CONTACT INFORMATION
Mining Records Curator
Arizona Geological Survey
1520 West Adams St.
Phoenix, AZ 85007
602-771-1601
http://www.azgs.az.gov
inquiries@azgs.az.gov

The following file is part of the

Arizona Department of Mines and Mineral Resources Mining Collection

ACCESS STATEMENT

These digitized collections are accessible for purposes of education and research. We have indicated what we know about copyright and rights of privacy, publicity, or trademark. Due to the nature of archival collections, we are not always able to identify this information. We are eager to hear from any rights owners, so that we may obtain accurate information. Upon request, we will remove material from public view while we address a rights issue.

CONSTRAINTS STATEMENT

The Arizona Geological Survey does not claim to control all rights for all materials in its collection. These rights include, but are not limited to: copyright, privacy rights, and cultural protection rights. The User hereby assumes all responsibility for obtaining any rights to use the material in excess of "fair use."

The Survey makes no intellectual property claims to the products created by individual authors in the manuscript collections, except when the author deeded those rights to the Survey or when those authors were employed by the State of Arizona and created intellectual products as a function of their official duties. The Survey does maintain property rights to the physical and digital representations of the works.

QUALITY STATEMENT

The Arizona Geological Survey is not responsible for the accuracy of the records, information, or opinions that may be contained in the files. The Survey collects, catalogs, and archives data on mineral properties regardless of its views of the veracity or accuracy of those data.

PRINTED: 06-30-2006

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: IOWA GROUP

ALTERNATE NAMES:
PATENTED CLAIMS MS 1914
ROESE MINING CO. PROPERTY

YAVAPAI COUNTY MILS NUMBER: 1022

LOCATION: TOWNSHIP 12 N RANGE 2 E SECTION 32 QUARTER SW
LATITUDE: N 34DEG 22MIN 33SEC LONGITUDE: W 112DEG 10MIN 31SEC
TOPO MAP NAME: MAYER - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
COPPER SULFIDE
SILICON
GOLD
SILVER

BIBLIOGRAPHY:
USGS CLEATOR QUAD
BLM MINING DISTRICT SHEET 46
USGS MAYER QUAD
ADMMR IOWA GROUP FILE
YAVAPAI MAGAZINE MAR. 1918 P 5-6 SHARLOT HALL
MUESUM PRESCOTT, AZ
CLAIMS EXTEND INTO S2S2NW AND S2S2SE SEC. 32
ARIZONA MINING JOURNAL SEPT 1917 P 11

COMMODITY INFORMATION

*COMMODITIES PRESENT C10 < C,U, ... AU, >
*ORE MINERALS C30 < CHALCOPYRI... AU..FEROUS PYRITE, UNKNOWNS >
COMMODITY SUBTYPES C41 < >
GEN. ANALYTICAL DATA C43 < >
COM. INFO. COMMENTS C50 < >

* SIGNIFICANCE

PRODUCER

MAJOR PRODUCTS MAJOR < C,U, >
MINOR PRODUCTS MINOR < A,G, A,U, >
POTENTIAL PRODUCTS POTEN < >
OCCURRENCES OCCUR < >

NON-PRODUCER

MAIN COMMODITIES PRESENT C11 < >
MINOR COMMODITIES PRESENT C12 < >
OCCURRENCES OCCUR < >

*PRODUCTION

PRODUCER

PRODUCTION (YES) *(circle)* PRODUCTION SIZE (SML) MED LGE *(circle one)*

NON-PRODUCER

PRODUCTION UND NO *(circle one)*

EXPLORATION OR DEVELOPMENT

*STATUS

PRODUCER

STATUS AND ACTIVITY A20 < 4 >

NON-PRODUCER

STATUS AND ACTIVITY A20 < >

DISCOVERER L20 < >
YEAR OF DISCOVERY L10 < > *NATURE OF DISCOVERY L30 < B > *YEAR OF FIRST PRODUCTION L40 < 1920 > *YEAR OF LAST PRODUCTION L45 < 1943 >
PRESENT/LAST OWNER A12 < ROESE, AIRHEART, AND WILSON (1944) >
PRESENT/LAST OPERATOR A13 < >
EXPL./DEV.COMMENTS L110 < >

DESCRIPTION OF DEPOSIT

DEPOSIT TYPE(S) C40 < STRATIFORM MASSIVE SULFIDE >
DEPOSIT FORM/SHAPE M10 < LENS >
DEPTH TO TOP M20 < > *UNITS M21 < > *MAXIMUM LENGTH M40 < 1000 > *UNITS M41 < FT >
DEPTH TO BOTTOM M30 < 225 > *UNITS M31 < FT > *MAXIMUM WIDTH M50 < 225 > *UNITS M51 < FT >
DEPOSIT SIZE M15 < (SMALL) > M15 < MEDIUM > M15 < LARGE > *(circle one)* *MAXIMUM THICKNESS M60 < 25 > *UNITS M61 < FT >
STRIKE M70 < N 20 W > *DIP M80 < STEEPLY WEST >
DIRECTION OF PLUNGE M100 < > *PLUNGE M90 < >
DEP. DESC. COMMENTS M110 < >

DESCRIPTION OF WORKINGS

Workings are: SURFACE M120 UNDERGROUND M130 BOTH (M140) *(circle one)* *OVERALL LENGTH M190 < 200 > *UNITS M191 < FT >
DEPTH BELOW SURFACE M160 < 225 > *UNITS M161 < FT > *OVERALL WIDTH M200 < > *UNITS M201 < >
LENGTH OF WORKINGS M170 < > *UNITS M171 < > *OVERALL AREA M210 < > *UNITS M211 < >
DESC. OF WORK. COM. M220 < >

GEOLOGY

AGE OF HOST ROCK(S) K1 < P,R,O,T, U/PB ZIRCON GREATER THAN 1720 MILLION YEARS >
HOST ROCK TYPE(S) K1A < META RHYOLITE, DACITE >
AGE OF IGNEOUS ROCK(S) K2 < P,R,O,T, AS LINE K1 >
IGNEOUS ROCK TYPE(S) K2A < META RHYOLITE, DACITE >
AGE OF MINERALIZATION K3 < P,R,O,T, >
PERT. MINERALS (NOT ORE) K4 < QUARTZ, CHLORITE >
ORE CONTROL/LOCUS K5 < STRATIGRAPHY >
MAJ. REG. TRENDS/STRUCT. N5 < BEDDING TRENDS N20W >
TECTONIC SETTING N15 < >
SIGNIFICANT LOCAL STRUCT. N70 < FOLIATION TRENDS N10W BUT IS NOT WELL DEVELOPED >
SIGNIFICANT ALTERATION N75 < SILICIFICATION, CHLORITIZATION >
PROCESS OF CONC./ENRICH. N80 < OXIDATION AT NEAR SURFACE >
FORMATION AGE N30 < P,R,O,T, AS LINE K1 >
FORMATION NAME N30A < SPUD MOUNTAIN VOLCANICS AND UNNAMED PRECAMBRIAN METAVOLCANIC UNITS >
SECOND FM AGE N35 < >
SECOND FM NAME N35A < >
IGNEOUS UNIT AGE N50 < P,R,O,T, AS LINE K1 >
IGNEOUS UNIT NAME N50A < AS LINE N30A >
SECOND IG. UNIT AGE N55 < >
SECOND IG. UNIT NAME N55A < >
GEOLOGY COMMENTS N85 < MASSIVE SULFIDE LENS IN METARHYOLITE >

GENERAL COMMENTS

GENERAL COMMENTS GEN < >

* GENERAL REFERENCES

REFERENCE 1 F1 <ABGMT CLIF[illegible]LE

REFERENCE 2 F2 <ABGMT- USBM FILE DATA

REFERENCE 3 F3 <MILS LOCATION DATA

REFERENCE 4 F4 <USGS BULL 1336, PLATE 2

U.S. CRIB-SITE FORM

RECORD IDENTIFICATION

*RECORD NUMBER B10 <>
*RECORD TYPE B20 <X,1,M>
DEPOSIT NUMBER B40 <>
*REPORT DATE G1 <8,1,0,9> (YR. MO.)
*INFORMATION SOURCE B30 <1,2>
*FILE LINK IDENT. B50 <USBM 004 025 1171>

*REPORTER(SUPERVISOR) G2 <DEWITT, ED, H> (last, first, middle initial) ( ) (last, first, middle initial)

*REPORTER AFFILIATION G5 <ABGMT>
*SITE NAME A10 <BURLINGTON - IOWA MINE>
SYNONYMS A11 <BURLINGTON, IOWA GROUP>

LOCATION

MINING DISTRICT/AREA A30 <AGUA FRIA DISTRICT>
*COUNTY A60 <YAVAPAI>
*STATE A50 <A,Z>
*COUNTRY A40 <U,S>
PHYSIOGRAPHIC PROV A63 <1,2>
DRAINAGE AREA A62 <1,5,0,7,0,1,0,2>
*LAND STATUS A64 <0,0>
QUADRANGLE NAME A90 <MAYER (1,9,7,4)>
*QUADRANGLE SCALE A100 <2,4,0,0,0>
SECOND QUAD NAME A92 <( )>
SECOND QUAD SCALE A91 <>
ELEVATION A107 <4,2,2,0,F,T>

UTM

*NORTHING A120 <3,8,0,4,2,70>
*EASTING A130 <3,8,9,9,2,8>
ZONE NUMBER A110 <+,1,2>

*ACCURACY

ACCURATE ACC (circle)
ESTIMATED EST <MILS LOCATION ONLY>

GEODETIC

*LATITUDE A70 < - - N>
*LONGITUDE A80 < - - W>

CADASTRAL

TOWNSHIP(S) A77 <01ZN>
*RANGE(S) A78 <002E>
SECTION(S) A79 <32>
SECTION FRACTION(S) A76 <NE OF SW>
MERIDIAN(S) A81 <GILA AND SALT RIVER>

POSITION FROM NEAREST PROMINENT LOCALITY A82 <4.4 MILES SOUTHEAST OF MAYER, ARIZONA>
LOCATION COMMENTS A83 <IOWA GROUP APPEARS TO BE SOUTHERN PART OF WORKINGS; BURLINGTON APPEARS TO BE NORTHERN PART OF WORKINGS. UTM COORDINATES FOR IOWA GROUP SHAFT>

ESSENTIAL INFORMATION
ESSENTIAL SOMETIMES OR HIGHLY RECOMMENDED

:h is located about of Mayer. This been abandoned and . The principal ggs and Hackberry per. Recently the ople have shown eviving these prop- s lies about a mile d Junction and the wo miles southwest n.

'his property was ie same time as the erry. It also fur- old smelter at Ari- w closed down and number of years. ago, however, both nd the Boggs were d and some ore was dwell Mining Com- Mayer.

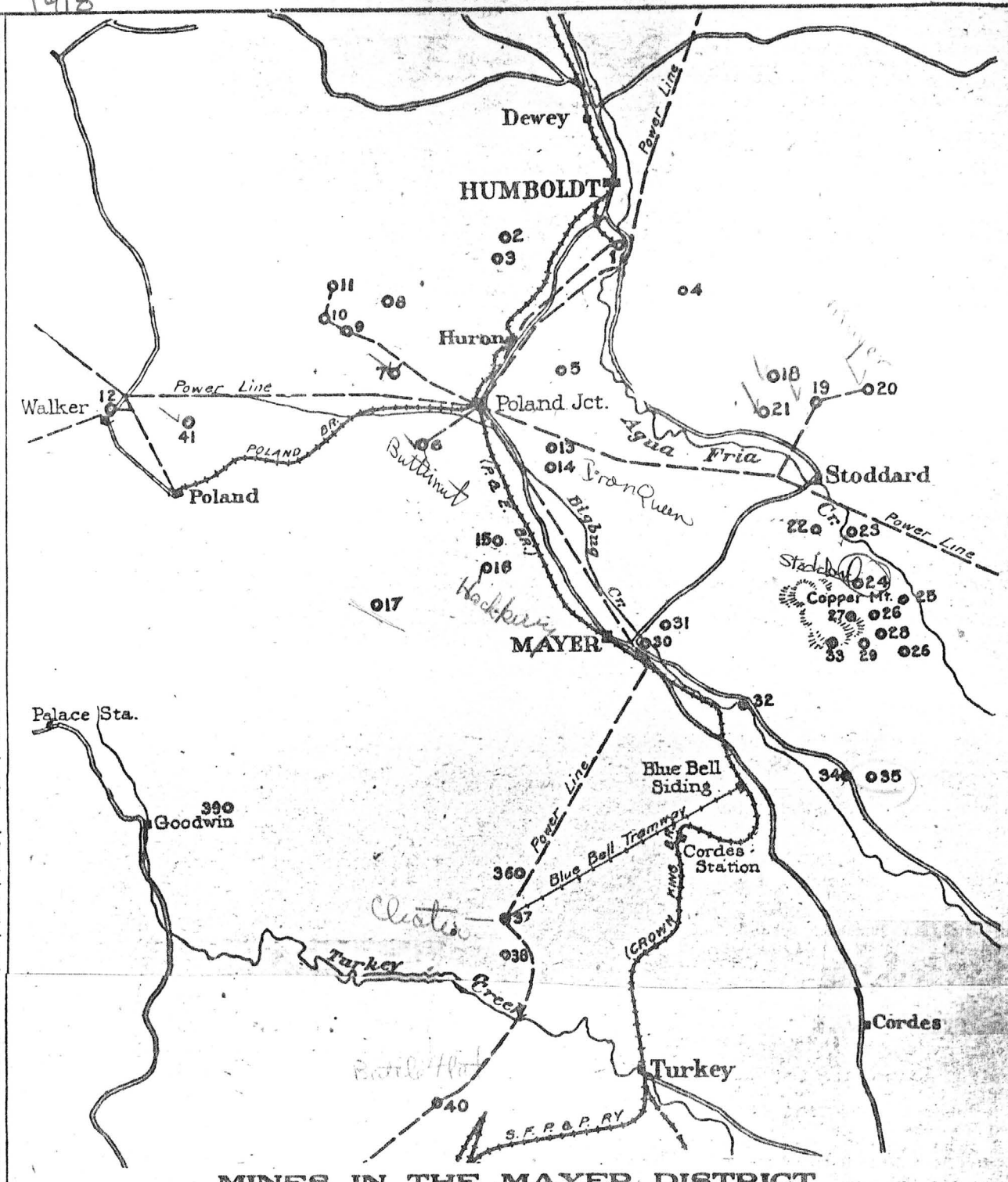
—On this property is being prosecuted e property consists ying about three Mayer. The shaft 00 feet and good opyrite ore are be- Three shifts are 20 men are em- s the property gets sis, an aerial tram- from the mine to h is about three- distant.

property is south- ua-Binghamton and gh the property is t, it has produced copper. Develop- ts of a shaft down and a number of

his property is lo- five miles east of The shaft is down 700 feet of develop- being done every perty is equipped carry on develop- itely and the camp assuming the pro- ing town. All ore ine is at present be- company's flotation tons are now being roximately 30 tons veraging 23½ per eing shipped daily Humboldt.

which adjoins the e of the producing r district. A total velopment work has property during the opment work con- , drifting, raising The shaft is down beginning of the totaled 20,000 tons. 239 tons were de- 7 tons were deliv- leaving 33,612 tons uary 1st, 1918.

is property adjoins on the south. Little has been done on ide of a shaft down is no equipment on showings encount- workings are good



MINES IN THE MAYER DISTRICT

1. Consolidated Arizona Smelting Co. Smelter
2. Silver Belt
3. Arizona National
4. Loma Verde
5. Swindler
6. Butternut
7. Henrietta
8. Gladstone-McCabe
9. Little Jessie
10. Lelan
11. Locey-Pabst (Union)
12. Mudhole
13. Boggs
15. Arizona Copper Mining Co.
16. Hackberry
17. Big Reef
18. Moscow
19. Arizona Binghamton
20. Copper Queen Gold Mining Co.
21. Arizona Copper Hill
22. Half Moon
23. Rio Tonto
24. Copper Mountain Mines Co.
25. Copper Age
26. Big Bug
27. Jerome Copper
28. Miner
29. Monte de Cobra (Barbara)
30. Great Western Smelter
31. Little Egypt
32. May Ore Purchasing Co. Smelter.
33. Easy Boss
34. Pocahontas
35. Iowa
36. May
37. Blue Bell
38. Cinderella
39. Circle Park
40. De Soto
41. Amulet
14. Iron Queen

to define walls and a drift is also being 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

claims. 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 en-

cludes a 340 foot tunnel, three shafts, the deepest being 70 feet, and a number of cuts. About 40 feet of one and three-eights copper was cut in the tunnel. At present work is suspended and funds are being raised. When the company is financed, a new

tation mill. The organization should prove of marked value to the small shipper and prospector in the Mayer district as it will enable them to dispose of small quantities of ore. The plant is equipped with modern sampling and concentrating machinery and represents a cost of upwards of $75,000.

The Pocahontas lies about four miles southeast of Mayer midway between the Blue Bell and Copper Mountain. There are two incline shafts on the property, the deepest being about 200 feet. Good values in lead and silver are now being encountered. At depth the management expects to develop the property as a copper proposition. The equipment consists of a hoist and boiler. A compressor is being installed and as soon as the property begins to produce a flotation mill will be built and equipped.

Iowa—This property lies near the Pocahontas. Surface indications and limited development work indicate that the property is capable of producing good copper values. There is a shaft 250 feet deep on the property.

May—This property adjoins the Blue Bell on the north end. It consists of two patented claims. There are two shafts on the property, 240 and 200 feet respectively. About 400 feet of crosscutting and drifting has been done. The equipment on the property consists of boiler and hoist. The property is now closed down but the management expects to resume operations in the near future.

Blue Bell is one of the biggest producing mines in the Mayer district. It is owned and operated by the Consolidated Arizona Smelting Company. The property is five miles southwest of Mayer in what is locally known as the Big Bug district. The mine is opened up to the 1200 level by a three compartment shaft. It is fully equipped with machinery to carry on development work indefinitely and the camp has just been rehabilitated and will accommodate 140 men. Approximately 20,000 feet of development work has been done, making this property one of the most extensively developed mines in the county with the exception of the United Verde. About 530,000 tons of ore are blocked out. This property ships 11,000 tons of ore monthly to the smelter at Humboldt.

Cinderella—This property is located about two miles south of Blue Bell. At present it is nothing more than a prospect but from a limited amount of development work done and the showings encountered, the owners are planning to equip the property with machinery in order that development work can be carried on a suitable scale. There are several shafts on the property, the deepest being 70 feet and a second being 40 feet. Various other cuts and openings have been worked on the property. The principal values encountered are silver, lead, zinc, and copper. There are a number of tons of ore on the dump and the owners are now considering sending this to the Mayer Ore Purchasing Company's

MAYER The City's Future

about 100 men. Approximately 10,000 feet of development work has been done on the proeptry. Each month 4,500 tons of ore are shipped to the smelter.

Amulet—Work was begun on this old time producer in the fall of 1917 by the General Mines Co., of Reno, Nev. Under the direction of Superintendent C. N. Brown, the mine has been entirely overhauled. The shaft has been sunk to 300 feet at which depth, the management is crosscutting. Ore running as high as 2200 ounces of silver to the ton was shipped from this property in former times.

SPECIALISTS NEEDED

Congress recognizes the fact that the immediate direction of the war should be in the hands of men who have specialized in fighting.

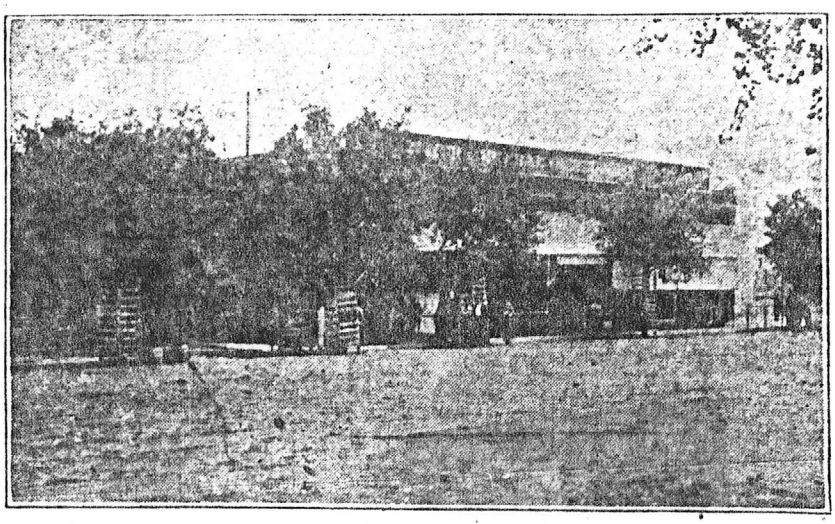
No people can make war effectively with pacifists in charge of the war machinery. People with pacifists' instinct are too ready to find excuses for themselves for the things that they may not do because the things they may be able to accomplish are so much more than they ever dreamed they would try. For this reason particularly the ideal Secretary of War for America should be a man in accord with the military point of view. In addition to administrative ability, he should have a love for, a sympathy with and an understanding of fighting men.

Something About Mayer's Growth and Development

The growth of Mayer may conveniently be divided into two periods—the past and the present. With the past was associated cattle. The present—or changing period—is becoming more and more associated with mining. The future, of course, will be associated with mining with cattle playing a negligible part.

The average Mayerite is beginning to insist on a third period—the future. This, of course, means that the average Mayerite has every confidence in the district. But the third period—the future—will be more readily understood, as will the Mayerite's confidence, if we understand the preceding two periods.

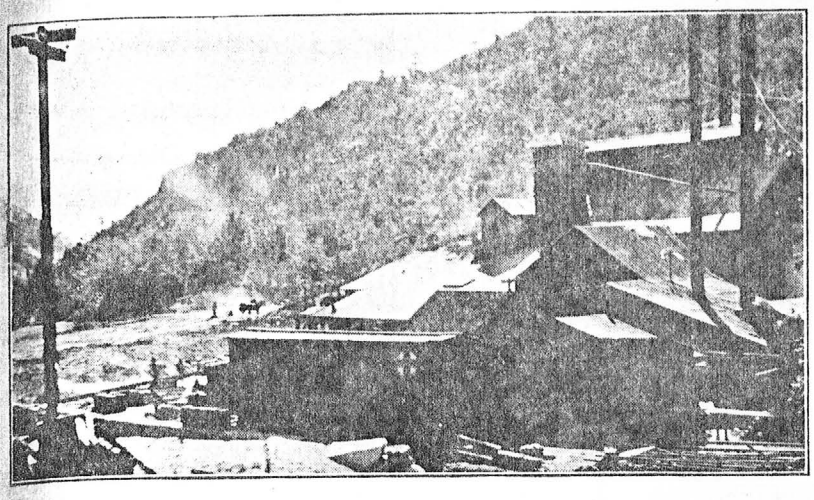
A few years ago Mayer was one of those real Western towns of the saloon and the cowboy sort. Besides poker, men rode the ranges in pursuit of cattle. Some men mined a little. But the town's revenue and subsistence came from cattle. Down from Ash Fork and the country beyond cattlemen and sheepmen drove their herds to the verdant ranges in the Mayer country and on down to the desert in the south. Mayer was then a sort of reprovisioning station. Cattlemen often came in the "General Store" and laid three or four thou-



THE BIG STORE OF THE TOWN.

sand dol
away wi
saries a
miles aw

In the
kept the
it. Eve
sheep pa
year. T
course, a
were ric
copper.
from sha
beds of s
Through
the soutl
ore, tru
railway
miles no
were car
river, an
boats an
from wh
ferent p
ing. It
high gra
ore from
some of
seas as
Many po
shippers
portation
destinati
the valu
to perm
transpor
tory of
derful ri
. But in
(C



Old Tailings of Crown King Mill are Dumped on an Endless Chain by Fresno Scraper

winze is to be sunk another 200 feet with drifts at each level. At adit No. 1, which is 1200 feet south, a 300-foot shaft is developing a separate ore system to that at adit No. 2 at which level most of the work has been done. There are half a dozen or more very promising outcroppings of ore which show a strong leaching at the surface.

The money for the development of this property has come from Paris and other cities in Texas. The officers of the company are: President and general manager, Louis Goldman; vice president, R. F. Scott; treasurer, A. Goldman; secretary, W. F. Gill, all of Paris, Texas, and Claude Ferguson is superintendent and resident manager.

Half Moon Company

There are six or eight new mining companies which have commenced operating north and south of the Arizona Binghampton and the Copper Queen mines, on what seems to be the extensions of the ore veins that are being developed in these two mines. The first property to the south is being developed by the Half Moon company, which is capitalized for 1,500,000 shares, par value, $1.00. O. E. Kemp of Mayer is the president and general manager. J. E. Russell of Prescott is secretary and treasurer and L. E. Hesla of Prescott and J. A. Brennan and Edward S. Spring of New York City, directors. A complete hoisting plant with air drills has arrived at the mine and work on a 500-foot shaft will be commenced as soon as the plant can be erected.

The Big Bug Company

A deal is pending for large capital that will finance the Big Bug company. Recently 29 per cent copper was encountered in a 40-foot shaft on the company's property on the north-

wagon road has been repaired to haul the ore to the smelter at Mayer.

Mayer-Belford Group

The Jerome Copper company has recently taken over the Mayer-Belford group of claims, which are south and close to the Arizona-Binghampton mine. Surface work has opened up a 30-foot vein of copper-gold ore, 17 feet of which will average about 6 per cent copper and another vein has been surfaced 100 feet in width, much of which is a milling grade of copper ore. The president of the company is E. A. Kastner of Prescott; the vice president is F. M. Burdick, Chicago; Markham Orde, Chicago; Gus Zork, El Paso; Wellington Hay, M. P., Toronto, Canada. The general manager is H. B. King. The property is extensively developed.

Pocahontas Copper Co.

W. H. Skinner, president of the Pocahontas Copper company, has returned from New York, where he arranged for large capital. This is one of the best developed mines on south extension of Copper mountain. Several shafts have been sunk, the deepest being 200 feet, with 300 feet of drifts all in ore, carrying milling values in copper, gold and silver. The company plans building a flotation mill yet this season. The stock is held principally by Oklahoma people.

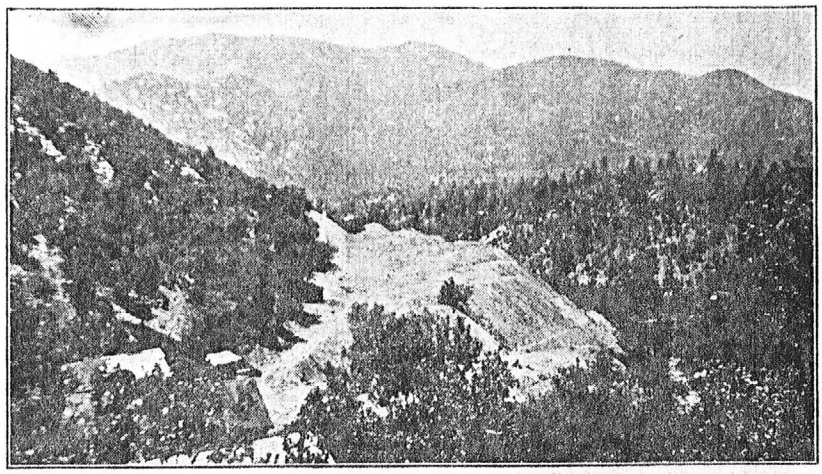
At the Iowa

Adjoining the Pocahontas mine are two properties, the Iowa, owned by Uri Embody of Prescott and H. R. Noel of Mayer and the Celebration group, owned by H. R. Noel and James Harris of Mayer. A deal is pending in the east that will fully fiance the Iowa property. Both groups carry the extension veins of Copper mountain on the south. Considerable high grade ore has been shipped from a 250-foot shaft on the Iowa mine.

The Harvard-Yale

One of the largest transactions in mine financing is about to be closed in Chicago. P. J. Montgomery, of that city, has acquired 33 claims adjoining the old Harvard-Yale mine and has an option to sell the latter property which makes a total of about 820 acres. The Harvard-Yale mine has a record of shipping several cars of very high grade copper ore from a shaft 86 feet deep. The vein is from four to nine feet wide. This is considered to be one of the most promising mining properties in that section of the copper-gold belt. Frank Giroux of Mayer and H. J. Perry of Cordes are the owners of the Harvard-Yale mine.

There is a great deal of new work being done covering this particular section of the belt. A carload shipment of 20 per cent copper ore was made by the Arizona Queen company recently. The company has one of the most complete steam hoisting plants of the belt, which is capable of sinking 1500 feet. A shaft is on its way to the 500-foot level and has already opened up a very strong vein of high grade copper-gold ore. At



DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine IOWA GROUP Date October 22, 1943

District Big Bug Mining District of Yavapai County, Arizona Engineer B. W. Brown

Subject: Examination of Iowa Group for Ralph Airheart and Frank Wilson of Presoctt, Arizona

I did this day examine the Iowa Group of eight patented mining claims for Ralph Airheart and Frank Wilson, residents of Prescott, Arizona. My findings are herewith reported.

The Iowa Group is situated in the Big Bug mining district of Yavapai County, Arizona. The property is connected with the town of Mayer, a rialroad shipping point, by about five miles of good, maintained, road.

Little development work has been done on these claims, notwithstanding their being one of the older mining interests in the districts. The development consists principally of numerous surface cuts and shallow exposures. The only working of considerable extent has been in two shafts which are reported to be 215 feet and 125 feet respectively. The lesser of these two shafts is now badly caved and entirely inaccessible. The major or No. 1 shaft is also inaccessible, but access can by made, partially anyway, by recollaring and replacing the shaft timbers which were stripped from it. The No. 1 shaft does not sound to 200 feet and it is possible that sloughing may have blocked access somewhere between the 75 and 100 foot levels. Of further interest on the property were two small buildings which could possibly be used to advantage in a mining operation. No water has been developed on the property, but it is within reason that ample water for normal mining purposes can be developed at Big Bug creek at a point where it traverses the property.

The best mineralized showing is in the vicinity of the aforementioned No. 1 shaft on the B and O Claim. Here, shallow trench cuts have exposed a zone from two to ten feet wide of copper mineralization within a persistent quartzite dyke. The No. 1 shaft, sunk on this outcrop, exhibits a dump of a size suffieient to account for 200 feet of sinking but of an apparent grade to raise the question of continuing values with depth. However, as the dump was mostly of schist and as the surface showing of ore follows the quartzite, it may be within reason, as is claimed by individuals familiar with the property, that the ore was lost into the hanging wall early in the shaft construction. Other than the quartzite mentioned, there are two parallel and similar quartzite dykes. These may be traced the length of the claims and beyond to the North where they strike into Copper Mountain N 12° E. These three major dykes of quartzite bind between them, as pages in a book, the many parallel dykes and veinlets comprising a variety of quartzy and schistose alterations of the Yavapai Schist country rock, including chloritic and amphibolitic schists, sericite schist, and schistose quartz porphyries. This structure and its component dykes dips to the West with a slight declination from vertical. It should also be pointed out, in passing, that the copper mineralization which breaks in every instance in the oxidized zone, is not confined to the quartzite but is found, also, as surface evidence in the schists and quartz porphyries.

Two shipments of ore from the Iowa made in April of 1943 to the Phelps Dodge smelter at Clarksdale were reported to carry values in copper between 2 and 3% with a trace, merely, of Gold and Silver but a very high fluxing value in silica.

In conclusion, two possible pictures present themselves for the economic advancement of this property. The first is a program of limited development on ore in the immediate vicinity of the No. 1 shaft. It is recommended that, to accomplish this end, the shaft be retimbered to the 100 foot level and a short crosscut be driven into the hanging wall to determine at that depth the perseverance of the ore and its value. The other program in mind would outline a proposal for diamond drilling the entire structure to determine the extent and nature of ore deposition to a vertical depth of at least 600 feet.

B. W. Brown-FIELD

Forward to Farnham — Please return for our files.

315 N. Coronado St.
Los Angeles 26, Calif.
October 11, 1950

Mr. Charles H. Dunning
Director Dep't. Mineral Resources
Fair Grounds
Phoenix, Arizona

My dear Mr. Dunning:

I have before me the issues of 'Pay Dirt,' of August 18th, and September 22nd. In the issue of the 18th of August, I note on page 7 regarding the 'Questionnaire,' you sent out to the mining men, may I have one? I can fill out same in regard to our copper property near Mayer, formerly the Iowa Group, now known as the Roese Mining Co., controlled by Frank Wilson and myself.

The property produced some 225 tons in the past, the last two cars in 1943; this ore from open cuts and shallow shafts. Average copper values 3.75% - 1½ oz. silver, 79% to 88% silica. History also gives the property a production in the middle 1920's from a shaft now badly caved. The ore was shipped to the Humbolt smelter that netted the lessors over $10,000. This comes from a very reliable source. It must have been high grade in both copper and silver as the shaft was only 75' deep, short drifts and stopes, all hand tools.

In the September 22nd issue on page 6, an article appeared on a proposed act, known as the M.E.A. I addressed a letter to Mr. Willis, asking for further information and his suggestions and advice as to how I may proceed to enable us to take advantage of the act and apply for a government loan or assistance to prosecute the development of the property. He very graciously has given me a general idea as to what I will need as regards to detailed data, etc., in making an application. I have at hand a quite conclusive statement on the property, but no report on the property of recent date by a reliable engineer. To assist us, bearing in mind that neither Wilson or I are over burdened with fifty cent dollars, to employ a reliable E.M., as still ready to lay out a few of them for a factual report on the property. Am I asking too much for your assistance in this matter? Would it be unethical for one of your field engineers to go upon the property, examine it, and write us his findings so we can present it to Mr. W. R. Storms, Tucson. Or will you suggest the name of an engineer in your vicinity to make us a report on the property. Of course we are willing to pay as far as our funds will permit. Mr. Willis advises that we

PRELIMINARY REPORT ON THE IOWA GROUP OF MINES.

OWNED BY THE MAYER COPPER MINING CORPORATION.

MAYER, ARIZONA.

COPY

LOCATION: The group of (8) patented mining claims, locally known as the Iowa, belongs to the mayer copper mining Corporation, and is situated in the Big Bug Mining District, Yavapai County, Arizona, about four miles easterly from the town of Mayer and about two miles north easterly from the Blue Bell Siding, a station on the Bradshaw Mountain R.R. a branch line of the Santa Fe Railroad.

Topography: The locality in which this property lies is generally mountainous, cut by ravines flowing westerly into the Big Bug Creek and also some flowing easterly into the Agua Fria River. The group is located on the main ridge between the Agua Fria River and Big Bug Creek.

Development: The development consists of numerous surface shafts, several ten foot cuts and two shafts. One shaft, well towards the north end of the center line of claims, is down some eighty feet. This shaft has produced some high grade ore; It is badly caved in at the present time and cannot be examined below the thirty foot level. The other shaft is down some two hundred feet. This shaft is not accessable, timbers having all been stolen. Work on this shaft however, was started in bold quartz outcrops which contained some copper; however, this condition seemed to have dipped more than the shaft incline to the west and the bottom of the shaft is not in ore, as evidenced by the dump. Crosscutting both to the east and west should uncover some good ore as it shows on the surface at both these points.

Geology and Vein Structure:

Briefly and generally discussing the subject: The formation of the property is schist lying between bold outcrops of quartzite ledges that can be traced the full length of the claims. there are three of these quartzite ledges parallelling each other lengthwise of the property; they are from three to six hundred feet apart, with a strike to Northeasterly and southwesterly.

Economic Conditions:

The property is crossed on the south end by a fairly good road which connects with the town of Mayer. Machinery and supplies can be transported at a low cost from the Railroad to the property. Water can be gotten from the Big Bug Creek, at small cost, should developments warrant the installation of a concentration plant ample water can be pumped from the Agua Fria River.

Summary and Recommendations:

The district in which this property lies is well mineralized with copper, gold and silver values. The Iowa Group justifies development on a large scale, as it is surrounded at distances to the North, south and west by producing mines that have practically have the same character of formations. While considerable copper shows all over the surface, the main ore bodies will be found at depth, this is the opinion endorsed by prominent mining men and experts from most parts of the country, many of them having become financially interested in this district. It is the opinion of the writer that large profitable ore bodies may be reasonably anticipated.

With favorable conditions for transportation, operation, smelting and the low cost of production, I consider this property to have great possibilities and it warrants the expenditure necessary to develope it at depth.

Respectfully submitted,

F. W. GIROUX

GENERALLY SAMPLING FROM THE MAYER COPPER MINING CORPORATION OF THE SURFACE DUMPS, CUTS, AND SHAFTS.
SEPTEMBER, 28th, 1923, by H. R. Noel and L. F. Wilson.

No. 1 - Schist Dyke, highly stained, 400 feet west shaft No. 1. On direct line shaft No. 2.

No. 2 - Selected dump, 15 ft. Shaft. N. end Central Claim 300 Ft. due East High grade shaft below road. Shaft sunk in schist.

MINNIE CLAIM:

Dyke 175 Ft. Wide 1600 ft. long.

No. 3 - 35 ft. N, Shaft No. 1 in cut 3 ft Deep. Taken about 3 ft. wide. (Ore shipped from here to Humboldt Smelter)

No. 4 - 100 ft. N, Shaft No. 1, 35 ft. east Assay No. 3. taken off dyke 2 feet wide.

No. 5 - General dump sample 100 ft. N, Shaft No. 1, 100 feet east assay No. 3. 40 ft. east assay No. 4. Shallow hole 5 ft. deep, Good Showing.

No. 6 - Taken 250 ft. N, Shaft No. 1, Open cut in dyke, 8 ft. Wide. High Grade ore here in streaks and bunches. Assay taken about middle of dyke. Dyke here 175 feet wide. Wonderful showing.

No. 7 - Taken 100 ft. South Shaft No. 1, 6 feet wide. taken off top of mineralized dyke that has been shot off. Highly mineralized selicified schist.

No. 8 - 800 ft. N, Shaft No. 1, 3 ft. wide oxide. N, end of 15 ft. Cut 35 ft. South 35 ft. shaft with collar set. Approximately 70 ft. wide. Esar (sic) main dyke, Good showing.

No. 9 - This assay taken for silver only, 3 inch streak taken from the same place as No. 8 on foot wall side of oxide.

No. 10- Selected ore taken from same cut as sample 8&9.

No. 11- Surface dyke, 35 ft. N. 35 ft. Shaft, Two and one half ft. wide, where shot had been put in schist. 70 ft. N. assays 8, 9 & 10, and about 25 feet to the west.

No. 12- Red oxide, shaft No. 2, selected high grade on dump.

No. 13- Red oxide and malichite, selected dump, shft. No. 2.

No. 14 - Selected ore down 60 ft. Shaft No. 2. North end.

No. 15 - Surface 6 Ft. wide running at right angles of copper schists, 300 ft. South Shft. No. 2, Porphry dyke running east and west, 60 ft. long and about 12 ft. wide.

No. 16 - General average dump sample of ore dump shaft 18 ft. deep 700 ft. west of shft. No. 1, on Big Bug slope. Shaft sunk in schist dyke. Good showing.

No. 17 - General average of best ore taken from dump same as sample No. 16.

RESULTS OF ASSAYS TAKEN ON THE IOWA BY H. R. NOEL AND L. F. WILSON.

ASSAYED BY F. W. GIROUX, MAYER, ARIZONA.

MAYER COPPER MINING CORPORATION. SEPTEMBER 28th, 1923.

No.	Gold	Silver	Copper.
1-	Tr.	0.18	Tr.
2-	0.05	1.60	7.50
3-	0.04	2.00	5.00
4-	Tr.	1.20	4.00
5-	0.06	1.85	4.15
6-	0.02	2.85	7.25
7-	0.04	0.95	2.35
8-	0.02	1.10	1.20
9-	Tr.	1.00	Tr.
10-	0.05	2.65	8.60
11-	0.02	1.32	5.75
12-	0.03	3.60	11.05
13-	0.02	1.95	7.45
14-	0.04	4.00	12.35
15-	Tr.	0.90	None
16-	Tr.	0.90	1.65
17-	0.10	3.98	11.85

This gives an average of 5.30% copper values taken over the area of four full claims, showing values for at least 600 feet wide and 3,000 feet long. Most of these samples were taken from the surface or from shallow holes and cuts.

COPY OF RESULTS OBTAINED FROM TWO CARS OF ORE SHIPPED TO THE HUMBOLDT SMELTER. FROM THE SURFACE AT DIFFERENT PLACES FROM THE MAYER COPPER MINING CORPORATION PROPERTY.

	Gold	Silver	Copper	(sic) Suluable	Iron	Lime	(sic) Insuluable.
FIRST CAR:	Oz.	Oz.	%	%	%	%	%
	.010	.010	4.38	64.00	9.5	1.01	.02
Second Car:	.004	Tr.	3.38	64.4	9.2	.06	.02

$85.44 Net.

Mayer Arizona. January 13th, 1925.

This is to certify that the samples submitted for assay by Mr. J. E. O'Brein, of Mayer, Arizona, from the property of the Mayer Copper Mining Corporation, gave the following results per ton of two thousand pounds.

	Gold Oz.	Silver Oz.	Copper %
No. 1- 5 ft. Wide, 50 ft N. Shaft No. 1	0.03	1.20	4.50
No. 2- 5 ft. wide, 50 ft s. shft. No. 1	0.06	1.45	1.75.
No. 3- 6 ft. wide, 100 ft S. Shft. No. 1....	0.02	1.10	2.60.
No. 4- Dump average N.E. Shaft. No. 1 100 ft East Assay No. 1.	0.02	1.85	4.35
No. 5- 8 ft wide, 100 ft, N. shft No. 1.	0.01	1.08	7.55
No. 6- 10 ft wide, 250 ft N. shft. No. 1.	0.04	1.89	2.10
No. 8- 4 ft wide, open cut 800 ft N. shaft No. 1.	0.08	0.92	0.75
No. 7- 4 ft. wide, surface, 450 ft N.E. shaft No. 1.	0.05	1.55	0.90
No. 9- 3 ft, wide, dyke 30 ft N. shft 35 ft shft. 900 ft N. shft. No. 1.	Tr.	0.45	5.40
No. 10 Picked sample, shft. No. 2 W. Dyke	0.07	3.00	8.95
No. 11 Grab sample shft No. 2 2nd class ore.	0.03	2.05	3.20
No. 12 South end of 15 ft shft. 5 ft wide 400 ft west shft. No. 1 W. Dyke.	0.02	2.02	0.45
No. 13 Dump sample, 20 ft. shft. W. Dyke about 600 ft. W. Shft. No. 1.	0.01	0.40	5.60
No. 14 General dump sample south end W. Dyke, 25 ft shft. 850 ft. S. W. Shaft No. 1.	Tr.	0.20	3.70
No. 15 General sample cut 4 ft. wide 500 ft s. shft. No. 1. Just above road	0.05	1.32	0.55
No. 16 Small shft. Just below road, 500 ft south shft. No. 1 East dyke, general dump sample	0.08	1.25	5.40

Charges: $34.00 paid.

F. W. Giroux,

(Copy) Assayer.

STATUS OF DORMANT MINES

1 MINE NAME: Roese Mining Co., formerly 'Iowa Group'

2 LOCATION: Big Bug Mining District-Yavapai County, Arizona

3 OWNER AND/OR LEASEE: Roese Mining Co., Arizona Corp.

4 ADDRESS: R. A. Airheart, Pres., 315 N. Coronado St., L. A. 26, Calif.

5 APPROXIMATE PRODUCTION (Year of 1945): Inactive since 1943.
Ore produced to date
COPPER returns 5971 Lbs. LEAD _____ Lbs.

ZINC _____ Lbs. (OTHER) _____

6 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) Prohibitive to mine surface exposures with a bonus of 5¢ granted 1944. No underground ore available at this date.

Development on 200' level will open up ore. Open cuts show substantial ore

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 22½¢ plus 5¢ premium..... 1,000,000 Lbs.
Copper at 22½¢ plus 10¢ premium..... 1,500,000 Lbs.

7 Estimate at least 400 tons per week from 200' level.

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?

Yes-underground will produce justified tonnage

(B) With a premium price (guaranteed for one year) could you carry out such a development program yourself? What premium?

No-Not financially able. A premium of 10¢ will be needed to give us a reasonable profit.

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

Yes-Surface indicates a drilling program

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

Both loan and drilling

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. Yes

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. Yes

Please discuss the above: Discussing Stage 1 & 2--We will be governed by the decision arrived at by Government Engineers as to what amount of drilling will be necessary to definitely prove values and the potential ores at depth. Map here, with showing area. We are agreeable to a mortgage loan on property in event a premium of 10¢ per pound be granted. Without this the margin of profit is too close as to cost of labor, freight & base smelter charges, quoted us as follows: Truck .75¢ freight-to Hayden $3.17 smelter $1.50 on assay value 3.31% copper-@ .21075¢. This leaves only $6.98 to cover mining costs.

SUGGESTIONS:

We suggest in event it is in your province, a field engineer view the property, give us his suggestions as to whether or not to proceed in making an application for Government assistance.

DATE November 8, 1950

SIGNATURE R A Hosteart

NAME OF MINE: IOWA

COUNTY: YAVAPAI C
DISTRICT: AGUA FRIA
METALS: CU

DATE:	OPERATOR AND ADDRESS:	DATE:	MINE STATUS
	Ralph A. Airheart Box 1623, Prescott 315 N. Coronado St. Los Angeles, California	1/44	Not shipping

Mayer Arizona. January 13th, 1925.

This is to certify that the samples submitted for assay by Mr. J. E. O'Brein, of Mayer, Arizona, from the property of the Mayer Copper Mining Corporation, gave the following results per ton of two thousand pounds.

	Gold Oz.	Silver Oz.	Copper %
No. 1- 5 ft. Wide, 50 ft N. Shaft No. 1	0.03	1.20	4.50
No. 2- 5 ft. wide, 50 ft s. shft. No. 1	0.06	1.45	1.75.
No. 3- 6 ft. wide, 100 ft S. Shft. No. 1....	0.02	1.10	2.60.
No. 4- Dump average N.E. Shaft. No. 1 100 ft East Assay No. 1.	0.02	1.85	4.35
No. 5- 8 ft wide, 100 ft, N. shft No. 1.	0.01	1.03	7.55
No. 6- 10 ft wide, 250 ft N. shft. No. 1.	0.04	1.89	2.10
No. 8- 4 ft wide, open cut 800 ft N. shaft No. 1.	0.08	0.92	0.75
No. 7- 4 ft. wide, surface, 450 ft N.E. shaft No. 1.	0.05	1.55	0.90
No. 9- 3 ft, wide, dyke 30 ft N. shft 35 ft shft. 900 ft N. shft. No. 1.	Tr.	0.45	5.40
No. 10 Picked sample, shft. No. 2 W. Dyke	0.07	3.00	8.95
No. 11 Grab sample shft No. 2 2nd class ore.	0.03	2.05	3.20
No. 12 South end of 15 ft shft. 5 ft wide 400 ft west shft. No. 1 W. Dyke.	0.02	2.02	0.45
No. 13 Dump sample, 20 ft. shft. W. Dyke about 600 ft. W. Shft. No. 1.	0.01	0.40	5.60
No. 14 General dump sample south end W. Dyke, 25 ft shft. 850 ft. S. W. Shaft No. 1.	Tr.	0.20	3.70
No. 15 General sample cut 4 ft. wide 500 ft s. shft. No. 1. Just above road	0.05	1.32	0.55
No. 16 Small shft. Just below road, 500 ft south shft. No. 1 East dyke, general dump sample	0.08	1.25	5.40

Charges: $34.00 paid.

F. W. Giroux,

Assayer.

(Copy)

Denver Group

C

Box 1623,
Prescott, Arizona.
October 22, 1943

DEPT. MINERAL RESOURCES
RECEIVED
OCT 23 1943
PHOENIX, ARIZONA

Mr. S. J. Coupal,
423 Home Builders Bldg.,
Phoenix, Arizona.

My desr Mr. Coupal:

We had a very satisfactory meeting last night, though a little along the "BLUE" line. I met Mr. Brown and we went out this morning at 9 o'clock and went over the copper property quite thoroughly. He is making a report to you which he hopes will reach you tomorrow.

He intimated very strongly that he would recommend a loan, ~~as~~ I now have before the RFC.

We discussed the possibilities of putting in two diamond drill holes and he seemed very favorable to this. I am of the opinion that if I am able to get these two holes drilled, that we will open up a very substantial copper deposit; at least the surface indicates it. Naturally, you will be governed by Mr. Brown's report.

I want to thank you very kindly for the addistance you gave me and I know that you will make every effort to expedite this copper loan.

With kindest personal regards, I am,

Yours very truly,

R. A. AIRHEART

ESOURCES
DS

February 24, 1958

Mr. Ralph A. Airheart
Box 1623
Prescott, Arizona

operty named below:

IOWA	COPPER
(Property)	(ore)

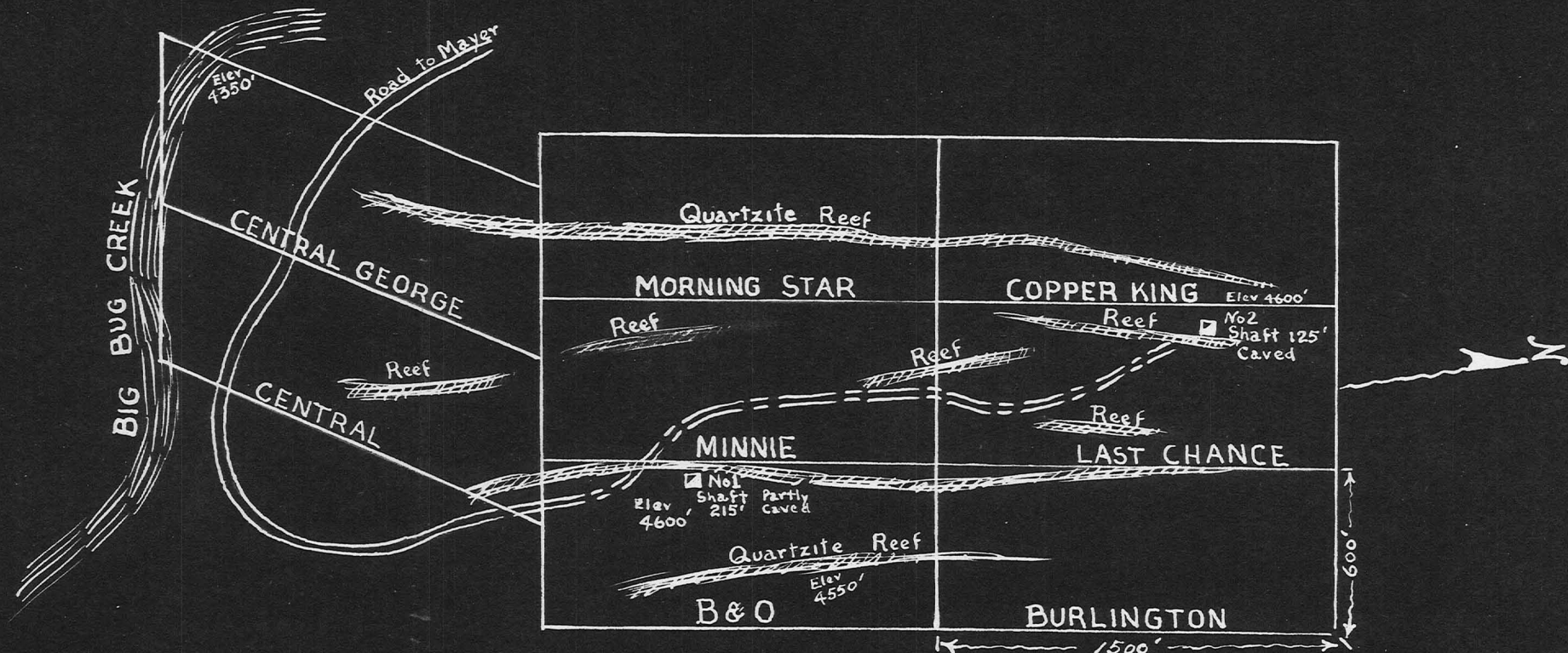
We have an old listing of the above property which we would like to have brought up to date.

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

FRANK P. KNIGHT,
Director.

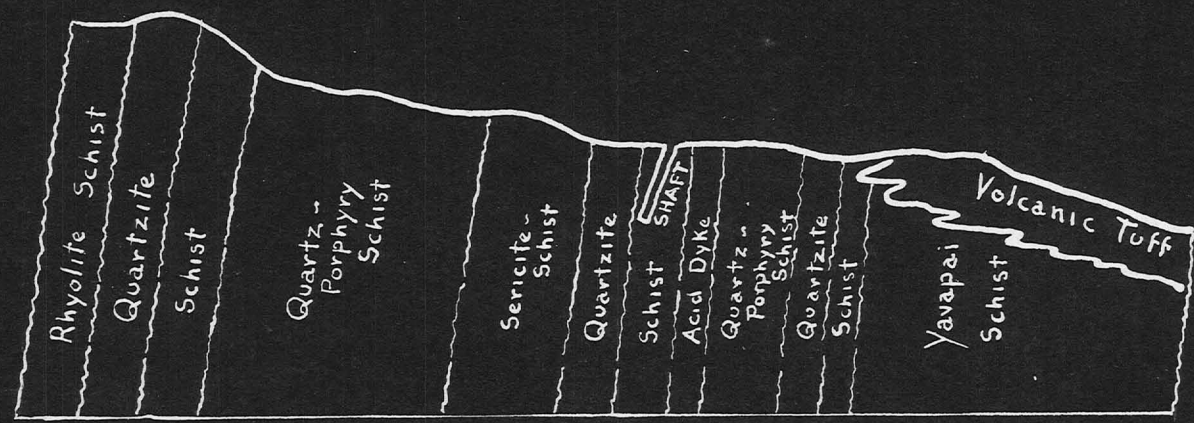
Enc: Mine Owner's Report



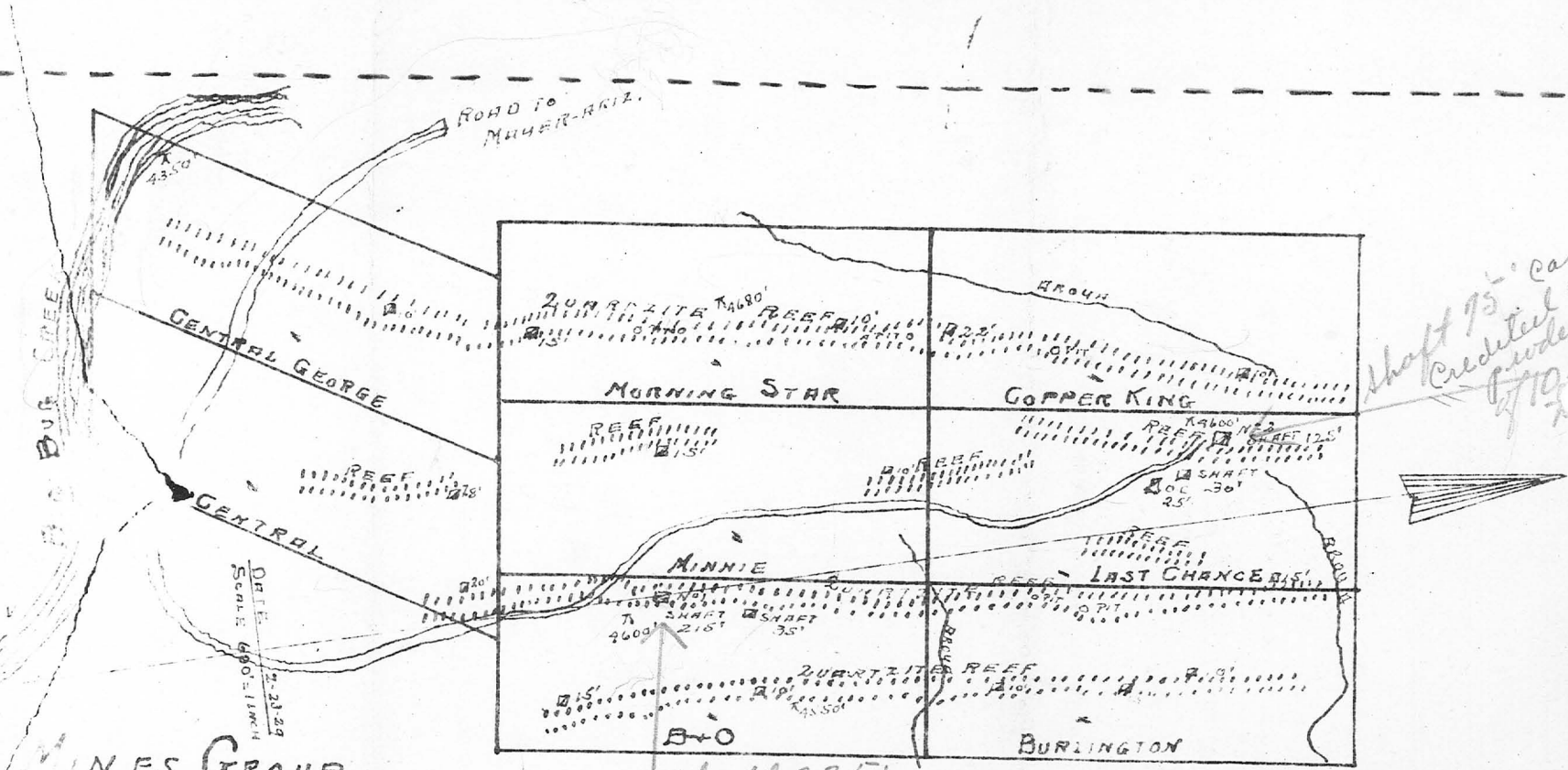
IOWA GROUP
SKETCH MAP

Drawn by J. W. Brown
Oct 22, 1943
From map by F. H. Clark
Submitted by R. Airheart

SCALE Distances as indicated



West – East Cross Section at No1 Shaft

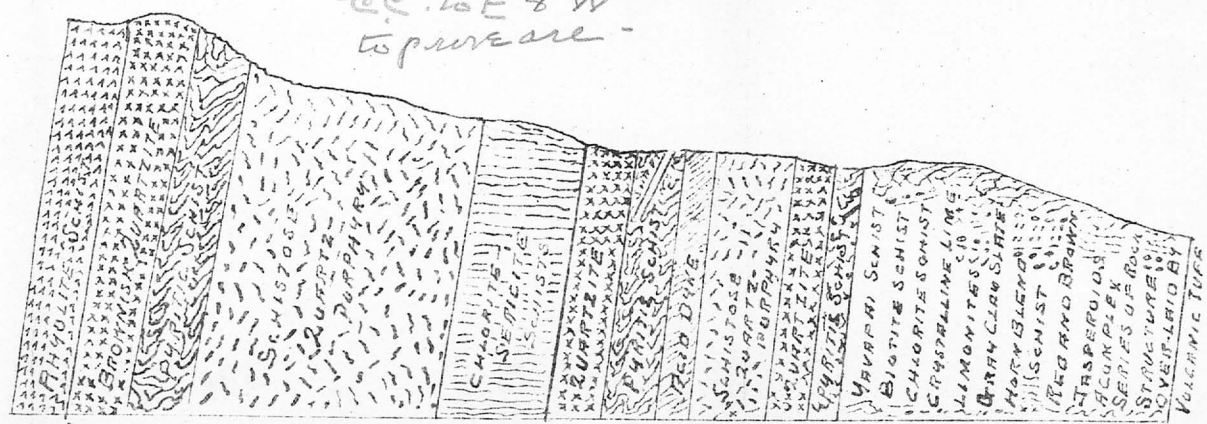


IOWA MINES GROUP

BIG BUG MINING DISTRICT

YAVAPAI COUNTY ARIZONA

FRANCIS M CLARK MINING ENGINEER
1245 BLUE COURT
LOS ANGELES CALIFORNIA



WEST - EAST CROSS SECTION THROUGH No. 1 SHAFT 1455' WIDE

1455'

1049
ARIZ
MC

Mayer, Arizona
October 19, 1950.

Mr. Chas. H. Dunning, Director
Dept Mineral Resources,
Phoenix, Arizona.

Dear Mr. Dunning;

Am returning herewith Mr. R. A. Airhearts letter concerning the Iowa Group of mining claims located some five miles southeast of Mayer, Arizona.

I looked this property over in the recent past and was not favorably impressed with the surface showing. The underground workings are inaccessible, they would no doubt give much more information and might change the picture.

Oxide copper minerals occur in the footwall portion of several short disconnected "bull" quartz lenses. The mineralization on the surface appears spotty and weak. To my knowledge, this type of copper occurence has never yielded a profitable ore body, of size, in this district. They all lack persistence.

My suggestion to the owners would be to first make the underground accessible. It does not appear that this would be difficuly or costly as the ground stands well and the shaft walls have not caved, as far as one can see. Ladders down to the drifts would probably be all that is required.

I feel sure that any competent appraiser, called upon to judge this property from the surface evidence only, as it exists now, would report unfavorably.

Sincerely

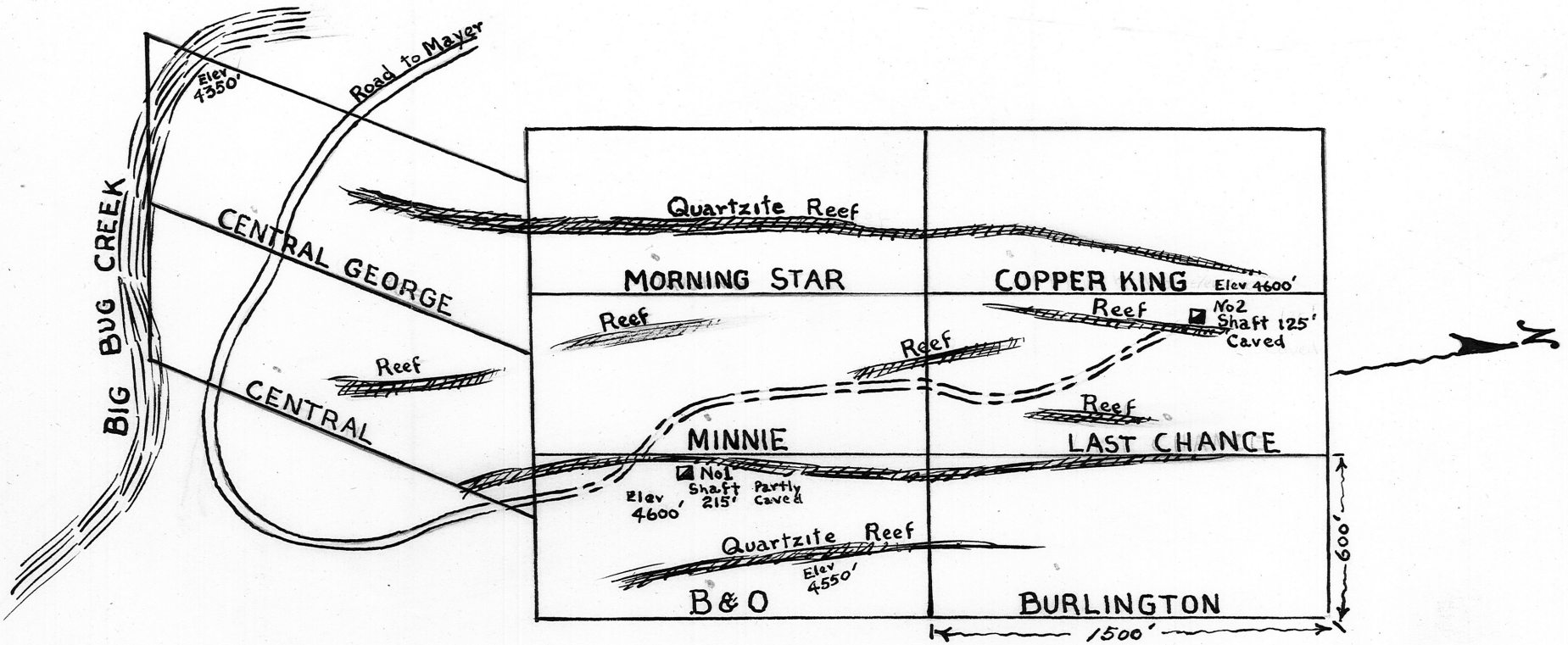
L. L. Farnham

prepare all the data they will require, and be ready to submit same when the machinery has been set up to handle the program.

Thanking you for all the trouble I am throwing in your lap, and I know well you will steer me along the proper lines. My very kindest personal regards, and I am hopeful of seeing you in the near future for an informative visit and a chit-chat, I am,

Very sincerely yours,

R. A. AIRHEART



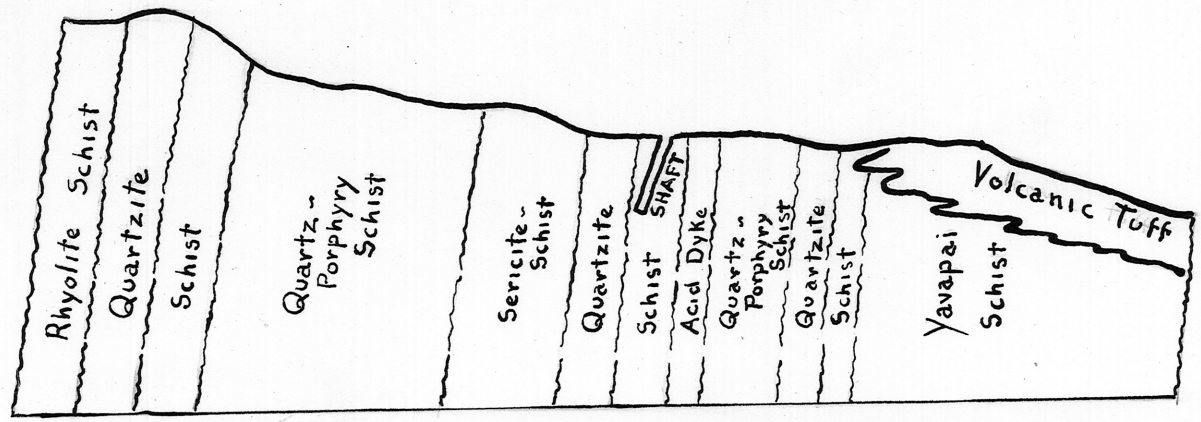
IOWA GROUP
SKETCH MAP

Drawn by B. W. Brown
Oct 22, 1943

From map by F. H. Clark

Submitted by R. Airheart

SCALE Distances as indicated



PRELIMINARY REPORT ON THE IOWA GROUP OF MINES.

OWNED BY THE MAYER COPPER MINING CORPORATION.

MAYER. ARIZONA.

LOCATION: The group of (8) patented mining claims, locally known as the Iowa, belongs to the mayer copper mining Corporation, and is situated in the Big Bug Mining District, Yavapai County, Arizona, about four miles easterly from the town of Mayer and about two miles north easterly from the BigeBbell Siding, a stattion on the Bradshaw Mountain R.R. a branch line of the Santa Fe Railroad.

Topography: The locality in which this property lies is generally mountainous, cut by ravines flowing westerly into the Big Bug Creek and also some flowing easterly into the Agua Fria River. The group is located on the main ridge between the Agua Fria River and Big Bug Creek.

Development: The development consists of numerous surface shafts, several ten foot cuts and two shafts. One shaft, well towards the north end of the center line of claims, is down some eighty feet. This shaft has produced some high grade ore; It is badly caved in at the present time and cannot be examined below the thirtyb foot level. The other shaft is down some two hundred feet. This shaft is not acessable, timbers having alll been stolen. Work on this shaft how ever, was started in bold quartz outcrops which contained some copper; How ever, this condition deemed to have dipped more than the shaft incline to the west and the bottom of the shaft is not in ore, as evidenced by the dump. Crosscutbing both to the east and west should uncover some good ore as it shows on the surface at both these points.

Geology and Vein Structure:
Breifly and generally discussing the subject: The formation of the property is schist lying between bold out crops of quartzite ledges that can be traced the full length of the claims. there are three of theses quartzite ledges parallelling each other lengthwise of the property; they are from three to six hundred feet apart, with a strike to North Easterly and Southwesterly.

Economic Conditions:
The property id crossed on the south end by a fairly good road which connectsw ith the town of Mayer. Machinery and supplies can be transported at a low cost from the Railroad to the property. Water can be gotton from the Big Bug Creek, at small cost. should developments warrant the installation of a concentration plant ample water can be pumped from the Agua Fria River.

Summaruy and Recomendations:
The district in which this property lies is well mineralized with copper, gold and silver values. The Iowa Group justifies development on a large scale, as it is surrounded at dista nces to the North, south and west by producing mines that have practically have the same character of formations. While considerable copper shows all over the surface, the main ore bodies Will be found at depth, this is the opinion endorsed by prominent mining men and experts from most parts of the country, many of them having become financially interested in this district. It is the opinion of the writer that large profitable ore bodies may be reasonably anticipated.

With favoarable conditions for transportation, operation, smelting and the low cost of production, I consider this property to have great possibilities and it warrants the expenditure neccessary to develope it at depth.

Respectfully Submitted..

F.W.Eiroux

COPY.

Mayer Arizona. January 13th. 1925.

This is to certify that the samples submitted for assay by Mr. J.E.O'Brein, of Mayer, Arizona, from the property of the Mayer Copper Mining Corporation, gave the following results per ton of two thousand pounds.

		Gold Oz.	Silver Oz	Copper %
No. 1-	5 ft. wide, 50 ft N. Shaft No.1	0.03	1.20	4.50
No. 2-	5 ft wide, 50 ft s. shft. No. 1	0.06	1.45	1.75.
No. 3-	6 ft.wide, 100 ft S. Shft. No. 1	0.02	1.10	2.60.
No. 4-	Dump average N.E. Shft. No. 1 100 ft East Assay No. 1.	0.02	1.85	4.35
No. 5-	8 ft wide, 100 ft,N. shft No. 1.	0.01	1.08	7.65
No. 6-	10 ft wide, 250 ftN. shft. No 1.	0.04	1.89	2.10
No. 8-	6 ft wide, open cut 800 ft N. shaft No. 1.	0.08	0.92	0.75
No. 7-	4 ft. wide, surface, 450 ft N.E. shaft No. 1.	0.05	1.55	0.90
No. 9-	3 ft,wide, dyke 30 ft N. shft 35 ft shft.900 ft N. Shft. No. 1.	Tr.	0.45	5.40
No. 10	Picked sample, shft. No. 2 W. Dyke	0.07	3.00	8.95
No. 11	Grab sample shft No. 2 2nd class ore.	0.03	2.05	3.20
No. 12	South end of 15ft shft. 5 ft wide 400 ft west shft. No 1 W. Dyke.	0.02	2.02	0.45
No. 13	Dump sample, 20 ft. shft.w. Dyke about 600 ft. W. Shft. No. 1.	0.01	0.40	5.60
No. 14	General dump sample south end W. Dyke, 25 ft shft. 850 ft. S. W. Shaft No. 1.	Tr.	0.20	3.70
No. 15	General sample cut 4 ft. wide 500ft s. shft.No. 1.Just above road	0.05	1.32	0.55
No. 16	Small shft. Just below road, 500 ft south shft. No. 1 East dyke, general dump sample	0.08	1.25	5.40

Charges: $34.00 Paid.

F.W.Giroux,

Assayer.

(Copy)

RESULTS OF ASSAYS TAKEN ON THE IOWA BY H.R.NOEL AND L.F.WILSON.

ASSAYED BY F.W.GIROUX. MAYER ARIZONA.

MAYER COPPER MINING CORPORATION. SEPTEMBER. 28th. 1923.

No.	Gold	Silver	Copper.
1-	Tr.	0.16	Tr.
2-	0.05	1.60	7.60
3-	0.04	2.00	5.00
4-	Tr.	1.20	4.00
5-	0.06	1.85	4.15
6-	0.02	2.25	7.25
7-	0.04	0.95	2.35
8-	0.02	1.10	1.20
9-	Tr.	1.00	Tr.
10-	0.05	2.65	8.80
11-	0.02	1.32	5.75
12-	0.03	2.00	11.05
13-	0.02	1.95	7.45
14-	0.04	4.00	12.35
15-	Tr.	0.20	None.
16-	Tr.	0.90	1.05
17-	0.10	3.98	11.85

This gives an average of 5.30% copper values taken over the area of four full claims, showing values for at least 600 feet wide and 3,000 feet long. Most of these samples were taken from the surface or from shallow holes and cuts.

COPY OF RESULTS OBTAINED FROM TWO CARS OF ORE SHIPPED TO THE HUMBOLDT SMELTER. FROM THE SURFACE AT DIFFERENT PLACES FROM THE MAYER COPPER MINING CORPORATION PROPERTY.

FIRST CAR:

Gold Oz.	Silver Oz.	Copper %	Suluable %	Iron %	Lime %	Insuluable. %
.010	.010	4.38	64.00	9.5	1.01	.02

Second Car:

.004	Tr.	3.39	64.4	9.2	.06	.02

$85.44 Net.

GENERALLY SMAPLING FROM THE MAYER COPPER MINING CORPORATION OF THE SURFACE DUMPS. CUTS. AND SHAFTS. SEPTEMBER, 28th, 1923. by H.R.Noel and L.F.Wilson.

No. 1- Schist Dyke, highly stained, 400 feet west shaft No 1. On direct line shaft No. 2.

No. 2- Selected dump, 15 ft. Shaft N. end Central Claim 300 Ft. due East High grade shaft below road. Shaft sunk in schist.

MINNIE CLAIM:

Dyke 175 FT Wide 1600 ft long.

(No. 3- 35 ft. N, Shaft No. 1 in cut 3 ft Deep. Taken about 3 ft. Wide. (Ore shipeed from here to Humboldt Smelter)

(No. 4 - 100 ft. N, Shaft No. 1, 35 ft. east Assay No. 3. taken off dyke 2 feet wide.

(No. 5- General dump sample 100 ft. N, Shaft No. 1, 100 feet east assay No. 3. 40 ft. east assay No. 4. Shallow hole 5 ftt deep, Good Showing.

No. 6- Taken 250 ft. N, Shaft No. 1, Open cut in dyke, 8 ft. Wide. High Grade ore here in streaks and bunches. Assay taken about middle of dyke. Dyke here 175 feet wide. Wonderful showing.

No. 7- Taken 100 ft. South Shaft No. 1, ~~Open cut in dyke, 8 ft. Wide. High Grade ore here in streaks and bunches. Assay taken about middle of dyke. Dyke here 175~~ 6 feet wide. Taken off top of mineralized dyke that has been shot off. Highly mineralized selicified schist.

No. 8- 800 ft. N, Shaft No. 1, 3 ft. wide oxide. N. end of 15 ft. Cut 35 ft. South 35 ft. shaft with collar set. Approximatly 70 ft. wide. Esar main dyke, Good showing.

No. 9-,This assay taken for silver only, 3 inch streak taken from the same place as No. 8 on foot wall side of oxide.

No. 10- Selected ore taken from same cut as sample 8&9.

No. 11- Surface dyke, 35 ft. N. 35 ft. Shaft, Two and one half ft. wide, where shot had been put in schist. 70 ft. N. assays 8,9 & 10, and about 25 feet to the west.

No. 12- Red oxide, shaft No. 2, selected high grade on dump.

No. 13- Red oxide and malichite, selected dump, shft. No. 2.

No. 14- Selected ore down 60 ft. Shaft No. 2. North end.

No. 15- Surface 6Ft wide running at right angles of copper schists, 300 ft. South Shft. No. 2, Porphry dyke running east and west, 60 ft. long and about 12 ft. wide.

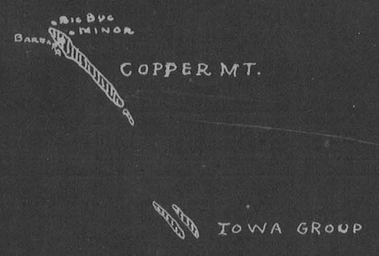
No. 16-General average dump sample of ore dump shaft 18 ft. deep 700 ft. west of shft. No. 1, on Big Bug slope. Shaft sunk in schist dyke. Good showing.

No. 17- General average of best ore taken from dump same as sample No 16.

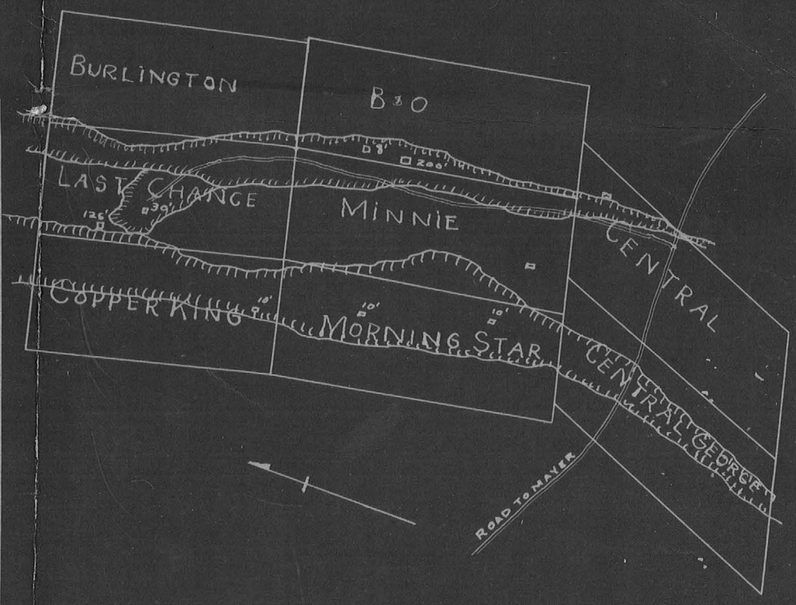
This is to certify that the samples submitted for assay by Mr. J.E. O'Brien, dupty state mine inspector Mayer, Arizona, from the property of Mayer Copper Mining Corporation, gave the following results per ton of two thousand pounds.

No.	Description	Gold oz.	Silver oz.	Copper %	Valuation $
1	5' Wide, 50' North Shaft No. 1	0.03	1.20	4.5	13.50
2	5' Wide, 50' South Shaft No. 1	0.06	1.45	1.75	5.25
3	6' Wide, 100' South Shaft No. 1	0 02	1.10	2.60	7.80
4	Dump average 100' N.E. Shaft No. 1 " " 100' East Shaft No. 1	0.02	1.85	4.35	13 05
5	8' Wide, 100' North Shaft No. 1	0.01	1.08	7.55	22.65
6	10' Wide, 250' North Shaft No. 1	0.04	1.89	2.10	6.03
7	Dyke 3' Wide 30' North 35' Shaft	Tr.	0.45	5.40	16.20
8	Picked sample Shaft No. 2 West Dyke	0.07	3.00	8.95	22.80
9	Grab Sample 2nd Class Ore dump Shaft # 2	0.03	2.05	3.20	9.60
10	Dump sample, 20' hole east dyke about 600' S.W. Shaft No. 1	0.01	040	5.60	16.80
11	General dump sample, South end, West dyke 25' Shaft, 850' S.W. of Shaft No. 1	Tr.	0.20	3.70	11.10
12	Small shaft just below road 500' South of Shaft No. 1 East Dyke General dump Sample	0.08	1.25	5.40	16.20
	Average				55.10 - 165.89

Average price of copper for 29 years period 1894 to 1923 inc, = 15.71 cents pound. Above figures are based on price of 15 cents per pound.



LAY OF THE DYKES.



IOWA GROUP

8 PATENTED CLAIMS LOCATED 5 MILES SOUTHEAST OF MAYER, ARIZONA.

DRAWN BY N. MAYER