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Arizona Department of Mines and Mineral Resources Mining Collection

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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: MIDNIGHT TEST

ALTERNATE NAMES:
PATENTED CLAIMS MS 1535

YAVAPAI COUNTY MILS NUMBER: 1064B

LOCATION: TOWNSHIP 13 N RANGE 1 W SECTION 30 QUARTER SW
LATITUDE: N 34DEG 28MIN 08SEC LONGITUDE: W 112DEG 24MIN 12SEC
TOPO MAP NAME: GROOM CREEK - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
SILVER
GOLD

BIBLIOGRAPHY:
ADMMR MIDNIGHT TEST MINE FILE
YAVAPAI MAGAZINE JULY 1918
BLM MINING DISTRICT SHEET 227
WILSON, E.D.ETAL. AZ LODE GOLD MINES AZBM
BULL 137 1967 P 32
ADMMR PROPERTY & LONGITUDINAL MAP (PHX OFFICE
ROLLED, UPSTAIRS)
ADMMR MIDNIGHT TEST MINE COLVO FILE

GROOM CREEK QUADRANGLE
ARIZONA–YAVAPAI CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)
NW/4 MT. UNION 15′ QUADRANGLE

4-25-58

MIDNIGHT TEST MINE
(NATIONAL GOLD MINE)

YAVAPAI COUNTY
HASSAYAMPA DIST.

A.B.M. Bull. #140, p. 102
see A.B.M. Bull. #137, p. 32
U.S.G.S. Bull. #782, p. 113,114

ABM # 129 p. 87

Skillings Mining Review, 1/26/74, p. 22

MAPS - Upstairs in the ABM rolled file boxes listed under National Gold Corporation maps include claims, underground workings, sampling and assaying

MIDNIGHT TEST YAVAPAI COUNTY

KAP WR 5/6/88: D. W. Jaquays brought in originals of an underground and surface mine map for the Arizona Gold Corp. property (Midnight Test (file) Yavapai County dated May 19, 1938. The maps cover the properties known as the Midnight Test as well as the Home Run Group (Success Group and Pine Grove). Mr. Jaquays pointed out some blocks of ore in the upper workings which he believes are still present.

MIDNITE TEST MINE

YA..PAI COUNTY

NJN WR 7/9/82: Production data was received from the Bureau of Geology and Mineral Technology for the Midnite Test Mine, Yavapai County. From 1902-1935 it produced 3,240 tons from which 2,000 lb. Cu, 13,730 oz. Ag, 882 oz. Au and 3,500 lb. Pb were recovered.

MIDNIGHT TEST

Au, Ag

DEPARTMEN
Mineral
PH(

Yavapai 13 - 4 T 13 N, R 2 W

J. W. Hildred, Rec., ~~301 W. Madison, Phoenix~~ unclaimed 8-6-46 '41

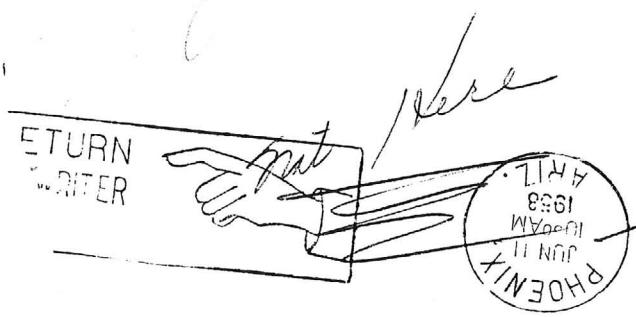
J. W. Hildred, 1407 E. Rose Lane, Phoenix

pend 10 3

Mr. J.W. Hildred

301 West Madison Street

Phoenix, Arizona



ARIZONA DEPARTMENT OF MINERAL RESOURCES
MINERAL BUILDING, FAIRGROUNDS
PHOENIX, ARIZONA

June 4, 1958

To the Owner or Operator of the Arizona Mining Property named below:

Midnight Test (Yavapai)	Gold, Silver
(Property)	(ore)

We have an old listing of the above property which we would like to have brought up to date.

Please fill out the enclosed Mine Owner's Report form with as complete detail as possible and attach copies of reports, maps, assay returns, shipment returns or other data which you have not sent us before and which might interest a prospective buyer in looking at the property.

Frank P. Knight

FRANK P. KNIGHT,
Director.

Enc: Mine Owner's Report

May 27, 1957

MIDNIGHT TEST YAVAPAI COUNTY

This property inactive.

MARK GEMMILL

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
MINE OWNER'S REPORT

Date March 31, 1941

Mine Midnight Test

Location

Mining District & County - Hassayampa Dist.
Yavapai Co.

Former Name - Same.

Owner - U. S. District Court Receivership
John W. Wildred, Receiver

Address - J. W. Hildred, Receiver
301 West Madison Street
Phoenix, Arizona

Operator

President, Owning Co.

President, Operating Co.

Gen. Mgr.

Principal Minerals - Gold, Silver

Mine Supt.

Production Rate - Formerly 200 tons daily.

Mill Supt.

Mill: Type & Cap. - Crushing, Grinding and Floatation.

Men Employed

Power: Amt. & Type - Power line installed and power now connected.

Operations: Present - None

Operations: Planned - Liquidation

Number Claims, Title, etc. - 3 patented
5 unpatented
Good title from U. S. Court

Description: Topography & Geography - Approximately 7000 ft. elevation

Mine Workings: Amt. & Condition - 600 ft. shaft. Several thousand ft. of drifts and raises, with stopes opened. Mine assay map available. Mine full of water to 100 ft. level.

Geology & Mineralization -

Ore: Positive & Probable, Ore Dumps, Tailings

Dimensions and Value of Ore body

Mine, Mill Equipment & Flow-Sheet - Primary jaw and secondary Gyratory conveyors to ore bins -64½ Marcy Ball mill with Doir duplex classifier (floatation cells and filter gone) Thickeners for concentrates and tailings. Also tables. Mill buildings good shape.

Road Conditions, Route - 5 miles south from Prescott on Senator highway. 2 miles easterly on Forest Ranger road.

Water Supply - From mine and other shafts.

Brief History - Promoted about 1935 as 2,500,000 stock company and operated short time. Shut down on account of financial difficulties and shortage of water.

Special Problems, Reports Filed -

Remarks - Receiver believes mine has merit and deserves a better fate than wrecking for liquidation. When considered as a 75 to 100 ton mine at a liquidation value of $50,000 complete.

If property for sale: Price, terms and address to negotiate - John W. Hildred,
Receiver
301 West Madison St.
Phoenix, Arizona.

(SIGNED) John W. Hildred

-64-

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
MINE OWNER'S REPORT

Date 3-31-'41.

1. Mine Midnight Test
2. Location
3. Mining District & County Hassayampa Mining Dist Yavapai Co.
4. Former name Same
5. Owner U. S. District Court Receivership
6. Address (Owner) J. W. Hildred Receiver 301 W. Madison St
7. Operator John W. Hildred Receiver
8. Address (Operator) — Phoenix Ariz
9. President, Owning Co.
9A. President, Operating Co. —
10. Gen. Mgr. —
11. Mine Supt. —
12. Mill Supt. —
13. Men Employed —
14. Principal Minerals Gold Silver
15. Production Rate formerly 200 Tons daily
16. Mill: Type & Cap. Crushing, Grinding & Floatation
17. Power: Amt. & Type Power Line Installed and power now connected
18. Operations: Present None
19. Operations: Planned Liquidation
20. Number Claims, Title, etc. 3 patented 5 Unpatented Good title from U.S. Court.
21. Description: Topography & Geography Approx 7000' elevation.
22. Mine Workings: Amt. & Condition 600 ft. Shaft. several thousand feet of drifts + raises. with stopes opened. mine assay map available. Mine full of water to 100' level.

(over)

3. Geology & Mineralization

4. Ore: Positive & Probable, Ore Dumps, Tailings

24A. Dimensions and Value of Ore body

25. Mine, Mill Equipment & Flow-Sheet Primary Jaw and Secondary Gyratory Conveyors to Ore Bins – 64½ Marcy Ball Mill with Dorr duplex classifier Flotation cells + filter gone) thickeners for concentrates and tailings also tables. Mill Buildings good shape.

26. Road Conditions, Route 5 miles South from Prescott on Senator Highway 2 " Easterly on forest ranger road.

27. Water Supply from mine and other shafts.

28. Brief History Promoted about 1935 as 2,500,000 stock company and operated short time. Shut down on account of financial difficulties and shortage of water.

29. Special Problems, Reports Filed

30. Remarks Receiver believes mine has merit and deserves a better fate than wrecking for liquidation. When considered as a 75 to 100 ton mine at a liquidation value of $50,000. complete.

31. If property for sale: Price, terms and address to negotiate. John W. Hilded Receiver
301 W. Madison St
Phoenix, Ariz.

32. Signature John W. Hilded

33. Use additional sheets if necessary.

April 8, 40

MEMO ON NATIONAL GOLD PROPERTY

LOCATION The mine is 7½ miles from Prescott, Arizona, 5 miles on good county road, which is now being oiled, and 2½ miles on Forest Service road which is a very satisfactory transportation road. The property is at an elevation of around 6700 ft, or about 1400 ft above Prescott.

WATER: TIMBER There is spring water for domestic purposes, altho the mine water has proven to be potable, as is water from practically all shafts in the district. At the present state of development, the mine makes about 15,000 gallons of water per 24 hours normally. This increases materially during periods of heavy rains and snows. Water now stands at 160' below Adit Shaft

There are other shafts in the neighborhood which make proportional amounts of water to their development. It has been fairly well determined that the present water table is just below the 600 level, and that further sinking will very likely produce considerable additional amounts of water. Just before closing down, sinking 200 feet below the 600 was scheduled. When present crosscuts are extended to cut other veins, the water supply should be increased. The mine is filled with surface water to the 160 level at present.

There should be no difficulty in gathering enough water for a 100 ton per day operation. If really necessary, a tailings filter can be installed which will furnish better recovery than pond settling.

POWER The Arizona Power Company still has their transformer station installed. Domestic power is still being furnished. All equipment is individually motor driven.

CLIMATE The mine can readily be worked without interruption the year around.

GEOLOGY The National Gold is in the Bradshaw Range, the typical rock of which is known as "Bradshaw granite" An area of schist is here found, as in other parts of the Bradshaws. These schists have been termed "Yavapai Schists". Here we have a dioritic intrusion in the schists of considerable extent. There is a system of quartz veins, all related, typical of the district. The main Midnite vein has walls of schist and diorite, with occassional inclusions of diorite in the veins. The vein system is traceable on the surface for several thousand feet.

The ore is in quartz with iron and manganese oxides present and considerable leaching may be seen. Although sulphides are present, some oxidization may be noted at the bottom of the present workings.

The width of the vein varies considerably, pinching down in places and with variable values. Good mining widths are found, according to the assay map running mostly from 4 to 6 feet.

E.M.

ORE A conservative estimate made by D. W. Jaquays during a Court hearing was that 25,000 tons of ~~maximum~~ positive ore of $8.00 or better per ton is available. He stated that only 25' around the 100 foot blocks had been used in his calculation so that this figure may actually be doubled and the difference called possible ore. Various estimates of probable ore have been made but are very hypothetical. There is little doubt that a good deal may be expected and that the above figured are conservative, judging from reports which have been made from time to time.

Mr. Jaquays also stated that the mine can be worked profitably with proper capital investment and good business and technical management with the values indicated.

This is born out by the economics of other operations in this County.

During the last examinations a part of the mine on the 600 level could not be entered. It is reported that the best reserves of the mine are here, and also the best values so that more positive ore may be available than is indicated. There are indications that the deposit will continue downward.

The old company reports show perhaps 6,500 tons of broken ore in the shrinkage stopes which was not drawn out. The values and condition of this broken ore are hard to estimate. It has been assumed to average $ 7.00.

EQUIPMENT Compressors for more than 1000 ft. of air are available, also a 50 HP Mundy hoist and other mining equipment. Buildings and installation first class. All small mining items were sold to maintain the estate during bankruptcy, as jack-hammers, stopers, drifters, steel, etc.

A considerable number of camp buildings are available.

MILL EQUIPMENT The mine was originally equipped with a 250 ton mill. However, the flow sheet was never properly worked out and various items of equipment were not adequate for such tonnage, even if water had been available.

Primary and secondary crushing was arranged for, primary and secondary grinding was practiced, sliming the ore badly. The flotation cells were 25 ton cells, on the assumption that 10 of these 25 ton cells in series would give 250 ton capacity. Amalgamation was installed between the primary and secondary circuits and proved of no value. The filter was of 25 ton capacity and on this slimy ore failed to give a dry enough product.

The writer, as Trustee of the estate, having determined that an operation of 100 tons per day was the probable economic lower limit, and that a larger operation in the present state of development and water supply was scarcely possible, sold all of the equipment which seemed out of key with such an operation.

The primary and secondary crushers are left, Blake and #2F Telsmith gyratory.

The ball mill, 64½ Marcy, which had been used for a forced, coarse, primary grind, was retained, together with the Dorr Classifier and the 5 x 5 secondary mill and its classifier were sold, as was the flotation unit and the filter. A battery of #6 Deister tables comprising three sets, right and left, or six tables, has been reduced to two good tables for pilot purposes.

This left the nucleus of a good 100 ton plant, the crushing and grinding end being very complete and at present properly set for the addition of recovery equipment.

The precise nature of this should be determined after further mill tests. At the present writing it would seem that the addition of a jig (Denver Mineral) in the ball mill classifier circuit is indicated. The flotation equipment probably should consist of 8-30" Denver Sub-A machanical cells hooked up for roughing and finishing. A new filter will be required.

Without going into details at this time, this equipment, installed, should not cost more than $ 6,500.00, unless it is desired to put in a large tailings filter for water recovery.

Ample water storage is available and two 30' thickeners for aid in water recovery are still in place.

ANALYSIS OF ORE I am not sure that an actual analysis is desired, but probably the values are meant. However, an analysis of Car # 127155 showed the following;
(Concentrates: 20:1)
Ins: 32.2 Fe: 29.8 CaO: 1.1 Zn: 0.2 S. 12.9 ~~XXXX~~ Al_2O_3 7.7 As: 2.05

A typical sample might assay Au. 0.191, Ag. 1.1 This will give an idea of the relative gold and silver content.

RECOVERY Tests made in 1937 with composite samples from various parts of the mine showed that good results may be had with the primary grinding circuit and straight flotation. Using Xanthate, the gold recovery was 92% and the silver recovery gave a 64.9 oz. concentrate, the ratio of concentration being 34 to 1.
The use of a mineral jig should be advantageous.

CAUSE OF SHUTDOWN The primary cause of the failure of the mine was dissention among the principal stockholders and the people who were arranging the finances. This was aggravated by lack of water for the 250 ton mill. Due to the manchinations of the financial group the property was dumped into 77B and lingered in the courts from then until 1938. It is now possible to make a deal, as the interests have been simmered down until there are only two principals to do business with.

There are about 5000 ft of shafts, drifts & crosscuts.

Mr. O. O. Smith,

The above is a rough draft of information accumulated by me when I was the Trustee of this property. I have never examined it, my knowledge of the underground work being limited to one trip to check the assets when I took it over. However, I was quite familiar with it during its development period, as far as general contact with the company was concerned. I also had occassion to go into the metallurgy to some extent, and saw the operation of the mill during the short time they tried to run it.

I have had in my possession at one time or another, brief reports by various engineers who looked at the property while it was developing. I have a copy of the company report and I also have the only extant assay [redacted] made during the development period.

Several cursory examinations were made during my incumbency as Trustee, the results being communicated to me verbally.

Just after the property came from bankruptcy, Mr. D. W. Jaquays and I looked into the matter of rehabilitation of the surface plant and discussed the proper mill alterations and additions. He agreed with me definately as to what needed to be done

I believe that with a sinker of 250 gpm capacity, 600 ft total head, the water can be removed in about ten days, allowing for saturation.

The condition of the underground works cannot be guessed, since the mine filled. I am sure that there will be some caving, but perhaps not serious. The shaft was completely straightened and retimbered with O.P. when the National Gold started its operations.

I have run this off hurriedly and it may not be too coherent. I will be glad to give you any further information I can.

April 8, 1940

W. C. Broadgate
Arizona Machinery Co
Prescott, Ariz.

6 November 1940

Mr. George W. C. Baker,
427 South Evergreen Avenue,
Los Angeles, California.

My dear Mr. Baker:

In compliance with your request, I am enclosing herewith three copies of a MEMO ON NATIONAL GOLD PROPERTY, which I trust may be helpful to you.

Yours very truly,

Jess R. Fickas
Secretary to Mr. Coupal

jrf
encls.

24 April 1940

Mr. Frederic Kaefer,
Spokane,
Washington,

Dear Sir:

With further reference to your letter of April 13, I have received a brief report on the Midnight Test Mine, which is now called the National Gold property, from Mr. W. C. Broadgate, Arizona Machinery Company, Prescott, Arizona.

The property is equipped with a 250 ton mill and part of the equipment is in excellent condition. There is a nucleus for a 100 ton plant available. The water now stands at the 160 ft. level; the main shaft is down 600 feet. It is estimated by Mr. D. W. Jaquays, mining engineer, during a court hearing, that there was 2,500 tons of positive ore available of $8.00 per ton or better averaged value in gold and silver. It was also stated that there was an additional possible tonnage of ore which could be developed in addition to this, and that the mine could be profitably worked with proper capital and good business and technical management.

The old company, The Hidden Treasure Mining & Development Company, went into bankruptcy due to dissension between the principal stockholders and the people financing the property. The property has since been acquired by Mrs. Katherine Linesba and plans are being made to interest capital to resume operations.

I trust this answers your inquiry, and if you desire further information, I should suggest that you write Mr. W. C. Broadgate, who was trustee for the former company and is in close touch with the present plans.

Yours very truly,

J. S. Coupal
Director

JSC-jrf

To: J.S.Coupal, Director

From: Carl G.Barth, Jr, Pr scott, Arizona.

Re: Midnight Test Mine, Groom Creek, Yavapai County

I forw rd herewith the only resume of the Midnight Test Mine that is really authentic. This was made by Broadgate for a O.O.Smith who I believe is trying to promote the property to the parties that may be inquiring. Do not copy but make the nesessary excerpts and return to Broadgate.

It got into such a mess that it is hard to say whether it is any good or not. Mr.Linesba, the original promoter was a weird financier but is now out. The property is now held by the former Mrs. Katherine Linesba, with a minor mortgage inter st held by a Mr.Campbell of Chicago, whose interest is being decided by the Federal Courts.

Jaquays was a conservative engineer and I would accept his opinion.

The fact that the water is 160 feet below the collar makes it impossible to examine as the area above this level is practically stoped.

Water was the big problem always, there never being sufficient to carry on the mill operations even when I in 1930 was the Mill Superintendent. The shaft was then 400 feet deep and made very little water.

I would have written some kind of a letter for you onthe subject, but I do not feel up to it.

Hope you can give som answer from Broadgates sketch, but be sure to return it to him. Ignore the note to O.O.Smith.

Carl G.Barth, Jr.
April 21,1940.

Examinations, Reports,
Management of Mines,
and Ore Testing

222
~~400~~ Peyton Building,
Telephone
M 4433

FREDERIC KEFFER
MINING ENGINEER
Spokane, Washington

April 24th. 1940

Mr. J. S. Coupal,
Director, Department of Mineral Resources,
State of Arizina,
Capitol Bldg, Phoenix.

Dear Mr. Coupal;-

Your letter of the 17th, delayed in transit, has arrived, and I want to thank you for your interest in our behalf. And will look forward to receiving information through your Mr. Barth. Which I trust may be of a favorable nature.

Yours sincerely,

Frederic Keffer

17 April 1940

Mr. Frederic Keffer,
Spokane,
Washington,

Dear Sir:

Your letter of April 13 is being referred to our field engineer in the Prescott District for information requested on the Midnight Test Mine.

As soon as I hear from Mr. Barth, I shall write you again.

Assuring you of my desire to be helpful, I am

Yours very truly,

J. S. Coupal

J. S. Coupal
Director

JSC-jrf

CC- Carl Barth, Jr.

Carl: Please return letter for our file.

Examinations, Reports,
Management of Mines,
and Ore Testing

222
~~406~~ Peyton Building,
Telephone
M 4433

FREDERIC KEFFER
MINING ENGINEER
Spokane, Washington

April 13th. 1940.

Arizona Department of Mineral Resources,
Phoenix, Arizona.

Gentlemen;-

I have this morning a letter of inquiry from an old mining friend in Chicago, asking what I know about the plans, prospects and condition of the Midnight Test Mine, about eight miles from Prescott, Arizona.

Unfortunately, I know nothing whatever about this property; So am writing to you for any information you can furnish. Any expense entailed I will gladly defray-in the way of typists services etc. An early reply will greatly oblige,

Yours very truly,

Frederic Keffer

Air Mail.

First Concentrate Shipment

- ANALYSIS -

Ins.	32.2
Fe.	29.8
Ca O	1.1
Zn.	.2
S.	12.9
A 1203	7.7
As.	2.05

NOTE: This is on car No. 127155.

UNITED VERDE EXTENSION MINING COMPANY

MINES: JEROME, ARIZONA

SMELTER: CLEMENCEAU, ARIZONA

Jerome, Ariz.
Nov. 22, 1937

Mr. W.C.Broadgate, Federal Trustee,
National Gold Corporation,
Prescott, Arizona

Dear sir:-

Replying to your letter of Nov. 20th, please be advised that our engineers have never made an examination of the Midnite Test mine for the United Verde Extension Mining Co.

Yours very truly,

Geo Kingdon

General Manager

AMERICAN SMELTING & REFINING CO.
MINING DEPARTMENT OF THE SOUTHWEST
P. O. BOX 2028
TUCSON, ARIZONA

B. R. HATCHER,
MANAGER

November 24, 1937

Mr W.C.Broadgate
National Gold Corporation
c/o Arizona Machinery Company
230 North Cortez Street
Prescott, Arizona.

Dear Sir:

Your recent letter to the Company at El Paso in reference to the Midnight Test Mine, near Prescott, Arizona, has been forwarded to this office for reply.

In answer to your inquiry will state that an examination has never been made of the Midnight Test Mine by an engineer of the Mining Department of this Company.

Very truly yours,

B. R. Hatcher

cc: RDBradford

PHELPS DODGE CORPORATION

OFFICE OF GENERAL MANAGER

DOUGLAS, ARIZONA.

November 22, 1937.

Mr. W. C. Broadgate, Federal Trustee
National Gold Corporation
230 North Cortez Street
Prescott, Arizona

Dear Sir:

Replying to your letter of November 20th in regard to the Midnite Test Mine located near Prescott, Arizona:

I can not find that any of our engineers have ever made an examination of this mine and know nothing about the matter mentioned in your letter.

Yours very truly,

J. H. Davis.

Office Manager.

JHD/d

PHELPS DODGE CORPORATION

UNITED VERDE BRANCH, MINES DIVISION

JEROME, ARIZONA

November 24, 1937

Mr. W. C. Broadgate, Federal Trustee,
National Gold Corporation,
230 North Cortez Street,
Prescott, Arizona.

Dear Sir:

Our geologists have made no examination of the Midnight Test mine from any records in our files. It may be that P. C. Benedict could have examined this property on his own time, but we have no record of any report by him.

Yours very truly,
PHELPS DODGE CORPORATION, UNITED VERDE BRANCH,

Chief Engineer.

CEM.A

Tonopah,Nevada,
12/2/1937.

Mr. W.C.Broadgate,Federal Trustee,
National Gold Corporation,
Prescott,Arizona.

Dear Mr. Broadgate:

I now have before me the letter I wrote to A.E.Brugger and I wish to answer more fully the allegation contained in you letter of recent date in the third paragraph, viz " He replied about like this:" I have made a detailed examination and assay maps for our Chicago interests and found a very delightful climate,excellent camp facilities but positively no ore or mine".The only thing he could vision for its use was a dude ranch or home for one lungers.'

I now wish to deny this statement without any reservations. I did not say"positively no ore or mine"or anything that could so be construed. I did not say anything about camp facilities or climate."Our Chicago interests" is untrue first because I do not know what "our" means and secondly I or our have no Chicago interests. What I did say was "We made a very extensive examination and sampling about three years ago for a syndicate in Chicago".

I did not say anything about "dude ranch or home for one lungers".

Yours very truly,

H. A. Johnson

: 3985

CABLE: HARENCO

THE HARRIS ENGINEERING COMPANY

INCORPORATED

SUITE 501 HAAS BUILDING

C. R. HARRIS
CONSULTING ENGINEER

LOS ANGELES, CALIFORNIA

November, 17, 1930.

Mr. W. W. Linesba,
General manager,
National Exploration Corporation,
Bartlett Building, Los Angeles, Calif.

Dear Mr. Linesba:

On returning from your mining properties near Prescott, Arizona, formerly known as the Midnight Test Mines, I wish briefly to give my impressions of this property and the adjoining mines recently acquired by your organization. While I had made superficial examination of the Midnight property several years prior to your taking over and rehabilitating the same I was wholely unprepaired to fully appreciate the real value of it until I had seen the extensive developments, improvements, and tonnage of commercial ore you have put is sight during the past year.

The vein system you are now developing is unique in the annals of western mining in several respects, The continuity in length and depth and the length and width of ore shoots producing shipping and milling ore are all that could be desired, while paraleling of contiguous veins of yet unknown numbers assure unusual tonnage of ore with a low cost of production. Another matter, heretofore unknown to me, is the score or more of partially developed veins of workable width and commercial values on your several hundred acres of intensively mineralized area, any one of which would be considered a prize find by any inteligent prospector or mine buyer.

I feel that I speak advisedly when I state that the potential ore in these numerous veins will eventually warrent several major mining and milling operations of much greater capasity than your present plant. It is a matter of record that practically all of the prominent gold producers of this country have been limited to one or two veins, when these veins faulted or bottomed the mining operations were definately concluded. The Vulture, Congress, United Eastern and Catherine in Arizona, the Goldfield Consolidated in Nevada and the Yellow Aster in California are examples of this type of properties, while they produced many millions their life was short.

My thirty years experience in the west, having covered practically all the gold producing areas, fully convinces me that your property is entirely in a class of its own, and, if you retain and develop all your gold bearing ledges and veins, you will have ample ore to continue major operations for half a century to come. With sufficient capital and able and efficient management your enterprise will, in my judgement, create, in the near future, the outstanding gold producer in this or other countries.

Thanking you for courtesies extended during my visit to your camp, I am

Very sincerely yours

C. R. Harris

Consulting Engineer.

CRH/G

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: MIDNIGHT TEST

ALTERNATE NAMES:
PATENTED CLAIMS MS 1535

YAVAPAI COUNTY MILS NUMBER: 1064B

LOCATION: TOWNSHIP 13 N RANGE 1 W SECTION 30 QUARTER SW
LATITUDE: N 34DEG 28MIN 08SEC LONGITUDE: W 112DEG 24MIN 12SEC
TOPO MAP NAME: GROOM CREEK - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
SILVER
GOLD

BIBLIOGRAPHY:
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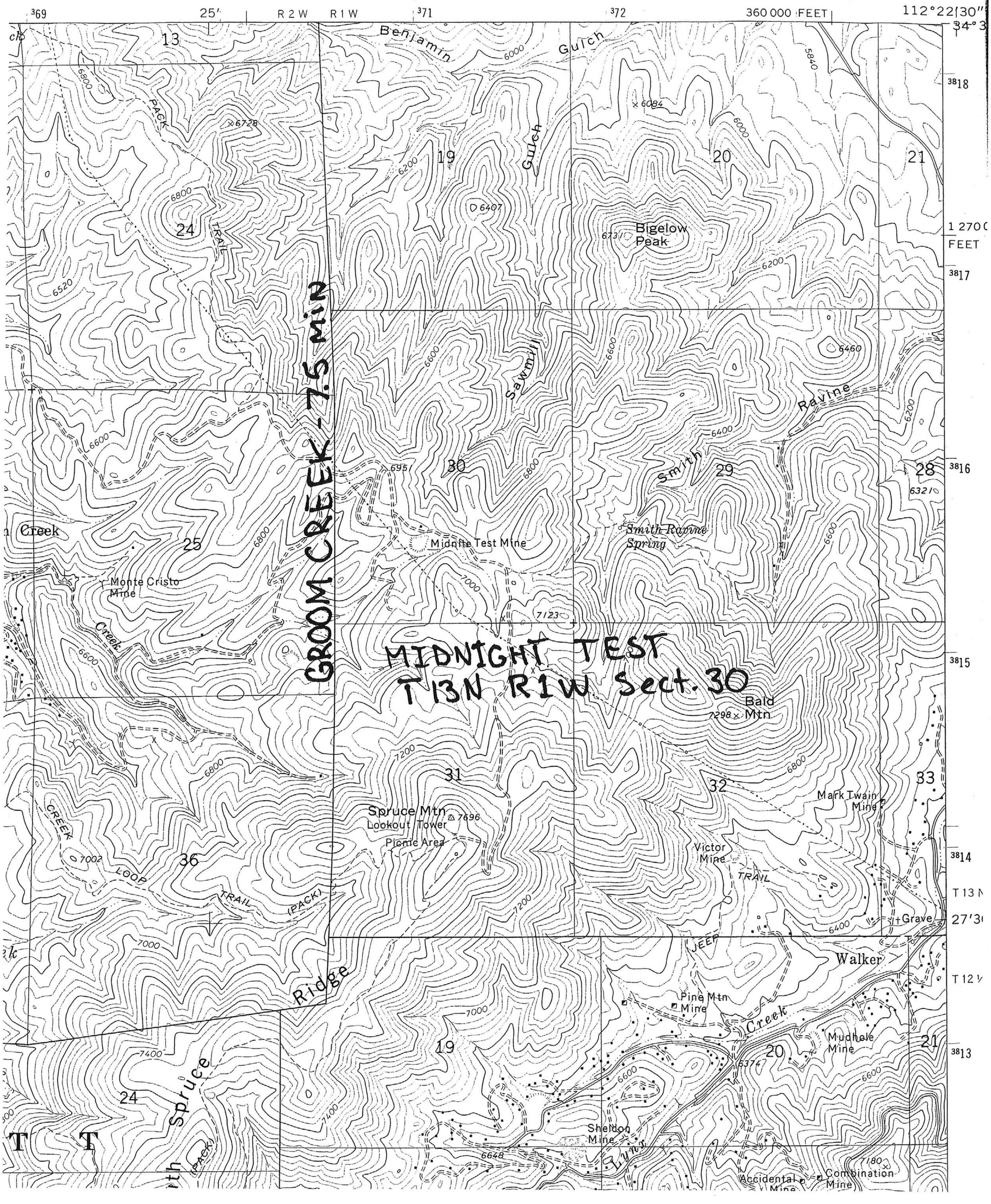
YAVAPAI MAGAZINE JULY 1918
BLM MINING DISTRICT SHEET 227
WILSON, E.D.ETAL. AZ LODE GOLD MINES AZBM
BULL 137 1967 P 32
ADMMR PROPERTY & LONGITUDINAL MAP (PHX OFFICE
ROLLED, UPSTAIRS)
ADMMR MIDNIGHT TEST MINE COLVO FILE

GROOM CREEK QUADRANGLE
ARIZONA—YAVAPAI CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)
NW/4 MT. UNION 15' QUADRANGLE



1936 May.

INVENTORY OF PERSONAL PROPERTY OF THE

NATIONAL GOLD CORPORATION

STEEL AND STEEL SHARPENING BUILDING:

Steel and Steel Sharp. Building. 21' x 14'6" x height 8'6" C. Iron.

Steel Sharpener Ingersoll Rand, Serial 4002, size 1 - R 33.
Dies and Dollys for 1" Hex. and 1" Round Steel.

1 - Forge connected with air.
1 - Anvil - small
23 - up to 24" Starter 1" Hex. Jack Hammer Steel, shanked and bitted.
43 - " " 30" " " " " " " " "
3 - " " 36" " " " " " " " "
46 - " " 42" " " " " " " " "
12 - " " 48" " " " " " " " "
20 - " " 54" " " " " " " " "
11 - " " 60" " " " " " " " "
22 - " " 66" " " " " " " " "
9 - " " 72" " " " " " " " "
6 - " " 84" " " " " " " " "

17 - " " 24" Started 1" Hex. Jack Stopper Steel, no shanks but bitted.
6 - " " 30" " " " " " " " "
23 - " " 36" " " " " " " " "
6 - " " 42" " " " " " " " "
15 - " " 48" " " " " " " " "
15 - " " 54" " " " " " " " "
9- " " 60" " " " " " " " "
19- " " 66" " " " " " " " "
5 - " " 72" " " " " " " " "
14 - " " 84" " " " " " " " "

7 - " " 24" Starter 1" Round Steel - with Shanks and bits.
2 - " " 30" " " " " " " "
14 - " " 36" " " " " " " "
10 - " " 42" " " " " " " "
13 - " " 48" " " " " " " "
4 - " " 54" " " " " " " "
7 - " " 66" " " " " " " "
4 - " " 72" " " " " " " "

38' - Air Hose ¾" with fittings
2 - Column Bars and Clamps - 2 ft. - 3½" x 3½"
2 - Column Bars and Clamps - 3½ x 3½
5 - Machine Line Oilers
2 - Gal. Castor Oil
9'6" Long Steel - 1" - Round, shanked and bitted.
12'4" " " - " - " " " "
14'8" " " - " - " " " "
17'6" " " - " - " " " "
19'5" " " - " - " " " "
11'5" " " - " - Hex. " " "
12'4" " " " " " " "
12'4" " " " " " " "
14'10" " " " " " " "
20'10" " " " " " " "

Miscl. Lot of new drill parts, inc. 2 shucks 50-S-49 - 8615 and 7125, 2 Hammers D-65-S49 - 327008 and 327064.

BLACKSMITH SHOP:

Building Sheet Iron 14'4" x 15'2" x 10'.

1 - Drill Press Fay and Egan - Line Shaft Pulley and Belt.
1 - Grinder #12
1 - Anvil 100 lb.
1 - Vise - Blacksmith
1 - Motor G. E. Serial 4247526 - Mod. 400260 - Type Kt952-
60 Cycle - Speed 900, 5 H. P.
1 - Column Bar and Arm 5 ft - 3½"
1 - Jim Crow - Rail Bender
1 - 2 Wheel Truck N. G.
1 - Blacksmith Forge connected with air
1 - Welding outfit - Purox Torch complete
2 - Bundles Welding Rod - ½ box Weld Rod
24 - Miscl. Drill Bits Timkin
1 - Toledo - Stock and Die #B36617 - complete with dies
1", 1½" and 2"
10 - Blacksmith Tongs and Miscl. Tools
4 - up to 24" - 1" Hex. Jack Hammer Steel - shanked and bitted
6 - " " 30" " " " "
4 - " " 36" " " " "
2 - " " 42" " " " "
1 - " " 48" " " " "
3 - " " 54" " " " "
3 - " " 60" " " " "
2 - " " 66" " " " "
2 - " " 72" " " " "
3 - " " 84" " " " "
1 - 32" Round Steel, bitted and shanked
5 - Gal. Tempering Oil
2 - picks -
1 - shovel
1 - sledge hammer

TOOL HOUSE

1 - Building - Sheet Iron, Lumber lined 14'3" x 10'10" x 10'
1 - Centuary Elec. Motor 3 H. P. 110 Volt. #105157
2 - Column Bars 7' - 3½"
1 - " " 6' - 3½"
1 - " " Arm 24 "
1 - " " " clamp
2 - C. L. Metal Shaft Bearings 1.¾" "Swivel"
Miscl. lot of valve - bearings and pipe fittings
7 - Lots Nails - probably about 500 lbs.
1 - Pipe Cutter #3
1 - Chain Pipe Wrench
3 - Lumber Saws
2 - Axes
2 - Picks
9 - Shovels Square Point
5 - " Round
18'- 6" Belt

18 - Steel Hex. - 20' x ¾")
1 - " Square 16' x ⅜" x 1") Outside Tool House

ELECTRIC SHOP

1 - Building 12' x 20" x 10'
1 - West. Safety Switch - 100 Amp. 125-250 DC - 230 AC serial #K62330 (East Camp #1)

1 - West. Safety Switch - 100 Amp. 125-250 DC - 230 AC serial #K62330 (Cook House #2)

1 - West Safety Switch - 200 Amp. 125-250 DC - 230 AC serial #K62334 (West Camp #3)

1 - E. M. Safety Switch- Cat. #0SF3021 - Type GEN. USE 125 V. 30 Amp. - 2 Pole Single Phase

1 - Panel Board - with four - 3 Blad Knife Switches

1 - Transformer - G. E. Co. #4309910, Type H. form N. 50/60 Cycles - Rating 10 KVA - 440 110 - 220 Cycles.

1 - Transformer - Same as above serial 4309925

1 - " #4503044 - Type H - form K, Cycles 50/16 Rating 25 KVA Voltage rating 440 - 110 - 220.

1 - " - G. E. 3438722 - Type H - form N 5 KVA 440/110 - 220 Volts

1 - Motor - Fairbanks Morse - serial 92306 Speed 1500 20 HP - B - Type - 3 phase - 50 cycle 440 volts.

1 - " - Fairbanks Morse - 5 HP serial 91414 - Speed 1500 - B Type - 3 phase - 50 cycle 440 volts

1 - " - Century - Type S - Mod. 14 - #20785 - 110 volt 60 cycle - A. C. Fan.

1 - Compensator - G. E. Co. #355302 - Form F - 4 volt Prim 440 - Sec 176-374 - for 50 HP Motor - 60 cycles - 3 phase.

1 - " - Emerson Elec. Co. 1/8 HP serial 315270 Type 3222200 - Speed 3400 - single phase - volts 104 - 60 cycle.

1 - Motor - G. E. Repulsion - _____ HP - 220 volts - form C - 60 cycle, serial 3177781, speed 1735.

1 - Sangamo Current Transformer - serial 41278 - 300/5 Amp. 6600 volts - 300 Amp.

1 - Sangamo Current Transformer - serial 41281 - 300/5 Amp. 6600 volts - 300 Amp.

1 - Transformer - Wagner - serial #8939 - Type ROD - 10 Watts - cycles 25 - 133.

1 Square D - Safety Switch - Cat. 86341 - 30 Amp. 800 A. C. Volts.

ELECTRIC SHOP: - continued

1 - Safety Switch - Westinghouse - K551510 - 30 Amps. 575 V. A. C.

1 - Safety Switch - Westinghouse #K62103B - 60 Amps. 250 Volts.

1 - Safety Switch - Trumball - #72363 - 100 Amps. - 3 Pole - 575 V. A. C.

1 - Magnetic Switch - G. E. CO. C. R. - 7006 - D. 30 B Control - 440 Volts - Cycle 60 for 25 HP 440 Volt Motor.

1 - Sponge Pump --Byron Jackson #126690 - Type 2 x 8 with Motor complete

1 - Motor G. E. Co.- Serial #3749421 - Form C - Volt 220 H. P. Continuous 40 C.

1 - Hand Drill - Champion.

1 - Motor - North East Electric - serial 1787519 - type 3804 - volts 12 - Mod. G. A.

1 - Watt Hour Meter - Sangamo Type H. C. 300 Amps. 460 volts - 60 cycles - 3 phase #5850216.

1 - Motor with shaft for Emery & polishing Wheel - Emmerson Elec. Co. serial #989166 1/3 H. P. - speed 1750 - 60 cycle - single phase.

1 - Electric Hand Drill - Van Dorn - serial 206311 - motor A C or D C 110 volts.

1 - Hand Blower (for Motors) #H2367

1 - Voltmeter - Westinghouse serial #1204445

17 - 200 Watt Lamps)
18 - 100 Watt Lamps) Stocked for replacement
1 - 300 Watt Lamps)

Misel. lot of fuses and elec. fittings.

1 - shaft 2½' x 1½ with pulley
2 - shafts 3' x 1.3/8 with pulley
1 - stock & die - Armstrong Adjustable #1A
1 - " " " - Toledo
1 - grease gun - Alemite
Misel. lot of elec. wire
1 - chain vise - Vulcan #2

AIR & WATER HOSE IN HOIST HOUSE

9 - 50' Air Hose with Connections - 3/4"
1 - 32' " " " - 3/4"
1 - 8' " " " - 3/4"
1 - 10' " " " - 3/4" - 1 splice
1 - 36' Water Hose " " - ½" with Goose Neck
1 - 26' " " no connection
1 - 21' " " " "
1 - 15' " " with connection

HOIST HOUSE:

1 Building 40' x 52 x 25 approx.

1 - Compressor I. R. Class E R 1 #25929 - 12 x 10 with piping and receiver belted to 15

1 - Motor - Westinghouse - Induction #280 - 100 H. P. 440 Volts - 115 Amps. per terminal. 3 phase - 850 RPM - style 160882 - serial 1932988 - Belt 39' x 10" pulley 16" x 16".

1 - Steam Hoist - Hendrie & Bolthoff - "Lightning". Single Drum with Approx. 800 Ft. 7/8 Cable. no value

1 - Hoist Electric - double Drum - J. S. Mundy with

1 - Motor - Western Elec. 50 HP - type MTC 5532 - 8 - 50 - 900 form B-3- Cycle 60 - Volt 440 - Amp. 69 Sec. Amp. 167 - RPM 855 #4832033 - complete with Controller & Grids & Cable 1000' - 1". ok. good condition

1 - Compressor - Ing. Rand - Type 10 B - R. H. Side #14314 P. P. - Air Cylinder 18 - 16 - L. L. Side #14313 P. P. - Air Cylinder 11 x 16 - (138c 11 x 16 two stage) belted to. ok.

1 - Motor - G. E. Induction #1379987 - Type 1 - 20 125 - 360 Form M - 60 Cycle - 180 Amp. 125 HP - 440 Volts - Speed no load 360 Speed full load 345 - Sec. Amp. 117 with 18" x 35" pulley and 61' x 14" belt.

1 - Vertical Sinker Centrifugal Pump - Krogh - Type L No. 1¼ x 9 - with

1 - Motor G. E. 10 HP - 60 Cycle - 440 Volt Speed 1740 - serial 4683124.

1 - Pump - Smith - Valls - 3 x 2 x 4 # 39538 - Boiler Feed Type.

1 - Krogh Cent. Pump with Motor - U. S. ". HP. serial 35458 - 3 phse - volt 440 - 220 type FRU

1 - Mine Signal Bell - 8" diam.

1 - Controller G. E. serial 408359 - Type 108A

1 - Ammeter G. E. - Type R6 - #476455

1 - Transformer G. E. 5 KVA No. 4794589 - 50/60 cycles 440 - 110/220 volts 460 - 115-230 - 480 - 120/240 volts.

1 - Panel Board - Diamond Elec. Co. volts 125 - 250 Max. Amp. 60 - Cat. F. S. 10

1 - Westinghouse Switch - 600 Amp. Max & 600 volts - A. D. serial 782546 Main switch

HOIST HOUSE: continued

1 - Westinghouse Switch - 600 Amp. Max. & 600 Volts. A. C. serial 782546 - Big Compressor

1 - Westinghouse Switch - 225 Amp. 600 A C 250 D C, serial 781816 "Hoist"

1 - Westinghouse Switch - 60 Amp. 575 Volts - 30 HP. style 5971540 - Water Witch

1 - WWestinghouse Switch - 30 Amp. 575 Volts A. C. - 20 HP style 5971510 - Return Pump

1 - Switch - Magnetic - Diamond E. Type KYR - Max. HP 10 Cat. #7524N - form N - Volts 440 - Cycles 50/60 - marked W. S.

1 - Westinghouse Switch - 225 Amp. 600 AC - 250 DC #781810 (Small Compressor)

1 - Square D Safety Switch - Cat. 86343 - 100 Amp. 600 Volts AC - Station Pump.

1 - Westinghouse Safety Switch - 30 Amp. 575 Volts A C - 20 HP S #5971510 (Main Lights)

1 - Starting Compensator - Westinghouse - 3 phase - 440 volts. 60 cycle 125 - 200 HP. #24770.

1 - Grease Gun - Alemite
1 C. L. Stove with pipe
1 Westinghouse Ammeter - Type LY. Style 423677, Serial 1197736

1 - Magnetic Switch G. E. Cat. #388584 - 9G 108- 220 Volt 60 Cycle - Motor Racing 5 HP

1 - ~~xMagnetic Switch~~ Receiver - Compressed Air - piped to Compressor #14314
1 - Hand Saw - timber

1 - Pick

2 - Pipe Tongs

1 - Double Jack

1 - Suction Hose 16 Ft. with connections 3"
1 - " " 9 ft. " " 3"
2 - Carbide Lamps

CHANGE ROOM - ADDITION TO HOIST HOUSE:

1 - Stove & Hot Water Tank - Stove U. S. #50
4 - Benches
1 - Wash Basin connected
4 - Showers - installed.

ASSAY OFFICE:

1 - Building Sheet Iron 23½' x 10' x 10 high

1 - Muffle Assay Furnace Denver Fire Clay Co. #4-411 Serial 1117, with burner, oil tank and motor Serial 1477589 - Blower DFC250

ASSAY OFFICE: continued

1 - Denver Fire Clay Co. Bullion Furnace with burner, tank and crucible 12" x 17" type ?

1 - Scale - Howe - No. 5309
1 - Balance Henry Trommer #85
1 - Trommer Balance Glass Enclosed 19" x 19" x 10½"
1 - Thompson " " " 12" x 10" x 5⅛"
1 - " " " " 16" x 17" x 8"
1 - Electric Plate - 2 burner
1 - Mine Saw
1 - Elec. Switch - Safety EM Cat. OSF-3021 - Volt. 125 S. Phase 30 Amps. 2 Pole Type Gen. Use.

1 - Entrance Switch Trumball Cat. #5791 - 2 pole - 30 Amp. 125 Volt.

1 - Line Starter - Westinghouse - Style 832593 - 110 - 220 Volts - 50/60 Cycle.
1 - Becker - Pulp Balance
Miscl. lot of Chemicals - Glassware, etc.

BUCKING ROOM:

1 - Building - Sheet Iron - 20' x 12' x 12'

1 - Braun Disc. Pulverizer - Type UA - serial 24238
1 - K & K Laboratory Flotation Machine " 23482
1 - Motor U. S. 2 HP. - 400 Volts " 39818
1 - Switch - Oil - G. E. Type T. Volt 600 Amp. 60
1 - Switch - Brown & Pengilly - Cat #3035 - 30 Amp. 500 Volt. 3 pole.
1 - Jack Shaft and Bearings 2" x 10 ft.) 4 split steel pulleys
10' Belt 2")12"d x 6"f.-S.S.
18' " ")32 D x 6 f.-S.S.
14' " ")10 d x 4½f.-S.S.
16' " ")16 d x 4½f.-S.S.

1 - Bucking Board 20" x 24"
1 - Muller 15 lb.
1 - Gas Stove - Monarch. 1 burner
1 - Mine Axe
1 - Single Jack
1 - Braun Lab. Crusher (n.g) broke
1 - Cupel Moulding Machine Serial 20458
1 - Sample Splitter - Braun
10 - Pulp Sieves 20-30-50-60-70-80-90-100-150-200
250 lb. Bone Ash
250 lb. Borax Glass
425 lb. Sod. Bicard.
150 lb. Soda Ash
240 35 Gram Crucibles
200 Cupels - Approx.
1 Gal Barrett Oil #4
½ Gal Coal Tar

GUEST HOUSE:

Building - Front 38' - 48' - 1½ story - Bungalow, Frame construction - six bedrooms - sleeping porch- main living room - two bath rooms (showers) complete - basement - bedroom - kitchen - dining room with Veranda.

MILL BUILDING:

Building - 52' wide - 85' long with addition - woodsheet metal and concrete construction.

1 - Motor - Allis Chalmers - Induction 100 HP. RPM 435 102 Amps. - 60 Cycle - 3 Phase - 440 Volt.

1 - G. E. Controller #22131
1 - G. E. Oil Switch #335997 - Form K14 Amps. 100 Volt. 600.
1 - Set of Grids for Marcey Ball Mill Motor
1 - #64½ Marcey Ball Mill #163
1 - Dorr Duplex Classified 22' long 6' wide with belt
1 - Motor U. S. Elec. Co. - Induction #11966 - 3 phase 50 cycle - RPM 1000 - 10 HP.
1 - West Line Starter - Class 11-20 B5, serial 513126 - 60 cycle, 440 volt, with conduit, wiring and push button.

1 - Safety Switch - West. 100 Amp. 50 HP - 575 Bolts AC serial 597157B (Ball Mill #2)

1 - Merco Overload Realy 50 Amp. 600 Volt., Type A. Serial 132. (On Ball Mill #2)

1 - Starting Compensator G. E. C. CR1034 - Type NR 1625 - Form 42P1 - #1016 - 440 Volt. Prim 176/ 374 Volt. Sec. for Type 1 Form K. 35HP - 60 cycle - 3 phase.

1 - Ammeter - West Type LY. Style 423677 - Serial 1197737 0 to 800

1 - Oil Circuit Breaker - West. Type FLO - 200 Amp. Volt. Max. 2500. Breaker Unit #437892A (On Ball Mill #1).

1 - Oil Circuit Breaker - West. Type FLO - 300 Amp. Volt. Max. 750 #437893A (On Main Power)

1 - Safety Switch - West - 30 Amp. 20 HP - 575 Volt. A6 Style 597151C (On thickner #1)

1 - Safety Switch on Thickner No. 2
1 - Safety Switch on Classifier "C"
1 - Safety Switch on Amalgamator
1 - Safety Switch on Tables

1 - Safety Switch - West - 60 Amp. - 30 HP. - 575 AC. Style 597154C on Thickner #3 and Mud Pump
1 - Safety Switch West on Filter Plant
1 - " " " " Sand Pump #1
1 - " " " " " " #2
1 - " " " " Flotation
1 - " " " " Classifier #D
1 - " " " " Return Water Pump
1 - " " " " No name

MILL BUILDING: continued

1 - Compensator G. E. - CR 1034 - Type NR - 1660 Form H. 3 ϕ 1 - Volt. Prim - 400 - Volts Sec. 200/320 for Motor Type 1 - form K - 10 HP cycle 40-50 - 3 phase (on classifier D)

1 - Relay - Diamond E. (On Classifier D)

1 - Line Starter - West. Class 11 - 200 H - 60 Cycles - 440 volts. (On Classifier C)

1 - Motor Starting Switch - G. E. - 3 phase or 2 phase - 3 HP - 110 Volts or 7½ HP. - 400 volts (On Thickner #1)

1 - Safety Switch - West - 30 Amp. - 500 Volt - AC - Style K662201B (On lights)

1 - Panel Board - Diamond E. - 125-250 Volts - 47 Amp. Max. Cat. FS8 - 8 circuit

1 - Transformer - G. E. Ser. 3870244 - Type H. Form N., Cycles 50/60 - ⅝ KVA - 440 Volts - to 110/220 Volts - 460 to 115/230 - 480 to 120. 240 Volts.

1 - Dorr Thickner - Approx. 20' Diam x 12' high - complete with agitator and motor G. E. 60 cycle serial 1684079.

1 - Motor G. E. Induction #89679 - Type 1 - Class 8 - 40 - 900 - form K - 60 Cycle - 3 phase - 40 HP - 440 Volts - 50 Amp.

1 - Sand Pump - Wilfley - serial #C32473 - size 3 with ✓

1 - Motor - West - 10 HP. - serial #2646614 - Style 770940A - ✓ 220 Volt - 3 phase - 25.4 Amps. per terminal.

1 - Induction Motor - Robbins & Meyers - 3 phase 60 cycle - 440 volt - speed 1160 RPM., Amp. 614., Frame 202 - "HP., Type K #501848 (Belted to)

1 - Lab. Flotation Mach. Denver Equip. Co. with G. E. Motor Type KSA - form C - Volt 110 - Amp. 5.4 Single phase - HP½ - 60 cycle RPM 1725- Mod. 5KSA57 - C1.

1 - 4 Compartment Reagent Feeder driven by electric motor G. E. Mod. 5 RSA 45 A1 - type RSA - frame 45 - single phase - ⅛ HP. - 60 cycle - speed 1725. Pat. No. 1490708 through ✓

Speed Reducer "Boston" Serial No. 58583 - Cat #TA80 Ratio 60/1

1 - Plat O Sand Table - Deister #801 - with direct connected

1 - Panel Board - Diamond E - 125-250 Volts - 45 Amp. Max. Cat. #FS6 - 6 circuit.

MILL BUILDING: continued

Induction Motor - West. - 1 HP. - 440 Volt - Frame 863 - Style ES 21726 - 3 phase - 60 cycle - 1.6 Amp. per terminal 1160 RPM. serial 3591464 - complete with speed reducer.

1 - Motor Starting Switch - West - Type WK16 - 115 volt. AC. Style 545212A.

1 - Plat O Sand Table - Deister - with direct connected induction Motor - West. 1 HP. - 440 volt. Frame 863 - Style ES21726 - 3 phase - 60 cycle - 1.6 Amp. per terminal 1160 RPM ser. 3591502 - complete with speed reducer.

1 - Starting Switch - West. - Type WK16 - 116 Volt. AC. style 545212A

1 - Plat O Sand Table - Deister with direct connected induction Motor - West - 1 HP. - 440 Volt. Frame 863 - Style ES21726 - 3 phase - 60 cycle - 1.6 Amp. per terminal - 1160 RPM- serial 3591440 - complete with speed reducer.

2 - Starting switches - West. Type WK16 - 115 Volt. AC. Style 545212A.

1 - Plat O Sand Table - Deister with direct connected induction motor - West - 1 HP motor - 440 volt. Frame 863 - Style ES 21726 - 3 phase - 60 cycle - 1.6 Amp. per terminal - 1160 RPM. Serial 3591435, complete with speed reducer.

1 - Starting switch - West. - Style 782106 - Type WK18- Max. H. P. 2 - 550 Volts.

1 - Plat O Sand Table - Deister with direct connected motor - West. - 1 HP - 440 volt. - frame 863 - Style ES 21726 - 3 phase - 60 cycle - 1.6 Amp. per terminal - 1160 RPM - serial #3591486 - complete with speed reducers.

1 - 6 Cell #24 Fahrenwald Denver - Sub. A. - Flotation Machine With

5 - Induction motors - Allis Chalmers - Type AR - Frame 225 - 2 HP. - 24 hour - 3 phase - 60 cycle - 1740 RPM - 220/440 volts. 2.7/5.4
Serial Nos. 55600K - 709E - 10 - 6
" " 55600K - 709E - 10 - 7
" " 55600K - 709E - 10 - 4
" " 55600K - 709E - 10 - 5
" " 55600K - 709E - 10 -430-4224-113

1 - Motor West. Type Ar - Frame #225 - 3 HP - 24 hour - 1740 RPM - 220 - 240 volts. Ser. 709E. M. 6660-2 with

1 - Vert. Centrifugal Sand Pump. Denver Equipt. and Motor

1 - Starting Switch - West p Type WK16 - 115 Volt. AC. style 545212A

MILL BUILDING - continued

5 - Motor Starters - West. - style 782108 - Max. HP. 2 - 550 Volts - Type WK18

1 - Starter Switch - West - WK 16 - style 545212A

1 - Vertical steam boiler - Approx 10 HP. Complete with valves, lubricator and pump.

1 - Motor - U. S. Elec. Co. connected to Compensator.

1 - Compensator GE - CR1034 - Type NR 1655 - Form H&P1. 440 Volt - Primary - for induction Motor type 1 - Form K - 15 HP. 40/50 cycle - 3 phase.

1 - Relay West - Type TA - Style #576241A
1 - Belt 29' x 6"
1 - " 16' x 3
1 - " 19' x 3
1 - " 11' x 3
1 - Line Shaft 9' x 2¼" (mounted on self aligning bearings)
1 - Split Pulley 13" x 5" (
1 - " " 14" x 5" (
1 - " " 24" x 7" (
1 - " " 20" x 7" (
1 - " " 12" x 4" (
1 - Jack Shaft 4' x 1½"
1 - Split Pulley 20" x 5"
1 - " " 5" x 3⅜

1 - Starting Compensator G. E. CR 1034 Type NR 1664 for H. P. 1. - 440 Volts primary - volts secondary 220 - 352 for induction Motor Type 1 - Form K - HP 15 - Cycles 4-/50 - 3 phase.

1 - Relay - West. Type T. A. Style 576241A.
1 - Starting Switch - G. E. CR1038 - A 1 Cat. 256911
1 - Dorr Thickener - 20 x 8 complete with rakes 7 mechanism- motor - West - 1 HP - 200 volt. 60 Cycle, speed 1140 - Style 99A593 - ser. 2857581.
1 - Rotary Pump - Viking - #B
1 - Sand Pump - Wilfley #3 - serial #229 coupled to motor No. 88A87
1 - Cent. Sand Pump - Dean, direct connected to G.E. Mod. 400382 - 3 phase Speed 130 - 60 cycle - 220 volts. Amp. 3.3
1 - Snap Switch - West. Type WK20 style K55866A - Max/ HP 5, 3 pole.
1 - Gibson 200 ton impact Amalgamator - head motion for same #5968 with
1 - Motor U. S. Elec. Co. #109486 - Amps. 3 - 15 - Speed 1200 - 3 phase - 60 cycle 220-440 volts. 1 HP.
1 - Starting switch - west. style 782108 - type WK 18 - Max. Hp. 2 - 550 volts - for Amalgamator.

1 - Gibson Mercury Feeder

1 - Bucket Elevator to Amalgamator driven by
1 - Motor - Elec. Generator & Motor Co. in Allis Chalmers Mounting.
1 - Starting switch - West. Style 782108B - Type WK - 18 -550 volts.

MILL BUILDING: continued

1 - Ore Feeder complete with belts and pulleys
1 - Ore Bin Gate - All metal - complete with wheels and control wheel
1 - Jack Shaft 6' x 1¼" with split steel pulley 24" x 4½"
1 - Pulley solid 6" x 4" -
1 - Belt 14'6" x 3"
1 - Hand Timber Saw
1 - Work Bench metal covered 10' long x 3' wide with shelves
1 - Bench Vise - Columbian #604 Approx. 4" jaws
2 - Wheel Barrows metal
1 - Roll Wire - probably filter binding wire.

BACK OF MILL BUILDING:

1 - Tailing Thickner 25' x 12" Complete with Gear - Rakes and pulleys - Belt connected to Motor - west. 1 HP. 220 volts - 60 cycle - 3 phase - speed 1140- Ser. 2857525 - covered by sheet iron.

1 - Starting switch - West #782108 - type WK 18 - Max. H. 2 - 55 volts.

1 - Tailing Thickner 40' x 8' complete with Gear, Rakes and pulleys - belt connected to motor Y. S. Elec. Co. - 5 H.P. - Speed 1800 - 3 phase - 60 cycle 220 - 440 volts. #113562 - covered by frame and sheet iron.

1 - Oil Switch - G. E. #514310 - Form P10 - 30 Amps. 600 volt.

1 - Dorco Simplex Diapghram Pump - Motor G. E. Mod. C2839 - Frame 204 - Type K - Cycle 60 - 3 phase - speed 1135 - 1. HP. on 25 x 12 Thickner.

RET. PUMP HOUSE:

Sheet metal 8' x 8' x 10'

1 - Motor West. Serial 4402950 - Style 36D827 - 970 RPM.- 50 cycles - 3 phase - 15 HP. 110 volts.

1 - Switch Trumbell - Type C. Cat. Np. 40362 - 60 Amps. 3 Pole - 575 AC Volts Max. HP 15.

1 - Auto Starter - West. 5 to 15 HP. 440 volts - 60 cycle - 3 phase - style #185157

1 - Belt 19' x 6"

1 - Cent. Tailing Pump - Kimball Kroch - 2"

1 - Denver Automatic Sampler

1 - Cent. Pump - Byron Jackson 1½"?

1 - Lot Mill Balls - 4" cast. 2000 lbs. approx.
60 - bags Soda Ash
25 - bags salt
6½ - barrels Sodium Sulphur 700 lbs bbl.
1 - lot coke - Approx 500 lb. outside Hoist House
5½ - bbl. Sodium Hydroxide - 600 lb. bbl.
1½ - bbl. Zanthate
50 - lb. Re Agent 301 Approx.

RET PUMP HOUSE: continued

50 lb. ReAgent 208 Approx.
1 gal. Yarmour oil
1 gal. Aerofloat
75 lb. Cup grease - Approx.
25 lb. Gear Grease - approx.
40 gal. Yarmour oil - Approx.

1ST CONVEYOR HOUSE:

1 - Motor - Allis Chalmers - Type AR - 217C - Ser. 22913K - 217 C - 1 - 1 - 25 HP 3 phase 50 cycle - 32 Amps - 440 Volts - 960 RPM.

1 - Potential Starter - Allis Chalmers - Type R - 10 - 25 HP. 3 phase - 440 volts - 50 cycle - ser. 22913K - MO - 2 - 1

1 - Safety Switch - West - Style 597154 C - 60 Amp., - 575 Volts AC.

1 - Safety Switch - West - Style 597151 C - 30 Amp. 575 volts AC. 20 H. (Fan Main Switch)

1 - Reversing Switch - Home-made Double Pole Double Throw.

1 - Belt 25' x 8"
1 - Jaw Crusher - Telesmith - 9" x 18" #40
1 - Grizzly 4 x 8

CONVEYOR SYSTEM:

360' of 24" Conveyor Belt complete with conveyor pulleys and Idlers - Approx. length.

1 - Motor - Allis Chalmers - serial 3K7679 - 1 - 5 HP - 440 Volts - 7.5. Amps - 3 phase - 60 Cycle RPM 850.

1 - Stearns Magnetic Pulley - serial 0391 - RPM 40 - Volt 125 - Amps 11.

1 - Motor Generator Set - West. type CS - 3.5 HP - 3.3 Amp. motor per terminal 440 volt. 174 RPM - 60 cycle 3 phase Ser. 2017256 & Generator D. C. West #10 type SK 2 KW- 125 Volt - 16 Amp 0 1740 RPM. Ser. 2017254.

1 - Line Starter - West. - Class 11200 - H7 - volts. 220 - 440 - cycles - 25/60 - style 825213

1 - Control Panel - West - with voltage control and 1 voltmeter West. Type SL. DC Style #156293D, serial #323807 and 1 Ammeter West - Type SL. DC. Style #173050D - Serial #325673

1 - Safety Switch West. Style 597151 C - 30 Amp. 575 Volt AC.

1 - Line Starter - West - Class 11200 - H. Volts. 220 -440 Cycle 25-60 - Style 588971.

1 - Circuit Breaker - West - Type ABL - Style 782483 Max. Amps 100 - 600 AC Volts. 250 DCV.

#2 Conveyor System & Mill Ore Bin:

1 - Motor - Allis Chalmers - 5 HP - #3K7679 - 3 Volt. 440- Amp. 7.5 - 3 phase 60 cycle 850 RPM.

1 - Line Starter - West. - Class 11- 700H - Volts 440 - 220 - cycles 80-25 - style 588971.

#2 CRUSHER HOUSE:

1 - Starting Compensator G. E. - CR - 1034 - Type NR 1630 form H3) a, Volts - Prim - 440 - Sec. 1760374 for Motor Type 1 - Form K - cycle 60 - 3 phase - 50 HP.

1 - Relay panel - G. E. Cat. 189769 - Type P-C146 - Amps. 60- Volts 600.

1 - Safety Switch - Square D - Cat. No. 86342 - 60 Amp. 600 V. AC.

1 - Switch - Trumball - type C. - 30 Amp. - 500 V. AC - 3 Pole Cat. No. 40351.

1 - Motor G. E. No. 1385985 - cycle 60 - Volt. 440, Amp. 60- 3 phase - RPM 1160 - 50 HP.

1 - 2' Telesmith Cone Reduction Crusher
1 - 2' Ore Gate
1 - 2' x 8 Grizzley
1 - Line Shaft 8' x 2⅛"
1 - Pulley - Split 36' x 11"
1 - Pulley - Split 42' x 13"
1 - Yale Super Geared Block

SHAFT COLLAR & MINE:

1 - 2½ ton skip 32 cubic 2 tons -
1 - Blower Coppus Eng. Corp. Type SM - Size 350 #19194 ✓
1 - head Frame - Speed 3600.
Blower Pipe - Approx 600' x 12" 6. 1. ✓
Skip Rail - Approx 1200' - 20 lb rail ✓
100 Level - N. 1" Pipe line to face S.2-1½" lines to face - 1 car. Approx 600' - 8# track rail

200 Level - N. & S. One pipeline 1" and one line 2" to face approx. 1000' - 8# and 12# track rail - 2 mine cars.

300 Level - N. & S. One pipeline 1" and one pipeline 2" to face. Approx 400' - 8# track rail, 1 mine car.-

400 Level - S - One pipeline to face and 2" line to face and track to face.

400 Level - N - No pipe or track. 2 cars skip pocket with Grizzley - one pump with motor ser. 72824 - 40 HP one - 4 stage Byron Jackson Elec. Sponge #126690 with 40 HP Motor Ser. 72824. Approx.
100 1000' in 8# and 12# track rail laid, and approx. 800' not laid. Also Approx. 400 ft. 1, 1½ and 2" pipe not connected.

600 Level - 3 Cars 0 skip pocket with Grizzley.

SHAFT COLLAR & MINE: - continued

1 - 3½ x 5 Worth. Triplex Pump with 20 HP Motor in Sump. One Pipeline 1" and one pipeline 2" and track to face of North and South drifts and cross-cuts.

Misc. Small tools - shovels, etc.

BOARDING HOUSE:

18' x 34' - two story in front - outside stairway and basement-frame building - sheet metal roof.

DINNING ROOM:

1 - Stove - "Alcalde"
1 - Table - Rough board 11½' x 3'9"
1 - Table - " " 11'10" x 2'10"
4 - Benches
1 - Elec. Water Heater - Hot Point - Cat. #116 W44 serial #CW8372 - volt 230 - capacity 50 gals. - watt 5000

1 - Range - Edison Electric - Cat. #43 - 1RA121 - K. W. 9 volts. 220 #CF1686

1 - Meat Block - 24" x 24"
1 - Scales - Scoop - No name - NX10980
2 - Cook tables
1 - Sink and drain board - wood - metal lined
Lot Misc. dishes - cutlery - cookery utensils
" " " " " " - basement.

UPPER ROOM:

1 - Folding Cot - and pad and mattress
1 - Stove - sheet and iron
1 - Electric - Meter 14 845 974
1 - " " 5674156
1 - Safety Switch - West Style 781 - 906-60 Amp. 230 Volts.

BASEMENT:

1 - Elec. Switch - All Steel Elec. Co. 30 Amps. 125 Volts - 2 pole - cat #31 - connected to Kelvinator Cooling Unit.

Lot Misc. Dishes, Cutlery and cooking utensils.

#1 HOUSE:

3 Room - Frame Construction - sheet metal roof - ply board sealed 14' x 28
1 Meter Elec. #5670884 Sangamo
1 Switch - West. type 60 - 30 Amps. - 125-250 volts
1 Cot

#2 HOUSE:

4 Room - Frame Construction - sheet metal roof - ply board sealed - main building 14' x 30' - lean to kitchen 8' x 10'
1 Meter Sangamo #5675076
1 Switch West. Type 60

#3 BUILDING:

Sheet Metal 10' x 8'
1 All metal double bunk with springs
1 Sheet from heater - small

#4 BUNK HOUSE:

Frame Construction sheet metal Roof - plaster board sealed - 36' x 12'
3 all metal double bunks with spring
2 springs
1 sheet iron heater
1 meter - Sangamo #5673723
1 switch - West - type 00 - style K-60969

#5 BUNK HOUSE:

Frame construction - sheet metal roof - not sealed 36' x 10'
2 all metal double bunks with springs
1 metal folding cot - 1 pad
1 sheet from heater
12 cot springs in rear of bldg.

#6 HOUSE:

Frame construction - sheet metal roof 20' x 12'
1 meter Sangamo #5675077
1 meter Sangamo #5675057
1 switch West. type 00 Style K60969

7 HOUSE:

3 room - main building - frame construction - sheet metal roof- lumber sealed 20' x 12' - addition at rear - sheet metal construction 10 x 10
1 meter Sangamo #5670927
1 Switch West. type 00 - style K60989

#9 HOUSE:

3 room - main building - frame construction - not sealed - sheet metal roof - 24' x 14' addition sheet metal construction 5' x 10'
2 cot springs - 3 cot mattresses - 1 pad
1 S. I. heater
1 meter - Sangamo - #5670931
1 Switch West
1 Fuse Box

GARAGE:

23' x 20' x height 10' sheet metal
1 - oil house - sheet metal construction 8' x 8'
Box 3 delay elec. blasting caps #3
" 3 " " " " #4
" 3 " " " " #5
" 4 " " " " #7
" 3 " " " " #8
17 " " " " #3
9 " " " " #4
1 " " " " #5
29 " " " " #6
10 " " " " #7

#10 HOUSE:

3 rooms - frame construction - sheet metal roof - sealed
plaster board - 24' x 18'
1 meter - Sangamo - #5674207
1 switch - west. type 00
1 fuse box

#11 HOUSE:

3 room and bath - frame construction - shingle roof - comp.-
ply board - sealed - main building 30' x 20'
addition lean to lumber construction - metal
roof 16' x 8'
1 meter - Sangamo - #5837730
1 safety switch E. M. Cat. #29 - 6032N
1 switch - west - type 00 - style K62251
1 fuse box

#12 HOUSE:

1 room - frame construction - sheet metal roof - not sealed -
18' x 12'
1 meter - Sangamo - 5670920
1 switch - west - type 00
1 meter - Sangamo - #5675083 - on building belonging to Mr. Linesba.

#13 HOUSE:

7 rooms - frame construction - shingle roof - comp. sealed
plaster board - 30' x 54' - approx. Manager's
house.

AUTOMOTIVE EQUIPMENT:

1 Dodge truck - 2 ton - 1929 mod. GIB-18828

TANKS:

1 water tank - metal .....7½' x 7' with gauge
1 G. I. iron tank.....8 ' x 8½'
1 G. I. iron tank .....10' x 8½'
1 steel tank - fuel oil .....7'9" x 16'4"
1 tank (red) .....6' x 7' - probably no good. G.I.

ON SURFACE AT SHAFT:

1 bench 12' x 2'
1 pipe vise Standard #72
52 pieces round pine mine timbers 8' long average
22 pieces round pine mine timbers 14' long average
1 wheel barrow - metal

YARD:

1 bucket bailer - brown bros.
1 sheeve wheel 42" x 2"
Approx. 200' mine rail (waste track)
2 mine cars
2 mine car tracks (dolly)
2 mine buckets
1 mine bucket - n.g.
2 mine buckets
Lot Idlers conveyor system
32 pieces G. I. blower pipe 12"
1 grind stone end pulley
1 mine car - dismounted
1 tank G. I. 5' x 6' - rear Elec. Shop
1 Pulley C. I. 30" x 15" x 2½"
200' rail est.
pipe ? All sizes
3 wheel barrows
1 Dumsey Pump 5 x 5 #24989 Multiple Belt - Motor Howell #213658 - 5 HP - Safety Switch - west - #5971510 Hopkins House
Switch - west. W. K. 16 - #545212A
1 metal file cabinet (4 drawer legal)

12'4" Long Steel - 1" - Round, shanked & bitted
14'8" " " 1" " " "
17'6" " " 1" " " "
19'5" " " 1" " " "
11'5" " " 1" - Hex. - shanked & bitted
12'4" " " 1" " " "
12'4" " " 1" " " "
14'10" " " 1" " " "
20'10" " " 1" " " "

Misl. Lot of new drill parts, inc. 2 shucks 50-S-49 - 8615 & 7125, 2 Hammers D-65-S-49 - 327008 and 327064

~~6 Gooseknecks~~

BLACKSMITH SHOP

Building Sheet Iron 14'4" x 15'2" x 10'

1 Drill Press Fay & Egan - Line Shaft Pulley & Belt
1 Grinder #12
1 Anvil 100 lb.
1 Vise - Blacksmith
1 Motor G. E. Serial 4247526 - Mod.400260 - Type KT952 - 60 Cycle - Speed 900, 5 H.P.
1 Column Bar & Arm 5 ft - 3⅛"
1 Jim Crow - Rail Bender
1 2 Wheel Truck N. G.
1 Blacksmith Forge connected with Air
1 Welding Outfit - Purox Torch complete
2 Bundles Welding Rod - ⅛ box Weld Rod
24 Miscl. Drill Bits Timkin
1 Toledo - Stock & Die #B36617 - complete with dies 1", 1⅛", 2".
10 Blacksmith Tongs & Miscl. Tools

4 up to 24" - 1" Hex. Jack hammer Steel, shanked & bitted
6 " " 30" " " "
4 " " 36" " " "
2 " " 42" " " "
1 " " 48" " " "
3 " " 54" " " "
3 " " 60" " " "
2 " " 66" " " "
2 " " 72" " " "
3 " " 84" " " "

1 32" Round Steel, bitted & shanked

~~4 up to 24" Rods for Detachable Bits 1" Hex~~
~~2 " " 30" " " "~~
~~1 52" " " "~~
~~2 58" " " "~~
~~1 64" " " "~~
~~2 75" " " "~~

5 Gal. Tempering Oil
2 Picks - 1 Shovel - 1 Sledge Hammer

TOOL HOUSE

1 Building - Sheet Iron, Lumber lined 14'3" x 10'10" x 10'

1 Cochise Stoper #4, Serial 9572
1 " " #4, " 9530
1 " " #4 " 9578
1 " " #4 " 9539
1 Cleveland " #17 " OM3484
1 " " #17 " 9L3878
1 Cochise Jackhammer #40 Serial 10516
1 Frankfurter Maschinebun Serial 14889 - Jackhammer
1 Ingersoll 849 - Mounted Serial 391004 "
1 " 849 Serial 332829 "
1 " 849 " 349735 "
1 " N72 " 304609 Drifter Mounted
1 " " " 304643 " "
1 " " " 294993 " "
1 " AIL74 " 336212 " "
1 Jack Hammer Mounting - Cochise - Serial 539 ?
1 Centuary Elec. Motor 5 H.P. 110 Volt. #105157
2 Column Bars 7' - 3½"
1 " " 6' - 3½"
1 " " Arm 24"
1 " " " Clamp
2 C. I. Metal Shaft Bearings 1.3/4" "Swivel"
Misel. lot of Valve - Bearing & Pipe Fittings
7 Lots Nails - probably about 500 lbs.
1 Pipe Cutter #3
1 Chain Pipe Wrench
3 Lumber Saws
2 Axes
2 Picks
9 Shovels Square point
5 " Round
4 boxes Timkin Bits (50 in box)
18' - 6" Belt

18 Steel Hex. - 20' x 3/4)
1 " Square 16' x ½" x 1") Outside Tool House

ELECTRIC SHOP

1 Building 12' x 20' x 10'

1 West. Safety Switch - 100 Amp. 125-250 DC - 230 AC
Serial #K62330 (East Camp #1)

1 West. Safety Switch - 100 Amp. 125-250 DC - 230 AC
Serial #K62330 (Cook House #2)

1 West. Safety Switch - 200 Amp. 125-250 DC - 230 AC
Serial K62334 (West Camp #3)

1 E. M. Safety Switch - Cat.#OSF3021 - Type GEN.USE
125 V. 30 AMP - 2 Pole Single
phase

1 Panel Board - with four - 3 Blade Knife Switches

1 Transformer - G. E. Co. #4309910, Type H. form N.
50/60 Cycles - Rating 10 KVA - 440
110 - 220 Cycles

1 Transformer - Same as above Serial 4309925

1 " #4503044 - Type H - form K, Cycles
50/16 Rating 25 KVA Voltage rating
440 - 110 - 220.

1 Transformer - G. E. 3438722 - Type H - form N -
5 KVA 440/110 - 220 Volts

1 Motor - Fairbanks Morse - Serial 92306 Speed 1500
20 HP - B - Type - 3 Phase - 50
cycle 440 volts

1 Motor - Fairbanks Morse - 5 HP Serial 91414 -
Speed 1500 - B Type - 3 Phase - 50
cycle 440 Volts

1 Motor - Centuary - Type S - Mod. 14 - #20785 -
110 Volt 60 Cycle - A. C. Fan.

✓ 1 Compensator - G. E. Co. #355302 - Form F - 4 Volt
Prim 440 - Sec 176/374 - for 50 HP
Motor, 60 cycles, 3 phase.

1 Motor - Emmerson Elec. Co. 1/8 HP #Serial 315270
Type 322200 - Speed 3400 - single
phase - Volts 104 - 60 cycle.

1 Motor - G. E. Replusion - ___ HP - 220 Volts -
form C - 60 Cycle Serial 3177781,
speed 1735.

1 Sangamo Current Transformer - Serial 41278, 300/5 Amp. 6600 Volts.300 Amp.

1 Sangamo Current Transformer - Serial 41281 - 300/5 Amp. 6600 Volts. 300 A.

1 Transformer, Wagner - Serial #8939 - Type ROD - 10 Watts - Cycles 25 - 133.

1 Square D - Safety Switch - Cat. 86341 - 30 Amp. 600 A. C. Volts.

1 Safety Switch - Westinghouse - K551510 - 30 Amps. 575 V. A. C.

1 Safety Switch - Westinghouse #K62103B - 60 Amps. 250 Volts.

1 Safety Switch - Trumball - #72363 - 100 Amps. - 3 Pole, 575 V. A. C.

1 Magnetic Switch - G. E. Co. - C. R.- 7006 - D 30 B Control - 440 Volts. Cycle 60 for 25 HP 440 Volt Motor

1 Sponge Pump - Byron Jackson #126690 - Type 2 x 8 with Motor Complete

1 Motor G. E. Co. - Serial #3749421 - Form C - Volt 220 H. P. Continuous $^{O}40$ C

1 Hand Drill - Champion.

1 Motor - North East Electric - Serial 1787519 - type 3804 - Volts 12 - Mod. G. A.

1 Watt Hour Meter - Sangamo Type H. C. 300 Amps. 460 Volts, 60 cycles, 3 phase #5850216.

1 Motor with Shaft for Emery & Polishing Wheel - Emmerson Elec. Co. Serial #989166, 1/3 H.P. - speed 1750 - 60 cycle - single phase.

1 Elec. Hand Drill - Van Dorn - Serial 206311 - Motor A C or D C 110 Volts.

1 Hand Blower (for Motors) # H2367

1 Voltmeter - Westinghouse Serial 1204445

17 - 200 Watt Lamps)
18 - 100 " ") Stocked for replacement
1 - 300 " ")

Miscl. lot of Fuses and elec. fittings.

1 shaft 3½'x 1⅛ with pulley
2 " 3' x 1.3/8 with pulley

1 Stock & Die - Armstrong Adjustable # 1A
1 " " - Toledo
1 Grease Gun - Alemite
Miscl. lot of Elec. Wire.
1 Chain Vise - Vulcan #2.

AIR & WATER HOSE IN HOIST HOUSE

9 - 50'	Air Hose with	Connections -	3/4"
1 - 32'	"	"	3/4"
1 - 12'	"	"	3/4" & oiler
1 - 10'	"	"	3/4" "
1 - 8'	"	"	3/4"
1 - 10'	"	"	3/4" - 1 splice
4 - 50'	Water Hose	"	1"
3 - 50'	"	"	3/4" & Goose Neck
1 - 36'	" "	"	3/4" with Goose Neck
1 - 26'	" "	no Connection	
1 - 21'	" "	" "	
1 - 15"	" "	with Connection	

HOIST HOUSE

1 Building 40' x 52 x 25 approx.

1 Compressor I. R. Class E R 1 #25929 - 12 x 10
with piping & Receiver belted to

1 Motor - Westinghouse, Induction #280 - 100 H.P.
440 Volts - 115 Amps. per terminal.
3 Phase - 850 RPM - style 160882 -
Serial 1932988 - Belt 39' x 10"
pulley 16" x 16".

1 Steam Hoist - Hendrie & Bolthoff - "Lightning"
Single Drum with approx. 800 ft. 7/8
Cable.

1 Hoist Electric, Double Drum - J. S. Mundy with

1 Motor - Western Elec. 50 H.P. - Type MTC 5532-
8 - 50 - 900 form B-3- Cycle 60 -
Volt 440, Amp. 69 Sec. Amp. 167 -
RPM 855 #4832033 - complete with Con-
troller & Grids & Cable 1000' - 1".

1 Compressor - Ing. Rand - Type 10 B - R.H. Side #14314
P.P. - Air Cylinder 18 x 16 - L. L. Side
#14313 P. P. - Air Cylinder 11 x 16 -
(188c 11 x 16 Two stage) belted to

1 Motor - G. E. Induction #1379987 - Type 1 - 20 - 125 - 360 Form M - 60 Cycle - 180 AMP. 125 H.P. - 440 Volts - Speed no load 360 speed full load 345 - Sec. Amp. 117 with 18" x 35" pulley & 61' x 14" Belt.

1 Vertical Sinker Centrifugal Pump - Krogh - Type L No. 1½ x 9 - with

1 Motor G. E. 10 H.P. - 60 Cycle - 440 Volt Speed 1740 - Serial 4683124.

1 Pump - Smith - Valle - 3 x 2 x 4 #39538 - Boiler feed type

1 Krogh Cent. Pump with Motor - U. S. 2 H.P. Serial 35458 - 3 Phase - Volt. 440 - 220 type FRU

1 Mine Signal Bell - 8" diam.

1 Controller G. E. Serial 408359 - Type 108A.

1 Ammeter G. E. - type R6 - #476455

1 Transformer G. E. - 5 KVA No. 4794589 - 50/60 Cycles 440 - 110/220 Volts 460 - 115/230 - 480 - 120/240 Volts

1 Panel Board - Diamond Elec. Co. Volts 125 - 250 Max. Amp. 60 - Cat. F. S. 10

1 Westinghouse Switch - 600 AMP Max. & 600 Volts. A C Serial 782546 Main Switch

1 Westinghouse Switch - 600 AMP Max. & 600 Volts. A C Serial 782546 - Big Compressor

1 Westinghouse Switch - 225 Amp. 600 A C 250 D C, Serial 781816 "Hoist"

1 Westinghouse Switch - 60 Amp. 575 Volts. - 30 H P Style 597154C- Water Witch

1 Westinghouse Switch - 30 Amp. 575 Volts. A C - 20 HP Style 597151C - Return Pump

1 Switch - Magnetic - Diamond E. Type KYR - Max.H.P.10 Cat. #7524N - form N - Volts 440 - Cycles 50/60 - marked W.W.

1 Westinghouse Switch - 225 Amp. 600 AC - 250 DC #781810 (Small Compressor)

1 Square D Safety Switch - Cat. 86343 - 100 Amp. 600 Volts AC - Station Pump.

1 Westinghouse Safety Switch - 30 Amp. - 575 Volts A C - 20 H.P. S #597151C (Main Lights)

1 Starting Compensator - Westinghouse - 3 Phase - 440 Volts. 60 Cycle 125 - 200 H.P. #24770.

1 Grease Gun - Alemite
1 C. I.Stove with pipe
1 Westinghouse Ammeter - Type LY. Style 423677 Serial 1197736

1 Magnetic Switch G. E. Cat. #388584 - 90 108 - 220 Volt. 60 Cycle - Max. Motor Rating 5 H.P.
1 Receiver - Compressed Air - piped to Compressor #14314
1 Hand timber saw
1 Pick
2 Pipe Tongs
1 Double Jack
1 Suction Hose 16 ft. with Connections 3"
1 " " 9 ft. " 3"
2 Carbide Lamps

CHANGE ROOM - ADDITION TO HOIST HOUSE

1 Stove & Hot Water Tank - Stove U. S. #50
4 Benches
1 Step Ladder - 10 ft.
1 Wash Basin connected
4 Showers - installed

ASSAY OFFICE

1 Building Sheet Iron 25½' x 10' x 10 high

1 Muffle Assay Furnace Denver Fire Clay Co. #4-411 Serial 1117? with burner, oil tank and motor Serial 1477589 Blower DFC250

1 Denver Fire Clay Co. Bullion Furnace with burner, Tank & Crucible 12" x 17" Type ?

1 Scale - Howe - No. 5309.
1 Balance Henry Tromner #85
1 Tromner Balance Glass Enclosed 19" x 19" x 10½"
1 Thompson " " " 12" x 10" x 5½"
1 Thompson " " " 16" x 17" x 8"
1 Electric Plate - 2 burner
1 Mine Saw
1 Elec. Switch - Safety EM Cat. OSF-3021 - Volt. 125 S. Phase 30 Amps. 2 Pole Type Gen. Use.

1 Entrance Switch Trumball Cat. #5791 - 2 Pole - 30 Amp. 125 Volt.

1 Line Starter - Westinghouse - Style 832593 - 110 - 220 Volts, 50/60 Cycle
1 Becker - Pulp Balance
Miscl. lot of Chemicals - Glassware, etc.

BUCKING ROOM

1 Building - Sheet Iron 20' x 12' x 12'

1 Braun Disc Pulverizer - Type UA - Serial 24238
1 K & K Laboratory Flotation Machine " 23482
1 Motor U. S. 2 H.P. - 440 Volts. " 39818
1 Switch - Oil - G. E. Type T. Volt. 600 Amp. 50
1 Switch - Brown & Pengilly - Cat.#3035 - 30 Amp. 500 Volt. 3 Pole.
1 Jack Shaft & bearings 2" x 10 ft.
10' Belt 2"
18' " 2"
14' " 2"
16' " 3"

4 Split steel pulleys
12"d x 6"f.-S.S.
36 d x 6 f.-S.S.
10 d x 4½f.-S.S.
16 d.x 4½f.-S.S.

1 Bucking Board 20" x 24"
1 Muller 15 lb.
1 Gas Stove - Monarch, 1 burner
1 Mine Axe
1 Single Jack
1 Braun Lab. Crusher (N.G.)
1 Cupel Moulding Machine Serial 20458
1 Sample Splitter - Braun
10 Pulp Sieves 20 - 30 - 50 - 60 - 70 - 80 - 90 - 100 - 150 - 200
250 lb. Bone Ash
250 lb. Borax Glass
425 lb. Sod.Bicarb.
150 lb. Soda Ash
240 - 35 Gran Crucibles
200 Cupels - Approx.
1 Gal. Barrett Oil #4
⅛ gal. Coal Tar

GUEST HOUSE

Building Front 38' - 48' - 1½ Story - Bungalow, Frame Construction - Six bedrooms, sleeping porch - Main Living Room - Two Bath Rooms (Showers) Complete - Basement - Bedroom - Kitchen - Dining Room with Veranda.

Main Living Room contains :
1 Axminster Rug 11 x 14"
2 Overstuffed Rockers
1 " Chair
4 Occasional Chairs
1 Floor Lamp
2 Lighting Fixtures (cluster)

Bed Room #1 contains :
1 Axminster Rug, 8 x 10
1 Simmons Bed - Box Mattress & Mattress, 1 double Blanket, sheets & Pillows & Covers
1 Bureau
1 Floor Lamp
1 Wardrobe

Bed Room contains:
1 Simmons Single Bed - Box Mattress & Mattress, Double Blanket & Sheet - 1 Pillow

Bed Room contains:
1 Axminster Rug 8 x 10
1 Simmons Bed Double - Box Mattress & Mattress, 1 Double Blanket, Pillow.
1 Bureau

Bed Room # 2 contains:
1 Axminster Rug 8 x 10
1 Simmons Bed - Box Mattress - Mattress - Double Blanket, 1 sheet
1 Bureau

Out

Bed Room #3 contains :
1 Axminster Rug 8 x 10
1 Simmons Bed - Box Mattress - Mattress - 2 Sheets, 2 Pillows, 1 Double Blanket
1 Bureau

Bed Room #4 contains :
46 ITP Carbide Mine Lamps

Hall to Basement contains :
1 Wardrobe

1 Shower Room - Toilet - Wash Bowl - Mirror, Shower Fixtures Complete - 1 Shower Curtain

1 Electric Heater - Edison Hot Point #A30 Cat.111A44

1 Shower Room - Toilet - Wash Bowl - Mirror & Shower Fixture complete - 1 Shower Curtain

Basement Bedroom contains:
1 Simmons Bed - Coil Springs & Mattress, 1 Sheet, 1 Pillow
1 Light Fixture
1 Simmons ¾ Bed - Box Mattress & Mattress, 1 Pillow, 1 sheet.
1 Bureau - no glass
1 Axminster Rug 8 x 10

Dining Room - Basement contains :
1 Oil Heater - American #93 ?
1 Small Table N. G.
2 Light Fixtures

Kitchen contains :
1 Hot Water Heater G. E. Hot Point, Serial EW528, 230 Volts, Cap 30 Gal.
Kitchen Sink (Enamel)
3 Light Fixtures
1 Westinghouse Switch K 60-969
1 Bench 6'

Furnace Room contains :
1 Wardrobe
1 Furnace - pipeless with oil burner, Motor # etc.
18 Window Shades
14 Electric Light Fixtures Main Floor Bedroom & Hall
1 Ball Aerial
1 Meter Sangamo - #4822931
1 Safety Switch - Diamond D. Cat #47313E
1 Safety Switch - West. - K62332
1 Switch - West. Type O. O., style K62351
1 Fuse Box

MANAGER'S HOUSE
2 Simmons Beds - Box Spring - Mattress
2 Bureaus with Mirrors
4 Occasional Chairs
1 Arm Chair overstuffed
1 Night Stand

MILL BUILDING

Building - 52' wide, 85' long with addition - wood sheet metal and concrete construction.

1 Motor - Allis Chalmers - Induction 100 H.P. RPM 435, 102 Amps. - 60 Cycle - 3 Phase - 440 Volt.
1 G. E. Controller #22131
1 G. E. Oil Switch #335997 - Form K14 Amps 100 Volt. 600.
1 Set of Grids for Marcey Ball Mill Motor
1 #64½ Marcey Ball Mill #163
1 Dorr Duplex Classifier 22' long 6' wide with Belt
1 Motor U. S. Elec. Co. - Induction #11966 - 3 Phase 50 Cycle, RPM 1000 - 10 H.P.
1 West Line Starter - Class 11-20 B5, Serial 513126 - 60 cycle, 440 Volt, with Conduit, wiring and push button.

1 Safety Switch - West. 100 Amp. 50 H.P - 575 Volts AC Serial 597157B (Ball Mill #2)

1 Merco Overload Relay 50 Amp. 600 Volt., Type A. Ser. 132. (On Ball Mill #2).

1 Starting Compensator G.E.C. CR1034, Type NR 1625, Form 43P1 $1016 - 440 Volt. prim. 176/374 Volt. Sec. for Type 1 Form K 35HP, 60 Cycle, 3 Phase.

1 Ammeter - West. Type LY. Style 423677 - Ser. 1197737
0 to 800

1 Oil Circuit Breaker - West. Type F10 - 200 Amp. Volt.
Max. 2500. Breaker unit #437892A (On Ball
Mill #1).

1 Oil Circuit Breaker - West. Type F10 - 300 Amp. Volt.
Max. 750 #437893A (On Main Power)

1 Safety Switch - West - 30 Amp. - 20 H.P. - 575 Volt.
A C, Style 597151C (On Thickner #1)

1 Safety Switch on Thickner No. 2
1 " " on Classifier "C"
1 " " on Amalgamator
1 " " on Tables

1 Safety Switch - West. - 60 Amp., 30 H.P., 575 AC,
Style 597154C on Thickner #3 & Mud Pump
1 Safety Switch - West. on Filter Plant
1 " " " on Sand Pump #1
1 " " " on " " 2
1 " " " on Flotation
1 " " " on Classifier #D
1 " " " on Return Water Pump
1 " " " No name

1 Compensator G.E. - CR 1034, Type NR, 1660 form H.
3 P 1 - Volt. Prim. 400, Volts Sec 200/
320 for Motor Type 1, form K - 10 HP
Cycle 40-50, 3 Phase (On Classifier D)

1 Relay - Diamond E. (On Classifier D).

1 Line Starter - West. Class 11 - 200 H - 60 Cycles
440 Volts. (On Classifier C).

1 Motor Starting Switch - G.E., 3 Phase or 2 Phase -
3 H.P., 110 Volts or 7½ H.P. 440 volts.
(On Thickner #1)

1 Safety Switch - West. - 30 Amp., 500 Volt. AC,
style K662201B (On Lights)

1 Panel Board - Diamond E, 125-250 Volts, 45 Amp. Max.
Cat.#FS6 - 6 circuit

1 Panel Board - Diamond E, 125-250 Volts, 47 Amp.
Cat. FS8, 8 circuit.

1 Transformer, G.E., Ser. 3870344 - Type H. Form N.,
Cycles 50/60, 5 KVA, 440 Volts. to
110/220 Volts., 460 to 115/230, 480 to
120.240 Volts.

1 Dorr Thickner - Approx. 20' diam. x 12' high, com-
plete with agitator & Motor G.E. 60 Cycle
Serial 1684079.

1 Motor G. E. Induction #89679, Type 1 - Class 8 - 40 - 900 - form K., 60 Cycle, 3 Phase, 40 HP - 440 Volts. 50 Amp.

1 Ball Mill - Wellington Iron Works - Complete, 5'x5' Pulley & V. Belt.

1 Sand Pump - Wilfley - Serial # C32473 - Size 3 with

1 Motor - West. - 10 H.P., Serial #2646614 - Style 770940A, 220 Volt. 3 Phase - 25.4 Amps per terminal.

1 Induction Motor - Robbins & Meyers - 3 Phase, 60 Cycle - 440 Volt., Speed 1160 RPM., Amp. 614, Frame 202, 2 H.P., Type K. #501848 (Belted to)

1 Dorr Classifier - Approx. 36" x 20 ft. Simplex # 998-B,

1 Lab. Flotation Mach. Denver Equip. Co. with G. E. Motor, type KSA - form C., Volt. 110 - Amp. 5.4, Single Phase, HP ½ - 60 Cycle RPM 1725, Mod. 5KSA47 - C1.

1 - 4 Compartment Reagent Feeder driven by electric motor, G. E. Mod. 5 RSA 45 A1 - Type RSA, Frame 45 - Single Phase - 1/4 H.P., 60 cycle, speed 1725. Pat.No. 1490708 through

Speed Reducer "Boston" Serial No.58583 - Cat. # TA80 Ratio 80/1.

1 Plat O Sand Table - Deister #801 - with direct connected

Induction Motor - West. - 1 H.P., 440 Volt. Frame 863, Style ES 21726 - 3 Phase - 60 Cycle, 1.6 Amp. per terminal 1160 RPM, Serial 3591464, complete with speed reducer.

1 - Motor Starting Switch - West. - Type WK16 - 115 Volt. AC, Style 545212A.

1 Plat O Sand Table, Deister, with direct connected induction Motor - West. 1 H.P., 440 volt. Frame 863, Style ES21726 - 3 Phase - 60 Cycle, 1.6 Amp. per terminal 1160 RPM, Ser. 3591502, complete with speed reducer

1 Starting Switch - West. - Type WK16 - 116 Volt. AC, style545312A

1 Plat O Sand Table - Deister with direct connected induction Motor - West - 1 H.P. - 440 Volt. Frame 863, Style ES21726, 3 Phase, 60 Cycle, 1.6 Amp. per terminal, 1160 RPM, Serial 3591440 - complete with speed reducer.

2 Starting Switches - West. - Type WK16 - 115 Volt. AC, Style 545212A.

1 Plat O Sand Table - Deister, with direct connected induction Motor - West. - 1 H.P., 440 volt. Frame 863, Style ES 21726, 3 Phase, 60 Cycle - 1.6 Amp. per terminal, 1160 RPM - Serial 3589995 - complete with speed reducer.

1 Plat O Sand Table - Deister, with direct connected Motor - West. - 1 H.P. Motor - 440 Volt. Frame 863, Style ES 21726, 3 Phase, 60 Cycle, 1.6 Amp. per terminal, 1160 RPM, Serial 3591435, complete with speed reducer.

1 Starting Switch - West. - Style 782106 - Type WK18 Max. H.P. 2 - 550 Volts.

1 Plat O Sand Table - Deister, with direct connected Motor - West. - 1 H.P., 440 Volt., Frame 863, Style ES 21726, 3 Phase, 60 Cycle, 1.6 Amp. per terminal, 1160 RPM, Serial #3591486, complete with speed reducers.

1 6 Cell #24 Fahrenwald Denver - Sub.A - Flotation Machine with
5 - Induction Motors - Allis Chalmers - Type AR - Frame 225 - 2 H.P. - 24 hour, 3 phase, 60 cycle, 1740 RPM, 220/440 Volts. 2.7/5.4
Serial Nos. 55600K - 709E - 10 - 6
" " 55600K - 709E - 10 - 7
" " 55600K - 709E - 10 - 4
" " 55600K - 709E - 10 - 5
" " 55600K - 709E - 430-4224-113

1 Motor - West., Type AR - Frame #225 - 3 HP - 24 hour 1740 RPM - 220 - 240 Volts. Ser. 709E. M 6660-2 with

1 Vert. Centrifugal Sand Pump, Denver Equipt. and Motor

1 Starting Switch - West. - Type WK16 - 115 Volt. AC, Style 545212A

5 Motor Starters - West. - Style 782108 - Max. H.P. 2 - 550 Volts. - Type WK18

1 Starter Switch - West. - WK16, Style 545212A.

1 Vertical Steam Boiler, approx. 10 HP, complete with Valves, Lubricator & Pump.

1 Motor - U. S. Elec. Co., connected to Compensator

1 Compensator G.E. - CR1034, Type NR 1655, Form H3P1, 440 Volt. Primary, for Induction Motor Type 1, Form K - 15 H.P. 40/50 Cycle, 3 Phase.

BACK OF MILL BLDG:

1 Tailing Thickner 25' x 12" Complete with Gear, Rakes and pulleys - Belt connected to Motor - West. 1 H.P. 220 volts, 60 cycle, 3 Phase - speed 1140 - Ser. 2857525 - covered by Sheet Iron

1 Starting Switch - West. - #782108, Type WK 18 - Max. H. 2 - 55 Volts.

1 Tailing Thickner 40' x 8', complete with Gear, Rakes, and pulleys - belt connected to Motor U. S. Elec. Co. - 5 H.P. - Speed 1800, 3 Phase - 60 cycle - 220 - 440 Volts. #113562 - Covered by Frame and Sheet Iron.

1 Oil Switch, G. E. #514310 - Form P10 - 30 Amps. 600 Volt.

1 Dorco Simplex Diapghram Pump - Motor G. E. - Mod. C2838, Frame 204 - Type K - Cycle 60 - 3 Phase, Speed 1135 - 1 H.P. on 25 x 12 Thickner.

RET PUMP HOUSE Sheet Metal 8' x 8' x 10'

1 Motor West. Serial 4402950 - Style 36D827 - 970 RPM 50 YCycles - 3 Phase - 15 H.P., 110 volts.

1 Switch Trumball - Type C. Cat. No. 40362 - 60 amps. 3 Pole - 575 A C Volts Max HP 15.

1 Auto Starter - West. 5 to 15 H.P. - 440 volts - 60 cycle 3 phase, Style #185157

1 Belt 19' x 6"

1 Cent. Tailing Pump - Kimball Kroch - 2"

~~8~~ Denver Automatic Samplers (~~One Motor Missing; one in Conveyor House~~)

1 Cent. Pump - Byron Jackson 1½" ?

1 Lot Mill Balls - 4" Cast. 2000 lbs. approx.
60 bags Soda Ash
26 " Salt
6⅔ Barrels Sodium Sulphur 700 lbs. Bbl.
1 lot Coke - approx. 500 lb. outside Hoist House
3⅓ Bbl. Sodium Hydroxide - 600 lb. bbl.
1⅔ " Zanthate
50 lb. Re Agent 301 approx.
80 lb. " " 208 approx.
1 Gal. Yarmour oil
1 " Aerofloat
75 lb. Cup Grease - approx.
25 lb. Gear " "
40 Gal. Yarmour Oil "

1st CONVEYOR HOUSE:

1 Motor - Allis Chalmers - Type AR - 217C - Ser. 22913K - 217C - 1 - 1 - 25 HP. 3 Phase 50 Cycle - 32 Amps - 440 Volts - 960 RPM

1 Potential Starter - Allis Chalmers - Type R - 10 - 25 HP, 3 Phase - 440 Volts - 50 Cycle - Ser. 22913K - MO - 2 - 1

1 Safety Switch - West. - Style 5971540 - 60 Amp., 575 Volts A C

1 Safety Switch - West. - Style 5971510 - 30 Amp., 575 Volts A C - 20H (Fan Main Switch)

1 Reversing Switch - Home made Double Pole Double Throw

1 Belt 25' x 8"
1 Jaw Crusher - Telesmith - 9" x 18" #40
1 Grizzly 4 x 8

CONVEYOR SYSTEM:

360' of 24" Conveyor Belt complete with Conveyor pulleys and Idlers - Approx. length.

1 Motor - Allis Chalmers - Serial 3K7679-.1 5 HP 440 Volts - 7.5 Amps - 3 Phase - 60 Cycle RPM 850

1 Stearns Magnetic Pulley - Serial 0391 - RPM 40 - Volt 125 Amps 11

1 Motor Generator Set - West. - type CS - 3.5 HP - 3.3 Amp. Motor per terminal 440 volt. 174 RPM 60 Cycle - 3 Phase Ser. 2017256 & Generator D. C. West #10 Type SK 2 KW 125 Volt. 16 Amp - 1740 RPM. Ser. 2017254.

1 Line Starter - West. - Class 11200 - H7 - Volts. 220-440, Cycles 25/60 - Style 825213.

1 Control Panel - West. - with Voltage Control & 1 Voltmeter West. type SL. DC Style #156293D, Serial #323807 & 1 Ammeter West. - Type SL. DC. Style #173050D - Serial #325673.

1 Safety Switch West. - Style 5971510 - 30 Amp. 575 Volt AC

1 Line Starter - West. - Class 11200 - H Volts. 220-440, Cycle 25-60, Style 588971.

1 Circuit Breaker - West. - Type AB1 - Style 782483 Max. Amps 100 - 600 AC Volts. 250 D.C.V.

#2 CONVEYOR SYSTEM & MILL ORE BIN:

1 Motor - Allis Chalmers - 5 HP - #3K7679.3
Volt. 440, Amp. 7.5 - 3 Phase 60 Cycle
850 RPM

1 Line Starter - West. - Class 11 - 700H - Volts
440-220, Cycles 60-25, Style 586971.

#2 CRUSHER HOUSE:

1 Starting Compensator G. E. - CR - 1034 - Type NR 1630
form H3Fa, Volts. Prim. 440 - Sec. 176-374
for Motor Type 1 - form K, Cycle 60 - 3 phase,
50 H.P.

1 Relay Panel - G. E. Cat. 189769, Type P-C146, Amps.
60, Volts 600.

1 Safety Switch - Square D - Cat.No. 86342 - 60 Amp.
600 V. AC

1 Switch - Trumball - Type C - 30 Amp. 500 V. AC
3 Pole, Cat. No. 40351

1 Motor - G. E. No. 1385985 - Cycle 60 - Volt. 440,
Amp. 60, 3 Phase - RPM 1160 - 50 HP

1 - 2' Telesmith Cone Reduction Crusher
1 - 2' Ore Gate
1 - 2' x 8 Grizzley
1 - Line Shaft 8' x 2 7/16"
1 - Pulley - Split 36' x 11"
1 - Pulley - " 42' x 13"
1 - Yale Super Geared Block

SHAFT COLLAR & MINE:

1 - 2½ ton Skip
1 - Blower Coppus Eng. Corp. Type SM, size 350 #19194
1 Head Frame, Speed 3600.
Blower Pipe - Approx. 600' x 12" G. I.
Skip Rail - " 1200' - 20 lb. Rail
100 Level - N. 1" Pipe line to face S. 2 - 1½" lines
to face - 1 Car. Approx. 600' - 8# Track Rail
200 Level - N. & S. One pipeline 1" & one line 2" to
face - Approx. 1000' - 8# and 12# track rail,
2 mine cars.
300 Level - N. & S. One pipeline 1" & one pipeline 2"
to face. Approx. 400' - 8# track rail,
1 mine car.
400 Level - S - One pipeline to face and one 2" line to
face, and track to face.
400 Level - N - No pipe or track - 2 Cars Skip pocket with
Grizzley - one Pump with Motor Ser. 72824, 40 HP
one - 4 stage Byron Jackson Elec. Sponge #126690
with 40 HP Motor Ser. 72824. Approx. 1000' - 8#
& 12# track rail laid, and approx. 800' not laid.
Also approx. 400 ft. 1, 1½, 2" pipe not connected.
600 Level - 3 Cars 0 Skip pocket with Grizzley.
1 - 3¼ x 5 Worth.Triplex Pump with 20 HP Motor in Sump
One pipeline 1" & one pipeline 2" & track
to face of North & South drifts and Crosscuts
Miscl. Small Tools, Shovels, etc.

BOARDING HOUSE - 18' x 34' - Two Story in front - outside stairway - & Basement - Frame Building - Sheet Metal Roof.

Dining Room:

1 Stove "Alcalde"
1 Table - Rough board 11½' x 3'9"
1 " " " 11'10" x 2'10"
4 Benches
1 Elec. Water Heater - Hot Point - Cat. #116 W44 Serial # CW8372, Volt. 230 - Capacity 50 Gals. - Watts 5000

1 Range - Edison Electric - Cat. #43 - 1RA121 - K.W.9 - Volts. 220 #CF1686.

1 Meat Block - 24" x 24"
1 Scales - Scoop - No name NY10980
2 Cook Tables
1 Sink & Drain Board - wood, metal lined
Lot miscl. dishes - cutlery - cookery utensils
" " " " " " - Basement

Upper Room:

1 Folding Cot - & pad and Mattress
1 Stove - sheet iron

1 Elec. Meter 14 845 974
1 " " 5674156
1 Safety Switch - West Style 781 - 906 - 60 Amp. 230 Volts.

Basement:

1 Elec. Switch - All Steel Elec. Co. 30 Amps. 125 Volts - 2 Pole, Cat #31 - connected to Kelvinator Cooling Unit.

Lot miscl. dishes, cutlery and cooking utensils.

#1 House - 3 room - Frame construction, sheet metal roof, ply board sealed 14' x 28
1 Meter Elec. 5670884 Sangamo
1 Switch - West. type 80 - 30 amps - 125-250 Volts.
1 Cot

#2 House - 4 room - Frame construction - S.met. roof, ply board sealed - main bld. 14' x 30' lean to kitchen 8' x 10.
1 Meter Sangamo #5675076
1 Switch West. Type 80

#3 Building - Sheet Metal 10' x 8'
1 All metal double bunk with springs
1 sheet iron heater - small

#4 Bunk House - Frame construction, S.met. Roof, Plaster Board sealed 36' x 12'
3 all metal double bunks with spring
2 springs
1 sheet iron heater
1 meter - Sangamo #5673723
1 switch - West. - type 00, Style K-60969

#5 Bunk House - Frame construction. S.metal roof not sealed 36' x 10'
2 all metal double bunks with springs
1 metal folding cot - 1 pad.
1 sheet iron heater
12 cot springs in rear of bldg.

#6 House - Frame construction - sheet metal roof 20' x 12'
1 meter Sangamo 5675077
1 " " 5675057
1 Switch West. Type 00 Style K60969

#7 House - Frame construction, S.metal roof, Lumber sealed 20' x 12'

#8 House - 3 Room - Main Bldg. Frame Const. S. M. Roof, Lumber Sealed 20' x 12' - addition at rear, S.M.const. 10 x 10
1 meter Sangamo 5670927
1 switch West. type 00, Style K60989

#9 House - 3 Room - Main Bldg. Frame Const. Not sealed, sheet metal roof, 24' x 14' addition S. M. construction 5' x 10'
2 Cot springs - 3 cot mattresses, 1 pad.
1 S. I. Heater
1 Meter - Sangamo - 5670931
1 Switch West.
1 Fuse Box.

Garage 23' x 20' x height 10' Sheet Metal

1 Oil House - Sheet Metal Const. 8' x 8'

Box	3	Delay	Elec.	Blasting	Caps #3
"	3	"	"	"	#4
"	3	"	"	"	#5
"	4	"	"	"	#7
"	3	"	"	"	#8
	17	"	"	"	#3
	9	"	"	"	#4
	1	"	"	"	#5
	29	"	"	"	#6
	10	"	"	"	#7

#10 House - 3 rooms, Frame Construction - Sheet Metal Roof, Sealed Plaster Board - 24' x 18'
1 Meter - Sangamo - 5674207
1 Switch - West. - Type 00
1 Fuse Box

#11 House - 3 Room & Bath - Frame Construction - Shingle Roof - Comp. - Ply board sealed, Main Bldg. 30' x 20' - Addition lean to Lumber Construction, metal roof 16' x 8'
1 Meter - Sangamo - 5837730
1 Safety Switch E M - Cat. #29 - 6032N
1 Switch - West. - Type 00, Style K62251
1 Fuse Box

#12 House - 1 Room - Frame Construction - Sheet metal roof, not sealed - 18' x 12'
1 Meter - Sangamo - 5670920
1 Switch - West. - Type 00

1 Meter - Sangamo - 5675083 - on Building belonging to Mr. Linesba

#13 House - 7 Rooms, Frame Construction - Shingle roof, Comp. Sealed Plaster Board - 30' x 54' approx - Manager's House.

AUTOMOTIVE EQUIPMENT:

1 Plymouth Coupe - 1933 Mod. - Serial 1811237 - Engine PC54840 (Poor condition)

1 Dodge Truck - 2 ton - 1929 Mod. CIB-18028

1 Road King #7 Road Grader

1 Tractor - Holt - Caterpillar, 30HP

TANKS:

1 Water Tank - metal 7½' x 7', with gage
1 G. I. Iron Tank 8' x 8½'
1 G. I. " " 10' x 8½'
1 Steel Tank - Fuel Oil 7'9" x 16'4"
1 Tank (RED) 6' x 7' - probably no good - G.I.

ON SURFACE AT SHAFT

1 Bench 12' x 2'
1 Pipe Vise Standard #72
5000 approx. Mine Wedges
52 pieces Round Pine Mine Timbers 8' long, average
22 " " " " 14' " "
1 Wheel Barrow - metal

YARD

1 Bucket Bailer - Brown Bros.
1 Sheave Wheel 42" x 2"
Approx. 200' Mine Rail (Waste Tracks)
2 Mine Cars
2 Mine Car Trucks (Dolly)

2 Mine Buckets
1 " " N. G.
2 " "
Lot Idlers Conveyor System
32 pieces G. I. Blower Pipe 12"
1 Grind Stone and pulley
1 Mine Car - dismounted
1 Tank G. I. 5' x 6' - Rear Elec. Shop.
1 Pulley C. I. 30" x 15" x 2⅞"
200' Rail Est.
Pipe ? All sizes
2 Wheel Barrows
1 Rumsey Pump 5 x 5 #24989 Multiple Belt - Motor
Howell #213659 - 5 HP - Safety Switch -
West. - 5971510 Hopkins House
Switch - West. WK 16 - 545212A
~~1 Cone Settling Tank~~

~~2~~ Metal File Cabinets(4 Drawer Legal)
~~1 Adding Machine - Burroughs Portable~~

This physical inventory was made by the undersigned, and is substantially correct as above.

W. H. Broadgate

Walter Black

PHYSICAL INVENTORY OF SURFACE AND UNDERGROUND EQUIPMENT OF THE NATIONAL GOLD CORPORATION, made for W. C. BROADGATE, TRUSTEE IN BANKRUPTCY, on May 30, 1936.

STEEL AND STEEL SHARPENING BUILDING:

Steel & Steel Sharp. Building. 21' x 14'6" x height 8'6" C.Iron.
Steel Sharpener Ingersoll Rand, Serial 4002, Size
1 - R 33. Dies & Dollys for 1" Hex. & 1" Round Steel

1 - Forge connected with Air
1 - Anvil - small
23 - up to 24" Starter 1" Hex. Jack Hammer Steel, shanked and bitted
43 - " " 30" " " "
3 - " " 36" " " "
46 - " " 42" " " ""
12 - " " 48" " " "
29 - " " 54" " " "
11 - " " 60" " " "
22 - " " 66" " " "
9 - " " 72" " " "
6 - " " 84" " " "

17 - " " 24" Starter 1" Hex. " Stoper Steel, no shanks but with bits
6 - " " 30" " " "
23 - " " 36" " " "
6 - " " 42" " " "
15 - " " 48" " " "
15 - " " 54" " " ""
9 - " " 60" " " "
19 - " " 66" " " "
5 - " " 72" " " "
14 - " " 84" " " "

7 - " " 24" Starter 1" Round Steel - with Shanks and bits.
2 - " " 30" " " "
14 - " " 36" " " "
10 - " " 42" " " "
13 - " " 48" " " "
4 - " " 54" " " "
7 - " " 66" " " "
4 - " " 72" " " "

~~122 Assorted new detachable Bits - Timkin.~~
38' Air Hose 3/4" with fittings
2 Column Bars & Clamps - 2 ft. - $3\frac{1}{2}$" x $3\frac{1}{2}$"
2 " " Clamps - $3\frac{1}{2}$ x $3\frac{1}{2}$
5 Machine Line Oilers
2 Gal. Castor Oil
9'6" Long Steel - 1" - Round, shanked & bitted

ON

NATIONAL GOLD CORPORATION

Gold Mining Property

YAVAPAI COUNTY, ARIZONA.
August 15, 1937.

LOCATION:

The properties of the National Gold Corporation are located 8 miles south of Prescott, Arizona, and are accessible by a good motor road. This road is in good condition and may be kept passable throughout the winter season.

ALTITUDE AND TOPOGRAPHY:

The elevation of the properties is between 6,500 feet and 7,500 feet above sea level. The hills around the properties are about 2,000 feet above the surrounding territory.

This district is not rugged and the hills have gentle slopes and may be travelled over without difficulty. Several good tunnel sites are afforded on the property, thus making it possible to operate a portion of the mine through tunnels. An excellent tunnel location for the development of the section of ground above the 600 foot level in the present workings of National shaft and ground south into the Nevada holdings is located on the north end of the property. This would cover the vein system for nearly 3,000 feet, giving backs up to 900 feet high on the most southerly part of the Gazelle property.

TIMBER AND WATER:

The property is well supplied with pine and spruce timber suitable for mining timbers. It will be necessary,

however, to use outside timber for any permanent work underground, such as shaft timber, ladders, etc., due to the fact that the local timber deteriorates readily underground.

The water supply which is of utmost importance to the life of this property has been found to be only 9,000 gallons per 24 hours from the underground workings. This alone is not sufficient to insure steady operation of a 100-ton flotation mill and supply the domestic water for the camp. It is possible to bring in about 8,000 gallons per twenty-four hours from the Victor shaft also held by the National Gold Corporation and only a short distance to the east of the mill site. A pipe line has been installed to within 250 feet of the Victor from the mill and with a moderate expenditure on re-timbering the shaft collar and installing a pump this source of water could be tapped.

The possibilities of developing water as mining progresses are good either on the 400 foot level by driving the drift South in the Nevada ground or by sinking a 200 foot winze from the 600 foot level.

With some alterations and the addition of a tailing filtering plant to the mill flow sheet, operations could be carried on easilu with 20,000 gallons of water per day.

The amount of water will be greater than the amount being made now in the spring and it may be possible to store some of this water by damming the deep creek bed south of the Mill site.

The water situation can be solved without great expense so should not hinder steady operation of the Plant.

POWER:

The property is supplied with electric power from the Arizona Power Company's line which crosses the property.

All machinery and buildings are electrically equipped and in good repair.

CLIMATE AND WORKING SEASON:

The climatic conditions in this district are ideal and steady operation of the plant can be assure throughout the year.

GEOLOGY:

The National Gold Corporation's properties are located along the strike of a dioritic intrusion which is about two miles long and from a few hundred feet to a half mile wide. The rock intruded by the diorite is schist containing quartz and iron carbonate and some greenstones.

The vein system seems to be all related and connected to the main Midnight vein which may be traced nearly two miles.

Numerous branch veins lead out from the main vein and the majority of them carry values similar to the main break. The walls of the main vein are schist and diorite with the occasional large block of diorite included in the vein material itself.

The location of the property in relation to the Strikes of the diorite intrusion and the vein system gives a length of favorable ground about 3,000 feet long through which the vein system has been traced. Only 600 feet of this length has been explored by underground workings.

The work done to date indicates that occasional pinches and barren sections can be expected in the development of this type of vein so for safety it will be estimated that in future development only 50% of the vein developed will show ore. Parallel veins may make ore to balance this loss but until actual development it is only a matter of conjecture to expect more than 50 % ore from development done.

MINERALOGY:

The ore is a quartz ore with considerable amounts of iron and manganese oxides present in the vein material above 600 foot level. The lower levels indicate a bottom to the leached zone and the changing over of the mineral to sulfides. The gold and silver values are associated with the oxides and sulphides. The gold in the ore on the upper levels is coated with the manganese and iron oxides. A heavy primary slime is formed in milling the ore but it has been found that the slimes carry very little of the values so no difficulties should be encountered in treating the ore.

MILL AND SURFACE PLANTS:

The mine is completely equipped for mining operations and the compressors, hoist, etc., are in good repair.

The mill has machinery installed to treat 200 tons per day. The present flow sheet is not suitable for this type of ore and cannot operate even near the rated capacity on the present water supply.

All machinery in the mill with a small amount of adjustment can be put in working order hastily and easily.

It is recommended that the present flow sheet be altered by removing completely the secondary grinding unit, the installing of a heavy duty Denver Sub A flotation cell in place of the Gibson amalgamator, the installing of bank of 8-30 inch Denver Sub- A cells to take the primary classifier overflow, thus floating direct from the grinding circuit. It may be possible after some research on the problem to discontinue the use of the 4 Wilfley tables except one to be used as a pilot table on the end of the circuit.

It has also been found that in order to operate this mill on the present water supply it will be necessary to filter

and stack the tailings by means of a conveyor belt.
In this way recovering practically all the water for re-use in the mill

The mill with the above alterations can be operating or operated at 100 tons per day on 20 tons of water or about 6000 gallons per day.

The amount required to make the above alterations and place the mill in condition to operate at 100 tons per day capacity will not exceed $20,000.00.

A copy of the preliminary flotation tests run on a composite sample of the National Gold Corporations ore is enclosed along with other recommendations.

DEVELOPMENT:

The property is developed to 580 feet in depth by a two-compartment inclined shaft which, when inspected, was in very good condition and would require practically no repair to condition it for production.

The lateral work done is as follows:

100 foot level a total of 320 feet of drifting was done. A portion of this work is caved from 60 ft. on north of the shaft.

200 ft. level a total of 498 feet of drifting was done and the workings, although passable, will require cleaning up and retimbering in places before actual mining can be rusumed.

300 ft. level a total of 314 feet of drifting was done and the workings done are in the same condition as the 200 ft. level.

400 ft. level a total of 550 feet of drifting was done, all of which is in good condition and with very little work active mining could be resumed again.

600 ft. level a total of 548 feet of drifting was done, all of which is in good condition except the section of caved ground north of the north stope. This has closed the

drift complet[illegible] and will require cleaning out and re-mbering before the north end of the drift can be reached.

A total of 14 stopes have been started, some of which were carried through to the level above. To date stoping has been carried on with little care being given to leaving substantial shaft pillars or attempting to gain the highest recovery of minable ore developed.

Most of the stopes inspected were full of ore, probably low grade, due to the high dilution occurring at the period of shut down. These may be pulled an cleaned, however, and a milling grade obtained from them.

Another important section of developed ground is that opened up by the Nevada tunnel 600 feet long and to the South of the present shaft site. This tunnel, although it has a maximum vein height above it of only 70 feet, has proven the continuation of the Midnight vein system another 600 feet to the south. A small tonnage may be recovered by mining through this tunnel at a later date.

MINING:

All stoping to date has been by the shrinkage method. The walls are good and this method works very well. With shrinkage stoping in this ground when actively carried on should result in low mining costs and only moderate dilution of the ore by caving of the walls.

It may be necessary on the lower level to use timbered stopes later due to the increaded width in places. However, for the present, all mining can be done by the method being used now.

A mining cost of not over $3.00 per ton can be reasonably expected in mining this type of ore.

The present hoisting equipment is capable of raising 200 tons easil in working only two 8 hour shifts per day.

SAMPLING AND ASSAYING:

All samples were channel samples taken from the back of the drifts in stopes. Grab samples were taken from some of the chutes and broken ore in the stopes where possible.

This preliminary sampling of the present underground workings was carried on with the object in mind to sample only mineable ore and gaining information to indicate as accurately as possible in the time available if the properties concerned had a sufficient tonnage of ore to warrant a certain investment.

Assaying was done by R. W. Hunt and Company, of Chicago, Illinois and checked by the assay department of the Michigan College of Mining and Technology, at Houghton, Michigan.

ORE RESERVES:

The ore reserves to be considered positive in this report are only blocks of ground that were sampled. No credit is given for any ore reported or estimated by examinations made prior to August 10, 1937. Some of the reports examined and written by well known engineers are very optimistic and cannot be considered to be based on sound mining at all.

It has been estimated from examination that the positive ore may be as follows:

POSITIVE BROKEN ORE

100 ft. level	200 tons @	$ 12.00	$ 2,400.00
200f,, ,,	1,200 ,, ,,	10.00	12,000.00
300 ,, ,,	2,000 ,, ,,	10.00	20,000.00
400 ,, ,,	400 ,, ,,	8.00	1,600.00
600 ,, ,,	1,600 ,, ,,	8.00	12,800.00
600 ,, ,,	700 ,, ,,	8.00	5,600.00
Total	6,100		$ 54,400.00

POSITIVE UNBROKEN ORE

Above Nevada Tunnel	2,500 tons	@ $12.00	$30,000.00
200 ft level north	1,000 ,,	,, 12.00	12,000.00
300 ft level north	1,500 ,,	,, 14.00	21,000.00
300 ft level south	750 ,,	,, 10.00	7,500.00
400 ,, ,, north	1,200 ,,	,, 12.00	14,400.00
400 ,, ,, south stope	400 ,,	,, 10.00	4,000.00
400 ,, ,, ,, Nevada A Sec.	1,000 ,,	,, 8.00	8,000.00
400 ,, ,, ,, ,, B ,,	3,200 ,,	,, 12.00	38,400.00
600 ,, ,, north	3,000 ,,	,, 10.00	30,000.00
600 ,, ,, south	1,000 ,,	,, 8.00	8,000.00
Below 600 foot level	4,000 ,,	,, 10.00	40,000.00
TOTAL	$20,550		$212,300.00
Deduct mining cost @ $6.00			$132,000.00
		Profit	$129,700.00

POSSIBLE ORE

200 ft. level north	2,500	tons		
400 ft. level south drift to Nevada Shaft	15,000	,,		
Above Nevada Tunnel	2,500	,,		
300 ft. level south	3,000	,,		
300 ft level north	3,000	,,		
400 ft level north drift north of fault	2,000	,,		
Development of other indicated Veins	3,000	,,		
	31,000	,,	@ $10.00	$310,000.00

Total Value of Positive and Possible Ore..... $522,000.00

OUTLINE OF ORE VALUES AND OPERATION

POSITIVE BROKEN

6100 Tons - Value	$54,000.00
Mining Cost @ $4.00 per Ton.	24,000.00
Profit	$30,000.00

UNBROKEN ORE

20,650 Tons - Value	$212,300.00
Mining Cost @ 6.00	123,300.00
Profit	$89,000.00

Ore mined in development during period of milling positive Ore.

1200 feet of drifting 50% in ore - 1200 Tons @ $8.00 - $8,600.00

Total feed to mill 320 operating days @ 100 tons per day would be 32,000 tons, of which a portion will come from newly developed ore and the preparation of the developed ore in the Nevada section for stoping. Net profit of operations at this capacity should be at least $150,000.00 per year.

There remains considerable ore to be developed north of the fault on all the levels. This section of ground although indications are good has not been credited with any great amount of ore due to the fact that it could not be accurately sampled.

Returning to the Nevada section of the property the 2,500 tons of possible recorded above the tunnel is blocked out and may be classed as positive as soon as it is thoroughly sampled. Below this section of ground which is 600 feet long along the vein lies the immediate future ore to be developed that can be blocked out and mined very quickly. The estimates on positive ore have left nothing

to chance and [illegible] conservative.

The property considering all chances taken in development of vein material can be expected with a reasonable amount of development being carried on to replace any ore milled for at least five years while operating at 100 tons per day capacity. The development charge included in the mining cost would be $1.00 per ton milled

RECOMMENDATIONS AND EXPENDITURES REQUIRED TO RESUME OPERATIONS.

MILL:

It is recommended that the present mill flow sheet be changed as follows;

1. The secondary grinding mill be removed completely.
2. A heavy duty flotation cell be placed in the primary grinding circuit, to remove the coarse gold and coarse sulphides, thus avoiding over grinding of valuable mineral particles.
3. Amalgamation be discontinued.
4. A bank of 8 - 30 inch flotation cells be installed to float the classifier over flow direct.
5. To install a tailing filter plant to recover 90% of the water used in the plant. Along with the filter it will be necessary to install staker conveyor to carry the tailings to the dump.
6. To install a concentrate filter.
7. Discontinue the use of the Wilfley tables if possible. This may be decided upon from results of the operations of the new flow sheet in the mill. Tests made indicate the Possibility of making a 95% recovery by flotation alone, as well as producing a high grade shipping concentrate.

The above alterations to recondition the mill for a 100 ton daily capacity including machinery necessary and

labor for installing the machinery will not exceed $a .000.00
and if good used machinery is purchased this figure may be cut to $15,000.00

WATERSUPPLY:

To obtain sufficient water and to assure a steady supply for the mill it is recommended that the Victor shaft be retimbered sufficiently to allow a pump to be installed, and this source of water be utilized. The cost os this will not exceed $5,000.00.

UNDERGROUND:

For an active mining program to be carried on on this property it will be necessary to retimber part of the workings the cost will not be over $5,000.00. The workings will then be in condition for active mining and stoping.

It will be necessary to purchase five new drill machines along with other tools, etc. This will not exceed $5,000.00.

PROGRAM OF DEVELOPMENT:

The development underground where the fastest and greatest returns on money invested could be realized would be the driving of the 400 foot level drift south. In this way a large amount of ore could be exposed quickly and cheaply. After the 400 foot drift is under way and progressing a program may be laid out for the development of a section north of the shaft. This, however, can wait until the south drift is completed.

For future information as to ore at depth and the development of a permanent water supply it may be necessary to sink a 200 foot winze below the present 600 foot level. This may be resorted to as a last chance of developing the mines water supply. I believe, however, that the 400 foot

south drift into the Nevada ground will develop water as it progresses, which may be sufficient to supply the water requirements on the property.

SUMMARY OF EXPENDITURES NECESSARY TO RESUME PRODUCTION:

Mill Alterations	$20,000.00
Water Supply	5,000.00
Mining Machinery	35,000.00
Reconditioning Mine	10,000.00
Reserve including two months payroll	30,000.00
Total Amount Required...	$70,000.00

SUMMARY:

The time required to recondition the underground workings for production would be one month, and the mill alterations depending upon the delivery of machinery should not require over two months. By the time the mill work is completed the property would be in good condition to insure steady operations.

The property has ready for immediate hoisting and milling 6,100 tons of broken ore - having a total value of $54,400.00 from which after deducting $4.00 per ton for mining and milling costs a profit of $30,000.00 should be realized. There is with a small amount of preparation, 20,550 tons of ore ready to be mined and having a gross value of $212,300.00 and after deducting $6.00 for mining and milling a profit of $129,700.00 should be realized. During the period in which the above ore is being removed the development program recommended will develop and prepare for stoping the 15,000 tons of probable ore credited to the 400 foot south drift in the Nevada ground. A portion of this will go the mill

the first year, which will pay part of the cost of development in this section.

CONCLUSION:

From a very conserative estimate there is sufficient ore in sight to maintain production at 100 tons per day for a period of 18 months. The possibilities of developing more are excellent and profitable operations could with competent management be maintained for at least five years with possibilities of even a greater life and larger milling capacity.

Even after being very conservative in my estimates of tonnages and values I find that the National Gold Corporation's property may be classed as a payable mine and fully warrants the expenditures necessary in order that operations may be resumed

Respectfully submitted,

[redacted], -B. Sc. M. E.

REPORT OF DRESS..G TESTS ON NATIONAL GOLD CORPOR..ION ORE, PRESCOTT ARIZONA. PERFORMED AT MICHIGAN COLLEGE OF MINING AND TECHNOLOGY, AUGUST 16, 1937.

The tests were made on ore which was furnished by [redacted]. It had been crushed to pass ½ inch. Grinding was done in laboratory rod mill which was loaded with one 7/8 inch rod, two ¾ inch rods, and 27 pounds of 5/8 inch rods. Conditioning was done in the rod mill.

Flotation was carried out in a 500-gram Fahrenwald flotation machine. A wilfley laboratory table was used for the table test.

The various steps in the tests were carried out in the order in which they are given below:

TEST NO.1:

500 grams ore

500 cc tap water
0.50 pound amyl xanthate (Great Western Electro-Chemical Co. Z-5 was used in all tests)
1.0 pound soda ash
1000-gram rod mill, grinding for 4 minutes
Transfer to flotation cell.
0.10 pound pine oil (G. N. S. #5 was used in all tests)
Collect concentrate 5 minutes (in all tests sulfides floated rapidly and completely in about 3 minutes.)
Determine pH of tailing water (pH = 8.3
Filter tailing and concentrate (tailing filtered readily)
Table tails to produce concentrate, midds, tailings and slimes

TEST NO. 2

500 grams ore
500 cc. tap water
1.0 pound amyl xantahte
1.0 pound soda ash
1000-gram rod mill, grinding for 6 minutes
transfer to flotation cell
1.10 pound pine oil
Collect froth for 5 minutes
Filter and dry concentrate and tailing products.

TEST NO. 3

500 gram ore
500 cc tap water
1.o pound amyl xanthate

1.0 [illegible]nd [illegible]a ash
1000-gram [illegible]d mill, grinding for 6 minutes.
Transfer to flotation cell
0.10 pound oleic acid
2.0 pounds fuel oil
No conditioning, flotation began immediately
(5 Minute flotation)

The above products of the flotation tests were samples and assayed by [redacted]. The Metallurgical results are given in the following table:

The ore, although containing considerable slimes, responded well to flotation and it undoubtedly can be satisfactorily treated by this process.

(It is noted that the Michigan College of Mining and Technology, Houghton, Michigan, assumes no responsibility in this work, the name of the institution appearing in this report only for identification - the undersigned having performed these tests as an individual consultant and not as a member of the faculty of the above college.)

Respectfully submitted

(signed) Walter E. Keck

METALLURGICAL RESULTS FROM TESTS ON NATIONAL GOLD CORP.

ORE, PRESCOTT, ARIZONA.

TEST NO	PRODUCT	WT. OF PROD. GRAMS	WT. RECOV.	GOLD GRADE OZ/TON	GOLD M. G. METAL	GOLD % RECOV.	TOTAL RECOV.	SILVER OZ/TON	RATION 1 CONC.
1	Xanthate Conc.	13.9	2.8	15.6	7.33	74.4	96.2	60.4	20.1
	Table Conc.	10.9	2.2	4.9	1.81	18.4			
	Table Midds.	100.0	20.0	0.10	.34	3.4			
	Table Tails	183.	36.6	0.02	.12	1.2			
	Table Slimes	192.2	38.4	0.04	.26	2.6			
		500.0	100.0		9.86	100.0			
2	Xanthate Conc.	14.8	3.0	15.1	7.70	92.0	92.0	64.9	34.1
	Xanthate Tail.	485.2	97.0	0.04	.67	8.0			
		500.0	100.0		8.37	100.0			
	Feed								
3	Xanthate Conc.	14.0	2.8	21.05	10.10	86.5	97.3	65.8	36.1
	Oleic Conc.	28.6	5.7	1.29	1.26	10.8			
	Oleic Tails	457.4	91.5	0.02	.31	2.7			
	Feed	500.0	100.00		11.67	100.0			

1 By Weight

ASSAY RESULTS

RE: [redacted] EXAMINATION AND SAMPLING OF

NATIONAL GOLD PROPERTY

ASSAYING BY ROBERT W. HUNT COMPANY, CHICAGO, ILLINOIS

AS OF AUGUST 14, 1937

Gold @ $35.00 per Oz. Silver @ $.74 per Oz

Sample No.	Oz Gold Per Ton	Value Gold Per Ton	oz Silver Per Ton	Value Silver Per Ton	Total Value Per Ton
#901	Trace	-----	0.5	.37	.37
#902	0.008	.28	0.6	.44	.72
#903	0.336	11.76	1.3	.96	12.72
#904	0.062	2.17	1.3	2.07	3.13
#905	0.585	20.47	2.8	66.66	21.54
#906	0.680	23.80	9.0	2114	30.46
#907	0.423	14.80	2.8	10.36	16.87
#908	0.667	23.34	9.0	.89	30.00
#909	0.421	14.74	2.9	3.48	16.88
#910	0.778	27.23	14.0	2.66	37.59
#911	0.782	27.37	1.2	.81	28.26
#912	0.662	23.17	4.7	1.11	26.65
#913	0.416	14.56	3.6	.15	17.22
#914	0.382	13.37	1.1	1.41	14.18
#915	0.480	16.80	1.5	3.23	17.91
#916	0.010	.35	0.2	.66	.50
#917	0.274	9.59	1.9	.30	11.00
#918	0.280	44.80	4.5	2.88	48.13
#919	0.295	10.33	0.9	8.44	10199
#920	0.181	6.33	0.4	1.40	6.63
#921	0.688	24.08	3.9	1.11	26.96
#922	0.300	10.50	11.4	5.18	18.94
#923	0.072	2.47	1.9	2.51	3.87
#924	0.493	17.25	1.5	1.63	18.96
#925	0.376	13.16	7.0	1.63	18.34
#926	0.842	29.47	3.4	1.18	31.98
#927	0.401	14.03	2.2	---	15.66
#928	0.300	45.50	1.6	.74	47.13
#929	1.815	28.52	0.1	1.11	29.70
#930	Trace	----	1.0	.29	--
#931	0.683	23.90	1.5	--	24.64
#932	1.280	44.80	0.4	.81	45.91
#933	0. 344	12.04	Trace	1.40	12.33
#934	Trace	---	1.1	3.03	----
#935	0.191	6.68	1.9	1.33	7.43
#936	0.437	15.29	4.1	1.18	16.69
#937	0.564	19.74	1.8	---	22.77
#938	0.934	32.69	1.6		34.02
#939	0. 033	1.15	2.4		2.33
#940	Trace	----	Trace		-

Sample No.	Oz Gold Per Ton	Value of Gold per Ton	Oz Silver Per Ton	Value Silver Per Ton	Total Value Per Ton
#941	0.023	.80	0.5	.37	1.17
#942	0.086	3.02	1.9	1.40	4.42
#943	0.208	7.28	0.7	.52	7.80
#944	0.384	13.44	2.5	1.85	15.29
#945	0.044	1.54	1.0	,74	2.28
#946	0.127	39.44	2.7	2.00	41.44
#947	0.842	29.47	1.8	1.33	30.80
#948	0.402	14.07	2.3	1.70	15.77
#949	sample missing		S.M.	-	
#950	0.036	1.26	0.6	.44	1.70
#951	0.537	18.79	1.3	.96	19.75
#952	0.498	17.43	1.6	1.18	18.61
#953	0.017	.60	0.2	0	.60
#954	0.633	22.15	1.4	1.03	23.18
#955	sample missing		S.M.		
#956	0.896	31.36	1.9	1.40	32.16
#957	1.035	36.22	2.6	1.92	38.14
#958	0.904	31.64	2.1	1.55	33.19
#959	0.690	24.15	1.9	1.40	25.55
#960	2.317	81.09	2.7	2.00	83.09
#961	0.580	20.30	1.1	.81	21.11
#962	0.563	19.70	0.9	.66	20.36
#963	1.080	37.80	1.7	1.25	39.05
#964	0.846	29.61	3.4	2.51	32.12

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ANALYSIS OF SAMPLING

TONNAGE ESTIMATES, AND VALUES AND PROFITS

AS PER [redacted] EXAMINATION OF

NATIONAL GOLD PROPERTY
August, 1937

Sample No. 901 is a face sample of South Face of 200 leves and is taken at point where creek fault has broken up vein. It shows no values except Trace Gold and 0.5 Silver.

BLOCKN NO. 1.

Positive Ore Sampled.

Samples Nos. 902-903-904-905 are back samples taken over vein length of 40 ft. They average 0.249 Gold ounces per ton, and 1.5 Silver ouncer per ton, with a total average value of $9.53 per ton. This is a fair average of block of ground above these samples of 100ft. in length, 100 ft. in heighth and 3ft. in with, or 2500 tons. 2500 tons @ $9.53 per ton is $23, 825.00 gros value. Cost of mining and milling should not exceed $4.00 per ton leaving a net value of $13,825.00

BLOCK NO. 2.
Positive Ore Sampled

Samples Nos. 906-910-911 are back samples taken on 2nd level north of shaft and are over a length of 250 ft. from 906 to 911. Samples 907-908 are broken ore samples taken from mouths of chutes below stope, approximately in center of thas 250 feet in length by 120 ft. heighth, by at least an average 4ft. with, or 10,000 tons. The average value of these above samples is $28,636, per ton. 10,000 tons @ $28.636 per ton is $286,360.00 gross value. The mining and milling cost should not exceed $4.00 per ton, and leaves a net value of $246,360.00.

BLOCK NO. 3.

Samples Nos. 960-961-962-963 are taken on 3rd level, north of shaft and represent only a small block of ground

40 ft. in length by 100 ft. in heighth by approx. 3 ft. in width, or 1000 tons. The average value of these samples is $40.90 per ton. At this average the gross value would be $40,900.00 and at $4.00 per ton mining milling cost would leave a net value of $36,900.00. The only other sampling done on this third level was Sample Nos. 912-954, south of shaft, which will be taken up in estimate of following block.

BLOCK NO. 4.

Positive Ore Sampled.

Samples Nos. 912-954-923-924-925-926-927 were taken in backs of stope above fourth level and on third level abobe these backs and represent a small block of ground approx. 60 feet long by 140 feet high by 4 feet in width, or 2800 tons. The average value of these samples is $19.72 per ton. At this average the value of this Block would be $$55,216.00x. and the net value after deducting $4.00 per ton for mining and milling would be $44,016.00.

BLOCK NO. 5.

Sampled.

Samples Nos. 937-938-939-941- are back samples taken on four hendred foot level south of shaft, over a length of approx. 80 ft. with 300 ft. of backs above the samples. The average width of these samples should be conservatively at least 3 ft. This would represent a tonnage above thes samples of 6000 tons. The average values of these samples is $12.06 per ton. At this average 6000 tons would have a gross value of $72,360.00 and with a cost of $4.00 per ton deduction for mining and milling would have a net value of $48,360,00.

BLOCK NO. 6.

Sampled.

Samples Nos. 914-915-916-917-918 919-920-921-922-942-943-944 were taken on the 4th level backs, south of shaft, from the Nevada End line to South Face of 4th level. They represent a tonnage above these samples of 22,000 tons as represented by 185 feet in length by 360 feet in heighth by 4 feet in width. The average value of these samples is $14, 636. per ton At this average the gross value of ore above these samples would be $321,992.00 . With deduction of $4.00 per ton for mining and milling costs, the net value would be $233,992.00.

BLOCK NO. 7.

This block was set up by [redacted] for the development he recommended by continuinuing the fourth level south to Southern extremity of Nevada Tunnel Development. This would mean continuing the 400 ft level south for a distance of 520 ft. There would then be a block of ground above the 400ft level ready for stoping, 520 feet long by 400 feet high by an estimated width of 4ft, or 69,333 tons. The samples taken with this , or that can be used for computation of any average values are Nos 914-928-929. These average $30.33 per ton. Naturally this is not sufficient to class this Bock as anything other than probable and with probable average equal to Block No. 6. Estimating the same value as Block No. 6, that is $14.636 per ton, the estimated 69,333 tons would have a gross value of $1,013,757.78. Allowing for new defelopment, this would cause a deduction of $5.00 per ton to cover all costs, leaving a net value of $667,092.78

BLOCK NO. 8.

Samples Nos. 930-931-932-933-934 were taken over backs representing a length of approx. 50 feet on the North f00 level. Only a small tonnage would be represented. Approx. 50x80x3' to the 300 level, or that is approx. 1000 tons. The samples average $16.57 per ton. This small block would at these averages have a gross value of $16,570.00 or a net value of $12,570.00.

BLOCK NO. 9

Sampled.

Samples Nos 945-946-947-948-949-950-951-952-957 are back samples taken all in Stope above 600 level, north of shaft, except No. 957, which is a back sample on the level just north of stope. These cover a length of 140 feet, have a conservative width of 4 feet, represent in reality backs of approx. 550 feet, but are set up herewith as backs of 120 feet to the 400 level. Sample No. 958 is a grab sample of broken ore in the stope, and will be used as both a check on above Stope. Sample No. 958 is a grab sample from Stope chutes as check on broken ore in Stope. The Tonnage set up above these samples up to the 400 level is 140 ft. x 120ft. x 4 feet, or 5600 tons. At the average value of assays, or that is $22.40 per ton, the gross ore value of this Block is $125,440. net value would be $1o3,040.00.

Samples Nos. 951 and 958 checking the broken ore in Stope and as a further check on value of ore Stope is on, shows an average value of $26. 47 per ton.

BLOCK NO.10.

Sample No. 959 is a broken ore sample from chutes of Stope on the South 600 level. This taken in conjunction with samples above this Block on the 400 level, and the 300 leve, and 200 level, causes an average to be arrived at as follows: Block No. 4. immediately above this Block, showed an average of $19.72 per ton. This, together with No. 959 would show average of $22.63 per ton. The tonnage above this Stope up to 400 level would be represented by length of 50 feet, height of 80 fee t and width of 5feet, or 1666 tons. At average shown gross value would be $37,701.58. Deducting costs of mining and milling, $4.00 per ton, would leave net value of $31,037.58.

600LEVEL NORTH STOPE.

Samples Nos. 951 and 958are of broken ore in this Stope and average $26.47 per ton. [redacted] sets up the tonnage of broken ore in this stope as 1600 tons. At average value as shown by above assays this would have a gross value of $42,352.00 Deduct $2.50 per ton for hoisting and milling and net value would be $38,352.00.

600 LEVEL SOUTH STOPE.

Sample No. 959 is of broken ore in Stope and the assay of it is $25.55. [redacted] sets up 700 tons of broken ore in this Stope. 700 tons at $25.55 would show gross value of $17,885.00. Decuct $2.50 per ton for mining and milling would leave net value of $16,135.00.

400 LEVEL SOUTH STOPE

[redacted] sets up 400 tons of broken ore in this Stope. His samples Nos. 913-912-923-924-925-926-927in and surrounding this Stope show an average value of $18.87 per ton. His Sample No. 955 of broken ore in Stope is set up as missing. Therefore, the aveage of $18.87 per ton is used to show a gross value of broken ore in this Stope of $7,548.00 Deducting $2.50 per ton for hoisting and milling would leave a net value of $6,548.00.

300 LEVEL SOUTH STOPE

[redacted] sets up 1000 tons of broken ore in this Stope. His Samples Nos. 912-913-954 below the Stope and 902-903-904-905 above the Stope show an average assay value of $15.02 per ton, thereby showing a gross value of broken ore in this stope of $15,020.00.

300 LEVEL NORTH STOPE.

M [redacted] sets up 1000 tons of broken ore in this Stope. No assays or samples are shown to check the values of the broken ore in this Stope, be he sets up an estimate ~~of the broken ore in~~ $10.00 as the value. Taking this estimate, the gross value of broken ore in this stope $10,000.00 Deduct $2.50 per ton for hoisting and milling, leaves a net value of $7500.00

200 LEVEL SOUTH STOPE

[redacted] sets up 500 tons as broken ore in this Stope at a value of $10.00 per ton. No assays are shown to figure an average so it is herewith set up at his estimates as having a gross value of $5,000.00. Deducting $2.50 per ton for hoisting and milling, leaves a net value of $3,750.00

200 LEVEL NORTH STOPE.

[redacted] sets up 700 tons as broken ore in this Stope with an estimated value of $10.00 per ton. However, his samples Nos. 910-911-907-908 show an averagevalue of $28.18. At his set up estimate gross value is $7,000.00. At his Sample average, gorss value is $19,726.00 Deducting $2.50 per ton his net would be $5,250.00. Deducting $2.50 per ton from Sample Values, net would be $17,976.00.

--ooOoo--

A summary of the foregoing described Blocks of ore Sampled by [redacted] is as follows:

BLOCK	TONNAGE	GROSS VALUE	NET VALUE
1	2500	$ 23,825.00	$ 13,825.00
2	10000	286,360.00	246,360.00
3	1000	40,900.00	36,900.00
4	2800	55,216.00	44,616.00
5	6000	72.360.00	48,360.00
6	22000	321,992.00	233,992.00
7	69333	1,013,757.00	667,092.78
8	1000	16,570.00	12,570.00
9	5600	125,440.00	103,040.00
10	1666	37,701.58	31,037.58
N. 600 Stope	1600	42,352.00	38,352.00
s. 600 Stope	700	17,885.00	16,135.00
S. 400 Stope	400	7,548.00	6,548.00
S. 300 Stope	1000	15,020.00	12,520.00
N. 300 Stope	1000	10,000.00	7,500.00
S. 200 Stope	500	5,000.00	3,750.00
N. 200 Stope	700	19.726.00	17,976.00
Totals	127,799 Tons	$ 2,111,653.36	$ 1,539,974.36

Briefly, approximately a tonnage of 127,799 tons was sampled and according to the assays of said samples indicated a Gross Value of $2,111,653.36, and a net value, after deducting the proper expense of mining and milling, of $1,539,974.36.

The average value indicated by these samples and assays is $16.523 per ton.

Basing earnings upon the above figures and upon 100 tons per day milling operation to begin with, there would be a daily net earning of $1,252.30 or a monthly net earning of $37,569.00, or a yearly earning of $450,828.00

It must be distinctly understood that the above set forth estimates of tonnages, values, etc. does not in any way mean that the entire mine was sampled, and that these findings are any total result of such. As a matter of fact, the sampling analysed herein represents only a small portion of the developed or known area of this mining property.

Attached hereto is the report of [redacted], and also the list of assays made by the Robert Hunt Company as determination of Mr. [redacted] examination and sampling.

This analysis was necessary for the reason that Mr. [redacted] does not show in his report how his determination or estimates of tonnages or values were arrived at, and this

analysis merely sets forth the figures arrived at by using the values of his assays, measuring the blocks of ground he sampled, and the use of ultr conservative known widths of ore.

[redacted] examination was intended to check the tonnages and values set up in Reports and on Maps of the National Gold Property, and by the spotting of the ground this analysis covers on said maps, a comprehensive idea can be had of this property.

An itemized payroll and operating expense estimate is also attached hereto for the purpose of showing operating costs, and earnings that should accrue with any proper, intelligent management of operation.

On National Gold Assay May Blocks 1 to 40 are set up as having a tonnage of 121,732 tons of unbroken ore in sight, and that can be sampled and measured.

Add to this the tonnage of ore estimated from [redacted] proposed development, to-wit, 69,333 tons, and the tonnage shows 191,065 tons.

Take the tonnage estimated in this analysis that was sampled by [redacted], to-wit, 127,799 tons, and add the unsampled tonnages, to-wit, as follows:

UNSAMPLED

Block #2 of National Gold Map		1.533	Tons
,, # 1-16-18	portion	2,600	,,
,, # 17	,,	600	,,
,, # 4	,,	1,000	,,
,, #8		2,240	,,
,, #7		1,666	,,
,, #10	portion	1,400	,,
,, #9	portion	500	,,
,, #13	portion	840	,,
,, #23	portion	3,000	,,
,, #11	portion	800	,,
,, #12	portion	1,420	,,
,, #20	portion	4,000	,,
,, #22	Portion	1,800	,,
,, # 24		5,333	,,
,, #19	portion	5,000	,,
,, #21	portion	3,000	,,
,, #27		5,000	,,
,, #28		5,000	,,
,, #26		5,000	,,
,, #25		5,000	,,
,, #31		5,000	,,
,, #40		4,800	,,
,, # 33	portion	1,000	,,
,, #32	portion	1,000	,,
Unsampled on Map.....		68,532	Tons
Plus Sampled by [redacted]		127,799	Tons
Total.....		196,331	

Thus, where 191,065 tons would be set up on National Gold maps, [redacted] examination gigures, when analysed would show 196,331 tons as a check of tonnage

On the National Gold Assay Maps there is set up as broken in Stopes A, B, C, D, E, F, G, H, I, J, K, L 7,415 tons. Setting these up separately, as estimated by National Gold and by [redacted] we find the following

	NATIONAL GOLD EST.	[redacted] EST.
Stope A	846 Tons	700 Tons
" B	90 Tons	no estimate
" C	375 "	500 "
" D	60 "	no estimate.
" E	1,000 "	1000 Tons
" F	1,320 "	1000 "
"G	320 "	No estimate
" H	480 "	480
" I	480 "	no estimate
" J	734 "	700 "
" K	1,655 "	1,600 "
" L	55 "	No est.
Total	7,415	5,900 Tons
		Unestimated..... 1,005 "
		6,905 "

To [redacted] estimate, add the estimated Stopes, to-wit, B - 90 tons, D -60 Tons G -320 tons, I - 480 tons, L - 55 tons, or 1,005 tons, and [redacted] Stope tonnage estimate would be 6,905 tons. His estimate on these would naturally be very conservative since it would be impossible to view the widths in more than top and bottom of Stope.

The attached itemized pay roll and operating expense clearly shows an operating cost below figures set up in this Analysis for the purpose of estimating earnings.

As to check upon ore values, [redacted] assays of his sampling clearly show a higher value than the records of the National Gold show.

Respectfully Submitted,

W. W. Linesba

ITEMIZED PAY ROLL

TOP MINE:

2	Hoisting Engineers	@ $ 5.50	$ 11.00
1	Electrician	@ 6.00	6.00
2	Skip Tenders	@ 5.00	K10.00
2	XTop Men	@ 4.50	9.00
1	Blacksmith	@ 5.50	11.00
1	" Helper	@ 4.50	9.00
1	Assayer	@ 6.00	6.00
1	Truck Driver & Gen. Roustabout	@ 5.00	5.00
11			

MINE:

8	Miners	$ 5.50	$ 44.00
8	Muckers	5/00	40.00
1	Mine Foreman	6.50	6.50
1	Shift Boss	5.50	5.50
18			

MILL:

1	Mill Superintendent	$ 7.00	7.00
3	Mill Operators	6.00	18.00
3	Mill Operator Helpers	5.00	15.00
7			

MANAGEMENT & OFFICE:

1	Gen. Superintendent	$ 10.00	10.00
1	Accountant & Time Keepr. & Storekeeper	6.00	6.00
1	Secretary	3.50	3.50
$			

BOARDING HOUSE:

		XXXXXX	XXXXX
k			
1	Cook	3.50	3.50
2	Cook Helpers	2.50	2.50
3			

42 Men .... Total per day	$ 221.00
Insurance	18.00
Mine Supplies	50.00
Mill and Assay & Office Supplies	35.00
XXXXXXXXXXXXXXXXXXXXX.	$324.00
Safety Factor	$ 26.00
GRAND TOTAL	$ 350.00

The above figures represent an ample allowance to carry on the operation and development recommended by [redacted] and clearly show that the figures used to compute profits or earnings are liberal and dependable ahd have a good safety allowance.

PRINTED: 02/01/2002

3 of 3

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: MIDNIGHT TEST

ALTERNATE NAMES:
PATENTED CLAIMS MS 1535

YAVAPAI COUNTY MILS NUMBER: 1064B

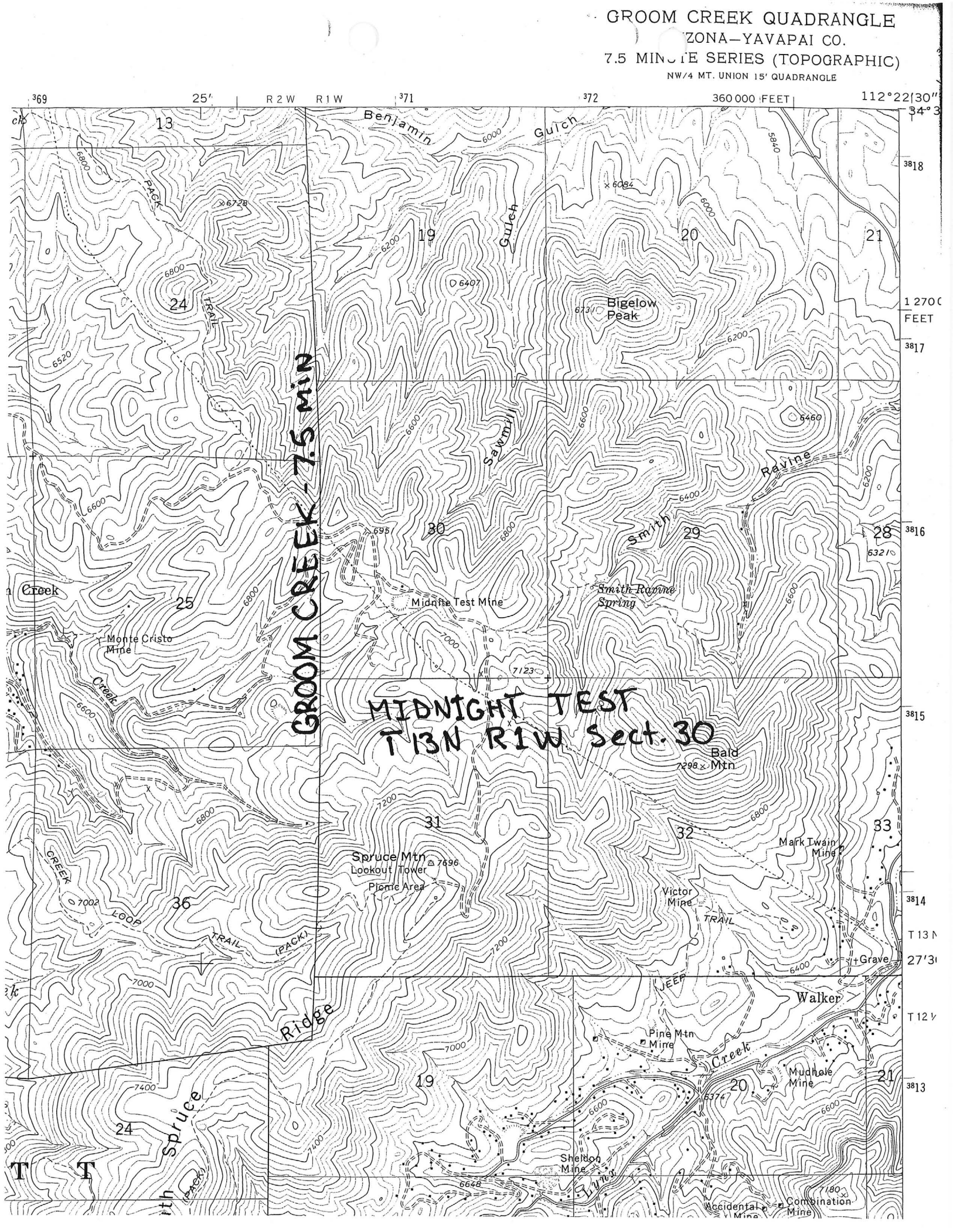
LOCATION: TOWNSHIP 13 N RANGE 1 W SECTION 30 QUARTER SW
LATITUDE: N 34DEG 28MIN 08SEC LONGITUDE: W 112DEG 24MIN 12SEC
TOPO MAP NAME: GROOM CREEK - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
SILVER
GOLD

BIBLIOGRAPHY:
ADMMR MIDNIGHT TEST MINE FILE
YAVAPAI MAGAZINE JULY 1918
BLM MINING DISTRICT SHEET 227
WILSON, E.D.ETAL. AZ LODE GOLD MINES AZBM
BULL 137 1967 P 32
ADMMR PROPERTY & LONGITUDINAL MAP (PHX OFFICE
ROLLED, UPSTAIRS)
ADMMR MIDNIGHT TEST MINE COLVO FILE

GROOM CREEK QUADRANGLE
ZONA—YAVAPAI CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)
NW/4 MT. UNION 15' QUADRANGLE



REPORT

ON

NATIONAL GOLD CORPORATION

Gold Mining Property

YAVAPAI COUNTY, ARIZONA,

June 1st, 1935.

****

PROPERTY:

The property consists of twenty (20) mining claims which are segregated into three groups, to-wit:

GROUP 1	(Midnight Test (Dixie (Saxon	- Patented
GROUP 2	(Joe H. (Badger (Edris (Wallie (Sunrise	- Under process of patent survey No. 4174
GROUP 3	(Security (Waterwitch (Uncle Joe (Pay Day (Hard Cash (Southern Slope (Mountain View (Fairview (Summit (Newark (Legal Tender (Gold Note	- Possessory

The total acreage represented by the above twenty claims is approximately 300 acres, some of the claims being fractional claims. The claims are contiguous, forming a connected group of claims, covering and embodying the most extensive vein system in this section of the Hassayampa and Walker Mining Districts.

TITLE:

The title to Group 1 is vested in the Company free and clear. On this group is all of the company's principal

development, to-wit: the main Midnight Shaft, and also all the buildings and equipment, camp, etc.

The title to Group 2 is vested in the company free and clear and is now under process of patent.

The title to Group 3 is vested in Geo. T. Scholey, with this company holding a purchase contract on which there is now an unpaid balance of $9,600.00, payable as follows: $100.00 payable the 17th of each month except November, when a $3,900.00 payment is due. Balance at same terms per month. Said purchase contract carries usual clauses in regard to assessment work being done by purchaser, and that royalties from ore shipments apply on purchase price. Under an escrow agreement in the Valley Bank & Trust Co., Prescott, Arizona, the bank acts as depository for payments and is to deliver to this company good and sufficient deed when remaining balance has been paid according to contract.

LOCATION:

The property is situated eight (8) miles in a southeasterly direction from Prescott, Arizona, in the Hassayampa and Walker Mining Districts, Yavapai County. The property lies at the foot of and on Spruce Mountain, one of the highest peaks of the Bradshaw Mountains, the altitude varying from 6,500 feet to 7,600 feet. It is reached by the Senator Highway, leaving Prescott in a southerly direction; thence 5½ miles to the company's mine road, thence 2½ miles in a southeasterly direction to the property.

CLIMATIC CONDITIONS:

An all year working condition is prevalent by taking care of heating problems in winter and proper housing of pipes, etc., which are subject to freezing. On account of the altitude of 6,800 feet at mine and mill of principal workings,

there is occasionally from 6 inches to 2 feet of snow in winter months with maximum temperature ranging from around freezing to zero. The Spring, Fall and Summer periods provide a delightful working climate with maximum heat temperature rarely going above 85°.

TRANSPORTATION:

Transportation facilities are rarely better at a mining property. The haul into Prescott, eight (8) miles by good roads at a slight down grade, make it possible to haul ores and concentrates at a maximum figure of $2.00 per ton. The condition of the roads is easily understood by the fact that the trip from the mine to Prescott and return can be made by auto in less than one hour's time, or less than thirty minutes each way. Trucking is slightly slower.

TOPOGRAPHY:

Although situated at altitude of 6,500 to 7,600 feet, the general contour of the holdings may be classed as gradual and mild slopes surrounding the vein system. However, several tunnel sites are available which would open different veins to a depth of from 100 feet to 700 feet. Tunnels are now run on the Pay Day, Southern Slope, and Gold Note Claims for distance of several hundred feet, in each instance to date following course of veins. A tunnel site is available on the northern end of property, which would open the main Midnight vein at shaft at a vertical depth of approximately 600 feet.

FUEL AND POWER:

The Arizona Power Company's high tension power lines cross the property within 100 feet of the Company's mill building and within 300 feet of the main working shaft on the

Midnight Test claim. The Power Company erected transformer station between mill building and hoist plant and the entire plant is electrified, every operating piece of machinery being separately motored, and all buildings and camp electrically lighted, the boarding house electrically equipped for cooking, hot water and electric refrigeration. The various motors in use for the operation of mining and milling machinery total 557 Horse Power. The cost per K. W. hour for electricity consumed is 1½ cents.

In addition to the complete electrification of the camp this company erected their own pole line one half mile in length for a supplementary pumping plant for camp and mine use.

The rate obtained is by contract with the Power Co. and while considered a good rate can likely be lowered as operations increase necessitating the use of more power.

TIMBER:

There is an abundance of pine and spruce timber on the property. Conservative estimates place the value of standing timber at from $50,000.00 to $75,000.00. Hence domestic and mine timber is available for a number of years. Framed heavy timbers and lumber can be obtained from the local lumber mills at Flagstaff and laid down on property at cost of $28.00 per 1,000 board feet in car lots, from the local lumber companies at Prescott at cost of $45.00 per 1,000 board feet and from Coast at $30.00 per 1,000 board feet in car lots. Better prices can be obtained by proper quantity buying.

WATER:

For proper milling at capacity, that is from 200 to 250 tons per day, there must be available at all times not

less than 150,000 gals. of water per day. Domestic or camp use, under capacity operation, will require an added 10,000 gals. per day, making a total of 160,000 gals. of water per day necessary for successful capacity operation.

There is available now 40,000 gals. per day, or only one-fourth of the amount needed, consequently it becomes necessary to develop or bring in an adequate dependable water supply.

This water question is not serious as this is a known water district, the permanent water level, when reached, being ample for large operation. It is the concensus of opinion of all engineers and water experts who have examined the property that the 6th level is close to the permanent water level and that the sinking of from 100 to 200 feet will be certain to tap permanent water. Another permanent and dependable water source is also available. Consequently the two following recommendations are here made.

Recommendation No. 1 - As a first recommendation, that a winze be sunk on the vein in the 6th level to an additional depth of from 100 to 200 feet. This is particularly recommended for the reason that the bottom of the level is in good ore and apparently just on top of a sizable and valuable ore body.

Any normal or proper mining development would demand this sinking regardless of the water requisite. The estimated cost of preparation, equipment, labor and materials necessary to sink this winze 200 feet below the 6th level is $6,400.00, itemized as follows :

1 -	Preparation for a hoist and tipple to dump directly in 6th level ore pocket	600.00
2 -	The purchase and installation of a hoist and necessary accessories for the purpose of sinking this winze	1,500.00
3 -	The sinking of the winze	3,000.00
4 -	Air and water lines, etc.	500.00
5 -	Sinker pump	800.00
	TOTAL	$6,400.00

As this winze will be sunk entirely on ore, it will go considerably toward the payment of this work. However, no estimate or allowance is herewith set forth as to that, although this development should unquestionably add a great deal of value to the mine, and go a great way toward the proof of depth ores, and will quite likely open up ample permanent water for sizable operation. This work can be completed in approximately 70 days and seems the quickest method of securing ample water for maximum mill operation, to say nothing of ore that would be developed in this work.

Recommendation No. 2 - It is possible to bring in a water supply from the Sheldon Mine, distant approximately three and one-half miles, that would be ample for milling capacity of at least five hundred tons per day. This supply could be definitely and permanently relied upon, regardless of surface conditions, and exclusive entirely of water we now have or will develop in our present workings.

It would be a good insurance policy to bring in this water supply, however, in the event that Recommendation No.1 encounters sufficient water, this investment would represent at least 75% loss of the entire investment. Complete estimates and plans are out on this, and the maximum cost of the pipe lines, pumps, electric lines, etc., completely installed, is $25,000.00.

It will take 120 days to install this Recommendation No. 2.

GEOLOGY:

A complete topographical and geological survey of this district of the Bradshaw quadrangle has been made by the United States Geological Survey, which is published together with description and statistical data in United States Geological Survey Bulletin No. 782. This publication is comprehensive and valuable in that it shows conditions surrounding the property from which $18,000,000.00 has been produced, and in that it shows at least a partial production from this particular property from its early grass roots workings. Dr. Lindgren, the author of the publication, has covered the geology of this particular district in an extremely thorough way considering the comparatively small time he must of necessity have spent on any one particular piece of ground of this size. Also the maps, on account of the scale, cannot be expected to show any more than the general geology, hence I will outline briefly the particular formation surrounding the main workings of this property.

The entire area was at one time covered by schist. This schist has been intruded by diorite and grano diorite dykes of great magnitude both as to length and width and with numerous rhyolite and other porphoretic and quartz porphory flows. In the immediate vicinity of the main workings (Midnight Test Shaft) is the longest diorite stock in the Quadrangle. This extends to the southwest for more than a mile and varies in width from a few hundred feet to half a mile. At the immediate vicinity of the Midnite Shaft is the neck or narrowest point and contacts the schist both east and west of the shaft. To the northwest this diorite dyke extends for a mile and one-half and has a maximum width of one-half mile. The Midnight shaft is located at the elbow of the two (2) arms

of this diorite stock and at its narrowest dimensions with the maximum points of contact with the schist. Almost without exception production in this district has come from or near the contact of the schist with the various volcanic intrusions. Veins in every instance appear to have split off from the schist contacts and on the particular ground surrounding the Midnight shaft numerous veins have split off the contact, all carrying wherever prospected good values in gold, silver and lead. It is nothing but reasonable to assume that if these splits into the diorite are carrying good values, that the source of contact and veins lying along the contact should carry higher values and with much larger dimensions of size. Such a condition is quite evident and in fact a proven fact in and near the Midnight workings. Here the main shaft is sunk on a point where the vein has split off into the diorite and is approximately 250 feet distant from the contact and the vein lying alongside the contact. Recent work back toward this contact has fully proven the fact that the nearer to the contact the better the quality of ore and the larger the vein material. This is also proven by the Nevada tunnel 350 feet south of the shaft on the same vein and by the work recently done on a spur off of this vein running through the Midnight shaft and contacting with the main vein and with the contact itself. Most of the underground work has been done on or near this spur vein and on feeders and stringers running into and absorbed in this spur vein. Spruce Mountain, the highest point in this vicinity and just above the workings, has no doubt influenced the entire immediate area and during its upthrust has contorted and radiated the veins and veinlets in all directions from there to the Midnight vein which can undoubtedly be called the Mother Lode Vein of this district. It is a noticeable fact that no vein crosses

the Midnight vein but that all are absorbed in their contact. There is direct evidence of a second flow of mineral solution in the underground workings that will with depth greatly enrich the ores, and an unquestionable fact that the fissuring and ore bodies are of deep seated origin. The absorption of the contacting veins also show the deep seated origin of the fissure.

The accompanying surface and level maps studied in conjunction with this report clearly bear out the geological contentions herein. I would recommend that a thoroughly competent expert geologist be employed to check the immediate geology surrounding the main workings (one of known and unquestioned repute) as one of the most important features of future development along intelligent lines will depend upon the geology.

MINERALOGY AND METALLURGY:

The mineral contents of the vein can be briefly classed as gold, silver, iron, galena and pyrites. The iron being of the hemitite family. The pyrites and galena are disseminated throughout the quartz masses. The quartz carries all of the present high grade values. The remainder of the vein filling or the lower grade ore is a silicious schistose gangue. The leaching and erosion of the quartz caused the values to settle and become disseminated throughout this schistose filling.

The ores opened by present development above the 600 level are oxidized ores with less than 10% sulphides. Occasionally sulphide pipes have pushed their way up into the oxidized material and wherever this occurs the ore is invariably high grade.

The gold appears as free and oxidized.

The silver occurs as native, horn, wire, chlorides, carbonates, bromides and sulphides. Of the total value of the mineral content gold represents an average of about 90%, silver 10% in dollars and cents.

DEVELOPMENT:

The Midnight Test Vein, on which the major workings are located, has been worked at various intervals for over a mile in length and in all these various workings show commercial ores. A total footage of these various workings is approximately 8,000 feet and consists of shafts and drifts in shafts, tunnels, raises, winzes, cuts and trenches. In addition to the development above listed on the Midnight Test vein, other close paralleling veins have been worked and prospected by over 2,000 feet of work, (refer to accompanying map listed as Vein System Map No. 1). For development on Midnight Test vein refer to accompanying map listed as Midnight Test Vein Contour Map No. 5. Going further into detail as regards the above development:

MAIN SHAFT

The main Midnight shaft is a new shaft, 580 feet deep, on an incline of 78° to the west. The shaft is straight, well timbered and with a concrete collar and concrete apron covering all the working space around collar of shaft. The shaft is two compartment, one compartment being the ore elevator compartment which is four feet six inches by four feet six inches in the clear. A 32 cubic foot or 2 ton automatic dump skip on rails with safety guides is installed in this compartment, with which ore is hoisted at rate of 400 feet per minute. The skip capacity and speed used allows a hoisting capacity from the 600 level ore pocket of 24 tons per hour, and from the 400 level ore pocket of 30 tons per hour. The

other compartment is used for manway and houses all the pump water lines, air lines, ventilator pipe and electric lines. This compartment is three feet two inches by four feet six inches in the clear. Four by eight inch Oregon Pine spreaders separate the two compartments.

STATIONS & LEVELS

Stations and levels, called the 100 or first level, 200 or second level, 300 or third level, 400 or fourth level, 500 or fifth level, 600 or sixth level, are cut with the floors of same being as follows :

1st level	86	ft. below the collar of shaft
2nd "	157	" " " " " "
3rd "	267	" " " " " "
4th "	353	" " " " " "
5th Station	453	" " " " " "
6th Level	537	" " " " " "

SUMPS

A water sump is extended 43 feet below the 6th level and a Worthington Heavy Duty Pump is installed in this sump. The pump has a capacity of 140 gals. per minute at 1,000 ft. head. A water sump is also sunk in the footwall back of the shaft on the 400 level. In this sump is installed a Krogh Pump four stage direct connected to 40 H.P. vertical motor. This pump has a capacity of 300 gals. per minute with a 550 ft. head.

ORE POCKETS

Ore pockets are cut in the hanging wall of the shaft below the 400 and 600 levels. These ore pockets are each of approximately 100 tons storage capacity, well timbered and lagged, with chute gates 30 ft. below the respective levels. All hoisting is done from these two ore pockets. The ores above the 400 level being passed down throw chutes and trammed into the fourth level. The ores from the 600 level pulled from 600 level stopes and trammed to 600 level ore pocket.

100 LEVEL NORTH

This level is driven from the shaft 223 ft. north, following a strong vein the entire distance. The average strike of this drift or level, from the shaft to its face, is N. 22' W. The average dip of the vein on this level is 78' W. At a point 27 ft. north of the shaft a vein branches off which has an average strike from level to face of N. 30' E. This vein has been drifted on for distance of 40 ft.

100 LEVEL SOUTH

This level is driven 97 ft. south of the shaft with an average strike of S. 19' E. The vein followed has an average dip of 71' W. Fifty feet south of the shaft the vein branches and the hanging wall branch was followed. No work has been done on the branch going into the footwall.

200 LEVEL NORTH

This level is driven 294 ft. 6 in. north of the shaft on an average strike from station to face of N. 17' W. The vein followed has an average dip of 84' W. The average width of vein is 5 ft. 4 in. Several spurs or branch veins come into or branch off of vein followed on this level. 50 feet north of shaft a vein branches off to the east or into the footwall with a strike of N. 18' E., and an average dip of 65' W. This is the same vein that left the 100 level 27 ft. north of shaft. A drift has been run on this vein for a distance of 174 ft. 6 in. 27 ft. in on this drift the vein branches and hanging wall branch was followed. No work has been done on footwall branch. 52 ft. in vein again branched and footwall branch was followed. 137 ft. in vein again branched and hanging wall branch was followed to present face. This branch in this drift averages 3 ft. 2 in. wide. The main drift vein averages 4 ft. in width.

200 LEVEL SOUTH

This level is driven 204 ft. 6 in. south of the station on an average strike from station to face of S. 31' E. The vein followed had an average dip of 75' W. Two strong appearing veins branch off of vein followed on this drift, one 103 ft. 6 in. south of shaft with a strike S. 17' E. A short drift 7 ft. from center of level is run on this branch. The other branches off 200 ft. 6 in. south of shaft and has a strike of S. 24' E. and dip of 85' W. A cross-cut west from near south face of drift cuts this branch vein 40 ft. south of where it left main drift. Vein drifted on averages 3 ft. 4 in. in width.

300 LEVEL NORTH

This level is driven 173 ft. 6 in. north of shaft on an average strike from station to face of N. 18' W, the vein followed having an average dip of 79' W. for 147 ft. 6 in., then 55' W. from there to the face. This level does not conform to the north 200 level above it and is on a different vein for at least most of its total distance, the vein being in the hanging wall from the vein on the level above (note Composite Plan Map No. 4). Vein drifted on averages on the level 3 ft. 3 in. in width.

300 LEVEL SOUTH

This level is driven 141 ft. south from the station, the first 81 ft. having a strike of S. 24' E. and the other 60 ft. having a strike of S. 7' E. 31 ft. south of station the vein branches and hanging wall branch is followed. 83 ft. south of station vein again branches and hanging wall branch is followed. 133 ft. south of shaft vein again branches and footwall branch is followed. Vein followed by this drift has an average dip of 70' W.

400 LEVEL NORTH

This main level is driven 121.6 north on vein with strike N. 34' W. The vein has an average dip of 80' W. This vein on which level is driven is foreign to any vein on any of the three north levels above it. No raise or connection is yet made from this fourth level north to the third level north; consequently Map No. 4 should be carefully studied as to this level. At a point 57 ft. north of station a branch vein having a strike of N. 12' W. has been drifted on for 30 ft. At a point 116 ft. 6 in. from station a cross-cut is driven 19 ft. into footwall where the vein is encountered that branched off 57 ft. from the station. This vein maintains the same strike as where it split off and has been drifted on for another 22 ft. north. From the same point, to-wit: 116 ft. 6 in. from the station, a cross-cut is driven 10 ft. into the hanging wall where another vein having a strike of N. 40' W. is drifted on for 12 feet. This makes a total of drifting on three veins close together on this 400 level north of 185 ft. 6 in.

400 LEVEL SOUTH

This level is driven 334 ft. south of station to the end line of the Midnight claim on an average strike of S. 20' E. The vein has an average dip of 61' W. It has then been driven an additional 185 ft. south into the Nevada claim on an average strike of S. 13' E. The dip this last 185 ft. averages 80' W. This last 185 ft. of drifting south is into another property and was carried principally with expectation of cutting a water course beneath Groom Creek, below which it passes. No water course was cut, however, although considerable additional vein seepage water was developed. Permission was granted for this drifting and the company used all the ore taken out while drifting. However, this company has no ownership of this last

185 ft. of drifting and no estimate of ore from this will be included in the estimate of ore reserves. At the station south the vein splits and the hanging wall branch was followed with the drift. The split into the footwall has a strike of S. 25' E. 151 ft. 6 in. south of station vein branches and the footwall branch was followed. The hanging wall branch strikes south 15' E. while the branch followed strikes S. 32' E. 48 ft. 6 in. south of above mentioned vein branching the vein again branches, this time the hanging wall branch was followed. 58 ft. beyond this vein again branched, this time footwall branch was followed. 17 ft. beyond this another branch occurs, this time hanging wall branch was followed.

500 LEVEL

Nothing is done here except preparation for a station in the hanging wall of shaft.

600 LEVEL NORTH

This level is driven 327 ft. north from the station, which is 30 ft. in the hanging wall from the shaft. The course or strike of the level averages N. 11' W. and the vein followed has an average dip of 75' W. The vein has an average and uniform width of 5 ft. 6 in. 22 ft. north of station a vein branches into hanging wall with strike of N. 28' W. However, nothing was done on this, and the vein followed from there on has a uniform strike of N. 11' W. with no noticeable or important branching.

600 LEVEL SOUTH

This is driven 221 ft. south from station on average strike station to face of S. 12' E. 26 ft. south of station vein branches and hanging wall branch, striking S. 3' W., is followed. Other branch strikes S. 12' E. 29 ft. beyond

this vein again branches, the footwall branch striking S. 22' E. is follows. The other branch strikes S. 12' W. 35 ft. beyond this hanging wall branch is followed. 25 ft. beyond this another branching occurs and hanging wall branch is again followed. 34 ft. beyond this a double branching occurs, the more important looking footwall branch being followed. 55 ft. beyond this branching again occurs and a footwall branch is followed.

100 LEVEL CROSS-CUTS

28 ft. North of shaft a diagonal drift is driven off the first level on a vein striking N. 28' E. for a distance of 40 ft.

16 ft. south of shaft a cross-cut is driven east off of first level for 15 ft. This cross-cut exposes a 10 ft. width of vein.

200 LEVEL CROSS-CUTS

62 ft. north of station a diagonal drift is driven on vein for distance of 174.6 ft. (174 ft. 6 in.).

217 ft. north of station a cross-cut is driven east into the footwall for distance of 15 ft., cutting another vein in its face.

294 ft. 6 in. north of station a cross-cut is driven 40 ft. into the hanging wall. This cross-cut is diagonal and in reality only cross-cuts country approximately 30 ft.

103 ft. south of station a diagonal cross-cut is driven 7 ft. 6 in. into hanging wall on spur or branch vein.

196 ft. 6 in. south of station a cross-cut is driven into hanging wall for 45 ft. and cuts a promising vein.

From the shaft a cross-cut is driven west for distance of 94 ft. cutting several veins in tight ground.

300 LEVEL CROSS-CUTS

30 ft. north of shaft cross-cuts are driven in hanging and foot wall respectively 8 and 20 foot distances. Each cross-cut cuts a new vein.

400 LEVEL CROSS-CUTS

9 ft. north of station a cross-cut is run 10 ft. west into hanging wall, cutting another vein.

116 ft. 6 in. north of station cross-cut is run west into hanging wall 10 ft., cutting a vein.

116 ft. 6 in. north of station cross-cut is run 19 ft. east into footwall, cutting vein which is then drifted on for 22 ft.

37 ft. 6 in. south of station a cross-cut is run each for distance of 343 ft. This cross-cut cuts 7 veins in its course. There has been no lateral work done on any of these to prove their importance.

600 LEVEL CROSS-CUT

From the shaft a cross-cut has been driven west for a distance of 337 ft. This cross-cut has cut three veins in its course. No lateral work has been done on any of them to prove their importance.

RAISES AND MANWAYS

From 100 level 160 ft. north of shaft a raise and manway is raised through to the surface, a distance of 94 ft.

From 100 level 210'north of shaft a raise is up 30 ft.

From 100 level 97 ft. south of shaft a raise and manway is raised through to the surface, a distance of 76 ft.

From 200 level 75 ft. north of shaft a raise is up into stope 41 ft.

From 200 level 172 ft. north of shaft a raise and manway is raised through to 100 level 70 ft.

From 200 level 15 ft. south of shaft a raise and manway is carried through to 100 level 70 ft.

From 300 level 15 ft. north of shaft a raise is up into stope 55 ft.

From 300 level 50 ft. north of shaft a raise and manway is carried through to second level, a distance of 97 ft.

From 300 level 22 ft. south of shaft a raise is up into stope 50 ft.

From 300 level 74 ft. south of shaft a raise and manway is through to 200 level, distance 100 ft.

From 300 level 127 ft. south of shaft a raise is up 19 ft. into stope.

From 400 level 22 ft. south of shaft raise into stope 10 ft.

From 400 level 40 ft. south of shaft raise and manway through to 300 level 85 ft.

From 400 level 92 ft. south of shaft raise and manway through to 300 level 80 ft.

From 400 level 115 ft. south of shaft raise into stope 27 ft.

From 400 level 150 ft. south of shaft raise into stope 20 ft.

From 600 level 60 ft. north of shaft raise and manway up 55 ft.

From 600 level 100 ft. north of shaft raise and manway up 52 ft.

From 600 level 150 ft. north of shaft raise and manway up 40 ft.

From 600 level 115 ft. south of shaft raise and manway up 80 ft.

From 600 level 132 ft. south of shaft raise and manway up 80 ft.

A summary of development in Midnight shaft as per the above and exclusive of ore breaking in stopes is for convenience as follows :

Level	Drift	Cross-cuts & Diag.Drifts	Raises	Total
100 N.	223	40	124	387
100 S.	103	15	76	194
200 N.	294.5	229.5	111	635
200 S.	204.5	146.5	70	421
300 N.	173.5	28	152	353.5
300 S.	141		169	310
400 N.	185.5	39		224.5
400 S.	333	343	222	898
600 N.	327	337	147	811
600 S.	221		160	381
Total	2,206 ft.	1,178 ft.	1,231 ft.	4,615 ft.
Shaft				580 "
			TOTAL	5,195 "

OTHER DEVELOPMENT:

SUNRISE CLAIM

There has been a great amount of shallow prospecting on this claim which lies immediately east and south of Midnight claim. Several paralleling veins outcrop the surface. Principal of these workings are a shaft 50 ft. deep, open cut 100 ft. long connecting with shaft and six other shallow shafts from few feet to 50 ft. apart exploring this Sunrise vein for distance of 600 ft.

SECURITY CLAIM

This claim carries the southern extension of some of the Sunrise veins. Over 600 ft. of shafts, trenches and cuts comprise the development.

MOUNTAIN VIEW CLAIM
SUMMIT CLAIM
LEGAL TENDER CLAIM
NEWARK CLAIM

Several hundred feet of prospecting has been done on these claims. Refer to Claim & Vein System Map.

GOLD NOTE CLAIM

The Midnight vein extends through this claim and on it a tunnel is driven 590 ft. on the vein and a shaft now caved was sunk 60 ft. deep. Numerous pits and shallow prospect shafts have also been sunk. Refer to Claim & Vein System Map and Contour Map of Midnight Vein.

SAXON CLAIM

Shallow shafts and pits are sunk at close intervals for a distance of 400 ft. on the Saxon vein, which lies along the contact of the diorite and schist immediately west of the Midnight shaft.

DIXIE CLAIM

This claim carries the north extension of the veins developed in the main Midnight shaft. The usual prospect holes have been put down. However, no important development has yet been done on this claim.

HARD CASH CLAIM

Shaft 65 ft. deep and numerous prospect holes.

PAY DAY CLAIM

A tunnel has been driven 90 ft. on vein and then diagonal cross-cut driven for 60 ft. to cut three veins showing on surface and then come under Uncle Joe shaft at depth of approximately 200 ft.

FAIRVIEW CLAIM

Numerous prospect holes.

SOUTHERN SLOPE CLAIM

Shaft 30 ft. deep and tunnels or drifts each way for 100 feet. High grade ore exposed.

WATER WITCH CLAIM

A shaft has been sunk to depth of 185 ft. and 100 ft. level established on which 150 feet of drifting has been done.

UNCLE JOE CLAIM

A shaft has been sunk to reported depth of 110 ft. and about 50 feet of drifting done near the surface. This shaft caved for about 30 feet below collar. Recent work has started to reclaim this shaft as an unusually strong vein is disclosed.

OTHER CLAIMS

Numerous and usual prospect development has been done on all of these claims.

NOTE: Refer to Claim & Vein System Map and Midnight Vein Contour Map regarding all of the development on above mentioned claims.

BUILDINGS:

Camp buildings consist of following:

Bunk House No. 1
" " " 2
Residence " 1
" " 2
" " 3
" " 4
" " 5
" " 6
" " 7
Guest House
Office & Gen. Mgr's Residence
Boarding House
Laboratory
Crushing Bldg. for Laboratory
Blacksmith Shop No. 1
" " " 2
Tool House No. 1
" " " 2
Transformer & Elec. Bldg.

Hoist & Compressor Bldg.
Buildings housing Conveyors & 2 Ore Bins
Mill Building.

The residences range from 2-room cottages to modern 7-room and bath residences. The guest house is modern 8-rooms 2 baths kitchen and dining room, completely furnished.

MACHINERY & EQUIPMENT:

HOIST & COMPRESSOR PLANT

1 - Double Drum Hoist, direct connected to
1 - 50 H. P. Slip Ring Motor
1,000 Feet one inch cable
1 - Imperial Ingersoll Rand 1,086 cu.ft.Compressor
125 H.P.Motor drives the above compressor
1 - Ingersoll Rand Compressor 400 cu.ft.
100 H.P.Motor drives this compressor
1 - Water Pump for No. 1 Compressor
1 - Single Drum Hoist - not now in use.
1 - Complete Elec. Switch Board and all switches, etc., controlling all machinery in hoist and compressor room, and three mine pumps.
1 - 45 Ft. Head Frame
2 - Ton Automatic Dump Skip, rails, guides, etc.
1 - Ore Bin attached to Head Frame
1 - 4 x 8 Grizzly through which fines pass directly to conveyor belt, the coarse ore going for primary crushing to a -
1 - Tellsmith Jaw Crusher 10" x 20" crushing to 3" maximum, crushed product going on -
1 - No. 1 Belt Conveyor (2') which takes ore to
1 - No. 1 Ore Bin of 250 ton capacity. Below this No. 1 Ore Bin is -
1 Telsmith (2') Fine Reduction Crusher which crushes to maximum ⅜ inch, this product going to No. 2 Belt Conveyor (2 ft.) which takes it to Mill Ore Bin of 250 ton capacity. Ahead of No. 1 Ore Bin and in connection with No. 1 Conveyor is -
1 - Magnetic Pulley & Generator Set to remove all tramp iron ahead of fine crusher.

1 - Belt Feeder takes ore from Mill Ore Bin to
1 - 64⅜ Marcy Ball Mall driven by
1 - 125 H.P.Motor with res. grids
1 - Dorr Duplex Classifier 6' x 22' in circuit with Marcy Ball Mill
1 - 200 ton Gibson Impact Amalgamator
1 - Automatic Electric Motored Dry Sampler above Mill Ore Bin
4 - Automatic Electric Motored Wet Samplers through Mill System
6 - Deister Concentrator Tables individually motored
1 - 4.6 x 4.6 Llewlyn Marcy Type Ball Mill for secondary grinding

1 - Dorr Classifier Simplex 3' x 24'
1 - 5 H.P.Motor drives above Classifier
1 - 50 H.P.Motor drives No. 2. Ball Mill
1 - 3 inch Wilfley Sand Pump direct connected to
1 - 10 H.P.Motor
1 - 10 Cell Denver Sub A Fahrenwalt Flotation Machine
1 - 2 inch Denver Concentrate Pump
2 - Dorr Thickeners,Tanks & Mechanisms
1 - 40' x 8' Dorr Thickener & Mechanism
1 - 25' x 14' " " "
1 - 4 inch Dorco Diaphram Pump
1 - 3 inch Wilfley Sand Pump direct connected to
10 H.P. Motor
1 - Rumsey 2" Pump for return water
1 - 3' x 4' Oliver Filter with Compressor,
Vacuum Pump and Motor
2 - Large Concentrate Drying & Loading Bins
1 - Tailing Disposal Equipment
1 - Complete Electric Switch Board
1 - Automatic Elec. Dry Re-agent Feeder
1 - " " Wet Re-agent "
Complete Launders, Pipe Lines, etc.
1 - Completely equipped Laboratory
1 - Completely equipped Laboratory Crushing
and Ore Testing Department
1 - Ingersoll Rand Steel Sharpener with all
accessories
2 - Forges and complete equipment of tools
1 - Drill Press
1 - Lathe
2 - Large Air Receivers
Mine is completely equipped with several
thousand feet of air and water lines, rail,
mine cars, etc. etc.
Considerable supplies and miscellaneous tools,
several thousand feet surface pipe lines
Electric shop completely equipped
Several transformers
1 - 2 ton Truck

In short the mine, mill and camp is completely and modernly equipped for a 200 to 250 ton per day operation. The company's books carry a complete itemized inventory account of all equipment and supplies, etc. etc.

MINING:

All mining is done with air machines and electric blasting is employed on all level work. Stoping to date is done by shrinkage system. However, the lower levels now suggest, on account of their size and character of vein filling and wall rock, that some cut and fill mining will later be required. The

mining costs compare favorably with the usual operation of this size. In fact, a very low mining cost has already been established. The record books of the company, covering in detail all development and mining costs, show that the total mining cost of this company, figured on a per ton basis of ore milled, during an intermittant and experimental milling period and that during this time at least 90% of mining was strictly development, has been $3.87 per ton. Analyzing these figures the total mining cost under steady capacity operation should not exceed $2.00 per ton to supply the mill. Another $1.00 per ton should be figured to take care of development of ore reserves ahead of mill requirement. This would then make a total of $3.00 per ton for mining costs and would provide a sufficient development allowance to build up the ore reserves ready for milling.

Thus a total mining cost of $3.00 per ton can be depended upon as against $3.00 to $6.00 per ton for most mining operations of this size and character. If and when cut and fill style of ore breaking is employed the costs will be slightly higher.

MILL FLOW SHEET:

The mill flow sheet is as follows :

Automatic 2-ton mine skip to mine ore bin

to

Coarse — Fines through 4 x 8 Grizzly

to

10 x 20 Telsmith Jaw Crusher, crushing to maximum 3 inch — to

to

2 Ft. Belt Conveyor with Magnetic Pulley

to

250 ton Coarse Ore Bin

Mine Ore Bin

to

Telsmith 2 ft. Reduction Crusher, crushing to maximum ½ inch

to

250 Ton Fine Ore Bin or Mill Bin

to

Belt Feeder

to

6½ Marcy Ball Mill, grinding 30 to 60 mesh

to

6' x 22' Dorr Duplex Classifier

to

200 Ton Gibson Impact Amalgamator

to

4 Deister Concentrating Tables

to

Concentrates to Smelter

Middlings & Tails

to

Dorr Thickener

to

No. 2 Ball Mill 4.6 x 4.6

to

10 Cell Fahrenwald Flotation Machines

to

Concentrates to Pump

to

Dorr Thickener

to

Oliver Filter Plant

to

Smelter

Tails

to

2 Deister Slime Tables

to

Concentrates to head of mill

Tails

to

1 - 25' x 14' Dorr Thickener with 4 inch Dorco Pump

to

1 - 40' x 8' Dorr Thickener for water reclamation

MILLING:

To date the milling done with the new mill can only be considered as experimental. It was found immediately upon completion of the mill and the first week's run upon waste for purpose of breaking in machinery and bedding down the thickeners, that the water supply of approximately 200,000 gals. per day that had theretofore existed at the Water Witch shaft, has been tapped by an adjacent operation and that there was not enough water available to properly handle anywhere near the capacity for which the mill was designed. From a careful study of the actual milling done, the results to be had under proper capacity milling becomes immediately evident and clearly shows that handsome profits can then be expected. On account of lack of water and only experimental and intermittent milling all milling has been charged to development by the company and the returns therefrom credited to same.

The mill machinery broke in perfectly with no changes or adjustments of any importance necessary. Mechanically and technically the mill is as nearly perfect as one could be designed, except that flotation machines are slightly under capacity on some of the slimier ores. For safety two large Flotation cells should be installed ahead of the present ten cells, these new cells to act as conditioners and relief regarding capacity. While not absolutely necessary it would also be advisable to replace the amalgamator with large special Denver Sub A Fahrenwald machine to take out coarse gold before build-ups occur in system. This would relieve and simplify water situation in mill. In case this latter substitution is made I would recommend that concentrating ahead of flotation be abandoned and all concentrate tables follow flotation. This

would then give one product (a flotation concentrate). Filter capacity would have to be enlarged if above changes are made.

During the breaking in and experimental running of mill capacity tests were carried on for short periods showing as high as 14 tons per hour could be put through the mill.

The results of the mill operation in this experimental and intermittent operation, while in no way representative of average ore values, capacity, economy, or recovery, are herewith set forth :

MILL REPORT

NATIONAL GOLD CORPORATION

OCTOBER, 1933, - JULY, 1934.

Period	Hours Mill Run	Tons	Heads @ $20.00	tails	% Recovery	$ Recov.	Amount should Result as per Assay Recovery
Oct.5 -(1	157.75	820	3.85	.64	83.34	3.21	$ 2,632.20
to (2	77.5	420	4.52	1.54	66.0	2.98	1,251.60
Jan.14 (3	197.0	1549	2.87	.84	71.0	2.03	3,144.37
Jan.14-Mar. 15	221.71	804	4.79	2.18	55.0	2.61	2,098.44
Mar.16-Apr. 4	270.5	1376	5.37	2.62	51.0	2.75	3,784.00
Apr.15-Apr. 25	135.0	640	6.12	1.77	72.0	4.35	2,784.00
Apr.25-May 12	168.5	795	7.80	2.20	65.0	5.60	4,452.00
May 13-Jun. 1	30.0	120	12.00	3.33	72.25	8.67	1,040.40
Jun. 2-Jul. 1	139.0	352	[illegible]14.91	3.20	80.0	11.71	4,130.71
Jul.1 -Jul. 7	29.0	81	[illegible]14.993	2.19	88.5	12.803	1,039.10
	1425.96	6957.93					$26,366.82

Smelter Value of Shipments made	$17,619.68
Estimated Build-up in Milling System	8,747.14
	$26,366.82

The ore going to the mill as per the above tonnages was taken from -

500 Tons	- Stope H above	400 South Level
800 "	" M "	100 North "
600 "	" N "	200 " "
300 "	" N & raise 1 "	200 " "
700 "	"	400 South "
216 "	177 ft.Drifting	100 North "
300 "	330 " "	600 " "
338 "	224 " "	600 South "
200 "	N Stope & Raise	200 North "
315 "	295 Ft.Drifting	400 South "
400 "	Shrinkage Stopes L & K	600 North "
120 "	" Stopes J	600 South "
220 "	Raises & Manways	600 North "
200 "	" "	600 South "
200 "	130 Ft. Drifting	600 North "
3,049 "	Waste Dump & Development waste plus approx. 200 tons Leasers	
8,458		
1,500.07"	Deducted for moisture	
6,957.93"	Dry to mill	

You will note that the first period shows a recovery of 83% and that the last period shows a recovery of 88.5%. This illustrates the effect of proper water on both capacity and recovery. We were using a supply of fresh water in the first period, hence the satisfactory recovery considering it was the initial breaking in period. The last period shows a fair recovery because tonnage was cut down consistent with the water supply.

You will note that when normal ore is run that the mill heads become immediately increased to the claimed normal mine run value.

This mill operation to date has further proven what can be expected as to production costs. Since the mill was started in October to July 7th, you will note that it ran only a small fractional part of the time as compared to a normal mill operation of 24 hours per day. In spite of this the total cost per ton milled had been only $1.59 per ton. Under normal operations it should not exceed $1.00 per ton.

The mine operation which has included approximately 90% development work on new ore and has therefore added a large asset in Ore Reserves, in addition to the ore run, has cost an average of $3.87 per ton milled.

When breaking ore for the mill run only the total average cost should not exceed $2.00 per ton, making a total mining and milling cost of $3.00 per ton. In order to operate at capacity it is necessary to develop adequate permanent water. Permanent and ample water undoubtedly will be reached within the next 200 feet of underground development by sinking. This problem is not at all serious, as this district is a known and proven water district with permanent water ample for any large operation. It will take approximately 70 days to develop the 200 feet above mentioned. It should also be considered that this development will be on ore and will add a large additional asset in ore reserves as well as develop water.

From the foregoing it should be quite evident that this is a very valuable property which is fairly well developed and exceptionally well equipped for future development and production. An analysis of the Mill Report will show that at the time the operation of the mill was stopped the following results should be had from a capacity operation, with adequate water available.

The Period from May 12th to June 1st

This period represents 20 days.

The tons actually milled were 120 tons, or considerably less than one day's capacity operation.

The tons that should have been milled under capacity operation would be 4,000 tons, or 200 tons per day.

The Mill Heads were $12.00 per ton average.

The Mill Tails were $3.33 per ton average.

The Recovery was $8.67 per ton average.

At capacity 4,000 tons at $8.67 per ton would be $34,680.00, or at capacity would be $1,734.00 per day.

Less a mining and milling expense of $3.00 per ton, which would be $600.00, would leave a profit of $1,134.00 per day, or of $340,400.00 per year of 300 working days, or 22% plus on the entire outstanding stock at $1.00 per share par value.

The Period from June 1st to July 1st

This period represents 30 days.

The tons actually milled in this period were 353 tons, or less than two days capacity operation.

The tons that should have been milled under capacity operation would be 6,000 tons.

The Mill Heads were $14.91 per ton average.

The Mill Tails were $3.20 per ton average.

The Recovery was $11.71 per ton average.

At capacity 6,000 tons @ $11.71 per ton would be $70,260.00, or $2,342.00 per day, or $702,600.00 per year of 300 working days.

Less a mining and milling cost of $3.00 per ton, which would be $600.00 per day, or $18,000.00 for the 30 day period, at capacity would show a profit of $1,742.00 per day or a profit of $52,260.00 per 30 days, or a profit of $522,600.00 per year of 300 days, or 31½% interest on the entire outstanding stock at $1.00 per share par value.

The Period from July 1st to July 6th, inclusive.

This period represents 6 days.

The tons actually milled were 81 tons.

The tons that should have been milled under capacity operation would be 1,200 tons.

The Mill Heads were $15.785 per ton average.

The Mill Tails were $1.935 per ton average.

The Recovery was $14.850 per ton average.

At capacity 1,200 tons @ $14.85 would be $17,820.00, or $2,970.00 per day, or $891,000.00 per year of 300 working days.

Less a mining and milling cost of $3.00 per ton, which would be $600.00 per day, or $3,600 for the six day period at capacity would show a profit of $2,370.00 per day, or a profit of $71,100.00 per 30 days, or a profit of $711,000.00 per year of 300 days, or 42.6% interest on the entire outstanding stock at $1.00 per share par value.

The above and foregoing estimates are arrived at by the daily Head and Tail assays made by David Reck, and by assuming and figuring average values from ores actually milled.

SAMPLING & ASSAYING:

Sampling, as per detail assays on Map No. 2 "Longitudinal Section and Assay Map", has been done by A. Boseley, E. Bosdey, L. Culp, W. Perry, F. Bradfield and W. Larson, assaying by David M. Reck. All assays on map are taken from signed and certified assay certificates, assaying by David M. Reck, occasionally checked by Critchett & Ferguson, El Paso, Texas, and John Herman, Los Angeles, Calif.

The Gold has been figured in some of the assays shown on Map at $32.00 per oz. with later assays at $35.00 per oz. Silver from 40¢ per oz. to changes up to 64¢ per oz. Several slight errors have been found in total values arrived at by Mr. Reck. However, as these when found have been lower than they should be no changes have been made to differ with assay certificates, except where error was extremely important.

Where the values are referred to on assay map as from former operators, the sampling was done by T. Headley, A. VanCleve, A. Boseley, J. Baird, E. H. Crabtree, and assaying

done by J. B. Hutchison, Carl G. Barth, H. Hart, F. B.Carr, and E. H. Crabtree.

ORE RESERVES:

ORE RESERVES - A -

The ore reserves listed under this head are composed of broken ore in stopes, ores blocked out ready for stoping, and immediate blocks of ore ready for development and stoping. All ore reserves under this heading are practically immediately available. These are all shown on Map 2 "Longitudinal Section and Assay Map". In arriving at the following figures as to tonnages and values, it has been figured only as one vein extending from the surface to the 600 level and 150 below the level, and having certain average widths. As a matter of fact, the development levels which blocked out the ore shown on Longitudinal Map are not all on one vein but on several veins, all lying so close together as to be taken for one vein unless carefully checked by survey and development. This fact makes the ores actually developed by the main workings considerably more than the Longitudinal Map suggests. However, under this heading (Ore Reserves-A) we will place the figures arrived at from map referred to and deal with additional ores developed and here above referred to in heading of Ore Reserves - B.

Ore reserves under this head are as follows:

Stope A -	Broken	Ore	in	Stope	-	846	tons	@	$20.00	-	$16,920.
" B -	"	"	"	"	-	90	"	"	20.00	-	1,800
" C -	"	"	"	"	-	375	"	"	15.00	-	5,625
" D -	"	"	"	"	-	60	"	"	15.00	-	900
" E -	"	"	"	"	-	1000	"	"	20.00	-	20,000
" F -	"	"	"	"	-	1320	"	"	13.60	-	17,952
" G -	"	"	"	"	-	320	"	"	16.00	-	5,120

Stope H - Broken Ore in Stope -	480	Tons @	$17.38 -	8,342.40
" I - " " " -	480	" "	24.61 -	11,812.80
" J - " " " -	734	" "	8.97 -	6,583.98
" K - " " " -	1655	" "	10.08 -	16,682.40
" L - " " " -	55	" "	10.46 -	575.30
TOTAL	7415			$112,313.88

Deduct $1.75 per ton for pulling and conveying ore to mill and milling — 12,976.25

Net Value Broken Ore in Stopes — $ 99,337.63

BLOCKS OF ORE DEVELOPED

Block 1 - Assays shown on Assay Map show an average width of 2 ft. 8 in. and an average value of $32.86 per ton. At these figures this block would have a gross value of $49,947.20. Deduct from this $1.50 per ton for stoping and conveying to the mill and $1.00 per ton for milling or a total deduction of $3,800.00 for the 1,520 tons estimated in the block, and the -
Net value as ore reserve is 46,147.20

Block 2 - Basing average same as Stope B or $20.00, 1,533 tons @ $20.00 gross value is $30,660.00. Deduct $2.50 per ton stoping and milling or $3,833.33 and .....
Net Value is 26,826.66

Block 3 - Not considered as having enough tonnage to estimate at this time

Block 4 - Basing average same as Stope C is based 1,100 tons @ $15.00 per ton gross value is $16,500.00. Deducting as above $2.50 per ton or $2,750.00 -
Net Value is 13,750.00

Block 5 - Basing average same as Stope D is based 2,380 tons @ $15.00 gross value is $35,700.00. Deduct $2.50 per ton as above or $5,950.00 and -
Net Value is 29,750.00

Block 6 - Basing average same as Stope A is based 853 tons @ $20.00 gross value is $17,060.00. Deduct $2.50 per ton or $2,132.50 leaves -
Net Value 14,927.50

Block 7 - Basing average same as Stope E - 1,666 tons at $20.00 gross value is $33,320.00. Deduct $2.50 per ton or $4,165.00 and -
Net Value is 29,150.00

Block 8 - Basing average same as Stope F - 2,240 tons at $13.60 gross value is $30,464.00. Deduct $2.50 per ton or $5,600.00 and - Net Value is 24,864.00

Block 9 - Basing average same as Stope G - 3,240 tons at $16.00 gross value is $51,840.00. Deduct $2.50 per ton or $8,100.00 and - Net Value is 43,740.00

Block 10- Considering high grade value of Stope N above this block a value estimate of $20.00 per ton is placed on this block 2,666 tons @ $20.00 gross value is $53,320.00. Deduct $2.50 per ton or $6,665.00 and - Net value is 46,665.00

Block 11 - Considering value of Stope E above this block and figuring stope to break into the foot wall from vein on 4th level a figure of $15.00 per ton is estimated for this block, 1,520 tons at $20.00 gross value $30,400.00. Deduct $2.50 per ton or $3,800.00 and - Net Value is 26,600.00

Block 12 - This is discounted on account not being completely blocked top and bottom to an estimate for value of $15.00 per ton, 1,520 tons at $15.00, gross value $22,800. Deduct $3.00 per ton or $4,560.00 and - Net Value is 18,240.00

Block 13 - Basing values same as Stope H - or $17.38 per ton, 840 tons at $17.38 is gross $14,599.20. Deduct $2.50 per ton or $2,100.00 and - Net Value is 12,499.20

Block 14 - Basing values same as Stope I or $24.61 per ton, 840 tons at $24.61 is gross $20,672.40. Deduct $2.50 per ton or $2,100.00 and - Net Value is..... 18,572.40

Block 15 - On account of extreme value of Stope N and ore left in it this unbroken block is estimated at $30.00 per ton. 1,067 tons at $30.00 per ton is gross $32,010. Deduct $2.50 per ton or $2,668.00 and - Net Value is 26,674.00

Block 16 - Based on average assays on Map of $13.60 per ton, 1,400 tons at $13.60 is gross $19,040.00. Deduct $2.50 per ton or $3,500.00 and - Net Value is 15,540.00

Block 17 - For conservative estimate on this block width is discounted and value placed at $10.00 per ton, 1,600 tons at $10.00 gross $16,000.00. Deduct $3.00 per ton or $4,800.00 and -
Net Value is 11,200.00

Block 18 - Discounting the high average value of $55.82 of the few samples taken on this block estimate of $20.00 per ton is used for value. 1,500 tons at $20.00 is gross $30,000.00. Discount $3.00 per ton or $4,500.00 and -
Net Value is 25,500.00

Block 19 - Basing estimates on this block assays on map from 6th level below the block average $11.30 and average assays on map of Stope J $8.97, average being $10.13, a $10.00 per ton value is used for estimating this block. 5,333 tons at $10.00 per ton is gross $53,333.00. Deduct $2.50 per ton or $13,333.00 and -
Net Value is 40,000.00

Block 20 - Basing estimates on this block the average of assays on map of 6th level below this block $16.63 together with the average of Stope L $10.46 together with Stope K $10.08 average is $12.39. 5,586 Tons @ $12.39 per ton is gross $69,210.54. Deduct $2.50 per ton or $13,965.00 and -
Net Value is 55,245.54

Block 21 - Basing estimates on this block, the average of assays on map of 6th level below this block $15.81 and averages of Stope J $8.97 are averaged and is $12.39 per ton average. 4,333 tons at $12.39 is gross $53,685.87. Deduct $2.50 per ton or $10,833.00 and -
Net Value is 42,852.87

Block 22 - Basing estimate on average of 6th level assays on map below this block $18.71 and assays on map of Stope K $10.08, the average $14.40 per ton is used. 5,264 tons at $14.40 is gross $74,701.60. Deduct $2.50 per ton or $13,160.00 and -
Net Value is 61,541.60

Block 23 - An estimate of $10.00 per ton is used arbitrarily. Widths are discounted in figuring tonnage. 6,000 tons at $10.00 per ton is gross $60,000.00. Deduct $3.00 per ton or $18,000.00 and -
Net Value is 42,000.00

Block 24 - Assays on map on 6th level below this block indicate an average of $6.06 per ton. 5,333 tons at $6.00 per ton is gross $31,998.00. Deduct $2.50 per ton or $13,333.00 and -
Net Value is 18,665.00

Block 25 - Assays on map on 6th level above this block are used as average value. They average $18.71. 5,000 tons at $18.71 is gross $93,550.00. To care for extra cost of mining on account sinking $4.00 per ton is deducted or $20,000.00 leaving Net estimated value of $73,550.00

Block 26 - Assays on map on 6th level above this block are used as average, to-wit: $16.63. 5,000 tons at $16.63 is gross $83,150.00. Deduct $4.00 per ton or $20,000.00 and - Net Value is 63,150.00

Block 27 - Assays on map on 6th level above this block are used as average, to-wit: $11.30. 5,000 tons at $11.30 per ton is gross $56,500.00. Deduct $4.00 per ton or $20,000.00 and - Net Value is 36,500.00

Block 28 - Assays on map on 6th level above this block are used as average, to-wit: $15.81. 5,000 tons at $15.81 per ton is gross $79,050.00. Deduct $4.00 per ton or $20,000.00 and - Net Value is 59,050.00

Block 29 - An estimate of $10.00 per ton is arbitrarily used. Widths are discounted. 5,333 tons at $10.00 per ton is gross $53,330.00. Deduct $3.00 per ton or $15,999.00 and - Net Value is 37,331.00

Block 30 - $10.00 per ton value estimate arbitrarily used. 5,000 tons at $10.00 is gross $50,000.00. Deduct $4.00 per ton or $20,000.00 and - Net Value is 30,000.00

Block 31 - Assays on map above this block on 6th level are used as an average, to-wit: $6.06. 5,000 tons at $6.00 per ton is gross $30,000.00. Deduct $4.00 per ton or $20,000.00 and - Net Value is 10,000.00

Block 32 - Is estimated same as Block 31 ..... 10,000.00

Block 33 - Arbitrarily estimated at value of $10.00 per ton. 5,333 tons at $10.00 per ton $53,330.00. Deduct $3.00 per ton or $15,999.00 and - Net Value is 37,331.00

Block 34 - Arbitrarily estimated at value of $10.00 per ton. 1,600 tons at $10.00 per ton $16,000.00. Deduct $3.00 per ton or $4,800.00 and - Net Value is 11,200.00

Block 35 - Estimated same as Block 34 ..... 11,200.00

Block 36 -	Estimated same as foregoing except tonnage is 2,666 tons at $10.00 is $22,660.00 less $3.00 per ton or $7,998.00 - Net Value is	$18,662.00
Block 37 -	Estimated same as Block 36	18,662.00
Block 38 -	1,700 tons at $10.00 per ton, $17,000.00 gross, less $3.00 per ton or $5,100.00. Net Value (Arbitrary Estimate) is.....	11,900.00
Block 39 -	Estimated same as Block 38	11,900.00
Block 40 -	Estimated from assays as of average value of $20.00 per ton. 4,800 tons at $20.00 per ton is gross $96,000.00, less $2.50 per ton or $12,000.00 leaves - Net Value	84,000.00

SUMMARY - ORE RESERVES - A

Broken in Stopes	7,415 Tons	- Est.Net Val.	99,337.63
Blocks 1 to 40 incl., as per Map 2	121,732 "	" " "	1,215,426.97
TOTAL Broken - Stopes & Blocks	129,147 "	Net Val.	1,314,764.60

ORE RESERVES - B

Map No. 4 is referred to in basing all of the following estimates and contentions, "Composite Plan Map". As mentioned under Ore Reserves - A, Map 2 (Longitudinal Section) suggests the development from surface to 600 level of one vein. Refer to Map No. 4 (Composite Plan), which is a survey of the underground workings, and it will be found that such is not the case and that the development has actually proven a far greater tonnage than Map 2 suggests. Consequently, under this head we will estimate other ores developed and proven in some cases and suggested and estimated in others.

1 - First and second levels north of shaft conform and are on same vein for 220 ft. in length. The third, fourth and sixth levels are on different veins, hence vein on which first

and second level are driven is figured as extending to depth of 450 ft. below the second level, 220 ft. in length by 450 ft. in height by 4 ft. in width equals 396,000 cu. ft. or 26,400 tons. Discounting the values found and proven in first and second level by 50% this vein extended to depth figured for this map presents an ore reserve valued at gross $132,000

2 - Third level north of shaftis on different vein from any other level north of shaft. Extend this vein to surface and to 750 ft. in depth and it represents 750 x 170 x 3 equals 382,500 cu.ft. or 23,500 tons. Estimating average value of $10.00 per ton there is gross 255,000

3 - Fourth level north is on different vein from anything above or below it. Extending this to surface and to 750 ft. in depth, 750 x 120 x 3 equals 270,000 cu. ft. or 18,000 tons. Estimating value of $10.00 180,000

4 - Sixth level north of shaft is on different vein from anything above or below it. Extending this to surface and to depths figured on others we have - 750 x 330 x 5 equals 1,237,500 cu. ft. or 82,500 tons. Estimating value at $10.00 per ton 825,000

5 - The levels south of the shaft in general conform more nearly to development of one vein. However, many branch veins occur and in some instances different branching is followed on different levels, such as - the south 41 feet of first level is on different branching than the other levels. The south 120 feet of second level is on different branching vein. The south 58 feet of third level is on different branch vein from other

south levels with possible exception of 34 ft. of 6th level. The south 400 level for 162 ft. 6 in. on course of level is on different branch vein from other levels. The south 600 level leaves branch developed by upper veins for 64 ft. and 106 ft. respectively and develops other branch veins. There are numerous other branch veins of possible importance when developed. However, by estimating development of the south branch footage above mentioned there is represented a possible tonnage, etc. as follows :

1st	Level	- 41 ft.
2nd	"	- 120 "
3rd	"	- 58 "
4th	"	- 162 "
6th	"	- 170 "
TOTAL		551

length x 750 height x 4 width equals 2,053,000 cu.ft. or 136,866 tons. For safety discount 50% and result is 68,433 tons of estimated value of $10.00, or gross value $684,333.00

SUMMARY - ORE RESERVES * B.

1 -	Gross Value	$132,000.00
2 -	" "	255,000.00
3 -	" "	180,000.00
4 -	" "	825,000.00
5 -	" "	684,333.00
	TOTAL.	$2,076,333,00

Deduct 40% or $4.00 per ton for mining, milling and marketing and Net Estimated Value is $1,245,799.80

NOTE: - It is possible, of course, that the dips and strikes of the veins and branch veins used for estimates under this head may change and may converge into units at places. This occurrence, if it should happen, however, should not greatly change these estimates as contacts should cause widths to compensate.

ORE RESERVES - C.

Refer to Map #3 regarding figures and estimates of ore reserves figured from Cross Section of Midnight Ore Zone as exposed by cross-cuts and surface outcrops.

Vein - No. 1 - already figured in Ore Reserve - A
" " 2 - " " " " " - B
" " 3 - " " " " " - B
" " 4 - " " " " " - A
" " 5 and 6 unimportant as will or have formed contact with other veins figured comparatively close to surface.

Vein - No. 7 - Estimated as follows: 600 feet depth by 700 ft. length by 3 ft. width equals 1,260,000 cu. ft. or ..... 84,000 tons

" " 8 - Where cut by cross-cut is small and while it may show commercial width when developed is not estimated now of value.

" " 9 - Estimated 600 ft. by 700 ft. by 3 ft... 84,000 "

" " 10 - " " " " " " " " "... 84,000 "

" " 11 - " " " " "" " " " "... 84,000 "

" " 17 - " " " " "" " " " "... 84,000 "

Total tonnage indicated and estimated under this head ..... 420,000 "

Deduct 25% safety factor ..... 105,000 "

Remaining.. 315,000 "

Estimated value of $10.00 per ton)) $3,150,000.00

Deduct 40% for mining, milling and marketing 1,260,000.00

Estimated Net Value as Future Ore Res. $1,890,000.00

ORE RESERVES - D

(Estimated as per Contour Map of Midnight Vein minus 700' Midnight Shaft Block).

Block 1 - Average height above tunnel floor - 0 to 343.75 equals 171.87. Estimating average 3' width of ore. Length of block or claim 1,500 ft. - 1,500 x 171.87 x 3 equals 257,805 cu. ft. 15 cu. ft. to ton ..... 17,187 tons

Block 2 - Average height 343.75 to 562.25 by 2 equals 453 ft. 1,500 x 453 x 3 equals 2,038,500 cu. ft. Minus 700 x 453 x 3 equalling 951,300 is 1,087,200 cu. ft. Block estimated in long. sec. 15 cu. ft. to ton is ..... 72,480 "

Block 3 - Average height 968 to 1,225 x 2 equals 1,096 ft. 1,500 x 1,096 x 3 equals 4,932,000 cu. ft.
15 cu. ft. to ton is ..... 328,800 tons

Block 4 - Average 1,225 to 1,345 by 2 equals 1,285 ft. 1,500 x 1,285 x 3 equals 5,782,500 cu. ft.
15 cu. ft. to ton is ..... 385,500 "

TOTAL Estimated Tonnage 803,967 "

This is estimated as probable and possible ore for future development by carrying lateral work north and south of depth now developed in Midnight shaft. The vein width is estimated at very low figure and actual widths will likely be much greater. For a purpose of estimating a probable value an average of $10.00 per ton is placed as value. Surface work along this vein indicates that this should be a reasonable and conservative figure for estimating probable values. Naturally there will be lean places during development when off of ore chutes. However, the ore chutes themselves should be high enough to bring average tonnages and values to these estimated figures. For an additional safety factor a further deduction of 25% is made.

Resulting figures are then -

Total Tonnage Estimated	803,967 tons
Estimated Value per ton - $10.00	
Estimated Total Gross Value -	$8,039,670.00
Less Safety Factor 25% -	2,009,917.50
	6,029,752.50
Less 40% or $4.00 per ton Mining, marketing, milling -	2,411,901.00
NET	$3,617,851.50

ORE RESERVES - E.

(Estimated from Map 1 of other veins and workings).

Possible and probable ores ESTIMATED IN VEINS, OTHER than Midnight Vein and Ore Zone, developed by Midnight shaft and workings. Estimated to depth of Midnight Workings or 600 ft. deep.

To arrive at the following estimates a conservative estimate of 3 ft. is figured as width:

600 ft. is figured as depth or height of backs.

Length is measured from scale of map.

15 cu. ft. to ton for undeveloped ore in place.

$10.00 for average value per ton.

25% deducted for safety factor.

There is hardly any doubt but what the major veins are deep seated and will extend to 1,000 ft. and more depth (possibly three or four thousand feet) and will carry their greatest values and widths at depth. Refer to Map No. 1 (Claim and Vein System Map) regarding the following estimates and explanations.

MAIN BRANCH VEIN.

This is marked on map as Main Branch Vein and is the branch off of the Midnight Vein from near the Midnight shaft and on which most of the underground lateral work has been done in the Midnight shaft workings.

Starting from beyond the 700 ft. length of ore zone developed at shaft and continuing to north end line of Dixie Claim, there is estimated as follows :

Length	- 1,800 ft.	
Depth	- 600 "	
Width	- 3 "	
Cu. ft.	- 3,240,000	
Tons	- 216,000	
Estimated Value per ton - $10.00		
Total Gross Value		$2,160,000.00
Deduction 25% for Safety Factor.		540,000.00
Remaining Gross Value		1,620,000.00
Estimated Mining, Milling & Marketing costs $4.00 per ton equals 40% or		648,000.00
Estimated Net Value		$ 972,000.00

Natural course of development will extend the present levels north on this vein.

SAXON VEIN

This vein is approximately 300 ft. east of Midnight Vein at Midnight shaft and 400 south cross-cut reaches it if it has maintained the estimated dip. Lateral drifting from the cross-cut can be carried both north and south. North for 2,700 ft., south for 300 ft. to Nevada north end line.

Estimates as follows:

Length	3,000 ft.	
Depth	600 "	
Width	3 "	
Cu. ft.	5,400,000	
Tons - at 15 cu.ft. per ton	360,000	
Estimated Value per ton -	$ 10.00	
Total Gross Value -	$ 3,600,000.00	
Deduct 25% Safety Factor	900,000.00	
Remaining Gross Value		$2,700,000.00
Deduct Mining,Milling,Marketing,40%		1,080,000.00
Estimated Net Value as Future Ore Res.		1,620,000.00

SUNRISE VEIN

This vein lies approximately 350 ft. east of Midnight Vein. Estimates as follows :

Length	1,800 ft.	
Depth	600 "	
Width	3 "	
Cu. ft.	3,240,000	
Tons @ 15 cu.ft. to ton	216,000	
Est.Value per ton	$10.00	
Total Gross Value -	$2,160,000.00	
Deduct 25% Safety Factor	540,000.00	
Remaining Gross Value		$1,620,000.00
Deduct 40% Mining,Milling,Marketing		648,000.00
Est. Net Value as Future Ore Res.		972,000.00

SECURITY VEIN

This vein lies approximately 450 ft. east of Midnight vein. Estimates are as follows :

Length	3,300 ft.
Depth	600 "
Width	3 "
Cu. ft.	5,940,000
Tons @ 15 cu.ft.to ton	396,000
Est.Value per ton	$ 10.00

Total Gross Value	$3,960,000.00	
Ded.25% Safety Factor	990,000.00	
Remaining Gross Value		$2,970,000.00
Deduct 40% Mining,Milling,Marketing		1,188,000.00
Est. Net Value as Future Ore Res.		$1,782,000.00

WATER WITCH VEIN

This vein lies approximately 750 ft. east of the Midnight vein and has considerable development on it, principal of which is shaft 185 ft. deep with 150 feet of drifting on the 100 level. On account of it being a little farther away from a central control development the mining costs are increased by $1.00 per ton in the following estimates. Estimates are as follows :

Length	2,700 ft.	
Depth	600 "	
Width	3 "	
Cu. ft.	3,860,000	
Tons @ 15 cu.ft.to ton	257,333	
Estimated Value per ton	$10.00	
Tptal Gross Value	$2,573,333.33	
Ded. 25% for Safety Factor	643,333.33	
		$1,930,000.00
Ded.50% Mining,Milling,Marketing		965,000.00
Est. Net Value as Future Ore Res.		$ 965,000.00

SUMMARY this head as to value of these Net Ore Reserves.

Main Branch Vein	$ 972,000.00
Saxon Vein	1,620,000.00
Sunrise Vein	972,000.00
Security Vein	1,782,000.00
Water Witch Vein	965,000.00
TOTAL	$5,611,000.00

The foregoing estimates are only on close major veins paralleling and close to the Midnight vein and which could be worked through the present main workings by cross-cuts and drifts, and which have already been quite extensively prospected and developed. These represent only a small percentage of the

actual veins within this zone, any of which may be as important or even more important than the ones on which reasonable estimates are here made. However, nothing is at this time figured or allowed for their value.

A further and enormous tonnage is possible from the veins paralleling and lying farther each, and the veins branching off to the west on the southern part of the property, and the veins crossing the Edris, Joe H., and Badger Claims on the north end of property.

RECAPITULATION ORE RESERVES:

ORE RESERVES - A

	Tons	Est. Net Value
Broken in Stopes	7,415	$ 99,337.63
Blocks 1 to 40 incl.	121,732	1,215,426.97

ORE RESERVES - B

Ore Partially Developed by Midnight Shaft Workings

1 - Gross Value -	$132,000.00	-26,400
2 - " " -	255,000.00	-25,500
3 - " " -	180,000.00	-18,000
4 - " " -	825,000.00	-82,500
5 - " " -	684,333.00	-68,433
TOTAL Gross	$2,076,333.00	

Deduct $4.00 per ton for mining, milling and marketing and Estimated Net Value is 1,245,799.80

ORE RESERVES - C

7 - Gross Value -	$840,000.00	-84,000
9 - " " -	840,000.00	-84,000
10 - " " -	840,000.00	-84,000
11 - " " -	840,000.00	-84,000
17 - " " -	840,000.00	-84,000
TOTAL Gross -	$4,200,000.00	
Deduct 25% Safety	1,050,000.00	
	3,150,000.00	
Deduct Additional 40% for mining, milling, etc.	1,260,000.00	
TOTAL Net Value	$ 1,890,000.00	

ORE RESERVES - D

Block 1	17,187
" 2	72,480
" 3	328,800
" 4	385,500
Total Tons	803,967
at est. value of	

$10.00 per ton -	$8,039,670.00	
Less 25% Safety Factor	2,009,917.50	
	6,029,752.50	
Less 40% for mining,milling &c.	2,411,901.00	
Est. Net Value	3,617,851.50	$3,617,851.50

ORE RESERVES - E.

Main Branch Vein	216,000	972,000.00
Saxon Vein	360,000	1,620,000.00
Sunrise Vein	216,000	972,000.00
Security Vein	396,000	1,782,000.00
Water Witch Vein	257,333	965,000.00
TOTAL Est.Ore Reserves	3,019,280	$14,179,415.90

NOTE: - It must be distinctly understood that the above and foregoing tonnages and values are estimates only, with exception of Ore Reserves - A - which can be measured and checked. However, from a careful study and analysis of what the development on all of these mentioned ore reserves show and indicate it is believed more than probable that the above figures will be found conservative when sufficient added development is done to prove the ore bodies.

SUMMARY PHYSICAL ASSETS:

The physical assets heretofore listed, and discussed in this report, and consisting of timber, buildings, machinery, equipment, tools, supplies, broken ore in stopes, blocked and partially blocked ore, and possible and probable ore, are summarized here briefly as follows :

Timber - est. value to going mine	50,000.00
Buildings - Est. replacement value	40,000.00
Machinery - " " "	70,000.00
Equipment) Tools)- " " " Supplies)	10,000.00
Broken Ore in Stopes - Est.Net Value	99,337.63
Blocked & Partially Blocked Ore-Net Est.	1,245,799.80
Possible & Probable Ore - Est. Net	12,834,278.47
TOTAL	$14,349,415.90

NOTE: It must be understood that there is a great variation in the value of mine assets, when aplied to a going mine as against a non-going mine. The above estimates are as to a going mine. Independent appraisals have been made on machinery and equipment, ore tonnages, etc., by Engineers and Appraisers, and

their written reports and appraisals will be attached to this report without comment in regard thereto.

ESTIMATED EARNINGS FROM 200 TON PER DAY MILLING OPERATION:

By a study of preliminary mill operation a very clear idea can be formed as to what this mine, operated at its present mill capacity, can and should do. Very low mine and milling costs have been proven. Much lower costs will prevail when and if capacity is increased, after sufficient development is done to warrant an increased capacity.

Disregarding actual ore values heretofore run and checking with mine development assay values, and with the thought of placing the operation on a safe manufacturing basis, I believe earnings should be estimated on a steady average of $10.00 per ton value basis. This should allow cheaper mining as low grade ores which are bound to occur in places during development can be mixed with ores of higher known values, thereby assuring ready tonnages and eliminating selective mining when in low grade ore.

A 200 ton per day milling operation and a $10.00 per ton average mill head the following is set up :

200 Tons per day at $10.00 per ton is per day		$2,000.00
Less Mining & Milling @ $3.00 per ton -	$600.00	
" Loss of 6% in milling -	120.00	
" 50¢ per ton for marketing -	100.00	
" 10¢ " " " upkeep & deprec. -	20.00	
Less Total per Day -	840.00	840.00
NET PROFIT per day		$1,160.00

Net Profit per Day	$1,160.00
Net Profit per Month	34,800.00
Net Profit per Year	407,600.00

BALANCE SHEET:

Balance Sheet as of June 1st, 1935.

This Balance Sheet is exclusive of Ore Reserves, Timber, etc., as set forth and appraised heretofore in the Report of June 1st, 1935, except Ore Reserve - A as set up in Report of Estimated Net Value of $1,314,764.60.

ASSETS

CURRENT ASSETS

Accounts Receivable	$ 1,038.96		
Materials & Supplies	3,412.00		$4,450.96

FIXED ASSETS

Cost Mine Property		$1,507,091.06	
Development Expense Since		167,369.73	
Shaft Sinking Expense		18,587.07	
Mine & Mill Bldgs.	$16,863.63		
Other Buildings	13,979.36		
Machinery & Equipment	53,426.74		
Small Tools	863.47		
Cars, Trucks, etc.	2,366.05		
Office Furniture & Fix.	3,619.07		
Water,Power,Pipe Lines	4,495.81		
Less Reserve for Deprec.	13,188.93	82,645.80	
			1,775,593.66

OTHER ASSETS

Machinery not in use	1,058.50

DEFERRED CHARGES

Capital Stock Discount	6,275.00
Ore Reserves - A as per Report of June 1, 1935.	1,314,764.60
TOTAL ASSETS	3,102,142.72

LIABILITIES

Preferred Creditors	$15,166.01		
Secured Creditors	14,925.74		
Unsecured Creditors	90,552.09	120,643.84	
Purchase Contract		9,600.00	130,243.84

CAPITAL

Common Stock - $1.00 Par Value			
Authorized - 2,500,000 Shares		$2,500,000.00	
Unissued - 836,821 "		836,821.00	
Outstanding- 1,663,197 "		$1,663,197.00	$1,663,197.00
Surplus Assets to Balance			1,308,701.88
			$3,102,142.72

RECOMMENDATIONS:

1 - Immediately develop or bring in a certain adequate water supply to insure continuous milling operation. This is covered by recommendations made under heading "Water" heretofore in this report.

2 - By all means sinking should immediately be started as, aside from the water it will develop, the sixth level development indicates that it is just on top of the real values and widths of ore necessary to make a large and successful mine.

3 - From a point 50 feet north of the shaft on the 4th level cross-cuts should be run west into the hanging wall for 30 feet and east into the footwall for 100 feet. These will open up the ores showing above the 400 level north already developed and on the 600 level below already developed.

4 - From the present face of the 600 level south run cross-cut west into the hanging wall for 100 feet. This will cut the branching shown on composite plan of underground workings.

5 - From a point 160 feet north of the shaft on the 300 level run cross-cuts as follows : 50 feet west into the hanging wall and 100 feet east into the footwall. This will open up the ore developed above this level on the first and second levels and cut the diagonal vein opened up and drifted on on the first and second levels, and also the vein developed on the sixth level north of shaft.

6 - Start drifts north and south on all veins cut by 400 level east cross-cut. These should carry themselves and be blocking out easily accessible future ores ready for milling when desired.

7 - Naturally as a normal mining operation all present drifts will be carried on, particularly to the north. This will care for itself and build up large ore reserves.

The first five recommendations should be considered purely as a necessary development program and a development fund set aside for this particular work. The total cost of the five recommendations should not exceed $35,400.00 as per the following :

1 -	For adequate Water Supply and 200 ft. sinking of winze below 600 level -	$31,400.00
2 -	Provided for under 1	
3 -	Cross-cutting 130 ft. on 400 level -	1,300.00
4 -	" " 100 " " 600 " -	1,000.00
5 -	" " 150 " " 300 " -	1,500.00
	TOTAL -	$35,200.00

FINANCIAL:

Permanent and adequate finances should be made available for retirement of all present indebtedness, and working capital of sufficient amount to take care of the development above recommended and provide a safety operating treasury of at least $50,000.00.

CONCLUSION:

With the recommendations herein contained completed and future mining practice that will or should be applied toward development of depth ores and increase of present known ore reserves, efficient management applied, and the finances recommended under financial heading, this property should become a profitable outstanding Gold Mine.

The following Maps are attached and made a part hereof.

Map 1 - Claim & Vein System Map

" 2 - Longitudinal & Assay Map

" 3 - Cross Section Map

" 4 - Composite Underground Survey Plan

" 5 - Contour of Midnight Vein Map

The following copies of Reports of Examining Engineers are hereto attached without comment.

1 - P. O. Norville
2 - H. V. Burgard
3 - C. R. Harris
4 - John H. Bowles
5 - A. C. Noe

Respectfully submitted,

As of June 1st, 1935.

W. W. Linesba.

THE TONOPAH MINING COMPANY OF NEVADA

TONOPAH, NEVADA.

May 24, 1934.

Mr. J. J. Barnet,
Cleveland, Ohio.

Dear Mr. Barnet:

Your wire of May 12th was not received until May 14th, due to my being out of town Sunday.

As soon as necessary arrangements could be made, I was able to leave here Thursday, May 17th, arriving in Prescott May 18th. I went out to the mine that evening and met Mr. Linesba, and made arrangements to inspect the property the next day. Two days were spent with Mr. Linesba, going over the property and talking over in detail the conditions existing. I was very cordially received by the management and all information asked for was freely and unhesitatingly given.

The report which I shall give is from an operating standpoint, and not a geological report.

The property covers a mineral-bearing area of approximately a half mile wide by a mile and a half long. Through the center of the property is a diorite intrusion some 1000-1200 feet wide. Schists are found on both sides of this intrusion. Through approximately the center of this diorite intrusion occurs the Midnight vein, on which the working shaft is sunk and from which the main development work has been prosecuted. To the east of the Midnight vein, several other veins occur which have been worked more or less by former operators. The veins are not confined to the diorite, but also occur in the schists beyond. To the west, surface showings indicate the possible existence of several veins in the diorite, and on the contact between the

diorite and schists there is a massive outcrop of quartz from 50 to 100 feet wide. Further to the west, other veins occur in the schists. Laterally, to the north and south, the Midnight vein has been prospected on the surface by open cuts, shafts and tunnels, for approximately one mile, and values of a milling grade are said to exist along the entire length. Most extensive of this lateral work is the Nevada Tunnel, which is several hundred feet south of the main working shaft. Leasers have opened up this tunnel lately for a distance of about 450 feet. The vein as shown in this tunnel is from 3 to 5 feet wide, and, I was informed, contained values of milling grade over the entire distance. The total length of this tunnel is said to be 700 feet.

The Sunrise and Sunset veins, lying to the east of the Midnight vein, have likewise been prospected, but not so intensive as the Midnight. These veins are said to contain ore of milling grade. No sampling was done in these veins, as a sample taken here and there would be of no value and a proper sampling which is necessary would take several weeks' work.

SURFACE EQUIPMENT:

The mine is equipped with an electric hoist suitable for at least 1,000 feet of depth. An Imperial Type 10 Ingersoll compressor, size 18 - 10 x 16, furnishes compressed air for drilling purposes and is of ample size for the operation. When not drilling, compressed air is furnished for the assay office and blacksmith shop by a small single stage compressor.

The blacksmith shop is equipped with Ingersoll sharpener and forge.

The assay office is well equipped for the operation, with the exception of the coarse crusher which is too small.

Two hundred-ton plant amalgamation, concentrating tables, and flotation machines, which I was told have treated as high as 14 tons per hour, or at the rate of 336 tons per day.

Head Frame equipped with 2-ton automatic dump skip.

The shaft has been sunk on the dip of the vein at approximately 80 degrees dip (estimated) to the west to a depth of 600 feet plus a sump. Laterals have been run north and south from the 100 level, 200 level, 300 level and 400 level, also 600 level. The approximate length of drifting on each level is as follows :

100 level - 350 ft.
200 " - 520 ft.
300 " - 320 ft.
400 " - 400 ft.
600 " - 600 ft.

At the time of my visit, drifting was being carried on to the south on the 400 level, and to the north on the 600 level. Crosscutting west on the 600 level is also in progress. This crosscut was in 180 feet on May 20th. It is estimated that between 270-300 feet additional will be required to cut the projection of the large quartz vein on the contact mentioned above in this report. The diorite is very hard in this crosscut and progress is slow; 4½ to 5 feet being broken in two shifts. At this rate, from two to two and one-half months will be required to reach the contact.

Stoping has been started generally on all levels and raises carried to the levels above in a number of cases. Due to the stoping, the vein has been removed in the drifts and any sampling of the backs of the drifts attempted would be very incomplete, and sampling of the bottom of the drifts would be very tedious and costly. No samples were, therefore, taken from what exposures were left in the backs of the drifts.

The condition of the vein on the various levels in the extreme faces is as follows :

100 Level N. - Vein good. No samples taken
100 Level S. - Very small. " " "
200 Level N. - " " " " "
200 Level S. - 47 in. wid. Au.Trace; Ag. .84; Value $0.54
300 Level N. - 40 in. wide Au. .90 ; Ag.1.50; Value $32.47
400 Level N. - No ore commercial grade north of shaft.
400 Level S. - 36 inc.wide Au.1.72; Ag.2.88; Value $62.05
600 Level N. - 59 in. wide Au. .40; Ag.7.04; Value $18.54
600 Level S. - Vein very small. Last 50 feet barren.
Grub sample muck pile 600 N.D. 5/18/34 - Au. .42; Ag. .46, Value $14.99.

The above samples were cut by me and assayed in Tonopah by The Tonopah Mining Company assayer.

In addition to the above samples, grab samples were taken from the stope chutes which contain the broken ore in the mine. While this sampling was extremely rough, it was hoped that it would give some idea of the value of the broken ore. It is not at all conclusive, but in view of the low values obtained, I would recommend that at least 10 tons be drawn from each stope and sampled as separate lots by the automatic sampler at the head of the mill. This information would be very valuable, and is essential in order to maintain an average mill head. The results of this sampling are as follows :

	No.Chutes	Au.Ozs.	Ag.Ozs.	Value
100 Level N.	4	.08	2.00	$ 4.09
200 Level N. (New Stope)	4	.12	4.60	7.17
200 Level N.	3	.16	2.44	7.17
200 Level S.	7	.06	1.90	3.32
300 Level N.	3	.12	3.68	6.57
300 Level S.	9	.08	3.92	5.32
400 Level S.	11	.22	1.82	8.87
600 Level N.	9	.04	1.76	2.53
600 Level S.	3	Trace	1.40	0.90

Other samples taken consisted of an 8-inch streak in the bottom of the north drift on the 600 level. This sample assayed Au. 3.92 ozs., Ag. 4.42 ozs., value $140.02. A grab sample was taken from the top of a mine car containing ore from the new stope above the 200 Level

N. This assayed Au. .3 ozs., Ag. 91.46 ozs., value $69.49.

The only stoping now being done is above the 200 Level N. where from 3 to 5 feet of very good ore is being mined.

The following information was taken from the Company's stope map, which indicates the values that have been used to arrive at the value of the ore reserves :

100 Level	
Block #1	$41.06 per ton
" #2	19.63 " "
200 Level	
Stope #1	20.00 " "
Block #3	29.65 " "
Stope #2	20.00 " "
300 Level	
Block #4	12.00 " "
Block #5	20.00 " "
Block #6	24.00 " "
Stope #9	20.00 " "
Stope #6	18.00 " "
400 Level	
Block #7	13.16 " "
Block #8	36.32 " "
Stope #10	20.00 " "
Stope #11	21.00 " "
600 Level	
Block #9	21.00 " "
Block #10	29.00 " "

The stope map gives 78,131 tons of ore, with a total value of $2,500,000.00 above the 400 level, or an average value of $32.00 per ton. Mr. Linesba is of the opinion that this is approximately 25 per cent too high, due to dilution.

The average value of the 600 ft. level, over a distance of 450 feet and an average width of 5 feet, was given as $21.00 by Mr. Linesba, Mr. Linesba stated that the Midnight vein passed in the footwall of the shaft below the 400 level. This being the case, the vein on the 600 level which is in the hanging wall of the shaft is a different vein than the Midnight vein. A raise on the 600 S. is up 100 feet on this vein. Due to numerous branchings and splits in the vein in different parts of the mine, this

condition might be expected, and the following out of these branches will likely lead to important ore bodies.

Development in the mine to the south has not yet been carried far enough to reach a point under the Nevada Tunnel mentioned above, and which shows a continuous vein of 700 feet in length said to carry ore of mill grade for the entire distance. The face of the 400 S. Drift is the most southerly face in the mine, and this is now being carried forward on two shifts. As noted above, this drift showed 36 inches of ore assaying $62.05 at the date of my visit. The vein has shown a tendency to get wider for the last 30 feet of drift. This work should be continued, as well as drifting both south and north on the various other levels, as time and necessary warrant.

On May 21st, 1934, the Company's payroll was as follows:

	No.	Rate
Miners	10	$4.00
Muckers	8	3.50
Skip tenders	2	3.50
Topmen	2	3.50
Pumpmen	1	4.00
Hoist Engineers	2	4.00 or 4.50
Shift Bosses	2	4.50
Mine Foreman	1	5.50
Mine Superintendent	1	Salary $250.00
General Manager	1	-
Electrician	1	6.00
Blacksmith	1	4.00
Blacksmith Helper	1	3.50
Assayer	1	5.00
Assayer Helper	1	3.50
Watchman	1	3.00
Crusherman	1	4.00
Crusherman Helper	1	3.50
Mill Operators	2	4.00
" " Helpers	2	3.50
Pumpman & Tailings Disposal	1	4.00
Truck Drivers	2	3.50
Auditor	1	-
Timekeeper	1	-

This is a substantial reduction over the May 1st - May 15th payroll. The payroll for the first half of May was $2,868.72, made up as follows:

Mill	-	$1,165.03
Mine	-	1,485.55
Surface	-	218.14
		$2,868.72

I consider the payroll to be conservative, although some reduction might be made, as I will later recommend.

As you doubtless know, the mill is unable to operate at capacity because of shortage of water. All over the western states, there has been very little, if any, snowfall the past winter, and very little rain for the past year east of the Sierras. As a consequence, springs have dried up and the water level in general has been lowered.

I was told that at the time mill construction was started, the Water Witch shaft, less than a quarter of a mile away, was making sufficient water to require the services of a two inch triplex pump for twenty-four hours daily. This in itself would be sufficient for your plant. However, the flow in this shaft has diminished to a point whereby only two hours pumping daily can be had. Almost all of the entire flow from this source is being used for domestic purposes. This source is gradually diminishing and unless relief is had soon from rains, will be insufficient for domestic purposes. Practically all the water now available for milling purposes is coming from the mine. Mr.Linesba assured me that this was sufficient to operatethe mill for one shift daily, or enough to treat between 60 and 70 tons per day.

Possible additional water sources were discussed in detail with Mr. Linesba. These consisted of (1) Smith Tunnel where it was thought an appreciable amount of water was available. Upon examination, the flow here was found to be negligible. (2) Gold Note Tunnel; it is thought that there is sufficient water here to fill a 1 inch pipe continuous flow. This is between

4,000 and 5,000 feet away and would be gravity flow. If this flow is available and Mr. Linesba can obtain sufficient 1-1/2 inch second-hand pipe for from 5 cents to 6 cents per foot (as he is of the opinion he can) it would be worth the expenditure to bring this water in. (3) Victor Shaft, 1,500 feet away - gravity after pumping from shaft. This shaft is now caved and water to be obtained here is problematical. (4) Sheldon Shaft, 1,400 feet deep - 3 miles south. This shaft is reported to have had a heavy flow of water when operating. It would be necessary to raise water 600 feet in addition to the head of the shaft to get over the hill between the Sheldon and the Company's plant. An expenditure of approximately $25,000.00 would be necessary for this installation. It would be necessary to thoroughly test out this supply by preliminary pumping before seriously considering this source.

The final source, and to me the most feasible, is the development of additional water in the Midnight shaft. The water now being made in the mine is coming from the veins. With this in mind, Mr. Linesba is now driving the 600 W. crosscut in the hopes of encountering water when and if the veins indicated on the surface are cut, and when the contact is reached. I would consider it possible that water may be encountered, as hoped for, and as this is essential development, I would recommend that this work be continued. The most likely source, in my opinion, will be on the Midnight vein or the vein now showing in the 600 drift, as further depth is gained. There is no question but that the shaft will be sunk deeper, if for no other reason than the development of the 600 drift vein, and I would recommend that sinking an additional 100 feet be started at once. This should be accomplished for an amount not exceeding $5,000.00, and be completed

in about 45 days. Another possible source for water, together with essential development, would be an east crosscut about 600 feet in length to cut the vein on which the Water Witch shaft was sunk.

During the past three months the mill has operated from eight to sixteen hours per day, and has treated between 5,000 and 6,000 tons of ore of an average value of $7.73 per ton. The ore treated was derived from the following places :

500 tons Stope #11 above 400 S. Drift
800 " Stope above 100 N. Drift
600 " Stope above 200 N. "
300 " Raise between 200 and 300 Levels N.
700 " New Stope above 400 S. Drift.
Material from 180 ft. drifting on 100 N. drift
Balance from drifting north and south on 600 Level.

As stated above, Mr. Linesba thinks he has sufficient water to operate with a satisfactory recovery at the rate of 60 to 70 tons per day. It is my recommendation that the mill heads be raised at once, and that any doubtful development ore be placed in a low-grade ore dump on the surface where it can later be recovered when the mill is on a more productive basis.

On ore of $7.73 grade, Mr. Linesba states that he was able to carry on the operation at no loss, notwithstanding the low tonnage milled. He also states that he will have no trouble whatever in maintaining a $15.00 head. If this head can be maintained and the mill operated satisfactorily on 60 tons per day, a handsome profit will result and more than pay for the extra development suggested.

A number of leasers are working at various places on the property and the ore is being treated at the Company's mill. Since there is nothing to be gained in the way of development by these leasers, and with a $15.00 mill head more profit can be derived from a ton of mine ore than from a ton of leasers' ore, I suggest

that with the small tonnage that can be milled on account of the water shortage, milling operations be confined to Company mine ore solely.

At the time of my visit, the mill was down and had not started when I left. This was due to certain changes being made whereby it is hoped to increase the recovery by amalgamation, and to relining the fine grinding ball mill. It is hoped to raise the recovery, by amalgamation, from 15 per cent to 25 per cent or 30 per cent. This will result in making more bullion at the mine for which approximately $35.00 per ounce gold is paid against $32.00 per ounce which is paid for gold in concentrates.

During this emergency schedule, and until full tonnage can be treated, it is my opinion that Mr. Linesba could, with the help of his shift bosses and mine foreman, look after the operation, thereby eliminating a mine superintendent. At present, the assayer has very few assays to run, and the services of the helper could well be dispensed with.

Answering your telegram briefly, I would say that with the exceptions noted, the operation is in balance and that future prospects are good.

I hope that I have given you the information desired. I would feel better had the chute samples taken shown higher values, but as I have stated, they consisted of a few handfuls from each chute, and a more complete sampling will undoubtedly show different results. I have therefore recommended taking the large samples in order to arrive at the approximate grade of ore that may be expected from the mine. The ore is spotted and small samples are unreliable. No record of any systematic sampling was shown me, and I am of the opinion that it would be of great value to the Company if an accurate and complete sampling of the mine were made.

Yours very truly,
(Sgd.) H. A. JOHNSON

JAH:M

COPY

ESTIMATE OF TONNAGE OF ORE RESERVES, NATIONAL GOLD CORPORATION GOLD MINING PROPERTY. YAVAPAI COUNTY, ARIZONA

AUGUST 26th, 1933.

In estimating the tonnage and checking previous engineering reports of the ore reserves of this property, the evidence at hand, such as the surface development work on the many parallel outcropping veins, together with the persistent manner in which these same veins are encountered at depth in the workings of the Main Midnight Shaft, forces one to realize that in order to the properdy justice, it would require several months' work with a crew of assistants to work out what might be considered a fair estimate of the tonnage of this immense mineralized area.

The reports of previous engineering examinations, together with the report of Mr. W. W. Linesba and the Company maps of the property, which picture very accurately the development work on the property to date, have been taken as a basis of checking the tonnage of ore reserves.

In order to facilitate checking, the same classification will be given to the ore reserves as is used in the report of September 16th, 1932, covering this property.

Except in a few isolated sections to establish the extent of mineralization, no sampling has been attempted in connection with this report, hence no estimate of ore values will be given.

ORE RESERVE "A".

MAIN MIDNIGHT SHAFT.

First Level North driven 54 feet on vein.

The vein widths on this level vary from 5.5 ft. to 5.9 ft., with an average of 5.7 ft. Forty feet from shaft a diagonal drift 14 feet into footwall side of vein is in ore 5 ft. wide.

First Level South - driven 103 feet on vein.

Width of vein checked every 20 feet ranges from 3.9 ft. to 5.8 ft., with an average of 4.9 feet. The ore figured in Blocks 1 and 3 are measured from the Second Level and the measurements taken on this level are for the purpose of checking the width of the vein.

Second Level North - driven 330 feet on vein.

Fifteen foot pillar next to shaft, from 15 ft. to 80 ft. a fillstope up 42 feet. Sixty feet north of shaft a diagonal drift is driven into footwall side a distance of 100 feet in ore the entire distance. 215 feet north of shaft a crosscut id driven 10 feet into footwall ore. The average width of ore exposed in this level is of necessity taken as the width of the drift as all work is in vein material. At a point 50 feet north of shaft, where the raise comes through from the 3rd level, a 14 foot width of ore is exposed but no foot or hanging wall encountered. Widths checked every 25 feet range from 5.7 ft. to 14 ft. with an average of 8.8 ft.

Block No. 1.

Length 125 ft. x 160 ft. average height x 8.8 ft. width - 176,000 cu.ft.
Deduct 26,232 cu.ft. for openings - 149,768 cu.ft.
15 cu. ft. per ton equals - 9,984 Tons

Block No. 2.

Length 205 ft.x 160 ft.average height x 5.1 ft.width - 166,800 cu.ft.
15 cu. ft. per ton equals - 11,029 Tons

Block No. 11.

This block covers ore developed above the cross drift starting sixty feet north of shaft on second level.

Length 115 ft.x 200 ft.height x 6.0 ft.width - 138,000 cu.ft.
15 cu. ft. per ton equals - 9,200 Tons

Second Level South - driven 202 ft. on vein.

Twenty foot pillar next to shaft and a raise through to frist level. For 60 feet south of raise a filled stope extends to within 15 feet of first level. 110 ft. south an 8 ft. crosscut is driven into a vein, 115 ft. south a 40 foot stope begins, height 20 feet, 125 ft. south of shaft a 40 ft. crosscut is driven into hanging wall intersecting a 4 foot vein at 30 feet. From the shaft, a 60 ft. crosscut into the hanging wall intersects four veins. These veins will be considered in a separate group. Vein widths on this level range from 3.4 ft. to 9.0 ft. with an average of 5.8 ft.

Block No. 3.

Length 202 ft. x 5.8 ft.width x 134 ft.average height - 158,146. cu.ft.
Deduct 32,952 cu.ft. for openings above - 126,194 cu.ft.
15 cu. ft. per ton equals - 8,413 Tons

Third Level North - driven 175 ft. on vein.

Fill stope extends from 15 ft. pillar to raise 38 ft. north of shaft, up 45 ft. Forty feet north of shaft a 10 ft. crosscut into hanging wall cuts another vein. Widths checked every 25 ft. range from 5.8 ft. to 14.2 ft. with average 10.0 ft.

Block No. 5.

Length 175 ft. x 10.0 ft.width x 100 ft.height - 175,000 cu.ft.

15 cu. ft. per ton equals - 11,666 Tons

Block No. 4.

Extending from end of 3rd Level through to end of 2nd level, average length 78.5 ft.

Length 78.5 ft. x 6.0 ft.width x 100 ft. height - 47,100 cu.ft.

15 cu. ft. per ton equals 3,140 Tons

Third Level South - driven 154 ft. on vein.

Twenty foot pillar next to shaft. Filled stope up 60 ft. extends to raise 80 ft. south of shaft. Widths checked every twenty feet range from 6.0 ft. to 12.7 ft. with average 10.0 ft.

Block No. 6.

154 ft. on Third Level, 202 ft. on second level, average 178 ft. length,

Length 178 ft.x 10.0 ft.width x 100 ft.height - 178,000 cu.ft.

15 cu. ft. per ton equals - 11,866 Tons

Fourth Level North - driven 130 ft. on vein.

Widths checked every twenty feet range from 3.6 ft. to 4.5 ft. with average 4.0 ft. Four short crosscuts along this level, all in vein material; one 10 ft. north of shaft 6 ft. into hanging wall; one 50 ft. north, 26 ft. into foot wall; one 105 ft. north 20 ft. into hanging wall, and one 110 ft. north 20 ft. into foot wall.

Block No. 7.

130 ft. on Fourth Level, 175 ft. on Third level, average length 152.5 ft.

Length 152.5 ft. x 4.0 ft. width x 120 ft. height - 73,200 cu. ft.

15 cu. ft. per ton equals - 4,880 Tons.

Fourth Level South - driven 230 ft. on vein.

Vein width along this level averages 8.0 ft., while widths in stope show from 10.0 ft. to 14.0 ft. Forty feet south of shaft a 390 ft. crosscut into foot wall intersects eight separate veins on which no development work has as yet been done.

Block No. 8.

230 ft. on Fourth Level, 154 ft. on Third Level, average length 192 ft.

Length 192 ft. x 8.0 ft.width x 120 ft.height	-	184,320 cu. ft.
Deduct 40,768 cu.ft. for openings, equals	-	143,552 cu. ft.
15 cu. ft. per ton equals	-	9,570 tons.

Stope No. 1.

70 ft. x 42 ft. x 9.5 ft. -	-	26,980 cu. ft.
Deduct 25% for broken ore -	-	20,210 cu. ft.
15 cu. ft. per ton equals -	-	1,347 Tons

Stope No. 2.

70 ft. x 60 ft. x 6.0 ft. -	-	25,200 cu. ft.
Deduct 25% for broken ore -	-	18,900 cu. ft.
15 cu. ft. per ton equals -	-	1,260 Tons

Stope No. 6.

60 ft. x 30 ft. x 7.5 ft. -	-	13,500 cu. ft.
Deduct 25% for broken ore -	-	10,125 cu. ft.
15 cu. ft. per ton equals -	-	675 Tons.

Stope No. 9.

55 ft. x 45 ft. x 10 ft. -	-	24,750 cu. ft.
Deduct 25% for broken ore -	-	18,583 cu. ft.
15 cu. ft. per ton equals -	-	1,237 Tons.

Stope No. 10.

54 ft. x 49 ft. x 8.0 ft.	- -	21,168 cu. ft.
Deduct 25% for broken ore	- -	15,876 cu. ft.
15 cu. ft. per ton equals	- -	1,058 Tons

Stope No. 11.

94 ft. x 25 ft. x 8.0 ft.	- -	19,600 cu. ft.
Deduct 25% for broken ore	- -	14,700 cu. ft.
15 cu. ft. per ton equals	- -	980 Tons

No lateral work has been done below the Fourth Level. However, the sinkjng of the shaft which is now down 525 ft. in ore increases the ore reserve at depth beyond the quantities estimated in previous reports.

Block No. 9, North of shaft,

Length 115 ft. x 145 ft. depth divided by 2, equals 8337.5

8337.5 x 6.0 ft. width equals 50,025 cu. ft.

15 cu. ft. per ton equals - - 3,334 Tons

Block No. 10, South of shaft.

230 ft. length x 145 ft. depth divided by 2, equals 16,675

16,675 x 6.0 ft. width equals - - 100,050 cu. ft.

15 cu. ft. per ton equals - - 6,670 Tons

RECAPITULATION, ORE RESERVE "A".

Block No. 1 - - - - - - - -	9,984 Tons
" No. 2 - - - - - - - -	11,029 "
" No. 11 - - - - - - - -	9,200 "
" No. 3 - - - - - - - -	8,413 "
" No. 5 - - - - - - - -	11,666 "
" No. 4 - - - - - - - -	3,140 "
" No. 6 - - - - - - - -	11,866 "
" No. 7 - - - -, - - - -	4,880 "

RECAPITULATION, ORE RESERVE "A" -- CONTINUED:--

	Forwarded -	85,184 Tons.
Block No. 8	- - - - - - - -	9,570 "
Stope No. 1	- - - - - - - -	1,347 "
" No. 2	- - - - - - - -	1,260 "
" No. 6	- - - - - - - -	675 "
" No. 9	- - - - - - - -	1,237 "
" No. 10	- - - - - - - -	1,058 "
" No. 11	- - - - - - - -	980 "
	TOTAL - - -	85,805 Tons.

ORE RESERVE "B"

ORES ALREADY MINED AND ON DUMPS
OTHER THAN THE MIDNIGHT SHAFT.

The quantities listed in this class have all been checked. It is particularly noted that the quantities as listed are in some cases considerably less than the amount calculated in checking the size of the dumps. The tonnage as listed is accepted as a conservative figure and herein listed as previously reported.

Water Witch Dump	- - - - - - -	4,000 Tons.
Sunrise "	- - - - - - -	50 "
Uncle Joe "	- - - - - - -	100 "
Security "	- - - - - - -	1,000 "
Hard Cash "	- - - - - - -	500 "
Pay Day "	- - - - - - -	600 "
Fairview "	- - - - - - -	100 "
Southern Slope "	- - - - - - -	100 "
Summit "	- - - - - - -	500 "
Gold Note "	- - - - - - -	1,000 "
Other Scattered Dumps	- - - - - -	3,000 "
	Total - - -	10,480 Tons

ORE RESERVE "C"

ORES DEVELOPED BUT NOT CONSIDERED AS BLOCKED OUT, IN WORKINGS OTHER THAN THE MIDNIGHT SHAFT.

See Map No. 5 for plans and dimension of workings on the various shafts and tunnels as listed below.

Gold Note Tunnel	12,980 Tons
Uncle Joe Shaft	833 "
Pay Day Tunnel	720 "
Water Witch Shaft	8,766 "
Sunrise Shaft	1,068 "
Sunrise "	533 "
TOTAL	24,900 Tons

ORE RESERVE "D".

ORE IN SIGHT FROM PRESENT UNDERGROUND DEVELOPMENT IN MAIN MIDNIGHT SHAFT.

In the description of the underground work under Ore Reserve "A", it will be noted that a great quantity of ore is encountered in the crosscuts and raises driven from the various levels. These veins and stringers, in close proximity to, or contacting the vein on which the levels are driven, are of showing widths which should be maintained over and above the widths figured in Ore Reserve "A", shown on Map No. 3. This tonnage might be classed as ore in sight from the Midnight Shaft development. Being in strong evidence on both sides of the workings on all levels, it is reasonable to assume an increase of 200%, figured only to the depth to which the Midnight Shaft is developed. This does not take into consideration the fact that these ores evidently extend downward to a great depth. Refer to Maps No. 2 and No. 4 covering this estimate.

85,805 Tons x 2 equals - - - 171,610 Tons

ORE RESERVE "E".

ORES EXPOSED THROUGH DEVELOPMENT IN MIDNIGHT SHAFT BY CROSSCUTS AND CORRELATED WITH SURFACE OUTCROPS. CLASSIFIED AS PROBABLE ORE UNTIL FURTHER DEVELOPED.

Considering the evidence obtained from the long crosscuts driven toward both the foot wall and hanging wall from the Main Midnight Shaft, the number of veins intersected by these crosscuts, and the manner in which it is possible to correlate them with the parallel veins outcropping on the surface (see Maps No. 4 and No. 7), it is reasonable to give these veins an average width of 3 feet, with the exception of the vein known as the Hanging wall Vein. This vein shows a surface outcrop of over 50 feet in width, but for estimating will be taken at a width of only 20 feet. This gives a total ore width of 56 feet for these veins. The lateral development as represented by the various levels already driven totals 560 feet and it may be considered that mineralization extends for that length. Taking a height of 400 feet, as represented from the 4th Level to the surface, the following tonnage is represented:

560 ft. length x 56 ft. width equals 31,360

31,360 x 400 ft. height equals - - - 12,544,000 cu. ft.

15 cu. ft. per ton equals - - - - 836,266 Tons

ORE RESERVE "F".

ORES OF MIDNIGHT VEIN TO BE CONSIDERED IN THE POSSIBLE TUNNEL OPERATION AT THE LEVEL SHOWN ON MAP NO. 6

From a series of Prospect Shafts, Tunnels and Trenches along the Midnight Vein, ore is evident along the surface for a distance of approximately 8,375 feet. This estimate is considered in connection with the possible Tunnel Development along this vein at a depth of 625 feet in the Midnight Shaft. (See Map No. 6).

Ore Reserve "F" - Continued.

Considering the topography of the country, and the surface elevation of the tunnel development of the Gold Note and Southern Slope Claims on the Midnight Vein, the proposed Midnight Tunnel should reach a depth of 1345 feet at the southern end of the property.

Considering a height of from 0 to 1345 ft. above the tunnel along this distance, an average height of 672 is obtained. Although the ore where worked on the vein is exposed for greater widths, and as shown in the Midnight Shaft reaches a width of up to 14 feet, a stoping width of 4 feet is considered on this estimate. Deducting 3,000 feet from the approximate length through the elimination of the Nevada and Gazelle Claims and quantities previously estimated leaves a distance of 5,375 feet.

5,375 ft. length x 4.0 ft. width x 672 ft.height-	14,448,000	cu. ft.
15 cu. ft. per ton equals - - - - -	963,200	Tons
Less 25% safety margin or 240,800 tons- - -	722,400	"
Deducting the block of Midnight Vein listed in Ore Reserve "A" - - - - -	85,805	"
Leaves this item with an estimated tonnage of -	636,595	Tons

RECAPITULATION OF ORE RESERVES.

Ore Reserve "A" - - - - -	85,805	Tons
" " "B" - - - - -	10,480	"
" " "C" - - - - -	24,900	"
" " "D" - - - - -	171,610	"
" " "E" - - - - -	836,266	"
" " "F" - - - - -	636,595	"
TOTAL DEVELOPED, PROBABLE & POSSIBLE ORES - - - - - - -	1,765,656	Tons

The above represents as complete a check on the tonnage of Ore Reserves as a short examination will permit. Future development on the many veins intersected in the cross-cuts, together with the exploration of the Hanging Wall Vein, will undoubtedly show tonnage in excess of the amount herein represented.

(SIGNED) HOWARD O. NORVILLE

Registered Professional Engineer,
Arizona Registration No. 602.

June 23, 1933

H. V. BURGARD

Consulting Engineer
Los Angeles, California

Ralph R. Langley Company,
Los Angeles, California.

Gentlemen:

At your request, I have recently inspected the properties of National Gold Corporation near Prescott, Arizona. It was my second visit to the property, I having examined it some time ago for another client. I was aided in my recent examination by having the use of a complete detail report, including maps, assay plan, mill costs and operating data prepared by W. W. Linesba, General Manager, who is an experienced, competent engineer. I am attaching the Linesba report to this and making it a part hereof. I will summarize my review of the Linesba report and data and my personal examination of the properties herewith.

GENERAL

This brief summary report is made after a disinterested and impartial inspection and investigation of the property and operations on November 4th, 5th and 6th, 1933. This report is built upon facts and factors, surrounding or a part of the subject property conditions, developments, improvements and potentials, existing at the time of my inspection at the time above stated. Facts were ascertained and are submitted to the best of my ability and knowledge after 30 years experience in Mining and Metallurgical Engineering throughout the United States.

The detail report of Mr. W. W. Linesba, General Manager, was reviewed prior to and since my inspection, and, in my opinion, based upon my findings, is tangible, concordant, and his actual and potential ore tonnage calculations and ore value evaluations and factors are approximately estimated and are, in my opinion, within the narrow limits of possible human error.

The geological, physical, economic and potential features of the property are favorable, for enlarged, and continuous operations. The basic factors, water, timber, electricity and physical conditions of the mine are favorable and excellent.

VEIN SYSTEMS:

The detail ore and value calculations which I will set up herein will embrace only that part of the Midnight Vein system the ore in which is partly or wholly blocked out ready for mining and milling. This limited portion of one vein was sampled and assayed as work progressed. A good part of the ore is broken and lays in the stopes ready to be run. This is a section of the Midnight Vein, 1,850 feet in length, 6 feet in width and 700 feet of depth, at the main shaft, whereas the full length of the Midnight Vein system is about 8,375 feet and bears every indication of great depth.

The Midnight Vein system lies between two enclosure walls, averaging about 600 feet apart, and of which 600 feet, about one third or 200 feet is the prospected gold bearing ore zone. In addition to the Midnight Vein system there are a number of other partly developed and proven veins, separate from but parallel to the Midnight Vein. These additional veins carry ore of similar character to that of the Midnight system, and together with the undeveloped portion of the Midnight Vein, indicate enormous tonnage and values for extensive operations in addition to that portion of the Midnight Vein calculated herein. The entire vein system and values are shown on the maps and data included in the Linesba report very clearly setting out the magnitude of the entire ore zone.

It is logical and reasonable to assume, geologically, that the pay ore deposition, in an elevation of over 8,000 feet above sea level, will extend to greater depth, based upon the general geological and mineralogical premise that the depth extension of ore is proportionate to the well defined and persistent lineal length of the vein. The vein strikes located, and/or exposed and developed with persistent width downward to 600 feet at the main shaft reveal no apparent nor visible factor which may cause vein faulting, squeezes or split-ups.

ORE VALUES

It is logical and reasonable to assume as approximately correct the aggregate average per ton values found by two disinterested engineers, Messrs. Crabtree and Hart, with Mr. H. J. Hutchinson, formerly with the Nevada Consolidated, doing all assaying of samples, in November, 1930, to-wit:

Aggregate	average	above	the	first	level	floor	$25.70
"	"	"	"	second	"	"	15.70
"	"	"	"	third	"	"	16.95
"	"	"	"	fourth	"	"	26.24

These values represent about 90% gold and 10% silver, and average, $21.15 per ton. However, the 1932 average per ton assay value of 154 built up composite samples, reported by Mr. Linesba were based on Gold @ $20.67, Silver @ 30 cents and with Lead not evaluated, disclosed an aggregate average value of $34.08 per ton. For ultra-conservative calculations, I will base my value summary upon a premise that with Gold @ $30.00, Silver at 41 cents, Lead not evaluated, that 50% of $34.08 per ton or $17.00 does, in my opinion, constitute a conservative basis for potential gross value yield estimations.

OPERATING COSTS

A review of the costs detailed on page 33 of the Linesba report can reasonably be accepted as embracing the costs as shown, at $3.85 per ton, but for entire safety, I am estimating the development and mining cost at $2.50 per ton of mill input ore delivered into the crude ore bin; the crushing, conveying, milling and upkeep cost is estimated at $3.00 per ton of mill input; or a total combined cost of $5.50 per ton. The mill recovery percentage has ranged above 90% of assay value. A net mill recovery estimated 92% of $17.00 or $15.64 per ton, will, after deducting $5.50 per ton for production and upkeep costs, leave an estimated gross net profit of $10.14 plus per ton.

Taxes, amortization, administration and some other operating costs being subject to variation, they are herein calculated for ultra-conservative reasons at $5.50 per ton, or $1.65 per ton, for possible variable higher costs. And that $1.65 per ton, plus 14 cents per deduction from the $10.14 above estimated gross net profit per ton of ore milled brings the estimated net bankable fund realization to $10.00 per ton of ore treated with a 92% recovery from the sweetened aggregate average gross ore value of $17.00 per ton.

AVAILABLE ORE NOW DEVELOPED

Applying the costs and values indicated above to the ore now blocked, partially blocked, developed and indicated (a considerable amount of which is broken and lying in the stopes) within that limited calculated area of the Midnight Vein alone, the returns applied to the outstanding stock of the corporation would be as follows :

	Present Developments:		
Developed and probable ore	600' x 370' x 6'-15-	88,800	tons
	South Extensions:		
Indicated and potential ore	600' x 1,100 x 6'-15	266,400	"
	North Extensions:		
Indicated and potential ore	600' x 370' x 6'-15	88,800	"
	Additional 100' Depth of Shaft		
Indicated and potential ore	100' x 1,850' x 6'-15-	74,000	"
	Total pay ore in the limited area indicated	518,000	"

Value Calculations for above 518,000 Tons

Developed and probable	88,800 tons	@ $17.00	$1,509,600.00
Additional Shaft Depth	74,000 "	@ 17.00	1,258,000.00
South Extensions	266,400 "	@ 17.00	4,528,800.00
North Extensions	88,800 "	@ 17.00	1,509,600.00
Estimated Ore Values within dimensions indicated			$8,806,000.00

Estimated Net Yield per share of stock outstanding at the present time; from the ore within the area of the Midnight Vein indicated.

Ore Block (1)	88,800 tons	@ $10.00	$ 888,000.00
Ore Block (2)	74,000 "	@ 10.00	740,000.00
Ore Block (3)	266,000 "	@ 10.00	2,664.000.00
Ore Block (4)	88,800 "	@ 10.00	888,800.00
Or about $3.00 net per share on outstanding shares - from the area indicated.			$5,180,800.00

Similar potential costs and earnings, I believe, will be experienced in the extensive tonnage to be developed and milled on the remainder of the Midnight Vein and on the several other veins of similar ore on the property.

THE MILL

The mill flowsheet embraces primary jaw crusher, gyratory secondary crusher, Marcy primary ball mill, in closed circuit with Dorr Classifier and Gibson impact amalgamators; Deister-Plate table concentrators, Marcy secondary ball mill in closed circuit with Dorr classifier; Reagent control feeders. Fahrenwald sub-aeration flotation units, Deister-Plate slime concentrators, Continuous Rotary Filter for concentrate de-hydration, all electrically powered and well co-ordinated. The mill buildings and ore bins are well constructed of wood with galvanized iron covering; cement floors throughout the ore recovery portion of the mill buildings;

The mining and milling plant facilities are in size and character to economically operate the property continuously, on a daily tonnage basis of over 200 tons. The practicability of the amalgamation and concentration mill methods have been fully demonstrated and proven. The direct supervision of mine and mill operations are under men considered high class, in their respective duties, and are well regarded in personal respects.

MANAGEMENT:

The officers and management of the National Gold Corporation are well recommended in every respect; possessed of good capacity; their ore production, operating methods and metallurgical adoptions are standard. There is no apparent reason why this corporation should not have a successful future. The integrity of those interested is regarded sufficient to inspire confidence.

Respectfully submitted,

H. Victor Burgard

Consulting Engineer

Hollywood, California
November 27, 1933.

A. C. NOE
The University of Chicago,
Chicago, U. S. A.

Robt. [illegible] Co. Papers
Jan. 23-1933

Mr. Max Schwarz,
Hotel Shoreland,
55th St. at the Lake,
Chicago, Ill.

Dear Mr. Schwarz:

I have summerized in the following seven points my observations of the National Gold properties in Yavapai County, Arizona.

1. I consider the gold mining property of the National Gold Corporation very rich in high grade gold and silver ores. It contains enough ore masses to guarantee at least fifty years of operation at 1,000 tons a day.

2. The property is already sufficiently developed to permit an operation based on 200 tons daily as soon as the mill is completed.

3. The construction of the plant is economical and can easily be enlarged without interrupting operations.

4. The layout of the mill seems practical. There is sufficient water available and the necessary electric power is provided at a fair cost.

5. The location of the Midnight Test Vein Shaft with adjoining mill is convenient for shipping and marketing free gold and concentrates.

6. Some ores of very high grade can be shipped at once and would insure an immediate income even before milling operations start. Large quantities of ore are in stopes ready for the mill.

7. The ore runs above $20. a ton on the average in gold.

My opinion is based upon a careful study of all available information embodied in the reports and maps drawn up by Mr. Linesba and upon personal inspection of the property. I have checked Mr. Linesba's data in the field as much as was possible in two days.

Independent assay tests of the ore collected by different persons were made. I have collected samples myself without assistance

from the mine manager, merely accompanied by a miner who was under my orders. In these tests made by Robert W. Hunt Co. in Chicago the statements of Mr. Linesba about the ore values of the mine were checked up and found to be conservative. I consider Mr. Linesba to be a competent and reliable mining engineer and operator.

The entire district in which the property of the National Gold Corporation is located was studied in detail by Professor Waldemar Lindgren of the Massachusetts Institute of Technology in 1922 and his report was published by the U. S. Geological Survey in 1926 (Ore Deposits of the Jerome and Bradshaw Mountains Quadrangles, Arizona. U. S. Geological Survey Bulletin 782).

The entire district south of Prescott in the Bradshaw Mountains is an old gold mining locality. The rich free gold of the veins has former placer deposits in Lynch Creek which have been exploited since 1863, and about $1,000,000 was taken out of the gravel. The placer gold pointed to the lodes in the mountains as sources of the free metal, and mining was started at an early date in the mountains but never flourished owing to poor transportation facilities. North of the Prescott or Bradshaw district lies the Jerome district where between 1883 and 1922, the date of Dr. Lindgren's field work, about $126,000,000 have been taken out in copper, silver and gold, chiefly from the United Verde Mine. There is no reason why the Bradshaw district which has a geologic structure very similar to the Jerome district could not make an equally good showing under competent mine management.

Samples taken by A. C. Noe in the Midnight Test Vein of the National Gold Corporation and assayed by Robert W. Hunt Co., Chicago:-

The gold value is figured at $20.67 per ounce, and the silver value

at $0.37 per ounce.

Sample 1: Taken at station on second level near northwest corner of shaft.

Gold	ounces per ton	1.01	value per ton	$20.88
Silver	" " "	10.35	" " "	3.83
	Gold and silver value per ton			$24.71

Sample 2: Taken from vein on side drift about ten feet from main drift north on second level.

Gold	ounces per ton	1.29	value per ton	$26.66
Silver	" " "	2.02	" " "	0.75
	Gold and silver value per ton			$27.41

Sample 3: Taken from vein at face, end of side drift from main drift north on second level.

Gold	ounces per ton	0.05	value per ton	$ 1.03
Silver	" " "	0.54	" " "	0.20
	Gold and silver value per ton			$ 1.23

Sample 4: Taken from vein at face at end of main drift south.

Gold	ounces per ton	0.07	value per ton	$ 1.45
Silver	" " "	0.59	" " "	0.22
	Gold and silver value per ton			$1.67

Sample 5: Taken at station on second level near southwest corner of shaft.

Gold	ounces per ton	12.37	value per ton	$255.69
Silver	" " "	17.31	" " "	6.40
	Gold and silver value per ton			$262.09

Sample 6: Taken between levels 3 and 4 from ore pile in depression reached from level 3 south at a point about 90 feet from shaft.

Gold	ounces per ton	2.88	value per ton	$ 59.53
Silver	" " "	29.62	" " "	10.95
	Gold and silver value per ton			$ 70.48

Sample 7: Taken on crosscut each of level 3 north

Gold	ounces per ton	0.25	value per ton	$ 5.17
Silver	" " "	0.37	" " "	0.14
	Gold and silver value per ton			$ 5.31

Sample 8: Taken at face on end of level 3 north

Gold	ounces per ton	0.03	value per ton	$ 0.62
Silver	" " "	0.47	" " "	0.17
	Gold and silver value per ton			$ 0.79

Sample 9: Concentration sample taken from the pilot mill which had been set up for experimental purposes and has been removed since to make place for mill of 200 ton per day capacity. It represents probably an 80 times concentration.

Gold	ounces per ton	143.81	value per ton	$2,972.55
Silver	" " "	88.00	" " "	32.56
	Gold and silver value per ton			$3,005.11

Assumed that it is an 80 times concentration, this sample indicates an average gold and silver content of $37.56 throughout the mine.

Samples 3, 4, and 8 were taken at points where at present the levels end. These places will not necessarily be exploited but there is a great deal of excellent high grade ore in veins of sufficient width. The vein at the place where sample 7 was taken measures 15 feet in thickness.

The following tests are still being made by the Robert W. Hunt Co. and will not be available until the afternoon of June 28th; a complete chemical analysis of sample 5; an amalgam test of an average run of samples 1-8; an assay test of the rich silver ores from south slope claim.

Sincerely yours,

(SIGNED) A. C. NOE

ROBERT W. HUNT COMPANY, ENGINEERS

CHICAGO, ILLINOIS
June 28th, 1933

File No. 26199-1 Order B-78986
Report D-7976 to D-7984

Professor A. C. Noe
University of Chicago
Faculty Exchange
Chicago, Illinois

Dear Sir:

We have made amalgamation test on a composite of samples #1 to #8 inclusive. Amalgamation test shows the material contains 1.08 ox. of free gold capable of being amalgamated. This represents 48.21% of the total gold content of this composite sample.

On sample #5 we made a chemical analysis to determine the nature of the rock. Amalgamation test was also run on this sample.

Chemical Analysis:	% Loss on Ignition	7.30
	% Carbon Dioxide	0.40
	% Silica	33.30
	% Lime	0.75
	% Magnesia	0.35
	% Manganese Oxide	2.32
	% Phosphorus Pentoxide	0.178
	% Aluminum Oxide	14.60
	% Sulphur	0.22
	% Iron Oxide	41.80

The ore appears to be a mixture of iron oxide and clay.

Amalgamation Test:

Ounces of free gold per ton 10.96

This represents 88.92% of the total gold as free gold, capable of being amalgamated.

Respectfully submitted,

ROBERT W. HUNT COMPANY

(SIGNED) Clayton E. Plummer
Technical Director,
Chemical & Metallurgical
Engineering.

ROBERT W. HUNT COMPANY, ENGINEERS
CHICAGO, ILLINOIS

June 23, 1933.

File No. 26199-1 Order B 78986
Report D 7976 - D 7984

Assaying of Ores & Concentrates

Prof. A. C. Noe,
University of Chicago,
Faculty Exchange,
Chicago, Illinois.

Dear Sir:

In accordance with your verbal instructions of June 20th we have made the assay of the eight samples of ore and one sample of concentrates delivered to our laboratory the same date.

SAMPLE (Lab. No.)	No. 1 D 7976	No. 2 D 7977	No. 3 D 7978	No. 4 D 7979	No. 5 D 7980
Oz. gold per ton	1.01	1.29	.05	.07	12.37
Gold value per ton: @ $20.67 oz.	$ 20.88	26.66	1.03	1.45	255.69
Oz silver per ton	10.35	2.02	.54	.59	17.31
Value silver per ton @ $0.37 oz.	3.83	0.75	.20	.22	6.40

SAMPLE (Lab. No.)	No. 6 D 7981	No. 7 D 7982	No. 8 D 7983	Concentrates D 7984
Oz. gold per ton	2.88	.25	.03	143.81
Gold Value per ton @ $20.67 oz.	59.53	5.17	.62	2972.55
Oz. silver per ton	29.62	.37	.47	88.00
Value silver per ton @ $.37 oz.	10.95	0.14	.17	32.56

Respectfully submitted,

ROBERT W. HUNT COMPANY

(SIGNED) C. E. Plummer
G
Technical Director,
Chemical & Metallurgical
Engineering

- Copy -

THE HARRIS ENGINEERING COMPANY

Incorporated

Suite 501 Haas Building

C. R. HARRIS
Consulting Engineer

Los Angeles, California,
November 17, 1930.

Mr. W. W. Linesba,
General Manager,
National Exploration Corporation,
Bartlett Building, Los Angeles, Calif.

Dear Mr. Linesba:

On returning from your mining properties near Prescott, Arizona, formerly known as the Midnight Test Mines, I wish briefly to give my impressions of this property and the adjoining mines recently acquired by your organization. While I had made superficial examination of the Midnight property several years prior to your taking over and rehabilitating the same I was wholly unprepared to fully appreciate the real value of it until I had seen the extensive developments, improvements, and tonnage of commercial ore you have put in sight during the past year.

The vein system you are now developing is unique in the annals of western mining in several respects. The continuity in length and depth and the length and width of ore shoots producing shipping and milling ore are all that could be desired, while paraleling of contiguous veins of yet unknown numbers assure unusual tonnage of ore with a low cost of production. Another matter, heretofore unknown to me, is the score or more of partially developed veins of workable width and commercial values on your several hundred acres of intensively mineralized area, any one of which would be considered a prize find by any intelligent prospector or ming buyer.

I feel that I speak advisedly when I state that the potential ore in these numerous veins will eventually warrant several major mining and milling operations of much greater capacity than your present plant. It is a matter of record that practically all of the prominent gold producers of this country have been limited to one or two veins, when these veins faulted or bottomed the mining operations were definitely concluded. The Vulture, Congress, United Eastern and Catherine in Arizona, the Goldfield Consolidated in Nevada and the Yellow Aster in California are examples of this type of properties, while they produced many millions their life was short.

My thirty years experience in the west, having covered practically all the gold producing areas, fully convinces me that your property is entirely in a class of its own, and, if you retain and develop all your gold bearing ledges and veins, you will have ample ore to continue major operations for half a century to come. With sufficient capital and continued able and efficient management your enterprise will, in my judgement, create, in the near future, the outstanding gold producer in this or other countries.

Thanking you for courtesies extended during my visit to your camp, I am

Very sincerely yours,
(Signed) C. R. HARRIS, Consulting E-o

CRH/G

BRIEF REPORT ON PROPERTIES OF THE NATIONAL GOLD CORPORATION

(This can scarcely be considered a report, but rather a brief resume' of my findings in a brief visit; a report being unjustified by the amount involved.)

The property under discussion is located in the Hassayampa and Walker district of Arizona in Yavapai County eight miles south of Prescott, the County Seat.

Climatic conditions are ideal with a temperature varying from zero to 90 degrees in extreme cases. Timber in abundance for all mining purposes will be found on the property for years to come. Water is produced from the property in sufficient quantities to supply present needs and future development should supply future requirements.

The property consists of twenty claims and fractional claims comprising in all some 320 acres. Fair roads have been constructed by present and former owners, making virtually all claims accessible to truck transportation from the present mill site which is reached by a good road from Prescott.

GEOLOGY

A very superficial examination shows a country rock very schistos and probably of very ancient geologic origin. This schist has been cut in the general north-south direction by a heavy dioritic intrusion. This dyke or stock varies in width from a few hundred feet to something over a half a mile and is about two miles in length. Heavy horses or blocks of schist are occluded in the dioritic mass.

Since intrusion the dioritic mass, occluded schist, and surrounding schist has been subjected to one or several orogenic movements. These movements develop numerous fractures or plans of weakness extending in a general north-south direction.

Thermal waters rising through these planes of weakness have altered and replaced both schist and diorite producing numerous parallel veins. These veins vary in width, but in the main are of sufficient width for operation as they have a dip of approximately 80 degrees, which allows a rather narrow vein to be worked without removing any appreciable quantity of country rock.

From the similarity of material and the continuity of the veins, it would appear that material for vein filling emanated from a common source. It seems logical to assume that at certain points replacement may have occurred throughout the entire mass between some of the planes of weakness, thus producing ore bodies of comparatively large size.

OPERATION

Many of the claims embraced in this group have been worked in bygone days, and from numerous claims, high-grade ore has been shipped. The value of such claims can only be judged by the quality of material as found on the old dumps. The assay sheets of the present company show that much of this material can be hauled and treated in their present plant at a very nice profit.

Several claims other than the Midnight claim where the principal work is being done have had considerable prospecting done by the present management. Their assay sheets show that much profitable ore will be developed on these claims.

The majority of the permanent work is now being done on the Midnight claim, where a 400 ft. shaft has been put down. This shaft is well timbered, and has a concrete collar, and cuts all the numerous workings which were made from an old shaft. A new headframe for this shaft was being completed at the time of my visit.

Drifts along the vein from this shaft at the 200, 300 and 400 ft. levels, cross cuts and raises therefrom show ore in place or broken in stopes to an estimated tonnage of 78,000 tons. The assay maps show this ore ranging in value from $12 to $48 per ton.

My understanding is that something over 3,000 assays had been made on the property, over 200 of which were shown on the assay map of this block of ore opened up from the Midnight shaft. Figuring the average gold content from this number of assays gives a total value to the 78,000 tons of over $2,500,000 gross.

This shows an extremely high average value for ore in any mine, and in the ordinary prospectus of a gold promotion scheme would cast a grave doubt upon the accuracy of any other statement which might be made therein. Although no assay values have been checked, my association with the management leads me to believe that all assays are accurate within a reasonable allowable limit.

A mill of 200-ton capacity is now being erected on the property, and should be in operation within the next forty-five days. This is being built in lieu of a small pilot mill through which a considerable tonnage has been put in an effort to determine the mill value of the ore, and the most economical method of treatment. The flow-sheet for this mill has been scientifically worked out, and good machinery is being installed. Unit electric power is being used throughout. Little trouble should be encountered after the mill is ready for operation. My impression is that the mill will be doing full capacity within twenty days after the mill is started.

Cost sheets as worked out by the management show that ore can be mined and milled for a total cost of $3.85 per ton, which allows 75% of the cost of mining for the development of ore reserves. This should produce a reserve of at least two tons of ore for each ton mined. As the value of physical property owned by the company is based practically entirely upon ore reserve, their development should be the the first consideration of a successful management.

Allowing $32,000 net for ores already mined and on the various dumps on the properties, and figuring a 30% error in assay value and tonnage of ore blocked from the Midnight shaft, we have a net value of over $1,500,000 of ore in sight.

The above makes no allowance for any physical properties such as mills, houses, timber, etc., nor does it take into consideration or give any value for anything save net ore in sight, and allows from twenty to thirty percent for errors.

The total capital of the National Gold Corporation is 2,500,000 shares of a par value of $1.00 each, and 1,050,000 of which are outstanding. With all bills paid to the present time, and sufficient cash on hand to put the mill in operation, it would seem that little or no more stock should or would be issued.

With no more stock than that outstanding, the present values in sight would indicate a book value of over $1.50 per share.

CONCLUSION

The impression made upon me by the property and its handling was very favorable. Mr. Linesba, the General Manager, under whose direction the property has been brought to its present state of development, is a graduate of the Colorado School of Mines, and has had much mining and business experience in other fields. His grasp of the situation from geologic to economic is seldom found in mine management.

As previously stated, the net value of ore in sight should with continued good management return from 150% to 160% on the outstanding stock at par. I have tried to make this estimate extremely conservative, basing my figures upon given assay values and blocked ore, with reasonable discount for error. This estimate allows absolutely nothing for all physical and personal property on the claims, nor does it give but little credit for other claims outside the Midnight.

It appears to me that with net values in sight sufficient to more than return an investment, and with all the possibilities of future large developments with depth at the present shaft, and the possibilities of future development of other good properties on the group of claims held, stock purchased is more of an investment than a gamble.

(SIGNED) JOHN H. BOWLES
M. S., E. M.

LAKE SPRING, MISSOURI