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James Doyle Sell Mining Collection

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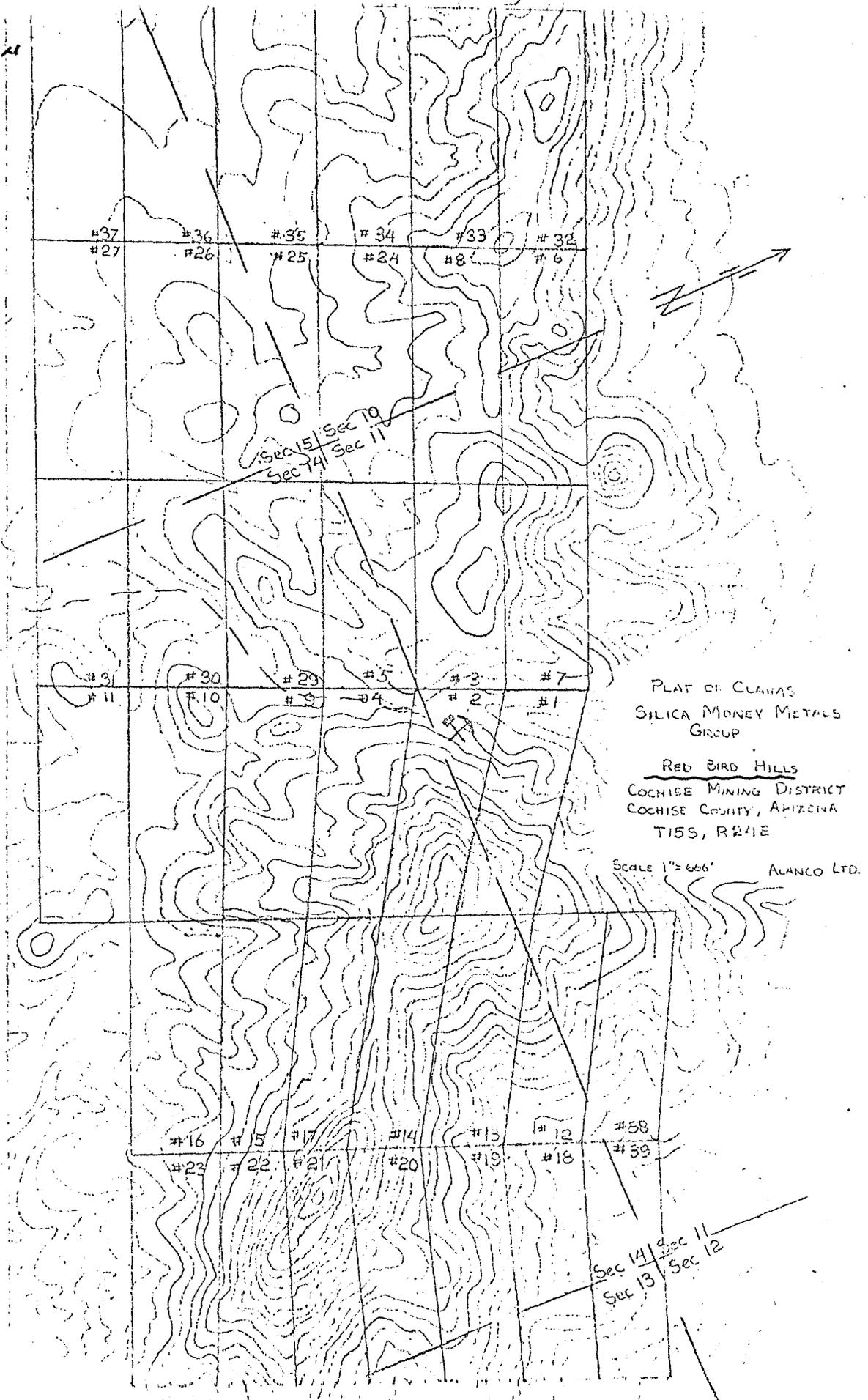
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MAURICE HEDDERMAN  
P.O. BOX 727  
AMAZO, AZ  
85640

PH: 398-2533



ANTHONY LANE & ASSOCIATES  
GEOLOGIST, ENGINEER'S AND CONTRACTORS

P. O. BOX 5843  
TUCSON, ARIZONA  
602-624-0951

March 24, 1973

Rollan May  
9750 East Tanque Verde Road  
Tucson, Arizona 85715

Dear Mr. May:

In reply to your enquiry pertaining to specific programs on the Red Bird Hill Project, I am herein outlining in detail the various phases of the proposed program.

I have included a map of the general area of the Cochise Mining District. This indicates the location of the Red Bird Hills. The other large shaded area to the south and west is that which is presently being drilled by Superior Oil Company and Cypruss Mines. Quintana Oil Company is also active in the area. The area noted as the Stewart Leases are presently being drilled. The other shaded areas are those which are under lease by various concerns and individuals from the State of Arizona.

The main reason I am referring to the activity in the area is that besides the potential of the precious metal (Gold - Silver) being contained in vein type systems within the Red Bird Hills (previous reports), there also is a good potential of a copper deposit at depth. The drilling, which is being undertaken by the various mining companies in the area, has been in both the sediments and in the intrusives.

The area of the Red Bird Hills is basically an intrusive in part and as such may have a direct bearing on the possible copper mineralization.

Therefore, in outlining a program, I feel that both aspects of this property require consideration. Program I should consist of appraisal of precious metals

within existing vein systems. Program II should consist of exploration of a deeper seated base metal deposit.

Program I.

a. Complete Geological Survey including regional geology, local geology, underground mapping, sampling and assaying of underground workings, projections.

\$3,500.00

b. Incline Drilling of Areas of Projection both lateral and horizontal.

The reason for incline drilling is that most vein systems in this area are more accurately defined by drilling from both sides of possible vein type structures. These drill holes would be located to encounter projection of vein systems to depths below existing workings and extending along structures from known ore sources.

10,000 feet incline drilling @ \$15.00 per foot, including splitting and assaying of core in sections of mineralization...

\$150,000.00

c. Set Up of Mining Operations

Rehabilitation of existing shafts 100' @ \$100.00 per ft. \$10,000.00

Development of 200 ft. New Shaft @ \$250.00 per ft. 50,000.00

Development of 200 ft. Drift and Levels @ \$50.00 per ft. 10,000.00

Equipment for Above - Permanent Hoist, Compressor, etc. 50,000.00

Total Cost of Program I \$273,000.00

Program II

Geological and Geophysical Surveys \$10,000.00

20,000 ft of Vertical Drilling @ \$8.50 per ft. 170,000.00

Geological Logging and Splitting Core 5,000.00

Assays 3,000.00

Misc. Engineering Time, Surveys of Holes  
Cross-sections, etc. 5,000.00

Total Cost Program II \$193,000.00

The two Programs, as outlined above, are both predicated on sufficient values being established from the first appraisal of the property and each phase of exploration, providing values are established initially, are based upon the results of the work preceding.

Program I would, if values are established, place the property to the stage of production. In fact, in all probability, some production would be expected during the rehabilitation period.

Another aspect of Program I is the values expected would be in the form of precious metals which, when refined, represent no problems for sale. The same is not true at this time pertaining to base metals due to the pollution controls being applied at the various smelters in the county.

Program II would, if successful, make available a large deposit which could be placed with a major company or placed into production on some negotiated basis with major finance.

I hope this proposal allows you to interpret the requirements of this undertaking. If there are further questions, please contact me immediately.

Yours sincerely,

Anthony Lane & Associates  
Anthony Lane

AL/tis



# HAWLEY & HAWLEY

ASSAYERS AND CHEMISTS, INC.

Registered Assayers

Supplies, Reagents, etc. - Samples - Weights - Balances

1800 WEST 41st ROAD  
TULSA, OKLA. 74106  
PHONE 461-1111

Department of Buyer's Name: Phelps Dodge Corp., Douglas, Arizona and El Paso, Texas; A.S. 1100, El Paso, Texas and Douglas, Ariz.

| IDENTIFICATION | Gold<br>oz | Silver<br>oz | Copper<br>oz | Lead<br>oz | Other |
|----------------|------------|--------------|--------------|------------|-------|
| Sample 1       | 0.040      |              |              |            |       |
| Sample 2       | 0.360      |              |              |            |       |
| Sample 3       | 0.840      |              |              |            |       |
| Sample 4       | 0.630      |              |              |            |       |
| Sample 5       | 0.140      |              |              |            |       |
| Sample 6       | 0.10       |              |              |            |       |
| Sample 7       | 0.190      |              |              |            |       |
| Sample 8       | 0.140      |              |              |            |       |

There is pay silver in several of the samples.

APPROX AVERAGE of Above @ 3500 Told  
\$12.50 PER TON  
\$7000 Gold would be \$2500 ore

RED BIRD MINE

**SAWYER-ADECOR INTERNATIONAL, INC.**

3780 WILSHIRE BOULEVARD  
LOS ANGELES, CALIFORNIA 90010  
TELEPHONE 380-3232

April 22, 1971

Mr. Maurice Hedderman  
Old Gold Mining Company  
P. O. Box 727  
Amado, Arizona 85640

Dear Maurice:

Reference is made to agreement entitled "Modification and Restatement of Mining Lease," dated March 11, 1966, between Sawyer Petroleum as Lessor and Maurice Hedderman, Lessee. This lease, dated March 11, 1966, and including an option to purchase as set forth therein, is scheduled to end on September 11, 1971.

This is to confirm to you that Sawyer-Adecor International, the successor named corporation to Sawyer Petroleum Company, hereby extends the term of this lease and option from September 11, 1971 for an additional sixty six (66) months beyond that date.

The only further modification is the modification of the agreement to clause ten (10) entitled "Removable of Machinery and Supplies" and this extension period will provide that removable of any such mill or improvements on the property can be made within a six (6) months period in the event of abandonment.

Please confirm in writing your acceptance of the terms and conditions governing this extension.

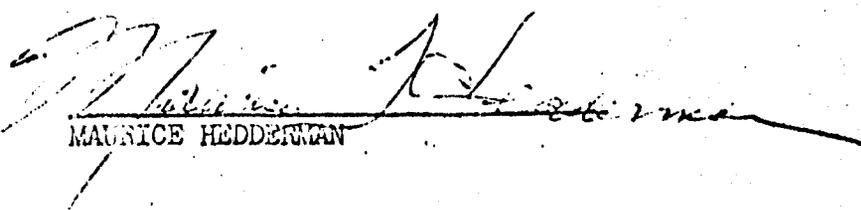
Yours truly,

SAWYER-ADECOR INTERNATIONAL, INC.

  
ERNEST W. SAWYER, JR.  
Executive Vice President

NOTE: \$70,000.00 is due and payable to Sawyer-Adecor by  
March 11, 1977 for full title to optionor

ATTEST:

  
MAURICE HEDDERMAN

4240 E. Bellevue  
Tucson, Arizona  
July 2, 1962

Mr. Earl H. Brown III  
6536 Shepherd Hills  
Tucson, Arizona

Dear Mr. Brown:

The Payne, Bethune, and Emerson reports on the "Red Bird Mine", made in 1926 and 1934, are as up to date regarding the underground development of the mine, as though they were made as of this date. Development work is all that has been done on the property during the interim of time since the writing of the above reports.

Thirty years ago the mine was in an isolated area, and milling the ore to save on shipping costs was uppermost in the minds of all mine operators. Considerable experimentation was done on the ore with the idea of putting in a 250 ton per day mill; however, nothing ever came of it due to the lack of capital and the low price of gold and silver at that time.

Conditions have changed today. Gold and silver have increased in value, and there is constant speculation over further increases. The basic vein matter of the mine is silica quartz, and all copper smelters need siliceous ore as a flux in their copper converters. One can negotiate a favorable contract for this class of bonus ore--a flux with a metal content. Such a contract would normally include free smelting of the ore and some additional bonus, either in cash or free shipping. Therefore, the only real cost would be that of mining the ore, which should be quite low with a vein of such great width; and consequently, milling is no longer a necessary consideration.

As stated previously, the underground works are the same now as at the time these reports were made. Some development and assessment work on the claims is all that has been done on the property in the last years. All of the ore, both in reserves and potentialities, that is estimated in the reports is still there. To the best of my knowledge, only 50 or 60 tons have been shipped from the property.

There is a tremendous tonnage of ore in sight; and if worked properly, the mine will show a very nice dividend.

Sincerely yours,

Maurice Hedderman

(present owner)

6536 Shepherd Hills  
Tucson, Arizona  
July 2, 1962

As evidenced by the reports of Payne, Bethune, and Emerson, the "Red Bird Mine" is very obviously well considered by men experienced in the mining profession. But what about the investor? To him it should be attractive from three standpoints:

1. SECURITY. During times of uncertainty in the stock market, gold mining stocks usually gain in strength for the simple reason that it is commonly recognized that gold is, and must continue to be, an absolutely stable standard of value, regardless of the state of the economy. This renewed interest in gold stocks is also stimulated by the belief that in this period of rising costs and shrinking reserves, raising the price of gold and therefore revaluating the dollar, is the only possible stimulus to profits and a means of counteracting the "gold flow".

2. TAX ADVANTAGES. If a limited corporation (Sub-Chapter S Corporation) were to be formed, consisting of not more than ten investors, tax relief normally intended for the corporation could be passed on to the investor, and the corporation itself would not be required to pay federal corporate taxes. After return of capital, the investor's income would, I believe, be 15% tax free due to the depletion allowance, and additional "write-offs" could be made against this income from costs of development and mining and depreciation of the equipment.

3. PROFIT. In the report of Dr. Henry Mace Payne it is pointed out that by using the depth of the shaft, 180 ft., and the development work along the length of the vein for a distance of 500 ft., there is a proven reserve of 500,000 tons, which at an average value of almost \$5.00 per ton would equal \$2,500,000. As the vein is exposed on the surface for over one mile in length, it might be possible to multiply this figure by ten to arrive at \$25,000,000, which could be the value of the full length of the vein to a depth of 180 ft. Then one could project this depth an additional 190 ft. to arrive at a possible value of \$50,000,000. And so on. The indication of the reports is that the vein should increase in value with depth, especially at the 500 ft. level.

Our initial goal would be to produce something in excess of 200 ton daily within the first two months and progressively increase production to between 500 and 1,000 tons a day. Actually, our only limitation in daily production would be the capacity of our machinery. However, using the lowest figure of 500 ton per day and 20 working days, one arrives at a monthly production of 10,000 tons. By using "block caving" as the means of mining the ore, it should be possible, according to estimates I have received, to mine

the ore for less than \$1.00 per ton. And assuming that a reasonable contract can be negotiated with Phelps Dodge at Douglas, Arizona, a distance of 50 miles by rail, providing free treatment of the ore and free shipping, this would leave a net of \$4.00 per ton or a net monthly income of \$40,000.

Finally, we would like to claim and patent a large area of ground on the basis of the existing mine, possible as many as 500 claims of 10,000 acres which would be located only a mile and a half from the Benson Highway.

Sincerely,

Earl H. Brown III



# HAWLEY & HAWLEY

ASSAYERS AND CHEMISTS, INC.

Regulators - Assayers

Chemists - Metallurgists

Impress

Weights

Receptacles

Keep for file

\$35.00 Gold

1800 WEST GRANT ROAD

SILICA

OKLAHOMA ASSAYERS ASSOCIATION

Properties of Buyer's Plant: Phelps Dodge Corp., Douglas, Arizona and El Paso, Texas; AMARCO, El Paso, Texas and Mexico

| IDENTIFICATION             | Gold | Silver | Copper | Oxides | Other | Value |
|----------------------------|------|--------|--------|--------|-------|-------|
| Surface Dust               | .140 | .040   |        |        |       | 43.2  |
| Foot of Flyer Ladder       | .350 | .360   |        |        |       | 27.0  |
| Bottom of Screen Ladder    | .250 | .890   |        |        |       | 68.2  |
| 40 Feet from Screen Ladder | .650 | .650   |        |        |       | 27.0  |
| End Second Level           | .250 | .140   |        |        |       | 30.9  |
| Specimen Second Level      | .010 | .010   |        |        |       | 23.4  |
| 2nd Foot Level             | .190 | .190   |        |        |       | 55.4  |
| Central Sample Level       | .140 | .140   |        |        |       | 42.3  |

@ \$80.00 Gold

1 - \$32.00

AV. 7 - \$28.80

3 - \$67.20

4 - \$50.40

5 - \$11.20

6 -

7 - \$15.20

8 - 11.20

7 / 187.20

\$26.74 AVERAGE

DID NOT TAKE No 6  
IT WAS A SPECIMEN

Note: There is pay silver in several of the samples. Please advise if you desire further analysis and reporting.

There is pay silver in several of the samples.

That average gives us roughly FIFTEEN MILLION IN PLACE.

COI  
ADU  
CTV  
ADD  
CIV  
AED

9/6/62

# HAWLEY & HAWLEY

ASSAYERS AND CHEMISTS, INC.

Regulation Assays

Assays of Concentrates

Impure

Weights

Assays

1308 WEST GRANT ROAD  
 P.O. BOX 1075  
 DENVER, COLORADO

Properties: Gold of Bayer's Plant; Photo Dates Co. v. Douglas, Arizona and El Paso, Texas; ASSAYED: El Paso, Texas and Mexico, etc.

| IDENTIFICATION              | Gold | Trace | Lead    | Copper  | Other Metals | Elms    | Grains |
|-----------------------------|------|-------|---------|---------|--------------|---------|--------|
|                             |      |       |         |         | \$35.00      | \$66.80 |        |
|                             |      |       |         |         | Sold         |         |        |
| Surface Dress               | .040 | .040  |         |         |              |         | 65.0   |
| Face of First Ladder        | .360 | .360  | \$12.60 | \$23.76 |              |         | 27.0   |
| Bottom of Second Ladder     | .820 | .820  | 29.40   | 55.44   |              |         | 68.0   |
| 60 Foot Run between Ladders | .630 | .630  | 22.05   | 41.58   |              |         | 37.0   |
| End Second Level            | .140 | .140  | 4.90    | 9.24    |              |         | 21.0   |
| Specimen between Levels     | .010 | .010  |         |         |              |         | 21.0   |
| 200 Foot Level              | .190 | .190  | 6.65    | 12.54   |              |         | 23.0   |
| Country Sample between      | .140 | .140  | 4.90    | 9.24    |              |         | 22.0   |

Note: There is pay silver in several of the samples. Please advise if you require further assaying and analysis.

There is pay silver in several of the samples.

NAME: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_  
 CITY: \_\_\_\_\_  
 STATE: \_\_\_\_\_  
 ZIP: \_\_\_\_\_  
 PHONE: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 TIME: \_\_\_\_\_  
 RED BIRD MINE

(u)

**DEPARTMENT OF MINERAL RESOURCES**  
STATE OF ARIZONA  
**FIELD ENGINEERS REPORT**

Mine Red Bird Mine  
(former name-- Yackley Mine)  
District Teviston Mining Dist., Cochise Co.

Date Feb. 15, 1956  
Engineer Axel L. Johnson

Subject: Present Status.

Location 8 miles E. of Willcox.

Number of Claims 2 claims.

Owners Kratzberg, Scott & McKee, Box 135, Bowie, Ari<sub>z</sub>.

Operators Not in operation.

Principal Minerals Gold, Silver, Lead, Vanadium.

Remarks This property is reported as still owned by the owners listed above.

The Red Bird Gold Mining and Milling Co.:

Gentlemen:

I have made a n examination of your property, The Red  
Gold Mining and Milling Company, and submit herewith a report.

Yours truly,

(Signed) Geo. A. Betts

## REPORT ON RED BIRD MINE BY GEO. A BETHUNE

### LOCATION

The Red Bird Gold Mining and Milling Company's property is situated four and one-half miles west of the town of Cochise, a shipping point of the Souther Pacific Railroad, a transcontinental line. Also a junction point with the Arizona Eastern Railways. In the Cochise District, Cochise County, Arizona.

### CLAIMS

The property consists of twelve claims. Mining and Millsite combined. These claims are held by U.S. Location.

### GEOLOGY

The geology of the Cochise Mining District is made up principally of the Paleozoic sediment cut by granite porphyry replacements, contact, Metamorphic Veins, etc. The intrusion of silicified porphyry rose through the limestone, lifted, shifted and engulfed the superimposed Paleozoic strata which is now the principal and ever occurring rock of this part of the district. The mineral is found principally in sills between layers of limestone and quartz porphyry and the base of the Paleozoic strata.

### VEINS

The outcrop of the principal property has a northwest and a south-east strike with a dip to the east. The surface croppings vary from several hundred feet to over a thousand feet in width and can be traced for over a mile in length.

Considerable prospecting has been done on the Red Bird Mine shafts and cross-cut tunnels have been made on the other claims. The Red Bird was sunk to a depth of 100 feet and shows good value in gold and silver.

Only recently, development has demonstrated that the Globe-Miami district is a district of deep mining and some of the veins are frequently barren for hundreds of feet in depth and open in strong and big ore chutes. From the number of strong indications of mineralized rock on the surface of this property it ought to encourage the management to prosecute the development of this property.

## WATER

Sufficient water may be encountered in development of the property or a series of wells can be sunk nearby and water pumped to the mill at a nominal cost.

## CONCLUSION

Summing up, I find the property is traversed by numerous strong croppings. These croppings show gold and silver values. Everybody realizes that mining especially in its development stage has decided elements of chance and that nothing can be guaranteed in depth, but from my samples taken at different dumps, surface and openings on the property I can consistently state the Red Bird Gold Mining and Milling Co. hold out excellent promise to develop into a big mine. In fact I do not know of another property that has such a big showing of mineral on the surface. All this is confirmed by tests: mostly large samples being taken and from the past development there is nothing to refute this statement, that work should be prosecuted and the property put on a paying basis.

---

## RED BIRD GOLD MINING AND MILLING COMPANY

### ASSAYS

|               | <u>Gold</u> | <u>Silver</u> | <u>Total</u> |
|---------------|-------------|---------------|--------------|
| Lower Level   | \$ 6.20     | \$ 2.47       | \$ 8.67      |
| 100 ft. level | 6.00        | 1.08          | 7.06         |
| " " "         | 22.40       | 1.56          | 23.96        |
| " " "         | 6.80        | .98           | 7.78         |
| " " "         | 6.00        | 1.04          | 7.04         |
| " " "         | 4.20        | 2.21          | 6.41         |
| " " "         | 11.20       | 2.80          | 14.00        |
| " " "         | 6.00        | 1.17          | 7.17         |
| 52 ft/ Level  | 6.40        | 1.20          | 7.60         |
| " " "         | 2.50        | 1.30          | 3.80         |
| " " "         | 6.00        | 1.43          | 7.43         |
| " " "         | 2.00        | 1.19          | 3.19         |
| " " "         | 6.00        | 1.24          | 7.24         |
| " " "         | 5.00        | 2.47          | 7.47         |
| " " "         | 18.00       | 1.43          | 19.43        |
| Dumps         | 6.00        | 2.21          | 8.21         |
| "             | 5.00        | 2.34          | 7.34         |
| "             | 5.80        | 1.69          | 7.49         |
| "             | 5.70        |               | 5.70         |
| "             | 3.96        |               | 3.96         |
| Surface       | 3.68        |               | 3.68         |
| "             | 3.76        |               | 3.76         |
| "             | 2.76        |               | 2.76         |
| "             | 6.80        |               | 6.80         |

---

\* Gold at \$20.00 per oz., silver at old values

The Red Bird Gold Mining and Milling Co.:

Gentlemen:

I have made an examination of your property,  
The Red Bird Gold Mining and Milling Company, and submit  
herewith a report.

Yours truly,

{Signed} Geo. A. Bethune

Here is the report & promised  
At prices this should be a winner.

LOCATION. The "Red Bird Mining Property" consist of eight unpatented claims, or 160 acres, lying 4.1 miles Northwest of Cochise Station on the Southern Pacific Railroad, in Cochise Mining District, Cochise County, Arizona.

The claims extend along the vein in a Northwest and Southeast direction. Cochise Station has an elevation of 4,225 ft. The top of the shaft at the "Red Bird" is approximately 7,000 ft. elevation.

The property is easily accessible by automobile direct to the mine, over a private road from the main highway.

GEOLOGY. In general it would appear that the "Red Bird" property lies in the same vein system which characterizes the "Powers Mine" under the North side of Kilberg Peak, about forty miles Northwest, and the "Pierca Mine" lying twenty miles Southeast.

The general dip is to the East, and in the mountain where the property centers, the vein begins at a depth of about 165 ft., to "cauliflower" out, toward the surface, giving rise to innumerable ore shoots which appear as typical eruptions.

Many of these shoots have been mined in the earlier days and much unrecorded gold recovered therefrom. As they are followed down from the surface, they converge into a distinct vein with excellent foot-wall and hanging-wall.

The gangue material is greatly altered and consists of brecciated andesite, porphyry, sylvite and occasionally limestone. When mined, that portion from the 165 ft. level to the surface runs about 50% through a 1/2" screen. The balance is very friable and no problem is encountered in reduction to screen sizes for concentration.

At the 100 ft. level the breccia follows the hanging-wall and the limestone appears along the foot-wall. From this point to the bottom of the shaft, the

vein is well defined and averages 60 ft. in width. While not specifically lenticular, nevertheless wherever talcose schists occur, higher values are invariably found, as local enrichments of the vein.

WATER SUPPLY. At the 165 ft. bottom of the shaft, permanent underground water level appears. It is logical to suppose therefore, that by further sinking, abundant water will be available. In any event, should more be required, an unlimited supply can be piped from Sulphur Springs Valley, 2 1/2 miles West.

DEVELOPMENT. The underground development consists of:

shaft 165 ft. deep, 6'x8' and well timbered in 1 1/2 compartments, with manway ladders and langes in excellent repair.

On the shaft-level, are drifts or tunnels, extending 70 ft. East and 60 ft. South, and a winze 45 ft. deep; also an incline 45° to the 60 ft. level, on which is a drift 40 ft. South, and a winze to the 100 ft. level. On the 60 ft. level is also a tunnel extending 70 ft. South, another 60 ft. Northeast, and one 40 ft. West, together with a cross-cut 45 ft. long extending Southeast, to the winze mentioned above.

On the 100 ft. level, are tunnels extending 40 ft. East, 20 ft. South, 160 ft. to the shaft, 60 ft. West, and a cross-cut running 74 ft. Northeast and 64 ft. Southwest;

260 ft. down the hill, and Northeast from the main shaft, is another 90 ft. shaft, with a 140 ft. tunnel to the East.

Around the hill, 150 ft. North of the main shaft, is an 80 ft. tunnel driven transversely into the vein, known as the "Cave Tunnel".

There are therefore 425 ft. of shafts and winzes, and 1073 ft. of tunnels and cross-cuts covering the "lower" area and down the established unbroken continuity of the vein between the regular foot and hanging-walls.

WATER

Sufficient water may be encountered in development of the property or a series of wells can be sunk nearby and water pumped to the mill at a nominal cost.

CONCLUSION

Summing up, I find the property is traversed by numerous strong croppings. These croppings show gold and silver values. Everybody realizes that mining especially in its development stage has decided elements of chance and that nothing can be guaranteed in depth, but from my samples taken at different dumps, surface and openings on the property I can consistently state that the Red Bird Gold Mining and Milling Co. hold out excellent promise to develop into a big mine. In fact I do not know of another property that has such a big showing of mineral on the surface. All this is confirmed by tests; mostly large samples being taken and from the past development there is nothing to refute this statement, that work should be prosecuted and the property put on a paying basis.

RED BIRD GOLD MINING AND MILLING COMPANY

ASSAYS

|               | <u>Gold</u> | <u>Silver</u> | <u>Total</u> |
|---------------|-------------|---------------|--------------|
| Lower Level   | \$ 6.20     | \$ 2.47       | \$ 8.67      |
| 100 ft. level | 5.00        | 1.08          | 7.06         |
| " " "         | 22.40       | 1.56          | 23.96        |
| " " "         | 6.80        | .93           | 7.78         |
| " " "         | 6.00        | 1.04          | 7.04         |
| " " "         | 4.20        | 2.21          | 6.41         |
| " " "         | 11.20       | 2.80          | 14.00        |
| " " "         | 6.00        | 1.17          | 7.17         |
| 52 ft. level  | 6.40        | 1.20          | 7.60         |
| " " "         | 2.00        | 1.30          | 3.30         |
| " " "         | 6.00        | 1.43          | 7.43         |
| " " "         | 2.00        | 1.19          | 3.19         |
| " " "         | 6.00        | 1.24          | 7.24         |
| " " "         | 5.00        | 2.47          | 7.47         |
| " " "         | 15.00       | 1.43          | 16.43        |
| Dumps         | 5.00        | 2.21          | 7.21         |
| "             | 5.80        | 2.34          | 8.14         |
| "             | 5.80        | 1.69          | 7.49         |
| "             | 5.70        |               | 5.70         |
| "             | 3.96        |               | 3.96         |
| Surface       | 3.68        |               | 3.68         |
| "             | 3.76        |               | 3.76         |
| "             | 3.76        |               | 3.76         |
| "             | 6.80        |               | 6.80         |

\* Gold at \$20.00 per oz., silver at old values

RED BIRD MINE

HARLEY A. SMIL  
Consulting Engineer  
1011 South Figueroa Street  
Los Angeles

August 14th, 1934.

Dr. Henry Mace Payne,  
546 North Western Ave.,  
Los Angeles, Calif.

ANALYSIS

| Designation           | Grains | G O L D | Value  |
|-----------------------|--------|---------|--------|
| Sample No. 1          | 0.11   |         | 03.03  |
| " " 2                 | 0.09   |         | 3.15   |
| " " 3                 | 0.24   |         | 8.40   |
| " " 4                 | 0.17   |         | 5.95   |
| " " 5                 | 0.03   |         | 1.75   |
| " " 6                 | 0.17   |         | 5.95   |
| " " 7                 | 0.05   |         | 1.75   |
| " " 8                 | 0.07   |         | 2.45   |
| " " 9                 | 0.23   |         | 8.05   |
| " " 10                | 0.20   |         | 7.00   |
| " " 11 - Concentrates | 6.95   |         | 243.25 |

\* Gold @ \$34.00

HARLEY A. SMIL  
Consulting Engineer

ARIT. AV. 1138

LOCATION. The "Red Bird Mining Property" consist of eight unpatented claims, or 160 acres, lying 4.1 miles Northwest of Cochise Station on the Southern Pacific Railroad, in Cochise Mining District, Cochise County, Arizona.

The claims extend along the vein in a Northwest and Southeast direction. Cochise Station has an elevation of 4,323 ft. The top of the shaft at the "Red Bird" is approximately 7,000 ft. elevation.

The property is easily accessible by automobile direct to the mine, over a private road from the main highway.

GENERAL. In general it would appear that the "Red Bird" property lies in the same vein system which characterizes the "Peters Mine" under the North side of Hillborg Peak, about forty miles Northwest, and the "Picosa Mine" lying twenty miles Southeast.

The general dip is to the East, and in the mountains where the property centers, the vein begins at a depth of about 165 ft., as "cauliflower" cut, toward the surface, giving rise to innumerable ore sheets which appear as typical eruptions.

Many of these sheets have been mined in the earlier days and much unrecorded gold recovered therefrom. As they are followed down from the surface, they converge into a distinct vein with excellent foot-wall and hanging-wall.

The gangue material is greatly altered and consists of brecciated andesite, porphyry, rhyolite and occasionally limestone. When mined, that portion from the 165 ft. level to the surface runs about 55% through a 1/2" screen. The balance is very friable and no problem is encountered in reduction to screen sizes for concentration.

At the 160 ft. level the breccia follows the hanging-wall and the limestone appears along the foot-wall. From this point to the bottom of the shaft, the

vein is well defined and averages 60 ft. in width. While not specifically lenticular, nevertheless wherever talcose schists occur, higher values are invariably found, as local enrichments of the vein.

WATER SUPPLY. At the 165 ft. bottom of the shaft, permanent underground water level appears. It is logical to suppose therefore, that by further sinking, abundant water will be available. In any event, should more be required, an unlimited supply can be piped from Sulpher Springs Valley, 2½ miles West.

DEVELOPMENT. The underground development consists of:

Shaft 165 ft. deep, 5'x20' and well timbered in 1½ compartments, with manway ladders and ladders in excellent repair.

On the shaft-level, are drifts or tunnels, extending 70 ft. East and 60 ft. South, and a winze 45 ft. deep; also an incline 45° to the 60 ft. level, on which is a drift 40 ft. South, and a winze to the 100 ft. level. On the 60 ft. level is also a tunnel extending 70 ft. South, another 60 ft. Northeast, and one 40 ft. West, together with a cross-cut 45 ft. long extending Southeast, to the winze mentioned above.

On the 100 ft. level, are tunnels extending 40 ft. East, 20 ft. South, 160 ft. to the shaft, 60 ft. West, and a cross-cut running 74 ft. Northeast and 64 ft. Southwest.

260 ft. down the hill, and Northeast from the main shaft, is another 90 ft. shaft, with a 140 ft. tunnel to the East.

Around the hill, 150 ft. North of the main shaft, is an 80 ft. tunnel driven transversely into the vein, known as the "Cave Tunnel".

There are therefore 425 ft. of shafts and winzes, and 1023 ft. of tunnels and cross-cuts covering the "cauliflower" area and from the established unbroken continuity of the vein between the regular foot and hanging-walls.

VALUES. It is stated by the owners that on the 43 ft. level at the bottom of the 43 ft. winze, 35 ft. Southeast of the shaft, values ran from 47.65 to 820. per ton, and in a lens following a talcose lead, and assay showed \$400. per ton at 820.67 per oz. Similarly it is stated that in the 140 ft. West cross-cut from 50 ft. shaft down the hill, a channel sample of ore across 20 ft. of vein assayed 83.50 to 820.67 per oz.

The owners also offer the following data of assays made on ores removed in sinking the main shaft, all on 820.67 per oz.:

- 14 assays averaged 44.30 per ton, ranging from 30.9 to 89.30.
- 23 assays averaged 85.24 per ton, ranging from 81.39 to 916.23.

ORE XV SIGN. The development indicated, together with a number of irregular prospect holes and stopes not listed, covers 500 ft. NW-SE along the vein, with an average recoverable width of 60 ft. and 100 ft. or back from the tunnels and cross-cuts, at the foot of the main shaft.

500 X 60 X 100 = 3,000,000 cu. ft. Allowing 10 cu. ft. per ton for ore in place, this would show better than one-half million tons of proven ore. As a matter of fact, there are a number of cross-cuts and stopes lying filled with mined ore ready for removal and milling. It is impossible to estimate this amount, but it unquestionably runs into several thousand tons.

SAMPLES. Sample No. 1. Across 6 ft. in a raise 70 ft. East of main shaft on top of shaft level.

Sample No. 2. Across 9 ft. at head of winze 50 ft. Southeast of main shaft.

Sample No. 3. Across 8 ft. at bottom of 43

Sample No. 4. Across many small ore shoots on 40 ft. level, 50 ft. South of main shaft.

Sample No. 5. Across 40 ft. of vein on the 60 ft. level, 120 ft. south of main shaft.

Sample No. 6. Across 40 ft. of vein on the 100 ft. level at bottom of winze, 160 ft. southeast of main shaft.

Sample No. 7. Across 8 ft. of tunnel, 60 ft. from foot-wall and along hanging-wall, on the 100 ft. level, 165 ft. south of main shaft.

Sample No. 8. General nine-run sample of vein at mouth of tunnel leading to Main Shaft. (Same material as general sample sacked for "Spire"-Concentration test.)

Sample No. 9. Across face of "Cavv" tunnel to East.

Sample No. 11. Consists of "Spire"-Concentrates from 126 pounds of nine run ore from which sample No. 8. above, was taken.)

ASSAY. The original assay report on these 11 samples made by Harley A. Hill of Los Angeles, California, is submitted herewith and made a part of this report.

The general average of the ten straight samples is 64.83 per ton.

There are therefore in the approximately one-half million tons of ore in sight, not less than 62,000,000 recoverable.

A report on the concentration test of this ore is appended hereto.

Respectfully submitted,

(Signed) Harry Mace Payne  
Harry Mace Payne

August 15, 1930

Mr. V. W. Moody,  
Thatcher, Arizona

Mr. M. H. Merrill,  
Cochise, Arizona

Mr. Thomas Hargis,  
Bisbee, Arizona

"RED BIRD MINE"

COCHISE, ARIZONA

Gentlemen:

Herewith I transmit to you as joint partners in the  
"Red Bird Mine", my report on your property.

Very truly yours,

(Signed) Henry Mace Payne  
Henry Mace Payne

Henry Mace Payne  
(C.E., Ph.D., Sc.D)  
546 North Western Ave.  
Los Angeles, Calif.  
Tel. Gladstone 7539

Consulting Engineer  
Mine Equipment and  
Engineering Co.

Geologist  
Gulf. Mobile Norther R.R.  
Jackson, Mississippi

LOCATION. The "Red Bird Mining Property" consist of eight unpatented claims, or 160 acres, lying 4.1 miles Northwest of Cochise Station on the Southern Pacific Railroad, in Cochise Mining District, Cochise County, Ariz

The claims extend along the vein in a Northwest and Southeast direction. Cochise Station has an elevation of 4,225 ft. The top of the shaft at the "Red Bird" is approximately 7,000 ft. elevation.

The property is easily accessible by automobile direct to the mine, over a private road from the main highway.

GEOLOGY. In general it would appear that the "Red Bird" property lies in the same vein system which characterizes the "Powers Mine" under the North side of Kilberg, Peak, about forty miles Northwest, and the "Pierce Mine" lying twenty miles Southwest.

The general dip is to the East, and in the mountain where the property centers, the vein begins at a depth of about 165 ft., to "cauliflower" out, toward the surface, giving rise to innumerable ore shoots which appears as typical eruptions.

Many of these shoots have been mined in the earlier days and much unrecorded gold recovered therefrom. As they are followed down from the surface they converge into a distinct vein with excellent foot-wall and hanging-wall.

The gangue material is greatly altered and consists of brecciated andesite, porphyry, rhyolite and occasionally limestone. When mined, that portion from the 165 ft. level to the surface runs about 58% through a 1" screen. The balance is very friable and no problem is encountered in reduction to screen sizes for concentration.

At the 100 ft. level the breccia follows the hanging-wall and the limestone appears along the foot-wall. From this point to the bottom of the shaft, the vein is well defined and averages 60 ft. in width. While not specifically lenticular, nevertheless wherever talcose schists occur, higher values invariably are found, as local enrichment of the vein.

WATER SUPPLY. At the 165 ft. bottom of the shaft, permanent underground water level appears. It is logical to suppose therefore, that by further sinking, abundant water will be available. In any event, should more be required, an unlimited supply can be piped from Sulphur Springs Valley, 2½ miles West.

DEVELOPMENT. The underground development consists of:

Shaft 165 ft. deep, 6' X 8' and well timbered in 1½ compartments, with manway ladders and langings in excellent repair.

On the shaft-level, are drifts or tunnels, extending 70 ft. East and 60 ft. South, and a Winze 45 ft. deep; also an incline 45' to the 60 ft. level, on which is a drift 40 ft. South, and a winze to the 100 ft level. On the 60 Ft level is also a tunnel extending 70 ft. South, another 60 ft. Northeast, and one 40 ft. West, together with a cross-cut 45 ft. long, extending South-east, to the winze mentioned above.

On the 100 ft. level, are tunnels extending 40 ft. East. 20 ft. South, 160 ft. to the shaft, 60 ft. West, and a cross-cut running 74 ft. Northeast and 64 ft. Southeast.

260 ft. down the hill, and Northeast from the main shaft, is another 90 ft. shaft, with a 140 ft. tunnel to the East.

Around the hill, 150 Ft. North of the main shaft, is an 80 ft. tunnel driven transversely into the vein, known as the "Cave Tunnel".

There are therefore 425 ft. of shafts and winzes, and 1023 ft. of tunnels and cross-cuts covering the "cauliflower" area and down the established unbroken continuity of the vein between the regular foot and hanging-walls.

VALUES. It is stated by the owners that on the 45 ft. level at the bottom of the 45 ft. Winze, 55 ft. Southeast of the shaft, values ran from \$7.85 to \$30. per ton, and in a lens following a talcose lead, and assay showed \$4.00, per ton at \$20.67 per oz. Similarly it is stated that in the 140 ft. East cross-cut from 90 ft. shaft down the hill, a channel sample of ore across 20 ft. of vein assayed \$3.50 to \$20.67 per oz.

The owners also offer the following data of assays made on ores removed in sinking the main shaft, all on \$20.67 per oz:

14 assays averaged \$4.30 per ton, ranging from 30¢ to \$9.30.

23 assays averaged \$5.24 per ton, ranging from \$1.38 to \$16.23.

ORE IN SIGHT. The development indicated, together with a number of irregular prospects holes and stopes not listed, covers 500 ft. NW-SE along the vein, with an average recoverable width of 60 ft. and 180 ft. of backs from the tunnels and cross-cuts, at the foot of the main shaft.

500 X 60 X 130 = 5,400,000 cu. ft. Allowing 10 cu. ft. per ton for ore in place, this would show better than one-half million tons of proven ore. As a matter of fact, there are a number of cross-cuts and stopes lying filled with mined ore ready for removal and milling. It is impossible to estimate this amount, but it unquestionably runs into several thousand tons.

HARLEY A. SILL  
 Consulting Engineer  
 1011 South Figueroa Street  
 Los Angeles

August 14th, 1930

Dr. Henry Mace Payno,  
 546 North Western Ave.,  
 Los Angeles, Calif.

A S S A Y S

| Description         | Ounces | G O L D |          |
|---------------------|--------|---------|----------|
|                     |        | Value   | @\$60.00 |
| Sample No. 1        | 0.11   | \$9.85  | \$11.55  |
| " " 2               | 0.09   | 3.15    | 9.45     |
| " " 3               | 0.24   | 8.40    | 25.20    |
| " " 4               | 0.17   | 5.95    | 17.85    |
| " " 5               | 0.05   | 1.75    | 5.25     |
| " " 6               | 0.17   | 5.95    | \$17.85  |
| " " 7               | 0.05   | 1.75    | \$5.25   |
| " " 8               | 0.07   | 2.45    | 7.35     |
| " " 9               | 0.23   | 8.05    | 24.15    |
| " " 10              | 0.20   | 7.00    | 21.00    |
| " " 11 Concentrates | 6.95   | 243.25  | 729.7    |

\* Gold @\$2000

HARLEY A. SILL

Consulting Engineer

SAMPLING.      Sample No. 1. Across 6 ft. in a raise 70 ft. East of main shaft on top of shaft level.

Sample No. 2. Across 9 ft. at head of winze 50 ft. Southeast of main shaft.

Sample No. 3. Across 8 ft. at bottom of 45.

Sample No. 4. Across many small ore shoots on 60 ft. level, 50 ft. South of main shaft.

Sample No. 5. Across 40 ft. of vein on the 60 ft. level, 120 ft. South of main shaft.

Sample No. 6. Across 40 ft. of vein on the 100 ft. level, at bottom of winze, 160 ft. Southeast of main shaft.

Sample No. 7. Across 8 ft. of tunnel, 60 ft. from foot-wall and along hanging-wall, on the 100 ft. level, 165 ft. South of main shaft.

Sample No. 8. General mine-run sample of vein at mouth of tunnel leading to main shaft. (Same material as general sample sacked for "Spiro"-Concentrator test.)

Sample No. 10. Across face of "Cave" Tunnel to the East.

Sample No. 11. Consists of "Spiro"-Concentrates from 126 pounds of mine run ore from which sample NO. 8. above, was taken.

ASSAYS.      The original assay report on these 11 samples made by Harley A. Sill of Los Angeles, California, is submitted herewith and made a part of this report.

The general average of the ten straight samples is \$4.83 per ton.

There are therefore in the approximately one-half million tons of ore in sight, not less than \$2,000,000 recoverable.

A report on the concentration test of this ore is subtended hereto.

Respectfully submitted,

(Signed) Henry Maco Payne  
Henry Maco Payne

REPORT ON RED BIRD GOLD MINING & MILLING CO.

(H.L. EMERSON, M.E.)

1928

Dear Sir:

I herewith submit a brief report of the superficial examination I have made of your property, known as the Red Bird Mine, situated about four miles northeast of the Station of Cochise, Cochise, County, Arizona.

It is seldom that nature signals to man where it's hidden treasures are to be found more clearly nor hardly anywhere as plainly as here at this property, where a great intrusion has forced itself upward through the limes and shales of the sedimentary origin and left this great chimney of blowout of highly colored mineral-bearing rock beckoning and awaiting development.

Here you have a most complete example of the workings of Nature's laboratory fire and water, solids and liquids, acids and alkalies, heat and cold.

When this portion of the country was covered with water and the rivers had brought their muds and clays and sands from the mountains sides and deposited them in these waters and the soft sludge of lime precipitate was in the process of forming the top layers of lime-stone which cover this section of the country, and eruption occurred and the gases found vent in the hill or anticline on which the property is located; then a scething, boiling bubbling mass frothed and foamed and sized as it was constantly forced upward by the power of the unspent fires beneath. These fires were pouring out hot gases which were being condensed by the cooling liquids above a tremendous chemical change took place. Rock, pebbles and boulders were shot upward into this mass and were squeezed and pressed into a compact formation. These fragments were torn and broken from the ledge of the primary formation laying below which in this case was porphyry carrying rich values in gold and silver. Much of this gold was carried upward in the gases and in solution and was deposited by the precipitation throughout the entire mass so that all the lime-stones, conglomerates, the shales and porphyry were impregnated with fine gold.

It is nearly impossible to pick up a rock or snatch a small quantity of dirt anywhere on this immense blowout that will not pan fine free gold. The gold, however, is so fine that it would hardly be an amazing ore but it would prove to be an ideal cyaniding proposition. The rock is easily crushed when mined and will be free from slimes and should be easily and cheaply mined and milled.

The work done at the property, would not, at this time, justify the erection of a mill for the treatment of ore for the reason that the body of ore has not been fully proven (1919). A great deal of the first work done on the mine was useless and impracticable inasmuch as the operators had a misconception of the trend and dip and true course of the vein, and when the work was driven into barren territory it was given up and turned over to more practiced labor.

The latter part of the work has been to pursue the course of the vein rather than to lay out the work in a scientific manner, yet this has proven to be the wiser course as several barren lime slopes (commonly called horses) have impeded the course and would have discouraged most any miner doing the work. These last workers dove a round over the lime horse and followed and proved the vein by cross-cutting from wall to wall, a distance of more than 125 ft. This work can easily be put into perfect mine workings and has so proven the true vein of rich ore that much future labor has thereby been saved and now you have a good working knowledge of the property.

I did not test by assays any of the ore but several samples taken at different points on the vein showed me by panning a general average of five or six dollar ore with many places showing much richer values.

All of the work done in the mine thus far has been mineral-bearing rock, even the barren approaches to the ore body carry some values. It is impossible to measure the ore and make an estimate of the amount now opened up but it must be certain even to the most inexperienced eye that you have values which justify the expenditures of money to sink to the water level and run in several cross-cuts and prospect the vein down to the point where the rich values lie.

I would most emphatically urge you to continue this work at your earliest opportunity as you will be simply adding development to an early good investment. You need have no fear as to the outcome.

Your property is no longer a prospect—it is a mine and only needs careful attention of experience backed by a fair amount of money to bring it into a big producer. You should consider having a working fund of at least \$50,000.00. The first thing which should be done at the property would be to install a modern compressor and hoist. This need not be a large one to start with, but the compressor should have power to work at least four hammers.

Next, water for working purpose is most essential and can be developed at the mine only sinking the workings down to water level and pumping the water up to the mines. This latter method would not be very expensive because the work in the mine must be driven down to the water level anyway and this should be done as the first work. While this work is going on, the ore body is being developed all the time and as it is opened up rich ore will be found in place and become rich ore as the work progresses. When you strike actual or real body of ore below which is responsible for the values in the large blowout, you will undoubtedly come into shipping values. You could then begin to ship ore to the smelter and carry on the development of the ore body above at the same time. Presuming however, that you should develop only the ore in the body above the water level then it should be necessary to cross-cut and explore your ore body in more detail so that your values could be measured up and your estimates prepared for a mill of the proper size and character.

The ore in the workings now shows a good average of five or six dollars with richer ore streaks coming in continually. Estimate what values you have now exposed and you can readily see that you have a property worthy of a large investment. For your own consideration, as an example, you have now sunk over one hundred ft. on the vein and have proven it to be over one hundred feet wide and know that it continues many hundreds of feet in it's true course, but just take one hundred and fifty feet on the vein, one hundred feet in depth and one hundred feet in width and you have one million five hundred thousand cubic feet, solid measure; allowing fifteen cubic feet of this rock to the ton you already have one hundred thousand tons which will easily average five dollars per ton or a valuation of ore in place of \$500,000.00. Now continue this work on down to approximately the five hundred foot level and you will readily see that only when you figure on the kind and size of the mill to be erected. (This tonnage now (1928) approximately trebled.)

There can be no question as to the immensity of the ore body or of the fact that as the work proceeds down, the ore is bound to become richer. It cannot be otherwise. The great dyke that erupted this gold, lies below and when it is reached you will find your main body of rich ore. This will occur at the water level and here the character of the ore will probably change. This level should be reached at approximately five hundred feet.

To sum up:

1st. You have a mine which invites careful inspection and which openly answers the most incredulous as to it's values and size of this ore body.

2nd. You have an immense body of ore that will grow richer as the mine goes down in it's workings.

3rd. You have an ideal location for mining.

4th. You have a wonderful ore body in place, between two perfectly uniform walls and you are favored by many other good points and conditions which should induce you to prosecute speedily the work of development until you have a big producing mine.

There is absolutely no gamble in this proposition and there is no chance to lose if handled in the right way as you are already secure in your investment and the work will constantly increase and enhance the values.

It is a proposition worthy of investment and I trust you will pursue the work to rapid conclusion, feeling confident that will have no cause to regret your action.

Very truly yours,

(Signed) H.L. Emerson, M.E.

San Francisco, Calif.  
December 2, 1928

Mr. C. M. d'Autremont  
Southern Arizona Bank Building  
Tucson, Arizona

Dear Mr d'Autremont:

In reply to your letter Re: The Red Bird Mining Property of which I made the geological sketch map showing the large outcrops of mineral on the surface. The mineralization *more* than a mile long and 2000 feet wide. The thickness of the ore is not developed. The greatest thickness actually proven is 190 feet, 100 feet in the main shaft and 90 feet in another shaft approx. 300 feet in the canyon and approx 100 feet below the collar of the main shaft. This 90 ft. shaft has an East 140 ft. cross cut in the botton a channel sample of ore across 20 feet of ore assayed \$20.00 to the ton.

I would hesitate to estimate the probable ore in sight, the figure would be astronomical.

It is reasonably certain that there will be many times more ore in the main ore body at depth.

The ore body is not scratched at the present writing. To develop the property to make it possible to plan the mining, a drilling program is necessary. I feel sure you will find a big deep ore body. The thickness will probably be several hundred feet.

It seems almost certain that the mine will be far better at depth. Its present showing justifies a drilling program. The results can be expected with much confidence.

Sincerely yours,

(Signed) Ira B. Joralemon

*This is a Typed  
Copy of the ORIGINAL*