



CONTACT INFORMATION
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222 South Hinton Road
Scottsdale, Arizona
Whitney 5-2072

WATER MAINS • • • SEWER MAINS • • • GAS MAINS
September 12, 1957

Mr. E. N. Pennybaker,
23 E. 1st St.,
Scottsdale, Arizona.

Gentlemen:

"MINES ARE MADE, NOT DISCOVERED." This is a well used statement in the mining industry. We know that all big copper mines in Arizona are the product of venture capital in large amounts, plus modern equipment and business acumen, but the prime requisite of all is the mine property with reasonably high grade ore that can be removed and processed inexpensively plus the availability of ample water.

We have available such a potential mine location:

Size: Approximately 100 claims. Location and assesment work completed.
Type: Open pit with an estimated 200,000,000 tons of 2.25% to 4.50% ore.

This property can be procured:

1. Straight purchase basis.
2. Option to purchase after further exploration work.
3. Payments based on mill receipts.

An initial payment of the Owner's expense to date of sale will be required. A thirty day preliminary examination period by engineers and geologists will be extended to qualified buyers prior to initial payment.

Consideration will be given to consolidating this with other operations of proven value, but the initial payment will be required.

We will be happy to provide a qualified mine engineer for a tour of this property at a predetermined time which is mutually satisfactory.

Should you not be interested in this property, we would appreciate if you will suggest the names and addresses of several prospective purchasers.

Yours very truly,

Mark Cockrill
Mark Cockrill

MC:xc

'The West's Most Western Town'



222 South Hinton Road
Scottsdale, Arizona
Whitney 5-2072

WATER MAINS • • • SEWER MAINS • • • GAS MAINS

February 27, 1957

Mr. E. N. Pennybaker,
23 E. 1st Street,
Scottsdale, Arizona.

Re: Salome Copper Queen Properties
105 Copper Claims,
Yuma County, Arizona.

Dear Mr. Pennybaker:

It has been suggested to us by Mr. James Herron that a conference in connection with the sale of the above captioned project might be of mutual interest.

I have called at your Scottsdale Office on several occasions but have not been able to find you or anyone in your organization available.

Should you be interested in discussing this copper property, I suggest you telephone me at WH 5-2072 and we will arrange a time for an appointment which is suitable to both parties.

Yours very truly,

Mark Cockrill
Mark Cockrill

MC:xc

Mr. Penny: I called Mr. Cockrill this morning and explained that we were all among the living - he has been showing this property and will continue to do so until your return when he suggests that you call him for an appointment.

M.

'The West's Most Western Town'

Report of
CHARLES H. DUNNING
Mining Engineer

Geology

The general geology is a series of old volcanic flows, mostly andesite, together with some old sediments (now quartzite) and probably some old intrusives, that have been highly faulted, and metamorphosed in places.

At one spot on the CQ#15 claim a nearly vertical and narrow later intrusive dyke cuts through to the surface. This is of the rhyolite or monzonite type as distinct of the more basic terrain. This type of intrusive is often responsible for our copper orebodies in the southwest, as such intrusions were often accompanied by mineral bearing solutions.

As a rule andesite formations have not contained important copper orebodies in Arizona, but that is because most andesite (or basaltic) flows occurred later than that period of activity which brought copper bearing solutions.

In this case however, the andesites are very old and were laid down before the copper bearing activity, and constituted an excellent host rock.

Surface Outcrops

Claims #7, 8 & 9 have meagre mineral showings. Here there is a narrow vein (2" to 12") carrying copper minerals, along a nearly vertical fault with a north-south strike. The copper mineralization is probably due to infiltration and precipitation along the fault as a channel of circulation, rather than emanating from magmatic sources. Such ore would probably be found to be very spotty, and might well disappear entirely in any direction.

On Claim #10 there is an old, deep, vertical shaft. The dump indicates that it should be 400 to 500 feet deep. History of the shaft is unknown, but the dump is entirely of barren andesite.

Just east of the collar of the shaft there is a 4 ft. vein of copper bearing breccia, that dips about 80 degrees to the east. The shaft would have gotten further and further away from the vein as it attained depth, and whether or not any crosscuts were run to the vein is unknown. The shaft seems in fair repair but without ladders.

This situation is not very intriguing but if no great expense is involved, it would be worthwhile to repair the shaft sufficiently, and see if crosscuts were run to the vein with drill holes from the shaft. This entire situation on #10 however, smacks more of the infiltration type of deposit, than of the magmatic type.

On Claim #15 the situation has changed entirely. Here we have a north-west east-south trending wide mineralized zone consisting of andesite breccia with copper minerals in the cementing material, and filling the seams and crevices.

A cut about 60 ft. long has been run across this zone exposing at its north end a rhyolitic or monzonitic intrusive dyke, with a width of about 3 ft., a north-west, south-west strike and a dip to the south-west. There is some ore on the north-east side of the dyke, and on the south-west side the cut shows a width of 40 feet of andesite breccia splashed throughout with pockets, seams, and stringers of oxidized copper minerals (mostly chrysocolla).

This width would be difficult to sample accurately by hand, but I did take about 5 lbs. of material for test purposes that was somewhat better grade than the average. This sample assayed: Copper 4.60%; silver .20 oz.; gold tr. I would judge that the entire cut would assay at least half as well as the sample.

Still further toward the opening of this cut (south-west) there is a band of about 10 ft. of barren andesite and then 5 ft. of ore fully as good as the 40 ft. The barren strand could be the result of faulting, or could simply be a block that was not receptive to mineralization.

In any event here is a wide zone of tentative copper ore that has a sensible reason for being there, that could well be the top expression of an important commercial ore body. I was informed that some GI's had worked over the dump material from the cut and shipped a quantity of ore. This is reasonable to believe but probably would not pay on a sustained basis.

From Claim #15 it was necessary to go back and around some high ridges to Claims #2 & #4. In the general vicinity of Claims #2, 1, 12 & 4 there is a massive mineralized zone or area that appears to be as large as 1000 by 2000 feet, perhaps larger. Elevations vary from a narrow floor on claim 4 to about 600 ft. higher as one progresses west. And layer upon layer of the flow rocks outcrop along the ascent, each showing copper. Near the top is a layer of quartzite, boulders from which have fallen down the canyon, and they also show copper impregnation.

The presence of the quartzite (necessarily very old) on top of the andesite flows, indicates that the flows belong to a very old series. While no mineralizing type of intrusive was apparent in the very brief examination, such could be there, or perhaps such an intrusive did not reach through to the present surface.

It is natural to assume, and it is my opinion, that this massive copper mineralization was caused by ascending solutions under deep-seated conditions, and that the rather impervious quartzite cap, while receiving some solutions, acted as a dam, and caused the spreading out and concentration of the mineralizing solutions below it.

No estimate can be made of the average content of copper in the entire mass except that it appears to be as well or better stained as similar zones in our large open pit mines.

Nor is there any indication as to the depth or thickness of the oxidized or leached zones.

As a general rule in deposits such as this we have a stained zone near the surface where downward percolating waters have not acquired enough acid to cause complete leaching. Below this will be a leached zone showing the voids of a leachable mineral, and secondary minerals indicating the previous presence of copper. Below that a secondary enriched zone where the descending waters have dropped their load. Still below that would be the primary or unaltered zone as originally deposited by the ascending solutions.

Some mines are entirely dependant on the secondary enriched zone for commercial grade ore. Others have successfully treated the capping by the leaching process. Others have been able to successfully mine down into the primary, although it is usually lower grade than the secondary. Many factors effect these relationships and only development or drilling will tell the complete story.

We do know that this area appears to have the "earmarks" and could develop into either or all of three types of mine; (a) a surface orebody of leachable ore; (b) a secondary zone of higher grade ore; (c) a primary zone of deep commercial ore.

Mining Facilities.

If an open pit sized mine can be proved in the vicinity of claim #2 a very large tonnage of ore would be available above the valley floor level, and the proportion of ore, to waste that must be removed, would be very high. This indicates an unusually economical pit operation.

Water would be a problem but by no means impossible. It is merely a matter of finances, which are in turn a matter of proved tonnage and values.

Railroad available within 13 miles.

Recommendations.

The most economic and feasible first procedure would be exploratory diamond drilling. At least 5000 feet of such drilling should be planned as an initial step. The average cost should be in the neighborhood of \$5.00 per foot.

There are a great many pre-mineral and post-mineral faults, as well as changes in the characteristics of the host rocks, that could well effect the location and direction of the drill holes. Before spotting these holes in detail a further study should be made by a trained geologist experienced in large south-west copper deposits.

As a general idea however, there should be two angle holes on #15 - one to cut the ore zone at a moderate depth, and one deeper. And about four holes on #2 cutting the mineralized formation at various depths and angles.

Metallurgical tests to determine the leaching characteristics of the surfact ores will be made. Such tests will show the percentage of the copper that may be extracted by leaching, and the consumption of acid per pound of copper. It is possible that a small leaching operation might be carried on, during a development period, by selecting better grade areas,

of which there are many. The ore might even be hauled to available water. This matter can be further considered after the results of the leaching tests are available.

The location of the group should be pin-pointed on a map to determine the sections in which located, and a search made at the U. S. Land Office to make sure there are no conflicting patented claims.

More claims should be located west of #1, 2, & 3 if possible. While this area was not examined it is possible that the massive mineralization may extend there. As soon as any constructive plans regarding your property are known others will try to capitalize on same, and locations by others there could at least constitute a bad nuisance value.

I do not believe that attempts to selectively mine and ship ore direct to a smelter would be successful.

Conclusion.

The surface showings fully justify an initial exploratory program as outlined.

If such a program is as successful as I anticipate a very large amount of financing would be needed to fully develop - block out large tonnages - and equip the mine for large production.

But if the preliminary drilling semi-proves the existence of large bodies of commercial ore you should have no difficulty in obtaining any desired amounts of financial help.

The more you prove, the better deal you can obtain. The first steep is the most speculative but brings the highest reward.

Respectfully Submitted,

(Signed) Chas. H. Dunning

May 19, 1956.

(SEAL)

(Registered Mining Engineer)

University of Arizona
Tucson 25, Arizona

June 15, 1956

Mr. Charles H. Dunning
817 West Madison Street
Phoenix, Arizona

Ore test No. 1500

Dear Mr. Dunning:

The sample which you sent to the Arizona Bureau of Mines was leached in a glass cylinder for seven days. The last day a 2.5 per cent ferric sulphate and 1/2 per cent sulphuric acid was used instead of sulphuric acid only. The reason that the ferric sulphate was used was because the recovery was low. The results are given in Table No. 1.

The total copper dissolved amounted to 91.0 per cent of the total copper in the heads. The acid consumption amounted to 201.5 (for 80# copper, 201.5 over 80 equals 2.50 lbs. acid per lb. copper) pounds per ton of heads. The tailing assayed 0.375 per cent copper.

The leach copper leached without ferric sulphate amounted to 88.2 per cent of the total.

The assay head did not check too good with the calculated head or 4.6 against 3.98 per cent copper.

Yours very truly,

(signed)

George Roseveare
Metallurgist
Arizona Bureau of Mines

jn

UNIVERSITY OF ARIZONA
Arizona Bureau of Mines
Ore Testing Service

Ore No. 6 1500

Test No. 1

Solutions added:

No. 1 2.50 per cent acid

No. 2 2.55 " " "

No. 3 5.00 " " "

Ferric leach

2.5 per cent Ferric Sulphate
0.5 per cent Sulphuric Acid

Solutions taken off leach

Metallurgical Products

Table No. 1

Product	Tons in 100 Tons Feed	Copper	Assay is Sulphuric Acid	% of Total Copper
Heads	100.0			100.0
Solution #1	93.3	0.73	0.04	17.1
#2	109.7	0.71	0.16	19.6
#3	97.2	1.94	0.84	47.4
Washes	73.9	0.22	0.13	4.1
Ferric	111.1	0.10	---	2.8
Tailing	95.0	0.375		9.0

COPY **** COPY **** COPY **** COPY **** COPY

ARIZONA TESTING LABORATORIES

817 West Madison St. P. O. Box 1888 Phoenix

Chemists Engineers

For: Mr. C. H. Dunning
817 West Madison
Phoenix, Arizona

Date: May 18, 1956

Sample of: ore

Submitted by: same

ASSAY CERTIFICATE

Gold figured at \$35.00 per ounce Silver figured at \$0.90 per ounce

Lab. No.	Identification	GOLD		SILVER		Percentages
		Oz. per Ton	Value	Oz. per Ton	Value	
126843	C.Q. -15	Trace		0.20	\$0.18	COPPER CU 4.50

(SEAL)
(Registered Assayer)

Respectfully submitted,

ARIZONA TESTING LABORATORIES

(signed)

Claude E. McLean

COPY **** COPY **** COPY **** COPY **** COPY

RESUME OF OPERATION OF SIMILAR PROPERTIES IN ARIZONA

Name of Mine	Ore Removed	Copper Content of Ore	Investment	Estimated Profit	Gross Value Ore Mined
Ray Mine	107,000,000 Tons	2.0%	\$15,600,000.	\$70,000,000.	\$85,000,000.
Miami	150,000,000 Tons	1.54%			\$425,000,000.
Castle Dome	41,000,000 Tons	0.72%			\$101,000,000.
New Cornelia	200,000,000 Tons			\$94,000,000.	\$625,000,000.
Morancit	207,000,000 Tons		\$76,000,000.		
San Manuel		0.77%			

(The above figures are copied from State publications.)

PROPERTY WHICH WE OFFER

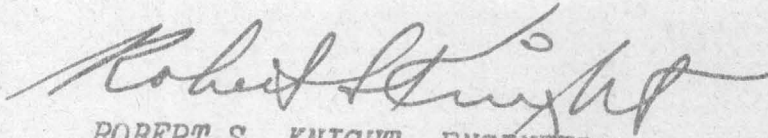
Est. Ore Available	Copper Content of Ore
200,000,000 Tons	1.75% to 3.50%

Re: Copper Queen and
Salome Copper Queen

THIS IS TO CERTIFY that the survey of the Hovatter - Cockrill properties, also known as Copper Queen and Salome Copper Queen Claims was made under my direction during July and August, 1956, and that the following procedures were followed.

1. The original survey monument for U. S. Mineral Survey #3207 was located, and its location confirmed by the original notes on file.
2. Enough of said Survey #3207 was retraced, and original corners found to determine its location.
3. Certain corners of the Hovatter-Cockrill claims were pointed out to us and these corners were located with reference to U.S.M.S. #3207.
4. The result of survey plat was then prepared from this information, showing the relationship of the Hovatter-Cockrill claims to U.S.M.S. #3207.
5. No further survey was made nor any additional corners of the Hovatter-Cockrill claims located in the field.

Yours very truly,


ROBERT S. KNIGHT, ENGINEER

Miami Copper Company

Incorporated under the Laws of Delaware,

Miami, Arizona,

B. R. Coit

Vice President and General Manager

Geology Dept.
March 13, 1959

Mr. Jim Thomson
2107 N. 27 Place
Phoenix, Arizona

Dear Mr. Thomson:

Enclosed are the two reports (Dunning and Hevatter) and the two maps (claim and geographical) which you loaned to me.

I thank you for their use.

Very truly yours,

Joseph E. Fowells
Joseph E. Fowells

Report of

CHARLES H. DUNNING
Mining Engineer

Geology

The general geology is a series of old volcanic flows, mostly andesite together with some old sediments (now quartzite) and probably some old intrusives, that have been highly faulted, and metamorphosed in places.

At one spot on the CQ#15 claim, a nearly vertical and narrow later intrusive dyke cuts through to the surface. This is of the rhyolite or monzonite type as distinct of the more basic terrain. This type of intrusive is often responsible for our copper ore bodies in the southwest, as such intrusions were often accompanied by mineral bearing solutions.

As a rule andesite formations have not contained important copper orebodies in Arizona, but that is because more andesite (or basaltic) flows occurred later than that period of activity which brought copper bearing solutions.

In this case however, the andesites are very old and were laid down before the copper bearing activity, and constituted an excellent host rock.

Surface Outcrops

Claims #7, 8 & 9 have meagre mineral showings. Here there is a narrow vein (2" to 12") carrying copper minerals, along a nearly vertical fault with a north-south strike. The copper mineralization is probably due to infiltration and precipitation along the fault as a channel of circulation, rather than emanating from magmatic sources. Such ore would probably be found to be very spotty, and might well disappear entirely in any direction.

On Claim #10 there is an old, deep, vertical shaft. The dump indicates that it should be 400 to 500 feet deep. History of the shaft is unknown, but the dump is entirely of barren andesite.

= Just east of the collar of the shaft there is a 4 ft. vein of copper bearing breccia, that dips about 80 degrees to the east. The shaft would have gotten further and further away from the vein as it attained depth, and whether or not any crosscuts were run to the vein is unknown. m The shaft seems in fair repair but without ladders.

This situation is not very intriguing but if no great expense is involved, it would be worthwhile to repair the shaft sufficiently, and see if crosscuts were run to the vein with drill holes from the shaft. This entire situation on #10 however, smacks more of the infiltration type of deposit, than of the magmatic type.

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This width would be difficult to sample accurately by hand, but I did take about 5 lbs. of material for test purposes that was somewhat better grade than the average. This sample assayed: Copper 4.60% silver .20 oz; gold tr. I would judge that the entire cut would assay at least half as well as the sample.

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In any event here is a wide zone of tentative copper ore that has a sensible reason for being there, that could well be the top expression of an important commercial ore body. I was informed that some GI's had worked over the dump material from the cut and shipped a quantity of ore. This is reasonable to believe but probably would not pay on a sustained basis.

From Claim #13 it was necessary to go back and around some high ridges to Claims #2 & #4. In the general vicinity of Claims #1, #2, #12 & #4 there is a massive mineralized zone or area that appears to be as large as 1000 by 2000 feet, perhaps larger. Elevations vary from a narrow floor on claim 4 to about 600 ft. higher as one progresses west. And layer upon layer of the flow rocks outcrop along the ascent, each showing copper. Near the top is a layer of quartzite, boulders from which have fallen down the canyon, and they show copper impregnation.

The presence of the quartzite (necessarily very old) on top of the andesite flows, indicates that the flows belong to a very old series. While no mineralizing type of intrusive was apparent in the very brief examination, such could be there, or perhaps such an intrusive did not reach through to the present surface.

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Respectfully Submitted,

(Signed) Chas. H. Dunning

May 19, 1956

(Seal)

(Registered Mining Engineer)

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University of Arizona
Tucson 25, Arizona

June 15, 1956

Mr. Charles H. Dunning
817 West Madison Street
Phoenix, Arizona

Ore test No. 1500

Dear Mr. Dunning:

The sample which you sent to the Arizona Bureau of Mines was leached in a glass cylinder for seven days. The last day a 2.5 per cent ferric sulphate and $\frac{1}{2}$ per cent sulphuric acid was used instead of sulphuric acid only. The reason that the ferric sulphate was used was because the recovery was low. The results are given in Table No. 1.

The total copper dissolved amounted to 91.0 per cent of the total copper in the heads. The acid consumption amounted to 201.5 (for 80# copper, 201.5 over 80 equals 2.50 lbs. acid per lb. copper) pounds per ton of heads. The tailing assayed 0.375 per cent copper.

The leach copper leached without ferric sulphate amounted to 88.2 per cent of the total.

The assay head did not check too good with the calculated head or 4.6 against 3.98 per cent copper.

Yours very truly

(signed)

George Roseveare
Metallurgist
Arizona Bureau of Mines

jn

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UNIVERSITY OF ARIZONA
Arizona Bureau of Mines
Ore Testing Service

Ore No. 1500

Test No. 1

Solutions added:

No. 1 2.50 per cent acid

No. 2 2.55 per cent acid

No. 3 5.00 per cent acid

Ferrie leach

2.5 per cent Ferrie Sulphate
0.5 per cent Sulphuric Acid

Solutions taken off leach

Metallurgical Products

Table No. 1

Product	Tons in 100 Tons Feed	Copper	Assays Sulphuric Acid	% of Total Copper
Heads	100.0			100.0
Solution #1	93.3	0.73	0.04	17.1
#11	99.7	0.71	0.16	19.6
#3	97.2	1.94	0.84	47.4
Washes	73.9	0.22	0.13	4.1
Ferrie	111.1	0.10	-	2.8
Tailing	95.0	0.375		9.0

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ARIZONA TESTING LABORATORIES

817 West Madison St. P. O. Box 1888 Phoenix

Chemists

Engineers

For: Mr. C. H. Dunning
817 West Madison
Phoenix, Arizona

Date: May 18, 1956

Sample of: ore

Submitted by: same

ASSAY CERTIFICATE

Gold figured at \$35.00 per ounce Silver figured at \$0.90 per oz.

Lab.No.	Identification	GOLD		SILVER		Percentages
		Gz. per Ton	Value	Gz. per Ton	Value	
						COPPER
						CU
126843	C.Q. -15	Trace	0.20	\$0.18		4.50

(SEAL)

(Registered Assayer)

Respectfully submitted,

ARIZONA TESTING LABORATORIES

(signed)

Claude E. McLean

COPY

COPY

COPY

COPY

COPY

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COPY

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COPY

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COPY

COPY

Salome, Arizona
Oct. 18, 1957

TO WHOM IT MAY CONCERN:

In regards to the estimate of 200,000,000 tons of copper ore on the Salome Copper Queen and Copper Queen property; the estimate is based on the continuous exposures of ore, and the elevations from the deep channeled washes which have cut through in various places on the property, and from old gold mine shafts of 3 to 400 feet in depth. Some of these are located at the base of the mountain which extends 15 to 1600 feet elevation above the opening of the shaft, with continuous oxidized ore showing.

Very truly yours,

(signed)

Ray D. Hovatter,
Mining Engineer.

RAY HOVATTER
Box 306
Salome, Arizona

Graduate Mining Engineer, Carnegie Tech and Colorado School of Mines. Completed college work in 1923. Since 1923, chief occupation mining and cattle ranching. Have examined a great number of properties, including Ajo, Ocotillo, Henrietta in Yuma County, Swansea, Butler, etc., also property in South America and Mexico for Anaconda, Phelps Dodge, also for Ventures, Ltd., American Smelting & Refining Company, Amzora, and others.

First became acquainted with the Salome Copper Queen group of claims about 1951, including the Moore group of patented claims. Is associated with Mark Cockrill in these groups of claims. All claims other than the Moore Group were located by Mr. Hovatter personally. Mr. Hovatter and Mr. Cockrill acquired an option on the Moore Group of claims from
MRS. FLORA MARSHALL

in November, 1956. They paid her \$2,000 down and the agreement calls for a payment of \$1,000 per month to her when operations begin. The price of these claims is \$250,000., to be paid on or before November, 1959, less the \$2,000 down payment and the \$1,000 per month which will have to be paid to her during operations.

EXAMINATIONS OF PROPERTY - MOORE GROUP

There are 5 shafts on the Moore Group of claims. On #5 there is an old gold operation. No one has been down in this shaft because it is too old and dangerous. Depth about 260 feet. The shaft was worked in the 1880's. Only record of shipment is six carloads. There is some evidence of copper, but not much of a dump left.

There is a shaft on Moore #2 of about 515 feet. This is in andesite. There is evidence of an old stamp mill here. There is no record of production. This shaft is in fair shape. They cut directly away from the fault contact, as they were interested in gold--not copper.

There are continuous open cuts and location holes on all claims of the Moore Group.

SAMPLES TAKEN FROM MOORE GROUP

Samples have been taken from Moore #2, 7, 10, 11, 13, 14, 15, 21, 27, 33 and 49. Tests ran from a low of 4.32 to a high of 11.3 copper. On Moore #2 there is an open cut above the shaft, and the sample was cut over approximately 15 feet, a 10 lb. sample.

Moore #7: An open cut driven in hill about 15 feet and the sample cut from both sides of the cut and across the face, about 10 lb. sample.

Moore #10, 11, 13, 14, 15, 21, 33 and 27: These were samples from the side line where they mined and where the carload shipments came from. Those shipments ran from 4.77 to a fraction less than 12% copper. The carload that ran approximately 12%, as stated in the report, was a hand-picked car.

Moore #49 is the only place in the group where the property touches the quartzite. Cut a sample of approximately 50 lbs. at various openings along the 415 foot shaft, which is full of water. There are several open cuts around this shaft and samples have been taken from face cuts over an approximate 250 foot area. These samples averaged about 5% copper. This includes sampling the shaft down a distance of 45 feet.

The highest point of the Moore Group is a dyke on the Moore #34. The strike across this group of claims is from the SE to the NW, 64' N, 39' W. The dyke was sampled on both sides and across the top. This was done by sending men up who took samples across the entire width and around the base of the butes. The copper was exposed everywhere, there being a continuous showing. The assayed samples averaged 5.5 to 6%. All these were surface samples.

The dyke is an altered rhyolite and andesite. All ores sampled have been oxidized ores.

Quartzite extends from the West boundary of Copper Queen #1, Salome Copper Queen #20, Salome Copper Queen #19, Moore #49, Copper Queen #3, Salome Copper Queen #7 and Salome Copper Queen #39, in an Easterly direction to the outer boundary line of this property. It is believed that the quartzite might be the underlying rock that goes clear through under the mountains. Most geologists say this is true. We know that the quartzite at the shaft is 415' thick.

The andesite, rhyolite and quartzite are all mineralized. The diorite also carries copper.

SURFACE AREA WITH COPPER SHOWINGS

Generally speaking, the copper showings cover an area approximately $4\frac{1}{2}$ miles in length and 6,600 feet in width at the widest part.

Tunnel on Moore #33 goes in 320 feet straight back in the hill. This tunnel was sampled all the way through by the U. of A. Parts of it were barren, but copper below and above the barren spots. From the type of rock and the way the ore disseminated, the ore had to ascent, not descend. The shaft going down to 415 feet and striking native copper, not even through the quartzite, would indicate that the ore came from below and has ascended and disseminated through the rock.

Rhyolite is a hard rock and there would not be much enrichment from the surface. The same is true of quartzite--there would be little enrichment from the surface, because it is a hard rock and the ore would not leach down.

In the andesite, there would be considerable leaching from the surface and there would be secondary enrichment on ore near the surface. The andesite does not cover more than approximately one-fourth of the area; the balance of the area consists of rhyolite and quartzite, with a small quantity of diorite.

Dated April 30, 1957.

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Re: Copper Queen and
Salome Copper Queen

THIS IS TO CERTIFY that the survey of the Hovatter - Cockrill properties, also known as Copper Queen and Salome Copper Queen Claims was made under my direction during July and August, 1956, and that the following procedures were followed.

1. The original survey monument for U. S. Mineral Survey #3207 was located, and its location confirmed by the original notes on file.
2. Enough of said Survey #3207 was retraced, and original corners found to determine its location.
3. Certain corners of the Hovatter-Cockrill claims were pointed out to us and these corners were located with reference to U. S. M. S. #3207.
4. The result of survey plat was then prepared from this information, shewing the relationship of the Hovatter-Cockrill claims to U. S. M. S. #3207.
5. No further survey was made nor any additional corners of the Hovatter-Cockrill claims located in the field.

Yours very truly,

(signed)

ROBERT S. KNIGHT, ENGINEER

RESUME OF OPERATION OF SIMILAR PROPERTIES IN ARIZONA

Name of Mine	Ore Removed	Copper Content of Ore	Investment	Estimated Profit	Gross Value Ore Mined
Ray Mine	107,000,000 Tons	2.0%	\$15,600,000.	\$70,000,000.	\$85,000,000.
Miami	150,000,000 Tons	1.54%			\$425,000,000.
Castle Dome	41,000,000 Tons	.72%			\$101,000,000.
New Cornelia	200,000,000 Tons			\$94,000,000	\$625,000,000.
Moranci	207,000,000 Tons		\$76,000,000.		
San Manuel		.77%			

(The above figures are copied from State publications.)

PROPERTY WHICH WE OFFER

Est. Ore Available	Copper Content of Ore
200,000,000 Tons	1.75% to 3.50%