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The following file is part of the

Arizona Department of Mines and Mineral Resources Mining Collection

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05/05/87

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: GRAND CENTRAL MINE

ALTERNATE NAMES:
HARDT MINE
HART
FREE GOLD

LA PAZ COUNTY MILS NUMBER: 344

LOCATION: TOWNSHIP 1 S RANGE 23 W SECTION 36 QUARTER SW
LATITUDE: N 33DEG 17MIN 39SEC LONGITUDE: W 114DEG 34MIN 59SEC
TOPO MAP NAME: CIBOLA SE - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
GOLD
SILVER

BIBLIOGRAPHY:
KEITH, S.B., 1978, AZBM BULL, 192, P. 181
ADMMR GRAND CENTRAL GROUP FILE
GEOEXPLORERS INTERNTL, VOL 6 (ADMMR GEO FILE)

GRAND CENTRAL GROUP

La Paz
~~YUMA~~ COUNTY
T1S R23W Sec 36

AKA: Hardt Mine, Hart, Free Gold

Yuma MILS Index #344

ABM Bull #192, p. 181

UGGS Cibola SE, Az. Quad map

Geology Report - Geoexplorers International Vol 6


Hart
Mine
Wash
Hart
Mine
1405
JEEP
TRAIL
INDEFINITE
BOUNDARY
RESERVATION
1051
949
1081
1325
1744
945
1186
1098
921
876
682
728
584
Grand Central
T 1S R23W Sec 36
Cibola SE, Az 7.5

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

Date November 5, 1939

Mine Grand Central Group

District Cibola

Location Yuma Co. Ariz.

Former name Free Gold

Owner Eugene B. Hart

Address Cibola, Yuma Co.,Ariz.

Operator " "

Address " " "

President

Gen. Mgr.

Mine Supt.

Mill Supt.

Principal Metals Gold

Men Employed

Production Rate

Mill: Type & Cap.

Power: Amt. & Type Gasoline compressor - 1 Hamer-Hudrix 30 H.P.

Operations: Present

MG-20 Dec.19,1939

Operations Planned

GOLD; 5 claims unpatented; good road to mine; approx. 1,300' of mine workings; some machinery on property; $12,000 RFC loan used to develop property, general average around $25; milling problem, some ore blocked out; for sale, terms on application; Cibola District, Yuma County MG-20 OR

Number Claims, Title, etc. 5 - unpatented

Description: Topog. & Geog. 6 miles east Cibola P.O. Tirgo Mts. formation - quartz,diorite, schist, quartzite. 40 mi. S.E. from Blythe, Calif. 100 mi. from Yuma north via Quartzsite-Yuma road and branching off to Cibola - 35 mi. Total distance from Yuma 100 miles.

Mine Workings: Amt. & Condition Old shaft 150' drifts N & S, 3 - total 270 ft. surface cuts and tunnels total 200 ft.- main tunnel & cut 475' - then drift along ledge 300 ft. - raise 40 ft.

(over)

Geology & Mineralization Ore is oxidized quartz - some visible free gold. Walls are quartz diorite with bands of petzite crossing diagonally - elevation 1000 feet dry- no timbering required except stulls - surrounding lower hills are mixture quartzite and schist with some lime and porphyry.

Ore: Positive & Probable, Ore Dumps, Tailings 2000 tons blocked out above 700 ft. tunnel - total back overhead - 200 ft. deep average

Mine, Mill Equipment & Flow Sheet None

Road Conditions, Route of From Highway 60 - 36 miles to camp - leaves highway 1/4 mile E. Patrol station - road good.

Water Supply Drilled well at camp - 38 ft. to water - 17 ft. of perforation in water - small gasoline engine and jack now pumping 400 gal. per hour. Can be increased to any desired amount. Another pump 6" centrifugal on same strata 1/4 mile N. irrigate 20 acres.

Brief History Discovered 1879 by Mexicans - arrastra built at valley and some over ground. Laid dormant until late 90's - Stock Co. from Colorado milled with straight stamp mill about 500 tons but only 35% free and mismanagement - closed until 1936. Present owner did development with $12,000 Government loan.

Special Problems, Reports Filed Cyanide tests following amalgamation show 35% recoverable on the place and 55.6% by cyanidation - ground to 40 mesh - too far to ship - general average about $25.00 per ton and transportation too costly as no custom mill close enough with proper treatment and smelter too far away.

Remarks Average width of vein about 20 inches - ore in lenses - 3 veins - one developed - others surface workings - all about same value and size.

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

Total price $20,000.
Cash $1,500 - if buyer wants to erect proper mill, will take 20% royalty after down payment. Royalty to be paid to R.F.C. until loan paid off - balance to myself until total price is completed.

Signed Eugene B. Hart

Use additional sheets if necessary.

NOV 2

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

Date Nov. 5-/39

Mine "Grand Central" group. 5 claims - unpatented.

District Cibola

Location Yuma Co. Ariz.

Former name "Free Gold"

Owner Eugene B. Hart

Address Cibola - Yuma Co - Ariz.

Operator " "

Address " " " "

President

Gen. Mgr.

Mine Supt.

Mill Supt.

Principal Metals Gold.

Men Employed none

Production Rate

Mill: Type & Cap.

Power: Amt. & Type Gasoline compressor - 1 Hamer. Hudnix 30 HP.

Operations: Present none

Operations Planned

Number Claims, Title, etc. 5. Unpatented -

Description: Topog. & Geog. 6 miles east Cibola P.O. Trigo Mts - formation - Quartz diorite schist & granite. 40 mi - S E from Blythe Calif. 100 mi from Yuma North via Quartzite - Yuma - road & branching off to Cibola - 35 mi. Total distance from Yuma 100 mi

Mine Workings: Amt. & Condition old shaft 150'. drifts N. & S. 3 - total 270 ft surface cuts & tunels total 200 ft - main tunel & cut 475' - 1 drift along ledge 300 ft. raise 40 ft -

(over)

Geology & Mineralization Ore is oxidized quartz – some visible free gold. Walls are quartz diorite – with bands of pegmatite crossing diagonally – Elevation 1,000 ft. Dry – no timbering required except stulls. Surrounding lower hills are mixture quartzite & schist with some lime & porphry –

Ore: Positive & Probable, Ore Dumps, Tailings

2000 Tons blocked out above 100 ft tunnel – Total back overhead – 200 ft. deep average

Mine, Mill Equipment & Flow Sheet none

Road Conditions, Route From Hiway 60 – 36 mi. to camp – leaves Hiway 1/4 mi. E. of Ehrenburg Patrol station – Road good –

Water Supply

Drilled well at camp. 38 ft to water – 17 ft of perforation in water. Small gasoline engine and jack now pumping 400 gal per hour. Can be increased to any desired amount. Another pump 6" centrifugal arcane strata 1/4 mi N. irrigates 20 acres.

Brief History Discovered 1879 by Mexicans – Arrastra built at valley well & some ore ground. Laid dormant until late 90's – Stock Co. from Colorado milled with straight stamp mill about 500 tons but only 35% free & mismanagement – closed until 1936. Present owner did development with $12,000 – Government Loan –

Special Problems, Reports Filed

Cyanide tests following amalgamation – show 35% recoverable on plates – and 55-6/10 % by cyanidation. ground to 40 mesh – Too far to ship – as gen. average about 25.00 per ton – and transportation too costly – as no custom mill close enough with proper treatment and smelters too far away.

Remarks

Average width of vein about 20 inches – Ore in lenses. 3 veins – one developed – others surface workings – all about same value & size

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

Total price $30,000 –
Cash $1500.00 – if buyer wants to erect proper mill – will take 20% royalty after down payment. Royalty to be paid to R. F. C. until loan paid off – balance to myself until total price is completed.

Signed Eugene B Hart.

Use additional sheets if necessary.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA

OWNERS MINE REPORT

Date November 5, 1939

1. Mine GRAND GENERAL GROUP
2. Mining District & County Cibola
3. Former name Free Gold
4. Location Yuma Co., Arizona
5. Owner Eugene B. Hart
6. Address (Owner) Cibola, Yuma Co., Arizona.
7. Operator " " "
8. Address (Operator) Cibola, Yuma Co., Arizona.
9. President
10. Gen. Mgr.
11. Mine Supt.
12. Mill Supt.
13. Principal Metals Gold
14. Men Employed
15. Production Rate
16. Mill: Type & Cap.
17. Power: Amt. & Type Gasoline compressor - 1 Homer-Hudrix 30 H. P.
18. Operations: Present

19. Operations Planned

20. Number Claims, Title, etc. 5 unpatented.

21. Description: Topography & Geography 6 miles east Cibola P. O. Tirgo Mts. formation - quartz, diorite, schist, quartzite. 40 mi. S. E. from Blythe, Calif. 100 mi. from Yuma north via Quartzite-Yuma road and branching off to Cibola - 35 mi. Total distance from Yuma 100 miles.

22. Mine Workings: Amt. & Condition Old shaft 150' drifts E & S, 3 - total 270 ft. surface cuts and tunnels to 200 ft.-main tunnel & cut 475' - then drift along ledge 300 ft.-raise 40 ft.

(over)

23. Geology & Mineralization Ore ... oxidized quartz - some visible ...ee gold, Walls are quartz diorite with bands of petzite crossing diagonally- elevation 1000 feet dry - no timbering required except stulls - surrounding lower hills are mixture quartzite and schist with some lime and porphyry.

24. Ore: Positive & Probable, Ore Dumps, Tailings 2000 tons blocked out above 700 ft. tunnel - total back overhead - 200 ft. deep average.

24-A Vein Width, Length, Value, etc. [illegible]

25. Mine, Mill Equipment & Flow Sheet None.

26. Road Conditions, Route From Highway 60 - 36 miles to camp - leaves highway 1/4 mile E. of Patrol Station - road good.

27. Water Supply Drilled well at camp - 30 ft. to water - 17 ft. of perforation in water - small gasoline engine and jack now pumping 400 gal. per hour. Can be increased to any desired amount. Another pump 6" centrifugal on same strata 1/4 mile N. irrigate 20 acres.

28. Brief History Discovered 1879 by Mexicans - arrastra built at valley and some over ground. Laid dormant until late 90's - Stock Co. from Colorado milled with straight stamp mill about 500 tons but only 35% free and mismanagement - closed until 1936. Present owner did development with $12,000 Government loan.

29. Special Problems, Reports Filed Cyanide tests following amalgamation show 35% recoverable on plate and 55.6% by cyanidation- ground to 40 mesh - too far to ship - general average about $25.00 per ton and transportation too costly as no custom mill close enough with proper treatment and smelter too far away.

30. Remarks Average width of vein about 20 inches - ore in lenses - 3 veins - one developed- others surface workings - all about same value and size.

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

Total price $20,000.
Cash $1,500 - if buyer wants to erect proper mill, will take 20% royalty after down payment. Royalty to be paid to R. F. C. until loan paid off - balance to myself until total price is completed.

32. Signed Eugene B. Hart

33. Use additional sheets if necessary.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

Date November 5, 1939

1. Mine GRAND CENTRAL GROUP

2. Mining District & County Cibola

4. Location Yuma Co., Arizona

3. Former name Free Gold

5. Owner Eugene D. Hart

6. Address (Owner) Cibola, Yuma Co., Arizona.

7. Operator " " "

8. Address (Operator) Cibola, Yuma Co., Arizona.

9. President

10. Gen. Mgr.

11. Mine Supt.

12. Mill Supt.

13. Principal Metals Gold

14. Men Employed

15. Production Rate

16. Mill: Type & Cap.

17. Power: Amt. & Type Gasoline compressor - 1 Novo-Duboix 30 H. P.

18. Operations: Present

19. Operations Planned

20. Number Claims, Title, etc. 5 unpatented.

21. Description: Topography & Geography 6 miles east Cibola P. O. Trigo Mts. formation - quartz, diorite, schist, quartzite. 40 mi. S. E. from Blythe, Calif. 100 mi. from Yuma north via Quartzsite-Yuma road and branching off to Cibola - 35 mi. Total distance from Yuma 100 miles.

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(over)

23. Geology & Mineralization Ore [illegible] oxidized quartz - some visible free gold. Walls are quartz diorite with bands of petsite crossing diagonally- elevation 1000 feet dry - no timbering required except stulls - surrounding lower hills are mixture quartzite and schist with some lime and porphyry.

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24-A Vein Width, Length, Value, etc. [illegible]

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30. Remarks Average width of vein about 20 inches - ore in lenses - 3 veins - one developed- others surface workings - all about same value and size.

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

Total price $20,000.
Cash $1,500 - If buyer wants to erect proper mill, will take 2% royalty after down payment. Royalty to be paid to R. F. C. until loan paid off - balance to myself until total price is completed.

32. Signed Eugene B. Hart

33. Use additional sheets if necessary.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA

OWNERS MINE REPORT

Date November 5, 1939

1. Mine GRAND CENTRAL GROUP
2. Mining District & County Cibola
3. Former name Free Gold
4. Location Yuma Co., Arizona
5. Owner Eugene B. Hart
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7. Operator " " "
8. Address (Operator) Cibola, Yuma Co., Arizona.
9. President
10. Gen. Mgr.
11. Mine Supt.
12. Mill Supt.
13. Principal Metals Gold
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16. Mill: Type & Cap.
17. Power: Amt. & Type Gasoline compressor - 1 Homer-Hudrix 30 H. P.
18. Operations: Present
19. Operations Planned
20. Number Claims, Title, etc. 5 unpatened.
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(over)

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24-A Vein Width, Length, Value, etc. [illegible]

25. Mine, Mill Equipment & Flow Sheet None.

26. Road Conditions, Route From Highway 60 - 36 miles to camp - leaves highway 1/4 mile E. of Patrol Station - road good.

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32. Signed Eugene B. Hart

33. Use additional sheets if necessary.

GRAND CENTRAL MINE LA PAZ COUNTY

RRB WR 7/17/87: Jess Seaggs is evaluating the Hart Mine (Grand Central Mine - file) La Paz County.

TAKEN FROM THE REPORT OF THE GOVERNOR OF ARIZONA 1899

FREE GOLD GROUP, YUMA CO.

In the Chocolate Mountains of Yuma County, 7 miles easterly from the Colorado River and Nortons Landing, about 6 miles northerly, as the crow flies, from the Old Clip Landing, and 60 miles northerly from Yuma, is situate the Free Gold group of mining claims. The country formation is of porphyry, quartzite, and granite, through which the ledge has its way in a northeasterly and southwesterly direction, defined for 8,500 feet on this group. The group consists of the Renown, Quien Sabe, Little Mint, Cashier, Hidden Treasure, Missing Link, Celestina, Free Gold, Arastra, Siwash, Rio Vista, and Skookum claims, but the development is principally done on the Free Gold, located on a horseshow-shaped basaltic porphyry mountain. Through the hills of this mountain, and two lesser spurs of porphyry, a fruitful green-granite belt cuts, on a northeast and southwest strike; about midway of this belt is situate the quartz vein of the Free Gold claim, and 240 feet above the base of the mountain is the main working shaft. From the collar of the shaft to the ore platform is an elevation of 140 feet, and a distance by skidway of 230 feet to where ore is delivered, the car being handled by whim hoist cable.

The development of this claim consists of 209 feet of shafting, 222 feet of drifting, and 75 feet of tunneling. The working shaft has a depth of 130 feet, with north drift at the bottom, 27 feet in ore. At the 75-foot level there is a north drift 125 feet in length, and 100 feet of the No. 1 ore chute on this drift is stoped to the surface. The average thickness of the pay streak is 16 inches, while the whole vein, all carrying more or less gold, is 2 feet in width. The south drift at the 75-foot level is 70 feet long, and ore chute No. 2 was struck 40 feet from the shaft. No stoping of account has been done here. In the north drift, the heading at 125 feet from the shaft is just entering ore chute No. 3. This chute is proven by shafts and cuts and by visible gold in outcrop for 150 feet in length. This is virgin territory. A tunnel 100 feet south from the working shaft is 75 feet long, and is all in ore chute. No. 2 showing a thickness of from 8 to 20 inches of $30. rock. Thus there are three well-defined ore chute, with from 40 to 60 feet of semi-barren ground, save occasional pockets of rich ore intervening. The vein is from 2 to 5 feet thick with small walls, and gouge casing on both foot and hanging. The ledge dips from horizontal 80 degrees to the east, and may be clearly defined, in place, for 1,000 feet. The average thickness on the surface is 1 foot.

Copper occurs rarely as a pyrites and cuprite; silver lead, infrequently, as galenite; and iron pyrites, at times in nuggets and kidneys, and disseminated in cubes and flakes through the quartz. These, with brown hematite, high in gold values, constitute the concentrating factor.

The ground stoped is fairly timbered, and is fitted with a man ladder and skidways. In the drifts is iron strap tracking and gunboats for buckets underground. Improvements on the surface include a blacksmith shop near the shaft, a Davis patent automatic horse-whim hoist, with 200 feet of five-eighths steel cable and 2 steel buckets of 300 pounds capacity. There is a skidway track to the ore platform on an incline of 35 degrees, and a wagon road over wash and mesa a distance of 5 miles, connecting mine and mill, over which four good horses or mules will haul 3 tons both ways.

On a point of mesa, on the county wagon road, is erected a modern 5-stamp mill, with narrow mortar, 850 pound stamps, inside plates, 4 by 12 feet silver-plated copper amalgamating apron plate, 6-foot canvas belt springer concentrator. Blake rock crusher with self-feeder. A steam plant of sufficient capacity furnishes power. Wells 30 feet deep furnish an ample supply of water, and an additional flow can be secured by driving the wells deeper.

Cont'd.

FREE GOLD GROUP 1899 Cont'd.

The ores of the Free Gold claim and group are essentially free milling, wire, shot, and flake gold, spooning freely from clean-grit, blue-white, friable quartz. The freest spoonings are from honeycomb quartz, and the highest values are held in a brown hematite that gives from 2 to 30 ounces of gold per ton. A low percentage of yellow-colored iron pyrites is found, which is rich in gold, the ~~percentage of yellx~~ rock will plate, under a competent mill man, 60 per cent of its assay value, and an average mill rock of $30 per ton can be mined. In conjunction with the cyanide process, 85 to 95 per cent of the assay values should be saved. The favorable iron matrix, holding the gold fine and free, renders this a premium cyaniding proposition; the lead contained in the ores is in too minute a quantity to be considered, and it has been practically demonstrated that when copper compounds exist in a state physically hard, the cyanide solution does not act on them, and there are no other refractory minerals in the ore.

The vein is a true fissure vein in every particular, and there is a clear improvement in the thickness of the pay streak and in the gold values-not in occasional swells, but steadily and peculiarly regular from the surface to the lowest levels.

VEINS ON THE SAN FRANCISCO RIVER 1899

A group of gold-bearing veins on the right bank of the river some distance above the placers gave promise of profitable working, especially as the water of the river was abundant for milling purposes and the conditions were favorable for cheap working.

In March, 1898, it was reported that the Evans-Vanhecke Gold Company was running a 20-stamp mill regularly on ores from the veins in the district, and that it was the intention to increase the plant by the addition of 30 more stamps.

amounts of wulfenite have been found within vuggy quartz veins in the southeastern portion of the range.

RED CROSS OR NORTON MINE

The Red Cross or Norton mine is at the eastern foot of the Mohawk Mountains, about 5½ miles from Mohawk station. In 1930, the road to the mine could be reached by passing under a railway trestle 1½ miles west of Stoval and continuing for some 3½ miles southwestward.

This mine was formerly held by Mr. G. W. Norton. In 1910, according to local press reports, it produced one car of silver ore worth $10,000. In 1913, it yielded a small tonnage of sulphide lead ore and siliceous silver ore.

Here, a hill, rising about 150 feet above the dissected pediment, is made up of schist that prevailingly strikes N. 25° E. and dips 20° SE., but has been locally displaced by faulting. It is cut by an irregular dike of white, fine-grained granite porphyry that has a maximum width of three feet and shows many small spots of iron stain.

A curving fault zone that, near its northwestern end, strikes N. 65° W. and dips from 60° to 80° SW., contains the vein. The richest portion of this vein was limited to the northwestern 150 feet of its length, beyond which it passes beneath surface gravels. Unmined remnants of this part of the vein consist of limonite, breccia, and gouge cut by veinlets of malachite, chrysocolla, and calcite, and containing irregular bodies of gypsum and copper-stained, crystalline calcite. No silver minerals were seen. The vein is traceable for several hundred feet farther east as a silicified, iron-stained, brecciated zone up to three feet wide. Its schist walls show abundant sericitization and silicification together with iron-staining along fractures.

Workings on the Red Cross vein consist of five or six shallow shafts and several surface cuts.

BARITE MINE

A group of nine claims, held by Messrs. Jas. Renner and Chas. Sam, is located on baritic veins that outcrop a short distance northwest of Mohawk. According to Mr. Renner, these claims were located in 1902 by Mr. G. W. Norton, but little work was done on them until 1929 and 1930 when the present owners and their lessees mined and shipped about eighteen carloads of barite from one of the veins. The costs per ton, as reported by Mr. Renner, amounted to about $1.25 for mining and $3.85 for shipping to Los Angeles.

In this vicinity, low, rounded hills of dark-gray, granitic gneiss rise above the gravel-mantled pediment at the western base of the Mohawk Mountains. This gneiss is cut by a few narrow, branching dikes of granite porphyry, many thin brown veins of ankerite, and a few veins of barite.

The principal barite vein occurs within a fault zone that strikes S. 70° E. and dips 80° SW. This vein, which is traceable for a length of several thousand feet, is mostly less than two feet thick, but in one place it swells to a thickness of seven feet. All of the barite shipped was mined from an open cut on the widest portion. In this cut, which was 25 feet long by twenty feet deep, the vein widened from a maximum of four feet at the surface to seven feet at the bottom. The barite occurs as white to pink radiating crystals, up to several inches in diameter, within masses of crystalline manganiferous calcite and white calcite of a later generation. The walls are bordered by irregular layers, up to several inches thick, of pale-blue chlorite and intermingled calcite. According to Mr. Renner, this chlorite carries a little silver.

A few narrow veins branch from the main vein. About 200 feet south of the open cut, one of these branch veins attains a width of ten inches.

RUBY PROSPECT

The Ruby claim, held in 1930 by Mr. W. G. Reed, is about four miles north of Mohawk, near the eastern foot of the range.

Here, eastward-trending arroyos have cut through a detrital mantle and exposed a pediment of granitic gneiss with lamination which strikes northwestward and dips about 45° E. A vertical shaft sunk through the gravel and into the gneiss contained water at a depth of approximately seventy feet. Its dump contains a minor amount of granular, vitreous, gray quartz, with fractures lined with sericite, limonite, and small amounts of malachite.

Some 500 feet farther northeast, a quartz vein that strikes northwestward and is seventy feet thick in places, outcrops as a low, sharp ridge. This quartz, which is similar to that on the shaft dump, is extensively shattered. Some of the fractures contain a little iron stain and traces of malachite.

TAVASCI OR VICTORIA PROSPECT

A prospect owned by Mr. G. E. Tavasci is on the western slope of the Mohawk Mountains, about six miles by road south of Mohawk.

Here, coarse-grained biotite schist strikes southeast, dips 30° NE., and is cut by a few dikes of aplite and pegmatite. More than 300 feet of tunnel, driven by Mr. Tavasci during the past 35 years, extends eastward along a steeply southward-dipping fault zone. This zone contains a vein, up to ten or more feet wide, of limonite, breccia, and scattered bunches of quartz. The quartz, which is dense, vitreous, and brecciated, contains limonite and calcite within fractures and cavities. According to Mr. Tavasci, the quartzose portions of the vein carry a little gold.

The Rio Colorado Gold Extraction Company has pay gold mines to start with. It is not a fake company organized for the purpose of selling worthless stock.

The Rio Colorado Gold Extraction Company.

Principal Office at
Colorado City, Colo.

Mines and Mill in Yuma County, Arizona.

Capital Stock, $1,000,000,
Shares, $1.00 Each.

BOARD OF DIRECTORS.

R. S. BRISCOE, President.
N. B. HAMES, Vice President.
C. D. TAYLOR, Treasurer.
W. P. EPPERSON, Secretary.
C. M. SHERMAN.

J. C. HAMES, General Manager.
GILES OTIS PEARCE, Metallurgist.

The properties of this company are rich gold producers with sufficient development to prove their value. A portion of the treasury stock is offered at 10 cents a share for the purpose of installing the machinery.

Announcement....

In introducing the Rio Colorado Gold Extraction Company, to the consideration of investors, the officers desire to say, that especial attention has been given to the incorporation of the same, so that as a corporation, the business of and for this company can and may be conducted in any country and at any place, as along the line, essentially, in the extraction of gold and other valuable metals, and to do any business or thing in anywise appertaining thereto, from the discovering of mines to the marketing of the refined metals, and more particularly, gold.

The first proposition taken up, is the ownership of twelve gold claims, each 600x1500 feet, which are located in south-western Arizona, Yuma county, near the Colorado river, as north of Yuma and south of Ehrenburg, which region was the La Paz or Weaver district. This district has yielded something over $2,000,000 in coarse placer quartz gold. These quartz veins are now being prospected and opened up. The twelve claims of this company's proposition have been opened and explored to that point where mill samples show that the groupe of claims secured by this company, is now certainly a pay ore proposition—one of values. The tenor of values shown places the proposition far beyond ordinary discoveries. The ore of this character is available now to continuously operate five stamps and the showing is enough to warrant the construction and operation of a ten-stamp gold mill. This is to be done as rapidly as possible and the mill put to work on the ores extracted from the company's mines.

About 65 or 70 per cent. of the values is in free metalic gold, some of which is quite coarse, and the remainder a good concentration proposition that will afford a high grade of concentrates for shipment to the smelters.

These mines are truly a vast storehouse of gold ores; filled to the brim and outcropping in long streaks of pay ores, which have been thoroughly tested by expert metallurgists and engineers, and the values of the ore, is chiefly in an abundance of gold in veins, the matrix of which is the regular California white quartz, banded with rich ores of gold, as in comparison, like the ores from the famous producer, the North Star mine, of Nevada county, California. In general character they are held to be duplicates as also same in general values.

From samples taken off the free gold of one of these claims, the following is a list:

No. 3087—300 feet along ore chute, outcrop $23.71 per ton.

No. 3088—Talc $12.36 per ton.

No. 3092—Bottom 75 feet shaft, $35.07.

No. 3093—General average of ten tons ore on dump, $110.46 per ton. Same ore and sample by school assay 20 scorifications gave average of $154.92 per ton.

No. 3094—Check on sample 3093 gave $94.96 per ton, the free coarse gold causing varience.

No. 3254—Float, surface, $9.27 per ton.

No. 3255—Pay shoot of No. 3254, $84.22

No. 3257—From 35 foot in shaft, $57.78 per ton.

No. 3258—Opposite side of vein at 3257 sample $16.48 per ton.

No. 3260—Milk white quartz $19.60 per ton.

No. 3263—Bottom of a shaft on vein $18.57 per ton.

No. 3265—Quartz $19.60 per ton.

No. 3267—Quartz and Hemetite iron $104.31 per ton.

No. 3268—Twenty-five feet in shaft, $72.31 per ton.

No. 3269—Surface rock of vein $14.42 per ton.

The sampling and assays show that this company have, beyond question, secured a bonanza gold producing proposition, and

that the ore is to be extracted. Therefore investors are invited to come into and become owners of the stock of The Rio Colorado Gold Extraction company; which they can do at this time by purchase of some of the treasury stock, if they are right quick about getting in with cash.

This company will immediately install the works for extraction of ore, the freight line for hauling ore to the mill, the erection of buildings and a commissary store with a full stock of supplies and necessaries, and put on a sufficient force of men to actively operate the proposition. To do all this takes money, and for the obtaining of this, the treasury received by donations, 450,000 shares of the capital stock. A part of this is now offered for sale at a stipulated price of ten cents per share, and you are offered values in this gold production and extraction combination for your ready money.

☞This mining district, as a quartz vein producing camp, is comparatively new and the ores are rich in gold without question, and this is your opportunity to get in on the ground floor with this company. Remember these facts, that time and tide awaits for no man, woman or child. This opportunity is RIGHT NOW. For surely, later on you will have to pay more to get this stock.

☞Besides the present ownership of these veins of gold ore, it is known that the Colorado river bed, bars and banks nearby, is enormously rich in gold, and this company is after that also.

For full particulars, or further particulars, call upon or address the officers of this company, who will cheerfully reply to your requests.

History and Geology
of the Properties of

The Rio Colorado Gold Extraction Company.

Principal Office at
Colorado City, Colo.

Mines and Mill in Yuma County, Arizona.

Capital Stock, $1,000,000,
Shares, $1.00 Each.

Arizona contains nearly 75,000,000 acres of land. Its breadth is 335 miles from east to west and its length from north to south is 390 miles.

Its surface consists of elevated tablelands and long mountain chains. Many of these valleys are more than 200 miles long and from 20 to 40 miles wide, and the soil is more fertile than the plains of the valley of the river Nile. Enormous reservoirs and ditches are now under construction. In the very near future this great territory will be one vast garden.

It is a "sun-kissed" land, with air pure and dry, invigorating and free from infection. In the northern part the climate is temperate and in the southern and southwestern it is semi-tropical, and the health-giving conditions of the climate are attracting there a horde of people.

The territory contains one of the most extensive bodies of timber in the known world, its plains sustain vast herds of cattle, sheep and horses, and the valleys produce prolific crops of grains and fruits. Its resources are without limit.

The mounains are the storehouse of precious metals and stones. It is to-day one of the richest mineral sections in America, and in this field there is no way to correctly approximate the possibilities. Every range of mountains yet prospected reveals rich bodies of the precious metals. Ore is found everywhere, gold, silver and copper mining being the most successfully pursued. Commerce is thriving there, and the stimulator is the great bodies of gold ores now being operated.

The most attractive gold mining regions lie in Southwestern Arizona. If one looks upon the map to the northwest corner of the Territory and draws downward a line to the intersection of Tombstone, and then views Southwestern Arizona, then the great gold region is located. This region is the continuation of the California gold belt, extending on into Old Mexico in a

southeasterly direction. Most of the mountain chains run from northwest to southeast. These many chains of mountains rise up abruptly and continue along for fifty or two hundred miles at a stretch. And in Southwestern Arizona they are ribbed with veins of the regular California milk-white quartz. At least the central regions of this belt so outcrop. The veins striking not always but generally north and south as diagonally across the force lines of the old and gigantic eruptions that produced these ranges of mountains. The veins are clearly volcanic interstices, or fractures, crevices, filled from below upwards by volcanic thermal springs or excretions, as solutions, in which the silica crystalized and clogged or filled up the eruptive cracks in the earth. Those solutions were full to their power of saturation, of gold, silver, copper, lead, iron and sulphur, and as the silica crystalized, so did the metallic bases, and there they are to this day awaiting the miners' extraction. Many of these veins are oxydized far down, and the gold is free and often very coarse particles. It is this condition that has been the cause of so large a production of free placer gold from Arizona. The history of mining of gold in Arizona dates away back, and its failure to have been foremost in production to date was undoubtedly due to the long since quieted, but persistent conflicts with the Apache Indians at the same periods coincident with the late rebellion. Those Indians for a time conquered and held that region, but they are silenced, and the remainder are now peaceful, and laborers willing to do something in the line of industrial pursuits and the education of their young at the Indian schools, especially so along the Colorado River country.

One of the first authentic records of finding gold was on the Colorado river, above what is now Yuma, in 1775, but little work then was done. The finders of it came out of Sonora, Mexico, going into California. This discovery was probably at what is now called the pot-holes in the Colorado river, just above the junction of the Gila and Colorado rivers. From there up the Apaches held and owned the country, though before the United States acquired that territory, then Mexico, afterwards New Mexico, and then Arizona; there was a Mexican population along the Colorado river, as central, and engaged in mining, about where was the old town of La Paz, now Ehrenburg. But with the war of the United States with Mexico and the Indian raids, this region was again left solely to the Indians—Apaches. Nevertheless the Mexicans took out and removed from that country millions of placer gold, coarse and quite pure. It went to Vera Cruz and the City of Mexico. Silence in mining then again held its sway. But next in 1858, the Gila river placers of gold were found 20 miles from Yuma, and then again the Colorado River country was invaded. This excitement began in January of 1862. Ascending the valley of this great river from the Gulf of California for 150 miles, one is at Yuma, where the mineral regions may be said to begin. This is at the first rock dyke that crosses the river. Here the volume of water is that of both the Gila and Colorado; it is a mighty volume, swiftly moving with a deep current as onwards to

the ocean. It is one-sixth or nearly so, sands and silt moving in conjunction with the water, which in three hours settles clear and makes the finest drinking water of the land. Above Yuma the Colorado river, at about 20 miles, has rim banks of rock and full of pot holes, from which came the first discoveries of gold in any quantity. A single shovel full often washes out $20 to $30, as it is lifted out from the pot holes. This rim rock region banks have several feet of sand upon them. It was the old bed of the Colorado river. It is the opinion of experts that if water were systematically conducted to these placers they would pay exceedingly well.

Forty miles from Yuma on the east side of the Colorado river is the Eureka district with its rich ores of argentiferous galena with gold. The lodes are from one to twenty miles from the river, reached by trails; the country rocks are metamorphic granites, quartz and slates and porphyritic quartz with greenstone or diorites along the veins, and some schistose materials. To the north and east is the Silver and Castle Dome districts, with ores of value, various, and up to $137.50 per ton. These ores pay a profit of $15 to $102.50 per ton. They go to San Francisco and El Paso for reduction.

Upon the west side of the Colorado river here are the mines of the Picacho district, in which are interested many Denver, Colorado, people. These are volcanic ores of gold, chiefly so, and the Jaynes group produced from a 10-stamp mill values of about or ranging from $1,000 to $1,500 per day for a period of four years and a half's mining. These ores averaged $18 to $20 per ton free milling. These properties are undergoing a reorganization of interests. There are about 400 claims located in this camp. There have been many improvements made preparatory to very extensive working. They have got here large bodies of moderately rich gold ores. At this place the Colorado river runs almost due from west to east, so that the Arizona side is on the north.

On the Arizona side back from the river and far to the northward and above on the east side of the Colorado, is the country that right now is being explored and prospected for the veins from which has come the enormously rich placer gold production of the earliest and past records. It is in this region where Coloradoans are going in to prospect and mine for gold.

The region is mountainous, and the junction of a northwest and southeast range with the San Barnadeno range. It is a semi-volcanic region of country with many crater-like eruptions. The Colorado river comes in at the junction of the ranges, and has cut them and its channel for thirty miles out of the solid rocks, and the river valley is consequently quite narrow, the current is swift and deep, but calmly flows the water. On the east side, Arizona side, of the river, and just above the junction, the Colorado river valley opens out broad, and the Chocolate range strikes to the northwest, its western wall being precipitous and for miles the line of fracture is a straight line wall of rocks erupted; here and there the horizon line is saw-toothed as the canons enter out upon the Colorado valley, these canons continue to the river as dry washes, on

either side leaving a long inclining mesa of auriferous gravels on top of the metamorphosed area of lithographic stones or belt, laying between the Colorado river and these Chocolate mountains. So far as known no one has tested the values of these great auriferous gravel beds that extend, at this point and place, for miles up and down the Colorado river, eastern bank, as detritus from the Chocolate mountain range, eruption and deposited wash from the ancient Colorado river bed, which at this place, was then very wide and quite deep; really a great lake or gulf. For the whole country shows it was then covered with salt waters and probably so at the time of the eruption that made these chains of mountains. Such are the indices and the elevation of the Colorado river at this point is but 325 or 350 feet above the ocean level.

In these dry washes, coming down out of the Chocolate mountains, is now found fine and coarse placer gold. As one goes east and up them, following the milk-white gold quartz and the hematite honey-combed float of the dry wash, in search of the source of this float, suddenly an entrance is made into a formation tilted and standing nearly perpendicular. These are slates, in which are bands and stringers of quartz with here and there great lines of carboniferous characters, all showing metamorphic alterations. As suddenly you enter upon belts of a volcanicly metamorphosed sandstone that now are wide zones of semi-quartzites, that on their east side rest on and contact with the second but first erupted azoic rocks, and immediately in them appear the long ore shoots and veins of the milk-white and hematite quartz from whence has come the free gold of the dry arroyos. These azoic rocks all show their metamorphisms and effects of the volcanic and eruptive stress—attractions to semi-serpentine and great strikes of diorite or greenstone, along the planes of which occur the white quartz and hematite ores of gold. These veins show true fissuring. Practically this belt, is the southwestern slope or side of the great continental belt that passes from Oregon, California, here, and on into Mexico. For they appear above here on the west side of the Colorado river, on their northwestern strike, and on the southeast to south strike they appear passing near Eureka district, and on to the southeast of Yuma, wherein is the famous producer, the Fortuna mine, of like ore and circumstances.

These Chocolate mountains were occupied by the Yuma Indians and their cousin on the north, the Mohaves—both Apaches, and a fine type of physical manhood. The mines of 1862 found them in these mountains, claiming the country as theirs. One says who were these miners of 1862, that explored these Chocolate mountains and mined the placer gol there? This question is best answered by M. A. McKey, who was a member of the Territorial Legislature of Arizona, from La Paz, about 1868. He says:

"Little was known of the mineral resources of the (Chocolate mountains) Colorado Valley until 1862 (by the Americans). But Captin Pauline Weaver and others in the month of January of 1862, were trapping on the Colorado river, and

at times would stray off into the mountains (Chocolate mountains) for the purpose of prospecting for gold. They had discovered what was then named and is still called 'El Arrolla de la Tenja' (rolled up sheepfold) which is about two miles north of El Campo Ferra (iron camp), and about seven miles east from La Paz (a town now in ruins and on Mohava Reservation.) In this gulch they had discovered gold in small quantities, and which Captain Weaver kept in a quill. Soon after this discovery Captain Weaver visited Fort Yuma (then where Yuma City is now) and exhibited what gold he had. This evidence found in quantities by hunting for it, got to the hearing of Don Jose M. Redondo, who at once set out to visit the newly found 'El Dorado' in company with several others. In a few days they were at the camp of Captain Weaver, who pointed out the gulch from whence came his gold. The party set out in different directions to discover, if possible, the extent of the placers. Within a mile from the Weaver camp southwards, Redondo took a pan of dirt to prospect, and when he had dry washed it, he found a 'chispa' (nugget) which weighed two ounces and one dollar, besides other small pieces. Others of that party found good prospects. They returned to La Laguna, twenty miles above Fort Yuma, for supplies and then went back to the "El Dorado." Forty persons went back with them. About the middle of February, 1862, discoveries were made almost daily. Until it was known that every gulch and ravine for thirty miles east and south was rich with gold, all had their rich diggings. Juan Ferra of the Ferra Gulch, led the discoveries in values. These discoveries spread as news to California and Sonora, and people poured in from all points until about 1,500 persons had arrived, and they stayed until 1864, when the extreme high prices of provisions caused many to come out. Besides the discovery of Weaver and Walker at Antelope mountain, where over $500,000 in gold nuggets had been collected from the top of one mountain drew others away as early as 1863. But many stayed at Captain Weaver's camp. Of the yield of these Weaver and Ferra placers, it was one of enormous quantities of gold, from $100 to $1,000 per day to the man was common. One nugget of 47 ounces was found by Don Juan Ferra; another of 27 ounces and another of 26 ounces, by others. Many one to two ounce pieces were found. Many of the larger nuggets were never shown because of the then hold-ups there. Much of the gold discovered then was in nuggets from $1 upwards. Papago Indians got $10 per day for work. The gold was large and generally clear from foreign substances. It brought $17.50 to $19.50 per ounce, generally in trade; at $16 to $17 per ounce at placers. Since 1864 to now, in winter months, many have mined these placers; even yet $40 nuggets are quite common. Dry washers make upwards of $20 per day. My opinion is that they produced over $2,000,000 before the Apaches drove out the miners of that country."

The richness of these placers suggested the existence of valuable quartz lodes in the vicinity, and leads prospecting started in 1862, and within an area of 30 miles south of La Paz several

were opened and their ores tested.

La Paz is now in ruins, and in the Mohava Indian Reservation, but just below, is Ehrenburg, which is off the Mohava Reservation. It is about five miles below.

The Constantine vein at 75 feet, 20 tons yielded with arrastres $40 per ton.

The Conquest vein owners refused $100,000 for their property.

There was the Cruc, Piacadio, Peach Bloom, Hughes, American Pioneer, Scotty, Salazan, the Apache Chief, of the original discoveries—all gold ores.

Another one southwards called then the "Colorado," was examined in 1867, about January, by Herman Ehrenberg, who had been the traveling companion of Baron Von Humboldt. Ehrenberg was among the first to examine the lodes upon the Colorado river. He was a cautious man with his expressions, and he said in his examination of the Colorado mine; "This mine is located on the east bank of the Colorado river, in the Territory of Arizona, nine miles south of La Paz, and about eight miles east from the river. The outcroppings are very heavy, and may be traced for a mile by bands or isolated outbreaks of quartz matter stained with carbonates, intermixed with copper glance. The Colorado appears more like a mighty interstratified deposit of gneiss and metamorphic slates in which it occurs, forced to the surface by an eruptive mass of rock that breaks forth west of the croppings. Its great extent and width on surface and the rich ores it contains speak extremely favorably for its becoming a lasting and extremely valuable mineral zone. The ores are of three qualities No. 1, 40 to 70 per cent. copper, and a large quantity of silver. No. 2, 30 to 50 per cent. copper, and the No. 3, $30 to $100 per ton, free gold. The ore was shipped to Swansea for testing and the offer for it was $250 per ton."

This Colorado mine is on the north end of what is called the Chocolate mountains, the now point from whence south and southeast are the recent rich discoveries of gold, free and combined, probably 60 to 75 per cent. of gold values free. Seventeen miles nearly due south, perhaps a little west of south, from this Colorado mine, is the group of 12 claims called the "Free Gold Group" of mines. This is the old discovery of one Celestina, during the 1862 and 1863 excitement. The loose float ores from this vein were packed out by burros to the Colorado river, west about six miles, and there worked in a primitive arrastre. At the exodus during the Indian raids from 1863 to 1880, many of those discoveries became a thing of the forgotten past. But there was the arrastre and ore, and where was the ore from. It was traced and the Free Gold Group of claims as the result, after many years of unknown. It is now a famous discovery, rich in gold ore. These ores, and almost all of the values, are in free gold.

Entering abruptly into one of those dry wash canons, crossing the carboniferous and sandstone metamorphosed rocks, the contact with the azoic rocks, also by volcanic action, now metamorphosed, is sharply defined. To the east, and above you, on the second bench or fold of the volcanic action, is before you the Free Gold

Group proposition. A mining proposition of a free milling gold ore.

On the east of the sandstone contact lays the first diorite, pyroxine of greenstone erupted rocks. These are exposed in long bosses or dykes, ring up through the metamorphosed feldspars to a breccia. It is possibly 200 feet from this ontact with sandstone as now quartzite, to the great milk-white quartz and hematite veins. These cut from south to north with 10 degrees east of south and west of north. This is the payore chute veins or vein.

The elevition here is 1,175 feet above the ocean. The elevation at the water in the Colorado river is 325 fee above the ocean. The peak on the east rises still above the 1,175 foot mark, and quite abruptly so. This erupted mountain is almost totaly barren of vegetation. The outcropping whit quartz is clear, clean and sharp. The ores are "free milling," that is, they contain native gold easily amalgamating with quicksilver. They will at depth contain metallic sulphurets. It is likely 30 to 40 mesh screens should be used in the mill. In the country rocks is much crystalline schists. The country shows three epochs of intense volcanic action, the lavas building up three chains of igneous masses of archaean rocks destroyed, with leavings of some grained granitic rocks. The dark green fine-grained rocks form pointed areas running nearly north and south. The lowest or earliest uplift was associated with outbreaks of igneous rocks, that began the mountain building, of different characters, porphyrites and diabase dykes appearing scattered. In the two and three dymamic forces with different intensity and in different directions produced fissures in systems, in which auriferous solutions ascended, crystalized and deposited their contents. Much schistose structure is visible, also the uplifts were tilting and to the westward, hence the drainage to the west and the formations of canons in that direction as towards what is now the bed of the Colorado river. In these canons is found dark diorite, gabbro and pyroxen lavas; also schistose greenstones, as wash from the mountain above and at the Free Gold Group of mines. The gravels in the dry washes are auriferous, well rounded, and some are polished, usually gray to black silicious rocks of the oldest archaean period.

These quartz veins carry native gold and lower down in the shaft show some auriferous metallic sulphides. Tracing on the surface is of the harder projecting quartz cropping from a few feet to several hundred feet. The matrix of the vein is on foot wall, a decomposed diabase stuff, then the milk-white quartz, then the quartz with hematite of iron as peroxides, at depth sulphides. This high grade ore hangs to hanging wallside. The foot wall material shows a little lime reaction. The quartz gives no reaction whatever for lime. The peroxides or decomposed ferraginous matter is the high grade ore. Some would call it a limonite, but it gave no calcium reaction, hence it is not limonite. The gold is nearly perfectly free in the surface ores. In the white quartz it is fine and barely visible to invisible to the naked eye. The mineralized with gold zone is extensive in length and strong, with dis-

tinct pay shoots.

Quite an extensive exploration of the veins has been made and from which many assay samples have been taken. A recent collection therefrom of mineralized quartz and ore gives returns as follows:

No. 3087—Pans rich in free gold—a quartz with hematite the surface spalls off vein outcrops to south of shaft of free gold claim for 300 consecutive feet ore shoot exposed and averaging about 11 inches wide. Erupted andesitic hanging wall and pyroxines to schists foot wall. Gold per ton $23.71.

No. 3088—Talc off foot wall in bottom 75 foot shaft; moist, gold per ton $12.36.

No. 3092—Hanging wall pay ore from vein in drift south at bottom of 75 foot shaft. Gold per ton $35.07.

No. 3093—Sample "A" from general average of ten tons on dump from ore shoot; gold per ton $110.46.

No. 3094—Sample "B," same as No. 3093, but second sample; gold per ton $94.96.

No. 3254—From 12-foot hole south of main shaft; gold per ton $9.27.

No. 3255—From same as 3254 pay shoot; gold per ton $84.72.

No. 3256—Sample of foot wall; gold per ton $2.30.

No. 3257—Sample from 35-foot mark, main shaft, a quartz; gold per ton $57.78.

No. 3258—Same place opposite side of vein; gold per ton $16.48.

No. 3259—Blue stuff, foot wall at 75 feet; gold per ton $2.06.

No. 3260—Bottom of shaft. F. G. claim, milk-white quartz $19.60.

No. 3261—Talc near bottom of shaft; gold per ton $1.06.

No. 3263—Bottom of shaft, next to hanging wall; gold per ton $18.57.

No. 3265—Quartz from shaft; gold per ton $19.60.

No. 3267—Quartz and hematite; gold per ton $104.31.

A school of 20 scorifications gave an average of 7½ ounces gold per ton. This was on the hematite ore in white quartz matrix.

No. 3268—Sample from 25 feet south of shaft; gold per ton $72.31.

No. 3269—Surface rock off vein 75 feet south of shaft; gold per ton $14.42.

Quite a number of rechecks upon these samples proved of like values.

The assays of the country rock show that the vein forming waters were ascending thermal waters, bearing upwards, their load of dissolved substances, these crystalized and precipitated, so closed up the fissures. Therefore mineral, i. e., gold of good values, may be correctly anticipated by deep workings of this property. The ore shoots are long and of good average width. It will be remembered that salts of gold form standard solutions with thermal waters, and so will there in this case be invisible gold in the milk-white quartz. The assays show that also, but such gold readily amalgamates on plates. The decomposed ores will be found above the water level of these mines.

Particles of sulphides coming up with the

waters caused crystalization and precipitation of the gold and silica. Hence the filling of these veins by a milk-white quartz, and which is liable to contain bonanzas of metallic gold occasionally. At depth there is a likelihood of this solid milk-white quartz constituting all the ore, as after the Nevada county, California, mines proposition, in which the gold is rarely visible to the naked eye, except where occurs the metallic gold bonanzas.

This vein lies near the contact on the surface, with strong evidence of movement and crushing of both country rocks. The quartz shows a ribbon structure, and in some places free, coarse gold.

The surface indicates other and parallel veins of like kinds. All generally trend as in direction of the general contact, and in dip nearly perpendicular, a light incline to the east, looks as though it might straighten up and finally dip to the west.

The comparison is good with the Nevada county, California, quartz mines. Particularly so with the North Star vein, in all of the aspects of that mine, except that the Free Gold Group of claims show a higher grade of ore upon the surface, and that the trend of the veins is nearly north and south, and as yet a nearly vertical vein.

The Free Gold Group of claims lie at the border line between the foothills of igneous rocks and middle uplift of the metamorphosed azoic or older aged rocks, as in the fractures of the azoic fissures system. The greater mountains on the east are higher and belong to the third violent and closing eruptions. These erupted ranges were subjected to great compressive stress, producing systems of joints and fissures, in and on which the milk-white quartz veins were formed by the ascending thermal solutions, which left quartz with native gold and metallic sulphides. The gold and sulphides were probably largely deposited mechanically with the crystalizing silica.

With such expert reports and several visits to these Free Gold Group claims, it has been concluded upon to take over the purchasing contracts and stock and incorporate on this proposition. The Rio Colorado Gold Extraction Company, as under the laws of the State of Colorado, and for $1,000,000 in 1,000,000 shares at $1 per share, par value.

In the treasury is to be donated 450,000 shares as a treasury fund and to be sold for a price set by the directory of the company.

These funds to be expended upon and for the property, by immediate opening of the mines on these outcropping pay shoots. To extract the ores and have them down to or near the river to be milled.

There will be constructed an improved five-stamp mill, to start with, and more as required. An improved concentrator will be a part of this milling plant, and it is expected to daily treat about 15 tons of this ore.

The outcrops of pay shoots now show that there is available plenty of ore for this five-stamp mill, and that by opening the other outcropping ore shoots a larger production can be steadily established.

To this end the management of this undertaking and enterprise is rapidly working, and it is intended to immediately install the works and the workings of these veins.

450,000 shares of the treasury stock is now offered for 10 cents per share, or so much thereof as will meet the call of the management for funds as required.

President, R. S. BRISCOE. Vice President, N. B. HAMES.
Treasurer, C. D. TAYLOR.
Secretary, W. P. EPPERSON. General Manager, J. C. HAMES.
Metallurgist, GILES OTIS PEARCE.

TO WHOM IT MAY CONCERN.

COLORADO CITY, COLO., 8, 11 '97.

The enclosure is sent to your address, at my request, and if but a moment is given to reflection, you will remember me as through the Financier publication, of New York. As a contributor to that papers news from the mining districts. This is the first you have heard from me for a year past. I have been engaged in looking up this class of gold property, for this party; now, THE RIO COLORADO GOLD EXTRACTION COMPANY. This company have now secured this property and proposition and it is as they have represented herewith. It is first class high grade ore from the top down. Good free milling ore and of unusual high grade values. I cheerfully can and do recommend you to the immediate, and probable necessary, telegraphic purchase of the amount you want of this allotment of the "Treasury Stock" of this company. It will pay you to do so. The board of directors of this company are well known at the Colorado Springs banks, and any stock broker can reach the Secretary and Treasurer or General Manager, by calling up telephone No. 294, Colorado City, Colorado.

I sampled these mines and assayed the ores. The values and quantity are there.

GILES OTIS PEARCE.
Member North of England Institute of Mining and Mechanical Engineers, New Castle-on-Tyne, England.

Hundreds of dollars per day to the man was common, and now and again a $1000 or more per day. The Ferra nugget weighed $976.55; another, $557.55; another, $536.00 and another, $413; and many nuggets from 20 oz down. [La Paz and Chocolate mountain placers, Yuma county, Arizona. M. R. U. S. 1886, page 454.]

See Hart "A" file

MG-20 GRAND CENTRAL GROUP [illegible] B.Hart,Cibola,Yuma [illegible]

Copy of Mine Owners Report covering property listed with th
Department of Mineral Resources has been furnished to -

CHAS. E. LEES,240 N. Cliffwood Ave., Los Angeles, Calif.

DEPARTMENT OF MINERAL RESOURCES

J. S. Coupal, Director