20900013

(59)

Item 13

November 19, 1963

TO : Otto Brink
5801 - 59th Street
Sacramento, California

FROM : J. H. Wren
143 Keystone, Ave., Apt. "B"
Reno, Nevada.

Dear Otto :

Imagine I missed you when you passed through Reno.

A very outstanding property and deal on a silver mine has been offered to me - and it won't keep long.

A Nevada property where something over $2,000,000 has been produced and $140,000 was spent on rehabilitation and development 1959-1961 with a 2200 drift along the strike of various ore shoots with ore above and below the level, a lot of tonnage available which was blocked out at lower silver prices and now is profitable ore along with track, pipe, ventilation, compressors, buildings, etc. can be acquired. There is $50 to $200 direct shipping rock that can start out within six weeks pending the construction of a small cyanide mill.

This property would put the U. S. stock in position to really be worth something. I think a deal can be made with the owners for a block of U. S. stock, and a management account. If Bill Fleming wants a deal, this is it. In any event it will put U. S. stock into position whereby it will be sought after.

I can swing this property for U. S. and work out a deal with the owners whereby we all can make some money. It'll have to be followed through on soon, however, as they can turn it any day.

Regards,

James H. Wren.

COPY

NOVEMBER 19, 1963

TO : Mr. J. P. Lowe,
957 College Ave.
Whittier, California

FROM : James H. Wren
143 Keystone Ave., Apt. "B"
Reno, Nevada

Dear Jack :

Have not heard from you for some time and have been wondering how things are going.

Have been quite busy during the past year in spite of the general mining trend.

As you no doubt know silver is higher in price now than any year since 1873. I've been doing a lot of silver mine examination work recently and just ran across an outstanding deal. At a Nevada property over $140,000 was spent in 1959-1961 before silver raised. It is tapped with a 2200' adit with ore both above and below the level. There is a series of ore shoots containing gold and silver amendable to cyanidation. There is immediately available shipping ore with a grade of $50 to $200 per ton in limited volume but its income would be highly acceptable while building a small cyanide plant. Much development work was done in zones which were not economic at the former prices ranging from less than 30¢ in the late 1920s to 67¢ in the middle 1930s to 74¢ in the late 1930s to the supported price of 90¢ and a fraction. Some considerable tonnage is available in these zones which could not previously be mined but now will show a very good profit. Track, pipe, ventilation facilities, compressors, buildings, etc. are in effect. Within six weeks profitable crude ore shipments can be produced. I have an excellent engineering file with sections, plans, assay maps, etc. They have not yet been compiled into a formal report. However a deal is available from the present lessees. In the event that you know of anyone speculatively inclined for a cinch deal in silver production, let me know and we'll work out a mutually equitable arrangement.

By the way, the above Reno address will be effective for me for about another month.

Very best regards,

James H. Wren.

COPY

November 18, 1963

TO : Mr. B. M. Snyder, Mgr.
Union Engineering Co.,
Park Central Building
Los Angeles, California

FROM : J. H. Wren
143 Keystone Ave., Apt. "B"
Reno, Nevada.

Dear Mr. Snyder :

A property of some considerable merit just came to my attention and in view of my present pressure thought you might be interested in it.

The property is a silver-gold mine, actually two mined now combined and tapped with a 2200 adit. During 1959-1961 some $140,000 was spent on rehibilitation and development.

Track, pipe, ventilation system, compressors, , etc. are now on the site. Mine buildings are on the property.

Crude ore shipments of $50 to $200 per ton can be commenced within six weeks. Ultimately a small mill should be built (cyanidation) and then one can market gold-silver bullion getting away from trucking, freight and smelting. Much of the old workings contain considerable tonnage which was non-economic under the old silver price , but now would furnish an extremely profitable mill head in view of the fact the exploration and development already in would be saved.

I have engineering and assay map data but it is not compiled in a report and I will not be able to do that in view of other duties for a while. However, will send you an outline , if you are interested, and then you could make a personal inspection and look over the loose pages of assay charts, maps, etc. One can now capitalize upon the $140,000 spent 1959-1961. This property is of interest to me in view of its readily available shipping one and the long range milling potential.

Regards,

James H. Wren.

COPY

November 18, 1963

TO : Major Leo J. Quinn
6805 Larchmont Dr.
North Highlands, California

FROM : J. H. Wren,
143 Keystone Ave., Apt. B
Reno, Nevada.

SUBJECT : Unit of proven production inventory.

1. A deal is available on the Miner's Gold and Elko Prince mines North of Winnemucca, Nevada.

2. These properties have an imposing production record.

3. Over $100,000 has been spent in recent exploration and development. Assay maps, mine plans, longitudinal sections and other engineering data is available. Production ore runs from $30 to over $200 per ton. Values are in gold and silver. Present price of silver will allow mining zones which were opened at the former low silver market but could not be mined, profitably.

4. An inventory of track, pipe, and some machinery including a compresson is on the site now.

5. The two properties are combined and will eventually make a major mining project. At the start highly selective mining will create excellent profit per ton produced, on a limited volume basis.

6. The present lease owners do not have capital with which to operate. I am now negotiating for a workable alignment for an operating agreement. We'll have to move fast in-order-to acquire this property.

Regards,

James H. Wren.

1cc: Joe Warren.
Jack Simpson.

COPY

November 18, 1963

TO : W. T. Carson, Sr.
P. O. Box 346
Hughson, California

FROM : J. H. Wren,
143 Keystone Ave., Apt. 8
Reno, Nevada

Bill :

There is an outstanding silver-gold property available North of Winnemucca, Nevada. There has been over $100,000 spent in recent development and exploration work. Good and adequate assay maps, mine plans, and other professionally setup details are available. ?

This property could result in becoming one of the largest producers of silver bullion in the state of Nevada. The ore is amendable for cyanide treatment - no trucking, freight or smelting fees. Thousands of development feet are already in, track, pipe, fan pipe etc. are installed and some considerable ore tonnage is blocked out. Before all rehabilitation is accomplished direct crude ore shipments of $50 to over $200 per ton can be made. The property is tapped with a tunnel with ore above and below it. There is 2200 feet of haulage tunnel already driven. There is also an equipment inventory such as compressor, mine buildings, etc.

I thought that either you or some of the contacts you made for Tybo, who wanted to stay clear of the legal entanglements down there, might be interested in an immediate production enterprise with an immediate direct crude ore product and a subsequent milling proposal which would produce the metallic gold and silver, [redacted]

There has been very good control over the money spent recently on the development and rehabilitation. I'd say that over $200,000 of development had been accomplished 1959-1961 before silver market raised. wrong

Pardon the typing, Regards,

James H. Wren.

cc: Joe Warren
Jack Simpson.

COPY

November 18, 1963

TO : Ed Cleve
1517 " E " Street
Sacramento, California

FROM : J. H. Wren
743 Keystone Ave, Apt. "B".
Reno, Nevada

SUBJECT : EXCEPTIONALLY ECONOMIC SILVER INVENTORY AVAILABLE .

Dear Ed :

There is a property of exceptional outlook that has just been brought to my attention as available. Thought it would add to your Steigmeyer lease and make a real deal. Description is as follows :

Property has produced over $2,000,000 in silver and gold. Ores are amendable to cyanide which will allow pouring gold and silver bullion for direct shipment to the mint for gold and the best silver markets at or over $1.29 per ounce.

Before having to construct a mill , crude ore shipments of $50 to over $200 per ton can be made to assist with mill construction cost.

Good and complete engineering maps, assay maps, and other project support evidence all are available.

There has been over $140,000 spent in exploration and development 1959 to 1961 before silver advanced. The mine is tapped with a tunnel from the hillside which is some 2200 in length. Ore is available both above and below this tunnel. Pipe, track, ventilation pipe, shop, compressors, Misc. buildings are in effect. Within one month shipments could be started out and subsequently a small mill would produce excellent profits.

This property which will produce immediately, is partly equiped and has had over $140,000 spent on it recently (foregoing money could be capitalized upon now), would lend strength to your Steigmeyer property from the stanpoint of using this one as a subsidiary but its relation would assist you in financing and getting setup at the Steigmeyer.

Evidently Otto had my report which the fellows in Grand Junction got. I'll get it back.

Regards,

James H. Wren

COPY

cc: Joe Warren
Jack Simpson.

Dear Arthur –
Hope Mrs. Lakes has fully recovered and that you are both well and will stay that way. It was a pleasure to make your acquaintance after all these years, and I trust we can do some business together some day. Assays in that cross cut over in the Miner's Gold were terrific – 18 inch cut in the floor 2.5 oz Au, 3 20.0 oz Ag, an 8' cut across the back 0.12 oz Au, 30.0 oz Ag and 6' of 0.08 oz Au and 23.0 oz. Ag. Hearty greetings and best regards

Virgil A. Hikes

To wish you
a
Happy
Holiday
Season

(59)

Item 13

January 14, 1966

Geo. Conrad Heikes,
112 Douglas Ave.,
San Jose, Calif 95117

Dear George:

I wish to thank you for your Xmas card and the assay information contained.

I have been trying to get data together to make an acceptable presentation of Miners Gold-Elko Prince and need reports on the assays in Miners Gold (with of course any additional Elko Prince data).

Jack Simpsontells me that you have the assay data. Could you send it to me and I will return it after copying. Any further items that you think would be applicable would also be appreciated.

I have had inquiries from Canada which is in the greatest mining boom of its history. They want silver,lead, mercury, and copper and are willing to go outside Canada to get meritorious properties. If you know of any it may be that you and I can do business together.

I will await your reply with interest.

Best regards

Sincerely yours

Arthur Lakes

(Arthur Lakes)

G. CONRAD HEIKES
112 DOUGLANE AVENUE
SAN JOSE, CALIFORNIA 95117
PHONE: 408-248-6680

Monday, January 17th, 1966.

Mr. Arthur Lakes,
Consulting Mining Engineer,
702 Forest Street,
Reno, Nevada 89502.

Dear Arthur:

Thank you for your letter of January 14th just received.

A relatively short time before I went over to Korea in 1960, I did some mapping in the Miner's Gold Tunnel and recommended they drive a crosscut over to where I thought the vein ought to be. This was done and in the course of events several samples were taken by various individuals but I did not take the samples myself nor do I have the assay certificates. After I was in Korea, I heard of the good results of sampling in the crosscut, and other samples that were taken. In looking over my notes, I find I was at Midas April 10th, 1960 but there are no notes under Elko County, Nevada, so I presume I turned them all over to the client I was working for at the time. I am sorry I cannot help you out at this important moment. Jack Simpson telephoned me Saturday concerning the same matter, and I had to tell him I didn't have any of the latest assays or assay certificates. The only assays I had were the ones I turned over to you in Reno, and I hope you will return those maps to me when you are finished.

The news that you have some friends in Canada who might be interested in silver, lead, mercury, and copper properties in the U.S.A. was enlightening. If I run across something I consider worthwhile, I'll get in touch with you as I don't know anybody I would rather work with, after having met you in Reno.

Kindest regards and best wishes.

Sincerely yours,

G. Conrad Heikes
Consulting Mining Geologist.

(59)
Item 13

January 12, 1966

John R. Lakes,
Barrister & Solicitor,
470 Granville Street
Vancouver 2, Canada

Dear Mike:

Re our phoned conversation last night.

I had Jack Simpson (Gen Supt. Rio Tinto copper mine) and Joe Warren (supt. Wabash mine) here last night to figure some kind of a proposal for a deal and to give me additional data for the outline I am preparing for the property's presentation. It will take me through next week because the large mass of data, assays, maps, etc. have been scattered over the years. However Simpson(who solely controls the deals) will provide me with a mass of records and I have spent three days on the various geological survey reports so will get a good outlihe accompanied by plan and longitudinal section.

The property is held by Yale Mining Co. a Nevada corporation with 1,000,000 share capitalization. Of this 250,000 shares have been issued, 150,000 shares owned by Simpson, the other 100,000shares under his control.

The property comprises: (1) a 40-year lease on Miners Gold (the property that is accessible and from which all work will proceed) on basis of 7½% royalty on net smelter of ore shipped and/or 2½% net smelter on ore milled. I have never seen a deal with such low royalty. The Miners Gold is reported (reliably) to have produced $300,000 shipping ore averaging 1.86-oz. gold and 35-40-oz. silver @ $20 gold and around 62¢ silver. This indicates a silver ratio of 19-oz. silver to 1-oz. gold and would be worth $64.10 gold, $44.15 (@ 35-oz) or total $108.25 today prices. (2) A $50,000 pruchase @ 10% net smelter royalty on Elko Prince mine until the $50,000 is paid. An advance royalty of $1200 per year is required in cash to be applied on purchase. The Elko Prince is on the same vein as Miners Gold and is reputed to have produced more than $3,000,000 by stopes aggregating 600-feet high by 1000-feet long. Mining extended down 900 feet and was projected to continue to 1200-feet when work stopped. The stope maps (of which I enclose a copy) indicate that about half the ore still remains above the 900-level. It is noteworthy that a winze down from 750 to 900-level averaged $75 per ton (@ $20 gold, 62 plus or minus silver price). The Elko Prince is presently inaccessible and will be attacked by shaft and drift operations from the Miners Gold Adit.

The vein occupoes a fault of considerable horizontal and vertical displacement. It has been followed underground in combined Elko Prince and Miners Gold workings for 4900-feet length. Opened 386-feet below surface by Miners Gold adit tunnel and 750-feet to Elko Prince 750-Level with two short drifts at 900-Level. All drifts are in ore which occurs in shoots 450- to 750-feet long in Elko Prince about 200 feet long in Miners Gold (Stope shown on map is longer than

wrong

depicted a correction to be established when I go up to the mine.

This letter is fragmentary but items put down as they occur to me. You may be assured that the Outline will be in more lucid order.

Deals We know that you are far more conversant with what is acceptable in B. C. and feel that you know best what to do. It is suggested that after the Outline is presented to you (in duplicate) and the property's possibilities assessed that we pay your expenses to come down here and advise us, either on modification of the two tentative proposals following or outline an entirely new method. The air fare is $100 round trip Vancouver-Reno and of course you will stay with us when you arrive. Jack Simpson, Warren and I think that this will be most beneficial to us all, including yourself. If possible it would be better tobe here a week end because both men have duties requiring their presences at the mines from Monday through Friday.

Proposal No. 1 Buyer pay $5000 per year advance royalty ($425 monthly) out of which Yale Co. pay the $100 per month due Elko Prince deal and we divide balance. The buyer assure $300,000 or whatever is required to open Miners Gold into downward and upward extension of the known orebodies, ultimately extend shaft to 900-Elko Prince level and drift into downward extension of unmined Elko Prince ore, (open into stopes filled with ore that was low grade in early days but would probably make good mill ore under present prices) and put the whole mine into productive condition. However the $300,000 estimate would be (1) rehabilitate part of Miners Gold adit portal (a small expenditure) open the ore bodies sufficiently to support a 50-75-ton mill and put the property into production. The buyer to get his money back @ 80% of production profit. When this is accomplished the buyer and Yale (or ourselves) go 50-50 on future profits. This plan appears to be very popular and is theone followed by Hecla in its New Park and Mammoth deals (two very satisfactory Utah propositions). Jack Simpson likes this proposal because it gives the present owners some sort of control so that the buyer cannot ball up the project as has so often occurred in Nevada.

Proposal No. 2 (suggested by Arthur Lakes) If buyer is an established company with list stock available. Yale Mining Co. sell 500,000 or 550,000 shares of its stock for stock in the buyer company (basis to be negotiated). Buyer to rpovide $300,000 more or less as above. Buyer get back his money @ 80% of the production profit. Then property owned 50-55% by buyer and balance by present shareholders and ourselves. The buyer pay the $1200 advance to Elko Price as above. Buyer pay taxes($140 per year) and file assessment work which be included as part of the work program.

In both deals whether as is or as you may change them, a stipulation will be made regards time of starting equipment, operations, etc. with minimum monthly work to be performed.

An item of interest to you would be that if we needed extra money for the more extensive development we could go to the U. S. Government for a loan to preform the exploration (no other work allowed under the loan) On this loan we would pay 25% because the property would be listed as a silver producer. Our equipment, etc. would apply as part of our loan percentage. This a thought to keep in mind. The government's part of the loan is payable @ 5% of the gross output (not net smelter). A thought.

The government reports state that the camp produced 109,765 ounces of lode gold and no stated silver but they classify the camp as one producing "between 1,000,000 and 10,000,000 ounces silver." On basis of the Miners Gold shipments (as per Jack Simpson to be further checked when I get the data) @ 19-oz. silver to 1-oz. gold the indications are that around 2,000,000 ounces of silver was produced.

See

opened [illegible] length to 900 ft. level

Elko Prince was by far the largest operation. Other mines were opened less than 400-feet depth. Miners gold has the same downward possibilities as Elko Price, which, as stated extended in very good ore to and beyond 900-level (were going to 1200 when operations ceased)

The ore veins averaged (as mined) about 2 to 2½-feet thick @ around $40 (old time prices (this to be checked). According to Simpson and Warren, the ore that produced $300,000 averaged a little more than 2-feet width but about 4-feet of "mill ore" adjoins the vein. This to be checked as much as I can when I go up to the mine. Under certain geological conditions (to be described in the Outline but I will not confuse you now) Mill ore up to 20-feet wide has been found in some of the mines but it would be unsafe to figure that these showings cover an appreciable part of the Elko Prince-Miners Gold vein which should be considered around 3-feet average width. The high grade ore makes up for the lack of width but it would be foolish to figure a mill of more than 75-ton capacity.

Put on 3 veins & values

Lindgren Tonopah etc

There are conditions that indicate that the vein (there are two others veins on the property, one of which has had some work in Elko Price mine, the other being an outcrop at present) will extend down to very considerable depths. The ore deposits are "epithermal" (continuing to shallower depths we say 1500-feet or so). A geologic possibility is that the epithermal ore (low in sulphides) may change in depth into "mesothermal" or intermediate ore zones whereby it might contain zinc and copper sulphides with silver and gold. However these thoughts are best presented in the outline. Prod camp less than Tonopah Goldfield

Suffice to say that the Comstock Lode ($800,000,000) Tonopah (more than $50,000,000 possibly closer to $100,000,000) Gold field very heavy production and other important Nevada mines fall in the epithermal classification.

Geo. C Heikes a geologist that worked when the Miners Gold operations proceeded 1957-58-59 reports the following from area opened and [illegible]sscut; 18-inches in floor 2.5-oz. gold 320.03-oz. silver ($500.30 today), 8-ft. cut across back 0.12-oz. gold 30.02-oz. silver ($52.90) and 6-ft. across back 0.08-oz. gold, 23-oz. silver ([illegible]3.79). Jack Simpson reports a 5-foot cut at some ore body @ 0.48-z gold, 117-oz. silver ($150-93 silver, $16.80 gold $167.73.

future

I hope I have'nt confused you but have given some of the data that will be more fully included (and checked) in the Outline. I think this is a good little mine (with possible production around $4,000,000 or more) It is in this position that it can be gotten on very reasonable terms, and price. However when we have the Outline and consult with you we may have some different ideas.

Now to come to where we get off at: Simpson has control and full say. He is inclined that we share @ 1/3 each (Warren-Simpson-Lakes) in balance of the Yale holdings less the issued shares. We (the group) to

to allott to you 10-15% of the whole (the interest less the issued shares) The agreements will be covered by contracts prepared by you or, if you think advisable by another high class lawyer.

The enclosed Longitudinal Section will be added to and corrected insofar as Miners Gold is concerned. Simpson thinks that there is more work on the Elko Prince than is shown on the Section, though not sufficient to materially change the picture.

I will close now toget this off to you Airmail.

Sincerely,

(Arthur Lakes)

Encl.

P.S. Operations ceased (1) by very low silver prices (down to 28 c per oz in 1931) and (2) by fire destroying the cyanide mill.

File -

June 24, 1960

Mr. C. H. Reynolds, General Superintendent
Continental Materials Corporation
P. O. Box 1550
Grand Junction, Colorado

Yale Gold Mining Co.
Midas, Nevada

Dear Herb:

Although you are fully conversant with most of my ideas concerning the MIDAS area, because of our recent trip there together, I have prepared the following suggestions for your consideration.

1. The present SIMPSON crosscut from the old Midas Gold Tunnel should be immediately driven well through the vein at least 20 feet on the other side, then a drift easterly undertaken. The vein may be an extension of the Elko Prince Vein, and if it is, there should be at least 1,000 feet of hitherto unprospected vein to explore. I expect you will find several good ore shoots in this area, of various sizes and intensity of mineralization -- mostly silver, some gold.

2. Published data on the area which has come to our attention, especially the J.V. N. Dorr article in AIME transactions, the article by Rott in a Nevada State Mines Bulletin; and the U.S.G.S. Bulletin by W. H. Emmons, have all been sketchy as to general geology. A good detailed surface geological map of the immediate claims and the nearby area should be made showing the differentiation of the intrusive and extrusive andesite, the rhyolite flows; adjoining, branch and parallel veins, and faulting. The geological mapping job is important and complicated enough to warrant a study by Wisser and Cox, with Jerry Brooks and Clay Rowley working with them to get the valuable experience.

3. After a statigraphic and petrological study of the surface has been made, the underground geology should be remapped, then suitable sections made tying the underground with the surface observations.

4. If the above mentioned ideas were successful, it would then be worthwhile to sink a vertical shaft out in solid rock, between the Elko Prince

and June Bell Veins, to explore both these veins at depth. As you know, there are supposed to be several attractive blocks of $100 gross value ore in the lower levels on the Elko Prince and June Bell Veins.

5. A small 25 ton per 24 hour pilot cyanide mill should soon be justified. For example, if in the course of drifting on the Miner's Gold-Elko Prince Vein, we were to encounter an ore shoot 200 feet long, three feet wide, we could expect it to extend at least 300 feet in depth. Using a factor of 12 cubic feet per ton, this would give us 15,000 tons. Suppose the mined grade of ore after dilution was $40 gross gold and silver recoverable value, this would be $600,000. A small cyanide mill of 1 ton per hour capacity could probably be erected for $30,000. A capacity of 25 tons per day for 250 working days would be 6,250 tons per year. With the high grade ore already known at depth, there should soon be several years of ore developed. If ore development progressed as expected, the mill could then be enlarged accordingly and the production increased. By that time, the original 25 ton per day mill would have been perfected and maximum metallurgical recovery be obtained. The Western Knapp Division of Western Machinery, with its considerable gold and uranium plant experience, should be competent to design, and perhaps erect, a suitable plant for this operation, or Gallagher Machinery in Salt Lake, etc.

6. It could be that within a year or so there will be considerable interest for gold and silver properties. I again recommend this particular Elko-Prince property.

Since I am leaving the company to resume work with the United States Government on July 1st, I will not be with you during the development of this property. In case I can help you, however, I would be glad if you would keep me posted as to how the project progresses, as I might get some good ideas and would be glad to send them along to you. I would like to take this opportunity to express my appreciation to you and to thank you for your full and wholehearted cooperation during the past few years. I thoroughly enjoyed working with you and your staff, and I wish you great success.

Sincerely yours,

George C. Heikes
Manager, Mineral Resources

d
cc: G. S. Gidwitz
S. M. Gunther
M. M. Smithson

January 21, 1966

John R. Lakes,
Barrister & Solicitor,
470 Granville Street,
Vancouver 2, Canada

Dear Mike:

Your personal letter received this morning and I enclose a typed copy of the suggestions re the Miners Gold-Elko property, leaving out confidential matters.

I am going to the mine tomorrow returning early Monday morning. Simpson, Warren and I will go over the transcript of your letter and they promise me details re values, etc. which have been so long coming. I will then be able to complete the presentation outline. The delays have been due to the fact that they have had to get data from Salt Lake, that Heikes the geologist has not been able to provide data requested. etc. I felt that I should go to the mine for a day at least so that I will have first hand knowledge re Miners Gold tunnel (the only accessible workings at present) I put in a few hours there about 3-years ago but had no maps and went no further in the investigation because it was too big a proposition for the parties interested at that time.

We are, of course, aware and agreeable to an examination by any parties interested in the project. There is no material difficulty from snow though there might be 6 or 7 inches any time during the winter. I expect to encounter some snow but we are going up to the mine in a 4-wheel jeep which will accomplish the trip. The country to within 1-mile of the Miners Gold tunnel is probably free of any snow because the hills around Lovelock which are higher have none at present.

Frankly what I want (for myself anyway) is some deal whereby I can get some money. Of course I have had too much experience to be unreasonable and I fully appreciate that the projects speculative nature does not warrant any appreciable down payments I had thought that if some company having shares with a market outliet could arrange to make part payment in such stock I could (in six months after receipt of such stock) sell some to get cash. Simpson's proposal (No. 1) would preclude this because no sale is made. It is a participation deal. However I will not interfere in any way that would make difficulty.

We feel that it would be of utmost value to us that you come down, say leave on a Friday be here Saturday and return Sunday or if it would be better for your business leave on a Saurday be here Sunday and return to Vancouver Monday. Whatever plan suits you would be followed down here and I would have Simpson and Warren here for a detailed meeting. Incidently Simpson would furnish transportation for whoever comes down to examine the property.

I will close this now with the very best,

Arthur Lakes

Suggestions by John R. Lakes re my letter to him January 12th.

Before proceeding it must be agreed that any trip fo Reno would have to be over a weekend (ie. Friday and/or Monday but only one "working day" (day away from Vancouver A.L.)

Comments

First It must be understood that any company up here would want an examination period before it was committed to pay advance royalty and, if I am correct, there is no examination problem this could be a short term, commencing at execution. I guess there is no delay due to snow, etc.

I also assume that a "40 year lease" means 40-years from now, or has part expired? The mathematics of a deal must, of course, be considered with reference to the term of agreement. Thus under what you call Deal 1 there could be an examining period followed by an option where there could be a royalty for the term (to coincide with the lease term) and no definite price or any advance royalty and "pay out" price at which the optionor delivers all its rights to the optionee as if it was a complete sale.

Your side (Simpson, Warren, Lakes) must decide whetherthere would be a pay out price and also whether this may be made partly in shares of a company with a market outlet. Thus it is possible that Proposal 2 could merge with No. 1 but Yale need not sell any shares, it would receive shares as a consideration of the transfer and I suggest that if this was done there could be another option on your side, either Simpson, Warren, Lakes secure all the shares of Yale 33-1/3 each and arrange a pro rata transfer to me, of if this is objectionable (as for some reason it appears to be) we could form a holding company in Nevada and at first instance all of its shares be issued to the parties and all of what otherwise would go to the individuals would go through the corporation. The only "bug" to check here is what is the Nevada law on winding up a company. Up here it is discouraging for tax reasons. It could be that down there we could take our dividends and wind up without any trouble- we are all taxable anyway. Aside from this I am familiar with a formula of agreement to cover the other points. I have had a very recent one dealing with Utah Construction here so am well briefed.

One item I find interesting is the loan proviso (Office of Mineral Exploration -AL) I assume that Yale would have to apply for the loan as a Nevada (U.S.) company and if so we must be careful that the optionee does not manouver it so that we end up financing the option. I suggest that would have to be a strict condition that the optionee indemnify Yale on the loan.

Finally we must give some thoughtto a protection against high grading, ie. so that after the optionee has recovered out of the 80% and the royalty increases from 20% to 50% we have preserved against a wholesale raping of the property.

(59)

Item 13

SHANNON AND LAKES

BARRISTERS, SOLICITORS, NOTARIES

WYNDOM E. SHANNON
JOHN R. LAKES, L.L.B.

ROGERS BUILDING, 470 GRANVILLE STREET

VANCOUVER 2, CANADA

MUTUAL 1-3823
MUTUAL 1-2628

May 24th 1966

Arthur Lakes, Esq.,
700 Forest St.,
Reno, Nevada

Dear Sir:

This is to acknowledge your letter and to tell you that under the circumstances I think you made the right decision. I confess that I don't know very much about the Columbia River people and of course I am thoroughly fed up with Carter,and the way the situation is at the present time it strikes me it might be some little time before one could get the right group interested in this property in Nevada and what is more there would have to be a great amount of application to the job and as I understand it you are concerned with getting going in a hurry so we would not have the luxury of time to get the right people interested.

You must appreciate the fact that a great deal of the alleged mining market here is based on a gambling instinct rather than a bona fide investment. We have had a couple of very bad examples very recently of these gambles but I will not try to describe them in a letter. The main problem which comes up time and again is that before you can get a serious company interested in a property you have to be able to show positive results and then of course the policy of the company very often may be not the same as the policy of the people who are interested in selling shares in the market. Therefore, in my opinion, even if the proposal you have down there may not seem quite as attractive as what appears to be the situation here, in the long run it may turn out to be more dependable for you, certainly I hope so.

Insofar as the correspondence with Gillis is concerned I hope you understand I am not trying to discourage you from making your own decision, nor is it to be in any way suggested we would not want to see you established here for personal reasons; it is merely that I am attempting to give you what I consider the best advice I can and I am doing so on the presumption you are settled in Reno and therefore that any work you take up here must be secured, and as long as it is secured then I am all in favour of it and as a matter of fact we would be very happy to see you up here, for personal reasons. I hope you have the best of luck with the financiers you mention. If by any chance anybody does come along who is interested I will certainly let you know without delay. My own idea of Carter and his group is that I don't find myself very highly impressed with their responsibility.

Yours truly,

John R. Lakes

JRL/AIRMAIL

(59)
Item 13

SHANNON AND LAKES

BARRISTERS, SOLICITORS, NOTARIES

ROGERS BUILDING, 470 GRANVILLE STREET

VANCOUVER 2, CANADA

WYNDOM E. SHANNON
JOHN R. LAKES, L.L.B.

MUTUAL 1-3823
MUTUAL 1-2628

June 6th 1966

Arthur Lakes, Esq.,
700 Forest St.,
Reno, Nevada

Dear Sir:

This is to acknowledge your two letters received this morning. I telephoned Carter and wanted to know when I would get the report back from him. Incidentally, I was very annoyed because I had made it known to him through Jim Mitchell that he was supposed to give the report back before now. He gave me the rather incredible story that the report was in the hands of the Columbia River people who had another report on the property as well and that he would deliver them both to me by this evening. I am unconcerned about the story about Columbia River but I certainly hope and expect that I will have the report today.

Insofar as the copy was concerned I delivered that to another firm here which is looking for properties and I haven't heard back on it yet and the only comment I will make now is that it is more reliable than apparently Carter turned out to be. I was hoping that this other firm might come up with a proposal that would be interesting to you,

Turning now to Gillis and Davidson, I would like very much to see them get you to come up here obviously for several reasons but I urge you to be sure that you are going to be well protected. I have already given my own personal opinion on this matter to the extent that I think I can do so. I think Mr. Gillis is very well meaning and I am sure he would not deliberately cause harm to anybody and of course if he would provide you with the firm retainer and you could work out your time in a logical manner I think it would be a very excellent situation.

Aside from the question of securing your finances there would be a matter of time discipline. In other words, we all have duties to perform and the best way to do them is within the time available in a logical way. My own suggestion is that if you were going to be working here and also in Nevada you must give some consideration to the problem of working out a time schedule which would be not only acceptable to you but which could get your work done effectively.

I don't know anyone named Lippman, which doesn't prove anything one way or another. I am not very impressed by his appointment of an engineer* but on the other hand maybe the man has something and you might be able to make some business out of it.

It is my hope that the report will be in my hands this evening

*Dave Sloan!

June 6th 1966

Arthur Lakes, Esq.

in which case we will airmail it to you. My difficulty of course is trying to get anything dependable from Carter who, as proved, is anything but dependable.

Yours truly,

John R. Lakes

JRL/

PS Actually from a personal point of view of course we would like to have you come here so that you could see the children and so on but we would not want to cause you harm and so we think you should insist on the safeguards from Gillis. He strikes me as a very unsettled person and difficult to get down to business with and whereas other companies are getting ahead Lodestar is still [in my opinion] flounder around. But there is no doubt that there is work available here, another geologist just went freelance [Bob Seaphim] so I dont know the best answer except that you have to be sure of your sanity as well as your time. As you know if you earned fees here you would have to be sure your income tax position was well covered in both countries and this has a direct bearing too. What makes all so difficult is that Daphne & the Children would all like to see you both and so business is mixed with other values.

(59)

Item 13

June 16, 1966

Jack Simpson,
Mgr. Rio Tinto Metals Cpn.,
Mountain City, Nevada

Dear Jack:

I have written to Mike to resume efforts to get a B. C. company financially interested in Midas Gold-Elko Prince in view of Morgan's information to Joe that he could do nothing until July-August. Mike had stated that he had given the report to another, more reliable company, even though he figured it was too late in view of our stated intention to deal with Morgan. My letter of June 14th. to him asked him to keep the report copies and to go ahead. If a B. C. company should come in there would be no need to change the report but if Morgan should proceed with the financing he will have to get report changed by deletion of the paragraph that stated I had not examined the property. This would be brought about by my May 21st. visit to the mine wherein also would be a change in equipment and preparation costs which I wanted to take up with both you and Joe.

In my June 7th. letter to you I outlined a tentative plan for Yale stock distribution prior to Morgan financing. It is obvious that the distribution be made prior to Morgan's starting financing hence it was important that we consult with you for your opinion and decision. If a B. C. company should come into the picture it would not be interested in Yale stock in any event.

At the time of my phone call June 7th. you said that you would handle the stock issue and also would handle the $76.35 your share of the $229.11 advanced by me. Will you please forward the $76.35 and the stock coming to me.

Expecting to hear from you shortly,

Yours truly,

(Arthur Lakes)

June 7, 1966

Jack Simpson,
Mountain City, Nevada

Dear Jack:

Due to your absence in Elko las Satruday-Sunday Joe Warren and I had a long meeting here Sunday June 5th. re Miners Gold-ElkhoPrince to go over important matters to expedite financing and get the work underway to take advantage of the good weather season.

The report is being rearranged due to my having been at the property May 21st. I am giving considerable data re the Roberts Mountain Thrust Fault and its probable influence on the continuity, vertically and harizontally, of the veins and ore occurrences. The fact that Gold Circle district is on a "crossroads" of the Southwesterly Belt that includes Mountain City and extends through Gold Circle, Battle Mtn. etc. to Virginia City and (2) the Lynn Railroad Belt striking SE through Gold Circle to the Outcrop of the Roberts MtnainThrust as shown on enclosed map which will be part of the new report. You will notice that Mountain City is on the upper (disturbed) side of the thrust just as are most of Nevada mines (lying west of the fault outcrop). I hope to get the new report out before the end of this week for forwarding to Morgan. "Times awaisting".

I quote from a letter from Mike Lakes received yesterday: "It is too bad the Carter deal was a bust and I have turned the report over to someone else, even though it may be too late now, so that if by chance a good deal could still be offered you would at least know about it". In view of the decision to work with Morgan (largely by Mike's advice after the Carter debacle) it would seem to me that we could hardly switch horses now, even though a very good deal might be presented. I w would appreciate your views in this respect.

The most important matter at the moment is regards to the stock distribution now that Morgan plans to sell 300,000 shares to finance the deal. Lacking your presence and after lengthy discussion Joe and I tentatively worked out the following, to be discussed, confirmed or changed after we can meet with you.

Capital stock	1,000,000 shares
Issued	250,000
	750,000
To be issued for financing	300,000
	450,000
To be issued to the three of us	210,000
Balance in Treasury for emergencies	240,000

Thus on the above basis you and Joe would each have the stock presently issued to each of you plus 1/3 of 210,000 shares or 70,000 shares more. I would get 70,000 shares. This Joe and I think is equitable under the circumstances that our efforts of the past 6-months have brought the property to its present stages re financing

whereby it was lying idle.

We both think that it is vitally important that you, Joe and I have a meeting. If you could arrange to come to Elko for an evening we would meet with you, I would stay overnight and return to Reno the next day. During this meeting the stock matter could be finanlized either by issuing certificates (subject to escrow according to Morgan's requirements,(some stock issued to me for fee so that it would be on same sale basis as the stock issued already to you and Joe). Other matters that will expedite the deal, such as data required by Morgan that you and Joe alone can provide. As stated I hope to get the new report out this week for forwarding by you or Joe (as might be determined between you) to Morgan.

In this connection I enclose a copy of Experience Profile which I had to make out when I was elected Life Member of Professional Engineers Association of British Columbia. This is not to be published but Joe thinks it would be important to Morgan. I am also Registered No. 1408 of the of Registered Professional Engineers of Nevada. The B. C. rules are much more stringent than the Nevada rules. Both make it imperative that a professional enginner be registered and under control of the Respective state and provincial laws.

I am enclosing a bill for $76.35 which is 1/3 the Miners Gold-Elko Prince expenses for the months January through May (6-months @ $9.12 each per month. I have absorbed much telephone expense not included here but which would have been included if British Columbia Co. had come into the deal. I have to divide the expense because I have not been working this winter and cannot afford the whole $229.11 myself.

I shall phone you urging a meeting next Saturday evening June 12th. I feel that the matters are highly important and sufficient to make the effort.

With best regards and hoping that your Rio Tinto project is progressing satisfactorily,

Yours truly,

Copy to Joe Warren.
Encl-map and profile

700 Forest Street,
Reno, Nevada
6/7/66.

Jack Simpson &
Joe. Warren

IN ACCOUNT WITH

ARTHUR LAKES

To expenses Miners Gold-Elko Prince 6-months
January-through May, 1966

Total expense:	Xerox reports, etc.	22.75	
	Prints, mpas, etc	20.17	
	Long distance	163.69	
	Miscellaneous	22.50	
	Total charged (considerable phone not charged re British Columbia negotiations)		$229.11
	Divide $229.11 into 3 parts		
	Jack Simpson	$76.35	
	Joe Warren	76.35	
	Arthur Lakes	76.35	
	Amount due from you		$76.35

This at rate of 9.11 per month telephone & telegraph

8/8/66 Zerox 2 maps, 5-copies new report
10-maps
5x12=60 pages. 39.00

Divide
Jack Simpson 1/3 13.00 + 76.35 = $89.35 due.
Joe Warren 1/3 13.00 76.35 Paid.
Arthur Lakes 1/3 13.00
$39.00

13.00

Total due by Telephone 8/8/66 $89.35

(59)

Item 13

August 14, 1966

John M. Simpson, Gen Mgr.,
Rio Tinto Mines,
Mountain City, Nevada

Dear Jack:

Herewith three copies of letter of division of proceeds from Miners Gold-Elko Prince signed by Joe and Mary Warren and Arthur and Elizabeth Lakes. Please sign and have your wife sign the three copies, putting on the date and keep the original and return the two carbon copies to me one to go to Joe Warren. If you wife's signature is not available you proabably can sign for her. It is important to get this cleared quickly so that the matter is cleared up.

I am preparing Geologic report on Miners Gold in accord with the law and as per my previous letter to you. We will make out the afidavit (Proof of Labor) in accord with the requirements and will forward to you for your personal filing in Elko. I presume that the assessment filing will be for Yale Mining Co. (Joe says it should be Yale Gold Mining Co. so please inform me immediately by phone so that we can get it correctly.

The time is so short that we must get action hence I expect to mail the data to you on receipt of your phone call and completion of the report by August 17th. Any delay will be by lack of information from you. I have put in so much time and effort and expect to put in much more to get the property into operation that I cannot afford any risk of its falling down hence am doing my part to expedite.

It is apparent that the filing of the assessment work on basis of Geologic report require personal appearance and should not be mailed. This probably because the Recorder receives few such filings.

Hoping to get immediate action in view of the importance of the matter, With regards,

Yours truly,

cc-J. Warren

Arthur Lakes

(59)
Item 13

TO WHOM IT MAY CONCERN:

The undersigned, JOHN M. SIMPSON, and his wife, MARY SIMPSON, JOSEPH W. WARREN, and his wife, MARY WARREN, and YALE MINING COMPANY, a corporation acting by and through its duly authorized officers, agree that ARTHUR J. LAKES and his wife, ELIZABETH LILLIAN LAKES, are entitled to receive, and shall receive, an undivided one-third (1/3) interest in any and all moneys, considerations and payments made under options or leases, or in the event that the stock of YALE MINING COMPANY is sold, a one-third (1/3) interest in the vendors' stock, the one-third (1/3) interest is given in consideration of services rendered in aiding the financing, optioning or leasing or the sale of the mining property, consisting of the Miners Gold, Elko Prince or Yale Mining Company properties, all situate in the Gold Circle Mining District, Elko County, Nevada.

DATED this _____day of _____, 1966.

_____
JOHN M. SIMPSON

_____
MARY SIMPSON

_____
JOSEPH W. WARREN

_____
MARY WARREN

YALE MINING COMPANY

By _____
JOHN M. SIMPSON, PRESIDENT

_____
ARTHUR J. LAKES

_____
ELIZABETH LILLIAN LAKES

Loc

(59)
Item 13

O U T L I N E

OF THE

FEATURES AND ORE POSSIBILITIES

OF

ELKO PRINCE & MINERS GOLD MINES

ELKO COUNTY, NEVADA

Arthur Lakes

March, 1966

ARTHUR LAKES
MINING ENGINEER
700 FOREST STREET
RENO, NEVADA
TELEPHONE 323-8910

O U T L I N E

of the

Features and ore possibilities

ELKO PRINCE AND MINERS GOLD MINES

Elko County, Nevada

SUMMARY Whilst the following outline is based upon information that is considered reliable it is not guaranteed because I have not examined the property. Sources of information are listed at the end of the outline.

The property comprises combination of Elko Prince 11-claims and adjoining Miners Gold 8-claims covering 4000-feet vein length in Gold Circle Mining District, Nevada. The district was discovered in 1907 and operated until silver prices fell to 34-38¢ in 1940-42.

Small shipments of selected high grade ore were made directly to smelters but the bulk of the ore produced required cyanide milling into silver and gold bullion, economically important in saving high transportation and smelting costs. The ratio of silver to gold varies from camp production @ about 13-oz. silver to 1-oz. gold to 43-oz. silver to 1-oz. gold by available samples from Miners Gold "A" Drift. The silver-gold proportion would place the property into silver category whereby U. S. Government OME loan would apply @ 75% of exploration costs. ~~in event that application should be made for government assistance suggested in the body of this outline.~~

Elko Prince mine dominated the district producing a possible 80% of the camp's ~~production~~ by reported production in order of $3,000,000 ($4,750,000 at today's silver-gold prices). Miners Gold was essentially worked on selected high grade ore for shipment to smelters. It is reported that Miners Gold accounted for approximately $300,000 ($450,000 at today's metal prices).from small stopes ~~along~~ its adit tunnel.

The connecting Miners Gold-Elko Prince workings include 4000-feet proven vein length opened to 900-feet in Elko Prince and 550-feet in Miners Gold as shown on accompanying Longitudinal Section. High grade ore in Elko Prince bottom workings strongly indicate that good ore will continue considerably deeper, into horizons yet unexplored.

The most recent work which was performed in 1957-1960 by Yale Mining Company extended Miners Gold adit about 1100-feet in central part of the combined workings. Unfortunately the work was off the vein its entire distance being 250-feet south of Elko Prince's NW vein exposure as shown on accompanying Plan Map. This section will have to be opened into its ~~probably~~ good ore showings, possibly by ~~applying for~~ a U. S. Government loan.

Some years ago the Miners Gold records were turned over to a company and are now lost to present owners. The lack of assay records handicaps estimate of Miners Gold ore reserve possibilities as the only assays available are from Miners Gold short "A" Drift ranging from $3 to $500 per ton and averaging $62.92 per ton. The other source is recollection of the assay records by Messrs. Heikes, Warren and Simpson who combine in estimating Miners Gold mill heads @ $40 per ton by inclusion of high grade with low grade. Wren indicates that appreciable shipping ore running from $50 to $200 per ton can be mined within 6-weeks after resumption of underground work.

In view of the lack of assay records a tentative estimate has been made of ore possibilities by comparison of Elko Prince stope area (andreported production therefrom) with unmined areas of vein exposures within Elko Prince and Miners Gold workings. The unmined areas have been reduced 2/3 as a precautionary measure. ~~The ore possibilities may prove greater or lesser when Miners Gold adit workings are resampled.~~

Elko Prince stoped area is in order of 560,000-sq. ft. Its production is estimated at $3,000,000 ($4,500,000 today). The unmined area within the two mines amounts to 1,863,000-sq. ft. which reduced to 1/3 is in order of 621,000-sq. ft. The area where the vein is outside Miners Gold tunnel is not included. On this comparative basis the properties would have an ore potential of about $5,500,000 which at $40 per ton should yield approximately $2,200,000 operating profit. Elko Prince mine bottom indicates downward continuation of good ore into deeper horizons which would materially add to the ore occurrences.

It is estimated that it will require about $220,000 to restart Miners Gold operations to develop ore reserves to put the mine into production. It is estimated that it will require about $100,000 additional for mill construction.

~~The work plan should proceed in about the following order: (1) Resample Miners Gold adit workings~~, (2) Rehabilitate the adit portal workings, (3) Mine selected ore from high grade oreshoots and ship to smelter, (4) Extend recommended Upraise in Miners Gold adit workings and put into productive condition, (5) Sink shaft in footwall of Miners Gold vein, extend crosscuts and drifts at 150 and 300-Levels and prepare to production, (6) Start mill construction, (7) Apply for U. S. Government OME loan to open up presently undisclosed vein between Miners Gold and Elko Prince workings. (8) Envisage about $350,000 to re-equip the mine and carry out suggested operations.

It is estimated that the procedure outlined in Miners Gold would require about 8-months time. It is probable that sufficient ore will be developed to warrant starting mill construction prior to that time.

The accompanying maps are essential in consideration of this project.

Reno, Nevada
March 18, 1966

Arthur Lakes

Property

LOCATION The property comprises combination of (1) Elko Prince group of 11-patented claims , Patent No. 314565, U.S. Survey #4034 and (2) adjoining Miners Gold group of 8-unpatented claims as they appear on Elko, Nevada Mine Assessment Roll for 1955-56, page 31. In addition are 24 blocks of land in the settlement of Midas, Elko County, Nevada.

OWNERSHIP The Elko Prince property is owned by John M. and Mary Simpson who will assign the property to Yale Mining Co on a lease and bond as noted herewith.

The Miners Gold is a lease for 20-years dated April 6, 1956 with option for 20-years renewal April 6, 1976. The terms of the lease call for 7½% net smelter royalty on all ore mined, milled and shipped or for 2½% net smelter royalty if ore is milled on the premises.

The Yale Mining Company, a Nevada corporation in good standing, bought out the Miners Gold lease June 20, 1960 and now is in full possession thereof.

Current taxes to July 1, 1966 have been paid on the Elko Prince claims and the Midas lots and Assessment work on Miners Gold claims has been filed at Elko County Courthouse up to September 1, 1966.

LOCATION & FACILITIES The claims are located in Gold Circle Mining District in hilly country along the southeast slope of Owyhee Bluffs near the edge of Squaw Valley. They are located in Section 16, T 39-N, R 46-E, MDB&M at northwest corner of Elko County, Nevada. State Highway 18 traverses the area and connects Midas, in the center of the district, with Golconda, 44-miles to the southwest which in turn is 16 miles over U. S. Highway 40 from the chief supply center Winnemucca, Nevada.

The claims are situated on a northerly trending ridge at from 5600 to 7200-feet above sealevel with elevations of various workings from 6900 down to 6000-feet elevation as shown on accompanying maps.

Water is abundant in close proximity to the various workings (Mineral Resources). Wood is scarce and winters are cold but snowfall is insufficient to interfere with year round operations. Mining timber costs about $100 per 1000-ft B.M.

125

Power will have to be generated on the premises by Deisel-Electric plant for mill and underground hoist and by Deisel compressors to actuate drills.

HISTORICAL Gold and silver were discovered on several Gold Circle claims in the summer of 1907 and a townsite was laid out at Midas. Except for leasers and some prospecting, mining ceased in 1942. From 1908 to 1948 (essentially to 1942) the district produced 401,753-tons of ore containing 126,726 ounces of gold and 1,630,265 ounces of silver with total value of $4,137,417. (Mineral Resources and Mineral Yearbook). At

present $35 gold and $1.29 silver the ore would return $4,435,430 for gold and $2,103,045 for silver, totalling $6,538.455.

During early development phase small shipments of rich ore were made directly to smelters but the bulk of the ore produced required local milling. The record of production is thus allied with local cyanide mills of which six were built during the period of production. They were dominated by two 75-tons per diem mills built by Elko Prince and by its successor Gold Circle Consolidated Mining Co. The Elko Prince operation dominated the district, the mine extending down 900-feet by 2300-feet long, with a reported production in excess of $3,000,000.

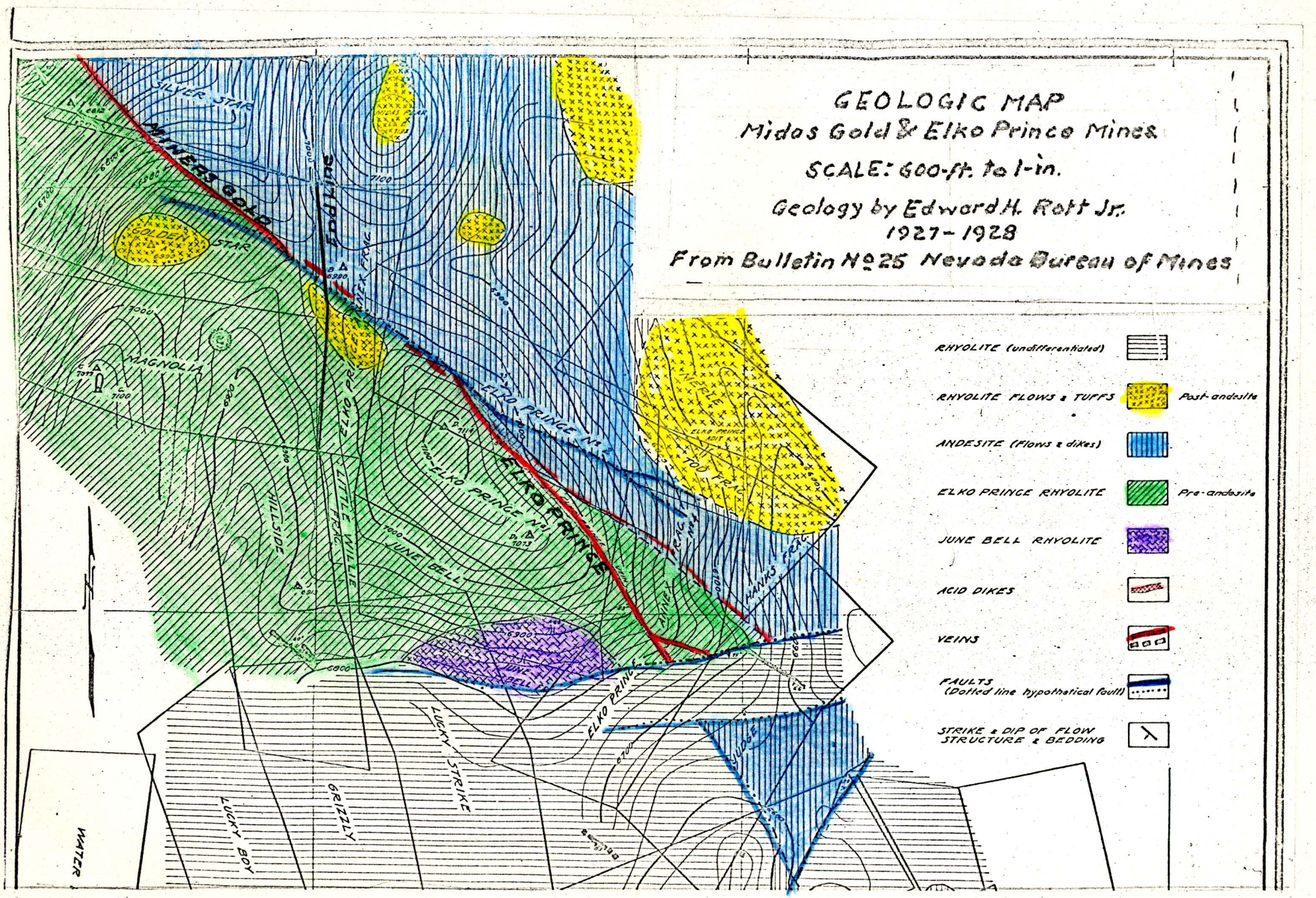
Miners Gold, which was first opened by a shallow shaft at the northwest end, was later opened by Adit tunnel that followed southeasterly along the common Miners Gold-Elko Prince vein lode for 1200-feet wherein a number of small stopes were run in rich smelting ore dominated by the Jewel and Miners Gold stopes which are reported to have produced more than $300,000 in smelting ore.

Production upsurge in 1916-1922 was brought about by the operation of the Elko Prince mill which burned down in 1922. This accounted for about 50% of the camp's total production. Another upsurge in 1927-1929 was again brought about by operation of Gold Circle Cons. (successors to Elko Prince Mining Co.) 75-ton cyanide mill which during that period accounted for about 1/3 of the camps total production. This mill ceased operation in 1929 when Gold Circle Cons. was unable to get right of way for a long tunnel project to tap Elko Prince mine at 1200-feet depth. This mill later burned down. Elko Prince mine is reported to have produced in excess of $3,000,000, two thirds during 1916-1921 and about one fifth during 1927-1929.

In 1957 Yale Mining Co. was formed and during 1957-1960 rehabilitated and extended Miners Gold Adit 930-feet (mostly off the vein) to connection with northwest end of Elko Prince workings as shown on the accompanying Maps. The area should be tested by drilling and crosscuttine into the vein.

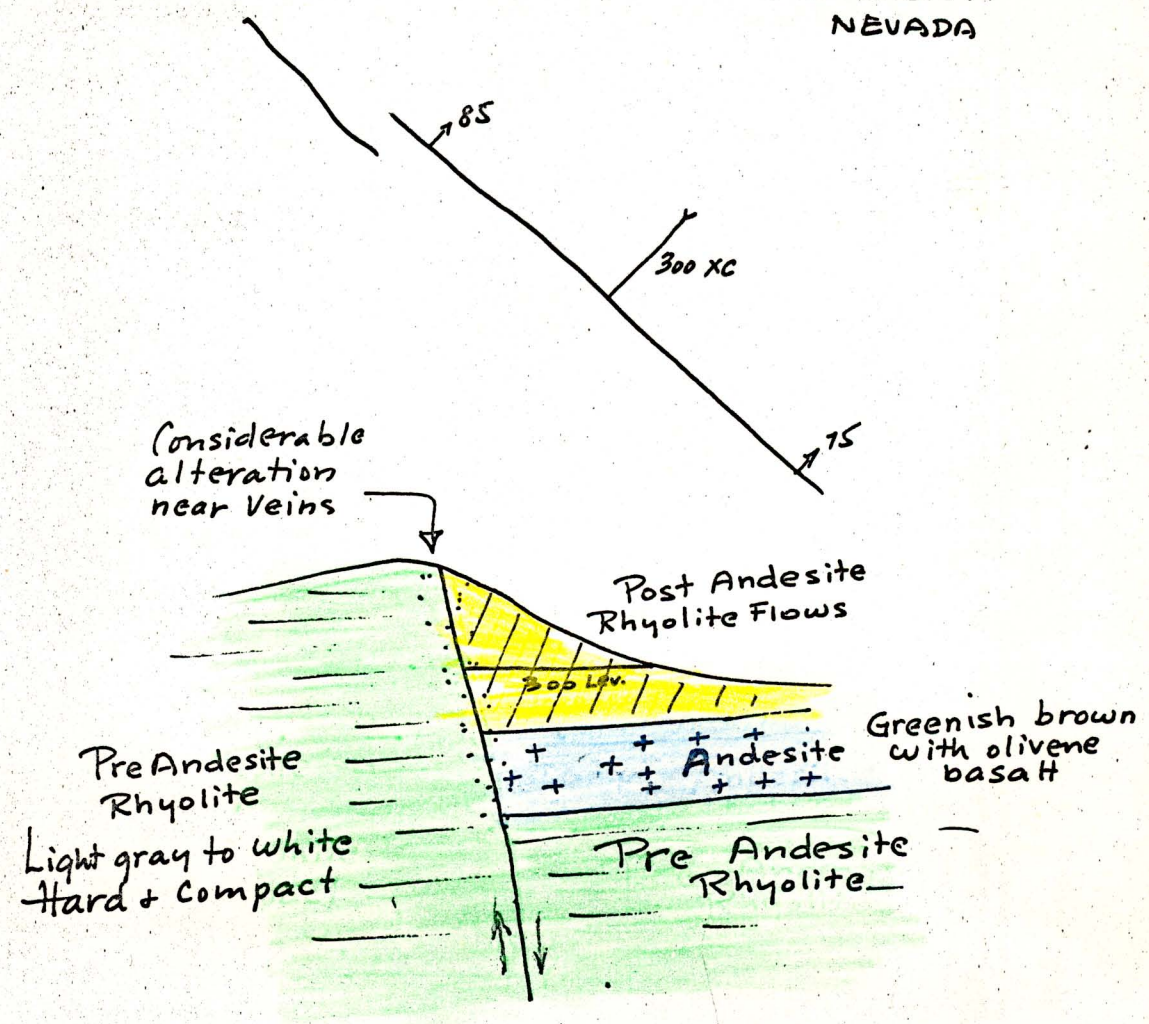
A total of 12,500-feet of tunnelling, shafting and raising has opened Elko Prince for 2300-feet long down 900-feet, providing two major stope areas (1) 800-feet long by 625-feet high in southeast section and (2) from 100 to 300-feet long by 750-feet high in northwest section. Shafts continue down 150-feet in good ore below both the southeast and northwest stopes. Crosscutting and drifting on the 300 and 600 Levels has opened up the parallel June Bell vein an aggregate 1200-feet long down 600-feet from surface where two, presently undescribed, stopes were opened in reportedly good ore, one on each of the 300 and 600 levels

A total of 3750-feet of tunnelling, shafting and raising in Miners Gold has opened 1200-feet length on the vein down to 550-feet depth below surface. The Jewel stope 40 to 70-feet long by 50-feet high and Miners Gold stope 150-feet long by about 185-feet high (85-feet up and about 100-feet down from the adit) are reported to have produced more than $300,000 in selected shipping ore.


GEOLOGIC MAP
Midas Gold & Elko Prince Mines
SCALE: 600-ft. to 1-in.
Geology by Edward H. Rott Jr.
1927-1928
From Bulletin No 25 Nevada Bureau of Mines
RHYOLITE (undifferentiated)
RHYOLITE FLOWS & TUFFS
Post-andesite
ANDESITE (Flows & dikes)
ELKO PRINCE RHYOLITE
Pre-andesite
JUNE BELL RHYOLITE
ACID DIKES
VEINS
FAULTS
(Dotted line hypothetical fault)
STRIKE & DIP OF FLOW
STRUCTURE & BEDDING
SILVER STAR
MINERS GOLD
GOLDEN STAR
MAGNOLIA
HILLSIDE
LITTLE MILLIE FRAC.
JUNE BELL
ELKO PRINCE No 1
ELKO PRINCE No 2
ELKO PRINCE
ELKO PRINCE ADIT
TOD FRAC.
HANKS FRAC.
LUCKY STRIKE
GRIZZLY
LUCKY BOY
WATER

MAP No 1

MIDAS - GOLD CIRCLE
ELKO COUNTY
NEVADA



Above Post andesite rhyolite are tuffs, acid & basic dikes.

MAP NO 2

Except for 900-feet length where Midas Gold (Yale) Adit is off the vein, the combined Miners Gold and Elko Prince workings extend a total of 4000-feet length on the vein by 550-feet Midas Gold depth and 900-feet Elko Prince depth with bottoms reported in good ore.

add. Roberts Mtns Thrust & effect on ore.

GEOLOGY The terrain is one of extensive Tertiary volcanic activity. It includes flows of rhyolite and andesite with associated basalt flows and minor amounts of olivine diabase, rhyolite tuff, and rhyolite breccia, the whole lying on upper side of the great Roberts Mountains thrust fault that courses northerly and dips westerly through most of eastern Nevada and probably affected formation of the extensive faults that contain the veins. Cutting these formations acid and basic dikes occasionally occur. (Detail effects R. M. thrust & mineb elts (x-roads)

In accordance with Rotte's (University of Nevada Bul. 25) interpretation of the geology the flow rocks are divisible into four lithologic units: (a) pre-andesite and (Elko) rhyolite, (b) andesite (principally andesite flows, some basalt, and minor occurrences of olivine diabase), (c) post andesite-rhyolite and (d) unconsolidated tuffs. Acid and basic dikes locally cut rocks as young as the basal portion of the post andesite-rhyolite.

The ore deposits occur in fissure fillings, sheeted zones, and shattered zones in rhyolite and in fault contacts between rhyolite and andesite. The enclosing rocks show notable effects of hyrothermal alteration. The orebodies are apparently confined to the pre-andesite rhyolite rocks along strong fault fissures striking northwest and dipping steeply northeast. Along these fissures auriferous pyrite and quartz with silver bearing sulphides were deposited, the solutions dissolving portions of the country rock and replacing it with ore and other minerals where conditions were favorable. From the fissures the solutions spread out into the country rock causing devitrification and other changes. A second fissuring with some displacement occurred after the ores were deposited. The movements were mainly along the lodes and brecciated quartz and sulphides, stringing the ores along the plane of later movement. Oxidation changed the pyrite into limonite and sericite and feldspar into kaolin. Hydrous silica deposited in crevices where it is associated with free gold and manganese oxide.

Elko Prince-Midas Gold The Elko Prince-Miners Gold lode occurs along a strong premineral fault zone followed more than 4000-feet and coursing N 45° W (Elko Prince) to N 55° W (Miners Gold) and dipping steeply (nearly vertically) to the northeast. The formations on the NE side of the fault zone were shifted downward, thus the upper reaches of the veins are in fault-contact zone having the footwall (SW) in ore favorable pre-andesite rhyolite and the hangingwall (NE) in contact of andesite with pre-andesite rhyolite as shown on Map 2. Richer ore occurs where the veins are enclosed entirely within rhyolite. Wider milling ore occurs where (a) veins are enclosed in rhyolite breccia, and (b) where pre-andesite rhyolite contacts andesite. The post andesite flows are apparently later than the veins hence show no ore.

There are two known veins disclosed underground on Elko Prince-Miners Gold properties (1) The principal Elko Prince-Miners Gold lode and

(2) the parallel June Bell lode about 550-feet south from Elko Prince which apparently also occurs at surface opposite Midas Gold adit about 1500-feet northwest from its occurrence near Elko Prince. Two additional veins are indicated by surface trenches.

ORE DEPOSITS The principal ore deposits of the district are east and north of Midas in a northwest trending zone 1 to 1½-miles wide by 3-miles long. The rocks of this area are leached to a chalky white, stained here and there to light brown by iron oxide. In the region of the ore deposits, which in a broad way coincide with the leached areas, hot solutions have saturated the country rock causing devitrification of the glass and other mineralogical changes.

As previously noted, the deposits comprise veinlike replacement bodies, fissure veins, and mineralized shear and brecciated zones in rhyolite and along shattered contact between rhyolite and andesite. The mineralized rhyolite-andesite contact deposits are the largest. Fissure veins and shear zones in rhyolite form the smaller high grade shipping ore deposits where ore up to hundreds of dollars per ton is found. The shattered zones contain the larger deposits of milling grade ore.

Elko Prince The accompanying Longitudinal Section shows stoped ore shoots in Elko Prince to be: (1) "A" Stope in the SE section, 800-feet long by 675-feet high down to the 750-Level. thence a winz extends 150-feet deeper in ore reported to run $74 per ton (silver @ 53¢) . (2) About 100 feet SE from "A" stope is "B" stope 150-feet long by 150-feet high at the 600-Level with 150-foot winz in ore to the 750-Level. This indicates an oreshoot upwards of 1050-feet long in excess of 900-feet high of which more than 150-feet depth is virgin below the 750-feet Level. The ore occurrence in the bottom 900-Level indicates farther downward extension of ore which Gold Circle Cons. planned to tap at the 1200-foot depth. Three samples show ore assaying from $26 to $208 per ton (@ $1 silver).

About 500-feet from "A" the drifts come into northwest Oreshoot "C", stoped in C-D-E stopes from 100 to 400-feet long for 700-feet depth to 750-Level whence is a 150-foot winz in ore reported @ $134.35 per ton (silver @ $1). Heikes indicates two high grade shoots at 891-tons totalling $120,511 or $134 per ton across an average 1.4-feet width. Five samples rimming Stope "E" average 1.75-feet width @ $71.20 per ton (@ $1 silver). The above indicates an oreshoot about 300-feet long, the ore occurring at bottom level indicating farther downward continuation of high grade ore to be developed by drift from proposed Miners Gold Shaft.

Ore up to $40 occurs in segments along the 500-feet of drifts between Oreshoot "A" and Oreshoot "C". It is estimated that the high grade ore varies from 0.75-feet to 2-feet width, the mill ore from 3 to 5-feet. An early estimate indicates about $1,000,000 ore reserves adjacent to the workings (@ $1 silver).

remain engineer's.

MINERS GOLD Miners Gold being less developed than Elko Prince is essentially virgin ~~except for a number of small stopes in high grade ore between Adit portal and Jewel Stope. These~~ together with the Jewel and Miners Gold stopes are reported to have produced in the order of $300,000 in high grade silver & gold shipping ore. At present metal prices this would be considerably greater.

On basis of geologic maps prepared for Yale Mining Co. by Harold Smithson and Clay E. Rowley in 1959 the Miners Gold Adit followed900 feet southeast from portal along an ore streak varying from 1 to 3-feet wide. ~~according to John Simpson who was in charge of operations at that time.~~ At the 900-foot point the tunnel was turned along a near barren branching fissure and thenceforth was off the vein for ~~750-feet~~ vein length to where ~~it~~ later picked up its extension as a strong vein in northwest end of Elko Prince workings as shown on the accompanying Map. Following this geologic mapping ~~a~~ Crosscut ~~("A")~~ was run northeasterly for 60-feet where it cut a strong SE extension of the Main vein in ore assaying from 1-oz to 320-oz. silver and from 0.02-oz to 1.2-oz. gold. This tunnel was extended 280-feet southeast and 60-feet northwest (towards Miners Gold stope 70-feet beyond). At the 100-foot SE point ~~a minor fault is reported to have~~ shifted the vein ~~to the east~~, thence the tunnel is extended in barren footwall of the vein. The northwest extension of the drift is in ore assaying from 1.8-oz. to 142.4-oz. silver and 0.01-oz to 0.78-oz. gold.

Thus we have about 1050-feet of ~~ore~~ vein exposure along Miners Gold Adit ~~with~~ 700-feet of tunnel off the vein which, in accordance with Miners Gold exposure and Elko Prince's extensive ore shoots, should provide an appreciable amount of additional ore when ~~the~~ unopened vein segments ~~are~~ explored.

The ~~ore depth proven to exceed~~ 900-feet in Elko Prince affords reasonable assurance that the Miners Gold deposits will likewise continue downward into similar horizon. ~~There~~ are good ~~possibilities~~ that economic silver-gold ore will continue for considerable depths beyond present limits of Elko Prince workings.

Miners Gold Adit is is 470-feet above Elko Prince 900-Level. The ore should continue 300 to 350-feet above the adit. Thus Miners Gold has a zone of economic ore ~~possibility~~ exceeding 1200-feet long by 820-feet or more high. To this should be added the ore possibilities of 700-feet length of presently unexposed vein where tunnel is off this structure.

The high grade is reported ~~by Simpson~~ to vary from 1 to 1½-feet width and the mill ore from 2½ to 3½-feet width. Simpson estimates that the general average of the ore will be about $40 per ton at present metal prices. (Miners Gold stope exceeded 31-oz. silver and 1.86-oz. gold with its rims in high grade ore.)

Ore The ore deposits are epithermal ~~in which classification are also~~ Comstock, Tonopah, Goldfield and other important Nevada camps.

Neither ore nor gangue are complex in mineral makeup. The primary ore comprises quartz, auriferous pyrite with silver sulphides

stromeyerite (CuAgS) and argentite (Ag_2S) with minor calcite and andularia. The secondary ores, ~~extending down about 100-feet~~, comprise quartz, free gold, iron oxide, manganese oxide and Horn silver.

Early records of Miners Gold production are not available ~~other than a~~ shipment to American Smelting & Refining Co ~~of part of~~ Miners Gold stope ~~which~~ returned 31-oz. silver to 1.86-oz. gold. The only samples now available are progress samples taken from Yale Mining Co's. limited work in "A" Drift. These are not correlated as to locality and are given merely to show the ore tenor. Arithmetrical average of available samples (eliminating a high sample) returns 43-oz. silver and 0.27-oz. gold per ton which at present prices would amount to $64.92 per ton.

SAMPLES FROM "A" DRIFT-ADIT LEVEL

	Silver oz	Gold oz	Silver $	Gold $	Total $
(1) At crosscut intersection	320-oz	2.5-oz	$412.80	$87.50	$501.30
(2) Going east at "	30	0.12	39.70	4.20	42.90
(3) Going West 15-ft?	49.5	0.21	63.85	7.85	71.70
(4) " " 20	91.2	0.50	117.65	17.32	134.97
(5) " "	16.1	0.185	20.75	6.47	27.23
(6) " "	1.5	0.04	1.93	1.40	3.33
(7) " "	56.3	0.25	72.63	8.75	81.38
(8) " "	3.76	0.04	4.85	1.40	6.25
(9) " "	5.8	0.01	7.48	0.35	7.83
(10) " "	22.6	1.20	29.18	42.00	71.18
(11) " "	44.0	0.28	56.76	9.80	66.56
(12) " "	28.10	0.14	36.25	4.20	40.45
(13) " "	110.7	0.45	142.80	15.75	158.55
(14) " "	117.10	0.51	151.06	16.85	167.91
(15) Going east	23.0	0.08	36.12	2.80	38.92
(16) " "	142.4	0.78	188.70	27.20	210.89
(17) " "	24.3	0.11	31.35	3.85	35.20
(18) " "	17.4	0.09	22.45	3.15	25.60

John Simpson and Joseph Warren estimate that the ore will average 2½ to 3-feet width as sampled above.

WORKINGS Miners Gold Adit is in good shape its full length. A cave will have to be cleared out at the 1500-foot point to renew strong ventillation between Elko Prince Airshaft and the adit portal and also to make accessible drill locations to test continuity of the vein structure between Drift "A" and northwest ends of Elko Prince workings as shown on accompanying Map.

The first 100-feet of Miners Gold Adit is at too steep a grade. This will be corrected by raising the tunnel roof and ballasting the floor to proper grade.

The adit is supplied with track but larger compressed air pipe and a water pipe will have to be installed.

Elko Prince workings are presently inaccessible for operation. Leasers robbed shaft pillars thereby destroying it. Elko Prince's ore showings remaining above 750-Level and those below 750-Level together with depth extensions below 900-Level will ~~have to~~ be attacked from the proposed Miners Gold ~~development~~ shaft workings described below.

WORK PLAN The proposed development plan comprises two sequences:

Sequence No. 1 at company expense comprises:

(1) Drifting at adit along the miners Gold-Elko Prince vein for 650-feet southeasterly from Drift "A" (after the vein's SE extension has been determined by longhole drilling). This will explore and develop the vein to the NW end of Elko Prince workings. About 100-feet length will be developed in Miners Gold and 550-feet length in Elko Prince as shown on accompanying Longitudinal Section

(2) Sink a new 2-compartment shaft vertically to a depth of 330-feet below the adit. It is believed that a new shaft will be more effective and in the long run cheaper than trying to reopen and enlarge either of the 2-135-foot shafts. From this shaft drive drifts along the vein at the 150 and 300-foot points. These drifts to extend 300-feet NW and 300-feet SE along the vein. They will be continued farther if ore conditions warrant.

(3) Raise a 2-compartment Upraise 250-feet on the vein or farther if ore conditions warrant. From the 100 and 200-foot points drive drifts 300-feet NW and 300-feet SE or farther if ore conditions warrant.

(4) When sufficient ore has been developed build a 50-ton cyanide pilot mill on the premises and put the property into production. This procedure need not necessarily await full completion of the above development plan but can go into effect when economics warrant.

Sequence No. 2 at 75% U. S. Government and 25% Company expense

Apply for a U. S. Government Office of Mineral Exploration loan which is repayable @ 5% royalty on ore produced by results of the loan's exploration work.

(1) Continue the shaft down 190-feet. At the 170-foot point (at the same elevation as Elko Prince 900-Level) drive a drift on the vein about 900-feet SE to connect with Elko Prince's NW 900 Drift. Continue along the vein to the 900 SE drift.

(2) Crosscut about 550-600 feet westerly to June Bell and explore it for 600-feet or so.

Further development and exploration into downward extensions of both Miners Gold and Elko Prince would be conducted ~~by the company~~ after the mines are put in production and during exploitation of the ore bodies disclosed by the two work sequences.

Mining will be conducted by shrinkage stoping which is the cheapest method and for which the mines appear ideally situated.

MILLING The ore is essentially a cyanide proposition. ~~When ore disclosures warrant~~ it is proposed to install a 50-ton per diem pilot mill on the premises at an estimated cost of $100,000 subject to flow sheet and cost data to be worked out by either Denver Equipment Co., Denver, Colorado or Gallagher Co. Salt Lake City, Utah. The estimate might be reduced materially if good used machinery should be acquired, ~~a matter for consideration.~~

Milling costs would approximate $4 per ton on basis of experience with other silver-gold cyanide operations.

EQUIPMENT & REQUIREMENTS Much of the following (used) equipment can be acquired on rental-purchase basis budgetted monthly. The following prices are for good machinery supplied by reliable Machinery houses.

1-75 KVA Deisel operated electric generator	$3500.00 ?
1-electric trammer with panel	2500.00 3500
10-end dump or rocker dump mine cars	850.00 2000
360-cfm Deisel operated compressor	2500.00
1-20 HP Electric hoist	2850.00 3000
1500-feet electric cable, estimated at	1500.00
1-skip	150.00 200
600-feet of cable for hoist	600.00
2-Jacklegs (new-purchase @ $55 per mo. each)	2200.00
1-Siz #12 Mucking machine	1500.00 2000
1500-feet 3-in compressed air pipe	900.00 1000
10,000-ft. B. M. Timber	1000.00 1250
Tools (new)	1000.00
Miscellaneous piping, etc. etc.	500.00 1000
Total	$21,550.00 24.75
Road work 1½-miles	$2000.00 2500
Buildings, Office-Assay plant-Dry-Shop estimated	5000.00
Total Equipment & Requirements	$28,550.00 3938
Add 15% for contingencies(truck etc)	4.300.00 513
Total required for preparation underground work	$32,550.00 #3938

DIRECT COSTS The following are considered liberal estimates based upon our combined Nevada experience. ~~Headoffice expenses will have to be added.~~

	Per ton	
(1) Mining cost inclusive stope preparation	$10.00	
Milling cost inclusive supervision	4.00	$14.00

(2) Development costs	Per foot	
2-compartment shaft, timbered	$150.00*	175-200 *
Drifting from shaft inclusive of transport to adit portal	45.00	50

Development Costs-continued

		Per foot
(3)	2-compartment Upraise timbered	$50.00
	Drifts from Upraise & Transport	40.00
(4)	Drifting & Transport at Adit Tunnel	45.00

* Shafting with Criderman shaft mucker ~~from 2100 to 2500-foot Levels, Mammoth Mine, Utah cost $148 per foot.~~ (Simpson)

Total Costs Sequence No. 1 to put the property into production.

(1)	330-feet of shaft, timbered @ $150	$49,500	
	1200-feet of drifting @ $45	54,000	$103.500
(2)	250-feet of Upraise, timbered @ $50	12,500	
	1200-feet of drifting @ $40	48,000	60,500
(3)	Station & bin shaft collar. stations and loading pockets drift levels, rehabilitate Adit, ventillation etc.	21,500	21,500
(4)	Mill cost, estimated*		100,000
(5)	Equipment, buildings, road work		32,500
(6)	Prepare campsite at Midas		2,000
	Total		$320,000

Sequence No. 2 will not come into effect until after the mine is in production therefore will require no capital outlay until a loan may be arranged. The company participation will then be 25%, which amount will be determined by the loan scope agreed by the Office of Mineral Exploration.

Time Factor (1) Shaft workings The shaft will be worked 2-shifts per diem, 1-shift drilling and blasting, the other, with Criderman shaft mucker, mucking and timbering. Estimated 5-feet per diem which will require a minimum of 66-working days or in order of 4-months inclusive of station and bin at shaft collar.

Drifts will not be started until the shaft is completed then each level will be worked individually, the NW and SE drifts being run at the same time. The work will be on 2-shift basis @ estimated 5-feet per shift in each face thus making a total of 20-feet per diem. The total 1200-feet of drifting would thus require a minimum of 60-working days or in order of 3½-months inclusive of station and loading pocket at each level.

(2) Upraise workings The Upraise will be run @ 2-shifts 1-shift drilling and blasting and the other mucking and timbering. Estimate 5-feet per diem which will require a minimum of 50-working days or in order of 3-months.

Drifts will not be started until the upraise is completed

then each level will be worked individually with NW and SE drifts run at the same time. The work will be on 2-shift basis @ estimated 5-feet per shift in each face thus making a total of 20-feet per diem. The total of 1200-feet of drifting would thus require a minimum of 60-days or in order of 3½-months. The output of the drifts and subsequent stopes would go directly to chute hence no station of loading pockets would be required.

(3) Adit drifting which should extend from Miners stope area to Drift "A" (see map) and thence to the NW end of Elko Prince workings. It should be preceeded by drilling from Yale Tunnel to test the vein structure extending off the tunnel course.

The drift will be worked on 2-shift basis @ estimated 5-feet per shift, totalling 10-feet per diem which would require a minimum of 70-workings days or in order of 4-months.

Thus the combined Shaft and Upraise work would require in order of 8-months to complete. Stoping could start on No. 1 Shaft level and No. 1 Upraise level prior to completion of the entire program but would be determined by mill installation the start on which might be warranted fairly early in the underground program.

Budget The $320,000 need not be supplied all at once. The following approximate budget would apply subject to unforseen changes that are to be expected and also subject to Nevada law which requires funds for two payrolls be in the bank at all times. If work should show that mill installation is warranted prior to work completion about $25,000 to $30,000 should be added to requirements for the months involved.

1st. month	Equipment, road, buildings-Midas camp		(37,500)	$39,000
	rehabilitation Adit tunnel		(4,500)	$37,500
2nd. month	Preparing shaft & raise	($5000)		
	50-feet Shaft	($7500)		
	50-feet Raise	($2500)		
	Other	($3000)		18,000
3rd. month	Shaft 100-feet	$15,000		
	Raise 100-feet	5,000		
	Other	3,000		23,000
4th. month	Shaft 100-feet	$15,000		
	Raise 100-feet	5,000		
	Other	3,000		23,000
5th. month	Shaft 80-ft. $12,000, shaft drift 80-ft $3,600			
	Raise drift 400-feet $16,000			
	Other $1,000			32,600

6th. month	Shaft drifts 400-feet	$18,000	
	Raise drifts 400-feet	16,000	
	Other	1,000	$35,000
7th. month	Shaft drifts 400-feet	18,000	
	Raise drifts 400-feet	16,000	
	Other	1,000	35,000
8th. month	Shaft drifts 320-feet	14,400	14,400
	Total		$220,000

There is good probability that the mill could be constructed and the Upraise workings put into production prior to completion of the program.

ORE VALUES Today's metal prices are 158% of the 1907-1942 years when Elko Prince and Miners Gold were producing.

Unfortunately the Miners Gold records are lost to present owners hence, except for the few samples from the short Drift "A" we have no assays on which to calculate Miners Gold ore reserves. over the extensive vein showings containing ore shoots along the Adit Tunnel. Shipping ore @ $50 to $200 per ton can be put into production within six weeks pending construction of a mill. Heikes indicates the average value of ore to go into the mill @ $40 per ton. Simpson and Warren, who were in charge of Yale Mining Co. operations, believe that the various ore shoots in Miners Gold should average about $40 per ton inclusive of high and low grades.

It is obvious that Miners Gold Adit should be sampled to allocate and determine ore grades of the various shoots exposed along it.

On basis of $40 per ton millheads @ 50-tons per day for 300-days a year the following operating profit is indicated:

Per ton	Per Day	Per month	Per year
$40.00 millhead	$2000.00	$60,000	$600,000
4.00 estimated mill loss			
$36.00	1800.00	54,000	540,000
.90 2½ % royalty			
$35,10			
14.00 estimated mine & mill cost	1055.00	31,600	316,500
$21,10			
42 2% State production tax			
$20.68 net operating profit	1030,00	30,900	$309,000

There appears to be a good chance that as development progresse the ore showings may warrant increasing mill capacity at least up to the early day 75-tons per day capacity. According to Wren there appers to be probability that income derived from high grade ore shipments may provide profitable return prior to starting mill operation.

ORE POSSIBILITIES Lacking basic sampling data makes an ore estimate largely a guess. However it is suggested that a rough estimate may be made by comparison of Elko Prince stoped areas and production therefrom vs. the undeveloped areas bordering vein exposures in the various Miners Gold and Elko Prince workings shown on accompanying Longitudinal Section . It is suggested that these presently undeveloped areas be reduced at least 2/3 or more as a precautionary measure.

Elko Prince stoped area measure in order of 560,000-sq. ft. Its unmined areas down to 900-Level masure about 990,000-sq. ft. At 1/3 this would be 330,000-sq. ft. The Miners Gold unmined areas adjacent to vein exposures in Adit Tunnel and Drift "A" measure in order of 880,000 down to horizon of Elko Prince 900-Level. At 1/3 this would be 293,000-sq. ft. The area adjacent to the vein where it is off Yale Tunnel measures in order of 552,000 sq. ft. which @ 1/3 would be 164,00 sq. ft. This latter unexplored area is not given status until it has been opened, possibly by a U. S. Government OME loan. It is expected to provide appreciable ore in shoots occurring along it.

Thus we have about 621,000-sq. ft. of possibly ore bearing vein which amounts to 110% of Elko Prince production estimated at $3,000,000 which at today's metal prices would amount to about $4,750,000. The indicated ore potential of the combined mines is possibly in order of $5,500,000 gross which, on basis of $40 ore would yield about $2,270,000 net operating profit. This figure may be greater or lesser as determined by Miners Gold sampling. In addition are ore possibilities to be explored in depth in view of $75 and $134 ore values reported in the two winzes extending from Elko Prince 750-Level to 900*Level. It is emphasized that the above estimate is indicative only and is contingent upon Miners Gold sampling results.

REFERENCES (1) Bulletin No. 25, Nevada Bureau of Mines, 1920 Edw. W. Rott Jr.. Gold Circle Mining District Geology freely drawn on in the outline.

~~(2) Jas. H. Wren~~, Consulting Mining Engineer, Sacramento, Calif. and Reno, Nevada. In a letter to a client Nov. 18, 1963. "There is $50 to $200 shipping ore which can start within six weeks" "This property may result in becomming one of the largest producers of silver bullion in the state of Nevada".

(3) Geo. C. Heikes, Geologist, San Jose, Calif. Consulting Geologist for Yale Mining Co. in a letter to the company June 24, 1960. "The present Simpson crosscut should be immediately driven through the vein, then a drift easterly undertaken. The vein may be an extension of the Elko Prince vein and, if it is, should be at least 1000-feet of hitherto unprospected vein to explore. I expect you will find several good ore shoots in this area, of various sizes and intensity of mineralization, mostly silver, some gold" ---- "Suppose the mined grade of ore diluted was $40 silver and gold recoverable value----there should be several years of ore developed".

(59)
Item 13

GEOLOGIC REPORT

ON THE

MINERS GOLD PROPERTY

Elko County, Nevada

Arthur Lakes
August 16, 1966

GEOLOGIC REPORT
ON THE
MINERS GOLD PROPERTY

Elko County, Nevada

GENERAL Miners Gold property comprises eight located mineral claims in Gold Circle Mining District, Elko County, Nevada.

The property adjoins the Elko Prince 11-patented claims which are on the same vein system, the Main vein having been traced over surface and underground for more than 4000-feet length on the two properties.

Gold and silver were discovered in Gold Circle Mining District in 1907 and mining progressed until silver price fell in 1942. During this period the district produced 401,750 tons of ore containing 129,726 ounces of gold and 1,630,265 ounces of silver with total value of $4,137,417 of which Elko Prince is reported to have produced $3,000,000 from milling ore and Miners Gold is reported to have produced in order of $300,000 from selected smelting ore assaying up to hundreds of dollars per ton.

A total of 3750 feet of tunnelling, shafting, and raising in Miners Gold property has opened 1200-feet length on Main vein down 550-feet depth below surface. A parallel June Bell vein productive in Elko Prince has been disclosed by cuts on Miners Gold but is not yet developed.

GEOLOGY The chief tectonic feature of the region is the effect of the great Roberts Mountains Thrust comprising a series of low angle faults caused by various orogenic occurrences to the west. The combination of these faults pushed masses of siliceous and volcanic rocks an aggregate of 90-miles eastward over carbonate rocks.

The great premineral shifts of this Roberts Mountains thrust caused wide disturbance in both its upper and its lower plates resulting in extensive faults, fissures, shearages, and brecciated zones that provided access for mineralizing agencies and deposition of orebodies at favorable localities in each of the upper and of the lower plates. This probably accounts for extensive faulting, fissuring, brecciation and shearage zones at Miners Gold which is in the upper plate.

The great majority of Nevada mines form in the upper plate of the Roberts Mountain thrust, essentially in volcanic and siliceous rocks west of the thrust's outcrop. The ore deposits apparently occur in belts, the most prominent belt coursing northeast from the large Yerington copper area, through the famous Comstock, and up to the important Rio Tinto copper-silver-gold area. This belt is joined, or intersected by, northwest trending belts that include Tonopah, Goldfield, and other prominent mining operations.

Miners Gold (and Elko Prince) is importantly located on "crossroads" formed by intersection of NW trending Lyn-Railroad belt containing Newmont's important gold operation with NE trending Yerington-Rio Tinto belt.

(59)

Item 13

OUTLINE FOR MIDAS GOLD*ELKO PRINCE

PROPERTY Claims, status. Surface, Timber, Water ✓

OWNERSHIP Owners & addresses, Terms of leases. Taxes & Assessment ✓

LOCATION Township, Mining District, County, State, Topography, Elev. ✓

HISTORICAL Location first claims, Production, Elko Prince-Miners Gold Amount of work performed, traced vein longitudinal and vert ✓

GEOLOGY Aerial, relation rocks to ore deposits, ore occurrence method, Elko Prince-Midas Gold, veins, vein lent, Type deposit, shoots. strike-dip. Minerals, (milling method) ✓

ORE Length of ore shoots, Width, Hi grade, Mill ore, Tonnage(?) Sampling method, Assays. Average high grade, Average mill ore ✓

MINE METHOD & COST Proposed shaft, sublevels to pilot mill Cost (inclusive rehabilitation portal, through cave, drilling Then sequence 2, deepen shaft, drift through Mineral Gold into Elko Prince (amount ore believed left in old workings Amount ore between 750-900) on Government loan. Work out costs (Jack-Joe-Art)

TREATMENT Cyanide. Cost of pilot mill, water, power, etc. Treatment cost per ton ($$?) Tim factor (Start pilot when get levels 300-feet below Midas Adit (months) ✓

EQUIPMENT Buildings, Office-Assay office, (Camp at Midas ?) shop, etc. Deisel electric for (1) hoist, etc. (2) Pilot mill, Deisel compressors (2). Cars, tools, drills, steel, mucking machine (#12) Trammer ? Miscellaneous tools (note) ✓

Costs - Mining - milling. 350,000

FINANCIAL & ECONOMIC (1) Require $300,000 (?) basis participation @ Investor gets back his money @ 80% of profits from the mine & mill, then go 50-50 inclusive of cost of Government loan project (divide $25%) (2) End price for the properties to be determined by us on basis of payment requirements (Think should have Mike Lakes in the above) Capital provided by investor Deals

Operating Co 50-50 after Sep. #1.

APPENDICES Heiks, Wren, Qoutes from each. Credits to sources of information.

21,500

Local Geology The terrain is one of extensive Tertiary volcanic activity It includes flows of andesite and rhyolite with associated basaltic flows and minor amounts of olivine diabase, rhyolite tuff and rhyolite breccia, the whole lying in the upper plate of the Roberts Mountain thrust.

The flow rocks are divided into four lithologic units: (a) early andesite and (Elko) rhyolite, (b) later andesite flows, some basalt and minor occurrences of olivine diabase, (c) post andesite-rhyolite and (d) unconsolidated tuffs. Acid and basic dikes locally cut rocks as young as the basal portion of the post andesite-rhyolite.

The principal ore deposits are located in the northeast part of the district in a northwest trending zone 1 to 1½-miles wide by 3-miles long. The rocks of this area are leached. In the region of the ore deposits, which in a broad way coincides with the leached area, hot solutions have saturated the country rocks.

The ore deposits occur in fissure fillings, sheeted zones, and shattered zones in early rhyolite and in fault contacts between early rhyolite and andesite which show effects of hydrothermal alteration.

The orebodies are apparently confined to strong fault fissures striking northwest and dipping nearly vertically. Along these fissures were deposited pyrite and quartz (gold bearing) with silver bearing sulphides. A second fissuring with some displacement occurred after the ores were deposited. The movements were along the vein-lode, stringing out the ore along the plane of later movement.

Oxidation changed pyrite into limonite and sericite and feldspar into kaolin. Hydrous silica deposited in crevices where it is associated with free gold.

Miners Gold Lode The Miners Gold lode is northwest extension of the Elko Prince lode as described. It occurs allong a strong northwest trending premineral fault. The formations on the NE side of the fault shifted downward, thus the upper reaches of the veins are in fault contact zone having the southwest wall of the vein in ore-favorable early andesite-rhyolite and northeast wall in contact with early andesite as shown on accompanying Sketch Map. The richer ore appears to form where (a) veins are entirely enclosed in rhyolite and rhyolite breccia and (b) where early andesite-rhyolite contacts andesite. The post andesite flows are apparently later than the veins and show no ore.

Small stopes (evidently in selected ore) occur along the vein's southeast course above and below the Adit Tunnel for 800-feet from the portal to where the vein shifted northeast and is thence drifted about 250-feet making a total of 1050-feet of vein exposure along Miners Gold Adit. The ore varies from 1-foot to more than 3-feet width and progress sampling along part of the faulted vein segment assayed from 1-oz. to 320-oz. silver and 0.02-oz. to 1.0-oz. gold per ton. Previous operators estimate that oreshoots along the vein should average a working width of about $40 (present prices) inclusive of high grade and low grade ores.

ORE The ore deposits are epithermal, similarly to Tonopah, Goldfield, the Comstock, and other important Nevada mining districts. Assays of two Elko Prince Main vein winzes down 950-feet below surface (500-feet below Miners Gold Adit) show in order of $136 per ton silver-gold indicative that good ore values will maintain for considerable distance below present Miners Gold exposures.

Neither ore nor gangue is complex in mineral makeup. The primary ore comprises quartz, auriferous pyrite with silver sulphides stromeyerite (CuAgS) and argentite (Ag_2S) with minor calcite and andularia. The secondary ores comprise quartz, free gold, iron oxide, manganese and Horn silver.

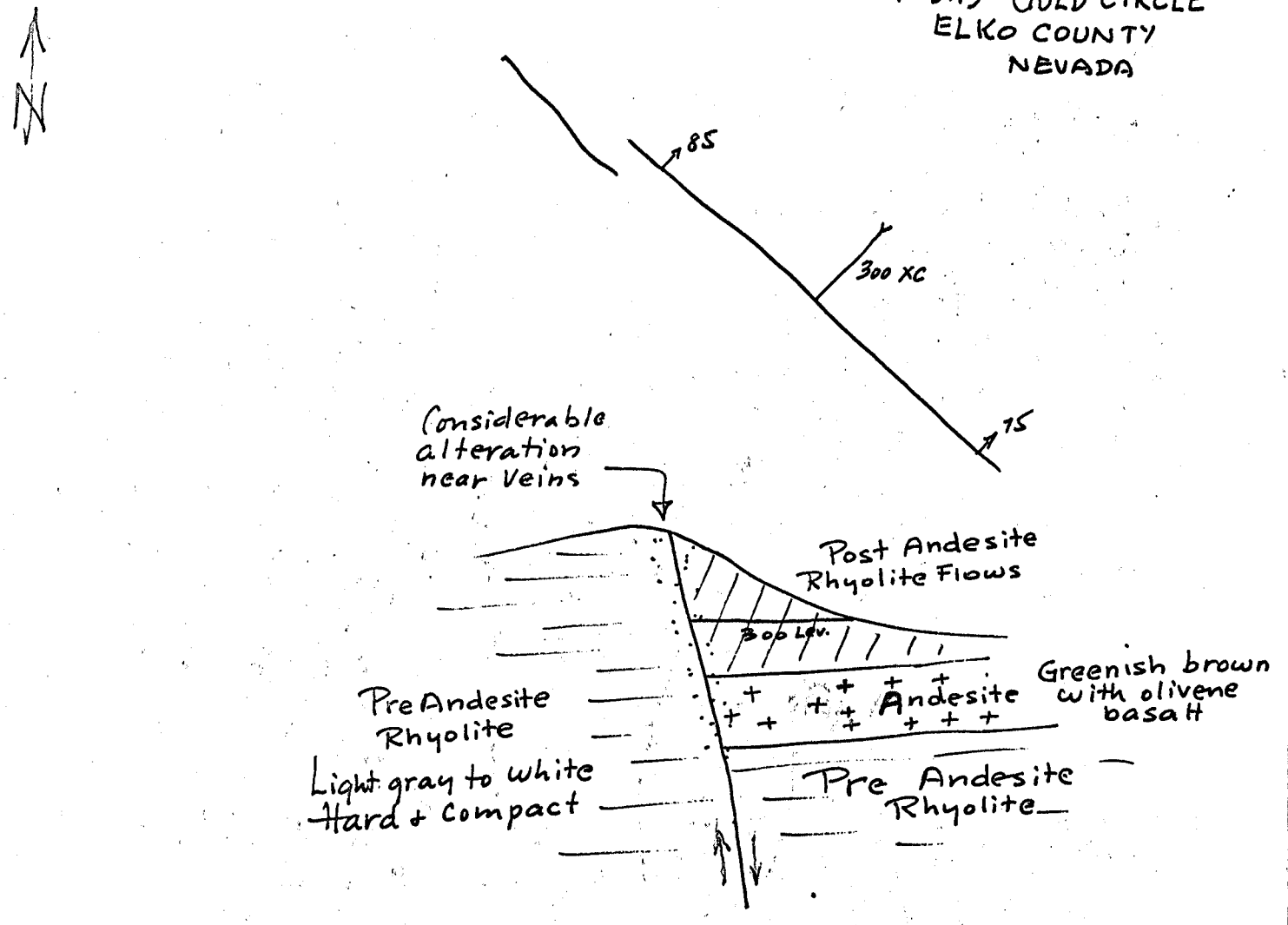
CONCLUSIONS Widespread ore-favorable host rocks, disturbed area above Roberts Mountains thrust and ore richness in silver and gold all afford expectancy that Miners Gold should provide appreciable bodies of profitable ore by development and mining the northwest extensionof the Elko Prince-Miners Gold Lode. Additional encouraging ore possibilities are in the unexplored June Bell vein.

Reno, Nevada
August 16, 1966

Arthur Lakes.

(Arthur Lakes)
Nevada Registered Engineer No. 1408

MIDAS - GOLD CIRCLE
ELKO COUNTY
NEVADA



Above Post andesite rhyolite are tuffs, acid & basic dikes.

(59) Item 13

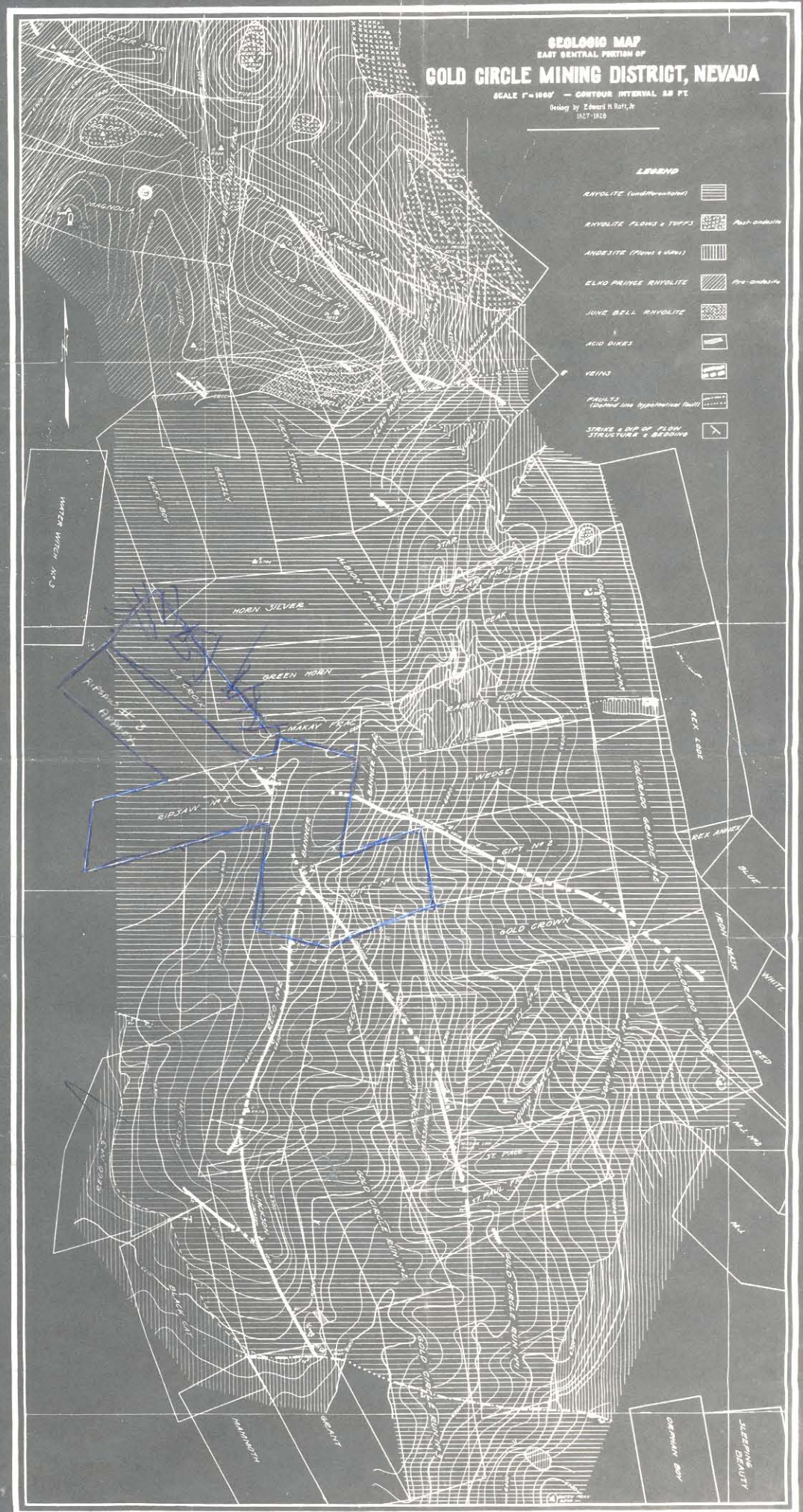


PLATE I

(59)

Item 13

GOLD CIRCLE (MIDAS, SUMMIT) DISTRICT

Gold, Silver

LOCATION

The Gold Circle district is on the southeastern slope of the Owyhee Bluffs, near the edge of Squaw Valley, in T. 39 N., R. 46 E. State Highway 18 traverses the area and connects Midas, in the center of the district, with Golconda 50 miles to the southwest and Tuscarora 35 miles to the east.
44 43

HISTORY

Gold was discovered on several claims in the summer of 1907, and by March 1908 a "rush" was under way. A townsite was laid out at Midas and in a few weeks contained some 1,500 persons. After the first excitement most of the newcomers left, and in September 1908 the population of the camp had decreased to about 250 persons. Mining ceased in 1942, but a little prospecting has been carried on recently.

PRODUCTION

From 1908 to 1949 the Gold Circle district produced 401,752 tons of ore containing 126,726 ounces of gold and 1,630,268 ounces of silver with a total value of $4,137,417 (Mineral Resources and Minerals Yearbooks).

During the early development phase small shipments of rich ore were made to smelters, but the bulk of ore produced then and afterwards was low-grade and local milling and treatment was necessary. The record of production is thus closely allied to the operation of various local mills. The upsurge of production for the interval 1916-1921 amounted to nearly 50 percent of the district's total yield, resulting mainly from the operation of a 75-ton-daily-capacity cyanide mill, erected in 1915 by the Elko Prince Milling Co. This mill was destroyed by fire in late 1921. The increase in production during the years of 1928 and 1929 resulted from the operation of a 75-ton-daily-capacity cyanide mill erected in 1927 by the Gold Circle Consolidate Mining Co. This mill ceased operations in August 1929. From 1930 to 1942 production was sustained by the mining companies of the district operating smaller capacity mills and making shipments of selected ore to smelters.

GEOLOGY (data from Emmons, 1910)

General outline.--The district is underlain by rhyolite and andesite flows that are cut by dikes of rhyolite and andesite. The rhyolite flows, the oldest rocks exposed in the district, cover the greater part of the area.

In accordance with Rott's interpretation of the geology, the flow rocks are divisible into four lithologic units: (a) pre-andesite rhyolite, (b) andesite (principally andesite flows, some basalt, and minor occurrences of olivine diabase), (c) post-andesite rhyolite, and (d) unconsolidated tuffs. Acid and basic dikes locally cut rocks as young as the basal portion of the post-andesite rhyolite.

The pre-andesite rhyolite is a light-gray to white, moderately hard, compact rock composed of phenocrysts of alkali and soda-lime feldspar, quartz, and a notable amount of small zircon crystals in a glassy or devitrified groundmass. This rhyolite is conformably overlain by dark generally greenish-brown finegrained porphyritic andesite that contains feldspar and pyroxene phenocrysts in an altered groundmass of glass, chloritic material, and calcite. The post-andesite rocks consist chiefly of rhyolite flows and tuffs. In some specimens the mineralogy is that of trachyte rather than rhyolite. The tuffs differ little from the flows in general appearance, but they show shards and fragments of feldspar in a matrix of minute mineral and glass fragments, and are poorly consolidated.

ORE DEPOSITS

The principal ore deposits of the district are east and north of Midas in a northwest trending zone 1 to 1½ miles wide and 3 miles long. The rocks in this general area are leached to a chalky white, stained here and there to light brown by iron oxides. In the region of the ore deposits, which in a broad way is coincident with the leached areas, hot solutions have saturated the country rock, causing divitrification of the glass and other mineralogical changes.

The deposits are veinlike replacement bodies, fissure veins, and mineralized shear zones in rhyolite and along the shattered contact between the rhyolite and andesite. The mineralized rhyolite-andesite contact deposits are the largest; fissure veins and shear zones in rhyolite form smaller deposits. In general, the veins of the district strike N. 30degrees - 60 degrees W. and dip from 65 degrees E. to steeply W. A number of the veins can be traced for distances of 1,500 to 3,500 feet. The tenor of the ore is generally higher in the narrow shear zones and fissure veins than in the shattered rhyolite-andesite contact zone, but their small size makes them difficult and costly to mine. The shattered contact zones contain large ore deposits of milling grade.

No placer deposits were developed in the gulches that drain the areas of outcrop. It is not known whether this is due to lack of exploration or some condition that did not allow concentration of gold in placer gravels.

MINEROLOGY.--

The most common type of vein or lode has a few inches of high-grade iron-stained siliceous ore here and there along the

GOLD CIRCLE (MIDAS, SUMMIT) DISTRICT

Gold, Silver

LOCATION

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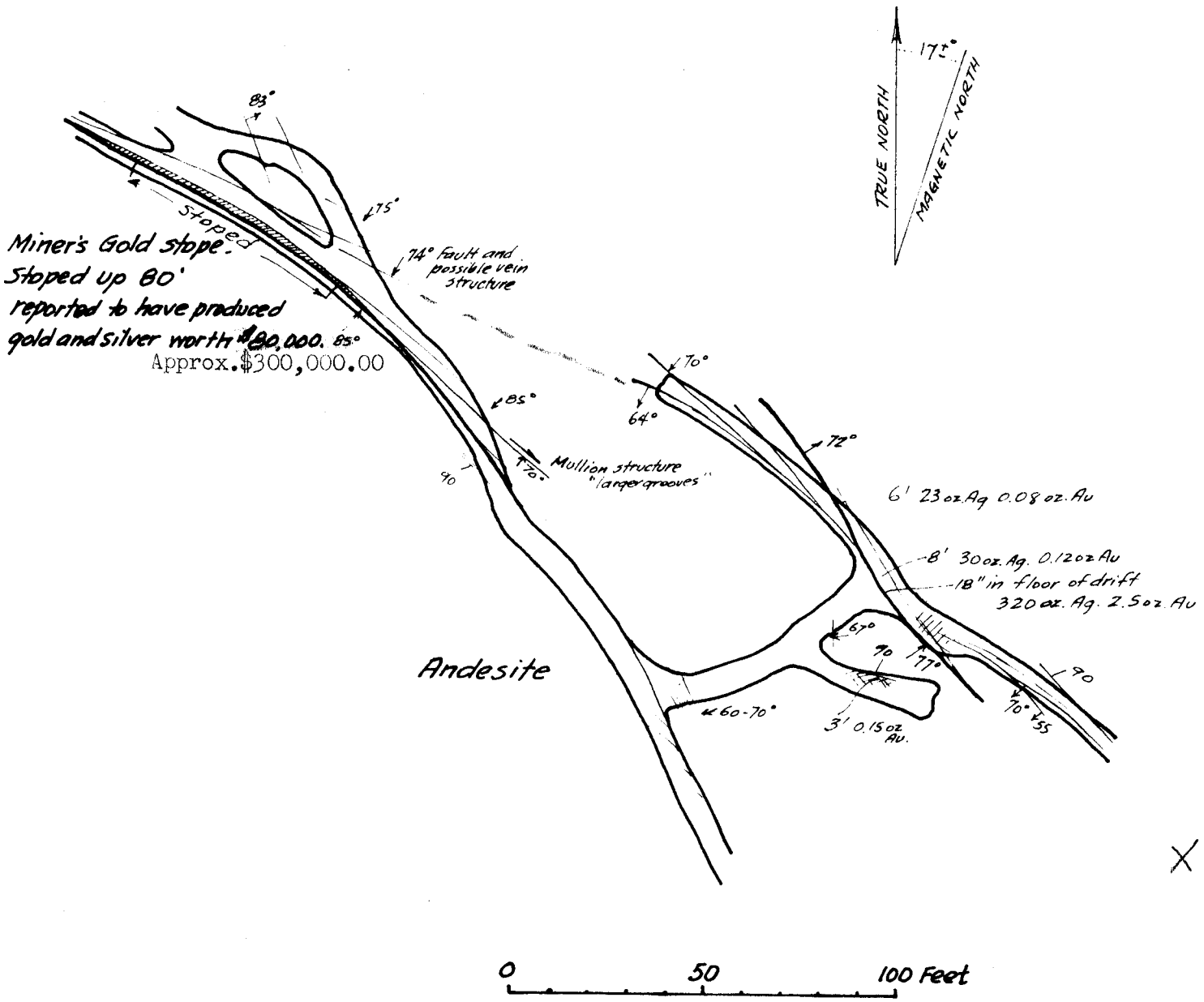
(59)

Item 1.3

MINER'S GOLD PROPERTY
GOLD CIRCLE MINING DISTRICT
MIDAS, ELKO COUNTY, NEVADA

Pace and Brunton Compass Survey, July 29, 1964 by G. Conrad Heikes.



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Item 13

GEOLOGIC MAP

Midas Gold & Elko Prince Mines

SCALE: 600-ft. to 1-in.

Geology by Edward H. Rott Jr.
1927-1928.

From Bulletin №25-Nevada Bureau of Mines

MINERS GOLD ELKO PRINCE

EAST

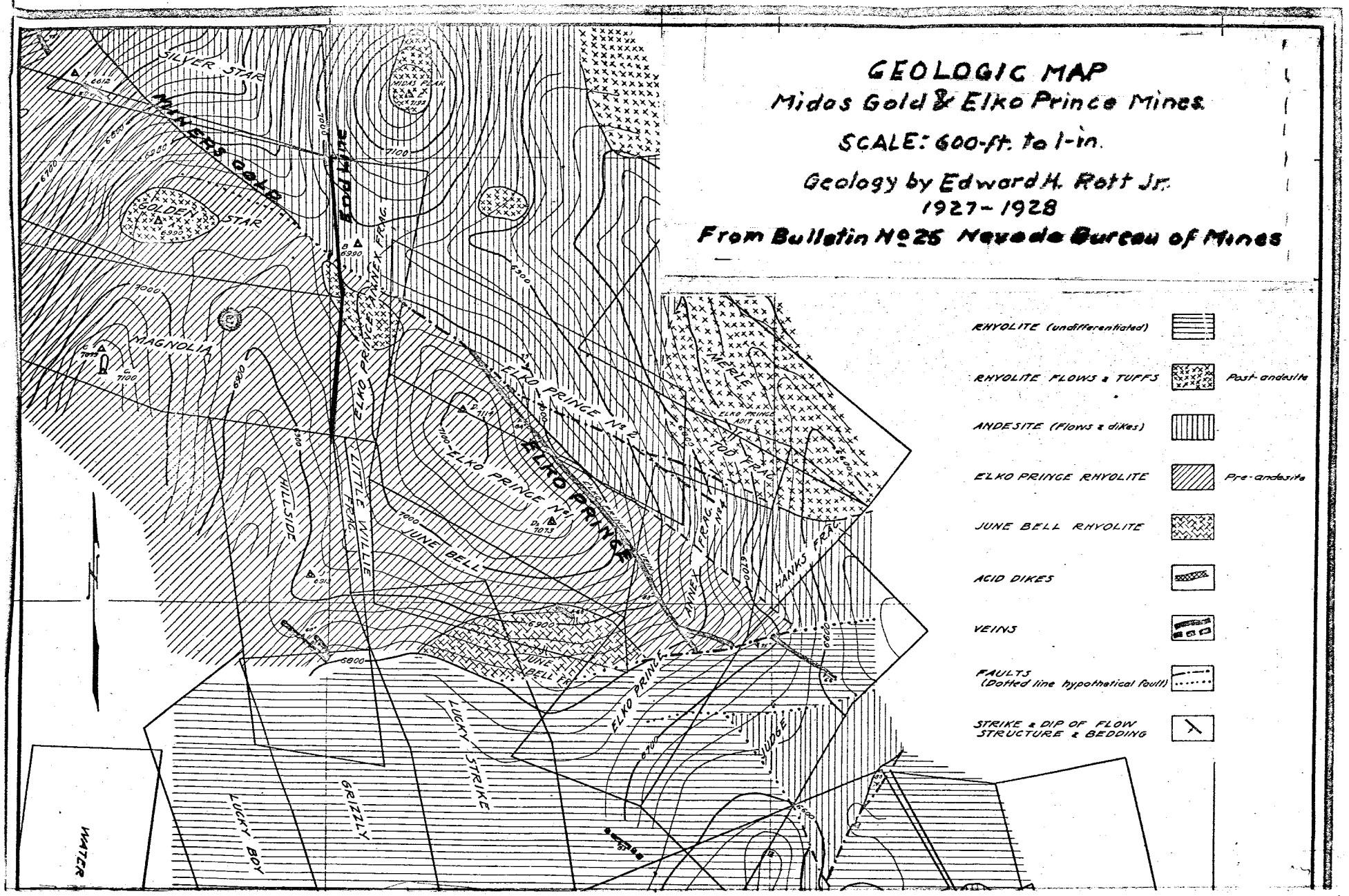
DIAGRAMMATIC SECTION A-A

Showing Major Fault and relationship of Workings to Formations & Structures.

SCALE: 100-ft. to 1-in.

Item 13

(59)



MAP No 1

Geology

Item 13

[illegible]

SUMMARY & CONCLUSIONS University of Nevada Bul 25, Vol 5 "Ore Deposits of Gold Circle Mining District, Elko County, Nev. Edward M. Rotte Jr. August 1, 1931

1. Terrain is one of extensive Tertiary volcanic activity. It includes flows of rhyolite and andesit, with associated basalt flows and minor amounts of olivine diabas, rhyolite tuff, and rhyolite breccia. Cutting these formations acid and basic dikes occasionally occur.

2. The volcanic series is divided into 3 major groups. Pre-andesite or Elko Prince ryholite, andesite, and post-andesite rhyolite flows and tuff The andesite overlies Elko Prince rhyolite with no apparent angular or erosional break. Conformably overlying these flows are early-post-andesite rhyolite flows with some interbedded tuff. X Intense tilting and faulting followed this period of volcanic activity, ending in mineralization and erosion. After this period of disturbance and erosoin, the late post-andesite tuffs covered the region to a depth of several hundred feet. This period was followed by some slight disturbance, and the erosion cycle which developed present topography of the region.

2. The ore deposits of the region occur in fissure fillings, sheeted zones, and shattered zones in rhyolite and along fault contacts between rhyolite and andesite. The enclosing rocks show notable effects of hydrothermal alteration.

4. Generall the ore shoots of the district so not show a definite tonrol. In case of the Grant-Jackson vein the major ore shoot is controlled by slight flattening in the dip of the vein and by a strong pre-mineral fault which intersects the vein. During mineralization movement occurred along this fault near the footwall, aiding in the opening of that portion of the vein in the footwall of the fault and keeping the channel open for the mineralizing and metallizing colutions.

5. There were three phases of silica deposition and one of calcit in the veins. The metallization is associated with the latter part of the second and all of the third phase of silica deposition. There is no evidence of metallization associated with the calcite, the last mineral introduced into the veins.

6. The evidence of the amount of erision, the mineral assemblage, the structural features of the veins, and the textural character of the vein filling indicate that the formation of these veins took place at relatively shallow depths below the surface. These represent a typical epithermal type of deposit. (

RESUME OF GEOLOGY. Bulletin 408, U. S. G.s. Reconnaissance of Some Mining Camps in Elko, Lander, & Eureka Cos. Nev

In Tertiary time, porbably in Miocene, extensive flows of rhyolite were poured out upon surface Palaeozoic sedimentary rocks. Subsequently rhyolites were fissured and through these andesite flows rose to the surface and covered rhyolite. A portion of magma remained in fissures causing dikes. Andesite again cut by fissures filled with an acidic magma of which a portion flowed to surfaceand formed rhyolite----After eruption of the andesite the country rock was strongly fissured, most of the planes

3-4-26

of movement striking NW and diiping steeply NE. Along these fissures auriferous pyrite and quartz with silver bearing sulphides were feposited the solutions dissolving portions of the country rock and replacing it where conditions were favorable with ore and other minerals. From the fissures the solutions spread out into the country rock, causing devitrification and other changes. A second fissures with some displacement occurred after the ores were deposited. These movements were mainly along the lodes and brecciated and quartz and sulphides. As a result the ores which were already irregularly spaced along the earlier fissures were strung along a plane of latter movement. As rocks were eroded the ores were oxidized, pyrite changing to limonite, sericite and feldspars to kaolin. Hydrous silica was deposited in crevices where it is associated with free gold and managanese oxides.

59

Item 13

O U T L I N E

OF THE

FEATURES AND ORE POSSIBILITIES

OF

ELKO PRINCE & MINERS GOLD MINES

ELKO COUNTY, NEVADA

Arthur Lakes

March, 1966

ARTHUR LAKES
MINING ENGINEER
700 FOREST STREET
RENO, NEVADA
TELEPHONE 323-8910

O U T L I N E

of the

Features and ore possibilities

ELKO PRINCE AND MINERS GOLD MINES

Elko County, Nevada

SUMMARY Whilst the following outline is based upon information that is considered reliable it is not guaranteed because I have not examined the property. Sources of information are listed at the end of the outline.

The property comprises combination of Elko Prince 11-claims and adjoining Miners Gold 8-claims covering 4000-feet vein length in Gold Circle Mining District, Nevada. The district was discovered in 1907 and operated until silver prices fell to 34-38¢ in 1940-42.

Small shipments of selected high grade ore were made directly to smelters but the bulk of the ore produced required cyanide milling into silver and gold bullion, economically important in saving high transportation and smelting costs. The ratio of silver to gold varies from camp production @ about 13-oz. silver to 1-oz. gold to 43-oz. silver to 1-oz. gold by available samples from Miners Gold "A" Drift. The silver-gold proportion would place the property into silver catagory whereby U. S. Government OME loan would apply @ 75% of exploration costs in event that application should be made for government assistance suggested in the body of this outline.

Elko Prince mine dominated the district producing a possible 80% of the camp's production by reported production in order of $3,000,000 ($4,750,000 at today's silver-gold prices). Miners Gold was essentially worked on selected high grade ore for shipment to smelters. It is reported that Miners Gold accounted for approximately $300,000 ($473,000 at today's metal prices).from small stopes along its adit tunnel.

The connecting Miners Gold-Elko Prince workings include 4000-feet proven vein length opened to 900-feet in Elko Prince and 550-feet in Miners Gold as shown on accompanying Longitudinal Section . High grade ore in Elko Prince bottom workings strongly indicate that good ore will continue considerably deeper into horizons yet unexplored.

The most recent work which was performed in 1957-1960 by Yale Mining Company extended Miners Gold adit about 1100-feet in central part of the combined workings. Unfortunately the work was off the vein its entire distance being 250-feet south of Elko Prince's NW vein exposure as shown on accompanying Plan Map. This section will have to be opened into its probably good ore showings, possibly by applying for a U. S. Government loan.

Some years ago the Miners Gold records were turned over to a company and are now lost to present owners. The lack of assay records handicaps estimate of Miners Gold ore reserve possibilities as the only assays available are from Miners Gold short "A" Drift ranging from $3 to $500 per ton and averaging $62.92 per ton. The other source is recollection of the assay records by Messrs. Heikes, Warren and Simpson who combine in estimating Miners Gold mill heads @ $40 per ton by inclusion of high grade with low grade. Wren indicates that appreciable shipping ore running from $50 to $200 per ton can be mined within 6-weeks after resumption of underground work.

In view of the lack of assay records a tentative estimate has been made of ore possibilities by comparison of Elko Prince stope area (andreported production therefrom) with unmined areas of vein exposures within Elko Prince and Miners Gold workings. The unmined areas have been reduced 2/3 as a precautionary measure. The ore possibilities may prove greater or lesser when Miners Gold adit workings are resampled.

Elko Prince stoped area is in order of 560,000-sq. ft. Its production is estimated at $3,000,000 ($4,750,000 today). The unmined area within the two mines amounts to 1,863,000-sq. ft. which reduced to 1/3 is in order of 621,000-sq. ft. The area where the vein is outside Miners Gold tunnel is not included. On this comparative basis the properties would have an ore potential of about $5,500,000 which at $40 per ton should yield approximately $2,250,000 operating profit. Elko Prince mine bottom indicates downward continuation of good ore into deeper horizons which would materially add to the ore occurrences.

It is estimated that it will require about $220,000 to restart Miners Gold operations to develop ore reserves to put the mine into production. It is estimated that it will require about $100,000 additional for mill construction.

The work plan should proceed in about the following order: (1) Resample Miners Gold adit workings, (2) Rehabilitate the adit portal workings, (3) Mine selected ore from high grade oreshoots and ship to smelter, (4) Extend recommended Upraise in Miners Gold adit workings and put into productive condition, (5) Sink shaft in footwall of Miners Gold vein, extend crosscuts and drifts at 150 and 300-Levels and prepare to production, (6) Start mill construction, (7) Apply for U. S. Government OME loan to open up presently undisclosed vein between Miners Gold and Elko Prince workings. (8) Envisage about $350,000 to re-equip the mine and carry out suggested operations.

It is estimated that the procedure outlined in Miners Gold would require about 8-months time. It is probable that sufficient ore will be developed to warrant starting mill construction prior to that time.

The accompanying maps are essential in consideration of this project.

Reno, Nevada
March 18, 1966

Arthur Lakes

LOCATION The property comprises combination of (1) Elko Prince group of 11-patented claims , Patent No. 314565, U.S. Survey #4034 and (2) adjoining Miners Gold group of 8-unpatented claims as they appear on Elko, Nevada Mine Assessment Roll for 1955-56, page 31. In addition are 24 blocks of land in the settlement of Midas, Elko County, Nevada.

OWNERSHIP The Elko Prince property is owned by John M. and Mary Simpson who will assign the property to Yale Mining Co on a lease and bond as noted herewith.

The Miners Gold is a lease for 20-years dated April 6, 1956 with option for 20-years renewal April 6, 1976. The terms of the lease call for 7½% net smelter royalty on all ore mined, milled and shipped or for 2½% net smelter royalty if ore is milled on the premises.

The Yale Mining Company, a Nevada corporation in good standing, bought out the Miners Gold lease June 20, 1960 and now is in full possession thereof.

Current taxes to July 1, 1966 have been paid on the Elko Prince claims and the Midas lots and Assessment work on Miners Gold claims has been filed at Elko County Courthouse up to September 1, 1966.

LOCATION & FACILITIES The claims are located in Gold Circle Mining District in hilly country along the southeast slope of Owyhee Bluffs near the edge of Squaw Valley. They are located in Section 16, T 39-N, R 46-E, MDB&M at northwest corner of Elko County, Nevada. State Highway 18 traverses the area and connects Midas, in the center of the district, with Golconda, 44-miles to the southwest which in turn is 16 miles over U. S. Highway 40 from the chief supply center Winnemucca, Nevada.

The claims are situated on a northerly trending ridge at from 5600 to 7200-feet above sealevel with elevations of various workings from 6900 down to 6000-feet elevation as shown on accompanying maps.

Water is abundant in close proximity to the various workings (Mineral Resources). Wood is scarce and winters are cold but snowfall is insufficient to interfere with year round operations. Mining timber costs about $100 per 1000-ft B.M.

Power will have to be generated on the premises by Deisel-Electric plant for mill and underground hoist and by Deisel compressors to actuate drills.

HISTORICAL Gold and silver were discovered on several Gold Circle claims in the summer of 1907 and a townsite was laid out at Midas. Except for leasers and some prospecting, mining ceased in 1942. From 1908 to 1948 (essentially to 1942) the district produced 401,753-tons of ore containing 126,726 ounces of gold and 1,630,265 ounces of silver with total value of $4,137,417. (Mineral Resources and Mineral Yearbook). At

present $35 gold and $1.29 silver the ore would return $4,435,430 for gold and $2,103,045 for silver, totalling $6,538.455.

During early development phase small shipments of rich ore were made directly to smelters but the bulk of the ore produced required local milling. The record of production is thus allied with local cyanide mills of which six were built during the period of production. They were dominated by two 75-tons per diem mills built by Elko Prince and by its successor Gold Circle Consolidated Mining Co. The Elko Prince operation dominated the district, the mine extending down 900-feet by 2300-feet long, with a reported production in excess of $3,000,000.

Miners Gold, which was first opened by a shallow shaft at the northwest end, was later opened by Adit tunnel that followed southeasterly along the common MinersGold-Elko Prince vein lode for 1200-feet wherein a number of small stopes were run in rich smelting ore dominated by the Jewel and Miners Gold stopes which are reported to have produced more than $300,000 in smelting ore.

Production upsurge in 1916-1922 was brought about by the operation of the Elko Prince mill which burned down in 1922. This accounted for about 50% of the camp's total production. Another upsurge in 1927-1929 was again brought about by operation of Gold Circle Cons. (successors to Elko Prince Mining Co.) 75-ton cyanide mill which during that period accounted for about 1/3 of the camps total production. This mill ceased operation in 1929 when Gold Circle Cons. was unable to get right of way for a long tunnel project to tap Elko Prince mine at 1200-feet depth. This mill later burned down. Elko Prince mine is reported to have produced in excess of $3,000,000, two thirds during 1916-;921 and about one fifth during 1927-1929.

In 1957 Yale Mining Co. was formed and during 1957-1960 rehabilitated and extended Miners Gold Adit 930-feet (mostly off the vein) to connection with northwest end of Elko Prince workings as shown on the accompanying Maps. The area should be tested by drilling and crosscuttine into the vein.

A total of 12,500-feet of tunnelling, shafting and raising has opened Elko Prince for 2300-feet long down 900-feet, providing two major stope areas (1) 800-feet long by 625-feet high in southeast section and (2) from 100 to 300-feet long by 750-feet high in northwest section. Shafts continue down 150-feet in good ore below both the southeast and northwest stopes. Crosscutting and drifting on the 300 and 600 Levels has opened up the parallel June Bell vein an aggregate 1200-feet long down 600-feet from surface where two, presently undescribed, stopes were opened in reportedly good ore, one on each of the 300 and 600 levels.

A total of 3750-feet of tunnelling, shafting and raising in Miners Gold has opened 1200-feet length on the vein down to 550-feet depth below surface. The Jewel stope 40 to 70-feet long by 50-feet high and Miners Gold stope 150-feet long by about 185-feet high (85-feet up and about 100-feet down from the adit) are reported to have produced more than $300,000 in selected shipping ore.

Except for 900-feet length where Midas Gold (Yale) Adit is off the vein, the combined Miners Gold and Elko Prince workings extend a total of 4000-feet length on the vein by 550-feet Midas Gold depth and 900-feet Elko Prince depth with bottoms reported in good ore.

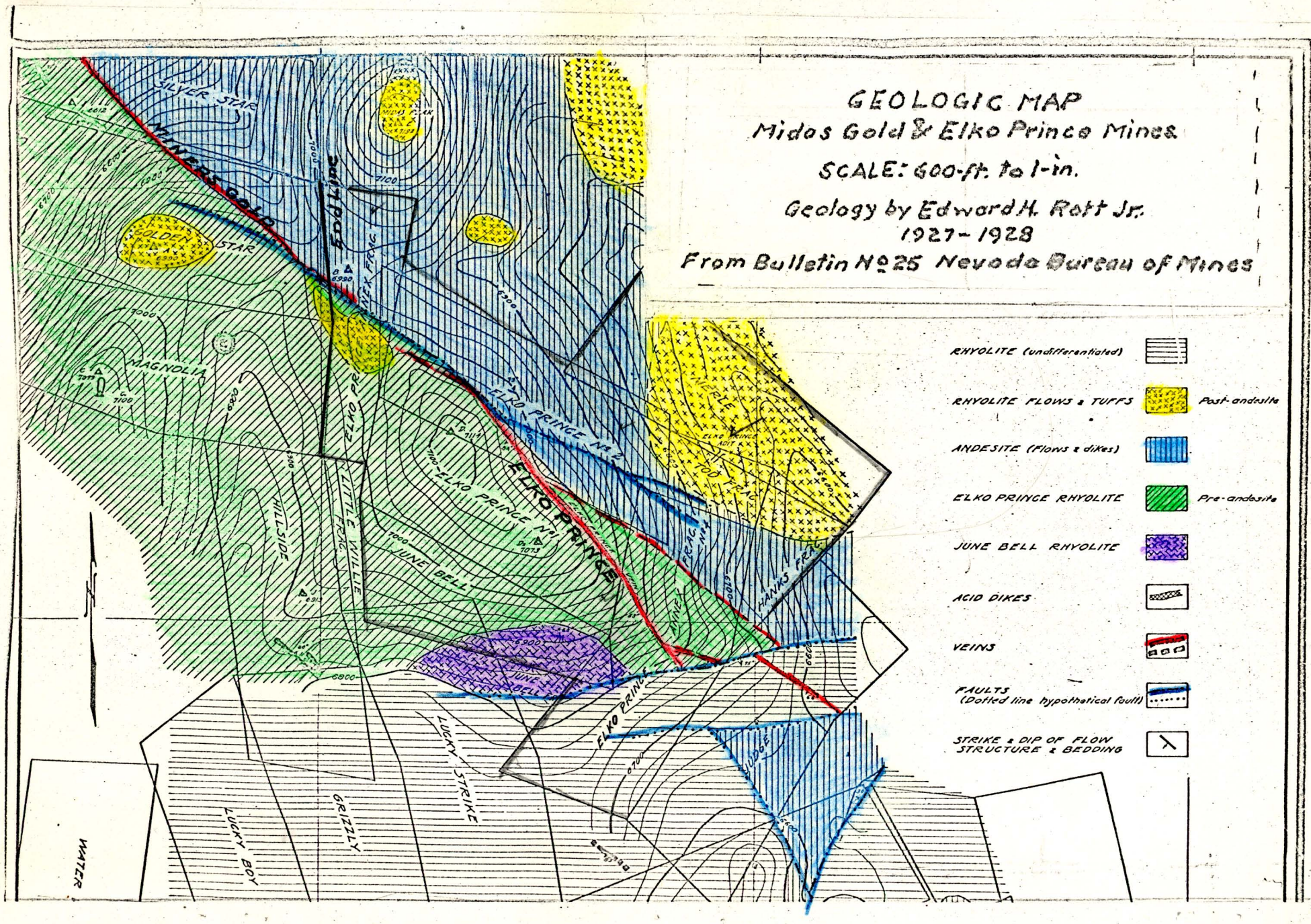
GEOLOGY The terrain is one of extensive Tertiary volcanic activity. It includes flows of rhyolite and andesite with associated basalt flows and minor amounts of olivine diabase, rhyolite tuff, and rhyolite breccia, the whole lying on upper side of the great Roberts Mountains thrust fault that courses northerly and dips westerly through most of eastern Nevada and probably affected formation of the extensive faults that contain the veins. Cutting these formations acid and basic dikes occasionally occur.

In accordance with Rotte's (University of Nevada Bul. 25) interpretation of the geology the flow rocks are divisible into four lithologic units: (a) pre-andesite and (Elko) rhyolite, (b) andesite (principally andesite flows, some basalt, and minor occurrences of olivine diabase), (c) post andesite-rhyolite and (d) unconsolidated tuffs. Acid and basic dikes locally cut rocks as young as the basal portion of the post andesite-rhyolite.

The ore deposits occur in fissure fillings, sheeted zones, and shattered zones in rhyolite and in fault contacts between rhyolite and andesite. The enclosing rocks show notable effects of hyrothermal alteration. The orebodies are apparently confined to the pre-andesite rhyolite rocks along strong fault fissures striking northwest and dipping steeply northeast. Along these fissures auriferous pyrite and quartz with silver bearing sulphides were deposited, the solutions dissolving portions of the country rock and replacing it with ore and other minerals where conditions were favorable. From the fissures the solutions spread out into the country rock causing devitrification and other changes. A second fissuring with some displacement occurred after the ores were deposited. The movements were mainly along the lodes and brecciated quartz and sulphides, stringing the ores along the plane of later movement. Oxidation changed the pyrite into limonite and sericite and feldspar into kaolin. Hydrous silica deposited in crevices where it is associated with free gold and manganese oxide.

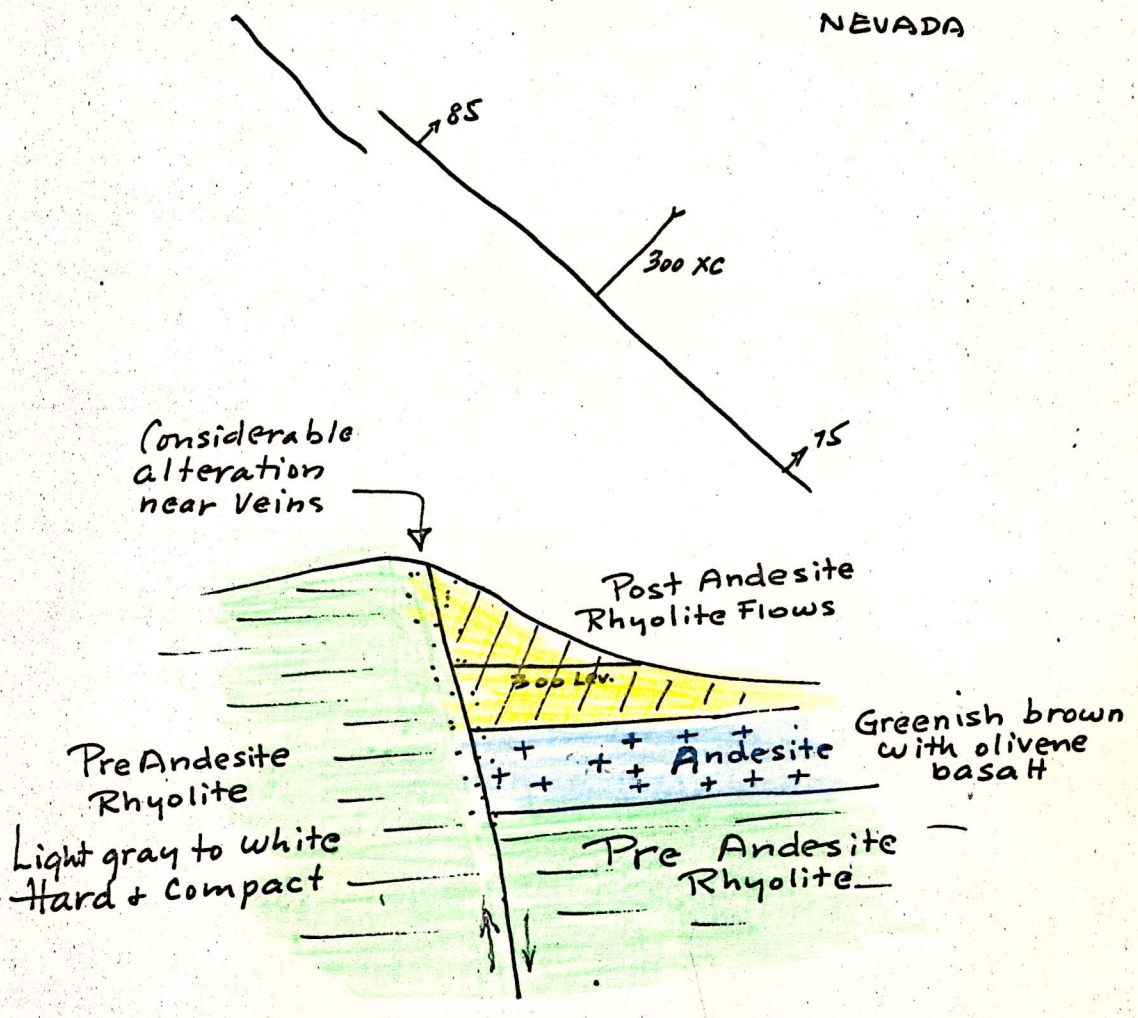
Elko Prince-Midas Gold The Elko Prince-Miners Gold lode occurs along a strong premineral fault zone followed more than 4000-feet and coursing N 45° W (Elko Prince) to N 55° W (Miners Gold) and dipping steeply (nearly vertically) to the northeast. The formations on the NE side of the fault zone were shifted downward, thus the upper reaches of the veins are in fault-contact zone having the footwall (SW) in ore favorable pre-andesite rhyolite and the hangingwall (NE) in contact of andesite with pre-andesite rhyolite as shown on Map 2. Richer ore occurs where the veins are enclosed entirely within rhyolite. Wider milling ore occurs where (a) veins are enclosed in rhyolite breccia, and (b) where pre-andesite rhyolite contacts andesite. The post andesite flows are apparently later than the veins hence show no ore.

There are two known veins disclosed underground on Elko Prince-Miners Gold properties (1) The principal Elko Prince-Miners Gold lode and


GEOLOGIC MAP
Midas Gold & Elko Prince Mines
SCALE: 600-ft. to 1-in.
Geology by Edward H. Rott Jr.
1927-1928
From Bulletin No 25 Nevada Bureau of Mines
RHYOLITE (undifferentiated)
RHYOLITE FLOWS & TUFFS
Post-andesite
ANDESITE (Flows & dikes)
ELKO PRINCE RHYOLITE
Pre-andesite
JUNE BELL RHYOLITE
ACID DIKES
VEINS
FAULTS (Dotted line hypothetical fault)
STRIKE & DIP OF FLOW STRUCTURE & BEDDING
SILVER STAR
MINERS
GOLDEN STAR
MAGNOLIA
HILLSIDE
LITTLE WILLIE
JUNE BELL
ELKO PRINCE
LUCKY STRIKE
GRIZZLY
LUCKY BOY
WATER
JUDGE
HANKS FRAC.

MAP No 1

MIDAS - GOLD CIRCLE
ELKO COUNTY
NEVADA



Above Post andesite rhyolite are tuffs, acid & basic dikes.

MAP NO 2

(2) the parallel June Bell lode about 550-feet south from Elko Prince which apparently also occurs at surface opposite Midas Gold adit about 1500-feet northwest from its occurrence near Elko Prince. Two additional veins are indicated by surface trenches.

ORE DEPOSITS The principal ore deposits of the district are east and north of Midas in a northwest trending zone 1 to 1½-miles wide by 3-miles long. The rocks of this area are leached to a chalky white, stained here and there to light brown by iron oxide. In the region of the ore deposits, which in a broad way coincide with the leached areas, hot solutions have saturated the country rock causing devitrification of the glass and other mineralogical changes.

As previously noted, the deposits comprise veinlike replacement bodies, fissure veins, and mineralized shear and brecciated zones in rhyolite and along shattered contact between rhyolite and andesite. The mineralized rhyolite-andesite contact deposits are the largest. Fissure veins and shear zones in rhyolite form the smaller high grade shipping ore deposits where ore up to hundreds of dollars per ton is found. The shattered zones contain the larger deposits of milling grade ore.

Elko Prince The accompanying Longitudinal Section shows stoped ore shoots in Elko Prince to be: (1) "A" Stope in the SE section, 800-feet long by 675-feet high down to the 750-Level. thence a winz extends 150-feet deeper in ore reported to run $74 per ton (silver @ 53¢) . (2) About 100 feet SE from "A" stope is "B" stope 150-feet long by 150-feet high at the 600-Level with 150-foot winz in ore to the 750-Level. This indicates an oreshoot upwards of 1050-feet long in excess of 900-feet high of which more than 150-feet depth is virgin below the 750-feet Level. The ore occurrence in the bottom 900-Level indicates farther downward extension of ore which Gold Circle Cons. planned to tap at the 1200-foot depth. Three samples show ore assaying from $26 to $208 per ton (@ $1 silver).

About 500-feet from "A" the drifts come into northwest Oreshoot "C", stoped in C-D-E stopes from 100 to 400-feet long for 700-feet depth to 750-Level whence is a 150-foot winz in ore reported @ $134.35 per ton (silver @ $1). Heikes indicates two high grade shoots at 891-tons totalling $120,511 or $134 per ton across an average 1.4-feet width. Five samples rimming Stope "E" average 1.75-feet width @ $71.20 per ton (@ $1 silver). The above indicates an oreshoot about 300-feet long, the ore occurring at bottom level indicating farther downward continuation of high grade ore to be developed by drift from proposed Miners Gold Shaft.

Ore up to $40 occurs in segments along the 500-feet of drifts between Oreshoot "A" and Oreshoot "C". It is estimated that the high grade ore varies from 0.75-feet to 2-feet width, the mill ore from 3 to 5-feet. An early estimate indicates about $1,000,000 ore reserves adjacent to the workings (@ $1 silver).

MINERS GOLD Miners Gold being less developed than Elko Prince is essentially virgin except for a number of small stopes in high grade ore between Adit portal and Jewel Stope. These together with the Jewel and Miners Gold stopes are reported to have produced in the order of $300,000 in high grade silver & gold shipping ore. At present metal prices this would be considerably greater.

On basis of geologic maps prepared for Yale Mining Co. by Harold Smithson and Clay E. Rowley in 1959 the Miners Gold Adit followed900 feet southeast from portal along an ore streak varying from 1 to 3-feet wide according to John Simpson who was in charge of operations at that time. At the 900-foot point the tunnel was turned along a near barren branching fissure and thenceforth was off the vein for 750-feet vein length to where it later picked up its extension as a strong vein in northwest end of Elko Prince workings as shown on the accompanying Map. Following this geologic mapping a crosscut ("A") was run northeasterly for 60-feet where it cut a strong SE extension of the Main vein in ore assaying from 1-oz to 320-oz. silver and from 0.02-oz to 1.2-oz. gold. This tunnel was extended 280-feet southeast and 60-feet northwest (towards Miners Gold stope 70-feet beyond). At the 100-foot SE point a minor fault is reported to have shifted the vein to the east, thence the tunnel is extended in barran footwall of the vein. The northwest extension of the drift is in ore assaying from 1.8-oz. to 142.4-oz. silver and 0.01-oz to 0.78-oz. gold.

Thus we have about 1050-feet of ore vein exposure along Miners Gold Adit with 700-feet of tunnel off the vein which,in accordance with Miners Gold exposure and Elko Prince's extensive ore shoots, should provide an appreciable amount of additional ore when the unopened vein segments are explored.

The ore depth proven to exceed 900-feet in Elko Prince affords reasonable assurance that the Miners Gold deposits will likewise continue downward into similar horizon. There are good possibilities that economic silver-gold ore will continue for considerable depths beyond present limits of Elko Prince workings.

Miners Gold Adit is is 470-feet above Elko Prince 900-Level. The ore should continue 300 to 350-feet above the adit. Thus Miners Gold has a zone of economic ore possibility exceeding 1200-feet long by 820-feet or more high. To this should be added the ore possibilities of 700-feet length of presently unexposed vein where tunnel is off this structure.

The high grade is reported by Simpson to vary from 1 to 1½-feet width and the mill ore from 2½ to 3½-feet width. Simpson estimates that the general average of the ore will be about $40 per ton at present metal prices. Miners Gold stope exceeded 31-oz. silver and 1.86-oz. gold with its rims in high grade ore.

Ore The ore deposits are epithermal in which classification are also Comstock, Tonopah, Goldfield and other important Nevada camps.

Neither ore nor gangue are complex in mineral makeup. The primary ore comprises quartz, auriferous pyrite with silver sulphides

stromeyerite (CuAgS) and argentite (Ag_2S) with minor calcite and andularia. The secondary ores, extending down about 100-feet, comprise quartz, free gold, iron oxide, manganese oxide and Horn silver.

Early records of Miners Gold production are not available other than a shipment to American Smelting & Refining Co of part of Miners Gold stope which returned 31-oz. silver to 1.86-oz. gold. The only samples now available are progress samples taken from Yale Mining Co's. limited work in "A" Drift. These are not correlated as to locality and are given merely to show the ore tenor. Arithmetrical average of available samples (eliminating a high sample) returns 43-oz. silver and 0.27-oz. gold per ton which at present prices would amount to $64.92 per ton.

SAMPLES FROM "A" DRIFT-ADIT LEVEL

	Silver oz	Gold oz	Silver $	Gold $	Total $
(1) At crosscut intersection	320-oz	2.5-oz	$412.80	$87.50	$501.30
(2) Going east at "	30	0.12	39.70	4.20	42.90
(3) Going West 15-ft?	49.5	0.21	63.85	7.85	71.70
(4) " " 20	91.2	0.50	117.65	17.32	134.97
(5) " "	16.1	0.185	20.75	6.47	27.23
(6) " "	1.5	0.04	1.93	1.40	3.33
(7) " "	56.3	0.25	72.63	8.75	81.38
(8) " "	3.76	0.04	4.85	1.40	6.25
(9) " "	5.8	0.01	7.48	0.35	7.83
(10) " "	22.6	1.20	29.18	42.00	71.18
(11) " "	44.0	0.28	56.76	9.80	66.56
(12) " "	28.10	0.14	36.25	4.20	40.45
(13) " "	110.7	0.45	142.80	15.75	158.55
(14) " "	117.10	0.51	151.06	16.85	167.91
(15) Going east	23.0	0.08	36.12	2.80	38.92
(16) " "	142.4	0.78	188.70	27.20	210.89
(17) " "	24.3	0.11	31.35	3.85	35.20
(18) " "	17.4	0.09	22.45	3.15	25.60

John Simpson and Joseph Warren estimate that the ore will average 2½ to 3-feet width as sampled above.

WORKINGS Miners Gold Adit is in good shape its full length. A cave will have to be cleared out at the 1500-foot point to renew strong ventillation between Elko Prince Airshaft and the adit portal and also to make accessible drill locations to test continuity of the vein structure between Drift "A" and northwest ends of Elko Prince workings as shown on accompanying Map.

The first 100-feet of Miners Gold Adit is at too steep a grade. This will be corrected by raising the tunnel roof and ballasting the floor to proper grade.

The adit is supplied with track but larger compressed air pipe and a water pipe will have to be installed.

Elko Prince workings are presently inaccessible for operation. Leasers robbed shaft pillars thereby destroying it. Elko Prince's ore showings remaining above 750-Level and those below 750-Level together with depth extensions below 900-Level will have to be attacked from the proposed Miners Gold development workings described below.

WORK PLAN The proposed development plan comprises two sequences:

Seugence No. 1 at company expense comprises:

(1) Drifting at adit along the miners Gold-Elko Prince vein for 650-feet southeasterly from Drift "A" (after the vein's SE extension has been determined by longhole drilling). This will explore and develop the vein to the NW end of Elko Prince workings. About 100-feet length will be developed in Miners Gold and 550-feet length in Elko Prince as shown on accompanying Longitudinal Section

(2) Sink a new 2-compartment shaft vertically to a depth of 330-feet below the adit. It is believed that a new shaft will be more effective and in the long run cheaper than trying to reopen and enlarge either of the 2-135-foot shafts. From this shaft drive drifts along the vein at the 150 and 300-foot points. These drifts to extend 300-feet NW and 300-feet SE along the vein. They will be continued farther if ore conditions warrant.

(3) Raise a 2-compartment Upraise 250-feet on the vein or farther if ore conditions warrant. From the 100 and 200-foot points drive drifts 300-feet NW and 300-feet SE or farther if ore conditions warrant.

(4) When sufficient ore has been developed build a 50-ton cyanide pilot mill on the premises and put the property into production. This procedure need not necessarily await full completion of the above development plan but can go into effect when economics warrant.

Sequence No. 2 at 75% U. S. Government and 25% Company expense

Apply for a U. S. Government Office of Mineral Exploration loan which is repayable @ 5% royalty on ore produced by results of the loan's exploration work.

(1) Continue the shaft down 190-feet. At the 170-foot point (at the same elevation as Elko Prince 900-Level) drive a drift on the vein about 900-feet SE to connect with Elko Prince's NW 900 Drift. Continue along the vein to the 900 SE drift.

(2) Crosscut about 550-600 feet westerly to June Bell and explore it for 600-feet or so.

Further development and exploration into downward extensions of both Miners Gold and Elko Prince would be conducted by the company after the mines are put in production and during exploitation of the ore bodies disclosed by the two work sequences.

Mining will be conducted by shrinkage stoping which is the cheapest method and for which the mines appear ideally situated.

MILLING The ore is essentially a cyanide proposition. When ore disclosures warrant it is proposed to install a 50-ton per diem pilot mill on the premises at an estimated cost of $100,000 subject to flow sheet and cost data to be worked out by either Denver Equipment Co., Denver, Colorado or Gallagher Co. Salt Lake City, Utah. The estimate might be reduced materially if good used machinery should be acquired, a matter for consideration.

Milling costs would approximate $4 per ton on basis of experience with other silver-gold cyanide operations.

EQUIPMENT & REQUIREMENTS Much of the following equipment can be acquired on rental-purchase basis budgetted monthly. The following prices are for good machinery supplied by a reliable Machinery house.

1-75 KVA Deisel operated electric generator	$3500.00
1-electric trammer with panel	2500.00
10-end dump or rocker dump mine cars	850.00
360-cfm Deisel operated compressor	2500.00
1-20 HP Electric hoist	2850.00
1500-feet electric cable, estimated at	1500.00
1-skip	150.00
600-feet of cable for hoist	600.00
2-Jacklegs (new-purchase @ $55 per mo. each)	2200.00
1-Siz #12 Mucking machine	1500.00
1500-feet 3-in compressed air pipe	900.00
10,000-ft. B. M. Timber	1000.00
Tools (new)	1000.00
Miscellaneous piping, etc. etc.	500.00
Total	$21,550.00
Road work 1½-miles	$2000.00
Buildings, Office-Assay plant-Dry-Shop	5000.00
Total Equipment & Requirements	$28,550.00
Add 15% for contingencies(truck etc)	4.300.00
Total required for preparation underground work	$32,550.00

COSTS The following are considered liberal estimates based upon our combined Nevada experience. Headoffice expenses will have to be added.

	Per ton	
(1) Mining cost inclusive stope preparation	$10.00	
Milling cost inclusive supervision	4.00	$14.00
(2) Development costs	Per foot	
2-compartment shaft, timbered	$150.00*	
Drifting from shaft inclusive of transport to adit portal	45.00	

Development Costs-continued	Per foot
(3) 2-compartment Upraise timbered	$50.00
Drifts from Upraise & Transport	40.00
(4) Drifting & Transport Adit Tunnel	45.00

* Shafting with Criderman shaft mucker from 2100 to 2500-foot Levels, Mammoth Mine, Utah cost $148 per foot. (Simpson)

Total Costs Sequence No. 1 to put the property into production.

(1)	330-feet of shaft, timbered @ $150	$49,500	
	1200-feet of drifting @ $45	54,000	$103.500
(2)	250-feet of Upraise, timbered @ $50	12,500	
	1200-feet of drifting @ $40	48,000	60,500
(3)	Station & bin shaft collar. stations and loading pockets drift levels, rehabilitate Adit, ventillation etc.	21,500	21,500
(4)	Mill cost, estimated		100,000
(5)	Equipment, buildings, road work		32,500
(6)	Prepare campsite at Midas		2,000
	Total		$320,000

Sequence No. 2 will not come into effect until after the mine is in production therefore will require no capital outlay until a loan may be arranged. The company participation will then be 25%, which amount will be determined by the loan scope agreed by the Office of Mineral Exploration.

Time Factor (1) Shaft workings The shaft will be worked 2-shifts per diem, 1-shift drilling and blasting, the other, with Criderman shaft mucker, mucking and timbering. Estimated 5-feet per diem which will require a minimum of 66-working days or in order of 4-months inclusive of station and bin at shaft collar.

Drifts will not be started until the shaft is completed then each level will be worked individually, the NW and SE drifts being run at the same time. The work will be on 2-shift basis @ estimated 5-feet per shift in each face thus making a total of 20-feet per diem. The total 1200-feet of drifting would thus require a minimum of 60-working days or in order of 3½-months inclusive of station and loading pocket at each level.

(2) Upraise workings The Upraise will be run @ 2-shifts, 1-shift drilling and blasting and the other mucking and timbering. Estimate 5-feet per diem which will require a minimum of 50-working days or in order of 3-months.

Drifts will not be started until the upraise is completed

then each level will be worked individually with NW and SE drifts run at the same time. The work will be on 2-shift basis @ estimated 5-feet per shift in each face thus making a total of 20-feet per diem. The total of 1200-feet of drifting would thus require a minimum of 60-days or in order of 3½-months. The output of the drifts and subsequent stopes would go directly to chute hence no station of loading pockets would be required.

(3) Adit drifting which should extend from Miners stope area to Drift "A" (see map) and thence to the NW end of Elko Prince workings. It should be preceeded by drilling from Yale Tunnel to test the vein structure extending off the tunnel course.

The drift will be worked on 2-shift basis @ estimated 5-feet per shift, totalling 10-feet per diem which would require a minimum of 70-workings days or in order of 4-months.

Thus the combined Shaft and Upraise work would require in order of 8-months to complete. Stoping could start on No. 1 Shaft level and No. 1 Upraise level prior to completion of the entire program but would be determined by mill installation the start on which might be warranted fairly early in the underground program.

Budget The $320,000 need not be supplied all at once. The following approximate budget would apply subject to unforseen changes that are to be expected and also subject to Nevada law which requires funds for two payrolls be in the bank at all times. If work should show that mill installation is warranted prior to work completion about $25,000 to $30,000 should be added to requirements for the months involved.

1st. month	Equipment, road, buildings-Midas camp		(37,500)	$39,000
	rehabilitation Adit tunnel		(4,500)	
2nd. month	Preparing shaft & raise	($5000)		
	50-feet Shaft	($7500)		
	50-feet Raise	($2500)		
	Other	($3000)		18,000
3rd. month	Shaft 100-feet	$15,000		
	Raise 100-feet	5,000		
	Other	3,000		23,000
4th. month	Shaft 100-feet	$15,000		
	Raise 100-feet	5,000		
	Other	3,000		23,000
5th. month	Shaft 80-ft. $12,000, shaft drift 80-ft $3,600			
	Raise drift 400-feet $16,000			
	Other $1,000			32,600

6th. month	Shaft drifts 400-feet	$18,000	
	Raise drifts 400-feet	16,000	
	Other	1,000	$35,000
7th. month	Shaft drifts 400-feet	18,000	
	Raise drifts 400-feet	16,000	
	Other	1,000	35,000
8th. month	Shaft drifts 320-feet	14,400	14,400
	Total		$220,000

There is good probability that the mill could be constructed and the Upraise workings put into production prior to completion of the program.

ORE VALUES Today's metal prices are 158% of the 1907-1942 years when Elko Prince and Miners Gold were producing.

Unfortunately the Miners Gold records are lost to present owners hence, except for the few samples from the short Drift "A" we have no assays on which to calculate Miners Gold ore reserves. over the extensive vein showings containing ore shoots along the Adit Tunnel. Wren reports shipping ore @ $50 to $200 per ton that can be put into production within six weeks pending construction of a mill and Heikes indicates the average value of ore to go into the mill @ $40 per ton. Simpson and Warren, who were in charge of Yale Mining Co. operations, believe that the various ore shoots in Miners Gold should average about $40 per ton inclusive of high and low grades.

It is obvious that Miners Gold Adit should be sampled to allocate and determine ore grades of the various shoots exposed along it.

On basis of $40 per ton millheads @ 50-tons per day for 300-days a year the following operating profit is indicated:

Per ton	Per Day	Per month	Per year
$40.00 millhead	$2000.00	$60,000	$600,000
4.00 estimated mill loss			
$36.00	1800.00	54,000	540,000
.90 2½ % royalty			
$35,10			
14.00 estimated mine & mill cost	[illegible]	[illegible]	
$21,10	1055.00	31,600	316,500
.42 2% State production tax			
$20.68 net operating profit	1030,00	30,900	$309,000

There appears to be a good chance that as development progresses the ore showings may warrant increasing mill capacity at least up to the early day 75-tons per day capacity. According to Wren there appers to be probability that income derived from high grade ore shipments may provide profitable return prior to starting mill operation.

ORE POSSIBILITIES Lacking basic sampling data makes an ore estimate largely a guess. However it is suggested that a rough estimate may be made by comparison of Elko Prince stoped areas and production therefrom vs. the undeveloped areas bordering vein exposures in the various Miners Gold and Elko Prince workings shown on accompanying Longitudinal Section . It is suggested that these presently undeveloped areas be reduced at least 2/3 or more as a precautionary measure.

Elko Prince stoped area measure in order of 560,000-sq. ft. Its unmined areas down to 900-Level masure about 990,000-sq. ft. At 1/3 this would be 330,000-sq. ft. The Miners Gold unmined areas adjacent to vein exposures in Adit Tunnel and Drift "A" measure in order of 880,000 down to horizon of Elko Prince 900-Level. At 1/3 this would be 293,000-sq. ft. The area adjacent to the vein where it is off Yale Tunnel measures in order of 552,000 sq. ft. which @ 1/3 would be 164,000 sq. ft. This latter unexplored area is not given status until it has been opened, possibly by a U. S. Government OME loan. It is expected to provide appreciable ore in shoots occurring along it.

Thus we have about 621,000-sq. ft. of possibly ore bearing vein which amounts to 110% of Elko Prince production estimated at $3,000,000 which at today's metal prices would amount to about $4,750,000. The indicated ore potential of the combined mines is possibly in order of $5,500,000 gross which, on basis of $40 ore would yield about $2,270,000 net operating profit. This figure may be greater or lesser as determined by Miners Gold sampling. In addition are ore possibilities to be explored in depth in view of $75 and $134 ore values reported in the two winzes extending from Elko Prince 750-Level to 900*Level. It is emphasized that the above estimate is indicative only and is contingent upon Miners Gold sampling results.

REFERENCES (1) Bulletin No. 25, Nevada Bureau of Mines, 1920 Edw. W. Rott Jr.. Gold Circle Mining District Geology freely drawn on in the outline.

(2) Jas. H. Wren, Consulting Mining Engineer, Sacramento, Calif. and Reno, Nevada. In a letter to a client Nov. 18, 1963. "There is $50 to $200 shipping ore which can start within six weeks" "This property may result in becomming one of the largest producers of silver bullion in the state of Nevada".

(3) Geo. C. Heikes, Geologist, San Jose, Calif. Consulting Geologist for Yale Mining Co. in a letter to the company June 24, 1960. "The present Simpson crosscut should be immediately driven through the vein, then a drift easterly undertaken. The vein may be an extension of the Elko Prince vein and, if it is, should be at least 1000-feet of hitherto unprospected vein to explore. I expect you will find several good ore shoots in this area, of various sizes and intensity of mineralization, mostly silver, some gold" ---- "Suppose the mined grade of ore diluted was $40 silver and gold recoverable value----there should be several years of ore developed".

(59)
Item 13

REPORT

ON THE

MINERS GOLD & ELKO PRINCE MINES

ELKO COUNTY, NEVADA

Arthur Lakes

July, 1966

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REPORT
ON THE
MINERS GOLD AND ELKO PRINCE MINES
Elko County, Nevada

SUMMARY Miners Gold and Elko Prince property comprises combination of Miners Gold 8-claims and adjoining Elko Prince 11-claims covering 4000-feet vein length in Gold Circle Mining District, Nevada. The district was discovered in 1907 and operated until silver prices fell to 34-38¢ in 1940-42.

Small shipments of selected high grade ore were made directly to smelters but the bulk of the ore produced required cyanide milling into silver and gold bullion, economically important in saving high transportation and smelting costs.

The ratio of gold to silver varies from (1) camp production at about 13-oz. silver to 1-oz. gold and to (2) 43-oz. silver to 1-oz. gold by available samples from Miners Gold "Drift A". The silver-gold proportion would place the property into silver category whereby U. S. Government OME loan would apply at 75% of exploratory costs.

Elko Prince Mine dominated the district, producing a possible 80% of the camp's output by reported production in order of $3,000,000 ($4,750,000 at today's silver-gold prices). Miners Gold is reported to have accounted for approximately $300,000 ($475,000 at today's metal prices) from shipments of selected high grade ore which must have run hundreds of dollars per ton to account for small stope area.

The combined Miners Gold-Elko Prince workings include 4000-feet proven vein length opened to 900-feet depth in Elko Prince and 550-feet depth in Miners Gold as shown on accompanying Longitudinal Section.

Elko Prince stoped ore in two areas (1) 800-feet long by 625-feet high down to water level at the mine's 750-Level; (2) the other 100 to 300-feet long by 750-feet high down to the 750-Level. Ore at $42 per ton is noted between the two stope areas (Longitudinal Section). Two 150-foot winzes extending down from the 750-Level to the unexplored 900-Level show good ore, the winze nearest to Miners Gold averaging $136 silver-gold per ton which gives assurance that good ore will continue considerably deeper into horizons not yet explored in either Elko Prince or Miners Gold.

Miners Gold stoped smelting ore running hundreds of dollars per ton from small stopes extending a short distance above and below its Main Adit as shown on the Longitudinal Sections . Miners Gold is essentially virgin with its ore still in place for mining and thus affords the most important objective for immediate future development outlined in the body of this report and illustrated on the Longitudinal Section.

The most recent work, which was performed in 1957-1960 by Yale

Mining Company extended Miners Gold Adit 1100-feet SE in central part of the combined Miners Gold-Elko Prince workings. Unfortunately the work was off the vein its entire length, requiring a 250-foot crosscut to penetrate into Elko Prince vein's NW extension as shown on the accompanying Plan Map. At a later date a crosscut driven opposite Miners Gold stope penetrated into the vein where "Drift A" opened ore with values from $3 to $500 per ton as detailed in the body of this report.

In addition to the Miners Gold-Elko Prince vein the parallel June Bell vein was opened in ore by Elko Prince 300 and 600 Levels-presently inaccessible- and is exposed 1500-feet NW by cuts near Miners Gold Adit as shown on Plan Map.

The geology is favorable for lateral continuation and depth extension of Elko Prince's orebodies into Miners Gold which, except for small "high grade" stopes, is virgin and unmined. The property is very advantageously located on a "cross roads" of two intersecting ore belts located in the upper (west) plate of the great Roberts Mountains Thrust in which are located more than 90% of Nevada mines as described in the body of this report and illustrated on accompanying Plat.

Early Miners Gold records are lost to present owners hence the only assays presently available are thosefrom Miners Gold "Drift A" averaging $64.96 per ton by eliminating the highest. It is reputed that an engineer's estimate made at Elko Prince's closing indicated $1,000,000 (old prices) remaining above its 900-Level. Yale Chief Geologist Heikes estimated that the Miners Gold ore should average about $40 per ton inclusive of high and low grades. Indications are that appreciable shipping ore can be mined from Miners Gold vein during preliminary work to put the mine into milling production.

For above reasons the estimate of Probable ore is arrived at by comparison of Elko Prince stoped areas (and reported production therefrom) with the unmined areas of vein exposures essentially in Miners Gold and extending into lateral and downward extensions within Elko Prince. These unmined areas have been reduced by 2/3 as a precautionary measure.

On the above basis it is indicated that work recommended in Miners Gold and later in Elko Prince should provide in order of $5,500,000 which on basis of $40 ore should return in order of $2,270,000 net operating profit. It is within expectation that this figure may be increased as work proceeds in the vein. In addition are ore possibilities to be opened in depth in both Miners Gold and Elko Prince. An additional ore possibility is in the presently unexplored June Bell vein.

The work is divided into 2-Sequences. Sequence No. 1 to put the mine into 50-tons per diem production and construct a mill to process the ore. Sequence No. 2 for further exploration along the Main Adit and in depth development in both Miners Gold and Elko Prince. It is possible that one or both these sequences may be aided by U. S. Government OME loan thus greatly reducing company expenditures.

It is estimated that it will cost about $350,000 for necessary expenditures to put the property into initial 50-tons per diem production. It is probable that part of this may be derived from a U. S. Government OME loan. It is also estimated that it will take about 8-months time to put the property into production.

Arthur Lakes.

Nevada Registered Engineer No. 1408
Life Member British Columbina Assn of Prof. Eng

Reno, Nevada
July 31, 1966

PROPERTY The property comprises combination of (1) Elko Prince group of 11-patented claims, Patent No. 314565, U. S. Survey #4034 and (2) adjoining Miners Gold group of 8-unpatented claims as they appear on Elko, Nevada Mine Assessment Roll for 1955-56, Page 31. In addition are 24 blocks of land in the settlement of Midas, Elko County, Nevada.

OWNERSHIP The Elko Prince property is owned by John M. and Mary Simpson who will assign the property to Yale Mining Co. on a lease and bond.

The Miners Gold is a leasefor 20-years dated April 6, 1956 with option for 20-years renewal April 6, 1976. The terms of the lease call for 7½% net smelter royalty on all ore mined, milled and shipped or for 2½% net smelter royalty if ore is milled on the premises.

The Yale Mining Company, a Nevada corporation in good standing, bought out the Miners Gold lease June 20, 1960 and now is in full possession thereof.

Current taxes to July 1, 1966 have been paid on the Elko Prince claims and the Midas lots and Assessment work on Miners Gold has been filed at Elko County Courthouse up to September 1, 1966.

LOCATION & FACILITIES The claims are located in Gold Circle Mining District in hilly country along the southeast slope of Owyhee Bluffs near the edge of Squaw Valley. They are located in Section 16, T. 39-N, R 46-E, MDB&M, at northwest corner of Elko County, Nevada. State highway 18 traverses the area and connects Midas, in the center of the district, with Golconda, 44-miles to the southwest which, in turn, is 16 miles over U. S. Highway 40 from the chief supply center Winnemucca, Nevada.

The claims are situated on a northerly trending ridge at from 5600 to 7200-feet above sealevel with elevations of various workings from 6900 down to 6000-elevation as shown on accompanying maps.

Water is abundant in close proximity to the various workings. Wood is scarce and winters are cold but snowfall is insufficient to interfere with year round operations. Mining timber costs about $100-125 per 1000-ft. B. M.

Power will have to be generated on the premises by Deisel-Electric plant for mill and underground hoist and by Deisel compressors to actuate drills.

HISTORICAL Gold and silver were discovered on several Gold Circle claims in the summer of 1907 and a townsite was laid out at Midas. Except for leasers and some prospecting, mining ceased in 1942. From 1908 to 1948 (essentially to 1942) the district produced 401,753-tons of ore containing 126,726-ounces of gold and 1,630,265-ounces of silver with total value of $4,137,417. (mineral Resources & Mineral Yearbook) At

present $35 gold and $1.29 silver the ore would return $4,435,430 for gold and $2,103,045 silver totalling $6,538,455.

During the early development phase small shipments of rich ore were made directly to smelter but the bulk of the ore produced required local milling. The record of production is thus allied with local cyanide mills of which six were built during the period of production. They were dominated by the 75-tons per diem mills built by Elko Prince and by its successor Gold Circle Consolidated Mining Co. The Elko Prince operations dominated the district, the mine extending down 900-feet by 2300-feet long with reported production in excess of $3,000,000.

Miners Gold first was opened by a shallow shaft at the northwest end and was later opened by Adit Tunnel which followed southeasterly along the common Miners Gold-Elko Prince vein lode for 1200 feet where a number of small stopes-dominated by the Jewel and Miners Gold stopes-combined into reported $300,000 production of smelting ore.

Of Elko Prince mine's reported $3,000,000 production about two thirds came during 1916-1922 and about one fifth during 1927-1929. Production upsurge in 1916-1922 was brought about by operation of Elko Prince's 75-ton cyanide mill which burned down in 1922. This amounted to about 50% of the camp's total production. Another upsurge in 1927-1929 was again brought about by operation of Gold Circle Cons. (successors to Elko Prince Mining Co.) 75-ton cyanide mill which during that period accounted for about 1/3 of the camp's total production. This mill ceased operation when Gold Circle Cons. was unable to get right of way for a long tunnel project to tap Elko Prince mine at its 1200-foot level. The mill later burned down. Thus Elko Prince's reported $3,000,000 production was provided 2/3 during 1916-1922 and about 1/5 during 1927-1929.

In 1957 Yale Mining Co. was formed and during 1957-1960 rehabilitated and extended Miners Gold Adit tunnel 930-feet (mostly off the vein) to crosscut connection with northwest end of Elko Prince workings as shown on the accompanying Maps. This area should be tested by drilling and crosscuting into the vein locality.

A total of 12,500-feet of tunnelling, shafting, and raising has opened Elko Prince for 2300-feet long down 900-feet, providing two major stope areas: (1) 800-feet long by 625-feet high in southeast section and (2) from 100 to 300-feet long by 750-feet high in northwest section. Shafts continue down 150-feet to 900-level in good ore below both southeast and northwest stoped areas. Crosscutting and drifting on the 300 and 600 Levels has opened up the parallel June Bell vein an aggregate 1200-feet long down 600-feet from surface where two, presently undescribed, stopes were opened in reported good ore, one on each of the 300 and 600-Levels.

A total of 3750-feet of tunnelling, shafting and raising in Miners Gold has opened 1200-feet length on the vein down 550-feet depth below surface. The Jewel stope, 40 to 70-feet long by 50-feet high and Miners Gold stope 150-feet long by about 185-feet high (85-feet up and about 100-feet down from the adit) are reported to have produced in order of $300,000 selected shipping ore.

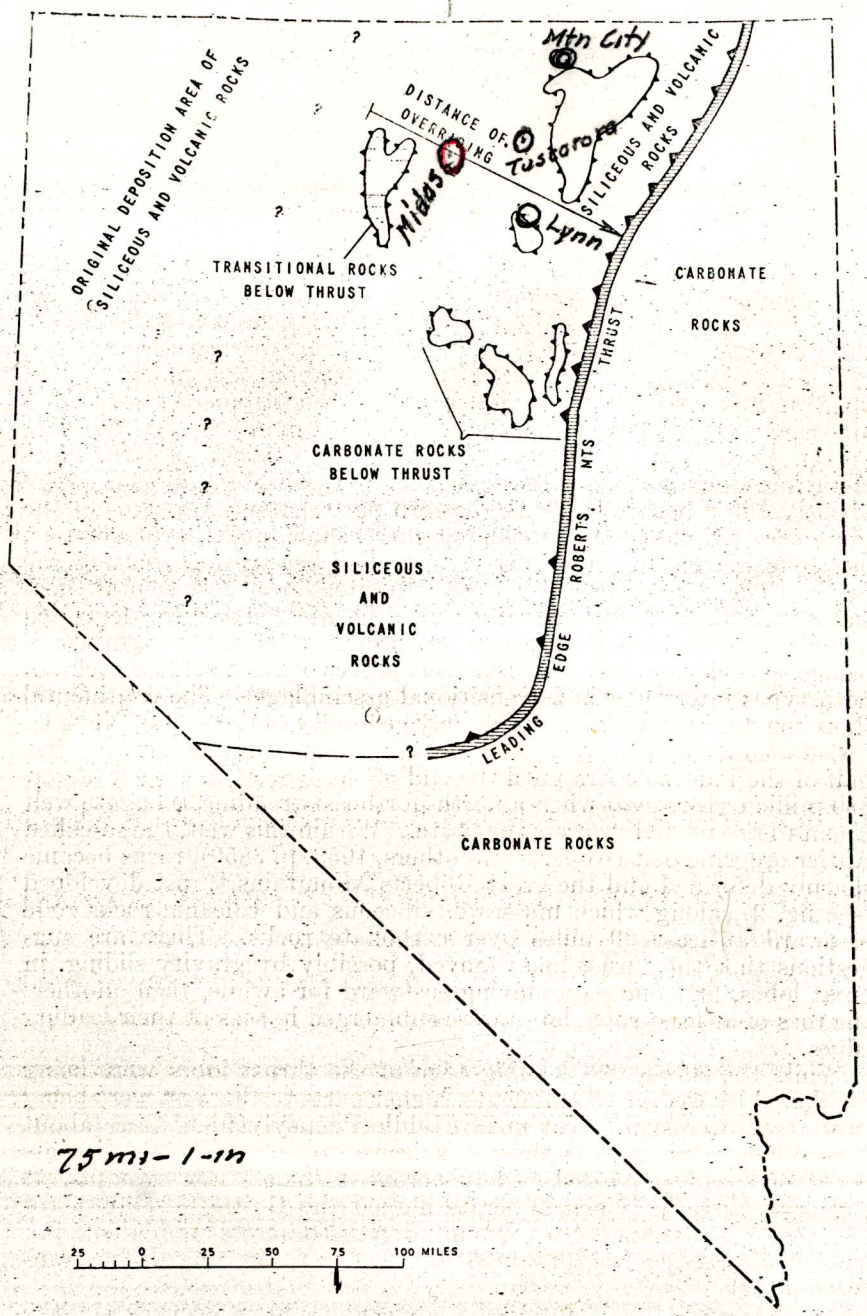


FIGURE 9.—Distribution of early Paleozoic siliceous and volcanic rocks, carbonate rocks, and transitional rocks, and their relation to the Roberts Mountains thrust fault in Nevada.

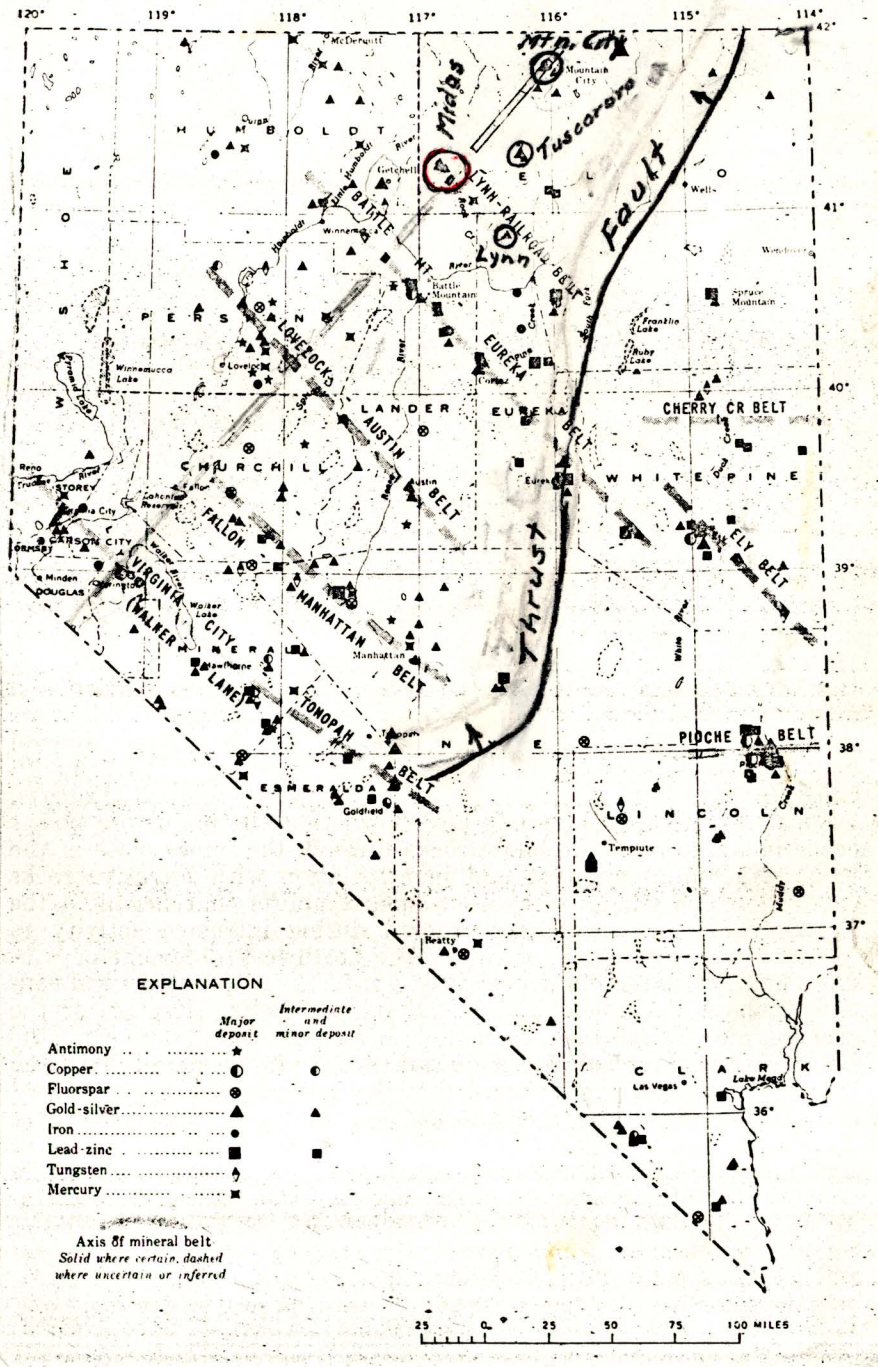
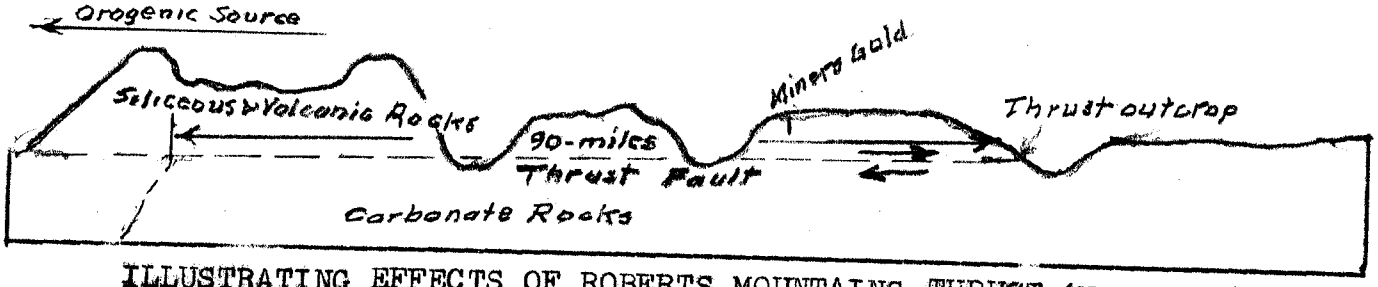


FIGURE 13.—Mineral belts and deposits in Nevada.

Except for 900-feet length where Miners Gold (Yale) Adit is off the vein, the combined Miners Gold and Elko Prince workings estend a total of 4000-feet length on the vein by 500-feet Miners Gold depth and 900-feet Elko Prince depth with its bottom in good ore.

GEOLOGY The chief tectonic feature of the region is the effect of the great Roberts Mountains Thrust comprising a series of low angle faults caused by various orogenic (mountain building) occurrences at the West. These pushed masses of siliceous and volcanic rocks an aggregate of 90-miles eastward over carbonate rocks as illustrated below and shown on on Plate 13 herewith.



ILLUSTRATING EFFECTS OF ROBERTS MOUNTAINS THRUST (No Scale)

The great premineral shift of this Roberts Mountains thrust caused wide disturbance in both its upper and lower plates resulting in extensive faults, fissures, shearage and brecciated zones that afforded access for mineralizing agencies and deposition of orebodies in each of the upper and lower plates. This accounts for the extensive fissuring, brecciation shearage, and other conditions at Miners Gold and Elko Prince.

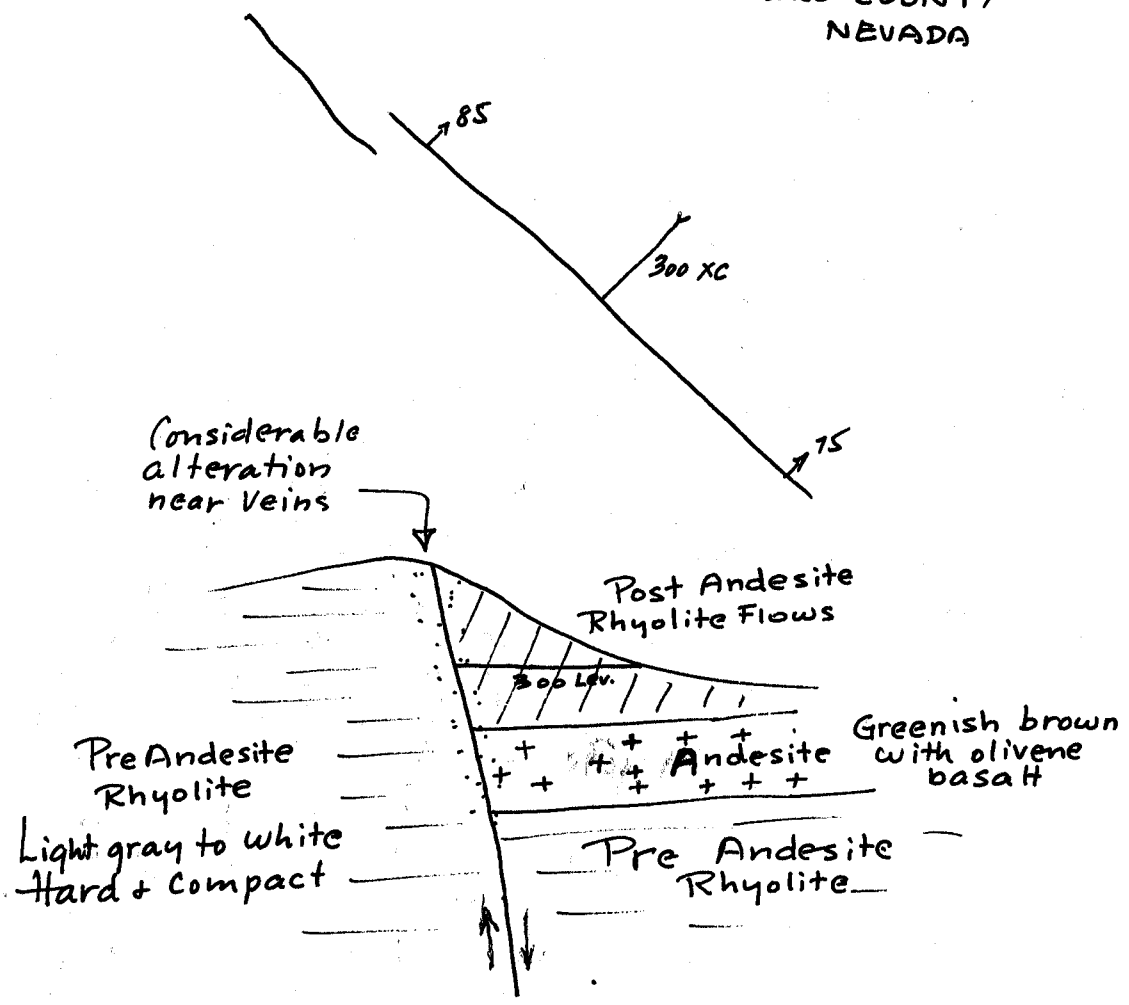
Plate 13 herewith shows that (1) the great majority of Nevada mineral deposits (inclusive of Tonopah, Goldfield, Comstock et al) form in the thrust's upper plate, essentially in volcanic and siliceous rocks west of the thrust's outcrop, (2) That the various mineral deposits form in belts, the most prominent belt coursing Northeast from the large Yerington copper area through the famous Comstock and up to the important Mountain City copper-silver-gold area. (3) This belt is joined or intersected by at least five northwest trending belts that include Tonopah, Goldfield, and the recently disclosed Newmont gold mine (second only to Homestake in the United States)which is on the Lyn-Railroad belt which crosses the Yerington-Mountain City Belt forming a "cross roads".Gold Circle District.

Local Geology The terrain is one of extensive Tertiary volcanic activity. It includes flows of andesite and rhyolite with associated basaltic flows and minor amounts of olivine diabase, rhyolite tuff, and rhyolite breccia, the whole lying in the upper plate of the Roberts Mountain thrust.

The flow rocks are divided into four lithologic units: (a) presome basalt and minor occurrences of olivine diabase, (c) post andesite-andesite and (Elko) rhyolite, (b) andesite (principally andesite flows) rhyolite and (d) unconsolidated tuffs. Acid and basic dikes locally cut rocks as young as the basal portion of the post andesite-rhyolite.

Ore Deposits The ore deposits occur in fissure fillings, sheeted zones,

MIDAS - GOLD CIRCLE
ELKO COUNTY
NEVADA



Above Post andesite rhyolite are tuffs, acid & basic dikes.

and shattered zones in rhyolite and in fault contacts between rhyolite and andesite. The enclosing rocks show notable effects of hydrothermal alteration. The orebodies are apparently confined to the pre-rhyolite andesite rocks along strong fault fissures striking northwest and dipping nearly vertically northeast (Elko Prince) and southwest (Miners Gold). Along these fissures auriferous pyrite and quartz with silver bearing sulphides were deposited, the solutions dissolving portions of the country rock. A second fissuring with some displacement occurred after the ores were deposited. The movements were mainly along the lodes and brecciated quartz and sulphides, stringing the ore along the plane of later movement. Oxidation changed pyrite into limonit, sericite and feldspar into kaolin. Hydrous silica deposited in crevices where it is associated with free gold and manganese oxide.

Elko Prince-Miners Gold The Elko Prince-Miners Gold lode occurs along a strong premineral fault zone followed more than 4000-feet and coursing N 45° W (Elko Prince) to N 55° W (Miners Gold) and dipping nearly vertically. The formations on the NE side of the fault zone were shifted downward, thus the upper reaches of the veins are in fault contact zone having the southwest wall in ore-favorable pre-andesite rhyolite and the northeast in contact of andesite with pre-andesite rhyolite as shown on accompanying Section. The richer ore occurs where (a) veins are enclosed in rhyolite breccia and (b) where pre-andesite rhyolite contacts andesite. The post andesite flows are apparently later than the veins hence show no ore.

There are two known veins disclosed underground in Elko Prince mine (1) the principal Elko Prince-Miners Gold vein lode and (2) the parallel June Bell lode about 550-feet south from Elko Prince vein. The June Bell apparently recurrs at surface opposite Miners Gold adit about 1500 feet northwest from its occurrence in Elko Prince workings. Two additional veins are indicated by surface trenches at northwest section of Miners Gold property.

ORE DEPOSITS The principal ore deposits of the district are east and north of Midas in a northwest trending zone 1 to 1½-miles wide by 3-miles long. The rocks of this area are leached to a chalky white stained here and there to light brown by iron oxide. In the region of the ore deposits, which in a broad way coincides with the leached areas, hot solutions have saturated the country rock causing devitrification of the glass and other mineralogical changes.

As previously noted, the deposits comprise veinlike replacement bodies, fissure veins, and mineralized shear and brecciated zones in rhyolite and along shattered contact between rhyolite and andesite. The mineralized rhyolite-andesite contact deposits are the largest. Fissure veins and shear zones in rhyolite form the smaller high grade shipping ore deposits where ore up to hundreds of dollars per ton is found. The shattered zones contain the larger deposits of milling grade ore.

Elko Prince The accompanying Longitudinal Section shows stoped ore shoots in Elko Prince to be: (1) "A" stope in the SE section, 800-feet long by 675-feet high down to the 750-Level, thence the vein extends 150-feet deeper in ore reported to run $74 per ton (@ 53¢

silver). (2) About 100-feet SE from "A" stope is "B" stope 150-feet long by 150-feet high at the 600-Level with 150-foot winz in ore to the 750-Level. This indicates an oreshoot upwards of 1050-feet long in excess of 900-feet high of which more than 150-feet depth is virgin below the 750-Level. The good ore occurrence in the bottom 900-Level indicates farther downward extension of ore which Gold Circle Cons. planned to tap at the 1200-foot depth. Three samples show ore assaying from $26 to $208 per ton (@ $1 silver).

About 500-feet from "A" the drifts come into northwest Oreshoot "C", stoped in C-D-E stopes from 100 to 400-feet long for 700-feet depth to 750-Level whence is a 150-foot winz in ore reported at $134.35 per ton (silver @ $1). Heikes indicates two high grade shoots at 891-tons totalling $120,511 or $134 per ton across an average 1.4-feet width. Five samples rimming the Stope "E" average 1.75-feet width @ $71.20 per ton (silver @ $1). The above indicates an oreshoot about 300-feet long, the ore occurring at bottom level indicating farther downward continuation of high grade ore to be developed by drift from proposed Miners Gold Shaft.

Ore up to $40 occurs in segments along the 500-feet of drifts between oreshoot "A" and oreshoot "C". It is estimated that the high grade ore varies from 0.75-feet to 2-feet width, the mill ore from 3 to 5-feet. An early estimate indicated about $1,000,000 (@ $1 silver) in ore reserves remains adjacent to the workings.

Miners Gold Miners Gold being less developed than Elko Prince is essentially virgin thus forms the main ore source for early exploitation. Small stopes occur above Adit level between portal and Jewel and Miners Gold stopes, the whole is reported to have produced in order of $300,000 in high grade shipping ore. At present metals prices this would be considerably higher.

On basis of geologic maps prepared for Yale Mining Co. by Harold Smithson and Clay E Rowley in 1959 the Miners Gold Adit followed 900-feet from portal in an ore streak varying from 1 to more than 3-feet wide. At the 900-foot point the tunnel was turned along a nearly barren fissure and thenceforth continued off the vein for 1100-feet to where a 250-foot easterly crosscut picked up the vein's extension in northwest end of Elko Prince workings as shown on accompanying Plan Map . Following the geologic mapping crosscut "A" was run northeasterly for 60-feet where it cut a very good SE extension of the Main vein in ore assaying from 1 to 320-oz. silver and from 0,02 to 1,2-oz. gold. This tunnel was extended 280-feet southeast and 60-feet northwest (toward Miners Gold stope, 70-feet beyond). At the 100-foot point SE the tunnel veered off to the south of the vein continuing in the footwall rock. The northwest extension toward Miners Gold stope is in ore assaying from 1.8 to 142.4-oz. silver and 0.01 to 0.78-oz. gold.

Thus we have about 1050-feet of vein exposed along Miners Gold Adit with about 750-feet vein length where the tunnel is off the vein. In accordance with Miners Gold ore exposure and Elko Prince's extensive ore shoots should provide an appreciable amount of additional ore when this vein segment is opened up.

Theore depth proven to exceed 900-feet in Elko Prince affords reasonable assurance that the Miners Gold ore deposits will likewise continue downward into similar horizon. Geologic and assay indications afford good possibility that economic silver-gold ore will continue down for considerable depths below the present depth limits of Elko Prince workings. This also applies to Miners Gold.

Miners Gold Adit is 470-feet higher than Elko Prince 900-Level. Good ore should extend 300 to 350-feet above the adit subject to possible encroachment by post adesite occurrence near surface. Thus Miners Gold has presently a zone of economic ore probability exceeding 1200-feet long by 820-feet or more high. To this should be added the ore possibilities of 750-vein length presently unexposed where the tunnel is off the structure.

The high grade is reported to vary from 1 to 1½-feet width and the mill ore from 2½ to upwards of 4-feet width. Simpson and Heikes estimate that the general average of the ore will run about $40 per ton at present prices by mixing high grade and mill grade together.

ORE The ore deposits are epithermal similarly to the important Comstock, Tonopah, Goldfield, and other important Nevada producers.

Neither ore nor gangue is complex in mineral makeup. The primary ore comprises quartz, auriferous pyrite with silver sulphides stromeyerite (CuAgS) and argentite (Ag_2S) with minor calcite and andularia. The secondary ores comprise quartz, free gold, iron oxide, manganese and Horn silver.

Early records of Miners Gold production are not available. High grade shipping ore is said to have run hundreds of ounces silver per ton. A shipment of second class ore from Miners Gold stope to American Smelting & Refining Co. returned 31-oz. silver and 1.86-oz. gold per ton.

The only samples now available are progress samples taken from Yale Mining Co's. limited work in "A" Drift. These are not correlated regards locality and are given here merely to show ore tenor. Arithmetical average of the available samples (eliminating the highest) returns 43-oz. silver and 0.27-oz. gold per ton which at present prices would amount to $64.92 per ton.

SAMPLES FROM "A" DRIFT-ADIT LEVEL

	Silver oz	Gold oz	Silver $	Gold $	Total $
(1) Crosscut intersection	320-oz	2.5-oz	$412.80	$87.50	$501.30
(2) Going southeast at "	30	0.12	39.70	4.20	42.90
(3) Going northwest 15-ft.?	49.5	0.21	63.85	7.85	71.70
(4) " " 20-ft?	91.2	0.50	117.65	17.32	134.97
(5) " "	16.1	0.185	20.75	6.47	27.23
(6) " "	1.5	0.04	1.93	1.40	3.33
(7) " "	56.3	0.25	72.63	8.75	81.38

	Silver oz	Gold oz	Silver $	Gold $	Total $
(8) Going northwest	3.76	0,04	4.85	1.40	6.25
(9) " "	5.8	0.01	7.48	0.35	7.83
(10) " "	22.6	1.20	29.18	42.00	71.18
(11) " "	44.0	0.28	56.76	9.80	66.56
(12) " "	28.10	0.14	36.25	4.20	40.45
(13) " "	110.7	0.45	142.80	15.75	158.55
(14) " "	117.10	0.51	151.06	16.85	167.91
(15) Going southeast	23.0	0.08	36.12	2.80	38.92
(16) " "	142.4	0.79	188.70	27.20	210.89
(17) " "	24.3	0.11	31.35	3.85	35.20
(18) " "	17.4	0.09	22.45	3.15	25.60

WORKINGS Miners Gold Adit is in good shape its full length. A cave will have to be cleared out at the 1500-foot point to renew strong ventillation between Elko Prince Airshaft and the Adit portal and also to make accessible drill locations to test continuity of the vein structure between "Drift A" and northwest end of the Elko Prince workings as shown on accompanying Map.

The first 100-feet of Miners Gold Adit is too steep a grade. This will be corrected by raising the tunnel roof and ballasting the floor to proper grade.

The adit is supplied with track but larger compressed air pipe and water pipe will have to be installed.

Elko Prince workings are presently inaccessible for operation. Leasers robbed shaft pillars thereby destroying it. Elko Prince's ore showings remaining above 750-Level and those below 750-Level together with depth extensions below 900-Level will be attacked by proposed Miners Gold workings described below.

Proposed Work All work for some time will be confined to the important Miners Gold virgin ore area above and below the Adit Tunnel. The Elko Prince will later be opened by extension of Miners Gold Shaft workings described herein.

Sequence No. 1 to put the mine into production will be localized in the vicinity of Miners Gold stope and "Drift A" and will comprise

(1) A 2-compartment Upraise 250-feet along the vein or farther acording to ore conditions. From the 100 and 200-foot points drift 300-feet NW and 300-feet SE along the vein to prepare for stoping. Extend the drifts farther according to ore conditions.

(2) Sink a new 2-compartment shaft to a depth of 155-feet in the vein's footwall and crosscut over (1) to the 135-Level which has already been driven 370-feet NW and 80-feet SE from shaft position and where good oreshoots are reported. Continue the 135-Level 400-feet SE and

prepare the level for production. It is believed that a new shaft will be more effective and in the long run cheaper than trying to reopen and enlarge Jewel Shaft though this working is already down to the 135-Level. It is also believed that the above work should provide sufficient ore to warrant installing a 50-ton pilot mill.

(3) Construct a 50-ton pilot cyanide mill because Projects No. 1 and No. 2 should open sufficient ore for 50-tons per diem production, the output to be increased as developments expand into Sequence No. 2.

It is probable that the above underground work may be aided by securing a 75% Government loan on account of the ore probabilities and the mine's silver ratio. The loan would be repayable by 5% royalty on ore produced as a result of the loan's exploration participation.

Sequence No. 2 to be conducted during mining and milling ore opened by Sequence No. 1.

(1) Extend the shaft down about 400-feet and open up the 200-Level by drifts 300-feet NW and 300-feet SE. At the 390-foot point, which is the elevation of Elko Prince 900-Level, drive about 900-feet SE along the vein into connection with Elko Prince's established 900-Level workings. Continue the drift 1500-feet or so through the vein's unexplored area below the stopes and drifts at the 750-Level thereby opening an important new mine suggested by the deeper ore values.

(2) Longhole drill into unexplored vein extension between Miners Gold stope and the NW end of Elko Prince workings as shown on Plan Map. Extend "Drift A" along the vein to be disclosed by long hole drilling.

(3) Crosscut 550-600 feet SW from near Miners Gold Adit portal to disclose Jewel Bell vein below its indicated NW extension by surface cuts. Drift 600-feet or more according to ore conditions.

Further development and exploration into deeper extensions of both Miners Gold and Elko Prince vein disclosures would be conducted after the mines are put into fullest production, possibly aided by Government loans.

Mining will be conducted by shrinkage stoping which is the cheapest method and for which the mines appear to be ideally situated.

MILLING The ore is essentially a cyanide proposition. It is proposed to first install a 50-ton per diem pilot mill on the premises (thereby acquiring the 2½% royalty proviso) and put the mine into production. The estimated cost of the mill installation is $100,000 subject to flow sheet and cost data to be worked out by either Denver Equipment Co., Denver, Colorado or by Gallagher Co., Salt Lake City, Utah. The estimate might be reduced materially if good used machinery should be acquired.

Milling costs would be approximately $4 per ton on basis of experience with other silver-gold cyanide mills in Nevada.

EQUIPMENT & REQUIREMENTS Much of the following equipment can be acquired on rental-purchase basis budgetted monthly. The following prices are for good used machinery supplied by reliable Machinery Houses. The prices are subject to change according to demand condition

1-75 KVA Deisel operated electric compressor	$3500.00 ?
1-Electric trammer with panel	3500.00
10-end dump or rocker dump mine cars	2000.00
360 cfm Deisel operated compressor	2500,00 ?
1-20 HP Electric Hoist	3000.00
1-Skip	200.00
600-feet of cable for hoist	600.00
2-Jackleg drilling machines (new @ $55 per mo each)	2200.00
1-Size 12 Mucking machine	2000.00
1500-feet 3-in pipe for compressed air	1000.00
10,000-ft. B. M. Mine timber	1250.00 ?
Tools (new)	1000.00
Rail for sublevels	2000.00
Miscellaneous, piping, etc. etc.	1000.00
Total	$25,750.00

The items marked "?" are subject to change according to availability.

Road work, 2½-miles	$2500.00
Buildings, office, assay plant, Dry, etc. estimated	5000.00
Equipment	$7,500.00
	25,750.00
Total	$33,250.00
Add 20% for contingencies, (Truck, etc.)	6,625.00
Total required for preparation Underground work	$39,875.00

Costs The following are considered liberal estimates based on our combined Nevada experience.

	Per ton	
(1) Mining cost inclusive of stope preparation	$10.00	
Milling cost inclusive of supervision	4.00	$14.00

(2) Development costs	Per foot
2-compartment shaft, timbered	$175 to $200
Drifting from shaft inclusive of transport to adit portal	$50
2-compartment Upraise, timbered	$60
Drifts from Raise and transport	45
Drifting and transport at Adit Level	45

Shafting by Cridemand Shaft Mucker.

SEQUENCE NO. 1 to put the property into 50-tons per diem production. An application will be made for Government OME Loan to defray part of the expense.

(1) 250-feet 2-compartment Upraise @ $60	$15,000	
1250-feet of drifting at 2-levels @ $45	54,000	$69,000
(2) 250-feet of 2-compartment shaft to 230-Level @ $200	50,000	
400-feet drift at 135-Level @ $50	20,000	
600-feet drift at 230-Level @ $50	30,000	100,000
(3) Station, bin, at Shaft collar, Stations and loading pockets at 135&230 Levels		
Rehabilitate Adit portal, estimated	15,000	15,000
(4) Equipment, road work, buildings, etc.	39,875	39,875
(5) Preparing campsite at Midas, estimated	2,000	2,000
(6) Mill construction cost, estimated	100,000	100,000
		$325,875
Contingencies, price changes of machinery, etc.		25,000
		$350,875

SEQUENCE NO. 2 will not come into effect until after the mine has been put into preliminary production and therefore will require no capital outlay until a Government loan can be arranged. The company participation would then be 25% which total amount would be determined by the loan scope agreed by the Government's Office of Mineral Exploration.

Time Factor (1) Upraise workings The Upraise will be run @ 2-shifts, 1-shift drilling and blasting, and the other mucking and timbering. Estimate 5-feet per diem which will require a minimum of 50-working days or in order of 3-months.

Drifts will be started when the raise is completed, then the two levels will be worked simultaneously on 2-shift basis at estimated 5-feet per shift in each face making a total of 20-feet per shift (5-feet NW and 5-feet SE in each level). The total of 1200-feet of drifting would thus require a minimum of 60-working days or in order of 3 to 3½-months. The output of the drifts and subsequent ore stopes will go directly to chute at the adit to be loaded into cars hence no station will be required.

(2) Shaft workings The shaft will be worked 2-shifts per diem, 1-shift drilling and blasting, the other shift mucking with Criderman shaft mucker and timbering. Estimated @ 4-feet per diem will require a minimum of 62-working days or in order of 3½-months. Allow 1-extra month for additional work establishing bin and station at Shaft collar.

Crosscuts at Shaft levels will not be started until the Shaft is completed to 250-foot point. Four hundred feet drift at 135-level will require in order of 40-working days and in 230-level 600-feet drift an additional 60-working days a total of about 5-months time.

(3) Mill planning and construction would probably start

during later stages of Upraise and Shaft developments, possibly within 5 or 6-months. Stope preparation will start during drift progress and ore stockpiled awaiting mill completion.

Ore Values Today's silver and gold values are 158% of the 1907-1942 years when Elko Prince and Miners Gold were producing.

Unfortunately the Miners Gold records are lost to present owners hence, except for the few samples from the short "Drift A" we have no assays on which to calculate Miners Gold ore reserves. It is estimated that shipping ore at $50 to $200 per ton can be put into production within two months after starting operations. Information from Heikes, Geologist in charge of Yale operations and Simpson and Warren who conducted the work and had access to the original records indicates that the various oreshoots in Miners Gold should yield an average of about $40 per ton inclusive of high grade and low grade ore.

Examination shows that the vein exposed in the Adit tunnel comprises brecciated quartz and country rock stained by iron oxide. Its metal content could only be determined by assaying. It is obvious that Miners Gold should be systematically sampled to allocate the various ore shoots exposed along it.

Production Possibilities On basis of $40 per ton millheads at 50-tons per diem for 300-days per year the following operating profit is indicated:

Per ton	Per day	Per month	Per year
$40.00 millhead			
4.00 estimated mill loss	$2000	$60,000	$600,000
$36.00			
.90 2½% royalty	$1800.	$54,000	$540,000
$35.10			
14.00 estimated mine and mill costs			
$21.10			
.42 2% State production tax	$1055	$31.600	$316,500
$20.68 Net operating profit	$1030	$30,900	$309,000

There is good chance that as development progresses the ore disclosures may warrant increasing the mill capacity at least up to the early day 75-tons per diem. There appears probability that income derived from high grade ore shipments may provide profitable return prior to starting mill operation.

ORE POSSIBILITIES Lacking basic sampling data makes an ore estimate largely a guess. However it is suggested that a rough estimate may be made by comparison of Elko Prince stoped areas and production therefrom vs. the undeveloped areas bordering vein exposure in the various Miners Gold and Elko Prince workings shown on accompanying Longitudinal Section It is suggested that these presently

undeveloped areas be reduced at least 2/3 as a precautionary measure. Elko Prince mine's extensive stoped areas and its bottom level assays provide an acceptable basis for this method of calculation.

Elko Prince stoped areas measure in order of 560,000-sq. ft. Its unmined area down to the 900-Level measures about 900,000-sq. ft. At 1/3 this would be 330,000-sq. ft.

The Miners Gold unmined areas adjacent to vein exposures in the Adit Tunnel and "Drift A" measure in order of 880,000-sq. ft. down to horizon of Elko Prince's 900-Level. At 1/3 this would be 293,000-sq. ft. The area adjacent to the vein where it is off Yale Tunnel measures in order of 550,000 sq. ft. which at 1/3 would be 164,000-sq. ft. This latter unexplored area is not given status until it has been opened. It is expected to provide appreciable ore shoots along it.

Thus we have about 621,000 sq. ft. of possibly orebearing vein which amounts to 110% of Elko Prince production estimated at $3,000,000 which at today's metal prices would amount to about $4,750,000. The indicated potential of the combined mines is possibly in order of $5,500,000 gross which, on basis of $40 ore would yield about $2,270,000 net operating profit. In addition are ore possibilities to be explored in depth below the 900-Level in view of the $75 and $134 ore values noted in the two winzes extending down from Elko Prince 750-Level The above estimate is indicative only and is contingent upon Miners Gold sampling results.

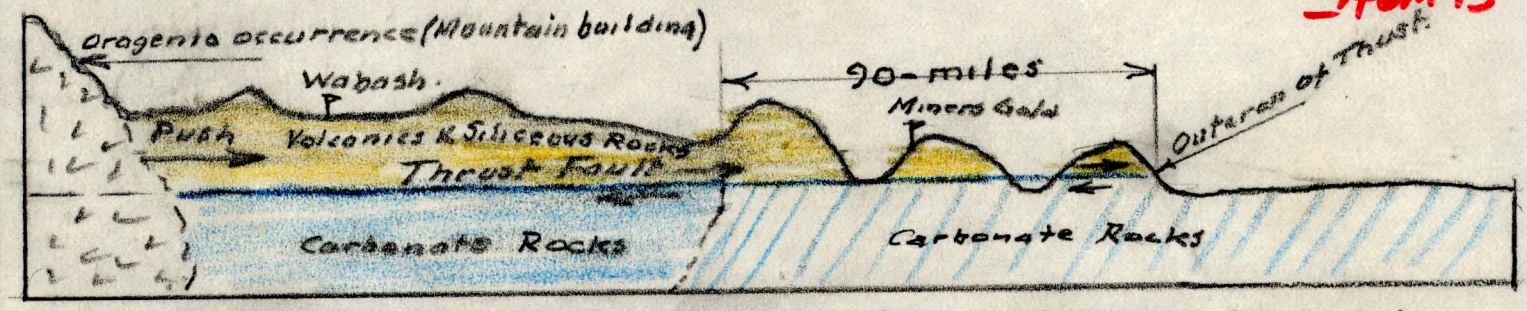
REFERENCES

(1) Bulletin No. 25 Nevada Bureau of Mines, 1920. Edw. W. Rott Jr. Gold Circle Geology and ore characteristics.

(2) Nevada Bureau of Mines Bulletin 65, 1964, "Mineral and Water Resources of Nevada".

(3) Geo. C Heikes, Geologist, San Jose, Calif. Consulting Geologist for Yale Mining Co. in a letter to the company June 24, 1960. "The present Simpson crosscut should be immediately driven through the vein, the a drift easterly undertaken. The vein may be an extension of the Elko Prince vein and, if it is, should be at least 1000-feet of hitherto unprospected vein to explore. I expect you will find several good ore shoots in this area, of various sizes and intensity of mineralization, mostly silver, some gold.----- "Suppose the mined grade of ore diluted was $40 silver and gold recoverable value, there would be several years of ore developed"

(59)
From 13



ILLUSTRATING EFFECTS OF ROBERTS MOUNTAINS THRUST FAULT (No Acale)

The chief tectonic (Rock structuresdirectly attirbutable to earth movementsinvolved in folding and faulting)feature of Nevada is the effect of the great Roberts Mountains Thrust fault (whereby the block of rocks in the upper plate is pushed as result ofstresses developed in the earth's crust by orogenic (mountain buildingO ocurrences. These pushed masses of upper volcanics and siliceous rocks 90-miles eastward over older carbonaceous rocks as illustrated above.

The great premineral shift of this Roberts Mountains Thrust caused wide disturbance in both the upper and lower plates resulting in extensive faults, fissures, shearages and brecciated zones that afforded access for mineralizing agencies and deposition of orebodies within them in each of the upper and lower plates. The tendency of the moved, upper plat, would be to form ore veins, and large orezones of brecciated and sheared formations some of which provide very important orebodies as witnessed by the recent Newmont huge scale operation in Lyn Valley where less than 50,000 ounces of gold and no silver had been taken out.

Plate 13 herewith shows that (1) the great majority (probably over 95%) of Nevada mineral deposits (inclusive of Tonopah, Goldfield, Comstock, fromwhich over a billion dollars of ore has been takenO form in the fault's upper plate, west of the fault's outcrop, and essentially in volcanic and siliceous rocks, though some limestone is found at the large Yerington Copper Camp. (2) That the various mineral deposits form in belts, the most prominent one coursing northeast from the large Yerington copper area through Comstock and up to the important Mountain City copper-silver-gold area. (3) This belt is joined or intersected by at least five northwest trending belts that include Tonopah, Goldfield, the recently disclosed Newmont gold mine (second only to Homestake in the United States) Unionville, Battle Mountain, Gold Circle, etc. (4) that "cross roads occur where the belts cross (as at Gold Circle with 126,726-ounces gold and 1,630,265-ounces silver record $6,538.455 at today's silver-gold prices) It is considered that these cross roads form an especially favorable locality for ore concentration, though good orebodies are found outside the "cross roads" such as Mountain City, Tuscarora and others that have produced important ore.

20900073

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Item 13

LEASE

THIS LEASE entered into this 6th day of April, 1956, by and between Miners Gold Mining Company, a Nevada corporation, hereinafter known as lessor, and James K. Carden of Salt Lake City, Utah, hereinafter known as lessee.

W I T N E S S E T H:

WHEREAS, lessor is the owner of the following unpatented lode mining claims located in Gold Circle Mining District, Elko County, Nevada, recorded in said county and more fully described as follows:

Name	Date Located	Recorded - Book and Page
Gold Queen	9/21/22	Book 6, Page 105
Silver Queen	9/21/22	Book 6, Page 104
Crown Point	9/21/22	Book 6, Page 106
Black Butte	9/21/22	Book 6, Page 103
Gold Standard	3/18/32	Book 22, Page 499
Free Coinage	3/18/32	Book 22, Page 498
Treasury Vault	3/18/32	Book 22, Page 496
Gold Coin	9/15/32	Book 22, Page 656

WHEREAS, lessee desires to enter upon and develop the said premises under a lease from the lessor,

NOW, THEREFORE, in consideration of the covenants mutually to be performed , lessor leases the above described premises to lessee for a period of twenty (20) years from the date hereof, and under the following terms and conditions:

1. Lessee agrees to do sufficient work upon the premises to satisfy the annual assessment requirements, and further agrees to file all necessary notices in connection therewith.

2. Lessee agrees to pay lessor a royalty of 7½% of the net smelter or mill returns on all ore mined and shipped from the premises.

3. Lessee agrees to operate the property in good minerlike fashion, comply with all of the laws, both Federal and State, post all necessary notices and to save the lessor harmless in the event of any liability arising out of the operation of the premises.

4. It is mutually understood and agreed that the violation of any provision contained herein shall constitute a forfeiture of this lease and lessor agrees to give lessee thirty days written notice of an intent to declare

a forfeiture, and lessee shall have thirty days within which to correct such violation. In the event a violation is not corrected within 30 days after written notice is received from lessor by lessee, then this lease and agreement shall be forfeited and the lessee shall have an additional 30 days within which to remove their machinery and equipment from the premises.

5. Lessee shall have the option to renew this lease for a like period on written notiolation within 60 days prior to the termination of this lease.

6. This lease shall be assignable and binding upon the successors and assigns of the parties hereto.

IN WITNESS WHEREOF, The parties hereto have set their hands and seals the day and year first above written.

MINERS GOLD MINING COMPANY

By _____

Lessor

_____

JAMES T. CARDON

Lessee

AMENDMENT

Net mill or smelter returns shall mean the amount paid by the purchaser, plus all bonus and premium payments made by the U. S. Government or its agencies; less treatment, freight, trucking, assaying and sampling charges.

In the event lessee, successors or assigns, engages in the milling of ore upon the premises, then the royalty shall be 2½% of the amount paid by the purchaser for concentrates or metals, less treatment, freight, trucking, assaying and sampling charges.

ASSIGNMENT OF LEASE

FOR TEN DOLLARS ($10.00) and other good and valuable consideration, receipt and sufficiency of which are hereby acknowledged, JAMES K. CARDON hereby transfers, sets over and assigns unto WHITNEY C. HANSEN an undivided one-half (1/2) interest in and to that certain Lease Agreement dated April 6, 1956, by and between Miners Gold Mining Company, a Nevada corporation, lessor, and James K. Cardon, lessee, covering the unpatented lode mining claims located in Gold Circle Mining District, Elko County, Nevada, recorded in said county and more fully described as follows:

Name	Date Located	Recorded - Book and Page
Gold Queen	9/21/22	Book 6, Page 106
Silver Queen	9/21/22	Book 6, Page 104
Crown Point	9/21/22	Book 6, Page 106
Black Butte	9/21/22	Book 6, Page 108
Gold Standard	3/18/32	Book 22, Page 499
Free Coinage	3/18/32	Book 22, Page 498
Gold Coin	3/18/32	Book 22, Page 684
Treasury Vault	3/18/32	Book 22, Page 498

WITNESS the hand of the assigner, this 5th day of March, 1957.

James K. Cardon

STATE OF UTAH)
: ss.
COUNTY OF SALT LAKE)

On this 5th day of March, 1957, personally appeared before me James K. Cardon, the signer of the foregoing instrument, who duly acknowledged to me that he executed the same.

Notary Public
Residing in Salt Lake City, Utah

My Commission Expires:
June 27, 1960

File No. 10420
FILED FOR RECORD
AT REQUEST OF
James K. Cardon
MAR 7 8 51 AM '57
RECORDED BOOK 28 PAGE 73
RUTH GRISWOLD SABALA
ELKO COUNTY RECORDER

ASSIGNMENT

For and in consideration of $750.00 (Seven Hundred Fifty Dollars) I, Whitney C. Hansen, do hereby sell and assign all my right, title, and interest in the following described Lease, known as MINERS GOLD, including all improvements and other properties: To John M. Simpson, David J. Haslam, Sr., and Archie T. Smith.

LEASE

"This lease entered into this 6th day of April 1956, by and between Miners Gold Mining Company, a Nevada Corporation, and James K. Cardon of Salt Lake City, Utah. Miners Gold Mining Co. is lessor. Cardon Lessee.

WITNESSETH:

Whereas, lessor is the owner of the following unpatented lode mining claims located in Gold Circle Mining District, Elko County, Nevada, recorded in said county and more fully described as follows:

Name	Date Located	Recorded- Book & Page
Gold Queen	9/21/22	Book 6, Page 105
Silver Queen	9/21/22	Book 6, Page 104
Crown Point	9/21/22	Book 6, Page 106
Black Butte	9/21/22	Book 6, Page 103
Gold Standard	3/18/32	Book 22, Page 499
Free Coinage	3/18/32	Book 22, Page 498
Treasury Vault	3/18/32	Book 22, Page 497
Gold Coin	9/15/32	Book 22, Page 696

Whereas, lessee desires to enter upon and develop the said premises, under a lease from the lessor, " etc.

A copy of the original lease shall become a part of this assignment.

Whitney C. Hansen

Whitney C. Hansen

JUL 22 1957

Witness:

John T. Ernst

(59)
Item 13

ASSIGNMENT OF LEASE

THIS ASSIGNMENT Made and entered into by and between John M. Simpson and Mary Simpson, his wife, James K. Cardon, a single man, David J. Haslam, Sr. and ERMA L. Haslam, his wife, and Archie T. Smith, and Kathryn Y. Smith Smith, his wife, all of Salt Lake City, Utah, hereinafter referred to as "Assignors", and Yale Gold Mining Company, a Nevada Corporation, with its principal office at 901-907 Walker Bank Building, Salt Lake City, Utah, hereinafter referred to as "Assignee".

WITNESSETH, THAT, WHEREAS, on the 6th day of April, 1956, a certain mining lease was entered into by and between Miners Gold Mining Company, a Nevada Corporation, as Lessor, and James K. Cardon, as Lessee, covering the hereinafter described unpatented lode mining claims, which agreement was duly recorded in the County Recorders' Office of Elko County, Nevada, in Book 28 at page 23, and

WHEREAS, on the 5th day of March, 1957, an assignment of the above described lease was entered into by and between James K. Cardon as Assignor, and Whitney C. Hansen, as Assignee, wherein James K. Cardon assigned an undivided one-half (1/2) interest in and to the above described mining lease and to the hereinafter described unpatented lode mining claims, which assignment was duly recorded in the County Recorders' office of Elko County, Nevada, in Book 28 at page 25, and

WHEREAS, on the 22nd day of July, 1957, an assignment was entered into by and between Whitney C. Hansen, as Assignor, and John M. Simpson, David J. Haslam, Sr., and Archie T. Smith, as Assignees, wherein the said Assignor assigned all of his right, title and interest in and to the above described mining lease and to the hereinafter described unpatented lode mining claims.

AND WHEREAS, the Assignee, Yale Gold Mining Company, is desireous of securing an assignment of all of the Assignors right, title and interest in and to the above described mining lease and to the hereinafter described unpatented lode mining claims.

NOW, THEREFORE, in consideration of the sum of Ten Dollars and other good and valuable consideration in hand paid to the Assignors by the Assignee,

the receipt and sufficiency of which is hereby acknowledged, Assignors hereby grant, transfer assign and set over unto the Assignee, its successors and assigns all of Assignors right, title and interest in and to the above designated mining lease and to the following described unpatented lode mining claims located in the Gold Circle Mining District, Elko County, Nevada, which claims are more specifically described in the location notices recorded in Elko County, Nevada, as follows:

Name	Date Located	Recorded in Book and Page
Golden Queen	7/2/22	Book 20, Page 199
Silver Queen	7/2/22	Book 20, Page 200
Crown Point	7/2/22	Book 20, Page 199
Black Butte	7/2/22	Book 20, Page 200
Gold Standard	3/18/32	Book 22, Page 499
Free Coinage	3/18/32	Book 22, Page 498
Treasury Vault	3/18/32	Book 22, Page 498
Gold Coin	9/15/32	Book 22, Page 656

ASSIGNORS hereby warrant that they are the sole legal and equitable owners of the rights under the above designated lease and that they have not in any manner encumbered said rights.

The rights, benefits and obligations hereunder shall inure to and extend to and shall be binding on the successors in interest of the respective parties hereto.

IN WITNESS WHEREOF, the Assignors and Assignee have executed this Agreement this 24 day of June, 1960.

WITNESS:

Roy E. Murray

James K. Cardon
James K. Cardon

John M. Simpson

David J. Haslam, Sr.
David J. Haslam, Sr.

John M. Simpson

Erma L. Haslam
Haslam

Archie T. Smith
Archie T. Smith

Michael Scott

Kathryn V. Smith
Kathryn V. Smith

John M. Simpson

Mary Simpson

ATTEST:

Secretary

YALE GOLD MINING COMPANY

By

President

STATE OF UTAH)
: ss.
COUNTY OF SALT LAKE)

On this 30th day of June, 1960, personally appeared before me a Notary Public in and for Salt Lake County, David J. Haalam, Sr., and [illegible] Haalam, his wife, and Archie T. Smith, and Kathryn V. Smith, his wife, and John M. Simpson and Mary Simpson, his wife, known to me to be the persons described in and who executed the foregoing instrument and they acknowledged to me that they executed the same freely and voluntarily and for the uses and purposes therein mentioned.

My Commission Expires:

June 1, 1961

Richard M. Hales
Notary Public, residing
at Salt Lake City, Utah

STATE OF UTAH)
: ss.
COUNTY OF SALT LAKE)

On this 30th day of June, 1960, personally appeared before me a Notary Public in and for Salt Lake County, W. H. H. Cremmer, President of Yale Gold Mining Company, known to me to be the person described in and who executed the foregoing instrument on behalf of said company for the uses and purposes therein mentioned.

My Commission Expires:

March 1963

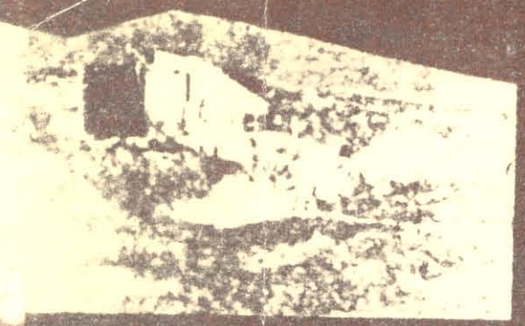
Notary Public, residing
at Salt Lake City, Utah

STATE OF UTAH)
: ss.
COUNTY OF WEBER)

On this 23rd day of June, 1960, personally appeared before me a Notary Public in and for Weber County, State of Utah, James K. Cardon, a single man, known to me to be the person described in and who executed the foregoing instrument and he acknowledged to me that he executed the same freely and voluntarily and for the uses and purposes therein mentioned.

My Commission Expires:

Notary Public, residing at
Weber County, State of Utah



Young Custom Mill

So Investors May Know

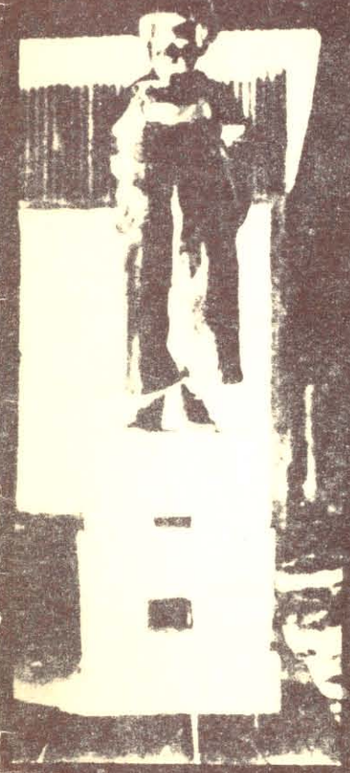
otal production of gold and silver to the value of
ly $5,000,000 by eleven mines in the Gold Circle
ict is shown by the data available. Gold was
for at $20 per ounce and silver at the average
cents per ounce. The same production now,
gold at $35 and silver at 64½ cents would ap-
imate $8,000,000, a gain of $3,000,000 for the
ucers.

he deepest mine in Gold Circle district is down
eet, the average depth of the others is around
eet. In the deep mine some of the best ore
s occur below the 200 and continue to the
ot level, where values are higher than above.
rts find no geological obstacles to the con-
nce of ore down to and below the 900-foot
in all mines.

hile the values of gold and silver have risen
d 61 per cent, respectively, the production cost
e metals in Gold Circle district is practically the
as in 1916, leaving a broad margin for profit.

ld Circle has attracted many prominent figures
in the mining world. Among those who have
ted money in the district are Charles A. Stone-
millionaire mining broker, now owner of the
York Giants ball club; Noble H. Getchel, Ne-
state senator and veteran mine operator;
S. Joseph, Utah mine developer; W. F. Snyder
s Company, associated with the National Lead
George Wingfield, Nevada mine operator and
r, and others. Jack Dempsey, late heavy-
champion, who was reared in the mining
ry, has invested some of his fortune in Gold

Gold By The TON



Gold, a ton of it, mined at Gold Circle, is shown here. It contains 29,166 troy ounces worth at $20.67 an ounce (old price) $602,861; at new price ($35 an ounce) $1,020,810. Output of Gold Circle to date would make 73 bars like those shown.

Data compiled by engineers who have examined the mines of the district indicate that this past production is but a small part of the gold that will be recovered when the mines of Gold Circle are carried five hundred or a thousand feet deeper. Moreover the new gold will command the high price and many economists foresee a further advance in the value of the metal.

Fortune Beckons to the Wealth-Laden Hills

of

Gold Circle Nevada

Guide and Manual

The World's Best Crop

Its price never falls
It never deteriorates
Its market is world-wide
It cannot be over-produced
It pays every debt
It buys every commodity
It banishes poverty
It employs labor
It stimulates industry
It rewards courage

It Is

GOLD

Issued by

CHAMBER OF COMMERCE
Midas, Elko County, Nevada
Copies on Request

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Item 13

Midas, Nevada

Town of Midas, trading center of Gold Circle Mining District, founded in 1907.

◆ ◆

HOW TO GET THERE

By automobile from California:

Leave Victory highway at Golconda, Nevada and go east 42 miles over graded and partly gravelled road.

By automobile from Salt Lake City and points East:

Leave Victory highway at Elko, Nevada, and go northwest 90 miles.

For Railroad Travelers:

Leave Southern Pacific and Western Pacific at Golconda and take mail auto stage on Monday, Wednesday or Friday.

Airplane passengers:

Leave plane at Elko, motor to Midas, or go to Golconda by rail and take stage as above.

◆ ◆

ACCOMMODATIONS AT GOLD CIRCLE

Hotel and boarding houses at Midas.

Mines of Gold Circle District

Gold Circle Consolidated Mines Co.—Mines Rex, Elko Prince, Big Chief Group (Missing Link, Grant, Jackson, Reco, St. Anthony, St. Paul) Colorado Grande. Claims, 48 acres, 1000. Deepest development, 900 feet. Production, gold and silver, $4,150,000. Average content, gold value, $15. Developed ore (engineers' estimates), $1,000,000. Owns 75-ton mill.

Miners Gold Mining Co.—Mine: Tod Adams group. Claims, 9, acres, 180. Deepest development 450 feet. Tunnel openings, 1285 feet. Production, gold and silver, $73,000. Average content per ton, gold and silver, $20. Mined ore, 6000 tons. Developed ore (engineers' estimates), 6000 tons. Probable ore (engineers' estimates), 2500 to 3000 tons per 100 feet of depth. Mill projected.

East Standard Mining Co.—Mine: Sleeping Beauty. Claims, 11, acres, 185. Deepest development, 300 feet. Tunnel, 700 feet. Production, $100,000. Average content, per ton, gold, $12. Developed ore (engineers' estimates), 20,000 tons. Probable ore (engineers' estimates), 200,000 to 800,000 tons. Owns 60-ton mill.

King Midas Gold Mining Co.—King Midas. Claims, 12, acres, 220. Deepest development, 100 feet. Tunnel, 325 feet. Production, $12,000. Average content, gold, $13 per ton.

Buena Gold Mining Co.—Mine: Esmeralda. Claims, 16, acres, 220. Deepest development, 300 feet, tunnel, 1800 feet. Production, $350,000. Average content per ton, gold 1 oz. Mill.

Gold Circle Crown Mining Co.—Mines: Banner Group. Claims, 8. Deepest development, 300 feet; tunnel, 2000 feet. Production, gold, $50,000. Average content per ton, gold (milling ore), $15.75; (high grade), $50 to $100.

Gold Circle Queen Mining Co.—Mine: Queen. Claims, 5; acres, 100. Deepest development, 315 feet. Tunnel, 1200 feet. Production, $100,000.

Golden Chariot Group—Mine: Golden Chariot. Claims, 2. Deepest development, 60 feet. Tunnel, 300 feet. Production, less than $25,000. Average content per ton, gold, $50.

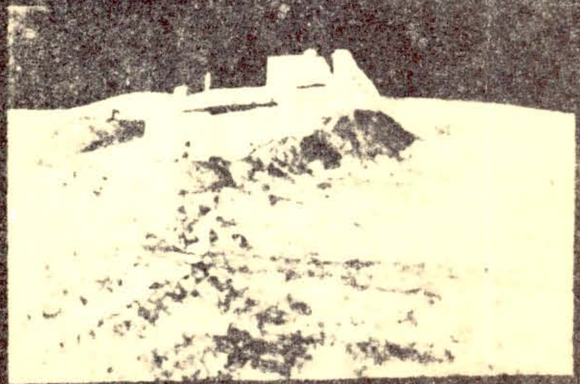
Ripsaw Mines Co.—Mine: Ripsaw. Claims, 2; acres, 40. Deepest development, 50 feet. Production, small. Average content per ton, gold, $40. Undeveloped.

Hardscrabble—Mine: Hardscrabble. Mrs. Rice, New York City, owner. Claims, [illegible]. Deepest development, 200 feet. Production, $5[illegible].

Champion Gold Mining Co.—Mine: Champion. Claims, 4. Development, [illegible] Production, bins full of ore. Operated by [illegible] H. Getchel, Jack Dempsey, and associates.

Mills of Gold Circle District

Cyanide Mill of Gold Circle Consolidated. Capacity 75 tons a day.



Amalgamation mill of East Standard Mining Company. Capacity 60 tons.

OTHER MILLS

Amalgamation mill of Esmeralda mine. Capacity 15 tons.

A 25-ton flotation plant is projected for the Miners Gold and Midas mines.

(59) Item 13

MIDAS OR GOLD CIRCLE DISTRICT.

LOCATION AND HISTORY.

The Gold Circle district is situated in the hilly country along the southeastern slope of the Owyhee Bluffs, near the edge of Squaw Valley. It is about 45 miles north of Battle Mountain and approximately the same distance from Golconda, and is connected with both of these stations by stages which make round trips three times a week. In the summer of 1907 gold was discovered on several claims, and in March, 1908, as a result of a number of rich strikes, the district experienced one of the rushes which is characteristic of the method of settlement of mining camps in Nevada. A town site was laid out at Midas, and within a few weeks some 1,500 persons were established in this town. After the first excitement had passed away a majority of the newcomers left, and in September, 1908, the population of the camp had decreased to about 250 persons. Several of the claims were under development, and a number of lodes were being prospected with more or less success. A few tons of rich ore have been shipped to smelters, but the bulk of the ore that has been developed is not of a grade to pay the shipment charges, which are necessarily high, as they include a long wagon haul. The deepest shaft is sunk 200 feet; several other shafts are down 100 feet; and three or four tunnels have been driven to depths approximately 100 feet below the surface. Ground was broken in September, 1908, for a 10-stamp custom mill, which it was planned to erect at once, and two mining companies were contemplating the erection of mills in the near future.

GEOLOGY.

General outline.—The rocks of the Gold Circle district are rhyolite flows and flow breccias which are cut by dikes of andesite and overlain here and there by andesite flows. The rhyolites, which are the oldest rocks exposed in the district, cover the greater portion of the area. They occur in considerable variety, but the most common is a light-colored, dense, streaked rock composed in the main of a glassy or devitrified groundmass which contains scattered phenocrysts of feldspar and quartz. Other phases of the rhyolite are perlitic and some are vesicular. In the vicinity of Queen Canyon, east of the Esmeralda claims, the vesicles of rhyolite are filled with amygdules of beautiful amethystine quartz.

In Queen Canyon and at several other places in the Gold Circle district the rhyolite is highly fissile and thinly bedded, presenting the appearance of a silicified shale. The shaly appearance is probably due to banding that was developed as the rhyolite flowed and is emphasized by subsequent weathering and the deposition of iron oxide along the parting planes. The rhyolites include also flow

breccias which contain many angular fragments of streaked rhyolite cemented by a matrix of glassy rhyolite. This brecciation is due to movement of the flow while it was still more or less fluid, but after a crust had formed on the surface. The brecciated rhyolite, after weathering or alteration by hot waters, may closely resemble a friction breccia along a vein, and it may easily be mistaken for ore, unless the fact that the cementing material is glass and not quartz is noted.

The andesite which outcrops at many places in the district is a dark, fine-grained porphyritic rock, cutting through the rhyolite or forming flows interbedded with it. Under the microscope it is seen to be composed of a brown glassy groundmass containing crystals of andesine and labradorite feldspar, a considerable amount of augite, some magnetite, and a little quartz. Augite and the brown groundmass are partly altered to serpentine, calcite, and sericite. The feldspars contain too much soda for basalts, and no olivine was found in any of the thin sections. Dikes of andesite in rhyolite are well exposed on the Dixie claim, about half a mile northwest of Midas. The andesite caps the rhyolite, at some places forming only a thin veneer above it, as is shown on the Iron Mask claim, 1 mile east of Midas, and on the hillside to the south of this claim. Some of the andesite is highly vesicular, and the larger portion of it undoubtedly forms surface flows, the dikes representing the vents through which the flows rose to the surface. About 1½ miles N. 15° E. of Midas, a few rods north of the Elko Prince Annex claim, there is a hill which is composed almost entirely of andesite. The rock forming the lower portion of the hill is solid porphyritic andesite; the upper 50 feet is highly vesicular and probably represents the upper portion of the same flow. Above the vesicular portion of the andesite is a bed of rhyolite, which represents a flow that was poured out subsequent to the extravasation of the andesite. In the country to the north of the Gold Circle district another bed of rhyolite was noted above andesite. Although the main mass of the rhyolite was erupted before the andesite, it is very clear that some of it is later than the andesite. This sequence is suggested also by a dike of felsitic quartz porphyry similar to rhyolite in composition which cuts andesite about one-fourth mile northwest of the Midas mine.

Hydrothermal metamorphism.—In a view of the rugged southeastern slope of the Owyhee Bluffs from the south, the Gold Circle district, including an area some 3 miles square, stands out in sharp contrast with the surrounding country. The rocks in this area are leached to a chalky white, stained to a light brown here and there by iron oxides. In the fresh glassy rhyolites which surround this area shades of pink and greenish gray predominate, the coloring matter being due to a very small amount of iron present in the glass. In the region of the ore deposits, which is in a broad way coincident with

the leached area, hot solutions have soaked into the country rock, causing devitrification of the glass and other mineralogical changes. Near the lodes, where the action was more intense, pyrite, quartz, chlorite, and sericite have been formed in the rhyolite. The few slides studied indicate that these minerals are rather closely restricted to the country rock within a few feet of the lodes and that devitrification has taken place farther away. The changes in andesite are less intense than in rhyolite; some feldspars are slightly sericitized and augite is partly altered to calcite and chlorite. Calcite, which is present in considerable quantity in the altered andesite, seems not to have formed in rhyolite, and that in the andesite may have been formed altogether by surface waters subsequent to the deposition of the ores.

Fissuring and faulting.—There has been considerable fissuring and faulting since the eruption of the rhyolite and andesite. All the ore deposits are related to planes of movement. At the Rex mine, on the Gold Circle claim, in the Sleeping Beauty tunnel and elsewhere, andesite and rhyolite are in faulted contact. The geologic sketch map (fig. 3) indicates the approximate distribution of the rhyolite and andesite. In work of a more detailed character the separate rhyolite flows could probably be distinguished and the details of the faulted structure could be worked out, but this was not done in the few days which were given to the study of the district. The lodes are plotted with a greater degree of accuracy than the boundaries of the geologic formations, which, at many places, were not traversed.

ORE DEPOSITS.

General features.—The deposits in the main are replacement veins and sheeted zones in rhyolite, which are located along prominent slickensided planes of movement. All the fissures strike northwestward and are with a few exceptions approximately parallel. In general they dip from 65° to 85° NE. In the commonest type a few inches of high-grade iron-stained siliceous ore occurs here and there along the slip planes, and in places the surrounding country rock for a distance of several feet is shattered and seamed with veinlets of quartz carrying gold. Thin drusy cavities with well-formed crystals of colorless quartz are found locally in these veinlets, and at some places this quartz is banded with a black silver-rich mineral, probably argentite. The rhyolite near the vein is devitrified, silicified, stained with iron oxide, and at many localities replaced by ore. In the St. Paul mine, where dark silver-bearing sulphides and pyrite occur in banded ribbons alternating with quartz and parallel to the walls of the vein, the deposit is a simple fissure filling, but in most of the lodes where the sulphides are shown the original openings were small and the deposition was mainly through replacement or impregnation

FIGURE 3.—Geologic sketch map of Gold Circle mining district.

of the rhyolite. The primary ore minerals are pyrite, quartz, gold, and probably argentite. The secondary minerals are quartz, iron oxide, manganese oxide, and horn silver. The gold is almost without exception associated with pyrite, with iron oxide, or with quartz highly stained with iron or manganese. At some places the sulphides begin to appear within a foot or two of the surface. The depth of the partly oxidized zone is from 100 to 150 feet below the surface.

Prospecting the lodes.—Well-defined fissures are very conspicuous in many of the replacement deposits. Some of these were formed before the ore was deposited, as is shown by the thin tabular bodies of oxidized ore which occur along some of the fissure planes and by the surfaces of the planes, which are corroded so that they do not show the polished striated surfaces that movement planes commonly exhibit. Along some of the lodes there are, however, slickensided planes which are clearly later than the ore. These are usually polished smooth and striated, and the ore along them is more or less brecciated. In some of the lodes this ore is ground to a gouge containing well-rounded fragments of quartz.

In developing a lode it is important to follow the fissures which were formed before the ore was deposited rather than those which are of later origin. In the oxidized zone it is difficult to distinguish the two classes of fissures, especially where there has been movement before and after deposition approximately along the same plane. The corrosion of the surface of the fissure and the presence of a thin tabular body of uncrushed quartz may distinguish these fissures from the slickensided planes of postmineral movement, which, in places, may carry crushed ore. Probably most of the faulting that brings the andesite into steep contact with the rhyolite took place after the deposition of the lodes, for, as a rule, such fault contacts show slickensiding or striæ, in contrast with the etched or roughened surfaces of fissures along which the uncrushed ore occurs. Where the lodes are walled on one side by the andesite they are, as a rule, highly crushed, but the andesite is relatively fresh, or at least is not nearly so much altered as the rhyolite. A faulted contact between these two rocks should be investigated with a view to finding a vein, for many of the planes of later faulting followed the zone of earlier fissuring, but it is not good prospecting to drift for great distances along faults which do not show mineralization or crushed ore, or which do not pan gold in the soil along the surface. Developments thus far have not shown any faults which cut across the lodes and displace the ore.

Ore shoots.—Notwithstanding the continued activity of lessees since the early discoveries, the search for shipping ore has thus far proved disappointing. Rich pannings and small bunches of high-grade ore are found near the surface in many places, but the present

state of the mines indicates that the production will have to come in the main from lower-grade deposits of milling ore. Some of the fissures along which the ore is found are regular and persistent, and have been opened here and there for half a mile or more along the strike, but these, where developed, do not carry ore of milling grade throughout their length, and development is not sufficient to show how extensive the ore shoots are. In the Rex mine a body of good milling ore 180 feet long has been developed on three sides to a depth of 65 feet, and there is also a considerable tonnage, partly in the sulphides, in the workings along the Gold Crown lode. A number of leases are in ore of milling grade, but these ore bodies have not been sufficiently developed to be regarded as ore in sight. On several of the undeveloped claims the surface showings seem sufficient to warrant further prospecting for milling ore.

Secondary enrichment.— The primary ore is auriferous pyrite and quartz, with which are associated a silver-bearing sulphide and other minerals. As the surface is worn away such ore is oxidized and the sulphur, together with most of the silica and iron and some of the gold, is carried away, but a larger proportion of the gold remains. As a result of this process there is likely to be a concentration of the gold in the upper part of the deposits, but to what extent such concentration has taken place in this district is not known. Some of the little seams of rich ore are solid and appear to have suffered slight change except oxidation. Some very good values have been found in the sulphide ore about 200 feet below the surface of the Gold Crown shaft, but there has been so little exploration in the primary sulphide ores that it is not possible to compare its value with that of the oxide ore.

RÉSUMÉ OF GEOLOGY.

A study of the Gold Circle district shows the following geologic history. In Tertiary time, probably in the Miocene, extensive flows of rhyolite were poured out upon a surface of Paleozoic sedimentary rocks. Subsequently the rhyolites were fissured and through these fissures andesite flows rose to the surface and covered the rhyolite. A portion of the magma remained in the fissures, forming dikes. The andesite was in turn cut by fissures which were filled with an acidic magma, of which one portion flowed out upon the surface and formed rhyolite and another portion, solidifying in the fissures, formed dikes of quartz porphyry. After the eruption of the andesite the country rock was strongly fissured, most of the planes of movement striking northwestward and dipping steeply to the northeast. Along some of these fissures auriferous pyrite and quartz with silver-bearing sulphides were deposited, the solutions dissolving portions of the country rock and replacing it where conditions were favorable with ore and other minerals. From the fissures the solutions spread

out into the country rock, causing devitrification and other changes. A second fissuring with some displacement occurred after the ores were deposited. These movements were mainly along the lodes and brecciated the quartz and sulphides. As a result, the ore shoots, which were already irregularly spaced along the earlier fissures, were strung out along a plane of later movement. As the rocks were eroded the ores were oxidized, pyrite changing to limonite, sericite and feldspar to kaolin. Hydrous silica was deposited in crevices, where it is associated with free gold and manganese oxides.

MINE DESCRIPTIONS.

Rex mine.—The Rex mine is on the eastern slope of a low ridge about a mile east of Midas. A shaft driven at an inclination of 64° is sunk to a depth of 65 feet. From the bottom of the shaft a drift is run 30 feet to the north and 120 feet to the south, with short crosscuts here and there. The lode is along a fault between rhyolite and andesite. It strikes about N. 15° W. and dips 66° W. It is a zone of crushed, silicified, iron-stained rhyolite from 5 to 16 feet wide and carries, according to C. G. Rothschild, from $5 to $28 a ton. The rhyolite is a dense, light-colored rock with a few phenocrysts of feldspar and quartz. In the lode it is silicified, iron stained, and cut by veinlets of quartz. The ore developed is highly oxidized, but a little pyrite is present in the bottom of the mine. There is a well-defined slickensided plane of movement along the foot wall between the andesite and the ore, and other fissures approximately parallel to this one cross the ore zone. The ore is restricted to the altered rhyolite, and the andesite, even where greatly crushed, is said to be barren. For this reason it seems probable that the displacement which brought the rhyolite and andesite into contact occurred after the deposition of the ore. Figure 4 is a plan of the Rex mine on the 65-foot level.

Gold Crown lode.—The Gold Crown lode between the Rex mine and Midas has been developed in a number of shafts, pits, and tunnels for a distance of nearly 3,000 feet along the strike. It is a zone of shattered rhyolite which strikes N. 67° W. and dips about 65° N. Wherever the lode has been developed there is a well-defined fissure which at some places is slickensided and carries gold values in crushed quartz. At the Snowstorm lease, at the west end of the lode, half a mile east of Midas, a vertical shaft is 84 feet deep and short levels are turned 70 feet and 84 feet below the surface. The shattered rhyolite for a width of 25 feet is said to carry milling ore. In the Climo lease, farther east on the lode, several pits and short tunnels expose a regular fissure along which some gold values have been obtained. Still farther east the lode is developed in the lower tunnel of the Gold Circle Crown Mining Company, where it is a wide zone of shattered rhyolite, through which considerable pyrite is disseminated. East of this tunnel, along the strike of the lode and higher on the hill, is a

second tunnel driven by the same company, and in this the lode is most extensively developed. The upper tunnel is a crosscut for a distance of 55 feet to a point where it encounters along the foot wall of the lode a smooth fissure that strikes S. 60° E. and dips 65° NE. This fissure is followed in the tunnel for a distance of 400 feet, and a shaft 200 feet deep is sunk in the hanging wall of the same fissure and intersects the tunnel at a depth of 80 feet. Small bodies of rich ore, from 1 to 10 inches wide, are found here and there along the fissure and the hanging-wall rhyolite is shattered, crushed, and cemented with veinlets of quartz and pyrite. A zone of the crushed rhyolite about 3 feet wide is said to be good milling ore. Some crushing has taken place since the ore was deposited, for fragments of quartz rounded by attrition are found here and there along the fissure in a mass of crushed leached rhyolite. The oxidized ore extends below the surface to a depth of about 110 feet, where the sulphides are encountered. The values in the oxidized and in the sulphide ore, so far as developed, are said to be approximately the same. The Emancipation lease is about 1,500 feet east of the Crown shaft and on the strike of the Gold Crown lode. Ninety feet below the collar of an inclined shaft driven in rhyolite there is a fissure which strikes southeastward and dips 58° NE. and carries pockets of good milling ore.

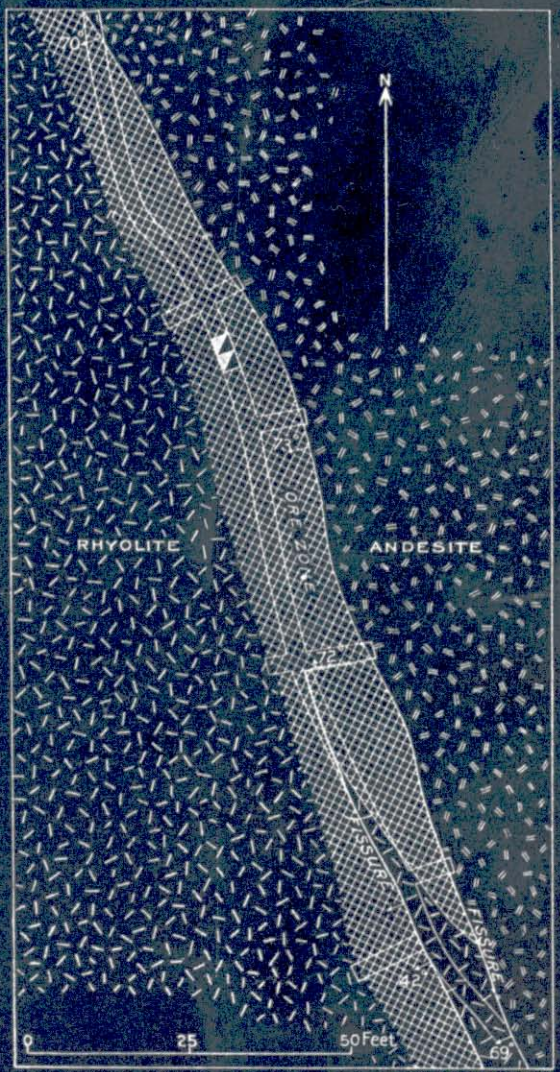


FIGURE 4.—Plan of Rex mine, 65-foot level, Midas (Gold Circle) district.

St. Paul-Banner lode.—The St. Paul mine is about a mile southeast of Midas. A shaft inclined 76° E. is sunk on the lode to a depth of 132 feet and levels are turned 60 and 120 feet below the surface. The country rock is rhyolite and rhyolite flow breccia. The rhyolite near the lode is altered to kaolin and sericite and contains small crystals of pyrite, but these are said to be barren. The lode is a simple fissure filling which has a maximum width of about 12 inches and carries high values in gold and silver. It strikes northwestward and dips steeply to the northeast. The ore is oxidized to a depth of 70 feet. Below this depth it consists of banded quartz and dark argentiferous sulphides with faint red bands that are probably ruby silver. This deposit at the St. Paul mine differs from the other ore bodies of the Gold Circle district, the ore being a banded fissure filling rather than a replacement vein. A few tons of ore carrying $100 to the ton have been shipped to smelters.

To the northwest, in the line of the strike of the St. Paul lode, exposures show values in several open cuts toward the Banner ground, and in one of these a little horn silver was found. On the Banner claim a fissure which is presumably the same as that of the St. Paul is exposed in three shafts. In the north shaft fine-grained andesite occurs on the west side of the fissure, which just north of this point passes through a flow of andesite that caps the rhyolite. On the Ripsaw claim, still farther north and in the strike of the Banner lode, a fissure with approximately the same strike is exposed in a long trench, where it dips 60° E. The Reco lode (No. 5) is 1,300 feet southwest of the Banner lode and approximately parallel to it. A shaft is sunk on a fissure in rhyolite which dips 86° E.

Golden Chariot claim.—On the Golden Chariot claim, 1 mile southeast of the St. Paul mine, three pits are sunk on the Gibson lode, which strikes a few degrees west of north and dips steeply eastward. Along the lode the rhyolite is highly shattered and stained with iron oxide. At the bottom of one of the pits there is a streak of rich ore composed of soft, rotten rhyolite, black manganese oxide, and hydrous silica, with numerous small flakes of free gold. On the Chariot vein near by a 50-foot shaft is sunk in shattered decomposed rhyolite, which carries pockets of rich ore.

Esmeralda mine.—The Esmeralda claim is about 3,500 feet south of the Golden Chariot. On the Charters-O'Byrne lease on this claim a 45-foot shaft is sunk on the promising outcrop of a lode which dips 76° SW. The strongly shattered rhyolite for a width of 3 feet along the lode carries low-grade gold ore. On the Riddle lease on the same lode, about 300 feet to the southeast, a shaft is sunk 50 feet in shattered iron-stained rhyolite, which is strongly mineralized and carries pockets of high-grade gold ore.

Water Witch mine.—The Water Witch claims are about half a mile north of Midas. In the Benan lease, on the Water Witch fraction, a

shaft is sunk in rhyolite on a sheeted zone which strikes a few degrees west of north. Along a prominent plane of movement there is from 1 to 12 inches of rich gold ore. A 3-foot zone of shattered rhyolite is said to carry $20 to the ton. The screenings of the dump are said to carry shipping values.

Elko Prince lode. The Elko Prince lode, about 1 mile northeast of Midas, is in altered rhyolite, strikes northwestward, and dips steeply to the northeast. It is developed in a shaft about 100 feet deep and in several surface pits near by. In places on the surface the lode is a sheeted zone of iron-stained rhyolite, but in the shaft it is a banded siliceous filling of an open space about a foot wide. The ore is said to carry $20 a ton in gold and silver.

Midas mine.—The Midas claim is about 1½ miles north of the town of Midas. A shaft 100 feet deep is sunk in rhyolite on a sheeted zone which is from 2 to 5 feet wide and is said to carry $8 to the ton in gold. The rusty ore from a small pay streak shows numerous specks of free gold.

Gold Circle claim.—The Gold Circle claim is about 1,200 feet northwest of the Midas. A zone of crushed silicified and highly iron-stained rhyolite along a fault between andesite and rhyolite pans free gold liberally. This deposit was discovered only a few days before the camp was visited by the writer and not more than 10 feet of work had been done.

Belvoir claim.—On the Belvoir claim, one-half mile south of the Midas, a sheeted zone of rhyolite is exposed in small pits and trenches. Some of the small fissures are filled with crushed rhyolite, cemented with iron-stained quartz which carries gold and silver.

Eastern Star mine.—The Eastern Star mine is on Frazier Creek about 4½ miles east of Midas, in an area of white devitrified rhyolite which is similar in appearance to that of the Gold Circle district. The two bodies of leached rhyolite are not directly connected, however, for a large area of fresh vitreous rhyolite lies between. A tunnel is driven northward for 160 feet along the strike of a zone of silicified iron-stained rhyolite which outcrops boldly on the summit of a low ridge. It is cut by three or four parallel veinlets up to 10 inches wide, which carry ribbons of quartz and argentite and in places show a liberal amount of free gold. Between the veinlets and for some distance on either side the rhyolite is impregnated with finely divided pyrite and other opaque minerals, so that a considerable mass of it is as dark as andesite.

INDEPENDENCE RANGE.

GENERAL FEATURES.

The Independence Range is a compact group of lofty mountains east of the Owyhee Bluffs and separated from them by a low pass

59 Item 13

Opposite Spruce Mountain are the Ruby Mountains, very little prospected, but reported to show good copper values. Dolly Varden, in the Antelope Range and about 100 miles south of Wells, has some good copper prospects.

Railroad district.—This old camp of 1869–1881 had two producers in 1907. The Standing Elk mine of the Nevada Bunker Hill Mining Company was worked by lessees, who shipped to Salt Lake City 22 cars, averaging 20 ounces of silver, 10 per cent of lead, 5 per cent of copper, and 5 per cent of zinc. The company has a wagon haul of 10 miles to Raines siding on the Eureka and Palisade Railway. The camp is 28 miles from Elko, and connected with that place by a good wagon road. The Sweepstake-Como mine made several shipments in 1907, and in 1908 opened up some higher grade ore. Development has gone on steadily.

Tecoma district.—Tecoma, on the Southern Pacific Railroad, is about 60 miles from the Utah line. During the summer of 1907 there was quite a rush into this country, and the whole district from the railroad to Contact was staked out. N. S. Jackson shipped considerable lead ore from his mine 10 miles north of Tecoma.

Gold Circle district.—At Gold Circle, 60 miles north of Golconda, is another new camp of the last few months of 1907. An area of 12 square miles was covered with claims in September, 1907. The ore is found in a honeycombed quartz with hematite and carries high values in gold. The ore is free milling and water is abundant. Not only are the ledges reported to be rich, but the placers are expected to be very productive. Wood is scarce and the winters are cold. During the spring of 1908 considerable work was done at this camp, to which the Post-Office Department has given the name of Midas. It is reported that ore was shipped from several properties, and the Gold Crown Mining Company has erected a mill. Other properties are the Golden Chariot, the Elko Prince, and those of the Nevada Gold Circle Mining Company. The camp lies on Rock Creek in a straight line between Golconda and Tuscarora, and near the old post-office at Fairlawn.

ESMERALDA COUNTY.

Metallic production of Esmeralda County, Nev., in 1906 and 1907.

Year.	Gold.		Silver.		Copper.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Fine ounces.		*Fine ounces.*		*Pounds.*	
1906	344,677.63	$7,125,119	141,975	$95,123	180,000	$31,740
1907	412,813.72	8,533,617	101,789	67,181	105,274	21,055
Increase (+) or decrease (−).	+68,136.09	+1,408,498	−40,186	−27,942	−74,726	−13,685

Year.	Lead.		Zinc.		Total value.
	Quantity.	Value.	Quantity.	Value.	
	Fine ounces.		*Pounds.*		
1906	676,510	$38,561			$7,293,543
1907	67,585	3,579	543	$32	8,625,164
Increase (+) or decrease (−).	−608,975	−34,982	+543	+32	+1,331,921

Gold Creek district. A small placer cleanup was made in the Gold Creek district in 1909.

Gold Circle district. The mine production of this district in 1909 was 1,815 tons of ore which yielded $88,635 in gold and 3,717 fine ounces of silver, with a total value of $90,568. This district began producing in 1908 with a yield of 245 tons of ore, which contained $36,561 in gold, and 1,172 fine ounces of silver, having a total value of $37,182 and an average yield per ton of $151.76. With the completion of local mills less high-grade ore was hauled to railroads and shipped to smelters in 1909 and increased quantities of lower-grade ore were milled so that the average recovered value per ton dropped to $49.90, and the value of the ore sent to mills averaged $36.44 per ton.

In this district, according to W. H. Emmons:

> The deposits in the main are replacement veins in sheeted zones in rhyolite, which are located along prominent slickensided planes of movement. All the fissures strike northwestward and are with few exceptions approximately parallel. In general they dip from 65° to 85° NE. In the commonest type a few inches of high-grade iron-stained siliceous ore occurs here and there along the slip planes, and in places the surrounding country rock for a distance of several feet is shattered and seamed with veinlets of quartz carrying gold. Thin drusy cavities with well-formed crystals of colorless quartz are found locally in these veinlets, and at some places this quartz is banded with a black silver-rich mineral, probably argentite. The rhyolite near the vein is devitrified, silicified, stained with iron oxide, and at many localities replaced by ore. * * * The gold is almost without exception associated with pyrite, with iron oxide, or with quartz highly stained with iron or manganese. At some places the sulphides begin to appear within a foot or two of the surface. The depth of the partly oxidized zone is from 100 to 150 feet below the surface.[a]

The largest producing mine in the district was the Esmeralda, most of whose output was milled by the American Ore Reduction Company. At the Gold Circle claim "a zone of crushed silicified and highly iron-stained rhyolite along a fault between andesite and rhyolite pans free gold liberally."[b]

At the Queen mine, the second producer in the district, some ore was reduced in the company's own 4-ton muller mill and some smelter shipments were made.

Jarbidge district.—Jarbidge is the name given to a new district in the northern part of Elko County. The district lies east of north of Charleston and east of Rowland in the rugged country at the headwaters of Jarbidge River. The first announcement of the new discovery was made in October, 1909, and the usual rush followed, but the ground was covered with snow and little prospect work was attempted until the following spring. The elevation at Jarbidge camp is about 6,400 feet, but the prospects are in some cases much higher as the area is extremely precipitous. Development work has been retarded by the lack of transportation facilities, as supplies must be freighted in from Twin Falls, Idaho, 90 miles distant over a rough country and at a prohibitive cost. It is planned to build 17 miles of new road to Charleston, and thus afford a 65-mile haul to the main lines of the Southern Pacific Company and the Western Pacific Railway Company at Deeth.

Railroad district.—The mines of Railroad district, at Bullion, 12 miles southeast of Palisade, supplied to smelters a small tonnage of ore and concentrates, which yielded $833 in gold, 2,061 fine ounces of silver, 5,116 pounds of copper, and 38,535 pounds of lead, with a total value of $4,227. In 1908, from this district, 649 tons of ore yielded a

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[a] Emmons, W. H., Bull. U. S. Geol. Survey No. 408, 1910, pp. 50–52. [b] Op. cit., p. 57.

total value of $18,298. The mines of this section were first worked in the seventies and eighties, when the ore was reduced in two small local smelters. In 1906 the mines were reopened, and development work has resulted in ore shipments to Salt Lake smelters. Most of the production of the district has been from ore occurring as replacement deposits of lead, silver, and copper ore in marbleized limestone.

The Nevada Bunker Hill Mining Company made reduced shipments of copper-lead ores carrying small silver values. At the Elk mine of this company the ore bodies are irregular replacement veins in limestone, which intersect to form chimneys of ore. "Nearly everywhere the ore is highly oxidized. The principal ore minerals are lead and copper carbonates, copper and iron oxides, bornite, pyrite, chalcopyrite, and a copper-antimony sulphide which is probably gray copper. Quartz and calcite are the important gangue minerals; * * * "[a]

At the Sweepstake mine of the Delmas Copper Company, the silver-lead ore carried small gold and copper values, principally in sulphide minerals. Development work was done at several mines in the district.

Spruce Mountain district.—With 4 producing mines in Spruce Mountain district, 45 miles south of Wells (as compared with 1 producer in 1908), the production was increased materially. The yield from 750 tons of ore smelted, including 600 tons of lead ore and 150 tons of copper ore, was $115 in gold, 10,668 fine ounces of silver, 40,615 pounds of copper, and 201,861 pounds of lead, with a total value of $19,622. Ore from the Black Forest mines, the district's largest producer in 1909, was reduced in a 30-ton lead blast furnace on the property. The mine is opened by 8,000 feet of tunnel work. From the Spruce Mountain copper mines silver-bearing copper ore was shipped to Utah smelters.

Tecoma district.—The yield from the Tecoma district was a little larger than in 1908 and consisted of 532 tons of lead ores, bearing $169 in gold, 5,469 fine ounces of silver, 85 pounds of copper, and 314,861 pounds of lead, with a total value of $16,563. The principal producer, the Jackson mines, were developed by 200 feet of work.

Tuscarora district.—The yield from cyaniding old tailings in this district was about equal to the recoveries in 1908. Hydraulic operations by the Nevada Hydraulic Mining and Milling Company resulted in a placer clean up in this district in 1909. Placer deposits were first discovered in this section in 1867, and the total placer yield to date from the district is reported to have been $7,000,000.

ESMERALDA COUNTY.

Mine production of metals and their ores in Esmeralda County, Nev., in 1908 and 1909.

Metal.	1908.		1909.		Increase (+) or decrease (−).	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Gold.....fine ounces.	289,527.76	$5,985,070	508,995.07	$10,521,862	+ 219,467.31	+ $4,536,792
Silver.....do....	438,588	232,452	1,299,090	671,527	+ 860,502	+ 443,075
Copper.....pounds.	32,500	4,290	96,907	12,598	+ 64,407	+ 8,308
Lead.....do...	500,119	24,785	1,601,854	72,751	+ 1,101,735	+ 47,966
Total.....	.....	6,246,597	.....	11,282,738	.....	+ 5,036,141
Ore output.....short tons.	208,421	[b] 29.97	468,703	[b] 24.07	+ 260,282	− [b] 5.90

[a] Op. cit., p. 93.

[b] Value per ton.

Gold Circle district.—In 1908 the new Gold Circle district became a factor in the gold output of Elko County. From 245 tons of ore from 6 mines $36,561 in gold and $621 in silver values were extracted. The average value per ton of ore sent to smelters was about $160. Only the best ore was shipped owing to the cost of wagon haul to the railroad, the lower grades being reserved for treatment at local mills which were being erected during 1908. Considerable development work was done in the district during the year by lessees, who opened bodies of milling ore reported to average from $8 to $30 per ton. Company work was confined to two or three properties. The Esmeralda mine was developed by lessees by means of a 500-foot tunnel and a 300-foot shaft. Developments at the Gold Circle Crown mine include a vertical shaft 240 feet deep and 2 tunnels, respectively, 560 and 440 feet long. At the Queen mine a portion of the ore was sent to the smelter and some crushed ore was handled in a crude rocker. The ore was extracted through a short tunnel. Development work on the holdings of the Rex Mines Company includes a vertical working shaft 100 feet deep and 1,075 feet of drifts and crosscuts. The Gold Circle-St. Paul Mining Company reported one smelter shipment and 500 feet of development work. The Gold Circle-Elko Prince Mining Company extracted some ore, but stored it until the custom mill should be completed.

Railroad district.—From the Railroad or Bullion district, southeast of Palisade, 4 mines shipped to smelters 649 tons of ore containing metallic values as follows: Gold, $965; silver, $5,309; copper, $8,887; and lead, $3,137—a total of $18,298, and an average value in all metals of $28.19 per ton.

The Nevada Bunker Hill Mining Company made a shipment of slag from their old smelter dump in addition to the regular production of silver-lead ore carrying copper and zinc. Only about a third of the ore extracted was sent to smelters. The mine is developed by a 600-foot vertical shaft and approximately 2 miles of tunnels on 5 different levels. The Sweepstakes mine, which is developed by tunnels, was operated during the year by the Delmas Copper Company. Individual operators also sent out small test shipments from this section during the year.

Ruby Valley district.—Ruby Valley is in the south-central part of the county, on the east slope of the Ruby Mountains. The National Development Company, operating the Friday mine, made a few shipments of lead ore to the Utah smelters.

Spruce Mountain district.—The Spruce Mountain Copper Mining Company was the sole producer of this district during 1908. The Black Forest Mining and Smelting Company extracted silver-lead ore in 1908, but it was stored to be smelted in the company's 30-ton lead blast furnace during 1909. Development work comprised a tunnel 1,100 feet long and about 6,000 feet of other workings. Neither the Keystone nor the Monarch mines produced in 1908.

Tecoma district.—The metallic product of this district increased over sixfold as compared with that of 1907. Shipments consisted of lead ores carrying some silver and small copper and gold values and were made from 3 mines. The Jackson group, located 10 miles northeast of Tecoma, was the largest producer and was operated the entire year; the underground developments are not extensive. The Argyle mine was operated part of the year. The ore is found at surface. A small shipment was reported from the Cleveland mine for 1908.

Tuscarora district.—A considerable tonnage of tailings were treated during August, September, and October, 1908, in the McKenzie 100-ton cyanide plant. The Tuscarora Nevada Mines Company did not work during 1908. The Hydraulic Mining and Milling Company did not begin to operate its placer mine until 1909.

ESMERALDA COUNTY.

Mine production of metals and their ores in Esmeralda County, Nev., in 1907 and 1908.

Metal.	1907.		1908.		Increase (+) or decrease (−).	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Gold.....fine ounces..	412,813.72	$8,533,617	289,527.76	$5,985,070	−123,285.96	$2,548,547
Silver.....do....	101,789	67,181	438,588	232,452	+ 336,799	+ 165,271
Copper.....pounds..	105,274	21,055	32,500	4,200	− 72,774	− 16,855
Lead.....do....	67,535	3,579	590,119	24,785	+ 522,584	+ 21,206
Zinc.....do....	543	32	.....	.....	− 543	− 32
Total value.....	.....	8,625,464	.....	6,246,597	.....	2,378,867
Ore output.....short tons..	130,441	a 66.13	208,421	a 29.97	+ 77,980	a 36.16

a Value per ton.

The total value of the metallic production of Esmeralda County in 1908 amounted to $6,246,597, or $2,378,867 less than in 1907 and $1,046,946 less than in 1906. This very large falling off was due to the decrease of $2,548,547 in value of gold output occasioned by a reduced yield from the mines at Goldfield. Much more silver was mined in Esmeralda County in 1908 than in the previous year, and the total value of $232,452 was an increase of $165,271, due to the shipments from the new producing camps of Lucky Boy, Lone Mountain, Hornsilver, and Rawhide. The first three of these districts were silver-lead producers and were also chiefly responsible for the large increase in the lead output.

Esmeralda County continued to rank first among the counties of Nevada as a producer of gold, but in 1908 it was surpassed by Nye County in the total values won from all metals. Seventy-six mines, operating in 22 districts in this county, mined 208,421 short tons of ore, of which 206,935 tons were siliceous, 96 tons were copper, and 1,390 were lead ores. The siliceous ores were the source of almost the entire gold product and of nearly 43 per cent of the silver output. The lead ores furnished only 181.31 fine ounces of gold, but 250,085 fine ounces of silver, or more than 57 per cent of the production of this metal, were won from this class of ore, which composed less than 7 per cent of the county's total tonnage. Copper ores yielded but small returns in gold and silver, and only a nominal output was reported from the placer mines of the county.

Bullion returns from 144,676 tons of ore sent to gold and silver mills showed production valued at $2,064,257 in gold and $18,830 in silver, a total of $2,083,087 for both metals, and an average recovery valued at $14.40 per ton. From this ore 307 tons of concentrates were produced, which carried $18,218 in gold and $1,404 in silver values, or an average value of $63.91 per ton in both metals. Thus the 144,676 tons of milling ore yielded, from bullion and concentrates, a total valued at $2,082,475 in gold and $20,234 in silver, or a total average value of $14.53 per ton.

There were also 61,110 tons of crude ore shipped to smelters from Esmeralda County in 1908, valued at $3,877,099 in gold and $211,775 in silver, containing in addition 32,500 pounds of copper, valued at $4,290, and 590,119 pounds of lead, valued at $24,785, or a total value in all metals of $4,117,949. The crude ore treated at smelters therefore averaged $63.44 per ton in gold, $3.47 per ton in silver, $66.91 per ton in gold and silver, and $67.39 per ton in all metals. The re-treatment of 2,635 tons of tailings gave an additional recovery of $24,313 in gold and $439 in silver.

Aurora district.—The production from Aurora district was approximately the same as in 1907, and the mine of the J. S. Cain Consolidated Gold Mining Company continued to be the only producer of any importance. All of the ore from this mine, except one small shipment, was treated in the company's 20-stamp mill in 1908. The Aurora Esmeralda Mining Company purchased all of the holdings of the California Exploration Company. The Del Monte Cyanide Company was idle throughout the year, and the property was sold to the owner of the Golden Fleece mine, at Fletcher, 5 miles northeast of Aurora. At the Summit group a tunnel was being driven to crosscut the ledge.

Bovard district.—See Rawhide district.

Buena Vista district.—A slightly increased production was reported from the Buena Vista or Oneota district, which is on the Carson and Colorado Railroad about 10 miles east of the California line. The year's shipments consisted of 109 tons of ore, carrying $973 in gold, $3,319 in silver, a small quantity of copper, and approximately 27,000 pounds of lead, with a total value for all metals of $5,523. Ore from the Brownie mine was shipped to the Sodaville mill, which is a 5-stamp plate-amalgamation plant. Development work at the Brownie mine was carried on during part of 1908. Increased shipments of silver-lead ore, carrying small gold and copper values, were made from the Indian Queen mine by the Phoenix Mining and Milling Company. The operators of the Nellie May mine, at Basalt, also shipped silver-lead ore to the smelters. The White Mountain Mining and Milling Company operated the Tip Top group throughout the year. Some high-grade ore was sacked for shipment, but the milling ore was placed on the dump. The mine is developed by about 900 feet of tunnels, drifts, and shafts.

Cuprite district.—See Hornsilver district.

The following table shows the production of metals and ores in the Goldfield district in 1908:

Mine production of metals and their ores in Goldfield district,[a] Nev., in 1907 and 1908.

Metal.	1907.		1908.		Increase (+) or decrease (−).	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Gold.....fine ounces..	406,756.16	$8,408,396	236,082.14	$4,880,251	−170,674.02	−$3,528,145
Silver.....do....	71,710	47,329	30,823	16,336	− 40,887	− 30,993
Copper.....pounds..	.....	.....	1,606	212	+ 1,606	+ 212
Total value.....	.....	8,455,725	.....	4,896,799	.....	− 3,558,926
Ore output.....short tons..	101,136	[b] 83.61	88,152	[b] 55.55	− 12,984	− [b] 28.06

[a] For the geology and mining industry of Goldfield, see Ransome, F. L., The geology and ore-deposits of Goldfield, Nev.: Prof. Paper U. S. Geol. Survey No. 66, 1909.

[b] Value per ton.

The value of the gold production from the Goldfield district in 1908 was $4,880,251, which was less by $3,528,145, or 42 per cent, than that of 1907. Likewise the silver output of 30,823 fine ounces in 1908 was 40,887 ounces, or over 57 per cent smaller than in 1907. In 1908 a small copper product was mined in the district.

The total value of all metals produced in the district in 1908 was $4,896,799, a decrease of $3,558,926 in value as compared with that of 1907. This makes the district take second place to Tonopah in total value of all metals mined in 1908, but it still retains the lead as a gold producer by a wide margin.

Twenty-three mines in 1908 produced 88,152 tons of ore, with an average value of $55.55 per ton. All except two small shipments of copper ore would be classed as siliceous ore. There were $1,084,479 in gold and $2,810 in silver won from 30,003 tons of ore treated at gold and silver mills, an average recovery of $36.24 per ton. From this ore 298 tons of concentrates were produced, carrying $16,552 in gold and $99 in silver values, an average value of $55.87 per ton. Thus there was a total average recovery of $36.79 per ton from ores sent to mills. The 58,025 tons of crude ore shipped to smelters carried $3,775,195 in gold, $13,427 in silver, and $212 in copper values, an average value of $65.30 per ton. There was also a gold saving of $4,025 from the re-treatment of old tailings in the district during 1908. It will be seen that with the advent of milling operations on a moderate scale in the district the grade of ore treated at the mills dropped from $44.90 per ton in 1907 to $36.79 in 1908, and likewise along with diminished smelter shipments, the average value per ton of ore smelted fell from $91.86 per ton to $65.30 per ton. The following table furnishes a summary of these changes noted in methods of treatment of Goldfield ores:

Ore production in Goldfield district, in 1907 and 1908, classified according to method of treatment.

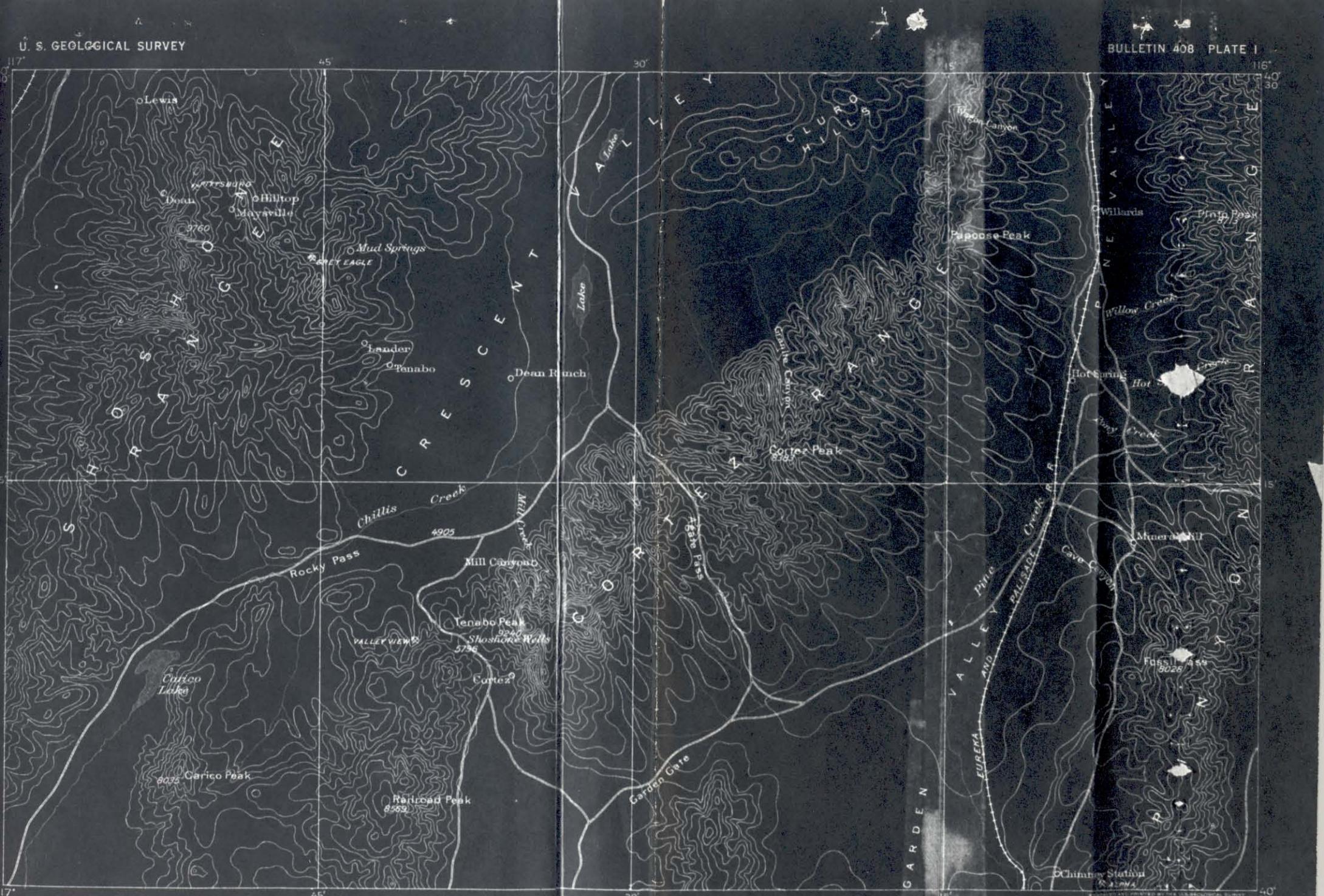
Year.	Ore to smelters.		Ore to mills.		Total.	
	Short tons.	Average value per ton.	Short tons.	Average value per ton.	Short tons.	Average value per ton.
1907	83,354	$91.86	17,782	$44.90	101,136	$83.61
1908	58,025	65.30	30,003	36.79	[a] 88,152	55.55
Increase (+) or decrease (−)	−25,329	−26.56	+12,221	−8.11	−12,984	−28.06

[a] Old tailings, 124 tons.

The following table shows production of gold and silver in the Goldfield district from the time it became productive up to the end of 1908:

Mine production of Goldfield district, Esmeralda County, Nev., from its inception in 1903 to 1908, inclusive, in fine ounces.

Year.	Gold.		Silver.		Total value.
	Quantity.	Value.	Quantity.	Value.	
1903	3,418.66	$70,670	287	$155	$70,825
1904	113,293.23	2,341,979	19,954	11,374	2,353,353
1905	91,087.76	1,882,951	8,589	5,188	1,888,139
1906	339,890.20	7,026,154	15,648	10,484	7,036,638
1907	406,756.16	8,408,396	71,710	47,329	8,455,725
1908	236,082.14	4,880,251	30,823	16,336	4,896,587
	1,190,528.15	24,610,401	147,011	90,866	24,701,267



Topography from U. S. Geological Exploration of the Fortieth Parallel
Clarence King, Geologist in charge

TOPOGRAPHIC MAP OF SOUTHERN QUARTER OF AREA SHOWN IN FIGURE 2

10 5 0 10 Miles

1909

(59)

Phone ELgin 9-9962

NICHOLS LABORATORIES, INC.
ASSAYERS & CHEMISTS
C. Ivan Nichols, Mgr.
160 South West Temple Street
Salt Lake City 1, Utah

Item 13

Mr. Jack Simpson
New Park Mining Co.
P O Box 929
Park City, Utah
242 West 3rd North, City

October 7, 1960

WE HAVE ASSAYED 3 SAMPLES

ASSAY PER TON OF 2000 POUNDS

DESCRIPTION	NO.	GOLD OUNCES	SILVER OUNCES	WET LEAD %	COPPER %	ZINC %	INSOL %	%	%	%	VALUE OF GOLD PER TO
320		0.11	24.30								
321		0.09	17.40								
322		Trace	1.40								

Neut?

CHARGES $ 6.00

C. Ivan Nichols

Phone ELgin 9-9962

NICHOLS LABORATORIES, INC.
ASSAYERS & CHEMISTS
C. Ivan Nichols, Mgr.
160 South West Temple Street
Salt Lake City 1, Utah

Jack Simpson

20 May 1961

WE HAVE ASSAYED 3 SAMPLES

ASSAY PER TON OF 2000 POUNDS

DESCRIPTION	NO.	GOLD OUNCES	SILVER OUNCES	WET LEAD %	COPPER %	ZINC %	INSOL %	%	%	%	VALUE OF GOLD PER TO
V	1	0.010	5.8	90 ft E							
	2	0.040	3.76	40 ft E							
	3	1.200	22.60	6 ft from x cut							

CHARGES $ 6.00

C. Ivan Nichols

Phone ELgin 9-9962

NICHOLS LABORATORIES, INC.

ASSAYERS & CHEMISTS
C. Ivan Nichols, Mgr.
160 South West Temple Street
Salt Lake City 1, Utah

Mr. Jack Simpson

March 31, 1961

WE HAVE ASSAYED 3 SAMPLES

ASSAY PER TON OF 2000 POUNDS

DESCRIPTION	NO.	GOLD OUNCES	SILVER OUNCES	WET LEAD %	COPPER %	ZINC %	INSOL %	%	%	%	VALUE OF GOLD PER TC
	1	0.01	3.60								
Grab	2	0.78	142.40								
	3	0.008	1.80								

CHARGES $ 6.00

C. Ivan Nichols

Phone ELgin 9-9962

NICHOLS LABORATORIES, INC.

ASSAYERS & CHEMISTS
C. Ivan Nichols, Mgr.
160 South West Temple Street
Salt Lake City 1, Utah

Mr. Jack Simpson

May 23, 1960

WE HAVE ASSAYED 1 SAMPLES

ASSAY PER TON OF 2000 POUNDS

DESCRIPTION	NO.	GOLD OUNCES	SILVER OUNCES	WET LEAD %	COPPER %	ZINC %	INSOL %	%	%	%	VALUE OF GOLD PER TC
		0.28	44.00								

Composite above Cars 2,3

CHARGES $ 2.00

C. Ivan Nichols

Phone ELgin 9-9962

ASSAY REPORT

MINERAL SERVICES, INC.
ASSAYERS & CHEMISTS
Merwin G. White, President
Don Johns, Vice-President
158 South West Temple Street
Salt Lake City 1, Utah

Western Oil & Mineral Development, Inc.
567 East 21st South
Salt Lake City, Utah

August 6, 1962

Lab # 230-6

ASSAY PER TON OF 2000 POUNDS

DESCRIPTION	NO.	GOLD OUNCES	SILVER OUNCES	WET LEAD %	COPPER %	ZINC %	INSOL %	%	%	%	VALUE OF GOLD PER TO
#166		0.250	56.3	✓							
#167		0.040	1.5								
#168		0.030	1.0								
#169		0.185	16.1			✓					
#172		0.495	91.2								
#173		0.210	49.5								
#170 - 171 Composite		0.098	9.1								

CHARGES $ 7 Samples @ $2.50 = $17.50

BY Don Johns ✓ a.l

Phone ELgin 9-9962

NICHOLS LABORATORIES, INC.
ASSAYERS & CHEMISTS
C. Ivan Nichols, Mgr.
160 South West Temple Street
Salt Lake City 1, Utah

Mr. Jack Simpson

+ cut

May 9, 1960

WE HAVE ASSAYED 4 SAMPLES

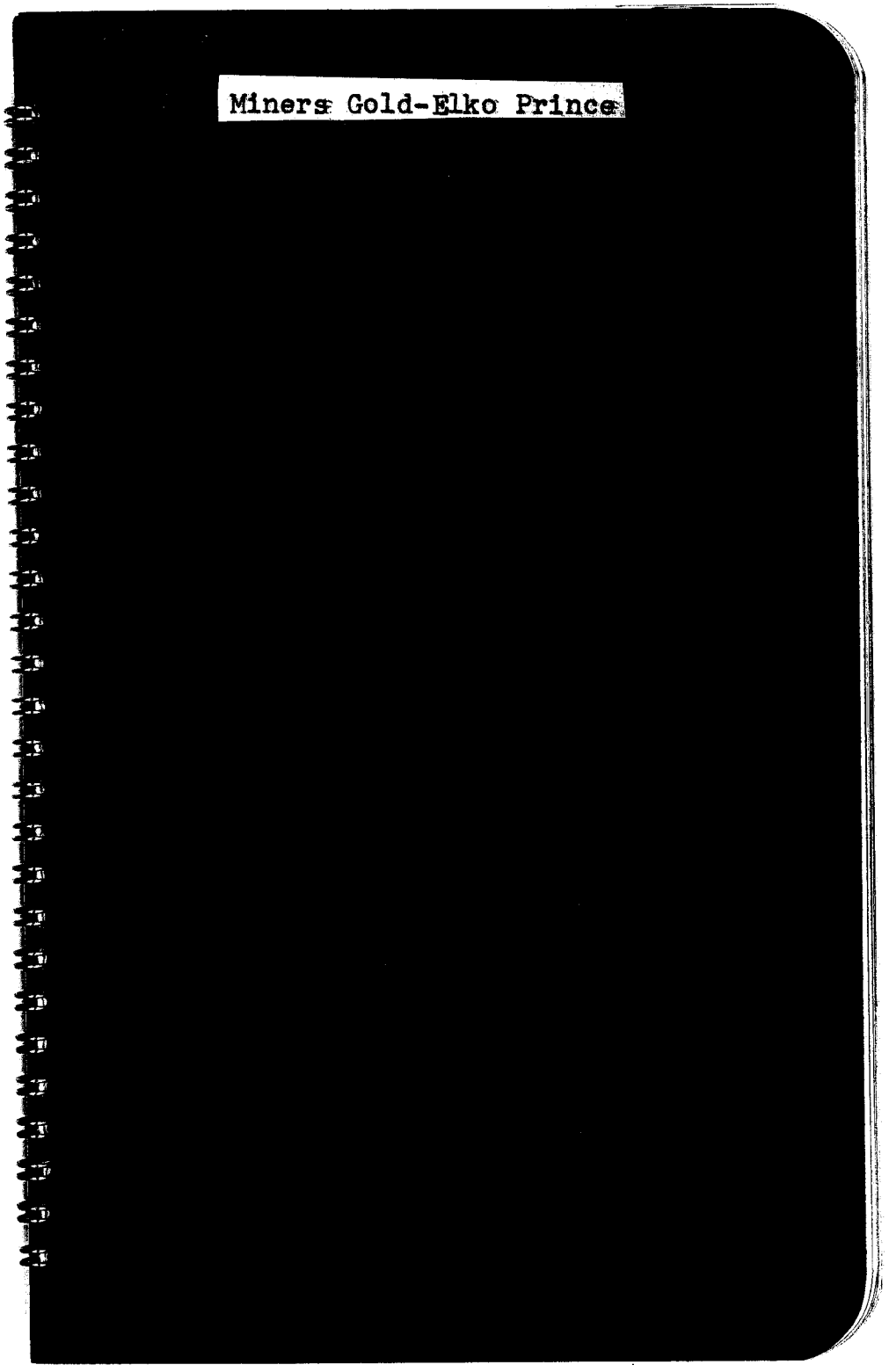
ASSAY PER TON OF 2000 POUNDS

DESCRIPTION	NO.	GOLD OUNCES	SILVER OUNCES	WET LEAD %	COPPER %	ZINC %	INSOL %	%	%	%	VALUE OF GOLD PER TO
	1	0.14	28.10								
	2	0.45	110.70	✓							
	3	0.51	117.10								
	4	0.03	2.20								

Face May 9. 1960

CHARGES $ 8.00

C. Ivan Nichols


Miners Gold-Elko Prince

(59)

Item 13

Midas - Elko. (Gold Circle M.D. T39N. R46E.)

Ore deposits of Gold Circle mining district. E.H. Roth - 1931 Nev Univ Bul {V 25 No 1}

Heikes re geology. 3/2/6

" References re Geology, production.

Univ Nev #65. refers to "Ore dep G.C. mining district E.H. Roth Jr. 1931.

Heikes quoted others.

" assays in that x-cut were Terrific"

18' in floor 2,5 ag 322 oz Ag #500.30
8' cut across back 0.12 Au 30. Ag 52.92
6' of .08 Au 23.27 Ag. 33.79

Mt. Roberts Thrust. 90 miles W

¶ Mineral Belt. - 1) an S.W. extension of Mountain City Belt & 2) N.W. Lynn - Railroad Belt. P41

Location re Mt. Roberts thrust P34.

all 1,000,000 to 10,000,000 oz. Ag

12=Midas-Elko. 13 Tuscarora.

(7) Mtn City 8 Jarbridge 9 Aura

Gold Circle production
gold. Silver
109,765 oz. 5000,000 to 10,000,000 oz.

1. References - U.S.G.S. Bull 408 (1910) p 48-57
2. Met. Min Eng. Vol. 60 (1918) pp. 78-97
"Elko Prince Mine & Mill J.V.N. Dorr

3. Nev. Mng Press Vol. 1, #15 p. 25
Vol. 2 #1 p 6 (1919)(1)

4. Univ. Nev Bul. Vol. 25 (1931) No 5. Ore dep
→ Gold Circle m. d., Elko Co. Nev ×
Roth?
5. Nev Bureau of Mines Bul 54 (1957)
p. 64. Geology Min Resources Elko Co

Geologic mapping Midas (Miners) Gold & Yale Tunnel Clay Rowley.
→ Harold Smithson 12/2/59
G.C. Heikes. 4/19/60 & 7/29/64
(get)

¶ Elko Prince is a great fissure of large displacement & downthrown on N.E side with considerable nearly hor movement. The 75 t a day Elko Prince mill (kind?) erected in 1915 burned down in 1921.
There were high grade narrow veins but most production of milling grade. Ratio of Ag to Au about
→ 10:1

Elko Prince Vein &
June Bell Vein ?

(Make a X-cut Section)

Elko Prince Dyke Vein North of E. Pr.
" Veins to South June Bell?

Cross Roads ???
Essentially Ag (10) - Au (1) in SiO_2

Elko Prince - Midas, strong fault
Prince Fault ? Feet long.

Elko Prince down deepest 900 ft, in ore
Yale Co. New company 1,000,000 Shares.
300,000 shares out to where?

Shaft Midas · deep cost.

Elko Prince Pat claim #4034 Sec 16 - T39N NW 4 R46E

Roth. Bul 75- No 5. 1931
Gold Circle also Midas district
N.E part Nevada first E of west
boundary of Elko County
45- N of Battle Mtn
52- N.E. Golconda ?
R.R. Western Pacific 35 mi S.W. (Red
House)
Topography Hilly country S. W slope
Owyhee Bluffs. between Bluffs
& Squaw Valley. Max relief
1000 ft.
History Discov 1907 camp boomed by
Mar, 1908.
6 mills 25-75 tpd. built & oper
during life of camp
R Elko Prince M Co. & Gold Circle
Cons. most extensive
1907 disc. 1908 to J&N Hoover.
50 tpd J.V.N. in 1915 burned 1922
ceased oper
1926. E.P. most promising through
by Gold Circle Cons. Mines & 75 tpd
cyanide mill by G.C. Cons
treatment started 1927 to fall 1929.

Principal prod 1927-29 from
Grant-Jackson above 775 (shallow
& missing Tech

From 1978 thru fall 1979 no new
+ production from Elko Prince
above 600 Lead principally
450-level & 300 June Bell
J-B?

Getchell ??

G.C. Corp. M reorganized absorbed
Betty O'Neill in Nev & Ariz holdings

The Co. had started dewater E.P.
shaft to 900 & plans sink to 1200
(didn't go to 1200 [illegible])

1908-1979 gross prod. # 3.000.000 +
2/3 during (1916-1922) during
which time J V N D, mill in oper
& 1/5 from G.C. Corp 1927-29.
Getchel.
Elko Prince Prince production
and History

General Geol.

Extensive Tertiary volc activity

+ flows rhy - and - basalt

~ rhy tuff — rhy brec - olivine diab

3 - major div (by lithological dif)

1 Pre-andesite rhyolite

2. Andesite flows some basalt (olivine diab)

3. Post andesite rhyolite

Acid & basic dikes cut. as young as basal post andesite

Hydrothermal alteration —

greater near veins - diminish proportional dist from them -

Faulting changed original position of flows & aided open channels hydrothermal sols. passed - these dep silica - calcite & metallic minerals comprising ore bearing veins.

Pre andesite Rhyolite (Elko Pr Rh y) differentiated from Dune Bell rhyolite & post-andesite rhy Occurs both E & W walls of EP vein at surface. & in E wall of EP vein at 300 level

Moderately hard - white - light grey

EP rhy in contact with andesite
under grd & at surface
Conformable.

Andesite no erosion interval
closely follows E.P. rhy.
greenish brown

Diabase black holocrystalline
Basalt. " "

Post andesite rhy & tuffs (white)
↑
June Bell - extensive under
ground (on 2000 ft ...
June Bell vein (ore?))
J.B. intrusion into E P rhy?
or E.P. rhy setting on erosion
surface (if intrusion younger
as are post rhy flows.

Dikes acidic & basic
Lamprophyre younger than
veins.

Structure

E.P. rhy pre-andesite age
lies conformably.
Post rhy conformable and.

During period sees headed vol activity marked by unconformity (and + post rhy). erosion cont. marked big unconformity, accompanied by pronounced faulting.

The fissures, sheeted zones & shattered zones were formed at this time & later became channels for min & metal solutions ... and depositing load & hydrothermally altering wall rx.

Some are free zones suitable loc for solution, other pronounced faults.

Faulting started & reached maximum intensity in pre mineral times.

Fault Rocks

Some min or post mineral faulting

The major fault zones & the faulting which dev. most vein openings belong to 2 periods of pre-vein faulting

1) Some fissures in which veins were dev. before major faults & have been offset by them prior to mineralization. Ore found seg of vein & along section of fault between separated vein seg.

Post-mineral faults few ft displacement (not important)

Veins - N 30-60° W - 65°-90° E dip
Some steep W dips
Major pre-mineral fault zones general E-W & steep S dip

Ore Deposits

Veins lie in highly altered area in which rx leached & bleached to chalky white. Coincides with distribution of veins

Principal veins lie in a zone from 1 & 1½ miles wide by 3 miles long in NW-SE direction
NW of this area some ore has
¶ been found which may extend the metalized zone

Veins occur in shattered zones, and sheeted zones as fissure fillings in Rhyolite, and along fractured contact between rhyolite & andesite

Vein material principally silica & brecciated wall rx, with mixed amounts $CaCO_3$ and adularia.
¶ In general fissures & sheeted zone in rhyolite form smaller veins few inches to 3-4 ft wide; shattered zones in rhy. (especial contact andesite) = larger veins 10-25 ft wide

¶ Fracturing has occurred repeatedly along these zones & vein material (as well as rx) has repeatedly undergone shearage & brecciation followed by cementation

¶ Ingeneous fissure fillings & sheeted zones form the smaller (few in to 4 ft) veins

¶ Shattered zones (especially along rhy-and contact) form the larger veins (often 10-15 ft wide some reported 20-25 ft.) Look see

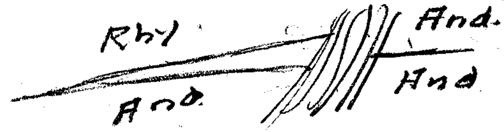
→ Tenor higher in smaller veins 12-15[?] (difficult mining) Shattered zones = mill ore

A number of veins traced 1500-3500 (depth? Elko Prince)

¶ Veins formed along open fissures & brec zones that existed during period of mineralization. These controlled distribution of veins, their physical character and length, width & trend ¶ 7

Oreshoots - Control = any factor have acted physically or chemically to aid in formation of ore shoots.

1) Grant - Jackson - formed inter section vein & a fault.



Grant-Jackson along fault contact Rhy & And = 10 ft. wide

2) Variation dip 5-10° = lenticular opening

Fault zone intense shearing 40-50 ft. wide.
H.W andesite
F.W Rhy?

Vein younger than fault

2 stages (Au) (Ag) of metalization??

Elko Prince –

¶ Vein is fissure filling along a steep fault of considerable displacement, with
Jenna Bell rhyolite on west wall and
Elko Prince rhyolite on east wall (of adit or 300 levels)

¶ Average 2-ft width
In addition to siliceous vein matter (several inches to 1 ft) of gouge developed on East wall

Walls are firm & well defined

On adit level mining for 1500 ft
¶ along vein strike
450–600 levels extensively worked
Some mining at 750 level
Wing from 750–900 level in ore
averaging $75 per ton (better prices now) Prior to 1921 ag. $62 av $70?
Pulled pumps in 1931

750–900

Main ore shoot, 600 ft long at 300
average 15"

810 ft long at 600

730 opened at 750 level
in Nov 1917 @ 30"

No definite control
Vein varies 5° up & down &
slight strike variation
None has apparent affect on med.

June Bell vein = fissure filling in Rhy
less than 1 ft.
1929 ore shoot on 300 where
small step faults affect vein
Ore shoot continued 170 ft S of
these faults to where cut by a
fault with andalusite H.W where
it (the vein) turned & followed
fault E.
Similar occurrence on 600 level
S. end E.P. vein where same
fault encountered

9 Zones of sheared and mineralized
Rhyolite of milling grade

(Plate 11A. see EP vein)

Genesis. Ore deps found in series of volcanic formations of comparatively recent age

?
At what depth below the then existing surface were these ores formed?

Mineralization took place period extensive erosion following 1st period of post andesite folding & faulting & prior to intrusion of post-andesite tuffs.
all earlier for greatly tilted & faulted prior to mine.
Ore deposited along fissures & faults developing disturb

Greatest erosion in vicinity E-P. (Midas) vein

Deposits formed at relatively shallow depths below surface (E.P. 900 level??) check

Place in epithermal type - which is type deposit in mines at Goldfield the Comstock, Tuscarora, Tonopah & other important districts of Nevada.

#

Neither ore nor gangue complex in mineral makeup. (Milling)

Pyrite Fe.S.

Stromeyerite (Ag Cu)$_2$S } ore

Native gold }

Quartz, }
Chalcedony }
Calcite } gangue
Brecciated rhyolite }
Small adularia. }

Stromeyerite principal Ag bearer
E.K. resembles argentite (Ag_2S)

Trans. pp. 26. under introduction metallic min into Vns,

pp. 29 Copy on typewriter

Emmons. pp 53, Summary

Pre-andesite Rhyolite

moderately hard - white - light gray
fine small crystals.

Andesite

greenish - brown
Feldspar - acid andesine
Pyroxene - augite

Post andesite = Freely to
sometimes impossible determine
post-andesite or pre andesite ry

Tuffs vary in character
White
soft white with green spots

Dikes - Rhyolitic or Andesitic
Lamprophyres younger than veins

Kelso Prince vein average 2-7 ft.
gouge on each wall.

9

48-57
At beginning of Midas Camp. (Aliv 1907)

Bull 408 - Wm H. Emmons 1908
Reconnaissance of Some Mining Camps in Elko, Lander & Eureka Cos Nev
Mines closed result 1907 business depression.

Production cannot be closely approx.
(Breedon hearsay)
1/2 Au - 3/4 Ag.

Rhyolites = glassy-igneous rx same chemical composition as granite
White-pink - purple & dark brown.

Andesite - brown - gray or greenish
intermediate Rhy & basalt

(Trachytes - andesites & dacites
(Spurr - Rhy - andesite - rhy - and - basalt

¶ Thickness is great" (rhyolites first & most extensive)
Andesites small amts
Rhyolites = flows.
Andesites dikes & large intrusive masses as well as flows - differ from Rhy which are flows.
Early Miocene Time than Pliocene

¶ Rx belong 2 distinct periods of volcanism
1st probably Cretaceous = granites - Mountain City - Cortez - Tenabo -
2 Tertiary - rhy - and - basalts

Ore bodies assoc. Tertiary - Tuscarora
gold circle - some Tenabo.

Metal content Ag-Au Au-Pb.
¶ Proportion Ag-Au greater in
the earlier deposits.

¶ Veins deposited by hot H_2O which
probably rose from deeper portions
of cooling intrusive mass
Hydrothermal alteration wallr.

Tuscarora veins in rhyolite

¶ In rhyolite - occur near intrusive
andesite (Check Rott.)

Dexter mine Tuscarora
Lodes of Gold Circle
Au principal metal (?? Main Res)
Small Ag present (Hill Res?)
Hydrothermal meta present in
rhyolites but less than in ande
- site - sericite pyrite, secondary
SiO_2
Ore very simple in composition
SiO_2 & FeS
Deposition in many small
openings rather than in wide open
space.

Basalts contain no ore
Rhy probably barren except where
cut by later intrusives (???)

Midas District pp 48

"a few tons of rich ore had been
✓ shipped to smelter but bulk of
ore not stand cost shipment.

Some places rhyolite highly fissile
& thinly bedded = appearance silicified
shale = due to banding when flow
enhanced deposition FeO in parting
planes.

Brecciated rhyolite, alteration Hot
H_2O closely resemble friction
breccia along veins & be mistaken
for ore unless fact cementing
material is glass & not SiO_2.
(Breccia movement flow while more
or less fluid)

Fissuring & faulting

all ore dep related to planes of
movement.
andesite & rhy in faulted contact

Ore deposits

Replacement veins & sheeted zones
✓ in (older) rhyolite along prominent
slickensided planes of movement.
all fissures strike NW - dip 65-85 NE

Primary ore minerals - Pyrite SiO_2
Au & argentite
Secondary minerals SiO_2 FeO,
manganese oxide - Horn silver.
Au assoc pyrite with FeO or SiO_2
- highly stained Fe or Mn.
partly oxidized 100-150 ft depth

Slickensided planes younger than ore

Prospecting

¶ Important follow fissures deep before ore dep rather than those of later origin.

Post mineral movements carry crushed ore

¶ Probably most of faulting that (?) brought andesite into steep contact with rhyolite took place after deposition of lodes. - showing slickensiding or striae in contrast to etched or roughened surfaces of fissures along unoredshoots ore.

Where lodes are walled on one side by andesite = highly crushed but andesite relatively fresh at least not nearly as much altered as rhyolite.

¶ A faulted contact between and & rhy should be investigated in view of finding a vein, for many planes of later faulting followed zone of earlier fissuring

→ Not good prospecting to drift for long distances along faults that do not show mineralization or crushed ore.

→ Have not shown any faults that cut across the lodes & displace ore.

Ore Shoots

¶ High grade disappointing

Production has to come, in the main, from lower grade dep. of milling ore

¶ Some (ore bearing) fissures are regular & persistent (E, P) & have been opened for 1½ miles or more along strike, but do not carry milling ore throughout their length (obviously)

Secondary enrichment

¶ Primary ore auriferous FeS & SiO₂ with which associated a Ag-bearing sulphide & other minerals.

As surface worn away such ore is oxidized & sulphur together with most of the Si & Fe and some of the Au is carried away – but larger proportion of Au remains = concentration of Au in upper part – not known what extent this district.

Some very good values in sulphide ore 700 ft below surface G.C.

6000 12000

Cost sink 2 compartment Shaft
Cleaning out & enlarging 120 ft. Shaft A.

Thence sink 340± ft to Elev 900 E.P.
@ $150 ft.
540 ft 5400
15
$\overline{\text{27000}}$ $80,000 100,000
5400

Cost per foot to drift S.E. 400 ft under
Big Stoke B. & newore C.
(Hicks assays in x cut. to "C")
~~Drift 45.~~

15)70,000 L

Jack Simpson

¶ X-cut. 117 ag .48 @ 5'

Average 2.5-3 ft width

Noble Getchel had gone East got money run deep-level tunnel from below Jackson at Midas into 840 E.P. thence planned go down to 1700 - Prices right of way too high.

Yale Mining Co. New Cpn 1,000,000
250,000
750,000

50,000
50,000
250,000 from Yale gives the Yale property in

1) Miner's option 40 year lease
7½ net smelter
2½ if milled,

2) $50,000 @ 10% royalty @ $1200 per year.

Blue Jasper 1472 10 E.P.
assessment 8 claims

¶ Big Hope crude ore, average
A.S.R. 1.86 au several thousand
35-40 ag. tons.

History 1958 Yuba Co. New Corp shares
par value;
shares issued

drove Midas Tunnel feet to
connection with NW. incline shaft E.P.
feet below E.P. 300 (adit level)
and feet above 900 (E.P. mine
bottom in # ore. (Planned to
reach to 1700 level, in 1928-79?).

Ore widths. E.P.?

300

450

750

900

Co. put up. 800.000 ± money

1) Change Portal (grade)

(To clear Shaft
2). Shaft A. 100 ft. 700 cars 1 comp.
Sinclair, slab to 2 compartment
+ 450 ft thence 2 comp shaft.)

Planned to sink from Mines
386 level to 900. Sink on

{Herb Reynolds & Geo Hicks said
when opened 4 times original
output}

Get all assays on Midas.
Helen Curtis - gave in $ 104.000
they put 104,000 & go 50-50.
Our plan
Then pay an advance royalty $ 5000
Put up $ 300.000 to sink - rehab - put
eqpt. - drift - mill

Out of production pay Yale 20
& get 80% until 300,000 repaid
Then go 50-50
Subject to default clause

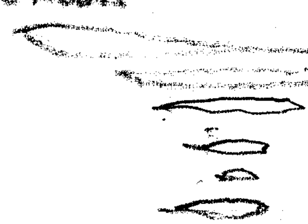
(Rotte)
Three phase silica deposition.

chalc 1) chalcedonic along breccia
movement & shattered = new open
med. coarse 2) sol entered & dep crystalline SiO_2
cementing frag chalcedon
andularia at this stage
fine 3) movement & shattering
introduction fine grain SiO_2
(Three stages silica deposition)
characterized by repeated reopening
& recementation by dep of
silica - carbonates

4) metallic const introduced
later than second phase
silica deposition

Bulk of pyrite & all other rich
minerals assoc with 2nd period
silica deposition

Older pyrite
Gold
Stromeyerite (Ag
Proustite (Ag
Chalco (?)
Sphalerite



Pyrite most persistent in all vein
matter from beginning almost
to close of metalization
Met. sol began dep native Ag with
pyrite after close 2nd SiO_2
Ag in gangue filling veinlets & cavities

Before cessation Au dep. strom
began depositing - related minerals
arc.

Tetra & proustite accomp. stron

Chalco & sphal contemporaneous
bulk of met.

Q Deposits epithermal type in
which mines of Goldfield, Comstock,
Tuscarora, Tonopah & other
important new districts.

Length E-P - Mines gold. gt.

Geol. Map. 600

Miners Gold - Elko Prince

Tunnel 365 (MG) feet
300 Elko Prince 37
~~Total Length.~~

(?) Endline E.P. 1850 ft. N.W. M.G portal
1210. ft. N.W. #300 cut
3060

S. End #600 E.P. 890 ft. S.E. cut #300
3950

Ore along Miners Gold Tunnel,
Portal = 0
¶ 1. 350-430
2. 730-850 #300,000 660 = shaft #100
3. 960-1060 x cut
Work started 478. 1154.

Vein on Elko Prince 57
Vein " Miners Gold. 77
Fault interception between 37

16 Jan 75

Elko Project

	Ft.
From SE end 600 Level to xcut.	880
xcut to NW end line	1,245
	2125

Miners Gold

SE end line to portal	1825
	3950

Jack Simpson.

✓ 1) Sec? 16? T39N-R46E MDB&M.

✓ 2) When Foxes (#140) deed Echo Prince

✓ 3) Owners Miners Gold, & address

" Echo Prince & address

✓ 4) Copies of (a) contracts MG & E.P. (b) Copies Yale registry (c) Copies Tax receipts (d) copies 1965 assess rec.

5) Water licenses?? Sources & location.

✓ 6) Distance from Winnemucca

✓ 1) Paved highway (2) County road, distance to Echo.

✓ 7) Climate - Snow depth in winter Can keep clear year round?

✓ 8) Operators 1) Echo Prince Co - Gold Circle Mining Co. - Yale ?? Any others & put in proper positions.

145 Shaft
40 drift

Joe [illegible] sample Samples

~~Feb~~ 730-6

	Au	Ag		✓
166.	.750	56.3✓	45 ft East from x-cut (A)	
167	.04	1.5	39	
168	.03	1.0	34	(2 ft wide)
169	.185	16.1✓	28	Wide at x-cut see Heiner
172	.1495	91.2✓	15✓	
178.	.710	42.5✓	0-15 East ✓	

(170-171 .098 9.1. 2 samples on floor main drift)

May 9. 60

4 samples - where x cut went into face. (see certificate

Going. West

0.78 44.00 6 ft West of x cut

March. 31, 1961 3 samples

.01	3.60	✓ grabs from cars.
0.78	142.40	
0.008	1.80	

Oct. 16. 1960

3 samples.

Check samples along drift (Xcut A.)
to East

0.11	24.30✓	}
0.09	17.40✓	}
Tr	1.40	}

Miners Gold Stopes.

A stopes near portal High grade pockets shipped direct. Also Jewel stope — Big stope milled at Esmeralda & small mill at portal (Amalg. Table) hi grade to ship direct.

Wren

Ore left in big stope $40

grade in drift (Xcut A) $80.

---

(1) Ownership — What is property leased

(Miner's Gold M. Co.) (SEG. Co.)

Miners Gold Lease, 20 years from April 6. 1956. with option for 20 more to Jas. A. Cardon. Salt Lake City 10 [illegible]. (cheat

Yale M. Co. bought out all leases on Miner's Gold June 30. 1960

~~Yale Co do assessment (no patented claims)~~ (Hansen's

Elko Prince sold by Battle State Bank. Mg. [illegible] to Jno M & Mary Simpson. (They are the owners)

~~Cancelled Assignment to Yale Gold M. Co.~~

~~Miners gold Hansen assigned right to Simpsons~~

Yale Gold owns Miners Gold.

Jno & Mary Simpson own Elko Prince will assign to Yale (or ?) if a deal is made.

Yale Gold. M. Co.

Simpson 100,000

Warren 50,000 shares.

210,000 shares out of 1,000,000

X Mill

Production according to Gold Circle Guides Manual

X Gold Circle Cons. (Elko Pr)		($4,150,000) ??
Miners Gold	900 ft. @ $15, 450. @ $20 (6000 mined)	73,000 ??
X East Standard	300 @ $12	100,000
King Midas gold	100 @ $18.	12,000
X Buena Gold M.	300 @ 1-oz Au	350,000
Gold Circle Crown	300 @ $15.75 DA $50-$100	50,000
Gold Circle Queen	315 @ ?	100,000
Golden Chariot	60' @ $50	75,000 -
Ripsaw Mines	50' @ $40	?
		541,700

Outline Gold Circle $4,137,417

4,137,400) 541,7000 (13%
4137400
12796000
12412200

Indicated that Elko Prince produced at least 80% of Gold Circle prod.
say, 126,726 Au 1,630,268 Ag 13-1
8 8
1,013,808 Au 1,304,214,4

say 101,000 oz Au = $3,535,000 @ $35.00
1,304,000 oz Ag = 1,681,600 @ $1.29
$5,216,600 today

Lacking detailed report, est as above.

401,752) 126,726 Au .315 @ 92% 0134 $11.90

401,752) 1,630,268 Ag 4.05 @ 90% 4.5 - $6.10

$18.00

Plan in sequence.

Mucking machine

Crowderman Shaft mucker - various

minimum size

18-ft ahead timber.

Production. Gold Circle district

Silver - 1.000.000 - 10,000.000 #14

Gold 109.755 #

Less than 500 tons of lead or zinc

1908-1949 - gold circle 401,752 tons of ore containing 176.776 oz au 1.630,266 oz ag Total $4,137,417 (Mineral Resources & Mineral's year book.) (13.3 oz ag to 1-oz au)

(Midas Brochure), - gold Circle Cons. $4,150,000!! Average au #15 New ore $1,000,000!! 75-Ton mill Elko Prince.

Miners Gold Prospect area 460-ft. Tunnel open 1285 ft. Production $73.000 Aver $20. mined ore 6000 Tons

Engineers est 2500-3000 tp/100 ft depth

Miner's Gold lease. Apr. 6, 1956.

7½% net smelter or mill returns of ore shipped from the property

Royalty 2½% if not as above.

(See contract

Notes to do -

Get copies assessment 1965-66 Midas
" " Tax receipts, 1965-66 Elko,
" release Yale M. Co. to J. & M. Simpson
" Tax receipts for 24 blocks in Midas
Patent survey plats -
Miners Gold M. Co. (who?)
Did miners gold merge into Yale?
Or was sequence, miners gold - gold circle - Yale?,
Must clear up title.

Wren's letters - Haines letter
Where mill?
When $35 Au?
Where H_2O for mill
Claims N.W. of Miners Gold,
Elko Prince whp inaccessible - be opened @ 900 level by drift from miners gold shaft.

Ground H2O at 750 level.

Elevations vary from 5600-ft 7200 ft above sea level.

Miner's Gold Adit 6564.
Elko Prince No 300 Adit 6693.
Eagle Tunnel 6778.
Jones Bell Tunnel ?

Workings on Elko Prince

on Elko Vein

Level.	Drift.	X-cut.	Shafts.
300 Adit	1650	720 Adit 510 to J.B	S.E 300 3-750 N.W (600) 3-900 Air.
450 Sub	650		220 Rs. SE 300
600	2330	600 to J.B	
750	2200		175 750-900 SE
900 S.E	150		
900 N.W	100		
	7080	1830.	1495
	(7100)	1900	1550

Total on Elko Vein 10,500 lineal ft.

This work has explored, High Comp S.E. 1) main crosscut. (S.E.) 650 ft 800 from 200 ft above 300 level to 750 Level and explored vein 150 ft down from 750 to 900 level (# 75 Roth)

N.W 2) Second (N.W) cross cut. upwards of 300 ft long x 300 ft depth from 450 to 700 level & explored down from 750-900 (# 33 Hirbel)

June Bell Vein. (450-600 ft Southwest from E.P. vein.

	Drifts	
300 (Adit)	650' S.E.	
600	800 N.W	To a total 1200 vein length
(June Bell June	320	X cut 120
	1770	120

420
350
1770

770
160
930

Workings on Midas Gold.

Level.	Drift.	X-cut.	Sh & Rs.
Old. Adit (400). Main	1220 old +Yale 930 New 2150 total.		Sh 130 } stope Ra 120 }
Branch Adit.	400		
Branch at M.G.Stope	100 2650 250 2900 Total		250

Work by Yale M. Co. 1959-61.

	Drift	X cut	Rs & Sh
SE Drift adit	930		
{ Xcut Adit to 450± E.P.		240	Rs 120
} X cut. S.		90	
~~X cut A.~~		80	
Drift A.	350	460	

1280
460
1740 Total

Midas Gold Adit & E.P. 600 follow vein structure (off vein in Yale work for 900 ft drill & X cut NE) a total of 4000 ft length. by from 400 (M.G.) to 900 (E.P.)

2900
1740
4640

Top stope 3 au 300 ag 8-9" (Midas)
50-Ton * 30-40 ore

Bldgs got be replaced.
where cave in Miner's Gold Tunnel.

Elko Prince N 44°E (nearly vert.
Miners gold N50-60
average.

Surface work on veins South
of Midas adit - appear cross
Midas Creek.
Portal at Midas Creek.

Change length claim on (1) Miners Gold
1600 ft. (2) Elko Prince 2400 ft.

1). Distribution of Stock.

250,000 outs

300,000 sell @ $1.00

150,000

700,000

300,000 divide 1/3 each get 100,000

2). Rewards

(a) Road.

(b) Camp site

(c) Equipment.

3).

S-70 761-853
586-587

Epithermal

Tonopah, Nye Co. 461-486-866

Au	Ag.
1,880,000	100,000,000+

Lodefield & Emmeralda 510

Au	Ag.
4,195,000	10,000,000?

Virginia City, Storey? 444 487 61-76

Au.	Ag.
8,560,000	100,000,000+

Summary
Decline in ag prices affected district adversely (1930?)

Operations

Manager Joe	800.00	
Consult Fee.	700	
Book keeper Winn	100	1600
Petit cash (1000)		
Travel & misc	200	
		1800
		12
		3600
		1800
		21,600

~~294,000~~

#257,000 (240.000 for 1st year

Overdue 25.000

215.000

114.000

#101.000

Loan. will reduce above.

4500

5

22500

Govt. loan

(1) Try for shaft.

(2) If can't go for adit drift.

150 shaft — Work 30.000 — Eqpt. etc. — say 40,000 start

40,000

80,000

150' raise	7,500
500. drift @ 45	23,000
70' Xcut. to Vein @ 135' @ 50#	3,500
	114,000

Ventilation

To reopen the Yale drift beyond Δ28

1) Put in airline 300 ft airline

(Possibility old airline past Δ28.)

Ventilation - muck out & timber Δ28

Rehab portal $2500

150 Shaft 40,000

Loans

(1) Shaft ?

(2) Yale drift.

(3) X cut out to June Bell.

Note - put 135 level on section

put Top raise

135 - level was from 400 - 900 = 500 ft.

Locations approx.

Plate 13 @ 75/1

Geolmap. @ 40/1

Midas. E. 165 miles
S. 57 "

Lyn
Newmont. E 180
S 77

Midas to Newmont S 38°30-39°E 35 miles

1,000,000 share capital
600,000 finance — 2 yrs.
400,000 sales
250,000
150,000

2000000
600,000
1,400,000
500,000
900,000

400,000
300,000 —
700,000
250,000 —
450,000 —

210,000 70,000 - 70,000 - 70,000
140,000 —

Nov. 4. '65 first mention Claves. March 1966 = report

Miner's Gold expense 1965 - Dec 11, - 15 - 25 '65

Xerox	Prints	Telephone	Misc
2.75 Maps	8.48 Maps	Jan - May Total 316.59	40.00
15.75 Rept.	2.20 "	3	80.00
7.00 Maps	9.49 "	163.69	25.00
2.25 Profile	20.17		145.00
			2

72.50
50.
22.50

27.75
20.17
163.69
22.50

3) 229.11 = 76.35 each for total expenses midas gold.

76.35 Warren
76.35 Simpson
76.35 Fales

76.35
76.35
152.70

152.70
175.00
327.70

Bell of Nevada Miners Gold

Jan (Dec)	27.73		7.29 Monthly service
Feb (Jan)	47.84	9.51	6
Mar (Feb)	70.96		43.74
Apr (Mar)	37.15		
May (Apr)	53.14		
June (May)	85.65	64.07	

316.57
43.74

272.83
60% Miners Gold

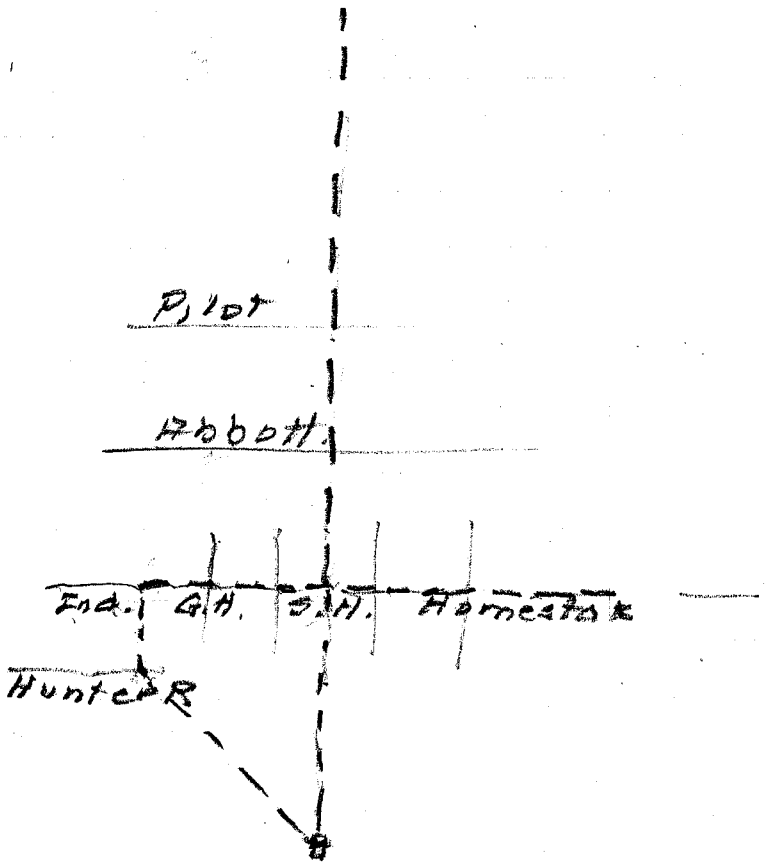
3) 163.698 | 54.55 each

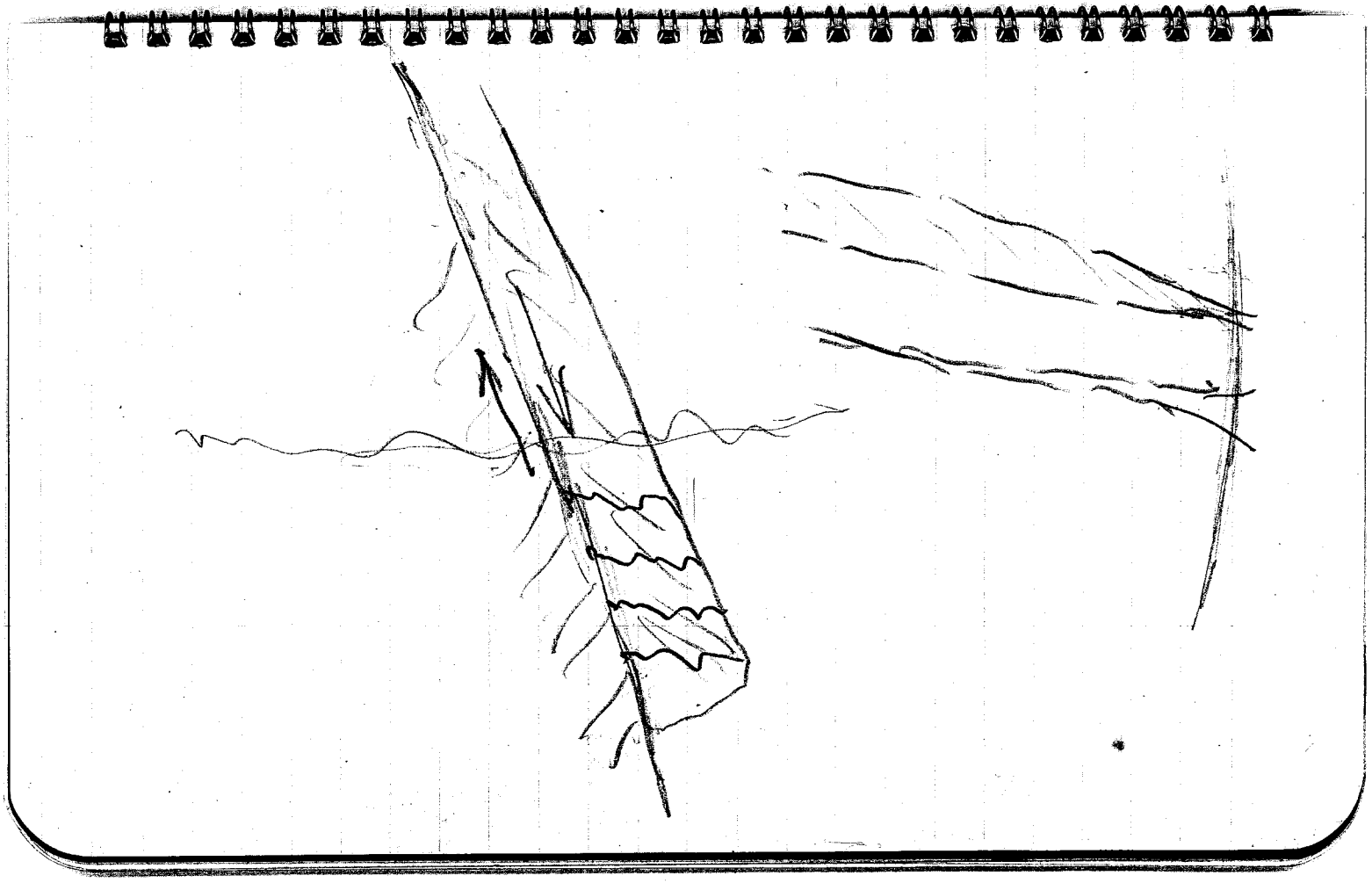
15
13
12
16
15
19

6) 54.55 | 9.09
54
5 #910
each per mo.

6) 163.69 | 27.36 per mo
12
43
42
16
15
19
9.12 each per mo.

Bills sent to Warren & Simpson
#76.35 each June 7, 1966.


Pilot
Abbott
End. I G.H. S.H. Homestead
Hunter R



Geology - Pershing County

High Temp SiO_2 - much muscovite

rarely pyrite & galena

Veins compact & glassy & for

most part barren of metallic

minerals

Vein 6-ft. about 18' north w contains

nodules & stringers Au bearing

SiO_2 frequently of high value

down to ?ft (bottom?)

Alunite & electrum = hot H_2O

100-200° = relation of ore with the

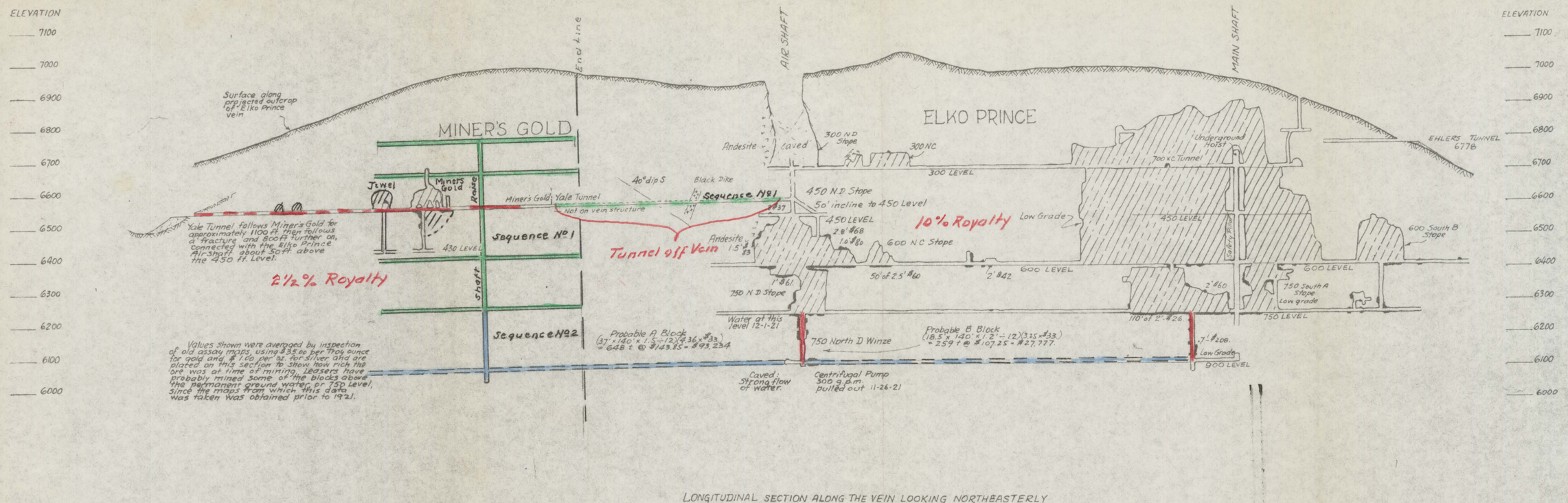
volcanics.

Few mines of State found in this

formation.

420.48
204.90
625.48

(59)
Item 13



LONGITUDINAL SECTION ALONG THE VEIN LOOKING NORTHEASTERLY

0 100 200 300 400 500

SCALE IN FEET

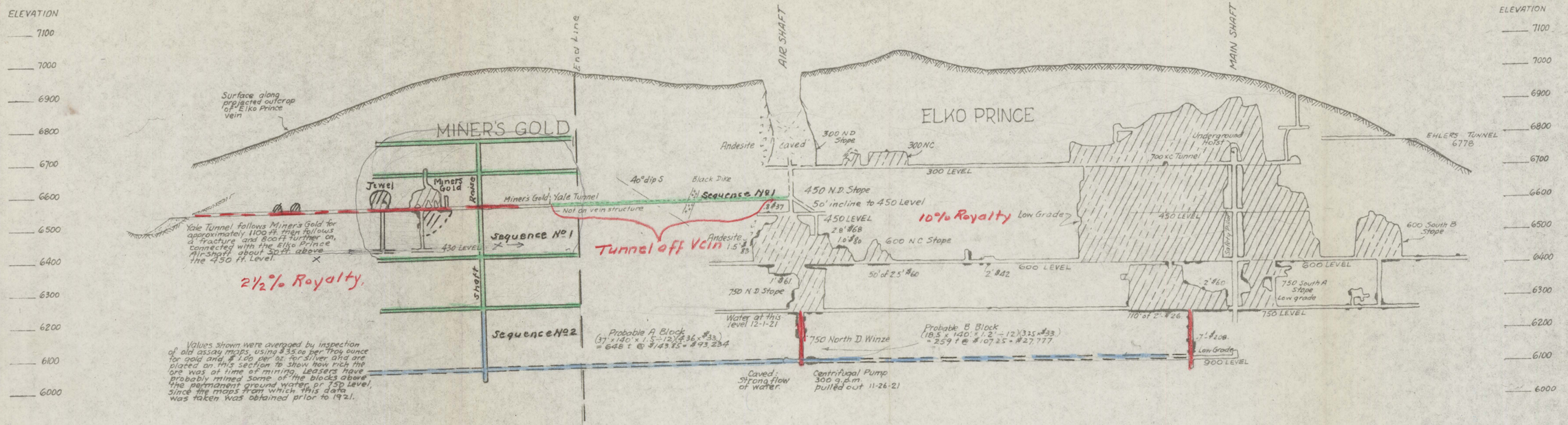
accompanies
Arthur Lakes Rpt., 1966

Longitudinal section along the ELKO PRINCE, MINER'S GOLD VEINS also showing the YALE TUNNEL. MIDAS GOLD CIRCLE MINING DISTR. ELKO COUNTY. Nevada.

T.39N. R.46E.

G. Conrad Heikes March 3, 1965

2090 0013



100,000

LONGITUDINAL SECTION ALONG THE VEIN LOOKING NORTHEASTERLY

Longitudinal section along the ELKO PRINCE MINER'S GOLD VEINS also showing the YALE TUNNEL. MIDAS GOLD CIRCLE MINING DISTR. ELKO COUNTY, Nevada. T 39 N. R 46 E.

G. Conrad Heikes March 3, 1965

11

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