CONTACT INFORMATION
Mining Records Curator
Arizona Geological Survey
416 W. Congress St., Suite 100
Tucson, Arizona 85701
602-771-1601
http://www.azgs.az.gov
inquiries@azgs.az.gov

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ENDORSE ALL ITEMS PROPERLY
LIST SEPARATELY

CHECKS	DOLLARS	CENTS
1		
2 Frank Russell		
3 Yarnell Ariz		
4		
5		
6		
7		
8 427-3342		
9		
10		
11		
12		
13 Gene McDuffee		
14		
15 At Mill + Comp.		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
TOTAL		

ENTER TOTAL ON FRONT OF THIS DEPOSIT SLIP

CASH COUNT		FOR BANK USE ONLY	
	X 100		
	X 50		
	X 20		
	X 10		
	X 5		
	X 2		
	X 1		
	TOTAL		

#30021

McKenzie, Tom

778-5466

604-584-0236

UW

RRB WR 1/22/82: James Blanton has been working at the Boaz and reports that they shipped some ore to Arizona City (Stutenrouth's?) for tests but they have not received any results. They are still trying to mine as silica flux.

RRB WR 3/12/82: Visited the Boaz Mine, Yavapai County. No one was at the property but it appears that some material has been shipped from a 10' wide quartz vein striking S60°E and dipping 50° to the north from a point 1,000 feet beyond the old mill site.

KAP WR 7/2/82: Chuck Bentzen of Reuter Equipment Co. reported that the developers of the Boaz Mine, Yavapai County are planning to assemble equipment for mining and processing.

RRB WR 7/16/82: Frank Arnspiger, formerly mining superintendent for G.D. & L. at the Buckeye-Apache was in. He is now in charge of mining at the Boaz and is looking for a custom mill or smelter to ship silicious ore to. I gave him names and addresses of smelters and the Springold Mill.

RRB WR 3/25/83: Richard Frank, 5902 E. Campo Bello Drive, Scottsdale, AZ 85255, part owner of the Boaz Mine, Yavapai County, reports that the leasees have not lived up to the terms of the lease. He also reports that they made off with most of the records, reports, etc. so he came in to copy our files.

NJN WR 3/25/83: Richard Frank, owner of the Boaz Mine, Yavapai County, visited. He reported that the lease between him and the Boaz Mining group is being terminated. The group did produce 30 tons of handpicked ore which was milled by Archie Stutenroth of Casa Grande and then refined by someone in Mesa. Mr. Balstra, from Youngtown, Ohio, one of the previous investors, is going to pick up the property next. If this proves to be an unsatisfactory arrangement, Mr. Frank would like to sell the property.

RRB WR 7/27/86: Richard Frank reports that control of the Boaz Mine, Yavapai Co has been retruned to him and that it is for sale for $100,000. It is a patented property and Lefty Little, Realy Executives, 995-8876 or 249-4400 is acting as his agent. Mr. Little brought in the leatest reports for our files. The Boaz is a silver-gold property that has had some production.

8/17/83 Dupl of Mine Documents

Boaz Mine

Richard Hauk Part owner

5902 E Campo Bello Dr

Scottsdale 85255

30 tons to Stimlamet

Manzanita File yavapai
6/12/82

Option → Phone
Send Geologist
work Commitment
(2.) equity
Silver Dollar front
North Manzanita (Lawsuit) (50 00¢ 1/4 return)
Golden Queen (Silver Dollar)
Reese
Manzanita Millsite (Lawsuit) Double Eagle

option expires –
drilling

Frank Russell
PO Box 101
Yarnell 85362
100 Manzanita Drive

100 Rough Home Cafe
Left on oiled road
around ½ mile right
on black Top
Orange & Blue House
noon

Cooper 16 ⅔ >

Boy – closed.

Sheep Trail

PHOENIX GLASS CO., INC.

FREE PICK-UP AND DELIVERY

Plate and Window Glass Replacements

PHONE 279-1621
3815 N. 16TH STREET
EAST SIDE

PHONE 264-6101
6014 N. 27TH AVENUE
WEST SIDE

Don Adams Sheppard Property

Charles Wade - head of Terry Corp

Supposedly in name of New Comstock

Litton & Smith

Sold mine ~~1000~~ 12 oz Au/month

for Adams - #100,000

wants Nesbit Mine

Kinzy atty (sheep?) - Pd taxes

for years

Billy from Smith - said too much

sheep trail - solidly tied up

Beamer - Creske Mining Engr from Okla

Adams - Don Adler atty in Bullhead

Tapes - Sun tour on minerals just above

Minerals w/ Adams

PHOENIX GLASS CO., INC.

FREE PICK-UP AND DELIVERY

Plate and Window Glass Replacements

PHONE 279-1621
3815 N. 16TH STREET
EAST SIDE

PHONE 264-6101
6014 N. 27TH AVENUE
WEST SIDE

Sleeptrail
New Comstock
2 heirs green - Freakley
Clark Wade - 75000 shares
promm 12 oz Au / mo → 400,000
Paid Tash in name of Chester Sintro (new contact)
vice president
Crawford controller for ↑
purchasing
leasing to Don Adams
and payment 1000 oz Au
Working for Clark
Re Shaun & Havasu
Nightmare -
Tut certificate → Holm
Holm sold Damin Paynes
Twin Drilling
→ Tyro

last Panel 1-2-3

Gone gathering
Queen Creek supplies.

Judy & Bob here Monday
morning to have coffee
with us

Boaz

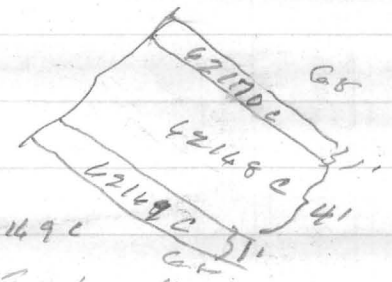
1' @ trench W-65-W Dip 45° NE

N of [illegible] pad

Joe Rominger
7520 N. Lakeside Lane
Scottsdale, AZ 85253

Main Vein N-70 W 57° NE 4' thick

Sample #1

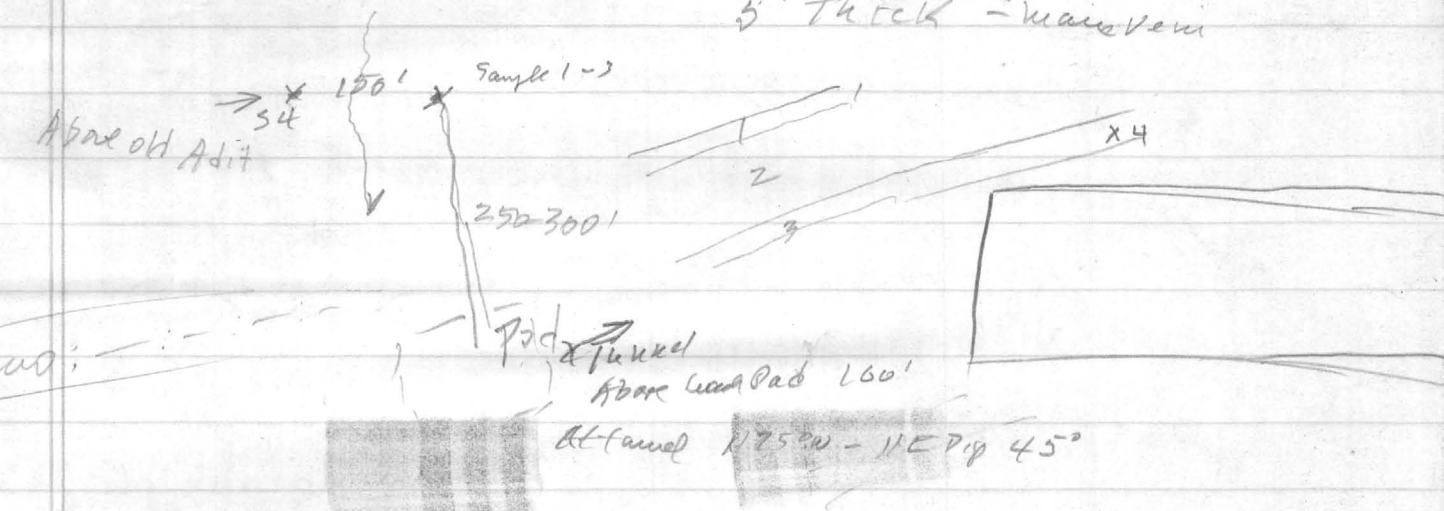


Sample # 62149c
1ft Footwall

operation -:-:- Turnover
Cars needs Battery
Departure 6:00-6:30 pm in San Diego

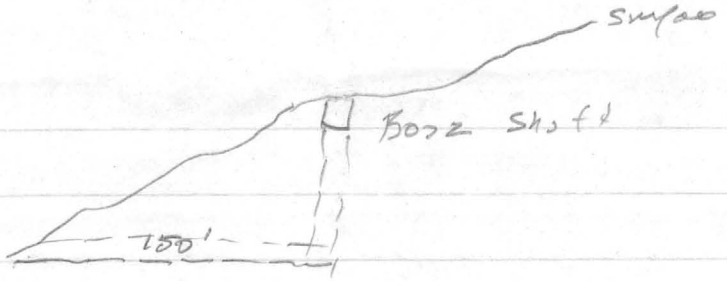
Sample #3 62170c 1' Thick Hanging wall

Sample # 6 - 62171c Iron Rich Zone, Broken at → 5' thick - main vein



S-5 62172c E. end of Road 1000-1200' from Boaz mill site
4-6' W.S. main vein

Perforation Shot #1



Silver Belle
(Golden Queen or Shaft)

N. 70° W Dip NE 2' Qtz
and Wormblende or Dark Mineral in Dump.

Field Check - Doug, Lloyd & Buzz
8-9-83

Silver Dollar - (Golden Queen) (Colossal?)
Group

Veins Str N 30 W, N 40 E

N 45 W - Fault?

Very Lousy Qtz Veins -  0-2' Locally Blebby 4'+

Ore veins 6-18" are value but erratic

NO Samples were taken - didn't seem worth while

12-1-77 Frank Russell - contact

2-4-81 A geol from major consulting firm supposedly took 80 samples at the Silver Dollar & Silver Dollar extension - Results did not substantiate previous reported values of the property.

Field Check - Doug, Lloyd & Bure
8-9-83

Manzanita Claims - 30 claims

Sec 12 T9N-R2W Yavapai Co.

Frank Russel - contact Gene McDuffee - on claims & caretaker

7-3-81 Ben Morgan, Rt. 6, Box 3116, Loudon Kentucky 40741 say they are investorting

the Silver Dollar, So Extension, Oro Grande & Colossal mines & the Manzanita mine

Dames & Moore were retained to evaluate property & develop flow sheet.

801.50
10
791.50
15
776.50
165.-
941.50

1503 7.1 End of Road.

1503 8.4 Junction

1504 1.2 turn off to S.D.

+2.3 Windmill tank

+2.5 fence / Spring mine

+3. end

+6.3 Darwin R Cooper
3717 Jackstadt St
San Pedro Calif
90731
Cooper Mill S. #3

+6.45 Junction

1504 7.5 Reese mine

+8.35 Windmill

+9.7 Junction

+9.0 main Road

Boaz Manzanita

14907 Begin
14995 Yarnell
15007 Kirkland
15011 Pavement
15017 J. Smith turnoff
15018.7 Walnut grove School

15024.6 Wagoner
15027.5 Cherry Creek
15033.4 Windmill
15033.8 Junction
15036.1 Oak Creek Well
15036.2 Boaz Junct
15038.5 Junction
36.9 Site

Boaz

8/16/83

Mr. Richard Frank
5902 E. Campo Bello Drive
Scottsdale, Arizona 85255

Dear Mr. Frank:

The Department of Mineral Resources in Phoenix, show you to be a part owner of the Boaz Mine located in the Bradshaw Mountains.

We have a client who is interested in persuing a mining venture within this area, and in particular, a structure such as the Boaz.

Please telephone us at your earliest convenience.

Very truly yours,

Douglas K. Martin

DKM:dm

INTERNATIONAL ENERGY SALES

6900 EAST CAMELBACK ROAD / SUITE 1020 / SCOTTSDALE, ARIZONA 85251 / (602) 949-8182

ACKNOWLEDGMENTS

The data herein contained on the Colossal Mine, the general property information, grades of ores, assays and facilities was obtained from the owner -Mr. R.E. Logan; also, from a mine report made in September, 1937 by -Carl G. Barth, Jr., Registered Mining Engineer of Arizona.

Mr. Logan has lived on this property and operated it since 1922. Through the 25 years of development he has obtained considerable information at the various developments which has contributed in many ways with the preparation of this preliminary mine report.

Local and other information was obtained during the course of field investigations. Operating costs on mines in the immediate area was submitted in order to show costs to be expected at the Colossal; two operations are: Reese prospect and Octave Mine which was obtained from Bureau of Mines Information Circular - I.C. 6991, "Gold Mining and Milling in The Wickenburg Area, Maricopa and Yavapai Counties, Arizona."

SUMMARY

This investigation was undertaken in order to determine the essential facts concerning the production of gold-silver-lead ores contained in the Colossal Mine group.

Geolographically, it was found, due to the topography the vein system in divided into five distinct mine developments and the fractional portions are covered in this report accordingly.

Considering the whole mining group of claims, or at any particular mine development, we are dealing with a well mineralized area and a mining property not yet producing and is in the various stages of exploration and small developments. This has been the condition since its discovery in the early 1860's which is probably due to the little change of ownership during the years.

The availability of rich surface croppings permitted easy discovery and production of direct smelter ore shipments which enabled the owners down through the years for their success; and also offered inducement for split-check leasors and chloriders.

The course of the vein system with its favorable geology establishes a sizable mining operation in ground known to contain commercial ores from shallow developments.

In analyzing the elements for either a small or large operation this property is favorable for commercial production when considering the grade of ore, climate, topography, water, smelters and the conceivable factors for a mining enterprise.

LOCATION

The Colossal Mine is located in the Silver Mountain Mining District, Yavapai County, Arizona and more particularly in Sections 1, 2, 11, 12 and 13, Township 9-North and Range 2-West

ASSESSIBILITY

Roads. From Prescott, the property is reached by going southward over U.S. Highway 89 to Kirkland Junction a distance of 22 miles. From Kirkland Junction, going southeast over 20 miles of county maintained road to Wagoner. The mine is reached over a fair up-grade road, 12 miles from Wagoner.

. Mail is received at Wagoner. All necessary mine and mill supplies are maintained at Prescott the county seat. Freight and ore are received at Kirkland Junction a station on the Santa Fe Railway.

TOPOGRAPHY AND CLIMATE

The elevation about the property varies from nearly 3,000 to 6,000 feet. The country is generally rough and precipitous, the rise of the mountains permits easy mine developments by either tunneling on veins or cross-cutting to the veins.

At this elevation the snowfall is light. The average annual temperature is about 60 degrees. The climate is mild both winter and summer and at no time weather conditions will prevent working outdoors.

WATER SUPPLY

The average annual precipitation is about 15 inches, the greatest rainfall is in the months of July and August from thunder storms.

There are no running streams. The vegetation consists of the usual desert growth at higher elevations. The water table is comparatively shallow as water is developed on various parts of the property.

Commercial water must be developed. The present water supply for the camp and mill, on the Silver King Claim is from a shallow well. This supply holds well during the dry season.

POWER

At the present all machinery is driven with internal combustion engines. Fuel oil will cost about 9 cents a gallon delivered at the mine, while gasoline will run about 15 cents a gallon without tax.

Electrical power is available within 4 miles from the property. The Arizona Power Company serves the area, on the secondary transmission lines the primary voltage is 11,000, three phase-60 cycle current. Transmission line would cost $500.00 per mile, the connection charge is $50.00 for transformer installation.

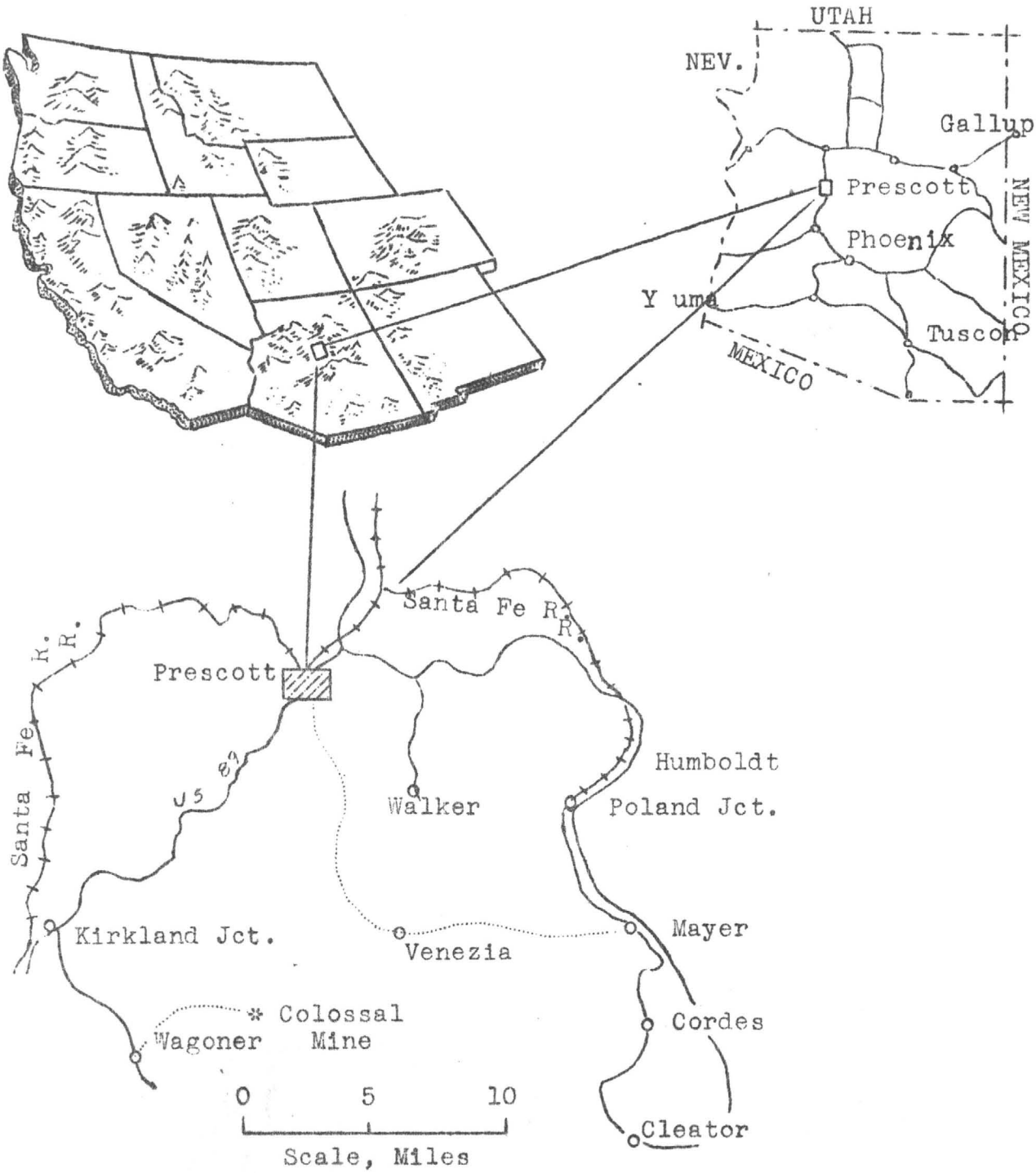


Fig. 1

SKETCH SHOWING AREA OF COLOSSAL MINE

I N T R O D U C T I O N

This is one of a series of mine reports prepared by the PACIFIC ENGINEERING COMPANY on metal on metal mines in the Western States and in Mexico.

INTENT. The purpose of this paper is to give certain preliminary property information to determine a mine's commercial possibilities, to those who may be in a position to participate with a mine development.

SERVICE. This service is only possible with the cooperation of the mine owner who may have a mine of commercial importance, and the financial principles who may be in a financial position to carry a mine development.

This service is founded on a principal of rendering service to both the mine owner and the prospective mine operator. Such a service requires detailed investigations, analysis of the projected mine, compuation of the capital costs and the calculation of operating costs with estimate of probable gross revenue.

SERVICE COSTS. We stand the expense for property preliminary examinations, and assembling the elements of the business. This work is paid for by the mine owner on a commission basis when the purpose has been accomplished.

On Mexican mines, a 10% service charge is made for Federal Mining Concessions, Title examinations, Incorporations, and mine and Mining Claim Surveys.

Cordially,

Percy T. Horrell
Chief Engineer

August 9, 1947

PACIFIC ENGINEERING COMPANY
P.O. Box 6830
Parkway Station
Kansas City 4, Missouri-USA

HISTORY

The presence of gold in this property has been known for many years, and mining operations on a small scale have been carried on intermittently sience in the early 1860's.

According to early records the outstanding work was done in early times by Major Pickens, Judge Campbell, Frank Ryland, Harvy Taylor and R.E. Logan.

The Silver Dollar and Gold Note mines were discovered in the late 60's by Major Pickens and the highgrade gold ores were worked by hand methods, the ore was hauled out by ox team and shipped to Swansea, Wales for smelting.

The Old Colossal claim was located in the early 70's by Harvey Taylor who was a Civil War veteran. Taylor also relocated the Gold Note as the Grubstake mine in 1902, from which much of the ore was treated in arrastres for the recovery of the gold values.

It is known that Tylor mined and recovered more than $50,000 from these mines until his death in 1916. On his death the property the mines laid dormant in his estate and was lost sight of until the present owner became active in the immediate area in 1922.

R.E. Logan, the present owner of the various mining groups which comprises the Colossal Mine obtained several claims from the Taylor Estate and relocated other claims which have been worked with better mining methods, living facilities and a small mill has been provided.

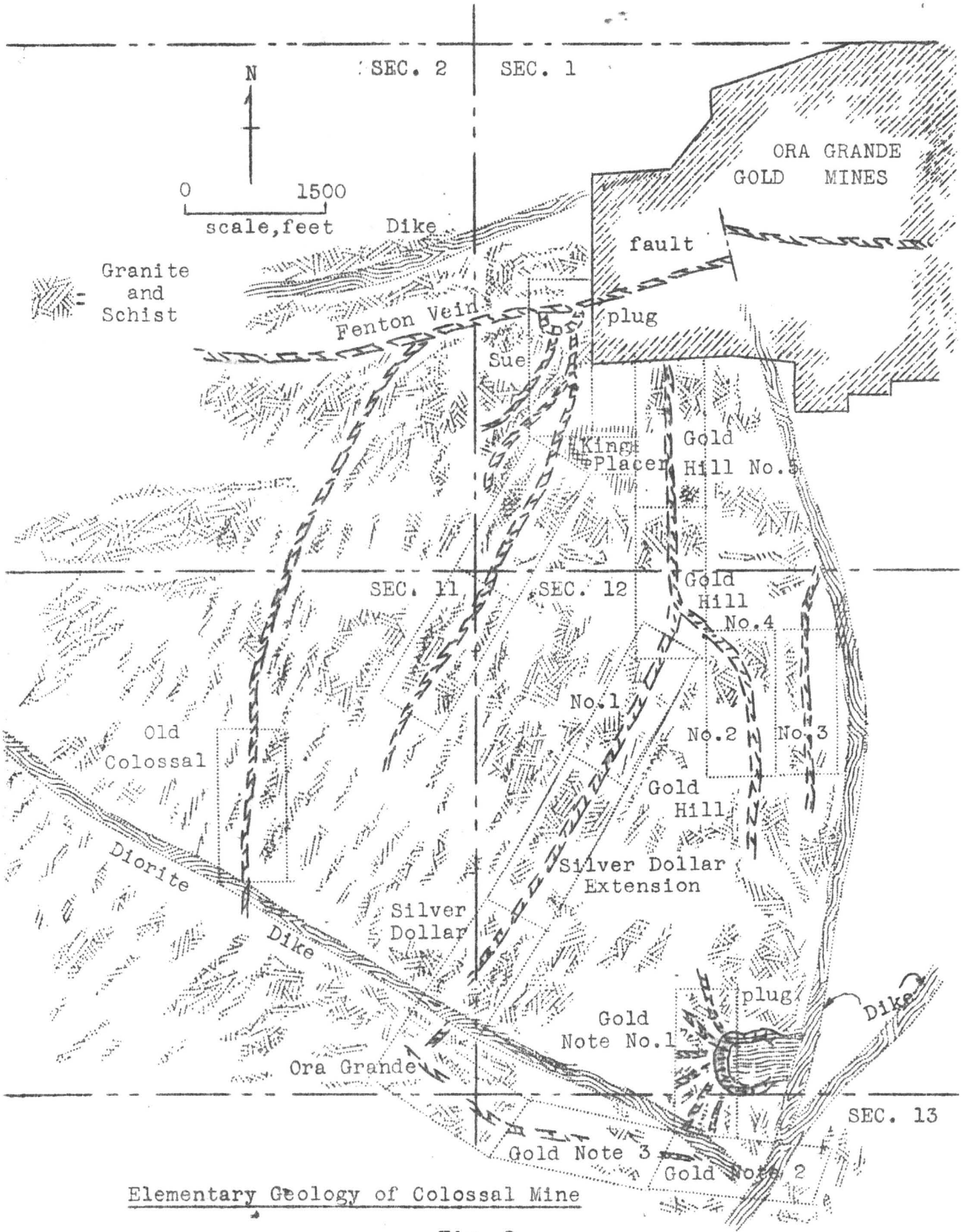
Mining has been carried more or less consistently by Mr. Logan since 1922 on the various mining groups. The work was largely by leasers who work surface croppings for highgrade shipping ores and it is reported by the owner $92,000.00 has been received, mostly for royalties from produced ores.

GEOLOGY

The general geology of the immediate area is described by the United States Geological Survey Folio No. 126 of the Bradshaw Quadrangle and in U.S.G.S. Bulletin No. 782.

Fig. 4 shows the elementary geology. The district is characterized by a great number of northeasterly striking veins. The veins consist principally of quartz filled in faulted fissures that are from a few inches up to greater width than 4 feet.

The country rock is essentially granite and beds of schist that run in a general northeasterly and southwesterly direction. Numerous diorites and aplitic dikes were intruded into the rocks of the area.



Elementary Geology of Colossal Mine

Fig. 2

The country about the property is rugged and precipitous permitting easy exploration and development work. Geological determinations are also quite simple since the vegetation comprises chiefly grass and sage brush, and veins are exposed over considerable depth due to the curvature on the vein's strike.

Generally the veins dip to the west from a nearly vertical to 60-degrees. By far the most abundant mineral in the veins is quartz. Several thousand feet of the vein system has been worked by comparatively shallow developments, this development work has showed there are two types of mineralization thus forming two distinct type of veins, one carrying free gold with little mineralization and the other with massive sulphide mineralization of iron, lead and copper, free gold is also found with the various sulphides.

The minerals in the ore deposit are typical of the deep vein or veins deposited under conditions of moderate temperatures and pressures in a granite intrusion on a batholithic scale. To the north, in the area of the Sue Claim, there are zones showing intense pressure resulted in schisting which gives evidence of the plastic condition of the rocks. Stresses of the granites country rock in the formation as a whole on the property show apparently much pressure and stresses were relived by flowing rather than faulting since the veins carry a good strike over thousands of feet, or at least until near the termination of igneous activity.

Development of the various veins in the vein system has indicated the mineralization is probably due to base dynamic action at the time of the intrusion of the dikes and plugs. The amorphisim which brought the disintergration of the lime in contact of the area which released the acidic material from the joint granites forming the diorite porphyry by fracturing sufficiently to oxidize all the minerals in the basic rock, as weal as in the sedementary rocks, forming and establishing a group of sulphides in a quartz magma thus filling the veins which have followed by long period of oxidization which resulted in leaving a tremendous body or oxide ore.

It could be said without fear of contradiction that the various dikes and plugs have fathered the mineral deposition of this net-work comprising the vein system.

The commercial sulphide minerals now exposed in the many shallow workings show evidence of heavy oxidization, and in some cases there is a complete leaching of the monzonite and replacement of blocky schis and as the veins are in a shear zone of the schist followed by a footwalling of the schist composed of amphobic schist material which is sufficient to resistance to avoid leaching in the secondary minerals deposition therefore inasmuch as the base minerals are copper, gold, and silver in those veins now showing lead as galena it is likely with depth the lead values would terminate into good values of gold and copper with intensive enrichments in the line of contact with intersections of vein-jointings.

COMMERCIAL MINERALS

Virtually all the base minerals produced have been by-products of gold and silver. Gold is the principal ore-mineral content. In all the veins, the outer zones at croppings carry a high percentage of gold which is free milling.

The development work already done, comprising about 40 opening, confined largerly to surface work since the depest development is 127 feet below the vein's cropping, has shown, invariably veins are found filling fissures of greater or less magnitude that occur as faults or joints. As a rule, ore bodies are not liable to be found along prominent or open cracks or breaks. This is accounted for by relative lack of impounding of solutions locally and excessive permeability. And it is remarkable, how earlier work was confined to parts of the veins where ore is far more often deposited in adequately permeable paths such as breccia-filled portions, or in tight joint planes where circulation was a slow process and ample time for penetrarion and precipitation was a slow process and ample time for penetration and precipitation.

MILLING

Highgrade free milling gold ores have been milled from all the major developments. The mill flow sheet is shown in Fig. 4. Mine ore is crushed in a Blake-type jaw crusher set at 3/4-inch discharge. The crusher is driven by a 4-cylinder automobile engine.

The ore is received in a Fine Ore Bin and discharged from the bin bu an Ore Feeder into the feed of a Straub Rib-Cone Ball Mill.

Water is feed into the feed of the Ball Mill at a ratio of about 3 to 1. Water is obtained from a near by well.

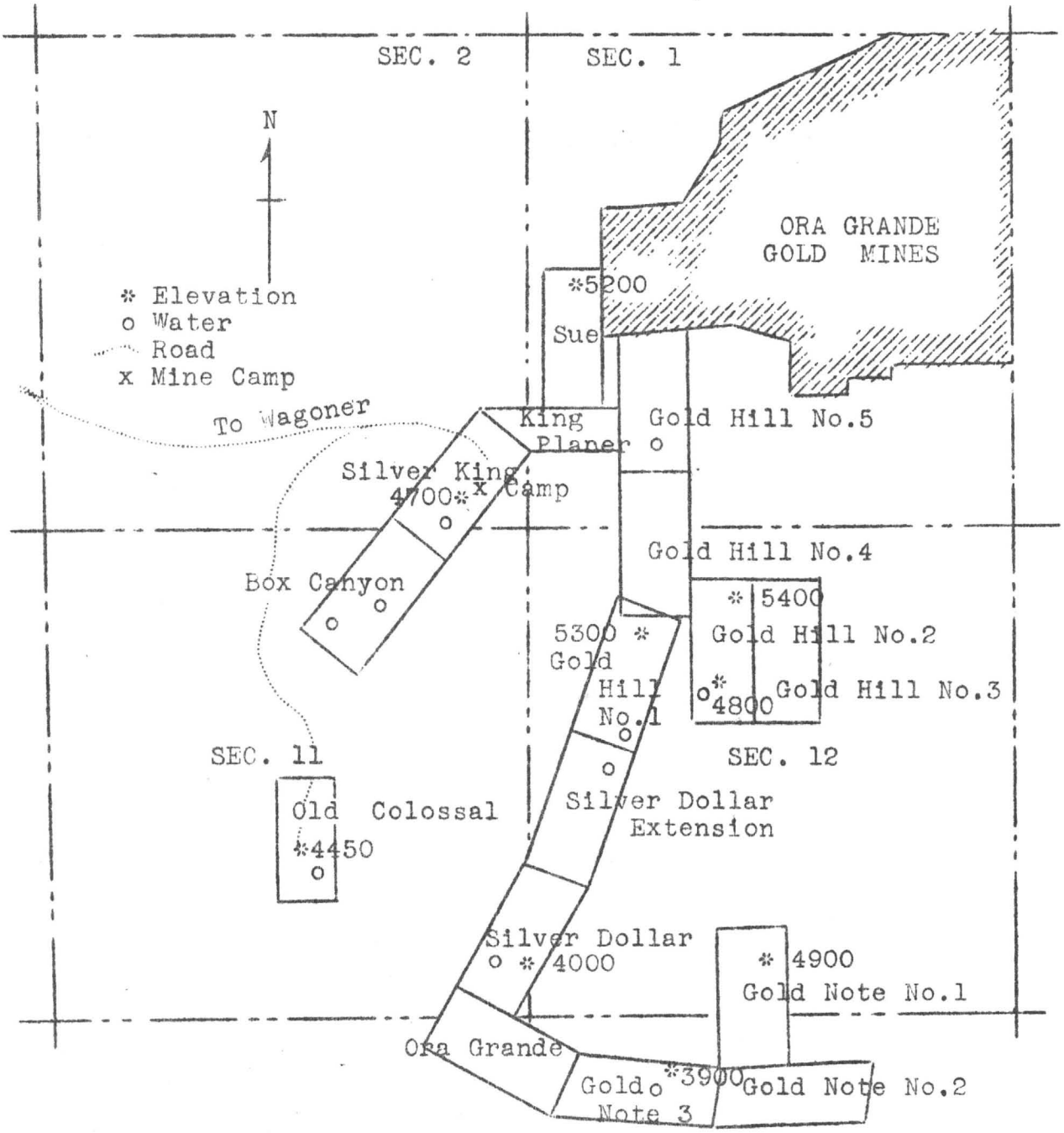
The Rib-Cone Ball Mill is equipped with screen at the discharge end of the mill for classification. When provided with 60-mesh screen the capacity of the mill is about 15-tons per day.

The ball mill discharge is passed through a Gibson Amalgamator and over an amalgamation plate. Here the gold is recovered in and as amalgam and is then retorted for a mint product.

Tailings from amalgamation are passed to the feed of a Deister Plat-O Concentrating Table, table concentrates go to the smelter and the tailings to waste. Concentrates are sun dried and sacked for shipments.

The mill and table is powered by a 4-cylinder Nova Engine rated at 10 horsepower.

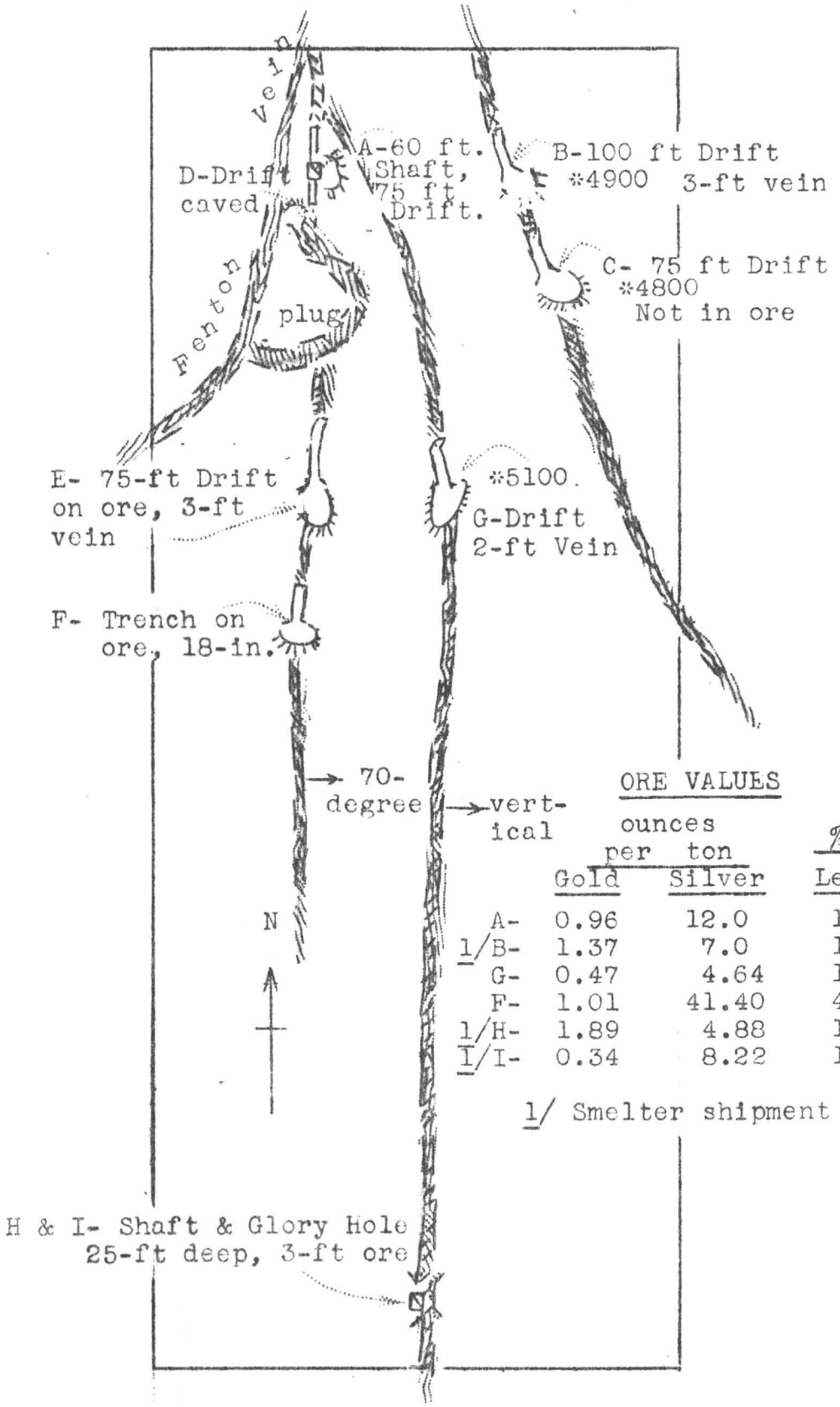
The mill equipments are housed with a wood-frame structure of dimensial lumber framing.



CLAIM MAP OF COLOSSAL MINE

Fig. 3

Property. The property consists of 16 unpatented mining claims, and recorded with the County Recorder at Prescott, County of Yavapai.



ORE VALUES

	ounces per ton Gold	Silver	% Lead
A-	0.96	12.0	14.00%
1/B-	1.37	7.0	12.04%
G-	0.47	4.64	11.20%
F-	1.01	41.40	49.00%
1/H-	1.89	4.88	18.40%
1/I-	0.34	8.22	17.70%

1/ Smelter shipment

SUE CLAIM

SUE CLAIM
(North Colossal Group)

The ground formerly held by the North Colossal, West Colossal, and Lead Carbonate Claims is now held by the Sue Claim which covers the major development work.

Topography and Geology

The elevation on this claim is generally 5,000 feet. The rough country contributes toward easy development of the veins from adit tunnels.

Fig. 3 shows the vein system. The veins are the quartz-fissure type and the country rock is granite schist. This group of veins appear to be in a shear zone and are of the mesothermal type deposited under conditions of moderately high temperatures and pressures.

There are three well-defined veins that are approximately parallel in strike bearing to the north with nearly vertical dips, and with widths of 3-foot average. These veins apear to be spur veins off the well-defined Fenton Vein. The Fenton vein strikes easterly and dips 70-degrees to the north.

Development

Fig. 3 shows the development. Little systematic mining has been done. Near the surface lead carbonates are found in areas of much oxidization, the carbonate ore has been worked fot its gold content which is free-gold and development work has been confined entirely to such outcrops.

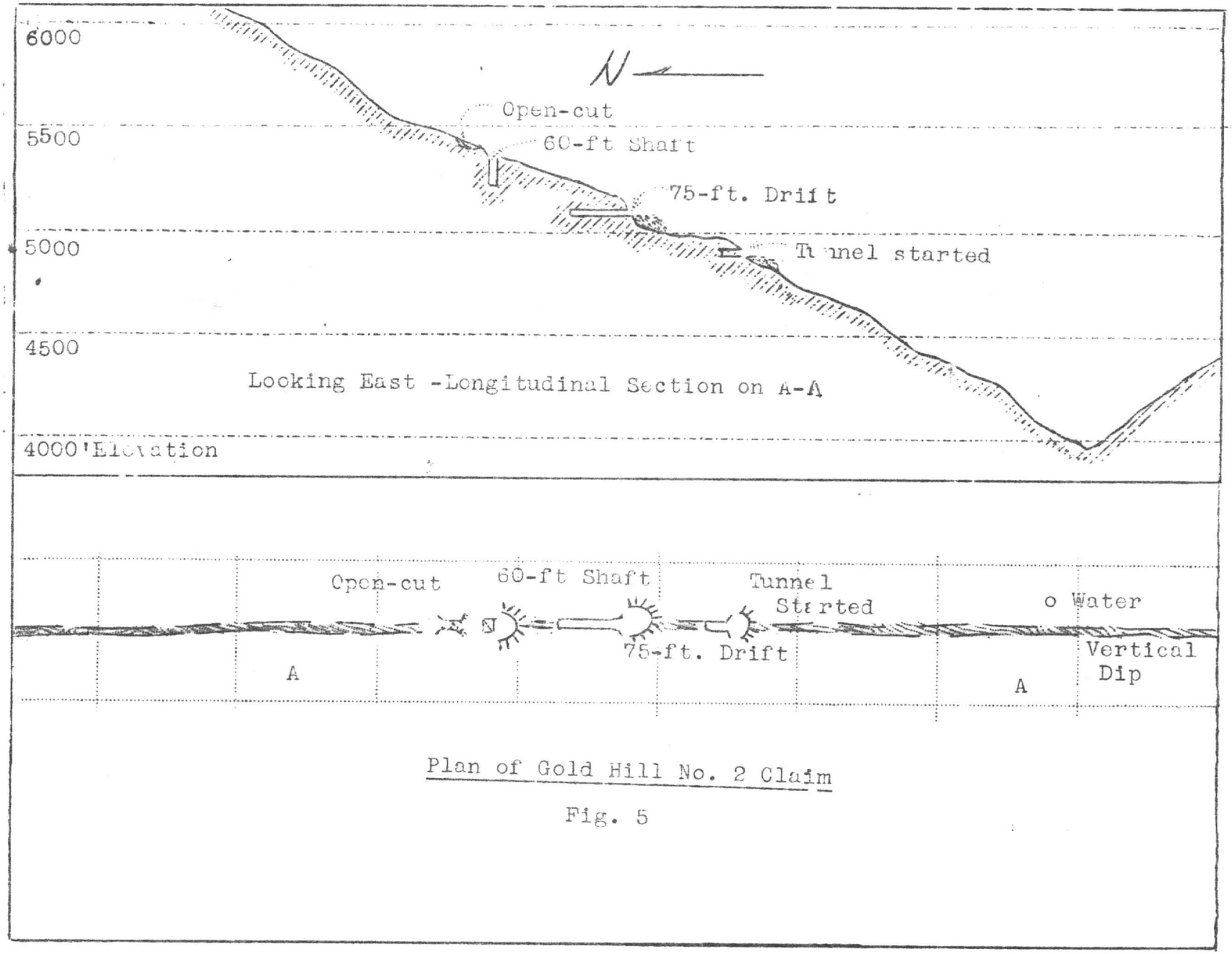
The development done by chloriders has determined considerable information as to the commercial possibilities from smelter shipments and attempts to mill the ore.

The ore on this claim are predominately oxides, mostly of lead with lead sulphides as galena. Some of the ore was milled in the Logan mill which is equipped with amalgamation and table concentration, this was not successful as only about 50% of the gold assay was recovered.

Fig. 3 shows assay results from smelter shipments and assays cut on the vein. The Fenton vein is from 5 to 25 feet in width and probably will average 0.50 ounce gold, this vein is free from lead oxides or sulphides as the gold is free and finely divided and found in the matrex of the vein filling.

Possibilities

There is ore in sight, veins are of sufficient width and contain commercial mineralization of gold, silver and lead of a smelter shipping grade. This claim could now be worked by sub-leasers on a split-check basis when equipped with mining facilities.



Plan of Gold Hill No. 2 Claim

Fig. 5

GOLD HILL GROUP

The Gold Hill group consists of 5 full-size mining claims:

1. Gold Hill No. 1
2. Gold Hill No. 2
3. Gold Hill No. 3
4. Gold Hill No. 4
5. Gold Hill No. 5

This group of claims is shown in Fig. 3 , and are reached over an old road from the Colossal Camp. The road is in poor condition but can be put in fai condition at little cost by renting equipment from the County Road Commission.

Topography and Geology

The country on this group of claims is rough and precipitous which permits easy development,development by adit tunnels with considerable vein above transportation levels.

The country rock is essentially granite and beds of schist that run in a general northeasterly and southwesterly direction. Rhyolite and diorite are intruded along the plane of the vein.

Gold Hill No. 2 Claim

Development has been confined to this claim. Fig. 5 shows the plan; while Fig.6 shows the elevation of the development work.

The vein is from 1 to 3 feet in width and consists of a quartz filling in a faulted fissure. Walls of the vein are on a nearly vertical dip and hold well without timbering. In the area of the development, the vein is traceable by its cropping some 300 feet southward and 150 feet northward from the 60-foot shaft, the vein strikes north-south

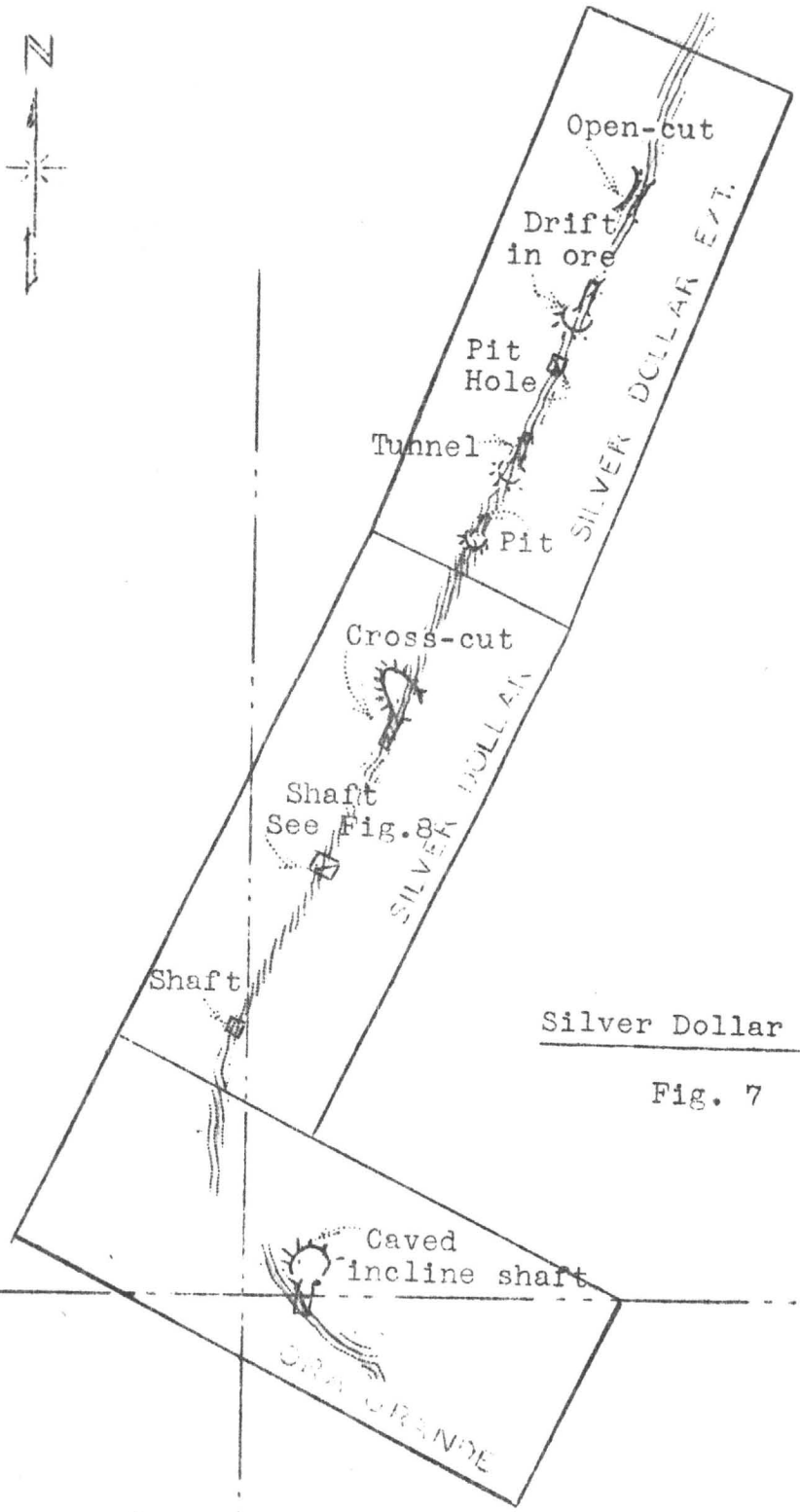
Possibilities

The work already done is in an oreshoot containing free gold and sulphide mineralization. Smelters shipments have been made and some of the ore milled in the Logan Mill.

In the shaft, the vein shows a 3-foot vein of sulphide ore assaying 1-ounce gold; lower down the hill, in the face of the 75-foot drift-tunnel the vein is 2-foot wide assaying 0.69 ounces gold.

This development appears to be the best of the group for easy and quick returns. Sufficient work has been done to expose ore of a commercial grade. Work could be continued in the known ground from the 75-foot tunnel.

To start with, on a small scale, to prove the possibilities at this development, a Mexican crew or split-check leasers could be put to work with mining equipments. Burro pack train could be used to pack the highgrade ore to the Logan Mill for treatment, or for direct smelter shipment.



Silver Dollar Group

Fig. 7

SILVER DOLLAR GROUP

The Silver Dollar group consists of 3 full-sized mining claims:

1. Silver Dollar
2. Silver Dollar Extension
3. Ora Grande

Fig. 3 shows the position of this group which is reached over a rough truck road through Ryland Gulch from the Logan Camp on the Silver King Claim.

Topography and Geology

The country is rough which permits development on the vein by adit tunnels. The elevation is around 4,000 feet.

On this group one vein has been developed, it is a quartz fissure with an average width of about 3 feet, it's strike is northeasterly with a dip of 75-degrees to the east. The country rock is wholly granite and altered at the surface. Walls appear to hold well at deeper development without the use of timbers.

Mineralization on this group is entirely sulphide of iron, copper and lead in the form of pyrite, chalcopyrite and galena. Gold is the commercial metal, it occurs as free and associated with the various sulphides.

Developments

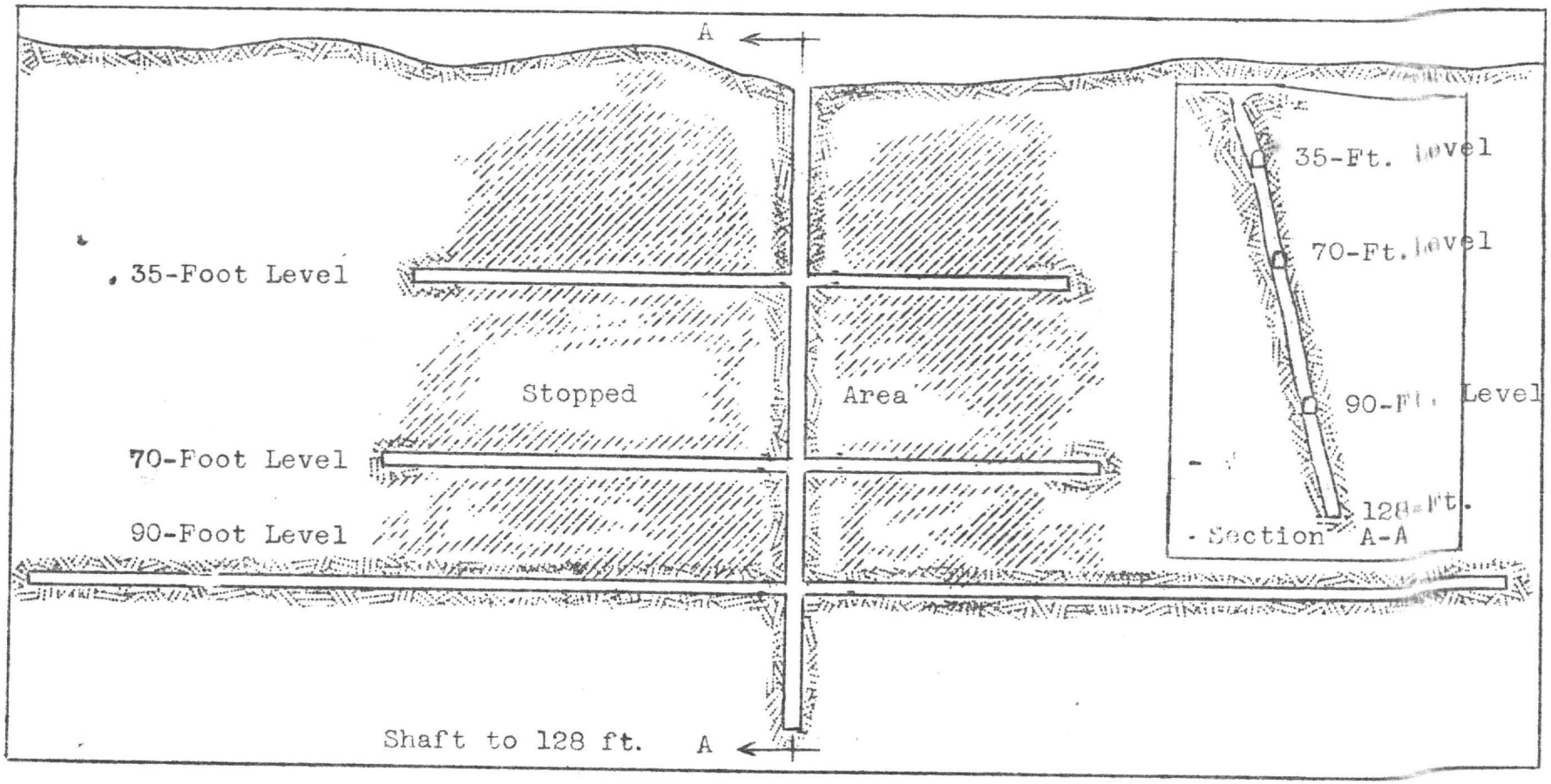
Open-cuts and shallow drifts has exposed the vein for some 1,500 feet on the Silver Dollar Extension and Ora Grande claims.

The major development has been done on the Silver Dollar Claim which is shown in Fig. 7. An incline shaft follows the vein to a depth of 128 feet. Levels are cut in both directions off the shaft, they are:

	Feet from Shaft	
	north	south
35-Foot Level -125 feet of drift	50	75
70-Foot Level -140 feet of drift	60	80
90-Foot Level -302 feet of drift	142	160

The ground from the 90-Foot Level to the surface has been mined. This block of ore showed a productive oreshoot od 145 feet in width and widening at depth with a rake southward from the shaft. The oreshoot appears to be a series of mineralized lenses, pinching and swelling vertically as well as horizontally with varying widths from 12 to 42-inches.

The shaft below the 90-Foot Level is filled with water. It is reported the vein is well mineralized and would pay to work with mine machinery.



VERTICAL LONGITUDAL PROJECTION LOOKING WEST
Silver Dollar Claim

Fig. 8

This group has been worked by various leasers over a period of time. For the most part all work was done by hand methods. Smelter shipments of selected ores were carried out on burro back and some of the ore was milled in the Logan mill from which mint and mill concentrate products were produced.

The following production will indicate the character of ore:

Smelter Shipments:

	Assay and Analysis of Ore					
	1/		2/		3/	
Gold	2.06	ounces	0.88	ounces	1.02	ounces
Silver	14.38	do	.30	do	4.50	do
Copper	2.6	%	.31	%	.77	%
Insoluble	69.56	do	65.0	do	-- --	
Iron	13.37	do	11.09	do	10.20	do
Sulphur	12.80	do	-- --		-- --	
Silica	68.74	do	56.80	do	67.40	do
Alumina	.86	do	-- --		5.50	do
Lime	-- --		.20	do	.08	do

1/ Shipped to Humboldt Smelter, Mayer, Arizona September 26, 1930

2/ Shipped to American Smelting & Refining Co., El Paso, Texas March 20, 1937

3/ Shipped to Magma Smelter, Superior, Arizona February 13, 1934

U.S. Mint:

Mint returns for the months of May and June, 1937 - $2,389.70

This product came from milling, the recovery was made by plate amalgamation and table concentration.

Mill Concentrates shipped to A.S. & R Smelter, El Paso, Texas

Date	Lot No	Value Per ton
June 9, 1937	2017	$ 185.18
July 6, 1937	2460	153.13
July 7, 1937	2466	179.19
July 7, 1937	----	306.18
July19, 1937	2813	237.41
Sept30, 1937	2941	208.60

Possibilities

Surface prospecting to the north from the shaft indicates that commercial ore can be mined. The present shaft shows values in that oreshoot of commercial importance which is indicated by smelter shipments and mill runs. Sufficient water will be developed from the mine and supplement water is available on the claim for a small mill.

When proper facilities are provided for mining and milling this group alone should be of commercial importance, even on a 25-ton basis.

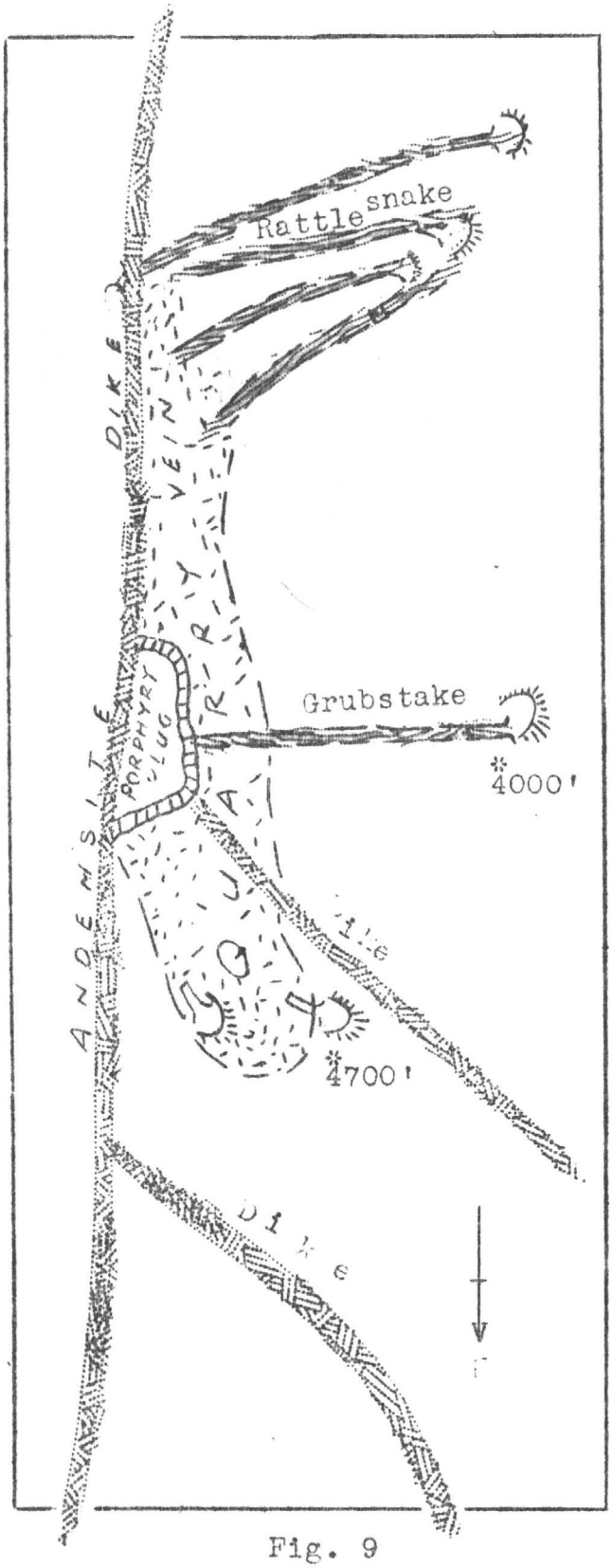
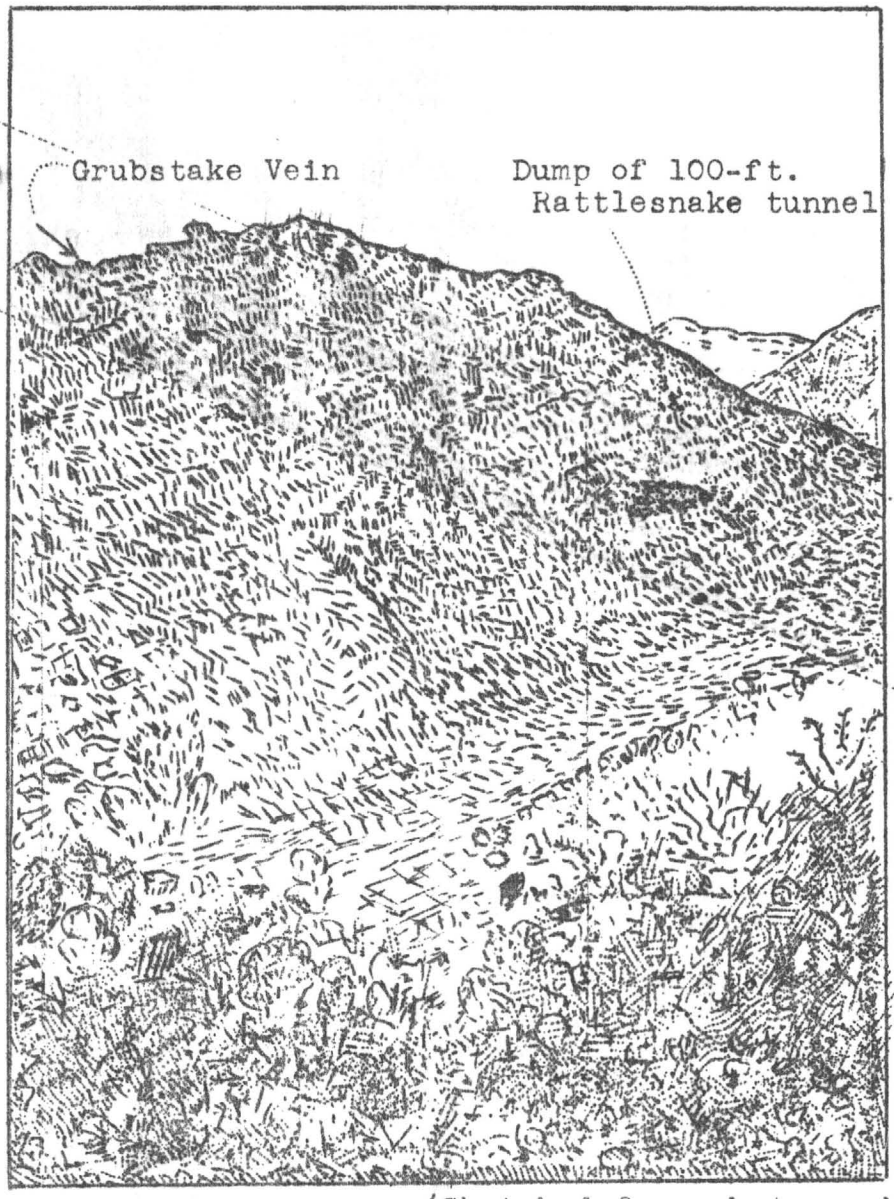


Fig. 9

Gold Note No.1 Claim



(Sketcked from photograph)

Fig. 10 -Looking southeast, dashed lines shows general width of Quarry Vein orebody on the slope of the mountain. Plan view is shown in Fig. 9.

GOLD NOTE GROUP

This group is located in the south part of the Colossal property. It is reached by trail from the Silver Dollar. The group consists of 3 mining claims:

Gold Note No. 1
Gold Note No. 2
Gold Note No. 3

Topography and Geology

The country is rough and precipitous, the elevation is around 4,000 feet. Water is available on this group, and sufficient water could be developed for a sizable operation.

The geological formation of this particular hill was noted by early field surveys by the U.S. Geological Survey and is described by Lindgren U.S. Geological Survey publication in Bulletin 782 in which it was thought the wide spread of mineralization is due to the various acidic dikes that cut the formation.

This group of claims are staked on ground that covers the intersecting of three major dikes that cut the country formation. Going northward, an andesite dike is exposed for some 6,000 feet; to the west and trending northward is a dike of diorite with width from 5 to 25-feet where exposed by its cropping; and, to the east there is found a large outcropping of rhyolite porphry which cuts the country.

Gold Note No.1 claim is the best mineralized claim of the group. Near the center of this claim, as shown in Fig. is a massive porphyry plug which is about 1,000 feet in height, above the small valley to the west, cuts the country formation and is on the west side of the andesite dike.

The west slope of the "plug", from its center, several quartz veins cut the country granite formation at various angles. These veins are quartz fissures with dips raking into the hill, widths are from a few inches up to 6 feet.

Along the slope of the "plug", Fig. 8 shows the Quarry Vein. This vein takes in an area of wide-spread mineralization, being about 300 feet wide and 1,000 feet long.

Development

This ground was discovered by Major Pickens in the late 60's and the highgrade ores were mined and shipped to Swansea, Wales for treatment. It was relocated in 1902 by Harvy Taylor and recorded as the Grubstake Mine. Taylor mined on several veins which strike toward the "plug" over a period of years and recovered the gold values in an arraster which was located in the near by valley.

After Taylor's death in 1916 the property lost the attention of prospectors and chloriders until it was relocated in 1924 by

R.E. Logan, the present owner. Since 1924, Mr. Logan has done considerable exploration, sampling and milling of the assessible ores.

More than 2,000 samples have been panned from the Quarry vein over a period of two month by two prospectors who were employed for the purpose. The results of this sampling showed free gold in many of the pannings from outcrops.

From an assay map, covering an area of about 1,000 feet in length and 800 feet on the slope of the mountain which was conducted by Carl G. Barth, E.M., sample No.'s 4,5,6,7, 10, 11, 12, 13, and 14 indicates an average of 0.74 gold, 4.5 silver ounces per ton, or a gross value of $23,39 with gold at $35 and silver at 64.6 cents per troy ounce.

Four mill run tests of five tons each was run by R.E. Logan with the following results:

Ounces per ton	
Gold	Silver
.69	.08
.49	.05
1.46	3.03
2.00	1.15

Possibilities

From the above investigations and from the developments on the Grubstake, Quarry and Rattle Snake veins it is likely a tonnage of large quanity and of commercial quality could be developed.

The problem of metalurgy is simple as the ore in the oxidized zone is free milling and the sulphides are simple to recover by either flotation and table concentration.

Water must be developed. The supply appears to be sufficient considering that water is now exposed at various points on the property.

Roads must be built into this part of the property, this does not offer a serious problem since roads are easily built in the desert mountains.

Electrical power is already within 5 miles from this development.

This group appears to contain commercial possibilities when provided with production and recovery equipments. And the installation should be justified after explorations are continued in known ground to determine the magnitude of the deposit.

OLD COLOSSAL CLAIM No. 1

History

Harvey Taylor, a Civil War veteran orginially discovered and located this ground in the early 1870's. Taylor work this claim and others in the area until his death in 1916. R.E. Logan, the present owner acquired control in 1923 and has worked it and others since.

According to records, Taylor's production exceeded $50,000. This ore was produced by hand mining and the ore was treated near the mine in arrasters using burros for power. Logan has continued in the ground using better equipments and milling some of the ores.

Geology and Mineralization

The country rock is granite schist with a sedimentary contact to the south. To the immediate south of the present development a westerly striking diorite dike cuts the granite country formation.

Fig. 11 shows the vein system. The veins are quartz filled fissures with a general north strike and dips about 60-degrees to the west. Gold is found as free-gold and associated with the various sulphides. Sulphides are of iron, copper and lead, in the form of hematite, chalcopyrite and galena. Sulphides are massive and veins are from 18-inches to 3-feet.

Development

All work has been confined largerly to open-cuts, the largest is 50-feet in width by 50-feet deep and about 70-feet in length. The deepest development is an inclined shaft, it follows the vein to a depth of 128-feet and at the bottom a small stope is cut.

This work is done in the area near the dike, it appears to be gossan capping and is stained with iron and its width of about 25-feet assays $10 per ton in gold. The 128-ft. shaft was sunk on what appears to be a split of the vein which is 18-inches wide, but at the 100-ft. level in the shaft another spur came in and 3-ft. vein was followed to the present 128-ft. level where a stope was opened.

The ore in the shaft is said to carry 4.5 ounces per ton in gold across a 2-foot width. Logan then started a cross-cut tunnel to tap this ore. The cross-cut was driven 100feet through the dike and heavy ground was encountered and work was stopped, about 25 feet will be required to cut the vein.

From the cross-cut, when the objective is reached, by drifting to the north on the vein, there will be considerable vein over the level of the drift, probably 500-feet.

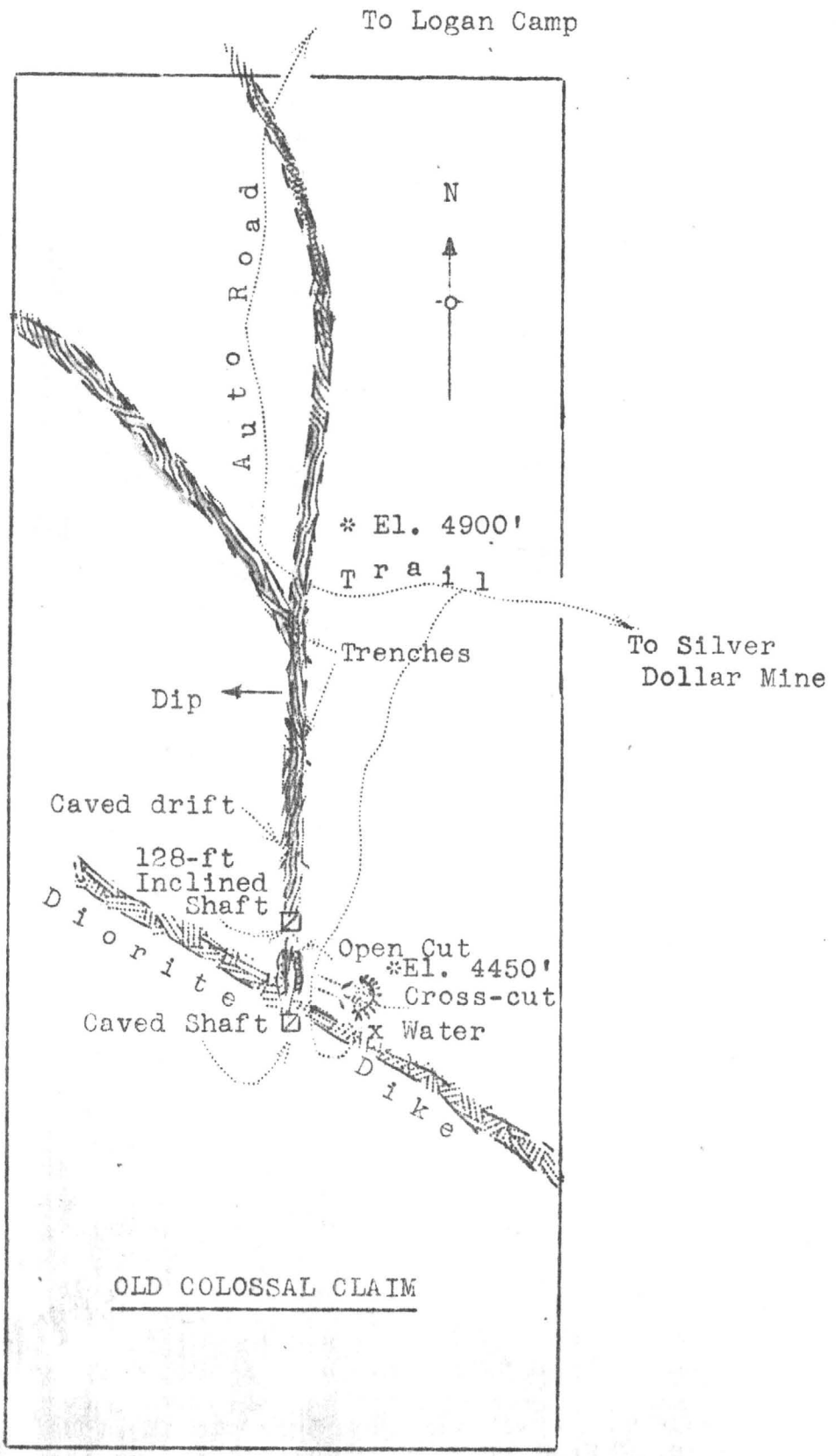

To Logan Camp
Auto Road
N
* El. 4900'
Trail
To Silver
Dollar Mine
Trenches
Dip
Caved drift
128-ft
Inclined
Shaft
Diorite
Open Cut
*El. 4450'
Cross-cut
Caved Shaft
x Water
Dike
OLD COLOSSAL CLAIM

Fig. 11

Recent shallow development done north of the shaft has exposed 3-foot of vein that assayed 5 ounces gold; and another 20-inch vein width that assayed nearly 1-ounce gold, and 12-ounces silver per ton.

Other surface assays are as follows:

Ounces per ton		Value	Width of
Gold	Silver	Per ton	Ore Sample
3.20	3.20	$113.12	18-inches
1.10	.40	38.90	3-feet
.70	.50	24.65	do
4.20	5.00	148.50	20-inches

Last smelter shipment of record was shipped September 24, 1941 to the El Paso smelter -Lot Number 1148. Return assays are:

Ounces per ton		Percent	
Gold	Silver	Lead	
1.003	41.40	49.00	As paid for.

Milling. -A small tonnage from the Colossal claim was packed to the Logan Mill and milled. Mr. Logan reports the ore will ratio a concentration of 25 to 1 and from second class ore he recovered 5-dwt. gold with amalgamation, and the table concentrates assayed 66.55 ounces per ton in gold and valued at $2,328.00; while the silver ran 43.50 ounces and valued at $15.20 per ton. He also reports the milling problems are simple.

Possibilities

The preliminary work for driving the cross-cut tunnel to the vein and cutting and opening stopes in the orebody will require about 30-days of dead work and should be completed for $5,000.

When this work is done, it will provide considerable tonnage of the vein above the transportation level. This would be in ground known to carry good values, considering the amount of vein prospected at surface croppings and the amount of ore produced for shipments.

Water is available near the workings, it must be developed for milling. Road must be built and put in shape before any sizable operation is carried.

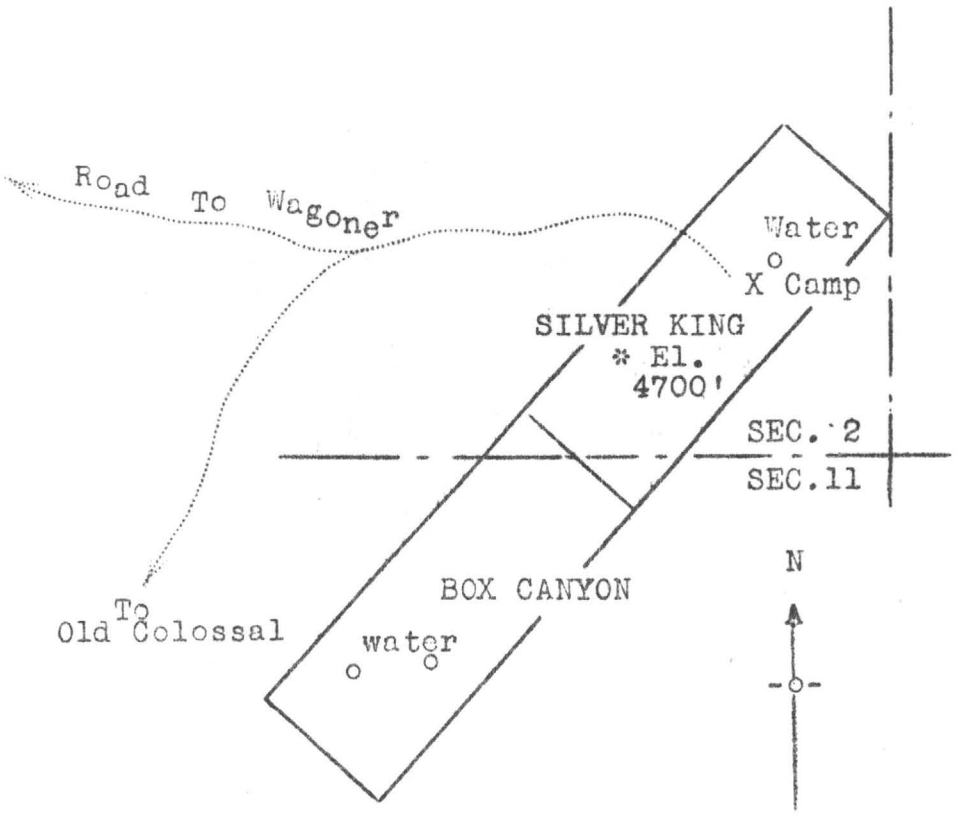


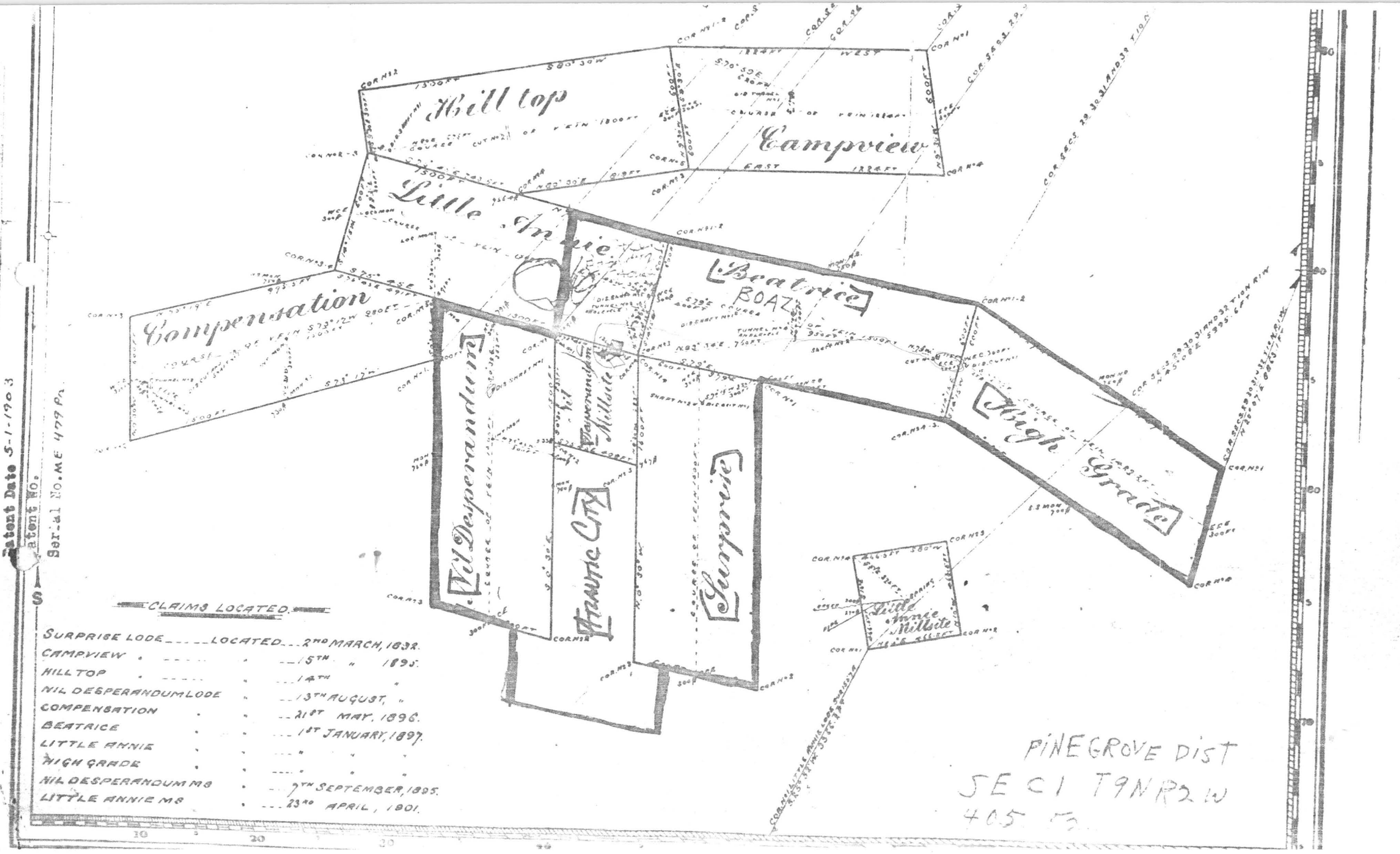
Fig. 12

The Silver King and Box Canyon Claims are staked on the southern part of the vein that is worked to the north on the Sue Claim. There is no active development on this group.

Domestic water is developed on the Silver King Claim and the camp and mill are grouped near the water.

The mine camp consists of two frame dwellings, three tent houses and a blacksmith shop. The mill is described on Pages 16 and 17.

Generally, for the past two years, the state of Arizona has experienced much lost water supply from the mountains for the lack of snow or rainfall. In the area of this property the water table has lowered some 25%. Stockmen are now using the Colossal supply for cattle. The present supply will be sufficient to keep the present mill operating 24-hours per day by reclaiming the water from the concentrating table.


Hill top
Campview
Little Annie
Compensation
Beatrice
ROAZ
Nil Desperandum
Annie City
Surprise
High Grade
Little Annie Millsite
Patent Date 5-1-1903
Patent No.
Serial No. ME 479 Pa.
CLAIMS LOCATED.
SURPRISE LODE ---- LOCATED ... 2ND MARCH, 1898.
CAMPVIEW " ---- " ... 15TH " 1895.
HILL TOP " ---- " ... 14TH "
NIL DESPERANDUM LODE " ... 13TH AUGUST, "
COMPENSATION " " ... 21ST MAY, 1896.
BEATRICE " " ... 1ST JANUARY, 1897.
LITTLE ANNIE " " ... " " "
HIGH GRADE " " ... " " "
NIL DESPERANDUM MS " ... 7TH SEPTEMBER, 1895.
LITTLE ANNIE MS " ... 23RD APRIL, 1901.
PINEGROVE DIST
SEC 1 T9N R2W
405 P

Gold Nots - Group. Ready to Mine ore.
See. Barths report.

Silver & Group. Since 1937 - about 3000 tons of ore mined

Mineral Hand Book. contains some reports. about $80.000 in recovers

Broadgate. made Mill tests on this ore.
Shaft & drifts now filled with water. about 500 000 gal.
no work since - 1937

Gold Hill = Shaft + Drifts = Ore found up ready to mine.
a. high grade gold ore.
Concentrates = shipped. value. 14 oz au. 45 oz. ag. 14% Pb.
Ratio of con. 20 to 1 = 1 oz. au recovered. % to Con. by Amal.
Ready to produce = This property has produced. 1500 oz. au ore from

North East. Shafts + Drifts. Ore ready to mine.
a lead ore. - See - Barths report.
New discovery. a Gold - Silver - Copper - Lead ore. = Now developing this ore. find.
Ready to get into production

Old Colossal. (Old Taylor) Shaft & Crosscut tunnels.
2. Gold - Copper Ore
crosscut drove into the foot wall. (Diorite) 130 feet to cut a vein (3 foot.) = value. 5.5 oz Au - 5. 3. Ag - 8 45% Cu.
Ready to Mine. The above work was done this year.

Colossal Gold mines
to P E Logan
Nov. 25 - 43

Incl - Silver Dollar

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Colossal

Date Feb 1st, 1943.

District Silver Mountain, Yavapai Co.

Engineer A. C. Nebeker

Former name same

Location Prescott

Owner Mr R. E. Logan, Grace Logan

Address Wagoner, Yavapai Co. Ariz.

Operator same

Address

President

Gen. Mgr.

Mine Supt.

Mill Supt.

Principal Metals Gold-Silver -Lead.

Men Employed none

Production Rate none

Mill: Type & Cap.

Power: Amt. & Type hand

Operations: Present none

Operations Planned no plans for early operations, due to lack of man power.

Number Claims, Title, etc. 10 held by location and annual work
Title appears to be good

Description: Topog. & Geog. This property is 16 miles south-east of Wagoner, Yavapai CO Ariz. The topography is plent ruff. The mountains are high and sides are cutt by many gullies or ravins. The surface is covered with a thick growth of scrubb brush.

Mine Workings: Amt. & Condition There is not a large amount of work on this property. The work consists of a trench drift along the vein for 40 or 50 feet, and a shallow incline shaft to the depth of 30 feet. These works are on the vein and are in good condition.

(over)

Geology & Mineralization The formation consists of granite, schist, which have been intruded by quartz and porphyry dikes. The fracturing and movements in the near vicinity of this property has not been sever. I noticed one well defined fracture crossing the property in which there is to be seen lead sulphide (galena) and lead carbonates, there is also some iron oxides with quartz.

Ore: Positive & Probable, Ore Dumps, Tailings There is no tonnage of ore blocked out the workings are not deep enough, nor has there been enough drifting along the vein to expose and amount of ore.
I was informed that there has been a few small shippments of ore made from here.

Mine, Mill Equipment & Flow Sheet There is no equipment on this property, however down at the camp where Mr Logan lives there is a small mill and some mining tools.

Road Conditions, Route Turn off the mainhighway at Kirkland Jct at the sign 20 miles to Wagoner, go to Wagoner pass the post office and take the road going south, follow this out for 16 miles to the property. The road to Wagoner is good, but from there out is passable but not so good.

Water Supply Plenty of water at camp.

Brief History Bean held for years by doing assessment work. It has been leases out a time or two and some small shipments of ore has been made.

Special Problems, Reports Filed

Remarks More prospecting of the vein is necessary to get a true line on the ore.

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

Property can be bought on reasonable terms.

Signed A.C.Nebeker

Use additional sheets if necessary. Separate sheets on each problem.

Silver Dollar

REPORT

ON

COLOSSAL GROUP OF GOLD MINING CLAIMS

in

Township 9 North, Range 2 West, G. & S., R. B. M.

Silver Mt. Mining District, Yavapai County, Arizona

FOREWORD

The writer was engaged by R. E. LOGAN of Phoenix, Arizona, to investigate and report on the above mentioned property, owned by him and Mrs. Grace H. Logan.
Spending several weeks in the area, it was found that these claims were definitely in the possible mining stage, and qualified them for further investigation and exploration.
I herewith submit the results of this investigation. It can only qualify and verify the results of the activities of the owners during the period of their activities while developing this group of claims during the last twenty five years.

Respectfully submitted,

(Signed) CARL G. BARTH, JR.,
Registered Mining Engineer,
Certificate No. 689,
State Board of Registration, Arizona.

Date: Sept. 15, 1937.

SUMMARY

My examination shows the property, held and owned by R. E. Logan and Grace H. Logan, to be four distinct groups of claims, but while sidelined and contiguous, are sufficiently removed each from the other as to make their operation impossible as a unit.
All of these groups can be said to be mines and possible mines.
Each group offers a distinct problem because of its geographical location and its type of mineralization.
On all the groups, sufficient work has been done in exploration of the different ore shoots and bodies to indicate further immediate possibilities.
The Gold Note group, owing to the visible indication of a tremendous deposit of ore, of good value, would require a great deal of intensive and careful exploration before any definite opinion can be given as to its future operation.
Water: quite adequate for all purposes. The present supply can easily supply sufficient for operation of 500 ton mill.

PROPERTY

The property owned by R. E. and G. H. Logan consist of 16 Lode Claims containing approximately 320 acres, as follows:-

Name			Book of Mines	Page
SILVER KING	---	SILVER KING Group = ---	122	488
SILVER DOLLAR	x		135	153
SILVER DOLLAR EXT.	x	GOLD NOTE and	133	510
ORA GRANDE	x	SILVER DOLLAR Group = x	133	509
GOLD II	o		135	284
GOLD HILL III	o	GOLD HILL Group = o	135	285
GOLD HILL IV	o		135	286
GOLD HILL V	o		135	323
NORTH COLLOSSAL	---		127	569
WEST COLLOSSAL	---		127	571
BOX CANYON	---		137	15
GOLD NOTE	=		135	321
GOLD NOTE II	=		137	16
GOLD NOTE III	=		137	17
LEAD CARBONATE	---		133	83
GOLD CARBONATE	---		124	279

Book and page numbers refer to the RECORDS of the COUNTY RECORDER of Yavapai County, Prescott, Arizona.

LOCATION

The property lies in SECTIONS I-II-12 & 13 of Township 9 North, Range 2 West, G.S.R.B.M. Silver Mt. Mining District, Yavapai County, Arizona.

ACCESSIBILITY

From PRESCOTT, Arizona, the county seat and nearest sizeable town, the property is reached by driving south over the HASSAYAMPA HIWAY, Route 89, 22 miles to Kirkland Junction, beyond which a quarter of a mile turning east over the Walnut Grove road a distance of 20 miles to Wagoner, The Post Office, thence over what is locally known as the Oak Creek road, 12 miles south of east, (formerly a part of an old road to Phoenix, Arizona, long since abandoned for the purpose.)

To the CAMP on The SILVER KING CLAIM at the head of Ryland Creek. Except for years of heavy snow, the road is passable throughout the year or closed for short periods only.

The rise from Wagoner, at an elevation of 3372 feet to camp is approximately 1330 hundred feet, indicating the hilly condition to be encountered.

KIRKLAND, the nearest railroad point, lies four miles west of Kirkland Jct., before mentioned, making this point 36 miles from the camp.

TOPOGRAPHY

Topographically, the country in the vicinity of the immediate property is extremely rugged. It lies at the head of RYLAND GULCH, a tributary of CASTLE CREEK, and has worn a deep canyon through the granites, with a drop of over 1000 feet from one end of the property to the other, with side washes from the east making similar deep canyons down the western slope of the northern end of Silver Mt.

GEOLOGY

The general geology, taken from Folio No. 126, U.S.G.S., "The Bradshaw Mountains Quadrangle", shows this area lying generally in the Bradshaw Granite in close proximity to the Crooks Complex, a structure consisting of varying bands of granites, schists, diorites and aplitic dikes, locally covered by volcanics, not, however, as much as reported by Jaggar and Palache.

On the western slopes of Silver Mt. northward trending dikes of Rhyolite Porphyry are prominently exposed and noted by Waldemar Linsgren, in Bulletin 782, U.S.G.S., on pages 22 and 24. Herein he attributes the widespread mineralization of this area to these acidic dikes.

Numerous dikes of Andesite, Diorite and Diabase, the latter seemingly having some bearing on the sulphide mineralization, in this area, and borne out by many observations by me, as indicated here in this vicinity where diabase dikes are very noticeable.

VEINS

The veins of this area trend generally northerly and northeasterly. They follow fracture zones, which are, as a general rule, very distinct, out crops regular giving evidence of continuity, and appear to be lenticular in form. Wall rock alteration quite evident at a number of points, especially where bold out crops are found.

HISTORY

After a careful search of the records, the evidence would show that these groups were discovered in the late 60's by Major Pickens, Judge Cambell, Frank Ryland, Harvey Taylor, and others. The properties were worked by hand methods, values recovered by primitive means and transportation by ox team, the extremely high grade gold ores were hauled by ox team and shipped to Swansea, Wales, for recovery of values. As depth was gained in their workings, sulphide ore was encountered, and as no method was perfected, at that date, to recover the values, they ceased to operate.

In the year 1922, R. E. LOGAN, a World War Veteran, and a practical mining man, came into the district, acquired the mines by purchase and discovery. He has operated them the last 19 years, mining the high grade ores, but using better equipment as to milling than the old timers. In this work, he has met with considerable success, as well as opening up, in this work, several areas, well worth further exploration, all of good gold bearing ores.

ADJOINING PROPERTIES

To the North, the Button and Ora Gold Mine; To the Northeast, Crown King, Tiger, and Ora Belle; To the East, the Pacific and F. X. O'Brian; To the South, the Indepence mine; To the Southwest, the Golden Astor and Old Taylor Mine; To the West, the Joker and the Fenton Mine. It would appear that this group is in the center of a highly mineralized area.

GENERAL DESCRIPTION OF CLAIMS

Four distinct groups of claims have been designated due to the character of its veins and physical location.
Reference is here made to a sketch map of the locations indicating this grouping.

The NORTH COLOSSAL GROUP, consisting of the North Colossal, Lead Carbonate, Gold Carbonate, West Colossal, and the Silver King lie in the northern end of the area. The Camp, consisting of two frame dwellings, three tent houses, Blacksmith shop and milling plant, consisting of RibCone Ball mill, 15 ton capacity, Deister Plato table, for concentration, amalgamation by plates and Gibson Amalgamator crusher and adequate power plant, all machinery, tools, and other equipment in excellent condition.
The camp and plant being grouped in the vicinity of living water, by gravity, on the banks of Ryland Wash on the Silver King Claim.

The work on this group has been recently confined to the North Colossal Claim. On this claim, three definite veins are distinguished, being fractures in the formation, expanding into lenticular mineralized shoots at closely spaced intervals. There is considerable wall rock alteration and where mineralized show quartz bands filled with galena, and carrying values in gold and silver. Near the surface is a definite oxidation to lead carbonate, showing free gold on panning, a sample cut at this point across 3 feet, assayed Au. I, 35 oz., Ag. 8.7 oz., Pl. 4% value, $ 52.26.
On the North end of the claim, work has been done in the past on what must have been a free milling outcrop, and a shaft 60 feet in depth was sunk. Recent chloriding, by a leasor, has been done in a surface cut near the collar of this shaft and together with ore sorted from the dump to the amount of 211 tons, after milling was shipped as a concentrate to the American Smelting & Refining Co., at El Paso, Texas, the returns netting $277.75 per ton before freight and sampling charges deducted.

At present, a drift tunnel is being driven by a leaser, 200 feet south of the shaft on a parallel vein and at a position to gain considerable depth and on what appears to be an ore shoot. A galena outcrop and float indicates a considerable sized ore shoot at this point. The tunnel now having gained a length of 100 feet, shows in its face two bands of quartz, each having a mineral content and producing a shipping and milling ore. The leasor works on a 30% of the net smelter returns from ore and concentrates, less hauling to shipping point, and is satisfied with results obtained.
The smelter returns from shipping ore was $89.00 per ton, the heads of milling ore was $36.00 per ton, ratio of concentration 10 to I, lead 4½ cts.
My assay of the shipping ore showed .96 oz. Gold, 8.8 oz. Silver, 51.5% Lead
The Lead Carbonate shows similar veins and values where examined, the Gold Carbonate and West Colossal veins have ore of similar character and value but as the principle work is on the North Colossal, these claims were not given a close examination.

THE GOLD HILL GROUP, consisting of Gold Hill II, III, IV & V, is the easterly group and can be reached from camp over the old road made by Judge Cambell in the early days. This road is bad repair.

Gold Hill IV & V are located along a fractured zone, Rhy. Phyr. and Granite contact, running north and south, above which no springs seem to issue and which zone may be a source of and for the development of more water, if needed for the North end of group.
There was no particular mineralization noted, beyond the evident oxidation of sulphides, causing discoloration of surrounding country rock, the mineralization being sufficient for requirements for location.

Gold Hill II is the major claim of the group. On its approximate center on the downward slope southward a quartz vein outcrops and is traceable a distance of 300 feet southward and 125 feet northward from the shaft here located, varying in width from one to three feet. Sulphide mineralization is indicated in the vein, particularly in the vicinity of the shaft and cuts adjoining, but highly oxidized. The shaft has apparently been sunk in what was at the time a free milling outcrop, and mined in open cuts. The shaft, about 80 feet in depth, shows a vein 3 foot in width, of sulphide bearing ore, assaying average value, Au. I.30 oz. - Ag. .05 oz. $46.94. In a shallow drift towards the shaft, 75 feet in length, a face of ore 2 feet in width, assayed as follows: Au. .69 oz., Ag. .8 oz. - $24.76. The vein seems to be a series of lenses in the Crooks Complex, with small dikes of Monzonite Phor. coming in at different angles, these lenses lying in echelon, the walls determining this fact.

Its dip is almost vertical. The past mining having been confined almost entirely to the vicinity of the shaft indicates the existence of very high values, in those ore shoots, but further work should now disclose other places along its outcrop well worthy of exploration.

Chloriding could be carried on, by leasors, with favorable results to be expected on these oxidized outcrops.

Gold Hill III, lying to the East of Gold Hill II, has quite a different geology. The ore occurs in lenses along pegmatite, vein 3 feet; ore has quartz stringers from a few inches to 18 inches in width. The working shows that it was mined many years ago, a shaft of shallow depth and short drift being all that was open for examination. A sample assay across one foot, Au. I.76 oz., Ag. 7.7 oz., value $67.53. Chloriders could do well on this claim.

THE SILVER DOLLAR GROUP consists of the Silver Dollar, Silver Dollar Extension, and Ora Grande Claim. These are reached by automobile over six miles of rough road, from the upper camp, part of which traverses up Ryland Wash, to the camp on the Silver King Claim.

The Silver Dollar lying wholly in the Granite, near the surface slightly decomposed, and on its southern end covered by surface debris, is the active claim of the group.

The surface generally shows a fracture in the granite, traceable beyond the northern end of the claim, with outcrops other than in the vicinity of the shaft, where quartz is very noticeable.

Slightly south of the center of the claim, the early operators mined this quartz in an open cut for a length of approximately 100 feet, sank a shaft 128 feet in depth, at an angle of 76 degrees, drove levels at 35, 70 and 90 feet, stoping from 90 to the surface. The length of 35 and 70 foot levels 125 and 140 foot. The 90 level was driven 160 feet southward and 142 feet northward.

Ore has been recently mined from the 90 level over a length of 115 feet south and 30 feet north, the total length of the ore shoot here is now accepted as 145 feet. On the 90 level it was possible to get a bulk sample 75 feet south of the shaft and another 30 feet north.

The mineralization here is different from that encountered on other parts of the property, being here a quartz, pyrite, chalcopyrite, galena, carrying free gold and showing at this depth only slight oxidation.

Wall rock mineralization by pyrite is here strongly evident, more so than in other parts of the group, and is a good indication of continuity, though in itself of no value. The ore shoot appears to be a series of lenses pinching and swelling vertically as well as horizontally and as reported and indicated varying from 12 to 42 inches in width. The stopes that were examined indicated this to be true as they have been left open without much need of timber, the walls being generally firm.

The samples mentioned above, when assayed were as follows:

South Sample. 75 feet from the shaft, 32 inches wide, 10 feet long, shows: Au. I.68 oz. Ag. 6.3. Value $63.65

North Sample. 30 feet from the shaft, 30 inches wide, 10 feet long, shows: Au. I.2 oz. Ag. 8.8 oz. A gross value of $48.82

Settlement sheets of car load lots to smelter as follows:

Au. 2.06 oz. Ag. 14.50 oz. Cu. 2.6. Insol. 69.56. Fe. 15.37-S. 12. Si. 68.74 Sul. 6. Value $80.15.

Au. 1.02. Ag. 4.50. Cu. .77. Value $39.17. Magma Smelter, Mar. 20/37/

The shaft was inaccessible below the 90 foot level.

A small amount of water is required to be pumped each day, but the quantity was insufficient to measure.

THE SILVER DOLLAR EXTENSION, so named because of its location along the Silver Dollar fracture zone northward, lies mostly on the precipitous northern slope of Hardscrabble Wash. An opening in the hill about 200 feet from the southern end line was examined, and gave evidence of considerable ore having been removed, and showed continuous ore in the face. The value by sample across 27 inches, as follows: Au. 1.26 oz. -- Ag. 5.13 -- $ 48.03. Several other openings were visible along this fracture, but of not sufficient work done to make any determination. To the east of the Silver Dollar Fracture about 150 feet lies a flat dipping greenstone dike, readily seen outcropping up the precipitous slope and which has been prospected rather thoroughly in the past, showing intense silicification on its hanging wall, somewhat oxidized, in places indicating good prospects of ore and from which considerable had been removed. A rather long drift tunnel was indicated near the bottom of the wash, by a sizeable dump. This claim would prove successful by operating by leasors.

The Ora Grande claim was not examined as nothing more than the necessary location work had been done.

The GOLD NOTE GROUP, consisting of the GOLD NOTE, GOLD NOTE II, and GOLD NOTE III, is reached over a trail from the SILVER DOLLAR eastward, about 2500 feet.
The GOLD NOTE II and III were located on and along a massive Diabase dike showing alterations and oxidation, with evidence of good ore in place and having been mined in the past. The Gold Note II is particularly valuable for camp and water purposes as sufficient quantity is available both for camp and milling.
The GOLD NOTE is the major mineralized claim, but of such magnitude as to the mineral deposit, that only a cursory examination could be made.
What appears to be an Andesite dike follows more or less along the eastern border of the claim, paralleling which is an area of mineralized granitic rocks. which can be called granite porphyry. Several irregularly outcropping quartz veins traverse the area, with minor quartz veins intersecting the granites. These are in places highly oxidized, indicating their former sulphide mineralization.
Several of these oxidized outcrops have been mined from which it is apparent considerable high grade ores have been removed. A bulk sample taken over 1000 feet in length from the many openings and remaining dumps showed as follows: Au. .74 oz. - Ag. 4.5 oz., a gross value of $29.39.
Several tunnels have been started that will give 1000 foot of back with 500 feet of drifting.
The widely scattered mineralization, of high value, indicates an area well worth while examining for the possibility of developing a low grade low cost property. The mineralized area can be said to cover roughly a width of 300 feet, a length of 1000 feet, and a length along its slope of 800 feet. This in itself would represent a tonnage of considerable magnitude

The recommendations as to the operation of the different groups will follow.

On the Silver Dollar Claim, as the shaft is only a prospect shaft and to comply with the Mining regulations of the State of Arizona, a new shaft should be sunk to not less than the 350 foot level.

On the GOLD NOTE Claim, a tunnel should be driven on what is known as the Grub Stake vein, 500 feet in length, then crosscut, both ways for an equal distance, blocking out this tremendous deposit of ore.

On the GOLD HILL II, the shaft should be continued downward to not less than the 350 foot level, with drifts on each hundred foot level.

On the NORTH COLOSSAL Claim, the conditions permit of drifting on the ore both ways North and South. To the South 300 foot of back will be gained in 150 foot drift; to the North the same condition exists.

In all other openings of high grade ores, on the different claims, leasors should be operating, using the present plant to mill those ore that are run of mine mill ores, shipping the high grade ores direct to smelter.

COSTS

A discussion of the probable cost to be expected cannot be estimated with any degree of accuracy, owing to the present economic conditions and the probable volume of ore to be handled, and in the manner necessary for successful operation.

Development costs such as sinking and drifting can be estimated and should not exceed $35.00 per foot for sinking and $10.00 per foot for drifting. Contract prices may be had at even a lower figure.

Milling costs, being based on volume, would approximate $2.00 per ton.

Respectfully submitted

(Signed) Carl G. Barth, Jr.

CARL G. BARTH, JR. E.M.
CERTIFICATE NO. 689
St. Bd. of Reg., Arizona.

Sept. 15, 1937.

Copied, compared and checked from
original, found correct.
July 17th, 1941.

(Signed) R. E. Logan.

Cliff Russell talked about the Manzanita claim south of Wagoner and claims on Rich Hill. Hoped for some production in 1975. FTJ WR 12/19/74

Cliff Russell called to say his 30 Manzanita claims in sec. 12, T9N, R2W, will be open for leasing January 13, 1976. GW WR 12/12/75

Tuesday, December 7 - Accompanied Frank & Cliff Russell to their 30 unpatented Manzanita claims in Sec. 12, T9N, R2W, about 12 miles S.E. of Wagoner on lower Minnehaha Flat. This property consists of almost all of the original Colossal group prospected and mined to a limited extent about 1902. Here there are at least two 6-8 ft. quartz veins trending N40E and dipping steeply north in course grained granite and gneiss. These veins are designated as Pre-Cambrian by Lingren in USGS bulletin 782, 1926, and contain pyrite, galena, chalcopyrite, and some tennantite along with gold and a little silver. In a 40 ft. adit drift two 4"-6" streaks of quartz with considerable galena about 3 ft. apart came together 4 ft. from the face to form an 18" vein reported to assay 7.7 oz. gold/ton. About 10 ft. from the face of this drift a strong cross fracture trending N4 5°W. may have had the effect of bringing the two streaks together. About 300 south of the above drift along the north side of a very steep canyon a 3-4 ft. diabase dike strikes N30E. and dips 30°- 50°N.

Tuesday, December 7 continued - About 30 ft. above the dike and roughly parallel to it an 8" to 12" quartz vein is traceable for more than 200 ft. and is reported to assay 3.8 oz gold/ton. About 150 ft. north east of the dike is a 4" vein of quartz striking N5°W which is exposed for only a few ft. and is reported to run 4.4 oz. gold/ton. Approximately 1/4 mile east of the adit drift an old stope from an 80 ft. shaft breaks thru to the surface. Here a foot of quartz is apparent and is said to assay 1.3 oz. gold/ton. This surface break thru is about 70 ft. west of the shaft. Here the vein trends N40E and dips steeply north. About ½ mile west of this old stope is a 4'x10' rod mill with a set of rolls and a jaw crusher set up above the mill. There is also a 12 ft. wilfley table in need of a new top setting on the ground near the rod mill. In the vicinity of the milling equipment is a 50Kva diesel generator, an old Eimco mucker and one 18" gauge ore car. Due to the thick brush and very steep terrain there may be several other undiscovered small gold-bearing veins on these 30 claims. GWWR

Cliff Russell, Phoenix, came in to discuss the disposition of table concentrates containing silver-gold to be made on his property in Minnehaha Flat by a Mr. Cooper, a lessee. GW WR 2/7/77

Manzanita Mines

2/3/81 Ben Morgan Rt 6 Bx 311C London KY 40741
of the Bledsoe Coal Co reports they are investigating
Silver Dollar, Sunset, & Oro Grande of the Colonial Mines
near Wagoner & the Manzanita Mine. Dames & Moore
were retained to evaluate property & develop a flow
sheet

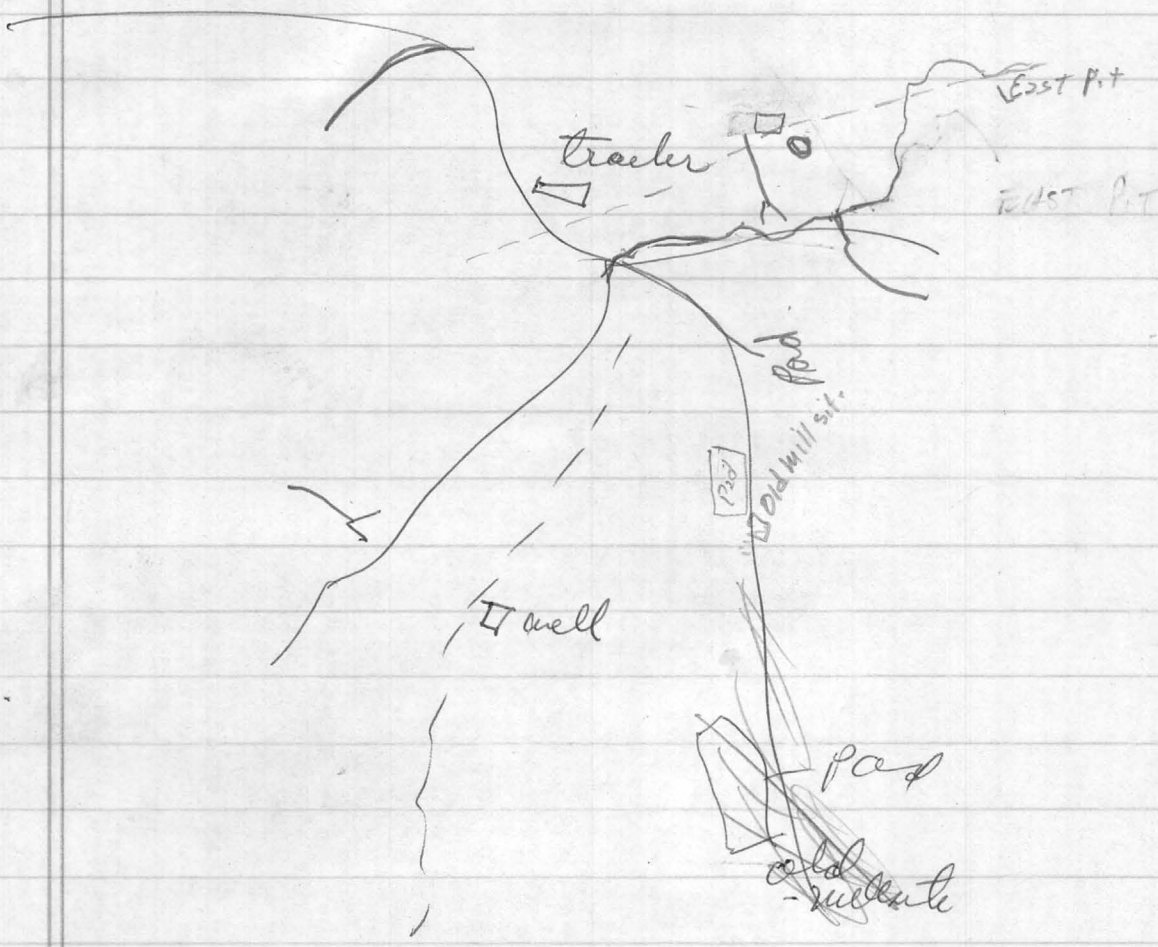
Salem Dollar

12/1/77 Cliff Russell came in with a chunk of pegmatite material which he said had approx 2% uranium in it. He said there were at least 6 pegmatites on the Salem Dollar group of claims all of which show some radioactivity - He also reported Natural Uranium Resources Inc had flown the area & had staked several hundred acres in the immediate vicinity of the Salem Dollar property

2/4/81 a geologist for a major consulting geology firm reported they completed a preliminary sampling program at the Salem Dollar & Salem Dollar ext mine. The program included some 80 samples reportedly did not substantiate previous assumptions as to values at the property

8-9-83

Bozz


East Pit
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REPORT
on
COLOSSAL GROUP OF MINING
CLAIMS
in
Township 9 North, Range 2 West, G.& S.R.B.M.
Yavapai County, Arizona.

FORWORD

The writer was engaged by John J. Darmody of Prescott, Arizona, to investigate and report on the above mentioned property held by the COLOSSAL MINES INC. under an agreement with the owners R.E. and Grace Logan of Phoenix, Arizona.

Spending several days in the area it was found that these claims were definitely in the prospect stage and as such did not call for an examination that would more than qualify them for further investigation and exploration.

I herewith submit the results of this investigation. It c an only qualify and verify the results of the activities of the organization during its brief operation,

Respectfully submitted,

Carl G. Barth, Jr., E.M.,
Registered Mining Engineer,
Certificate No. 689,
State Board of Registration,
Arizona.

Sept 17, 1937

Sept 17, 1937

SUMMARY

My examination shows the property now held by the COLOSSAL MINES INC. to be four distinct groups of claims sufficiently removed each from the other as to make their operation impossible as a unit.

None of these groups can be said to be other than in the prospect stage.

Each group offers a distinct problem because of its geographical location and its type of mineralization.

The Silver Dollar is the only group on which sufficient work has been done in exploration of its one ore shoot, to indicate further immediate possibilities.

The Gold Note requires agreat deal of intensive and careful exploration before any definite opinion can be given as to its future worth.

The ruggedness of the area makes the building and maintenance of roads a major problem.

Water, though adequate for the present, may possibly be augmented by drilling in some of the sheared zones.

RECOMMENDATIONS

Due to the activity already in progress at the Silver Dollar and the results obtained it is recommended that this work be continued with adefinite program of development to a further depth.
Some additional equipment and improved accomodations for living is at present required for efficient and satisfactory results at a minimum of cost.
Stoping of ore should not be carried on until such time as there is sufficient volume to make an efficient and continuous mill run.
Sorting of ore at the mine should be carefully done increasing the grade and decreasing the cost of transportation to the Mill.
Suggest that all development work be let on contract thereby reducing cost of supervision.

Continue leasing the Colossal on the same or a better basis than now offered. This is a cheap method of development.

Attempt to interest leasors on the Gold Hill as no organized work is called for at the present.

A program of exploration should be instituted on the Gold Note.
To carrynthis out it will be necessary to make it more accessible by building a mile of road; this could be done at a relatively small cost. A camp would have to be established for the purpose. a tent being all that would be now required.

PROPERTY

The property held by the COLOSSAL MINES INC. under an agreement with the owners, R.E.Logan and his wife Grace H.Logan consists of 16 Lode Claims containing approximately 320 acres as follows:-

NAME	BOOK OF MINES	PAGE
SILVER KING	122	488
SILVER DOLLAR	133	153
SILVER DOLLAR EXT.	133	510
ORA GRANDE	133	509
GOLD HILL II	135	284
GOLD HILL III	135	285
GOLD HILL LV	135	286
GOLD HILL V	135	322
BOX CANON	137	13
NORTH COLOSSAL	127	569
WEST COLOSSAL	127	571
GOLD NOTE	135	321
GOLD NOTE II	137	16
GOLD NOTE III	137	17
LEAD CARBONATE	133	83
GOLD CARBONATE	124	279

Book and page numbers refer to the Records of the County Recorder of Yavapai County, Prescott. Arizona.

LOCATION

The property lies in Sections 1,2,11 & 12 of Township 9 North, Range 2 West, Gila and Salt River Base Meridian, Yavapai County, Arizona.

ACCESSIBILITY

From PRESCOTT, Arizona, the county seat and nearest sizeable town, the property is reached by driving south over the Hassayampa Highway, Route 89, 22 miles to Kirkland Junction, beyond which a quarter of a mile turning east over the Walnut Grove road a distance of 20 miles to Wagoner, thence over what is locally known as the Oak Creek road, 12 miles south of east(formerly a part of an old road to Phoenix, Arizona, long since abandoned for the purpose) to the CAMP on the Silver King[illegible]

the road is passable throughout the year or closed for short periods only. The last 12 miles is at present very rough due to the recent heavy summer rains. The rise from Wagoner, at an elevation of 3372 feet to the camp is approximately 1300 feet, indicating the hilly condition to be encountered.

KIRKLAND, the nearest railroad point lies four miles west of Kirkland Junction, before mentioned, making this point 36 miles from the camp.

TOPOGRAPHY

Topographically the country in the vicinity of the immediate property is extremely rugged. It lies at the head of Ryland Gulch, a tributary of Castle Creek, and has worn a deep canon through the granites, with a drop of over 1000 feet from one end of the property to the other, with side washes from the east making similar deep canons down the western slope of the northern end of Silver Mountain. Reference is here made to the accompanying enlarged section of the Bradshaw Quadrangle, involving this area.

GEOLOGY

The General Geology, taken from Folio No.126, U.S.G.S. " The Bradshaw Mountains Quadrangle" shows this area lying generally in the Bradshaw Granite in close proximity to the Crooks Complex, a structure consisting of varying bands of granites, schists, diorites and aplite dikes, locally covered by volcanics, not however as much as reported by Jaggar and Pa Palache.
On the western slopes of Silver Mountain northward trending dikes of Rhyolite Porphyry are prominently exposed and noted by Waldemar Lindgren in Bulletin 782, U.S.G.S. on pages 22 and 24. Herein he attributes the widespread mineralization of the Bradshaws to these acidic dikes.

Numerous dikes of Andesite, Diorite and Diabase, thenlatter seemingly having some bearing on the sulphide mineralization along this eastern slope, borne out by many observations by me and indicated here in the vicinity of the Silver Dollar ground where diabase dikes are very noticeable.

VEINS

The veins of this area trend generally northerly and northeasterly. They follow fracture zones, which are, where no outcrops occur, indistinct. Outcrops are irregular and seemingly lacking in continuity and appear to be lenticular in form. Wall rock alteration almost lacking and therefore no bold outcrops are found.

HISTORY

The history is rather vague and sketchy, but dates back to the early history of mining in the county, locations having been made as early as 1876.
With the falling of of Placer Mining, lode mining drew the attention of the prospector and he, by panning, located outcrops of free milling gold. Resorting to the Arrastre for his grinding, a primitive but effective method imported from Mexice and driven by a Burro, he collected the free gold in quicksilver, as an amalgam, These Arrastres were located near permanent water and in close proximity to his mining operations. Arrastres are found in this vicinity and judging from the size and wear of the rocks used was both sizeable and of long duration. The time element may have been due to its close proximity to the major wagon route between Phoenix and Prescott, within a short distance of the location. Ryland, for whom the Wash is named, Taylor and Hardscrabble, names well known, were responsible for this activity.

A Judge Campbell of Alabama was active in building a branch road and sinking a shaft on the Gold Hill Claim. It is said that some of his ore was shipped to Swansea, Wales, indicative of the highgrade surface values encountered.

No large mines developed from these activities,

except perhaps the attempt about 1902 to operate the BOAZ property in the northeastern end of the Township on a low grade quartz vein on a fairly large scale. Equipment and a Mill were installed and considerable work done underground with no apparent success, due, it is said to metallurgical difficulties. It is now locally owned and some attempt is being made to place it in operation.

In 1923, R.E.Logan, a Spanish War Veteran and prospector, moved into the area, consolidated the holdings of others by purchase and location and operated intermittently to within the year. Following the tactics of the old timers, miming the free milling ores wherever they could be found, but with more modern mining and milling equipment, made a moderate success. His prospecting and exploration laid bare certain areas that seemed promising of future results.

In January 1937 the property was taken over, under option, by the COLOSSAL MINES INC.

GENERAL DESCRIPTION OF CLAIMS

Four distinct groups of claims have been designated due to the character of its veins and physical location.
Reference is here made to a sketch map of the locations indicating this grouping.

The NORTH COLOSSAL GROUP, consisting of the North Colossal, Lead Carbonate, Gold Carbonate, West Colossal and Silver King lie in the northern end of the area.

The CAMP, consisting of two frame dwellings, one galvanized iron dwelling and two tent houses and the Pilot Mill are grouped in the vicinity of several springs on the banks of Ryland Wash.on the Silver King Claim.

The work on this group has been recently confined to the North Colossal Claim. On this claim, two definite veins are distinguished, being tight fractures in the granite expanding into lenticular mineralized shoots at distantly spaced intervals. There is practically no wall rock alteration and where mineralized shows narrow quartz bands sometimes filled with galena. Near the surface is a

definite oxidation to lead carbonate, showing free gold values on panning.
On the north end of the claim work has been done in the past on what must have been a fre free milling outcrop and a shaft, reported to have been 60 feet in depth, was sunk, but now filled, thendump giving evidence of this possible depth.
Recent chloriding, by a leasor, has been done inna surface cut near the collar of this shaft and together with ore sorted from the dump to the amount of 211/2 tons, after milling was shipped as a concentrate to the American Smelting and Refining Co, at El Pas Texas, the returns netting $ 277.75 before freight and sampling charges, indicating a smelter value of approximately $ 13.00
See Smelter return Sheet of August 26,1937
Lot 3215 included herewith.

At present a drift tunnel is being driven by a leasor 200 feet south of the shaft on a parallel vein and at a position to gain some depth on what appears to be an ore shoot 50 Or so feet ahead. A galena outcrop and float indicates the possibility. The tunnel now having gained a length of 20 feet, shows in its face two narrow bands of quartz, each having some mineral content and producing a shipping and milling ore in small quantities satisfactory to the leasor. The leasor works on a 50% of the net smelter return from ore and concentrates, less hauling to shipping point and is seemingly satisfied with results so far.
An assay of a specimen of the shipping ore showed .96 oz Gold; 8.8 Oz Silver; 51.5 % Lead.

The Lead Carbonate shows a similar vein where examined but no ore was visible where work had been done some time in the past.

The Gold Carbonate and West Colossal claims were not examined but similar conditions were indicated by the general surface.

The Box Canon Claim is located mainly for the control of water, there being a very possible damsite in its deep canon through which Ryland Creek flows during rainy periods.

The GOLD HILL GROUP, consisting of Gold Hill II, III IV & V is the easterly group and can be reached from the camp over the old road made by Judge Campbell, now only a trail, within a half a mile.

Gold Hill IV & V are located along a fractured zone in the granite running north and south, above which no springs seem to issue and which zone may be a source for the development of more water when and if required. There was no particular mineralization noted other than requirements for location.

Gold Hill II is the major claim of the group. On its approximate center on the downward slope southward a white quartz vein outcrops and is traceable a distance of 200 feet southward and 75 feet northward from the shaft here located, varying in width from a few inches to as much as two feet. Sulphide mineralization is indicated in the vein, particularly in the vicinity of the shaft and cuts adjoining, but highly oxidized. The shaft has apparently been sunk in what was at the time a free milling outcrop and mined in open cuts for a few feet below the surface. The shaft, reported to be 60 feet in depth was not accessible nor could the bottoms of the cuts be properly examined due to debris.
The vein seems to be a series of lenses in the granite lying innechelon, with no wall alteration but showing some sulphide mineralization, particularly along its hanging wall side where this cou;d be determined. Its dip is almost vertical.
The past miningbhaving been confined almost entirely to the vicinity of the shaft indicates the lack of other ore shoots along the vein, but further work may now disclose other places along its outcrop worthy of exploration.
A sample of what appeared to be sulphide ore, unoxidized, of sufficient quantity to indicate its possible source being the bottom of the shaft, was assayed with the following results:-

.24 oz Gold; .02 oz Silver, a gross value of $ 8.85. This, if there was any particular width, would be worth investigating.

None of the oxide ores were assayed because of their limited extent but chloriding could be carried on with favorable results to be expected on these oxidized outcrops.

Gold Hill III was not examined due to its distance and ruggedness indicating the need for something unusual to warrant its investigation. It is reported however that pockets of highgrade ore were extracted in the past.

The SILVER DOLLAR GROUP consists of the Silver Dollar, Silver Dollar Extension, and Ora Grande Claims. These are reached by automobile over six miles of rough road from the upper camp, part of which traverses up Ryland Wash, to the camp on the Silver Dollar Claim.
On the Silver Dollar Claim has been established a small camp consisting of one corrugated iron building used as a Mess and a Tent house for living accomodations. A good spring lies within 300 feet of the camp on an adjoining claim and reported to flow the year round.

The Silver Dollar lying wholly in the Granite, near the surface slightly decomposed, and on its southern end covered by surface debris, is the active claim of the group.
The surface generally shows only a mere fracture in the granite but traceable beyond the northern end of the claim.with no outcrops other than in the vicinity of the shaft where some quartz is noticeable.
Slightly south of the center of the claim the early operators mined this quartz in an open cut for a length of approximately 100 feet, sank a shaft reported to be 128 feet in depth, at an angle of 76 degrees, drove levels at 35, 70 and 90 feet, stoping from the 70 to the surface.

The lengths of the 35 and 70 foot levels was not obtainable, but the 90 level was driven 160 feet southward and 142 feet northward. The two upper levels were driven southward only indicating no ore to the north at this point.

The Silver Dollar Extension, so named because of its location along the Silver Dollar fractur e zone northward, lies mostly on the precipitous northern slope of Hardscrabble Wash. A small opening on the side hill distant about 200 feet from the southern end line, was examined and gave evidence of ore having been removed but showed no continuous ore in its face. No other openings were found along this fracture. To the east of the Silver Dollar Fracture about 150 feet lies a flat dipping greenstone dike, readily seen outcropping up the precipitous slope and which had been prospected rather thoroughly in the past, showed intense silicification on its hanging wall, somewhat oxidized, in places indicating some prospects of ore and from which some had evidently been removed. A rather long drift tunnel was indicated near the bottom of the wash by a sizeable dump. No samples were taken as in my opinion it was not warranted due to lack of definite signs of sulphide mineralization.

The Oro Grande Claim was not examined as nothing more than the necessary location work had been done.

The GOLD NOTE GROUP consisting of the Gold Note, Gold Note II & III is reached over a trail from the Silver Dollar eastward about a mile.
The Gold Note II & III were apparently located for camp and water purposes which seems to be of sufficient quantity to maintain a small crew.

The Gold Note is the major mineralized claim but of such a nature that only a cursory examination could be made.
What appears to be an Andesite dike follows more or less along the eastern border of the claim, paralleling which is an area of mineralized granitic rocks, which can be called a granite porphyry. Several irregularly outcropping quartz veins traverse the area with minor quartz stringers intersecting the granites. These are in places highly oxidized indicating their former sulphide mineralization.

Ore has been recently mined from the 90 level over a length of 115 feet southward to the 70 level and a small stope 30 feet north of the shaft for the first time indicating ore in this direction. The total length of the ore shoot here is now accepted as 145 feet.
The north drift on the 90 level appears to have been driven on a barren side fracture and should be examined by a short cross cut.
The condition of the 90 level precluded regular sampling, but it was possible to get a bulk sample 75 feet south of the shaft and another 30 feet to the north of the shaft.
The mineralization here is different from that encountered on other parts of the property, being here a quartz, pyrite, chalcopyrite galena, carrying free gold and showing at this depth only a slight oxidation.
Wall rock mineralization by pyrite is here more strongly evident than in other parts of the ground and is a good indication of continuity though in itself of no value.
Thenore shoot appears to be a series of small lenses pinching and swelling vertically as well as horizontally and as reported by the foreman varying from a few inches to as much as 42 inches in width. The stopes that could be examined indicated this to be true as they have been left open without much need of timber the walls being generally firm.
The samples mentioned above, when assayed were as follows:-

South sample, 75 feet from the shaft, 8 inches wide and 3 feet long shows .39 oz Gold; 1.2 oz Silver, a gross value of $ 14.58.

North sample, 30 feet from the shaft, 3 inches innwidth, 1 foot long shows 1.2 oz Gold; 8.8 oz Silver, a gross value of $ 48.82.

The shaft was inaccessible below the 90 foot level,
A small amount of water is required to be pumped each day, but the quantity was insufficient to measure.

Several of these oxidized outcrops have been mined from which it is apparent ore has been removed. Statements of the owner and verified by a bulk sample consisting of grabs from remaining dumps show these to have been high grade free milling ores. In places sulphides were noticed but insufficient in quantity to gain any information by assaying. No depth has been obtained by work so far, but the widely scattered mineralization indicates an area well worth while examining for the possibility of developing a low grade low cost property. The mineralized area can be said to cover roughly a width of 100 feet, a length of 300 feet and a length along its slope of 200 feet. This in itself would represent a fair tonnage if found to be of a mining grade.

The sample mentioned herein consisting of grabs from the remaining dumps showed .74 oz Gold; 4.5 oz Silver, a gross value of $ 29.99.

DISCUSSION OF OPERATIONS ON THE SILVER DOLLAR

The Colossal Mines Inc. began its operations on the Silver Dollar Claim as the most promising and accessible for preliminary operations and exploration.
The Shaft is equipped with a headframe, gasoline hoist and a portable type 105 foot compressor and the necessary accessory equipment for underground work with some accomodations for a small crew.
The shaft was unwatered and cleaned to the 90 foot level, ore was mined upward to the 40 level for the length of the oreshoot together with a small stope on the north side of the shaft. The shaft is now being cleaned below this level from which drifting will start from its bottom.
Shipping ore direct to the smelter proved inadvisable. The mill was reequipped to handle sulphide ores and now consists of the following:

Small Dodge Srusher driven by a gasoline engine; 10 ton bin; 12-15 ton Straub Rib Cone Ball Mill; 2-No.12 Fahrenwald Flotation Cells; 24 inch Wheeler Denver Amalgamator; Deister Plato Table; necessary water tanks and pumps.

Grinding is done through a 30 mesh screen followed by flotation; flotation concentrates are passed through the amalgamator; extracting

the free gold; tailings from the flotation are tabled giving a concentrate and a middling; middling returned for regrind. Flotation and Table concentrates are combined.
Bullion is shipped to the U.S.Mint at San Francisco; concentrates are shipped by truck to the American Smelting and Refining Co, El Paso, Texas.

The results of this work, consisting of the milling of newly mined ore and debris from the 90 foot level, was estimated by the foreman as approximately 219 tons.
For use in the following calculations this has been reduced to 200 tOns which allows for its moisture content.
Results obtained from the Concentrates and Bullion covering the same period with an estimate made for the last shipment of 3400 pounds. This last shipment has been reduced by 5% for moisture and its value calculated on the average obtained from former shipments, is as follows;-

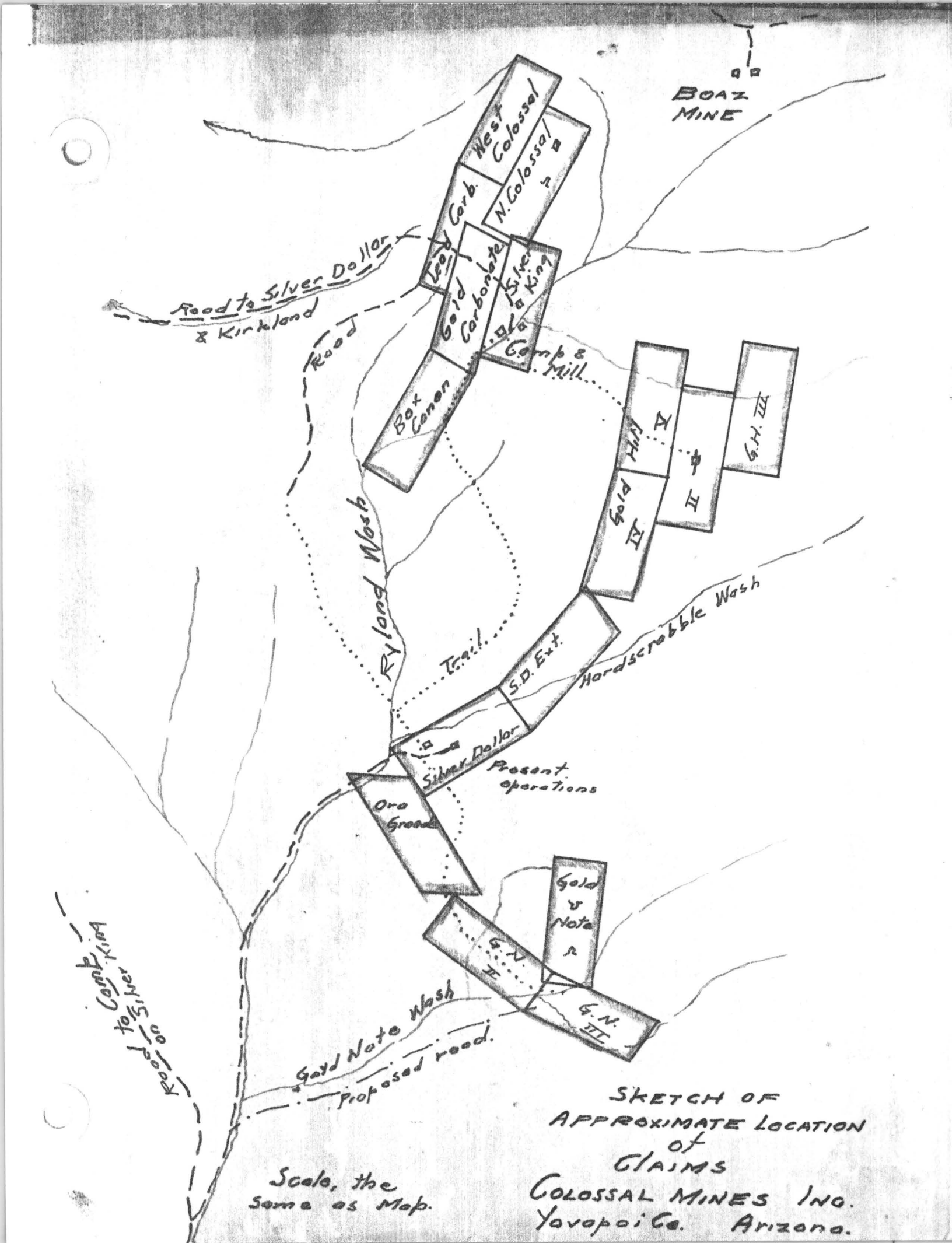
LOT NO.	DATE	LBS	TONS	VALUE/TON	GROSS
2017	6-9	2394	1.1970	$ 185118	$221.66
2460	7-6	4008	2.0040	153.13	306.87
2466	7-7	3192	1.5960	179.19	285.98
2813	7-19	3225	1.6125	237.41	382.82
2941	8-9	2867	1.4335	306.18	438.89
?	9-30	3230	1.6100	208.60	335.84
	Totals		9.453		$ 1972.06

BULLION from Mint returns covering same period,

No.329	June 23,1937	Value	$ 174.10
No. 19899	May 18, 1937		60.38
No. 2133	July 21.1937		119.68
?	August 1937	Est.	72,48
	Totals		$ 426.6

Total Gross value of Concentrates and Bullion before any charges is therefore $ 2398.70

Based on the above 200 tOns of Mine ore hhhhdd would give an estimated recovery as of $ 12.00 per ton. Using a 90% Mill recovery would show a Mine ore of an estimated value of $ 13.33 per ton.


Boaz Mine
West Colossal
N. Colossal
Carb. Lead
Gold Carbonate
Silver King
Camp & Mill
Box Canon
Road to Silver Dollar & Kirkland
Road
Ryland Wash
Trail
G.H. III
G.H. IV
Gold Hill IV
II
S.D. Ext.
Hardscrabble Wash
Silver Dollar
Present operations
Ore Grade
Gold Note V
G.N. II
G.N. III
Gold Note Wash
Proposed road
Road to Camp Kirkland & Silver Dollar
Scale, the same as Map.
SKETCH OF APPROXIMATE LOCATION OF CLAIMS
COLOSSAL MINES INC.
Yavapai Co. Arizona.

MILL TEST RUNS

Two Mill Tests were made by W.C.Broadgate of Prescott, Arizona, the results of which were placed at my disposal.
These tests indicated that the Mill was capable of handling approximately 7 tons of ore per 24 hours
Heads to the Mill averaged $ 14.75 checking sufficiently close the estimates made on the total ore milled and verifying the results of the operation to date.

COSTS

A discussion of the probable costs to be expected can not be even surmised as there is no basis on which to determine the probable volume of ore to be handled.

Development costs such as sinking and drifting can be estimated and should not exceed $35.00 per foot for sinking and $ 10.00 per foot for drifting. Contract prices may be had at even a lower figure.

Milling costs,being based on volume, can as well not be determined.

H. C. SMOOT
CHEMIST AND ASSAYER
REGISTRATION NO. 460

CUSTOM ASSAY OFFICE

Assay Certificate

IT PAYS to ASSAY

For Carl G. Barth, Jr., *Prescott, Arizona,* 8-7-31

DESCRIPTION	GOLD PER TON OZS. TROY	GOLD PER TON VALUE	SILVER PER TON OZS. TROY	SILVER PER TON VALUE	GOLD AND SILVER VALUE	OTHER METALS PER CENT	OTHER METALS VALUE
							$
Silver Dollad N Side	1.20	$42.00	8.8	$ 6.82	$ 48.82		
" " " "	.02	.70	Trace		.70	Pyrites	
" " S. "	.39	13.65	1.2	.93	14.58		
Campbell Pyrites	.24	8.40	0.2	.15	8.55		
Gold Note	.74	25.90	4.5	3.49	29.39		
Table Concentrates	2.48	86.80	11.7	9.07	95.87		

MARKET VALUES

GOLD PER OZ.	SILVER PER OZ.	COPPER PER LB.	LEAD PER LB.	ZINC PER LB.
$35.00	.77			

Charges $

REGISTERED ASSAYER
CERTIFICATE EXPIRES
H. C. SMOOT
DEC. 31, 19
ARIZONA U.S.A.

H. C. Smoot

H. C. SMOOT
CHEMIST AND ASSAYER
REGISTRATION NO. 460

CUSTOM ASSAY OFFICE

Assay Certificate

IT PAYS to ASSAY

For Carl C. Barth, Jr., *Prescott, Arizona,* 6-20-57

DESCRIPTION	GOLD PER TON OZS. TROY	GOLD PER TON VALUE	SILVER PER TON OZS. TROY	SILVER PER TON VALUE	GOLD AND SILVER VALUE	OTHER METALS PER CENT	OTHER METALS VALUE
		$		$	$	Lead	$
Silver Roller V Ground	1.44	50.40	5.0	3.87	54.27		
N. Colossal Dixon	.96	33.60	8.8	6.82	40.42	51.5	
E. Colossal	.02	.70	Trace		.70		

MARKET VALUES

GOLD PER OZ.	SILVER PER OZ.	COPPER PER LB.	LEAD PER LB.	ZINC PER LB.
35.00	.77			

Charges $

REGISTERED ASSAYER
CERTIFICATE EXPIRES
H. C. SMOOT
DEC. 31, 19
ARIZONA, U. S. A.

H. C. Smoot

117 miles from Tempe
110 " " PX

Boag -

3/25/83 Richard Frank owner - Lease w/ Boag Mining is being terminated - Group produced 30 tons & hand picked ore, milled by Archie Sluterroth of Casa Grande & had refined in Mesa. Mr Balstra of Youngstown Ohio (one of previous investors) is going to pick up property rent. If prove unsatisfactory; Frank wants to sell

3/25/83 Richard Frank, 5902 E Compo Bello Drive Scottsdale 85255 (Port Owner)

7/16/82 Frank Arnspiger in charge of mining at Boag looking for custom mill & smelter to ship Selicious ore

8/12/81 Mr Ned Fledderjohn 6343 E Osborn Scottsdale az 85251 (1/4 owner in partnership that owns Boag Mining Corp) (Inc Feb 1981)

12/19/80 Bill Sullivan was looking for buyers of silica he hoped to produce - It was explained the majority of the silica is too barren for selicous flux & not pure enough for high priority quartz uses

Tiger Mining Dist

Boog (Southern Bell)
Silver Dollar
colossal Mines
Gold Note
Gold Hill
Manzanita
~~Bob Harris~~ -
Oro Grande

T 9N R 2W
Sec 1, 2, 11, 12 (22 & 15)?

USGS 782 p 177 ✓

ABM Bul 137 p 60 ✓
~~ABM Bul 137 p~~

Button below

ASARCO INCORPORATED
HAYDEN PLANT
ASSAY CERTIFICATE

BOAZ MINE - NO SAMPLE LOC. OR DESCRIPTION

DATE ASSAYED 11/4 1980

MARKED Hand Sample #3374

NO.	GOLD OUNCES PER TON	SILVER OUNCES PER TON	LEAD %	COPPER %	INSOL %	SiO_2 %	Fe %	CaO %	Zn %	S %	Al_2O_3 %			
	.260	.52	1.40	.05	90.1	83.0	3.2	.1	.10	2.6	1.0			
					As %	Sb %	Bi %	Cd %	Ni %					

Ag at 18.00 per Tr. oz.

BY [signature] CHEMIST

ASARCO INCORPORATED
HAYDEN PLANT
ASSAY CERTIFICATE

DATE ASSAYED 11/4 1980

MARKED Hand Sample #3369

GOLD OUNCES PER TON	SILVER OUNCES PER TON	LEAD %	COPPER %	INSOL %	SiO_2 %	Fe %	CaO %	Zn %	S %	Al_2O_3 %			
.130	.19	.52	.05	95.8	92.8	1.6	.1	.18	.4	2.1			
				As %	Sb %	Bi %	Cd %	Ni %					

Net per Ton $4.50

BY [signature] CHEMIST

BOAZ MINE - NO SAMPLE LOC. OR DESCRIPTIONS
(FILE)

ASARCO INCORPORATED
HAYDEN PLANT
ASSAY CERTIFICATE

DATE ASSAYED 11/4 1980

MARKED Hand Sample #3368

GOLD OUNCES PER TON	SILVER OUNCES PER TON	LEAD %	COPPER %	INSOL %	SiO_2 %	Fe %	CaO %	Zn %	S %	Al_2O_3 %			
.046	.045	.30	.04	95.0	84.0	1.8	.1	.03	.8	.2			
				As %	Sb %	Bi %	Cd %	Ni %					

BY [signature] CHEMIST

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine BOAZ MINE

Date October 10, 1980

District SILVER MOUNTAIN

Engineer Ken A. Phillips, Mineral Resources Engineer
Dick R. Beard, Mineral Resources Specialist

Subject: YAVAPAI COUNTY

Commodities: Gold, silver, siliceous flux.

Subject: Property visit by Ken Phillips and Dick Beard, and information on current status.

References: Arizona Department of Mineral Resources; Boaz Mine File, Yavapai Co.

Lindgren, Waldemar; 1926, Ore Deposits of the Jerome and Bradshaw Mtns. Quadrangles, Arizona U.S. Geological Survey Bulletin 782, pp 177-178.

Wilson, Eldred D., et. al. 1934, Arizona Lode Gold Mines and Gold Mining, Arizona Bureau Geology and Mineral Technology Bulletin 137, pp 60. (This is a direct quotation of Lindgren, 1926).

Numerous independent consultant reports have also been written.

Property: The Boaz patented property group consists of 17 patented claims and possible additional unpatented claims all located in Sec. 1, T9N, R2W, and Sec. 6, T9N, R1W. The patented claims are listed below and shown on attached Map #1.

Compensation
Cleveland
Boston
Hilltop
Campview
Chicago
Little Annie
*Southern Belle
Beatrice
Nil Desperandum
Atlantic City
Surprise
Seattle
Fort Worth
High Grade
Pittsburg
**Phelon
New York

*Surveyed as the Southern Belle and later patented as the Beatrice.
**Surveyed as the Phelon and later patented as the Little Annie.
The group also includes a patented mill sight.

Location: Section 1, T9N, R2W, and Section 6, T9N, R1W, see attached map #2, shown on U.S. Geological Survey, Minnehaha, Az. 7 1/2 Quadrangle.

Ownership: See report of office visit by William and Geraldine Silliman on October 14, 1980, under present operations, below:

History: Lindgren (1926) reports the vein was opened up by the late F.E. Harrington in about 1902. The operation was equipped with a 20-stamp mill and a cyanide plant. Foundations rubble and shack are all that remains. Tailings piles from two cyanide mills were noted during our visit as noted on Map #2. Each pile contains an estimated 100 to 400 tons of tailings.

Past Production: Yes. No reports are available. Estimates can range from 800 to 8,000 tons of ore which Lindgren (1926) reports to have been about $20.00 (one troy ounce per ton) in gold from upper workings.

Workings: Described in Arizona Department of Mineral Resources Boaz Mine File.

Inclined shaft - 650' deep, two compartments, water standing about 50' below main tunnel level. Closed by caving at the collar, but open and in good condition at the tunnel level. Shaft inclined approximately 45° N.

Tunnel - approximately 280' bearing N 32° E. to intersect shaft at vein. Tunnel is in excellent condition. Driven in barren granite. Includes one stub cross tunnel (exploratory?) and one crosscut to an ore chute under a pocket.

Drifts - Lindgren (1926) reports 2,500'. One drift runs on the vein in both directions from the shaft - tunnel station. It appears in fair conditions.

Numerous shallow shafts and pits and short drifts are on the outcrop of the vein. Most are caved.

Dumps.

Geology: Lindgren (1926) reports the deposit as an east-west quartz vein which is "spotty" and "frozen to the walls". It is reported to be a precambrian vein. During the authors' visit the strike of the vein was measured at N 80 W dipping 49 N. The outcrop of the vein forms a prominent feature and can be readily traced along the surface. It outcrops as massive quartz with occassional iron stained vugs. Where the outcrop and wall rocks can be observed together the quartz vein material appears to more or less grade into the country rock (granite? - possibly quartz monzonite). Wall rock alteration is slight to absent. Fresh vein material on dumps contains massive quartz with pyrite and rare chalcopyrite and copper staining.

Present Operations: The first mile of the road to the Boaz Mine from its junction with the Wagoner-Minnehaha road has been graded.

William F. and Geraldine Silliman, dba Gold Mesa Inc. - Boaz Mine, P.O. Box 1568, Bullhead City, Arizona 86430, along with Joseph P. Caletta, President, International Financial Advisors and Developers, Ltd., P.O. Box 5071, Poland Ohio 44514, phone (216) 757-8875, Fred Lanz and Ed Karyn (also from Poland, Ohio), were in the Department's office on October 14, 1980. During the visit they reported they have purchased the Boaz Mine and plan to evaluate it as a possible shipper of siliceous gold ore to ASARCO's Hayden smelter. They reported that ASARCO requires a minimum value of $75 per ton. Frez Lanz is a coal mining engineer who will be doing the engineering and evaluation of the mine.

KAP-DRB/ap

June 21, 1946

B022

Mr. W. F. Paine
Arizona Barite Co.
Box 926
Mesa, Arizona

Dear Bill:

Enclosed is the assay map of the Southern Bell or Boaz Mine we talked about. This mine is located 33 miles east of Kirkland Junction in Yavapai County.

There is a cave at the point I have marked with a red circle that prevents one from checking the intriguing assays in that area beyond.

According to this map there is in that area about 400 feet of ore averaging about 5.0 feet wide and nearly 1/2 an ounce.

If this is true it would be well worth while, as the whole thing is laid out for rather economical mining, and is readily amenable to sample cyanide milling.

I have confidence in the map as submitted, and feel that one would be well justified in cleaning out that cave to check the assays beyond.

I have gone to some extent to investigate the history of the mine and find that there has been little, if any, work done there since 1902. No one has seen it below water level since then. I talked with the man who was foreman when they sank the main 650 foot shaft, and he said the vein continued in and out of the shaft all the way down but "didn't get any better". The work done where that intriguing ore is, including that 100 foot winze, was done after that, and I can find no authentic stories regarding it.

It may be another of "those things" but I think it justifies looking behind that cave.

One of its best features is that I believe a very reasonable deal can be obtained. Mr. E. E. Sweeney, whom you know, holds the lease and option, and I feel sure he would be amenable to a lot of reason.

Yours sincerely,

CHD:LP
End.

Chas. H. Dunning, Director

Samples

No 1 85' West of Shaft
3'6"

" 2 60' W of Shaft
3'6"

3 - 15' West of Shaft -
3'

4 - 200' East -
7'6"

5 - 300' East of Shaft
5'

6 - 400' East of Shaft
5'

7 - 440 " " "
5'

No 8 - 480 E of Shaft
6'

" 9 - 530' E. " "
8'

" 10 - 550 E of Shaft -
5' @ Raise

1-11 - 570 E. of Shaft -
1'

No 12 - 600 - @ Winz
2'

" 13 - Small Lime
on strike 70' E. Winz
E of Fault

14 Apex. 4'
150' E. - Winz.

15 ~~Top of Raise~~
300' ~~W of~~ Winz -

16 Surface 100 E
of Winz

16 Top of Raise 25'
West of Winz.

17 Top of Shaft -

16 Chunk Sample of
short-lived vein
South of Old Cuts

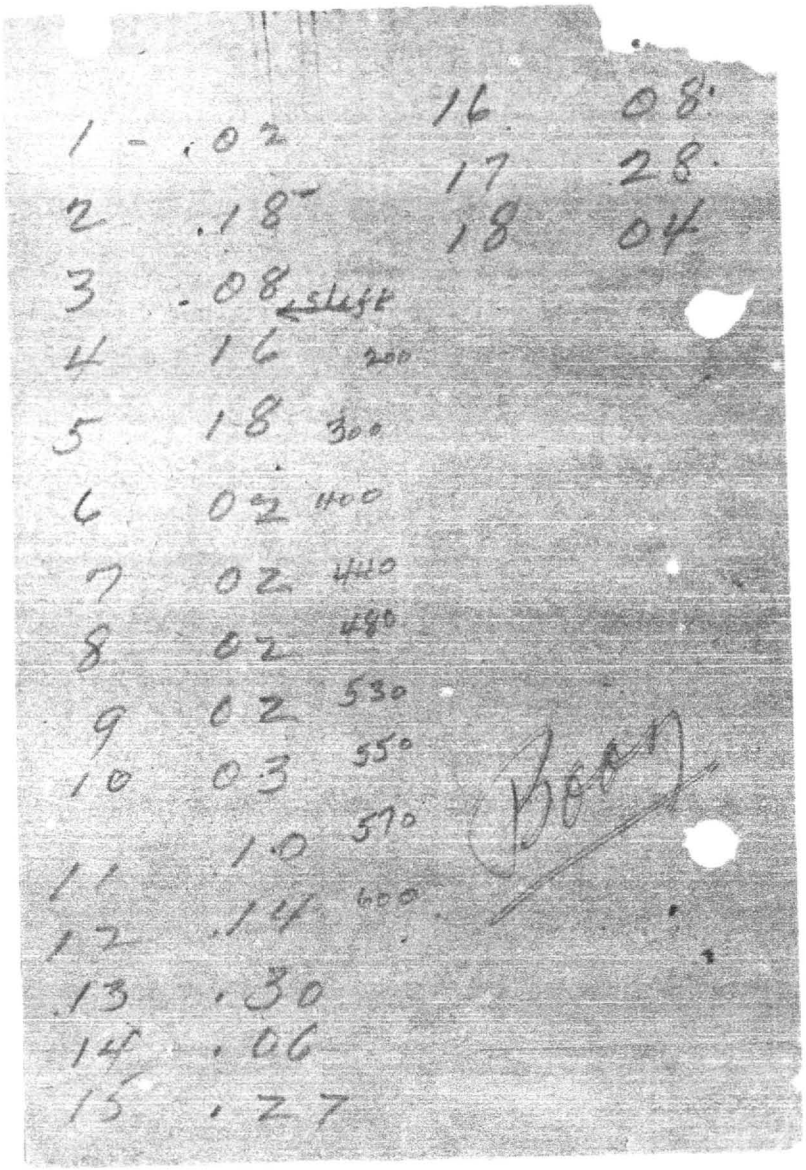
~~119~~
~~181~~
~~363~~
~~149~~

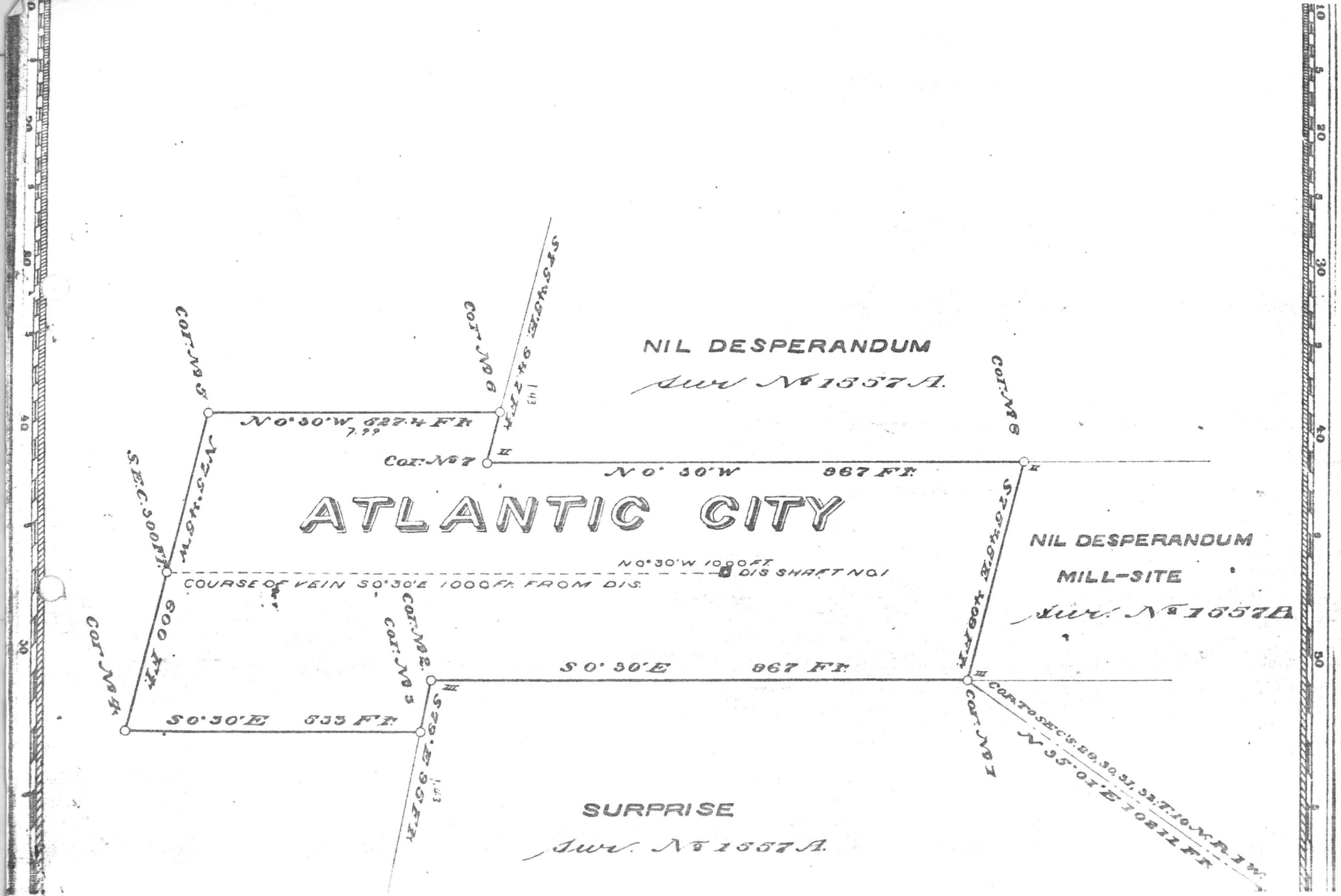
May 27, 1957

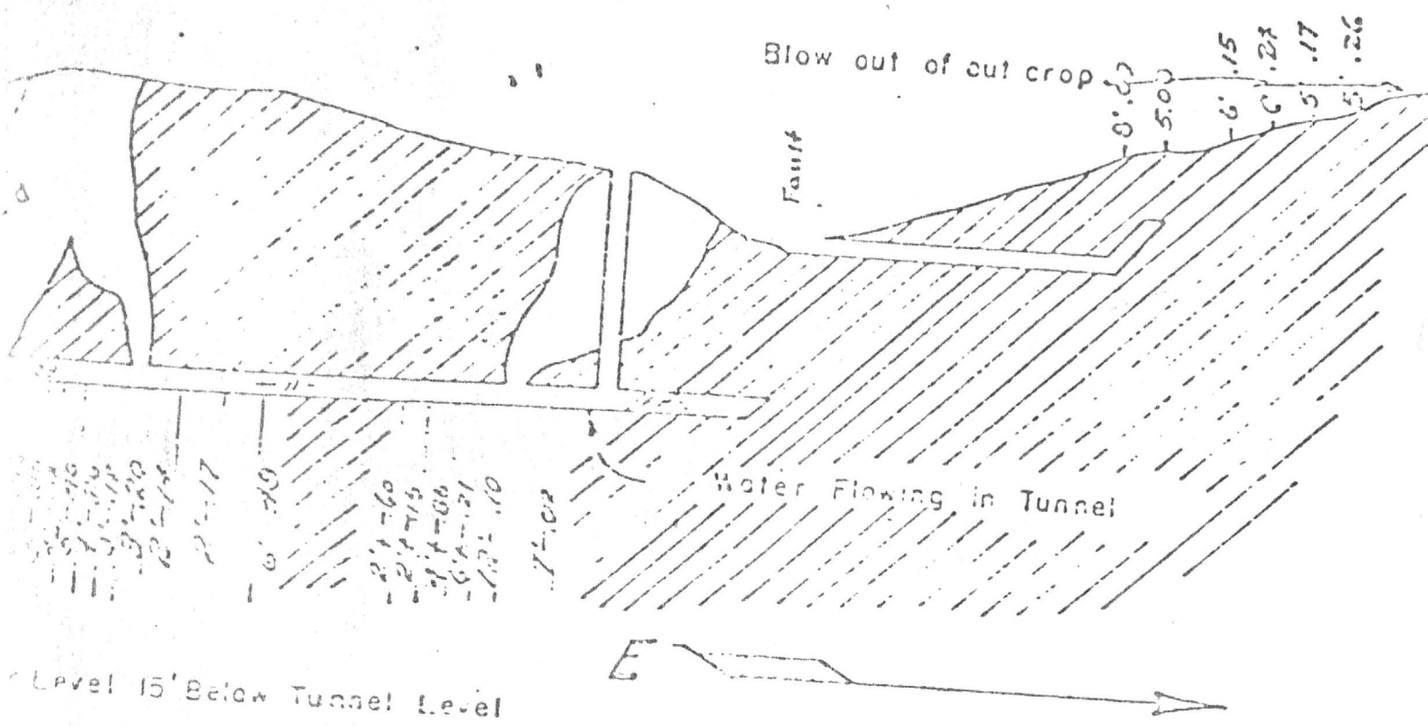
BOAZ MINE (file)
NIL DESPERANDUM MILLSITE,
Little Annie, Beatrice
et al — — Yavapai Co.

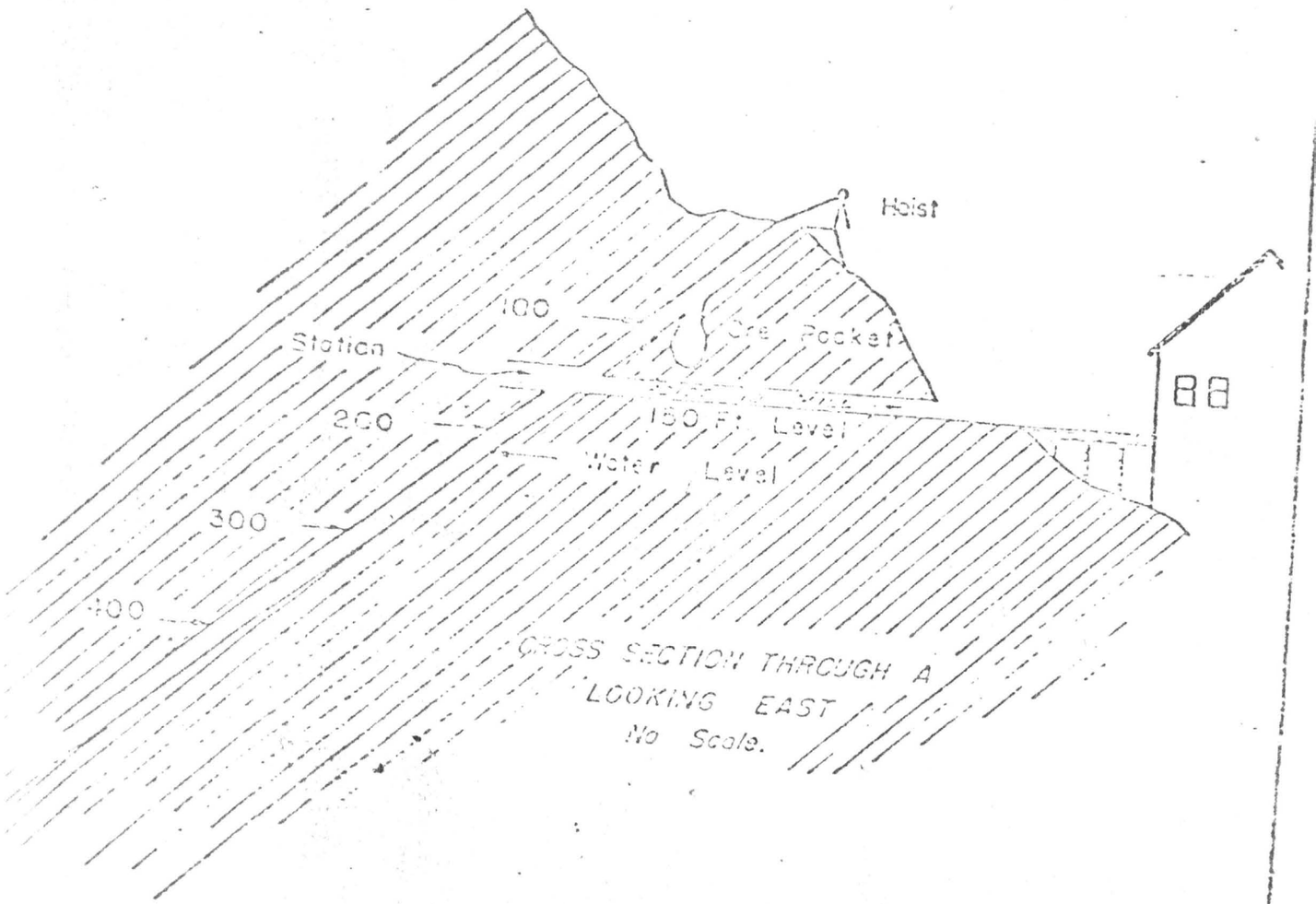
This property idle.

MARK GEMMILL



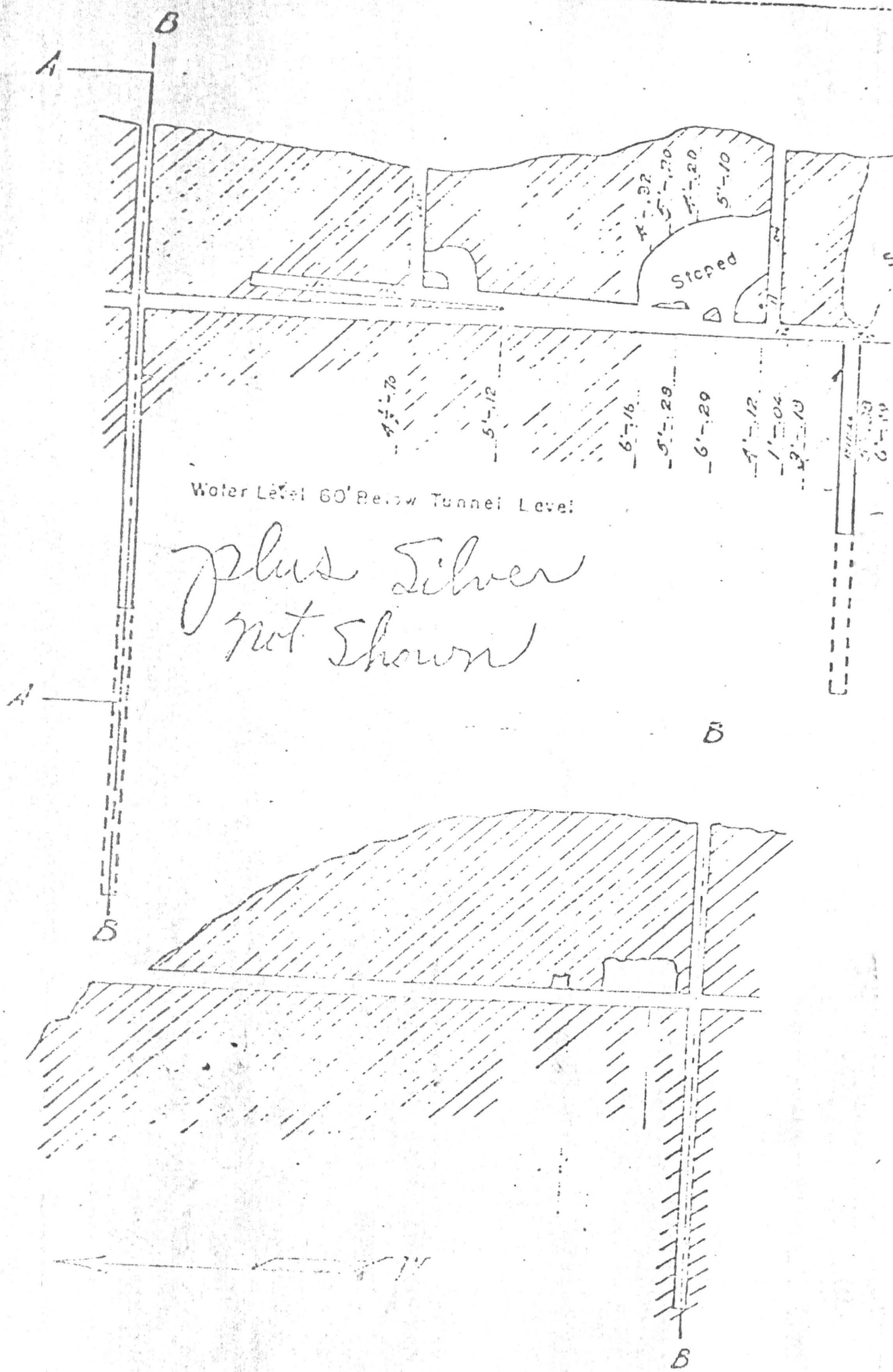

NIL DESPERANDUM
Surv. No 1557 A.
Cor. No 6
S 5° W 9.4 Ft
Cor. No 5
N 0° 30' W 827.4 Ft
Cor. No 7
N 0° 30' W 967 Ft
Cor. No 8
ATLANTIC CITY
S 5° 45' E 960 Ft
S.E.C. 300 Ft
N 84° W 300 Ft
NIL DESPERANDUM
MILL-SITE
Surv. No 1557 B
N 0° 30' W 100 Ft
DIS SHAFT NO 1
COURSE OF VEIN S 0° 30' E 1000 Ft FROM DIS.
Cor. No 4
600 Ft
Cor. No 2
Cor. No 3
S 0° 30' E 967 Ft
S 0° 30' E 533 Ft
Cor. No 1
COR TO SEC'S 29, 30, 31, 32 T. 10 N. R. 3 W.
N 35° 01' E 10811 Ft
S 29° E 957 Ft
SURPRISE
Surv. No 1557 A.





CROSS SECTION THROUGH A
LOOKING EAST
No Scale.

SOUTHERN BELLE VEIN
GOLD VALUES IN DOLLARS PER TON
Scale 1" = 100'
DRAWN FOR MRS. RHODA H. JONES
BY Forrest H. Coulter
of the
U.S. BUREAU OF RECLAMATION
Region 4, Denver, Sept. 1943.


B
A
Sloped
Water Level 60' Below Tunnel Level
Plus Silver
Not Shown
A'
B
B'
B

C.C. HUSTON & ASSOCIATES
MINING AND GEOLOGICAL CONSULTANTS
2001-80 RICHMOND STREET WEST
TORONTO 1

C.C. HUSTON
H.H. COX
S.C. BROWN
G.S. DISLER
G.W. GOETTLER
N. FINTH

EMPIRE 2-1474-5-6
CABLE "HURONTO"

July 12th, 1960.

Mr. A. R. Lee,
c/o 2001 West Hadley Street,
PHOENIX,
Arizona.

Dear Mr. Lee:

The other day after seeing you, I talked with Mr. and Mrs. Rankin on the telephone and they are agreeable to the option which we discussed and whose terms I outline as follows:-

1. We will proceed to have our lawyer draw an Option Agreement for signature by all parties.

2. We will pay on signature the sum of two thousand five hundred dollars ($2,500.) for the option for six months.

3. After the expiry of six months, we will pay five hundred dollars ($500.) per month to maintain the option for eighteen further months and at our option, on or before two years from the date of signature, we will purchase all the patented claims held by you for the further sum of seventy-five thousand dollars ($75,000.).

During the tenure of our option you will continue to pay the taxes and we will rebate to you such tax payments.

It is understood that you wish to retain the grazing rights here until final payment is made. This will be acceptable to us and incorporated in the Option Agreement.

Cash

Boag Mine 1/2.

105

Mr. A. R. Lee July 12th, 1960.

A copy of this letter is enclosed herewith, so that you may send it to Mr. and Mrs. Rankin.

You will in a very short time hear from our lawyer in this connection and in the meantime, I would ask you, if possible, to mail the original or a copy of the claim map which I saw in your office, to Mr. John Riggins, P.O. Box 27, Yarnell, Arizona, so that he can try to find the relevant claim corners.

The claims to which this option refers are as follows:-

Little Annie	-	20.649 acres
Beatrice	-	20.620 "
High Grade	-	18.643 "
Surprise	-	20.249 "
Nil Desperandum	-	19.980 "
Nil Desperandum Mill Site	-	4.823 "
Atlantic City	-	15.81 "

Will you advise me that these are the actual claims, all lying in Yavapai County, Arizona.

Yours very truly,

C. C. HUSTON & ASSOCIATES.

C. C. Huston, P.Eng.

CCH:md

Enc.

PRESCOTT
LOWER WOLF CREEK
UPPER WOLF CREEK
Phoenix YMCA Camp
SPRUCE MTN
THIRD
Mt Elliot
Trap Corral Spr
Board Creek Spr
Glen Oaks Spr
White Rock Wolter
Telegraph Tank & Windmill
Telegraph Spr
Wilhoit
Burro Wallow
Scotty Spr
Payoff Spr
Maverick Mtn
Kendall Camp
South Spruce Ridge
Boundary Spr
Potatoe Patch
Hassayampa Lake
Breezy Pines
Independent Spr
Mt Tritle
Davis
STANDARD PARALLEL NORTH
Quartz Mtn
Big Chief Mine
Mt Union
Big Bug Mesa
Davis Spr No 2
Watson
Orofino Well & Windmill
Orofino Wash Well
Hassayampa
Lone Pine Spr
Roost
Lookout Mtn Spr
Lookout Mtn
Moscow Peak
Yankee Doodle Peak
Venezia
Golden Eagle Mine
Riggle
Buzzard Spr
Buzzard
Blower Spr
Quail Spr
August Spr
Apple Orchard Spr
Seaton Spr
Grouly
Carter
Orofino
Seep Spr Creek
Canyon
Johnson Flat
Spence Spr
Juniper Spr
Pine Flat
Middlewater Well
State Spr
Pole Camp
USLM 1804
Bodie Mine
Shipley
Gales Spr
Goodwin
River Pasture
Pole Spr
McNelly Spr
Blackjack Spr
Collins Spr
Moores Spr
Tin Trough Spr
Cottonwood Spr
Bodie Spr
Good Pine Spr
Indian Camp Mine
Arrastra Creek
Triangle M Hooker Spr
Crooks
Trails End Mine
Orejano Spr
Big Rebel
BM 3772
Walnut Grove
Battleship Butte
Longfellow Ridge Spr
Battle Flat
Black Mtn
BRADSHAW
North Fork Spr
Willow Spr
Deer Spr
Barrel Spr
Shady Dell
Baldwin Place
Ross Spr
Eph Spr
Walnut Spr
Tuscumbia
Tuscumbia Mtn
Walnut Grove School
Hackberry
Pine Spr
Butler Spr
Dandy Wire Spr
Horse Spr
Hidden Tunnel
Ross Spr
Indian
Berry Spr
Purebred Spr
Willow Spr
Seep
Orr Trap
Park Creek
Swimming Pool
Bain Spr
CELLERS BASIN
Grapevine Spr
Horse Mtn
Horse Mtn Spr
TOWERS MTN
Diamond
Rock Spr
Indian Sprs
Steamboat Spr
Box Spr
Lawrence Spr
Cellar Sprs
Colorado Spr
Boulder Dam Spr
Black Jack Spr
Patterson Spr
Ashe Spr
BM 3381
Wagoner
McAllister Spr
Peter Spr
Jackies Pass Spr
John Spr
Thompson Butte
Springfield Mine
CROWN KING
Minnehaha
Minnehaha Spr
Minnehaha Flat
Cooper
Cherry Creek
Campbell Flat Spr
Charlies Spr
Escondido Spr
Cherry Trap Spr
Log Cabin Spr
Standard Mine
Spring
Cherry Spr
Paxton Place
Rush Spr
Bull Run Spr
Ridges Spr
Camp Bird Mine
T B Spr
Button Mine Sprs
Juniper Mine
Castle Rock
Martin Spr
Wades Butte
Ash Spr
Ralphs Spr
Cedar Spr
Seal Mountain
Oak Creek
Bodie Mine
Chilean Mill
Silver Mtn
Silver Creek
Shelley-Pearce
Copper Basin Spr
The Hole

NAME OF MINE: BOAZ
OWNER:

COUNTY: Yavapai
DISTRICT:
METALS: Au

OPERATOR AND ADDRESS		MINE STATUS	
Date:		Date:	
10/45	Chas. F. Moores & Art Robard, Crown King, Ariz.	10/45	Developing
		3/46	Idle

WICKENBURG ORE MARKET

Operated by John C. Herr

Wickenburg, Arizona April 26th 1941 ..., 194...
Settlement for Lot No. 875
Classification:

Shipper: A. M. Jones:
Address: Wagoner, Ariz.

Name of Claim: Southern Belle:
Mining District: Tiger:
County: Yavapai:

Net Weight of Lot:	2130	lbs.
Moisture: 3% per cent	63	lbs.
Net dry weight:	2067	lbs.
Equivalent in tons (2000 lbs.):	1.033	Tons

PAYMENTS PER TON

	Assay		Amount Paid For	Rate	Value
Gold:	1.50	ozs.	All	oz. at $ 32.20	$ 48.30
Silver:	1.50	ozs.	All	oz. at 70	1.05
Copper:		Pct.		lbs. at	
Lead:		Pct.		lbs. at	

Value per ton at shipping point:		$ 49.35
Freight Rate per ton:	$3.60	$
Smelter—Treatment per ton:	6.00	
	$ 9.60	$ 9.60
Net smelter value per dry ton:		$ 39.75

WICKENBURG ORE MARKET

Operated by John C. Herr

Wickenburg, Arizona Oct. 21st 1941 ..., 194...
Settlement for Lot No. 1203
Classification:

Shipper: A. M. Jones.
Address: Wagoner Ariz.

Southern Belle Vein

Name of Claim: Boaz.
Mining District: Tiger:
County: Yavapai:

Net Weight of Lot:	1160	lbs.
Moisture: 6% per cent	70	lbs.
Net dry weight:	1090	lbs.
Equivalent in tons (2000 lbs.):	0.545	Tons

PAYMENTS PER TON

	Assay		Amount Paid For	Rate	Value
Gold:	4.10	ozs.	All	oz. at $ 32.20	$ 132.02
Silver:	2.30	ozs.	All	oz. at 70	70
Copper:		Pct.		lbs. at	
Lead:		Pct.		lbs. at	

Value per ton at shipping point:		$ 132.72
Freight Rate per ton:	$6.10	$
Smelter—Treatment per ton:	6.00	
	$ 12.10	$ 12.10
Net smelter value per dry ton:		$ 120.62

WICKENBURG ORE MARKET

Operated by John C. Herr

Wickenburg, Arizona ..Aug..31..st..1941.., 194...
Settlement for Lot No. 706
Classification:

Shipper: A. M. Jones .
Address: Wagoner Ariz.

Name of Claim: Southern Belle:
Mining District: Tiger:
County: Yavapai:

Net Weight of Lot:	1166	lbs.
Moisture: 7% per cent	81	lbs.
Net dry weight:	1085	lbs.
Equivalent in tons (2000 lbs.):	0.542	Tons

PAYMENTS PER TON

	Assay		Amount Paid For	Rate	Value
Gold:	2.80	ozs.	All	oz. at $ 32.20	$ 90.16
Silver:	2.00	ozs.	All	oz. at 70	1.40
Copper:		Pct.		lbs. at	
Lead:	3%	Pct.	None	lbs. at	
				Value per ton at shipping point:	$ 91.56
				Freight Rate per ton: $ 5.00	$
				Smelter—Treatment per ton: 6.00	
				$ 11.00	$ 11.00
				Net smelter value per dry ton:	$ 80.56

WICKENBURG ORE MARKET

Operated by John C. Herr

Wickenburg, Arizona .....Aug.. 1st. 1941.. 194...
Settlement for Lot No. 1089
Classification:

Shipper: A. . . Jones:
Address: Wagoner Ariz.

Name of Claim: Boaz.
Mining District: Tiger
County: Yavapai:

Net Weight of Lot:	649	lbs.
Moisture: 12% per cent	77	lbs.
Net dry weight:	572	lbs.
Equivalent in tons (2000 lbs.):	0.286	Tons

PAYMENTS PER TON

	Assay		Amount Paid For	Rate	Value
Gold:	4.80	ozs.	All		
Silver:	4.50	ozs.	All	oz. at $ 32.20	$ 154.56
Copper:		Pct.		oz. at 70	3.36
Lead:		Pct.		lbs. at	
				lbs. at	
				Value per ton at shipping point:	$ 158.92
				Freight Rate per ton: $ 7.00	$
				Smelter—Treatment per ton: 6.00	
				$ 13.00	$ 13.00
				Net smelter value per dry ton:	$ 144.92

CHAS. A. DIEHL

May 24, 1946

ARIZONA ASSAY OFFICE

Phone 3-4001

815 North First Street

Department of Mineral Resources

P. O. Box 1148

This Certifies That samples submitted for assay by ____ contain as follows per ton of 2000 lbs. Avoir.

MARKS	No.	SILVER Ounces	SILVER Tenths	VALUE @ $35.00	GOLD Ounces	GOLD Hundredths	VALUE @ $35.00	TOTAL VALUE Of Gold and Silver	% PERCENTAGE	REMARKS
85' W. of shaft	1					.02	$	.70		
60' W. of shaft	2					.18	$	6.30		
15' W. 3'	3					.08	$	2.80		
200' E. 7'8"	4					.16	$	5.60		
300' E.6'	5					.18	$	6.30		
400' E. of shaft	6					.02	$	.70		
5' E.440' N.of shaf	7					.02	$	.70		
480' E.of shaft 6'	8					.02	$	.70		
530 E.8'	9					.02	$	.70		
	10					.03	$	1.05		
1 foot	11					.10	$	3.50		
2' 6" winze	12					.14	$	4.90		
Face S.tunnel N. apex E. of fault	13					.30	$	10.50		
Apex 750 E.winze	14					.06	$	2.10		
Surface 100' E. of winze.	15					.27	$	9.45		
Top of raise 25' west of winze.	16					.08	$	2.80		
Surface top of sft	17					.28	$	9.80		
Dump S.tunnel on vein.	18					.04	$	1.40		

plus Silver Not Shown

Boaz mine
Southern Belle Vein

Charges $18.00

Assayer ARIZONA ASSAY OFFICE

No. 194 Du

Phoenix, Arizona,
April 3, 1946.

CHAS. A. DIEHL

ARIZONA ASSAY OFFICE

Mail: P. O. Box 1148 — 815 North First Street — Phone 3-4001

THIS CERTIFIES That samples submitted for assay by Mr. C. L. Lanning. contain as follows per ton of 2000 lbs. Avoir.

MARKS	Wt.	SILVER Ounces	SILVER Tenths	VALUE (OZ.)	GOLD Ounces	GOLD Hndths	VALUE (OZ.)	TOTAL VALUE Of Gold & Silver	PERCENTAGE	REMARKS
Screen Heads			.32			.195	6.47			
Minus 10 Mesh-51[illegible]	Dr.					.095	3.32			
" 30 " 39[illegible]						.13	4.55			Plus Silver not Shown
" 50 " 30[illegible]			Plus			.23½	8.17			
" 100 " 330			Silver			.41	14.35			

Charges $ 5.25 (assaying)

Assayer. ARIZONA ASSAY OFFICE

Boaz Mine
Southern Belle Mine

Shop No. 7486 W Date 8 AUG 1967

File No.

VALUES
Latest Quotation

1 oz. Gold.....
1 oz. Silver.....
1 lb. Copper.....
1 lb. Lead.....
1 lb. Zinc.....

THIS CERTIFIES
Samples submitted for assay contain as follows:

Arizona Assay Office

815 NORTH FIRST STREET
Phone: 253-4001

Phoenix, Arizona 85001
P. O. BOX 1148

Short Ton ..... 2000 Lbs.
Short Ton Unit ..... 20 Lbs.
Long Ton ..... 2240 Lbs.
Long Ton Unit ..... 22.4 Lbs.

R.V. Frank

MARKS	SILVER PER TON Ozs.	SILVER PER TON Tenths	VALUE PER TON	GOLD PER TON Ozs.	GOLD PER TON 100ths	VALUE PER TON	TOTAL VALUE PER TON of Gold & Silver	PERCENTAGE	REMARKS
BOAZ EAST VEIN		.6	$ .90		.80	$28.00			
		Please Silver not tested							
East Vein									

REGISTERED ASSAYER
CERTIFICATE EXPIRES
JACK E. STONE
SEP 31 19[illegible]
ARIZONA, U.S.A.

Charges $ 4.00

Assayer.....

ANDY CHUKA, PRINT

JACK STONE REG. No. 5479

Discovery - Sec 10 T 4-

ATL ARIZONA TESTING LABORATORIES

PHOENIX • TUCSON

A DIVISION OF CLAUDE E. McLEAN & SON LABORATORIES, INC.
PHONE ALpine 3-6272 817 WEST MADISON ST. P. O. BOX 1888 PHOENIX

Chemists . . . Engineers

CHEMICAL • RESEARCH • ASSAY • ORE TESTING • PHYSICAL TESTING

For Mr. R. R. Kinney
210 South 24th Street
Phoenix, Arizona

Date July 23, 1957

Sample of Ore

Received: 7-23-57

Submitted by: Same

ASSAY CERTIFICATE

Gold figured at $ 35.00 per ounce. Silver figured at $ 0.90 per ounce.

Lab. No.	Identification	Gold		Silver		Percentages	
		Oz. per Ton	Value	Oz. per Ton	Value		
135941	No Mark	26.80	$938.00				

REGISTERED ASSAYER CERTIFICATE EXPIRES CLAUDE E. McLEAN DEC. 31, 1958 ARIZONA, U.S.A.

Respectfully submitted,
ARIZONA TESTING LABORATORIES
Claude E. McLean

Charges: $2.00 (Paid - Receipt #5893)

10M AMPCO

VALLEY ASSAY OFFICE
AND ORE TESTING LABORATORY
MEMORANDUM OF ASSAY

de for Boas Mine — Tempe, Arizona, April 29, 19 6

SAMPLE NO.	PER TON OF 2000 POUNDS AVOIRDUPOIS								COPPER, OR			LEAD, OR			ZINC			TOTAL	
	GOLD				SILVER														
	AT 35.00 PER OUNCE				AT 2.00 PER OUNCE				AT		PER LB.	AT		PER LB.	AT		PER LB.		
	OZS.	100's	$	CTS.	OZS.	100's	$	CTS.	%	$	CTS.	%	$	CTS.	%	$	CTS.	$	CTS.
1	0.	22	7	70	0.	70	1	40										9	10

Dupe at assay House

REMARKS:

REGISTERED ASSAYER — CERTIFICATE EXPIRES DEC. 31, 1945 — L. LEE BOYER — ARIZONA, U.S.A.

CHARGE $ 5.00 Pd.

BY L. Lee Boyer
Registered Assayer.

VALLEY ASSAY OFFICE
AND ORE TESTING LABORATORY
MEMORANDUM OF ASSAY

for Ned C. Fledderjohn — Tempe, Arizona June 30, 19 71

SAMPLE NO.	PER TON OF 2000 POUNDS AVOIRDUPOIS								COPPER, OR			LEAD, OR			ZINC, OR			TOTAL	
	GOLD, [illegible]				SILVER														
	AT 35.00 PER OUNCE				AT 2.00 PER OUNCE				AT		PER LB.	AT 0.15 PER LB.			AT		PER LB.		
	OZS.	100's	$	Cts	OZS.	100's	$	Cts.	%	$	Cts.	%	$	Cts.	%	$	Cts.	$	Cts.
1	0.	52	18	20	6.	10	12	20				1.3	3	90				34.	30

REGISTERED ASSAYER — CERTIFICATE EXPIRES DEC. 31, 1971 — L. LEE BOYER — ARIZONA, U.S.A.

MARKS: Copper is one of the constituents. Also

CHARGE $ 9.00 Pd.

BY
Registered Assayer.

STATE OF ARIZONA, County of Yavapai—ss.

I do hereby certify that the within instrument was filed and recorded at the request of ARIZONA TITLE INSURANCE & TRUST CO.

on March 7 A.D., 196 7 at 11:05 o'clock A M. Book 439 Official Records

Page 311 Records of Yavapai County, Arizona.

WITNESS my hand and official seal the day and year first above written.

FRANK C. BAUER, County Recorder.

By Evelyn D. Jones Deputy

INDEXED PHOTOSTATED

When recorded, mail to:
Arizona Title
P.O. Box 395
Phoenix Arizona

Witness my hand and official seal.

N. C. "KELLY" MOORE, County Recorder

By

Deputy Recorder

Compared

Photostated

Fee:

2114865

Joint Tenancy Deed

For the consideration of Ten Dollars, and other valuable considerations, I or we,

A. R. LEE and AUDREY LEE, husband and wife, as to an undivided one-half interest and WANDA H. RANKIN, a widow, as to an undivided one-half interest

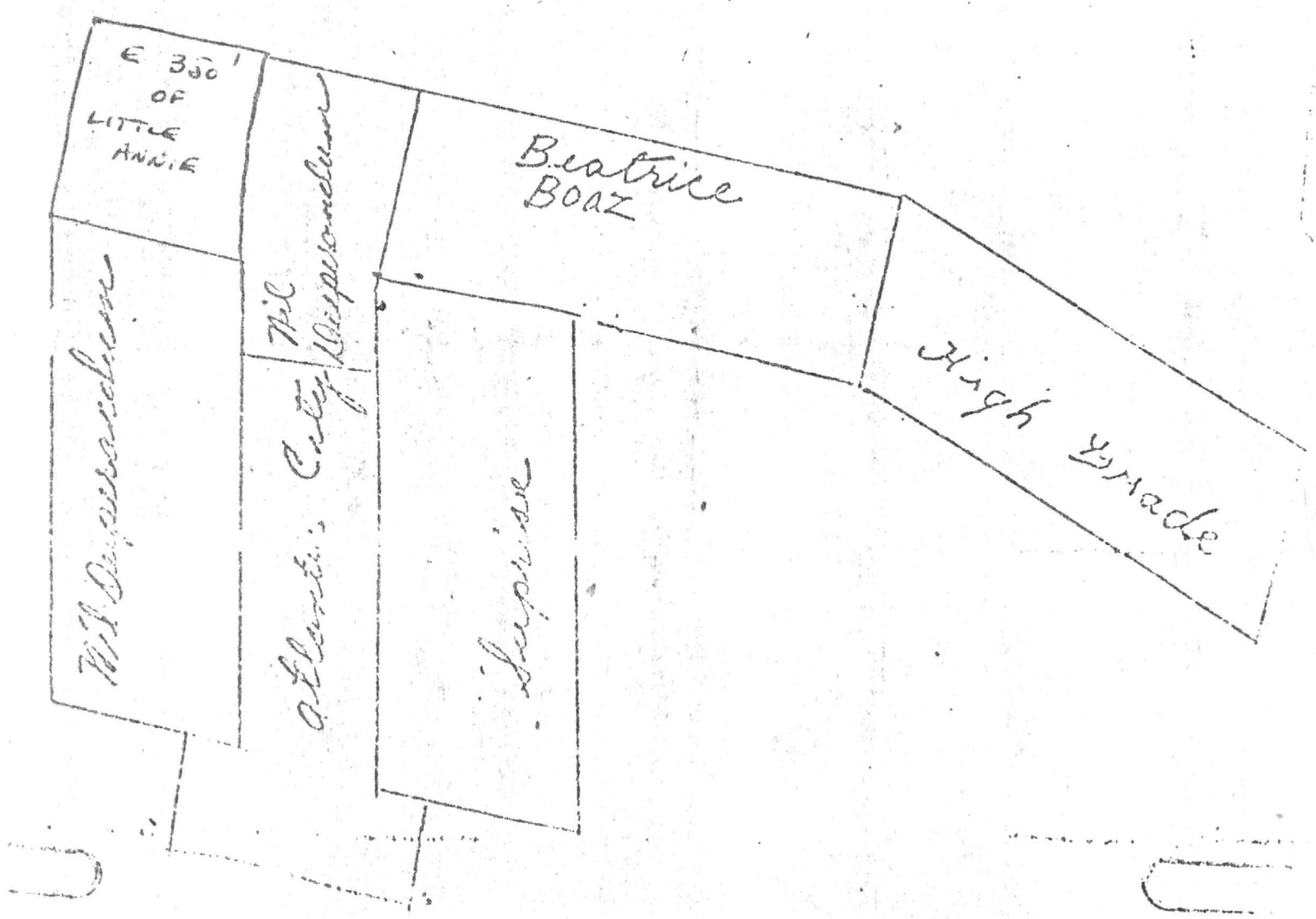
do hereby convey to

WALTER W. FRANK and SUSIE A. FRANK, husband and wife, and RICHARD W. FRANK, a single man,

as tenants in common and not as community property estate, but as joint tenants with right of survivorship, the following described property situated in the County of Maricopa, State of Arizona.

Yavapai,

BEATRICE, HIGH GRADE, SURPRISE and NIL DESPERANDUM lode Mining claims and NIL DESPERANDUM MILL SITE, designated by the Surveyor General as Lots numbered 1557A and 1557B, United States Patent whereof is of record in Book 63 of Deeds at Page 499, et seq., in the office of the County Recorder of Yavapai County, Arizona and THE ATLANTIC CITY Lode Mining Claim, designated by the Surveyor General as Lot numbered 1675, United States Patent whereof is of record in Book 82 of Deeds at Page 233, et seq.



H. C. SMOOT
CHEMIST AND ASSAYER
REGISTRATION NO. 460

CUSTOM ASSAY OFFICE

Assay Certificate

For Carl C. Barth, Jr., *Prescott, Arizona,* 9-1-37

DESCRIPTION	GOLD PER TON OZS. TROY	GOLD PER TON VALUE	SILVER PER TON OZS. TROY	SILVER PER TON VALUE	GOLD AND SILVER VALUE	OTHER METALS PER CENT	OTHER METALS VALUE
		$		$	$		$
Silver Dollad N Side	1.20	42.00	8.8	6.82	48.82		
" " Wolf Pack	.02	.70	Trace		.70	Tungsten	
" " S. "	.39	13.65	1.2	.93	14.58		
Campbell-Pyrites	.24	8.40	0.2	.15	8.55		
Gold-Note	.74	25.90	4.5	3.49	29.39		
Table Concentrates	2.48	86.80	11.7	9.07	95.87		

MARKET VALUES

GOLD PER OZ.	SILVER PER OZ.	COPPER PER LB.	LEAD PER LB.	ZINC PER LB.
35.00	.77			

Charges $

REGISTERED ASSAYER
CERTIFICATE EXPIRES
H. C. SMOOT
PRESCOTT
ARIZONA U. S. A.

H. C. Smoot

Phoenix, Arizona,

CHAS. A. DIEHL

May 24, 1946

ARIZONA ASSAY OFFICE

Phone 3-4001

815 North First Street

P. O. Box 1148

This Certifies That samples submitted for assay by Department of Mineral Resources contain as follows per ton of 2000 lbs. Avoir.

MARKS	No.	SILVER Ounces	SILVER Tenths	VALUE (Oz.)	GOLD Ounces	GOLD Hundths	VALUE (Oz.) $35.00	TOTAL VALUE Of Gold and Silver	% PERCENTAGE %	REMARKS
85' W. of shaft	1				.02		$ .70			
60' W. of shaft	2				.18		$ 6.30			
15' W. 3'	3				.08		$ 2.80			
200' E. 7'8"	4				.16		$ 5.60			
300' E.6'	5				.18		$ 6.30			
400' E. of shaft	6				.02		$ .70			
5' E.440' N.of shaf	7				.02		$ .70			
480' E.of shaft 6'	8				.02		$ .70			
530 E.8'	9				.02		$ .70			
	10				.03		$ 1.05			
1 foot	11				.10		$ 3.50			
2' 6" winze	12				.14		$ 4.90			
Face S.tunnel N. apex E. of fault	13				.30		$10.50			
Apex 750 E.winze	14				.06		$ 2.10			
Surface 100' E. of winze.	15				.27		$ 9.45			
Top of raise 25' west of winze.	16				.08		$ 2.80			
Surface top of sft	17				.28		$ 9.80			
Dump S.tunnel on vein.	18				.04		$ 1.40			

Charges $18.00

Assayer ARIZONA ASSAY OFFICE

No. 194 Du

Phoenix, Arizona,
April 3, 1946.

CHAS. A. DIEHL

ARIZONA ASSAY OFFICE

Mail: P. O. Box 1148 — 815 North First Street — Phone

THIS CERTIFIES That samples submitted for assay by Mr.C.H.Dunning. contain as follows per ton of 20

MARKS	Wt.	SILVER Ounces	SILVER Tenths	VALUE (OZ.)	GOLD Ounces	GOLD Hndths	VALUE ($35.00 OZ.)	TOTAL VALUE Of Gold & Silver	PERCENTAGE
Screen Heads			.32			.185	$6.47		
Minus 10 mesh-518	Gr.					.095	$3.32		
" 30 "	397					.13	$4.55		
" 50 "	300					.23½	$8.17		
" 100 "	330					.41	$14.35		

Charges $ 5.25 (assaying)

Assayer ARIZONA ASSAY OFFICE

No. 194 Du

Phoenix, Arizona,
April 3, 1946.

CHAS. A. DIEHL

ARIZONA ASSAY OFFICE

Mail: P. O. Box 1148 — 815 North First Street — Phone 3

THIS CERTIFIES That samples submitted for assay by Mr.C.H.Dunning. contain as follows per ton of 20(

MARKS	Wt.	SILVER Ounces	SILVER Tenths	VALUE (OZ.)	GOLD Ounces	GOLD Hndths	VALUE ($35.00 OZ.)	TOTAL VALUE Of Gold & Silver	PERCENTAGE
Screen Heads			.32			.185	$6.47		
Minus 10 mesh-518	Gr.					.095	$3.32		
" 30 "	397					.13	$4.55		
" 50 "	300					.23½	$8.17		
" 100 "	330					.41	$14.35		

Charges $ 5.25 (assaying)

Assayer ARIZONA ASSAY OFFICE

Gill Boy Mine

THIS AGREEMENT, made this _____ day of August, 1946, between WANDA JONES RANKIN, of Wickenburg, Arizona, first party, and E. H. SWEENEY, of Phoenix, Arizona, second party:

WITNESSETH:

That first party, for and in consideration of the sum of Twenty Five Dollars, lawful money of the United States, to her in hand paid by second party, and the further covenants and agreements, hereinafter set forth, to be performed by second party, has given and granted, and by these presents does give and grant, unto second party, the sole and exclusive option to lease and purchase the following described mining claims and millsite, on the terms and conditions hereinafter set forth, to-wit:

Nil Desperandum, Beatrice, High Grade, Surprise, and Atlantic City, patented lode mining claims, situated in the Tiger Mining District, Yavapai County, Arizona, the United States Patent whereof is of record in the office of the County Recorder of Yavapai County, Arizona, in Book 63 of Deeds, at page 499, et seq;

Nil Desperandum Millsite, the United States Patent whereof is of record as aforesaid;

Little Annie, patented lode mining claim, situated in said Mining District, County and State, the United States Patent whereof is of record as aforesaid; subject, however, to the rights of George P. Dawson and Florence Dawson, his wife, and their successors in interest, under that certain deed, executed by Archibald M. Jones and Wanda H. Jones, his wife, of record in the office of said County Recorder in Book 161 of Deeds, at pages 244-5.

The option herein granted may be exercised by second party by giving written notice to first party at any time prior to the expiration of sixty (60) days after the date hereof, during which time second party shall have the right to go upon said mining claims, examine the workings thereof, and take samples of ore, and upon such

exercise second party shall be deemed to have a lease of said mining claims and millsite, upon the following terms and conditions, to-wit:

(1) Second party shall have the right to the possession of said mining claims, millsite and premises for mining purposes, together with the right of ingress and egress to and from the same, and to extract, remove and ship for milling or smelting ores therefrom; subject, however, to the right of first party and persons identified in interest with her, which is hereby expressly reserved, to the full use of said premises for grazing of livestock and purposes incidental thereto; provided such use shall not interfere with the mining operations of second party, it being understood that only a small part of the surface of said premises will be necessary for mining.

(2) Second party covenants and agrees to pay to first party a royalty equal to five per cent (5%) of the net smelter or mill returns from all ores and mineral substances removed from said mining claims, or of the values of all ores taken at the head of the mill in the event a mill should be constructed on said property; provided, however, that such royalty, or minimum rental, shall not be less than Twenty Five Dollars ($25.00) per month, payable monthly, on the ____ day of each month, commencing with the month of September, 1946, and continuing throughout the entire term this lease remains in effect. All royalty payments on ores actually shipped for treatment by smelter or mill shall be paid within ten (10) days following the receipt of returns, and all such payments shall be accompanied by duplicate copies of smelter or mill returns. Second party shall be entitled

to deduct minimum royalty payments from actual royalties in excess of the minimum, but only for the month in which such payments are made.

(3) The term "net smelter or mill returns", as herein used, shall be construed to mean the net values found and accounted for by the smelter, mill, or other place of treatment and sale, less smelter, mill or other treatment charges, penalties and deductions; railway transportation or the reasonable cost of trucking between railway shipping points, and taxes, if any, levied on the production and/or sale of metals.

(4) Second party shall perform all work on said mining claims in a good and minerlike manner, in conformity with the laws of the State of Arizona and the rules and regulations of the State Mine Inspector.

(5) Second party shall pay all direct property taxes levied on said mining claims during the life of this lease, commencing with taxes to be levied for the year 1946, as well as taxes levied on personal property which may be brought upon said premises, before the same shall become delinquent.

(6) First party shall have the right at all times to go upon said property and into all working places for the purposes of inspection and examination; to inspect and examine all books of account and other records kept by second party in connection with the working of said property, and to take copies of the same, and second party agrees to furnish first party all information concerning his operation of said property upon request.

(7) The term of this lease shall be ten (10) years, commencing with the date hereof, and second party

shall have the right and option, during said term, to purchase said mining claims, millsite and premises for the price of Seventy Five Thousand Dollars ($75,000.00), all royalty payments hereafter to be made hereunder to be credited on said price. In the event second party shall, within said term, pay an amount equal to one-half of said price, he shall have the right to renew this lease and option to purchase for an additional term of ten (10) years, on all the terms and provisions herein set forth.

(8) Second party agrees to record, post, and keep continuously posted, in the manner required by law, a notice of non-liability for labor performed and materials furnished, as provided by law; and further agrees to comply in all respects with the Workmen's Compensation Law of the State of Arizona, and to that end keep all premiums for liability insurance currently paid or covered by deposit in accordance with the rules of the Industrial Commission of Arizona.

(9) Upon the payment in full of the purchase price herein named, first party shall execute and deliver to second party a good and sufficient mining deed of the herein described mining claims, millsite and premises, and second party covenants and agrees with first party to keep and preserve said property free of liens and encumbrances of every kind and character.

(10) Upon the expiration or earlier termination of this lease second party shall have the right to remove from said property all machinery, equipment, tools, appliances, and improvements or property of every kind and character which he may have installed or brought thereon, save only timbers and pipe installed underground, within

six months after such expiration or termination; provided second party shall not be in default in the performance of any of his duties or obligations hereunder.

So long as second party shall perform this agreement on his part he shall have and enjoy the peaceable possession and quiet enjoyment of said property, subject to the conditions herein named; but if default be made in the payment of any of the sums of money herein required of him to be paid, or if second party shall fail to keep or perform any of the covenants, conditions or agreements herein required of him to be kept or performed, first party shall have the right, by giving second party ten (10) days prior written notice and demand of performance to declare this agreement terminated, and if, at the expiration of said time, the default or defaults in respect of which such notice shall have been given be not cured, this agreement shall stand terminated and at an end, first party shall be entitled to recover the actual and peaceable possession of said premises, with all improvements and betterments thereto, all sums of money theretofore paid by second party hereunder shall be deemed forfeited to first party as liquidated damages for the breach of this agreement and as reasonable rental for the use and occupancy of said premises, and all parties hereto shall thereupon stand relieved of further obligation hereunder.

Second party shall not assign this agreement, or any interest therein, or sublet the whole or any part of said premises, without the prior written consent of first party.

The covenants, conditions and agreements herein

contained shall extend to, be binding on, and inure to the benefit of the heirs, executors, administrators, and permitted assigns of the respective parties hereto.

IN WITNESS WHEREOF, the parties have hereunto set their hands the day and year first above written.

_____

First Party

_____

Second Party

STATE OF ARIZONA)
) SS.
COUNTY OF MARICOPA)

THIS INSTRUMENT was acknowledged before me this _____ day of August, 1946, by Wanda Jones Rankin, first party within named.

My commission expires _____

_____

Notary Public

STATE OF ARIZONA)
) SS.
COUNTY OF YAVAPAI)

THIS INSTRUMENT was acknowledged before me this _____ day of August, 1946, by E. H. Sweeney, second party within named.

My commission expires _____

_____

Notary Public

Nil Desperandum, Beatrice, High Grade, Surprise, and Atlantic City, patented lode mining claims, situated in the Tiger Mining District, Yavapai County, Arizona, the United States Patent whereof is of record in the office of the County Recorder of Yavapai County, Arizona, in Book 63 of Deeds at page 499, et seq;

Together with the Nil Desperandum Millsite, the United States Patent whereof is of record as aforesaid; and

Together with the Little Annie, patented lode mining claim, situated in said Mining District, County and State, the United States Patent whereof is of record as aforesaid; subject, however, to the rights of George P. Dawson and Florence Dawson, his wife, under that certain deed, executed by Archibald M. Jones and Wanda H. Jones, his wife, of record in the office of said County Recorder in Book 181 of Deeds at pages 244-5.

October 8, 1943

Mr. Lynn Hersey, Assistant Chief
Primary Production Board, Copper Division
War Production Board
Room 1652 Temp. H Building
Washington, D. C.

Dear Mr. Hersey:

Subject: Access Road Connecting Upper Castle Creek Project with Waggoner Road

I have just met Mr. A. C. Nebeker, War Production Board, along with Mr. L. E. Logan, who is the owner of the North Colossal Mine located a short distance off of the Waggoner road. The North Colossal Mine has shipped considerable ore and is now operating. The shipments of their selected ore ran 51% lead and 8.45% copper.

At the present time Mr. Logan has a long haul out of his mine to the Kirkland station on the Santa Fe railroad, a distance of some 35 miles. The haul over the new connection to railroad facilities at Wickenburg will be about 20 miles. In addition to this, this new road would provide a better access to sources of supply for materials, equipment and labor out of Wickenburg and Phoenix, rather than the tough road to Prescott which in the winter time is apt to be wet and snowy.

Mr. Logan asked me to forward to you this application for an access mine road to make the connection between the end of the Waggoner road going south to a connection with a proposed Upper Castle Creek access road from Wickenburg to Abe Lincoln and then to the Duso Boy Mine.

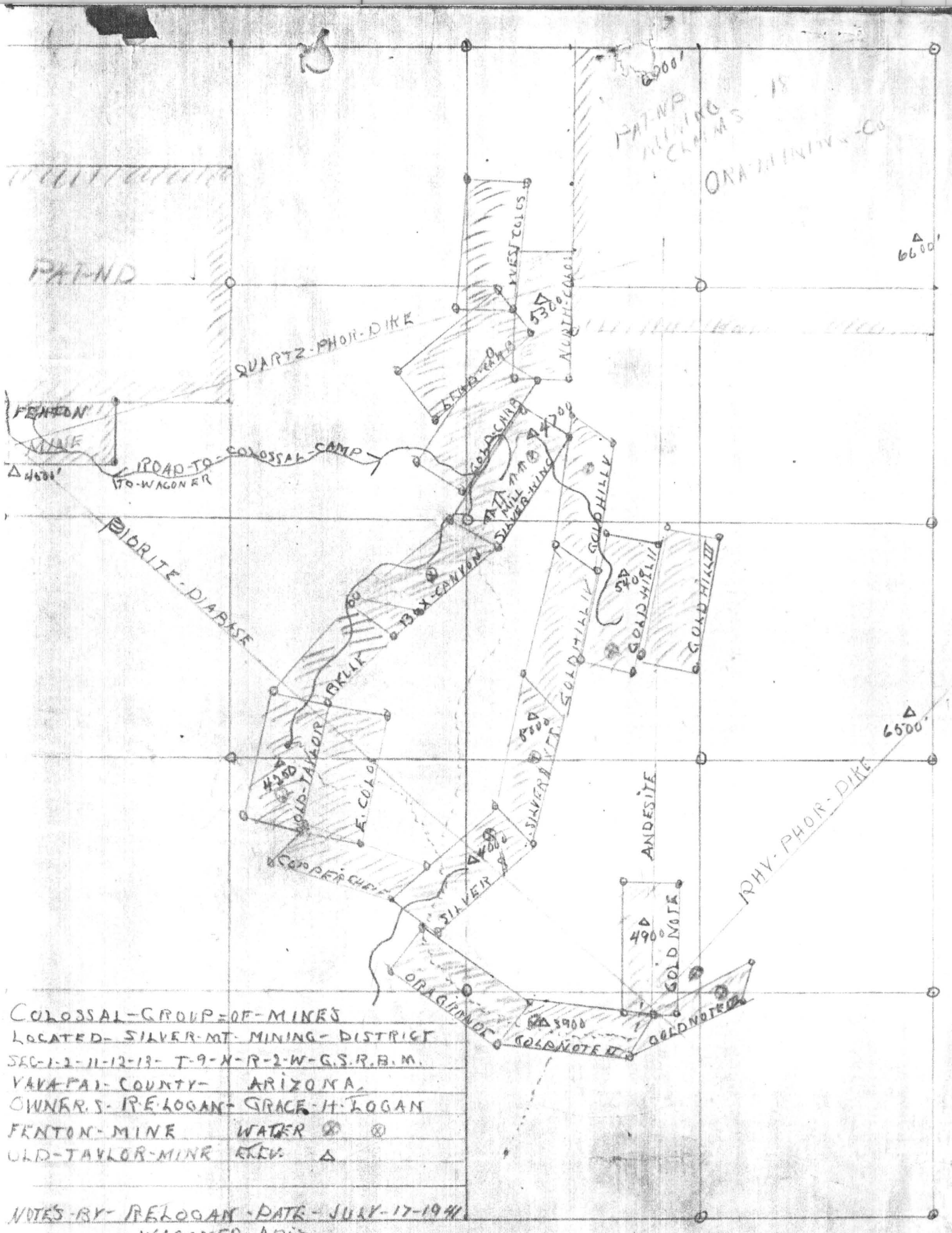
This connection has had a preliminary survey by Dick Merritt, County Engineer, Yavapai County, and is feasible and will not require any heavy work. The whole job can be performed by bulldozer with practically no blasting.

Yours very truly,

W. S. Caupal, Director

JSC:LP
Enc.

CC: A. C. Nebeker



COLOSSAL-GROUP-OF-MINES
LOCATED- SILVER MT. MINING- DISTRICT
SEC-1-2-11-12-13- T-9-N-R-2-W-G.S.R.B.M.
YAVAPAI- COUNTY- ARIZONA.
OWNERS- R.E.LOGAN- GRACE H. LOGAN
FENTON- MINE WATER ⊗ ⊗
OLD-TAYLOR-MINE ELEV. △

NOTES-BY- R.E.LOGAN - DATE - JULY-17-1941
WAGONER-ARIZ

1010 Pershing Square Bldg.
Los Angeles, 13, Calif.

December 4th, 1946.

Mr. Nebeker.
State Bureau of Mines.
Phoenix, Arizona.

Dear Sir,

I am a practicing mining engineer here and have a client who is interested to learn what we can of the Logan Mine of the Cherry Creek district of Yavapai County, Arizona.

We understand that you are especially versed in the properties adjacent to Prescott and so, we hope, can assist us.

Our information is that some good ore was mined and shipped from the upper portion of this mine but that as depth was attained the values decreased to the point of non-commerciality, even at $35 for gold.

Included in the available data is that Mr.A.L. Flagg, of Phoenix, was connected with the property back in the twenties, at the time the shaft was sunk to the 600 and the 400 north drift was driven. No doubt you would consider his comment on the vein at depth as entirely dependable? And what do you think of information given out by Mr. Joe Hobbs who, it appears, was intimately acquainted with the property during that development campaign?

We have the name of Ray Witcher as being an engineer who had a lease on the property at one time and dewatered it to some depth -not specified. We do not have the dates of his activity nor the outcome; perhaps you can help us on this phase also.

We have W.C.Broadgate's longitudinal projection of the vein showing the workings, samplings and assays, but the title on the map specifies that Broadgate drafted the projection on data supplied by W.F.Burns and J.T.Hinds and not on any samplings or surveys made by himself. Would you condider data supplied by Burns and Hinds as dependable?

I thank you in advance for your kindness in giving me as early a response as meets your convenience.

Very truly yours,

H. R. Van Wagenen.

HRVW:YM

Hugh R. Van Wagenen.

TO: H. PALMER

FROM: P. HORRELL

SUBJECT: COMMUNICATION - COLOSSAL MINE, YAVAPAI COUNTY, ARIZ.

AUTO ROAD

To reach the Colossal property you will have to go to Kirkland Jct which is on U.S. Highway 89.

From Kirkland Jct. - - - - trun southeast off U.S. #89.

It is about 13 miles to Wagoner. Wagoner is nothing more than a small store - - - you would hardly know you are there.

When you arrive at Wagoner S T O P.
Mr. Cole runs the store and P.O.
He knows the country.
He is well acquainted with the Colossal
as he worked there years ago.
Mr. Cole will give you the directions.

But when you leave Wagoner . . . keep on the MAIN ROAD to a point marked on the map (*) - (LOOK) this is in a dry wash; and there is a sign in it "COLOSSAL MINE" . . . then head your car up the Dry Wash . . . . . and keep going.

You will drop right off a "RIM" right into the Colossal Camp --- you will see the camp.

This is the worst part of the trip. You will be OK. I have a large NASH and it goes through.

TELEPHONE: In an emergency - inquire from Mr. Cole and he will direct you to a ranch house . . . AND WHAT A RANCH HOUSE, CHICAGO DUDES $ $ $ $ $.

ALL ROADS ARE GOOD ..... YOU WILL NOT HAVE ANY TROUBLE.

P. H.

P.S./ Attached is a map. The squares are Sections.

Phoenix, Ariz. 2/27 48.

Chas. H.Dunning.
Dirctr. Dept. Min. Rec.
Mineral Bldg. Fairgrounds.
Phoenix, Ariz.
Dear Sir;-

Your letter of the 26th inst. received, relative to one of the group comprising the Colossal Mines.
The property refered to is the GOLD NOTE MINE.
Last examination and sampling was by the late Carl Barth Jr. E.M. .
His sample consisting of grabs from remaining dumps, over a length of 1000 ft. 200 feet in width, returned $ 29.39-- AU.** AG.
My samples averaged $ 18.00.
Mr Barth was the only Engr, who had examined the property, who admitted that they hed ever encountered , similiar conditions, he stated, that it was " just like the Yarnell Mine , but ten times larger ".
However, there is no one at my camp, at the present time, but from correspondence now at hand, would seem to indicate, that parties will be in Phoenix, shortly, to look over the entire situation.
If that situation developes,I could advise your Dept. and if you and the Field Engr was then available, would be glad to go into the entire situation .
I have rather complete maps and reports of this group, and as always, more than pleased to cooperate with the Dept.
The recent weathr conditions , would , for a few days preclude any trip up there.
I will advise you, of developements, the coming week, and as I have put in about 25 years on this property, or group, I am more or less familiar with certain conditions, that would be, perhaps, overlooked, in a hasty examination.
That being the situation , I wish to be present, to give any information , I have relative to my sampling , mill runs etc.

Yours Sincerely

P. E. Logan

2PhBenBroadway.

21 E. BROADWAY

A REPORT ON
THE BOAZ MINE

Humbug Mining District
Yavapai County, Arizona

by

Hallen Mining Consulting Co.

August, 1984

LOCALITY

The Boaz Mine is situated in the Bradshaw Mountain Range in Central Arizona. Airline distance from Phoenix is about fifty miles northward, but due to the circuitous route that must be taken by auto, it is about 100 miles from Phoenix. The nearest larger city is Prescott, the Yavapai County Seat, about 35 miles to the north. This description is useful in the view of mine maintenance.

Most of the route to the mine is paved and just the last eight miles is a County-maintained gravel road. This is also the road leading to the well-known Crown King Mine, which is about ten miles from the Boaz Mine.

During the winter months, snowfalls of up to one foot are likely. Elevation at the mine is about one mile and the brush and trees are mostly laurel, oak brush and oak trees. This is mentioned because the mine property is just inside the boundaries of the Prescott National Forest. Although the Ranger Service must be notified of any mining activity planned, they have thus far been quite cooperative and have even assisted insofar as road building is concerned. About two miles of road must be maintained by the Mine Operators.

In view of the foregoing values, the individual shipments at present gold prices of $350.00 per oz. would be as follows:

#1	Gold	=	$16,975/ton
#2	Gold	=	$ 1,680/ton
#3	Gold	=	$ 980/ton
#4	Gold	=	$ 735/ton

Qualification of these results is needed to put a real perspective on the ore. First, these ores apparently were found by one or two men and hand mined. Second, there is no doubt that the ore was hand-sorted (cobbed) to upgrade it for the shipment; therefore this could not be considered an average value of ore in the whole mine. However, this does prove what I have observed, that there are pockets or vugs of rich ore in the veins, especially on the East end of the property.

From remnants of leaching casks being found on the property, apparently an attempt was made during the 1920's and 1930's to chloride leach some of the concentrated sulfides. However, due to the lack of tailings being present, it is believed that this method was not successful. Samples of tailings were obtained by me and assayed, and the results were upward from 1/4 oz. of gold per ton.

Observation of the amount of tailings around the millsite indicates that most of the ore mined from the main shaft and drifts was shipped to some other site for milling and smelting. A rough estimate of ore tonnage removed from the mine is 10,000 tons..

GEOLOGICAL CHARACTERISTICS

Predominant geological structures in and around the Boaz Mine are of Pre-Cambrian origin. This means that the rock was initially formed through volcanic action about two billion years ago. What must be recognized is that under extreme pressures and temperatures this originally lava rock (basalt) has been transformed and is matamorphic at the present time. Also, because the earth's crust has undergone a shrinking action since this rock was deposited and metamorphized, cracks were formed from vertical to lateral, and these cracks were later filled with igneous (super-hot) solutions of silica along with gaseous material which cooled to liquids and later, solids. This solution is what is presently called enriched quartz. The enrichment is in the form of sulfur compounds with the gold, silver and platinates having been carried by the sulfides which were formed during solidification of gases and liquids. In the vein structures the primary carrier was lead sulfide (Galena) with a secondary carrier of iron sulfide (pyrite - "fool's gold").

Because the cracks which were formed and later filled, were stressed afterward, an expansion in various parts of the veins caused a widening or narrowing. Also coupled to that is the fact that the cracks were formed irregularly. These characteristics have caused pockets or vugs to form of highly-enriched ore. These irregularities also cause the thickness of the veins to vary from two feet to as much as twelve feet. This is quite evident at the Boaz Mine. Usually the wider areas are richer. It must be recognized that this creates a problem in averaging values throughout the whole veinal structure.

GEOLOGICAL CHARACTERISTICS (continued)

In addition to the description of veinal structure, another geological phenomenon has occurred in the same vicinity. This phenomenon was created as metamorphic Andesite. This material was again formed during Pre-Cambrian activity but was thrust upward during later periods of upheaval. Therefore, this structure is adjacent to the veinal system, but was enriched under different circumstances. As a result of this there is presently a body of ore (not vein) which contains a lower enrichment than the veins. But where the veins represent about five million tons of ore, this body represents more than a billion tons of ore.

It must be noted that I have tested this ore and feel that it will prove to be more profitable than the veinal system under long-term operation. This body <u>is</u> on the Boaz property.

PERSONAL OBSERVATION AND TESTING

In May 1981 Mr. Halpin (my partner) and I contracted with a concern to do consulting work on value assessment, followed by production processing and recovery of gold and silver from the Boaz Mine. During the following four months we tested the ore and derived a method of value recovery. Unfortunately, a lack of financial and work force management which we had no control over caused the production program to falter and later collapse.

During this period I tested the vein ore extensively and found that prior reports were true in the assessment of ore value. I also found that the Andesite body had a potential of at least $40.00 per ton value, but the people involved did not care to pursue this. Therefore, a very limited amount of testing was accomplished on this ore.

PROPOSED APPROACH TO PRODUCTION

Due to the present exposure of the east portion of the vein structure, a limited production is possible within two months of start. This ore can be stripped, crushed, milled, concentrated, and the values recovered. It is reasonable to expect at least twenty tons per day of $200.00 per ton ore to be available. This could partially defray costs of further exploration, especially of the Andesite body. These evaluations are no doubt on the conservative side.

The Andesite body should be test drilled, sampled and analyzed extensively to determine the best method of recovery and to obtain a more accurate assessment of ore reserves. At the same time, some drilling could be done on the vein system to obtain ore reserve evaluation.

I have always felt that a true evaluation of total reserves and values cannot be obtained for less than $200,000.00.

SUMMARY AND RECOMMENDATIONS

In Summary, the Boaz Mine has never been fully explored for its true value. I have, over the past 16 years, surveyeds over 200 mine sites in this vicinity, and my conclusion is that this mine has the best potential of all of those I have evaluated.

To emphasize the potential of the Boaz Mine, it is situated in the center of an overall geological structure (enriched zone) stretching for fifty miles. It is no doubt the same structure on which Crown King Mine is situated.

With thorough testing and development, this mine should eventually be the best producing mine for precious metals in this vicinity.

SUMMARY AND RECOMMENDATIONS (Continued)

In all fairness, I emphasize that this development must be approached with all astuteness of good mining practice and careful planning of expenditures in order to realize a successful operation. The values are truly contained in the ore and the ore is plentiful; therefore it is potentially profitable.

It is impossible without further reports and study to establish the true value of this mine. In its present condition, and what is known, of its history, as well as the history of the other mines in the area, which in this writers opinion are generally on the same vein as this mine, I would therefore establish a value at a minimum of one million two hundred fifty thousand dollars (1,250,000.00) and a top value of ten million dollars ($10,000,000.00).

Careful study of the attached reports can be most enlightening about the Boaz Mine.

Submitted by:

Bruce Allen

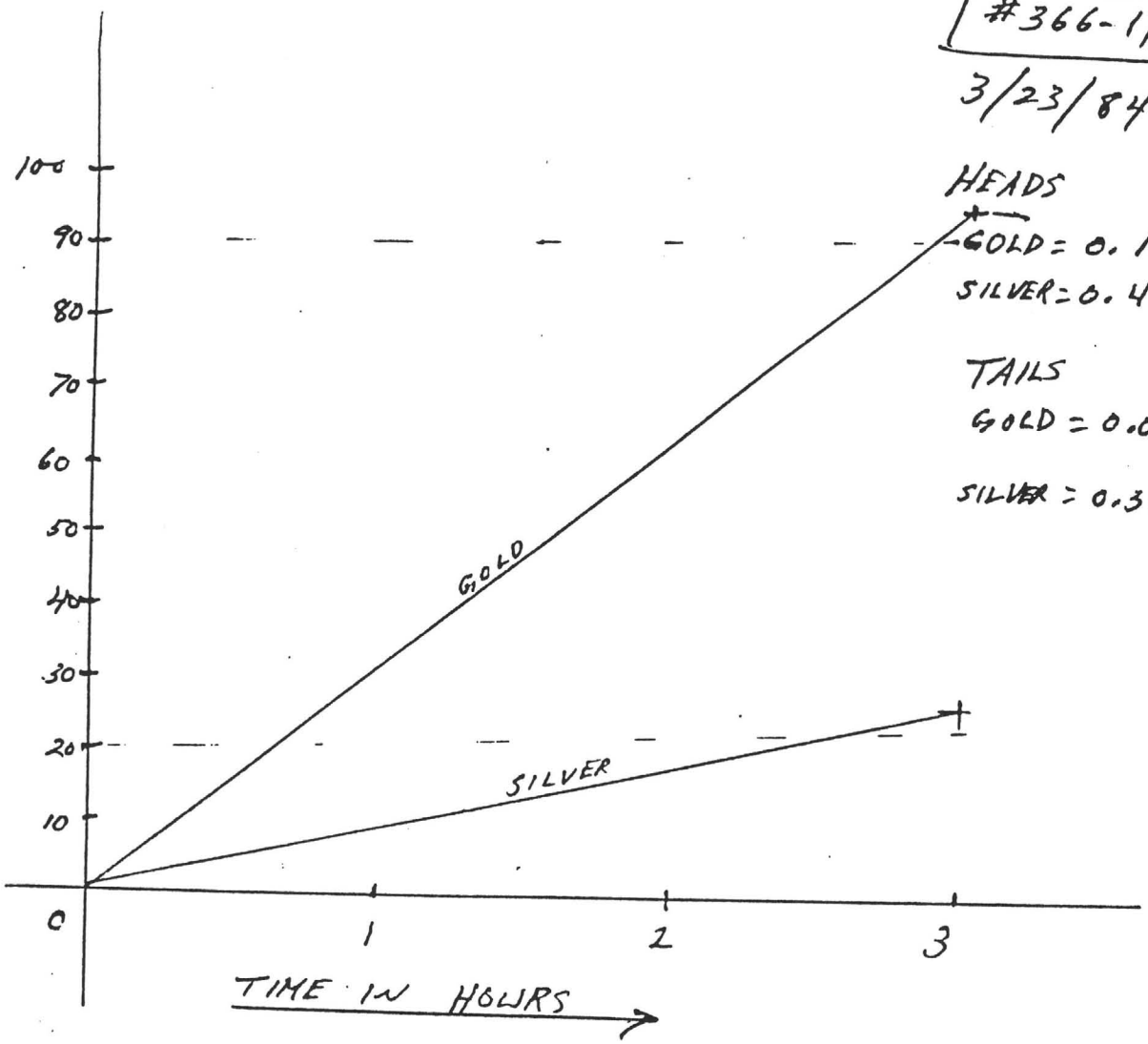
Bruce Allen

9-5-84

Date

#366-1

3/23/84



HEADS

GOLD = 0.1654 g/ton

SILVER = 0.4184 g/ton

TAILS

GOLD = 0.0097 g/ton

SILVER = 0.3113 g/ton

+60 MESH 5.4% by wt

+100 MESH 17.8

+200 MESH 40.6

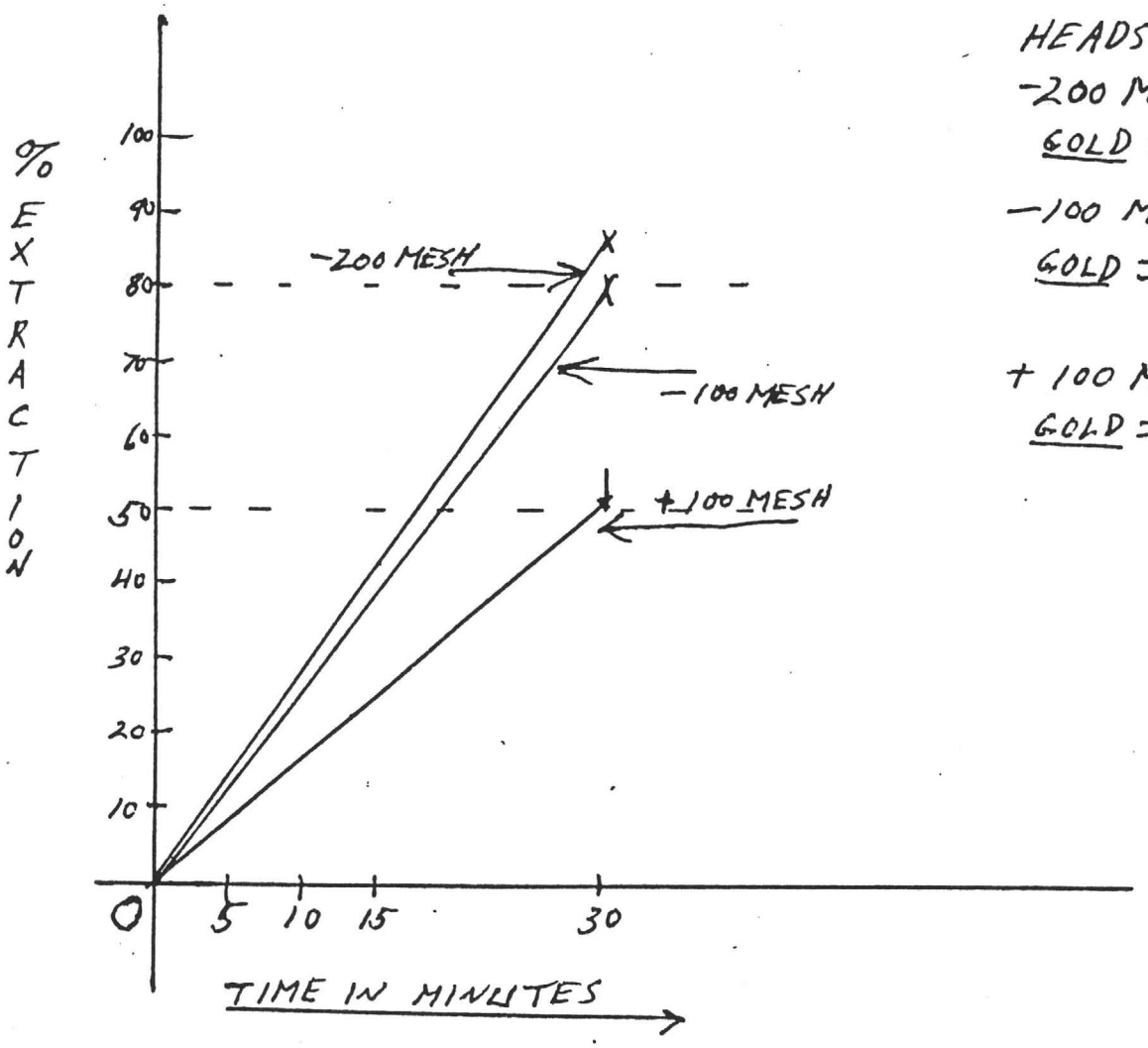
-200 MESH 36.0

SAMPLE WAS WHITE QUARTZ

HEAD WAS TAKEN FROM MATERIAL IN AGITATOR

3/27/84
#366-2

SIZE & % EXTRACTION



HEADS

-200 MESH

GOLD = 0.2822 g/ton

-100 MESH

GOLD = 0.2620 g/ton

+100 MESH

GOLD = 0.2919 g/ton

-200 MESH 86.2% PULLED INTO SOLUTION IN ½ HOUR

-100 MESH 80.0% " " " " ½ "

+100 MESH 53.3% " " " " ½ "

SAMPLE WAS DARKER QUARTZ

HEAD WAS TAKEN FROM MATERIAL IN AGIATOR

PRECIOUS METALS RECOVERY PROCESSES

Evaluation of Properties by Drilling and Assaying.

Experts in the Refining of Precious Metals by Ion Exchange Technology.

Mr. Stan Deadman
Mr. Ken Lee
P.O. Box 249 Route 2
Kimberly, Idaho 83341

September 15, 1983

Dear Mr. Deadman & Mr. Lee

The following is the assay results of 400# ore sample that Mr. Lee personally submitted to our laboratory for the determination of the gold and silver content. The ore was processed thru our in-house "DYNALEACH" pilot plant.

Sample Identification	Element	Oz/Ton
1. 400# - Quartz ore	Gold	0.29
	Silver	0.75

Sincerely yours,

David M. Novak
President

This analytical report pertains only to the chemical analysis of the above samples, which may or may not be representative of the precious metals values of the entire ore body, and therefore the results should be interpreted in this manner.

1894 Commercenter West, Suite 201
San Bernardino, CA 92408 (714) 889-8313

n. R. Jones, Manager
n C. Gill, Chemist

DOT & NORTON

ASSAYERS and CHEMISTS

P.O. Box 338 — 1025 Empire Street
Silverton, Colorado 81433 USA

(303) 387-5492
Established 1900

CERTIFICATE OF ASSAY

BOAZ mine

samples taken by
Butler + D. Blake
~~Approx~~. 11-18-84

Silverton, Colorado 11/30/84

NO.	DESCRIPTION	Ozs. Per 2000 Lbs. Gold	Ozs. Per 2000 Lbs. Silver	Per Cent Lead	Per Cent Copper	Per Cent Zinc	Per Cent Iron	Per Cent Insoluble	Per Cent	Per Cent	Remarks
-1		0.094	0.27								
-2		0.010	0.01								checks
-3		0.174	0.05								0.152 0.13
-4		0.744	0.65								0.756 0.43
-1	Mineralized channel	(5'o	-6')	± 100'	E of W shaft						
-2	Barren qtz vein	(5' or	6')	E of W shaft							
-3	Mineralized channel	±	6'	± 100'	E of E shaft						
-4	Mineralized channel (just above ore chute)	± first	6'	± 50'	E of E shaft						

PRINTED IN SILVERTON

Assayed for Charles Butler
Charges $ 50.00

Assayer

n C. Gill, Chemist

KOOT & NORTON
ASSAYERS and CHEMISTS

P.O. Box 338 — 1025 Empire Street
Silverton, Colorado 81433 USA

Established 1900

Samples taken by
C. Butler + D. Blake
on 6-10-84

CERTIFICATE OF ASSAY

BOAZ Mine Silverton, Colorado 6-15-84

NO.	DESCRIPTION	Ozs. Per 2000 Lbs. Gold	Ozs. Per 2000 Lbs. Silver	Per Cent Lead	Per Cent Copper	Per Cent Zinc	Per Cent Iron	Per Cent Insoluble	Per Cent	Per Cent	Remarks
1		0.100	0.34								
2		0.102	0.28								
	Samples taken 250' + 310' E of W shaft. ± 6' channels on mineralized qtz vein.										

PRINTED IN SILVERTON

Assayed for Chas Butler

Charges $ 25¢

Assayer

IRON KING ASSAY OFFICE

ASSAY CERTIFICATE

BOX 247 — PHONE 632-7410
HUMBOLDT, ARIZONA 86329

REGISTERED ASSAYER CERTIFICATE NO. 2978 WALTER G. STATLER Date Signed 1-5-84 ARIZONA, U.S.A.

ASSAY MADE FOR

Bob Cable
Box 368
Yarnell, Az. 85362

June 5, 1984

REF. NO.	DESCRIPTION	oz/ton Au	oz/ton Ag		% Fe	% Pb	% Zn	% Cu
2-20-30	Boaz Mine.	0.052	0.31					
-14-1	Boaz Mine. Cable Sample #1	0.072	0.13					
-2	Table Cons.	4.004	2.74					

CHARGES $30.75 Paid

ASSAYER _____

Arizona Testing Laboratories

817 West Madison Street □ Phoenix, Arizona 85007 □ 602/254-6181

For Mr. Robert Cable
Post Office Box 368
Yarnell, AZ 85362

Date March 7, 1984

ASSAY CERTIFICATE

LAB NO.	IDENTIFICATION	OZ. PER TON		PERCENTAGES			
		GOLD	SILVER	COPPER			
5232	#23 Dirt from open pit acres 2-17-29	0.02	Trace				
	#26 Red rock sample	0.24	0.30				
	#27 Pyrite rock sample	1.5	0.80				
	No Mark	0.12	0.05				

Respectfully submitted,

ARIZONA TESTING LABORATORIES

Claude E. McLean, Jr.

Registered Assayer
CERTIFICATE NO
6258
CLAUDE EUGENE
McLEAN, JR.
Date Signed 3-7-84
ARIZONA, U.S.A.

IRON KING ASSAY OFFICE

ASSAY CERTIFICATE

BOX 247 — PHONE 632-7410
HUMBOLDT, ARIZONA 86329

REGISTERED ASSAYER
CERTIFICATE NO. 2978
WALTER G. SCHOLLER
Date Signed 10-29-82
ARIZONA, U.S.A.

ASSAY MADE FOR
Hobart Rundell
P.O. Box 274
Yarnell, Az. 85362

Oct. 29, 1982

REF. NO.	DESCRIPTION		oz/ton Au	oz/ton Ag		% Fe	% Pb	% Zn	% Cu
-25-41	#1	.22	Tr	0.99	40	drift			
-42	#2	.66	Tr	13.70	45	shaft			
-43	#3	.24	2.600	1.34	45	surface			

CHARGES # 30.75 Pd

ASSAYER

Arizona Testing Laboratories

817 West Madison · Phoenix, Arizona 85007 · Telephone 254-6181

year ?
probably 1983

For Arizona Zinc Platers
918 West Buchanan
Phoenix, Arizona 85007

Date December 23

ASSAY CERTIFICATE

LAB NO.	IDENTIFICATION	OZ. PER TON		PERCENTAG		
		GOLD	SILVER	COPPER		
9257	S.C. Tailings:					
	Coarse	0.05	2.1			
	Fine	0.03	6.1			
	BOAZ Open Pit	0.28	0.34			

Bob Cable

Respectfully submitted,
ARIZONA TESTING LABORA

Claude E. McLean, Jr.

IRON KING ASSAY OFFICE

ASSAY CERTIFICATE

BOX 247 — PHONE 632-7410
HUMBOLDT, ARIZONA 86329

REGISTERED ASSAYER
CERTIFICATE NO. 2978
WALTER G. STATLER
Date Signed 2-23-84
ARIZONA, U.S.A.

ASSAY MADE FOR: Bob Cable

Feb. 23, 1984

SAMPLE DESCRIPTION	oz/ton Au	oz/ton Ag			
-17-30 #24 Halfway down slope	N:I	0.14			
-31 #25	0.022	0.36			
-32 #26 Red Rock Sample	0.088	0.51	.24	.30	
-33 #27 Pyrite Rock Sample	1.582	0.94	1.5	.80	

CHARGES_____

ASSAYER_____

IRON KING ASSAY OFFICE

ASSAY CERTIFICATE

BOX 247 — PHONE 632-7410
HUMBOLDT, ARIZONA 86329

REGISTERED ASSAYER
CERTIFICATE NO. 2978
WALTER G. STATLER
Date Signed 2-23-84
ARIZONA, U.S.A.

ASSAY MADE FOR
Bob Cable
Box 368
Yarnell, Az. 85362

Feb. 23, 1984

SAMPLE DESCRIPTION				oz/ton Au	oz/ton Ag.	ATL — Au	AA Ag
-17-7		#1		0.006	0.21	.04	TR ~~.05~~
-8	drill cuttings at E end - dip slope area.	2	7'	0.024	0.24	.03	.05
-9		3	7'	0.046	0.23	.09	.05
-10		4	5'	0.240	0.46	.30	.25
-11		5	6'	0.132	0.29	.15	.10
-12		6	7'	0.028	0.27	.04	.10
-13		7	6'	0.004	0.14	Tr	Tr
-14		8	6'	0.012	0.21	.04	Tr
-15		9	6'	0.186	0.33	.26	.15
-16		10	6'	0.096	0.22	.16	.10
-17		11	6'	0.048	0.23	.09	.05
-18		12		0.028	0.13	.07	Tr
-19	#13	150' Down slope		Tr	0.18	.19	.10
-20	#14	100' Down Slope		0.306	0.61	.45	.60
-21	#15	50' Down Slope		0.052	0.45	.08	.10
-22	#16	Edge of slope		0.326	0.33	.45	.20
-23	#17	#2 tunnel to right		0.800	0.36	.45	.20
-24	#18	#2 tunnel to Left		0.032	0.09	.04	Tr
-25	#19	New vein on Hill		0.108	0.25	Tr	Nil
-26	#20	Dump		0.012	0.09	.05	Tr
-27	#21	Stopes		0.074	0.33	.08	.20
-28	#22	Stope at open pit		0.181	0.16	.38	.10
-29	#23	Dirt from open pit area		Tr	0.28	.02	Tr

CHARGES $276.75

ASSAYER

Frank Russel
Yarnell, Az
427-3342

PRELIMINARY GEOLOGICAL

STUDY

ON THE

"BOAZ" MINE

IN

HUMBUG MINING DISTRICT

YAVAPIA COUNTY, ARIZONA

FOR

RICHARD FRANK

BY

GRANT W. KIME
CONSULTING GEOLOGIST

GRANT W. KIME
CONSULTING GEOLOGIST
9412 RAMBLER DR.
HUNTINGTON BEACH, CALIF.
536-3757

June 10, 1969

Mr. Richard Frank
1223 South 7th Street
Phoenix, Arizona

Re: "BOAZ" MINE

Dear Mr. Frank;

I am pleased to transmit in accordance with your request a Geological Study of certain mining claims that you and your family own in the Huumbug Mining District, Yavaipia County, Arizona.

After an extensive reconnaissance survey of the entire property, I am attaching the foregoing study.

All data and information gathered in my investigation are believed to reflect a factual and objective picture of the claims as of this date.

The property is an extremely interesting prospect and with the silver market at a new high, it appears that this is a large and valuable group of claims.

Thank you for allowing me the privilege to serve you and if any further questions pertaining to this study is needed, please feel free to call me.

Respectfully submitted,

Grant W. Kime

GRANT W. KIME
GEOLOGIST

GENERAL DISCUSSION

The "BOAZ" mining claims are located in a highly minerilzed area. The mine has produced in excess of ten million ($10,000,000) dollars in silver and gold around the turn of the century.

The mine was closed because the price of silver and gold at that time made it non-economical.

The large veins found in the mine ran as high as seventeen hundred ($1,700.) dollars per ton and as low as three ($3.00) dollars per ton.

The vein that is exposed on the out side of the property could be very easily stripped and also on an economical basis. The rich ore of this particular vein is quite visiable to the eye.

The large vein found in the tunnel is also quite rich in precious metals and it to is quite significant to the eye.

The history of Arizona mining properties indicates that the richer ore is found a much greater depths. The "BOAZ" mine under discussion in this study has never been worked at a depth more than about fifty feet below the ground level.

From all indications the "BOAZ" mine should be core drilled and its quite probable that a large rich ore body would be found.

LOCATION

The "Boaz" Mining claims is located in the Crown King Quadrangle, Section 1, Township (9) North, Range (2) West, Yavapai County, Arizona. The property is located approximately ten (10) miles east of Wagoner, Arizona. Wagoner is situated about sixty (60) miles north of Phoenix, Arizona. 105 miles by Road

The area under discussion in this study is one of modest relief, with altitudes ranging from four thousand (4,000) feet in the valley floor to a height of six thousand (6,000) feet at the ridge of the Silver Mountain Range about one and a half miles from the mine. The "Boaz" mine is situated about fifty three hundred (5,300) feet.

The property consists of six (6) patented claims with approximately one hundred (100.141) acres. A good road that can be traveled the year around makes the property continuously accessiable.

The general area several years back at the turn of the century was one of the states largest producing silver and gold mining districts.

GEOLOGY

Most of the rocks exposed in the "BOAZ" mining area make up a metamorphosed pre-Cambrian complex of volcanic rocks, tuffaceous rocks and sedimentary rocks and associated intruded igneous rocks of diverac composition. After consider-

able erosion, this pre-Cambrian complex was covered by rhylite tuff and intruded by associated dikes of late Cretaceous or early Tertiary Age. Later, stocks of quartz monzonite and associated dikes were displaced. Some of the granite found in the area is impregnated with iron pyrites over which lies a series of rocks including quartz veins with glassy quartz and a chalcopyrite, galena, and sphalenite. The wall rock of amphibolite shows no sericitization.

All of these rocks have been subjected to faulting and folding and sheer zones have been formed in which there has been a deposition from ascending solutions of vein materials including large veins of high grade silver and gold associated with the iron pyrites and with gangue minerals which are mainly quartz, calcite and brecciated wall rock. The ore in the tunnel has been largely oxidized and in places there were zones of secondary enrichment.

There are two large veins exposed on the property that take on a significant value in this mine. One vein is exposed outside of the tunnel. This particular vein is approximately five (5) wide and runs up the mountain about 150 feet. The ore in this vein averages approximately thirty six dollars ($36.00) per ton. Some of the ore was extremely rich in values. The second vein was inside the tunnel about seventy five feet (75'), this vein was approximately 55' wide and looked like it could be quite deep.

THE COLOSSALL GROUP

OF MINES

SILVER MOUNTAIN DISTRICT YAVAPAI COUNTY ARIZ.

This group consists of FIVE MINES of two or more claims, all contigious or sidelining.

LOCATION.

Silver Mt. Mining District, Yavapai County, Arizona. About FIVE miles air line, from Crown King and SEVEN miles south-east from Waggoner, Ariz.

TITLE.

U.S. Mineral locations, Assessment work and other requirements satisfactorily performed.

ELEVATIONS.

About 5,200 ft. above sea level, on the NORTH COLOSSAL Claim, and 3,700 ft. on the ROGERS SILVER GROUP, on the south.

COMMUNICATIONS.

Post Office, Wagoner, Ariz. 11 miles by auto road, freight and shipping point, Kirkland, Ariz. 33 miles.

WATER.

Excellent body of living water, at the camp, on the Silver King claim, N. Colossal group, like conditions obtain on the South Colossal also at camp on the Rogers Silver. Water easily developed on the ORA GRANDE and FENTON Groups.

CLIMATIC CONDITIONS.

Favorable for all the year operations, moderate summer and winter conditions. Precipitation said to be about 14 inches per year. Very little snow.

TIMBER.

Considerable growth of small timbers close to the properties, which would be suitable for domestic purposes. Dimention and special timbers can be obtained in Bradshaw Mt's, distant 8 Miles, or can be purchased from Arizona Mills, at prices averaging $30.00 per M. Feet, delivered at Kirkland, Ariz.

OPERATING CONDITIONS.

Generally favorable, experienced labor can be had at prices prevailing in other Arizona districts. Living conditions good, roads good most of the year.

GEOLOGICAL CONDITIONS.

Development work and ore values, of the different claims of the group, their ore bodies and veins, are discussed seperately, as follows.

SOUTH COLOSSAL CLAIM.

The principal Geo. structure of this claim, is Granitic Schist, strike of vein N. 40 E. Dip 60 deg. W., Walls of Schist heavily impregnated with iron, Gouge on foot wall, 1 to 10 feet of altered Diorite gangue matter, quartz, heavy with Hematite, width of vein 3 ft. opened up by incline shaft 128 feet. Open cut 50 x 45 by 50 feet, shaft 60 feet, cross cut above vein, trenches and open cuts on vein along surface out crop. 300 foot depth obtainable on tunnel level, 500 foot long.
ORE VALUES, $28.00 to $90.00 Gold and Silver.
Average RUN of MINE, of three foot vein in shaft, assayed $28.00 GOLD and SILVER; the general average of metal contents of this ore is one ounce gold and one ounce silver.

A Mill run, on this group of this ore, by Amalgamation and Concentration, returned 16.5 PWT. Gold by Amalgamation, and $1331.00 Gold, $30.46 Silver per ton, CONCENTRATES. Ratio of Concentration 25 to 1. Mill run at Boaz Mill averaged $35.00 Gold per Ton by Amal. Arrastre recovery on same ores over a long period of years saved $27.00 Gold per ton, tails banked and oxidized, then on re-running yielded $21.00. Shaft open and ore exposed for sampleing.

This is the main productive vein of this group, and these workings are 350 feet below the camp and main water supply, distant about 1000 feet. On the south end of S. Colossal claim is the Copper King Claim, a Copper Silver bearing vein, strike E. and W. on contact of Schist and Lime, width of vein 6ft, values Copper 10%, Silver 22 oz. Gold $1.50, Total $49.00. The other claims of this group show high mineralization in all openings.

NORTH COLOSSAL.

The main workings on this group are on the N. Col Claim and the West Colossal Claim.

On the N. Colossal the geology would be Granite on the east and Schist on the west.

Four veins of RHYOLYTE - PROPHY carrying good values in Gold- Silver and Lead come into main vein, (Quartz-Porphry) on the North end of this claim, width of vein matter 50' to 100' feet, strike N. 45 E. Dip 60 W. Shaft on north end 60' feet sunk on contact of RHYOLYTE DIKE and main vein, width of ore, 4 feet- a Lead Carbonate- average value $36.00. A 14" inch streak with this ore assays Gold $60.80, Silver $2.90, Lead 1.6%, Total $74.60.

The Galena ore with this vein Assayed Gold $60.80, Silver $4.00, Lead 68 %. A total of $140.00.

A cross cut has been started on main vein 300 feet south of shaft, to get under ore shoot, will gain 250 feet depth in same distance, Assay of this outcrop of ore, across 3 feet gave Gold $5.20, Silver $0.60, Lead 3.8 %. Total $10.55.

Width of vein on outcrop 2 to 8 feet, Quartz. The area of mineralization at this point is about 400 feet in width.

Cross section of Geology. Granite on the east, Diorite 20', Pegmatite 75', Vein 1 to 10', RY-POR 75', Vein (quartz) 4 to 10', QUARTZ-POR Vein 20', RHY-SI 25', QUTZ-POR 75', QUARTZ-MONZONITE 100', Schist on west.

WEST COLOSSAL.

On this claim the junction of the FENTON vein and the Colossal occurs, and has made a tremendous deposit of highly mineralized vein matter, the general Geology at this junction, is a Lime Schist hanging wall and a QUARTZ-PORPHRY foot, the ore occurs at this point in quartz, on foot wall of vein, width from 3 to 6 feet, average value at this point Gold $14.80, Silver .42, Lead $2.00, Total $17.22. Width of vein matter 50'. On the south end of this claim a tunnel has been started in 75' on the vein, which will when drove 1000 feet, give approximately 300' vertical depth. Strike on vein N. 45 E. Dip 60 deg W. Thirty feet below the portal of this tunnel is about 5 acres of level ground which would be the camp and mill site. The LEAD CARBONATE CLAIM has the N. Colossal Vein and the main RHYOLYTE vein, that makes contact with the PORPHRY DIKE at the highest point, on N. Colossal Claim. Strike N. 30 E. At the different openings the ore exposed is a Galena ore,

showing good values in Gold and Silver. THE GOLD CARBONATE CLAIM has two RHYOLYTE - PORPHRY dikes, showing replacement of HY. by SILICA, where this occurs, excellent values in GOLD - SILVER occur. All veins onthis claim go into the main vein on N. Colossal Claim 500' south of shaft.

THE F RTON GROUP of claims lies west of the N. COLOSSAL and [illegible] feet along the vein. Strike Easterly and Westerly

THE ROGERS SILVER F

THE ROGERS SILVER GROUP.

ASSAYS:-

GOLD	2.34 oz	$46.80
SILVER	20.20 oz	$10.75
COPPER	3.00 oz	$00.75
TOTAL VALUE		$61.25

THE REPORT SHOWS THAT SOME YEARS BACK A CAR LOAD SHOWED $63.50 WHILEE NOW AN ASSAY ON THE DUMP SHOWS $61.25, HENCE THE REPORT IS APPARENTLY FAIRLY ACCURATE.

[illegible]
On the GOLDEN WIZARD CLAIM? sidelining the ORA GRANDE No 1 on the east is a vein running along a large dike of PEGMATITE? ore a quartz, width from 6 inches to 3 feet. A test run of this ore by the writer returned $51.00 GOLD per ton, by amalgamation, and assayed $70.00 GOLD AND SILVER.

DISCUSSION.

The above general data is given to show the principle operating Conditions of the district. More specific discussion of the COLLOSSAL MINES follows. All of the claims of the group are very favorably located as to elevation, surface contour and mineralixation. These claims have been held for many years and have produced considerable GOLD BULLION, from time to time, as well as shipping in carload lots, but mostly being operated by hand methods, intermittent work and ore values recovered by primitive means. The ores which have been extracted have been mostly GOLD SILVER bearing and when Lead or base ores were encountered, the mining was discontinued as such ores had no market value at that time and under the conditions which then obtained, as to treating and transportation. The metalurgy or treatment problems for handleing these ores, from the different workings whould not be difficult, as the ores are not seriously complexed. The present situation, therefore, presents an unusual combination of favorable circumstances for profit taking, or profitable mining operations, on any one of the different claims, the favorable operating conditions and terms make it possible to undertake the work with less initial capital and less delay than is usually necessary.

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occur. All veins on this claim go into the main vein on N. COLOSSALVCLAIM, 500 feet south of shaft.

THE SILVER KING CLAIM, the Camp issiocated on this claim, living water of considerable magnitude, Bunk House, work shop and Garage.

Geol. Granite and Schist. A shaft sund 40 feet on vein, vein matter porphritic, granite foot, schist hanging wall. Width of vein 4 feet, ore occurs in veinlets of quartz, 2 to 4 inches wide, Values inGOLD SILVER LEAD and COPPER, Native Silver has been found on this vein. Strike N. 20 E. Dip 70 W. converges to dike on N. COLOSSAL claim.

THE FENTON GROUP of claims lies west of the N. COLOSSAL and extends 4500 feet along the vein, Strike Easterly and Westerly, Dips N. 60 degrees; width of vein 5 feet (quartz), on the Mother Lode Claim, a cross cut 70 feet then tunnel drove 200 feet on vein, averate value $12.51 GOLD AND SILVER. On the Wonder Claim vein matter Silica 100 feet wide avarage value across 10 feet $5.48 Gold and Silver/ On the GOLD KING Claim Vein 4 feet quartz, value $8.40 GOLD AND SILVER.

THE ROGERS SILVER GROUP lies east of the SOUTH COLOSSAL claim, takes 3000 feet along the vein, which is well defined and free from faults. Geology. The vein is a true fissure in granite, on the SILVER DOLLAR CLAIM? Shaft 120 feet in depth, width of vein 4 feet, strike N. E- SW. Dip. 85 deg. W..
Values GOLD SILVER COPPER AND LEAD , a carload shipped from this shaft averaged, in value $63.50 per ton, GOLD SILVER. Considerable tonnage of ore now on dump, average value Gold Silver One mile distant from road, numerous openings along the vein show good ore from 6inches to 2 feet in width; living water on claims.

THE ORA GRANDE GROUP lies east of the SILVER KING CLAIM on the South west slope of SILVER MT. The vein on the Ora GRANDE No 1 crops the full length of the claim 1500 feet. Width of the vein from 3 to 5 feet quartz Granite and Porphry walls; strike N. 20 E. Dip. Vertical,; Shaft down 100 feet, 50 tons of ore on dump, assaying in Gold, Silver and Lead, $37.80, $24.60, $12.20; also numerous other openings.
On the GOLDEN WIZARD CLAIM? sidelining the ORA GRANDE No 1 on the east is a vein running along a large dike of PEGMATITE? ore a quartz, width from 6 inches to 3 feet. A test run of this ore by the writer returned $51.00 GOLD per ton, by amalgamation, and assayed $70.00 GOLD AND SILVER.

DISCUSSION.

The above general data is given to show the principle operating conditions of the district. More specific discussion of the COLLOSSAL MINES follows. All of the claims of the group are very favorably located as to elevation, surface contour and mineralixation. These claims have been held for many years and have produced considerable GOLD BULLION, from time to time, as well as shipping in carload lots, but mostly being operated by hand methods, intermittent work and ore values recovered by primitive means. The ores which have been extracted have been mostly GOLD SILVER bearing and when Lead or base ores were encountered, the mining was discontinued as such ores had no market value at that time and under the conditions which then obtained, as to treating and transportation. The metalurgy or treatment problems for handleing these ores, from the different workings should not be difficult, as the ores are not seriously complexed. The present situation, therefore, presents an unusual combination of favorable circumstances for profit taking, or profitable mining operations, on any one of the different claims, the favorable operating conditions and terms make it possible to undertake the work with less initial capital and less delay than is usually necessary.

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********AFFIDAVIT********
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I, RICHARD E. LOGAN of Yavapai County, State of Arizona, do hereby certify, that , to the best of my belief and knowledge, the data and assays of ore, stated in the Descriptive Report of the COLOSSAL GROUP OF MINES, is correct.

Richard E. Logan.

STATE OF ARIZONA. }
COUNTY OF YAVAPAI. }

Before me H. W. Cole , A Notary Public in and for the county of Yavapai, State of Arizona, on this day personally appeared Richard E. Logan known to me to be the person whose name is subscribed to the above statement.

Given under my hand and seal of office, this 12 th day of August, A. D. 1929.

H. W. Cole

Notary Public.

My commission expires Nov 3, 1930.


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B.M.
Minnehaha
5440
4354
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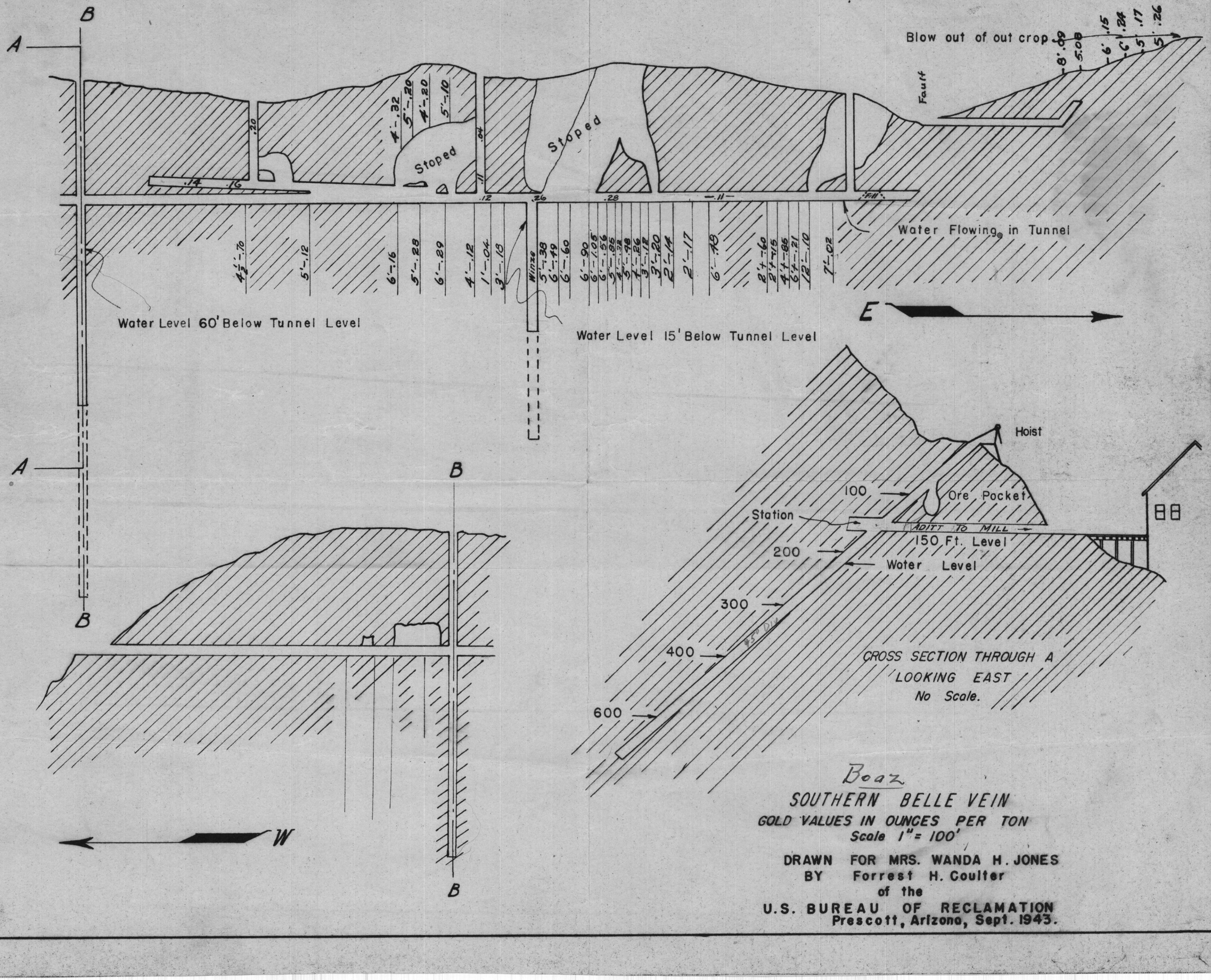
MANZANITA
COLOSSAL
SILVER DOLLAR
BOAZ
Double Eagle
Sue
King Planet
Silver King
Gold Hill-5
Gold Hill-4
Reese
Gold Hill-1
Gold Hill
Silver Dollar
Gold Note-1
Gold Note-2
Gold Note-3
Gold Note Mine



Boaz

SOUTHERN BELLE VEIN

GOLD VALUES IN OUNCES PER TON

Scale 1" = 100'

DRAWN FOR MRS. WANDA H. JONES

BY Forrest H. Coulter

of the

U.S. BUREAU OF RECLAMATION

Prescott, Arizona, Sept. 1943.

BOAT