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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: GRIFFEN AND JOHNSTON CLAIMS

ALTERNATE NAMES:
BURRO-BURRO MINE

PIMA COUNTY MILS NUMBER: 385

LOCATION: TOWNSHIP 14 S RANGE 4 W SECTION 21 QUARTER SW
LATITUDE: N 32DEG 11MIN 17SEC LONGITUDE: W 112DEG 41MIN 28SEC
TOPO MAP NAME: MT AJO - 15 MIN

CURRENT STATUS: EXP PROSPECT

COMMODITY:
SILVER
GOLD LODE

BIBLIOGRAPHY:
FULL, ROY P., 1970, INDIAN CLAIMS COMM.
DOCKET 345, V. I, P. 400-401
J.B. TENNEY, 1927-29, HISTORY OF MINING IN
ARIZONA, P. 123
SEE ADMMR GUNSIGHT FILE
ADMMR GRIFFEN AND JOHNSTON CLAIMS FILE

R E P O R T
On The
GRIFFEN AND JOHNSTON MINING CLAIMS.

MEYERS MINING DISTRICT, PIMA COUNTY, ARIZONA.



PUBLIC STENOGRAPHER
MULTIGRAPH LETTER EXPERT

Phoenix, Arizona.
March 5, 1917.

R E P O R T
on the
GRIFFEN AND JOHNSTON MINING CLAIMS.

c/o H. E. Fredrickson,
Ajo, Arizona.

Dear Sir:

Complying with your request, I have visited the above mentioned mining claims and hereby submit for your consideration the following report.

This property is situated in the Meyers Mining district, Pima County, State of Arizona, at an altitude of 1970 feet, and is about seventeen miles in a southeasterly direction from the town of Cornelia, at which point is a railroad which connect with the main line of the Southern Pacific Railroad, at a town known as Gila Bend.

General Description of Property.

These claims embrace an area of about 179 acres and consist of eight full claims and one large fraction (see map). The names of the locations are as follows:

The Evening Star; The Evening Star No. 1; The Evening Star No. 2; The Badger Hill; The Ada; The New Hope; The Flap Jack No. 3; The Blue Jay, and The Silver Bell.

The map accompanying this report will illustrate this more fully. This map was constructed from field notes made by myself and is fairly correct and represents the metes and

bounds and claim area of the property.

On this property will be found sufficient wood for domestic purposes only.

The water supply is at the time of this examination undeveloped and the owners obtain their water from the Goat Ranch about one and one-half miles north of this property.

The adjoining proven mine is the Burro Burro Mine situated on the east end of these properties and apparently on the same veins as the Flap Jack No. 3; The Blue Jay; The Silver; The Ada; The Badger Hill and Evening Star No. 2.

On these veins the Burro Burro Mine has many deep shafts and workings from which I find on investigation that many hundreds of tons of high grade copper and gold has been mined and treated by the owners at a small smelter that was installed on their property some twenty years ago, and of which part remains today.

The ore deposits of this property do not seem to differ mineralogically or geologically from those of the Burro Burro Mine. These claims have not, however, become producers up to the present time, although first located years ago and worked by prospectors at different times since.

Development Work.

The outcrop of well defined veins are vividly traceable throughout the claims. These veins seem to parallel each

other. The outcrop of the veins on the north end of these claims so far as could be determined will average from three to four feet, and on the south end from three to five feet in width. The development work on these veins is described as follows:

The Evening Star.

On this claim four vertical shafts have been put down on the vein, varying in depth from ten to fifteen feet and in each instance show the vein to be in place, particularly at Shaft No. 2. Here the vein shows well defined walls, the hanging wall being a schist, the foot wall a quartz porphyry. The vein here is four feet in width. It strikes easterly and westerly and dips to the south at an angle of 60°.

Samples taken from here assayed from five per cent to fifteen per cent copper and from six to seventeen ounces of silver per ton. Samples taken from the other shafts on this claim carried approximately the same values as those taken from shaft No. 2. The vein in this claim is an oxidized vein containing Malachite and Chrysocolla.

The Evening Star No. 1.

On this claim two ten foot shafts have been put down on the vein. At shaft No. 1 the vein is four feet in width showing good walls. The vein at this shaft has the same characteristics as shaft No. 2 of the Evening Star, the hanging wall a schist, the foot wall a quartz porphyry. The vein here has an easterly and westerly strike and dips to the south at

an angle of 60°. Samples taken from the vein in this shaft assayed from 4⁵⁰ to 13 per cent copper and from 9 to 28⁴⁵ ounces of silver per ton.

Shaft No. 2 on this claim has been put down on the vein but not in a manner to determine if the vein is in place, (no samples were taken from here) however, the vein here shows an easterly and westerly strike and has the appearance of dipping at a 60° angle to the south.

The character of the ore on this claim is an oxidized ore showing Malachite and Chrysocolla.

The Evening Star No. 2.

On this claim are three shafts. One shaft I will call No. 1 shaft, and which is ten feet deep by six feet by four feet. This shaft has been put down in a small but very rich vein of oxidized ore from which very high assays can be obtained. This shaft I assume has been put down as anneral assement work. Shaft No. 2 shows a vein of ore four feet wide and in place here the vein has an easterly and westerly strike and dips to the south at an angle of 55° to the south. The foot wall of the vein here is a schist and the hanging wall a porphyry. The vein is of an oxidized variety containing Chalcopyrite, Chalcocite, Malachite and Chrysocolla. Samples taken from the vein here assayed from 3¹⁸ per cent copper, seven ozs. of silver to 18 per cent copper and 32 ozs. of silver. Shaft No. 3 has the same characteristics as shaft No. 2. Samples taken from here assayed about the same as the samples taken from the vein at shaft No. 2.

The Badger Hill.

On this claim are many shafts, the principal of which I will describe as No. 1, 2, and 3.

Shaft No. 1 is a vertical shaft 12 feet deep by six feet by four feet. The examination of this shaft discloses the fact that the vein when just encountered was very much decomposed, but at the bottom of the shaft has resumed its normal condition. The vein in this shaft shows but one wall, that being a foot wall of schist. To determine the true characteristics of the vein the owners must do more work for at the present showing its true dip cannot be determined, however, the vein has a northeasterly and southwesterly strike and has the appearance of a 50° dip to the northwest. Samples of commercial ore were obtained from the vein at this shaft.

The vein is an oxidized vein impregnated with Malachite and Chrysocolla.

Shafts No. 2 and No. 3 are each eight feet and are six feet by four feet. These shafts have been put down on small veins evidently one of the many feeders that are characteristic to these claims. Here the feeders crosscut the schist formation. These small veins are impregnated with Malachite and Chrysocolla.

The Ada.

On this claim the workings consist of two shafts and one trench. The shaft I will call No. 1 (see map) is a shaft ten feet deep by six feet by five feet. This shaft has been put down on the vein that I will call the Burro Burro vein. This vein is an oxidized vein four feet in

width. It has a northeasterly and southwesterly strike and dips at an angle of 55° to the northwest. The walls of the vein in this shaft show the vein to be in place with a hanging wall of schist and a foot wall of porphyry. The vein here contains chalcopyrite, malachite and chrysocolla, and carries values from $3\overline{50}$ per cent copper, $9\overline{18}$ ozs. silver up to 21 per cent copper, $14\overline{70}$ ozs. silver and $0\overline{82}$ ozs. of gold.

Shaft No. 2 is eight feet deep by six feet by four feet. This shaft has been put down on the gossan (iron capping) characteristic to this section of the country.

No. 3 is a trench which crosscuts several rich stringers. This trench is twelve feet long, three feet wide and three feet deep and is more or less copper stained throughout.

The New Hope.

On this claim are two shafts. Shaft No. 1 which is eleven feet deep by six feet by four feet. This shaft has been put down in a vein which is an intersecting vein, which dips to the north at an angle of 60° with an east and west strike, and cuts the Burro Burro vein. The vein here is in place with good walls of porphyry and schist. The vein is oxidized and of low grade samples taken from this shaft which did not contain commercial values. The highest assay being $3\overline{55}$ per cent copper $4\overline{22}$ ozs. silver and $0\overline{15}$ gold.

Shaft No. 2 put down on this claim is nine feet by five feet by four feet, and has been put down in the wash, with the object, I understand to make a well later on. surface indications and data gathered from the wells in this vicinity show that a good supply of water should be gotten here at from

fifty to seventy-five feet in depth.

The Flap Jack No. 3.

On this claim six perpendicular shafts have been put down. The most important I will name and describe as follows: No. 1 shaft is twenty feet deep by six feet by five feet. This shaft has been put down on the vein which is four feet wide at this point. The vein here has a northeasterly and southwesterly strike and dips at a 60° angle to the northwest. The vein here is in place showing a good foot wall of porphyry and a hanging wall of schist. At this shaft is an ore dump with about twelve tons of commercial ore. Samples taken from here assayed commercial values, the ore is an oxidized ore containing chrysocolla, diopside, and traces of tennantite.

Shafts No. 2 and No. 3 are perpendicular shafts, fifteen feet deep by six feet by five feet. The vein showings in these shafts have the same characteristics as shaft No. 1. Good commercial ores are on the dumps here and values are equally as good as those obtained at shaft No. 1.

Shafts No. 4, 5, and 6, are all ten feet deep by six feet by four feet. Shaft No. 4, while on the vein, has not been put down in a way to show the vein to be in place. Shafts No. 5 and 6 are shafts that have been put down on small oxidized veins (or feeders). These shafts have been put down as annual assessment work and are for the present of no importance.

The Blue Jay.

On this claim there are a number of shafts and cuts, the principal of which I will describe as shaft No. 1 and No. 2, also a crosscut trench which I had my assistant make during my

examination.

Shaft No. 1 (see map) is a perpendicular shaft ten feet deep by six feet by five feet. This shaft has been put down on the Burro Burro vein. The vein here is four feet wide. It has a northeasterly and southwesterly strike and dips to the north at an angle of 65°. The vein here is in place at this shaft showing a schist hanging wall and a porphyry foot wall. The ore is an oxidized ore and contains chalcopyrite, malachite, and chrysocolla, with traces of tetrahedrite. The samples taken from this shaft all carry good commercial values, and run unusually high for shallow workings. One sample taken from the ledge at the bottom of the shaft ran 28 per cent copper 20⁷ ozs. of silver and \$9.00 gold. Shaft No. 2 is a perpendicular shaft eight feet deep by six feet by four feet. This shaft has been put down on the vein and shows the same in place with the same characteristics as the vein in shaft No. 1.

No. 3 is a trench six feet long two feet deep and three feet wide. This crosscuts the continuation of the vein from shaft No. 1. Here the vein is about five feet in width and has a northeasterly and southwesterly strike and without doubt has the same dip as it has at shaft No. 1.

While the crosscutting of this vein was in progress some very rich rock was uncovered, showing chalcocite, impregnated freely through this ore.

The Silver Bell.

On this claim are three perpendicular shafts. One I

will call No. 1 is the main shaft. This shaft is thirty feet deep by seven feet by five feet. The vein here is four feet seven inches in width and has a northeasterly by southwesterly strike with a dip of 60° to the southeast. The vein in this shaft is in place with well defined walls particularly the hanging wall, which is a porphyry, while the foot wall is a schist. The ore is an oxidized ore impregnated with malachite, chrysocolla and traces of chalcopyrites. A number of tons of commercial ore is on the dump here, and samples taken from the vein in this shaft assayed from five per cent copper and 9¹⁰ ozs. of silver up to as high as 17²² per cent copper and 14³⁰ ozs. of silver with a little gold.

Shaft No. 2 is a perpendicular shaft six feet deep by five feet by four feet. The vein in this shaft has the same characteristics as shaft No. 1, with the exception that the chalcopyrites show more prominently. Shaft No. 3 is a perpendicular shaft seven feet deep by five feet by four feet. This shaft has been put down on a small vein which is evidently a feeder of the main vein. This vein cuts through the schist. It is oxidized and impregnated with malachite.

Remarks Relative to Old Workings.

There are many old workings on these claims which have been done by prospectors some years ago, at the time when this district was producing large quantities of ore particularly the mines that join and are in the immediate vicinity of this property. These old workings are in such a condition for caveins that examination would be unwise and almost impossible so I have confined my examination to the shafts that have been put down recently.

Geology.

The geological horizon for two or three miles in any direction is comprised of schist rocks alternating with porphyry dikes at various intervals. These dikes so far as determined follow the foliation and are more or less paralleled with the schist. The vein system is likewise paralleled, and the veins occur as contacts between the porphyry and schist rocks, some of which have schist hanging walls and porphyry foot walls, while others have porphyry hanging and schist foot walls. The porphyries cut through and fault the strata and hence the dikes are younger than the Archaen rocks and consequently the contact veins are younger than the dikes.

The slick and well defined walls of the veins traversing these properties evidence extensive plane faultings. On both foot and hanging walls of the veins the ores assume a more or less branched structure.

There are frequent porphyry intrusions through the ore and often a few inches of Kavalinite selvage on either wall. The evidence given therefore, points conclusively to a true fissure origin of veins. The gangue matter of these veins is principally quartz and the oxidation products are Hematite Limonite and Pyrolusite.

The undecomposed ores are made up of these minerals. Chalcopyrite, Malachite, Chrysocolla and traces of Tetrahedrite.

Recommendations.

I suggest it would be advisable at shaft No. 1 on the Flap Jack No. 3, to continue sinking this shaft to a depth of

one hundred and eighty feet more is to a total depth on the slope of vein of two hundred and run levels each way on the vein at intervals of one hundred feet. At the two hundred foot level secondaries or sulphide zone should be encountered.

The cost of equipping and sinking to this depth would be perhaps about \$15,000.00, and the cost of drifting about \$5.00 per linear foot. It is possible by granting the continuance of the good grade portion of this vein and assuming that it will maintain its present value per ton this work of drifting could be made to almost pay for itself if the ore should be shipped.

If the sulphide ores are encountered in this shaft at two hundred feet I would suggest that shaft No. 1 of the Silver Bell be sunk to the same two hundred foot level and I would also recommend that if shaft No. 1 of the Flap Jack No. 3, and shaft No. 1 of the Silver Bell are developed as I suggest and encounter the secondaries, a small electric smelter be installed. By doing this the low grade as well as the good commercial ores of all these properties could be treated to a big advantage.

This small smelter if installed, could also become a custom smelter, as the following mines, which are in the immediate vicinity of this property could supply, if needed, thousands of tons of good commercial and good fluxing ores.

The following are the names of the mines I have reference to: The Gunsite Mine; The Burro Burro Mine; The Coyle & Coniadi Mine; The Sayers Mine; The Reel Mine; The Caley Mine;

and many others who would more than keep a small smelter running full blast for many years.

Climatic Conditions.

Climatic conditions are such that mining can be carried on throughout the year. The average temperature in winter is 55° farenheit, and in summer about 95° farenheit. The average rainfall is about six inches annually. The wet season occurs during the Fall of the year.

Labor and Supplies.

Good miners can be obtained at six dollars (\$6.00) per day of a working day of eight hours. Laborers (surface and underground) can be obtained at \$3.50 per day, and all other crafts in proportion.

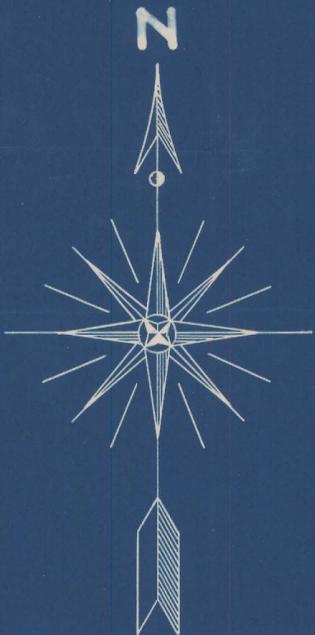
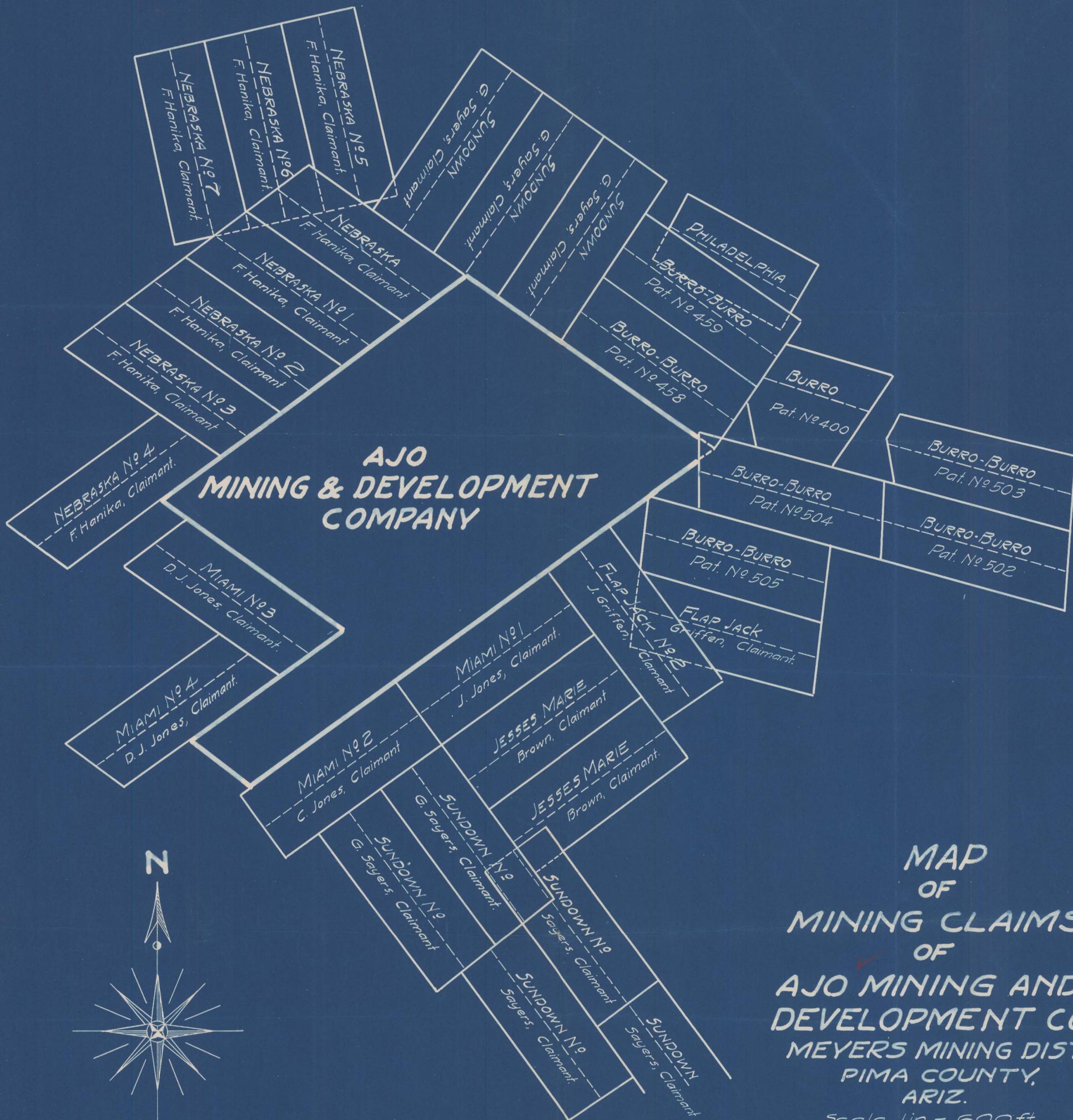
Supplies such as lumber, drill steel, hammers and mining tools can be obtained at a reasonable cost at Ajo.

Machinery such as Hoists, Compressors, Machine Drills, etc., can be gotten at Phoenix or Los Angeles at a very reasonable cost.

Conclusions and Remarks.

In conclusion I will say, while this property poses considerable merit, the development work is not sufficiently extensive to warrant a definite opinion as to its ultimate future, I am, however, led to believe from the facts stated that further explorations will, without doubt, result in the discovery of important ore bodies, such as would place this property in rank with the paying mines of the southwest.

Yours truly, *A. W. Bramwell E.M.*
Ajo Ariz



**MAP
OF
MINING CLAIMS
OF
AJO MINING AND
DEVELOPMENT CO.
MEYERS MINING DIST.,
PIMA COUNTY,
ARIZ.**

Scale, 1 in. = 600 ft.



MAP
OF
MINING CLAIMS
OF
AJO MINING AND
DEVELOPMENT CO.
MEYERS MINING DIST,
PIMA COUNTY,
ARIZ.

Scale, 1 in. = 300 ft.