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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: BIG BUG COPPER

ALTERNATE NAMES:

BLACK HILLS

YAVAPAI COUNTY MILS NUMBER: 1012B

LOCATION: TOWNSHIP 12 N RANGE 2 E SECTION 7 QUARTER S2 LATITUDE: N 34DEG 25MIN 58SEC LONGITUDE: W 112DEG 11MIN 24SEC TOPO MAP NAME: MAYER - 7.5 MIN

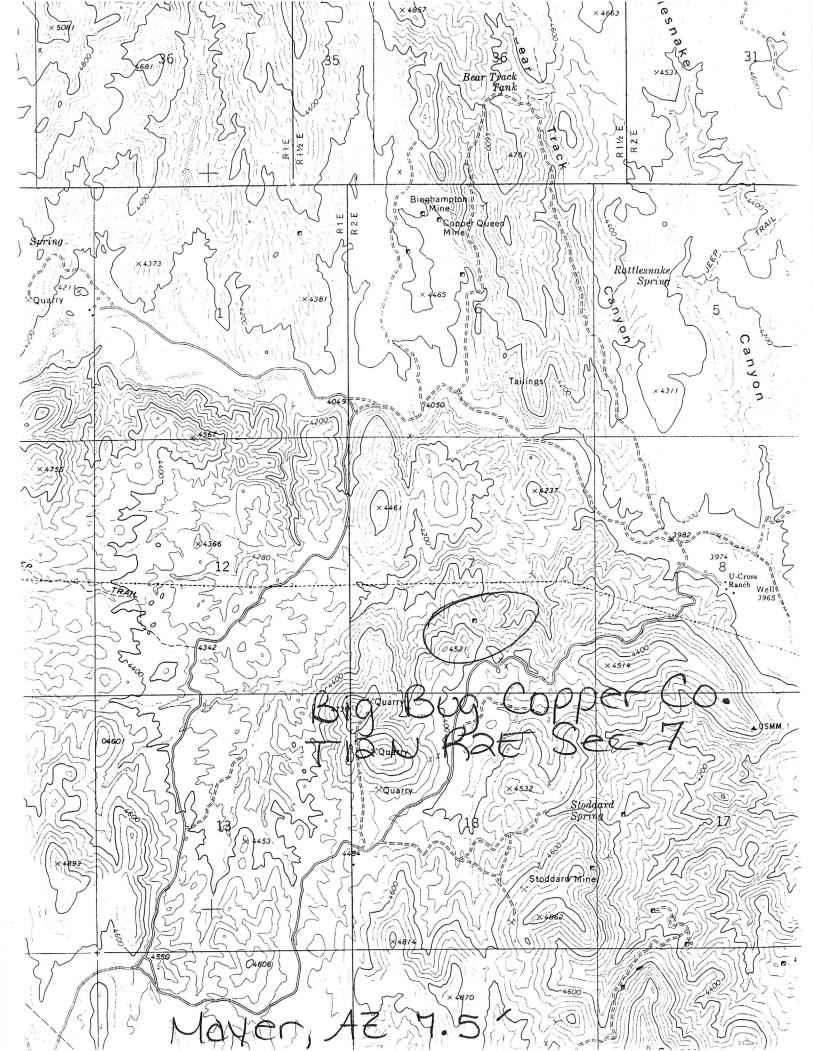
CURRENT STATUS: EXP PROSPECT

COMMODITY:

COPPER GOLD SILVER

BIBLIOGRAPHY:

USGS MAYER QUAD ADMMR BIG BUG COPPER FILE YAVAPAI MAGAZINE MAR. 1918 P 5 SHARLOT HALL MUSEUM PRESCOTT, AZ AA. MGN. JRNL. APR. 1919 P 82 WEED, W.H. THE MINES HANDBOOK VOL XIV 1920 P 340



BIG BUG COPPER CO

REFERENCES

YAVAPAI COUNTY AGUA FRIA DIST. T12N R2E Sec. 7

Yavapai County MILS Index #1012B

AKA: Black Hills

Yavapai Magazine March 1918, p. 5

AZ Mining Journal, April 1919, p. 82

The Mines Handbook Vol. XIV 1920, p. 340

Mayer, AZ 7.5' Topo (included in file)

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*** GENERAL REFERENCES** FICUSOS BULL 782. .10 REFERENCE 1 FILE DATA F2 < ABGMT- USBM REFERENCE 2 F3 (MSGS BULL 1336 PLATE 2 REFERENCE 3 FA (USBM MINE MAP REPOSITORY REEL 4045-17 REFERENCE 4 U.S. CRIB-SITE FORM RECORD IDENTIFICATION 820 (X, 1, M,) RECORD NUMBER B10 < RECORD TYPE DEPOSIT NUMBER 840 <_ FILE LINK IDENT. 850 (USBM 004 025 0193 GI (81 . 1. 0.9.) INFORMATION SOURCE BS0 (1.2. REPORT DATE REPORTER(SUPERVISOR) G2 < DEW ITT, ED. H (last, first, middle initial) (last, first, middle initial) SITE NAME A 10 BIG BUG MINE REPORTER AFFILIATION GS < ABC MT All & BURZOE , OLD MINER SYNONYMS LOCATION MINING DISTRICT/AREA ASO AGUA FRIA DISTRICT AGO YAU HAN STATE ASO (AZ) COUNTRY A40 (.U, S.) COUNTY > PHYSIOGRAPHIC PROV A63 (1,2,1) A62 (1,5,0,7,0,1,0,2,8, DRAINAGE AREA LAND STATUS A64 (0,0, F. . 1. ATO MANER (19 7.4) QUADRANGLE SCALE A100 (24,0,0,0 QUADRANGLE NAME SECOND QUAD NAME A92 SECOND QUAD SCALE A91 <____ A107 (,45,40, 8, F,T) ELEVATION UTM *ACCURACY GEODETIC NORTHING A120<3,8,0,8,7,7,0) LATITUDE ATO CL N,) ACCURATE ACC (circle) A130 (3,8,9,7,4,0) W,> EASTING LONGITUDE ABO ESTIMATED EST < ZONE NUMBER ATTO (+11, Z) CADASTRAL ATT < 0,1,2,1,: *RANGE(S) A78 (0,0,2,E, : , . TOWNSHIP(S) A79 - 17 . . . 1 SECTION(S) SECTION FRACTION(S) ATE SW OF SW ABIS GILL AND SALT RIVER MERIDIAN(S) POSITION FROM NEAREST PROMINENT LOCALITY A82 41 MILES NORTHEAST OF MAVER, HIZONA . LOCATION COMMENTS AND (0.3 MILES SOUTHEAST OF STODD ARD MILE ESSENTIAL INFORMATION

ESSENTIAL SOMETIMES OR HIGHLY RECOMMENDED

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COMMODITY SUBTYPES				
GEN. ANALYTICAL DATA				
COM. INFO. COMMENTS				
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YEAR OF DISCOVERY				
PRESENT/LAST OWNER		14		
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PRESENT/LAST OPERATOR				
EXPL./DEV.COMMENTS				
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GENERAL COMMENTS

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REPORT BIGBUG COPPER COMPANY

LOCATION.

The Big Bug Copper company's claims are located in the well known Copper Mountain mining district, about five miles northeast of Mayer, in Yavapai county, Arizona. The property consists of seven full claims, or about 140 acres.

ACCESS IBILITY.

The property can be reached in a short drive by auto from Mayer, which is the nearest freight station on the Crown King branch of the Santa Fe railway system. Freight c an be brought to the mine by auto truck at small expense and ore shipments can be made to the station by the same method of hauling. The large smelter of the Consolidated Arizona Smelting company is only nine miles distant at Humbeldt, where practically all of the copper ore of the mines of the district, is shipped.

HISTORY OF THE MINE AND DISTRICT.

Copper Mountain is, itself, a prominent land-makk of this district. The first mining of the section was done on the north end of the mountain by Isaac Stoddard about thirty-five years ago at which time a small smelter was built by him on the Agua Fria river a short distance from his mine. The development of the property opened a considerable amount of high grade and milling grade of copper ore. A number of reputable mining engineers have carefully examined the formation of this copper mountain and excellent reports by them as to its ore possibilities have been made.

The Big Bug company's holdings adjoin the original Stoddard mine on the north and east: An extension of the ere vain system in the Big Bug would carry it into the Arizona Binghampton and the Copper Queen mines, which lie to the north about one and one-half miles. Both of these mines are steady producers of an excellent grade of milling ere. Each of the mines has an eil flotation mill in operation on the property this process being especially well adapted to the treatment of the class of sulphide ores found in this district.

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copper and this is the average that I would place on the ore body from the surface to the present depth of the shaft. This average is about the same as that of the other copper mines of this immediate district such as the Arizona Binghampton and the Blue Bell.

At the bottom of the shaft, crosscuts have been run east and west and while no great discoveries of ore have been made in this work, I consider the showings of ore of particular value in the determination of the future work on the property.

I would call particular attention to the slip in the formation that is found in the east crosscut where the formation is an flatered silicified schist. It is here that the ore seems to be both primary and secondary in formation. An excellent indication of a larger body of ore at this point is the softening of the formation which would make it possible for the easy deposition of the values.

Southwest of the shaft, the surface shows a strong jasperoid dike cutting through the porphyry and this undoubtedly had a lot to do with the deposition of valuable ore bodies at this point. CLIMATE.

The climate is such that work can be carried on throughout the entire year. The elevation is about 4,400 feet above sea level. POWER.

The Arizona Power company's main power line passes within a few hundred feet of the shaft. Whis power is cheap and is used by practically all of the mines of the district.

LABOR.

Due to the nearness of a good live town and the excellent climate, there is never any difficulty in getting plenty of good mine labor.

RECOMMENDATIONS.

There is but one thing necessary in the development of the copper properties in this schist belt to make them commercially profitable and that is depth and development. My recommendations would be that the present shaft be sunk to the 500-foot level before cutting another station and at that point a thorough system of drifting and crosscutting be carried out. It is my belief that at this depth, the ore body that is making on the 225-foot level at the ted on the "Jerome to Phoenix" copper bearing schist belt, the large copper mines at Jerome being but 18 miles north and the Blue Bell, DeSete and Kay mines being to the south.

That the ore bearing formation in this district has depth has been well proven by the deep workings at the Arizona Binghampton and Copper Queen mines on the north and the Blue Bell and Kay properties on the south. In the Arizona Binghampton, a 3-compartment shaft has recently passed the 950-foot level where a crosscut found one of the several ore bodies in place and much wider and of higher grade than on the upper levels. On the 1,200-foot levelof the Blue Bell mine, the best grade of ore was found and the ore lenses were larger than on the upper levels. It has been estimated by various well known mining engineers that the possible depth of the ore deposition of this schist belt is from 5,000 to 7,000 feet.

GEOLOGY.

My observations of this particular district around Copper mountain are that the formation is very favorable for the deposition of mineral. The enclosing rock is the Yavapai schist which is the formation that extends north to the Jerome copper district and south to the Kay copper mine and to New River. Strong porphyrydiorite dikes have intruded the schist formation which are highly mineralized with iron and in many places, outcrops of copper carbonate and copper glance appear which are but indications of commercial deposits of copper ore that are to be found with depth. as has been proven in the mine development of this district.

MINE DEVELOPMENT.

There are numerous shallow shafts and pits along the strike of the ere system of this preperty. The main workings are confined to the shaft at the south end of the preperty which has reached a vertical depth of 225 feet. The hoist equipment is complete and has a capacity for sinking 800 to 1,000 feet.

The shaft has been in a commercial grade of copper ore from the surface to the present depth. Places in the shaft have encountered quite remarkable high grade ore. I have carefully sampled the dump at the shaft which should give a general average of the pre as found in the workings and my average was about 3 per gent point where the formation has become softer will be found to have developed into a large and commercial body of copper ore. It is dipping toward the shaft and should be encountered in the shaft at about the 500-foot level.

I would also expect to find a valuable ore deposit at the intersection of the jasperoid dike on the 500-foot level. This can be determined by a drift run a short distance from the shaft on that level.

To the north, the condition that exists on the surface leads me to believe that development in that direction should not be slighted. The surface shows copper for a distance of about 2,000 feet on the Big Bug ground and for a width of 1,200 to 1,500 feet and of particular interest, there is a phase of the schist that is especially promising, for it is in the character of "blue" schist that the best grade of copper ore has been found in this district.

The schist on this property is of a highly altered character and is idential with the schist found in one of the most noted copper camps of Arizona where are situated two of the most celebrated mines of the world.

I consider the future development of this property not speculative to any great degree. The producing mines around it did not, as a rule, have so good surface outcrops of copper ore at it has. The shaft has and is still in commercial ore and all of the lower workings at the present depth, are in ore.

Respectfully submitted,

mgineer of Mines

ARIZONA 1920

Management claims to have spent \$60,000 in development work, driving tunnels, 1,000' and 2,000' long respectively, and to have 10,000 tons of \$8 ore on the dump besides 500,000 tons in sight and blocked out above tunnels and between two winzes sunk below the tunnel level.

Equipment: engine, compressor and drills,

Reported idle 1918-19.

340

BEEMER CONSOLIDATED GOLD & COPPER CO.

Owns the Stormeloud Mine at Mt. Union, 12 miles S. of Prescott, ARIZONA Yayapai county, Ariz. Idle. BELCHER MINE

Formerly part of the Belcher Mining Co., but bought at tax sale by George Demain, Prescott, Ariz.

Property: 5 claims including the Belcher, Mammoth and the Eugene in the Big Bug district, 13 miles south of Prescott. Vein carries gold and silver, reported to average \$5.90 per ton.

Said to be under option to John R. McEwen and E. C. Evans representing Phoenix parties, for \$100,000. BELCHER MINING CO.

Defunct and assets reported sold for taxes. Fully described, Vol. XII. See Belcher Mine and Red Rock Mine. ARIZONA BIG BLUE MINING CO.

Mail returned unclaimed, March, 1919, from Constellation, Arizona. Inc. 1911, in Arizona. Cap., \$1,000,000; \$1 par. Col. E. F. Brown, owner; J. A. Caskey, supt. Property: the Big Blue and Copper Prince mines on the Hassayampa river, 14 miles from Wickenburg, Yavapai county, showing fissure veins in schist, that yield high-grade silver-gold-copper ore. Development: by 2 shafts commented on 2007 lived drifts comments

Development: by 2 shafts, connected on 200' level, drifts, crosscut and

tunnels.

Equipment: includes crusher, pump, gasoline engine, hoisting plant a concentration mill. Probably idle. and a BIG BUG COPPER CO.

soim bus ARIZONA

Office: Mayer, Ariz. Officers: Frank Thornton pres. gen. mgr.; Carl Raab, v. p.; A. E. Rice, sec.-treas.; Uri Embody, asst. sec.-treas.; with Marshall Stoddard, directors. Property: 6 claims, 5 miles east of Mayer, Yavapai county; 21 claims adjoining the Blue Bell, 2 near the smelter at Mayer, and 2 on Copper

Development: work on the Copper mountain property consists of shaft now 100' deep, reported in ore assaying from 15 to 45% copper. Ore is a sericite schist containing lime spar shot through with chalcopyrite and black oxide of copper. A 30' shaft, 1,000' away, is stated to show the same ore with more glance and gray copper. Machinery was erected in Aug., 1919. Property attracting attention and is regarded by competent engineers

BIG BUTTE COPPER CO.

ARIZONA

Address: H. E. Shumate, sec., Prescott, Ariz.

Officers: Geo. L. Reed, pres.; Ed. Shumate, v. p.; Geo. C. Ruffner, treas. Inc. April, 1917, in Montana. Cap., \$1,500,000; \$1 par. Property: 43 claims in Copper Basin district, 12 miles from Prescott, developed by tunnel, shafts and open cuts, from which some copper and silver ore has been shipped. Reported driving tunnel to cut vein at point below rich outcrop BIG COPPER CHIEF CO.

Address: care Thomas Boyd, pres., Mound City, Ill.; S. E. Jordan, sec.-treas., Phoenix, Ariz.; R. E. Grace, v. p. Mine address: Canyon, via Bumblebee, Ariz.

Property: the Jasper N. Nellis groups, 11/2 m. S. W. of Bumblebee, Yavapai county, shows schist mineralized by copper glance, etc., in a zone 300'

Developed by 50' shaft, 250' tunnel and many pits.

DIG 1

BIG DOME MINES

Owner: C. Benjamin Hay Property: 4 patented cl Walker district, Yavapai coun prophyry and schist, with gold ton in a 10-inch streak. Devel 3 h. p. gasoline hoist made by Expended \$1,800 in 1918;

BIG LEDGE COPPER CO. Office: 512 Sellwood Bld

York. Mines at Big Bug (H Yavapai county, Ariz.

Officers and directors: M mng. director; J. A. Percival, Titus, J. B. Cotton, directors. Company is the successor

Inc. in Arizona, Jan. 20, 19

paid and non-assessable; incre ing., Dec., 31, 1918, 2,865,587 sl velopment company was conv the name being changed to H shares increased to \$5, the nu change made share for share; the Tredwell or Great Wester In June, 1918, new interests, k control.

The annual report states ternut mines have been made only \$13,500 remains unpaid. \$102,278, a sum sufficient to co AM Property: consists of 3 a 1,900 acres. The Black Hills 4 miles east of Humboldt, Ariz and 22 unpatented claims; the 7 unpatented claims. In July, purchased for \$30,000. They a

There is a spur of the raily aerial tram, costing \$12,000 w nut ore to the railroad, but w

This property shows a fis hornblendic schists near a dior whose ore contains copper-py The claims cover 4,000' along t along a split or intersecting ve age width of 2' of ore reporte

Development: comprises Henrietta, or lower tunnel. sunk 650' below the tunnel floc double-drum electric hoist go shaft is to be sunk to 850' and 650' below the tunnel.

Still farther west and ovand recently reopened, compr 300' depth and by No. 2 sha tunnel 327' above the Henriet below the main tunnel, the Her This will eventually be connec-An interesting vein, the

Queen which adjoins the in is one of the producing he Mayer district. A total at of development work has on the property during the -development work consinking, drifting, raising 2. Silver Belt utting. The shaft is down

At the beginning of the serves totaled 20,000 tons. 17. 18,239 tons were dead 4.627 tons were delive mill, leaving 33,612 tons on January 1st, 1918.

to-This property adjoins Queen on the south. Little at work has been done on ty outside of a shaft down There is no equipment on ty. The showings encountlimited workings are good anagement expects to have active properties in the the near future.

Jountain Mines Co .- This any years ago was opened a Stoddard, the pioneer of first smelter in Arizona obe. Some remains of this stand on the banks of the ie mine. Recently Celora as undertaken to revive ty. Work of unwatering sering the shaft has just eted by Chaney, mine supof the Binghamton. The cen unwatered to the 160 but this it not the bottom From the 160 level the aues down to an unknown incline. Just how deep and what drifting has gunknown as no records ings were kept by Isaac The management is now is from contractors presinking the shaft another

rearrhis property inclaims which formerly a Philippine group. In

ing Co. Smelter 4. Loma Verde 6. Butternut-N 7. Henrietta 10. Lelan

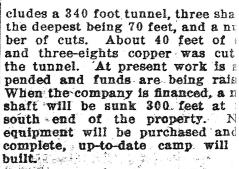
to define walls and a drift is also be- claims. ing driven in under the shaft that has produced some high grade copper ore several years ago. The property will be completely equipped with machinery and a camp will be built.

Big Bug-This property is situated on Copper Mountain. At present two men are working in order to determine a suitable location for a shaft. There is an old shaft down 35 feet. In addition to this there are several other small cuts on the property. Two tunnels have also been started. ountain. Isaac Stoddard From these shallow workings, good showing of ore have been encountered. It is planned to develop the of eight claims located three miles property extensively and permanent-

The southern neighbor of the Big Bug is the Copper Mountain Mines Company.

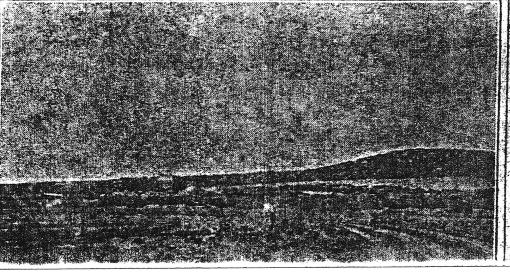
Jerome Copper-The holdings of the Jerome Copper Company are situated at Copper mountain. Little development work has been done on the property to date. but showings encountered on the surface are good enough in the company's estimation to warrant extensive development work. It is expected that work will begin in the near future.

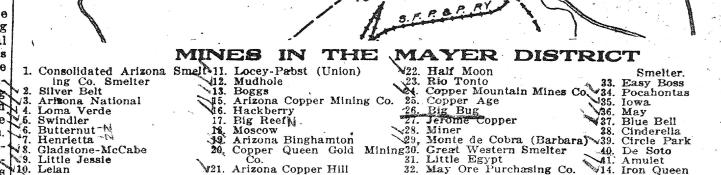
VBarbara-This property was recently taken over by the Monte de Cobra people. The property consists east of Mayer on Copper Mountain. about one and a half miles ly. The property consists of seven Development work done to date in-



Great Western Smelter-The sm er has been closed down for about months. The date of re-opening Indefinite at present, but it is I probable that the smelter will re-on until a sufficient quantity of ore h been blocked out in the Henrietta a Butternut properties to feed the pla indefinitely. At present the capac of the smelter is 200 tons da Sometime before the plant shut do a new stack was built which wou give the plant a capacity of 500 to additional. This unit, however, 1 not been completed.

Little Ecypt-This property co sists of six claims of 120 acres. The is a 100 foot shaft and two crosses 80 and 100 feet respectively on t property. The ore encountered these workings according to the ma agement averages from 3 to 23 p cent copper. Other values encour ered are gold and silver. At prese no active work is being done. T property lies about a mile southes of Mayer. 1.101





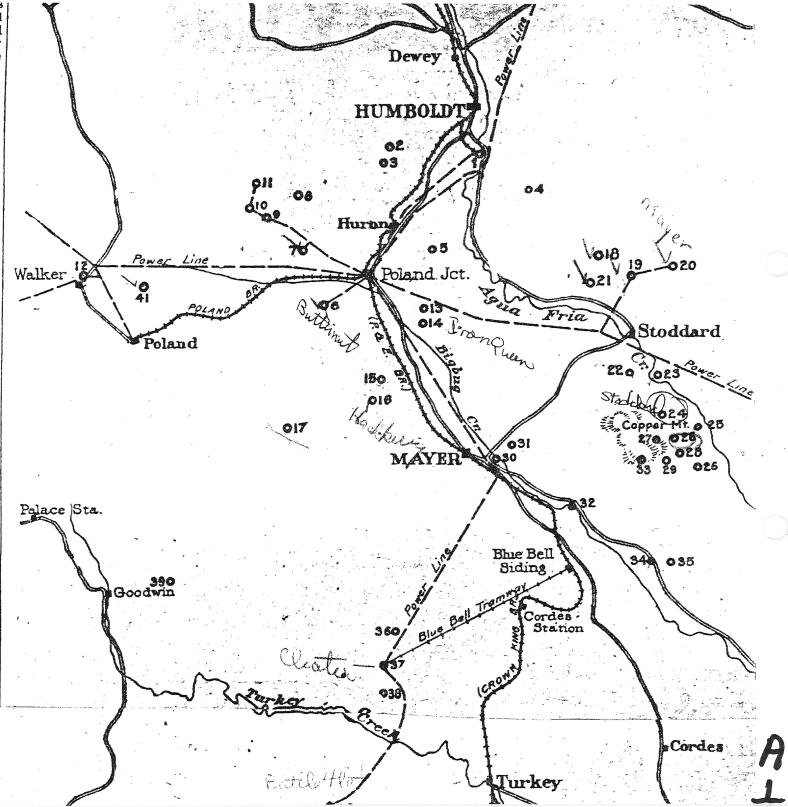
tes north of Mayer. This has since been abandoned and

removed. The principal of the Boggs and Hackberry d and copper. Recently the bodge people have shown erest in reviving these prop-Phe Boggs lies about a mile t of Poland Junction and the ry about two miles southwest d Junction.

Queen—This property was d about the same time as the ad Hackberry. It also furrefor the old smelter at Ari-7. It is now closed down and a for a number of years. 9. Sht years ago, however, both Queen and the Boggs were ily revived and some ore was a the Treadwell Mining Comnelter at Mayer.

a Copper—On this property ent work is being prosecuted ally. The property consists claims lying about three thwest of Mayer. The shaft about 400 feet and good of chalcopyrite ore are beuntered. Three shifts are king and 20 men are em-As soon as the property gets lucing basis, an aerial trambe built from the mine to oad which is about threeif a mile distant.

mton-This property is lo-Stoddard five miles east of strict. The shaft is down About 700 feet of developrk are being done every The property is equipped binery to carry on developk indefinitely and the camp rd is fast assuming the proof a thriving town. All ore at the mine is at present bed at the company's flotation out 200 tons are now being ily. Approximately 30 tons trates averaging 231/2 per or are being shipped daily



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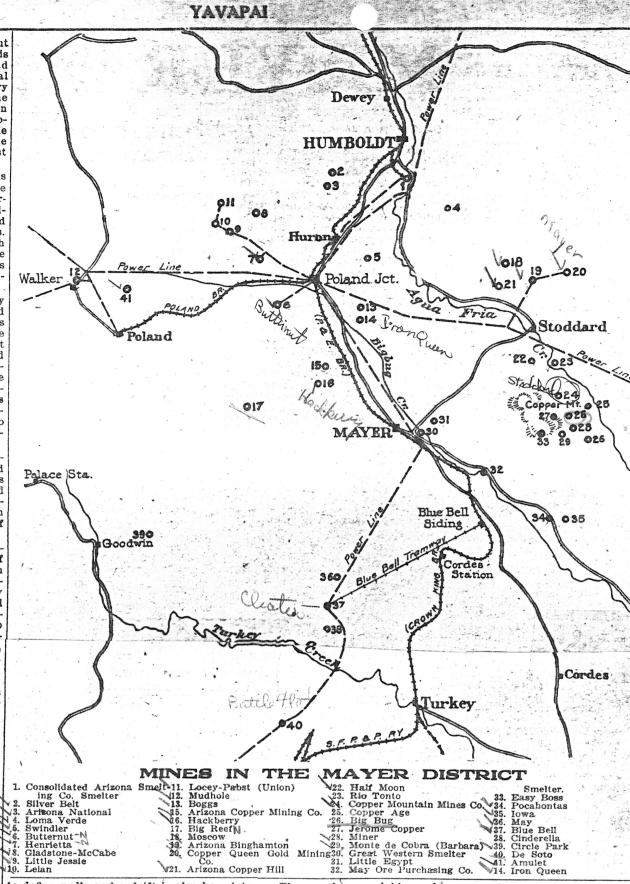
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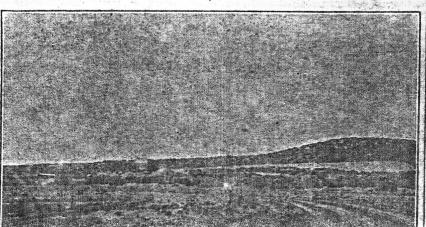
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cludes a 340 foot tunnel, three sh cludes a 340 foot tunnel, three sh the deepest being 70 feet, and a r ber of cuts. About 40 feet of and three-eights copper was cu the tunnel. At present work is pended and funds are being ra: When the company is financed, a shaft will be sunk 300 feet at south end of the property. equipment will be purchased an complete, up-to-date camp will built.

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