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PART 1 OF 3

PRINTED: 07/11/2001

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: GOLD BAR

ALTERNATE NAMES:
O'BRIEN
BLACK BEAR, PATENTED
HOMESTAKE, PATENTED
LITTLE JIM, PATENTED
CROWN, PATENTED
INTERIOR MINING AND TRUST CO.
JENNY LYNN PATENTED

YAVAPAI COUNTY MILS NUMBER: 399

LOCATION: TOWNSHIP 9 N RANGE 3 W SECTION 33 QUARTER NE
LATITUDE: N 34DEG 05MIN 01SEC LONGITUDE: W 112DEG 34MIN 10SEC
TOPO MAP NAME: MORGAN BUTTE - 7.5 MIN

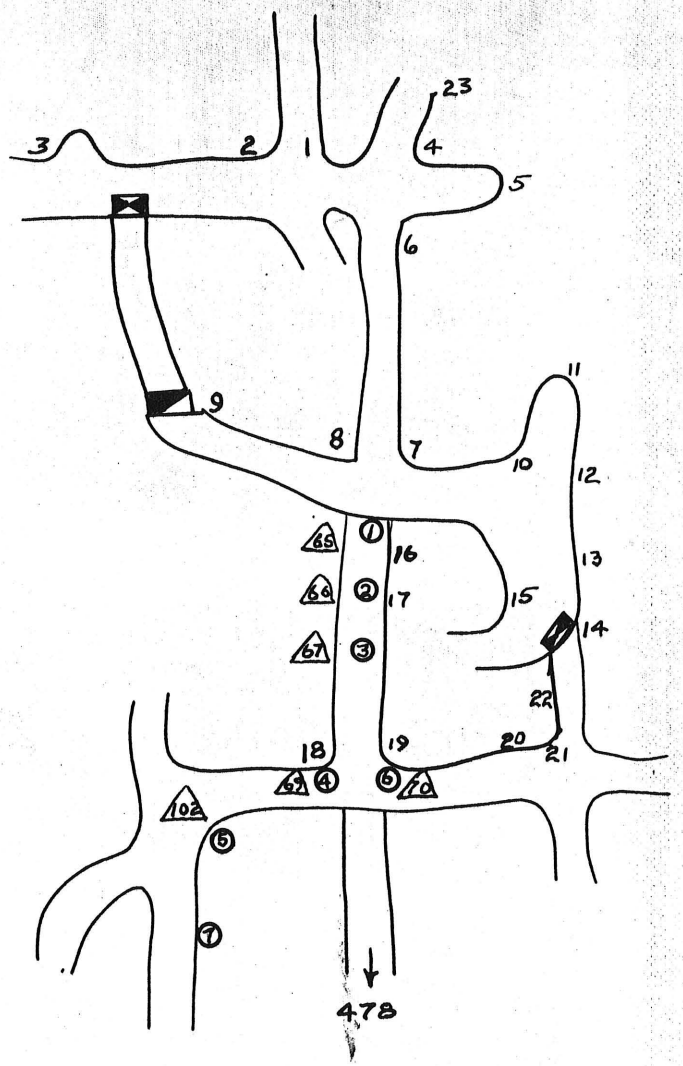
CURRENT STATUS: PAST PRODUCER

COMMODITY:
GOLD
SILVER
IRON HEMATITE
SULFUR
SILICON
QUARTZ CRYSTAL

BIBLIOGRAPHY:
WILSON, E.D. ET.AL. AZBM BULL 137 1967
PP 63-67
USGS MORGAN BUTTE QUAD
BLM MINING DISTRICT SHEETS 259, 260
ADMMR GOLD BAR MINE
AZ MINING JOURNAL MAR. 1918 P 23, DEC. 1918
P 7
ADMMR JENNY LYNN FILE
KOSCHMANN, A.H. & M.H. BERGENDAHL PRINCIPAL
GOLD-PRODUCING DISTRICTS OF THE US USGS
PP 610 1968 P 47
CLAIMS ALSO IN SEC. 27, 28 & 34
USGS MIN. RES. US 1907, P. 181
DEVAULT'S HAVE CLAIMS IN SEC. 27, 28, 33 & 34
T9N-R3W
ADMMR GOLD BAR MINE COLVO FILE

NUMBER	FILE	CONT	CONT1	PRINAME								
399	F	0	Y	GOLD BAR								
ALTNAME1					ALTNAME2							
O'BRIEN					BLACK BEAR, PATENTED							
ALTNAME3					ALTNAME4							
HOMESTAKE, PATENTED					LITTLE JIM, PATENTED							
ALTNAME5					ALTNAME6							
CROWN, PATENTED					INTERIOR MINING AND TRUST CO.							
CURSTAT			MNAME						NLATDEG	NLATMIN		
PAST PRODUCER			MORGAN BUTTE - 7.5 MIN						34	05		
NLATSEC	WLONGDEG		WLONGMIN	WLONGSEC	TOWN	RANGE	SECTION		QUARTER	COM1		
01	112		34	10	9 N	3 W	33		NE	AU		
MODI1	COM2		MODI2	COM3	MODI3		COM4	MODI4				
	AG			FE	HEMATITE		S					
COM5	MODI5		COM6	MODI6	COM7	MODI7						
SI			QTZ	CRYSTAL								
BIB1												
WILSON, E.D. ET.AL. AZBM BULL 137 1967												
BIB2												
PP 63-67												
BIB3												
USGS MORGAN BUTTE QUAD												
BIB4												
BLM MINING DISTRICT SHEETS 259, 260												

GOLD BAR MINE, East of Wickenburg



SKETCH SHOWING SAMPLING

LEVELS - 385 - 407 - 445

SHANKLIN - HYDE ⚠

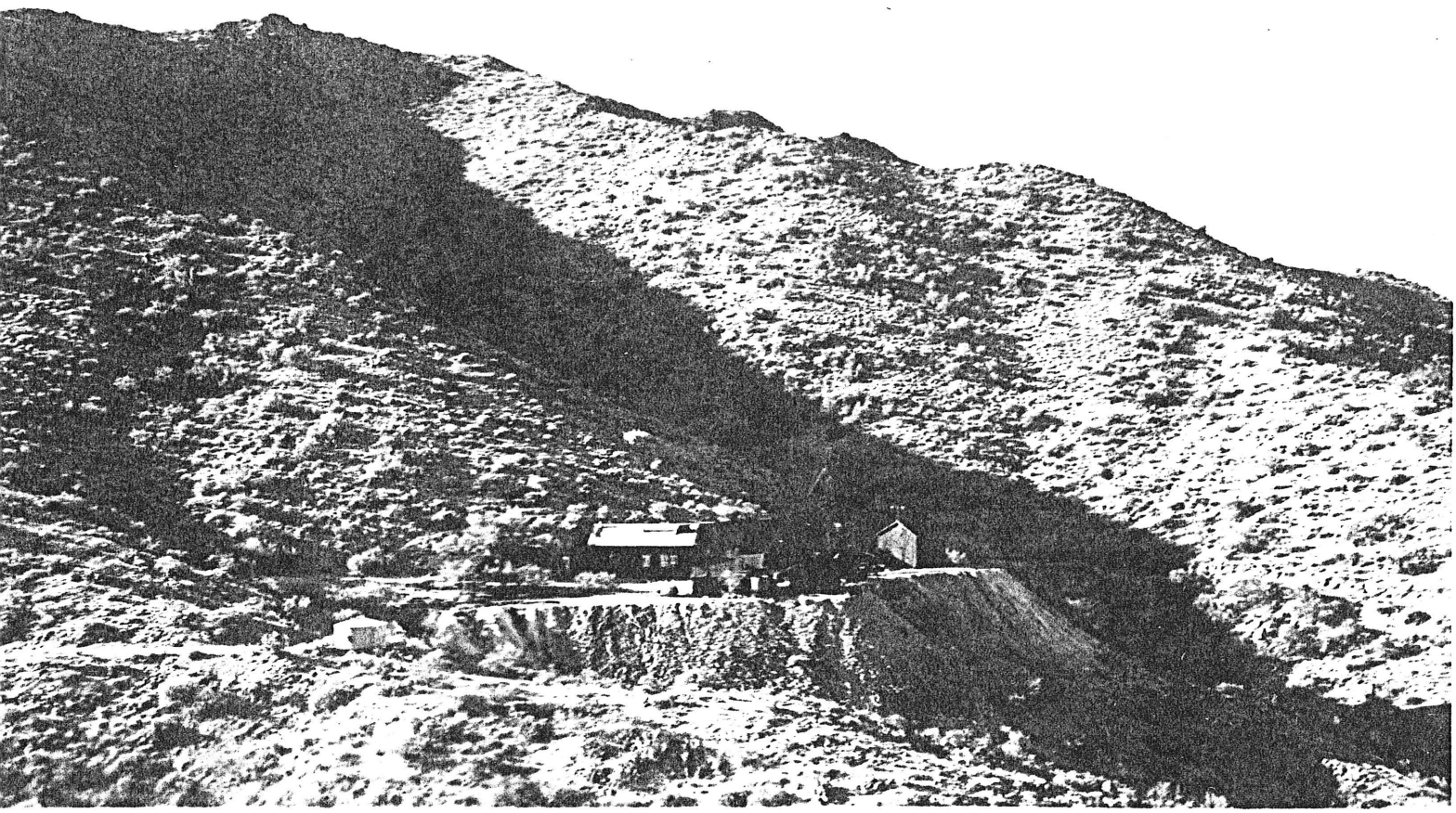
SMITH - HOLDERNESS — 1

A. L. FLAGG ①

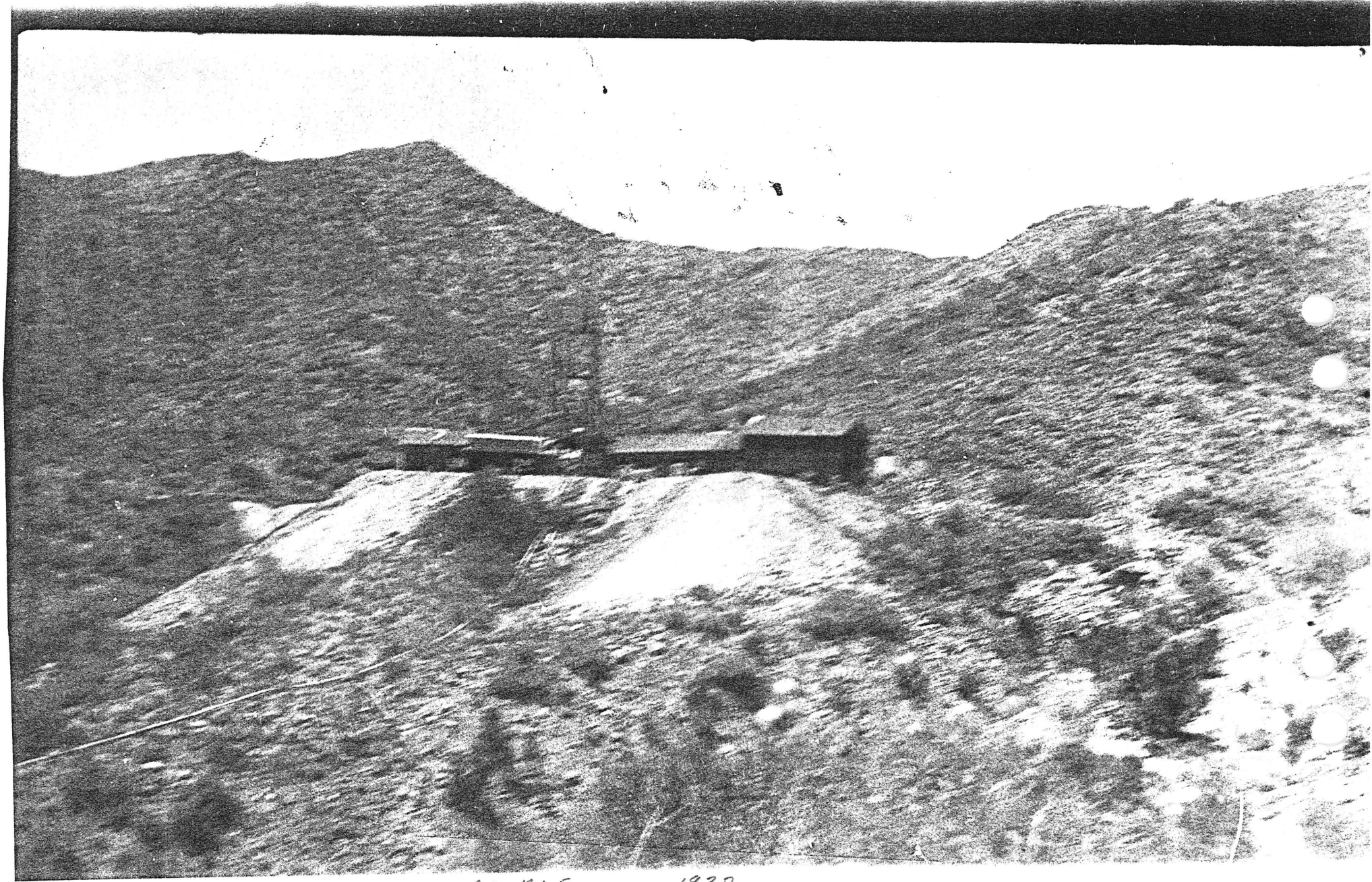
(NOT TO SCALE)

4-20-31

A-62-1 #1 SHAFT BY C.H.M. C-1950

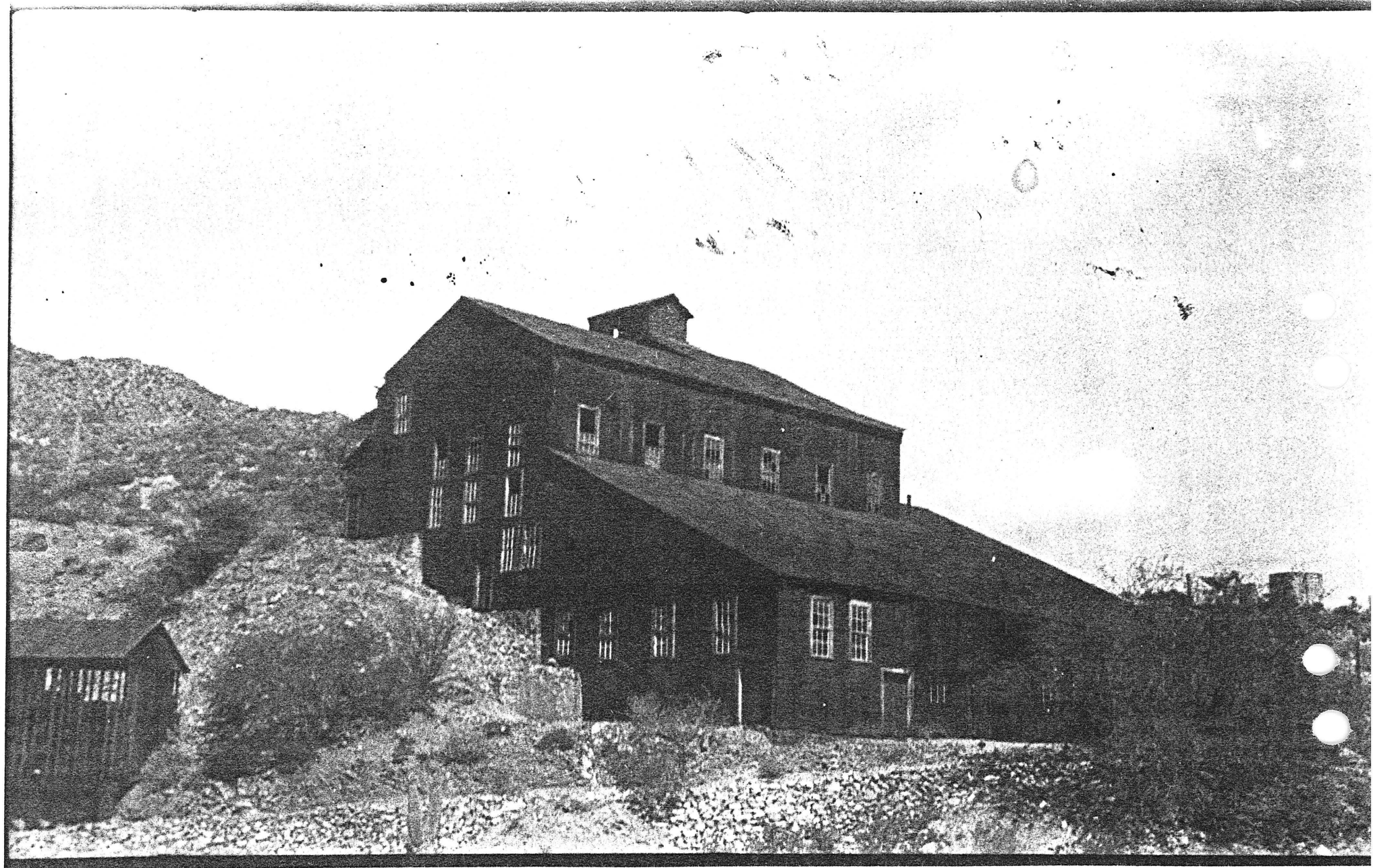


A-62-2 #2 SHAFT BY C.H.D. C-1950



D-228-4 #2 SHAFT BY A.L.F. 1930

D-228-3 GLORY HOLE BY-ALF. 1930 #2 SHAFT #1 SHAFT



D-228-5

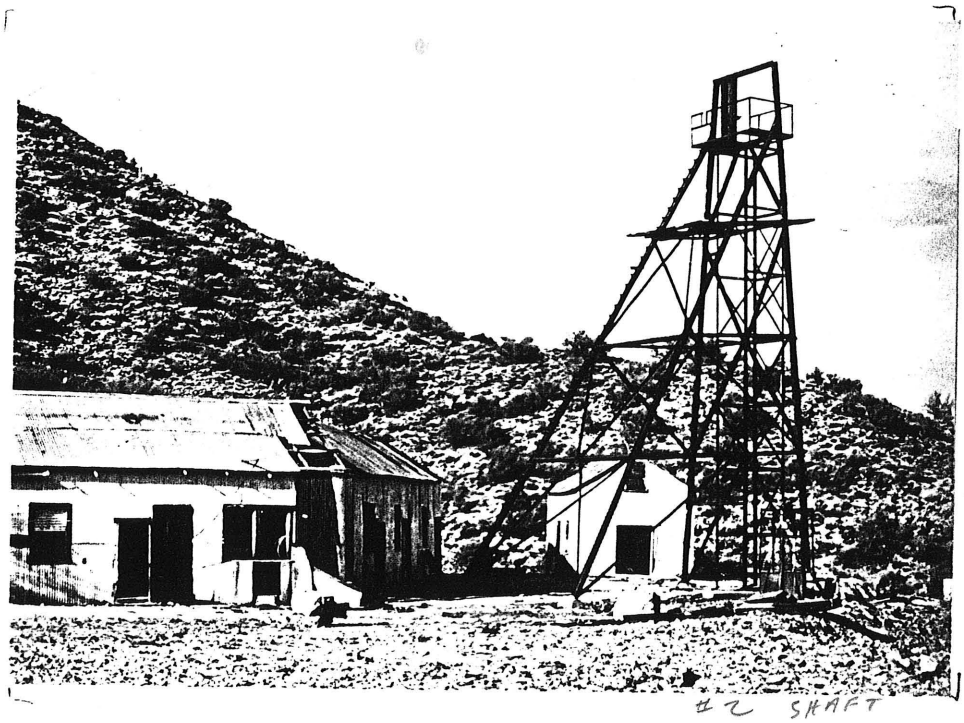
MILL

BY - A.L.F. 1930

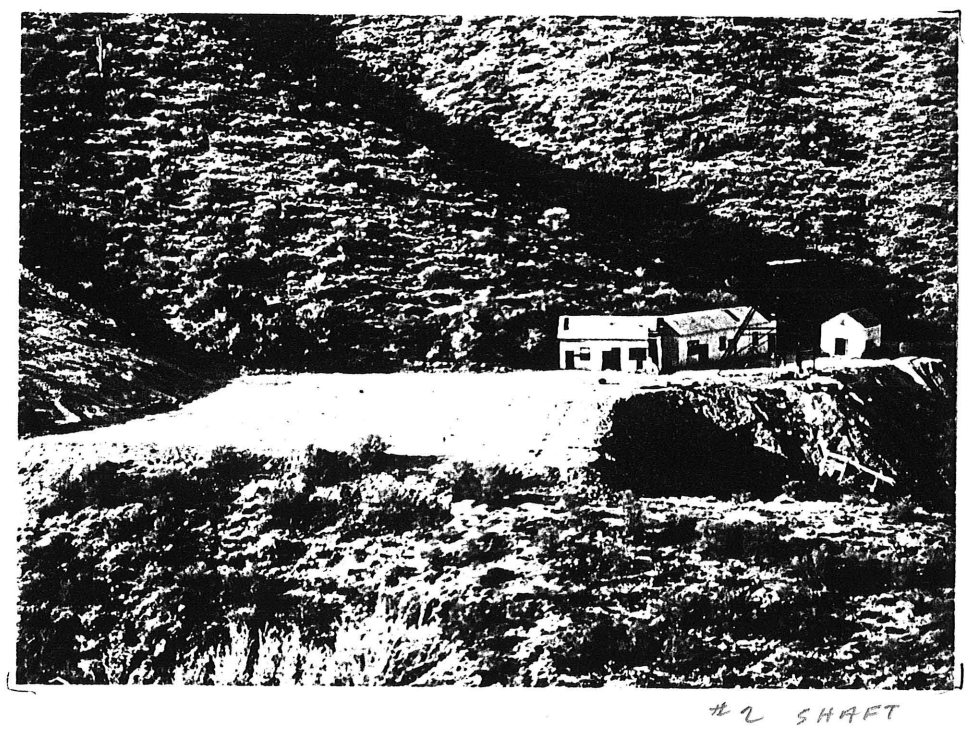
TANKS STILL THERE

CONCENTRATE SHED STILL STANDS (LEANS)

GOLD BAR PROPERTY

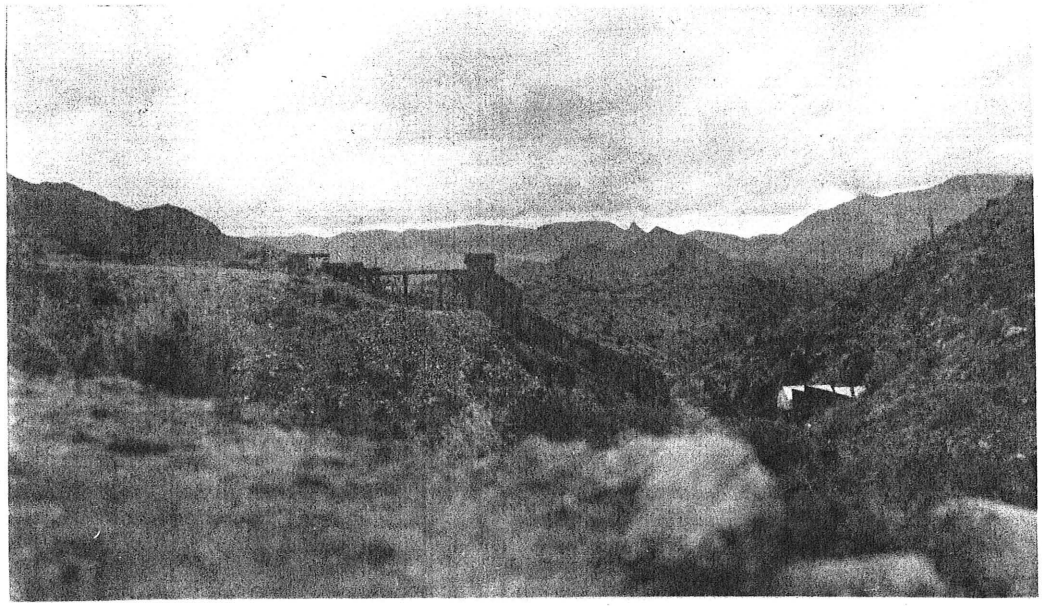


Buildings and headframe of the Gold Bar.



Overall shot of the working area.

Photos by Nyal Niemuth, December 26, 1981.



O'Brien's Mill and Camp

and continuity of ledge as well as surface values.

Interior Mining and Trust Co., or O'Brien Claims

This group lies to the east of Mahoney Peak and about two miles from Slim Jim Gulch by wagon road. The manager Mr.O'Brien was unwilling that any thorough sampling and measurements of the property should be made and permitted the sampling of the sulphide ores only, which will be of shipping or concentrating character if the development proves sufficient tonnage.

The country rock is granite. The outcroppings show an iron stained quartz in a porphyritic gangue. In the lower levels no walls have beendefined. The main shaft has been sunk to 340 feet where water is stated to have been encountered to an extent rendering additional equipment necessary for further sinking.

Considerable ore was taken from open cut work and drifts on the 100 foot level and milled. About 1700 tons of tailings running $2.65 per ton were cyanided with a yield of 90% or $2.45 per ton. The surface shows outcrop of at least four ledges converging toward a heavy quartz outcrop on a ridge which runs between the principle workings The lower levels show a quarts-porphyry carrying iron sulphides and Mr.O'Brien states that he feels assured of

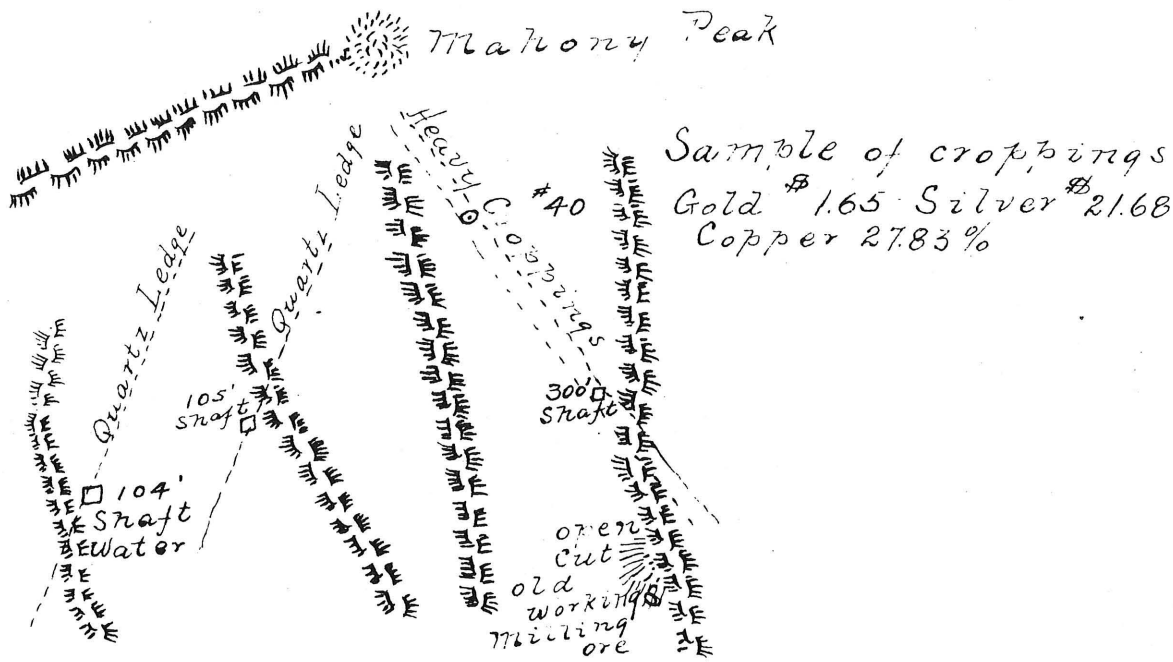
50,000 tons of concentrating ore on present developments. It would be difficult to measure any such amount, though the assumption might be proven reasonable with well directed and fortunate development. The samples permitted above the 300 foot level resulted as follows:-

See sketch for location of samples.

	Oz.per Ton Gold	Silver
32. Cut 4.5' at 22' below 200' level 160' raise	.04	.36
33. Cut 4.0' at 62' below 200' level 160'raise	.03	.30
34. Cut 4.5' at 102' below 200' level 160' raise.	.42	.36
35. Cut 3.7'at 132' below 200' level 160'raise	.56	2.90
36. Cut 5.0' at 142'below 200' level 160'raise	1.96	8.74
37. Cut 4.3' wall drift at junction with winze	3.80	14.54
38. Cut 5.5' vertical in tunnel under winze 20'in.	1.30	3.10
39. Cut 7.0'vertical in tunnel under winze 10'in.	1.96	.76
40. Outcroppings on main ledge selected shipping	.08	38.72

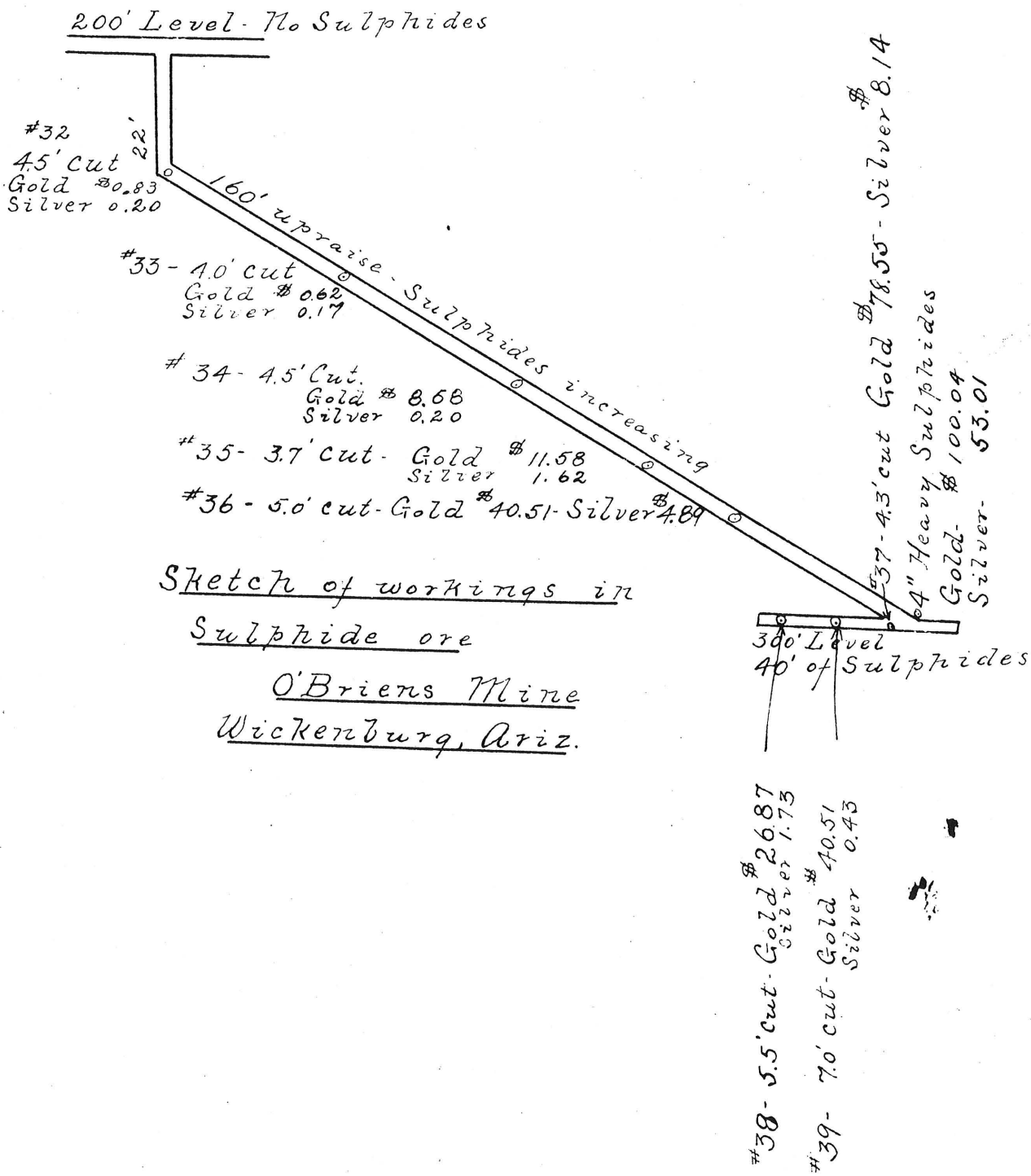
Copper 27.83%

A concentration test of 32 to 39 showed 6 into 1 with concentrates carrying Gold 4.48 oz. Silver 8.12 oz. This shows but 59.2 % of the gold and 34.8% of the Silver saved. It is however certain that amalgamation would better this saving if combined with the concentration, since satisfactory amalgamation results have been obtained in actual work on ore from this raise.



Sample of croppings
Gold $1.65 Silver $21.68
Copper 27.83%

General sketch - showing approximate positions of croppings and workings on O'Briens property Wickenburg, Arizona

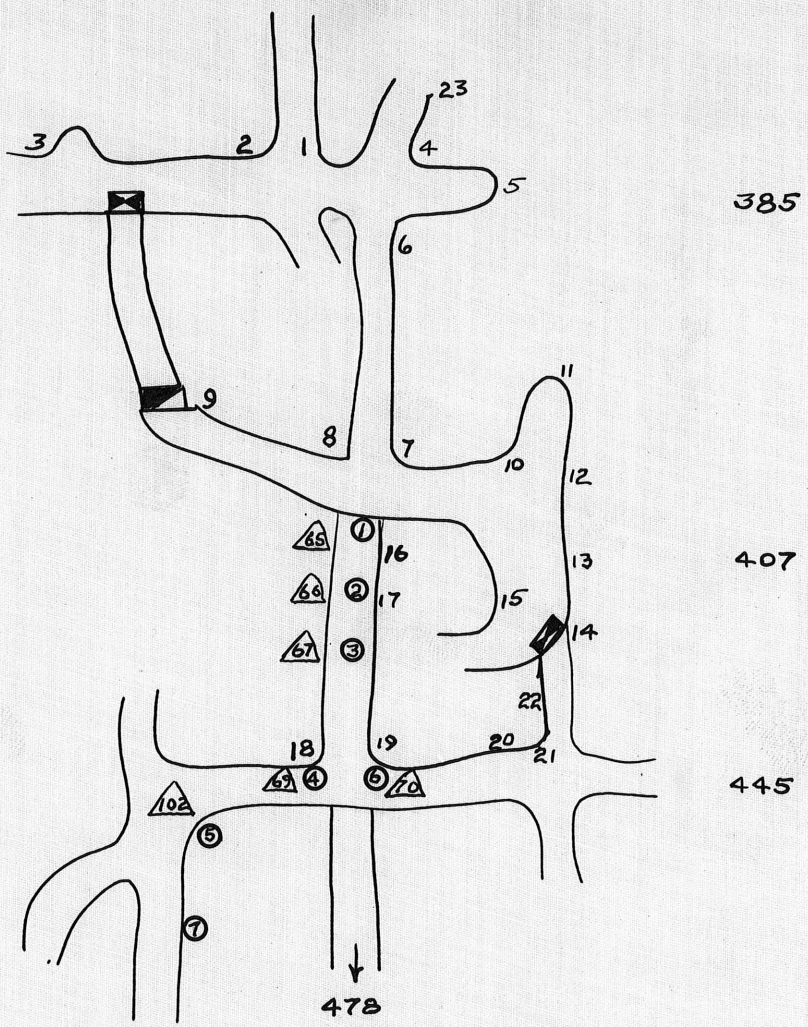


Sketch of workings in Sulphide ore

O'Briens Mine

Wickenburg, Ariz.

GOLD BAR MINE, East of Wickenburg



SKETCH SHOWING SAMPLING

LEVELS - 385 - 407 - 445

SHANKLIN - HYDE ①

SMITH - HOLDERNESS — 1

A. L. FLAGG ①

(NOT TO SCALE)

4-20-31

GOLD BAR YAVAPAI COUNTY

NJN WR 10/4/85: Allan St. James (c) reported that at the Gold Bar (f) Yavapai County Sunshine drilled in early 1984 two or three holes about 500' thick. The results of the drilling were not revealed.

GOLD BAR MINE YAVAPAI COUNTY

DO NOT REPRODUCE Nr. Wickenburg

11-23-77 - A map of Black Rock District, and a map of Wickenburg showing points of interest, filed in Wickenburg general file. 11-23-77 bh

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KAP WR 3/12/80: An unconfirmed report was received that some had purchased the GOLD BAR MINE, Castle Hot Springs District, Yavapai County, and that some one is now living on the property.

RRB WR 9/26/80: Mr. W.M. "Bill" Anderson, Box 12682, Dallas, Texas 75225, reported that some one is doing some work at the Gold Bar, Yavapai County.

RRB WR 1/16/81: Mr. Ivanoff of the Gold Bar, Yavapai County, reports that they are installing a headframe and will be going underground to sample and maybe produce some development ore. They prepared a pad foundation last summer and are considering leaching up to 50,000 tons of ore at .28 to .30 tr.oz/ton Au.

KAP WR 6/25/81 - Russ French reported that anew headframe has been erected at the Gold Bar property, Black Rock Dist., Yav. Co.

RRB WR 3/12/82: Visited the Gold Bar in Yayapai County and talked with the watchman. He reported that the property was leased by a Canadian by the name of Ivanoff. They have not done much since being vandalized.

GOLD BAR MINE (card) Yavapai County
Constellation District

CJH WR 3/25/80: Jack and Dorothy Devault, Box 1498, Wickenburg AZ 85358, phone 684-5514, own the GOLD BAR and UNIDA Mines, Constellation District, Yavapai County. The GoldBar has been leased to a Mr. Steve Ivanoff representing a Canadian company who will operate it under the name SAVANNAH HOLDINGS.

See: SAVANNAH HOLDINGS (card)

RRB WR 5/16/80: Visited Gold Bar Mine, Sec. 33, T9N,R3W, Yavapai County. No activity.

5/13/80

GOLD BAR MINE YAVAPAI COUNTY

DO NOT REPRODUCE

Elmer C. Von Glohn, Golden Gate Mining Co., Inc. (Arizona Corp.)
P.O. Box 1118, Wickenburg, Arizona. Office in Rancho Grande Motel.

Gold Bar Claims now owned by Ward Twitchell according to E. C. Von Glohn who is interested in them.
FPK 2-28-61

Went to the Gold Bar-O'Brien mines 2 miles north of Constellation or 14 miles NE of Wickenburg. Here Ed Huffman, about 70 years has been watchman more than 4 years. He said the properties, 15 unpatented claims were purchased about 2 years ago by Messrs. Cole and DuVault from the Twitchel family, Wickenburg. Shortly after the sale a Mr. Eddington of Washington perhaps Spokane, took a lease on it had has since staked more than 100 claims in the vicinity and has a young geologist working on the surface. The Gold Bar has a 700 foot vertical shaft and the O'Brien has a small glory hole stope. The camp, in O'Brien Gulch consists of 3 stone and adobe buildings, the largest of which is a 2 story and was originally the stage depot and later a ~~xx~~ school house, according to Mr. Huffman. GW WR 1-23-74

Dan Jacobs said Gold Bar mine belongs to Duval. Have not verified this. FTJ WR 4-11-74

Goldex Mining Company of Spokane has an option on the Gold Bar-O'Brien mines 14 miles NE of Wickenburg. They located more claims and were mapping and sampling theproperty. FTJ AR 73-74

Phone call from Ed Armstrong of the Gold Bar Mine, P.O. Box 2024, Wickenburg, 85358.

Ed Armstrong, geologist for Goldex Inc., 417 Paulson Bldg, Spokane, Wash., 99201, said they had completed unwatering and timbering the Gold Bar property and were going to start drilling underground. Wickenburg address is P.O. Box 2024. FTJ WR 3/13/75

There is no activity at the Gold Bar mine. GW WR 10/17/75

Ed Armstrong, of Goldex, called for information on the Beehive mine, about 2 meles east of the Octave, saying, the owner, Louis Meitz, Lansing, Mich., had contac ted his company to take it over. GW WR 6/11/76 (6/10/76)

11-23-77 - A map of Black Rock District, and a map of Wickenburg showing points of interest are filed in the Wickenburg ganeral file. 11-23-77 bh

Taken from "ARIZONA LODE GOLD MINES AND MINING" ARIZ.BUREAU OF MINES #137,p 63
(August 15, 1934)

Yavapai County
Blackrock District

GOLD BAR OR O'BRIEN MINE

The Gold Bar or O'Brien mine is 15 miles by road northeast of Wickenburg and 2.7 miles northeast of Constellation.

This deposit was located in 1888 by J. Mahoney. About 1901, the Saginaw Lumber Company erected a 10-stamp mill on the property and is reported to have treated 4,000 tons of ore that yielded about $60,000.[86] In 1907-1908, the Interior Mining and Trust Company is reported to have mined the ore body from the surface to the 385-foot level on the incline. This company erected a 100-ton mill, equipped with stamps, amalgamation plates, tables, and vanners. Heikes states that the 1907 production amounted to $33,402 in bullion and concentrates. These concentrates averaged, per ton, 2 ounces of gold, 3 ounces of silver, 49 per cent of iron, 15 percent of silica, and 15 per cent of sulphur.[87] He also states that, in 1908, $91,749 worth of gold came from the Black Rock district of which the largest producer was the Interior Mining and Trust Company.[88] About 1915, the company was reorganized as the Gold Bar Mining Company and a vertical shaft was sunk to the 700-foot level. In February, 1934, the property was under the trusteeship of the Commonwealth Trust Company, of Pittsburg, and was being worked in a small way by lessees.

This region has been deeply dissected by northward-flowing tributaries of Hassayampa Creek. The principal rock is medium-grained granite, with some inclusions of schist. It is intruded by pegmatite, granite-porphyry, and basic dikes. Fissuring in N. 70° E. and S. 30° E. directions is evident. The vein, which outcrops on the western side of O'Brien Gulch, at an altitude of 3,400 feet, occurs within a fissure zone that strikes N. 70° E. and dips 30° NW. Its filling consists of coarsely crystalline, glassy, grayish-white quartz. In places, the quartz from the oxidized zone is rather cellular with cavities that contain abundant hematite and limonite formed from pyrite. Pyrite is present in the deeper workings. The gold occurs as fine to mediumly coarse particles, both in the quartz and with the iron minerals. The wall rock shows intense sericitization.

The mine workings indicate that the ore shoot was a chimney that measured about 40 by 50 feet in cross-section at the surface and plunged 30° SW.

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86 - Oral communication from Ward Twichell.
87 - U.S.Geol. Survey, Mineral Resources, 1907, Pt. 1, pp. 182-83.
88 - Work cited, 1908, Pt. 1, p 310.

GOLD BAR MINE YAVAPAI COUNTY

Wickenburg (file) correspondence "Mines of Wickenburg" p. 24

A. L. Flagg vanadium reports - Book VI

USGS P.P. 610 p. 47

Eagle-Picher (geology file) George M. Fowler report
See: Arizona Mining Journal Issue of March 1918 p. 23 ; Dec., 1918, p. 7

E/MJ, Jun e, 1974, p. 211 (rehab. & expl.)

Mining Journal, December 13, 1974, p. 508 (progress at the Gold Bar; Goldex Inc. acquired 72 more unpatented claims adjacent to the Gold Bar)

" " November 19, 1976 (Rio Algom Ltd. (Canadian Co.) has entered into an agreement with Goldex; they have option to purchase the property until 2/1/86; Goldex will receive 20% of the net profits from any mining operations after the recovery by Rio Algom of all costs and expenses on Gold Bar)

Colvaresses Gold Bar file

GOLD BAR

Comparison of results of sampling in levels 407 and 445 by (1) Shanklin and Hyde; (2) Smith and Holderness; (3) A.L.Flagg. (3) 4-16-1931.

Shanklin and Hyde		Smith and Holderness		A.L.Flagg	
Number	Oz Au	Number	Oz Au	Number	Oz Au
65				1	.04
66				2	.46
67	.24	16	.32	3	.72
68	.23	17	.30		
69	.23	18	.24	4	.82
70	.67	19	.41	6	.10
71	.16				
72	1.15				
73	2.20				
74	.03				
75	.02				
76	.02				
102				5	.30
				7	.66
				8	.20

Arith. Ave. all assays .387

Smith-Holderness Composite 1.16	
Average Shanklin-Hyde 67-68-69-70	.3425
Average Smith-Holderness 16-17-18-19	.3125
Average A.L.F. 3-4-6	.4100

(Copied from A.L.F. original notes 1/2 3/59)

This was an area in dispute concerning a proposed lease.

Do d Bar

DATE: January 18, 1985

TO: Mr. F. J. Menzer, Chief Geologist

FROM: J. A. Waegli, Geologist

SUBJECT: Arizona Department of Mineral Resources
List of Flux Properties

In early October, 1984, Mr. John Robertson, Ore Buyer for Phelps Dodge Corporation, requested that the Arizona Department of Mineral Resources (ADMR) compile a list of properties in the state that could produce material grading +80% SiO_2 and +1/3 O/T Au. In response, Mr. Nyal Niemuth, Mineral Resources Specialist with the ADMR, compiled a list of 16 properties (attached) that he feels are capable of producing +70% SiO_2 with $100.00 metal credits. (He stated that he did not know of any mines capable of meeting Mr. Robertson's criteria.)

November 19-21 were spent in Phoenix examining ADMR files to obtain information on each of the mines. Mr. J. E. DuHamel of Western Exploration screened their files and compiled the resulting information in a memo dated November 27 (attached). Based on his memo, pertinent reports were copied from the Western Exploration files on December 3 and 4.

The following is a listing of these 16 properties arranged in order by quad number. A brief description of each property is given, with information on current activity and a summary of past work conducted by Phelps Dodge Corporation. Recommendations based on information compiled to date are also given. Table 1 summarizes information compiled in this report.

According to the Western Prospector and Miner (January, 1983), an unidentified party leased the claims and conducted underground sampling and surface drilling in seven holes. They concluded that the vein has a strike length of 2,000 feet, a +1-foot width, and unknown depth. Gold is highly localized and confined to the quartz.

No work on these claims has been conducted by either the Small Mines Division or Western Exploration. Although the vein probably has locally high-grade gold mineralization, its narrow width and shallow dip make it unattractive. If any further investigation of the property is conducted, it should be considered as a low priority.

5. BEEHIVE (Figure 2): Yavapai County, T.10N., R.4W., Sec. 33, AZ 245

According to Wilson, et al (1934), the Beehive property lies about two miles northeast of Octave where a northwestward trending shear zone intersects the continuation of the Octave vein system. Like the Octave and Bishop, the vein has a shallow northerly dip.

According to the Western Prospector and Miner (April, 1984), Cruiser Minerals, a Canadian firm, conducted diamond drilling on the claims as part of a joint venture agreement with International Gold and Minerals Ltd. of Golden, Colorado. Cruiser reported vein intercepts of 4 to 8 feet grading 0.186 to 0.386 O/T Au. The depth of these intercepts is not given.

The only work conducted on the property by Phelps Dodge was a 1920 examination by the Copper Queen Branch (see J. E. DuHamel's memo dated November 27, 1984). They reported a pockety quartz vein.

It appears worthwhile to contact either Cruiser Minerals or International Gold and Minerals to obtain more information on the recent diamond drilling. However, because the property has the same drawbacks as others in the district, further work is considered to be low priority.

6. GOLD BAR (Figure 2): Yavapai County, T.9N., R.3W., Sec. 33, AZ 245

The Gold Bar mine produced 24,000 tons of 0.87 O/T Au ore from an oval-shaped ore shoot in brecciated Precambrian granite (see M. R. Pawlowski letter to Mr. BaSaw Khin of Western Exploration dated September 14, 1984). The brecciated area is cut by gold-bearing quartz-pyrite-chalcopyrite veinlets.

A 1963 report by G. L. Holbrooke (consultant) states that remaining reserves are 17,000 tons at 0.60 O/T Au in "breccia pipe

No. 1", 1,400 tons per vertical foot in "breccia pipe No. 2" and 2,000 tons per vertical foot in "breccia pipe No. 3". The grade of the latter two pipes is not given.

Mike Pawlowski examined the property in September, 1984. Fourteen samples collected on the property ranged from nondetectable to 0.325 O/T Au. The latter is from a dump sample. The evaluation was in progress when the owners (Jack and Dorothy Devault) signed an agreement with Sunshine Mining Company in October.

It is recommended that Sunshine's activity on the property be monitored and M. R. Pawlowski's final report be completed on a low priority basis.

7. BOAZ (Figure 2): Yavapai County, T.9N., R.2W., Sec.1, AZ 246

The Boaz mine, located south of Crown King, developed an east-west gold-quartz vein. Workings include a 650-foot shaft and 2,500 feet of drifts (Wilson, et al, 1934). The property is currently held by Mr. Richard Frank of Scottsdale, Arizona.

An October, 1980 report by Ken Phillips and Dick Beard of the ADMR states that the water level in the shaft is approximately 50 feet below the main tunnel level. Past production is estimated at 800 to 8,000 tons which averaged around 1.0 O/T Au.

In November of 1980, a group called Gold Mesa, Inc., leased the property and submitted several samples to Asarco at Hayden for analysis. No sample locations or descriptions are given, but the three samples averaged 0.145 O/T Au, 0.25 O/T Ag, 0.74% Pb, 0.05% Cu, 0.10% Zn, 86.6% SiO_2, 0.1% CaO, and 1.1 % Al_2O_3.

Sevearal lessors have held the property since then, including Frank Arnspiger, formerly of Gold Depository and Loan Company. No significant work was done; in fact, Arnspiger's group reportedly stole most of the records and reports on the mine.

No work has abeen conducted on the property by Phelps Dodge personnel. Based on the Asarco assays, the material would make excellent flux, but the precious metal grades and vein widths are not known. Other Precambrian veins in the Bradshaws tend to be narrow with erratic grades, and apparently the Boaz is no exception. It may be worthwhile to contact Mr. Frank, the owner, but the property is considered to be of low priority interest.

GOLD BAR MINE
aka O'BRIAN MINE)

LOCATION

The mine is located approximately 15 miles northeast of Wickenburg on Constellation Road. This is about 40 miles southeast of Congress Mine by all weather dirt road and highway.

(Sections 27,28,33,34,T9N,R3W; topo. sheet: Morgan Butte)

PROPERTY DESCRIPTION

Several patented claims plus large group of unpatented claims.

OWNER/LESSEE

The property is owned by Mr. and Mrs. Jack Devault, Wickenburg (684-5514). As of January 1985 it has been leased to Sunshine Mining, Idaho.

HISTORY

The property was located in 1888 and worked until 1934. A 700 foot shaft was sunk.

The property is currently undergoing a drilling program.

GEOLOGY

The country rock is PreCambrian granite and schist. It is intruded by pegmatites, granite porphyry and mafic dikes.

Fissuring in the area trends N70E and dips 30 degrees E.

MINERALIZATION

Mineralization occurs within a breccia pipe approximately 40 x 50 feet in cross-section. The grade of production in 1907 is given as 2.0 oz./ton gold, 3.0 oz./ton silver, 49% iron, 15% silica and 15% sulfur.

Hematite and limonite occur in the brecciated quartz near surface and pyrite occurs at depth. The breccia pipe plunges 30 degrees SW.

RECOMMENDATIONS

It would be worthwhile to establish contact with Sunshine Mining Company in several months time. They may have determined the potential size and grade of the zone of mineralization. If it is too small to support its own milling operation, it might be economic to ship it to the Congress Mine.

Please return to

Z. A. [illegible],

Consultation, [illegible]

Copy from original

GOLD BAR MINE.
Vickenburg, Arizona.

REPORT ON EXAMINATION.

T A B L E O F C O N T E N T S.

PHOTOSTATS:-

not attached

F O O T E A N D C O M P A N Y
Industrial Engineers, Auditors and Appraisers
136 Liberty Street
NEW YORK.

Telephone Rector 9186

May
Tenth
1929.

James A. Twichell, Esq.,
Gold Bar Mines,
Wickenburg, Arizona.

Dear Sir:-

In accordance with your instructions, we have made an examination of your Mining Property located at Wickenburg, Arizona, in the County of Yavapai, known as the:

G O L D B A R M I N E .

At the time of our examination between the dates of April the Eleventh and Twenty Third, Nineteen Hundred and Twenty Nine, considerable time was saved, as we were furnished accurate maps of the surface and underground workings, which maps and other valuable data was offered to us by Mr W.R. Shanklin, Mining Engineer and Geologist. These maps by the courtesy of Mr. Shanklin, have been made a part of this report, who was present during our examination of the mine, and rendered valuable assistance to our Engineer.

The specific data contained on the aforesaid maps, were carefully checked, and found to be correct.
The maps submitted consist of:-

Long Section of Mine Workings and Marked A-A
Cross Sections and Marked Sections B-B and C-C
Location of Underground Workings
Plat of Claims, showing locations of Development Work.

Our Mining Engineer and Geologist, Mr. Geo. P. Hyde, was instructed to pursue a policy of brevity during the period of his examination of your property, where the data had been so ably treated in other reports, but to give consideration and careful study to the treatment of the ores, and a decided opinion of the best ways and means for the proper development of the Mine, to ultimately extract therefrom the best results obtainable without jeopardizing the underground working, which would result in a large capital outlay for its rehabilitation and safety of operations.

Respectfully submitted
FOOTE AND COMPANY.
(Signed) F.R. FOOTE.
F.A.A., F.C.I., C.P.A.

G O L D B A R M I N E .
Wickenburg, Arizona.

Location:-

This Property is located in Yavapai County, in the State of Arizona, about fifteen miles North Easterly from Wickenburg, which is on the Santa Fe Railroad, which is reached by a road in good condition, tho having in places steep grades, which could be bettered by the expenditure of a few thousand dollars.

Claims:-

The Property consists of sixteen full, contiguous patented claims as follows:-

15 LODE CLAIMS
1 MILLSITE

1	~~West End~~	9	Red Wonder
2	Bennett	10	Cable
3	Galbraith	11	Robert
4	Homestake	12	Little Jim
5	White Blaze	13	Little Johnny
6	Charm	14	Crown
7	Fob	15	Buttons
8	Black Bear	16	Home

and a fractional claim, the Prunton, situated on the Hassayampa River, and on which is a pumping station.

A suit to quiet Title has been instituted, and a favourable decision rendered by the Court.

TOPOGRAPHY:-

The country in which the claims are located is rough, with deep canyons and precipitous sides. The elevation of the camp being about three thousand five hundred (3,500) feet above sea level.

The climate conditions are favourable for continuous operations the entire Year. A decided advantage.

HISTORY:-

The property was discovered about 1877 88 by James Mahoney, who interested Mr. F.X. O'Brien, who was then mining in Colorado,. Later O'Brien purchased Mahoney's interest. In 1901 a year's lease was given John Brown, Trustee of the Saginaw Lumber Company. During the life of this lease a ten stamp mill was erected. The ore treated came from an open cut in the outcrop of the ore chute and from measurements of this cut in the out-crop, I estimate about 4000 tons of ore were treated with a recovery, according to Mr. O'Brien, of $60000. On the basis of an 80% recovery, the ore treated contained a value of approximately $18.75 per ton.

The Interior Mining and Trust Comapny was then formed. This company sank the No.1 shaft to a depth of 325 feet, erected a

hundred tons capacity and worked the ore body by means of an incline from the 385 foot level to the surface,a distance of approximately 500 feet. These workings are inaccessable owing to caving,the rich supporting pillars having been pulled. Thro the courtesy of Mr.F.A.Mueller who was in touch with the operations during this period,and from a few records which escaped destruction,I find the mill ran ten months,treating some twenty thousand tons of ore with a recovered value of $200000.00,this from ore containing $275000.00 value or $13.75 per ton treated. A poor recovery.

Then came a reorganization and the property became known as the Gold Bar Mining Company. $80000.00 was raised with which the No.2 shaft was sunk to the 700 foot level and connections made between the 500 foot level of No.2 shaft and the old workings at the 385foot level by means of drifts an upraise. A small amount of ore was mined at this period and mill runs made.

GEOLOGY:-

The geology of this district offers nothing complex. The country rock is granite,and is known as the Bradshaw Mountain granite. There has been extensive fissuring,showing two major periods of movements. One resulting in a system of North 70 degrees East fissures,and the other in South 30 degrees East fissures. Both systems show evidence of intensive mineralization.

Developement has been almost entirely confined to one of the fissures of the North 70 degrees East system,with a dip of 30 degrees Northwest. Evidence of faulting in this fissure is encountered on the 445 foot incline level,where a thrust movement interrupted the ore body. The downward extension of the ore body will be found in the Northwest or hanging wall side of the vein. This displacement was undoubtedly caused by one of the fissures of the South 30 degree East system. There being a strong cross feature evidence at this point in the workings and it corresponds in position to what is known on the surface as the Black Bear Vein. This displacement accounts for the fact that while No.2 shaft was sunk on the supposed rake of the ore body,it failed to encounter the ore. On the 500 foot level of the No.2 shaft, and about 100 feet from the shaft,there is encountered a condition of extreme crushing,accompanied by extensive mineralization of Marcasite.

This same condition with Marcasite exists in the footwall and adjacent to the ore body from the surface to the 445 foot level. The downward extension of the ore body at the 500 foot level will undoubtedly be picked up by driving a short cross-cut to the Northwest.

Paralleling this fissure on which the work has been done,and about 600 feet distant to the Southeast,is another fissure having the same dip 30 degrees N.W. There are three very strong out-crops or blow-outs on this fissure. The two extremes

being about 1000 feet distant from each other. All three are larger and show very much more extensive mineralization than the outcrop on the fissure in which the mining has been done.

I was particularily impressed by the one furtherest to the South West, which is located on the Cable Claim, and is where the Red Wonder Vein or Fissure, the strongest fissure of the South 30 degree East system joins the S.70 W system. I believe when this property is developed, it will be found that under or in connection with this outcrop, the largest and richest orebodies will exist. I cannot understand why this feature of the property has received so little attention in the past. The invitation is unmistakable.

ORIGIN OF ORES:-

That the ores have been deposited as sulphides, filling, pre-existing deep fissures in the granite and by hot ascending solutions is so evident in view of present knowledge that it requires little further argument. In as much as deep seated ascending origin are always genetically associated with igneous rocks and this condition pre-eminately exists in the case under observation, there is every reason to expect permanency and continuation of the ore bodies to depth.

From conditions I observe at the property I should expect stronger and richer ore bodies to occur as greater depth is attained and be accompanied in the values by copper content. The copper will eventually form a considerable proportion of the values is sustained by its occurence in a drift on the 445 foot level, in the Bennett drift on the 475 foot level at 610 feet in the No.2 shaft and 165 feet from the No.2 shaft on the 700 foot level. This copper occurs as carbonates and oxides and as assays gave copper 6.15%, Gold $6.80.

ORE BODIES AND VALUES:-

The orebody developed consists of quartz intermixed with massive sulphides, carrying Gold and Silver values in the proportion of four ounces silver to one ounce gold.

From the surface to the 385 foot incline level, the ore is oxidized to a more or less extent, at the surface completely, then in diminishing proportion until at the 385 foot level the ores occur almost completely as original sulphides.

In only two places, the surface and on the 407 foot incline level has the ore been cross cut. In the former place for a width of 60 feet and in the latter place 45 feet. The distance between these two points being approximately 500 feet. The depth of the ore body on the dip of the vein has in no place been demonstrated. At the surface the ore in the bottom of the Glory-hole is still "going" and is exposed at this point 40 feet in depth.

On the 407 foot incline level,the same depth has been exposed by stoping with ore still in the roof and floor.

Assuming,as one is justified,from reports of conditions as they existed in the stoped area that the same dimensions of width and depth hold for the distance of 560 feet or from the 445 foot incline level to the surface,and using twelve cubic feet for a ton of ore in place and deducting 20000 tons as mined, we have an available ore supply of 69600 tons,not to mention a large expectancy of probable ore.

Various results of values in this ore body are as follows:

Ten stamp mill,results per ton ----	$18.75
Large mill, " " "	13.75
Mill-run of 70.166 tons,taken without sorting across a 4'x6'x40' cross-cut on the 407 foot level-Copy of this report of this run attached as exhibit A ----------	28.56
Average of 43 samples of the ore body taken in the Winze area ------	12.80
Composite of 15 samples,taken at random by me as a check on above (see exhibit B)----------	11.20

From the foregoing results a valuation of $12.00 is conservative. On this basis the 69,600 tons represent a value of $835200.00. This estimate takes no account of the low profitable grades of ore of which there is an abundance,nor the large expectancy of probable ore.

In justice to the property,it should be noted that the conditions existing when the samples were taken,the mine having been under water for many years,with resulting muddy accretions on walls and roof,would tend to give lowere results than would be attained in the extraction and milling of the ore. With modern mining and milling methods,this ore carrying $12.00 in value per ton, should give a handsome profit.

EQUIPMENT:-

Excellent living quarters for both staff and a large crew are now on the property.

No.2 Shaft is well constructed,a double compartment shaft,and is well equipped for hoisting. It has in connection compressor and pumping facilities.

No.1 Shaft while not so well equipped or in as good a condition as No.2,can with but little expense be made into a good workable shaft.

Mill buildings are well constructed,in good condition and with a little expense will lend itself to the installation of modern machinery. The advance of late years in ore reduction methods since the installation of this plant has rendered much of the machinery obsolete,still a very considerable portion can be utilized.

WATER:-

The mine as at present developed produces about 60 gallons of water per minute. This will undoubtedly be increased with further developement. This gives an assurance of sufficient water for all mill purposes.

POWER:-

A power line has been brought to the Monte Cristo Mine, one and one-half miles distant. The rate for power is two cents per KWH.

METALLURGY AND REDUCTION:-

While decision as to reduction and concentration of the ore should be left for more detailed investigation than I was able to give it,the process that will undoubtedly be adopted will follow more or less on this line:

> Crushing and sizing to a four mesh product, tabling same.

The reject from the tablesgoingto a ball mill circuit to be finished by flotation cells. The product of tabling and flotation sent for reduction to a smelter.

Should tonnage of concentrates warrant,it might be well to investigate the feasibility of a Dwight-Lloyd cintering plant.

CONCLUSIONS:-

In order to complete this report the following summary of conclusions may be briefly stated:

The large body of excellant grade of ore so far exposed warrants an extensive campaign of development. This should be done as follows:

1 - Sink No.1 shaft 125 feet deeper and drive connections between the two shafts on the 500 foot level of the No.2 shaft.

2- At the 385 foot incline level of No.1 shaft a working station should be made and so constructed as to easily handle large timbers and long lengths of pipe.

Twenty feet below this level a sub-level of short length should be run to act as a discharge for a reserve or pocket bin, extending from the station above. Such a bin is necessary to prevent delays. Drifts should be run on this level to delimit the ore body.

3 - From the station at the 500 foot level of the No.1 shaft drifts should be run to pick up and delimit the ore body on that horizon.

4 - The cross cut on the 500 foot level and 100 feet from the No.2 shaft should be driven ahedd with every expectation of picking up the ore body within a short distance.

5 - From this same station a drift should be run about 310 degrees W for six or seven hundred feet to prospect for the downward extension of th the ore under the No.3 blow-out.

6 - This campaign of developement should cost not to exceed $30000.00 and should be done before any decision is reached as to the character and size of the permanent reduction plant. It would be advisable to install a small pilot plant of about 25 ton capacity for reducing the ore extracted from the development campaign. This could be done at a reasonable cost as the machinery necessary is largely on the ground. What would have to be purchased could be done with the idea of its being a unit of the permanent plant. The profit from the pilot plant should largely pay for the development cost and being an excellent guide as to character of the permanent plant.

The property at present is not sufficiently developed for the extraction of large tonnage. The commodity in this instance being gold is not subject to market fluctuations. The cost of opening up and proving this exceptional ore showing will be nominal and the outcome will undoubtedly result in a large and successful mining venture.

(Signed) FOOTE AND COMPANY.

Attest:
Signed by George P.Hyde
Mining Engineer and Geologist.

(signed) T.R.FOOTE.
F.A.A,F.C.I.,C.P.A.

G O L D B A R M I N E
Wickenburg, Arizona.

MILL TEST RUN MADE BY V.G.HILLS, E.M.

LOT NO.4.

This ore was taken from the 41' winze level and consisted of all the material taken from a 4x6x40' cross-cut thro the ore-body.

The mine weight was 72.336 tons. Moisture was 3%, making the dry weight 70.166 tons.

Owing to several stops of the mill during the run the time was lost. But during the first day the stamps crushed about 1¼ tons per hour or 7.44 tons dry per stamp for 24 hours.

Owing to the failure of the power the mill stopt and the clean-up was made with 6.41 tons dry left in the bin. Thus there was 63.756 tons in the test.

The concentrates saved were:-

Wilfley table	1" lot	12.530 tons,	moisture	13.75%,	dry	10.807 tons.
"	" 2" "	2.790 "	"	14.8 %,	"	3.377 "
						13.374 "
Vanner	"	1.111 "	"	16.8 %,	"	.929 "

Making one tons of concentrates to 4.52 tons ore.

The coarse rock sample 9427 returns:
Gold 1.04 oz. Silver 5.2 oz.

The sands head sample #9428 returns:
Gold 1.30 oz. Silver 3.2 oz.

Considering the complete and careful manner in which the sands sample was taken it must be regarded as representing the correct value of the ore.

The mint value of the ore is:-

Gold 1.30 oz. at	$20.67	$26.87
Silver 3.2 " "	.53	1.71
		$28.58

The savings on the plates was 2# 8oz. avoirdupois of amalgum, which at the uniform mine estimate before noted gives value of $193.33.

			per ton
From amalgam (approx.only)		$193.33	3.03
Wilfley Con. Gold 2.33 oz.	$48.16		
" " Sil. 9.2 "	4.88		
13.184 tons	53.14	699.28	10.97
Vanner con. Gold 3.83 oz.	79.17		
Sil.12.1 "	6.41		
o.929 tons at	85.58	79.51	1.25
Wilfley tails. Gold .22 oz	4.55		
" " Sil. .6 "	.32		
40.459 tons at	4.87	197.04	3.09
Vanner tails. Gold .70 oz	14.47		
" " Sil. 1.8 "	95		
9.184 tons at	15.42	141.62	2.22
Discrepancy		510.73	8.02
		$1821.51	$28.58

63.756 tons at $28.58.

G O L D B A R MINE
Wickenburg, Arizona.

Sample marked	SILVER Oz. pr, ton	Value at 60¢ per oz.	GOLD Oz. pr ton	VALUE $20. pr ton	
Composite sample	1.6	$ .96	.56	11.20	
1	.2	.12	.02	.40	from out crop
41	1.0	.60	.12	2.40	
41A	8.6	5.16	1.34	26.80	
46	.6	.36	.17	3.40	
48	.6	.36	.11	2.20	
53	1.1	.66	.28	5.60	
55	.9	.54	.30	6.00	
59	2.2	1.32	.58	11.60	
64	.4	.24	.16	3.20	
67	4.0	2.40	1.48	25.60	
70	1.0	.60	.53	10.60	
72	.1	.06	.20	4.00	
78	2/3	1.38	.42	8.40	
82	.7	.42	.08	1.60	
87	.9	.54	1.45	29.00	
102	.3	.18	.03	.60	

Signed by Chas. A. Diehl
Assayer.

G O L D B A R M I N E.
Wickenburg, Arizona.

M A P S .

Long Section of Mine Workings — Section AA

Cross Sections — BB and CC

Location of Underground Workings

Plat of Claims, showing Location of Development Work.

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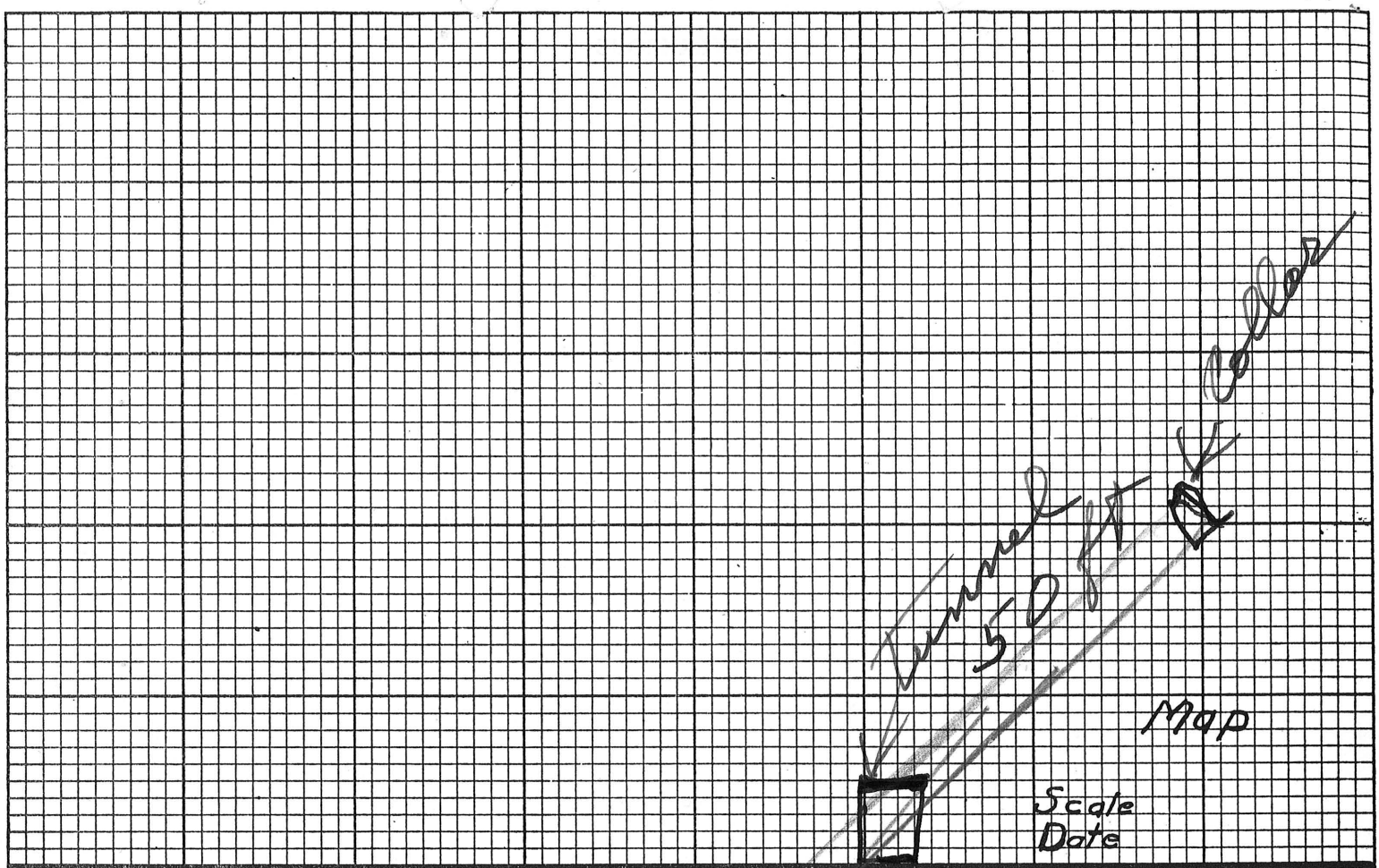

Section

Scale 2 ft per square
Date Sept 30-1953

by P. D. Hesse

13-7

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine O Brien Group

Date April I9th I948

District Castle Creek

Engineer A. C. Nebeker

Subject: Examination

The OBrien group of claims consisting of I4 patented lode claims is located I6 miles East of Wickenburg, and two miles from the old Monte Cristo mine in Yavapai County, Arizona.

The owner of these claims is Dr. H. DeHesse , Prescott, Arizona.

The road to the property is fair until ones passes the Monte Cristo Mine and starts up the gulch to the property. However, and auto can be driven to the property.

The main formation is granite, schist and ~~pegmatite~~ Pegmatite, cut by porphyry fissures showing gold quartz and a large acreage of hematite iron of low grade showing some copper in places.

The property was worked for its gold in the early days and several tunnels were driven in for a hundred feet or so following the vuggy quartz fissure. There could not have been very much of a production judging from the works seen, but there are several very likly spots where ore maybe developed.

The property is worthy of a few test drill holes put down to the depth of 400 ~~or~~ 500 feet, if they proved there was a copper zone under the iron showings there could be millions of tons there waiting development.

ACN

DEPARTMENT OF MINERAL RESOURCES
State of Arizona
MINE OWNER'S REPORT

Date September 30th 1955

1. Mine: Jenny Lyn
2. Location: Sec. 3 Twp. 8 N. Range 3 W Nearest Town Wickenburg
   Distance 12 miles Direction Easterly Road Condition 10 miles good, 2 miles bad.
3. Mining District & County: Black Rock , Yavapai County.
4. Former Name of Mine: Lawrence X. O'Brien Group of mining claims
5. Owner: P. D. Hesse
   Address: 106 No. Cortez St, Prescott, Arizona
6. Operator: Same
   Address: Same
7. Principal Minerals: Copper
8. Number of Claims: 14 Lode yes Placer no
   Patented yes Unpatented
9. Type of Surrounding Terrain: hilly or semi mountainous

10. Geology & Mineralization: A Mr. Nebeker of Prescott made a report to the Bureau of mines on the Geology of this group about 1948

11. Dimension & Value of Ore Body: About 5 ft true fissure vein , Assayed 3.52 % copper $ 2.00 gold, $ 1.00 silver at bottom of the 97 ft shaft; assay and sampling was done by a man from the Bureau of Mines , Tuscon ; about 1948. no work done since then.

12. Ore "Blocked Out" or "In Sight": Ore blocked out , none. ore in sight, about 5 ft true fissure vein

Ore Probable: Mr. Nebeker told me that he thought there would be commercial ore at the 100 ft level and that we had an excellent prospect for a sizable ore body at about the 600 ft level if we followed the vein on down; I hit ore at 97 ft.

13. Mine Workings—Amount and Condition: Many old workings that I did not look at.

	No.	Feet	Condition
Shafts	One	97 ft	new and good in 1948
Raises	one	50 ft	new good and collored in 1948
Tunnels	one	100 ft	old good and showed copper stain and some ore.
Crosscuts			
Stopes			

About $30,000. worth of development and prospect work on the claims that I did not investigate, The Jenny Lyn looked good so I worked there.

14. Water Supply: About 100 gallons of water daily in the shaft at 97 ft.

15. Brief History: Mr. F. X. O ' Brien did about thirty thousand dollars worth of prospecting and development on the claims prior to 1925 , no more work done on the claims until I did some work on the Jenny Lyn in 1940 and then none until I sank the shaft in 1948.

The work done prior to 1925 is listed as 10 shafts, 37 cuts, 1 winze, 1 trench.

16. Signature: P. D. Hesse

17. If Property for Sale, List Approximate Price and Terms: about $50,000.00 10% down, Balance in 10 years

MINE O Brien Group Date April 19, 1948

DISTRICT Castle Creek Engineer A. C. Nebeker

SUBJECT: Examination

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A C N

C O P Y