The following file is part of the

Arizona Department of Mines and Mineral Resources Mining Collection

ACCESS STATEMENT

These digitized collections are accessible for purposes of education and research. We have indicated what we know about copyright and rights of privacy, publicity, or trademark. Due to the nature of archival collections, we are not always able to identify this information. We are eager to hear from any rights owners, so that we may obtain accurate information. Upon request, we will remove material from public view while we address a rights issue.

CONSTRAINTS STATEMENT

The Arizona Geological Survey does not claim to control all rights for all materials in its collection. These rights include, but are not limited to: copyright, privacy rights, and cultural protection rights. The User hereby assumes all responsibility for obtaining any rights to use the material in excess of “fair use.”

The Survey makes no intellectual property claims to the products created by individual authors in the manuscript collections, except when the author deeded those rights to the Survey or when those authors were employed by the State of Arizona and created intellectual products as a function of their official duties. The Survey does maintain property rights to the physical and digital representations of the works.

QUALITY STATEMENT

The Arizona Geological Survey is not responsible for the accuracy of the records, information, or opinions that may be contained in the files. The Survey collects, catalogs, and archives data on mineral properties regardless of its views of the veracity or accuracy of those data.
ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: POLARIS GROUP

ALTERNATE NAMES:
- AMAX INC.
- PARROT GROUP
- KING MTN. GROUP
- VICTORY MINING CO.
- GOLDEN EAGLE & PHONOLITE TUNL.
- EVANS POINT GOLD PLACERS
- ARICANA MINING CORP.

GREENLEE COUNTY MILS NUMBER: 28B

LOCATION: TOWNSHIP 3 S RANGE 29 E SECTION 25 QUARTER S2
LATITUDE: N 33DEG 07MIN 00SEC  LONGITUDE: W 109DEG 17MIN 35SEC
TOPO MAP NAME: CLIFTON - 15 MIN

CURRENT STATUS: UNKNOWN

COMMODITY:
- COPPER
- GOLD
- SILVER
- ZINC
- GOLD PLACER

BIBLIOGRAPHY:
- ADMMR POLARIS GROUP FILE
- ADMMR U FILE
- ADMMR INFO
- SKILLINGS MINING REVIEW, THE STORY OF BANNER MINING CO. FEB. 22, 1969
- DOCKET 36, DEC. 7, 1970, P. 282-292, BANNER AMAX TO ESSEX, GREENLEE CO. RECORDERS OFFICE
- COE & VAN LOO INFORMATION
- BLM MINING DIST. SHEET 848, 847, 839, 837, 838
- PAT. MINING CLAIMS EXTEND INTO SEC. 35, 36, 31, 2, 1, 6, 11, 12, 7 (31, 16 IN T3S-R30E)
  (6 AND 7 IN T4S-R30E)
El Rey Cheese Co.
Manufacturers and Distributors of
Finest American and Mexican Cheeses
115-119-121 N. Eastern Ave. - Phone Angeles 2-5167
LOS ANGELES 22, CALIFORNIA

August 7, 1947

Alan A. Sharp
300 E. 44th St.
New York City, N.Y.

Dear Sir:

Writer has been informed of your probable interest in a large mining undertaking, which is partially developed to the extent of $100,000 and is available to lessee or purchaser on a straight royalty, no cash advance and paid for from 5 or 10% of ore proceeds applied to purchase price. Should you not be interested, possibly you would desire to refer this to someone who is, in which case 15% or $30,000 would be allowed you for engineering or similar services. A short description follows:

MINE: Eastern Arizona. Gold, silver and copper, 41 claims. Development $100,000. 3,000 feet of workings (tunnel). Over 5 miles extensive mineralized traceable veins, several reaching 15 to 20 feet wide and outcropping across property. Good assay values throughout. Authoritative data, hundreds of assays. Stands persistent investigation. Price $200,000 on straight royalty basis, or other possible arrangement. Includes 55 acre dam and mill site on which government contemplates construction of $1,000,000 to $3,000,000 dam, which project recently again passed the United States Senate. Climate excellent for year round operation. Water plentiful. Now ready for mill. Property has great future potentialities.

Available only to large operator, financially able to operate on substantial scale, making it possible to avail themselves of several million tons of ore now in sight, and financially able to open the additional tonnage in the sulphides in the veins outcropping across property. Property obtainable only because of unusual circumstances. It is rare to find property of such potentialities not already in operation and producing. Owners are not versed in mining nor are they in position to undertake development or mining and milling, therefore it is offered for your consideration.

Engineers' and geologists' reports, geological and topographical maps, data of the United States Geological Survey and Bureau of Mines, vein and working maps, photographs and data, other than enclosed, are available on request.

Very truly yours,

Alan A. Sharp

DEPT. MINERAL RESOURCES
PHOENIX, ARIZONA.
POLARIS GROUP

USGS P.P. 43 p. 363 (Golden Eagle Mine)

Metal Mining & Processing August 1964 p. 18

MINING JOURNAL for JUNE 15, 1941
August 30, 1943

Mr. J. W. Buckley
P. O. Box 571
Clifton, Arizona

Dear Mr. Buckley:

I am in receipt of your two applications for a mine loan on the Victory Mining Company, also copies of your articles of incorporation.

I have read over the application and find that it is lacking in description and it seems to depend upon a description by Mr. Macfarlane, field engineer for the Department. This report from Macfarlane has not as yet arrived in the office but I have had blueprints made of the longitudinal sketch on the property.

Unless otherwise instructed I will hold your application on hand here in the office until I have the Macfarlane report. I am sending Macfarlane a copy of this letter.

Yours very truly,

J. S. Goupil, Director

JSC:LP

CC: Andrew Macfarlane
Mr. J. W. Buckley, President
Victory Mining Company, Inc.
Clifton, Arizona

Dear Mr. Buckley:

I am pleased to learn from your letter of August 5th that you are resuming production at the Polaris Mine.

Assuming that your future shipments will be of substantially the same analysis as heretofore, we can readily use this material as copper converter flux either at our El Paso Plant or at our plant at Hayden, Arizona.

At the present time, we are short of highly silicious fluxing ores for our converter operations at Hayden. Consequently, after you get into steady production, we shall probably ask you to divert your shipments to that plant. In making these diversions, we would make settlement on the basis of the El Paso schedule and, until further notice, would absorb the difference in freight rate. In other words, your net return would be the same at Hayden as if you had shipped to El Paso.

Yours truly,

R. D. BRADFORD

cc:B.N.Rickard
H.O.Woods.
August 23, 1943

MEMORANDUM

TO: Andrew Macfarlane

FROM: J. S. Coupal

I have been holding map with blueprints on the Golden Eagle and Phonolite tunnels of the Victory Mining Company, Clifton, Arizona, but have had no report from you on this property.

I am returning herewith a blueprint of your sketch.
August 10, 1943

Mr. G. Preston
337 South Hubart
Los Angeles, 5
California

Dear Mr. Preston:

In reply to your letter of August 9, I am sorry to say that I do not have the information you desire on the Polaris Mine. I would suggest that you write to the man in operating charge, who is Mr. J. W. Buckley.

Very truly yours,

J. S. Coupal, director
Los Angeles - Calif.  
Aug 9, 1943

Department of Natural Resources  
Phoenix, Arizona

Dear Sir:

Would you kindly inform me if the 
Polaris Mine 
is producing and shipping ore at the present time? If so, 
how much?

Thanking you, I remain

Very truly,

Preston
337 South Hudson  
Los Angeles - 5

Calif.

Please convey your price for the ore at the 
present time, also just this 
mine produces chromite copper
May 25, 1943

MEMORANDUM

Polaris Mine
Mr. Buckley
Clifton, Arizona

TO: Andrew Macfarlane

FROM: J. S. Coupal

The next time you are in the Clifton area please contact Mr. Buckley and advise him regarding an application for a loan. He may need some assistance from you.
October 30, 1942

Mr. J. W. Buckley
P. O. Box 571
Clifton, Arizona

Dear Mr. Buckley:

Many thanks for your information on the Polaris Mine.

I hope you will pardon my delay in replying to this, but we have taken all the information necessary and I will return your file to you when I am in Clifton, which will be at the meeting Wednesday, November 4.

With best wishes and kindest regards, I am

Very truly yours,

J. S. Coupal
Director

JSC:kk

P. S. I hope to see you at the meeting and I will have a chance to discuss the situation with you.
Clifton, Arizona
October 12, 1942

Mr. J. S. Coupal, Director
Department of Mineral Resources,
Phoenix, Arizona

Dear Mr. Coupal:

In reply to your letter of October 2nd relative to speeding up production and probably render assistance where needed.

I am enclosing copies of most of the exhibits I have mailed to Washington, D. C. in my application for a Development Loan of $20,000.00. I think you will find they cover the questions and information requested in your Mine Owners' Report, Numbers from 1 to 33.

The main reason we are not producing is lack of finance, our equipment is meager as you will note, one small compressor only large enough to run one hammer.

About a year ago we moved it from the Golden Eagle, where we were able to produce in a small way as you will note from the Smelter Sheets. We moved up the canyon on what is known as the Black Prince and Lady Franklin veins, these veins are much larger than the Golden Eagle, but to date we have been able to develop only mill ore in quantities, not withstanding the fact picked samples run higher in Copper, Silver and Gold, however, we are now running a cross-cut from the Black Prince over to the Lady Franklin and expect to intersect the vein any round at 100 feet depth. We are hoping that at this depth we will encounter at least a portion of the vein of a shipping grade and enable us to go on production at an early date.

In our plan submitted to the R. F. C. for a loan to develop the Golden Eagle by sinking a shaft as outlined. Our reasons are first, the fact the Golden Eagle you might say is all ready a developed mine
in a small way. Second, the values in Copper and Zinc are fair and indications show that the Copper and Zinc values will materially increase as depth is gained. I realize that at this critical time when Copper, Zinc and other strategic metals are needed so much that Gold and Silver is more or less frowned upon, never the less, the values in these two metals will enable us to produce considerable Copper and Zinc without installing a mill which takes time and money and I realize from what you told me when I called on you in Phoenix that what was wanted was production now, which makes good sense. Third, we have a road up to the Golden Eagle which enables us to truck the ore to the railroad for $2.00 per ton. To operate any other place on our property a road would have to be built or resort to a donkey's back.

To make my story short, Mr. Cougal, if it is possible for you to crowd, say $5,000.00 loan through at once it will enable us to go on production just as soon as we are able to install a compressor and some equipment. In the mean time the $20,000.00 loan less the $5,000.00 loan could be made if our showing justifies.

After going over our exhibits, maps, smelter returns, assay certificates and etc. you feel justified in sending one of your field men over here to check up on us and our property, I will be glad to meet him at Clifton and take him over the works, also furnish him all the information and data required.

Because of the fact that I must put most of my time in at the mine, on short notice wire me when to meet your field man at Mr. Harold Freeland, Central Hotel, Clifton, if it is a matter of days a regular letter will reach me in time for me to be in Clifton when he arrives.

I wish to state further that I have some first class used equipment in view that can be bought at a bargain such as we need.

Sincerely yours,

J.W. Buckley, Manager
October 2, 1942

Mr. J. W. Buckley  
Box 71  
Clifton, Arizona  

Dear Mr. Buckley:

We are compiling a list of the potential copper producers in the state of Arizona at the request of the Army and Navy Munitions Board, which compilation will be used in formulating a policy to speed up production and probably a plan to render federal assistance where necessary.

I am enclosing a Mine Owner's Report form and we would like to have in our files a report on the Polaris Mine's holdings with detailed highlights regarding the property. In addition we would like an added paragraph on the problems connected with your property. Under this heading we would like to know why the property is not producing, what production and what grade of ore could be obtained, how long it would take to get this production and how much money would be involved, as well as any other problems regarding difficulties in setting this production.

I would appreciate having this information for our files so that we might promptly finish our report.

Yours very truly,

J. S. Goupal, Director

JSC:LP  
Enc.
Your name and address has been furnished to -
H. L. Loewenthal, 640 So. Flower St., Los Angeles, Calif.

who has made inquiry for the same with reference to property
listed with the Department of Mineral Resources.

DEPARTMENT OF MINERAL RESOURCES
J. S. Coupal, Director
Tabulation Of Ore Shipments

<table>
<thead>
<tr>
<th>Slope No.</th>
<th>O2.5 Au O2.5 Ag Cu% Si% Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.52 9.3 1.1 7.7 2.3 34.53</td>
</tr>
<tr>
<td>2</td>
<td>0.435 4.26 0.31 8.6 0.3 37.6</td>
</tr>
<tr>
<td>3</td>
<td>0.43 3.5 1.35 7.6 4.2 5</td>
</tr>
<tr>
<td>3</td>
<td>0.40 4.20 2.30 69.0 57.16</td>
</tr>
<tr>
<td>3</td>
<td>0.45 3.5 2.17 72 29.75</td>
</tr>
<tr>
<td>3</td>
<td>1.00 5.3 3.30 59.2 7.0 2.0</td>
</tr>
<tr>
<td>3</td>
<td>0.26 4.4 1.10 78.6 32.3</td>
</tr>
</tbody>
</table>

LONGITUDINAL SKETCH
GOLDEN EAGLE & PHONOLITE TUNNEL
VICTORY MINING COMPANY
Clifton, Arizona Aug. 1st 1943
Notes Of Dept. Of Mineral Resources
Globe Office A. Macfarlane E. Engr.
Approx. Scale 1" to 50"
Dear Mr. Coupal:--

Thanks for sending me the form for filling in and correction. I really don't believe they will be able to finance the mill with shipping ore, as it is not rich enough to clear them very much, but if they should manage to get it on the ground, with a good millman in charge, they should soon be out of the red.

Yours truly,

[Signature]

[Address]
Active Mine List April 1967 - Expl.

No work at present time. GWI Note 2-6-68

The Evans Point Lime quarry has been put in operation with the completion of the new tram line to the smelter. (Aerial Tram) GWI QR 10-1-70

The Evans Point Lime quarry appears to be working full blast. GWI QR 6-30-71

KAP WR 9/6/79: A visit was made to the Phelps Dodge Metcalf Mine in Greenlee County. In the company of Jim Madson, Mine Foreman, we toured the Metcalf open pit copper mining operation. The geology, mineralogy, and operations are well described in a variety of technical literature. However, a few interesting points were noted: The Metcalf crude ore storage, primary and secondary crushers and fine ore storage are linked by rail to the similar components at the Morenci Mine which facilitates transfer of ore back and forth for best utilization of crushing and mill capacity. The Metcalf Mine presently consists of three separate pit operations: The Metcalf, the Shannon or Standard and the King (King Mountain). They eventually will all become one pit. The Metcalf Mine produces oxide ore, sulfide and a mixed ore. The oxide-sulfide mixed ore is first crushed, ground and treated by flotation and the flotation tailings are then leached in a special tailings leach plant. 10/12/79 mw
Field Engineer's report. Information from F. D. MacKenzie, geologist

References: Report of May 17, 1963

Present Mining Activity: Diamond drilling by Boyles Bros. Drilling Co. on contract was started recently. They are drilling on their first hole, which is now down a little over 600 ft.

The construction of the access roads was completed about one month ago.
DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine: Polaris- King Mountain Groups
(formerly called Parrot Group)
District: Metcalf District, Greenlee Co.

Date: May 17, 1963
Engineer: Axel L. Johnson

Subject: Field Engineers Report. Information from F. D. MacKenzie, geologist


Location: Approximately Sections 25, 26, 35, & 36 -- T 3S -- R 29 E
         and Sections 29, 30, 31 & 32 -- T 3S -- R 30 E.
         About 8 miles N. of Clifton, and about 4 to 6 miles by air NE of Morenci pit.

Owners: Banner Mining Co., P.O. Box 5605, Tucson, Ariz.
         Allen B. Bowman, Manager.

Number of Claims:
(a) 41 unpatented claims in the Polaris Group (formerly called Parrot Group).
(b) 100 patented and 40 unpatented claims in the King Mountain Group.

Principal Minerals: Copper.

Present Mining Activity: Building access roads/ and miscellaneous annual assessment work.
5 men working. 1 bulldozer used. Access roads will be used for possible future diamond drilling and other exploration work.
DEPARTMENT OF MINERAL RESOURCES  
STATE OF ARIZONA  
FIELD ENGINEERS REPORT

Mine  Parrot Group  
(formerly Polaris Group)  
District  Metcalf District, Greenlee Co.  
Date  July 20, 1962  
Engineer  Axel L. Johnson


Location  Sections 25, 26, 35, & 36 -- T 3 S -- R 29 E. About 4 miles by air NE of Morenci pit, and adjoining some of Phelps Dodge Co. claims.

Number of Claims  41 unpatented claims, purchased recently from private owners.

Owners  Banner Mining Co., P.O. Box 5605, Tucson, Ariz.  
Allen B. Bowman, Manager.

Principal Minerals  Copper

Present Mining Activity  None.

Review of Recent Operations  One diamond drill hole was drilled by Glen Thatcher on contract to a depth of 600 ft. Hole was finished and diamond drilling discontinued about July 13. Hole was drilled to take care of the annual assessment work on the claims, and for preliminary testing.
Discussion of the Banner Mining Co. claims near Clifton and Morenci ---
It was reported that the Banner Mining Co. is holding approximately 300 claims in this area, quite a number of these being patented claims. They were reported to have acquired these by purchase, lease, or location within the past 2 or 3 years. These claims lie in the area of 4.5 to 7.5 miles north of Clifton and NE of Morenci in the Colorado Gulch and Chase Creek area, and include the Polaris Group of 60 claims, the Colorado claims, and the Cottonwood claims.

AXEL L. JOHNSON - ASMDA - Clifton, 11-3-59
DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine    Victory Mining Co.
Golden Eagle and Phonolite Tunnels
District Greenlee Co.-Clifton, Arizona.

Subject: Examination.

Property: Known for many years as the Polaris Group composed of more than 20 unpatented claims, all now under option to and in control of the Victory Mining Co. of which Mr. J.W. Buckley of Clifton, Arizona, is President and manager.

This report is limited to a statement of the mineralization as now visible, within the Golden Eagle tunnel and the Phonolite tunnel, about 90' lower than the Golden Eagle level.

Location: The Polaris claims are situated high up on an east slope and shoulder of the mountains about 10 miles northerly from Clifton, the elevation at the portal of the Golden Eagle tunnel is 4,500' while at the crossing of the San Francisco river some four miles southeasterly from the mine, the elevation read a little over 3,000'. In 4 miles of winding narrow road, nearly 1,300' difference of elevation was recorded.

Roads: Leaving Clifton the San Francisco river road is followed up stream and in a general north direction for about 5 miles to a crossing which is only fordable for motor vehicle during dry season and low water. After crossing the river the road continues up the left bank for about 3 miles, thence turning more westerly, a narrow steep winding road reaches the Victory buildings and ore bin.

It is in project to construct a road from Chase creek and the Coronado Trail road, some few miles easterly, to serve the rather important mining belt, comprehending several small production mines of the Polaris area; giving them an all year transitable road to railroad switch at Clifton.

Vein Description: As opened by the two above named tunnels is a fissure of considerable continuity, with walls defined and structurally deep seated. The vein width may range from 2' to 5' but the ore lenses or shoots are more accurately stated as being from one to three feet in width. This fissure has a dip of 80 Deg. towards the northwest subject to local deflections, slicken-sides and selvage along the walls, the vein material mostly quartz, highly silicious to being a convertor flux, now required by most of the smelters.

Mineralization: I believe to be of the hot solution origin and that a large proportion of the deposition of silica, will contain more copper and iron pyrites, beneath the top oxidation.

It is noted that the copper content of the ores is higher in the floor and back of the Phonolite tunnel, than in the upper Golden Eagle, also the average thickness of the vein.
seems to have increased slightly.

The ore shoots so far opened in these two tunnels are from 20' to 50' in length, then will pinch for a few feet to a narrow streak, to again reopen to 2' or more; ore faces of 3' are visible in the stope of the Phonolite tunnel.

As 7 settlement sheets from the smelter at El Paso, were examined for ore grade and analysis, I did not take vein samples, the owner designating the ore lots from the corresponding stopes.

The 236 tons sold to smelter per the records in hand show an average copper content of 2.5% almost .5 oz gold and about 4.0 oz silver; it is to be expected the copper content may be higher following the ore shoots below the floor of the Phonolite tunnel, as at this level more evidence of primary mineral is seen.

The vein on the Golden Eagle level is opened for fully 250' along its southwest course from portal and at the heading has attained a depth of about 110' beneath the cropping, the vein here being 2' thick.

The Phonolite tunnel is in all nearly 400' but the first 180' is an adit driven to cut the vein stratigraphically beneath the portal of the upper tunnel, thence follows the vein along its southwest strike for about 220'. The last or most innermost portion of this tunnel is caved and I was unable to determine the size or grade of the ore, except by ladder leading to over-head stope, the vein here varies around 3' in width.

Herewith attached a sketch map of the above described tunnels and stopes, forming the basis of this report.

**Geological Features**; Igneous formations of the Pre-Cambrian age extending eastward from the schists of the Metcalfe area, are the casing rocks of the fissures within the Polaris group.

A rhyolite dyke forms the east or footwall of the Golden Eagle vein and related metamorphic andesitic rocks surround and occupy the immediate area.

There are in close proximity other fissures and dykes, showing both incroppings and in the mine cuts attractive mineralization and structural extent, capable of housing similar ores, as now showing in the Phonolite tunnel.

**Mine Development**; Of the vein system has been slow, as the Lessees are of small means, having to depend in a large measure on ore sales to provide working capital. The operators have neither the mine opened up sufficiently to allow of a proper commercial quantity of ore produced daily and for the past few years smelter ores from this locality, found a market at El Paso, Texas, quite distant and costly rail freight.

When the new smelter at Morenci will accept occasional carlots and engage in custom smelting, a saving should be made of $2.00 per ton, in rail freight.
Further contemplated development of the vein, calls for advancing both tunnels along the southwest strike, until the limits of the mineralization are reached.

An upraise from the Phonolite adhering to the ore shoots, to connect with the Golden Eagle tunnel some 100' or more beyond the present ends of the tunnels, should add greatly to the ore reserves.

Sinking a winze on the widest ore shoot found along the floor of the Phonolite tunnel to a depth of 50' or more, would also contribute to the rapid enlargement of this mine.

Economic Features: There are continuous springs of water within the claims and by sinking on the Phonolite vein, it is possible that sufficient water for a metallurgical plant will be developed, as considerable seep is now noted from this vein. The San Francisco river nearest point to mine about 2 miles, is also a reliable source of water for all purposes.

To market ores from the Pollaris group at Morenci Smelter, the costs on an ore of a smelter assay value of $20. are about as follows:

<table>
<thead>
<tr>
<th>Gross Smelter Value per ton</th>
<th>$20.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smelting cost per ton</td>
<td>$4.00</td>
</tr>
<tr>
<td>Trucking to smelter</td>
<td>3.00</td>
</tr>
<tr>
<td>Net Smelter</td>
<td>13.00</td>
</tr>
</tbody>
</table>

On obtaining a full premium price for the copper content of the Pollaris ores, this would add about $3.00 per ton on these 2 1/2% shipments and would cover the trucking cost from mine to smelter.

Field Engr.
## Mine
Polaris Mining Co.

## District
Copper Mt. District, Greenlee Co.

## Date
July 9, 1956

## Engineer
Axel L. Johnson

### Subject: Present Status

<table>
<thead>
<tr>
<th>Location</th>
<th>12 miles south of Clifton, Sec. 7 - T 48 S - R 30 E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Claims</td>
<td>Not reported.</td>
</tr>
<tr>
<td>Operator</td>
<td>None. Mine is idle.</td>
</tr>
<tr>
<td>Principal Minerals</td>
<td>Gold, Silver, Copper.</td>
</tr>
<tr>
<td>Operator and Address</td>
<td>Mine Status</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>5/1/44 Buckley, Clifton, Box 5741</td>
<td>Shipping 5/1/44</td>
</tr>
<tr>
<td>11/45 W. Hagen, Clifton, Box 933</td>
<td>Idle 8/44</td>
</tr>
<tr>
<td>J.A.</td>
<td>Some development 11/44</td>
</tr>
</tbody>
</table>
1. Mine  The Victory Company, Inc.

2. Mining District & County  Gold Mountain Mining District, Greenlee County

3. Former name  Polaris Group

4. Location  Clifton, Arizona

5. Owner  The Victory Company, Inc.

6. Address (Owner)  Box 571, Clifton, Arizona

7. Operator  Same

8. Address (Operator)  Same

9. President


13. Principal Metals  Copper, zinc, gold

14. Men Employed

15. Production Rate


17. Power: Amt. & Type


19. Operations Planned  Reopen Golden Eagle section if $20,000 RFC Loan is granted. Sink 300 ft. below lowest adit.

20. Number Claims, Title, etc.  41 Claims

21. Description: Topography & Geography


(over)


24-A Vein Width, Length, Value, etc. 5 to 6 foot vein. 300 foot ore shoots.

25. Mine, Mill Equipment & Flow Sheet

26. Road Conditions, Route: Good.


28. Brief History


30. Remarks: High silicious ore has been shipped from miscellaneous workings.

31. If property for sale: Price, terms and address to negotiate. No.

32. Signed: (Data from Mr. Buckley)

33. Use additional sheets if necessary.
DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

Mine Polaris Group
District Clifton-Morenci
Former name
Owner J. A. Hagan
Operator Polaris Mining Company
President
Mine Supt.
Principal Metals Gold, Silver, Copper
Production Rate None
Power: Amt. & Type None
Compressor and air drills
Operations: Present Development

Operations Planned For sale
The plan at present, is to ship ore enough to purchase and install a mill or sell.

Number Claims, Title, etc. 41, Held by location

Description: Topog. & Geog. Elevation 4,000 to 6,500, 8 miles from Clifton, 1 mile from river

Mine Workings: Amt. & Condition Mostly tunnels, one badly caved, the balance more or less accessible.

Date August 8, 1939
Location Greenlee County
Address Clifton, Arizona
Address " "
Gen. Mgr.
Mill Supt.
Men Employed Two
Mill: Type & Cap. None
Geology & Mineralization  Porphyry-quartz veins, granite walls. Veins large and continuous, some shipping ore, but classed as a milling proposition

Ore: Positive & Probable, Ore Dumps, Tailings  Two or three thousand tons blocked out and wide veins of milling ore uncovered.

Mine, Mill Equipment & Flow Sheet

Road Conditions, Route  Six miles fair mountain road, two miles narrow

Water Supply  Possibly enough on property for small pilot mill if water used over. Plenty of water one mile distant.

Brief History  Numerous prospectors grouped their claims to form a stock company, which finally went broke about 1905. The ore is complex and the mill they had would not save the values.

Special Problems, Reports Filed

Remarks

If property for sale: Price, terms and address to negotiate. Price $100,000. Small payment down and balance on very favorable terms. J. A. Hagan, Box 933, Clifton, Arizona.

Signed  J. A. Hagan

Use additional sheets if necessary.
DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine: Victory Mining Company
Golden Eagle and Phonolite Tunnels

District: Greenlee County
Clifton, Arizona

Subject: Examination

Property:

Known for many years as the Polaris Group composed of more than 20 unpatented claims, all now under option to and in control of the Victory Mining Company of which Mr. J. W. Buckley of Clifton, Arizona, is president and manager.

This report is limited to a statement of the mineralization as now visible, within the Golden Eagle tunnel and the Phonolite tunnel, about 90' lower than the Golden Eagle level.

Location:

The Polaris claims are situated high up on an east slope and shoulder of the mountains about 10 miles northerly from Clifton, the elevation at the portal of the Golden Eagle tunnel is 4,500' while at the crossing of the San Francisco river some four miles south-easterly from the mine, the elevation read a little over 3,600'. In four miles of winding narrow road, nearly 1,300' difference of elevation was recorded.

Roads:

Leaving Clifton and the San Francisco river road is followed up stream and in a general north direction for about 5 miles to a crossing which is only fordable for motor vehicle during dry season and low water. After crossing the river the road continues up the left bank for about 3 miles, thence turning more westerly, a narrow steep winding road reaches the Victory buildings and ore bin.

It is in project to construct a road from Chase creek and the Coronado Trail road, some few miles easterly, to serve the rather important mining belt, comprehending several small production mines of the Polaris area, giving them an all year transitable road to railroad switch at Clifton.

Vein Description:

As opened by the two above named tunnels is a fissure of considerable continuity, with walls defined and structurally deep seated. The vein width may range from 2' to 5' but the ore lenses or shoots are more accurately stated as being from one to three feet in width. This fissure has a dip of 30 degrees towards the northwest subject to local deflections, slickensides and swelling along the walls, the vein material mostly quartz, highly silicius to being a converter flux, now required by most of the smelters.

Mineralization:

I believe to be of the hot solution origin and that a large proportion of the deposition of silica, will contain more copper and iron pyrites, beneath the top oxidation.

It is noted that the copper content of the ores is higher in the floor and back of the Phonolite tunnel, than in the upper Golden Eagle, also the average thickness of the vein seems to have increased slightly.

The ore shoots so far opened in these two tunnels are from 20' to 50' in length, then will pinch for a few feet to a narrow streak, to again reopen to 2' or more; ore faces of 3' are visible in the stopes of the Phonolite tunnel.
As 7 settlement sheets from the smelter at El Paso, were examined for ore grade and analysis, I did not take vein samples the owner designating the ore lots from the corresponding stopes.

The 236 tons sold to smelter per the records in hand show an average copper content of 2.9% almost .5 oz. gold and about 6 oz. silver; it is to be expected the copper content may be higher following the ore shoots below the floor of the Phonolite tunnel, as at this level more evidence of primary mineral is seen.

The vein on the Golden Eagle level is opened for fully 330’ along its southwest course from portal and at the heading has attained a depth of about 110’ beneath the cropping, the vein here being 2’ thick.

The Phonolite tunnel is in all nearly 400’ but the first 160’ is an adit driven to cut the vein stratigraphically beneath the portal of the upper tunnel, thence follows the vein along its southwest strike for about 330’. The last or most innermost portion of this tunnel is caved and I was unable to determine the size or grade of the ore, except by ladder leading to overhead stopes, the vein here varies around 3’ in width.

Hereewith attached a sketch map of the above described tunnels and stopes, forming the basis of this report.

GEOLOGICAL FEATURES:

Igneous formations of the Pre-Cambrian age extending eastward from the schists of the Metacalf area, are the casing rocks of the fissures within the Pellaris group.

A rhyolite dyke forms the east or footwall of the Golden Eagle vein and related metamorphic andesitic rocks surround and occupy the immediate area.

There are in close proximity other fissures and dykes, showing both in crossings and in the mine cuts attractive mineralization and structural extent, capable of housing similar ores, as now shown in the Phonolite tunnel.

MINE DEVELOPMENT:

Of the vein system has been slow, as the Lesners are of small means, having to depend in large measure on ore sales to provide working capital. The operators have neither the mine opened up sufficiently to allow of a proper commercial quantity of ore produced daily and for the past few years smelter ores from this locality, found a market at El Paso, Texas, quite distant and costly rail freight.

When the new smelter at Morenci will accept occasional carlots and engage in custom smelting, a saving should be made of $2.00 per ton, in rail freight.

Further contemplated development of the vein, calls for advancing both tunnels along the southwest strike, until the limits of the mineralization are reached.

An upraise from the Phonolite adhering to the ore shoots, to connect with the Golden Eagle tunnel some 100’ or more beyond the present ends of the tunnels, should add greatly to the ore reserves.

Sinking a winze on the widest ore shoot found along the floor of the Phonolite tunnel to a depth of 50’ or more, would also contribute to the rapid enlargement of this mine.
ECONOMIC FEATURES:

There are continuous springs of water within the claims and by sinking on the Phonolite vein, it is possible that sufficient water for a metallurgical plant will be developed, as considerable seep is now noted from this vein; the San Francisco river nearest point to mine, about 2 miles, is also a reliable source of water for all purposes.

To market ores from the Polaris group say at Morenci Smelter, the costs on an ore of a smelter assay value of $20, are about as follows:

<table>
<thead>
<tr>
<th>Cost</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smelting cost per ton</td>
<td>$4.00</td>
</tr>
<tr>
<td>Trucking to smelter</td>
<td>3.00</td>
</tr>
<tr>
<td><strong>Gross smelter Value per ton</strong></td>
<td>$20.00</td>
</tr>
<tr>
<td><strong>Net smelter</strong></td>
<td>13.00</td>
</tr>
</tbody>
</table>

On obtaining a full premium price for the copper content of the Polaris ores, this would add about $3.00 per ton on these 2 1/2% shipments and would cover the trucking cost from mine to smelter.

A. Macfarlane
Field Engineer
Reconstruction Finance Corporation

Gentlemen:

The following report upon the present condition of The Victory Mining Co. Inc. is hereby presented. For your convenience a summary is given first, followed by detailed discussion. A sketch map of the vein system accompanies this report.

SUMMARY

Locations: In the Greenlee Gold Mountain Mining District, 7 miles north of Clifton, Greenlee County, Arizona. A little over a mile from the San Francisco River and from one to three thousand feet higher.

Facilities: An ideal climate, the property can be worked the year round. From the lower to the higher part of the claims there is a change in elevation of about 2000 feet and the slopes are nearly all abrupt and the veins perpendicular.

Geology: Perpendicular fissure veins filled with quartz and porphyry, usually with granite walls and run northeast and southwest. Sedimentaries appear on the western side of the property and the vein walls are sedimentary rock and contacts between sedimentaries and granite. After the veins were formed intrusive dykes of rhyolite and phonolite were thrust up from below, cutting all formations and veins alike. The property is situated near the northeast edge of the Clifton-Morenci mineral belt.

The Golden Eagle Vein is a proven mine with several thousand tons of ore opened 90 ft. between the Golden Eagle and Phonolite Tunnels for a distance of over 300 ft. on each level.

The ore runs well in copper and also some zinc as the smelter sheets and assay certificates show, when the secondary zone is reached, will without doubt produce much higher grade copper as the present works show that a greater portion of the vein is leached and gone down to lower depths.

The vein averages about 5 to 6 ft. wide, the greater portion leached. Depth is all that is needed to reach the secondary zone which in my opinion will produce much higher grade copper and zinc than the present showing and without doubt larger bodies of ore.

The Victory Mining Co. claims covers ten veins, most of them are large continuous veins and give much promise of developing large bodies
of high grade copper, zinc, silver and gold ores because of the fact that we are counting on centering our efforts on the Golden Eagle Vein I will not go into further details regarding the other veins at this time as they are situated up the canyon and off the road and can be developed later.

The Golden Eagle Vein runs parallel to and about 400 feet northwest of the Loco Boy. It crosses Polaris Gulch and continues on northeast.

On the south side of the Dorsey Gulch the vein is developed by the Golden Eagle Tunnel which drifts 330 feet on the vein and the Phonolite Tunnel which after crosscutting drifts 350 feet on the vein 90 feet below the Golden Eagle Tunnel. A winze connects the two and a raise goes to the surface from Golden Eagle Tunnel. These two tunnels show a hard, quartz ore shoot, copper glance and chalcopyrite and sulphide of iron. See smelter settlement sheets.

The average silica for a number of samples is 73.4 per cent, which is so high that the ore will serve for converter lining and therefore get the benefit of a very low smelter rate (about $3.50 per ton).

If further development is to be done on the Golden Eagle Vein it should be done by sinking the present shaft 2 to 3 hundred feet and drift along the vein on the one, two and three hundred foot levels and stope the ore in the regular manner.

The Golden Eagle Vein is situated near the Southeast border line of the property. The values run good in copper, zinc, silver and gold, compares favorable with the Copper King ore which adjoins this property on the Southwest, (see map of vein systems of Polaris, also read Mr. H. C. White's letter to Polaris Co., dated Nov. 16, 1937, relating statistics of the Copper King Mine and his frank opinion of the similarity of the two properties).

All of the ore which the smelter sheets represents came from the Golden Eagle vein and Phonolite Stope. The pay streak averages from a few inches to about 3 ft. wide on the hanging wall side, the lower portion of the vein has leached and gone down to lower depths.

Exhibit A.

3. Estimated cost of development and plan of operations.

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Install an air compressor (used one)</td>
<td>$1500.00</td>
</tr>
<tr>
<td>One hoist (used one)</td>
<td>$1000.00</td>
</tr>
<tr>
<td>Incidentals such as pipe, rails, ore bins, drilling machines pump, timber, road work, small tools, Social Security Ins. etc.</td>
<td>$3500.00</td>
</tr>
<tr>
<td>300 ft. shaft at $30.00 per ft.</td>
<td>$9000.00</td>
</tr>
<tr>
<td>Drift along the vein both ways on the one, two and three hundred ft. levels, estimated cost</td>
<td>$5000.00</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$20,000.00</strong></td>
</tr>
</tbody>
</table>

Respectfully submitted,

(Signed) J. W. Buckley
In 1946 the Polaris was sold to one of Canada's largest mine operators after their engineers and geologists recommended it be core drilled to explore the sulphides (the property having never been drilled or the sulphides explored and determined). They first undertook to drill another mine I contracted to sell them but when copper went below 30¢ they decided to go ahead. Prior to this other Canadian interested purchased the property for $175,000.00, triangulated it at a cost of $3500.00 and prepared to drive a one-mile tunnel reaching a maximum depth of 3500 feet to develop the entire property. Operation was to be undertaken under the name of ARICANA MINING CORPORATION (abbreviation for Arizona-Canada) and an Arizona subsidiary corporation under the same name. Friction developed between the Arizona management and the directors of the holding corporation in Canada and the delay caused me to foreclose the $175,000.00 mortgage deed.

Ores shipped usually averaged about equal value of copper, gold and silver. All mined from near the surface pocket lenses of either enriched by redeposited or unweathered ores (the quadrangle's) production is around 99% copper). Whether or not these gold values continue in the sulphides is undetermined as all development has been in the oxides and the depth of the sulphides is unknown though in the district they are usually from four to six hundred feet.

A hundred thousand dollars of near surface development has not made a mine out of this property. The oxide values being too irregular, apparently caused by extensive leaching. Practical further exploration would be drilling the sulphides to ascertain the extent and values. The P-D are drilling on their property immediately to the south where they have been drilling now for five years. Apparently a new pit is contemplated. Their present pit is said to be the second largest pit operation in the country (was 80,000 tons daily).

This mine does not warrant immediate operations. Presently copper is too low to make this feasible. It is an investment to hold until copper returns to a price that will permit profit.

The property was originally acquired by the writer in 1916. The family owned an interest in it since 1906. It was located around 1899 and small groups which later became the POLARIS MINING AND MILLING COMPANY. In about 1899 a smelter was installed for the property, presumably a promotional scheme. In 1904 an amalgamation mill, which failed to work because of the copper content of all ores. In 1912 the company undertook to install a smelter, went broke and the writer's father, a creditor, acquired it.

The property as developed will apparently only support a milling operation. Shipping has extended over a 50-year period but the oxides were encountered never indicated any particular merit for a shipping operation.

The property is an excellent opportunity to invest for someone with practical foresight that realizes that the present depressed copper market is not permanent. Such declines have occurred in the past and the market always returned to normal to permit profitable operations and undoubtedly will again.

A BRIEF DESCRIPTION

(See reports for further information)

Location is in the northeast portion of the mineralized quadrangle, being the north end of the high ridge into which Dorey Gulch heads, the south half of which is the P-D Copper King Mine (see government map of Morenci-Clifton quadrangle). Sycamore Gulch heads in the north side of the Polaris. The airline from Evans Point to the mine is less than two miles, the winding road three miles and two miles from the paved road to Dese Creek.

About the Polaris on the east are the Banner 100 patented claims and the P-D. adjoins on the south and now possibly on the west (I am informed they are locating claims on the west contemplating drilling the volcanic flow). To the north the mineralization continues a few miles and then is covered by the vast area of malbars. The San Francisco River is one and three-quarters miles east and contains a great fault of four or five hundred feet, to the east of which is the volcanic eruption of Sunset Peak, 1500 feet, covered the area east of the river. The P-D Copper King adjoins the Polaris on the south where, at 800 feet, large copper deposits have been encountered. South of this is the King mine, (old Arizona Copper Company now P-D) from which many millions have been taken and still contains fabulous copper ores.

Both the geology and mineralogy has been quite extensive covered in the reports on the Polaris. Some $100,000.00 of surface exploration is not indicative of shipping ores. The possibilities in the property is apparently too come from the sulphides which have been the values of the 75-year production in the district.

The surface gold values (greatly increasing in the northeast portion of the quadrangle) are very irregular, ranging from low values to good shipping ores and occasionally high values, but in the oxides have not been persistent and could not be depended upon. Manganese is present in all ores and therefore there could be a redeposit of gold and most oxide ores have been subject to extensive leaching.

The reports, maps, and other information pertaining to these properties cover a few dozen sheets and offer quite extensive data, copies of which are available to anyone further interested to gether with such other information as I might be able to offer.

I am not versed in mining, never operated or undertook milling. Property was acquired by mercantile credit in the general mercantile business. I am going to sell both the mines and the dam site for the best offer I can get for them by the end of this month (1946) though if a reasonable offer is made I will sell immediately. Title is clear, having just finished quiet title action that was undertaken because of threats from ten to thirty years back. The offer is a "first come first serve" proposition, and being offered at a very reasonable period, therefore practically a "giveaway" price. Exclusive options will not be given though a non-exclusive agreement as to price, etc., given to anyone.

If you are not interested, possibly you can refer this to someone who would be.
SAN FRANCISCO RIVER, ARIZONA - 55 ACRES
(Included with the 800-acre mine for $10,000.00)

Designated on all government topographical maps of the area as Evans Point. Was acquired by the writer's father in 1903 by Civil War script, being a narrow gorge some 200 feet wide with high perpendicular bluffs on both sides. This river, 14 miles south, empties into the Gila River which then winds through the canyon for 25 miles and opens into the great Safford Valley, continuing for some 50 miles to the Coolidge Dam.

This valley is usually subjected yearly to shortage of water and it is unexplainable why this dam site has not been used, long since, by the government, state of the farmer's Water Association to accumulate billions of gallons of water during the summer rainy season and the winter melting of snow to avoid the hundreds of thousands of dollars in loss of crops.

During the war I was approached by persons who did not disclose their principals, wanting to purchase this 55 acres. After they failed to negotiate, various representatives of the Federal Government contacted me to buy. I eventually refused to negotiate further. Apparently, at that time, I could have gotten a very substantial price had my sights been lowered and, of course, I now realize I was foolish in not having done so. Thereafter the government, as I recall under some war-time decree, seized the property resulting in my taking process in the Federal Courts of Arizona. Thereafter, investigation and exploration continued for one year, said to have cost the government $240,000. The termination of the Federal Court action was that the government gave me $1500.00 and I got my property back. As to what the government is ultimately going to do no one can possibly know. They are too busy financing ventures for other's throughout the world and with too little time to give attention to our own.

BRIEF DESCRIPTION
(Request other data for further information)

The dam site is located on the San Francisco River three miles north of Clifton, the county seat of Greenlee County, and is reached by good roads and from there the Polaris jeep road leaves the river to climb to the divide to the Polaris mines. The dam would have three possible uses: storage of water for the Safford Valley; for hydroelectric power for the district and the copper mines; flood control, which has, in the past years, destroyed thousands of acres of agricultural land. The San Francisco River is a sizeable stream and flows the year around.

I do not wish to contend that the river gravels have a practical gold potential as it has been, at times assumed. In fact they do not, though many thousands of dollars in gold have been taken from the Evans Point gravels. These were concentrations deposited from the erosion of the Polaris and the adjoining properties over the ages. On the Polaris $300.00 was taken from a wagon load of gravel. Across the river $7000.00 was taken out of a tunnel in semi-conglomerate. Advice: Don't try to repeat it! I did, resulting in being out of pocket some $6000.00.

In 1906 a steam pump was installed at Evans Point and water was pumped upon the mesa for the Polaris amalgamation mill. Such water rights in Arizona are quite valuable. There are large cottonwood trees on the banks of the river and the scenery is very beautiful. Further to the north the tributaries enter the great pine forests covering thousands of square miles. A paved road leaves Clifton to the north, passing through magnificent scenery and forests where game and fish are plentiful.

The title to this dam site is clear. Nevertheless I am just now completing a quiet title to both the properties which is at the request of a prospective purchaser though such has no purpose as quiet title was completed in 1953, when I foreclosed the $175,000 trust deed. The price of $10,000.00 includes both properties, though I will sell either separately. The offer I now have will be accepted by June 30th so immediate attention is necessary for anyone desiring to purchase.
COMMISSION OFFERED

I will pay the usual commission of 20% to anyone furnishing a buyer. The full commission will be paid at the time the sale is fully consummated, whether it be for cash or on terms.

Since the sale of these mines to Canadian interests two years ago and their return to me, interest in mines and mining has deteriorated. Unquestionably the unprecedented mining boom has largely tapered off. I have offered the Polaris mines on the assumption that they will sell if the price is low enough and the same applies to the dam site.

Recent past mining activities are like the real estate boom here in the Los Angeles area, which has broken all records in history. Selling, subdividing and building have made many millionaires with billions of dollars in profits during the past few years. The deserts are being filled with homes.

I have often considered Mexico for a mining undertaking, though the possibility of getting together a group to locate, investigate and finance a sufficiently sizeable venture to make it worth while can only be determined by an attempt to do so. A few years back, the average investor was still skeptical of the Mexican government, based on it's past conduct. I set up a Mexican corporation out of Mexico City to enter mining but it was not practical for me to "go it alone".

I have incurred a few thousand in expenses looking about in Mexico and additional sums in a little investigating, the more of which one undertakes the more they realize the great extent of the potentials yet existing in that country from undertakings that no one down there goes to the trouble to bother with.

A few years back, when the attitude of the Mexican government changed toward American investors, I attempted to find others to associate in a venture. The period was then no right as the investor was still reluctant, but now this appears to be rapidly changing.

As to what might be more practical and successful is something that in this modern age requires careful scientific investigation and is also affected by the extent of the privileges granted by the Mexican government and other factors. This entails, in most instances, much time and expense that may be considerable where a careful and detailed investigation is conducted.

It is advisable in Mexico for most all undertakings to be under a corporate charter. By so arranging, one can, under Mexican laws, have the rights of a Mexican citizen. There are several forms of corporations, but one in particular that is usually used is Sociedad Anonima and it is considered to be the most satisfactory. Occasionally subsidiaries of American corporations are used but are not too practical.

Taxes are certainly not acceptable. One must offset these by first arranging for special privileges not too difficult to obtain.

Sometime ago I investigated some undertakings in central South America but then decided that unless a very large activity it was not practical since the inconvenience became a substantial obstacle to progressing whereas Mexico there are similar possibilities that do not have some of the disadvantages that one encounters a thousand miles to the south, though taxes in some South American countries are more acceptable than those of Mexico. Gold production, though taxable, but by payment one obtains the right to dispose of it as he sees fit which is certainly not our privilege in the United States, except with placer gold. Mercury in Mexico is among one of the promising field to enter. I have been brought samples that ran above 10%. No doubt, of course, carefully selected (one should never expect to get an average sample from there).

My offer to sell is only those properties I own or that I own an interest in.

If you are not interested in this offer, possibly you have someone in mind who will be and can hand them this information.

EVERT L. HAGAN 115 N. Eastern Ave. Los Angeles 22, Calif. Angelus 2-5109
The operation on the Polaris mines have not, in the past, resulted in what could be described as successful operations; therefore to again lease the mines would not be practical. All attempts to operate the mines were unsuccessful. Shipping is further impractical because the Phelps-Dodge smelter at Morenci does not handle large tonnages and the nearest smelter is over a 200-mile rail haul and therefore a practical operation would require a contract with the smelter.

In the past years I have received many thousands of dollars income from the property but in view of the large investment this income was substantially inadequate. I have made the mistake of not selling when substantial offers have been made at periods when copper mining was a practical undertaking. I always kept my sights too high, resulting in losing the deal. New time does not permit giving these properties any further attention, therefore the best offer buys them both.

As I have clearly, herebefore, indicated, this is not an opportune time to undertake copper mining. Should the property have any merit for the production of gold cannot be determined from the present development in the guides. All ores increasing in copper content usually do so proportionately in Gold and Silver. This condition is not to be found elsewhere in the quadrangle. What importance this indicates, if any, is unknown.

All of the $100,000.00 of development has, from an engineering standpoint, been impractically undertaken. This work having been done from 30 to 40 years ago, none of which apparently was carried on under the supervision of an engineer, and the expense resulting in waste of money. The writer is not called to recommend what should now be undertaken. The last engineers and geologists, being copper men from Canada, recommended the drilling of the large veins to the south. That they prepared to have their company do, which was not carried out because of the continued copper decline. During the time they held my mines, approximately a year, I received almost $10,000.00, but when copper went below $30 they claimed the insufficient to go ahead as longer existed, "pulled up stakes" and returned to Canada. This company was one of the world's largest operators of mines.

The title to both of these properties is presently clear and this will be further confirmed by a decree of the Superior Court of Gila County, Arizona in a quiet title proceedings which I instituted at the request of a prospective purchaser who makes a standing offer for both of the properties, which offer I have not accepted, but will should a better one not develop. There is actually, though, to purpose in this quiet title action, it only being undertaken to satisfy the prospective purchaser, should I decide to accept their offer.

I will emphasize that the potential in both of these properties is dependent upon favorable conditions which do not, presently, exist. As to how soon these conditions are going to improve, your guess is as good as mine. For over fifty years, during all recesions or depressions, copper dropped to unexpected low prices.

The Government, as we know, usually waits until the need of something becomes a dire necessity before undertaking to supply it. Apparently during the last war the Evans Point dam project became such a necessity, since it was then the last years to investigate the dam site and expended a large sum of money in doing so, though, as elsewhere stated there is a possibility that this was being undertaken for private use which the government represented and which I never able to find out, though I expended no particular effort to do so.

Neither for the mining property nor for the dam can I offer anyone an immediate return of profit. This is entirely dependent upon circumstances as with most other real estate investments. The attitude of investors under conditions as of today is the same as it always has been. They won't buy until prices soar and then they clamor to get the chance to buy. I have just sold a large amount near here for $84,500.00 which I am positive would bring a quarter of a million dollars should normal times exist but presently I had difficulty in finding a buyer at this ridiculously low figure. This, as with the mines and dam site, I am tired of bothering with and neither do I have time to do so, the result being that the best offer will buy them.

Options are usually customary in transacting such deals but since the offer I make is not an ordinary one and exclusive option cannot be given except for a substantial consideration, though a contract to sell at an agreed price will be furnished to anyone.

The lot of July 1st will be at the mining property, and could show it, and immediately close a deal with anyone, and if I am not successful in finding someone to pay a better price than the standing offer of less than what I ask for the property, faith it or otherwise, would then be held.

The Government, as we know, usually waits until the need of something becomes a dire necessity before undertaking to supply it. Apparently during the last war the Evans Point dam project became such a necessity, since it was then the last years to investigate the dam site and expended a large sum of money in doing so, though, as elsewhere stated there is a possibility that this was being undertaken for private use which the government represented and which I never able to find out, though I expended no particular effort to do so.

Neither for the mining property nor for the dam can I offer anyone an immediate return of profit. This is entirely dependent upon circumstances as with most other real estate investments. The attitude of investors under conditions as of today is the same as it always has been. They won't buy until prices soar and then they clamor to get the chance to buy. I have just sold a large amount near here for $84,500.00 which I am positive would bring a quarter of a million dollars should normal times exist but presently I had difficulty in finding a buyer at this ridiculously low figure. This, as with the mines and dam site, I am tired of bothering with and neither do I have time to do so, the result being that the best offer will buy them.

Options are usually customary in transacting such deals but since the offer I make is not an ordinary one and exclusive option cannot be given except for a substantial consideration, though a contract to sell at an agreed price will be furnished to anyone.

The lot of July 1st will be at the mining property, and could show it, and immediately close a deal with anyone, and if I am not successful in finding someone to pay a better price than the standing offer of less than what I ask for the property, faith it or otherwise, would then be held.

The Government, as we know, usually waits until the need of something becomes a dire necessity before undertaking to supply it. Apparently during the last war the Evans Point dam project became such a necessity, since it was then the last years to investigate the dam site and expended a large sum of money in doing so, though, as elsewhere stated there is a possibility that this was being undertaken for private use which the government represented and which I never able to find out, though I expended no particular effort to do so.

Neither for the mining property nor for the dam can I offer anyone an immediate return of profit. This is entirely dependent upon circumstances as with most other real estate investments. The attitude of investors under conditions as of today is the same as it always has been. They won't buy until prices soar and then they clamor to get the chance to buy. I have just sold a large amount near here for $84,500.00 which I am positive would bring a quarter of a million dollars should normal times exist but presently I had difficulty in finding a buyer at this ridiculously low figure. This, as with the mines and dam site, I am tired of bothering with and neither do I have time to do so, the result being that the best offer will buy them.

Options are usually customary in transacting such deals but since the offer I make is not an ordinary one and exclusive option cannot be given except for a substantial consideration, though a contract to sell at an agreed price will be furnished to anyone.

The lot of July 1st will be at the mining property, and could show it, and immediately close a deal with anyone, and if I am not successful in finding someone to pay a better price than the standing offer of less than what I ask for the property, faith it or otherwise, would then be held.

The Government, as we know, usually waits until the need of something becomes a dire necessity before undertaking to supply it. Apparently during the last war the Evans Point dam project became such a necessity, since it was then the last years to investigate the dam site and expended a large sum of money in doing so, though, as elsewhere stated there is a possibility that this was being undertaken for private use which the government represented and which I never able to find out, though I expended no particular effort to do so.

Neither for the mining property nor for the dam can I offer anyone an immediate return of profit. This is entirely dependent upon circumstances as with most other real estate investments. The attitude of investors under conditions as of today is the same as it always has been. They won't buy until prices soar and then they clamor to get the chance to buy. I have just sold a large amount near here for $84,500.00 which I am positive would bring a quarter of a million dollars should normal times exist but presently I had difficulty in finding a buyer at this ridiculously low figure. This, as with the mines and dam site, I am tired of bothering with and neither do I have time to do so, the result being that the best offer will buy them.

Options are usually customary in transacting such deals but since the offer I make is not an ordinary one and exclusive option cannot be given except for a substantial consideration, though a contract to sell at an agreed price will be furnished to anyone.

The lot of July 1st will be at the mining property, and could show it, and immediately close a deal with anyone, and if I am not successful in finding someone to pay a better price than the standing offer of less than what I ask for the property, faith it or otherwise, would then be held.
In 1946 the Polaris was sold to one of Canada's largest mine operators after their engineers and geologists recommended it be core drilled to explore the sulphides (the property having never been drilled or the sulphides explored and determined). They first undertook to drill another mine I contracted to sell them but when copper went below 30¢ they decided to go ahead. Prior to this other Canadian interested purchased the property for $175,000.00, triangulated it at a cost of $3500.00 and prepared to drive a one-mile tunnel, reaching a maximum depth of 9500 feet to develop the entire property. Operation was to be undertaken under the name of ARIZONA MINING CORPORATION (abbreviation for Arizona-Canada) and a Canadian subsidiary corporation under the same name. Friction developed between the Arizona management and the directors of the holding corporation in Canada and the delay caused me to foreclose the $175,000.00 mortgage deed.

Ores shipped usually averaged about equal value of copper, gold and silver. All mined from near the surface pocket lenses of either replaced by deposit or unaltered ore. The sulphides (the quadrangle) production is around 99% copper. Whether or not these gold values continue in the sulphides is undetermined as all development has been in the oxides and the depth of the sulphides is unknown though in the district they are usually from four to six hundred feet.

A hundred thousand dollars of near-surface development has not made a mine out of this property. The oxide values being too irregular, apparently caused by extensive leaching. Practical further exploitation would be drilling the sulphides to ascertain the extent and values. The P-D are drilling on their property immediately to the south where they have been drilling now for five years. Apparently a new pit is contemplated. Their present pit is said to be the second largest pit operation in the country (was 50,000 tons daily).

This mine does not warrant immediate operations. Presently copper is too low to make this feasible. It is an investment to hold until copper returns to a price that will permit profit.

The property was originally acquired by the writer in 1916. The family owned an interest in it since 1906. It was located around 1880 by small groups which later became the POLARIS MINE AND MILLING COMPANY. In about 1880 a minor was working for the property, presumably a promotional scheme. In 1904 an amalgamation mill, which failed to work because of the small contents of all ore. In 1912 the company undertook to install a smelter, went broke and the writer's father, a creditor, acquired it.

The property as developed will apparently only support a milling operation. Shipping has exceeded over a 50-years period but the mining costs encountered never indicated any particular market for a shipping operation.

The property is an excellent opportunity to invest for someone with practical foresight that realizes that the present depressed copper market is not permanent. Such declines have occurred in the past and the market always returned to normal to permit profitable operations and undoubtedly will again.

A BRIEF DESCRIPTION

[See reports for further information]

Location is in the northeastern portion of the mineralized quadrangle, being the north and of the high ridges in which Deer Creek trends, the north half of which is the P-D Copper King Mine (see government map of Mineral-Clifton quadrangle). Stemmons Creek flows on the north side of the Polaris. The claim from Evans Point to the scene is the main two miles, the winding road those miles and one mile from the proved road to Greg Creek.

Among the Polaris on the way are the famous 100 patented claims and the P-D, adjacents to the north and now possibly on the west (I am informed they are locating claims on the west and completing drilling the volcanic flow). To the west the unorganized quadrangle a few miles and then is covered by the west area of volcanic. The San Francisco River is one and three-quarter miles east and contains a great belt of five miles or more to the east of which is the volcanic cupola of Giant Peak, 9300 feet, curved the east area of the ridge. The P-D Copper King adjacent the Polaris on the north where a 300 feet, large copper deposits have been encountered. South of this is the P-00 mine, (old Arizona Copper Company now P-D) from which many millions of pounds copper have been on.

The geology and geology has been quite extensive covered in the report on the Polaris. Some 200,000.00 of surface development is not indicative of shipping ones. The possibilities in the property is apparently to come from the sulphides which have been the source of the 24 years production.

The surface gold values (dramatically increasing in the northeastern portion of the quadrangle) are very irregular, ranging from low values to good shipping ones and occasionally high values, but in the oxides have not been persistent and could not be depended upon. Silver is present in all cases and therefore there could be a redeposit of gold and most oxide ones have been subject to extensive leaching.

The reports, maps and other information pertaining to these properties cover a few dozen sheets and offer quite extensive data, copies of which are available to anyone interested interested to gather with such other information as I might be able to offer.

I am not interested in selling, never operated or undertook milling. Property was acquired by personal credit in the general mining business. I am going to sell both this mine and the same site for the best offer I can get for them by end of this month (July) and if a reasonable offer is made I will sell immediately. Title is clear, having just finished title action that was undertaken by owner from 1907 to many years back. This offer is a "first come first serve" proposition, and being offered in a very reasonable period, therefore practical a "give away" price. Exclusive option will not be given though a nonexclusive agreement is to price, etc., given to anyone.

If you are interested, possibly you can refer this to someone who would be
SAN FRANCISCO RIVER, ARIZONA - 55 ACRES
(Included with the 800-acre mine for $10,000.00)

Designated on all government topographical maps of the area as Evans Point. Was acquired by the writer's father in 1903 by Civil War script, being a narrow gorge some 200 feet wide with high perpendicular bluffs on both sides. This river, 14 miles south, empties into the Gala River which then winds through the canyon for 25 miles and opens into the great Safford Valley, continuing for some 50 miles to the Coolidge Dam.

This valley is usually subjected yearly to shortage of water and it is unexplainable why this dam site has not been used, long since, by the government, state of the farmer's Water Association to accumulate billions of gallons of water during the summer rainy season and the winter melting of snow to avoid the hundreds of thousands of dollars in loss of crops.

During the war I was approached by persons who did not disclose their principals, wanting to purchase this 55 acres. After they failed to negotiate, various representatives of the Federal Government contacted me to buy. I eventually refused to negotiate further. Apparently, at that time, I could have gotten a very substantial price had my rights been lowered and, of course, I now realize I was foolish in not having done so. Thereafter, the government, as I recall under some war-time decree, seized the property resulting in my taking process in the Federal Courts of Arizona. Thereafter, investigation and exploration continued for one year, said to have cost the government $240,000. The termination of the Federal Court action was that the government gave me $1500.00 and I got my property back. As to what the government is ultimately going to do no one can possibly know. They are too busy financing ventures for other's throughout the world as with too little time to give attention to our own.

BRIEF DESCRIPTION
(Request other data for further information)

The dam site is located on the San Francisco River three miles north of Clifton, in county seat of Greenlee County, and is reached by good roads and from there the Polaris joy road leaves the river to climb to the divide to the Polaris mines. The dam would have three possible uses: storage of water for the Safford Valley; for hydroelectric power for the district and the copper mines; flood control, which has, in the past years destroyed thousands of acres of agricultural land. The San Francisco River is a shallow stream and flows the year around.

I do not wish to contend that the river gravels have a practical gold potential as it has been, at times assumed. In fact they do not, though many thousands of dollars in gold have been taken from the Evans Point gravels. These were concentrations deposited from the erosion of the Polaris and the adjoining properties over the ages. On the Polaris $3000.00 was taken from a wagon load of gravel. Across the river $7000.00 was taken out of a tunnel in semi-conglomerate. Advice: Don't try to regrett it! I did, resulting in being out of pocket some $6000.00.

In 1906 a steam pump was installed at Evans Point and water was pumped upon the mesa for the Polaris amalgamation mill. Such water rights in Arizona are quite valuable. There are large cottonwood trees on the banks of the river and the scenery is very beautiful. Further to the north the tributaries enter the great pine forests covering thousands of square miles. A paved road leaves Clifton to the north, passing through magnificent scenery and forests where game and fish are plentiful.

The title to this dam site is clear. Nevertheless I am just now completing a quiet title to both the properties which is at the request of a prospective purchaser though such in no purpose as quiet title was completed in 1953, when I purchased the 1073,000 trust deed. The price of $10,000.00 includes both properties, though I will sell them separately. The offer a few have will be accepted by June 30th so immediate attention is necessary for anyone desiring to purchase.
COMMISSION OFFERED

I will pay the usual commission of 20% to anyone furnishing a buyer. The full commission will be paid at the time the sale is fully consummated, whether it be for cash or on terms.

Since the sale of these mines to Canadian interests two years ago and their return to me, interest in mines and mining has deteriorated. Unquestionably the unprecedented mining boom has largely tapered off. I have offered the Polaris mines on the assumption that they will sell if the price is low enough and the same applies to the dam site.

Recent past mining activities are like the real estate boom here in the Los Angeles area, which has broken all records in history. Selling, subdividing and building have made many millionaires with billions of dollars in profits during the past few years. The deserts are being filled with homes.

I have often considered Mexico for a mining undertaking, though the possibility of getting together a group to locate, investigate and finance a sufficiently sizable venture to make it worth while can only be determined by an attempt to do so. A few years back, the average investor was still skeptical of the Mexican government, based on its past conduct. I set up a Mexican corporation out of Mexico City to enter mining but it was not practical for me to "go it alone".

I have incurred a few thousand in expenses looking about in Mexico and additional sums in a little investigating, the more of which one undertakes the more they realize the great extent of the potentials yet existing in that country from undertakings that no one down there goes to the trouble to bother with.

A few years back, when the attitude of the Mexican government changed toward American investors, I attempted to find others to associate in a venture. The period was then no right as the investor was still reluctant, but now this appears to be rapidly changing.

As to what might be more practical and successful is something that in this modern age requires careful scientific investigation and is also affected by the extent of the privileges granted by the Mexican government and other factors. This entails, in most instances, much time and expense that may be considerable where a careful and detailed investigation is conducted.

It is advisable in Mexico for most all undertakings to be under a corporate charter. By so arranging, one can, under Mexican laws, have the rights of a Mexican citizen. There are several forms of corporations, but one in particular that is usually used is Sociedad Anonima and it is considered to be the most satisfactory. Occasionally subsidiaries of American corporations are used but are not too practical.

Taxes are certainly not acceptable. One must offset these by first arranging for special privileges not too difficult to obtain.

Sometimes I investigated some undertakings in central South America but then decided that unless a very large activity it was not practical since the inconvenience became a substantial obstacle to progress. Whereas Mexico there are similar possibilities that do not have some of the disadvantages that one encounters a thousand miles to the south, though taxes in some South American countries are more acceptable than those of Mexico. Gold production, though taxable, but by payment one obtaining the right to dispose of it as he sees fit which is certainly not our privilege in the United States, except with placer gold. Mercury in Mexico is among one of the promising fields to enter. I have been brought samples that ran above 20%. Be assured, of course, carefully selected (one should never expect to get an average sample from there).

My offer to sell is only those properties I own or that I own an interest in.

If you are not interested in this offer, possibly you have someone in mind who will be and can hand them this information.

EVERT L. HAGAN 115 N. Eastern Ave. Los Angeles 22, Calif. 

Angelus 2-3109
Deals operating on the Polaris mines have not, in my part, resulted in what could be described as successful understandings; therefore to again lease the mines would not be practical. All attempts to operate the mines were discontinued. Shipping is further impractical because the Phelps-Dodge smelter at Bisbee does not handle copper concentrates, and the nearest smelter is over a 300-mile railroad and therefore a practical operation would require a mill to concentrate the ore.

In the past years I have received many thousands of dollars income from the property but in view of the large investment the income was substantially inadequate. I have made the mistake of not selling when substantial offers have been made at periods when copper prices was a practical understanding. I always "hope my sight too high", resulting in losing the deal. Now times does not permit giving these properties any further attention, therefore the best offer buys them both.

As I have clearly, unknown, described, this is not an opportunity time to undertake copper mining. Should the property have any merit for the production of gold cannot be determined from the present development in the outside. All costs increasing to a limited extent in Gold and Silver. The condition is not to be found elsewhere is the quadrangle. What importance this indicates, if any, is unknown.

All of the $100,000 development has, from an engineering standpoint, been completely undertaken. This work has been done since 20 to 50 years ago, as of which apparently was carried out under the supervision of an engineer, and the corpus resulting in a waste of money. The writer is not warranted to recommend what should be undertaken. The last engine and equipment, being moved from Canada, recommended the drilling the large veins to the sublevels. This they proposed to have their company do, which was not carried out because of the continued copper declines. During the same they held the mines, approximately a year, I received almost $10,000, but when copper got "low 300 day claimed the incentive to go ahead no longer existed, "pulled up stakes" and returned to Canada. This company was one of the world's largest operators of mines.

The title to both of these properties is perfectly clear and this will be further confirmed by a survey of the Superior of Secrecy, County, Arizona in a quiet title proceedings which I plugged at the amount of a prospective price, who makes a standing offer for both of the properties, which offer I have not accepted, but will cherish in hopes I may develop. It is true, in fact, that the prospectus produced by the prospective buyers, should I decide to accept the offer.

I will emphasize that the potential in both of these properties is dependent upon more favorable conditions which do not, present, exist. As to how long those conditions are going to improve, your guess is as good as mine. For over twenty years, during all conditions or depression, copper dropped to unprecedented low prices.

The Government, as we know, really wants until the world recognizes a time necessary before undertaking to supply. Apparently during the war was the began point for large production, since it was that time they perceived a large want of money in doing so, though, an elsewhere named there is a possibility that this was not being undertaken for purely which the government approved and which I was unable to find out, though I expected no particular effort to do so.

Whether for the mining property or for the home, is an offer an immediate means of profit. This is certainly depends upon circumstances as with more other real estate investments. The summary of investment under conditions as with the same, it always has been. They have been until prices real and then they chance to be the chance to buy, have just sold a large average at least for $24,000,000 which I am positive would bring a quality of a million dollar would normal times exist but properly I had difficulty in finding a buyer at this ridiculously low figure. With the miner and such like I am used of the miner that and members do have times to do so, the result being that the best buyer will take them.

Options are quite customary in transactions such deals but since the offer I make is not an ordinary one and ordinary option cannot be given except for a substantial consideration, though a contract as well as an applied price will be furnished to anyone.

The lot of only I will be at the mining property, and could show it, and immediately close a deal with anyone and if I am not interested in finding these by way of house price than the standing offer of less than what had for the property will, at that time, accept.

On another copy when I have suggested how the property can be easily located from the air should answer were to take a quick look at both properties and possibly the district in general, or they could land at the Clifton airstrip and arrange transportation, or if they should advise me when I am in Clifton I will come, show them the property myself, though I could only see those from the end of June on for a few days at which time I will be there again.

The climate is ideal for either a spring or fall vacation. Summers, though, are a little warm until the first fall, turns, and there is an occasional little snow in winter but from early spring until early summer or early fall until late you will find no more ideal climate anywhere. The crisp, dry atmosphere is more invigorating and easy in the middle of the year, and when the sun does yield, that they become warm and pleasant. Because of the climate, acreage and all the rest of it would it be very difficult to make the trip once a year to take one of the largest trees, and it is not observed that you will find a more exhilarating climate anywhere in the United States.

A brief description of the district themselves will not be stated. Entering the area from the north, either from Selig or Durango (Site Highway 70 on the Gila River, east, in forty miles, drops into the tributary of the Gila. The San Francisco, that, on all passed and excellent mountain roads. Clifton is a town of a few thousands only on the other hand. It is the county seat of Gila County from which, its only water, is fed, the location of the second largest copper pit in the United States, and also the second largest copper operation where a hundred to 1000 in the Phelps-Dodge Company after the war is preparation for the great mining operations that originally started about 35 years ago and it still have been the first copper production in the state of Arizona. During this period Clifton and bisected have been the location of fine group of copper smelters and large copper companies, all property being now of the Bisbee-Dodge Company.

A road leading up the mine takes one, in a ½ hour, into the mine which contains more than one hundred of miles of tunnel in some of the most magnificent scenery in the United States. The road continues east, east, Springfield in highway 69.

From Clifton, our battlefield, these roads on a gravel road up the river that is good, to learn from which a climbing program could even which is possible from a deep, closer 3 miles to the beginning of the Polaris mine, from where it is necessary to either walk 300 feet to the end of the mining property from where a good road could be taken to the rich copper deposit where a short are of about 300 feet. From the top of the property the Phelps-Dodge holds and extends to the south where they own 15,000 feet of fenced claim, I am told the largest mining property in the U.S. by plane from L.A. one hour to the property and another 1-2 hours from L.A. to the property during the directional, this road could take the first side of the property along the side of the road and finally one could be of the bisected property. From the top of the property the Phelps-Dodge holds and extends to the south where they own 15,000 feet of fenced claim, I am told the largest mining property in the U.S.

So please from L.A. one hour to the property and another 1-2 hours from L.A. to the property and finally one could be at Clifton or should they desire to see the property they may give them phone numbers by which they can make arrangements to have someone look at the property and any other the property which I am offered, for sale.
1. Mine: Polaris

2. Location: Sec. 7 Twp. 4S Range 30E Nearest Town: Clifton
   Distance: 12 Direction: South Road Condition: Poor

3. Mining District & County: Copper Mountain, Greenlee

4. Former Name of Mine: Same

5. Owner: J. A. Hogan
   Address: Clifton, Ariz.

6. Operator: None
   Address:

7. Principal Minerals: Au, Cu, Ag

8. Number of Claims: Lode 1 Placer
   Patented: Unpatented

9. Type of Surrounding Terrain: Rough. High hills, steep valleys. Sparse vegetation. EL 1500

10. Geology & Mineralization: 24" vein quartz strike N70E

11. Dimension & Value of Ore Body: 24" wide pinches down considerably (about"") in places 15 series of lenses exposed about 300' along strike underground. Outcrop traceable for 1500' on surface. Shaft full at water to adit level.
12. Ore "Blocked Out" or "In Sight":

Ore Probable: Coal... prospects.

13. Mine Workings—Amount and Condition:

<table>
<thead>
<tr>
<th>No.</th>
<th>Feet</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shaft</td>
<td>1</td>
<td>?</td>
</tr>
<tr>
<td>Raise</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Tunnel</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Crosscut</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Stopes</td>
<td>1</td>
<td>General</td>
</tr>
</tbody>
</table>

14. Water Supply: Springs sufficient for camp... date on amount of water mine makes.

15. Brief History: Worked intermittently. Workings beginning to cave. Blacksmith shop office and boarding house could be repaired.

16. Signature: Short visit by Manning 10-28... did not talk to owner. Short visit only.

17. If Property for Sale, List Approximate Price and Terms:
Mine: Polaris Mining Co.

District: Copper Mt. District, Greenlee Co.

Subject: Present Status.

Date: July 9, 1956

Engineer: Axel L. Johnson

Location: 12 miles south of Clifton. Sec. 7 - T 14 S - R 30 E

Number of Claims: Not reported.

Owner: Evert Hagan, 115 North Eastern Ave., Los Angeles 22, Calif. (former owner, J. A. Hogan, Clifton, Ariz., now deceased.)

Operator: None. Mine is idle.

Principal Minerals: Gold, Silver, Copper.
Reconstruction Finance Corporation

Gentlemen:

The following report upon the present condition of The Victory Mining Co., Inc. is hereby presented. For your convenience a summary is given first, followed by detailed discussion. A sketch map of the vein system accompanies this report.

SUMMARY

Locations: In the Greenlee Gold Mountain Mining District, 7 miles north of Clifton, Greenlee County, Arizona. A little over a mile from the San Francisco River and from one to three thousand feet higher.

Facilities: An ideal climate, the property can be worked the year round. From the lower to the higher part of the claims there is a change in elevation of about 2000 feet and the slopes are nearly all abrupt and the veins perpendicular.

Geology: Perpendicular fissure veins filled with quartz and porphyry, usually with granite walls and run northeast and southwest. Sedimentaries appear on the western side of the property and the vein walls are sedimentary rock and contacts between sedimentaries and granite. After the veins were formed intrusive dykes of rhyolite and phonolite were thrust up from below, cutting all formations and veins alike. The property is situated near the northeast edge of the Clifton-Morenci mineral belt.

The Golden Eagle Vein is a proven mine with several thousand tons of ore opened 90 ft. between the Golden Eagle and Phonolite Tunnels for a distance of over 300 ft. on each level.

The ore runs well in copper and also some zinc as the smelter sheets and assay certificates show, when the secondary zone is reached, will without doubt produce much higher grade copper as the present works show that a greater portion of the vein is leached and gone down to lower depths.

The vein averages about 5 to 6 ft. wide, the greater portion leached. Depth is all that is needed to reach the secondary zone which in my opinion will produce much higher grade copper and zinc than the present showing and without doubt larger bodies of ore.

The Victory Mining Co. claims covers ten veins, most of them are large continuous veins and give much promise of developing large bodies
of high grade copper, zinc, silver and gold ores because of the fact that we are counting on centering our efforts on the Golden Eagle Vein. I will not go into further details regarding the other veins at this time as they are situated up the canyon and off the road and can be developed later.

The Golden Eagle Vein runs parallel to and about 400 feet northwest of the Loco Boy. It crosses Polaris Gulch and continues on northeast.

On the south side of the Dorsey Gulch the vein is developed by the Golden Eagle Tunnel which drifts 330 feet on the vein and the Phonolite Tunnel which after crosscutting drifts 350 feet on the vein 90 feet below the Golden Eagle Tunnel. A winze connects the two and a raise goes to the surface from Golden Eagle Tunnel. These two tunnels show a hard, quartz ore shoot, copper glance and chalcopyrite and sulphide of iron. See smelter settlement sheets.

The average silica for a number of samples is 73.4 per cent, which is so high that the ore will serve for converter lining and therefore get the benefit of a very low smelter rate (about $3.50 per ton).

If further development is to be done on the Golden Eagle Vein it should be done by sinking the present shaft 2 to 3 hundred feet and drift along the vein on the one, two and three hundred foot levels and stope the ore in the regular manner.

The Golden Eagle Vein is situated near the Southeast border line of the property. The values run good in copper, zinc, silver and gold, compares favorable with the Copper King ore which adjoins this property on the Southwest, (see map of vein systems of Polaris, also read Mr. H. C. White's letter to Polaris Co., dated Nov. 16, 1937, relating statistics of the Copper King Mine and his frank opinion of the similarity of the two properties).

All of the ore which the smelter sheets represents came from the Golden Eagle vein and Phonolite Stope. The pay streak averages from a few inches to about 3 ft. wide on the hanging wall side, the lower portion of the vein has leached and gone down to lower depths.

Exhibit A.

3. Estimated cost of development and plan of operations.

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Install an air compressor (used one)</td>
<td>$1500.00</td>
</tr>
<tr>
<td>One hoist (used one)</td>
<td>$1000.00</td>
</tr>
<tr>
<td>Incidentally such as pipe, rails, ore bins, drilling machines pump, timber, road work, small tools, Social Security Ins. etc.</td>
<td>$3500.00</td>
</tr>
<tr>
<td>300 ft. shaft at $30.00 per ft.</td>
<td>$9000.00</td>
</tr>
<tr>
<td>Drift along the vein both ways on the one, two and three hundred ft. levels, estimated cost</td>
<td>$5000.00</td>
</tr>
</tbody>
</table>

TOTAL: $20,000.00

Respectfully submitted,

(Signed) J. W. Buckley
Gentlemen:

Your company being listed as active in mining, possibly another mine, if of sufficient merit and "dirt cheap" would be of interest.

If the enclosed is of interest I have considerable technical data that will be sent upon request.

Yours truly,

Everett Hagan
THOMAS A. RHODIMER
Consulting Mining Engineer
Registered Washington, D. C.

A REPORT ON THE POLARIS GROUP OF MINING CLAIMS
LOCATED NEAR CLIFTON, GREENLEE COUNTY, ARIZONA
by
WILL D. HARTMAN & THOMAS A. RHODIMER

FOREWORD: This property was visited for the purpose of checking information contained in old reports and for examining possibilities of further development.

PROPERTY AND LOCATION: The Polaris group of 41 mining claims is located 6 miles in a northerly direction from Clifton, Greenlee County, Arizona. The property may be reached by following four miles of easily passable road out of Clifton and paralleling the San Francisco River, and a 2-1/2 mile stretch of road which can be traversed by a short wheeled vehicle. This second stretch of road can be improved, with very little additional work and expense, to allow the passage of any vehicle. The principal workings are approximately 3 miles from the San Francisco River, and there is 2,500 feet of difference in elevation. (NOTE BY OWNER: The lower elevation of the property is 1,500 feet above the San Francisco River, and the higher elevation of the property is 2,500 feet above the lower elevation.)

HISTORY: The history of this property has been discussed in some detail by other examiners, as only brief comments will be made here. The property has been mined by various persons and organizations even before the 20th century. Various methods of recovery have been tried and discarded. For the most part development has been ill-advised and haphazard. No large scale development program has ever been attempted. Most of the ore exposed by existing workings has been removed.

TOPOGRAPHY: The property is in steep mountain terrain and has an elevation differential of approximately 5,000 feet.

CLIMATE: The climate is suitable for year-round operation. It is warm and dry in the summer but because of altitude the heat will never be uncomfortable. Light snows may be expected during the winter season but never heavy enough to curtail operation.

CAMP AND LABOR: The housing facilities on the property will accommodate ten men. This will be adequate for a preliminary drilling crew and for the workmen who are to initiate the construction of additional housing. An adequate labor supply can be obtained in the district at the local standard of pay. Said rates are as follows:

Miner: $1.55 per hr.
Labor: $1.20 per hr.
Labor: $1.00 per hr.

NATURE OF DEPOSIT AND DEVELOPMENT: There are ten parallel or nearly parallel veins on the property which can be traced from the surface. The veins are fissure type filled with quartz and porphyry with granite foot and hanging walls. Examination of existing workings indicates that a steeply dipping formation predominates. Enough ground has been opened to prove that the ore is not of pocket formation. The lenses occur at regular intervals. There is every reason to believe that these lenses will become larger in size and contain better values as depth is attained.

The Golden Eagle Vein has been opened by the Phonolite or Blacksmith Tunnel, the Golden Eagle Tunnel, and the Phonolite Tunnel. The Phonolite Tunnel, on the north side of the Dorey Gulch, has been completely stripped of all developed ore and apparently the vein has been lost and abandoned. The nearby Golden Eagle Tunnel has also been opened for ore on the same vein. Nearly all of the ore developed by this tunnel has also been stopped out.

The condition of the dump as well as the thoroughness with which the ore was removed indicate that most of the vein material was of shipping grade. Much more material was removed from the workings than appears on the dump. Both of these workings show the continuous iron formation typical of other workings on the property.

On the north side of Dorey Gulch, the Grey Eagle Tunnel and a short prospect are believed to expose ore of economic interest. To all appearances the Golden Eagle ore body has been lost in the existing workings. However, some diamond drilling would soon prove or disprove this observation.

A tunnel drive near the intersection of the Black Prince and Lady Franklin veins has been driven approximately 1,500 feet from portal to face on the Lady Franklin vein. However, due to tax and disinterested mining practice, this tunnel has been allowed to cave in and has not been developed further.

METHOD OF SAMPLING: Due to its size and extent, the Russian Bear Vein has been given particular attention. This vein will in all probability eventually become the big producer of the property. For this reason, beginning at the east end, 91 samples have been taken from outcrops along this ore body. All samples taken from this vein and other vein outcrops were taken across the vein, unless otherwise noted. All underground samples were cut across the vein except where otherwise noted.

Surface samples, in this type of formation, do not indicate the true values to be found in the ore bodies. Due to leaching action, values in this type of ore body are richer at depth than on the surface.

As can be seen from the attached record of sample assays, the Golden Eagle Vein has produced ore of economic interest. This deposit cannot be depended on for future production, but further development by drilling methods is definitely indicated.

RECOMMENDATIONS: A survey to accurately locate vein outcrops and a diamond drilling program should be initiated. These two jobs can be accomplished simultaneously and should be supervised by a competent mining engineer. A tractor with angle dozer should be put on the property for road building purposes. This should be done immediately as it will greatly facilitate and speed up exploration work.

Initial exploration work should center around the Black Prince and Lady Franklin veins. Two thousand feet of core drilling at a cost of $6 a foot will locate the intersection of these two ore bodies and indicate a shaft site. A standard 3-compartment shaft should then be sunk on the site so located. This shaft should be sunk to a depth of 800 feet before production is attempted.

After exploration of the Black Prince and Lady Franklin veins has commenced, attention should next be turned to the Russian Bear vein. A core drilling program will be set up to prove its extent and indicate method for exploitation. Proof of the Russian Bear will provide ore for many years of large scale operation.

At a later date the other veins on the property can be examined. There is reason to believe some of them will become producers.

A mill with modern flotation plant must be set up to treat the ore from this property. This mill should have a minimum capacity of 250 tons a day. The mill should be constructed with the idea of increasing capacity as more ore is developed on the property.

CONCLUSIONS: Care has been taken to make conservative estimates for the purpose of this report. There are definite grounds for assuming that the ore bodies will increase in value and possibly in size as depth is attained. There is also a good possibility of encountering other veins, not traceable on the surface, at depth.

With good management, this mine should become a successful producer. It cannot be too strongly recommended that development of this property be instigated only under the direction of a trained and experienced mining engineer. It is obvious that past failures on the Polaris property have been due to ignorance or underfinancing.

(Signed) WILL D. HARTMAN
(Signed) THOMAS A. RHODIMER

SAMPLES FROM OUTCROPS ON RUSSIAN BEAR VEIN, BEGINNING AT EAST END

<table>
<thead>
<tr>
<th>SAMPLE</th>
<th>WIDTH</th>
<th>AU</th>
<th>AC</th>
<th>CIPS</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8.8 ft</td>
<td>$0.35</td>
<td>tr</td>
<td>0</td>
<td>$0.35</td>
</tr>
<tr>
<td>2</td>
<td>9.3</td>
<td>0.70</td>
<td>tr</td>
<td>tr</td>
<td>0.70</td>
</tr>
<tr>
<td>3</td>
<td>16.4</td>
<td>1.40</td>
<td>tr</td>
<td>tr</td>
<td>1.40</td>
</tr>
<tr>
<td>4</td>
<td>16.3</td>
<td>tr</td>
<td>tr</td>
<td>tr</td>
<td>1.78</td>
</tr>
<tr>
<td>5</td>
<td>8.8</td>
<td>0.35</td>
<td>0.09</td>
<td>0.35</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>18.2</td>
<td>0.35</td>
<td>tr</td>
<td>tr</td>
<td>0.35</td>
</tr>
<tr>
<td>7</td>
<td>6.6</td>
<td>1.75</td>
<td>tr</td>
<td>tr</td>
<td>1.75</td>
</tr>
<tr>
<td>8</td>
<td>4.4</td>
<td>tr</td>
<td>tr</td>
<td>tr</td>
<td>0.78</td>
</tr>
<tr>
<td>9</td>
<td>16.9</td>
<td>0.35</td>
<td>0.06</td>
<td>0.35</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>19.0</td>
<td>0.65</td>
<td>tr</td>
<td>tr</td>
<td>1.68</td>
</tr>
<tr>
<td>11</td>
<td>29.2</td>
<td>tr</td>
<td>tr</td>
<td>tr</td>
<td>0.35</td>
</tr>
<tr>
<td>12</td>
<td>25.6</td>
<td>1.05</td>
<td>0.06</td>
<td>1.11</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>5.8</td>
<td>0.65</td>
<td>tr</td>
<td>tr</td>
<td>1.68</td>
</tr>
<tr>
<td>14</td>
<td>8.4</td>
<td>0.35</td>
<td>tr</td>
<td>tr</td>
<td>0.35</td>
</tr>
</tbody>
</table>
SAMPLE FROM LADY FRANKLIN VEIN TAKEN FROM BOTH OUTCROPS - AND PRESENT WORKINGS

SAMPLE
<table>
<thead>
<tr>
<th>NO.</th>
<th>WIDTH</th>
<th>Au</th>
<th>AC</th>
<th>Cu</th>
<th>TOTAL VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>3.4 ft</td>
<td>s</td>
<td>.24</td>
<td>0</td>
<td>0.29</td>
</tr>
<tr>
<td>16</td>
<td>3.1</td>
<td>s</td>
<td>.26</td>
<td>0</td>
<td>0.31</td>
</tr>
<tr>
<td>17</td>
<td>3.1</td>
<td>s</td>
<td>.20</td>
<td>0</td>
<td>0.20</td>
</tr>
<tr>
<td>18</td>
<td>2.8</td>
<td>s</td>
<td>.10</td>
<td>0</td>
<td>0.10</td>
</tr>
<tr>
<td>19</td>
<td>2.1</td>
<td>s</td>
<td>.05</td>
<td>0</td>
<td>0.05</td>
</tr>
</tbody>
</table>

NOTE: Values used for calculations are:

Au = $35.50 per ounce.
AC = $0.01 per ounce.
Cu = $0.04 per ounce.

All samples were assayed for lead, but only traces found.
NOTE: For more complete discussion of the above subjects, see COPPER KING AND POLARIS MOUNTAINS (8 pages).

The following is derived from various sources of information, though quite well compiled from 1910 to 1930. Since this period of exploration has shown little additional information to alter conclusions of the earlier explorers, covering and discussing the topography, geology and mineralization, and the investigation, some being extensive and of a technical character, it is hoped this data will offer the reader a better understanding of what he will encounter upon investigation.

GEOPHYSICS AND GEOLOGY: OF PROVINCE.

The area of Arizona may be divided into three large physiographic regions: the central area which includes the Colorado Plateau, the northern area including the Grand Canyon and the New Mexico area which extends from the Colorado Plateau to the west and north toward the Great Basin. For a practical purpose, this province may be considered as being composed of three main sections: the central region, the northern region and the western region. These sections are separated by the traditional boundary lines of the state and are further defined by the boundaries of the province.

The Colorado Plateau is composed of a series of high and low points separated by a series of rifts. These rifts are formed by the movement of the earth's crust, and they are characterized by the presence of water bodies. The central region is characterized by a series of large and small lakes, which are the result of the movement of the earth's crust. The northern region is characterized by a series of large lakes, which are the result of the movement of the earth's crust. The western region is characterized by a series of large lakes, which are the result of the movement of the earth's crust.

The Santa Fe River is a major tributary of the Colorado River, which flows through the state of Colorado. The river is characterized by a series of large and small lakes, which are the result of the movement of the earth's crust. The river is also characterized by a series of large and small lakes, which are the result of the movement of the earth's crust. The river is further characterized by a series of large and small lakes, which are the result of the movement of the earth's crust.

The Santa Fe River is characterized by a series of large and small lakes, which are the result of the movement of the earth's crust. The river is further characterized by a series of large and small lakes, which are the result of the movement of the earth's crust. The river is further characterized by a series of large and small lakes, which are the result of the movement of the earth's crust.

The Santa Fe River is a major tributary of the Colorado River, which flows through the state of Colorado. The river is characterized by a series of large and small lakes, which are the result of the movement of the earth's crust. The river is also characterized by a series of large and small lakes, which are the result of the movement of the earth's crust. The river is further characterized by a series of large and small lakes, which are the result of the movement of the earth's crust.

The Santa Fe River is characterized by a series of large and small lakes, which are the result of the movement of the earth's crust. The river is further characterized by a series of large and small lakes, which are the result of the movement of the earth's crust. The river is further characterized by a series of large and small lakes, which are the result of the movement of the earth's crust.

The Santa Fe River is a major tributary of the Colorado River, which flows through the state of Colorado. The river is characterized by a series of large and small lakes, which are the result of the movement of the earth's crust. The river is also characterized by a series of large and small lakes, which are the result of the movement of the earth's crust. The river is further characterized by a series of large and small lakes, which are the result of the movement of the earth's crust.

The Santa Fe River is characterized by a series of large and small lakes, which are the result of the movement of the earth's crust. The river is further characterized by a series of large and small lakes, which are the result of the movement of the earth's crust. The river is further characterized by a series of large and small lakes, which are the result of the movement of the earth's crust.

The Santa Fe River is a major tributary of the Colorado River, which flows through the state of Colorado. The river is characterized by a series of large and small lakes, which are the result of the movement of the earth's crust. The river is also characterized by a series of large and small lakes, which are the result of the movement of the earth's crust. The river is further characterized by a series of large and small lakes, which are the result of the movement of the earth's crust.

The Santa Fe River is characterized by a series of large and small lakes, which are the result of the movement of the earth's crust. The river is further characterized by a series of large and small lakes, which are the result of the movement of the earth's crust. The river is further characterized by a series of large and small lakes, which are the result of the movement of the earth's crust.
Along many of these offshore and subterranean faults there are places, and at various angles of Copper King mine have been recommended. The veins contain copper, silver, lead, zinc, and other valuable minerals, and are able to be worked through the same piercer to the passage of the detritus. The stream some of the veins may be followed to depths of several hundred feet, and it flows through the Copper King mine, which is a little less than a mile to the surface. The Copper King mine is located in the district of San Francisco Bay, and is one of the most important mining centers in the United States. Copper King mine is located in the district of San Francisco Bay, and is one of the most important mining centers in the United States.
C. GEOLOGY

Reconstruction Finance Corporation

Gentlemen:

The following report upon the present condition of The Victory Mining Co. Inc. is hereby presented. For your convenience a summary is given first, followed by detailed discussion. A sketch map of the vein system accompanies this report.

SUMMARY

Locations: In the Greenlee Gold Mountain Mining District, 7 miles north of Clifton, Greenlee County, Arizona. A little over a mile from the San Francisco River and from one to three thousand feet higher.

Facilities: An ideal climate, the property can be worked the year round. From the lower to the higher part of the claims there is a change in elevation of about 2000 feet and the slopes are nearly all abrupt and the veins perpendicular.

Geology: Perpendicular fissure veins filled with quartz and porphyry, usually with granite walls and run northeast and southwest. Sedimentary rocks appear on the western side of the property and the vein walls are sedimentary rock and contacts between sedimentaries and granite. After the veins were formed intrusive dykes of rhyolite and phonolite were thrust up from below, cutting all formations and veins alike. The property is situated near the northeast edge of the Clifton-Morenci mineral belt.

The Golden Eagle Vein is a proven mine with several thousand tons of ore opened 90 ft. between the Golden Eagle and Phonolite Tunnels for a distance of over 300 ft. on each level.

The ore runs well in copper and also some zinc as the smelter sheets and assay certificates show, when the secondary zone is reached, will without doubt produce much higher grade copper as the present works show that a greater portion of the vein is leached and gone down to lower depths.

The vein averages about 5 to 6 ft. wide, the greater portion leached. Depth is all that is needed to reach the secondary zone which in my opinion will produce much higher grade copper and zinc than the present showing and without doubt larger bodies of ore.

The Victory Mining Co. claims covers ten veins, most of them are large continuous veins and give much promise of developing large bodies
of high grade copper, zinc, silver and gold ores because of the fact that we are counting on centering our efforts on the Golden Eagle Vein I will not go into further details regarding the other veins at this time as they are situated up the canyon and off the road and can be developed later.

The Golden Eagle Vein runs parallel to and about 400 feet north-west of the Loco Boy. It crosses Polaris Gulch and continues on northeast.

On the south side of the Dorsey Gulch the vein is developed by the Golden Eagle Tunnel which drifts 330 feet on the vein and the Phonolite Tunnel which after crosscutting drifts 350 feet on the vein 90 feet below the Golden Eagle Tunnel. A winze connects the two and a raise goes to the surface from Golden Eagle Tunnel. These two tunnels show a hard, quartz ore shoot, copper glance and chalcopyrite and sulphide of iron. See smelter settlement sheets.

The average silica for a number of samples is 73.4 per cent, which is so high that the ore will serve for converter lining and therefore get the benefit of a very low smelter rate (about $3.50 per ton).

If further development is to be done on the Golden Eagle Vein it should be done by sinking the present shaft 2 to 3 hundred feet and drift along the vein on the one, two and three hundred foot levels and stop the ore in the regular manner.

The Golden Eagle Vein is situated near the Southeast border line of the property. The values run good in copper, zinc, silver and gold, compares favorable with the Copper King ore which adjoins this property on the Southwest, (see map of vein systems of Polaris, also read Mr. H. C. White's letter to Polaris Co., dated Nov. 16, 1937, relating statistics of the Copper King Mine and his frank opinion of the similarity of the two properties).

All of the ore which the smelter sheets represents come from the Golden Eagle vein and Phonolite Stope. The pay streak averages from a few inches to about 3 ft. wide on the hanging wall side, the lower portion of the vein has leached and gone down to lower depths.

Exhibit A.

3. Estimated cost of development and plan of operations.

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Install an air compressor (used one)</td>
<td>$1500.00</td>
</tr>
<tr>
<td>One hoist (used one)</td>
<td>$1000.00</td>
</tr>
<tr>
<td>Incidental such as pipe, rails, ore bins, drilling machines pump, timber, road work, small tools, Social Security Ins. etc.</td>
<td>$3500.00</td>
</tr>
<tr>
<td>300 ft. shaft at $30.00 per ft.</td>
<td>$9000.00</td>
</tr>
<tr>
<td>Drift along the vein both ways on the one, two and three hundred ft. levels, estimated cost</td>
<td>$5000.00</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$20,000.00</td>
</tr>
</tbody>
</table>

Respectfully submitted,

(Signed) J. W. Buckley
Buckley Report

C. Geology

Reconstruction Finance Corporation

Gentlemen:

The following report upon the present condition of The Victory Mining Co. Inc. is hereby presented. For your convenience a summary is given first, followed by detailed discussion. A sketch map of the vein system accompanies this report.

Summary

Locations: In the Greenlee Gold Mountain Mining District, 7 miles north of Clifton, Greenlee County, Arizona. A little over a mile from the San Francisco River and from one to three thousand feet higher.

Facilities: An ideal climate, the property can be worked the year round. From the lower to the higher part of the claims there is a change in elevation of about 2000 feet and the slopes are nearly all abrupt and the veins perpendicular.

Geology: Perpendicular fissure veins filled with quartz and porphyry, usually with granite walls and run northeast and southwest. Sedimentaries appear on the western side of the property and the vein walls are sedimentary rock and contacts between sedimentaries and granite. After the veins were formed intrusive dykes of rhyolite and phonolite were thrust up from below, cutting all formations and veins alike. The property is situated near the northeast edge of the Clifton-Morenci mineral belt.

The Golden Eagle Vein is a proven mine with several thousand tons of ore opened. 90 ft. between the Golden Eagle and Phonolite Tunnels for a distance of over 300 ft. on each level.

The ore runs well in copper and also some zinc as the smelter sheets and assay certificates show, when the secondary zone is reached, will without doubt produce much higher grade copper as the present works show that a greater portion of the vein is leached and gone down to lower depths.

The vein averages about 5 to 6 ft. wide, the greater portion leached. Depth is all that is needed to reach the secondary zone which in my opinion will produce much higher grade copper and zinc than the present showing and without doubt larger bodies of ore.

The Victory Mining Co. claims covers ten veins, most of them are large continuous veins and give much promise of developing large bodies.

The Victory Mining Co. Inc.
of high grade copper, zinc, silver and gold ores because of the fact that we are counting on centering our efforts on the Golden Eagle Vein. I will not go into further details regarding the other veins at this time as they are situated up the canyon and off the road and can be developed later.

The Golden Eagle Vein runs parallel to and about 400 feet northwest of the Loco Bay. It crosses Polaris Gulch and continues on northeast.

On the south side of the Dorsey Gulch the vein is developed by the Golden Eagle Tunnel which drifts 330 feet on the vein and the Phonolite Tunnel which after crosscutting drifts 350 feet on the vein 90 feet below the Golden Eagle Tunnel. A winze connects the two and a raise goes to the surface from Golden Eagle Tunnel. These two tunnels show a hard, quartz ore shoot, copper glance and chalcopyrite and sulphide of iron. See average settlement sheets.

The average silica for a number of samples is 73.4 per cent, which is so high that the ore will serve for converter lining and therefore get the benefit of a very low smelter rate (about $3.50 per ton).

If further development is to be done on the Golden Eagle Vein it should be done by sinking the present shaft 2 to 3 hundred feet and drift along the vein on the one, two and three hundred foot levels and stop the ore in the regular manner.

The Golden Eagle Vein is situated near the Southeast border line of the property. The values run good in copper, zinc, silver and gold, compares favorable with the Copper King ore which adjoins this property on the Southwest, (see map of vein systems of Polaris, also read Mr. H. C. White's letter to Polaris Co., dated Nov. 16, 1937, relating statistics of the Copper King Mine and his frank opinion of the similarity of the two properties).

All of the ore which the smelter sheets represents came from the Golden Eagle vein and Phonolite Stops. The pay streak averages from a few inches to about 3 ft. wide on the hanging wall side, the lower portion of the vein has leached and gone down to lower depths.

Exhibit A.

3. Estimated cost of development and plan of operations.

Install an air compressor (used one) $1500.00
One hoist (used one) $1000.00
Incidentals such as pipe, rails, ore bins, drilling machines pump, timber, road work, small tools, Social Security Ins. etc. $3500.00
300 ft. shaft at $30.00 per ft. $9000.00
Drift along the vein both ways on the one, two and three hundred ft. levels, estimated cost $5000.00

TOTAL $20,000.00

Respectfully submitted,

(Signed) J. W. Buckley
GEOLOGY

Reconstruction Finance Corporation

Gentlemen:

The following report upon the present condition of The Victory Mining Co., Inc. is hereby presented. For your convenience a summary is given first, followed by detailed discussion. A sketch map of the vein system accompanies this report.

SUMMARY

Locations: In the Greenlee Gold Mountain Mining District, 7 miles north of Clifton, Greenlee County, Arizona. A little over a mile from the San Francisco River and from one to three thousand feet higher.

Facilities: An ideal climate, the property can be worked the year round. From the lower to the higher part of the claims there is a change in elevation of about 2000 feet and the slopes are nearly all abrupt and the veins perpendicular.

Geology: Perpendicular fissure veins filled with quartz and porphyry, usually with granite walls and run northeast and southwest. Sediments appear on the western side of the property and the vein walls are sedimentary rock and contacts between sediments and granite. After the veins were formed intrusive dykes of rhyolite and phonolite were thrust up from below, cutting all formations and veins alike. The property is situated near the northeast edge of the Clifton-Moroczi mineral belt.

The Golden Eagle Vein is a proven mine with several thousand tons of ore opened 90 ft. between the Golden Eagle and Phonolite Tunnels for a distance of over 300 ft. on each level. The ore runs well in copper and also some zinc as the assayer sheets and assay certificates show, when the secondary zone is reached, will without doubt produce much higher grade copper as the present works show that a greater portion of the vein is leached and gone down to lower depths.

The vein averages about 5 to 6 ft. wide, the greater portion leached. Depth is all that is needed to reach the secondary zone which in my opinion will produce much higher grade copper and zinc than the present showing and without larger bodies of ore.

The Victory Mining Co. claims covers ten veins, most of them are large continuous veins and give much promise of developing large bodies
of high grade copper, zinc, silver and gold ores because of the fact that we are counting on centering our efforts on the Golden Eagle Vein. I will not go into further details regarding the other veins at this time as they are situated up the canyon and off the road and can be developed later.

The Golden Eagle Vein runs parallel to and about 400 feet north-west of the Loco Boy. It crosses Polaris Gulch and continues on northeast.

On the south side of the Dessey Gulch the vein is developed by the Golden Eagle Tunnel which drifts 330 feet on the vein and the Phonolite Tunnel which after crosscutting drifts 350 feet on the vein 90 feet below the Golden Eagle Tunnel. A winze connects the two and a raise goes to the surface from Golden Eagle Tunnel. These two tunnels show a hard, quartz ore shoot, copper glance and chalcopyrite and sulphide of iron. See smelter settlement sheets.

The average silica for a number of samples is 73.4 per cent, which is so high that the ore will serve for converter lining and therefore get the benefit of a very low smelter rate (about $3.50 per ton).

If further development is to be done on the Golden Eagle Vein it should be done by sinking the present shaft 2 to 3 hundred feet and drift along the vein on the one, two and three hundred foot levels and stop the ore in the regular manner.

The Golden Eagle Vein is situated near the Southwest border line of the property. The values run good in copper, zinc, silver and gold, compares favorable with the Copper King ore which adjoins this property on the Southwest, (see map of vein systems of Polaris, also read Mr. H. C. White's letter to Polaris Co., dated Nov. 16, 1937, relating statistics of the Copper King Mine and his frank opinion of the similarity of the two properties).

All of the ore which the smelter sheets represents came from the Golden Eagle vein and Phonolite Stopes. The pay streak averages from a few inches to about 3 ft. wide on the hanging wall side, the lower portion of the vein has leached and gone down to lower depths.

Exhibit A.

3. Estimated cost of development and plan of operations.

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Install an air compressor (used one)</td>
<td>$1500.00</td>
</tr>
<tr>
<td>One hoist (used one)</td>
<td>$1000.00</td>
</tr>
<tr>
<td>Incidentals such as pipe, wells, ore bins, drilling machines pump, timber, road work, small tools, Social Security Ins. etc.</td>
<td>$3500.00</td>
</tr>
<tr>
<td>300 ft. shaft at $30.00 per ft.</td>
<td>$9000.00</td>
</tr>
<tr>
<td>Drift along the vein both ways on the one, two and three hundred ft. levels, estimated cost</td>
<td>$5000.00</td>
</tr>
</tbody>
</table>

**TOTAL** $30,000.00

Respectfully submitted,

(Signed) J. W. Buckley
Reconstruction Finance Corporation

Gentlemen:

The following report upon the present condition of The Victory Mining Co. Inc. is hereby presented. For your convenience a summary is given first, followed by detailed discussion. A sketch map of the vein system accompanies this report.

SUMMARY

Locations: In the Greenlee Gold Mountain Mining District, 7 miles north of Clifton, Greenlee County, Arizona. A little over a mile from the San Francisco River and from one to three thousand feet higher.

Facilities: An ideal climate, the property can be worked the year round. From the lower to the higher part of the claims there is a change in elevation of about 2000 feet and the slopes are nearly all abrupt and the veins perpendicular.

Geology: Perpendicular fissure veins filled with quartz and porphyry, usually with granite walls and run northeast and southwest. Sedimentaries appear on the western side of the property and the vein walls are sedimentary rock and contacts between sedimentaries and granite. After the veins were formed intrusive dykes of rhyolite and phonolite were thrust up from below, cutting all formations and veins alike. The property is situated near the northeast edge of the Clifton-Morenci mineral belt.

The Golden Eagle Vein is a proven mine with several thousand tons of ore opened 90 ft. between the Golden Eagle and Phonolite Tunnels for a distance of over 500 ft. on each level.

The ore runs well in copper and also some zine as the smelter sheets and assay certificates show, when the secondary zone is reached, will without doubt produce much higher grade copper as the present works show that a greater portion of the vein is reached and gone down to lower depths.

The vein averages about 5 to 6 ft. wide, the greater portion leached. Depth is all that is needed to reach the secondary zone which in my opinion will produce much higher grade copper and zine than the present showing and without doubt larger bodies of ore.

The Victory Mining Co. claims cover ten veins, most of them are large continuous veins and give much promise of developing large bodies
C
'ARTMENT
OF
MINERAL RESOL
ES
STATE OF ARIZONA
MINE OWNER'S REPORT

1. Mine The Victory C, Inc.
2. Location Clifton, Ariz.

3. Mining District & County Gold Mountain, Maricopa
4. Former name

5. Owner The Victory C, Inc.
6. Address (Owner) B01571, Clifton

7. Operator Same
8. Address (Operator)

9. President, Owning Co.
9A. President, Operating Co.
13. Men Employed
15. Production Rate
17. Power: Amt. & Type

18. Operations: Present None

19. Operations: Planned

Reopen Golden Eagle section if $20,000.00 P.F.C. loan is granted. 4 sink 300 ft.
below lowest adit.

20. Number Claims, Title, etc. 41

21. Description: Topography & Geography.

Res. pressure veins filled with quartz
porphyry - granite walls. Intrusive schistite dikes cut all NE formations - por matrix mineral. Golden Eagle
Vein 5' -6' wide, partially back and high silica cont.

22. Mine Workings: Amt. & Condition

2 adits on Golden Eagle with max 250 ft. back. Other workings not described.
A. Dimensions and Value of Ore body

5-6 ft. vein, 100 ft. ore shoots

300 ft.

Mine, Mill Equipment & Flow-Sheet

Road Conditions, Route

Good

Water Supply

ample

Brief History

Special Problems, Reports Filed


Remarks

High pilicious ore has been shipped from

mace workings.

If property for sale: Price, terms and address to negotiate.

No.

Signature: (Data from Mr. Buckley)

Use additional sheets if necessary.
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Mine</strong></td>
<td>The Victory Company, Inc.</td>
</tr>
<tr>
<td><strong>2. Mining District &amp; County</strong></td>
<td>Gold Mountain Mining District, Greenlee County</td>
</tr>
<tr>
<td><strong>3. Former name</strong></td>
<td>Polaris Group</td>
</tr>
<tr>
<td><strong>4. Location</strong></td>
<td>Clifton, Arizona</td>
</tr>
<tr>
<td><strong>5. Owner</strong></td>
<td>The Victory Company, Inc.</td>
</tr>
<tr>
<td><strong>6. Address (Owner)</strong></td>
<td>Box 571, Clifton, Arizona</td>
</tr>
<tr>
<td><strong>7. Operator</strong></td>
<td>Same</td>
</tr>
<tr>
<td><strong>8. Address (Operator)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>9. President</strong></td>
<td></td>
</tr>
<tr>
<td><strong>10. Gen. Mgr.</strong></td>
<td>J. W. Buckley</td>
</tr>
<tr>
<td><strong>11. Mine Supt.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>12. Mill Supt.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>13. Principal Metals</strong></td>
<td>Copper, zinc, gold</td>
</tr>
<tr>
<td><strong>14. Men Employed</strong></td>
<td></td>
</tr>
<tr>
<td><strong>15. Production Rate</strong></td>
<td></td>
</tr>
<tr>
<td><strong>16. Mill: Type &amp; Cap.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>17. Power: Amt. &amp; Type</strong></td>
<td></td>
</tr>
<tr>
<td><strong>18. Operations: Present</strong></td>
<td>None</td>
</tr>
<tr>
<td><strong>19. Operations Planned</strong></td>
<td>Reopen Golden Eagle section if $20,000 RFC Loan is granted. Sink 300 ft. below lowest adit.</td>
</tr>
<tr>
<td><strong>20. Number Claims, Title, etc.</strong></td>
<td>41 Claims</td>
</tr>
<tr>
<td><strong>21. Description: Topography &amp; Geography</strong></td>
<td></td>
</tr>
<tr>
<td><strong>22. Mine Workings: Amt. &amp; Condition</strong></td>
<td>Two adits on Golden Eagle with maximum 250 ft. backs. Other workings not described.</td>
</tr>
</tbody>
</table>
23. Geology & Mineralization  Ten Perp. fissure veins filled with quartz and porphyry--
granite walls. Intrusive rhyolite dikes cut all N.E. formations--post mineral. 
Golden Eagle Vein 5 feet to 6 feet wide, partially leached. High silica content.

24. Ore: Positive & Probable, Ore Dumps, Tailings  "Several thousand tons."

24-A Vein Width, Length, Value, etc.  5 to 6 foot vein. 300 foot ore shoots.

25. Mine, Mill Equipment & Flow Sheet

26. Road Conditions, Route  Good.

27. Water Supply  Ample.

28. Brief History


30. Remarks  High silicious ore has been shipped from miscellaneous workings.

31. If property for sale: Price, terms and address to negotiate.  No.

32. Signed.................................................................
(Data from Mr. Buckley)

33. Use additional sheets if necessary.
Date: August 9, 1939

Location: Greenlee County

Address: Clifton, Arizona

Number Claims, Title, etc.: 41, held by location

Description: Topog. & Geog. Elevation 4,000 to 6,500 - 8 miles from Clifton, 1 mile from river.

Mine Workings: Amt. & Condition: Mostly tunnels, one badly caved, the balance more or less accessible.

(over)
Geology & Mineralization  Porphyry-quartz veins, granite walls. Veins large and continuous, some shipping ore, but classed as a milling proposition

Ore: Positive & Probable, Ore Dumps, Tailings Two or three thousand tons blocked cut and wide veins of milling ore uncovered

Mine, Mill Equipment & Flow Sheet

Road Conditions, Route  Six miles fair mountain road, two miles narrow

Water Supply  Possibly enough on property for small pilot mill if water used over. Plenty of water one mile distant.

Brief History  Numerous prospectors grouped their claims to form a stock company, which finally went broke about 1905. The ore is complex and the mill they had would not save the values.

Special Problems, Reports Filed

Remarks

If property for sale: Price, terms and address to negotiate.
Price $100,000. Small payment down and balance on very favorable terms. J. A. Hagan, Box 933, Clifton, Arizona

Signed  J. A. Hagan

Use additional sheets if necessary.
Date August 6, 1939
Location Greenlee County

Owner J. A. Hagan
Address Clifton, Arizona

Operator Polaris Mining Company

President

Mine Supt. J. W. Buckley

Principal Metals Gold, silver, copper

Mill Supt. Four

Production Rate Nominal, at present.

Men Employed None

Mill: Type & Cap. None

Power: Amt. & Type Compressor and air drills

Operations: Present Development

Operations Planned The plan at present, is to ship ore enough to purchase and install a mill, or, sell.

Number Claims, Title, etc. 41, held by location

Description: Topog. & Geog. Elevation 4,000 to 6,500 - 8 miles from Clifton, 1 mile from river

Mine Workings: Amt. & Condition Mostly tunnels, one badly caved, the balance more or less accessible.
Geology & Mineralization Porphyry-quartz veins, granite walls. Veins large and continuous, some shipping ore, but classed as a milling proposition

Ore: Positive & Probable, Ore Dumps, Tailings Two or three thousand tons blocked out and wide veins of milling ore uncovered

Mine, Mill Equipment & Flow Sheet

Road Conditions, Route Six miles fair mountain road, two miles narrow

Water Supply Possibly enough on property for small pilot mill if water used ever. Plenty of water one mile distant.

Brief History Numerous prospectors grouped their claims to form a stock company, which finally went broke about 1905. The ore is complex and the mill they had would not save the values.

Special Problems, Reports Filed

Remarks

If property for sale: Price, terms and address to negotiate.
Price $100,000. Small payment down and balance on very favorable terms. J. A. Hagan, Box 953, Clifton, Arizona

Signed ........................................

J. A. Hagan

Use additional sheets if necessary.
THE POLARIS MINE

The data covers a period of approximately forty years obtained from company records, U.S. Government sources, geologists, engineers and mining men, etc.

Area - Southeastern Arizona and Eastern Greenlee County

Property - Forty-one claims of gold and copper development $100,000.00. Three thousand feet of working (tunnel) over five miles extensive mineralized tracable veins reaching fifteen to twenty feet wide extending deep into the property. Year-around excellent climate, water plentiful. New ready for Mill.

Mill Site Includes Evans Point Dam and Mill Site fifty-five acres which project recently passed Senate contemplative construction of $1,000,000.00 dam.

Accessibility - Three miles of good county road. Three miles of fair mountain road.

History dates back prior to this century when miners were used in obtaining surface gold values.

Titles by location and deed from the United States patented to Theodore Roosevelt.

Mineralization - Placer veins in granite. Include sliver of pyrite and sphalerite. Surface ores, malachite and pyrite cemented in in depth replaced by secondary calcite, coating and replacing pyrite. The ore is fine-grain, salicous pyrite, calcopryite, and calcerite.

Geology - The oldest rocks are pre-cambrian granite and quartzite schists separated from the covering paleozoic strata. The base is cambrian, quartzite, schistose, succeeded by ordovician limestones, devonian shales and argillaceous limestones cover of the cambrian bed and the upper part of the limestones consist of heavy beaded limestone of carboniferous age. A quartar sandstone porphyry occupies a semi-circular area in the basin of the Polaris. The upper surface of this massive fragments of quartzite, limestones and shale. The contact metamorphic notion of this porphyry included in the porphyry development of magnesite and pyrite, sliver of light colored white or pink lithoid pyrite cut the granite.

Topography - The area is composed of high ridges and complex rugged hills. The geographical structure explains the presence of older rocks, granite, limestones and conglomerates is deeply and irregularly eroded, as a result of these conditions the area is an extremely irregular topography.

General Information - Elevations 3,500 feet at Evans Point 6,500 feet at crest of Polaris. San Francisco River passing through Evans Point, a sinuous stream. Property extends east and west one mile approximately the same north and south. The land is very irregular and poorly drained, the surface area is very large and potentially valuable. Arising from engineers report May, 1947. Total samples 129. Group One - 67 samples. Extent 6,500 feet. Outcroppings and surface workings. Value from $67.00. Group Two - 62 samples. Extent 1,500 feet. Lowest value $0.33. Highest value $33.00. Average value $3.00. (from Phase One 14 samples, excepting 4,000 feet. Lowest value $0.33. Highest value $70.00. Average value $15.00 per ton). Group Three - 24 samples. Extent 4,000 feet. Lowest value $0.33. Highest value $155.37. Average value $12.79. Extent of sampling 4,000 feet. Group Five - 9 samples. Lowest sample $5.88. Highest sample $86.22. Average $32.95.

EXECUTIVE AND STATEMENTS FROM AVAILABLE DATA ON THE POLARIS PROPERTY

By Engineers and Geologists Waldemar, Lindgreen, Evans, Wincbelet, Reid, etc.

Mineralization - The mineralization of this property is not given sufficient credit in the old reports (40 years ago). Possibly the examining engineers in these days realized the great difficulties to be encountered by the early operators. They had to appeal to authority to support their low value of appraisal.

Superintendence - This early operation was conducted under gross mismanagement. Engineers and geologists' advice evidently was not obtained and it is presumed that the owners were not mining men.

Operations - Analysis and mapping do not appear to be clearly indicated. Under proper supervision and finances this property should have been a big producer long ago.

Search - For the present mineralized area of showing of this character is difficult to locate that is not already in operation. The ore deposits are exceptionally large area. Indication are that it is possible and some surprising shows are possible evident in the subsides.

Exploration - Determination of the potentialities of this property would require extensive exploration because of the extent of the mineralization. Values, both shipping and milling, have been encountered generally throughout the property where any particular degree of development was undertaken. The indications for exceptionally large ore bodies are excellent.

Environment - The eventual large scale mining of this property should be from a 4,000,000 ton from Dorey Gulch, cutting all of the immense veins. The tunnel should be a single opening and acting as a drainage tunnel from which it is indicated ample water will be supplied for all mining.

Depletion - It is indicated the depletion will be excessively large.

Surface - For more than 100 assays principally of the surface district, values have been persistent and indicate that the ore is as depth is obtained, depth being necessary to avoid the area where the values are lost, near the surface. The geology is such that you cannot expect to find other than small enriched areas near the surface.

Surface - Don't misunderstand your values of the surface showing. The values that were once there are not there now—they're practically all washed away.

15 is in. below the main level which is 100 feet down through the ore runin in to the tunnel on the Lady Franklin Vein. Samples taken in this tunnel indicate that the value of this ore will be $20.00. More wealth will be encountered in the Russian Bear vein than is indicated in the ore runin samples. From other evidence on the property a ton would be a conservative estimate of the value of this ore body. Four million tons of ore will be developed by each thousand feet of depth on this deposit. Only a drilling program can prove actual depth and values to be found here.

Sample assays from the Black Prince and Lady Franklin Veins indicate that $20.00 will be a conservative estimate for the value for the ore contained in those deposits. A short cut near the intersection of these two veins can be used to exploit both. Above this short cut in 100 feet, will develop in excess of one million tons of ore.

Pozitive ore dresser - The old Polaris Company had no alternative then to try to locate the points of rich ore. The large bodies of silicified ore were possible to these because of their complex condition,...
THE POLARIS MINE

The data covers a period of approximately forty years obtained from company records, U.S. government sources, geologists, engineers, and mining firms, etc.

Area - Southeastern Arizona and Baja California

Property - Forty-one claims of silver, gold, and copper development $200,000.00. Three thousand feet of working (tunnels) over five miles extensive mineralized trackage reaching fifteen to twenty feet wide extending across property. Continuous good assay. Tear-around excellent climate, water plentiful. Now ready for mill.

Mill Site Includes Evans Point Dan and Mill Site fifty-five acres which project recently completed Senate committee plan for construction of $1,000,000 dam.

Accessibility - Three miles of good county road. Three miles of fair mountain road.

History dates back prior to this century when miners were used in obtaining surface gold value.

Title by location and deed from the United States executed by Theodore Roosevelt.

Mineralization - Fissure veins in granite, Inclulsive dikes of pyrite and chalcopyrite. Surface ore, malachite and other oxidized minerals, in depth replaced by secondary chalcoite, coating and replacing pyrite. The ore is fine-grained, saltpeter, pyrite, caliche, and calcite pyrite.

Geology - The oldest rocks are pro-cambrian granites and quartzite schists separated from the covering palaeozoic strata. The base is cambrian, quartzite, sandstone, succeeded by ophiolite, limestone, dolomite shale, and serpentine. Limestone cover of the ophiolite beds and the upper part of the palaeozoic shales consist of heavy bedded limestone of carboniferous age. A quartz monzonite porphyry occupies a semi-circular area in the basin of the Polaris property and contains as inclusion masses fragments of quartzite, limestone and shale. The contrast metamorphic action of this property included in the porphyry development of magnetite and epidote, dikes of light colored white or pink lithicologic cut the granite.

Topography - The area is composed of high ridges and complex rugged hills. The geographical structure explains this condition of affairs very well. A core of old rocks, granite, limestones and sandstones is deeply and irregularly eroded, as a result of those conditions.

General Information - Elevation from 5,500 feet at Evans Point to 6,600 feet at crest of Polaris. San Francisco River passing through Evans Point, a sizable stream. Property extends East and West one mile, approximately the same north and south. The terrain is very irregular and probably the surface area is twice the survey area.


Excepts and statements from available data on the Polaris Property.

By Engineer and Geologist Waldman, Langford, Schreiber, Jones, Winchell, Calhoun, Reid, etc.

MINERALIZATION: "The most important of this property is the high grade of silver in the old ore bodies which are excellently mineralized and promise to be a very large producer." (Group Three)

SUPERINTENDENT: "No possibility of milling, distance to plant and low value of silver." (Group Three)

SOMES: "An extensively mineralized area of showing of this character is difficult to locate that is not already in operation. The ore deposits cover an exceptionally large area. Indications are that it is deep-seated and some surprising showings are possibly evident in the sulfides." (Group Three)

EXPLORATION: "Determination of the potentialities of this property will require extensive exploration because of the extent of the mineralization. Values, both aditng and milling, have been encountered generally throughout the property where any particular degree of development was undertaken. The indications for exceptionally large ore bodies are excellent."

INVESTMENT: "The eventual large scale mining of this property should be from a 4,000 ft. tunnel from Dorney to Evans Point the access to the underground veins. This tunnel should be a hoistage tunnel and acting as a feeding tunnel from which it is indicated ample water will be supplied for all milling." (Group Four)

DEEP: "Keep the north end of the tunnel and eventually the deposit will be surprisingly large." (Group Four)

"For more than 100 assays principally of the surface showing, values have been persistent and indicate that all of these veins carry pyritic ore as soon as depth is obtained, depth being necessary to avoid the barren zone. Nearly all the ore has been lost, near the surface area. The ore is such that you cannot expect to find other than small swelled areas near the surface."

SOMES: "I do not understand your values from the surface showing. The values that were once there are not there now-they're practically all leached away." (Group Three)

"It is estimated that five thousand tons of ore remain to be stopped out of the tunnel on the Lady Franklin Veins. Seventy per cent of this ore will be $30, a ton would be a conservative estimate on the value of this ore body. Four million tons of ore will be developed by each thousand feet of depth on each deposit. Only a drilling program will prove actual deposits and values to be found here." (Group Four)

"Sample assays from the Black Prince and Lady Franklin Veins indicate that $30, a ton will be a conservative estimate for the value of ore contained in these deposits. A short run near the intersection of these two vein values can be used to exploit both. Each shaft, sunk to five hundred feet, will develop in excess of one million tons of ore." (Group Four)

INVESTMENT: "The old Polaris Company had no alternative but to try to locate the deposits of rich ore. The large bodies of milling ore were entirely useless to them because of their complex condition, poor grade, and lack of assays."

WELL MINERALS: "There is a large number of strong, persistent veins are found on the Polaris." (Group Three)

FLASHER: "6.5 miles along the San Francisco River implies indicates that the eroded area of the Polaris and vicinity contain a very substantial amount of ore."

MINERALS: "1.0 million feet of the Franklin and Borek Veins, which extend across the property for 6,500 ft. and which will average more than 15 ft. in width, will undoubtedly develop 6 to 7 million tons of ore above the 500 ft. level, while the great thickness of these formations in this district assures a continuing of veins which follow the limit of profitable extraction." (Group Three)

DEPTH REQUIREMENT: "It is difficult to understand that with so many excellent sites to gain depth and that there are miles of feet of workings and only a minimum depth of under 200 feet. The most important thing on this property was to reach the ore where it would be most stable. This does not appear to be far from the present deepest workings." (Group Four)

CONCLUSION: "The property is of sufficient size and the ore bodies adequately extensive to permit large scale operations. The mineralization is of such a character that there is a large amount of actual ore available with a number of years of the property has not yet been prospected. A property with $100,000, invested in connection therewith through not entirely a practical expenditure, nevertheless, such an outlay has been sufficient to permit the conclusion that the property is to be a producer on a substantial scale." (Group Four)

EVANS POINT CLAIM: "Owners question value of placer gravel. It is, however, an indicator of gold deposits once existing on the Polaris. Geologists conclude this placer area, extending for several miles, is eroded from the Polaris and surrounding property."

The short excerpts herein are taken from the extensive data concerning the Polaris Property. The mining information dating from the early 20th Century is taken largely from the records of the then operating company, the United States Geological Survey, Bureau of Mines and other agencies and sources of information. There is also available recent engineering and geological reports and other data on the Polaris Property. Since 1908 or 1910 the property has not been operated or developed.

The Polaris lies between meridians 100° 15' and 100° 30' West Longitude and parallels 32 and 33 North Latitude. It is in the Southern part of Greenlee County, in the Southeastern part of Arizona, and the dividing line between Arizona and New Mexico is 11 miles distant from its Eastern boundary and 9 miles South of its Southern boundary. The South of the Southern boundary is 3,500 feet.

LOCATION

The Polaris (Goldendale) Mining Property, also known as the Polar Property, is located 6 miles North of Clifton. (Refer to any government topographical map of that area). Precious minerals are found in the area from the Germanic, Colorado, and Pimlico. The elevation is 6,000 feet.

EVANS POINT

Records, Miscellaneous Vol. 452, Page 295, filed and recorded July 6th, 1903 at 9 A.M.

The property is located 6 miles North of Clifton, on the San Francisco River, at the river's westmost point.

Access: A county road from Clifton extending up the San Francisco River to Evans Point and from there the Polaris Road climbs up 800 ft. to the S. E. corner of the Polaris Property.

History

The Polar Property is located in an area of Arizona said to be the location of the first discovery of gold in the state. The copper production dates back to the 70's.

General Information

The Polar Property extends about 800 yards into the property. At 6,000 ft., there is a principal airfield, and at Evans Point, moored 2,600 ft. below. Water is available on the property and the San Francisco River. A stream of water runs one mile North and South the same distance. The terrain is very irregular and the surface area is twice that of the cutout.

Geology

The widest vein yet encountered is a cross-cut near the surface of 40 ft. Outcroppings of 10 to 20 ft. are abundant. The surface of the property is covered with a strike of a W.N.E. E., S.W. slight dip to the West. The veins are composed of sedimentary rock and contains sedimentary and granular. After the veins were formed, the veins of malleable and other malleable minerals, which are at depth, are replaced by secondary chalcopyrite, szomolnita, and malachite. In depth the primary ore will dissolve, be found to consist of pyrite and malachite. The ore is encountered by a wealth of quartz gangue. The ore bodies occur in clusters of variable form and extend to 80 ft. or more in diameter. The ore is fine, with pyrite, chalcopyrite, and other minerals.

General Status

The oldest rocks are pre-Cambrian granite and quartzite schist. From the bottom to the top, the base of erosion, quartzite schist, succeeded by another limestone, dolomite shale and argillaceous limestone cover the original bed. The uppermost part of the pre-Cambrian sediments contain heavy banded limestones of carboniferous age. The limestones are present with their usual characteristics. They are covered by small areas of shale. A quartz monzonite porphyry occupies a semi-circular area in the basin of the Polar Property and contains as included masses fragments of granite. The contact metamorphic action of this porphyry is as a rule slight and close to the sediments. The smaller masses include the porphyry development of mafic, eclogite, and granitic-granulite gneiss, generally with a Westerly trend.

The area is composed of high ridges and remnants of rugged hills. The geographical structure is much of the area. The area is deeply and irregularly eroded, as a result of the occurrence of the area is an extremely irregular terrain. The “Lava” rising on the West side of the San Francisco River is composed of a series of imposing mountains towering above the River, exceedingly rough and precipitous amphitheatres leading down from the summit to the slopes of Colorado and Dorsey Galcias. The Pahrases, limited by the River Creek on the South, has an elevation of 6,200 ft., and rises boldly with dark red cypums 2,000 ft., above the basaltic filling the bottom of San Francisco Canyon.

EXTRACTS AND STATEMENTS FROM THE AVAILABLE DATA OF THE POLARIS PROPERTY

By Engineers and Geologists

"There are two perpendicular or nearly perpendicular veins on the property which can be traced from the surface. The veins are fissure type filled with quartz and pyrite with granite rock and hanging walls. Ex-"
"Samples taken any from the Black Prince and Lazy Franklin Veins indicate that $30, a ton will be a conservative estimate for the value of ore contained in these deposits. A shaft sunk near the intersection of these two veins would be used to exploit them both. Such a shaft, sunk to five hundred feet, will develop in excess of one million tons of ore."

"A mill with modern flotation plant must be set up to treat the ore from this property. This mill should have a minimum capacity of 600 tons per day. The mill should be designed to treatment of the ore with the idea of increasing capacity as more ore is developed on the property."

"In my opinion, there is no evidence that the owners are already in a position to mine this property a successful producer."

"There is definite grounds for assuming that the ore bodies will increase in value and position in size as depth is attained. There is also a good possibility of encountering other veins, not traceable on the surface."

FOLLOWING SAMPLES RECENTLY TAKEN BY ENGINEERS ARE EXAMPLES OF 126 SAMPLES TAKEN

<table>
<thead>
<tr>
<th>Samples Taken May 24, 1927 From the Outcrops of Russian Bear Vein, Locating East End</th>
<th>Total samples 57</th>
</tr>
</thead>
</table>
| which sample was taken at 39.2 ft, A.U. 30.25, A.G. tr. | C.U. 1.04, Value $53.34, Highest value in wide outcrop 49.4 ft, A.U. 38.20, A.G. 60.28, C.U. 0.72, Value $22.12. Highest value picked sample, 3.5 ft, A.U. 34.00, A.G. 58.19, C.U. 0.42, Value $75.85, Outcrops from which the foregoing samples were taken extend 50 ft.


<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest Value taken in tunnel $64.85, Sample taken from ore stores in tunnel 15 ft. from face - depth of this vein from which furthest values were taken, 4,000 ft. All samples were taken across the vein unless otherwise noted in both outcrop and underground sampling.</td>
<td></td>
</tr>
<tr>
<td>I am informed that the foregoing compilation, recently prepared among some additional, was at an expense of 4,000.</td>
<td></td>
</tr>
</tbody>
</table>

Miscellaneous Information of Polaris "Which Has Been Extracted and Conveyed as Much as Possible from the Forthcoming Expository Information of the Polaris Holdings"
OLD DATES. The gold seekers; the water-shed hills used on the Polaris 50 years ago, were no mere pecuniary
the attempt to lay 6 miles of pipelines for hydraulicking the placer gold found from the Polaris, without San Francisco River. The fact that the Polaris failed
fifty years ago has very definitely proven reason. They failed to dig the Pennes Canal on their first attempt,
but with grate perseverance it was lately accomplished.

The old Polaris Company had no alternative then to try to locate the proofs of rich ore. The large bodies of milling were entirely useless to them, because of their complex
condition, they could not be called to known method in those days.

ADVANTAGES. "Investigation might involve the following 1. "Diggings as scattered over the property to the extent of 3,000 ft., offer an idea as to what will be encountered with cost developments.
2. Forty years ago, when the property was operated, the methods of today had not yet been invented, which was not the case with Polaris. In milling operations then up to 1,600,000 tons of ore was handled. Now, with new machinery we can mine about 2,000,000 tons of ore in a year.
3. Since 1899, the values of metals have increased 6% in gold, silver and copper, adding which to the fact that the sales price and value becomes exponentially 25%. Old-timers are not always right done by hand. New machinery is used greatly reducing the cost per ton of ore mined and under methods decrease the labor required.

"The property has defined limits. The requirements to start operation constitute only the proper equip-
ment to obtain the metals or the concentrates from the available area that are fully established, with
$100,000.00 machinery in place. This is not out of the proper character, it does constitute a foundation to proceed further on, reducing such of the future exploration work."

ADVANTAGES COMPANY. 

The present company believe the assumption of the property is much more stable.

A preliminary examination shows that there are available substantial amounts of gold milling ore with an excellent promise of recovery in several areas of the property.

25 ASAssay Average of:

25 assays Total Average Inclusive copper ---- 1.0.1
25 assays Total Average excluding copper ------- 7.79

Above assays based on 100 ounces silver, 25% per lot, and copper at 30 cents per pound.

Note: Values today would be about 80% higher with copper at 45c, instead of 30c, and at 42c, instead of 50c, in the above assays. The same applies to the ore body in the property, by extrapolating the mining opinion.

DISCLAIMER: The disclaimers on the Polaris property stand out with exceptional clearness. When sufficient depth is obtained to get below the breccia on the Southeast portion of this property, indications are that the ore formation may be found in conjunction with a rich float resting in the thousands of dollars that is said to have been poured up in that area.

GRAVE IMPORTANCE. When the placer was exposed apparently exist in the gold but consideration must be given to that the copper and other metals have leached from the surface and the shallow workings to such an extent that it is 500 ft. formerly exist.

"It has not been determined that in the present case the condition, extensive copper deposits must be expected."

EVIDENCE. "It is quite evident that at no distant date hydroelectric power will be avail-
able on the property. This construction has been under consideration for a number of years, on occasions preparations for condemnation was made. Such an installation will add very materially to the value of the Polaris holdings."

BOULDER DAM SITE. "It is quite evident that at no distant date hydroelectric power will be avail-
able on the property. This construction has been under consideration for a number of years, on occasions preparations for condemnation was made. Such an installation will add very materially to the value of the Polaris holdings."

TIENTS POINT DAM SITE. "It is quite evident that at no distant date hydroelectric power will be avail-
able on the property. This construction has been under consideration for a number of years, on occasions preparations for condemnation was made. Such an installation will add very materially to the value of the Polaris holdings."

GENERAL INFORMATION. "This is a case some few hundred ft., above the river, which drops off in almost a perpendicular precipice into a narrow gorge of the San Francisco River. The Phelps Dodge Corporation had in the past attempted to get on this dam site from us. They were assisted by the War Department. This property is based upon a deed from the U.S. government by President Theodore Roosevelt in 1903, granting title to the actor of the present owners.

The location was under consideration by Congress for a dam costing $100,000 to $3,000,000, depending on height. A recent newspaper article re-establishment of construction of Central Arizona Water Projects passed Senate, bringing construction to a point, which is the property of the New Years Point Improvement Company. The feasibility of the project should add greatly to the value of property and amount derived from sale of dam site should be substantial.

The conditions of placer ground. It is, however, an indicator of gold deposits once existing on the property. Geologists conclude this placer area, extending for several miles, is around the Polaris and surrounding property.

ENGINEERING, GEOLOGICAL U.S. GEOLOGICAL SURVEY DATA, BUREAU OF MINES, VEIN MAPS, TYPICAL MAPS, HYDRO-
MECHANICS, ASSAY, HISTORY, ETC. AVAILABILITY OF REQUEST.