



CONTACT INFORMATION
Mining Records Curator
Arizona Geological Survey
3550 N. Central Ave, 2nd floor
Phoenix, AZ, 85012
602-771-1601
<http://www.azgs.az.gov>
inquiries@azgs.az.gov

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June 19th 1922

Memo to Mr Colvocoresses:

T Supplementing memorandum of June 16th re analyses of triangle samples. Laboratory reports following results of composites made up as indicated in pencil on memorandum of the 16th:

	<u>Ins</u>	<u>Fe</u>	<u>CaO</u>	<u>S</u>	<u>Zn</u>	<u>Pb</u>
Large Piece and Main Sample	73.5	8.7	0.4	0.5	0.6	Nil
Nos 2, 3 and 4	69.3	10.9	0.7	0.2		
No. 7	70.4	6.0	0.5	0.4		
No. 9	78.7	6.0	0.4	0.2		
No. 10	63.6	2.6	1.0	0.4		
No. 14	71.8	8.3	0.3	0.5		
No. 15	79.5	3.3	0.4	0.2		
No. 16	87.9	2.1	0.7	0.2		
No. 17	55.4	7.9	0.5	0.2	1.3	Nil

J. White

TWW*

Triangle


June 16th 1922

Memo to Mr Colvocoresses:

In line with your request of yesterday.

Below please find the only assay records on file in the Ore Buying Department relative to samples taken on the "Triangle" property:

<u>Date</u>	<u>Marks</u>	<u>Au</u>	<u>Ag</u>	<u>Cu</u>
April 26	Oxidized piece	0.06	0.80	0.50
" "	Large piece Cu ore	0.03	1.79	9.50)
" "	Main sample	0.04	0.86	5.60)
May 31	No. 1	Tr	0.14	1.65
" "	" 2	0.01	0.13	6.79)
" "	" 3	Nil	Nil	2.18)
" "	" 4	Tr	0.24	6.65)
" "	" 5	0.04	0.26	0.94
" "	" 6	Tr	0.12	0.45
" "	" 7	Tr	0.76	9.18-
" "	" 8	Tr	0.30	0.88
" "	" 9	Tr	0.26	5.34-
" "	" 10	Tr	0.48	18.30-
" "	" 11	Nil	Nil	1.02
" "	" 12	Nil	Nil	0.75
" "	" 13	Nil	Nil	0.49
" "	" 14	0.01	1.37	9.20-
" "	" 15	Nil	Nil	6.57-
" "	" 16	Tr	0.18	3.59-
" "	" 17	Tr	0.12	6.28-
" "	" 18	Nil	Nil	0.04
" "	" 19	0.02	4.58	0.12
" "	" 20	Nil	Nil	0.04

J.W. White
.....

*Make composite assays of marked samples
for Fe, Lead, Cu, Pl & Zn.*

McNabb will run as indicated.

July 18th 1922

Mr. Jas. A. Caskey,

Morristown, Arizona

Dear Mr. Caskey:

We have assayed the samples which were taken when we were at your property last week, and they ran as follows:

	Gold oz per ton	Silver oz per ton	Copper per cent
#19, grab sample from hole in S.E. part of property	Nil	0.18	4.57
#20, sample from Owl shaft, E. side. . .	Nil	0.18	0.57
#21, sample from Owl shaft, N. side. . .	Nil	1.06	9.75
#22, sample from bottom of blue gorge. .	Tr	2.14	2.37
#23, grab from dump at hole near red hill--dark rock with bright green copper showing	Nil	0.22	6.16
#24, high grade piece which you gave me, half of the piece which ran about 10 oz silver and 34% copper . .	0.02	18.62	35.46

Am glad to learn that you are going to do some mining work there and hope that your efforts will be justly rewarded. I will be glad to hear from you from time to time. With best regards to all, I remain,

Yours very truly,

HSM*W

September 30 1922.

Mr. Jas. A. Caskey,
Morristown, Arizona.

Dear Mr. Caskey:

We have received and assayed the samples which you sent us a few days ago and obtained the following results:

	Gold	Silver	Copper
No. 1	Tr	0.22	8.20 %
No. 2	Tr	0.20	10.64
No. 3	Tr	0.22	12.46
No. 4	0.02	0.44	0.16

In as much as none of the assays to date have shown any appreciable values in gold and silver, we suggest that in the future - except in special cases - we run the samples for copper alone. The assaying for gold and silver is much more expensive than for copper.

With kind personal regards,

Yours truly,

September 1st 1922

Mr. James A. Caskey,

Morristown, Arizona

Dear Mr. Caskey:

I regret the delay in sending you the returns on samples which you left here several days ago. Have just returned to Humboldt and hasten to forward you the following results:

Sample No 1. Gold, Nil, Silver 0.24, Copper 0.25%

"	2.	Copper 3.34%
"	3.	" 9.96%
"	4.	" 5.86%
"	5.	" 2.13%
"	6.	" 0.62%
"	7.	" 3.92%
"	8.	" 5.90%
"	9.	" 8.12%
"	10.	" 16.56%

Very truly yours,

HSM:W

Triangle Mining, Milling & Development Company

Morristown,
PHOENIX, ARIZ. , Oct. 2, 1922.

Mr. G. M. Colvocoresses,
Humboldt, Arizona.

Dear Mr. Colvocoresses,-

Was indeed sorry to hear of your accident and trust that it is not as serious as I was told it was at Hot Springs Junction, the same evening on which the accident occurred. Had I been ten minutes later leaving the Junction that day I would have met you there as I was in there just a few minutes before you arrived.

Am also sorry that you did not get up here and until I received your letter had hoped that you would be able to come out here from Phoenix.

Of course, it is not necessary for me to go into details with you, a mining man, nor tell you that there are always a few dark clouds along with the silver lining, but we are fixed up fine now on pulling the ore. Have the hole nearest to camp (where the sorting table stood) down about 23 feet and drifting both ways. The ore in bottom shows about 18 inches and have it to the top or 23 feet; showing about 10 inches at the top. Have a three ton truck in here now which will start hauling to the loading platform at the Junction tomorrow morning. My expectations are to pull a car load a week.

We have drifted to the east of north on the "owl" shaft, approximately 20 feet and will tap a main ledge on that side about five feet further on, but found after going that distance that the shaft was in what we commonly term "a horse"; I then turned and went five feet to the south, breaking through this "horse" and broke into 18 inches of ore. One of the samples which I recently sent up for assay coming from this place, running over 10% copper. We shall drift on approximately two feet further and timber up, fill up the old shaft and sink on the ore to a depth of 50 feet before we start drifting. We are setting right on top of the ore at a distance of about 25 feet, and am satisfied that the entire shaft will be in ore when we sink down and no telling how wide the vein is. Do not expect to cross-cut on it until we get down 100 feet, as I am wasting no more time than is absolutely necessary to get to the ore.

Triangle Mining, Milling & Development Company

G. M. C. No. 2

PHOENIX, ARIZ.

With the truck which we have here we should easily make four trips a day, or twelve tons, with the roads in their present condition; have about five tons on platform now.

On Wednesday, this week, we put on a night shift of four men so will be pulling ore day and night.

If you could spare the time, would like very much to have you come down and look the situation over. If this is not possible, I will come to Humboldt after we get our second car load out, but would much prefer your coming down here on the ground. You could come by train as we have a car out here which is half car and half truck with which we could meet you at the train and bring you out to camp.

We are making every effort to get this first car load out Thursday night, which will be about 40 tons this time. On all following cars I want to ship full capacity -- 60 tons.

Will write you again within the next day or so, when we are under full headway pulling the ore and will give you further details.

With kindest personal regards, in which my wife joins me,

Yours very truly,

JAC/C

James A. Caskey

Triangle Mining, Milling & Development Company

Morristown,

PHOENIX, ARIZ. , October 26, 1922.

Mr. G. M. Colvocoresses,
Humboldt, Arizona.

Dear Mr. Colvocoresses,-

Enclosed herewith you will find diagram of the workings here on the property, which I told you in previous letter I would send you, and which consist of the following:

Drift No. 1 was run to a distance of 18 feet; ore about one-third or possibly one half the way coming to the surface. As it was striking under the hill the ore only run to about one-half the face of the drift in height, being a lense, or swell showing in the bottom of this drift, in places, over two feet wide of good ore; but as the ground so near the surface was becoming cavey, I considered it too expensive to timber, even at the rate at which we get our timbers which consist of railroad ties and timber cut at the river. I came to the surface for air and abandoned this drift for that reason.

Drift No. 2, running Southeasterly and on vein where sorting table stood, is a bearing streak from the present shaft of possibly 25 feet. We now have 50 feet of ore just coming into the face from that to the hole where this sorting table stood from which we will be pulling ore.

Drift No. 3 was started this morning at the bottom of 32 ft. shaft; the ore, to begin with, measuring about $1\frac{1}{2}$ ft. wide -- in vein matter, possibly 3 feet. We will have stoping ore from drift No. 3 to drift No. 2, a distance of about 11 ft.

Drift No. 4, at bottom of shaft and opposite No. 3, shows ore to start with, two feet wide, and good ore from drift No. 4 to No. 1 on the stoping; still showing a vein of ore in bottom of shaft of very good grade.

Drifts No. 4 and 3 will give us enough depth to get into good ore and shall continue to run on these drifts as long as the ore continues. No. 3 is getting more backing on every foot we drift ahead.

Shall discontinue the shaft for the present, until I can get fixed up with a tripod, using the truck for

JAMES A. CASKEY
PRESIDENT AND GENERAL MANAGER

ED. TILLEY
SECRETARY AND TREASURER

N. V. CASKEY
ASS'T SECRETARY AND TREASURER

Triangle Mining, Milling & Development Company

PHOENIX, ARIZ.

G. M. C. No. 2

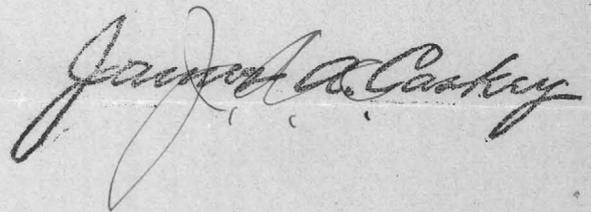
hoisting; work is now going ahead for that purpose.

This ore is all showing higher grade as we reach depth, and at all odds shall follow this rich ore in every direction.

At the present time, can not see anything to prevent us loading a car of ore this week, and if nothing else unforeseen takes place, expect to have another car load for the following week, but am sorting this ore down to give us a far better grade.

I expect to be in Prescott sometime in the near future and shall come on out to Humboldt and see you. Will let you know just when I expect to be there.

Yours very truly,



Oct. 26 - 1922

No. 1 drift

this drift closed
on account of caving
ground and stepped to
top for ~~over~~ 11 ft

Shaft 4 x 6 - 32. ft deep

No 2. drift

drift 26 ft ^{over}
this drift is just
coming into good ore

No. 4 drift

^{over}
2 ft

No 3. drift

^{over}
1 1/2 ft

Starting these drifts this morning

Name: The Triangle Mining, Milling & Development Co.
Property: Eight hundred acres of unpatented land composing forty claims.
Location: The property is in the San Domingos Mining district, Maricopa County, Arizona and is situated in the Southeast quarter of Township 7 North, Range 4 W., Gila and Salt River Principal Meridian. It is $5\frac{1}{2}$ miles N.E. of Hot Springs Junction (P.O. Morrystown) Arizona.

Examined May 20-25, 1922 by H. S. McKnight.

The property is owned by the Triangle Mining, Milling & Development Co., which is incorporated under the laws of Nevada. Capital Stock 2,500,000 shares, par value \$1.00.

Mr. James A. Caskey, Morrystown, Arizona, is President and General Manager.

Topography: The present camp is about 200 ft. higher than Hot Springs Junction, which is 1971 ft. above sea level, as per U.S.G.S.B.M. The country West and South of the property consists of low rolling hills and dry washes. North and East the topographical relief is somewhat greater.

The Hassayampa river passes about two miles West of the camp and five of the forty claims are so located, end to end, as to secure a right of way between the camp and the river. An abundant supply of water is to be had here at all seasons, although the water flow during dry season is a few feet below the surface of the sand and gravel in the river bed.

San Domingos wash cuts across the N.W. end of the property, as shown on sketch map. There is a continuous stream of water under the loose sand and gravel. About $1\frac{1}{2}$ miles above the property a dam has been constructed across this wash by placer miners to obtain head for placer operations above and below the property. These workings have long since been abandoned and the manager of the Triangle Co. has applied for water rights. The dam is at least 12 ft. high, about 150 ft. long and six ft. wide at the top. It is built of solid masonry and is in excellent condition, although the reservoir above the dam is entirely filled with sand and gravel. I was told that water flows over the dam at all seasons.

15

which is 35' above the
level of the camp -
site

Where this wash passes through the property the stream has eroded and cut through the formation until it has formed a gorge or canyon about 300 ft. deep, the walls being very steep.

There are numerous small dry washes cutting across the property forming small hills and valleys but the country in general is not rough. No survey has as yet been made but center end line and corner monuments have been placed by pacing off distances and the claims are located in a group six wide and six long, as shown on sketch map. The general direction of the claims is N.W., S.E. The N.E. side line of

the property lies on a hill of pink and gray andesite, the top of which is probably four or five hundred feet higher than the ground at the S.W. side line. The country to the S.W. slopes off gently to the Hassayampa river below.

There is a fair automobile road between the camp and Hot Springs Junction, a distance of $5\frac{1}{2}$ miles, and a very good road could be constructed at a moderate cost. The topography would also allow for a railroad to be built to the property from the main line of the A.T. & S.F. R.R., which passes about 3 miles to the S.W.

The State Highway, which is now being built between Wickenburg and Phoenix will pass within a mile of the present camp. There is now a telephone line along this proposed roadway, which crosses one of the five claims located, as explained above, between the camp and the Hassayampa river.

Vegetation
&
Timber:

There is very little vegetation on or near the property. What vegetation there is consists principally of various kinds of cactus, palo verde, mesquite and grease wood. There is no timber available *but considerable fire wood*

Geology:

While the length of time spent in the examination did not allow for exploration of the surrounding country other than in the immediate vicinity of the property, the district appears to be characterized by a topography of hornblende-schist underlying a capping of agglomerates and andesitic lava flows. The trend of the schist is roughly E-W. The accompanying sketch-map shows the general geology of the group.

With the exception of one old vertical shaft 100 ft. deep, which is inaccessible on account of caved condition, there has been done no development work other than the digging of small holes and trenches, the deepest of these being from 15 to 20 ft. deep. Numerous small washes and gulches have exposed the underlying formation at various points over the property, but a considerable area is covered and obscured by loose float.

The underlying or basic rocks show evidence of extreme metamorphic action and consist chiefly of highly laminated hornblende schist, some mica schist and massive amphibolites in which the lamination is absent. The schistosity seems to be more highly developed toward the N.W. end of the property.

There are in evidence numerous veins or lenses of quartzite most of which follow the general trend of the schist. These veins vary in thickness from a few inches to several feet and form in some places small hills with blowouts of pure white quartz. Most of the quartzite is heavily stained with oxides of iron.

Numerous faults in the schist formation were observed, most of them nearly vertical and one main fault was traced throughout the length of the property, as shown on map. This fault plane lies in a N.W.-S.E. direction and is cut by cross faults or planes of movement parallel to the trend of the schist.

On the East side of the group there is a hill of pink and gray felsitic rock which is probably andesite. There are several small hills of the same material on the property and are probably cappings lying on the schist. Toward the East and N.E. this material is extensive and fragments of the rock are to be found in all the agglomerate and

float rock in the district toward the West and South.

Southwest of the main fault the schist formation was observed only in a small canyon in the southwestern part of the group. Here the schistosity was not highly developed. At all other localities to the West of this fault there is a deposit of loose float which is probably volcanic agglomerate. The agglomerate is made up of fragments of schist, andesite and basaltic rock and contains a large amount of lime which acts as a cementing material. Indications are that the entire district has at some time been covered with this material. In the San Domingos wash this agglomerate is seen to be at least 100 ft. thick. No rock in place was found in this wash immediately west of the fault. About $1\frac{1}{2}$ miles down the wash andesite porphyry was found in place

In the N.E. corner of the property there is a complex formation including white and gray andesites and a bluish gray basaltic rock with cavity filling of calcite. A small deep gorge has been formed in this bluish basalt and at the lower end toward the San Domingos wash the amphibolite and schist formation is exposed in the bottom.

Northwest of the property and across the San Domingos wash there is a pegmatitic intrusion striking N. N.E. There is a tall hill, as shown on map, which is made up of this material.

The mineralization is confined almost entirely to the schist and amphibolite rocks. Numerous outcroppings of veins were found nearly all of which lie parallel to the main fault plane or parallel to the trend of the schist and quartzite lenses. These veins contain hematite, limonite, chrysocolla, malachite, azurite, atacamite, and chalcocite and vary in thickness from a few inches to five feet or more.

Copper outcroppings and stains were found scattered over the entire property where the schist formation is exposed. Most of these showings have been marked on the map.

At hole #101 on Copper Hill claim there is a good showing of mineralization along the fault plane. The hole is 8 ft. deep on the fault and a grab sample from dump material ran Au - Tr. Ag - 0.14, Cu - 1.65%

Hole #102 is on a small fissure in the andesite on Silver Bell claim #3. The vein is narrow and flat and sample taken here showed, Au - 0.01, Ag. - 0.13, Cu - 6.79%

Holes #103 and #104 are shallow holes about two feet deep near the old shaft. There is good copper showing in each.

Hole #105 on Silver Bell Claim #4 is about 8 ft. deep and exposes beneath the float mineralized fissures in the schist. Good copper showings. Sample of dump ran Au - Nil, Ag - Nil Cu - 2.18%.

Holes #106, 107 and 108 are on mineralized veins in faulted zone as shown on map. These veins vary in thickness from a few inches to at least 4 ft. Hole 106 shows cross faulting and a sample cut from this cross vein showed Au - Tr., Ag - 0.24, Cu - 6.65%. Was told that four carloads of ore was shipped to Hayden from this hole which netted \$75.00 per ton. A grab sample from waste dump at this hole gave Au - 0.04, Ag. - 0.26, Cu - 0.94%. A grab sample from waste dump at hole #107 showed Au - Tr., Ag - 0.12, Cu - 0.45%.

A sample of ore from this hole ran Au - tr., Ag - 0.76, Cu - 9.18%. Samples of waste dump and ore at hole #108 ran respectively, Au - Tr., Ag - 0.30, Cu - 0.88% and Au - Tr. Ag - 0.26, Cu - 5.34%.

Hole #109 is on cross fissures in S. W. corner of Silver Bell Claim #6. It is about 5 ft. deep and shows copper and quartz. No sample was taken here.

Holes #110 and 111 are on same vein as 109. Hole 111 is a trench about 75 ft. long with holes from 1 to 8 ft. deep. A sample of ore from hole 111 ran, Au - Tr., Ag - 0.48, Cu - 18.30%

Hole #112 is about 100 ft. E. of Hole 111. It is 50 ft. long and from 4 to 8 ft. deep on a vein 3 to 4 ft. wide which runs parallel to vein in hole #111. Two grab samples taken from dump at this hole ran #1, Au - Nil, Ag - Nil, Cu - 1.02%
#2, Au - Nil, Ag - Nil, Cu - 0.75%

The veins exposed in these holes are all practically vertical.

Holes, 114, 115, 116, 117 and 118 are on a vein lying parallel to the trend of the schist. The vein is from 2 to 4 ft. wide and is well mineralized but does not show much copper. Hole #114 is 10 ft. deep and a sample taken across vein in N.W. end showed Au - Nil, Ag - Nil, Cu - 0.49%.

Holes 119 and 120 are probably assessment holes and like hole 113 are on a large quartzite dike running, as shown on map, forming hills and ridges. There are copper stains in each of the holes and the quartzite is stained brownish black with iron.

Holes 121 and 122 are in faulted zone and show heavy iron stains and some copper.

Holes 124 and 125 on small andesite hill. Good copper showing. Sample of ore from hole 124 ran Au - 0.01, Ag - 1.37
Cu 0 9.20%

On Bright Star claim #23 there is a low hill or ridge of andesite which lies as a capping over the amphibolite. The latter rock could be seen in only a few places, it being practically entirely covered by the finer grained felsitic rock. Streaks of quartzite run along the hill and the quartzite and fine grained rock seem to be the principal mineral carriers at this point. The veins appear to be flat but no definite idea of the dip could be found because of the shallowness of the holes and the loose float covering. There are a number of small holes, practically all in the andesite, and nearly all show copper stains. The hill extends, as shown on the map, to the large andesite hill to the S.E. Two samples were taken of the outcrop along the hill and assayed as follows:

#1 Au - Nil, Ag - Nil, Cu - 6.57%
2 Au - Tr. Ag - 0.18, Cu - 3.59%

A grab sample of dump material at one of the holes on this hill gave Au - Tr., Ag - 0.12, Cu - 6.28%

Copper stains were found in few places in schist formation exposed in the San Domingos wash. The lamination or schistosity is more highly developed here than in some other parts of the property but the mineralization is not so strong.

In the bottom of the blue gorge in Bright Star claim #1, the massive amphibolite formation is exposed and shows good mineralization. A sample of this material was taken and showed Au - 0.02, Ag - 4.58 - Cu, 0.12%.

A sample taken from a light colored iron stained dike in the same locality showed Au - Nil, Ag - Nil, Cu - 0.04%.

The geology in this section of the group is complex and there are numerous small mineralized veins in the upper volcanics but these are probably of no great importance.

At the N.W. end of Bright Star claim #1 there is a small deposit of loose agglomerate on top of the bluff overlooking the San Domingos wash, the bottom of which is some 300 ft. below. This material I was told, has been worked with a profit for placer gold. Several other placer workings of a similar nature were observed on the property.

Conclusions

The property is merely a prospect, no mining development of any consequence having been done on it. The old shaft which I was told, was sunk vertically 100 ft. without any cross cuts or drifts, is located between two very promising looking outcrops and is in an excellent position to develop these veins by very little cross-cutting. I presume that those sinking the shaft had some such intentions because there is no ore on the shaft dump and it appears to have been sunk in barren ground. No information could be obtained as to what was found in the shaft, the present owner never having been down. It is caved near the surface but to what extent, could not be determined because no ladder or rope was available as a means of descent. I believe an examination of this shaft could be accomplished without a great deal of preparation, especially since there is apparently no water in it. Why the present owners have not repaired the shaft and examined it was not learned.

The ground is well mineralized and copper ore and stains were found scattered over the entire property. There is an abundance of red iron oxide or gossan, especially in the central position of the group, and present indications would point to this portion as being the most promising. However, most of the trenching work has been done in this locality and further development in other quarters might uncover more promising indications. The N.E. quarter of the group is well mineralized and is worthy of further investigation.

In view of the uniform and substantial mineralization, together with the geological formation, I believe this property to be a good prospect and well worthy of further development.

H.S. Mc Knight

t
Humboldt
6/1/22

A D D E N D A T O
Report by J.L.White
on the
TRIANGLE MINING, MILLING & DEVELOPMENT CO

- 0 -

Examination of Old Shaft:

Shaft 4' x 8' measured 100 feet deep, timbering consisting of 2 x 12 cribbing and in very good condition in the hoisting compartment except for the first twelve feet.

Two cross-cuts from the bottom of the shaft cut the formation at right angles.

Schist dips to the north at about 60° from the vertical. The cross-cut north is about 200 feet long and intersects numerous vertical east-west veins which show much lime. For the last 25 feet the cross-cut follows a north-south fissure similar to the east-west vein.

At one point small copper stains were observed.

At a point 15 feet north from the shaft a drift had followed a vein for 25 feet west. The vein had a small amount of copper stain and much calcite.

The south cross-cut is about 100 feet long and is similar to the north cross-cut. A trace of copper stain was observed.

Although the cross-cuts were not long enough to intersect the more prominent veins as exposed on the surface, the cutting of many similar veins which were apparently barren at this depth, indicates extreme doubtfulness of the ore extending much below the surface.

J. L. W.

*Castle Hill
Spring*

A D D E N D A T O
Report by J.L.White
on the
TRIANGLE MINING, MILLING & DEVELOPMENT CO

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J. L. W.

TRIANGLE MINE.

Note by G. M. Colvocoresses,

October, 1937.

In 1922 I took an option on this property for Southwest Metals Company and we did some development and made a few shipments of high grade oxidized ore from near the surface.

Our conclusion was that the deposit was entirely secondary and that the better grade ore was confined to pockets and seams. There seemed to be little hope of finding any large body of pay ore and we dropped the option.

Several attempts were subsequently made to work these claims by Caskey and small companies with which he was associated, but it has now been idle for many years and in my opinion is entirely unpromising.

TRIANGLE MINE

Name: The Triangle Mining, Milling & Development Company.
Property: Eight hundred acres of unpatented land composing forty claims.

Location: The property is in the San Domingos Mining district, Maricopa County, Arizona and is situated in the Southeast quarter of township 7 North, range 4 W., Gila and Salt River Principal Meridian. It is 5½ miles N.E. of Hot Springs Junction (P.O. Morristown) Arizona.

examined May 20-25, 1922 by H. S. McKnight.

The property is owned by the Triangle Mining, Milling and Development Company, which is incorporated under the laws of Nevada. Capital Stock 2,500,000 shares, par value \$1.00.

Mr. James A. Caskey, Morristown, Arizona, is President and General Manager.

Topography: The present camp is about 200 ft. higher than Hot Springs Junction, which is 1971 ft. above sea level, as per U.S.G.S.B.M. The country West and South of the property consists of low rolling hills and dry washes. North and east the topographical relief is somewhat greater.

The Hassayampa River passes about two miles west of the camp and five of the forty claims are so located, end to end, as to secure a right of way between the camp and the river. An abundant supply of water is to be had here at all season, although the water flow during dry season is a few feet below the surface of the sand and gravel in the river bed.

San Domingos wash cuts across the N.W. end of the property, as shown on sketch map. There is a continuous stream of water under the loose sand and gravel. About 1½ miles above the property a dam has been constructed across this wash by placer miners to obtain head for placer operations above and below the property. These workings have long since been abandoned and the manager of the Triangle Co. has applied for water rights. The dam is 15 ft. high, about 150 ft. long and six ft. wide at the top, which is 35 to 40' above the level of the camp-site. It is built of solid masonry and is in excellent condition, although the reservoir above the dam is entirely filled with sand and gravel. I was told that water flows over the dam at all seasons.

Where this wash passes through the property the stream has eroded and cut through the formation until it has formed a gorge or canyon about 300 ft. deep, the walls being very steep.

There are numerous small dry washes cutting across the property forming small hills and valleys but the country in general is not rough. No survey has as yet been made but center end line and corner monuments have been placed by pacing off distances and the claims are located in a group six wide and six long, as shown on sketch map. The general direction of the claims is N.W., S.E. The N.E. side line of the property lies on a hill of pink and gray andesite, the top of which is probably four or five hundred feet higher than the ground at the S.W. side line. The country to the S.W. slopes off gently to the Hassayampa River below.

There is a fair automobile road between the camp and Hot Springs Junction, a distance of $5\frac{1}{2}$ miles, and a very good road could be constructed at a moderate cost. The topography would also allow for a railroad to be built to the property from the main line of the A.T. & S.F. R.R., which passes about 3 miles to the S.W.

The State Highway, which is now being built between Wickenburg and Phoenix will pass within a mile of the present camp. There is now a telephone line along this proposed roadway, which crosses one of the five claims located, as explained above, between the camp and the Hassayampa River.

Vegetation

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Timber: There is very little vegetation on or near the property. What vegetation there is consists principally of various kinds of cactus, palo verde, mesquite and grease wood. There is no timber available, but considerable fire wood.

Geology: While the length of time spent in the examination did not allow for exploration of the surrounding country other than in the immediate vicinity of the property, the district appears to be characterized by a topography of hornblende-schist underlying a capping of agglomerates and andesitic lava flows. The trend of the schist is roughly E-W. The accompanying sketch-map shows the

general geology of the group.

with the exception of one old vertical shaft 100 ft. deep, which is inaccessible on account of caved condition, there has been done no development work other than the digging of small holes and trenches, the deepest of these being from 15 to 20 ft. deep. Numerous small washes and gulches have exposed the underlying formation at various points over the property, but a considerable area is covered and obscured by loose float.

The underlying or basic rocks show evidence of extreme metamorphic action and consist chiefly of highly laminated hornblende schist, some mica schist and massive amphibolites in which the lamination is absent. The schistosity seems to be more highly developed toward the N.W. end of the property.

There are in evidence numerous veins or lenses of quartzite most of which follow the general trend of the schist. These veins vary in thickness from a few inches to several feet and form in some places small hills with blowouts of pure white quartz. Most of the quartzite is heavily stained with oxides of iron.

Numerous faults in the schist formation were observed, most of them nearly vertical and one main fault was traced throughout the length of the property, as shown on map. This fault plane lies in a N.W. -- S.E. direction and is cut by cross faults or planes of movement parallel to the trend of the schist.

On the east side of the group there is a hill of pink and gray felsitic rock which is probably andesite. There are several small hills of the same material on the property and are probably cappings lying on the schist. Toward the east and N.E. this material is extensive and fragments of the rock are to be found in all the agglomerate and float rock in the district toward the west and south.

Southwest of the main fault the schist formation was observed only in a small canyon in the southwestern part of the group. Here the schistosity was not highly developed. At all other localities to the west of this fault there is a deposit of loose float which is probably volcanic agglomerate. The agglomerate is made up of fragments of schist, andesite and basaltic rock and

contains a large amount of lime which acts as a cementing material. Indications are that the entire district has at some time been covered with this material. In the San Domingos wash this agglomerate is seen to be at least 100 ft. thick. No rock in place was found in this wash immediately west of the fault. About $1\frac{1}{2}$ miles down the wash andesite porphyry was found in place.

In the N.E. corner of the property there is a complex formation including white and gray andesites and a bluish gray basaltic rock with cavity filling of calcite. A small deep gorge has been formed in this bluish basalt and at the lower end toward the San Domingos wash the amphibolite and schist formation is exposed in the bottom.

Northwest of the property and across the San Domingos Wash there is a pegmatitic intrusion striking N. N.E. There is a tall hill, as shown on map, which is made up of this material.

The mineralization is confined almost entirely to the schist and amphibolite rocks. Numerous outcroppings of veins were found nearly all of which lie parallel to the main fault plane or parallel to the trend of the schist and quartzite lenses. These veins contain hematite, limonite, chrysocolla, malachite, azurite, atacamite, and chalcocite and vary in thickness from a few inches to five feet or more.

Copper outcroppings and stains were found scattered over the entire property where the schist formation is exposed. Most of these showings have been marked on the map.

At hole #101 on Copper Hill claim there is a good showing of mineralization along the fault plane. The hole is 8 ft. deep on the fault and a grab sample from dump material ran Au - Tr., Ag - 0.14, Cu - 1.65%.

Hole #102 is on a small fissure in the andesite on Silver Bell claim #3. The vein is narrow and flat and sample taken here showed Au - 0.01, Ag - 0.13, Cu - 6.79%.

Holes #103 and #104 are shallow holes about two feet deep near the old shaft; there is good copper showing in each.

Hole #105 on Silver Bell Claim #4 is about eight feet

deep and exposes beneath the float mineralized fissures in the schist. Good copper showings. Sample of dump ran Au - Nil, Ag - Nil, Cu - 2.18%.

Holes #106, #107 and #108 are on mineralized veins in faulted zone as shown on map. These veins vary in thickness from a few inches to at least 4 ft. Hole #106 shows cross faulting and a sample cut from this cross vein showed Au - Tr, Ag - 0.24, Cu - 6.65%. Was told that four carloads of ore was shipped to Hayden from this hole which netted \$75.00 per ton. A grab sample from waste dump at this hole gave Au - 0.04, Ag - 0.26, Cu - 0.94%. A grab sample from waste dump at hole #107 showed Au - Tr, Ag - 0.12, Cu - 0.45%. A sample of ore from this hole ran Au - Tr, Ag - 0.76, Cu - 0.18%. Samples of waste dump and ore at hole #108 ran respectively, Au - Tr, Ag - 0.30, Cu - 0.88% and Au - Tr, Ag - 0.26, Cu - 5.34%.

Hole #109 is on cross fissures in S.W. corner of Silver Bell Claim #6. It is about 5 ft. deep and shows copper and quartz. No sample was taken here.

Holes #110 and #111 are on same vein as #109. Hole #111 is a trench about 75 ft. long with holes from 1 to 8 ft. deep. A sample of ore from hole #111 ran Au - Tr, Ag - 0.48, Cu - 18.30%.

Hole #112 is about 100 ft. E. of Hole #111. It is 50 ft. long and from 4 to 8 ft. deep on a vein 3 to 4 ft. wide which runs parallel to vein in hole #111. Two grab samples taken from dump at this hole ran #1, Au - Nil, Ag - Nil, Cu - 1.02%
#2, Au - Nil, Ag - Nil, Cu - 0.75%

The veins exposed in these holes are all practically vertical.

Holes #114, #115, #116, #117 and #118 are on a vein lying parallel to the trend of the schist. The vein is from 2 to 4 ft. wide and is well mineralized but doesn't show much copper. Hole #114 is 10 ft. deep and a sample taken across vein in N.W. end showed Au - Nil, Ag - Nil, Cu - 0.49%.

Holes #119 and #120 are probably assessment holes and like hole #113 are on a large quartzite dike running, as shown on map, forming hills and ridges. There are copper stains in each of the holes and the quartzite is stained brownish black with iron.

Holes #121 and #122 are in faulted zone and show heavy iron stains and some copper.

Holes #124 and #125 on small andesite hill. Good copper showing. Sample of ore from hole #124 ran Au - 0.01, Ag - 1.37, Cu - 9.20%.

On Bright Star claim #23 there is a low hill or ridge of andesite which lies as a capping over the amphibolite. The latter rock could be seen in only a few places, it being practically entirely covered by the finer grained felsitic rock. Streaks of quartzite run along the hill and the quartzite and fine grained rock seem to be the principal mineral carriers at this point. The veins appear to be flat but no definite idea of the dip could be found because of the shallowness of the holes and the loose float covering. There are a number of small holes, practically all in the andesite, and nearly all show copper stains. The hill extends, as shown on the map, to the large andesite hill to the S.E. Two samples were taken of the outcrop along the hill and assayed as follows:

#1, Au - Nil, Ag - Nil, Cu - 6.57%

#2, Au - Tr., Ag - 0.18, Cu - 3.59%

A grab sample of dump material at one of the holes on this hill gave Au - Tr, Ag - 0.12, Cu - 6.28%.

Copper stains were found in few places in schist formation exposed in the San Domingos Wash. The lamination or schistosity is more highly developed here than in some other parts of the property but the mineralization is not so strong.

In the bottom of the blue gorge in Bright Star claim #1, the massive amphibolite formation is exposed and shows good mineralization. A sample of this material was taken and showed Au - 0.02, Ag - 4.58, Cu - 0.12%.

A sample taken from a light colored iron stained dike in the same locality showed Au - Nil, Ag - Nil, Cu - 0.04%.

The geology in this section of the group is complex and there are numerous small mineralized veins in the upper volcanics but these are probably of no great importance.

At the N.W. end of Bright Star claim #1 there is a

small deposit of loose agglomerate on top of the bluff overlooking the San Domingos Wash, the bottom of which is some 300 ft. below. This material I was told, has been worked with a profit for placer gold. Several other placer workings of a similar nature were observed on the property.

Conclusions:

The property is merely a prospect, no mining development of any consequence having been done on it. The old shaft which I was told was sunk vertically 100 ft. without any cross cuts or drifts, is located between two very promising looking outcrops and is in an excellent position to develop these veins by very little cross-cutting. I presume that those sinking the shaft had some such intentions because there is no ore on the shaft dump and it appears to have been sunk in barren ground. No information could be obtained as to what was found in the shaft, the present owner never having been down. It is caved near the surface but to what extent, could not be determined because no ladder or rope was available as a means of descent. I believe an examination of this shaft could be accomplished without a great deal of preparation, especially since there is apparently no water in it. Why the present owners have not repaired the shaft and examined it was not learned.

The ground is well mineralized and copper ore and stains were found scattered over the entire property. There is an abundance of red iron oxide or gossan, especially in the central position of the group, and present indications would point to this portion as being the most promising. However, most of the trenching work has been done in this locality and further development in other quarters might uncover more promising indications. The N.E. quarter of the group is well mineralized and is worthy of further investigation.

In view of the uniform and substantial mineralization, together with the geological formation, I believe this property to be good prospect and well worthy of further development.

(signed) H. S. MCKNIGHT.

t
Humboldt
6/1/22

(Map referred to throughout report not in files.)

A D D E N D A T O

Report by J. L. White

On the

TRIANGLE MINING, MILLING & DEVELOPMENT CO.

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Examination of Old Shaft:

Shaft 4' x 8' measured 100 feet deep, timbering consisting of 2 x 12 cribbing and in very good condition in the hoisting compartment except for the first twelve feet.

Two cross-cuts from the bottom of the shaft cut the formation at right angles.

Schist dips to the north at about 60° from the vertical. The cross-cut north is about 200 feet long and intersects numerous vertical east-west veins which show much lime. For the last 25 feet the cross-cut follows a north-south fissure similar to the east-west vein.

At one point small copper stains were observed.

At a point 15 feet north from the shaft a drift had followed a vein for 25 feet west. The vein had a small amount of copper stain and much calcite.

The south cross-cut is about 100 feet long and is similar to the north cross-cut. A trace of copper stain was observed.

Although the cross-cuts were not long enough to intersect the more prominent veins as exposed on the surface, the cutting of many similar veins which were apparently barren at this depth, indicates extreme doubtfulness of the ore extending much below the surface.

J. L. W.

June 19th, 1922.

Memo to Mr. Colvocoresses:

Supplementing memorandum of June 16th re analyses of Triangle samples. Laboratory reports following results of composites made up as indicated in pencil on memorandum of the 16th:

	<u>Ins.</u>	<u>Fe.</u>	<u>CaO.</u>	<u>S.</u>	<u>Zn.</u>	<u>Pb.</u>
Large Piece and Main Sample	73.5	8.7	0.4	0.5	0.6	Nil
Nos 2, 3 and 4	69.3	10.9	0.7	0.2		
No. 7	70.4	6.0	0.5	0.4		
No. 9	78.7	6.0	0.4	0.2		
No. 10	63.6	2.6	1.0	0.4		
No. 14	71.8	8.3	0.3	0.5		
No. 15	79.5	3.3	0.4	0.2		
No. 16	87.9	2.1	0.7	0.2		
No. 17	55.4	7.9	0.5	0.2	1.3	Nil

(signed) T. W. WHITE.

TWW*

June 16th, 1922.

Memo to Mr. Colvocoresses:

In line with your request of yesterday.

Below please find the only assay records on file in the Ore Buying Department relative to samples taken on the "Triangle" property:

<u>Date</u>	<u>Marks</u>	<u>Au</u>	<u>Ag</u>	<u>Cu</u>
April 26	Oxidized piece	0.06	0.80	0.50
" "	Large piece Cu ore	0.03	1.79	9.50
" "	Main sample	0.04	0.86	5.60
May 31	No. 1	Tr.	0.14	1.65
" "	2	0.01	0.13	6.79
" "	3	Nil	Nil	2.18
" "	4	Tr.	0.24	6.65
" "	5	0.04	0.26	0.94
" "	6	Tr.	0.12	0.45
" "	7	Tr.	0.76	9.18
" "	8	Tr.	0.30	0.88
" "	9	Tr.	0.26	5.34
" "	10	Tr.	0.48	18.30
" "	11	Nil	Nil	1.02
" "	12	Nil	Nil	0.75
" "	13	Nil	Nil	0.49
" "	14	0.01	1.37	9.20
" "	15	Nil	Nil	6.57
" "	16	Tr.	0.18	3.59
" "	17	Tr.	0.12	6.28
" "	18	Nil	Nil	0.04
" "	19	0.02	4.58	0.12
" "	20	Nil	Nil	0.04

(signed) T. W. WHITE.

TRIANGLE MINE.

Note by G. M. Colvocoresses,

October, 1937.

In 1922 I took an option on this property for Southwest Metals Company and we did some development and made a few shipments of high grade oxidized ore from near the surface.

Our conclusion was that the deposit was entirely secondary and that the better grade ore was confined to pockets and seams. There seemed to be little hope of finding any large body of pay ore and we dropped the option.

Several attempts were subsequently made to work these claims by Caskey and small companies with which he was associated, but it has now been idle for many years and in my opinion is entirely unpromising.