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PRINTED: 07-09-2012

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: COPPER HILL GROUP

ALTERNATE NAMES:
MINNEAPOLIS PAT CLAIM 1619
ST. PAUL PAT CLAIM 1619
BELLE CLAIM
AMALGAMATED COPPER CO.

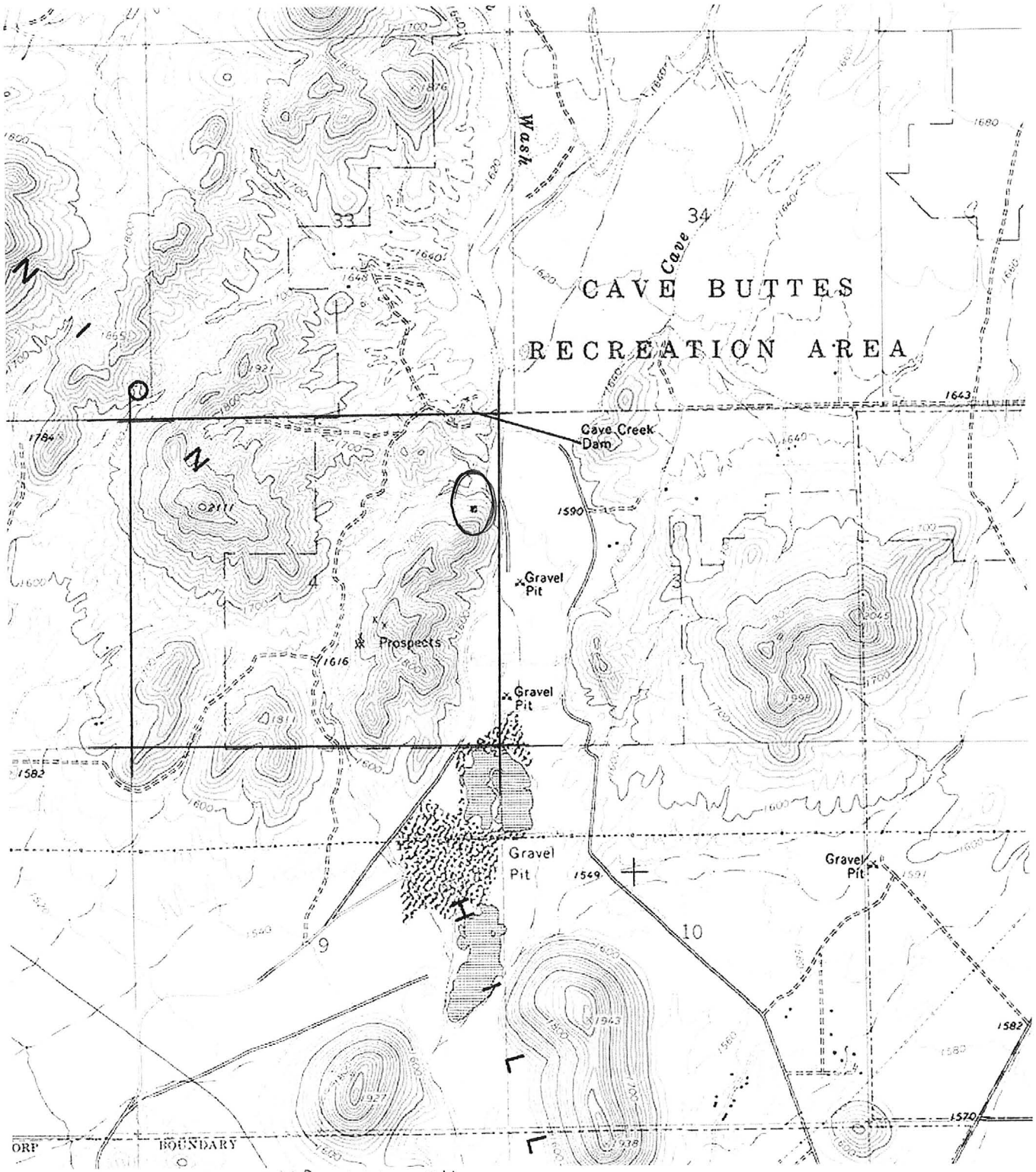
MARICOPA COUNTY MILS NUMBER: 477

LOCATION: TOWNSHIP 4 N RANGE 3 E SECTION 4 QUARTER NE
LATITUDE: N 33DEG 43MIN 23SEC LONGITUDE: W 112DEG 02MIN 55SEC
TOPO MAP NAME: UNION HILLS - 7.5 MIN

CURRENT STATUS: EXP PROSPECT

COMMODITY:
COPPER OXIDE
IRON SULFIDE
IRON HEMA-MAGNE
SILVER
GOLD LODE

BIBLIOGRAPHY:
USGS UNION HILLS QUAD
BLM MINING DISTRICT SHEET
ADMMR MINN. & ST. PAUL FILE



N33 43' 23" W112 02' 55"

Copper Hill Group

ArcGIS -

HOCKETT, W. G. PROPERTIES

MARICOPA COUNTY

WINIFRED DISTRICT

S5- T4N - R3E

COPPER

SW side Cave Creek Dam - owned at one time by Hockett -

Sued State for $15,000 because of building of Cave Creek Dam - didn't collect.

Shaft 150' or deeper.

Narrow stringer of copper (Flagg) - not commercial.

(Probably withdrawn from Mineral entry)

B. J. SQUIRE

March 1, 1957

No. 262 Ho

Phoenix, Arizona,
July 26, 1946

CHAS. A. DIEHL

ARIZONA ASSAY OFFICE

Mail: P. O. Box 1148 | 815 North First Street | Phone 3-4001

S CERTIFIES That samples submitted for assay by Mr. W. G. Hockett. contain as follows per ton of 2000 lbs. Avoir.

MARKS	SILVER Ounces	SILVER Tenths	VALUE (OZ.)	GOLD Ounces	GOLD Hndt	VALUE (OZ) $35.00	TOTAL VALUE Of Gold & Silver	% PERCENTAGE COPPER	REMARKS
1X					.18	$6.30		Kruger & Sulton	
1	Trace			Trace					
2	Trace			Trace				Minneapolis & St Paul	
3	Trace			Trace					
4		.2		Trace				.21	
5		.2			.02	$.70		.06	

Charges $ 8.75 Paid

Assayer ARIZONA ASSAY OFFICE

CAD

DEPARTMENT OF MINERAL RESOURCES

News Items

Date 7/24/46

Mine Red Minneapolis & St. Paul

Location S 4 4 N 3 E

Owner Min Sec 16 19 (1901)

Address #1 El 1450

Face 7 Short Tunnel

Operating Co. 5' in N 55 W

Address S D

Pres. Tunnel 210

Genl. Mgr. # N 70° W

Mine Supt.

Mill Supt. S x 135 E Dip 25° N

Principal Metals Sample #2 90

Men Employed 11 #3 180

Production Rate

Mill, Type & Capacity

Power, Amt. & Type

Signed

MINNEAPOLIS & ST. PAUL

Cu

Maricopa 7 - 2 Sec. 4, T 4 N, R 3 E

W. G. Hokett, 2322 N. 9th St., Phoenix '46

DEPARTMENT OF MINERAL RESOURCES
State of Arizona
MINE OWNER'S REPORT

Date July 24, 1946

1. Mine: Minneapolis & St Paul
2. Location: Sec. 4 Twp. 4 N Range 3 E Nearest Town Phoenix
   Distance ..... Direction S Road Condition Good
3. Mining District & County: Winfred Maricopa
4. Former Name of Mine: None
5. Owner: W. G. Hackett
   Address: Phoenix
6. Operator: None
   Address:
7. Principal Minerals: Cu.
8. Number of Claims: 2 Lode ✓ Placer .....
   Patented ✓ Unpatented .....
9. Type of Surrounding Terrain: Low mountains

10. Geology & Mineralization: Quartz vein 18" wide
Strike N 19° E H & F in schist

11. Dimension & Value or Ore Body: 18" wide 0 to .21 oz Cu.
Five samples

Maricopa 7-2 B - A 46

12. Ore "Blocked Out" or "In Sight": None

Ore Probable: ?

13. Mine Workings—Amount and Condition:

	No.	Feet	Condition
Shafts	5	?	Caved
Raises		?	
Tunnels		?	
Crosscuts			
open cuts ~~Stopes~~	3	1000'	Fair

14. Water Supply:

15. Brief History:

Claims patented 1902

16. Signature:

17. If Property for Sale, List Approximate Price and Terms:

MEMORANDUM IN SUPPORT OF H. B. 1 INTRODUCED

BY MR. TIMMERMAN,

BEING AN ACT FOR THE RELIEF OF WILLIAM GOLDING HOKETT

FORWARD: This Act appropriates $12,500.00 for the relief of William Golding Hokett. The basis of the appropriation is the fact that Mr. Hokett owns the Minneapolis patented lode mining claim upon which lies the Cave Creek Flood Control Dam, constructed pursuant to the provisions of acts enacted by the Arizona Legislature.

CHAIN OF TITLE: The Minneapolis claim was located and patented by one Charles F. Baker in 1896. By several deeds of conveyance the claim was finally vested in the Amalgamated Copper Mines Company, an Arizona corporation, which company also became owner of contiguous mining claims. Subsequently, the State of Arizona obtained title through tax sale to the Minneapolis claim and on September 13, 1944, by and through the Board of Supervisors of Maricopa County sold the claim in question to Mr. Hokett. Thereafter a judgment quieting title to said claim was rendered in favor of Mr. Hokett and against the State of Arizona, Maricopa County, Verde River Irrigation and Power District, along with other parties defendant.

See: Copper Hill Group file Maricopa Co.

HISTORY OF CAVE CREEK FLOOD CONTROL DAM CONSTRUCTION: Pursuant to the authority granted to the State Engineer under authority of the laws enacted by the Legislature, the State of Arizona, through its State Engineer, Maricopa County, through its Board of Supervisors, the City of Phoenix, Salt River Valley

Water Users' Association and Paradise Verde Irrigation District entered into an agreement for the construction of the Dam. However, no permit as required by law was ever obtained from the State Water Commissioner to construct the dam. A judgment in condemnation was entered in favor of the parties to the agreement against the Amalgamated Copper Mines Company, predecessor in interest to Mr. Hokett, prior to the construction of the dam, condemning eighteen parcels of land. The Minneapolis lode claim, however, was not included in the condemnation proceedings, nor condemned in said judgment.

The strike of the ore-bearing vein of the Minneapolis claim has a course which requires the exploration and development under the West end of the Cave Creek Dam structure. Mr. Hokett, while working on the said Minneapolis claim in 1947 was verbally warned and told by representatives and the attorneys of the Salt River Valley Water Users' Association, being the caretakers of the dam at that time, to refrain from further exploration of the Minneapolis claim, due to the fact that his workings might prove hazardous to the dam structure. Shortly thereafter, Mr. Hokett, through his attorney, informed the State Engineer and the Attorney General of all of these facts. Since being warned by the representatives and attorneys of the Water Users' Association, Mr. Hokett has refrained from further development of the claim, in order that the dam structure would not be injured by his development in

pursuing the vein of ore on the claim which runs under the dam.

It is the opinion of the Attorney General that title to the Minneapolis claim is vested absolute in Mr. Hokett. It is also the opinion of the Attorney General that title to the Cave Creek Dam, by operation of law, is vested in the State of Arizona, under the control and administration of the State Highway Engineer.

A survey made by the State Engineer and Mr. Hokett definitely establishes the fact that the West end of the Cave Creek Dam rests upon the Minneapolis patented lode claim, owned by Mr. Hokett.

VALUE: Analysis of the ore body of the Minneapolis claim shows that, in addition to other mineral deposits and a large deposit of tufa stone which is valuable for building purposes, the ore body runs an average of 7% copper and 10% iron. To determine the actual value of the claim occupied by the Dam would require extensive Diamond drilling at perhaps a cost to the State of more than $5,000.00. It is believed that the sum of $12,500.00 compensation to Mr. Hokett, in return for his conveying the title to the Minneapolis claim to the State of Arizona, is fair and reasonable.

Reference: AMJ 11/5/22, p. 16 (Amalgamated Copper)

10-19-1917

MINING REPORT BY
J. H. FARRELL
ON COPPER HILL PROPERTIES
PHOENIX, ARIZONA.

COPY OF LETTER REPORT OF W. H. FARRELL,
MINING GEOLOGIST.

Phoenix, Arizona
October 13, 1917

Mr. Timothy Mahoney, Pres.,
Amalgamated Copper Mines Co.,
San Fernando, Bldg.,
Los Angeles, California.

Dear Sir:-

In accordance with your instructions I have visited the Cave Creek property of the Amalgamated Copper Mines Company and shall submit a formal preliminary report upon my return to headquarters. As it will be some weeks before I reach Los Angeles, I summarize my findings on the property as follows:

LOCATION: TRANSPORTATION.

The Cave Creek property is situated about 20 miles north of Phoenix, Arizona; the common corner of Sections 3 and 4, T. 4 N., R 3 E. and 33 and 34 T. 5 N., R 3 E. is close to the camp.

The road from Phoenix consists of about 7 miles of oiled macadam (?) in good condition and 16 or 17 miles desert road, part of which is in bad shape where the soil is so light it would be necessary to make road for heavy trucking.

I was informed that Indians with light wagons from the neighboring reservation would haul ore from the property to Phoenix at $5.00 per ton, which is a very low cost and subject to verification.

For transportation on a large scale caterpillar tractors hauling trains of wide-tired wagons have proved most satisfactory on roads of this sort.

TOPOGRAPHY AND CLIMATE

Elevations on the property range from 1,500 to 1,800 feet There are 60 claims in the group, making a total acreage of over 1,200; of these I consider about 12 claims as comprising the most important area.

The ground covers a group of hills rising 200 feet or more above a broad desert plain, and the Cave Creek wash crosses the most promising area.

The climate of this region is favorable for mining operations at all seasons; the winters are mild, but summers are quite hot.

WORKING CONDITIONS

Water:

Water may be had in the Cave Creek wash at depths of less than 50 feet and probably in quantities adequate for large milling operations. There is at present a well in fairly good condition about three-quarters of a mile from the camp. Water stands in the main shaft near the camp at or near the 100 foot level.

Power:

Electric power may be had from the Pacific Gas & Electric Company.

The nearest point on their line is about 7 miles north of the business district of Phoenix. It would require a line 13 or 14 miles long to reach the property, costing approximately $1,200.00 per mile, which would have to be paid by the mining company.

Electric power would cost between 1.5¢ and 1.7¢ per Kilowatt hour or from $10.00 to $12.00 approximately per horse power month.

WOOD AND TIMBER

Wood for domestic purposes may be cut in limited quantity on the property.

Mine timber is obtained from Northern Arizona or Pacific Coast points.

Labor:

Owing to the present activity in all Arizona mining districts, the wage scale is much higher than in the past, and it is probable that the average wage would approximate $4.50 or $5.00.

GEOLOGY OF THE AREA

Schist formation:

The central part of the Cave Creek property, comprising the major portion of the probable productive area, consists of a series of slatey schists partly of sedimentary origin, but also comprising sheared igneous rocks of granitic type originally.

These schists stand steeply on edge, with dips ranging from 60 degrees northwest, to vertical; the general strike is northeast.

The weathered surface is quite dark due to a thin film probably of manganese oxide and locally there is much iron stained float.

Quartz stringers and nodules are quite numerous, and, associated with the quartz, one commonly finds pseudomorphs of hematite resulting from oxidation of pyrite.

Granitic Rocks:

On the east and west sides of the central schist belt there are masses of granite and granite porphry which are locally altered and show some indications of mineralization. Possibly portions of this formation may ultimately prove to be ore bearing.

Indications of Copper:

For a distance of over one mile along the schist formation there are evidences of copper mineralization; this length includes about 1,200 feet across the Cave Creek wash where there are property showing copper minerals on both banks.

The width of this mineralized zone in the vicinity of the camp is over 1,000 feet, but it narrows somewhat both to the northeast and southwest, and it would not be possible without a detailed examination to try to definitely outline the probably productive area.

The surface indications range from faint copper carbonate stains to stringers of copper carbonate and silicate (minerals malachite and chrysocolla, chiefly), with occasionally veinlets of

chalcocite, the rich copper sulphide.

POSSIBILITIES OF THE PROPERTY

It should not be inferred from the foregoing that the ground is uniformly mineralized. On the contrary, it seems probable from the surface showing that should ore deposits of importance be developed, they will consist of parallel, overlapping, lenticular bodies, similar in occurrence to those of the Blue Bell Mine, for instance, in the Mayer district.

Commonly in such schist formations in this comparatively arid region, the surficial indications of important ore bodies are very slight, due to leaching and downward concentration of the copper contents of the rock. For this reason the deductions even of a trained observer may be at fault and only underground development work will definitely determine the presence of commercially important ore bodies.

In this case the indications are distinctly favorable and warrant full investigation. The work done on the property to date has been by no means decisive; trenching has been done along narrow seams showing carbonate minerals instead of across the formation. Thus it is impossible to state with certainty widths for such of the ore shoots as might be indicated on outcrop. In one instance prospect pits are so located as to indicate that the width of that particular body might be 25 feet or more; in another case a width of about 15 feet is shown. These two leads are roughly parallel and are separated by 200 feet of schist showing practically no signs of copper mineralization. Lengths of these outcrops are respectively about 200 feet for the former and 300 feet for the latter.

The deepest shaft on the property is down 200 feet with the present water level at or near the 100 foot level. Work here was not carried far enough to definitely determine whether or not the zone of leaching and oxidation had been passed.

The general conditions favor the chances for important secondary enrichment ore bodies at or near water level.

In four surface prospects good chalcocite ore has been found confined to seams a few inches in width. This material is of shipping grade, but the occurrences are such as to indicate that only small bunches of ore could be expected, at least near surface; and here again, not enough work has been done to tell whether profitable operations could be conducted on a small scale. Further prospecting in these places is suggested.

RECOMMENDATIONS

1. Prospecting: It is suggested that a few men be put to work at the prospects showing chalcocite stringers and that the ore obtained at those places be carefully sorted and shipped. This work should pay for itself at least.

2. Drilling: It is recommended that the productive formation be crosscut by diamond drilling with holes inclined at angles of 30 to 45 degrees from the horizontal. Three such holes averaging 1,000 feet in length should suffice for preliminary work; one of them should be so located that it can be checked by a crosscut from the shaft. Another hole should be drilled at such a point as to prospect the downward continuation of the more important surface showing. The third should cut the formation under the Cave Creek wash.

It is very important that one hole should be verified as far as possible by a crosscut from the shaft.

Churn drilling is not indicated in this ground because the ore bodies will probably be found to be tabular and standing at small angles from the vertical.

Drilling should be let by contract to a reputable concern such as the E. J. Longyear Company, 710 Security Bank Building, Minneapolis, Minnesota. This firm has a branch office at Tucson, Arizona

The records furnished and attested by this company will be accepted by any examining engineers who visit the property in the future.

The cost of drilling 3,000 feet is estimated roughly at from $10,000.00 to $12,000.00.

COPY OF LETTER REPORT OF J. H. FARRELL
MINING GEOLOGIST.

3. Underground Exploration: The shaft should be repaired and unwatered. It is partly vaced apparently about 35 feet from the collar and cannot be inspected without two men to man a windlass, while a third goes down. Below the water at the 100 foot level it should be in good condition.

A crosscut to the southeast for about 800 feet would adequately prospect some promising ground. It may prove desirable to sink another 100 feet before this is undertaken.

This work need not be done until the drilling of the first hole has been completed.

4. Geological Survey: A detailed geological survey should be made of the more important area preparatory to starting work on the property in order to determine the best locations for drill holes and the directions and distances to which they should be driven.

Yours very truly,

J. H. Farrell.

May 28. 1917

Copper Hill

MINING REPORT BY J.D. HUBBARD, E.M.

ON COPPER HILL PROPERTIES,

PHOENIX, ARIZONA.

Los Angeles, Calif., May 28th, 1917

Mr. Timothy Mahoney,
1755 Woolworth Building,
New York City.

Dear Sir:

At your request I have visited and examined the Copper Hill Group of mines in Arizona, and the Bonanza Group near Vidal in California, also the Bullion Mountain Group near Lavic in California; all the property of the Amalgamated Copper Mines Company. I will report each group herewith.

COPPER HILL GROUP.

Situated near Phoenix, Arizona, on Cave Creek, twenty-two miles from Phoenix. An excellent road runs right on to the property and when shipment of ores commence trucks can be used to economical advantage as there are no grades or hills to cause any trouble. Phoenix affords an excellent base for supplies, and labor is plentiful in the vicinity. The prevailing wages for miners are four dollars a day with a dollar a day charge for board. There is sufficient fuel for domestic purposes on the property and a natural spring of water sufficient for all uses. This same spring of water is a valuable asset in that desert country.

The claims are all in one cohesive group and comprise an area of 800 acres. They completely blanket the great dyke of Paleozoic Schist in which occur the copper ores. The country rock or magma on each side is granite. The strike and dip of the shists is generally true and no decided fault appears, although the whole country has been subject to much crushing and shearing due to volcanic action in the neighborhood during the later Mesozoic Period. This movement developed many fissures and lenses in which copper bearing material has been deposited and which readily shows even on the surface. There is a good chance for a really great mine here, and a series of diamond drill holes well placed will cut the whole great dyke traversely and prove the extent of the ore bodies below. The conditions are favorable for drilling and I recommend the installation of a diamond drilling rig at once as it will be the most economical and thorough method of prospecting the property. When the necessary data is obtained the proper permanent workings may be put in at the right place and without loss of time.

The surface work has proved the existance of several strong veins which should make into large bodies below. All the carbonate forms are there and some of the sulphide forms, even on the surface. The tests for copper show all the way from one to twenty-five per cent. and even much of the great belt of Shist will test traces in copper. The Shist is very strongly mineralized all the way on the surface. Practically the same conditions on the surface obtain at Copper Hill as at several of the great copper mines in Arizona, notably Miami and the Ray Consolidated.

The prospects for a very rich property at Copper Hill are excellent, and diamond drilling should be started there without delay.

BONANZA GROUP

Located in San Bernardino County in California

about twelve miles from Vidal on the Santa Fe Railroad. An excellent road runs right past the mine and no to Needles. There is a slight grade toward the mine from Vidal but this will be an advantage in hauling ore out. And the road is in good shape and easily kept up. Needles is forty-four miles from the mine. A stage runs from Needles to Vidal twice a week and brings supplies and fresh meat and vegetables. The accessibility and transportation facilities of the locality are very good.

The geological conditions here are quite different than at Copper Hill. Although the primary magma is granite as at Copper Hill, the copper occurs in intrusive Diabase with some Shists. The whole mass has been tremendously faulted and crushed by internal pressure due to volcanic action. The copper values have been leached through this mass and deposited in favorable lenses and fissures. Like Copper Hill, the ores carry gold and silver in varying amounts, but the copper is the metal of greatest value throughout. Some Bornite and black Oxide of Copper was observed along the surface as well as the many carbonate forms.

Rather extensive work has been done on the south vein, but I do not think they went deep enough to encounter the real primary ores. A Shaft has been sunk 700 feet vertically and drifts run off at the first, second and third levels, and more extensive drifts at the seventh level. Some good shipping ore was obtained, but the company failed to drift to any extent along the strike of the vein and open up ore chutes that way. The work done is mostly of a cross-cut nature. It would be a good plan to use the diamond drill on this property after Copper Hill has been prospected and put holes down to the fifteen hundred foot line to find out what bodies of ore are below the present development.

The northerly or American Eagle vein on this property is the most valuable I think. It is continuous and strongly marked. At the American Eagle mine they took out twelve carloads of good ore at the 80 foot level, and are now sinking from the 180 foot mark, which is the depth of their shaft at present. They have copper ore all the way and black oxides are particularly rich in copper. The American Eagle adjoins the Bonanza Group, and is a good indication of what may be expected on development of this particular vein at this time, at proper intervals. This will give data that will help when it comes time for diamond drilling, and will show where to put down the holes. Some shipping ore can be taken out right along when this work is started and help pay for the development. Air drills of the Jackhammer type can be used as all the equipment and pipe is on the property and in shape for immediate operations. The property is very well equipped with air-compressor, hoist, pumps, blower, etc., and each run as a separate unit. There is a good amount of supplies of all kinds except dynamite and food, and the work can be started at small expense. I would recommend the purchase of a one ton truck however, as there will be supplies to haul in now and then, and ore to haul out, and this would be the economical way of doing it. Distillate engines are used for power for all the units.

Labor is not so plentiful here as at Copper Hill, but miners may be obtained in the larger places along the railroad. The same wages are paid as at Copper Hill. Wood is scarce for domestic purposes, but may be obtained a few miles away. As to water, there is an abundance of good drinking water on the third level in the mine. It is caught in a concrete sump at the third level and pumped out with a separate pump. The minewater is bailed

out with a bucket. Two or three hours pumping twice a week is sufficient to keep the mine dry. Plenty of good water for all purposes.

This property has not the great future possibilities that the Copper Hill Group have, but sufficient to warrant considerable development work, as it is very likely to prove a good paying property. A small crew of men should be put to work now, developing the American Eagle vein.

This group is also cohesive and comprises 280 acres.

THE BULLION MOUNTAIN GROUP.

Located about fifteen miles from Lavic on the Sante Fe Railroad, in San Bernardino County, California; comprising four groups of claims about one mile apart; total area being 240 acres. Transportation, accessibility, wood, water and supplies more difficult here that at either Copper Hill or Bonanza.

The geological conditions show a great granite country rock with volcanic intrusions. The copper stains are in the places and fissures in the granite. This was difficult ground to get over, but the conditions were found to be the same all over the group. I would not advise any work done on this group at present, as the Copper Hill and Bonanza Groups have a very much better showing and can be developed at less expense. I would urge concentration of effort on the two properties at present.

Of the three groups I think the Copper Hill will prove to be the greatest mine, and is likely to become one of the great mines of Arizona.

Respectfully submitted,

J. D. Hubbard, E.M.

R E P O R T

UPON

THE AMALGAMATED COPPER MINES COMPANY'S

PROPERTIES

BY

THOMAS A. WETZEL.

PHOENIX, ARIZONA,

Dec. 20, 1916

The Amalgamated Copper Mines Company,
Phoenix, Arizona.

Gentlemen:-

I hand you herewith my report upon "The Amalgamated Copper Mines Company's property consisting of four mines, one known as the "Copper Hill Mine" located in Arizona and three others located in California, namely The Bonanza Mine, and the Bonanza Group.

I have just recently made a visit to the different properties and have made an exhaustive study of the geological condition existing at the different places.

For the past fifteen yearw I have had an opportunity to study the mining districts of Arizona and California; much of my time has been spent in operating and examining mining properties in these states.

This experience enables me to readily realize the favorable geological conditions presented on the several properties owned by your company as well as the future possibilities.

I have read with interest the report of Fitz James MacCarthy on the Copper Hill Mine and that of the Bonanza Mine, that was handed to me.

I have set forth in my report on your properties a description of the properties as they appeared to me with my recommendations as regard to future development work.

I am,

Respectfully yours,

(signed) Thos. A. Wetzel
Mining Engineer

REPORT ON THE

COPPER HILL MINE

WINIFRED MINING DISTRICT

MARICOPA COUNTY, ARIZONA

Now the Property

of

THE AMALGAMATED COPPER MINES COMPANY

by

THOMAS A. WETZEL

CLAIMS

The Copper Hill Group of mines consists of the following forty-two claims, each a lode claim with an approximate area of twenty acres. The Mable, Elner, Joe H., Belle, Minneapolis, Minneapolis No. 1, Minneapolis No. 2, St. Paul, St. Paul No. 1, St. Paul No. 2, Helen, Minerva, Copper Hill, Plank, Iron Mast, Buda, 95, 96, Hindoo, Shelby, Apache, 48, 49, Goveland, Holt, Carson, Hobo, Gold Nugget, Grande, Copper Oxide, Divide Colorado, Big 4, Valley View, Pope, Andre, Big Chief, Little Chief, Mohamed, Emma, Badger No. 1,. Making a total area of (840) eight hundred and forty acres of mineral ground.

Location and Accessibility.

The property is situated in Winifred Mining District, Maricopa County, State of Arizona. The nearest railroad station is Phoenix, about twenty miles distant, from which the property is reached by an excellent hard wagon road over which a tri-weekly mail stage travels between Phoenix and the mining camps surrounding The Amalgamated Copper Mines Company's property.

The large map of the Phoenix district shows the Copper Hill Mine to be located north of Phoenix in Township 5, North of Range 3 East.

An electric railroad from Phoenix is now built to within twelve miles of the Mine. When development work has reached the point where a railroad is necessary, arrangements can be made to extend this line. Arrangements can now be made to have all freight hauled over this electric railroad to the end of this line.

General Conditions.

The property is well located for economical development, being but 20 miles from Phoenix, the capital of the State, a city with a population of about 25000, where mining machinery and supplies of all kinds can be obtained. Good shaft sites can be selected where there is good dump room for the main working shaft. A portion of the property's surface can be used for a mill or smelter site.

The property should be worked through a system of shafts, crosscuts and drifts.

Fuel for camp use is plentiful. A well near Cave Creek furnishes good water supply for camp use and sufficient can be developed for all purposes. Cave Creek is similar to all Arizona streams, dry on the surface most of the time but carrying large volumes of water part of the year and at all seasons carrying a current of water at a little depth beneath the surface.

Title and Present Ownership

The titles to the property are regular in every way, as shown by the abstract which brings it down from the original location to the present owners, "The Amalgamated Copper Mines Company". Three of the claims are patented as shown on the claim map of the old Arizona Gold and Copper Hill Mining Company. The other claims are held in the regular way, having been originally located, and the work and conditions required by law to hold mining claims have been complied with in every sense.

History of the Property and other Mines
of the District.

- - - - - - - - - - - - - - - -

Mining has been carried on in the immediate vicinity of the Copper Hill Mine for a period of 30 years, first being worked for gold. In later years many of the copper croppings have been developed in a small way by poor men who have taken out some of the rich surface ores and shipped them to the smelters, making a livlihood in this manner. Lacking the necessary capital to develop the greater bodies of copper gold ore that undoubtedly existed at depth, and the many new districts of Arizona that have been discovered and developed, have all had a tendency to stimulate mining in this particular section. Of late years this district has attracted the attention of mining men because of its similarity with many of the great copper districts of the state, and at present activity is at its height as shown by the several surrounding properties now being developed.

Your properties are within three miles of the famous Old Union Mine and the Fortuna and others in that group, within five miles of the Contention, within seven and one-half miles of the Mormon Girl and within twelve miles of the Phoenix Mine with its 50 stamp mill near the head of Cave Creek.

Topography.

The claims are located in a sort of basin among small rolling hills that rise between Cave Creek and Agira Fria Creek. In every direction higher hills rise up from the edges of the valleys abruptly several hundred feet. The country slopes gradually to the south, draining into Cave Creek. The claims lie in an extension of the same topographic and geologic belt as the Gerome District, the famous copper producing area. The maps accompanying this report will show the contour of the country, location of the rivers and creeks

Elevation and Climate.

The Copper Hill Mine is about 1800 feet above sea level, insuring in this latitude a mild climate all the year round, with no obstructions to overcome in the way of snow and ice.

GEOLOGY.

The general formation of the Copper Hill properties is schist with an intrusive metamorphic granite on either side.

A study of the Bradshaw Mountains Folio (U.S.Geologic Survey) will give one a clear conception of the Algonkin schists which exist on your property. In my opinion the schist found on your property is the same as that of the Bradshaw Mountains, which has not as yet been perfectly correlated, hence they have been given other temporary names until their correlations can be perfectly connected up.

It is very well understood among geologists that the names given the schists of the Bradshaw Mountains are but different expressions of the same rock series. They are the most important series of sedimentary rocks in North America, and their making occupied more than half the time that has gone since time began on this earth.

There is much reason to believe that these schists or this Basal complex, constituted the original home of all the more important copper deposits in North America, and nearly all the great iron deposits also. In Arizona the original source of the ore is pretty clearly traceable to this certain series of sedimentary rocks. These schists differ greatly in places, but they have a condition of character that distinguishes them and makes them easily recognizable everywhere. They have been intensely folded up and the tops of the folds were worn away by erosion before the succeeding beds were laid down so that they now appear to stand on end.

The road from Phoenix to your property runs over upturned

edges of slaty schists which when they were horizontal was intruded by extensive sheets of eruptive rocks. The subsequent application rendered these eruptive also schistoes and they are now often indistinguishable from the sedimentaries which have been metamorphosed to a crystalline condition like true eruptives.

The schists on the Copper Hill ground ranges from 1000 feet to 3000 feet wide practically covering the whole area of the property, and is the same as that mentioned in the U. S. GeoIogic Survey of the Bradshaw Mountains (which are in sight of your property) as "The Yarapi schists."

The Copper Hill property covers a distance of about two miles along this schist. It is important to understand the schists of the Copper Hill Mine, as the great United Verde Mine and others are entirely within the Yavapai schists, which at the point of the United Verde have a thickness of 7000 to 8000 feet. The theory is that the metal was first thinly disseminated throughout the schists as their horizontal beds were laid down, deposited perhaps from the sea water, and that the workable ore is now found only where the metallic value became concentrated by aqueous solutions.

Work Done.

The property has been very well prospected on the surface, opened by a number of open cuts and shallow shafts showing copper without an exception. On the Minneapolis Claim a shaft is down about 200 feet and some drifting done as seen on the accompanying maps, which show the open cuts and tunnels as well. Shipping ore has been encountered in several of the openings, and I consider the surface showing of copper is most remarkable.

On the 96 a shaft has been sunk down to a depth of 60 feet on an incline of about 45°, considerable glory holding and cutting has been done at the bottom. This ledge is claimed to have run $400 per ton in gold and silver.

I took samples from these Claims as follows:

A SAMPLE FROM - CLAIM 96: Quartz Ledge shaft 60 feet in depth from the surface a cut 5 feet in width was run for gold and silver but contained no copper. I sampled this ledge in several places and trying practically its entire length found it contained no copper whatever, but contains some gold and silver.

ON THE MINNEAPOLIS CLAIM a shaft has been sunk on the edge of the wash to a depth of 200 feet and this passes for 35 feet through fairly good grade copper oxide and carbonate ore averaging 2.5% to a depth of 36 feet. At the 100 foot level a cross cut sample taken 100 feet below the surface a cut 5 feet in length ran a trace of gold and silver but no copper. The cross cut at the bottom of the shaft, 200 feet, sample cut 200 feet in depth and 4 feet across shows $1.60 in gold, 2.7 oz. silver, 1.7% copper. This showed bunches of sulphides, but not generally intermingling the mass, mostly carbonate ore.

At the bottom of the 200 ft. shaft a sample was cut to a depth of 200 ft. 4 ft. wide, which ran a trace of gold and silver and copper. 125 ft. south of this shaft is an open cut which I sampled, cutting 3 ft. below surface 3½ ft. in length across the formation which gave copper, gold and silver a trace. 120 ft. northeast of the 200 ft. shaft is an open cut which is 4½ ft. in depth cut 3½ ft. across the formation which showed gold, silver and copper a trace. On the west side of the Superintendent's house an open cut about 1 ft. deep cut 4 ft. across gave a trace of gold and silver and 2.1% copper. 75 ft. southwest of this open cut near the Superintendent's house and down in line with the 200 ft. shaft, I made a cut 8 ft. in length across the formation which carried a trace of gold and silver and 2.4% copper.

ON THE MINNEAPOLIS NO. 1. but one sample was taken, which gave copper and a trace of gold and silver.

MINNEAPOLIS NO. 2. Sample No. 30 on Sample Sheet, surface cut 6 ft. across formation shows $4.60 gold, 3.4 oz silver and 11.7% copper. This sample was checked twice with the cyanide method and once with the iodine method to make sure there was no mistake.

ON THE ST. PAUL CLAIM directly South and West of the Minneapolis 5 samples were taken. No. 10 was cut one foot in depth 200 feet in length and about 2000 lbs. was taken in this sample which gave an average of 2.4% copper. No.11 out crop on the St. Paul 200 ft. south of the north end line. 200 ft. east of the east side line surface cut, 7 ft. gave 60 cents in gold and a trace of silver and copper.

THE ST. PAUL NO. 2: One sample was taken which was quartz outcrop taken from the surface, cut 3 ft. and gave $3.20 gold, 2.4 oz silver and a trace of copper.

THE JOE H. AND BELLE, as well as the ELNER and MABEL were not sampled.

On the Shelby six samples were taken, three on the quartz dyke which cuts through gave good returns in gold and silver, but only two instances in the crossing of the copper outcrop did it show any copper which is in samples No. 18 and 19, showing 4.2% copper in No. 18 and 2.8% in No. 19.

On the Shelby shaft 55 ft. in depth gave a sample from a cut 55 ft. deep five feet across which yielded $3.20 in gold, 5.2 oz silver and 3.8% copper. 50 ft. east of the 55 ft. shaft is a 12 ft. shaft sample was taken from a cut 12 ft. in depth and five feet across, showing $5.80 in gold, 9 oz. silver and 4.7% copper. 20 cars of ore from these two holes was shipped to El Paso averaging 7% copper hand picked ore.

On the Hindoo Shaft a sample was taken 12 ft. deep, width of cut 4½ ft. and averaged 2.5% copper. No. 25 of Assay Sheet.

On the Plank one sample was taken on the east side 4 ft. deep 8 ft. across, which carried gold, silver a trace and 4.4% copper.

The Iron Mast at the location shaft one sample was taken at a depth of 15 ft. width of cut 4 ft. showing gold $2.60, silver 1.5 oz. and copper a trace, copper oxide. Only two samples were taken near the surface from a cut 3 ft. wide which carried nothing. One cut 8 ft. in depth and 8 ft. across carried gold and silver a trace and 2% copper,

On the Big Four Claim, two samples were taken from the 50 ft. shaft at a depth of 25 ft. cut 3 ft. showing gold $2.40 silver 3 oz., copper trace. At the bottom of this shaft is a cross cut cutting to the west 50 ft. in length, sample was cut at a depth of 50 ft., width 5 ft. showing gold $3.20, silver 7 oz. copper 4.7%.

On the Holt, the quartz outcrop from a sample cut 6 ft. wide gave $16.20 gold, 14.5 oz. silver and no copper. Another place on the Holtz quartz outcrop 74 ft. deep gave a trace of gold and silver and no copper.

The Big Chief 10 ft. deep was sampled at the bottom, cut 6 ft. wide gave $2.40 gold, 2 oz. silver and 2.6% copper.

On the Andre tunnel one sample was taken at the breast, about 20 ft. in depth and a cut 4½ ft. wide, giving $4.20 in gold 6.3 oz. silver and 14.2% copper. This was checked twice with the cyanide method and once with iodine.

The Pope: One sample gave trace of gold, silver and copper.

On the Loveland a shaft has been sunk to a depth of 10 ft. a cut 5 ft. wide at the bottom gave a trace of gold and silver and 1.2% copper.

On the Elmira a shaft 40 ft. has been sunk. This was cut 6 ft. across at the bottom and gave gold $7.20, 6.2 oz. silver and 4.7% copper.

The following were not sampled:

Mohamed	Grande
Minerva	Hobo

Emma	Gold Nugget
Carson	Badger No. 1
Valley View	Colarado
Divide	95
49	Apache
48	Buda

After going over all the surface of this property sampling and breaking the schist with the pick, I found hardly any place on the property where I could stick a pick in but that evidence of carbonate copper showed through the entire surface.

I have visited Inspiration and Miami and compared the two properties, and I believe that in comparison with the surfaces that the surface is more highly mineralized on the Copper Hill than either on Inspiration or Miami.

EQUIPMENT: There is no equipment to speak of on this property, with the exception of 3 shacks, gallows frame, pump, 1 8x8 air compressor, a few blacksmith tools, one 2¼" Sullivan Air Drill.

After carefully going over this property and averaging my assays I find that the general average is 1.9% copper.

The bedding planes of Schist are about 86° vertical, and the general trend of the country is northeasterly and southwesterly, with dip northwesterly.

Possibilities.

You have the copper producing Algonkian schists beyond a question of a doubt, and an extensive surface display of copper ores which undoubtedly mark the location of ore bodies of importance. You have many excellent copper blossoms on your ground (cappings of the red oxide of iron and other indications) carrying all the indications, in a way of the less soluble copper compounds (the blue and green carbonates and chrysocolla). In my opinion you will find plenty of copper if you go after it.

ing can be made of the ore reserves which will probably figure into the millions of tons.

The ground should be finally developed by shafts, cross-cuts and drifts, which can be intelligently planned after the proper amount of drilling has been accomplished and the ore bodies determined.

Conclusions.

The Copper Hill Mine presents the most encouraging copper property that I have had the pleasure to examine for some time, and I heartily recommend that drilling be started at once, ore bodies located and ore reserves developed. It is my opinion that ore like that of the United Verde will be found and be valuable for its gold contents as well as copper, as the surface ores that have withstood the leaching process contain good gold and silver values as you will see by the list of assays attached.

Your ground is the most likely kind that has proven itself in many places in Arizona. The surface showing is as good as is usually found in the best known parts of the State. All that is needed to make the property a financial success is capital, good and intelligent management and economical development.

All the geological facts observed, structural, petrographic and mineralogic, are most favorable.

Respectfully submitted,

(signed) Thos. A. Wetzel
Mining Engineer.

Needles, Calif.
12-20-16

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Respectfully submitted,

(signed) Thos. A. Wetzel
Mining Engineer.

Needles, Calif.
12-20-16

Phoenix, Arizona, Dec. 16, 1916

ARIZONA ASSAY OFFICE

This is to Certify

That the samples submitted to me for assay by Mr.Wetzel contain as follows per ton of 2000 lbs. Avoir.

	Silver Ozs Hundths.	Value at 70¢ per oz.	Gold ozs. Hundths.	Values at $20 per oz.	Total value Gold and Silver	Percentage Copper
No. 1	3.50	2.45	.02	.40	2.85	27.00%
2	.50	.35	Trace			3.40%
3	1.00	.70	Trace			5.85%
4	1.00	.70	.02	.40	1.10	13.65%
5	2.00	1.40	.02	.40	1.80	14.20%

F. W. Libby Assayer

Charges $7.50

No. 1 - Sample of dump at open cut on Hindoo Claim at south end

No. 2 - Sample of dump from open cut on St. Paul Claim

No. 3 - Sample from dump on Copper Top

No. 4 - Sample taken from open cut at edge of Cave Creek on Minneapolis No. 2

No. 5 - Sample of dump at 200 ft. shaft main workings.

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No. 1	3.50	2.45	.02	.40	2.85	27.00%
2	.50	.35	Trace			3.40%
3	1.00	.70	Trace			5.85%
4	1.00	.70	.02	.40	1.10	13.65%
5	2.00	1.40	.02	.40	1.80	14.20%

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No. 5 - Sample of dump at 200 ft. shaft main workings.

THE AMALGAMATED COPPER MINES COMPANY

PHOENIX, ARIZONA

WHERE FROM	DEPTH FROM SURFACE	WIDTH OUT	GOLD	SILVER	COPPER
#1-125' S.of 200 Shaft	3 ft.	3½ ft	Trace	Trace	Trace
#2-120' N.E.of 200' Shaft	4½ ft.	3½ ft.	"	"	"
#3-Bottom of 12' Shaft 1000' N.of 200' Shaft	12 ft.	5 ft.	"	"	None
#4-300' E.of 200' Shaft	5 ft.	8 ft.	"	"	1.7
#5-S.E.Corner Minneapolis #1	3 ft.	3½ ft.	"	"	Trace
#6-S.W.Corner St.Paul #1	10 ft.	2 ft.	.60	"	2.4
#7-N.E.Corner Copper Top	4 ft.	9 ft.	Trace	"	None
#8-38' Shaft Copper Top Center of Claim	38 ft.	10 ft.	$1.40	"	1.7
#9-Copper Top Large Open Cut	10 ft.	5 ft.	$1.20	2.4	8.6
#10-Out Crop St. Paul	Surface	200 ft.	-	-	2.4
#11-Out Crop St.Paul 200' S.of N.End Line and 200' E.of East Side Line	"	7 ft.	.60	Trace	Trace
#12-Open cut St.Paul Center of Claim	4 ft.	11 ft.	2.60	7.	4.56
#13-St.Paul Open Cut Center of Claim(quartz)	4 ft.	10 ft.	Trace	Trace	None
#14-St,Paul Open Cut 100' from E.Side Line Near Center	3 ft	11 ft.	"	"	"
#15-St.Paul 300' from S.Line and 125' from E.Line (Quartz outcrop)	Surface	3 ft.	$3.20	2.4	Trace
#16-St.Paul #2 about 300' N.W.from S.E. corner	Outcrop Surface	50 ft.	Trace	Trace	.8
#17-Shelly S.End and Center (Quartz)	"	10 ft.	$4.60	7.2	Trace

WHERE FROM	DEPTH FROM SURFACE	WIDTH OUT	GOLD	SILVER	COPPER
#18-Shelly 150' N.E.of #17(Quartz)	Outcrop Surface	4 ft.	$2.20	4.7	4.2
#19-Shelly 150' N.E. of #18(Quartz)	"	4 ft.	$1.20	Trace	2.8
#20-Hindu Locations Shaft	12 ft.	18"(Quartz only)		5	None
#21-Shelly 350' from S.end Line about center	4 ft.	16" "	$11.60	8.2	"
#22-Shelly 300' from S.end Line near center of Claim	3 ft.	8 ft. (Quartz	$12.40	16.4	"
#23-Shelly 55 ft. S. Shaft	55 ft.	5 ft.	$3.20	5.2	3.84 20 oa
#24-Shelly 50' E.of 55' Shaft	12 ft.	5 ft.	$7.80	9	4.7 " "
#25-Hindu 12' Shaft near Big Shuashua	12 ft.	4½ ft.	$4.40	5.8	2.5
#26-Plank Center East Side	4 ft.	8 ft.	Trace	Trace	4.4
#27-Outcrop at Side of Supt's house Minneapolis Claim	Surface	4 ft.	"	"	2.1
#28-Minneapolis S.W. side of claim 10 ft. Shaft	10 ft.	5 ft.	$4.80	7 oz	7.1
#29-75 ft. S.W. of Supt's house on line with 200' Shaft	Outcrop Surface	8 ft.	Trace	Trace	2.4
#30-150' N.E. of 200' Shaft	Surface	6 ft.	$4.60	3.4	11.7
#31-West Cross Cut 100' Level 200' Shaft Breast	100 ft.	5 ft.	Trace	Trace	None
#32-36 ft. Level 200' Shaft on Full Width Shaft 5' x 7'	36 ft.	5 ft.	"	"	2.5
#33-Breast of West Cross Cut 200' Level 200' Shaft	200 ft.	4 ft.	$1.60	2.7	1.7
#34-Bottom of 200' Shaft	200 ft.	7 ft.	-	-	Trace
#35-Iron Mast Location Shaft	15 ft.	4 ft.	$2.60	1.5	"

WHERE FROM	DEPTH FROM SURFACE	WIDTH OUT	GOLD	SILVER	COPPER
#36-Copper Oxide Stringer in wash near Trail	Surface	3 ft.	-	-	None
#37-Copper Oxide S.End	8 ft.	8 ft.	Trace	Trace	.2
#38-Big 4-25 ft. Shaft	25 ft.	3 ft.	$2.40	3 oz.	Trace
#39-50' Shaft at Breast of 50 ft. Cross Cut to the West Big 4 Claim	50 ft.	5 ft.	$3.20	7 oz.	4.7
#40-Claim S.of Big 4-10 ft.Shaft	10 ft.	(Quartz) 2 ft.	$2.20	Trace	Trace
#41-Holt West Line (Quartz)	Surface Outcrop	6 ft.	$16.20	14.5	None
#42-Holt 300' N. of #41	Outcrop Quartz	4 ft.	Trace	Trace	"
#43-Big Chief Open Cut N.End W.Side	10 ft.	6 ft.	$2.40	2.	2.6
#44-N.Center of claim #48	10 ft.	20 ft.	Trace	Trace	1.2
#45-Andre Tunnel Breast in 12 ft.	About 20 ft.	4½ ft.	$4.20	6.3	14.2
#46-Pope West Side of Big Four Dyke	Surface	4 ft.	Trace	Trace	Trace
#47-Pope Location Shaft	12 ft.	5 ft.	"	"	"
#48-Elenor 60' Shaft	60 ft.	6 ft.	None	None	None
#49-Elmira 40' Shaft	40 ft.	6 ft.	$7.20	6.2	4.7
#50-Loveland Shaft 10 ft.	10 ft.	5 ft.	Trace	Trace	1.2
#51-Claim 96 Quartz Ledge 60' Shaft	60 ft.	5 ft.	Not run	Not run	None
#52-From stringer Disregarded in Sample No.4	4 ft.	1 in.	"	"	9.5

Assayed by H. P. Collins, E. W.,
206 Story Building,
Los Angeles, Calif.

1-7-1917

MINING REPORT BY MARK BRADLEY

ON COPPER HILL PROPERTIES

PHOENIX, ARIZONA.

REPORT OF THE AMALGAMATED COPPER MINES COMPANY

""""""""""""""""""""""""""""

This property consists of forty full mining claims, each being 600 feet in width by 1500 feet in length, aggregating an area of about 800 acres.

TITLES:

The title to the property is vested in the owners by location, purchase and U. S. Patent. There is no dispute as to titles, liens, or incumbrances against the property, the owners guaranteeing the title as above set forth.

The Bell, St. Paul No.2, and Minneapolis Claims are patented.

GEOGRAPHY:

This group of claims is situated in the Winifred Mining District, organized in Maricopa County, State of Arizona, and is distant about twenty(20) miles north of Phoenix, the nearest railroad and shipping point; Phoenix being also the County Seat of Maricopa, and the Capitol of Arizona, from which point the property is reached by a good wagon road by team or auto.

GEOLOGY:

The County rock in which this particular Group of claims is located, consists of the Algonkian Schists, locally known as Yavapai Schists, showing over the entire surface of the property, which also shows a heavy percentage of iron, with stringers of copper ore coming up through the schist throughout its entirety.

GENERAL CHARACTERISTICS OF PROPERTY

Formation of the ore; Algonkian Schist (Yavapai)

Strike)	Northeast and Southwest
Dip)	90 degrees Northwest from strike
Width)	Covering the entire property, showing a
Length)	highly leached condition.
Fillings)	Consists of Iron, Quartz, Copper Carbonates, Red Oxide, Green Copper Oxides, Copper Glance, and in a few places Copper Sulphides.
Elevation)	This property is about 1375 feet above sea level in a typical desert country.

MINING FACILITIES:

There being no timber in this section it would be necessary to ship it in from Phoenix. The same would apply to fuel, which for the present would be gasoline.

Water for domestic purposes is developed from wells, plenty being had at a depth of 40 feet, and no doubt by sinking deeper sufficient could be had for all practical purposes. The camp is equipped with tents, houses and boarding house to take care of ten or twelve men.

DEVELOPMENT:

There have been driven and sunk a number of shafts, tunnels and open cuts on the different claims, comprising this group, in the schists and on the stringers of ore which come up all through the schists. All of which openings show the same leached conditions in depth as far as developed, as exists on the surface, therefore, do not consider the work done of any material advantage to the property as to its value.

On the Minneapolis claim a shaft 200 feet in

depth has been sunk which is caved and full of water. Judging from the material on the dump it is very evident that the leaching condition extends down beyond this point.

ASSAYS:

A number of samples were taken from the property at different places to ascertain the mineral contents of the schists and the value of the ore stringers which come up all over the property.

Sample No. 1 Represents the Schist, heavy in iron, on the Bell Claim

Gold	Silver	Copper
Trace	0.6	1.5%

Sample No.2 Represents the Schist only from different places.

Gold	Silver	Copper
Trace	0.4	.8%

Sample No.3 Represents sample from stringer of ore taken from Hindoo Claim

Gold	Silver	Copper
Trace	7.6	11.5%

Sample No.4 Represents stringer of ore running through the Schist on the Minneapolis Claim No.1.

Gold	Silver	Copper
Trace	4.2	27.1%

It is not the intent to represent any available tonnage or its value. On the other hand to prove that this vast mineral bearing zone does contain commercial values. Other average samples taken from all over the property regardless of condition, gives a copper value of one and three-tenths per cent (1-3/10%).

FREIGHT:

The freight charges on mining material from Phoenix is $3.00 per ton, and if back freight could be loaded, it would be much cheaper.

REMARKS:

After making an examination of the property belonging to the Amalgamated Copper Mines Company, I find that it consists of a large area of Yavapai Schists through which a net work of quartz stringers are in evidence, carrying good values in copper and schists, although very much leached, show remarkable copper contents. Considering its extent and magnitude, the intense movement and shearing which has taken place, and the character of the ore forming material, leads to but one conclusion, namely:

That a Secondary enriched Zone, containing large bodies of copper ore, will be discovered in this property with depth, and in order to determine its value and size, would advise drilling the ground to a depth of 600 feet from lowest point.

This can be done by contract at a cost not to exceed $4.00 per foot, after which the proper equipment can be installed on the property to make a paying mine.

It might be stated at this time for comparison that all of the large producing copper mines of the state have been found in the Algonkian Schists (locally known as the Yavapai Schist) and might name the Blue Bell, United Verde, United Verde Extension (Little Daisy) Stoddard, Miami, and other large mines in the southern part of the State.

Therefore, everything considered, will recommend this property for your consideration as a drilling proposition.

Respectfully submitted,

(signed) Mark Bradley, E.M.

To,
John F. Bell

Prescott, Arizona, January 7, 1917