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DIXIE MINING GROUP

Phoenix, Arizona

Gentlemen:

Pursuant to your request of April 5th, 1917, I submit for your consideration the following report, based upon a personal examination of your property:

LOCATION

This group of eleven unpatented and unsurveyed mining claims, consisting of approximately two hundred and twenty acres, is situated in the central portion of the Dixie Mining District, in Maricopa County, Arizona.

The locations claimed, cover the mineralized outcropping ore bodies in an advantageous manner, and is large enough to prevent all chance of conflict from extra lateral rights of any adjoining properties. (The claims were located with the evident intention of covering Four Thousand, Eight Hundred feet in length of the main dyke. See map of the claims for the position of mineralized dykes, indicated between dotted lines). The property in consideration is situated on the east slope of the McDowell range of Mountains, in air line about sixteen miles northerly from Mesa, about Thirty-five miles northwesterly from Weever's Needle, about Thirty miles northeasterly from Phoenix and about six miles westerly from Fort McDowell, Arizona.

ACCESSIBILITY:

From Tempe, a station on the Southern Pacific and Arizona Eastern Railroads, the property is reached by a wagon road of good grade in a distance of about thirty miles. However, from Mesa, a station on the Southern Pacific Railroad, the distance to the property, by fording the Salt River would be about five miles less and a fairly good road with the exception of crossing the river.

For all-year freighting, Tempe would be the most favorable on account of a bridge over the Salt River at that point. (There

has been a survey made on the west side of the Verde River for a railroad from Mesa to Clarkdale, which comes within about five miles from the Dixie Mining Group's property. The grade for this new Railroad is now under construction, and, no doubt, will be completed within a reasonable length of time. It is therefore, plainly evident that the property is very well situated for economical operation. When the new Railroad is completed, the Dixie Mining Group can put its ores either to the northern smelters at Clarkdale, Arizona or the Southern Smelters at Hayden and Douglas Arizona, at a comparatively low cost per ton.) The electric power lines from the Roosevelt dam pass about six miles away, and thus take care of the important factor of power when large amounts are required.

It is well to state there that the mines in this section are not so expensive to operate as mines usually are. This is owing to the fact that the mines are close to the fertile and productive Salt River Valley; living is cheaper, and labor for surface work can be had for much less than in sections where the living commodities have to be shipped a long distance.

ALTITUDE, WATER AND CLIMATE.

An elevation of about two thousand five hundred feet above sea level makes and admirable and mild, but exhilarating climate, free of the extremes of heat and cold. With little development, near-by springs of fairly good water will furnish an abundance for camp and domestic purposes. For concentration and everything connected with the treatment of ores, water in quantity is available, and can be had by bringing it from the flats near the Verde River. The mine will also provide considerable water as depth is gained.

TITLE

The claims have been held by the original locaters for years and the title established by annual assessment work, is good and perfect.

TOPOGRAPHY

The locality in which this property lies is generally mountainous cut by ravines and gulches flowing easterly into the Verde River, and rising abruptly a short distance westerly to the high mountains

of the McDowell Range, where a few jagged quartzite, or silicious knobs protrude their heads conspicuously above the eroded schists, forming prominent land marks on the horizon and then gradually descending into the Paradise Valley

GENERAL GEOLOGY

BRIEFLY AND GENERALLY DISCUSSING THIS SUBJECT: The Dixie Mining property lies in a belt of mineralized schist and porphyry traversed and paralleled by quartzite dykes which have a northeasterly and southwesterly strike. There is also some limestone bordering the mineralized dyke on the southeast, and the true granite lies to the north about a mile.

Leaching of the dykes and formation has occurred on an extensive scale.

The most prominent rock of the mineral bearing part of the property is a silicified schist carrying calcite. These rocks are evidently of sedimentary origin. With the silicified schists there is an intrusion of highly acidic granular rock resembling quartz-porphyry of igneous origin. This intrusion has resulted in a great shearing and alternation of the nearby schists causing them, in places to take on a darkened aspect in their weathered and silicified outcrops.

The formation near the igneous rock in the dyke and ore zones is more or less stained, and bears the appearance of gossan, carrying much iron oxide on the surface, having a highly cellular and pitted structure caused by the leaching out of former sulphides and leaving a condition very similar to the ore forming rocks of the large copper mines of Arizona and other places. The property is notable for its bold outcrop and continuous mineral bearing dyke over a distance of fully five thousand feet and in places, over a hundred feet in width. The strike is northeasterly to southwesterly with dip southeasterly from forty to fifty degrees. A number of pits cuts, tunnels, and small shafts have exposed good showings with the apparent conclusion that when shafts are sunk into the underlying water levels large sulphide bodies of commercial copper ore can be reasonably anticipated.

This conclusion is substantiated by a winze sunk fifty feet in one of the tunnels on the property, and has proved that there exists valuable sulphide ore bodies beneath the water levels.

DEVELOPMENT

The Development on the property of the Dixie Mining Group comprises some four hundred feet. It is work of a prospecting character, such as tunnels, cuts and shallow shafts, and while of no great importance in the opening up of the property, yet, as a means of proving the great ^{area} ~~area~~ of the mineralized possibility, is of very considerable importance.

The accompanying map shows the location of the tunnels, and the strike to the mineralized dykes and ore bodies are indicated between the dotted lines. Tunnel number one is one hundred and eighty-seven feet in length with a twenty-eight feet cross cut in the dyke matter and as yet, neither wall has been encountered. It also has a winze down fifty feet which is now full of water which assays .01% in copper values. The material which came from the winze shows a high percentage of sulphides. The bottoms of the tunnel is heavily copper stained.

Tunnel number two is one hundred feet in length with a cross-cut fifteen feet in the dyke matter, the whole tunnel is heavily copper stained.

VALUES:

The following list of assays were taken across the vein and they give an idea of the values of the leached material in the roof of the tunnels:

| Sample Number | Gold. Oz. | Silver oz. | Copper % |
|---------------|-----------------|------------|----------|
| #1 | None | 0.3 | Trace |
| #2 | Trace | 0.4 | Trace |
| #3 | Trace | 0.6 | 0.06 |
| #4 | 0.05 | 0.7 | 0.1 |
| #5 | Trace | 0.6 | 0.22 |
| #6 | Trace | 0.9 | 0.32 |
| #7 | Trace | 3.0 | 0.54 |
| #8 | None | 0.8 | 0.16 |
| #9 | None | Trace | Trace |
| #10 | None | 0.6 | Trace |
| #11 | None | 0.4 | Trace |
| #12 | Trace | 1.2 | 0.21 |
| #13 | Copper Contents | 0.04% | |
| #14 | " " | 0.01% | |
| #15 | Trace | 3.2 | 0.17 |

Taken from dump of vein matter which came out of the fifty feet winze.

The following list of assays were taken across vein, and they give an idea of the values in the less leached matter which is in the floor of the tunnels

| Sample No. | Gold. oz | Silver oz. | Copper % |
|------------|----------|------------|----------|
| 16 | .04. | 1.00 | .80 |
| 17 | Trace | .60 | 0.40 |
| 18 | .01 | .30 | 0.15 |
| 19 | Trace | .40 | 1.21 |
| 20 | Trace | Trace | 1.10 |
| 21 | Trace | Trace | 0.20 |
| 22 | .08 | 10.00 | 1.89 |
| 23 | .04 | 1.50 | 0.54 |
| - 24 | .02 | Trace | 0.30 |
| 25 | Trace | .30 | 0.93 |
| 26 | .05 | 2.50 | 0.55 |
| 27 | .26 | 26.00 | 4.50 |

Samples Nos. 26 and 27 were taken from dump which came out of the bottom of the fifty foot winze.

The following assays have been taken by parties at different places on the property.

| Samples | | Gold oz. | Silver oz. | Cu % |
|---------|-------------------|----------|------------|------|
| #2 | 60 ft. along dyke | Trace | 10.9 | 2.7 |
| " | 3 28 ft. across " | .32 | 51.1 | 1.8 |
| " | 5 veinlet in " | 2.20 | 508.2 | 15.2 |
| " | 6 -- ----- | .90 | 107.1 | 10.8 |

The samples were not taken as an average of any proven ore body but as an illustration of the actual metal contents in the leached and the semi-leached vein and dyke matter and veinlets in the tunnels and cross cuts which serves to warrant development on an extensive scale.

The copper contents in the water flowing out of the tunnel is a very good indication for sulphide ore bodies at depth.

RECOMMENDATIONS

There are two very favorable points where serious development is warranted. One of these points is indicated on the map by tunnel number One. At and near bottom of the fifty foot winze in this tunnel, considerable sulphide ore of good grade is already showing (see assays Nos. 26 and 27). Near this winze a shaft should be put down, at least, three hundred feet before any crosscutting or drifting is done. At this depth, or better five hundred feet it would be advisable to cross cut the vein and ore zone, and drift northeasterly a few hundred feet, and the to

and to the southwesterly extensively, or at least 700'. 700' southwesterly from the shaft would put the face of the drift under a low ridge where two prominent dykes form a junction, and conditions are favorable for large ore bodies at this point. In fact, development in this vicinity will probably disclose the most important ore bodies on the property. At, or near this junction would be the place for the other shaft. The two shafts would be about 800' apart, and when connected with drifts and crosscuts would give good air for the mine and a very good plan for economical mining on a large scale. The sum of One Hundred and twenty-five Thousand Dollars will be ample for the above purposes if directed in an economical way by conservative and judicious management.

CONCLUSIONS

In valuing such a property as the Dixie Mining Group, it is necessary in a way, to use comparison. With few exceptions, the surface conditions of this property are as good as many of the producing mines of this state. There can be no reason, then, that by developing to depth, mines of equal importance may not be opened.

On this copper belt, as well as most all other copper belts, it is necessary to get below the leached and weather surface, down into the standing water, where original conditions prevail in order to find bodies of payable ore.

On account of the favorable geological conditions and the good grade of copper and other values found near the surface, it is reasonable to assume that at depth, ore bodies of commercial grade may be found.

Summarizing the different advantages in favor of the Dixie Mining Group's property, attention is drawn to

- (1) The mineralized belt in which it is located compares favorably with the geological conditions of the producing mines of Arizona.
- (2) The formation is favorable for economical mining.
- (3) The satisfactory grade of sulphide copper contained in

the mineralized dykes and which is easily treated by one of the several processes now operating on this character of ore in Arizona.

(4) the important fact that it will be close to a railroad.

m (5) With ample funds and proper management, the property has very good prospect of making a large producing mine.

In view of the characteristic feature of this splendid dyke system, and the favorable geological condition, I have no hesitation whatever, in recommending extensive development. Such development, I feel assured will give promising results, and the property may develop into one of the large concentrating propositions of the state. Therefore, I consider the Dixie Mining Group to have great possibilities, and I believe warrants the expenditure necessary to develop same.

Respectfully submitted,

C. E. Meyers

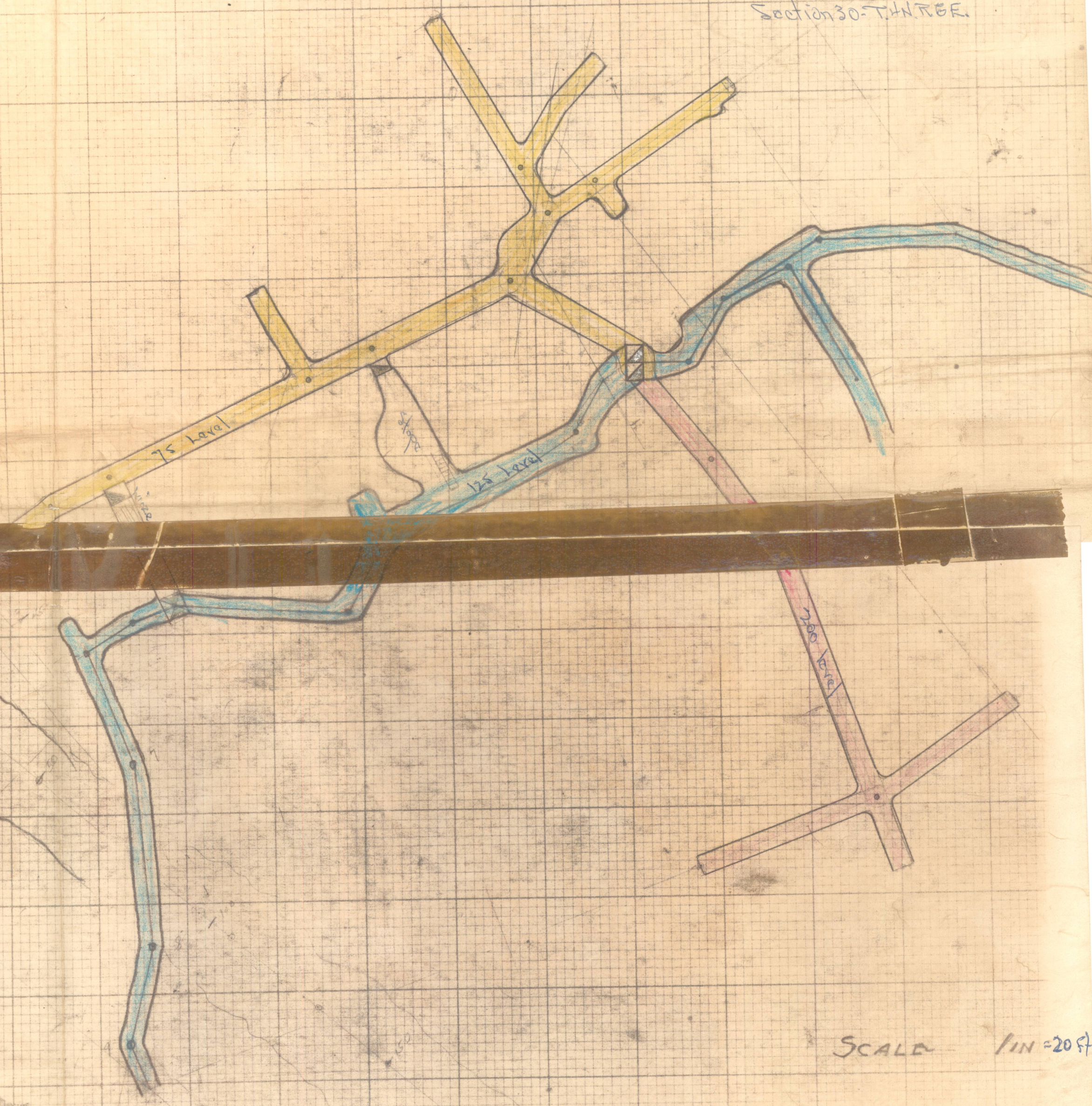
Mining Engineer

APRIL 26th, 1917



Hub 22
INCLINE

DIXIE MINE
in the
Southeast Corner
of
Section 30-T.4N.R.6E.



SCALE 1" = 20'