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Dorothy Devant Irent P.O. Box 1498 Wickenburg, AZ 85358 Oct. 15. Ag 7 Ehom: 520-684-5514

Mr. Ravdy Moore Cambior Epploration 230 S. Rock Block, Seite 23 Reno, NV 89502

Dear Mr. Moore,

an sending the folder and roll of maps on the Sold Bar. I have all backup material etc.

I do ask that your retern the super when not needed.

I look forward to your visit in november.

Sencerely, Norothy Devault

P.S. Call me if There's questions.



Northern Miner. Feb. 13, 1989

A SUMMARY REPORT

ON THE ECONOMIC GEOLOGY AND POTENTIAL OF THE

GOLD BAR MINE

(YAVAPAI COUNTY, ARIZONA)

by Don L. Jenkins

Professional Geologist-Mining Engineer CPG#3341 M.E. #1594874

MAY, 1995

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INTRODUCTION

It should be noted that in 1979 a Mr. L.S. Trenholme, Professional Engineer, did make a solid effort at discussing previous reports and exploration data; unfortunately however, he was not privy to following work that would be done in 1985 by the Callahan Mining Corp., and in 1989 by Roddy Resources Inc. Nevertheless, Trenholme is commended for his work which resulted in a very useable report in November of 1979. The report not only summarizes previous work but reflects upon his own interpretation of previous efforts by limited verification sampling, mapping, and general field observations.

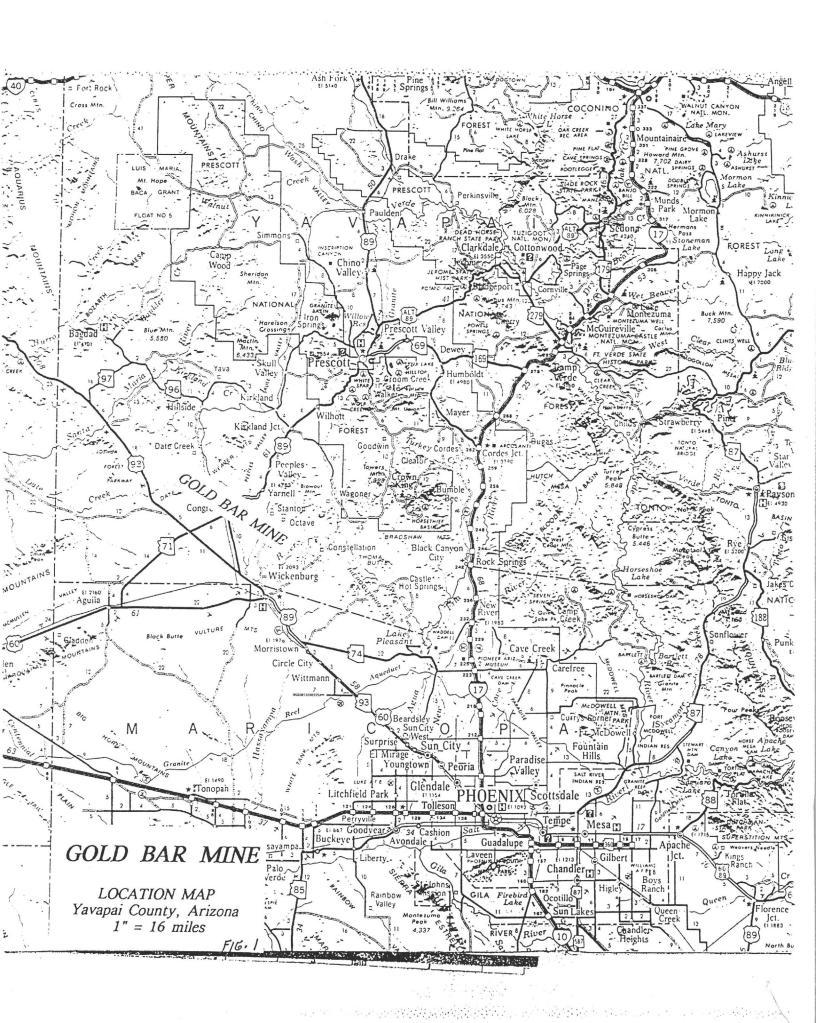
Much of the general description and history is adequately discussed in previous reports that are attached as appendices to this report; consequently, these subjects are very briefly touched upon herein.

LOCATION-CLIMATE-ACCESS-FACILITIES

The Gold Bar Property is situated approximately 15 miles northeast of the community of Wickenburg, Arizona, and accessed via the well known "Constellation Road". The Property occupies portions of sections 27, 28, 33, and 34 of Township 8 North, and Range 3 West. At one time the unpatented claim holdings were of greater extent than at the present time.

The year-round working climate at the Gold Bar Mine is excellent, characterized by very mild winters, some hot days in June, July, and August, but with periodic heavy rainstorms during the hot months of July and August. The Property as a whole lies at an elevation of approximately 3400'.

Water is available from deep underground workings that are accessed by the deepest Gold Bar shaft, a nearby spring, "monsoon" rain runoff that can be captured, by potential drilling, and possibly from the Hassayampa River. Power is not available at the minesite, thus requiring onsite power generation......considering Arizona's power rates this is not a negative factor.



PROPERTY DESCRIPTION

The Gold Bar Mine includes 15 patented lode claims, together with 18 unpatented lode claims that are held by location. The Property is a consolidation of several old mines; namely, the Gold Bar, O'Brien, Blue Moon, Red Wonder, and White Blaze. Included among old workings are a number of shafts, adits, a decline connecting surface with the No.1 shaft of the main Gold Bar workings, and scattered prospect pits througout the Property. Most past production has come from the No.1 shaft and connecting decline, and from the O'Brien mine

HISTORY AND PRODUCTION

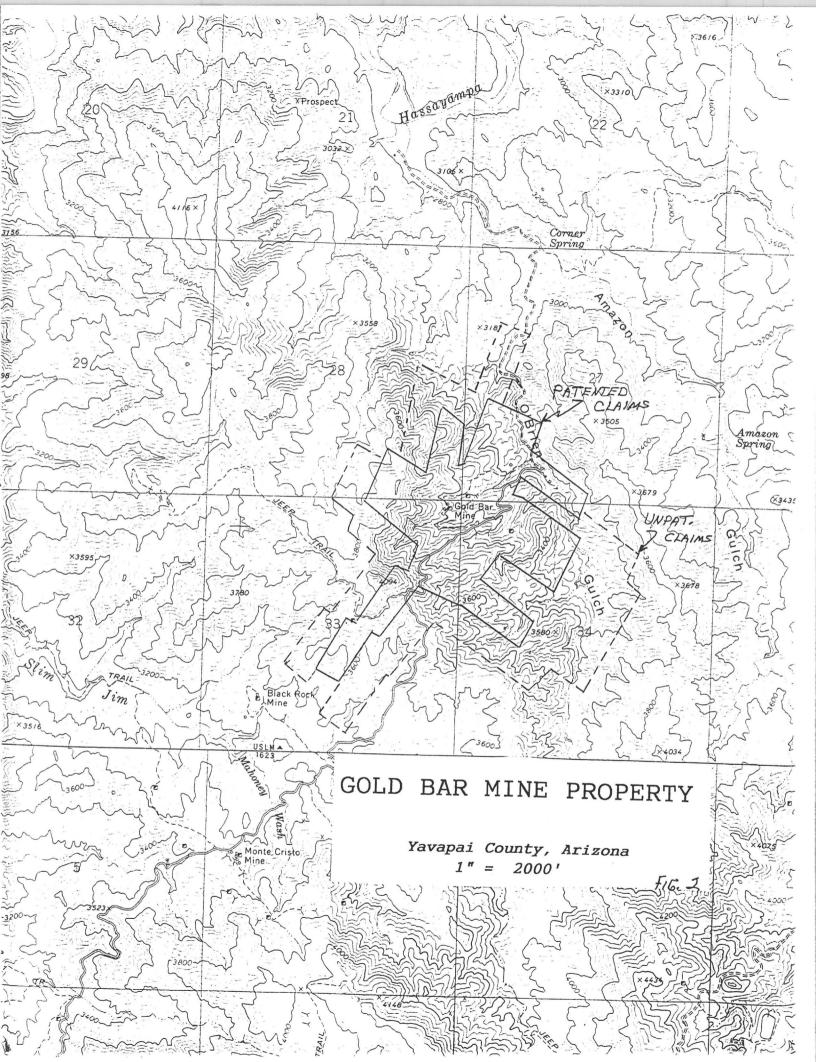
Previous reports by Trenholme, 1979, Holbrooke, 1963, Shanklin, 1927, and others are referred to and attached hereto as Appendices. It is recommended that these many reports be consulted for a thorough description of the history of the Gold Bar Property.

GENERAL GEOLOGY

The geology of the Gold Bar Mine has been described to varying degree by several engineers and geologists who have examined the Property; consequently, the reports in the accompanying appendices are referred to for gaining an understanding of the varied geologic interpretations of the Gold Bar Property.

The overall general geology seems adequately reported yet detailed geologic mapping is lacking. Berkey, 1927, describes the Gold Bar geology as "simple and presents nothing of an unusual nature"......nothing could be farther from the truth. He further describes the geology as granite, extensively fissured with some faulting though not of large displacements. This geologic description is over simplified and lacking in detail. Other geologic descriptions by Shanklin, 1927, Hyde, 1929, Steinmesch, 1934, Gilmore 1955, and Holbrooke, 1963, are more thorough and accurate; nevertheless, the precise genesis of the geology, associated mineralization, and ore controls, are yet to be unraveled. In the simplest of terms the general geology of the Gold Bar Mine consists of a Pre-Cambrian granite host, containing lenses and blocks of schist. This host has been faulted and sheared, including a strong north 70 degrees east fracture system, and a crosscutting shear system of south 30 degrees east. Trenholme, 1979, indicated that G.L. Holbrooke 1963, provided the best geologic description of the Gold Bar Property......therefore, reference to the Holbrooke report is recommended.

There remains alot of room, however, for interpretation of a detailed geologic analysis as is evidenced by the Patton report, 1987, which suggests a modified view of the geology and associated gold mineralization controls. It is clear that gold mineralization, structural controls, and detailed geologic genesis is not thoroughly understood. It is likely that this condition will continue until a detailed and conserted effort is undertaken to unravel the mysteries that prevail. Such an effort will include a detailed geologic mapping program that emphasizes structural geology, alteration, mineral associations, and



rock geochemistry. Patton, 1987, alluded to this problem by stating "The controls of gold mineralization are not well understood. In my opinion, the breccia zones are not pipes, but are localized along one or more low-angle detachment (?) faults. The fact that all breccias do not appear to carry gold suggests that high-angle structures which cut the breccia zones may have acted as feeders for gold-bearing solutions. An additional factor which will be important in any proposed drilling program is post-mineral movement along low-angle faults". So, it is easy to determine that the geology of the Gold Bar Mine is neither simple nor understood; yet, it is essential that future work include a detailed geologic study that will indeed determine the genesis of Gold Bar mineralization......this will help insure that future development can be completed with the least amount of dollars spent.

ECONOMIC GEOLOGY AND POTENTIAL

As previously stated, detailed geologic controls for gold mineralization are yet unknown; nevertheless, it is a fact, through previous mining and past exploration activities, that gold potential at the Gold Bar Mine is confined to shear/breccia phenomena. North 70 degree east mineralized fissures have yielded production at the Black Bear and Gold Bar; other shear zones showing promise include the Red Wonder, the No.2 Breccia zone, and the stockwork/breccia zone located adjacent and north of the White Blaze workings. Gold mineralization at the Gold Bar Mine may indeed be associated with high-angle and low-angle faulting as suggested by Patton, but considerable work must be carried out to determine if this is fact or speculation. What is known is that gold mineralization is found at and immediately adjacent to structural loci (intersections). Therefore, a thorough study of the structural geology will only enhance the understanding of Gold Bar mineralization. Another known fact is the direct association of gold with silica and pyrite; therefore, an understanding of the chemistry and mineral associations also becomes of importance.

The oxide zones at the Gold Bar Mine are characterized by limonite-goethite after pyrite, together with intense silicification along shear planes; however, not all brecciation and shearing within the Gold Bar geologic complex contain gold. This suggests that other controlling factors and associations are yet to be determined.

(A) DISCUSSION OF POTENTIAL BY PREVIOUS EXAMINERS

1. H.L. BERKEY, 1927:

According to Berkey the Gold Bar deposit has been partially stoped to the 307 Level, leaving "many thousand tons of a good grade of ore yet to be drawn from the mine". A vertical winze from the 307 Level was sunk 252 feet in sulphide ore, and based on mill tests of this ore the grade is much higher than the oxide ore above. Berkey indicated that no stoping was done below the 307 Level due to the sulphide content of the ore. Berkey discussed sampling done down the 252 winze and laterals, with many samples taken outside the orebody. With gold at \$20/oz the value of the individual samples ranged from a low of \$.40 to a high of \$63.60/ton. Berkey estimated a minimum of 39,276 tons of sulphide ore grading 0.75 oz/ton Au. He further states that oxide ore just above the 307 Level totals approximately 6,545 tons at also 0.75 oz/ton Au. Below the 307 Level to the 700 Level 116,363 tons of probable ore are indicated. Over 200 feet of "heavy mineralization" was noted in a crosscut at the 500 Level.

2. V.G. HILLS:

A mill test run on 63.756 tons of ore from the 407 Level was completed by crosscutting through the orebody and bulk sampling the deposit at this level. The excavation measured 4'x6'x40', providing the ore for the test. The results were impressive, yielding an average of 1.3 oz/ton Au and 3.2 oz/ton Ag......the ore at this Level remains in place.

3. W.R. SHANKLIN, 1927:

Shanklin conducted a thorough investigation of the Gold Bar Property, resulting in many useable underground maps, together with considerable sample data. Shanklins' work resulted in a good report which is attached in the Appendices of this report......his work is summarized as follows:

- a) The character of ore from oxides to sulphides resulted in the eventual shutdown of the mill.
- b) Sampling by Shanklion produced 138 samples averaging .58 oz/ton Au; this included many samples outside the ore zone. According to Shanklin there \$\frac{12}{25}\$ 92,000 tons of \$12/ton ore between the 445 Level and Glory Hole...........At todays gold price this equates to approximately 0.60 oz/ton Au. This calculation does not include the "large amount of low grade ores that are found under the footwall of the vein or the possible ore that can be developed. Shanklins' sampling of the Glory Hole averaged 0.12 which included many samples outside the ore zone. If only the ore zone samples are considered the sample average is about 0.20 oz/ton Au. At surface the width of the ore zone is 60'.
- c) Two large sulphide ore samples were cut from walls and faces and sent to the maagma Smelter at Superior, Arizona, and the other to the AS&R Smelter at Hayden, Arizona. The results are tabulated below:
 - 1) Magma Copper Co.---2.72 oz/ton Au, 6.30 oz/ton Ag, 40.6% Fe, 12.2% SiO2
 - 2) AS & R Smelter----5.00 oz/ton Au, 13.36 oz/ton Ag, 42.4% Fe, 11.0% SiO2

4. FOOTE AND COMPANY (George Hyde), 1929:

- a) stated geology "offers nothing complex"
- b) expects stronger and richer orebodies with depth
- c) believes copper will be important based on exposures on the 445 Level, No.2 shaft, and on the 700 Level. Assays yielded 6.15% Cu, and 0.34 oz/ton Au
- d) ore is oxidized from surface to the 385 Incline Level
- e) the orebody has been crosscut in only two places......at surface and at the 407 Level. At surface the width is 60' and 45' at the 407 Level

f) Hyde indicates 69,600 tons of proven ore, and a large expectancy of probable ore between surface and the 445 Level. Hyde expects this ore to average 0.60 oz/ton Au.

5. J.H. STEINMESCH, 1934:

Steinmesch completed one of the first thorough appraisals of the Gold Bar Mine, similar to that conducted by Shanklin in 1927. Steinmeschs' work resulted in the following:

- a) extensive sampling of the Glory Hole at surface, indicating an average tenor of 0.23 oz/ton Au;
- b) stated that dumps contain "good mill ore";
- c) reported on 4500 tons of ore broken in the footwall of the Glory Hole workings, averaging .27 oz/ton Au (excluded some hi-grade samples); the 4500 tons was represented by a 5 ton bulk sample in which every tenth shovel was thrown onto a sheet making a 900 lb sample which was in turn broken into two samples. The weighted average was .272 oz/ton Au. Another sample series was completed under the direction of two different engineers, resulting in an average of 0.23 oz/ton Au;
- d) sampling was conducted at the Blue Moon, Crown drifts, and Red Wonder Zone with encouraging results; for example, a 100 lb sample from the Blue Moon yielded .18 oz/ton Au and 0.7% Cu.......a Red Wonder channel sample yielded .22 oz/ton Au and 2.61% Cu;
- e) Channel sampling in the Glory Hole was quite encouraging with the following results reported:

S 12 4' moil in roof 0.17 0.10 S 13 7' moil 0.21 S 14 Fines from Glory H 0.47 S29A bulk sample 0.30 S29B bulk sample 0.25 S30A bulk sample 0.10 S30B bulk sample 0.36	Ag
S 13 7' moil 0.21 S 14 Fines from Glory H 0.47 S29A bulk sample 0.30 S29B bulk sample 0.25 S30A bulk sample 0.10	
S 14 Fines from Glory H 0.47 S29A bulk sample 0.30 S29B bulk sample 0.25 S30A bulk sample 0.10)
S29A bulk sample 0.30 S29B bulk sample 0.25 S30A bulk sample 0.10	
S29B bulk sample 0.25 S30A bulk sample 0.10	
S30A bulk sample 0.10	
S30A bulk sample 0.10	
S32 footwall 0.12	

- f) Steinmesch provided excerpts of mill head assays for milling operations occurring between the period July, 1907 through October 17, 1907; together with many other samples taken in 1908;
- g) Glory Hole sampling by various engineers was compared and the following results offered:
 - 1. 21 samples by Shanklin averaged 0.12 oz/ton Au which included samples outside the ore zone;

- 2. Also in the Glory Hole area Steinmeschs' sampling averaged 0.236 oz/ton Au;
- 3. According to Steinmesch Stone and Major hi-graded ore from an area in the Glory Hole in which Shanklins' sampling showed little value;
- h) Steinmesch believes that the Blue Moon and pegmatite outcrops to the west of the Glory Hole are "surface expressions of mineralized shoots on a single large fracture zone. They are about in line with the main orebody".
- I) As noted by Steinmesch no geologic map of the Property had been made.

6. EXAMINATION BY HILLS AND WILLIS:

Considerable sampling was completed with apparent encouraging results; unfortunately, no sample map was noted. Sample results are compatible with previous work. Hills and Willis suggest that 110,000 tons of ore are situated between the 445 and 200 Levels.

7. GILMORE, 1955:

a) concluded that the Gold Bar Mine is located on a large orebody:

b) believes that the largest undeveloped ore deposit will be found on the Black Bear claim----that the Black Bear outcrop is very similar to the Glory Hole exposure;

c) Gilmores' sampling indicates that ore grade in the Glory Hole workings is compatible with the Steinmesch result.......Gilmores' sampling of the Glory Hole is summarized as follows:

SAMPLE DESCRIPTION	OZ. AU	OZ. AG
Glory Hole N. Side	0.20	1.87
Glory Hole from floor	0.36	2.04
Glory Hole entrance	0.25	2.01
Glory Hole average every 10'	0.28	
Glory Hole average every 5'	0.21	
Glory Hole north wall average	0.24	

Encouraging sampling at the Blue Moon, Red Wonder, and Black Bear zones was reported as shown below:

SAMPLE DESCRIPTION	OZ. AU	OZ. AG	% CU
Blue Moon outcrop in gulch Blue Moon in back of tunnel Red Wonder cut Red Wonder dump Red Wonder dump Black Bear tunnel at entrance Black Bear tunnel near back	0.20 0.16 0.35 1.04 0.09 0.34 0.14	1.40 1.28 0.85	12.0 .68 4.0 11.03 .52

8. HOLBROOKE, 1963:

a) gold mineralization is associated with silicified and mineralized porphyry

b) reported on two drillholes that were drilled horizontally across the orebody from opposite sides of the 407 Level drift, defining a width of 44.8 feet, and averaging acequivalent 0.71 oz/ton Au..... this obviously included the small amount of silver contained in the ore.

c) in addition to the drilling some 60 feet of channel sampling was completed. The results, combined with previous sampling, indicates 17,000 tons of ore grading 0.60 oz/ton Au.....this tonnage is situated between the 445 Level and what is referred to as the "old stope".

d) the no. 1 porphyry pipe (deposit) will yield 225 tons per vertical foot of oxide ore grading 0.60 oz/ton Au;

e) Holbrooke suggests that pipes no.2 and 3 may contain similar gold-bearing mineralization yielding as much as 2,000,000 tons to a depth equal to the elevation of the bottom of the No.2 Shaft.

9. McCARTHY, 1963:

- a) McCarthy describes the orebody as an intersecting mass of stringers, veinlets. and lenses:
- b) Based on previous sampling and drilling McCarthy believes that 25,000 tons of ore can be developed between the 385 and 478 Levels, averaging approximately 1.19 oz/ton Au. He also suggests the possibility of developing 15,000 tons of ore between the 385 Level and the bottom of the Incline Stope.
- c) considers the prospect of finding additional ore in the lower levels excellent

10. TRENHOLME, 1979:

- a) Trenholme examined the Property and analyzed previous reports and other data; He did prepare some new maps that are very useful for current evaluation and future development;
- b) Previous sampling and results were discussed.....see attached report for discussion:
- c) Trenholme estimated a minimum of 4900 tons of ore in place between the 385 and 455 Levels, grading 0.55 oz/ton Au, and 1.30 oz/ton Ag.
- e) Estimated a minimum of 40,000 tons of ore between the 445 and 700 Levels;
- d) Proposed various recommendations and briefly discussed exploration targets

and the data to justify further work......see attached Trenholme report

11. CALLAHAN MINING CORPORATION, 1985:

Mr. Lawrence Kennedy, geologist for Callahan, conducted an examination, including considerable sampling and underground mapping. Kennedy produced the most complete geologic mapping of many underground exposures to date. His work is summarized as follows:

- a) produced geologic maps, with some sample data, for the 385 Level, the 407 Level, the 445 Level, the 478 Level, the 503 Level, and the 600 Level;
- b) sampling in the Glory Hole at surface provided the following results:

1.	outer wall (low-grade) 4 samples	.036 oz/ton Au
2.	main core 2 samples	.346 oz/ton Au
3.	south wall 4 samples	.082 oz/ton Au
	footwall zone 4 samples	.368 oz/ton Au
5.	lower outer silicified zone (low-grade)	.023 oz/ton Au
6,	nw wall 8 samples	.111 oz/ton Au

Weighted average of Glory Hole (ore zone only) is 0.16 0z/ton Au across 60 feet

12. RODDY RESOURCES INC., 1989:

The most recent exploration activity of significance that has advanced the Gold Bar Mine to potential production status is that completed by Roddy Resources Inc. in 1989. Their work consisted of reverse circulation drilling, combined with limited surface sampling. Roddys' work, although defining reserves within the Gold Bar No.1 Breccia Zone, has proven the need for more detailed and systematic work to fully define the potential of the entire Gold Bar Property.......Roddys' work is summarized below:

a) Three RC drillholes were completed near the Glory Hole, intersecting goldbearing mineralization within the No.1 Breccia Zone. Hole 89-RC-GB10 cut a 5' zone assaying 0.68 oz/ton Au at 80' below the collar. Continuing for an additional 35' is ore grading 0.184 oz/ton Au. Hole 89-RC-GB11 intersected only the hi-grade 5' zone which assays .85 oz/ton Au.......for whatever reason this hole was not extended further into the zone.....probably the hole encountered difficulty forcing its termination. Approximately 30' nw of GB-10 hole 89-RC-GB12 was drilled to test the outer silicified shell that surrounds the main ore zone. Beneath the ore zone 22' of silicified and altered granite, containing limonite coatings along shears, averages 0.04 oz/ton Au. Along strike to the southwest a distance of 390', 585', and 690' respectively three additional holes were drilled to test the downward plunge of the oxide ore zone as it extends downward from the Glory Hole at approximately -32 degrees..........the results of these three holes are tabulated below:

DRILLHOLE	TOTAL DEPTH	ASSAY oz/ton Au	INTERVAL
89-RC-G88	445 feet	0.187	60 feet

89-RC-G813	460 feet	0.25	55 feet
89-RC-G86	705 feet	0.16	120 feet

(It should be noted that the top 30' in Hole 89-RC-G88 averaged .226 oz/ton Au)

- b) Other drillholes completed were somewhat scattered and irratically positioned. Drilling on the No.2 and 3 breccia zones was limited but did show the presence of anomalous and low-grade gold mineralization.....see attached report
- c) Roddy noted three holes previously drilled by the Sunshine Mining Company to test mineralization in the No.2 breccia zone.....their results are:

Hole RDH-1: 35 feet @ 0.069 oz/ton Au
 Hole RDH-2: 45 feet @ 0.070 oz/ton Au
 Hole RDH-3: 35 feet @ 0.103 oz/ton Au

- c) Drilling at the No.3 breccia zone was negative, although a 47' zone was encountered in one hole, averaging 0.042 oz/ton Au.....much more work will be required to determine if this breccia zone has significant potential. Hole No. 89-RC-GB24 intersected the O'Brien vein at 137', showing 7' wide interval assaying 0.166 oz/ton Au.
- d) The Red Wonder shear zone was tested by five holes from two locations, resulting in one 5' interval assaying 0.250 oz/ton Au, and another 8' section assaying 0.264 oz/ton Au. Drilling did not confirm surface exposures; however, copper values were not considered which may have resulted in partially misleading and incomplete data.
- e) South of Breccia Zone No.3 lies the O'Brien mine and numerous old workings. In this area the O'Brien vein was drill tested from three sites totalling six holes......the results are shown in the attached Roddy Resources Inc. report. Additionally, Roddy conducted sampling of the O'Brien surface exposures, indicating limited potential for surface mining.
- f) Unfortunately, no drilling was completed at the White Blaze breccia zone.

13. GOLDTECH ENGINEERING CO., 1992–1994:

The writer, aside from examining the geology of the Gold Bar Property and specific ore targets, conducted channel and panel sampling at various locations. Emphasis was placed on sampling the Glory Hole (No.1 Breccia Zone), the surface outcrop on the No.2 Breccia Zone, the surface exposures at the O'Brien workings, the broad gold/copper mineralized shear zone at the Red Wonder pit, and the stockwork/breccia zone that is exposed north of the White Blaze shaft. Additionally, the geology of the Gold Bar Property was examined and evaluated in terms of comparing previous geologic observations. Sampling results are shown on the accompanying maps and summarized a follows:

- 1. 75 chip channel and panel samples were taken from the Glory Hole workings, exposing a minimum width of 50 feet. The overall average for the Glory Hole sampling program is 0.21 oz/ton Au, and 1.37 oz/ton Ag.....comparing favorably with prior sampling data obtained by other examiners.
- 2. Surface sampling at the No.2 Breccia zone was confined to northwest side and around the southwest nose, consisting of 50 random panel style samples. The arithmetic average of these 50 samples is 0.068 oz/ton Au and insignificant Ag values......the results differ from that obtained by Roddy Resources Inc.
- 3. Sampling at the O'Brien shaft and tunnel area yielded results very close to that of Roddy Resources----see attached maps
- 4. A 25' wide copper/gold-bearing shear zone is exposed at surface in an old pit on the Red Wonder Zone. The entire 25' averages, where exposed, 0.18 0z/ton Au, and 1.9% Cu; however, a 10' wide section from the east wall assayed 0.35 oz/ton Au, and 5.7% Cu. Previous sampling by others has shown results ranging from 0.012 to 1.04 oz/ton Au, and .52% to 17% Cu.
- One of the more impressive exposures at the Gold Bar Mine includes a 5. broad zone of stockwork/breccia, containing strong limonite/goethite oxidation along shear planes. Gold is confined to the oxide mineralization that is associated with individual shears, as indicated by 10 samples taken at random from various outcrops. This zone lies adjacent to and north of the White Blaze shaft, and includes an area of approximately 200' in diameter. The individual outcrops appear to be surface expressions of a single large mineralized zone hidden by detrital and soil cover. Samples yielded assays ranging from .028 to 0.17 oz/ton Au, indicating a large area of gold-bearing mineralization at surface. Certainly, much additional work will be necessary to define the limit and extent of the mineralization, and to fully determine the potential that this zone may hold for future surface mining. Early indications are quite positive for defining a zone that might produce approximately 200,000 tons within the first 100' of mining depth, and averaging according to surface sampling roughly .07 oz/ton Au. Such a zone could yield 14,000 ounces of gold within the first 100', totalling \$5.3 million.

CONCLUSIONS

It is obvious from previous mining, examinations, evaluations, and exploration efforts. that the Gold Bar Property contains considerable potential in gold, silver, and copper, much of which is yet undeveloped. The most noteable locations for developing potential gold ore are found within the No.1 Breccia Zone, the No.2 Breccia Zone, the Red Wonder Zone, the White Blaze stockwork/breccia zone, and limited surface potential at the O'Brien and Blue Moon workings. Examining these individually results in the following conclusions:

NO.1 BRECCIA ZONE

As noted on the cross sections, Figures 12 and 13, the first 320' of downward plunge will yield approximately 72,000 tons of ore averaging 0.20 oz/ton Au.....or 14,400 ounces having a gross value of \$5.4 million. The stripping ratio for this block is excellent at about 1:1. The next 220' will also yield oxide ores totalling approximately 64,400 tons of ore. This ore will have a slightly higher ore tenor, approximating 0.25 oz/ton Au.....or 16,100 ounces with a gross value of \$6.1 million. The stripping ratio will increase to roughly 3:1, but still remains very economic for surface mining. The lower block amenable to surface extraction includes a 220' section of ore averaging 0.30 oz/ton Au, and totalling approximately 44,400 tons. This block of ore will provide 13,320 ounces of gold, or roughly \$5 million. It is possible that this block may average higher than 0.30, depending on the validity of some of the earlier reports of hi-grade gold ore situated in and around the 385 and 407 Levels. The stripping ratio will obviously increase but still remains economic at 5:1.

Ore reserves that are amenable to only underground methods are difficult to define given the many different evaluations of previous engineers. It is known, however, that the sulphide ores within the deeper workings will average at least 0.55 oz/ton Au, with estimates ranging from 11,000 to over 92,000 tons. It is also considered likely that additional underground exploration south of the main fault zone will prove 40,000 to 50,000 tons of ore between the 445 and 700 Levels.

2. THE NO.2 BRECCIA ZONE

This zone contains no proven or probable ore reserves, but does show significant gold values at surface from an exposure of approximately 100' x 220', and from limited drilling, suggests a potential geologic resource that would be amenable to surface extraction provided gold values were economic. More drilling and detailed surface sampling will be required to define this resource and determine its viability of being added as a mineable target. The data to date suggests the possibility of defining a target that may yield a minimum of 157,000 tons per 100' of downplunge depth.

3. THE RED WONDER ZONE

Drilling by Roddy Resources tested only the gold-bearing hangingwall and seemingly was not positioned to adequately test across the entire zone; additionally, copper values were not reported which may lead to a premature assessment of the total extent of both copper and gold mineralization present.

A geologic resource at the Red Wonder mine is based on very limited sampling of surface exposures, minor reverse circulation drilling, and extent of the surface exposures along strike. It is apparent that the width of mineralization will extend across at least 20' and is readily exposed along strike for 500'. A surface mineable depth of 100' will yield 70,000 tons of inferred ore, having an estimated tenor of 0.18 oz/ton Au, and 2.0 % Cu, or approximately \$8 million. The Red Wonder is a strong and prominent geologic target that deserves serious attention.

4. BLUE MOON AND O'BRIEN MINES

Surface mineable ore at the O'Brien workings is limited, and underground potential is unknown. A small zone near the O'Brien shaft and adjacent adit indicates from sampling and drilling a potential 5300 tons grading 0.12 oz/ton Au. This probable reserve is contained in a zone 10' wide x 150' long, and approximately 50' of mineable depth. The approximately \$240,000 of ore value could be easily extracted and added to mill feed derived from a potential mining program at the Glory Hole (No.1 Breccia) zone.

The Blue Moon does not appear to contain commercially mineable surface ore, but indications of underground potential are discussed in some of the attached reports. The Blue Moon structure is of significance in that it trends directly toward the White Blaze stockwork/breccia zone; therefore, its potential and geologic significance is of considerable importance. As noted previously Steinmesch, 1934, reported a smelter shipment from the Blue Moon adit that yielded 1.13 oz/ton Au, and 2.32% Cu....this type of potential for the Blue Moon may be worthy of investigation.

5. THE WHITE BLAZE STOCKWORK/BRECCIA ZONE

This mineralized zone represents to be an attractive additional target, yet undeveloped, for potentially adding significant ore reserves through a systematic program of trenching, sampling, and drilling. The surface extent of the deposit, together with the nature of the oxide, free milling gold mineralization, indicates the presence of a sizeable oxide gold-bearing deposit that would be amenable to surface extraction, and to either leaching or simple gravitational processing. This zone may very well turn out to be the largest single gold deposit present within the Gold Bar geologic complex; of course, an exploration program will be required to define the potential and turn an observation into fact.

It appears that the White Blaze and Blue Moon shear zones intersect, creating a loci effect and hence possibly creating a favorable structural phenomena for gold deposition. This target should be aggressively evaluated by detailed surface mapping, comprehensive outcrop sampling, trenching/sampling, and reverse circulation drilling.

6. CONCLUDING STATEMENT

The Gold Bar Mine and its many mineralized zones offers a rarely found opportunity for developing into a sizeable successful gold mining venture. The Gold Bar geologic complex is highly mineralized and structurally favorable for hosting potential commercial mineable deposits of gold and gold/copper ores. An added attraction to the Gold Bar Property is the presence of measured and probable ore, together with inferred or geologic resource potential. Not many inactive or dormant mines can offer these assets to such an advanced degree.

Gold Bar mineralization is at least in part structurally controlled and oxidized to a vertical depth of as much as 200' or more. Reserves amenable to surface extraction may exceed 2 million tons, provided that gold values are sufficient to cover all expenses and yield a reasonable profit. Although actual measured ore reserves do not now exceed 200,000 tons, the potential for putting inferred and probable reserves into a measured category is very high with a modest investment. Sulphide ores that are amenable only to underground mining methods are present, but will require a considerable investment to develop and extract. These deeper ores, although of higher grade, are not a primary target for immediate mining potential; nevertheless, the deeper sulphide ores do represent sound future mining potential, particularly with increased gold values. Current underground probable and inferred reserves within the lower levels of Gold Bar Mine (No.1 Breccia Zone) range from 75,000 to 100,000 ounces of gold, with secondary values in silver and copper. It has been suggested in one or more previous reports that the copper values in the sulphide zone may actually supercede that of gold......only time and future development will determine this possibility.

The Gold Bar has the potential to produce predominantly oxide gold ores from surface mining methods at a modest level of from 250 to 750 tons/day. It will be essential, however, to increase a reserve base through mining and continuing exploration and devlopment in order to extend minelife to an exceptable range. Surface mineable oxide ores will average approximately 0.25 oz/ton Au; whereas, deeper sulphide ores amenable only to underground methods should average a minimum of 0.55 oz/ton Au, plus silver and copper. An investigation into shipping direct copper/gold and sulphide ores to a smelter may be warranted to avoid adding or modifying an existing "oxide" processing circuit which would be contemplated for exploiting the strictly surface mineable oxide mineralization. A potential underground mining program at the Gold Bar would likely range between 100 and 300 tons/day, depending to some extent upon ores devloped and mined from other than those within the No.1 Breccia Zone.

The many reports and maps appended to this report should be examined and evaluated to determine ones own interpretation of existing data. The various efforts made by engineers and geologists since 1927, together with mining and development prior to 1927, collectively point to a high level of production potential for the Gold Bar Mine. This potential exists in known reserves, potential reserves, commercially viable suraface mineable oxide ore, and the opportunity to utilize simple gravity processing technique, if other methods are deemed undesireable, inefficient, or just to costly.

The No.1 Breccia Zone contains an oxide reserve base of approximately \$15.46 million, extending from the Glory Hole at surface downplunge a distance of 700' to the 445 Level. This reserve is adequate to justify a mining/processing program of about 500 tons/day, with potential expansion as reserves throughout the Property are more precisely defined and developed for commercial exploitation. The Gold Bar Mine does indeed possess the potential necessary for developing into a viable and successful mining venture.

Don L. Jenkins geologist/mining engineer

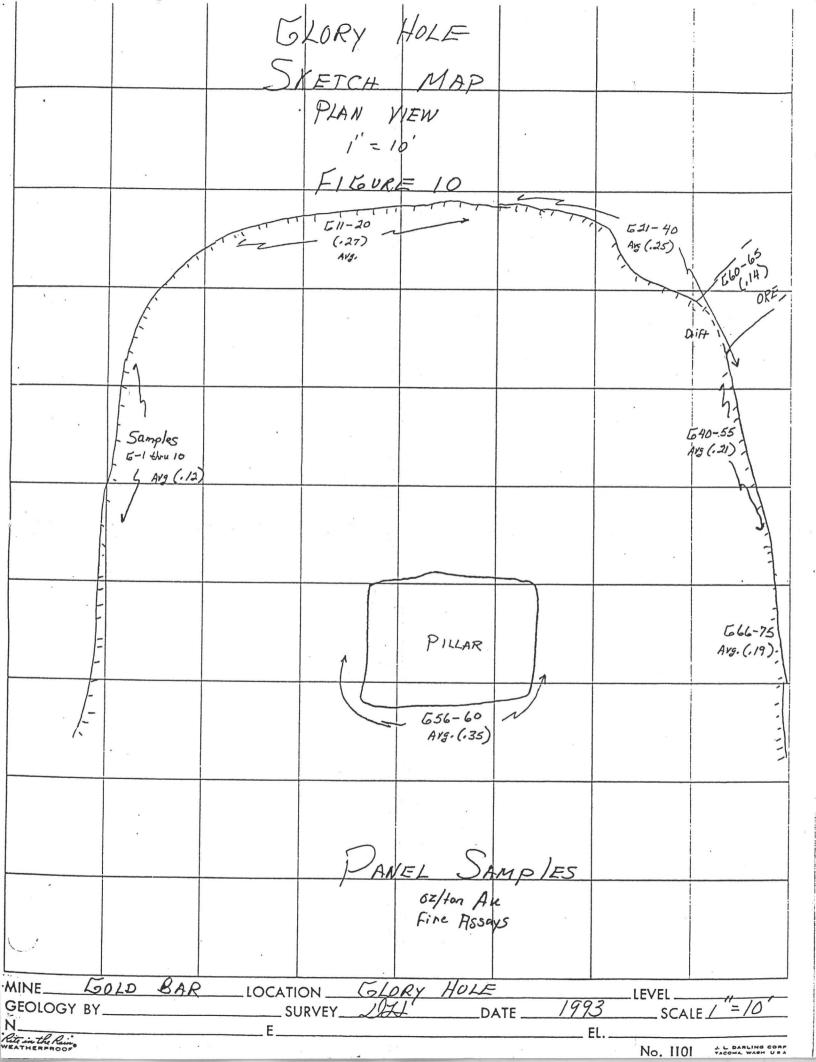


GLORY HOLE (See MAPS)

AVG. - 21 OP+ ALL (60')



RED WONDER ZONE (S& Maps) 25 @ .18 ALL, 1.9% CL



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Den Jenkins
520-442-9768
1385 Iran Spring Rd
Soite 234
Proscot Az 26301

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ELEMENTS: Au Ag As Sb Hg

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ELEMENTS: Au Ag As Sb Hg Cu Pb Zn

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ELEMENTS: Au Ag As Sb Hg Cu

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ELEMENTS: Au Ag As Sb Hg Cu Pb

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2036 Columbia Street Vancouver, B.C. Canada V5Y 3E1 Phone (604) 879-7878 Fax (604) 879-7898

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Vancouver, B.C. Canada V5Y 3E1 Phone (604) 879-7878 Fax (604) 879-7898

2036 Columbia Street

138611 5828 **482588** 28828 288984 1 of Page Section 3 mdd ខ្លួនន **45288** 25888 쩝 절 P M 1997 Out: Nov 12, In : Nov 10, 8 ह 66666 6.0000 3 g 66666 은단은단 **66666** 66666 [113210;22:11:79111897] Se587 ត្ត១៦៩% ₽ E ស៊ីទីទីខិស 등성왕各뛊 모형 S md **ሳሳሳሳሳ** ស<u>ក្ខខ្លួ</u>ងស As 3387 2122 v 69999 20 5.1% 9464 161 37 882574 85438 でなるがの 24 Samples 24-Rock 4.8 19.2 6.00.00 6.0.6.6 6.7 P P 6.73 2.97 31.80 30.13 11111 1111 g/mt 11181 11111 5200 3830 37m 23m 15m 650 650 610 610 27 47 12 14 19 25 138 138 138 138 ₽ dq Exploration USA, Inc Client: Cambior Project: 306 Sample Name

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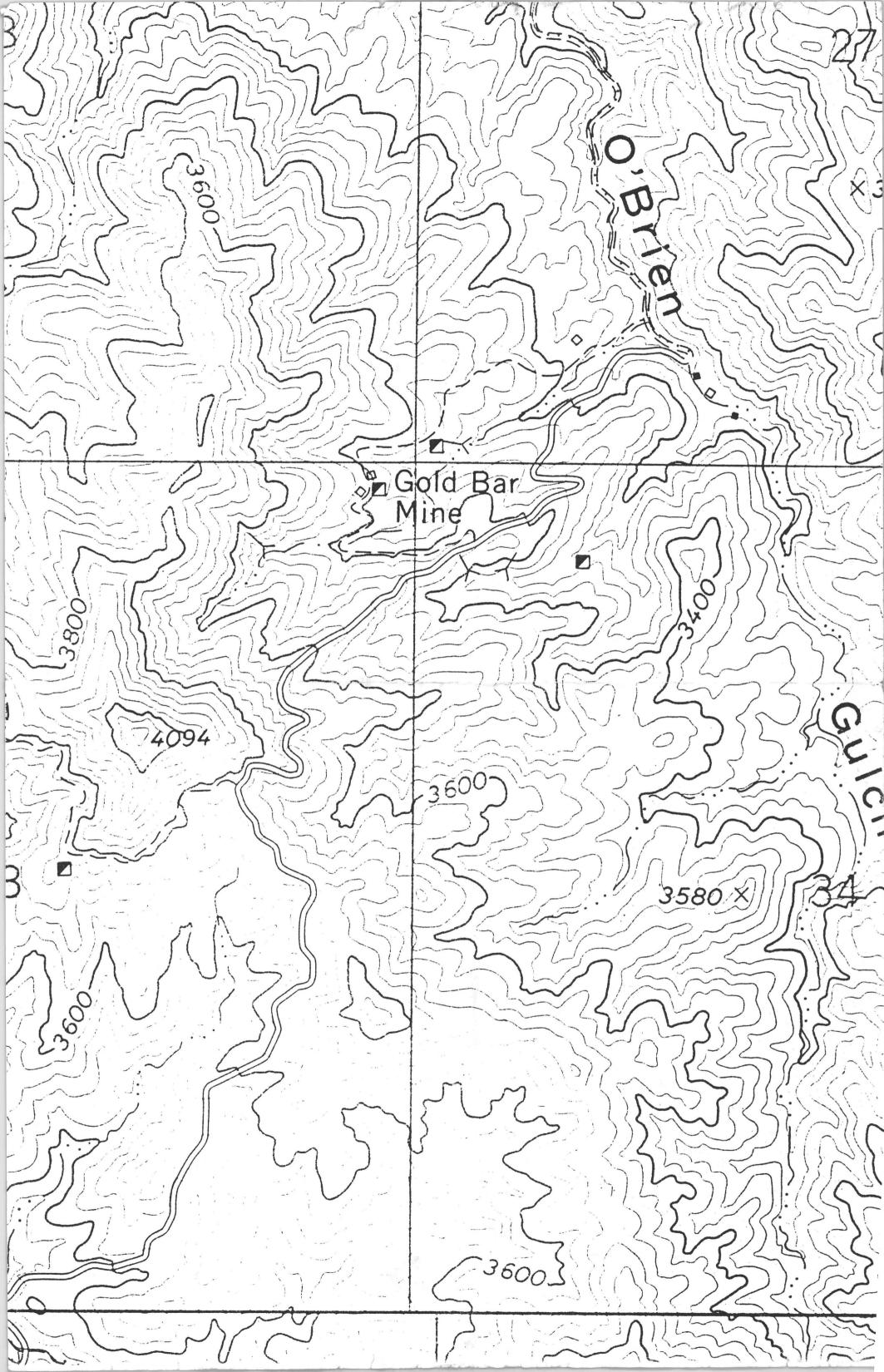
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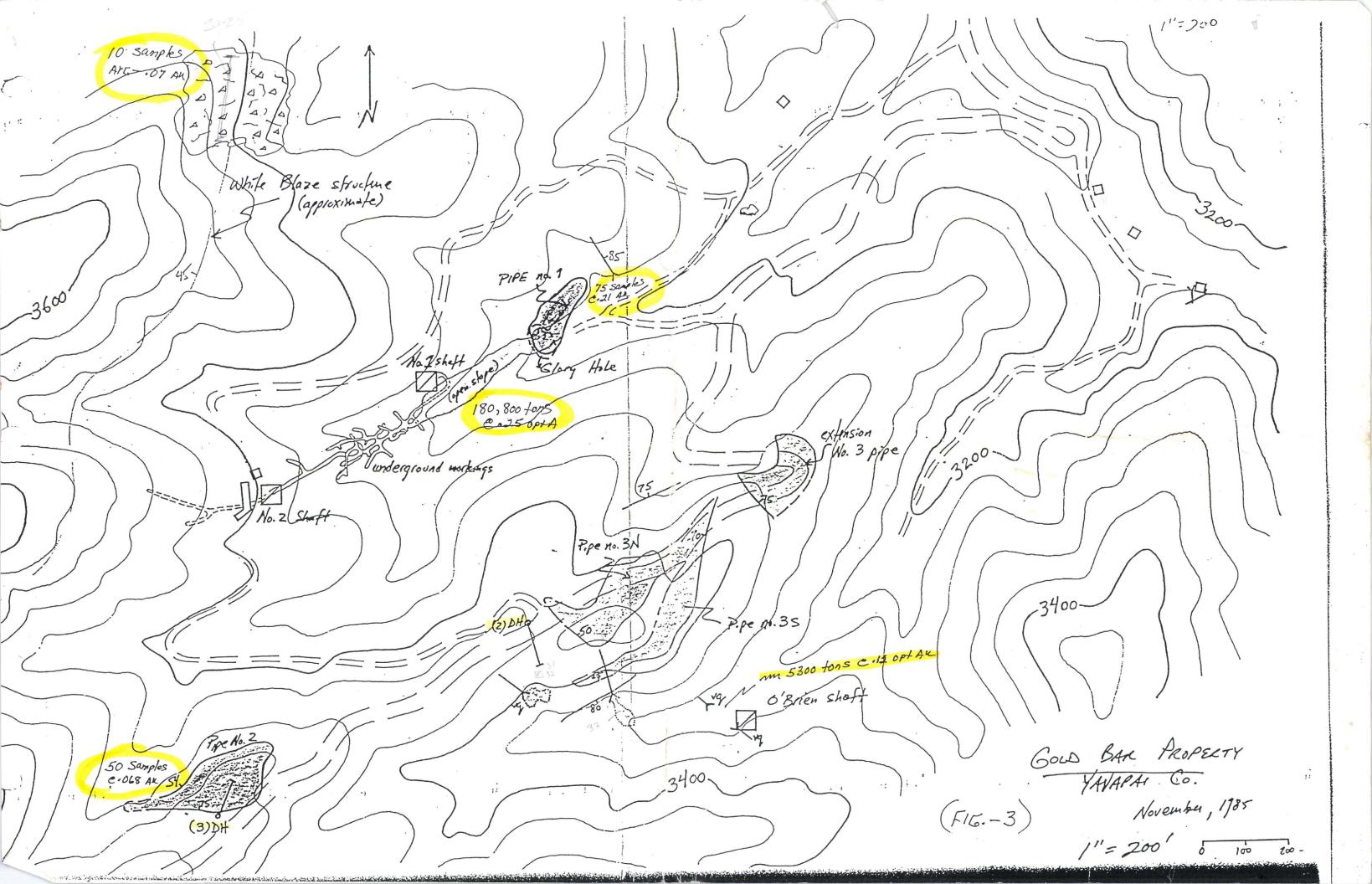
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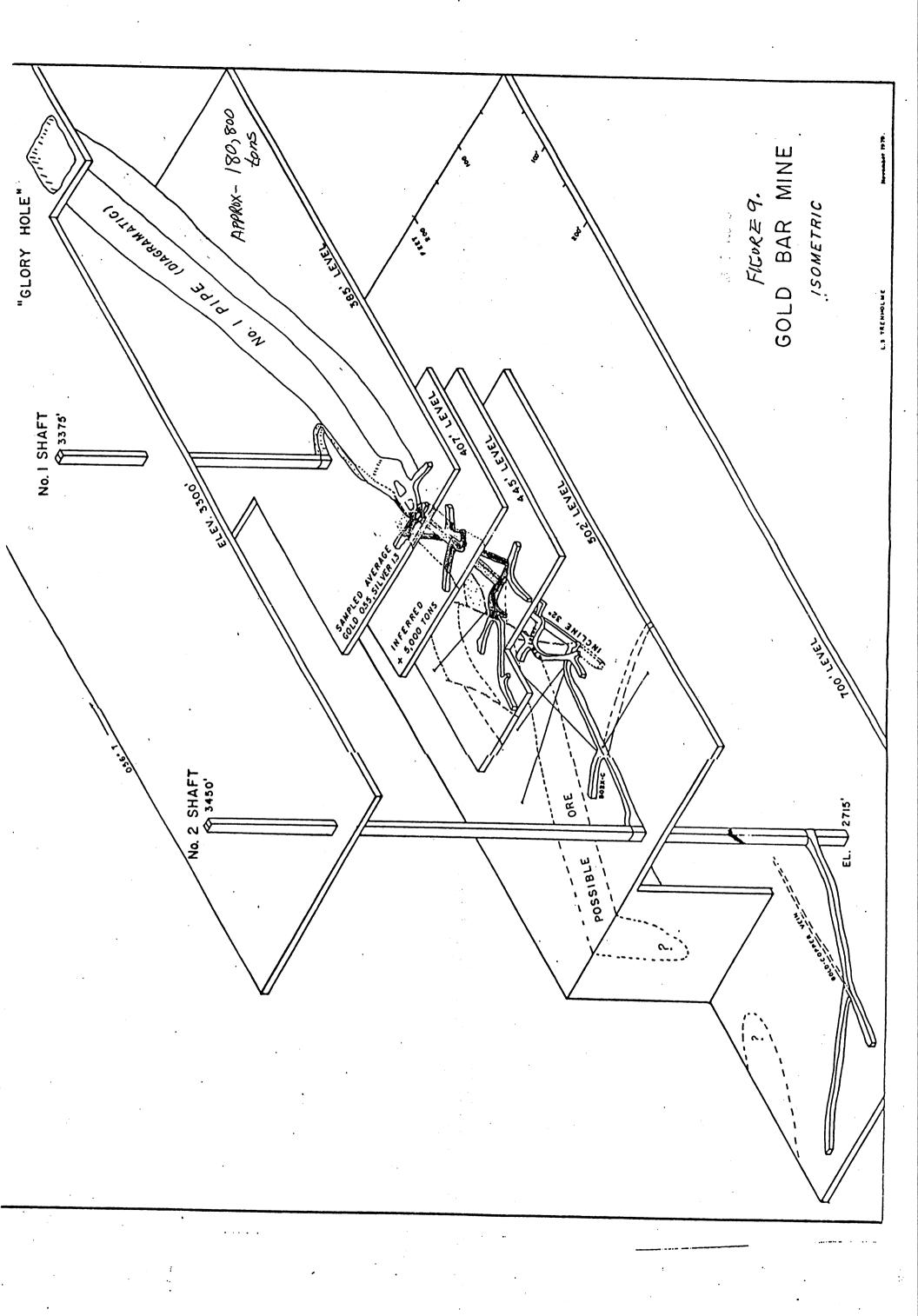
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FORM NO. 91171

GOLD BAR MINE PROPERTY Yavapai County, Arizona

OWNERS
Jack & Dorothy Devault
P. O. Box 1498
Wickenburg, AZ 85358

Report by: L. S. Trenholme, M.Sc. P. Eng. 1979

REPORT ON

THE GOLD BAR PROSPECT YAVAPAI COUNTY, ARIZONA

Prepared for

GOLDHURST RESOURCES INC.

Ву

L. S. TRENHOLME, P.Eng.

November, 1979

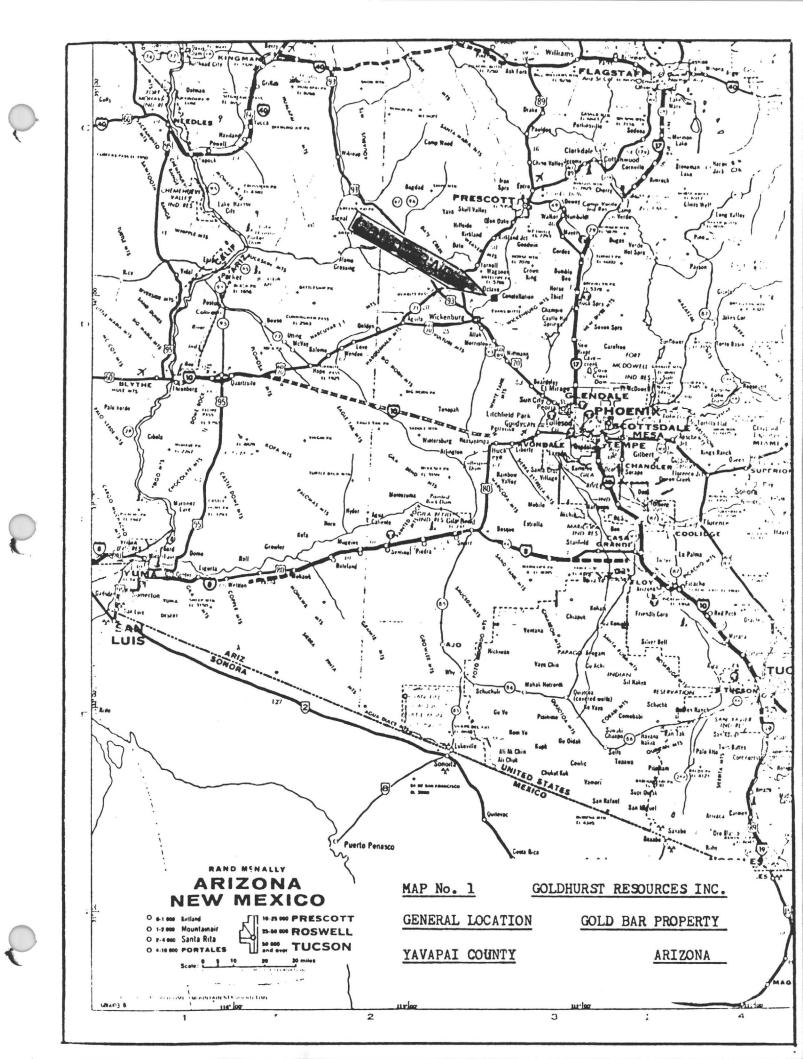


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INTRODUCTION

At the request of Mr. S. Ivanov, President of Goldhurst Resources, Inc. the writer made a 2-day examination of the Gold Bar property on September 24-25, 1979'in company with Mr. Ivanov and Mr. Jack Devault, property owner.

The present report is based on this examination and on numerous reports written between 1927 and 1969. It is accompanied by new maps compiled from various old maps and written data.

This writer was impressed by the number and variety of metallic mineral occurrences, visible on surface, as well as those described in the now inaccessible underground workings.

SUMMARY

The Gold Bar property is located 15 miles northeast of Wickenburg, Arizona.

Prior to 1909 it produced 24,000 tons grading 0.88 ounces gold per ton, plus unrecorded silver exceeding $1\frac{1}{2}$ ouces gold per ton.

Proposed rehabilitation of the old workings will give access to an estimated 5,000 tons of known ore of similar grade and will facilitate testing and development of the projected ore zone to a vertical depth of 700 feet with a reasonable expectation of delineating and partially developing an additional 40,000 tons of ore.

Numerous untested mineral occurrences on the property including some with good molybdenum assays, and a promising copper vein zone (grading better than 5%), merit detailed investigation.

A total proposed expenditure of \$187,000 is expected to provide sufficient information on which to base a decision for production at 50-100 tons per day using available used mill components.

A further expenditure of \$13,000 is proposed for preliminary evaluation of the more interesting surface showings with a view to providing additional mill feed.

Overall is the longer range concept of locating a large tonnage porphyrytype copper-molybdenum deposit on the property.

PROPERTY STATUS

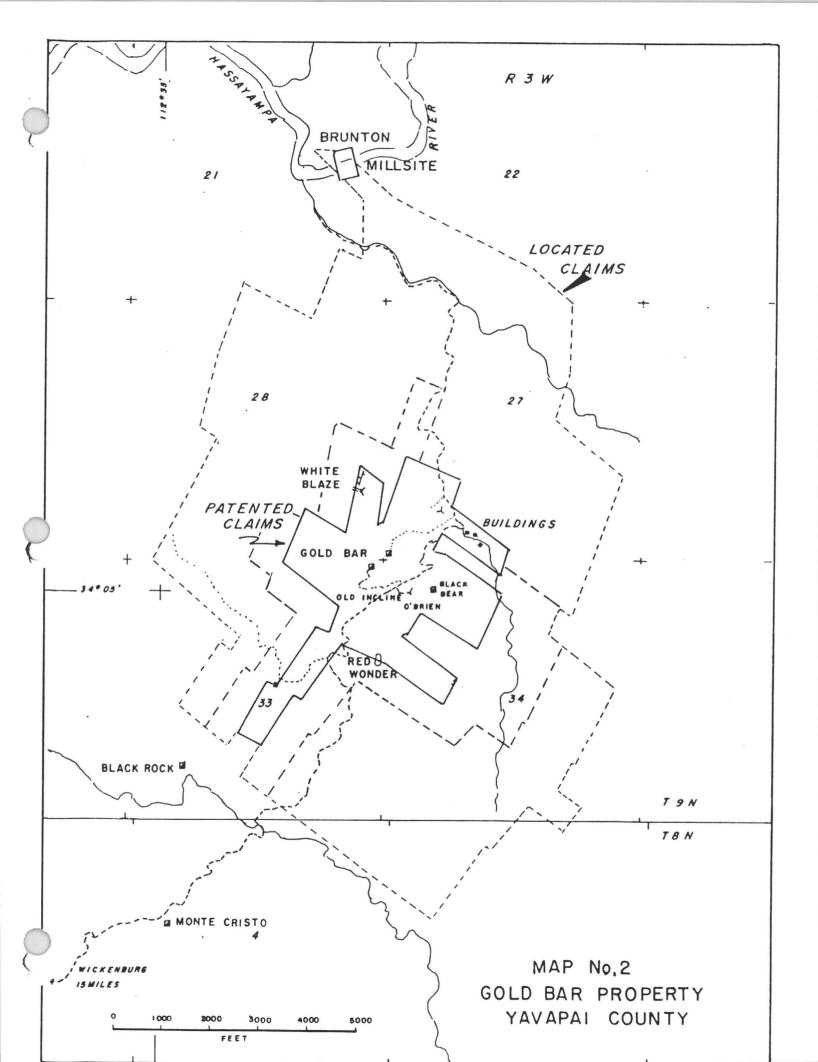
According to information supplied by Mr. Ivanov, the Gold Bar property consists of the following:

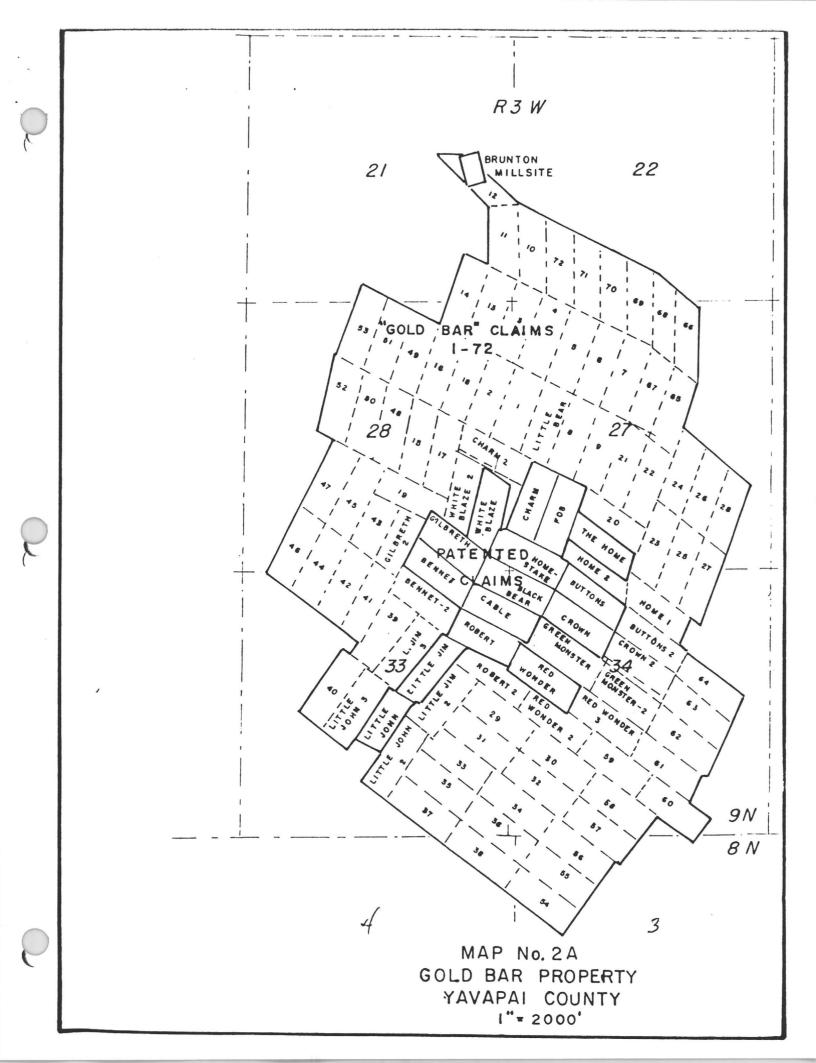
i) A central group of fifteen (15) patented claims, per U.S. Mineral Survey No. 40-60-A, namely:

Charm Buttons Cable
Fob Crown Robert
The Home Black Bear Red Wonder
White Blaze Gilbreth Little Jim
Homestake Bennet Little John

- ii) A single patented Millsite Claim The "BRUNTON" at the extreme north end of the group. (U.S.M.S. No. 40-60-A)
- iii) Ninety (90) located claims as follows:

1 - 72 inclusive Gold Bar Green Monster Little Bear Little Jim No. 3 Little John No. 2 Green Monster No. 2 Charm No. 2 Little John No. 3 Crown No. 2 White Blaze No. 2 Gilbreth No. 2 Robert No. 2 Buttons No. 2 Bennet No. 2 Red Wonder No. 2 The Home No. 1 Little Jim No. 2 Red Wonder No. 3 Home No. 2





Title to the Gold Bar property is held by Jack and Dorothy Devault of Wickenburg, Arizona who have granted an option to Mr. S. Ivanor, president of Goldhurst Resources Inc. It is understood that Mr. Ivanor will assign this option to Goldhurst in due course.

LOCATION, ACCESS

The Gold Bar claim group occupies parts of Sections 3 & 4, Twp. 8N and Sections 21,22,27,28,33 and 34, Twp. 9N; all in Range 3 West of the Gila and Salt River Meridian. The property is centred near 34° 05'N, 112° 34'W in the north-central part of the Morgan Butte Quadrangle, Yavapai County.

Access from Wickenburg is by 6 miles of paved road northeast to the county line, followed by 9 miles of good secondary road to the old minesite.

TOPOGRAPHY, WATER, FACILITIES

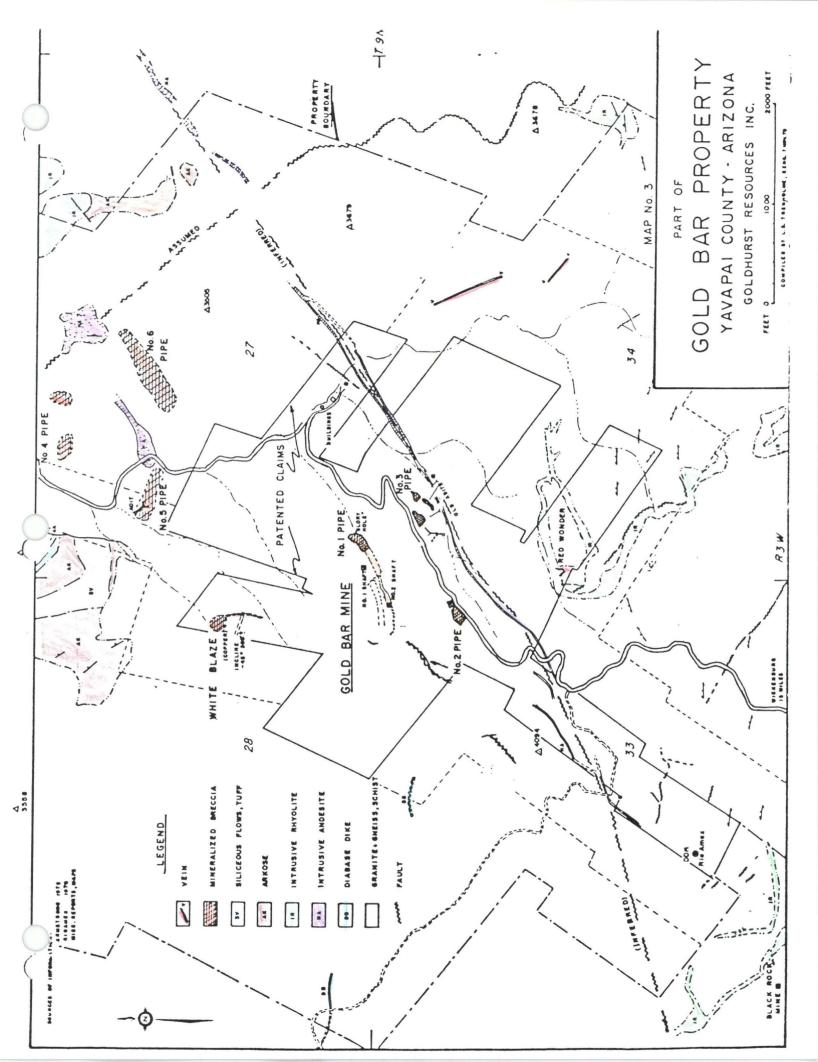
The semi-desert terrain is moderately rugged, with elevations ranging from 2,750 feet in the north at the Hassayampa River to near 4,000 feet in the south. A prominent peak known as "O'Brian" or "Gold Bar Peak" is located about 1/2 mile southwest of the old mine workings.

The Gold Bar mine workings could supply ample water for underground development and surface drilling and, possibly, sufficient water to supply a 100 ton mill. Estimates of underground flow are from 50 to 60 gallons per minute. Additional water could be obtained from the Brunton Millsite at the Hassayampa River.

Three well constructed buildings on the Home claim are suitable for staff living quarters, office, core and general storage.

Electric power, if not generated on the site, would require a transmission line of about 15 miles from the vicinity of Wickenburg.

HISTORY	<u> </u>	Reference
1877	Discovery by James Mahoney O'Brian Mine - "Glory Hole" mined for "several years"	(3) p.2 (17)
1901- 1906	Saginaw Lumber Company 10 stamp mill - Glory Hole Treated 4,000 tons yielding \$60,000 Property returned to former owners.	(3)
1906- 1908	Interior Mining & Trust Company Sank No. 1 shaft 325' (385 Level) New Mill operated 10 months (1908-last production) 20,000 tons ore yielding \$225,000 gold & silver (12-stamp mill, cyanide).	(3) p.3 (18)
1916- 1918	Interior reorganized to Gold Bar Mining Co. No. 2 shaft to 735 feet. Drifting on 500' and 700' Levels No production- shut down.	(3) p.3 (18)
1926- 1927	Gold Bar Mining Company Shafts connected on 500'level Extensive underground sampling Test shipment from 407-Level	(3) p.3
1930- 1934	De-watering and check sampling	9 - 10
1955	Surface Sampling - Gilmore	
1963	De-watering; core-drilling 407 level Reports by McCarthy and Holbrooke.	12, 13
1975-	Goldex - underground drilling, surface mapping	15
76 1977	Rio Amex - surface drill hole 2200'	14
1979	Denison - Log and assay 1976 drill cores	16



GEOLOGY

The best available description of the geological setting of the Gold Bar property is that given by Mr. G. L. Holbrooke in a report dated October 23, 1963. His geological description is quoted herewith.

"GEOLOGY"

"The general geology of the area consists of a basement complex of early pre-Cambrian schists and paragneisses intruded by irregular masses, batholiths, dykes and sills of granitic rock, also of early pre-Cambrian age. The basement rocks have been involved in the Laramide orogeny of late Mesozoic times which in this region consisted principally of large scale block-faulting and the intrusion of stocks and small masses of granitic rocks. Aside from the Cretaceous granitic intrusives post pre-Cambrian rocks are essentially lacking in the area although a small down-faulted block of Cretaceous sediments lies to the east of the Hassayampa River a mile or so from the mine.

Across the property itself practically all of the rocks are either pre-Cambrian granites or very highly altered older pre-Cambrian schists and paragneisses. The granites predominate in volume but the geology has not been mapped in detail and the complicated distribution of the granites and sediments has not been determined.

In the general vicinity of the Gold Bar shafts the pre-Cambrian rocks have been intruded by a series of pipes or small stocks of granite porphyry which are connected with the Laramide orogeny and are presumeably of late Cretaceous age. It is only recently that the mapping of Mr. D. P. McCarthy has established these features in the general granitic background of the area. As one of these pipes forms the host rock of the Gold Bar orebody they are described in some detail below using the No. 2 shaft as a point of reference.

Three porphyry pipes have been outlined by the mapping, each outcropping approximately 800 feet in different directions from the No. 2 shaft. All are roughly oval*in plan with the long axes trending N50° to 55° W.(E) They are strongly jointed in both northeast and northwest directions in common with the pre-Cambrian rocks. The three pipes are as follows:

- i) No. 1 porphyry pipe outcrops 750 feet at N65° from the No. 2 shaft along the northern edge of O'Brien Gulch, approximately at elevation 3,300 feet. The pipe has a horizontal length of 90 feet and a maximum width of 60 feet. Underground development shows that it has a plunge of 28° in a S65°W direction for at least the first 500 feet of its length.
- * (Detailed mapping by Armstrong Ref. #15-shows rectangular plan-L.S.T.)

The pipe consists of brecciated and altered granite porphyry cut by a large number of quartz stringers, veinlets, and small masses running in every direction. It is strongly mineralized by coarse pyrite in scattered blebs and in irregular stringers and veinlets. The outer shell of the pipe, across a horizontal width of several feet, is much more heavily brecciated and silicified than the interior portion and apparently carries fewer sulphides.

The upper part of the pipe, down to the water table at approximate elevation 3,125 feet, is completely oxidized and the pyrite has been converted to earthy limonite. Immediately below the water table rusty pyrite appears and at deeper horizons becomes quite fresh. On the 445 foot level the pipe is apparently cut by a small basic dyke and considerable copper sulphide mineralization is reported in association with this feature.

ii) No. 2 porphyry pipe outcrops 750 feet at \$10°W from No. 2 shaft along the top of the ridge between 0'Brien and Black Bear gulches at an elevation of about 3,610 feet. Two outcrops are to be seen separated by some 25 feet of basic dyke material.

The large mass to the southwest is 170 feet long by 120 feet wide in horizontal section while the smaller one is 80 feet long by 35 feet wide. This pipe is practically identical to the No. I pipe in composition, silicification, and sulphide mineralization. There is no indication of its plunge in the surface exposures and the best assumption is that it will plunge southwest at a flat angle in conformity with the No. I pipe.

The No. 3 pipe outcrops 800 feet at S60° E from the No. 2 shaft along the same ridge as No. 2 pipe approximately at elevation 3,450. It is larger than the other pipes but is identical to the No. 1 pipe in composition, silicification, and sulphide mineralization. Its long horizontal axis measures 280 feet while its greatest width is 180 feet. As in the case of the No. 2 pipe there is no indication in the surface exposure of the amount or direction of plunge and the best assumption at present is that it plunges in conformity with the No. 1 pipe.

Approximately contemporaneous with the porphyry pipes and presumably as a different expression of the same igneous activity a number of diabase and diorite dykes are found cutting the basement complex to the west of the mine area. For the most part these features trend from N30° W to N30° E and dip from 40° to 70° in both directions.

In the mine area itself a zone of strong shearing passes 300 feet west of No. 2 shaft and has been traced for several thousand feet along its irregular N30° E trend and 45° west dip. Much of its length is marked by 15 feet or so of sheared basic rock, probably intrusive, and alternatively

considerable stretches carry a massive quartz vein 5 or more feet wide. In one spot, some distance north of the No. 1 porphyry pipe, the quartz carries considerable copper mineralization and a small shaft has been sunk 50 feet or so on the vein.*

A second zone of fracturing and shearing in the mine area strikes N30° E with a 50° to 60° east dip and passes just west of the No. 3 porphyry pipe. Its course is marked by intermittent occurrences of basic dyke material and in one place near "O'Brien gulch by quartz veining. The basic dyke material is occasionally accompanied by copper mineralization in quartz veinlets and one such area has been investigated by the Black Bear workings near the edge of the No. 3 porphyry pipe."

*(WHITE BLAZE" - may be several hundred feet deep. Sampled for copper for copper by Gilmore Ref #11 - L.S.T. Nov. 1979)

ECONOMIC POTENTIAL - PART A

A. Gold Bar Underground Workings

The following information is sufficiently documented to be accepted as reliable.

A.1. Production History

- 1897 1905 4000 tons grading 0.90 ounces gold per ton from glory hole and shallow underground workings.
- 1907 1908 20,000 tons grading 0.87 ounces gold per ton above the 385 level. (No ore has been milled since 1908)

A.2. Mill Test

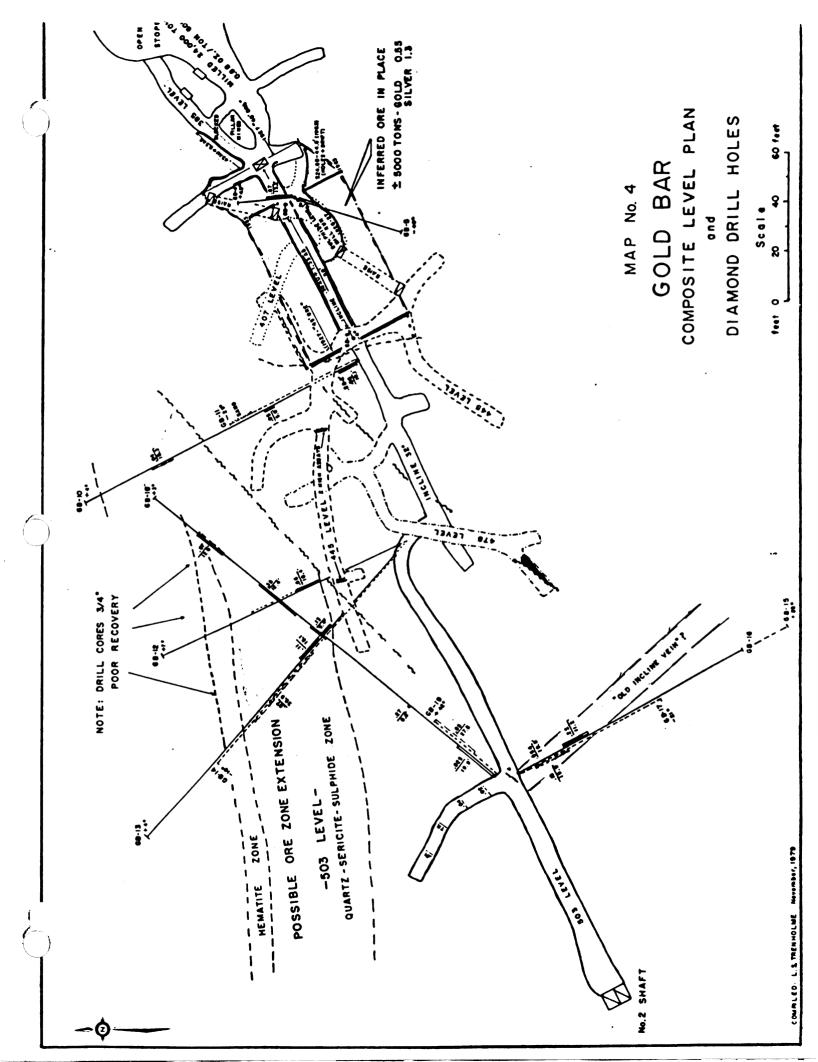
1926 - 1927 A test mill run from a sulphide lens in 407 south drift.

Tons Milled 63.75 Tons Concentrate 14.3

Calculated Grade from Concentrates and Head Sample: Gold
1.30 oz/ton, Silver 3.2 oz/ton.

A.3. Channel Sampling

- 1926 1927 Underground sampling by Shanklin (3) was checked by other examiners (7,8,10). Sample locations which can be reasonably well identified are as follows.:
- 3.1 Samples from incline between 385 level and 445 level (90 feet slope distance):
 15 samples (#59-#73) averaged gold 0.55 oz/ton, silver
 1.33 oz/ton.



- Five samples from 385 level near top of incline (#40-#44) over a wall length of 20 feet averaged gold, 0.43 oz/ton and silver, 0.43 oz/ton.
- 3.3 407 south drift: 14 samples over a drift length of 50 feet averaged; gold, 0.67 oz/ton and silver 3.55 oz/ton.
- 3.4 445 north drift: 18 samples (#85-#102) including 2 high erratics, taken over a drift length of 60 feet averaged: gold, 0.296 oz/ton and silver 0.3 oz/ton.

All of the foregoing samples are assumed to be regular channel samples taken from the walls and backs, though they are not so specified, and the material they represent is still in place.

A.4. Other Sampling Results

- 4.1 Shanklin (3) states the ore zone to have a width of 45 feet on both the 385 level and the 445 levels.
- 4.2 McCarthy (12) says combined drift and drill core assays on 407 level show a grade of \$25.60 (= 1.19 oz/ton gold) per ton across a combined horizontal width of 44.8 feet.
- Drill Hole GB-4 is the only hole of record drilled into the hanging wall of the known ore zone and the only source of information as to thickness of the ore between the 445 and 385 levels. This hole (at + 45°) intersected 13.2 feet grading gold, 0.67 oz/ton and silver, 0.53 oz/ton. Thus thickness of ore (drift plus drill intersection) is estimated at 16 feet.

 Note: Holes GB-5 and GB-9 were drilled into the footwall of the ore zone.

A.5. Estimate of Ore in Place (Between 385 and 455 Levels)

Sampled Length
Reported Width
Thickness
Cubic Feet per Ton
Total
Removed:
200' x 6' x 5'

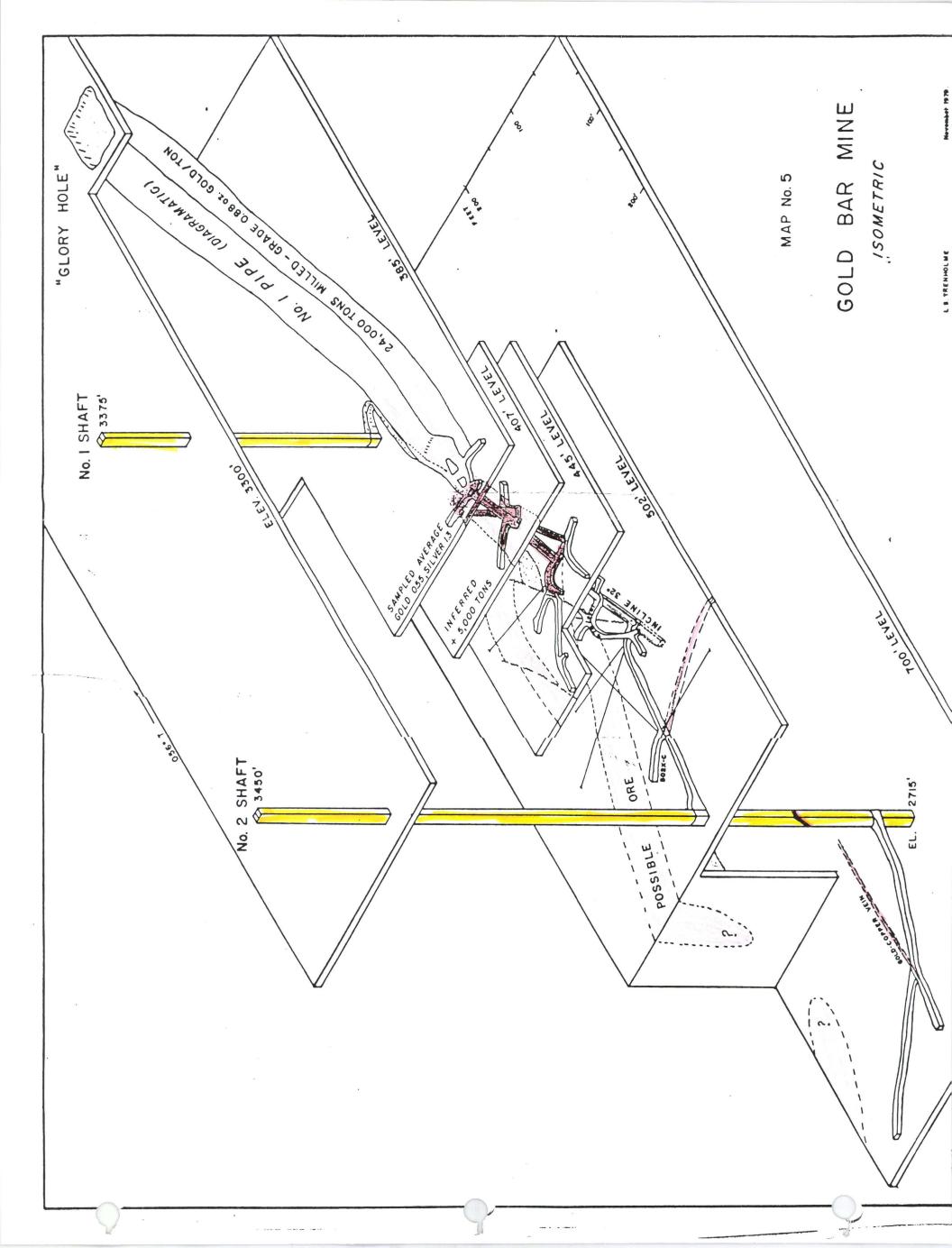
500 Tons

Ore in Place

4900 Tons (minimum)

Grade (Average of Incline) Gold 0.55 oz/ton Silver 1.30 oz/ton Gross Metal Value (Gold @ U.S. \$375.00 oz) (Silver @ U.S. 16.00 oz)

= \$227.00 per ton



It appears likely that some additional ore could be obtained from the 385 level.

It is also possible that the ore has a greater average thickness than indicated by hole GB-4.

Some previous estimates of ore projected below the 385 level are as follows:

		Tons	Gold (oz/ton)
Shanklin	1927	92,000	0.6
Burkey	1927	39,000	0.5
Hyde	1929	69,000	0.6+
Flagg	1929	11,000	0.53
Halbrooke	1963	17,000	0.6

As mentioned before, recently acquired drill core sampling results indicate the thickness of the ore zone (at one point only) to be about 16 feet, versus greater thicknesses used by previous writers.

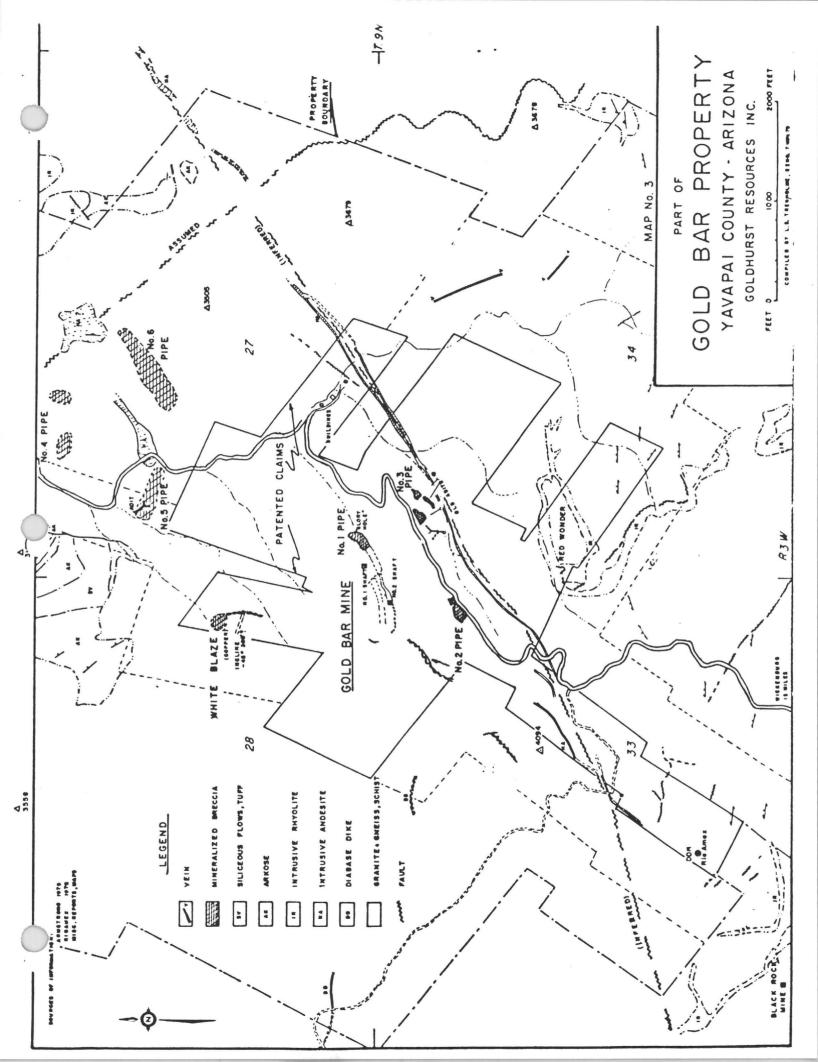
A.6. <u>Underground Diamond Drilling Results</u>

Holes GB-1 to GB-8 inclusive, were drilled in 1963 and GB-9 to GB-19 inclusive, were drilled by Goldex Inc. in 1975-76. All obtained "E" core of 3/4" diameter with predictable poor core recovery.

No systematic logging or sampling of these cores was done until 1979 (by P.K. Brown for Denison Mines Ltd.) A summary of Brown's sampling follows on page 11.

Map No.4 shows the offset ore zone to continue to the southwest with a width of about 40 feet on the 503 level; with some fair grade intersections over widths of 10 to 20 feet.

Because of very poor core recovery and the tendency for disproportionate grinding loss of gold-bearing sulphides in a quartz-sericite-sulphide-breccia environment, it is this writer's opinion that the recorded values are considerably below the actual values.



SUMMARY OF UNDERGROUND DRILLING

GOLDEX 375 - 76 Logged and Sampled By P. K. Brown (Denison) 1979

Hole	Location	Bearing True	Dip.	Depth Feet	From	입	Feet	Assays (Poz. Gold	(Per Ton) oz. Silver	% Copper	Core Recovery
GB-1 GB-2 GB-3	407 STA "			1 1 1	1 1 1	1 1 1	1 1 1				
GB-4 GB-5 GB-6	407 STA 407 STA 407 STA	348° 192° ?	+44° -41°	33.2 58.9 35.9	2.0 N/S N/S	15.2	13.2	0.67	0.53	0.003	53%
GB-7	407 STA	002°	-47°	<i>~</i> ،	Missing						
68-8	407 STA	<i>د</i>	<i>د</i> ٠	48.3	N/S						
GB-9	Incline-450'	020	+ 4°	56.0	N/S						
68-10	Incline-450'	330°	+ 4°	135.0	6.6	10.1	3.5	0.18	0.18	0.005	95%
68-11	GB-11 Incline-450'	330°	-29°	67.2	N/S						
68-12	503-Jet	335°	+ 7°	105.0	35.0 50.0	50.0	15.0	0.44	1.47	0.33	84%
68-13	503-Jet	310°	+ 4°	151	38.6	56.7	18.1	0.11		1.14	84%
68-14	503 X-C	310°	-10°	112	52.5	88.4	35.9	0.07	ı	0.01	68%
GB-15	503	149°	+25°	139	49.0	95.0	46.0	0.02	1	0.005	70%
68-16	503	149°	+ 4°	103	20.8	32.0	11.2	0.22	0.77	0.002	57%
68-17	503	149°	-21°	17	7.5	23.4	15.9	0.13	٦	0.007	35%
GB-18	503	035°	°n +	178'	0.0 44.2 88.6 104.6 143.0	19.9 45. 96.0 124.0 155.0	19.9 0.8 9.4 12.0	0.025 0.210 0.017 0.380 0.07	0.10 0.6 0.2 0.64 0.14	0.005 0.10 0.01 0.18	86 86 87 87 87 86 86 87 87 86
68-19	503	032。	+45°	45'	16.8	44.6	27.8	0.05	0.67	0.872	84%
	TOTAL DRILLING (APPROX	TNG (APPRO	,	1400 feet					*		

A.7 Tonnage Potential 445 Level to 700 Level

Cross-section 40! x 20' Assume:

Slope length 600'

Then $\frac{40 \times 20' \times 600'}{12}$ = 40,000 Tons

This is considered to be minimum expectation for the dimensions of the mineralized "ore zone". In particular the perpendicular dimension used (20') could, from geological considerations, be much greater.

A.8. Proposed Underground Exploration

Following de-watering and shaft rehabilitation:

- Extend 503 N x-cut 80 feet to cross ore zone 8.1
- 8.2 Drift along footwall minimum 100 feet
- 8.3 Raises to hanging wall (3) Total 100 feet
- Raise on 445 level and 407 level to locate hanging wall (2 @ 30' = 60 8.4 feet).
- Slash one wall of incline between 445 level and 385 level for bulk 8.5 sample. $\frac{100 \times 3 \times 5}{12}$ = 125 Tons
- Establish separate surface stock piles for ore, margined ore and waste. 8.6
- Ring drilling from 503 drift and x-cut using AXT core drilling equip-8.7 ment (1 3/4" Core).
- If results are encouraging, drill one hole north from 700 west drift 8.8 to test southwesterly plunge.

ECONOMIC POTENTIAL - PART B SURFACE EXPLORATION TARGETS

Breccia Pipes Nos. 2 - 6, inclusive: appear to have structure B.1. and mineralogy similar to No.1 Pipe but remain relatively unexplored.

No.2 Pipe: rectangular outcrop 100' x 230'. Some copper Reported that gold can be panned from detritus. oxides.

No. 3 Pipe: several rectangular segments within area of 220' x 360'. No workings in the breccia body, but nearby veins have been explored by old adits and inclines with sparse assay data as follows: (per Gilmore, 1955).

- a) Black Bear Tunnel Gold 0.34, 0.14, 0.24 Mo 1.14%, 0.38%, 0.57% Dump average 10 samples: Gold 0.08 oz/ton
- b) Old O'Brien Drift Gold 0.02 oz/ton, U = 0.11%

No.4 Pipe: no information except map location

No.5 Pipe: 90 feet of x-c and 95 feet drifts

No other information.

No.6 Pipe: about 200' x 1000'. Verbal report of gold showing -

no other information on hand.

B.2. White Blaze Vein and Breccia Pipe

Incline shaft - 45° West. Minimum depth 145 feet (Gilmore)

Owner thinks 300-400 feet depth. Strong fracture zone with

massive granite hanging wall strikes N20°E. Abundant secondary

copper minerals across 6'-8' true thickness.

Sampled by Gilmore, 1955, to 45 feet below the collar - "The copper runs from 0.58% to 12% with an average of better than 5% in 20 samples." Gold assayed only trace. Four specimens assayed for uranium ran as follows: 0.07%, trace, 0.09%, 0.16%. These were not assayed for molybdenum.

B.3. The Blue Moon Vein is exposed about 200 feet east of the Glory
Hole and strikes NW towards the White Blaze. Samples by Gilmore
assayed as follows:

	oz/	ton			
	Gold	Silver	Copper	Uranium	Mo
Outcrops	0.20	1.40	12%	Trace	-
Tunnel	0.16	1.28	0.68%	Trace	-

Steinmesch reports a shipment in 1933 assaying gold, 1.13 oz/ton, copper 2.32%.

- B.4. "Pebble Dike" a zone of finely crushed quartz with pyrite mineralization extends ENE from the vicinity of the Glory Hole. It is exposed at intervals in the floor of the gulch where it appears to have a width of 6 to 8 feet and is reported to carry good gold values.
- B.5. <u>Red Wonder</u> a 25 foot-zone in rhyolite porphyry is reported to have been traced for a considerable distance to the southwest. An old cut shows abundant malachite and azurite.

Samples taken by Gilmore assayed as follows:

	0Z/ t	on			
	Gold	Silver	Copper	Mo	<u>U</u>
Prospect Cut	0.35	0.85	4.0%	0	0
Dump	1.04	-	11.03		0
Dump	0.09	-	0.52	-	-

B.6. "Porphyry - Copper" Concept

The combination of the "breccia pipes", alteration zone, fault structures and metallic mineral associations has prompted various geologists to speculate on the presence of a large disseminated copper-molybdenum ore body on the Gold Bar property.

For this reason one deep hole (2200') was drilled by Rioamex in the southern part of the property. Although this hole did not achieve the desired results, this writer believes that the

concept is a valid one and worthy of further detailed study.

B.7 PROPOSED GENERAL PROPERTY EXPLORATION

- STAGE I Local detailed mapping and sampling.
 - 7.1 After a location check, sample the White Blaze incline at regular 10-foot intervals from the collar to the water table.

 Assay for copper and molybdenum and check radioactivity.
 - 7.2 Map structural detail of other breccia pipes to ascertain probable attitudes.
 - 7.3 Detailed mapping, plus sampling, of all other showings.
 - 7.4 Assaying: particular attention should be paid to molybdenum which has been reported in important amounts from the Glory Hole, the Black Bear "Blow out" (No. 3 Pipe) and the Black Bear Tunnel, but was not tested by Gilmore at the White Blaze and other breccia pipes.
 - 7.5 All showings should be checked with a scintillometer to determine if there are any significant concentrations of uranium, particularly at the White Blaze. Consideration can then be given to a general radiometric survey of the property.

CONCLUSIONS AND RECOMMENDATIONS

1. The Gold Bar underground workings can be re-habilitated at moderate cost and will provide access to a modest amount of ore in place with an excellent chance of developing larger reserves grading \$200.00 per ton in gold and silver with possible credits for molybdenum and copper.

- 2. At least 5 other similar pipe structures on the property, reported to have similar alteration and gold values, are almost completely unexplored. Two of these structures are within 800 feet of the mine workings.
- 3. The White Blaze deposit, 1500 feet north of No.2 Shaft, has been partially explored by an inclined shaft. Limited sampling to date inidcated a grade of over 5% copper across a vein width of 6 to 8 feet. More sampling is required.
- 4. Various other cuts and adits on the property suggest the possibility of providing additional gold-silver-copper-molybdenum ores to a central mill.

It is therefore recommended:

- i) that No.2 Shaft be de-watered and re-habilitated to provide access for the detailed exploration outlined in the proposals on page:12.
- ii) that, concurrently, detailed mapping and sampling of surface showings be carried out according to the proposals detailed on page 15.

COST ESTIMATE - PART 'A' - MINING PROGRAM						
(Based on 6-day week, 1 shift per d		Days				
REHABILITATION Shaft de-watering Note:(1)	\$ 5,000		10			
Headframe re-inforcement and partial replacement Note (2) Shaft re-timbering (0-300') (Note (3)	18,000	a				
	10,000	\$33,000	30			
EXPLORATION HEADINGS (Contracts)						
Drifting & crosscutting (800 tons ore & waste) Note (4) 200 feet @ \$100/ft.	20,000		35			
Raising (ore - 250 tons) 150 feet @ \$80/ft.	12,000		32			
Slashing (ore - 150 tons) 100 feet @ \$50/ft.	5,000	37,000	10			
DIAMOND DRILLING (Contract) 1000 feet NXT @ \$12/ft. Note (5)		12,000	concurrent			
GENERAL OPERATING						
Rentals, fuel, wages, supplies 4 months @ \$10,000/mo.		40,000				
DEVELOPMENT AND STOCKPILING						
(2 shifts - 40 days @ 50 t.p.d. 2000 tons @ \$24/ton. (Mining plus general operating c		48,000				

TOTAL PART 'A'

\$170,000

\$187.000

17,000

Note (1) per previous experience (2) materials available (3) surplus materials available (4)(5) per quotations (6) hoist on site

CONTINGENCIES - 10%

COST ESTIMATE - PART 'B' - GENERAL PROPERTY EXPLORATION

Geologist - 2½ months @ \$2000/mo. Sampling & assaying		\$5,000 2,000
Legal & accounting Miscellaneous & travel		5,000 1,000
Miscerialieous a craver	TOTAL	\$13,000

SUMMARY

PART 'A' - Mining \$187,000 PART 'B' - Exploration 13,000 TOTAL \$200,000

L.5. Vierholve 20-11-78

REFERENCES

	•	
Hills and Willis '	Report to Interior Mining and Trust Company	January 1908
H. L. Berkey		February 25, 1927
W. R. Shanklin	"Report on the Gold Bar Mine"	April 1927
V. G. Hills	"Mill Test Run"	1927
Magma Copper Company	Ore Shipment Letter Report	April 22, 1927
A.S. & R.	Ore Shipment Report	April 26, 1927
George P. Hyde	(for Foote & Company)	May 5, 1929
A. L. Flagg	Report of Examination (Foote & Co.)	May 10, 1929
A. L. Flagg	Check Sampling Report	April 20, 1934
J. H. Steinmesch	Report of Partial Exam- ination	July 1934
E. L. Gilmore	(Surface Sampling)	December 1955
Donald P. McCarthy	Report	April 1963
G. L. Holbrooke		October 23, 1963
Dana C. Durgin	(Rio Amex)	March 4, 1977
Edward J. Armstron	Goldex 1975-76	December 1978
P. K. Brown	(Denison Mines)	July 6, 1979

CERTIFICATE

The undersigned certifies that:

- He is a graduate geologist (M.Sc., McGill, 1939) and that he has practised as a mining and exploration geologist continuously (except 1942-1945) to the present time.
- He is a member in good standing of the Association of Professional Engineers of the Province of British Columbia and conducts a consulting practice from his office at #508 - 475 Howe Street, Vancouver, B. C.
- 3. He made a personal examination of the surface features of the Gold Bar property on September 24th and 25th, 1979 and since that time has studied numerous reports and other records pertaining to earlier mining and exploration activities thereon.
- 4. He does not own and does not expect to receive any financial interest, direct or indirect, in Goldhurst Resources Inc. or in any of the properties described herein or in any adjacent properties.
- 5. Goldhurst Resources Inc. is hereby authorized to use this report or any part of it (not taken out of context) for the purpose of a financial prospectus or any filing statement required by any Canadian regulatory authority.

DATED at VANCOUVER, B. C. this 15th day of November, 1979.

1.5. Tembolow 20-11-79

