be 20% on stock sold at 50c per share. The second year's dividend should be at least 50c per share, and the dividend should increase each year thereafter.

The Denver Engineering Works has given us an estimate on our proposed new mill. They estimate its cost at \$40,000.00, but in order to have plenty of money to install it and run it until we begin to get returns from the smelter we will sell 125,000 shares at 50¢ per share which will bring us \$62,500.00 gross.

Your management submits that it has accomplished a great deal, with the money available, for its stockholders and respectfully requests that each and every stockholder buy some of this issue of 125,000 shares so that your mill may be built as soon as possible and your mines be put on a paying basis and rapidly developed into one of the great mines of Arizona.

> DAILY ARIZONA CONSOLIDATED COPPER CO. By W. H. DAILY, General Manager.

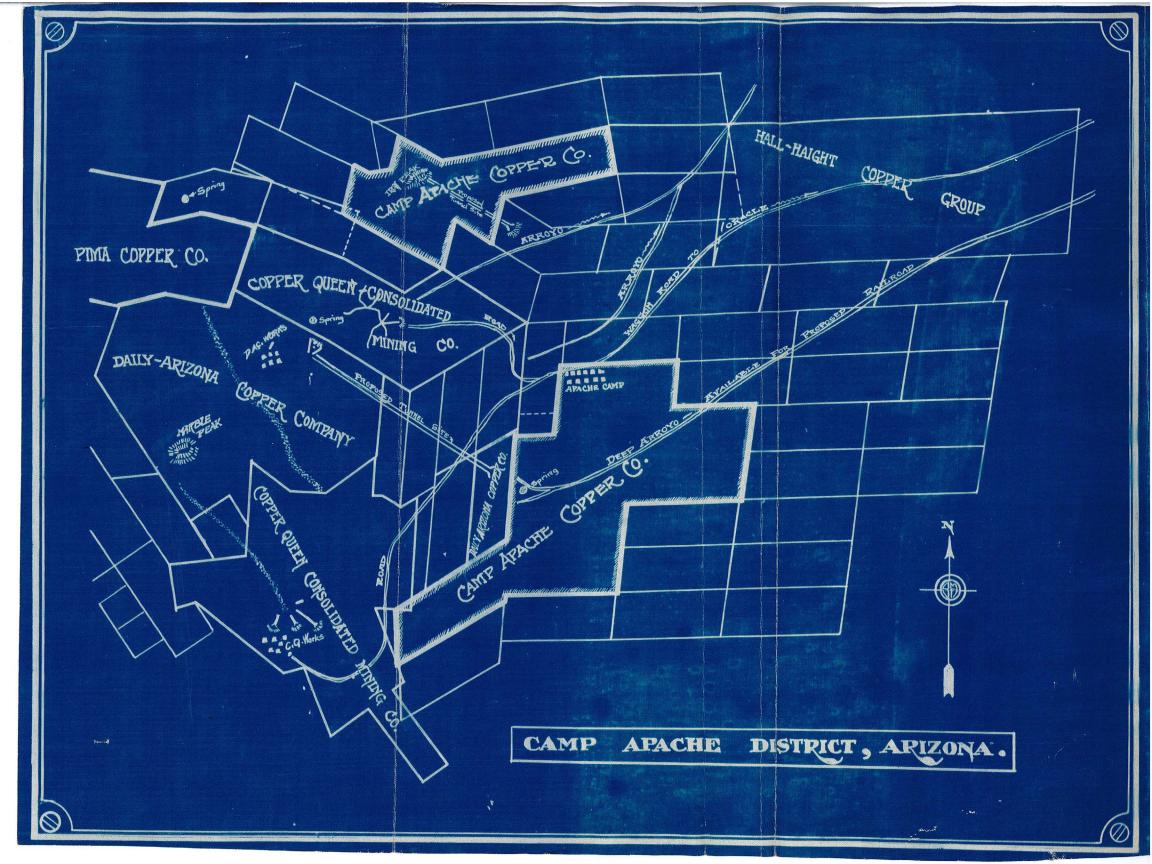


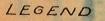












PIMA COPPER CO.

STRATTON COPPER CO.

Dore Bodies Boundary Lines-Daily Arizona Consolidated Copper Co.

NON

DAILY ARIZONA COMECAIDA TED

MARALE PEAK

COPPER CO.

COPPER QUEEN

Lime

CONSOL

LDATED MIN

NG

Diorite

- ===# Tunnels
- Shafts

PROPERTY OF THE DAILY ARIZONA CONSOLIDATED COPPER CO. DAILY CAMP, OLD HAT DISTRICT PIMA COUNTY, ARIZONA.

Road to Oracle

ATTITUTE -

DAILY Nº 2 ARIZONA CONSOLIDATES

uartzite

Geesaman Shaft

Lime

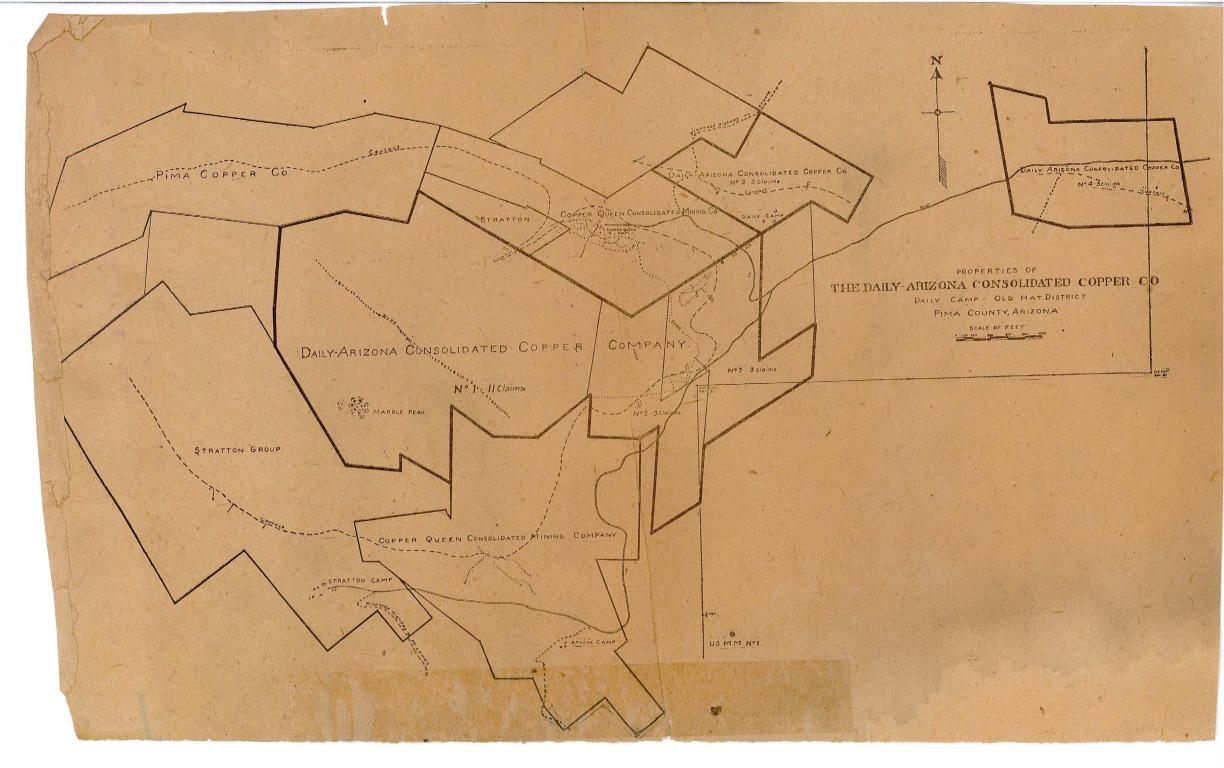
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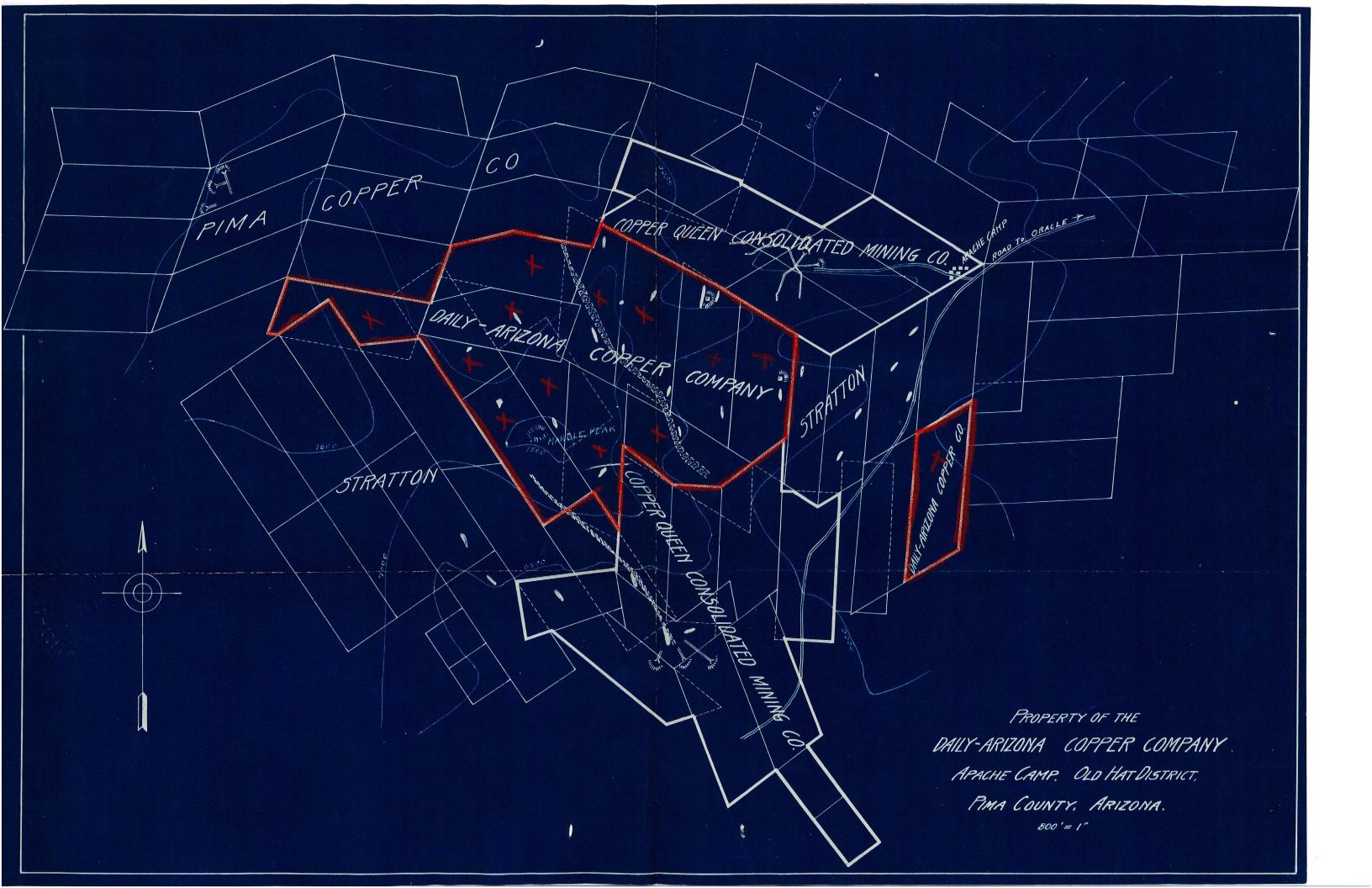
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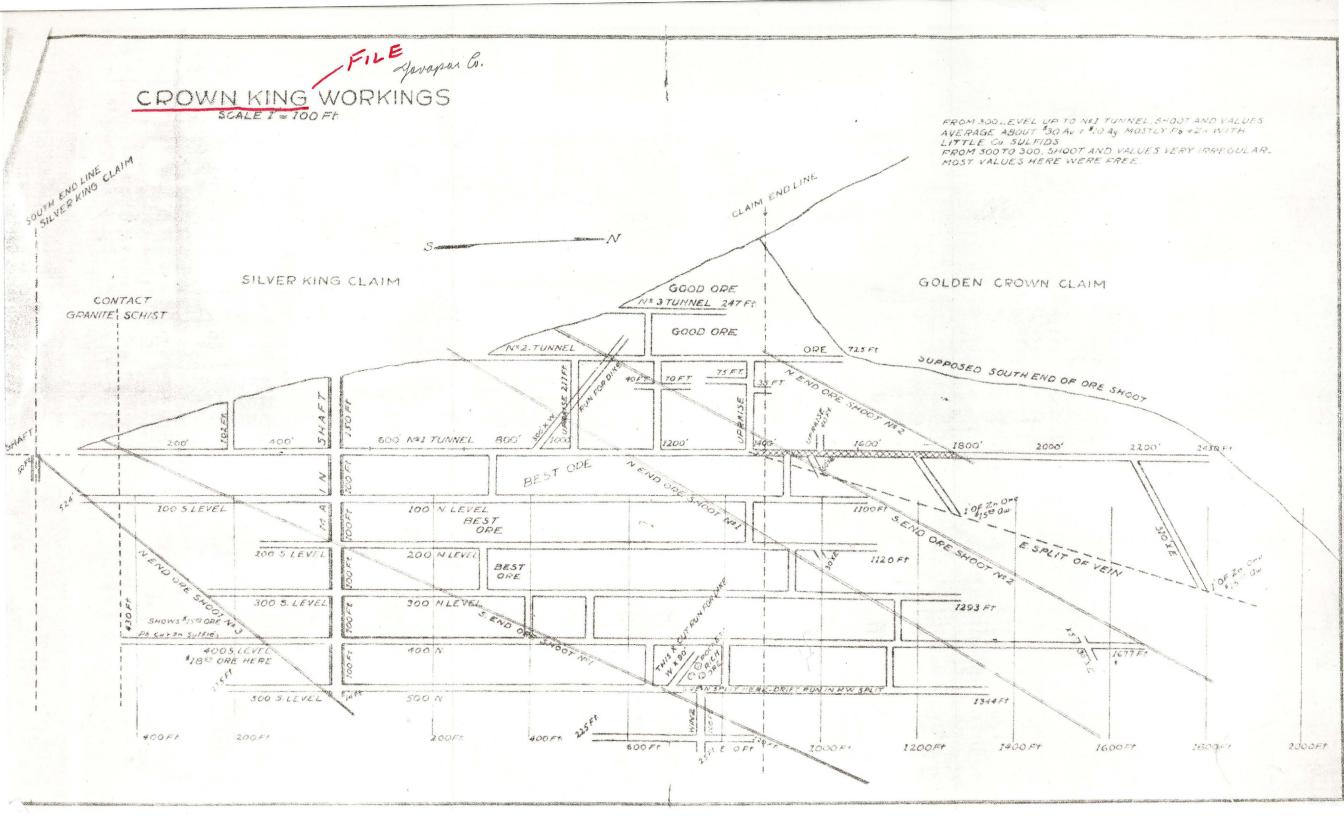
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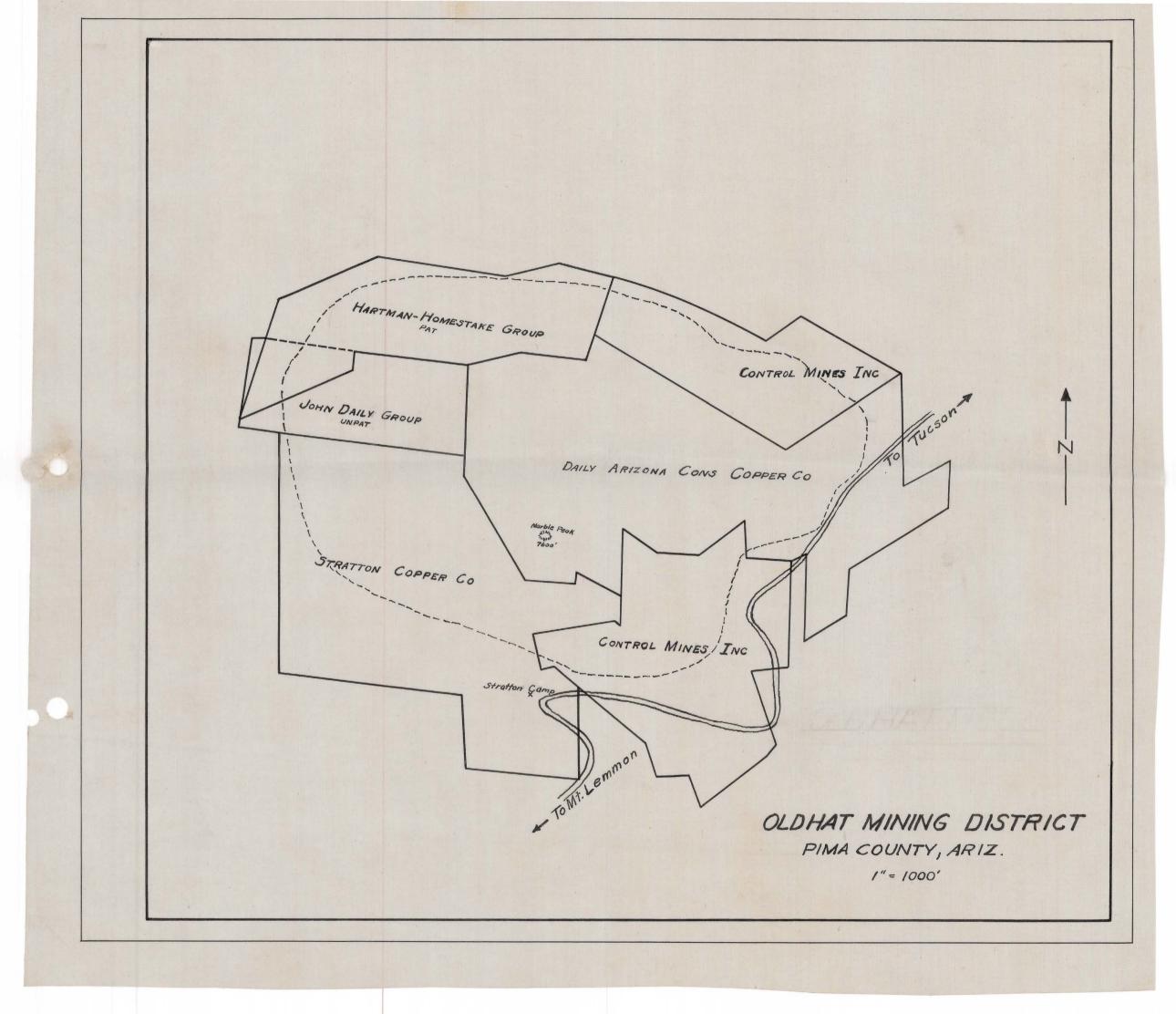
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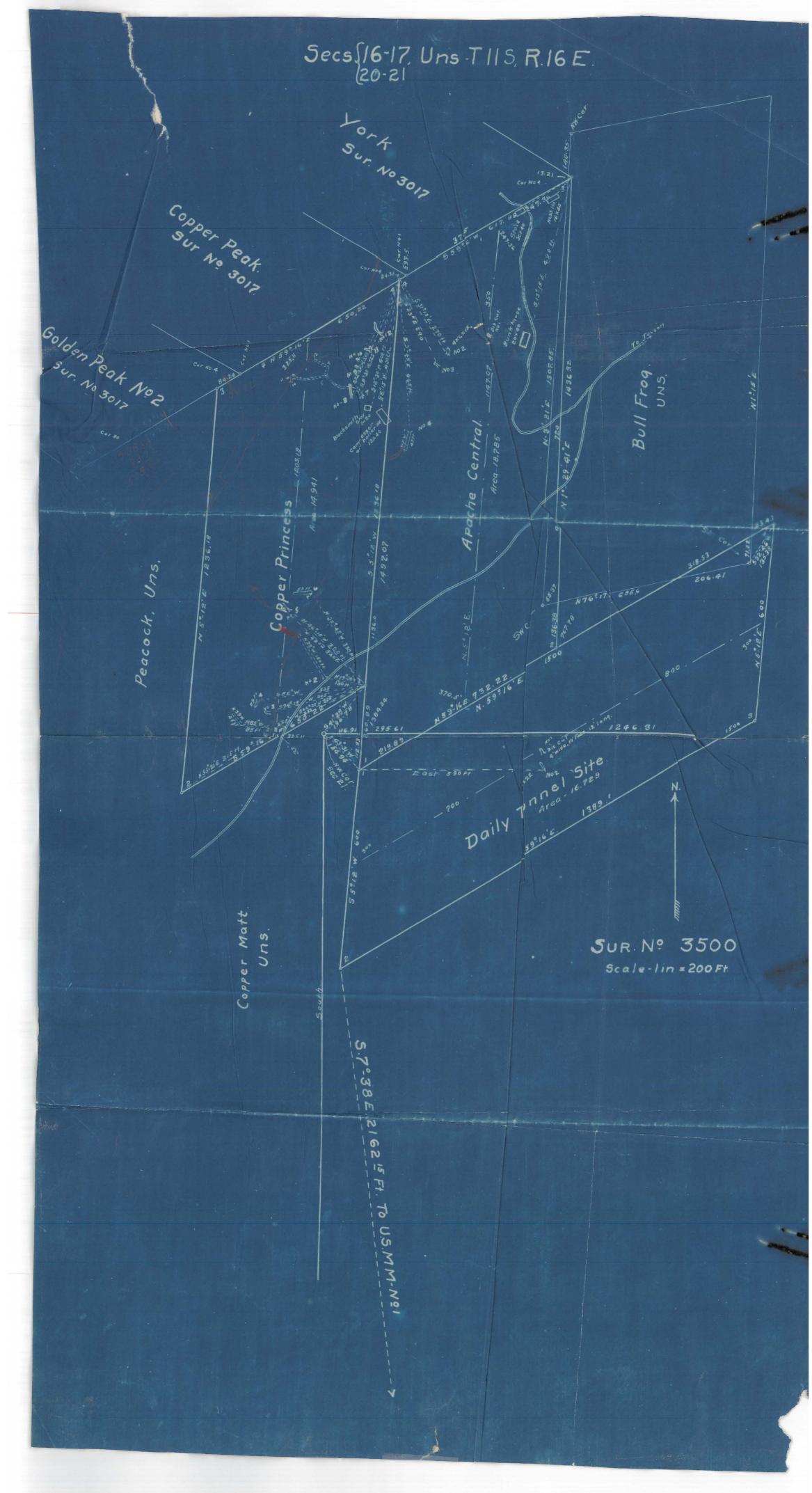
COPPER QUEEN CONSOLIDATED MINING CO.











TO U.S.L.M. Nº 2871

OSTORE

YORK

SOR

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	D.C.		5×12		4×6	× 30	
NO.2							
	COPPI	R	PEAK	1	ODE		

	BUILDING	10 × 11	\$ 43° 23'W			
		14 × 21	3 41" 28'W	295.5		
110.9			5 36° 36'W	281.0		
		20×48		291.6		

EAGLE NO.2 LODE - TOTAL AREA. 16.805	
AREA IN CONFLICT WITH	
SUR. NO. 2871 - HIDDEN TREASURE LODE 0.021 A.	
GRAND CENTRAL LODE - UNSUR	
EAGLE LODE :- TOTAL AREA	
AREA IN COMPLICE WITH	
YORK LODE - THIS SURVEY	
GRAND CENTRAL LODE UNSURVEYED 2.263 A	
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COPPER PEAK LODE - THIS SURVEY 0.050 A	
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YORK LODE - THIS SURVEY 0.050 A	
AND REAK NOS LODE - TOTAL AND NET AREA 14.215	

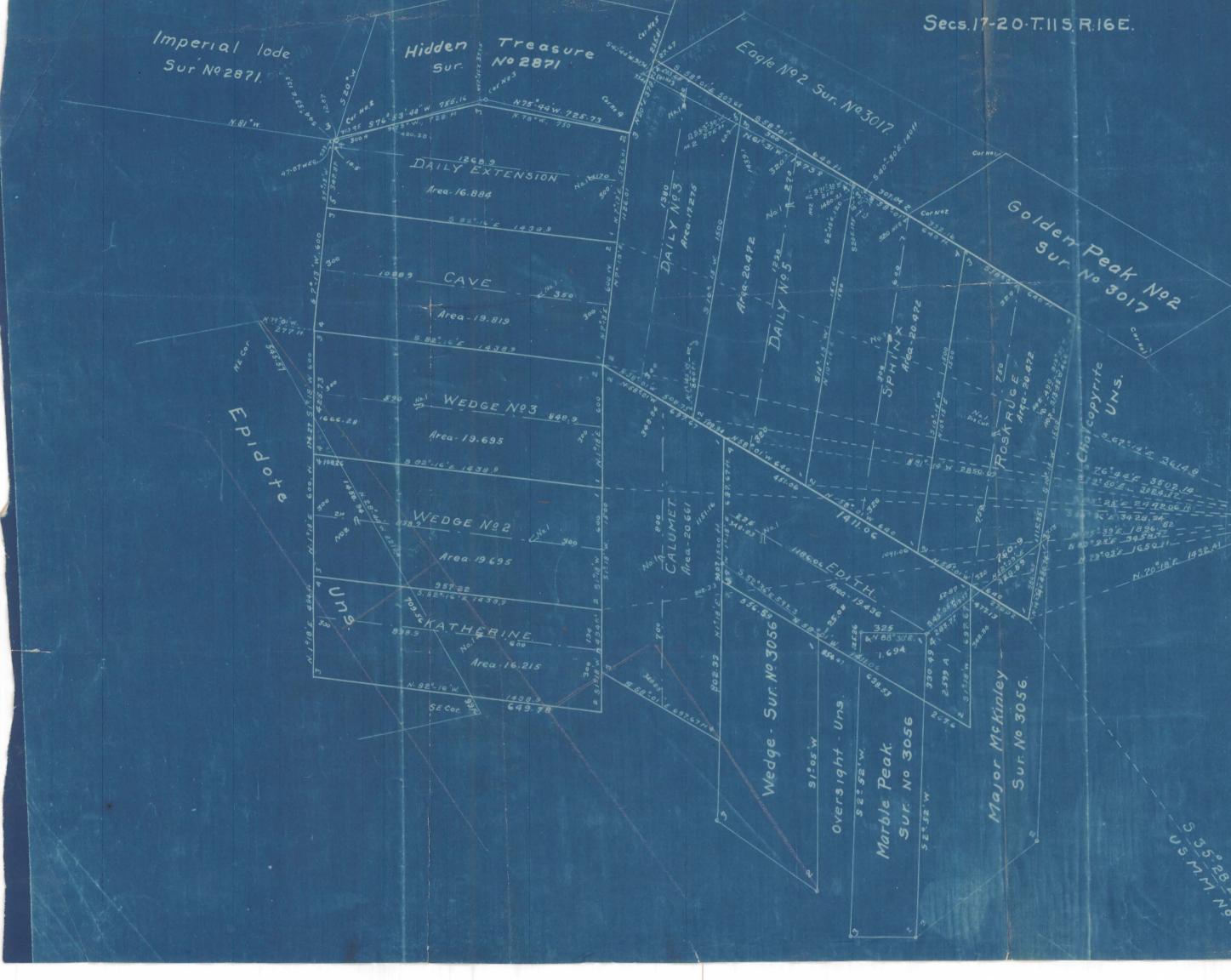
GRAND CENTRAL

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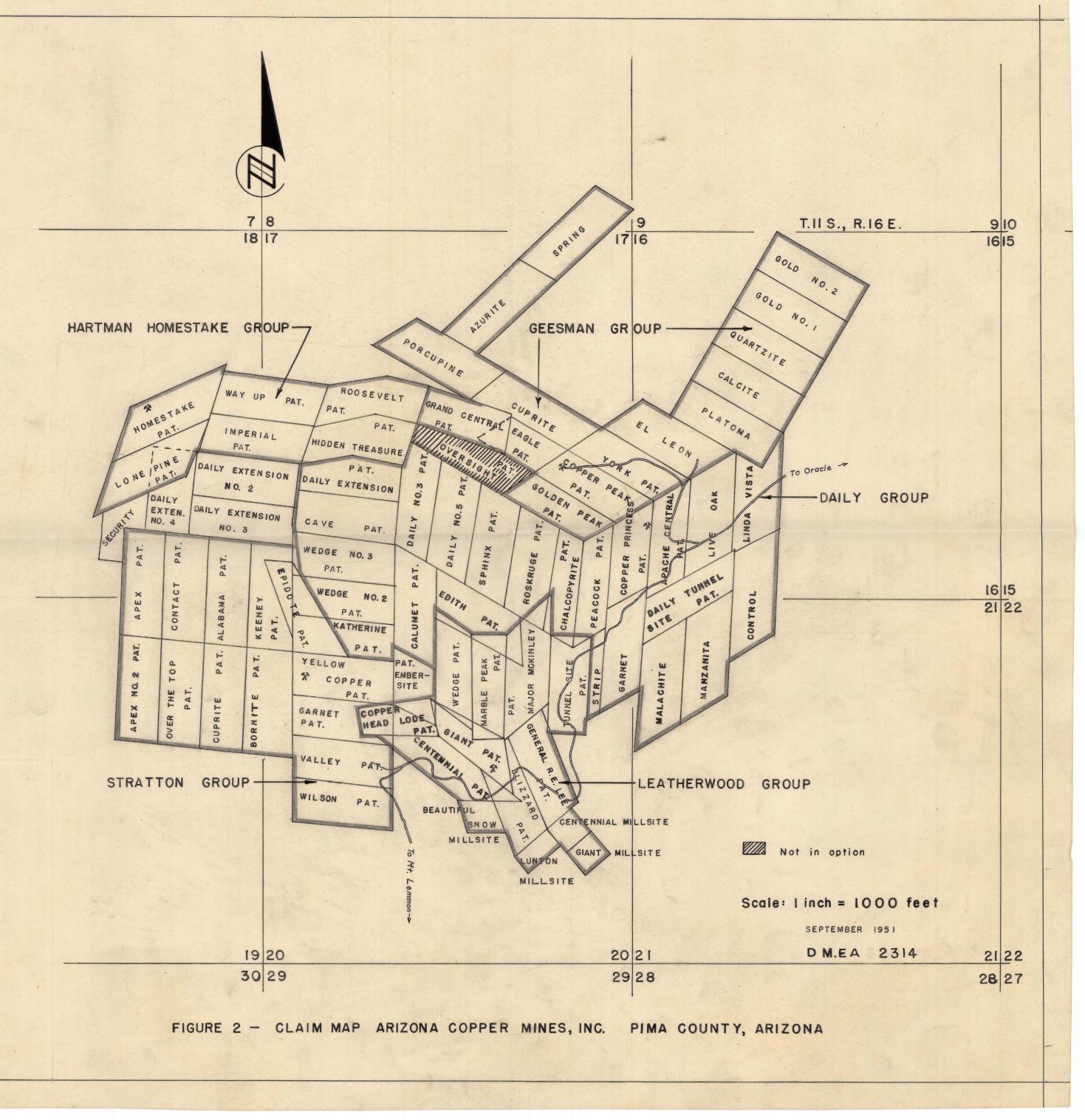




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N.W. Cor. Sec. 21, T 115, R. 16E.

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PLAT NORTHERN END COPPER PRINCESS CLAIM DAILY-ARIZONA CONSOLIDATED COPPER COMPANY SHOWING EXTENT WORKINGS 10thJAN.Y1918

Figures in (blue) are elevations referred to datum 43.5F below head of stake on Dump in Tunnel line For Geological Elevations add 5700'established U.S.G. survey Red Circles represent Transit Points

> SCALE = 20 F.F. to 1 Inc. h arthur. C Wheattey 26# Jany 1918 46 N. Stone Arc 'Turson. ARIZ.

> > Corner Not

86° 38 F

Copper Peak

jolden Peak O jurvey 3017

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- 100

-200

90LDEN 90LDEN -400

- 500

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GROUND

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