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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: LA PAZ PLACERS

ALTERNATE NAMES:
FERRAR GULCH
ARROYO LA PAZ

LA PAZ COUNTY MILS NUMBER: 116

LOCATION: TOWNSHIP 4 N RANGE 21 W SECTION 26 QUARTER NW
LATITUDE: N 33DEG 39MIN 40SEC LONGITUDE: W 114DEG 24MIN 08SEC
TOPO MAP NAME: LA PAZ MTN - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
GOLD PLACER
SILVER

BIBLIOGRAPHY:
KEITH, S.B., 1978, AZBM BULL. 192, P. 159
ADMMR LA PAZ PLACERS FILE
AZBM BULL 140, P. 104
AZBM BULL 160, P. 25, 28
AZBM BULL 180, P 158, 161, 163
USGS MINERAL RESOURCES 1912, PT. 1
USBIA STATUS OF MINERAL RESOURCES INFO. FOR
COLORADO RIVER IND. RES. P 15-16
USGS BULL 620, P. 45-54
USGS BULL 1355
ADDITIONAL WORKINGS IN T3N R21W & T4N R 21W

FERRAR GULCH

La Paz ~~YUMA~~ COUNTY
mils 11G

placer gold

See: ABM Bull. 160, p. 28
GW WR 2/10/72

ARROYO LA PAZ

La Paz ~~YUMA~~ COUNTY
mils 11G

placer gold -
See: ABM Bull. 160 p.28

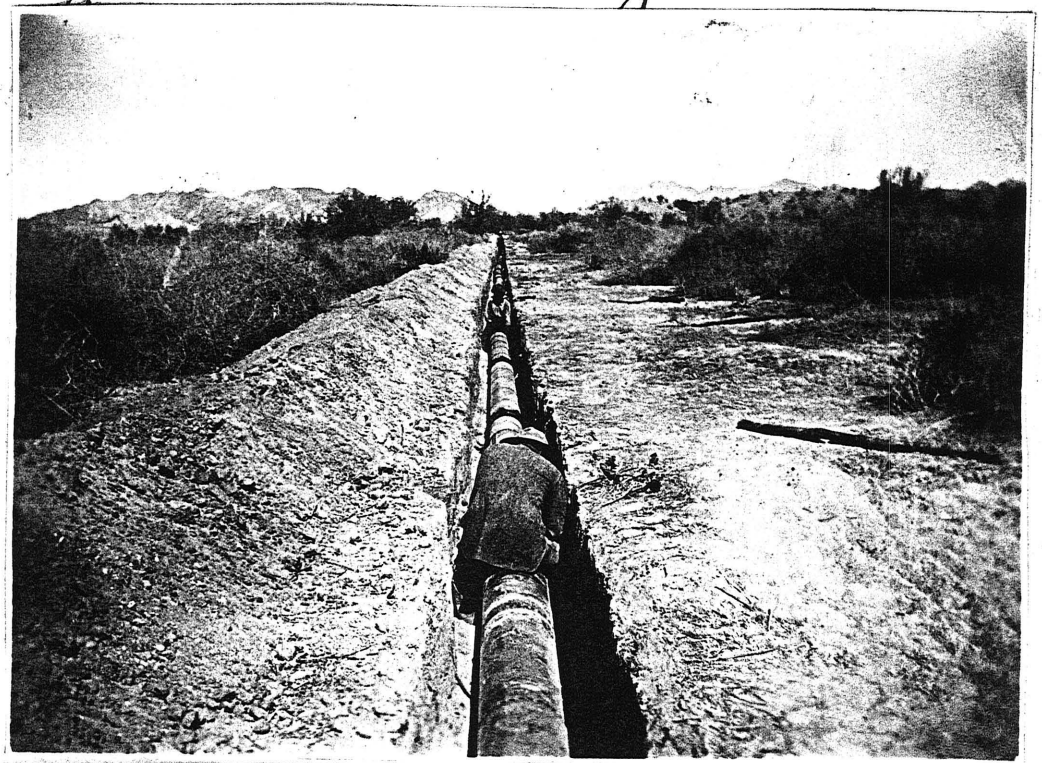
SEE: LAPAZ PLACERS

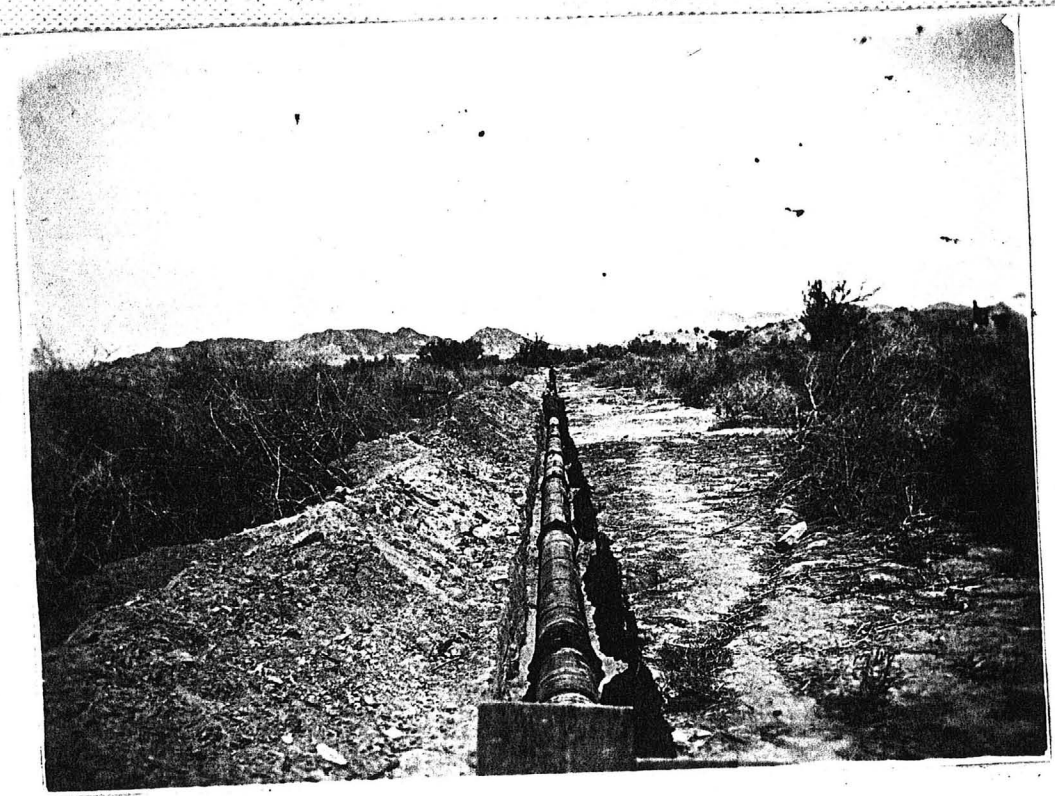
4/2281 (replacement card)

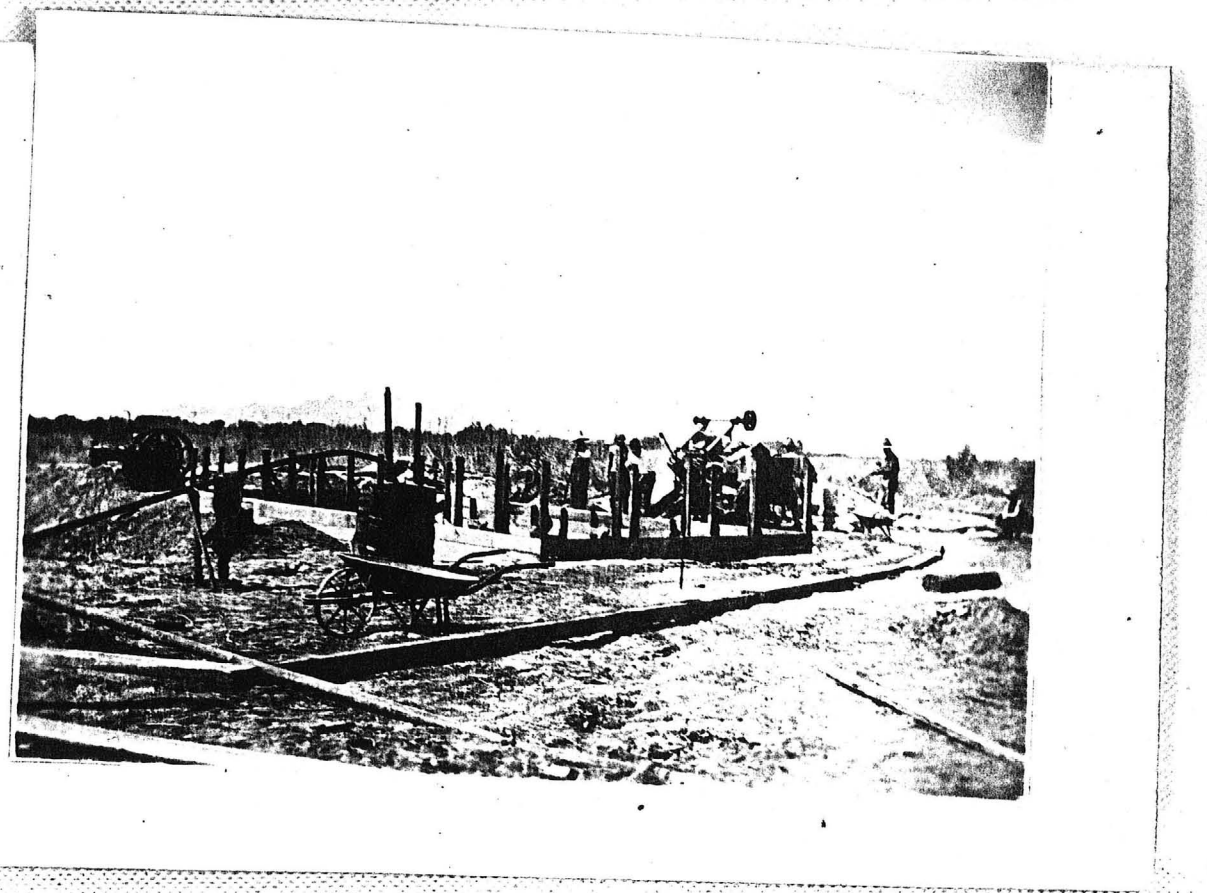
New La Paz Gold Mining Co.

May 18, 1921.

Showing Construction work at the mine of the new La Paz Gold Mng. Co.







LA PAZ PLACERS REFERENCES YUMA COUNTY

T4N R21W
T3N R21W

ABM Bull. 140, p. 104

ABM Bull. 160, p. 25

ABM Bull. 180, p. 158, 161, 163

USBIA Status of Mineral Resource Information for the Colorado River Indian Reservation p. 15-16 - See Library Indian Reservation Books.

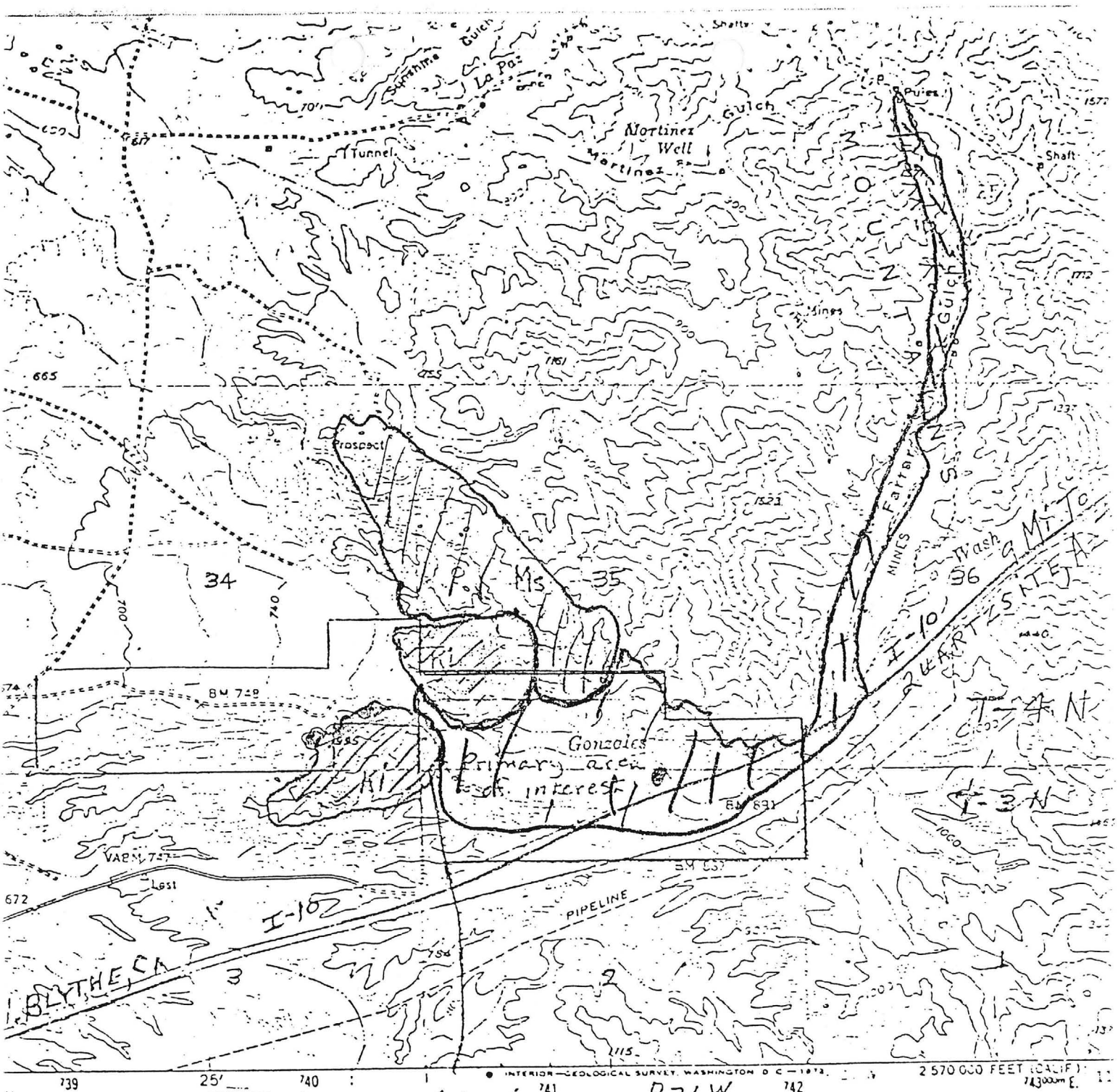
MILS Sheet 0040270257

ABM Bull. 192, p. 159

USGS Mineral Resources (1912) pt. 1 O. 254-263

USGS Bul. 620 p. 45-54

USGS Bull. 1355



Yuma Co.

- Cretaceous intrusive
- Mesozoic shist
- Known extent auriferous gravel

1 MILE

7000 FEET

LOMETER

ROAD CLASSIFICATION

Heavy-duty — Light-duty

Medium-duty — Unimproved dirt

U. S. Route

QUADRANGLE LOCATION

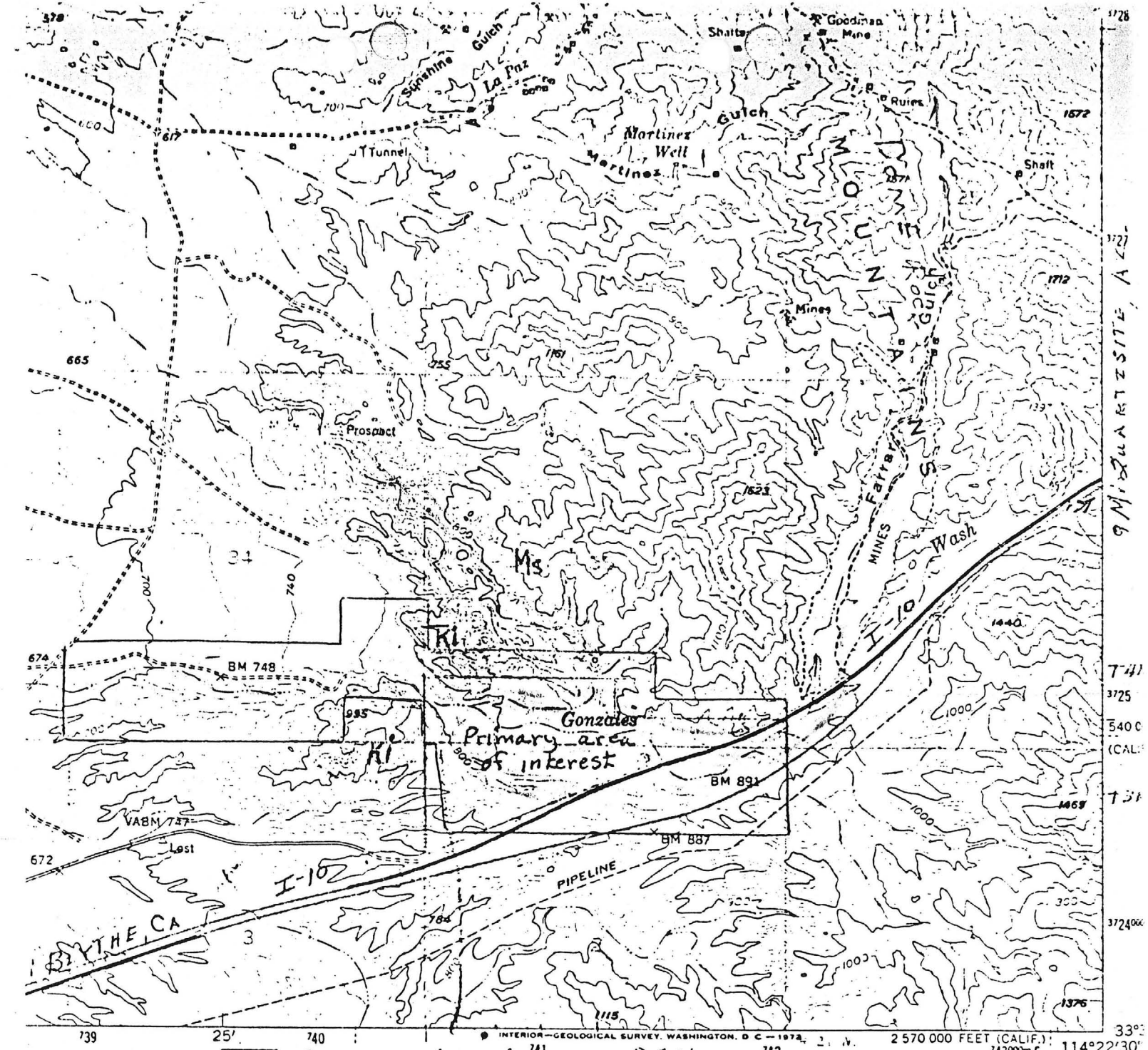
LA PAZ MTN., ARIZ.—CAL

NW/4 DOME ROCK MTS 15' QUADRANGLE
N3337.5—W11422.5/7.5

1955

AMS 3151 III NW—SERIES V896

GTON, D. C. 20242
EQUEST



Ki - Cretaceous intrusive

Ms - Mesozoic shist

- known extent auriferous gravel

Yuma Co.

LA PAZ MTN., ARIZ.—CALIF.

NW/4 DOME ROCK MTS 15' QUADRANGLE

N3337.5—W11422.5/7.5

1955

AMS 3151 III NW-SERIES V898

BLM SERIAL NUMBERS

AMC 46048 THRU 46053

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

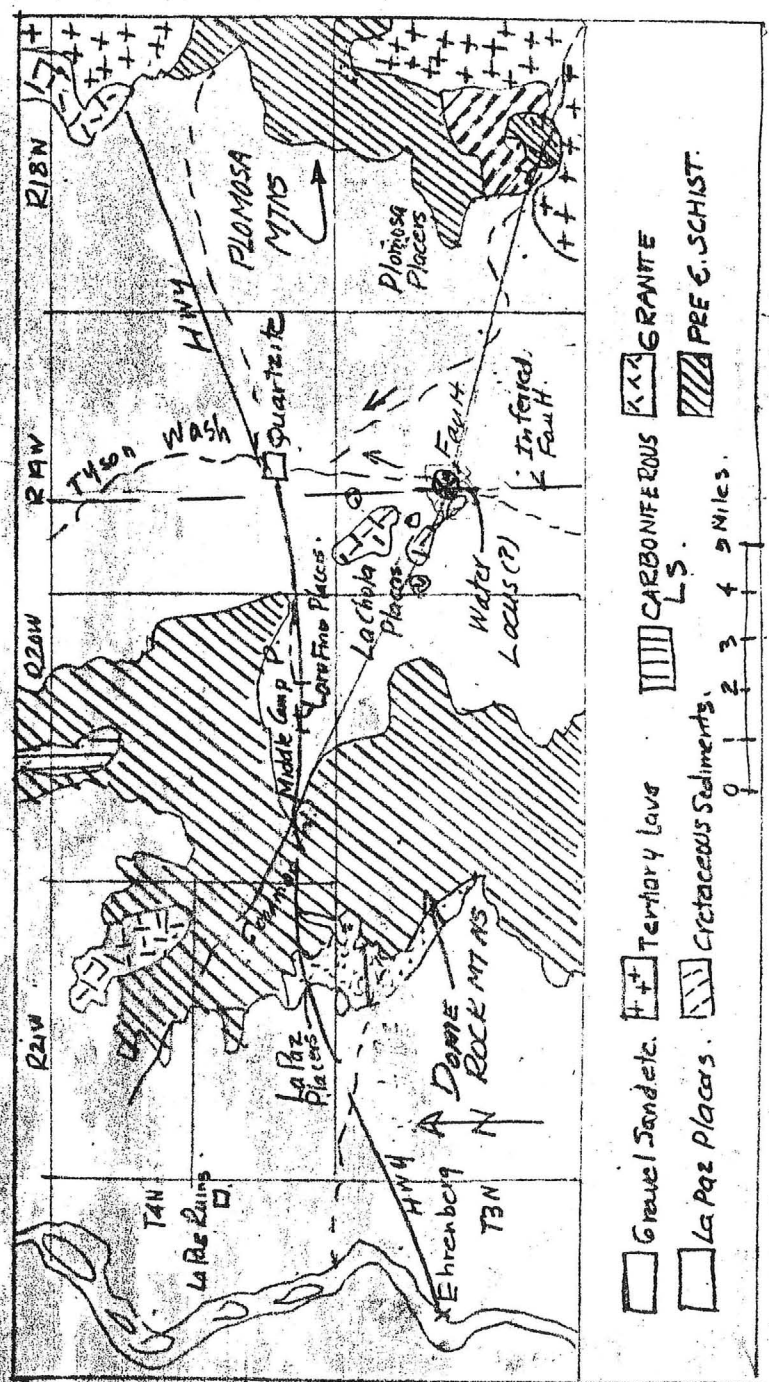
Mine La Cholla, Plomosa, Oro Fino, La Paz and Middle Camp Placers (gold)

Date 7-10-57

District Plomosa District

Engineer Lewis A Smith

Subject: Placers. (water problem.)



NEW LA PAZ GOLD MINES

John F. Duling

Mining Engineer.

(COPY)

Los Angeles, Calif.,
Nov. 16, 1920.

New La Paz Gold Mining Co.,
930 Merchants Natl. Bk. Bldg.,
Los Angeles, Calif.

Gentlemen:--

In accordance with your request I have examined your placer mining property in Yuma County, Arizona, and hereby submit a report on the same.

I understand that this report is to be used in connection with your application for permitto sell 150,000 shares of Treasury Stock for the completion of financing the property.

While my report has been confined to determining the gold values in the property I have taken occasion to glance over your general plan of development and the equipment you have purchased.

I wish to say that the expenditures on the development of the property and the general plan being followed are in accordance with established mining practice.

The values found in the areas already explored are sufficient to warrant a much greater expenditure in opening up the property than will be represented by the total of your expenditures to date plus the amount realized by the sale of stock now contemplated.

Yours very truly,

(Signed) John F. Duling.
Mining Engineer.

NEW LA PAZ PLACER MINES

The New La Paz Placer Mines are located in Yuma County, Arizona, about 12 miles northeast of the town of Blythe, California, and about 31 miles southwest of the town of Bouse, Arizona.

The property, comprising 15 claims, lying in Goodman Arroyo, covers an area of 1546 acres.

This ground was the scene of a rich gold strike in 1862 and was extensively worked for the following six (6) years by dry panning. Miners were said to have taken as high as $100.00 per day from the old diggings by this method.

Later dry washing machines were introduced and work was carried on in this way until this land was taken into the Colorado River Indian Reservation, from which it has only recently been released.

The early mining was confined entirely to the small side gulch where the gravel was shallow and bed rock easily reached.

No attempt was made to handle the deeper gravels in the main gulch which are entirely untouched. In fact, under the early methods used, only ground paying in the neighborhood of $10.00 per yard or better could be profitably worked.

The tailings from the old workings will undoubtedly carry good values as the losses by the crude methods used in the early workings were undoubtedly considerable.

The east end of the property was systematically prospected and sampled by E. A. Rasor, a Mining Engineer, in 1916. The prospecting was done by means of shafts, some 74 being sunk on this portion of the property. During the summer of 1919 the heavy rains covered and filled up the shafts in part so that in most cases only the upper portions of them are accessible for sampleing.

I visited the property on November 9, 10, and 11 of this year and took 33 representative samples from these shafts and exposed gravel banks along Goodman Arroyo, covering a total distance of about one half mile. It is estimated that the portion of the gulch covered by these samples contains approximately 1,000,000 yards of gravel.

The samples taken from locations shown on attached map varied in weight from 80 to 180 pounds and were run through a dry washer and then concentrates panned in a gold pan. Theresults of the panning were thendried and the coarse gold separated out and weighed.

The black sand concentrates, from which the coarse gold had been removed, were then combined and assayed.

The gulch was sampled in cross-section as follows:-

Samples No. 1 to 12.
Average coarse gold ---------- $1.04
Average value concentrates 1.20

Total average value per cu.yd.gravel $2.24

Samples No. 13 to 18.
Average coarse gold - - - - - $1.08
Average value concentrates 1.20
Total value per cu. yd. - - - - - - - - - $2.28

Samples No. 19 to 27.
Average coarse gold - - - - - $1.69
Average value concentrates - 1.20
Total value per cu. yd. - - - - - - - - $2.89

Samples No. 28 to 33 do not represent an average cross-section of the gulch but are typical samples as the gold is comparatively uniformly distributed across the gulch as shown in the above samples.

The samples 1 to 18 are representative of the average value of the top 8 feet of gravel. The gravel at this point has an average depth of 30 feet and undoubtedly will show higher values near bed-rock as is indicated by samples 32 and 33.

The method of concentrating with the dry washer, which was the only means available, is unsatisfactory and panning and assay tests made from the tailings show a very considerable loss in this method of testing. This partially due to slight clay cementing of the gravel which readily breaks up when put in water.

Taking into consideration the above conditions I consider the above values very conservative.

My sampleing of the property corresponds, as well as could be expected, with the values given in Mr. Rasor's replrt of October 16, 1916, as shown in the Prospectus of the Company. A check of his estimate of the total yardage in the eastern portion of the claim given as 5,300,000 cu. yds. is approximately correct. Mr. Rasor's estimate of an average value per yard of this material of $2.16 I believe to be conservative.

The estimate of operating cost of 10 cents per yard must be considerably increased under the present conditions.

However, the exceptional values as found in this gravel show your property to be exceptionally good and would warrant a very much larger expenditure on the property than you contemplate.

Yours very truly,

(Signed) John F. Duling.
Mining Engineer,
1125 Central Bldg.,
Los Angeles, Calif.

November 16, 1920.

SAMPLES FROM SHAFTS AND GRAVEL BEDS

Sample No.	Location	Coarse gold separated by hand washing from black sand. Val. per cu yd
1	Shaft 9' deep top to bottom N side	$1.12
2	Same as No. 1 W "	.76
3	Shaft 9' deep top to bottom W "	.16
4	Same as No. 3 E "	1.02
5	Shaft 7½' deep top to bottom E "	2.35
6	Same as No. 5 W "	1.09
7	Shaft 7½' deep top to bottom N "	1.17
8	Same as No. 7 W "	.34
9	Shaft 8' deep top to bottom W "	1.58
10	Same as No 9 N "	.40
11	Average of dump shaft 26'deep	1.66
12	Bank 2' high	.81
13	Bank 8½' high top to bottom	.20
14	Same as No. 13	1.56
15	Shaft 10' deep, average of dump	1.58
16	Same as No. 15	.73
17	Shaft 15' deep caved, average of dump	2.12
18	Same as No. 17, Upper 5½' of shaft	1.32
19	Bank 8' high top to bottom	1.04
20	Same as No. 19	.23
21	Shaft 30' deep to bed-rock caved, dump average	3.52
22	Same as No. 21	1.34
23	Shaft 26' deep dump average	0.00
24	Same as No. 23	4.25
25	Same as No. 25, Sample 6' to 16' N.E. side	1.98
26	" " " 23 " " " " S.E. "	1.43
27	Shaft 25' deep caved, dump average.	1.46
28	Shaft 8' deep top to bottom N side	6.52
29	Same as No. 28 W "	.86
30	Shaft 9' deep top to bottom W "	1.25
31	Same as No. 30 N side	.77
32	Shaft 23' deep, sample 8' to 23' S "	4.41
33	Same as No. 32 W "	6.21

Composit samples of the combined concentrates, after all loose gold was separated, assayed 29.9 oz. gold per ton. Mr. Rasor found that 300 yards gravel yielded one ton concentrates, on which basis the concentrates add to the coarse gold values given above an average of $1.20 per yard.

PRELIMINARY ESTIMATE
of
COST OF OPERATION OF THE NEW LA PAZ GOLD MINING COMPANY'S PLACER MINE.

The Placers are to be operated by hydraulic mining methods. The general plan of operation being to break down the gravel banks with giants, work the gravel to a central sump from which it will be elevated by gravel pumps or hydraulic elevators to the sluice boxes, in which the gold will be separated from the gravel.

125 miners inches of water will be pumped from wells at the old town of La Paz on the banks of the Colorado River 4¼ miles east of the point of operation.

The water from the tailings will be impounded and used over again, being pumped through an auxiliary plant. In operation, the water pumped from the La Paz wells will be used as make up water to supply the losses. The losses are estimated at 17% of the total quantity of water in use. This will allow the use of a total of 750 inches for operating purposes.

The duty per miners inch on this class of gravel and on the available grades is estimated to be 2 yards per miners inch.

The capacity of the plant on this basis would be 1500 cubic yards per day, or 45,000 yards per month.

The cost of operation of the plant, including power, labor and incidentals is estimated at $675.00 per day, or $0.45 per cubic yard of gravel mined.

It is estimated that the average recovery from the gravel sampled in the accompanying report will not run less than $2.50 per cubic yard.

Estimated monthly profit:		
45,000 yards gravel at $2.50	$112,500.00	
Monthly cost of operation at $675.00 per day.	20,250.00	
Net profit per month		$92,250.00

Yours truly,
(Signed) JOHN F. DULING.
Mining Engineer,
1125 Central Building,
Los Angeles, California.

STATE OF ARIZONA

ARIZONA CORPORATION COMMISSION

PHOENIX

7

FILE No.

SUBJECT

January 13, 1920.

TO THE COMMISSION:

Report of Findings with reference to Protest by Minority Stockholders Association of the New La Paz Gold Mining Company.

I made careful inquiry to ascertain the facts pertaining to the statements of the minority association as well as the statements made by the officers of the company. First I had a meeting with Mr. Woodard and Mr. Shoemaker, representatives of the minority association, and by reference to affidavits filed in the company's files convinced them that the report that the property contained no value unquestionably was erroneous as there is ample data to show the property has beyond question commercial value. This question having been disposed of I was handed a report made by Mr. Benjamin concerning the proposed plan of operation to be conducted by the company. Mr. Benjamin's report is adverse to the proposed plans, as set forth by him in his report, but on meeting with the officers of the company the following day it was disclosed that the outline on which Mr. Benjamin filed his report was not the plan as proposed to be followed by the company, therefore, the report of Mr. Benjamin is not represe ntative of the facts of the plan of operation. The statement made by Mr. Benjamin that in his opinion it would be well to calculate on 65% efficiency and the calculations and deductions made from that point, or from the point of 85% efficiency, I am inclined to believe erroneous, as the 85% efficiency claimed for the pumps relates to mechanical efficiency and not volumetric efficiency as is carried out in the report. While this statement of mine is made in conflict with Mr. Benjamin's it is only made after conference with the representative of a Standard Pumping Manufacturer's representative who assures positively the deductions in the report are irregular.

At the meeting the following day with the officers of the company and a Mr. Hammond I made inquiry of Mr. Rasor, a mining and hydraulic engineer, under whose supervision the company proposes to install its plan of operation, relative to Mr. Benjamin's report and it was stated the report of Engineer Benjamin did not deal with the proposed plan of

STATE OF ARIZONA
ARIZONA CORPORATION COMMISSION
PHOENIX

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FILE No.

SUBJECT

operation and I requested a signed statement from him setting forth in a short form his reason for making the statement that the report did not deal with the question. This statement is filed.

In the discussion of the plan proposed for conducting operations I made the suggestion that the company eliminate carrying the debris the 1350 ft. as contemplated, as by using approximately 150,000 yards of surface exposure the energy used to accomplish the disposing of the debris can be saved by using the yardage referred to temporarily as a dumping ground and recovery of values in this yardage can be effected later. This suggestion was received with favor by the officials and the company engineer and no attempt will be made to carry the debris the 1350 ft. as noted in the report. At this meeting I held a conference with Mr. Hammond who is the party who has offered to advance the sum of $65,000 cash to conduct operations. He advised me that he was convinced that the plan of operation, as proposed by the company, met his approval and inasmuch as he is entirely familiar with the proposed operations and will devote his time on the property as an employee in order to properly portect his money invested, which, in my judgment, adds considerable weightto the prospect of successful operations. Mr. Hammond is an old experienced miner and expresses no doubt as to the ultimate success of the company as he has personally sampled the property and has assays made by assayers of his own selection in whom he has confidence. I questioned him with reference to the proposed plan of operation as suggested by Mr. Benjamin and he informed me he would not advance one dollar to the company on that plan. He stated that subsequent to receipt of Mr. Benjamins report he made a visit to a property in Northern California where this plan had been used and that in his judgment the proposed plan of the company was the proper plan to follow. Mr. Hammond impressed me as being a conservative, honest, straightforward man whose integrity cannot be questioned.

I again visited Mr. Woodward, representative of the Minority Association on Monday and discussed with him freely relative to the objections of the Minority Association and told him I would recommend to the Commission that the company sell a sufficient amount of stock to create a fund of $65,000, the fund to be held in trust for the purpose of paying off the mortgage on the property in the event Mr. Hammond did not elect to take stock for the money advanced, as placing in jeopardy the property by a mortgage was the foundation of the

STATE OF ARIZONA
ARIZONA CORPORATION COMMISSION
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protests filed. I felt sure this plan would meet with Mr. Woodward's hearty approval and I was much surprised when informed by him that he did not approve of the plan, as in my judgment this plan of raising a fund to be held in trust to protect title to the company is essential as a safeguard to investors. In response to my query why it did not meet with his approval he stated that there would be "just that much more stock out". As the cash would be available to the company in event of Hammond taking stock and as the price to be received for the stock would be equal to the price received for any outstanding stock and far in excess of the payments received for a great majority of the outstanding stock, the failure of Mr. Woodward to heartily approve of the establishing a trust fund in this manner was keenly disappointing.

With reference to the stock represented by the Minority Association, I was informed by one of the largest stockholders that he was fully satisfied with the plans of the company and that he was responsible for the securing of nearly one half of the stock being represented on the minority association list but that now he was not in accord with the objections being offered by the minority association.

I respectfully recommend that approval be given to the petition of the company to enter into and execute the contract filed with the CommissionsJanuary 2, 1920 (a copy of which is attached) and that the company be ordered to sell a sufficient number of shares of treasury stock to create a fund of $65,000 to be held in trust for the purpose of liquidating the mortgage to be given to Mr. George Hammond and Mr. Oliver Adcock when due in the event that Messrs. Hammond and Adcock fail to exercise their rights to accept stock in payment for the obligation of the company and if payment is made to Messrs. Hammond and Adcock in stock the Commission then authorize the release of the fund from trust to be placed in the treasury of the company.

In conclusion I wish to state that I do not believe that the opportunity to finance the company should be jeopardized by delay in accepting the offer of Hammond and Adcock and I am convinced that the interests of investors in the stock of the company are

STATE OF ARIZONA

ARIZONA CORPORATION COMMISSION

PHOENIX

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FILE NO.

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benefitted as the property appears to be umusually meritorious and the securing of the nucleus of sufficient funds to conduct operations is essential.

Respectfully,

W. J. Graham

Los Angeles, Calif.,
January 10, 1920.

Mr. W. J. Graham,
Commissioner of Corporations,
Arizona.

Dear Sir:-

Complying with your request, I have read the report of Mr. Edward Benjamin upon the operation of New La Paz mining property near La Paz in Arizona. It does appear to me that there has been considerable misunderstanding, or that he was not fully advised on the plan of operation.

The company in the purchase of the engines were guaranteed a capacity of 125 H. P. each. The pumps, as I was advised, are capable of lifting 125 miners inches of water, measured under a 4 inch pressure, against a static head of 750 ft. Of course, the reservoir according to the original plan was to be built to a height of 12 ft., but afterwards was thought by the company advisable to construct it 15 ft. high.

The 12 inch steel pipe line contemplated is sufficiently large to convey the above amount of water from the pumping station to the reservoir without approaching the guaranteed 750 ft. static head.

It is not, nor never has been to my knowledge, the intention or plan to lift the gravel with the elevator to a height of 40 ft., and then have it conveyed 1350 ft. through sluices to the sump; the given amount of water and grade would in no manner accomplish the required results. This plan is only outlined and necessary as a part of the preliminary work in getting ready to properly operate the mine, and must be continued only until there is sufficient pit to dump the gravel behind as the work is carried up the gulches.

Again, when the pit is once made, a small self contained, portable auxiliary pumping plant is to be installed in the pit and the tail water used to operate the giant, thereby leaving all of the water from the reservoir for the elevator alone. Instead of lifting all of the gravel to an elevation of 40 ft., a large portion is to be lifted but 10 ft., giving the water four times the stated capacity, and none of it to be lifted more than 30 ft.

Using only as much sluice length as is necessary to settle the gold, there would be as much grade as desired.

Of course it is true that a 4 inch elevator and a 3 inch nozzle on the giant would empty the reservoir in 4¼ hours if working under a 200 ft. head and with ample delivery pipe. Neglecting friction, such head would create a spouting velocity of 113 ft. per second, which would cause the discharge to be nearly 900 cu. ft. of water per minute, but as such an idea has never been contemplated, it is of little use to discuss it.

In the first place it has been plainly set forth that a 12 inch pressure main is to be used, and it is quite evident that such main could not possibly deliver the 16 cu. ft. of water per sec. and give any force whatever at the giant or working power to the elevator, for that amount of water would make a velocity of about 30 ft. per sec. in the pipe and consume its power in friction. If that amount of water had been intended to be used, pipe of a larger diameter would have been specified.

Then too, if the elevator were to lift gravel 40 ft. high, the discharge must be at that point, which would diminish the pressure head by that amount. Still farther;

If the elevator is to lift gravel and water, all of the work done must of necessity be accomplished by the velocity of the water generated by the head. This also must be taken from the static head, thereby farther diminishing the velocity head and greatly reducing the discharge.

The idea is, as before stated, to use a 3 inch elevator and a 2 inch nozzle on the giant, the elevator cannot use more than about 5 cu. ft. per sec. Now as there is a constant supply to the reservoir from the pumps of 2.5 cu. ft. per sec., this amount must be subtracted from amount used, which makes a depletion of 9000 cu. ft. of water per hour. And at this rate, by starting with a full reservoir, the time required to completely empty it would be 25 hours.

The amount supplied by the auxiliary plant can be gauged from time to time as the spouting velocity is necessary to best and most economical work.

Therefore the sluicing can be carried on continuously 16 hours per day for six days of the week, by allowing a shut down of one hour per 8 hour shift to move elevator, shift sluice boxes, etc.

My original report, made some seven years ago, I have not at hand, but am inclined to believe that the amount of gravel to be worked was 2000 yds. per 24 hours, instead of 3000 as printed in the prospectus, which I think has been only a misprint.

Reviewing all of the details, I feel quite certain that the plant, if installed according to the original plans, will fully accomplish all that is claimed.

Yours very respectfully,

E. A. Rasor

Mining and Hydraulic Engineer.

The American Continuous Retort Co.

Denver, Colo. Dec. 17, 1919

LA PAZ MINING COMPANY.

Gold at $20 oz. Silver at $1.20

Marked	Gold oz.	Silver oz.		Total Value
Placer gravel over size 1.4 mesh	.15	1.25	1/3 over size	$4.75
Check	.15	1.25		
Over 14 mesh	.20	.75		
Check	.20	1.25	1/3 " "	5.40
Over 40 mesh	.40	.50		
Check	.40	1.50	1/6 " "	9.40
All through 40	.12	.50	1/6 " "	
Check	.12	1.50		5.20
All mixed	.16	2.00		6.00
Cyanide and amalgamation	.25	2.00		7.80
Check	.25	2.00		1.32

Black sand 8.30% @ 80 cts per
Free gols per ton 28 cts per cubic yard 37 cts

Platinum trace

Charges 100 lbs $10.00

Los Angeles,Cal.
Nov.15,1917.

Mr. C.Fred Grundy
Western Gen'l. Mgr.,
Andrews & Co.,
Los Angeles,Cal.

Dear Sir:--

As per your instructions, I have gone over the date furnished by the New La Paz Gold Mining Company, relating to their proposed hydraulic installation and beg to submit the following:--

WATER SUPPLY:

The company states that two miles east of the Colorado river they have wells furnishing at all seasons 125 miners of water equivalent to 2.5 sec. feet, and upon this quantity they have based their hydrualic installation.

Water from this source will be pumped 4.5 miles through a 12" main to a reservoir located 550 ft above the pumping plant; from the reservoir a pipe leads to the monitor and hydraulic elevator 300 ft vertically below to the placer ground.

RESERVOIR:

Ground has been lebeled at the top of a hill the area of which is 15000 sq.feet, for the site of the reservoir immediately above the placer ground where sluicing is to be initiated; the storage capacity of this reservoir with walls 15 ft high, will be 24 hours continuous run of the pumps delivering 2.5 cubic feet per second.

EQUIPMENT:

Most of the equipment has been already purchased. I have checked the duty of pumps and pipe and find their figures in substantial agreement with my own, and when installed they will handle the 2.5 feet per second.for the work as outlined.

QUANTITY OF WATER REQUIRED:

The quantity of water passing the 2" nozzle of the monitor with a 300 ft head is 3 ft per second; the elevator with a similar head will require 2 ft per second, a total of 4.5 second ft.

OPERATION:

In view of the paragraph immediately above, it is apparent that beginning with a full reservoir, the sluicing equipment can be run 14 hours per day, for six days in the week, leaving Sunday in which to fill the reservoir; it is probable however that a careful operation of the monitor may increase somewhat this 14 hour daily use. On a long time period operation proposition, it has been found that more satisfactory results are obtained with a six day per week schedule, than where the full seven days are worked.

ESTIMATE:

The estimate furnished by the company, made by G.A.Reichard, and dated Sept.28,1917, I find upon examination to be reasonable, but I have made a few additions, notably in the matter of pump and engine foundations and the distribution of pipe, and in trenching excavation and backfill; in all these operations except the last, there is apt to be lost time which is incident to the erection of all machinery in places remote from a base of supplies; again, the manufacturer always makes a scant design for foundations, and I have found the cost necessary to increase his design and sections, to be money well spent as an insurance against racking the equipment and interrupted service.

I have made a sketch design for a reinforced concrete retaining wall for the reservoir, sufficiently in detail for comparison with the gravity section, shown on the company's plans; there will be a material saving by substituting the reinforced section.

CONCLUSION:

While the additions to the estimate made by me will be largely offset by the savint in reservoir design, and there is reasonable assurance that the work contemplated can be carried out for$60,000.00, I beg to suggest that you set aside for construction purposes an additional $5000.00, in the event that during the construction period, minor changes looking to improvment in operation may be favorably considered.

Yours very truly,

(SIGNED)Edwin H.Warner.

(COPY)

Los Angeles,Cal.,
Dec.18,1917.

New La Paz Gold Mining Co.,
930 Merchants Natl.Bk.Bldg.,
Los Angeles, Cal.

Gentlemen:--

We herewith submit for your approval the following bid in regard to hauling your freight from Bouse, Arizona, to your mining property in Yuma County, 36 miles south west of Bouse.

Will furnish two new 3½ ton Indiana Trucks and trailers, and do your work for $8.00 per ton.

Yours respectfully,

BOWLES & MILES,

(Signed) By W.R.Bowles

1058 S.Flower St.,
LosAngeles,Cal.

LA PAZ PLACER YUMA COUNTY

Conference with H. G. Hubbard and William Wells

Mr. Hubbard reported that a Phoenix Group had drilled a few test holes at the La Paz Placer, but had left because the ground proved too low grade to mine. He did not know who the people were and inquiries, elsewhere, threw no light on the identity of these people. Wells, who operates a tavern 5 miles east of Ehrenburg verified what Hubbard said and added that one hole was cored for some depth. Wells said that the holes were contracted to Phoenix people. 2-6-64

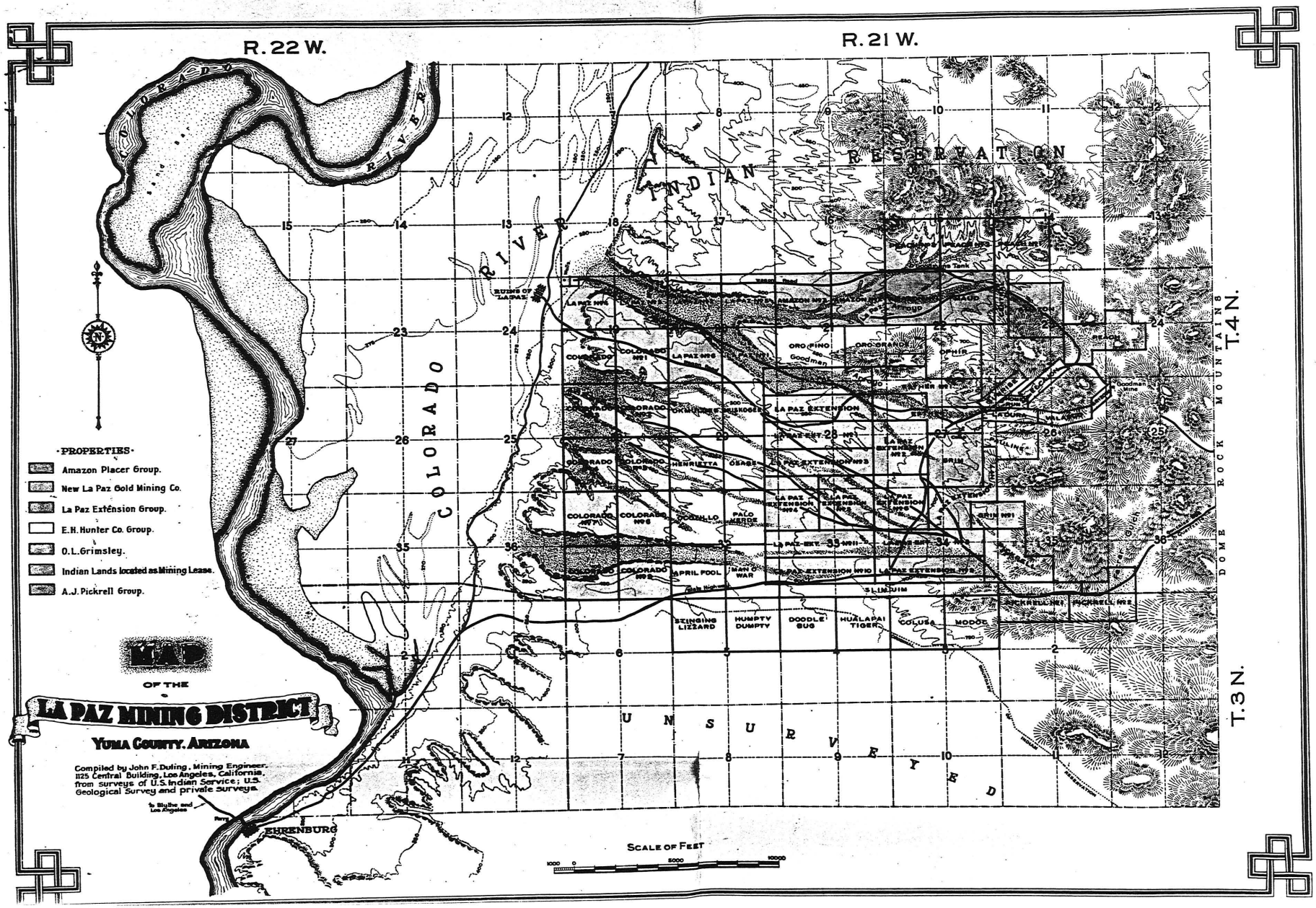
Ralph Campel, Canadian American Company, 2116 N. Vermont, Los Angeles, California, 90027, requested copies of data on the Pomosa and La Paz placers. He said we could expect to see a real boom in operation there as soon as his company started operations. KAP WR 8/7/75

MG WR 7/2/82: Copied Phoenix office with prospectus by Jay E. Fuller Construction, 1301 East Ft. Lowell Rd, Tucson, AZ 85719, phone 325-1505, on the LaPaz placers of Yuma County. Fuller has three association with Mr. Victor Livingston, placer claim groups: JV, SL, and NF. These groups cover parts of the old Goodman, LaPaz, Martinez, Gonzales, and Farrar placers.

NJN WR 4/22/83: It was reported that Carl Long has been running a 2500 ton per day placer operation in Farrar Wash, La Paz County. The operation uses a dry washing process that can cope with material containing up to 14% moisture. Mr. Long has been recovering gold and selling it to Silver Systems in Phoenix.

RRB WR 9/16/83: Dave Williams, Vice President, Lands and Kate Harmon, Land specialist with Doyan Ltd., Doyal Building, 201 1st Ave., Fairbanks, Alaska 99701 phone (907) 452-4755, were in to check on the Golden Eagle and Ext., Yellow Dollar, Flat Gold, Saguaro, etc. all placer claims in the La Paz placers south of Interstate 10, west of Quartzsite. They have a lease-option conditioned on clear title to the land and the availability of sufficient water. After checking these two items they intend to start an extensive sampling program.

MG WR 1/11/1985: Mr. Grover Heinrichs (c) and his associates are testing placer ground in the La Paz placer district (La Paz Co.). A number of holes have been drilled, generally to bedrock, by Venture Drilling. Complete samples are taken in a five-foot interval. Approximately 25 tons of samples were trucked to Tucson for concentrating. The black sand concentrates contain gold and apparently some cinnabar and native mercury. According to Mr. Heinrichs, results so far have been encouraging.


R. 22 W.
R. 21 W.
T. 4 N.
T. 3 N.
COLORADO RIVER
INDIAN RESERVATION
ROCK MOUNTAINS
DOME
UNSURVEYED
RUINS OF LA PAZ
EHRENBURG
To Blythe and Los Angeles
PROPERTIES
Amazon Placer Group.
New La Paz Gold Mining Co.
La Paz Extension Group.
E.H. Hunter Co. Group.
O.L. Grimsley.
Indian Lands located as Mining Lease.
A.J. Pickrell Group.
MAP
OF THE
LA PAZ MINING DISTRICT
YUMA COUNTY, ARIZONA
Compiled by John F. Duling, Mining Engineer, 1125 Central Building, Los Angeles, California, from surveys of U.S. Indian Service; U.S. Geological Survey and private surveys.
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HULAPAI TIGER
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JAY E. FULLER CONSTRUCTION CO. — SINCE 1947 —

1301 EAST FORT LOWELL ROAD
TUCSON, ARIZONA 85719
PHONE: AREA CODE 602 325-1505

April 30, 1982

Mr. W. J. Hacht
P. O. Box 1209
Scottsdale, Arizona 85252

RE: LaPaz Gold Placers, Arizona

Dear Mr. Hacht:

I am enclosing a Feasibility Study, Capital Requirements, Project Schedule, Topo Location Map, and a Geologic Report on the JV property, which is one of our three properties located at the LaPaz Gold Placers in Arizona. In fact we have several square miles representing several hundred million cubic yards which is the heart of all of the LaPaz Placers, taking in Goodman, LaPaz, Martinez, Gonzales, and Farrar Washes.

The property can be mined by open pit with a zero stripping ratio. The Colorado River is about 4 miles to the west, and with the water production from existing wells between our properties and the flood plain, we anticipate no problem developing the necessary water for our operations in this non-critical area.

We plan to do a resistivity survey which has been successful in the past, to contour the bedrock followed by drilling, similar to the Becker equipment for reserve delineation, and then construct a facility of 5000 cu.yds. per day. The total cost of processing a yard of material will be about $1.85 per yard, however I have figured $3 which gives plenty of cushion. We plan to produce gold for about $50 per oz.

We are looking for a financial participant on a joint venture basis, structured so that the principals can take the profits 'in kind'. The financial participant can have all the tax advantages, such as the write off for Stage 1 and parts of Stage 2, plus the investment tax credits.

The type of joint venture that we visualize would be something along the following.

We will contribute the property, which has no encumbrances and we have the operating capabilities.

Someone contributes the money.

If the money comes in as equity, our property will go in as equity, and the 10% royalty shown on the Feasibility will be omitted, and the other 2 properties we have there, known as the SL and NF, will be put into production with the equity from the joint venture.

If the money is to be paid back out of production, we will take back a 10% royalty for our property and not hold the other 2 properties for the joint venture. The joint venture would be shared on a 50-50 basis.

We would also consider leasing the SL or the NF property, or both, on a 10% royalty basis for others to operate.

Sincerely,

Jay E Fuller

JEF/n

enclosures

La Paz Gold Placers

By Victor V. Livingston

ABSTRACT

Gold bearing gravels exist on the western flank of the Dome Rock Mountains, Yuma County, Arizona as evidenced by historians and production records. Removal of the gold from the gravels has been achieved by inefficient methods, limiting recovery and productivity. In spite of this well over $2 million dollars (at $20.67/oz. gold price) had been recovered. The majority of the gold bearing gravels were not processed, especially the gravels located downstream from the juncture of Ferrar gulch and Gonzales Wash.

Limited sampling and geological reconnaissance has indicated that a potentially productive area exists in Gonzales Wash consisting of 30M cubic yards.

Deposit evaluation and production parameters are standard placer techniques utilizing "off the shelf technology."

Introduction:

Throughout much of the arid southwestern U.S., gold placer deposits are to be found. Exploration of these deposits has been, by and large, confined to desultory attempts by Spanish, Mexican and later Americans utilizing various methods of dry washing necessitated by the lack of large volumes of easily obtainable water.

Placer gold deposits of this type are usually refered to as "bajadas." The usual method of gold "winning" was to sink a small shaft to "bedrock" and extend burrows along this horizon until a pay streak was encountered. Only this material was removed, screened and further concentrated using various forms of air and or mercury. Obviously, only the larger particles of gold are amenable to this type of collection, with 50% of the total gold present lost to rejects.

The La Paz Placer is of this type (bajada) and the full meaning of the term is explained in the following text.

Bajada Placer: a definition

Rock decay and weathering are the causes of release of gold to form any type of placer deposit. Erosional processes, however, differ in effectiveness in different regions and the greatest divergence in their operation and result is probably to be measured between aridity and humidity. In bajada placer formation mechanical weathering is the prime disintegrating feature at work on auriferous outcrops and in the reduction of material to free the gold. In most stream placers

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CAPITAL REQUIREMENTS

JV GOLD MINE

Stage I

Surveying & Aerial Photography		2,000
Resistivity Survey		11,000
Drilling		100,000
Drill site dozer work		10,000
Royalty property lease, 3 months (minimum)		6,000
Sampling, testing & evaluation		
Salaries & Consulting Fees	62,480	
Travel & Subsistence	19,620	
Trucks (rentals & expenses)	30,100	
Office Rent	1,200	
Accounting expense & insurance	10,300	
Telephone expense	1,300	
Lab. expense for sample analysis	15,000	
Payroll expense	6,800	
Miscellaneous	4,200	
Water Well	70,000	
Contingency	50,000	271,000
Total Estimated Costs Stage I		$ 400,000

Stage 2

Production Plant estimated to cost (5,000 cu.yd./day)		1,850,000
Total Stage I & 2		$ 2,250,000

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FEASIBILITY STUDY
JV GOLD PLACER MINE

Reserves: Probable reserves have been estimated at 30 million cu.yds. based on estrapolated past production. A possible addition of 70 million cu.yds. is believed to be reasonable, based upon preliminary rock resistivity depth probes and known extent of auriferous gravel.

Gold Tenor per cu.yd.: According to reports in the 1860s there were a lot of nuggets taken weighing in the 20 oz range, and some weighing up to 47 & 50 oz, and production the first year and subsequent years was estimated at not less than $1 million dollars per year @($17 oz gold), or $14,750,000 @($250 oz), $17,700,000 @($300 oz), $20,650,000 @($350 oz), $23,600,000 @($400 oz), and $29,500,000 @($500 oz). Estimated on published past production it indicates that a conservative average gold tenor per yard of .05 oz would be reasonable, as the records show past production running from .0025 oz to .5 oz per cu.yd.

Financial Analysis: Providing that the work in Stage I is concluded satisfactorily with Reserves and Gold Tenor in the range indicated, the following projection is offered.

Plant: The plant facility would consist of various trommels, screens, heavy media tables and support equipment required to sustain a daily processing of 5000 cu.yds. Operating costs per yard of gravel processed has been estimated, utilizing data from aggregate plants in operation.

In the following projected Cash Flow Analysis, the assumptions are made that 30 to 100 million cu.yds. will be available for processing at an average gold tenor of .05 oz per cu.yd.

Projected Cash Flow: Plant (5000 cu.yd./day capacity)

	$250 oz	$300 oz	$350 oz	$400 oz	$500 oz
Average gold .05 oz cu.yd. processed	12.50	15.00	17.50	20.00	25.00
Royalty - 10%	1.25	1.50	1.75	2.00	2.50
Operating Costs cu.yd. processed	3.00	3.00	3.00	3.00	3.00
Gross profit cu.yd.	$ 8.25	$ 10.50	$ 12.75	$ 15.00	$ 19.50
Profit return/operating year (350 days)	$ 14,437,500	$ 18,375,000	$ 22,312,500	$ 26,250,000	$ 34,125,000

chemical weathering was probably equally important.

Transportation is an important adjunct to concentration in both stream and bajada placers, but is less vitally important in the latter. Transportion of stream gravels in most instances is over a much greater distance than that of bajada gravels, consequently corrosion and attrition were of more importance in reduction of detriters of stream placers and concentration is carried much further by transporting agencies than could be effected under arid conditions.

The characteristics of surficial deposits of bajada placers exhibit considerable divergence from those of stream placers. Where overburden exists on bajada placers it is related directly to the adjacent mountain range. Bajada placer overburden is usually the same kind of material as the placer proper, a coarse angular aggregate of rock spalls. Barren overburden of a stream placer may be caused by a thorough jigging action by the stream, which concentrates the gold in the lower portion of the grand mass. Nothing analogous to this takes place in a bajada placer. Changes in elevation and stream gradient may cause overloading of the stream and deposition of overburden material. A bajada placer occurs at a point of extreme change in gradient and loss of water volume, so that overloading and deposition of all but the finest material is usual. This material is further reduced in size by weathering and removed by wind and water agencies, with a lag of gold that produces a placer, so that overburden indicates lack of balance between accumulation and removal. There is a vague similarity of basic cause and result in accumulation of overburden in stream and bajada placers, but

processes operating on a bajada placer are conditioned by aridity and the result is greatly modified.

The character of the overburden takes the character of the auriferous detritus in both placers. In stream placers well rounded pebbles, gravel, sand and even finer material show the effect of attrition and water sorting. In bajada placers, overburden and auriferous gravels are a rough aggregate of rock spalls and fragments, even the finest of which show pronounced angularity. Usually there is a predominance of larger sizes and sorting of material is seldom evident. Stream gravels usually are of regional derivation and represent many rock types. Bajada gravels are of local origin and represent few rock types.

A comparison of the parts of the placers that contain values, shows several factors of economic importance. In bajada placers as in stream placers the bulk of the gold is on or near bedrock, but in bajada placers extreme concentration on bedrock is rare and a higher proportion of the gold remains disseminated throughout the bulk of the gravels than in stream placers. A stream placer may show several "paystreaks" on bedrock due to meandering of the main channels and paystreaks on bedrock are not uncommon in bajada placers. Runoff channels on a bajada sheet are rapidly shifting in position, so that such paystreaks are usually short and of erratic tenor.

Bajada placers, because of lack of sorting, lack of confinement in any channel and the release of some of the gold in the placer as well as in route, are apt to exhibit a more erratic distribution of values than stream placers, both horizontally and vertically. Bajada

placers usually show an appreciable and even considerable residual enrichment on the surface due to removal of lighter material by wind and sheet floods. This superficial enrichment, unless recognized and discounted, may give rise to serious errors in casual sampling.

Most of the gold of bajada placers is coarse. It is almost entirely rough and angular with adhering quartz and limonite common.

The conditions affecting prospecting and development of bajada placers are mostly adverse. This may not be an unmixed evil, as it has operated to delay the exploration of these placers until gold is at a premium. The factor of greatest moment is the lack of surface water for working gravels. Vegetation is virtually absent in the Sonoran Desert and is considered an advantage in that there is no necessity for clearing minable areas. Prospecting of bajada placers is made difficult by the fact that they represent an irregular and often ill defined area on the debris covered flanks of a mountain range. The range of prospecting a stream placer is often delineated clearly by the banks of an old or recent stream channel. Auriferous gravels of a bajada slope lack this clarity of expression. The question of tenor, quantity and position of the auriferous terrain of a bajada placer is not as easily solved by the drill as in a stream placer, as it presents a geologic problem foreign to stream placers. Since availability of water is of paramount importance, the geologic problem of the placer involves a detailed scrutiny of the water resources of the area. The geologic-economic problem of a bajada placer is amenable to solution through study of the environment and method of formation of the placer, since

its characteristics are largely a reflection of these features.

It is the writer's opinion that any large scale development of a bajada placer will not be attended by any revolutionary advance in methods of dry-washing but is contingent upon an intelligent development and application of the subsurface water resources of the region. The agricultural industry has long solved the problem of desert aridity of sinking deep wells for irrigation water. Six miles west of the Dome Rock Mountains is one of the western U.S. most fertile valleys irrigated by wells, producing up to 2,000 gallons per minute. Investigation into the availability of well-water for mineral processing, resulted in the information that the same option is present. Further, strict application of sound engineering principles in earth moving techniques will greatly enhance an undertaking of this type.

Location - Accessibility:

The La Paz Placer covers an unusually large area on the West flank of the Dome Rock Mountains in east central Yuma County, Arizona, located in Ts. 3 and 4N., Rs. 21 and 22W. Access is by Interstate Highway 10, twelve miles east of Blythe, California. The La Paz Mountain 7.5 minute topographic quadrangle sheet encompasses the area.

Topography:

The La Paz Placers lie on the western pediment of the Dome Rock Mountains which rise to approximately 2,000 feet above the surrounding plain. The pediment is widely dissected into benches sloping gently

westward to the Colorado River, 6 miles distant. No perennial streams are present in the placer district, but arroyos drain run-off during the rainy season to the Colorado River. Shallow wells are present in and near the mountain mass but they supply only a very small amount of water.

History:

The presence of placer gold in and near the Colorado River was known by the first inhabitants of the region, the Yuma Indians. Shortly after establishment of American military rule a trapper, Captain Pauline Weaver became aware of the existance of gold in the region. About 1862, Weaver and his party were guided to the La Paz Placer by Indians. They removed some $8,000 worth of nuggets and returned to Yuma for supplies. A gold rush soon followed and the town of La Paz, containing 1,500 people was established 3 miles from the Colorado River. The district flourished until 1864 when apparent exhaustion of the easily accessible higher-grade placers caused a decline in activity. Repeated attempts in the late 1800's and early 1900's to revive the district were frustrated by governmental bureaucratic bungling and low gold prices.

Production:

According to the early historians, (Browne and Jones), on the return to the La Paz Placer by the discoverer Weaver came also many other prospectors. Approximately $1 million in placer gold was recovered during the first year and another $1 million by 1964, when the easily accessable placers were worked out. Since that time, the La Paz district has been at times part of the Colorado River Indian

Reservation, and in consequence, small scale placer mining activity declined and large scale placer mining activities were interrupted. Small scale intermittant drywashing of surface gravel has been the only activity for the last 60 plus years.

The La Paz placers are famous for the large nuggets recovered, although most of the gold occured as pieces ranging in weight from 0.0025 to 0.5 ounces. Browne (1868, P. 454) describes large nuggets from the gravels, some weighing 26, 27 and upwards of 47 ounces. The largest recorded nugget weighed about 65 ounces and assayed 870 fine.

Local Geology:

The Dome Rock mountains in the vicinity of the La Paz Placers consist largely of metamorphic rocks and granite, of Mesozaic to early Tertiary age. For a short distance west of the foot of the range, these rocks floor a dissected pediment (bajada) and constitute the bedrock of the principal placers. The gold in the placers is attributed to erosion of the many gold-bearing veins distributed through the metamorphic rocks in the area. Some of these veins, such as the Goodman vein, which trends northwest-southeast across the north end of Ferrar Gulch and is exposed in Gonzales Wash, have been mined in the past. Although no production records are available gold production is judged to have been small due to the small size of the workings.

Distribution and character of the placer gravel:

The La Paz Placers occur, for the most part, in Goodman Arroyo, Arroyo La Paz and Gonzales Wash, and in tributary gulches such as

Ferrar, Martinez, Garcia and Ravenna. Ferrar gulch, tributary to Gonzales Wash contained the richest and most productive placer of the district. The thickeness of the gold bearing gulches were from a few inches to 20 feet and were readily mined out. Gravel thicknesses in Gonzales Wash, Goodman Wash and Arroyo La Paz are unknown except for small areas in Gonzales Wash probed by the writer utilizing rock resistivity. Depths indicated by this technique were 40 to approximately 250 feet. According to Jones, "shafts have been sunk in the wash to depths of thirty feet without reaching bedrock." By far the greater part of the auriferous material is unworked, especially that in the lower courses of the arroyos, where the gravel is deep.

The gold bearing gravels consist of sand and minor clay inclosing angular rock fragments of greatly variable size. Dry screen testing indicates that about twenty percent of the material will pass a quarter-inch screen, and the largest boulders weigh several hundred pounds. All the material is unassorted and that near the surface is unconsolidated. At depths of twenty feet and greater the gravel is consolidated but readily disintegrates on exposure to air. Jones states, "the gold is distributed throughout the gravel, though in the early workings the richest yield was obtained near bedrock."

No estimate can be made of the probable gold content in the washes of the La Paz district because of lack of detailed data and of uncertainty concerning the limits of the washes. Gold tenor has been variously stated by Jones and Heikes as varying between 50 cents and $1.50 per yard using the $20.67/oz. gold price. At present day gold prices, gold tenor would range between $12.00 and $36.00 per yard.

Recent work:

Reconnaissance surface sampling has indicated gold content ranging from 0 up to 36 mg./.5 feet^3, with an average of 12 mg./.5 feet^3 or .65 gram/yard^3. However, it must be emphasized that the validity of surface samples taken from this type of placer is totally dependant on numerous variables.

Limited attempts have been made by the writer to determine the depth of the gold bearing gravels present in Gonzales Wash. Depth probes utilizing rock resistivity indicates gravel depth to vary up to 250 feet. A surface outcrop map of that portion of Gonzales Wash contained in T.3N, R.21W; Sec. 2 and 3 and T4N, R.21W, Sec. 34 and 35 is included in this report. As indicated on the map Ferrar Gulch is a major tributary. Surface examination has indicated that a paleo-channel exists partially exposed in this area. This is indicated by a linear area containing numerous hematite pebbles and cobbles and higher than average gold content. The presence of hematite debris can be seen to extend over an area 6,000 feet long and 1,500 feet wide.

In Gonzales Wash there is some evidence to suggest that the bajada is undergoing either increased erosion or that the annual runoff from seasonal rains is sufficient to handle normal rock disintegration. Conceivably, this would indicate that the gravels in Gonzales Wash are being removed resulting in a gold "lag" or concentration. This does not appear to have been the case in the less recent geologic past. Examination of the gravels present in the south half of Sections 1, 2 and 3 T.3N, R.21W were derived from the rocks exposed in the southern part of the Dome Rock Mountains. The rocks present there are much

more easily erodable than those from Gonzales wash northward. In effect this restricted Gonzales Wash to the north, limiting gold deposition to that area.

Geological evidence, provided by the train of hematite debris, indicates that the present channel of Gonzales wash where it passes to the north of hill 995 in the southeast corner of section 34, was not the paleo channel. This gorge in the Cretaceous intrusive was a recent geological event. The original channel is interpreted to have passed to the south of hill 995 creating a large bend.

Gravel depths in this area are deep (up to 250 feet) implying a scour basin or depression in the bedrock, creating a natural trap for gold and other heavy minerals.

Deposit evaluation procedure:

The functioning and capacity of a placer system must be keyed to the environmental and natural conditions of climate, water availability, and the physical and geologic characteristics of the deposit.

The two most basic parameters that must be determined as accurately as possible is 1) volume; i.e. how much gravel, containing gold, is available for processing; 2) tenor; i.e. how much gold is recoverable per unit of volume.

The method to be utilized to determine volume is a rock resistivity survey. This survey is designed to determine the depth to bedrock at any given point on the property and has been used with commendable success on other placer properties. The data gathered from this technique will allow a bedrock profile and a volume determination.

The method used to determine tenor is considerable more exacting

and is in fact several interdependent processes. Samples will be obtained by a drilling technique designed to insure that the sample is representative of a particular volume of gravel. Gold content will be extracted by a collection system equating as closely as possible the technique utilized for production.

Processing Parameters:

Gold particle size and gravel characteristics dictate the processing technique and equipment. The governing criteria is that you must move and process large volumes of gravel in not only an efficient manner but one in keeping with environmental requirements.

Basically, the processing plant will consist of a grizzly, trommel, screens, storage bins, hydrocone, gravity tables and various conveyor belts. Earth moving equipment is fairly standard consisting of bulldozers, loaders and scrapers.

Emphasis will be on utilizing "off the shelf gravel plant technology" and obtaining a viable and steady water resource.

Victor V. Livingston

Victor V. Livingston

Geological Engineer

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LA PAZ PLACERS file
LA PAZ COUNTY

FEASIBILITY STUDY

JV GOLD PLACER MINE

Reserves: Probable reserves have been estimated at 30 million cu.yds. based on estrapolated past production. A possible addition of 70 million cu.yds. is believed to be reasonable, based upon preliminary rock resistivity depth probes and known extent of auriferous gravel.

Gold Tenor per cu. yd.: Estimated on published past production from the La Paz Placer, it indicates an average gold value per yd. of $25.00, with gold selling at $500.00/oz. According to reports in the 1860s there were a lot of nuggets taken weighing in the 20 oz. range, and production the first year and subsequent years was estimated at not less than $1 million dollars per year ($17 oz gold) or $29,500,000 per year at present gold prices ($500 oz).

Financial Analysis: Providing that the work in Stage I is concluded satisfactorily with Reserves and Gold Tenor in the range indicated, the following projection is offered.

Pilot Plant: The pilot plant facility would consist of various trommels, screens, heavy media tables and support equipment required to sustain a daily (10 hrs.) processing of 1000 cu.yds. Operating costs per yard of gravel processed has been estimated, utilizing data from aggregate plants in operation.

In the following projected Cash Flow Analysis, the assumptions are made that 30 to 100 million cu.yds. will be available for processing at an average gold tenor of $25.00 cu.yd.

Projected cash flow: Pilot Plant (100 cu.yd./day capacity)

Average gold/cu.yd. processed	25.00		
Royalty - 10%	2.50		
Operating costs/cu.yd. processed	3.00		
Gross profit/cu.yd.	$ 19.50		
Cu.yds. processed/operating day - 1000			
Gross return/operating day		19,500.00	
Profit return/operating yr. (350 days)			6,825,000.00
Depletion Allowance			1,312,500.00

Principals can take profit 'in kind' with no tax payable until they sell the gold.

FEASIBILITY STUDY
JV GOLD PLACER MINE

Projected Cash Flow: Production Plant (10,000 cu.yds./day capacity)

Average gold/cu.yd. processed		25.00	
Royalty - 10%		2.50	
Operating costs/cu.yd. processed		2.00	
Gross Profit/cu.yd.		$ 20.50	
Cu.yds. processed/operating day	10,000		
Gross return/operating day		$ 205,000.00	
Profit return/operating yr.(350 days)			$ 71,750,000.00
Depletion allowance			$ 13,125,000.00

Capital Requirement:

Stage I - Resistivity Surveys & Drilling	$ 200,000.00	
Stage 2 - Pilot Plant - 1000 yds. per day	455,111.00	
Approximate Costs	$ 655,111.00	

Stage 3 - Plant Expansion to 10,000 yds. per day financed from cash flow.

JAY E. FULLER CONSTRUCTION CO. — SINCE 1947 —

1301 EAST FORT LOWELL ROAD
TUCSON, ARIZONA 85719
PHONE: AREA CODE 602 325-1505

CAPITAL REQUIREMENTS
JV GOLD MINE

Stage I

Resistivity Survey		11,000
Drilling approximately 4000'		84,000
Advance royalty property lease		5,000
Sampling, testing, evaluation, permits, and environmental:		
Salaries & Consulting Fees	38,880	
Travel & Subsistence	13,620	
Trucks (rentals & expenses)	21,500	
Office Rent	600	
Accounting expense & insurance	4,500	
Telephone expense	900	
Lab. expense for sample analysis	15,000	
Payroll expense	2,000	
Legal & Miscellaneous	3,000	100,000
Total Estimated Costs Stage I		$ 200,000

Stage 2

Production Plant Equipment - see quote sheet - 1000 yd/day		183,615
Support Facility & Construction Costs to Production Plant:		
Plant equipment freight from Phoenix & Tucson	2,136	
Fencing plant site	6,260	
Mobile Office 12'x 40'	6,000	
Storage Building 10'x 40'	5,000	
Refinery Building 30'x 50'	30,000	
Site preparation	7,000	
Lining 3 ponds	2,000	
Water Reserve	15,000	
Fuel tank, 2000 gal.	5,000	
Diesel fuel, 2000 gal 60¢	1,200	
Oil, greases & service tools	1,500	
Toilet	1,000	
Electrical Wiring	7,000	
Installation of Plant	15,000	
Engineering	4,000	
Salaries & Consulting Fees	58,500	
Travel & Subsistence	28,400	
Plumbing	2,000	
Office rent	600	
Office Expense (acct., supplies, ins., etc.)	13,900	211,496
Total Stage 2		$ 395,111

CAPITAL REQUIREMENTS
JV GOLD MINE

Total Stage 2	395,111
Total Stage I	200,000
Total Stages I & 2	595,111
Contingency	60,000
Approximate Cost	$ 655,111

REPORT ON THE LA PAZ GOLD PLACERS

Yuma County, Arizona

Introduction:

Throughout much of the arid southwestern U.S., gold placer deposits are to be found. Exploration of these deposits has been, by and large, confined to desultory attempts by Spanish, Mexican and later Americans utilizing various methods of dry washing necessitated by the lack of large volumes of easily obtainable water.

Placer gold deposits of this type are usually refered to as "bajadas." The usual method of gold "winning" was to sink a small shaft to "bedrock" and extend burrows along this horizon until a pay streak was encountered. Only this material was removed, screened and further concentrated using various forms of air and or mercury. Obviously, only the larger particles of gold are amenable to this type of collection, with 50% of the total gold present lost to rejects.

The La Paz Placer is of this type (bajada) and the full meaning of the term is explained in the following text.

Bajada Placer: a definition

Rock decay and weathering are the causes of release of gold to form any type of placer deposit. Erosional processes, however, differ in effectiveness in different regions and the greatest divergence in their operation and result is probably to be measured between aridity and humidity. In bajada placer formation mechanical weathering is the prime disintegrating

feature at work on auriferous outcrops and in the retention of material to free the gold. In most stream placers chemical weathering was probably equally important.

Transportation is an important adjunct to concentration in both stream and bajada placers, but is less vitally important in the latter. Transportation of stream gravels in most instances is over a much greater distance than that of bajada gravels, consequently corrosion and attrition were of more importance in reduction of detriters of stream placers and concentration is carried much further by transporting agencies than could be effected under arid conditions.

The characteristics of surficial deposits of bajada placers exhibit considerable divergence from those of stream placers. Where overburden exists on bajada placers it is related directly to the adjacent mountain range. Bajada placer overburden is usually the same kind of material as the placer proper, a coarse angular aggregate of rock spalls. Barren overburden of a stream placer may be caused by a thorough jigging action by the stream, which concentrates the gold in the lower portion of the gravel mass. Nothing analogous to this takes place in a bajada placer. Changes in elevation and stream gradient may cause overloading of the stream and deposition of overburden material. A bajada placer occurs at a point of extreme change in gradient and loss of water volume, so that overloading and deposition of all but the finest material is usual. This material is further reduced in size by weathering and removed by wind and water agencies, with a

lag of gold that produces a placer, so that overburden indicates lack of balance between accumulation and removal. There is a vague similarity of basic cause and result in accumulation of overburden in stream and bajada placers, but processes operating on a bajada placer are conditioned by aridity and the result is greatly modified.

The character of the overburden takes the character of the auriferous detritus in both placers. In stream placers well rounded pebbles, gravel, sand and even finer material show the effect of attrition and water sorting. In bajada placers, overburden and auriferous gravels are a rough aggregate of rock spalls and fragments, even the finest of which show pronounced angularity. Usually there is a predominance of larger sizes and sorting of material is seldom evident. Stream gravels usually are of regional derivation and represent many rock types. Bajada gravels are of local origin and represent few rock types.

A comparison of the parts of the placers that contain values, shows several factors of economic importance. In bajada placers as in a stream placer the bulk of the gold is on or near bedrock, but in bajada placers extreme concentration on bedrock is rare and a higher proportion of the gold remains disseminated throughout the bulk of the gravels than in stream placers. A stream placer may show several "paystreaks" on bedrock due to meandering of the main channels and paystreaks on bedrock are not uncommon in bajada placers. Runoff channels on a bajada sheet are rapidly shifting in position, so that such paystreaks are usually short and of erratic tenor.

Bajada placers, because of lack of sorting, lack of confinement in any channel and the release of some of the gold in the placer as well as in route, are apt to exhibit a more erratic distribution of values than stream placers, both horizontally and vertically. Bajada placers usually show an appreciable and even considerable residual enrichment on the surface due to removal of lighter material by wind and sheet floods. This superficial enrichment, unless recognized and discounted, may give rise to serious errors in casual sampling.

Most of the gold of bajada placers is course. It is almost entirely rough and angular with adhering quartz and limonite common.

The conditions affecting prospecting and development of bajada placers are mostly adverse. This may not be an unmixed evil, as it has operated to delay the exploration of these placers until gold is at a premium. The factor of greatest moment is lack of surface water for working the gravels. Vegetation is virtually absent in the Sonoran Desert and is considered an advantage in that there is no necessity of clearing minable areas. Prospecting of bajada placers is made difficult by the fact that they represent an irregular and often ill defined area on the debris covered flanks of a mountain range. The range of prospecting a stream placer is often delineated clearly by the banks of an old or recent stream channel. Auriferous gravels of a bajada slope lack this clarity of expression. The question of tenor, quantity and position of the auriferous terrain of a bajada placer is not as easily solved by the drill as in a stream placer, as it presents a geologic problem foreign to stream placers. Since availability of water is of paramount impor-

tance, the geologic problem of the placer involves a detailed scrutiny of the water resources of the area. The geologic-economic problem of a bajada placer is amenable to solution through study of the environment and method of formation of the placer, since its characteristics are largely a reflection of these features.

It is the writer's opinion that any large scale development of a bajada placer will not be attended by any revolutionary advance in methods of dry-washing but is contingent upon an intelligent development and application of the subsurface water resources of the the region. The agricultural industry has long solved the problem of desert aridity by sinking deep wells for irrigation water. Six miles west of the Dome Rock Mountains is one of the western U.S. most fertile valleys irrigated by wells, producing up to 2,000 gallons per minute. Investigation into the availability of well water for mineral processing, resulted in the information that the same option is present. Further, strict application of sound engineering principles in earth moving techniques will greatly enhance an undertaking of this type.

Location - Accessibility:

The La Paz Placer covers an unusually large area on the West flank of the Dome Rock Mountains in east central Yuma County, Arizona, located in Ts. 3 and 4N., Rs. 21 and 22W. Access is by Interstate Highway 10, twelve miles East of Blythe, California. The La Paz Mountain 7.5 minute topographic quadrangle sheet encompasses the area.

Topography:

The La Paz Placers lie on the western pediment of the Dome Rock Mountains which rise to approximately 2,000 feet above the surrounding plain. The pediment is widely dissected into benches

sloping gently westward to the Colorado River, 6 miles distant. No perennial streams are present in the placer district, but arroyos drain run-off during the rainy season to the Colorado River. Shallow wells are present in and near the mountain mass but they supply only a very small amount of water.

History:

The presence of placer gold in and near the Colorado River was known by the first inhabitants of the region, the Yuma Indians. Shortly after establishment of American military rule a trapper, Captain Pauline Weaver became aware of the existance of gold in the region. About 1862, Weaver and his party was guided to the La Paz Placer by Indians. They removed some $8,000 worth of nuggets and returned to Yuma for supplies. A gold rush soon followed and the town of La Paz, containing 1,500 people was established 3 miles from the Colorado River. The district flourished until 1864 when apparent exhaustion of the easily accessible higher-grade placers caused a decline in activity. Repeated attempts in the late 1800's and early 1900's to revive the district were frustrated by governmental bureaucratic bungling and low gold prices.

Production:

According to the early historians, (Browne and Jones), on the return to the La Paz Placer by the discoverer Weaver came also many other prospectors. Approximately $1 million in placer gold was recovered during the first year and another $1 million by 1864, when the easily accessable placers were worked out. Since that time, the La Paz district has been at times part of the Colorado River Indian Reservation, and in consequence, small scale placer mining

activity declined and large scale placer mining activities were interrupted. Small scale intermittant drywashing of surface gravel has been the only activity for the last 60 plus years.

The La Paz placers are famous for the large nuggets recovered, although most of the gold occured as pieces ranging in weight from 0.0025 to 0.5 ounces. Browne (1868, P. 454) describes large nuggets from the gravels, some weighing 26, 27 and upwards of 47 ounces. The largest recorded nugget weighed about 65 ounces and assayed 870 fine.

Local Geology:

The Dome Rock mountains in the vicinity of the La Paz Placers consist largely of metamorphic rocks and granite, of Mesozoic to early Tertiary age. For a short distance west of the foot of the range, these rocks floor a dissected pediment (bajada) and constitute the bedrock of the principal placers. The gold in the placers is attributed to erosion of the many gold-bearing veins distributed through the metamorphic rocks in the area. Some of these veins, such as the Goodman vein, which trends northwest-southeast across the north end of Ferrar Gulch and is exposed in Gonzales Wash, have been mined in the past. Although no production records are available gold production is judged to have been small due to the small size of the workings.

Distribution and character of the placer gravel:

The La Paz Placers occur, for the most part, in Goodman Arroyo, Arroyo La Paz and Gonzales Wash, and in tributary gulches such as Ferrar, Martinez, Garcia, and Ravenna. Ferrar Gulch, tributary to Gonzales Wash contained the richest and most productive placer of

the district. The thickness of the gold bearing gulches were from a few inches to 20 feet and were readily mined out. Gravel thicknesses in Gonzales Wash, Goodman Wash and Arroyo La Paz are unknown except for through small areas in Gonzales Wash probed by the writer utilizing rock resistivity. Depths indicated by this technique were 40 to approximately 250 feet. According to Jones, "shafts have been sunk in the wash to depths of thirty feet without reaching bedrock." By far the greater part of the auriferous material is unworked, especially that in the lower courses of the arroyos, where the gravel is deep.

Auriferous material consists of sand and minor clay enclosing angular rock fragments of greatly variable size. Dry screen testing indicates that about twenty percent of the material will pass a quarter-inch screen, and the largest boulders weigh several hundred pounds. All the material is unassorted and that near the surface is unconsolidated. At depths of twenty feet and greater the gravel is consolidated but readily disintegrates on exposure to air. Jones states, "the gold is distributed throughout the wash, though in the early workings the richest yield was obtained near bedrock."

No estimate can be made of the probable gold content in the washes of the La Paz district because of lack of detailed data and of uncertainty concerning the limits of the washes. Gold tenor has been variously stated by Jones and Heikes as varying between 50 cents and $1.50 per yard using the $20.67/oz. gold price. At present day gold prices, gold tenor would range between $12.00 and $36.00 per yard.

Recent Work:

Reconnaisence surface sampling has indicated gold content ranging from 0 up to 36 mg/.5 feet^3. With an average of 12 mg./.5 feet^3. Computed to dollars 12 mg. x 54 = .65 gram/yard^3 x $16.00 (price/gram with gold at $500.00/oz.) = $10.40/yard^3. However, it must be emphasized that the validity of surface samples taken from this type of placer is totally dependant on numerous variables.

Limited attempts have been made by the writer to determine the depth of the auriferous gravels present in Gonzales Wash. Depth probes utilizing rock resistivity indicates gravel depth to vary up to 250 feet. A Surface outcrop map of that portion of Gonzales Wash contained in T.3N, R.21W; Sec. 2 and 3 and T4N, R.21W, Sec. 34 and 35 is included in this report. As indicated on the map Ferrar Gulch is a major tributary. Surface examination has indicated that a paleo-channel exists partially exposed in this area. This is indicated by a linear area containing numerous magnetite pebbles and cobbles and higher than average gold content. The presence of magnetite debris can be seen to extend over an area 6,000 feet long and 1,500 feet wide.

In Gonzales Wash there is some evidence to suggest that the bajada in undergoing either increased erosion or that the annual runoff from seasonal rains is sufficient to handle normal rock disintegration. Conceivably, this would indicate that the gravels in Gonzales Wash, in paleo-time, passed to the south of hill "995." Effectively, this would create a back-water or slow east of hill "995." Gold could be expected to be concentrated in this area.

Evaluation in Goodman Wash and Arroyo La Paz was limited to verifying that gravel was present. No attempt was made to determine the gold content or gravel depth.

Summary and Conclusions:

Auriferous gravels exist on the western flank of the Dome Rock Mountains, Yuma County, Arizona as evidenced by historians and production records. Removal of the gold from the gravels has been achieved by inefficient methods, limiting recovery and productivity. In spite of this well over $2 million dollars ($20.67 gold price) has been recovered. At the present price of $500.00/oz. this would be $58 million dollars. Only those gravels that were easily accessable were worked, leaving the vast majority of the gravels untouched.

Limited sampling and geologic reconnaisence has indicated that a potentially productive area exists in Gonzales Wash consisting of approximately 30M yards^3 grading between $12.00 and $36.00 per yard with gold at $500.00/oz. The following proposal recognizes the fact that Farrer Gulch is a main tributary of Gonzales Wash and that we in fact will be simply determining the value of the extension of a productive known placer.

Proposed format for determining yardage and tenor of auriferous gravel:

Stage 1: Resistivity surveys across Gonzales Wash starting at its juncture with Farrer Gulch, then south to hill 995. Approximately 5 line miles.

Purpose: To acertain a bedrock profile and depth of gravel. Sampling of auriferous gravels by Becker placer drill in

those area's indicated by resistivity surveys to be the main paleo Gonzales Wash.
Estimated footage: 4,200 feet

Stage II: Pilot Plant: See attached report.

Victor V. Livingston
B.Sc. Geological Engineering

JV GOLD MILL

Production Plant
Equipment Quotation

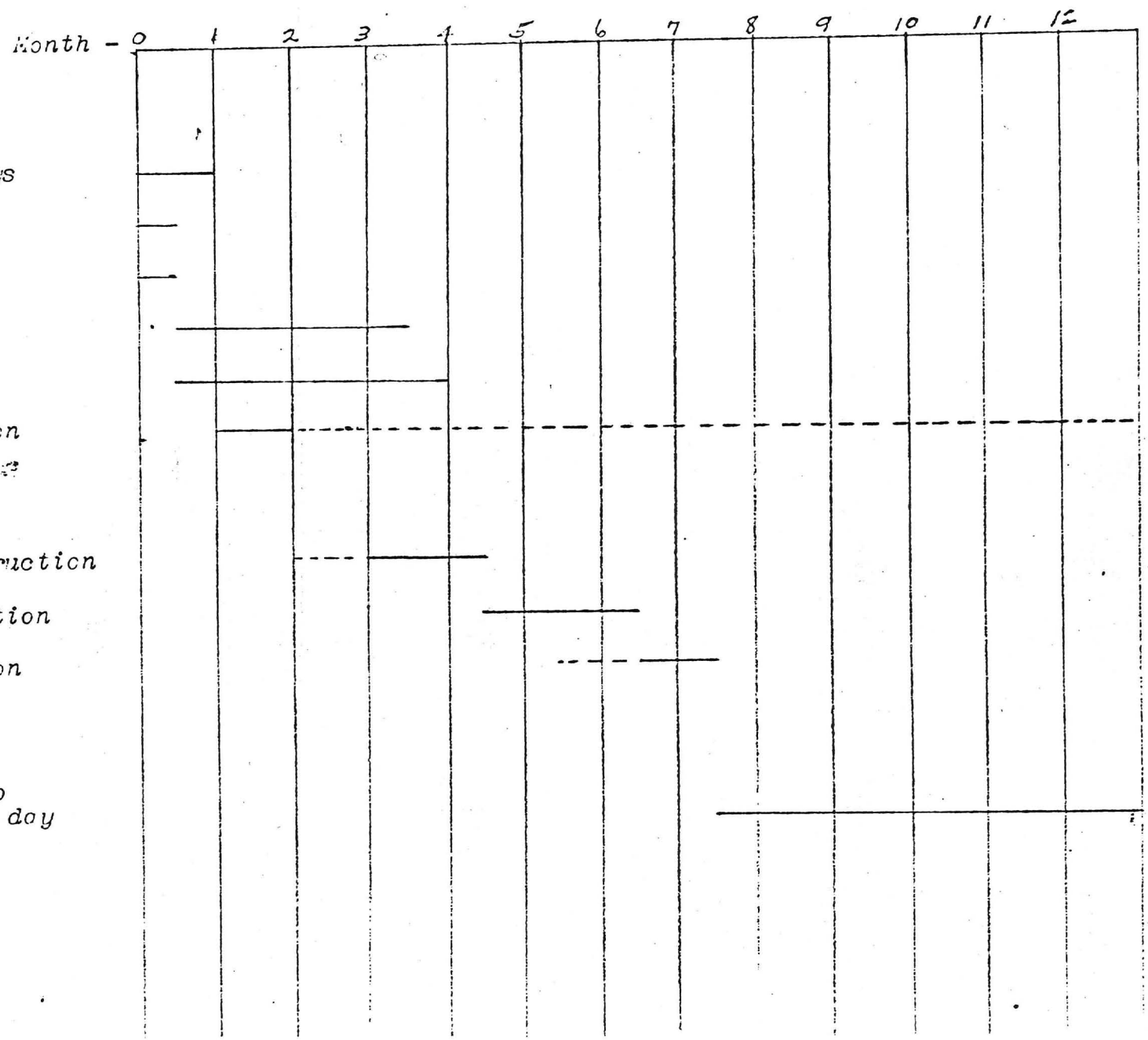
1- Portable self-powered 1000 yd. per day screening plant - 1973	$ 32,950	Excellent Condition	New Price	$ 52,000
2- 1/16" second deck screen	2,965	New	" "	2,965
3- 5 Wilfley 6'x 14' tables with electric motors - $5350 each	26,750	Rebuilt like new	" "	60,000
4- 1 Allis Chalmers 2"x 2" sand pump w/power	950	Rebuilt like new	" "	3,500
5- 1 Krebs cyclone	1,550	" " "	" "	7,500
6- 1 - 18"x 60' conveyor w/power	8,950	" " "	" "	17,900
7- 1 - 18"x 20' conveyor w/power	2,500	" " "	" "	5,000
8- 1 - 100 KW D.M. Generating Plant	14,500	" " "	" "	21,500
9- 1 - Tromell, 1972	15,000	Excellent condition	" "	75,000
10- 1 - Caterpillar 3 yd Loader, 1972	55,000	" "	" "	92,000
11- 2 - Amalgam Tables $2500 each	5,000	Rebuilt like new	" "	12,000
12- Conveyor upright	200	New	" "	200
13- Ford 470 Deisel Truck w/1800 gal tank	17,300	New	" "	17,300
	Used Equip. TOTAL $ 183,615		New Equip. TOTAL	$ 375,365

The above equipment subject to price and availability at time of shipment, F.O.B. Tucson/Phoenix, Arizona.

(All equipment, where not noted, is 1972 or younger.)

JV GOLD PLACER GROUP

Project Schedule



RESUME

Victor V. Livingston
Rt. #8, Box 336E
Tucson, Az. 85710
Tele. (602) 791-7648

Personal: Married 5'11" 170lbs.

Professional: Exploration Geologist

Education: Bachelor of Science, Geological Engineering; University of Arizona, 1970. Special emphasis on exploration tools and techniques.

Experience:

P.P.G. Inds. Inc.
238 W. Grant Rd.
Tucson, Az. 85705

6/19/75 to 4/1/79

Minerals Exploration

Manager, Southwestern U.S.

Responsible for designing and executing an exploration program to delineate potentially economic quantities of precious metals in lode and placer deposits. Special emphasis was placed on large low grade lode deposits and on the "bajada", desert gold placer types, common in the southwestern U.S.

Attendant with this directive was the recognition that a need existed for developing an analytical expertise for precious and noble metals.

Pursuant to these requirements, investigative research was applied to the problem of precious and noble metal analysis in mineralogically and chemically complex rock types.
The result was positive, creating an innovative, simplistic technique utilizing "off the shelf technology" to quickly and accurately evaluate precious and noble metal occurrances in geologic materials.

	P.P.G. Indus. Inc. (con't)	During my tenure with P.P.G. duties, in addition to the above, consisted of personnel direction, prospect evaluation detail evaluation of mineral properties including geologic mapping, geochemical and geophysical surveys with interpretation and drilling programs.
7/28/74 to 11/6/74	Silver Productions Inc. 4416 Camino Real Tucson, Az. 85718 Mine evaluation and exploration	Chief geologist Design and execution of surface and subsurface exploration and economic evaluation of silver properties in Oregon. Technical direction in the refurbishing of a flotation mill and underground workings. Preperation and presentation of geological-economic reports with recommendations.
4/1/74 to 7/28/74	California Exploration P.O. Box 1029 Laguna Beach, Ca. 92652 Porphyry copper type mineral exploration	Exploration geologist Provided geological assistance on two on-going porphyry copper prospects located in Pinal and Cochise counties, Arizona. Duties consisted of compilation and interpretation of data obtained by magnetic and geochemical surveys, geologic mapping of rock types, structures, and hydrothermal alteration mineral assemblages.
3/25/72 to 3/1/74	William Nicholas P.O. Box 12505 Tucson, Az. 85732 Precious metal prospect evaluation	Exploration geologist Evaluation of selected mineral properties for free milling and placer gold and silver in the Mexican states of Sonora, Sinaloa and Chihuahua. The assignment consisted of literature research, prospect sampling, geologic and topographic mapping, and the preparation and presentation of reports and recommendations.

6/10/70 to 10/8/71	Freeport Mineral Co. Freeport of Australia 18-20 Little Collins St. Melbourne, Australia 3000 Exploration geologist	Exploration geologist Delineation of large "Temporary Mineral Reserves" in Western Australia including examination and evaluation of copper-nickel occurrences in ultrabasic material. Exploration techniques included airbourne and ground magnetics, stream sediment and soil geochemistry, photo-geologic interpretation and geologic mapping, and subsurface examination by percussion-rotary and diamond drilling. All data was compiled, evaluated and submitted to managment with recommendations.
Prior to 6/10/70	Owner and operator of a small construction firm in Tucson, Az.	

The New La Paz Gold Mining Company

presents the following facts on its Arizona holdings which is believed to be conservative and very interesting from an investment standpoint.

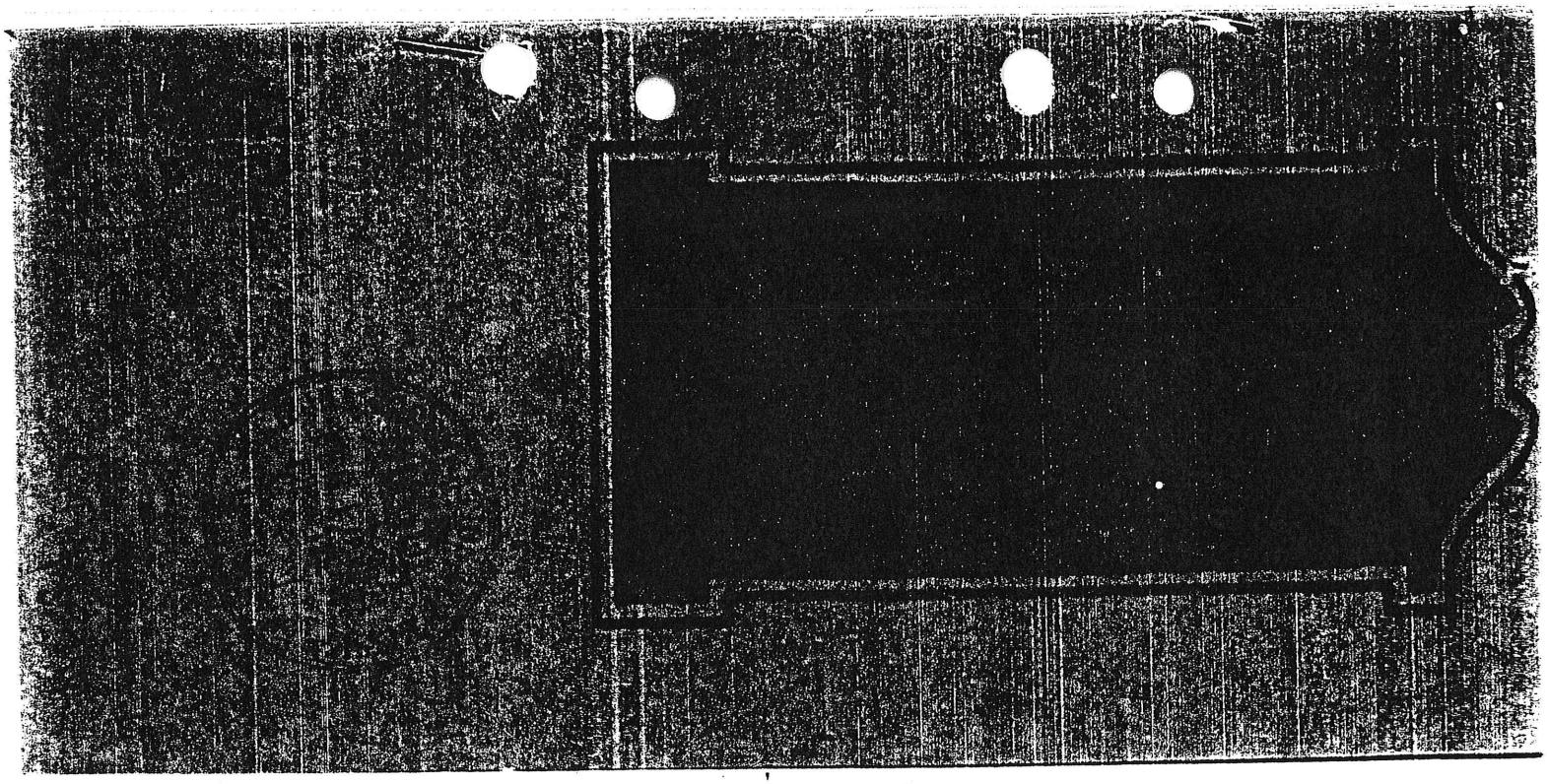
California Permit No. 1570

McDaniel & Cordary
504-08 Pacific Finance Building

6th & Olive Streets
Phone 64258

"Exclusive Fiscal Agents"

Serial No. 3



LEGALITY OF CORPORATION

Los Angeles, January 25, 1921.

Messrs. McDaniel & Cordary,
Pacific Finance Bldg.,
City.

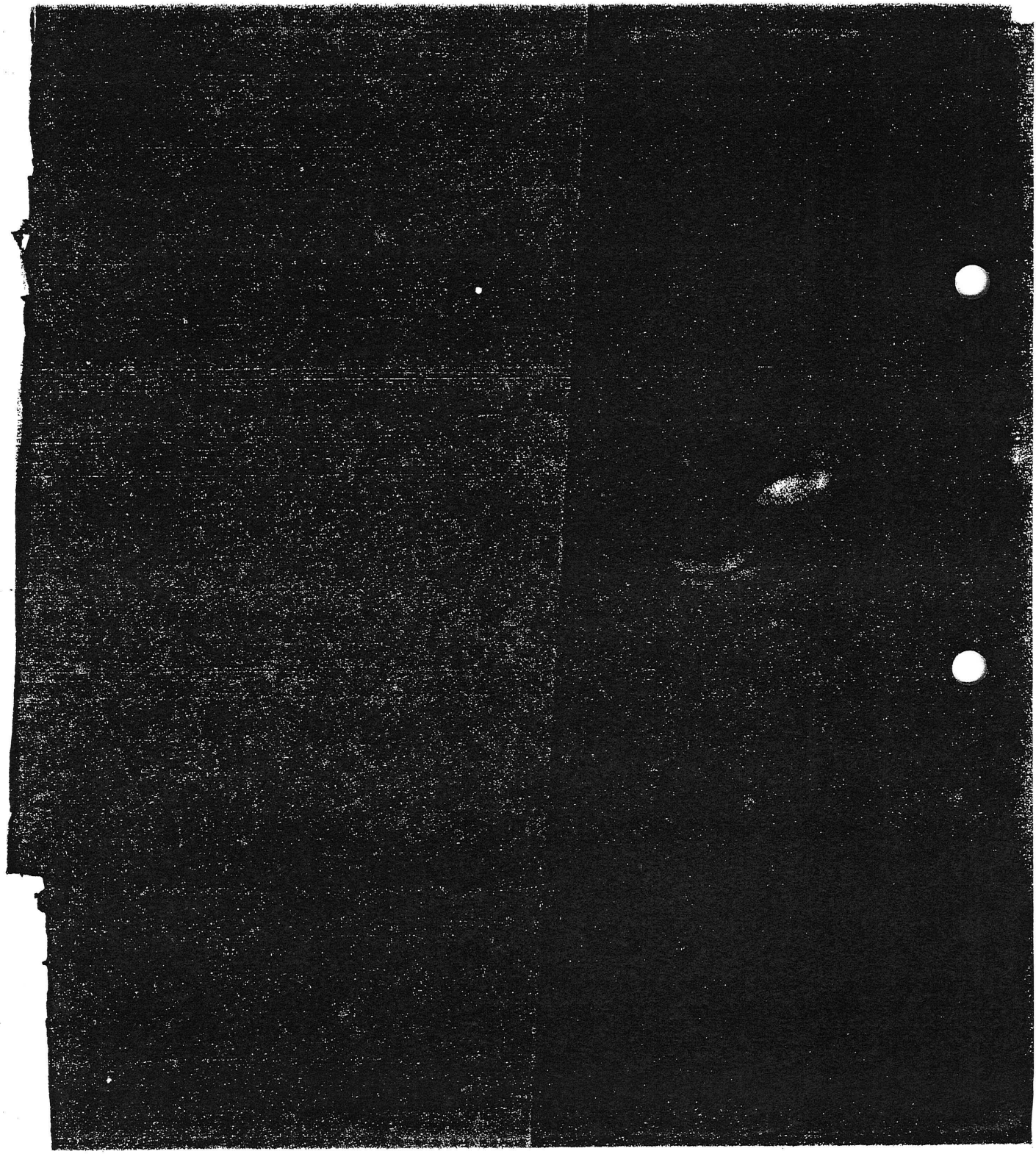
Gentlemen:

As the attorneys for the New La Paz Gold Mining Company we are pleased to advise you that said Company is a Corporation organized and existing under and by virtue of the Laws of the State of Arizona, and as such has complied with all the requirements of the Arizona concerning the incorporation and operation of Companies of like nature and is at the present time in good standing and privileged to continue in the exploitation of its gold mining properties.

Yours very truly,
MOOTE & PATTERSON.
By E. S. Patterson.

DIVIDENDS

Dividends will be paid as earned. Soon as plant installation is completed and mine being operated to capacity, we feel earnings will soon thereafter allow monthly dividends.



SAMPLES FROM SHAFTS AND GRAVEL BEDS

Sample No.	Location.		Coarse gold separated by hand picking from black sand. Val. per cu yd.
1	Shaft 9′ deep top to bottom	N. side	$1.12
2	Same as No. 1	W. "	.76
3	Shaft 9′ deep top to bottom	W. "	.16
4	Same as No. 3	E. "	1.02
5	Shaft 7½′ deep top to bottom	E. "	2.35
6	Same as No. 5	W. "	1.09
7	Shaft 7½′ deep top to bottom	N. "	1.17
8	Same as No. 7	W. "	.34
9	Shaft 8′ deep top to bottom	W. "	1.58
10	Same as No. 9	N. "	.40
11	Average of dump shaft 26′ deep		1.66
12	Bank 2′ high		.81
13	Bank 8½′ high top to bottom		.20
	Same as No. 13		1.56
	Shaft 10′ deep, average of dump		1.58
	Same as No. 15		.73
17	Shaft 10′ deep carved, average of dump		2.12
18	Same as No. 17, Upper 5½′ of shaft		1.32
19	Bank 8′ high top to bottom		1.04
20	Same as No. 19		.23
21	Shaft 30′ deep to bed-rock caved, dump average		3.52
22	Same as No. 21		1.34
23	Shaft 26′ deep, dump average		0.00
24	Same as No. 23		4.25
25	Same as No. 23, Sample 6′ to 16′	N.E. side	1.98
26	Same as No. 23, Sample 6′ to 16′	S.E. side	1.43
27	Shaft 22′ deep caved, dump average		1.46
28	Shaft 8′ deep top to bottom	N. side	6.32
29	Same as No. 28	W. side	2.86
30	Shaft 9′ deep top to bottom	W. side	1.25
31	Same as No. 30	N. side	.77
32	Shaft 23′ deep, Sample 8′ to 23′	S. side	4.41
33	Same as No. 32	W. side	6.21

Composite samples of the combined concentrates, after all coarse gold was separated, assayed 29.9 oz. gold per ton. Mr. Rasor found that 500 yards gravel yielded one ton concentrates, on which basis the concentrates add to the coarse gold values n above an average of $1.20 per yard.

PURPOSE OF ISSUE

To carry out our plans as confirmed above we are offering a limited number of shares of the CORPORATION at One Dollar ($1.00) par —money to be used in the INSTALLATION OF THE NEW PLANT and creating reserve sufficient to meet any **unforeseen** emergencies. After installation we feel safe in saying that we will be able to operate on a most profitable basis.

MANAGEMENT

The management will be under "The President and General Manager of the corporation," Mr. O. L. Grimsley, who has successfully spent the best years of his life in mining. Mr. Grimsley has the greater part of his fortune in this corporation and expects to push development work and operations as fast as money and brains will permit.

As a man of character and ability we feel there is no other more competent for the important position, which is confirmed by the First National Bank of this city and made a part of this booklet.

The First National Bank of Los Angeles

DESIGNATED DEPOSITARY OF THE UNITED STATES

Los Angeles, Cal. 5th January, 1921.

Messrs McDaniel & Cordary,

Los Angeles, California.

Dear Sirs:

I desire to write you as to my acquaintance with Mr. O. L. Grimsley, of the New La Paz Gold Mining Company.

I have known Mr. Grimsley for about fifteen years, during which time he has been a valued client of this Bank. Our experience with him has been most satisfactory and indicates that he is a man of ability in his particular line, i.e., mining, and also straightforward in his dealings.

I wish him every success in his venture which has been delayed, largely, I understand, through no fault of his own.

Yours very truly,

Assistant Cashier

CHARTER AND CAPITAL STOCK

Corporation is organized under the state laws of Arizona for $1,500,000, par value of shares $1.00. Number of shares 1,500,000, fully paid and non-assessable.

banks along Goodman Arroyo, covering a total distance of about one-half mile. It is estimated that the portion of the gulch covered by these samples contains approximately 1,000,000 yards of gravel.

The samples taken from locations shown on attached map, varying in weight from 80 to 180 pounds, were run through a dry washer and the concentrates panned in a gold pan. The results of the panning were then dried and the coarse gold separated out and weighed.

The black sand concentrates, from which the coarse gold has been removed, were then combined and assayed.

The gulch was sampled in cross-section as ows:

Samples Nos. 1 to 12.

Average coarse gold	$1.04
Average value concentrates	1.20
Total average value per cu. yd. gravel	$2.24

Samples Nos. 13 to 18.

Average coarse gold	$1.08
Average value concentrates	1.20
Total value per cu. yd.	$2.28

Samples Nos. 19 to 27.

Average coarse gold	$1.69
Average value concentrates	1.20
Total value per cu. yd.	$2.89

amples Nos. 28 to 33 do not represent an rage cross-section of the gulch, but are typical samples as the gold is comparatively uniformly distributed across the gulch as shown in the above samples.

The samples 1 to 28 are representative of the average value of the top 8 feet of gravel. The gravel at this point has an average depth of 30 feet and undoubtedly will show higher values near bed-rock as indicated by samples 32 to 33.

Concentrating with the dry washer, which was the only means available, is unsatisfactory, and panning and assay tests made from the

tailings show a very considerable loss in this method of testing. This was partially due to slight clay cementing of the gravel which readily breaks up when put in water.

Taking into consideration the above conditions, I consider the above values very conservative.

My sampling of the property corresponds, as well as could be expected, with the values given in Mr. Rasor's report of October 16, 1916, as shown in the Prospectus of the Company. A check of his estimate of the total yardage in the eastern portion of the claim, given as 5,300,000 cubic yards, is approximately correct. Mr. Rasor's estimate of an average value per yard of this material of $2.16 I believe to be conservative.

The values as found in this gravel show your property to be exceptionally good, and would warrant a very much larger expenditure on the property than you contemplate.

Yours truly,

JOHN F. DULING,
Mining Engineer.

1125 Central Bldg., Los Angeles, Calif.

to 650 feet apart and were zig-zagged so that the entire ground was systematically prospected and every shaft producing gold in a paying quantity.

General mining research work fully demonstrates that this is the psychological hour to operate gold mines, but before spending more money in developing our mine, we have caused further investigation of our holdings, report on which is herewith printed. You will find this report confirms all former engineer's reports and also shows that the mine is richer than first believed.

BENNETT & DULING
Mining Engineer
1125 Central Bldg.
Los Angeles

January 6, 1921.

New La Paz Gold Mining Co.,
328 Douglas Bldg.,
Los Angeles, Calif.

Gentlemen:

In accordance with your request I have examined your placer mining property in Yuma County, Arizona, and hereby submit a report on the same.

While my immediate work has been confined to determining the gold values in the property, I have taken occasion to glance over your general plan of development and the equipment you have purchased.

I wish to say that the expenditures on the development of the property and the general plan being followed are in accordance with established mining practice.

I have attached hereto an additional report covering the cost of operation and giving an estimate of the profits to be derived therefrom.

The values found in the areas already explored are sufficient to warrant a much greater expenditure in opening up the property than will be represented by the total of your expenditures to date plus the amount realized by the sale of stock now contemplated.

Yours very truly,
JOHN F. DULING,
Mining Engineer.

New La Paz Placer Mines

The New La Paz Placer Mines are located in Yuma County, Arizona, about 12 miles northeast of the town of Blythe, California, and about 31 miles southwest of the town of Bouse, Arizona.

The property, comprising 15 claims, lying in Goodman Arroyo, covers an area of 1596 acres.

This ground was the scene of a rich gold strike in 1862 and was extensively worked for the following six years by dry panning. Miners were said to have taken as high as $100.00 per day from the old diggings by this method.

Later dry washing machines were introduced and work was carried on in this way until this land was taken into the Colorado River Indian Reservation, from which it has only recently been released.

The early mining was confined entirely to the small side gulches where the gravel was shallow and bed rock easily reached.

No attempt was made to handle the deeper gravels in the main gulch which are entirely untouched. In fact, under the early methods used, only ground paying in the neighborhood of $10.00 per yard or better could be profitably worked.

The tailings from the old workings will undoubtedly carry good values as the losses by the crude methods used in the early workings were considerable.

The east end of the property was systematically prospected and sampled by E. A. Rasor, a Mining Engineer, in 1916. The prospecting was done by means of shafts, some 74 being sunk on this portion of the property. During the summer of 1919 the heavy rains covered and filled up the shafts in part so that in most cases only the upper portions of them are accessible for sampling.

I visited the property on November 9th, 10th and 11th of last year, and took 33 representative samples from these shafts and exposed gravel

No. of Sample	LOCATION	Grains of Gold in Sample	Value of Gold in Cents	Value of Gravel per Cubic Yd.
41.	Shaft No. —Taken from east side top to bottom 15' to bedrock	1	3.98	1.19
42.	Shaft No. —Taken from east side top to bottom 10' deep	½	1.99	.59
43.	Bank—Bank 12' high	½	1.99	.59
44.	Bank—Bank 12' high above 43	1½	5.96	1.78
45.	Bank—Bank 14' high	¾	2.98	.89
46.	Bank—Bank 11' high	¾	2.98	.89
47.	Bank—Bank 11' high	½	1.99	.59
48.	Bank—Bank 14' high	¾	2.98	.99
49.	Bank—Bank 12' high	½	1.99	.59
50.	Bank—Bank 12' high	½	1.99	.59
51.	Check—Check on sample No. 50	½	1.99	.59
52.	Shaft No. —Taken from east side and south end top to bottom 10' deep	½	1.99	.59
53.	Shaft No. —Taken from east side and south end top to bottom 10' deep	4	15.90	4.76
54.	Bank—Bank 15' high	1½	9.94	2.97
5.	Bank—Bank 13' high	½	1.99	.59
6.	Bank—Bank 12' high	1	3.98	1.19
57.	Bank—Bank 14' high	1½	5.96	1.78
58.	Bank—Bank 14' high	1	3.98	1.99
59.	Bank—Bank 12' high	1	3.98	1.99
60.	Bank—Bank 18' high	½	1.99.	.59
61.	Bank—Bank 18' high	½	1.99	.59
62.	Bank—Bank 13' high	½	1.99	.59
63.	Shaft No. —Taken from east side and south end 8' deep	½	1.99	.59
64.	Bench—Bench gravel	1¼	4.97	1.49
65.	Shaft No. —Taken from east side and south end 10' deep	2½	9.94	2.97
66.	Shaft No. —Taken from east side and south end 7' deep	1¾	6.96	2.08
67.	Bench—Bench gravel	1½	5.96	1.78
68.	Shaft No. —Taken from east side top to Hole 35'	3¾	14.91	4.46
69.	Shaft No. —Taken from east side 15 to 25	4¼	16.89	5.06
70.	Shaft—Taken from east side 25 to 35'			
71.	Shaft No. —Taken from east end and south side top to bottom	2¼	8.94	2.68
72.	Shaft No. —Taken from east end and south side 7' deep	4	15.90	4.76
73.	Shaft No. —Taken from east end and south side 8' deep	2¼	8.94	2.68
74.	Shaft No. —Taken from east end and south side 11' deep	3	11.92	3.57
75.	Shaft No. —Taken from east end and south side 14' deep	3	11.92	3.57
76.	Shaft No. —From bedrock 10'	7¼	28.81	8.63
77.	Shaft No. —Taken from east end and south side 10' deep	2¼	8.94	2.68
78.	Shaft No. —Taken from east side bottom 17' deep	2¼	8.94	2.68
79.	Shaft No. —Taken from east side 17' deep	2¼	8.94	2.63
80.	Shaft No. —Taken from east side 7 to 12'	1	33.97	1.19
81.	Shaft No. —Taken from east side top to	¾	2.98	.89
82.	Shaft No. —Taken from east and south side 10' deep	1	3.97	1.19
83.	Check—Check on sample No. 82	½	1.99	.59
84.	Shaft No. —Taken from east and south side 10' deep	1	3.97	1.19
85.	Shaft No. —Taken from the bottom 2' of sand	¾	2.98	.89
86.	Shaft No. —Taken from east side and south end 7' deep	½	1.99	.59
87.	Shaft No. —Taken from east side and south end 30 to 40'	1½	5.96	1.78
88.	Shaft—Taken from east side and south end 20 to 30'	1¼	4.97	1.49
89.	Shaft—Taken from east side and south end 10 to 20'	1¼	4.97	1.49
90.	Shaft—Taken from east side and south end top to 10'	1	3.97	1.19
91.	Shaft No. —Taken from west and south side 10' deep	1½	5.96	1.78

Financial Condition of Corporation

Ending Dec. 31st, 1920.

Member California State Society of Certified Public Accountants

Member American Institute of Accountants

CERTIFIED PUBLIC ACCOUNTANT
718 Hibernian Building
408 So. Spring St.
Phone 14049
Los Angeles, Cal.

W. R. BLACKMAN

New La Paz Gold Mining Company

Balance Sheet

December 31, 1920

ASSETS

Current:		
Cash in Bank		$ 19.81
Property:		
Mines and Land		602,250.00
Equipment:		
Mining	$ 60,062.42	
Manufactured Pipe on Hand	13,219.76	
Furniture, Office	1,050.46	
		74,332.64
Organization, Construction and Development:		
Commissions—Stock Operations	$ 15,160.71	
Expense—General	65,631.10	
Office	14,400.84	
Traveling	4,384.00	
Mine Operations	26,942.78	
	$126,519.43	
Less Transfer Fees	17.75	126,501.68
		$803,104.13

LIABILITIES AND CAPITAL

Current:		
Notes Payable		$ 1,000.00
Accounts Payable:		
Commercial Engine Co.	$ 707.87	
Petty Cash	15.73	
Stock Subscriptions	1,710.53	2,434.13
Total Current Liabilities		$ 3,434.13
Capital Stock:		
Authorized Issue 1,500,000 Shares	$1,500,000.00	
Less Unissued $496,523.00		
Less Stock Discounts 203,807.00	700,330.00	
Paid Up Capital		799,670.00
		$803,104.13

I certify the foregoing Balance Sheet of the New La Paz Gold Mining Company to be true and correct and in full accord with the books of accounts.

W. R. BLACKMAN, C. P. A.
Member American Institute of Accountants.

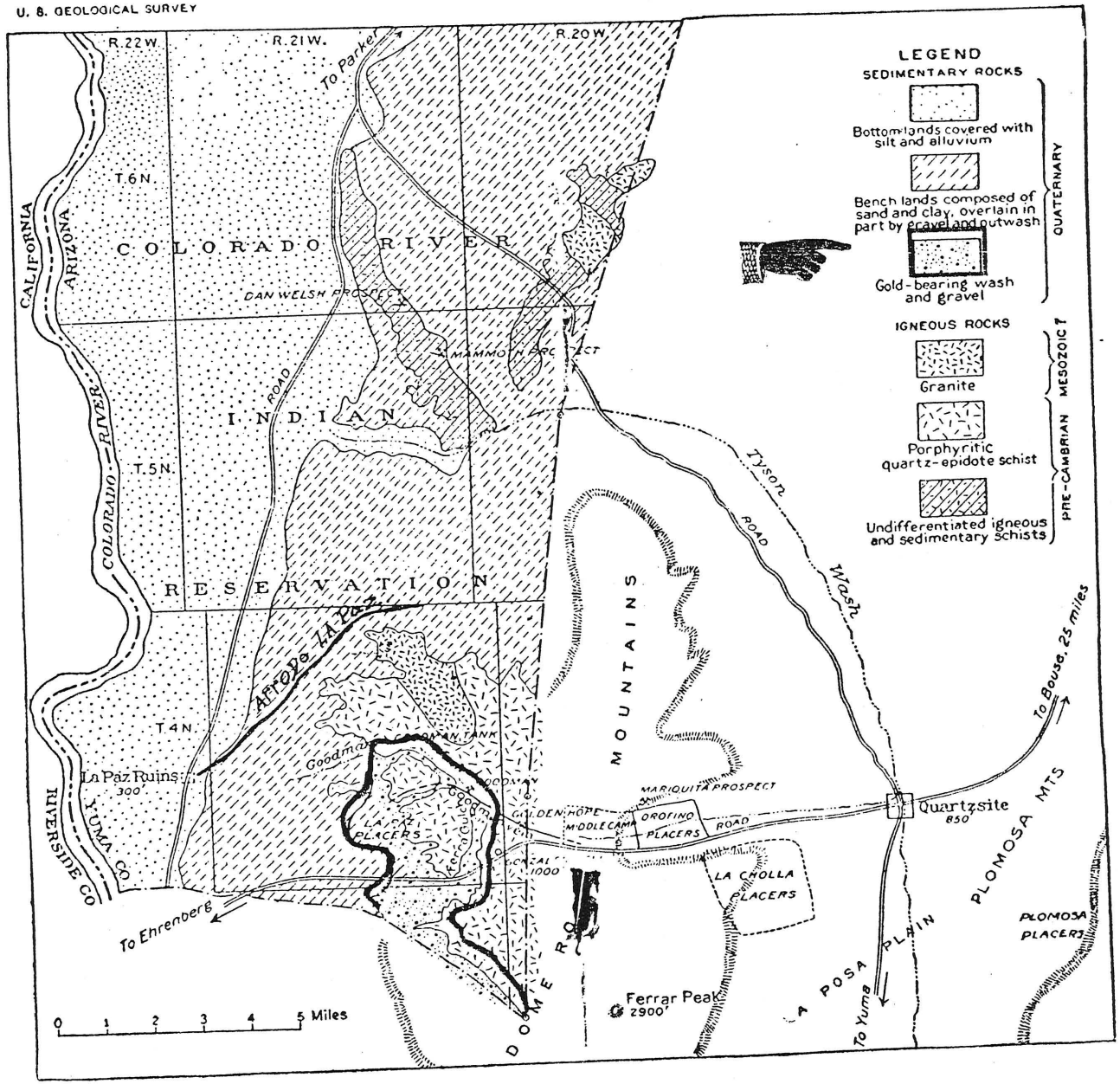
Los Angeles, Calif., January 24, 1921.

In addition to the above statement the original owners have spent approximately $5,000 prospecting this property to determine that the values were there before any more money was spent. The prospect shafts were sunk to bed rock ranging from six to forty feet in about 125 different places on the property from 350

T 3 + 4 N R 21 W

U. S. GEOLOGICAL SURVEY

BULLETIN 620 PLATE IV



Copy of United States Government Map.
New La Paz Gold Mining Company's Property
Indicated by Red Outline.

There are seventy-four shafts sunk on the property into the gravel to a depth of from five to forty-five feet and these gave the means of thoroughly testing the values.

The sampling was made under my own personal supervision and direction with the assistance of four helpers in the following manner:

I carefully weighed out one hundred (100) lbs. of the dirt for each and every sample. This was run through a hand dry-washer and the concentrates were then washed with water in a gold pan, after which the gold was carefully dried and weighed on a standard assayer's scales or balances.

Every effort was made to arrive at a correct estimate of the values and I can conscientiously state that the results shown on the sheets attached hereto represent the average value of the ground tested. From the topographical survey mentioned above, I find that there are 5,300,000 cubic yards of gravel included within the ground tested. Upon my arrival in Los Angeles I took the gold to a reliable assayer who gives us return of 923 fine and a value of $19.08 per oz. In the above operations a cubic yard was assumed to weigh 3,000 lbs. The assayer referred to above is of the firm of Gilfillan Bros., 217½ West Sixth St., Los Angeles, California.

Another item I must mention is the black sand which is found in all portions of your property. This black sand has a value of $28.50 in gold and $1.40 in silver to the ton.

By actual test made from the ninety-one samples we find that every five hundred (500) cubic yards of gravel contains one ton of black sand. In the 5,300,000 cubic yards of gravel in your holdings, there would be 10,600 tons of black sand worth $312,448.00. This black sand will be saved without one cent additional cost to the Company.

The result of the sampling shows an average value of $2.16 per cubic yard in free gold, which amounts to $11,448,000, and the total including the black sand would be $11,800,448.

Yours very respectfully,

EDWIN AMBROSE RASOR,
Mining Engineer,
Los Angeles, Cal.

TEST OF VALUES IN GRAVEL TAKEN FROM SHAFT'S SUNK.

No. of Sample	LOCATION	Grains of Gold in Sample	Value of Gold in Cents	Value of Gravel per Cubic Yd.
1.	Shaft No. 1—Taken from the north end and west side—10′ deep	½	$ 1.99	$ .59
2.	Shaft No. 1—Taken from south end and east side—10′ deep	½	1.99	.59
3.	Shaft No. 2—Taken from west side surface to 15′, 35′ deep	2	7.95	2.38
4.	Shaft No. 2—Taken from west side, 15 to 25′			
5.	Shaft No. 2—Taken from west side, 25 to 35′. 24c nugget not included in sample	3	11.93	3.57
6.	Shaft No. 2—General sample of dump	1½	5.96	1.78
7.	Shaft No. 3—Taken from west side surface to 7′, 10′ deep	1	3.97	1.19
8.	Shaft No. 3—Taken from west side 7′ to 10′	1½	5.96	1.78
9.	Shaft No. 4—Taken from east side surface to bottom 10′ deep	1	3.97	1.19
10.	Shaft No. 4—Check on sample No. 9	3	11.93	3.57
11.	Shaft No. 5—Taken from east side surface to bottom 7′ deep	2½	9.94	2.97
12.	Shaft No. 6—East end surface to bottom 12′ deep	2	7.95	2.38
13.	Shaft No. 7—Taken from east end surface to bottom 11′ deep	1½	5.96	1.78
14.	Shaft No. 8—Taken from west side surface to bottom 10′ deep	2¼	8.94	2.68
15.	Shaft No. 9—Taken from west side surface to bottom 10′ deep	1½	5.96	1.78
16.	Shaft No. 10—Taken from east side surface to bottom 9′ deep	2	7.95	2.38
17.	Shaft No. 11—Taken from east side surface to bottom 9′ deep	1½	5.96	1.78
18.	Bench—Bench gravel near mouth of Pauline Gulch	3	11.93	3.57
19.	Shaft No. 12—Taken from south side top to bottom 4′ deep	3	11.93	3.57
20.	Shaft No. 13—Taken from east side top to bottom 35′ deep	1½	5.96	1.78
21.	Bank—Taken from gravel bank 8′ high	2¼	8.94	2.68
22.	Shaft No. 13—Taken from top 15′ of west side	1¾	6.96	2.08
23.	Bank—Taken from gravel bank 7′ high	1½	5.96	1.78
24.	Shaft No. 14—Taken from east side top to bottom 17′ deep	1¼	4.97	1.49
25.	Shaft No. 15—Taken from east side top to bottom 20′ deep	3	11.93	3.57
26.	Shaft No. 14—Taken from east side and north end top to bottom	1½	5.96	1.78
27.	Shaft No. 14—Check on sample No. 24	6¼	24.84	7.44
28.	Shaft No. 16—Taken from east side top to bottom 20′ deep to bedrock	3½	13.91	4.16
29.	Shaft No. 17—Taken from east side and south end top to bottom 10′ deep	½	1.99	.59
30.	Bedrock—Select dirt from shallow bed-rock	7½	28.81	8.91
31.	Gulch—Select dirt from edge of gulch	4½	17.89	5.35
32.	Shaft No. 18—Taken from east side and south end top to bottom 10′ deep	¾	2.98	.89
33.	Shaft—Check on sample No. 32	½	1.99	.59
34.	Shaft No. 19—Taken from east and west sides top to bottom 10′ deep		1.99	.59
35.	Shaft—Taken from the bottom	3½	13.91	4.16
36.	Shaft No. 20—General sample of dump 40′ deep to bedrock	¾	2.98	.89
37.	Shaft No. 21—Taken from top to bottom 4½′ deep	½	1.99	.59
38.	Shaft No. 20—Taken from east side and south end between 10 and 20′	2½	9.94	2.97
39.	Shaft—Taken from east side and south end 20 to 30′	3¾	14.91	4.46
40.	Shaft—Taken from east side and south end 30 to 40′	1	3.97	1.19

port made from a personal examination of a certain gold mining property known to me as the New La Paz Gold Mining Company's property, and I, the said E. A. Rasor, do bind myself by these presents to assist in making a joint re-examination of the above named property with any interested party at any convenient time, and if all statements made and shown in this report cannot be reasonably corroborated in the joint examination, I hereby agree, in such an event, to make no charge for my expenses and services while thus engaged, but shall receive a fair compensation for such services provided my work is found practically correct.

This property, consisting of 1596 acres of gold placer mining ground, located and claimed by virtue of Chapter VI, Title 32 of the revised statutes of the United States, and the local customs, laws and regulations, lies on the west border of the Dome Rock Mountains, about seven miles northeast from the town of Ehrenberg, Yuma County, Arizona, and on the east side of the Colorado River. It is situated in township 4 north, Range 21 west, of the Gila and Salt River Meridian.

A railroad now runs into the town of Blythe, on the California side of the Colorado River, to within twelve miles of the property, but owing to the uncertain crossing of the river, it would be more conservative to calculate on handling all of the freight and materials from the town of Bouse, Arizona, on the Parker cut-off of the Santa Fe Railroad, which is about thirty-one miles by wagon road to the northeast. I have recently been over and examined both roads and found the road to Bouse to be in good condition for heavy hauling by motor truck.

The formation in the locality of the New La Paz Gold Mining Company's property is in general made up of micacious granite and schist and many beds and plugs of quartzite, also some volcanic lime on the extreme edge of the mountains. The schist is interwoven with many stringers of gold-bearing quartz, which, in my opinion, has, by erosion and disintegration, furnished the gold which is now found in the gold-bearing gravel beds.

Gold was first found in the La Paz district by Capt. Paul Weaver early in the summer of 1862 while he was trapping along the Colorado River. The existence of the metal was, in

all probability, made known to him by the Indians with whom he traded and was on friendly terms. A great rush and excitement immediately followed, and a townsite was surveyed by a young engineer by the name of Ehrenberg. The place was called La Paz and was made the first official county seat of Yuma County, and continued to be so until the year 1871, when it was removed to Arizona City, which is now the city of Yuma.

The placer fields, undoubtedly, were very rich, as many nuggets weighing three pounds were taken out and the largest of which we have record weighed three and one-half pounds. This was taken from Ferrar Gulch, one mile south of the Company's property. As nearly as can be ascertained, there was about $500,000 worth of coarse gold taken from the ground now owned by your Company and about $1,200,000 taken from the Ferrar Gulch. Beside this there was extensive workings in many other gulches in the vicinity. I have frequently sampled the tailings from the old workings and find that the early miners did not succeed in recovering all of the gold, and the tests show that these old tailings are what is now considered, with modern equipment for working, rich placer.

The object of this last expedition to the property, made in September and October of this year, was to thoroughly sample the ground and to determine the amount of available yardage and its contents of gold per cubic yard. During the months of June and July a thorough and exhaustive survey was made under my direction and I am herewith offering a contour map* which accurately represents the upper claims and a portion of the lower claims belonging to the Company. I also made a survey of the pipe-line leading from the proposed pumping station to the reservoir site and caused the same to be plainly staked out upon the ground. A profile of the said pipe-line is herewith enclosed.*

A reservoir site, which is on the top of a mountain about 225 feet above the average of the ground, is now cleared and ready for the construction of the reservoir. The site was completed by blasting off the top of the mountain and leveling the floor 60x250 feet.

*Same can be seen at our offices.

citement that invariably pervades the adventurous throngs who flock into new places of rich discovery.

The first visit which the writer ever made to the site of La Paz was in April, 1859, three years prior to the excitement aroused by the discovery of gold. At this time there was of course nothing whatever in the way of human habitation to be found on the spot that later became the scene of such great activity. The occasion of this visit was the taking of a boat of supplies to a point up the Colorado River that was afterwards known as Fort Mojave. This was during the Mojave War, and the supplies in question were being transported for the soldiers of the Sixth Regiment of United States Infantry who were then marching across the desert to the scene of hostilities. From this time forward, the various boats belonging to the Colorado Stream Navigation Company, of which the writer was Captain, and among which were the "Colorado," the "Cocopah," the "Mojave" and a smaller boat named the "Nina Tilden," made trips at more or less frequent intervals up and down the river.

That the placer fields of La Paz were decidedly rich was shown by the fact that nuggets of gold were taken out in great quantities. The largest of these, which was found in what was known as Ferrar Gulch, weighed three and one-half pounds; a number of others were discovered weighing as much as three pounds, while still others of smaller size were uncovered in large numbers. A great deal of gold was encountered daily, and dust was panned out in abundance. The supply seemed inexhaustible and the people became wild with excitement.

La Paz, by reason of its importance, was made the first official seat of Yuma County, and continued so to be until the first of the year 1870, but by an act of the Legislative Assembly of Arizona, which convened in Tucson during the winter of 1869, the county seat was removed to a point down the river then known as Arizona City, a name that was later discarded for that of Yuma. This move was effected some time between the 1st and 10th days of January, 187[illegible]. The writer was captain of the "Nina Til[illegible] the boat which transported the court re[illegible]nd paraphernalia, as well as all other re[illegible] of the County, down the river to the new county seat.

The Colorado Indian Reservation extends for

a distance of a mile and a half south of the old placer grounds, the southern boundary of the reservation being marked by what is known as the La Paz Gulch.

Parker, Arizona, is situated about thirty-five miles up the Colorado River from the former site of La Paz.

During the seven years that the placer mines of La Paz were actively worked, there was about eight million dollars in gold taken out. The method of extracting the metal, however, was extremely crude. The miners did not even have dry-washer machines, but the recovery of gold was effected solely by means of the Mexican bateas, a large wooden bowl, which was used in the same manner as the ordinary gold pan. By modern methods, placer mining should still yield a great deal of the precious metal, and the writer is sure that gold will be found in paying quantities in the area lying between the old site of La Paz and the foot of the mesa, which, so far as he is informed, has never been systematically worked at all.

Almost constantly since the discovery of La Paz, there has been a number of Mexicans and Americans working in the unrestricted fields with hand dry-washers.

The fact that they all have and are making a good living justifies me in saying that if the valuable ground owned by the New La Paz Gold Mining Company is worked as intended, with modern hydraulic machinery, there is no question but that the company will be paying handsome dividends in the near future.

(Signed) ISAAC POLHAMUS.

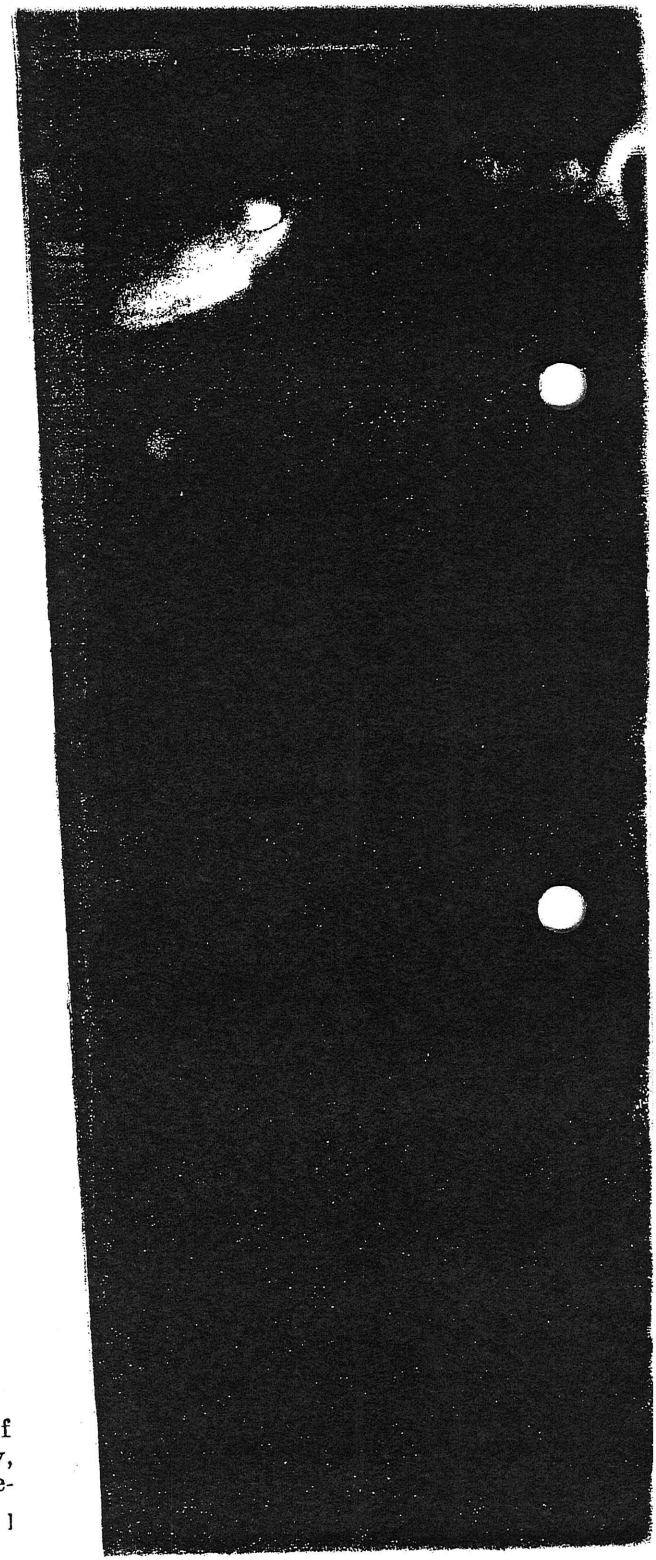
Special attention is invited to the details in the following report which is later confirmed in this booklet by the eminent mining engineer, Major John F. Duling of Los Angeles, who was selected by Commissioner of Corporations of the State of California.

REPORT OF EDWIN A. RASOR, MINING ENGINEER.

New La Paz Gold Mining Company,
328 Douglas Bldg.,
Los Angeles, California.

Gentlemen:

I, E. A. Rasor, a mining and civil engineer of Los Angeles, California, a disinterested party, do hereby make and submit the following re-



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President and General Manager
of Los Angeles

DR. G. A. SCROGGS,
Vice-President and Treasurer
of Los Angeles

GEORGE RENWICK,
Secretary of Los Angeles

Brief History of the La Paz Placer Fields

By Isaac Polhamus

(A Pioneer Resident of Recognized Standing.)

When the writer first came to what is now the State of Arizona, in the year 1856, it was a part of that region known as the Gadsden Purchase. It was not until 1863, or seven years later, that it was made a Territory, and at the time of its organization it originally comprised but four counties, namely, Yavapai, Mojave, Pima and Yuma.

Late in the spring, or in the early summer of 1862, the year before Arizona was established as a Territory, gold was discovered in large quantities at what immediately thereafter became known as the town of La Paz. Reports of the rich placer mines quickly spread and people of all nationalities began to flock into the new El Dorado. Many of the old forty-niners who had gone to California during the great gold excitement there heard of the fabulous wealth of the La Paz placer mines, and were drawn thither by visions of untold riches that lay in this virgin field and awaited only the hand of man to gather and place them in the channels of commerce.

The town of La Paz was located at a point two miles distant from the Colorado River. This was due to the fact that the Colorado attained a very high mark during the summer of '62, and the land for quite a distance back from the usual course of the stream had become inundated, rendering it necessary to establish the town almost at the foot of the high mesa which stood about two and a half miles from the river proper.

The population, as stated, was made up of every nationality to be found in America. The Mexicans, however, greatly predominated. There was, of course, the usual large percentage of adventurers, gamblers and confidence men, always to be found in large numbers in communities of this kind. It was an era of wonderful financial prosperity. Men were lavish in their expenditures and money flowed as freely as water, for each and every individual of this nondescript population was moved by that same spirit of reckless extravagance and feverish ex-

REPORT ON

NEW LA PAZ GOLD MINING COMPANY

Los Angeles, Cal.,
May 5, 1919.

To Whom It May Concern:--

At the request of some of my friends, some of whom are stockholders in the above company, and others who are contemplating and investment in its stock, I agreed to pay a visit to the property and make an investigation and report to them accordingly.

During the last part of April, 1919, I visited the property consisting of 1546 acres, owned by the company and more fully described in a report by E.A.Rasor, a mining engineer, dated October 1,1916.

I have carefully read the said report of E.A.Rasor, and after my examination agree with him in all of the salient features of the report, with the exception that I did not make a measurement of the cubic yards of gravel. After that I checked over his figures of the cost of operation, and from my experience, which has been for over forty years, I believe the estimate is entirely within reason.

EXAMINATION OF PAY DIRT

After I arrived at the property I examined it by taking the gravel myself from different places all over the property. I dry washed the gravel and repanned it and only took one pan of gravel in which I found no gold.

The gold is very coarse as the dry washer does not save the fine gold. I found it much better than I expected and believe there are untold values in the ground, but did not sample at bedrock in any place that I examined.

Upon the ground that I examined there are some very large quartz veins that prove to me where the gold originated by coeroding down in the gulches where I panned the gold. Upon examination of the many shafts I found gravel fromeight to forty feet deep lying on bedrock. The gravel is very clean and easily washed. The coarse gold will lie on bedrock. I found an abundance of black sand accompanying the gold, all of which will carry high values, and which gold can be easily saved.

I have examined a great many properties, but I can frankly and conscienciously say, that I have never examined a property as rich as this property. Untold wealth is there to be obtained as soon as the water is piped to the property to wash it out, I found that t' average values from my sampling of the ground ran $2.00 per cubic ya and there is a possibility that when bedrock is reached, the values will run much higher, as the coarse gold goes to bedrock, samples which I did not obtain in my examination.

WATER CONDITIONS

About one mile east from the Colorado River, this comp purchased five acres of water bearing land, and has sunk five wells in which the water stands to within 10 to 12 feet of the

These wells have been thoroughly tested by the company and will furnish five hundred minors inches of water per minute - more than sufficient to meet all comditions required.

These wells are four and one half miles from the reservoir site on the property. At present there is a 2" water line running from the wells to a tank situated on a high point back of the camp which is furnishing domestic water. The water is pumped and lifted by a 6 H.P. engine.

It will be necessary to run a 12" pipeline from the wells to the reservoirs to furnish water for mining purposes, and this water will have to be pumped to the reservoir at the height of 556 feet above the wells. The survey for this pipeline has already been made.

SUPPLY POINTS

The property of the company lies twelve miles east from the town of Blythe on the California side of the Colorado River, and some twelve miles west from the town of Quartzsite, and thirty-six miles from the station of Bouse onthe Parker cut-off of the Santa Fe Railroad. Food supplies, etc., can be readily purchased in Blythe or Quartzsite with but few miles to haul.

The hauling of machinery which is now in storage in Los Angeles, can be more feasibly handled from Bouse, owing to the condition of the road from there to the mine, which is excellent.

MATERIAL

From the mine I paid a visit to Los Angeles and made a careful check on the inventory of pipe, engines, pumps and much other equipment which has been stored for some time in that city awaiting delivery to the mine.

There is over four and one half miles of 12" water pipe included in this inventory. There is sufficient pipe, engines and machinery of allkinds, together with other necessary material to put the mine in operation, and this has all been paid for. There is no indebtedness against this equipment or the mine. I will state, however, that it will be necessary to purchase cement for the construction of the reservoirs. Now all that remains is the shipping of their material and equipment from Los Angeles by train to Bouse, and from there by truck to the property.

CAMP

At present the camp consists of a cookhouse and messhall and six sleeping houses with all necessary utensils and furniture, together with a corrogated iron garage and machine shop.

There is also installed on the property a large rotary rock crusher and a hoisting track has been erected from the gravel to the top of the reservoir site, which site has been leveled off furnishing a level area of about 60x250' on which the reservoirs are to be placed.

THE COMPANY

I find that this company is organized under the Laws of Arizona, which state like California has its own Blue Sky Laws. The Company also maintains an officein Los Angeles, California. It is

capitalized for 1,500,000 shares at a par value of $1.00 each and of which there has been issued 931,337 shares, the remainder being treasury stock.

IN GENERAL

The site for the reservoir is located about one half mile above the camp and is at an elevation of some three hundred feet above the ground to be washed. The work of leveling has been completed and the site is all ready for the construction of the reservoirs.

Owing to the extreme hot weather during the summer months in Arizona, it will be impossible to start the installation of the plant before early fall, but in the meantime the shipping of the material and equipment from Los Angeles can be accomplished.

The work of installation will take about three or four months time after which the water can be turned into the reservoirs, and the actual work of washing out the gold started and from then on a cleanup can be made of values every day or at such periods as the management determines. After the company is actually mining there will be no cessation of work during the hot summer months, but work will continue throughout the year.

FINAL

I have no hesitancy in recommending to anyone the purchase of stock in this company, as it is a very rich property. I have had over forty years of practical experience in mining and the examination of mining properties, and as stated before, these are the richest placer claims I have ever seen.

George Hammond

The New La Paz Gold Mining Company,
Los Angeles, California.

Gentlemen:

In compliance with instructions received from a committee of the stockholders of your company, I visited your placer mining property, situated in Yuma County, Arizona, and herewith submit my report as requested.

My instructions from your committee were received in writing by letter addressed to me as follows, to-wit:

"Los Angeles, California,
December 6, 1919.

Mr. Edward H. Benjamin,
San Francisco, California.

Dear Sir:

You are advised that a committee of the stockholders of the New La Paz Gold Mining Company has been appointed and given authority by the board of directors of the corporation to secure the services of a mining engineer to make certain investigations and report thereon to the corporation concerning two questions set out below, and said committee has unanimously selected you as an engineer to perform such services.

You will be accompanied to the mine by members of the committee, who will point out to you the location and boundary lines of the property of the company and who will also present to you the proposed plans for developing and operating the property as a placer mine, and it is the wish of the committee, and the board of directors and stockholders of the corporation whom it represents, that you shall thoroughly examine and inquire into all of the details of the proposed plan of operation from start to finish, and determine therefrom two questions:

(1) Whether or not the proposed plan of developing and operating the property is a feasible one.

(2) What it will cost to procure and install machinery and equipment to carry out such plan and put the mine upon an operating basis.

You will be expected to make such criticisms and suggestions concerning the proposed plan of operation and the equipment to be installed and used under such plan as may occur to you, pointing

out in detail your objections, if any, and recommendations.

If you find that the proposed plan is not feasible or, if feasible, is not, in your opinion, the most practicable and best way to pperate the property or that the equipment is not suitable, then we want your opinion and advice as to what is the right and best way to operate this property as a placer mine, both as to plan and equipment, and also your estimate of the cost of carrying out such plan of operation as you may advise in place of the one that has been proposed.

You will be furnished by the committee, all information and data that you may require for the purpose of your investigation and report on the questions presented, and if you desire any information that is not now available, you will specify what you want and the same will be obtained for you.

You will be expected to render your report in writing and we will appreciate your furnishing us two copies of the same.

The committee above referred to consists of the undersigned.

Yours very truly,

O. L. Grimsley)
J. E. Ransford)
George H. Woodruff) Committee.
Geo. Hammond ")

Taking up the problems in their order:

First: Whether or not the proposed plan of developing and operating the property is a feasible one.

The proposed plan, as explained to me by Mr. O. L. Grimsley, your president, and Mr. Edwin A. Rasor, your engineer, involves the following:

Installation of a pumping plant at the Company's wells, pumping water through a twelve inch riveted steel slip joint pipe to a concrete reservoir situated on a hill, distant 22,780 feet from the pumping plant, the floor of said reservoir being 557 feet in elevation above said pumping plant by actual survey. (See map exhibits 1 and 2, and photo exhibit No. 1). The water thus pumped to the reservoir to be used for working the suriferous ground located on the property, utilizing

the upper protion of the 12-inch pumping main as a pressure main for this purpose.

The proposed method of operating contemplates placing a check valve in the 12-inch main, approximately 1950 feet below the reservoir in distance, and 200 feet below mean water level in the reservoir, taking out a branch line above the check valve; and the installation of a hydraulic giant to break down the material and with the giant water convey it to and through a sluice to a hydraulic elevator of the Evans or Joshua Hendy type, to a second sluice, through which the material is to be carried to the dumping ground some 1350 feet distant, such gold as is contained in the material to be saved in riffles in the two lines of sluices.

The water is to be taken from five wells, 16" diameter and 100' deep, situated in a territory adjacent to the Colorado River, (see map exhibit No. 1), it being claimed that numerous tests have proven the supply of water from these wells to be practically inexhaustible.

The type of pump contemplated is a belt driven, vertical, single action, triplex power pump with cylinders 10" in diameter and 12" stroke, and are to be run 45 R. P. M. by two tandem type 125 H.P. internal combustion Commercial engines, using tops or distillate for fuel.

In the company's prospectus, page 3, I find the following statement:

> "******* the necessary machinery was purchased for installing a hydraulic plant capable of handling 2000 yards of gravel per day."

In the same prospectus, in the report of Mr. Edwin A. Rasor, I find the statement, (see page seventeen)

> "The hydraulic plant which you are installing is of the most modern type and will handle 3000 cubic yards of gravel per twenty-four hour day."

In another written statement given me by Mr. Grimsley, I find the following:

1- "2500 cu. yds of gravel in sixteen hours is 2.6 cu.yds. per minute. 2.6 cu.yds. is equal to 70.2 cu.ft. of gravel.

2- 250 miners inches of water is 300 cu. ft. of water per minute.

3- The proportion of water to gravel 4.3 cu.yds. of water to one cu.yd. of gravel.

4- Pumps will furnish 168 cu.ft. of water per minute or 241,920 cu.ft. of water per 24 hours.

5- Elevator and Giant use 18,000 cu.ft. of water per hour or 288,000 cu.ft. of water in 16 hours.

6- Reservoir will hold 450,000 cu. ft. of water and will hold enough water to run the plant or elevator for 24 hours in case of accident to the pumps. "

While the proposed plant can undoubtedly be installed at an expense of approximately $100,000, the contemplated net results from its operation could not possibly be obtained, for various reasons, as will be shown.

PUMPING PLANT:

It is claimed "the pumps will furnish 168 cu.ft. of water per minute" presumably delivered into the reservoir.

According to the catalogue of the Dean Pump Works, the builders of the pumps, it is claimed that each pump has a cylinder displacement of 4.08 gallons for each cylinder, or 12.24 gallons for the three cylinders, or 489 gallons per minute at safe speed of 40 R.P.M. - this is assuming that the pumps will operate at 100% efficiency.

It is proposed to run the pumps at 45 R.P.M. or 12½% overload, at which speed each pump would theoretically furnish -

550.8 gallons per minute
33048. " " hour
793152. " " 24 hours.

or reduced to cubic feet it would furnish

73.44 cu. ft. per minute
4,406.4 " " " hour
105,754. " " " 24-hour day.

The combined capacity of both pumps, running at the overload speed would therefore be

146.88 cu. ft. per minute
8812.8 " " " hour
211507.2 " " " 24 hours

or reduced to gallons equals 1,586,304 gallons in 24 hours. The builders of the pumps only claim 85% efficiency under most favorable conditions, therefore the net supply delivered at the pumps would be

124.85 cu. ft. per minute
7,490.88 " " " hour
179,781.12 " " " 24 hour day

or reduced to gallons equals 1,348,358.4 gallons in 24 hours. Reduced to miners inches this would mean that the total supply of water delivered at the reservoir could not, even if the pipe line were absolutely without leaks, exceed 124.85 cubic feet per minute, or 82 miners inches, and this assuming an efficiency of 85%.

As a matter of fact, I am of the opinion that 65% would be a much safer factor for an ordinary commerical operation;- bends and leakage in the pipe line, leaky valves in the pumps, slippage of belts and numerous conditions would no doubt reduce the efficiency of the mechanical operation of the plant and it is therefore far better to calculate on a plant of this character at 65% efficiency that at 85%, and if such a loss occurred you would only have available a little over a constant flow of 60 miners inches or 90 cubic feet per minute.

RESERVOIR:

The plans for the proposed reservoir show it to be 250 feet long, 60 feet wide and 15 feet deep, having a capacity of 225,000 cubic feet or a net capacity of 1,687,500 gallons.

At theoretical capacity it would require 25½ hours pumping to fill, and at 85% efficiency it would require 30 hours pumping to fill, based on 124.85 cubic feet per minute

delivered. A hydraulic giant with 3-inch nozzle and an elevator with 4 inch nozzle under 200 foot head would empty this reservoir in 4¼ hours, as they would discharge 873 cubic feet of water per minute; one 2-inch nozzle under same head would empty it in twenty-five hours.

Miners inch of water: A miners inch of water is a flow of one and one-half cubic feet per minute under any head or pressure. (See Cal. Statute 1901, Chap. CCXXLL, page 660; also Statutes 1913, page 1012). All modern hydraulic tables are based upon this amount, and all calculations are based upon one cubic foot of water as being equal to seven and one-half gallons.

Duty of a miners inch: There is a vast amount of data available regarding the duty of a miners inch of water, under widely varying conditions. Mr. G. K. Gilbert, of the Ul S. Geological Survey conducted a series of experiments at the University of California during a period of over two years and the result of his experiments and tests are published by the survey in a separate bulletin. (See Prop. paper #86 U.S.Geological Survey,1914). Peel's Mining Engineers' Handbook - 1918, in the chapter on Placer Mining Methods, pp. 750-836, gives a resume of hundreds of records, in all kinds of ground and under all conditions of grade, sluice and riffles. A careful compilation of these records establishes the average duty, or carrying capacity of one miners inch of water at 3 cubic yards in 24 hours, for general average conditions.

Some notable records are here quoted, as example:

La Grange Mine, Trinity Co. Calif. 5 season's operations:

Grade of sluice 2% or 3" in 12'.

624,745	miners	inches	moved	676,968	cu.yds.	24	hrs.-	1.08
375,155	"	"	"	683,244	"	"	"	1.82
207,010	"	"	"	284,932	"	"	"	1.37
302,960	"	"	"	459,570	"	"	"	1.52
203,325	"	"	"	329,120	"	"	"	1.57

North Bloomfield Mine, Nevada Co. Calif. 4 seasons.

Grade of sluice 4½% or 6½" in 12'

710,987	miners	inches	moved	3,250,000	cu.yds.	24 hrs.-	4.6
386,972	"	"	"	1,858,000	"	" " "	4.8
700,000	"	"	"	2,919,700	"	" " "	4.17
595,000	"	"	"	2,993,930	"	" " "	3.86

Brandy City Mine, Sierra Co. Calif.

Operations covering many years.

Grade of sluice 2½" in 12', under 2%

2,000 inches of water moved daily 1,600 cu. yds. .80

All this evidence warrants the conclusion that unless the grade of a sluice is over 4½ inches in 12 feet, or over 3%, a miners inch will not wash and carry away to the dump over 2 to 3 cubic yards of gravel in twenty-four hours.

GIANTS AND ELEVATORS:

While the hydraulic giant is a most effective machine for tearing down embankments and removing gravel and other material from natural banks, the hydraulic elevator is equally inefficient in raising and disposing of it.

In all operations the elevator takes from 50 to 66% of available water, and requires 5 feet of head for one foot lift, and then will only lift about 5% maximum in gravel of the volume of water used;,actual experience usually cuts down this quantity to 2 or 3% of the total weight lifted.

Therefore the total amount of gravel that could be worked in twenty-four hours would be 5% of 66% of the total water available in twenty-four hours, and in the La Paz property the total water available could not be more than the total supplied by the pumps, viz: 124 cu. ft. per minute. Of this the elevator would take 66% or 82 cubic feet per minute and the giant would take 34% or 42 cubic feet per minute. Raising a total of 5% solids the elevator would only handle 4.1 cubic feet per minute,

or 246 " " " hour
5904 " " " 24 hours
218 " yards daily.

THE PIPE LINE:

It has been shown that the pumps will deliver but 124.85 cubic feet per minute, or 2.08 feet per second. Water traveling at this velocity in a 12-inch pipe would lose 3.65 feet in head for each 1000 feet in length of the pipe line, and in the 22,780 feet of line, the loss in head by friction would be 83.15 feet, which must be added to the total surveyed head, making the hydraulic head 665.15 feet from the well to top of reservoir, and to lift the 124.85 cubic feet of water to this heighth through the 12-inch line would require 157 theoretical horse power.

GRADES AND DUMP:

From the contour map furnished I find that the grade of the proposed sluice, from the elevator to the dump is 20 feet in 1350, or 1 foot in 67½, which is equal to 1½% grade, or about 2½ inches per 12 feet, and on this grade less than one yard of gravel could be moved per miners inch in twenty-four hours, as was proven by many year's work in the Brandy City Mine, before referred to.

From the elevator pit to the upper end of the claim, a distance of approximately 1800 feet, there is a grade of 100 feet, or one foot in eighteen. This grade would be ample for a sluice if the bedrock was uniform.

A shaft 35 feet deep near the elevator pit shows the depth of the bedrock below the surface and therefore the sluice into which the elevator discharges could only be raised 5 feet above the ground, as the total lift possible for an elevator operating under 200 foot head would be 40 feet. If there was an abundance of water two steps of elevators could be utilized, and thus create a much greater grade by building up the receiving end of the sluice, but your conditions will not permit it.

From the above analysis it will be seen,

First: That the capacity of the pumps is only 124.85 cubic feet per minute at 85% efficiency and that they cannot deliver 168 cubic feet of water as stated;

Second: The reservoir capacity is 225,000 cubic feet or a little over 1,600,000 gallons; this amount is given correctly on the plan of the structure, but is erroneously stated elsewhere at 450,000 cubic feet.

Third: 250 miners inches of water would be equal to 375 cubic feet and not 300 cubic feet per minute.

Fourth: The elevator and giant would require a vast amount of water, more than could possibly be furnished by the pumps, or through the pipe line without excessive loss, to do any effective work.

The quantity of water that would be supplied under the proposed plan, to-wit: 124.85 cubic feet, is but 82 miners inches, and it is very doubtful if over 250 cubic yards of gravel could be handled daily with this amount of water; it is obvious, therefore, that unless your gravel carries an exceptionally high average value per cubic yard, that the installation of the proposed plant would not be warranted.

The three necessary conditions required to make a success of any placer mining claim are:

First: A sufficient value in the ground to pay operating expenses and return invested capital with interest;

Second: A sufficient amount of water to work said ground rapidly and to advantage; and

Third: Sufficient dumping room to dispose of the debris.

In your problem you lack both water and dump,-the question of values I have not investigated, as I assume that naturally you were satisfied as to this most important point before any investment was made. If, however, this

vital condition has not been entirely and satisfactorily settled, it should be the first step to take before attempting any further plan of operation.

I believe that the only method by which your property can be even partially successfully operated would be to instal a steam driven drag line cableway excavator, with a capacity of at least six hundred yards per day, to dig and dump the gravel into the hopper of a loading bin, from which it would be conveyed by an aerial cable tram to a washing station nearer the water, where ample water and dump would be provided to wash the gravel and dispose of the debris.

From a study of such conditions as I could observe on the brief visit, and from the maps and surveys furnished by Mr. Rasor, I believe that the water could be economically and satisfactorily pumped through a double pipe line to the 17,000 foot point on the profile where the elevation is given as 583 feet, or 298 feet above the pump station.

The heavy head would thus be avoided, and the heavy pipe line that has been purchased for the pipe line contemplated could be exchanged for more pipe of a lighter weight; a No. 12 gauge would be heavy enough for the lower end and No. 14 for the upper end, in this way practically enough pipe could be secured to lay a double line 17,000 feet long.

The plunger pumps would not be capable of furhishing a sufficient amount of water, and are not suitable or flexible enough for this character of work.

I would favor the installation of three multiple stage centrifugal pumps, each driven by the same engines you have on hand, and while this would necessitate the purchasing of an additional engine, it gives you a far more satisfactory and flexible unit and would give you three times the amount

of water that you could possibly get with the pumps purchased.

No doubt these plunger pumps could be sold for more than their original cost, and the three multiple stage pumps would give you 825 gallons per minute each, requiring 125 H. P. at 68% efficiency, each.

With this type of plant you would have a constant service.

The cost of such a pump would be approximately $2,000.00 F.O.B. San Francisco, and its weight 3,200 pounds.

The cost of the drag line excavator erected complete with engine and boiler would be approximately $10,000.00, and the tramway $30,000.00 for one mile in length erected.

The sluice of forty boxes would cost about $4,000.00 estimating roughly five hundred feet of lumber per box, and labor at $8.00 per day.

Estimating the laying of pipe line at 40¢ per foot would be $10,000.00 more, thus an outside figure for the proposed equipment would be: (exclusive of pipe line)

3 pumps	$6,000.00
Excavator	10,000.00
Tramway	30,000.00
Sluice	4,000.00
T o t a l	$50,000.00

These figures are only approximate and are made high, fore safety; freight has not been calculated, as rates are unknown.

The Exeavator outfit would weigh about 40,000 lbs.

The Pumps " " " 10,000 "

The Tramway " " " 100,000 "

An additional engine would have to be purchased, the cost of which is unknown. However, I am of the opinion that a saving of at least $25,000.00 would be made over the cost

of installing the other plant, and it would work four times the amount of ground with less labor and operating cost on the mine end.

The cost of operating the pump station would be increased the amount of fuel and oil for one engine, otherwise fixed charges would be the same. With such a plant the working costs would be under 60 cents per cubic yard. The pump end would be the heaviest item of expense.

Should you desire more detailed figures as to costs, I will be glad to go further into the problem when time permits, and will be pleased to furnish any further information in regard to the present situation that you may desire.

Respectfully submitted,

(Signed) Edward H. Benjamin,
Mining Engineer.

San Francisco, December 19, 1919.

REPORT
ON
LA PAZ PLACERS

Yuma County, Ariz.

December 1922.

T3&4N, R21W

John F. Duling
Mining Engineer
Los Angeles, Cal.

December 1922.

Major A. J. Pickrell,
California Bank,
City.

In March this year I entered into a contract with O. L. Grimsley of Los Angeles to sample and make a report on the Amazon Placer Claims near the old town of Erenburg, Yuma County, Arizona.

Under this contract I was to get paid for the report upon the sale of the property. Mr. Grimsley to stand all other expenses except my time.

As an additional compensation I was to have an option on these claims subject to Mr. Grimsley's contemplated sale to certain French investors whom he had interested in the adjoining property.

In May this year I made an examination and extensively sampled the property with the assistance of O. L. Grimsley and two of his employees, R. T. Reed and Ramon Robeles, both of whom had been intermitermittently in Mr. Grimsley's employ for some two or three years.

The results of this sampling were very favorable and indicated that the ground sampled on this property was very attractive dredging ground.

On my return to Los Angeles I spent some three weeks preparing an extensive report on the property combining my own work with such information as I could get from the available Government reports and other sources, together with estimated cost of plant and operating costs.

On July 8th following I obtained an informal option on this property, which was later supplemented by a formal option dated August 4th, 1922.

In July through Mr. R. E. Blewett I placed a copy of my report upon the Amazon Placers in your hands, for the purpose of getting you interested in the financing of the development of this property.

In August this year I assigned to you the formal option I had received from you on this property, and during the latter part of the month visited the Amazon property in company with your engineers Mr. Peach and Mr. Case.

We spent one day on the property and with the assistance of Ramon Robeles, then watchman on the adjoining property for Mr. Grimsley, we took some six or seven samples from the Amazon property. The results of this sampling compared favorably with the results I had obtained in my previous sampling.

In October this year I visited the property in company with you and Mr. Peach. The first two days of this trip was spent in taking and panning a number of small samples, with unfavorable results. In the afternoon of the second day Mr. Grimsley, Mr. Chalmers (a Director in the New La Paz Gold Mining Company) and Bud Bouser (a relative of Mr. Grimsley) joined us.

The third day I recommended that we take larger samples and put them through a rocker. Mr. Peach and myself took six or eight one cubic foot samples and with the assistance of Mr. Grimsley, Mr. Chalmers and Mr. Bouser, washed them through the rocker, Mr. Peach panning the results.

The results of this third day's sampling were favorable averaging in the neighborhood of thirty cents (30¢) per cubic yard.

You recently informed me that you engineers on further examination had proved beyond doubt that my original samples taken on the Amazon Placer with the assistance of Mr. Grimsley and his employees, had undoubtedly been salted.

You requested that I return to the property and

check my original sampling on this ground.

Pursuant to your request I returned to the Amazon property in company with Mr. Peach on December 15th this year.

We found Ramon Robeles at his camp, and R. T. Read, Z. Z. Fuller and A. F. Shelly in company with a Mexican girl, apparently about eighteen years old, living all together in the cook tent on the property.

We asked Ramon Robeles to accompany us and take some samples on the Amazon property; being aware of Mr. Peach's previous results he was reluctant to give us permission either to go on the Amazon property or to assist us, but went with us to see Read about it.

Read seemed agitated and nervous but readily gave his consent to our sampling the property and using Robeles as assistant. Read also granted us permission to use one of the company tents while on the property. We were informed that Mr. Grimsley and Bud Bouser had left the camp for Los Angeles two days earlier.

Mr. Robeles had previously made arrangements to go to Blythe that day for provisions, so that Mr. Peach and I worked alone the first day taking and washing ten samples on the Amazon property from cuts in the vertical arroyo banks which I had previously sampled and obtained good gold values.

Of these ten samples five showed good values in gold. Having seen fresh auto tracks on the mud and recent footprints in the sand of the arroyo, I felt that these places might have been recently salted, so on the following day I took five samples from new cuts made along side of each of those in which we had found good values. These latter five samples, in each case, showed no values.

Mr. Read later told me that he and Bud Bouser,

Fuller and Shelley had been on the property the previous Tuesday taking samples. I saw no evidence of their sampling.

On the second day we returned to the property with Mr. Robeles to assist us. I divided up the work, assigning certain of the sampling to Mr. Peach and Mr. Robeles being particular to take the five check samples on the previous day's work in person, and warning Mr. Peach to make fresh cuts for each sample along side of the original samples.

Mr. Peach, before starting the day's work, warned Robeles that he knew that this ground had been salted and that he believed Robeles knew also that there was no gold in this ground. Robeles was very much frightened and admitted that he knew there was no value in the ground but denied having anything to do with the salting.

We took fifteen new and five check samples the second day, none of which showed any values in gold.

I took in all twenty-five samples on the Amazon property, none of which showed any values with the exception of the five mentioned above.

Comparing these results with my former results in sampling this property, there is no doubt that my former samples were heavily salted and that this ground is of absolutely no value for Placer mining purposes.

See comparative list of samples attached.

After completing this sampling of the Amazon property I had a conversation with Read. I told him that there was no use in wasting words, that I knew and believed that he knew that my previous sampling of this property had been salted. He appeared very nervous, denied that he knew of the salting, but admitted that he thought it queer that I was getting

such high results out of my original sampling.

NEW LA PAZ GOLD MINING CO'S PROPERTY.

I was employed by O. L. Grimsley, President of the New La Paz Gold Mining Co's in November 1920 to make a supplementary report on the Company property in Yuma County, Arizona. This report was used in connection with the Company's application to the State Corporation Commission for a permit to issue an additional 200,000 shares of stock.

This property lies just South of the Amazon Placers, the latter group being owned by Mr. Grimsley personally.

I spent three days on this property, November 9th, 10th and 11th, 1922, taking thirty-three samples, with the assistance of Mr. Grimsley and R. T. Read, a Company employee.

The result of this sampling was very favorable, showing an average value of approximately $2.50 per cubic yard for the ground sampled. I reported favorably on the property.

After having re-checked my sampling of the Amazon property, and finding that my original samples had undoubtedly been salted, I decided to check my sampling on the New La Paz Gold Mining Company's property.

I took eight samples at same locations I had originally sampled. Four of the samples were taken from the vertical arroyo banks where I had originally obtained high values, and in each case the result was a blank.

The four remaining samples were taken from the dumps of shafts which I had previously sampled. These last four samples all carried values from the fact that not one of the first four samples taken in virgin ground showed any values where originally I obtained good values, I believe that the dumps from which the last four samples were taken had evident-

ly been salted.

There is no doubt that my original samples, taken on the New La Paz Mining Company's property in November, 1920, were salted.

LA PAZ EXTENSION GROUP.

In September this year Mr. O. L. Grimsley placed in your hands a report on the La Paz Extension Group of mining claims, made by E. A. Rasor, Mining Engineer, and dated April 17 - 22.

This report estimated that there was 20,000,000 cubic yards of gravel on the Southerly four claims of this group, averaging 51¢ per cubic yard.

I stated to you that I had had occasion to check Mr. Rasor's work on the New La Paz Gold Mining Company's property, and that I knew Mr. Rasor personally and believed his report on the Extension Group to be conservative.

You purchased this group of claims from Mr. Grimsley and his associates, together with the Grim & Grim No. 1 Claims owned by Mr. Grimsley personally.

Mr. Peach did considerable sampling both on the Grim Claim and on the South four claims of the La Paz Extension group, at first getting excellent values, with the assistance of Ramon Rebeles and Bud Bauser, but later when checking alone, getting no values whatever.

I took ten representative samples from the shafts and banks on the four South Claims of the La Paz Extension Group of claims. In this sampling I endeavored to cover the same ground covered by Mr. Rasor in his report, and to sample the same shafts.

Not one of the ten samples taken showed any values.

I believe that Mr. Rasor's samples, from this property, were salted.

From my recent sampling of the three properties above, I believe them to be entirely worthless for mining purposes. There seems to have been a systematic salting carried out on these properties, covering a long period of years. This was made to appear plausible by the continued expenditure of considerable sums of money in development by the New La Paz Mining Company, and by the early history of the district, which seems to have been very much exaggerated.

John P. Duling
Mining Engineer
Los Angeles, Cal.

SAMPLES FROM AMAZON PLACER

Taken by JOHN F. DULING, May & December, 1922.

Samples No.	Original No.	Value Per Cubic Yard — Original Sample Taken May, 1922	Sample Taken December, 1922	Check Sample Taken December 1922.
1	2	$0.58	$1.08	$0.00
2	9	0.20	1.75	0.00
3			.36	0.00
4	11	.54	.47	0.00
5	27	1.06	.00	
6	28	2.51	.00	
7	29	1.21	.00	
8	30	.28	.00	
9	12	1.73	.38	0.00
	12	.59		
10	13	2.83	.00	
	13	.00		
11			.00	
12	58	.47	.00	
13			.00	
14	26	.00	.00	
	26	3.06		
15	25	.32	.00	
16	24	.83	.00	
17	22	.43	.00	
18	22		.00	
19	54	.36	.00	
20	55	.00	.00	

SAMPLES FROM
NEW LA PAZ GOLD MINING COMPANY'S PROPERTIES

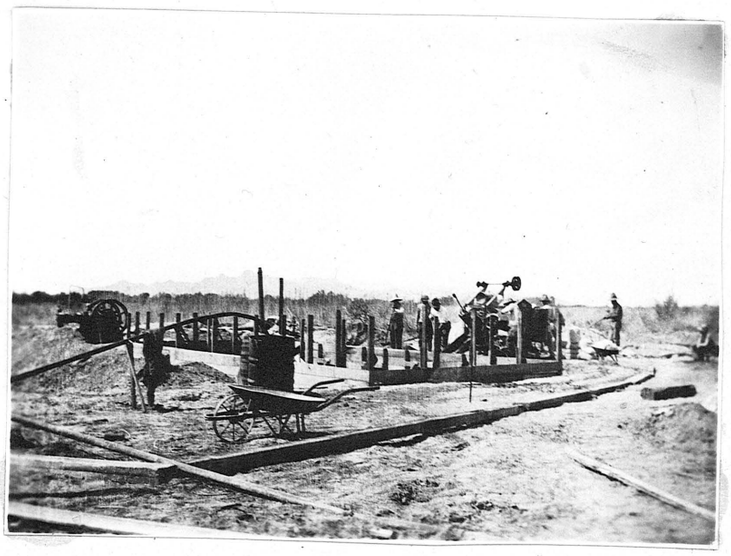
Taken by John F. Duling
Nov. 1920 and Dec. 1922

SAMPLE No.	Original No.	VALUE PER CUBIC YARD Original Sample Taken Nov. 1920	Sample Taken Dec. 1922	Description
21	32	$5.61	$0.72	Shaft Dump
22	33	7.41	.97	" "
23	19	2.24	.00	Arroyo Bank
24	20	1.43	.00	" "
25	13	1.40	.00	" "
26	14	2.76	.00	" "
27	21	4.72	.72	Shaft Dump
	22	2.54		" "
28	23	1.20	.94	" "
	24	5.45		

New La Paz Gold Mining Co.

May 18, 1921.

Showing Construction work at the mine of the New La Paz Gold Mng. Co.



REPORT ON

NEW LA PAZ GOLD MINING COMPANY

Los Angeles, Cal.,
May 5, 1919.

To Whom It May Concern:--

At the request of some of my friends, some of whom are stockholders in the above company, and others who are contemplating and investment in its stock, I agreed to pay a visit to the property and make an investigation and report to them accordingly.

During the last part of April, 1919, I visited the property consisting of 1546 acres, owned by the company and more fully described in a report by E.A.Rasor, a mining engineer, dated October 1,1916.

I have carefully read the said report of E.A.Rasor, and after my examination agree with him in all of the salient features of the report, with the exception that I did not make a measurement of the cubic yards of gravel. After that I checked over his figures of the cost of operation, and from my experience, which has been for over forty years, I believe the estimate is entirely within reason.

EXAMINATION OF PAY DIRT

After I arrived at the property I examined it by taking the gravel myself from different places all over the property. I dry washed the gravel and repanned it and only took one pan of gravel in which I found no gold.

The gold is very coarse as the dry washer does not save the fine gold. I found it much better than I expected and believe there are untold values in the ground, but did not sample at bedrock in any place that I examined.

Upon the ground that I examined there are some very large quartz veins that prove to me where the gold originated by coeroding down in the gulches where I panned the gold. Upon examination of the many shafts I found gravel fromeight to forty feet deep lying on bedrock. The gravel is very clean and easily washed. The coarse gold will lie on bedrock. I found an abundance of black sand accompanying the gold, all of which will carry high values, and which gold can be easily saved.

I have examined a great many properties, but I can frankly and conscienciously say, that I have never examined a property as rich as this property. Untold wealth is there to be obtained as soon as the water is piped to the property to wash it out, I found that t' average values from my sampling of the ground ran $2.00 per cubic ya and there is a possibility that when bedrock is reached, the values will run much higher, as the coarse gold goes to bedrock, samples which I did not obtain in my examination.

WATER CONDITIONS

About one mile east from the Colorado River, this comp purchased five acres of water bearing land, and has sunk five wells in which the water stands to within 10 to 12 feet of the

These wells have been thoroughly tested by the company and will furnish five hundred minors inches of water per minute - more than sufficient to meet all comditions required.

These wells are four and one half miles from the reservoir site on the property. At present there is a 2" water line running from the wells to a tank situated on a high point back of the camp which is furnishing domestic water. The water is pumped and lifted by a 6 H.P. engine.

It will be necessary to run a 12" pipeline from the wells to the reservoirs to furnish water for mining purposes, and this water will have to be pumped to the reservoir at the height of 556 feet above the wells. The survey for this pipeline has already been made.

SUPPLY POINTS

The property of the company lies twelve miles east from the town of Blythe on the California side of the Colorado River, and some twelve miles west from the town of Quartzsite, and thirty-six miles from the station of Bouse onthe Parker cut-off of the Santa Fe Railroad. Food supplies, etc., can be readily purchased in Blythe or Quartzsite with but few miles to haul.

The hauling of machinery which is now in storage in Los Angeles, can be more feasibly handled from Bouse, owing to the condition of the road from there to the mine, which is excellent.

MATERIAL

From the mine I paid a visit to Los Angeles and made a careful check on the inventory of pipe, engines, pumps and much other equipment which has been stored for some time in that city awaiting delivery to the mine.

There is over four and one half miles of 12" water pipe included in this inventory. There is sufficient pipe, engines and machinery of allkinds, together with other necessary material to put the mine in operation, and this has all been paid for. There is no indebtedness against this equipment or the mine. I will state, however, that it will be necessary to purchase cement for the construction of the reservoirs. Now all that remains is the shipping of their material and equipment from Los Angeles by train to Bouse, and from there by truck to the property.

CAMP

At present the camp consists of a cookhouse and messhall and six sleeping houses with all necessary utensils and furniture, together with a corrogated iron garage and machine shop.

There is also installed on the property a large rotary rock crusher and a hoisting track has been erected from the gravel to the top of the reservoir site, which site has been leveled off furnishing a level area of about 60x250' on which the reservoirs are to be placed.

THE COMPANY

I find that this company is organized under the Laws of Arizona, which state like California has its own Blue Sky Laws. The Company also maintains an officein Los Angeles, California. It is

capitalized for 1,500,000 shares at a par value of $1.00 each and of which there has been issued 931,337 shares, the remainder being treasury stock.

IN GENERAL

The site for the reservoir is located about one half mile above the camp and is at an elevation of some three hundred feet above the ground to be washed. The work of leveling has been completed and the site is all ready for the construction of the reservoirs.

Owing to the extreme hot weather during the summer months in Arizona, it will be impossible to start the installation of the plant before early fall, but in the meantime the shipping of the material and equipment from Los Angeles can be accomplished.

The work of installation will take about three or four months time after which the water can be turned into the reservoirs, and the actual work of washing out the gold started and from then on a cleanup can be made of values every day or at such periods as the management determines. After the company is actually mining there will be no cessation of work during the hot summer months, but work will continue throughout the year.

FINAL

I have no hesitancy in recommending to anyone the purchase of stock in this company, as it is a very rich property. I have had over forty years of practical experience in mining and the examination of mining properties, and as stated before, these are the richest placer claims I have ever seen.

George Hammond

The New La Paz Gold Mining Company,
Los Angeles, California.

Gentlemen:

In compliance with instructions received from a committee of the stockholders of your company, I visited your placer mining property, situated in Yuma County, Arizona, and herewith submit my report as requested.

My instructions from your committee were received in writing by letter addressed to me as follows, to-wit:

"Los Angeles, California,
December 6, 1919.

Mr. Edward H. Benjamin,
San Francisco, California.

Dear Sir:

You are advised that a committee of the stockholders of the New La Paz Gold Mining Company has been appointed and given authority by the board of directors of the corporation to secure the services of a mining engineer to make certain investigations and report thereon to the corporation concerning two questions set out below, and said committee has unanimously selected you as an engineer to perform such services.

You will be accompanied to the mine by members of the committee, who will point out to you the location and boundary lines of the property of the company and who will also present to you the proposed plans for developing and operating the property as a placer mine, and it is the wish of the committee, and the board of directors and stockholders of the corporation whom it represents, that you shall thoroughly examine and inquire into all of the details of the proposed plan of operation from start to finish, and determine therefrom two questions:

(1) Whether or not the proposed plan of developing and operating the property is a feasible one.

(2) What it will cost to procure and install machinery and equipment to carry out such plan and put the mine upon an operating basis.

You will be expected to make such criticisms and suggestions concerning the proposed plan of operation and the equipment to be installed and used under such plan as may occur to you, pointing

out in detail your objections, if any, and recommendations.

If you find that the proposed plan is not feasible or, if feasible, is not, in your opinion, the most practicable and best way to pperate the property or that the equipment is not suitable, then we want your opinion and advice as to what is the right and best way to operate this property as a placer mine, both as to plan and equipment, and also your estimate of the cost of carrying out such plan of operation as you may advise in place of the one that has been proposed.

You will be furnished by the committee, all information and data that you may require for the purpose of your investigation and report on the questions presented, and if you desire any information that is not now available, you will specify what you want and the same will be obtained for you.

You will be expected to render your report in writing and we will appreciate your furnishing us two copies of the same.

The committee above referred to consists of the undersigned.

Yours very truly,

O. L. Grimsley)
J. E. Ransford)
George H. Woodruff) Committee.
Geo. Hammond ")

Taking up the problems in their order:

First: Whether or not the proposed plan of developing and operating the property is a feasible one.

The proposed plan, as explained to me by Mr. O. L. Grimsley, your president, and Mr. Edwin A. Rasor, your engineer, involves the following:

Installation of a pumping plant at the Company's wells, pumping water through a twelve inch riveted steel slip joint pipe to a concrete reservoir situated on a hill, distant 22,780 feet from the pumping plant, the floor of said reservoir being 557 feet in elevation above said pumping plant by actual survey. (See map exhibits 1 and 2, and photo exhibit No. 1). The water thus pumped to the reservoir to be used for working the suriferous ground located on the property, utilizing

the upper protion of the 12-inch pumping main as a pressure main for this purpose.

The proposed method of operating contemplates placing a check valve in the 12-inch main, approximately 1950 feet below the reservoir in distance, and 200 feet below mean water level in the reservoir, taking out a branch line above the check valve; and the installation of a hydraulic giant to break down the material and with the giant water convey it to and through a sluice to a hydraulic elevator of the Evans or Joshua Hendy type, to a second sluice, through which the material is to be carried to the dumping ground some 1350 feet distant, such gold as is contained in the material to be saved in riffles in the two lines of sluices.

The water is to be taken from five wells, 16" diameter and 100' deep, situated in a territory adjacent to the Colorado River, (see map exhibit No. 1), it being claimed that numerous tests have proven the supply of water from these wells to be practically inexhaustible.

The type of pump contemplated is a belt driven, vertical, single action, triplex power pump with cylinders 10" in diameter and 12" stroke, and are to be run 45 R. P. M. by two tandem type 125 H.P. internal combustion Commercial engines, using tops or distillate for fuel.

In the company's prospectus, page 3, I find the following statement:

> "******* the necessary machinery was purchased for installing a hydraulic plant capable of handling 2000 yards of gravel per day."

In the same prospectus, in the report of Mr. Edwin A. Rasor, I find the statement, (see page seventeen)

> "The hydraulic plant which you are installing is of the most modern type and will handle 3000 cubic yards of gravel per twenty-four hour day."

In another written statement given me by Mr. Grimsley, I find the following:

1- "2500 cu. yds of gravel in sixteen hours is 2.6 cu.yds. per minute. 2.6 cu.yds. is equal to 70.2 cu.ft. of gravel.

2- 250 miners inches of water is 300 cu. ft. of water per minute.

3- The proportion of water to gravel 4.3 cu.yds. of water to one cu.yd. of gravel.

4- Pumps will furnish 168 cu.ft. of water per minute or 241,920 cu.ft. of water per 24 hours.

5- Elevator and Giant use 18,000 cu.ft. of water per hour or 288,000 cu.ft. of water in 16 hours.

6- Reservoir will hold 450,000 cu. ft. of water and will hold enough water to run the plant or elevator for 24 hours in case of accident to the pumps. "

While the proposed plant can undoubtedly be installed at an expense of approximately $100,000, the contemplated net results from its operation could not possibly be obtained, for various reasons, as will be shown.

PUMPING PLANT:

It is claimed "the pumps will furnish 168 cu.ft. of water per minute" presumably delivered into the reservoir.

According to the catalogue of the Dean Pump Works, the builders of the pumps, it is claimed that each pump has a cylinder displacement of 4.08 gallons for each cylinder, or 12.24 gallons for the three cylinders, or 489 gallons per minute at safe speed of 40 R.P.M. - this is assuming that the pumps will operate at 100% efficiency.

It is proposed to run the pumps at 45 R.P.M. or 12½% overload, at which speed each pump would theoretically furnish -

550.8 gallons per minute
33048. " " hour
793152. " " 24 hours.

or reduced to cubic feet it would furnish

73.44 cu. ft. per minute
4,406.4 " " " hour
105,754. " " " 24-hour day.

The combined capacity of both pumps, running at the overload speed would therefore be

146.88 cu. ft. per minute
8812.8 " " " hour
211507.2 " " " 24 hours

or reduced to gallons equals 1,586,304 gallons in 24 hours. The builders of the pumps only claim 85% efficiency under most favorable conditions, therefore the net supply delivered at the pumps would be

124.85 cu. ft. per minute
7,490.88 " " " hour
179,781.12 " " " 24 hour day

or reduced to gallons equals 1,348,358.4 gallons in 24 hours. Reduced to miners inches this would mean that the total supply of water delivered at the reservoir could not, even if the pipe line were absolutely without leaks, exceed 124.85 cubic feet per minute, or 82 miners inches, and this assuming an efficiency of 85%.

As a matter of fact, I am of the opinion that 65% would be a much safer factor for an ordinary commerical operation;- bends and leakage in the pipe line, leaky valves in the pumps, slippage of belts and numerous conditions would no doubt reduce the efficiency of the mechanical operation of the plant and it is therefore far better to calculate on a plant of this character at 65% efficiency that at 85%, and if such a loss occurred you would only have available a little over a constant flow of 60 miners inches or 90 cubic feet per minute.

RESERVOIR:

The plans for the proposed reservoir show it to be 250 feet long, 60 feet wide and 15 feet deep, having a capacity of 225,000 cubic feet or a net capacity of 1,687,500 gallons.

At theoretical capacity it would require 25½ hours pumping to fill, and at 85% efficiency it would require 30 hours pumping to fill, based on 124.85 cubic feet per minute

delivered. A hydraulic giant with 3-inch nozzle and an elevator with 4 inch nozzle under 200 foot head would empty this reservoir in 4¼ hours, as they would discharge 873 cubic feet of water per minute; one 2-inch nozzle under same head would empty it in twenty-five hours.

Miners inch of water: A miners inch of water is a flow of one and one-half cubic feet per minute under any head or pressure. (See Cal. Statute 1901, Chap. CCXXLL, page 660; also Statutes 1913, page 1012). All modern hydraulic tables are based upon this amount, and all calculations are based upon one cubic foot of water as being equal to seven and one-half gallons.

Duty of a miners inch: There is a vast amount of data available regarding the duty of a miners inch of water, under widely varying conditions. Mr. G. K. Gilbert, of the Ul S. Geological Survey conducted a series of experiments at the University of California during a period of over two years and the result of his experiments and tests are published by the survey in a separate bulletin. (See Prop. paper #86 U.S.Geological Survey,1914). Peel's Mining Engineers' Handbook - 1918, in the chapter on Placer Mining Methods, pp. 750-836, gives a resume of hundreds of records, in all kinds of ground and under all conditions of grade, sluice and riffles. A careful compilation of these records establishes the average duty, or carrying capacity of one miners inch of water at 3 cubic yards in 24 hours, for general average conditions.

Some notable records are here quoted, as example:

La Grange Mine, Trinity Co. Calif. 5 season's operations:

Grade of sluice 2% or 3" in 12'.

624,745	miners	inches	moved	676,968	cu.yds.	24	hrs.-	1.08
375,155	"	"	"	683,244	"	"	"	1.82
207,010	"	"	"	284,932	"	"	"	1.37
302,960	"	"	"	459,570	"	"	"	1.52
203,325	"	"	"	329,120	"	"	"	1.57

North Bloomfield Mine, Nevada Co. Calif. 4 seasons.

Grade of sluice 4½% or 6½" in 12'

710,987	miners	inches	moved	3,250,000	cu.yds.	24 hrs.-	4.6
386,972	"	"	"	1,858,000	"	" " "	4.8
700,000	"	"	"	2,919,700	"	" " "	4.17
595,000	"	"	"	2,993,930	"	" " "	3.86

Brandy City Mine, Sierra Co. Calif.

Operations covering many years.

Grade of sluice 2½" in 12', under 2%

2,000 inches of water moved daily 1,600 cu. yds. .80

All this evidence warrants the conclusion that unless the grade of a sluice is over 4½ inches in 12 feet, or over 3%, a miners inch will not wash and carry away to the dump over 2 to 3 cubic yards of gravel in twenty-four hours.

GIANTS AND ELEVATORS:

While the hydraulic giant is a most effective machine for tearing down embankments and removing gravel and other material from natural banks, the hydraulic elevator is equally inefficient in raising and disposing of it.

In all operations the elevator takes from 50 to 66% of available water, and requires 5 feet of head for one foot lift, and then will only lift about 5% maximum in gravel of the volume of water used;,actual experience usually cuts down this quantity to 2 or 3% of the total weight lifted.

Therefore the total amount of gravel that could be worked in twenty-four hours would be 5% of 66% of the total water available in twenty-four hours, and in the La Paz property the total water available could not be more than the total supplied by the pumps, viz: 124 cu. ft. per minute. Of this the elevator would take 66% or 82 cubic feet per minute and the giant would take 34% or 42 cubic feet per minute. Raising a total of 5% solids the elevator would only handle 4.1 cubic feet per minute,

or 246 " " " hour
5904 " " " 24 hours
218 " yards daily.

THE PIPE LINE:

It has been shown that the pumps will deliver but 124.85 cubic feet per minute, or 2.08 feet per second. Water traveling at this velocity in a 12-inch pipe would lose 3.65 feet in head for each 1000 feet in length of the pipe line, and in the 22,780 feet of line, the loss in head by friction would be 83.15 feet, which must be added to the total surveyed head, making the hydraulic head 665.15 feet from the well to top of reservoir, and to lift the 124.85 cubic feet of water to this heighth through the 12-inch line would require 157 theoretical horse power.

GRADES AND DUMP:

From the contour map furnished I find that the grade of the proposed sluice, from the elevator to the dump is 20 feet in 1350, or 1 foot in 67½, which is equal to 1½% grade, or about 2½ inches per 12 feet, and on this grade less than one yard of gravel could be moved per miners inch in twenty-four hours, as was proven by many year's work in the Brandy City Mine, before referred to.

From the elevator pit to the upper end of the claim, a distance of approximately 1800 feet, there is a grade of 100 feet, or one foot in eighteen. This grade would be ample for a sluice if the bedrock was uniform.

A shaft 35 feet deep near the elevator pit shows the depth of the bedrock below the surface and therefore the sluice into which the elevator discharges could only be raised 5 feet above the ground, as the total lift possible for an elevator operating under 200 foot head would be 40 feet. If there was an abundance of water two steps of elevators could be utilized, and thus create a much greater grade by building up the receiving end of the sluice, but your conditions will not permit it.

From the above analysis it will be seen,

First: That the capacity of the pumps is only 124.85 cubic feet per minute at 85% efficiency and that they cannot deliver 168 cubic feet of water as stated;

Second: The reservoir capacity is 225,000 cubic feet or a little over 1,600,000 gallons; this amount is given correctly on the plan of the structure, but is erroneously stated elsewhere at 450,000 cubic feet.

Third: 250 miners inches of water would be equal to 375 cubic feet and not 300 cubic feet per minute.

Fourth: The elevator and giant would require a vast amount of water, more than could possibly be furnished by the pumps, or through the pipe line without excessive loss, to do any effective work.

The quantity of water that would be supplied under the proposed plan, to-wit: 124.85 cubic feet, is but 82 miners inches, and it is very doubtful if over 250 cubic yards of gravel could be handled daily with this amount of water; it is obvious, therefore, that unless your gravel carries an exceptionally high average value per cubic yard, that the installation of the proposed plant would not be warranted.

The three necessary conditions required to make a success of any placer mining claim are:

First: A sufficient value in the ground to pay operating expenses and return invested capital with interest;

Second: A sufficient amount of water to work said ground rapidly and to advantage; and

Third: Sufficient dumping room to dispose of the debris.

In your problem you lack both water and dump,-the question of values I have not investigated, as I assume that naturally you were satisfied as to this most important point before any investment was made. If, however, this

vital condition has not been entirely and satisfactorily settled, it should be the first step to take before attempting any further plan of operation.

I believe that the only method by which your property can be even partially successfully operated would be to instal a steam driven drag line cableway excavator, with a capacity of at least six hundred yards per day, to dig and dump the gravel into the hopper of a loading bin, from which it would be conveyed by an aerial cable tram to a washing station nearer the water, where ample water and dump would be provided to wash the gravel and dispose of the debris.

From a study of such conditions as I could observe on the brief visit, and from the maps and surveys furnished by Mr. Rasor, I believe that the water could be economically and satisfactorily pumped through a double pipe line to the 17,000 foot point on the profile where the elevation is given as 583 feet, or 298 feet above the pump station.

The heavy head would thus be avoided, and the heavy pipe line that has been purchased for the pipe line contemplated could be exchanged for more pipe of a lighter weight; a No. 12 gauge would be heavy enough for the lower end and No. 14 for the upper end, in this way practically enough pipe could be secured to lay a double line 17,000 feet long.

The plunger pumps would not be capable of furhishing a sufficient amount of water, and are not suitable or flexible enough for this character of work.

I would favor the installation of three multiple stage centrifugal pumps, each driven by the same engines you have on hand, and while this would necessitate the purchasing of an additional engine, it gives you a far more satisfactory and flexible unit and would give you three times the amount

of water that you could possibly get with the pumps purchased.

No doubt these plunger pumps could be sold for more than their original cost, and the three multiple stage pumps would give you 825 gallons per minute each, requiring 125 H. P. at 68% efficiency, each.

With this type of plant you would have a constant service.

The cost of such a pump would be approximately $2,000.00 F.O.B. San Francisco, and its weight 3,200 pounds.

The cost of the drag line excavator erected complete with engine and boiler would be approximately $10,000.00, and the tramway $30,000.00 for one mile in length erected.

The sluice of forty boxes would cost about $4,000.00 estimating roughly five hundred feet of lumber per box, and labor at $8.00 per day.

Estimating the laying of pipe line at 40¢ per foot would be $10,000.00 more, thus an outside figure for the proposed equipment would be: (exclusive of pipe line)

3 pumps	$6,000.00
Excavator	10,000.00
Tramway	30,000.00
Sluice	4,000.00
T o t a l	$50,000.00

These figures are only approximate and are made high, fore safety; freight has not been calculated, as rates are unknown.

The Exeavator outfit would weigh about 40,000 lbs.

The Pumps " " " 10,000 "

The Tramway " " " 100,000 "

An additional engine would have to be purchased, the cost of which is unknown. However, I am of the opinion that a saving of at least $25,000.00 would be made over the cost

of installing the other plant, and it would work four times the amount of ground with less labor and operating cost on the mine end.

The cost of operating the pump station would be increased the amount of fuel and oil for one engine, otherwise fixed charges would be the same. With such a plant the working costs would be under 60 cents per cubic yard. The pump end would be the heaviest item of expense.

Should you desire more detailed figures as to costs, I will be glad to go further into the problem when time permits, and will be pleased to furnish any further information in regard to the present situation that you may desire.

Respectfully submitted,

(Signed) Edward H. Benjamin,
Mining Engineer.

San Francisco, December 19, 1919.

REPORT
ON
LA PAZ PLACERS

Yuma County, Ariz.

December 1922.

T3&4N, R21W

John F. Duling
Mining Engineer
Los Angeles, Cal.

December 1922.

Major A. J. Pickrell,
California Bank,
City.

In March this year I entered into a contract with O. L. Grimsley of Los Angeles to sample and make a report on the Amazon Placer Claims near the old town of Erenburg, Yuma County, Arizona.

Under this contract I was to get paid for the report upon the sale of the property. Mr. Grimsley to stand all other expenses except my time.

As an additional compensation I was to have an option on these claims subject to Mr. Grimsley's contemplated sale to certain French investors whom he had interested in the adjoining property.

In May this year I made an examination and extensively sampled the property with the assistance of O. L. Grimsley and two of his employees, R. T. Reed and Ramon Robeles, both of whom had been intermitermittently in Mr. Grimsley's employ for some two or three years.

The results of this sampling were very favorable and indicated that the ground sampled on this property was very attractive dredging ground.

On my return to Los Angeles I spent some three weeks preparing an extensive report on the property combining my own work with such information as I could get from the available Government reports and other sources, together with estimated cost of plant and operating costs.

On July 8th following I obtained an informal option on this property, which was later supplemented by a formal option dated August 4th, 1922.

In July through Mr. R. E. Blewett I placed a copy of my report upon the Amazon Placers in your hands, for the purpose of getting you interested in the financing of the development of this property.

In August this year I assigned to you the formal option I had received from you on this property, and during the latter part of the month visited the Amazon property in company with your engineers Mr. Peach and Mr. Case.

We spent one day on the property and with the assistance of Ramon Robeles, then watchman on the adjoining property for Mr. Grimsley, we took some six or seven samples from the Amazon property. The results of this sampling compared favorably with the results I had obtained in my previous sampling.

In October this year I visited the property in company with you and Mr. Peach. The first two days of this trip was spent in taking and panning a number of small samples, with unfavorable results. In the afternoon of the second day Mr. Grimsley, Mr. Chalmers (a Director in the New La Paz Gold Mining Company) and Bud Bouser (a relative of Mr. Grimsley) joined us.

The third day I recommended that we take larger samples and put them through a rocker. Mr. Peach and myself took six or eight one cubic foot samples and with the assistance of Mr. Grimsley, Mr. Chalmers and Mr. Bouser, washed them through the rocker, Mr. Peach panning the results.

The results of this third day's sampling were favorable averaging in the neighborhood of thirty cents (30¢) per cubic yard.

You recently informed me that you engineers on further examination had proved beyond doubt that my original samples taken on the Amazon Placer with the assistance of Mr. Grimsley and his employees, had undoubtedly been salted.

You requested that I return to the property and

check my original sampling on this ground.

Pursuant to your request I returned to the Amazon property in company with Mr. Peach on December 15th this year.

We found Ramon Robeles at his camp, and R. T. Read, Z. Z. Fuller and A. F. Shelly in company with a Mexican girl, apparently about eighteen years old, living all together in the cook tent on the property.

We asked Ramon Robeles to accompany us and take some samples on the Amazon property; being aware of Mr. Peach's previous results he was reluctant to give us permission either to go on the Amazon property or to assist us, but went with us to see Read about it.

Read seemed agitated and nervous but readily gave his consent to our sampling the property and using Robeles as assistant. Read also granted us permission to use one of the company tents while on the property. We were informed that Mr. Grimsley and Bud Bouser had left the camp for Los Angeles two days earlier.

Mr. Robeles had previously made arrangements to go to Blythe that day for provisions, so that Mr. Peach and I worked alone the first day taking and washing ten samples on the Amazon property from cuts in the vertical arroyo banks which I had previously sampled and obtained good gold values.

Of these ten samples five showed good values in gold. Having seen fresh auto tracks on the mud and recent footprints in the sand of the arroyo, I felt that these places might have been recently salted, so on the following day I took five samples from new cuts made along side of each of those in which we had found good values. These latter five samples, in each case, showed no values.

Mr. Read later told me that he and Bud Bouser,

Fuller and Shelley had been on the property the previous Tuesday taking samples. I saw no evidence of their sampling.

On the second day we returned to the property with Mr. Robeles to assist us. I divided up the work, assigning certain of the sampling to Mr. Peach and Mr. Robeles being particular to take the five check samples on the previous day's work in person, and warning Mr. Peach to make fresh cuts for each sample along side of the original samples.

Mr. Peach, before starting the day's work, warned Robeles that he knew that this ground had been salted and that he believed Robeles knew also that there was no gold in this ground. Robeles was very much frightened and admitted that he knew there was no value in the ground but denied having anything to do with the salting.

We took fifteen new and five check samples the second day, none of which showed any values in gold.

I took in all twenty-five samples on the Amazon property, none of which showed any values with the exception of the five mentioned above.

Comparing these results with my former results in sampling this property, there is no doubt that my former samples were heavily salted and that this ground is of absolutely no value for Placer mining purposes.

See comparative list of samples attached.

After completing this sampling of the Amazon property I had a conversation with Read. I told him that there was no use in wasting words, that I knew and believed that he knew that my previous sampling of this property had been salted. He appeared very nervous, denied that he knew of the salting, but admitted that he thought it queer that I was getting

such high results out of my original sampling.

NEW LA PAZ GOLD MINING CO'S PROPERTY.

I was employed by O. L. Grimsley, President of the New La Paz Gold Mining Co's in November 1920 to make a supplementary report on the Company property in Yuma County, Arizona. This report was used in connection with the Company's application to the State Corporation Commission for a permit to issue an additional 200,000 shares of stock.

This property lies just South of the Amazon Placers, the latter group being owned by Mr. Grimsley personally.

I spent three days on this property, November 9th, 10th and 11th, 1922, taking thirty-three samples, with the assistance of Mr. Grimsley and R. T. Read, a Company employee.

The result of this sampling was very favorable, showing an average value of approximately $2.50 per cubic yard for the ground sampled. I reported favorably on the property.

After having re-checked my sampling of the Amazon property, and finding that my original samples had undoubtedly been salted, I decided to check my sampling on the New La Paz Gold Mining Company's property.

I took eight samples at same locations I had originally sampled. Four of the samples were taken from the vertical arroyo banks where I had originally obtained high values, and in each case the result was a blank.

The four remaining samples were taken from the dumps of shafts which I had previously sampled. These last four samples all carried values from the fact that not one of the first four samples taken in virgin ground showed any values where originally I obtained good values, I believe that the dumps from which the last four samples were taken had evident-

ly been salted.

There is no doubt that my original samples, taken on the New La Paz Mining Company's property in November, 1920, were salted.

LA PAZ EXTENSION GROUP.

In September this year Mr. O. L. Grimsley placed in your hands a report on the La Paz Extension Group of mining claims, made by E. A. Rasor, Mining Engineer, and dated April 17 - 22.

This report estimated that there was 20,000,000 cubic yards of gravel on the Southerly four claims of this group, averaging 51¢ per cubic yard.

I stated to you that I had had occasion to check Mr. Rasor's work on the New La Paz Gold Mining Company's property, and that I knew Mr. Rasor personally and believed his report on the Extension Group to be conservative.

You purchased this group of claims from Mr. Grimsley and his associates, together with the Grim & Grim No. 1 Claims owned by Mr. Grimsley personally.

Mr. Peach did considerable sampling both on the Grim Claim and on the South four claims of the La Paz Extension group, at first getting excellent values, with the assistance of Ramon Rebeles and Bud Bauser, but later when checking alone, getting no values whatever.

I took ten representative samples from the shafts and banks on the four South Claims of the La Paz Extension Group of claims. In this sampling I endeavored to cover the same ground covered by Mr. Rasor in his report, and to sample the same shafts.

Not one of the ten samples taken showed any values.

I believe that Mr. Rasor's samples, from this property, were salted.

From my recent sampling of the three properties above, I believe them to be entirely worthless for mining purposes. There seems to have been a systematic salting carried out on these properties, covering a long period of years. This was made to appear plausible by the continued expenditure of considerable sums of money in development by the New La Paz Mining Company, and by the early history of the district, which seems to have been very much exaggerated.

John P. Duling
Mining Engineer
Los Angeles, Cal.

SAMPLES FROM AMAZON PLACER

Taken by JOHN F. DULING, May & December, 1922.

Samples No.	Original No.	Value Per Cubic Yard — Original Sample Taken May, 1922	Sample Taken December, 1922	Check Sample Taken December 1922.
1	2	$0.58	$1.08	$0.00
2	9	0.20	1.75	0.00
3			.36	0.00
4	11	.54	.47	0.00
5	27	1.06	.00	
6	28	2.51	.00	
7	29	1.21	.00	
8	30	.28	.00	
9	12	1.73	.38	0.00
	12	.59		
10	13	2.83	.00	
	13	.00		
11			.00	
12	58	.47	.00	
13			.00	
14	26	.00	.00	
	26	3.06		
15	25	.32	.00	
16	24	.83	.00	
17	22	.43	.00	
18	22		.00	
19	54	.36	.00	
20	55	.00	.00	

SAMPLES FROM
NEW LA PAZ GOLD MINING COMPANY'S PROPERTIES

Taken by John F. Duling
Nov. 1920 and Dec. 1922

SAMPLE No.	Original No.	VALUE PER CUBIC YARD Original Sample Taken Nov. 1920	Sample Taken Dec. 1922	Description
21	32	$5.61	$0.72	Shaft Dump
22	33	7.41	.97	" "
23	19	2.24	.00	Arroyo Bank
24	20	1.43	.00	" "
25	13	1.40	.00	" "
26	14	2.76	.00	" "
27	21	4.72	.72	Shaft Dump
	22	2.54		" "
28	23	1.20	.94	" "
	24	5.45		

New La Paz Gold Mining Co.

May 18, 1921.

Showing Construction work at the mine of the New La Paz Gold Mng. Co.