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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: MATCHLESS

ALTERNATE NAMES:
MONARCH GROUP
BIG JOHNNIE 1 AND 2

YAVAPAI COUNTY MILS NUMBER: 1034B

LOCATION: TOWNSHIP 12 N RANGE 1 E SECTION 6 QUARTER W2
LATITUDE: N 34DEG 27MIN 00SEC LONGITUDE: W 112DEG 17MIN 55SEC
TOPO MAP NAME: POLAND JUNCTION - 7.5 MIN

CURRENT STATUS: DEVEL DEPOSIT

COMMODITY:
SILVER
LEAD
GOLD

BIBLIOGRAPHY:
ADMMR MATCHLESS MINE FILE

04/23/99

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ADMMR MATCHLESS MINE FILE

NAME OF MINE: MATCHLESS

COUNTY: YAVAPAI
DISTRICT: ~~BIG BUG~~
METALS: PB,AG

OWNER: John P. Holman, 810 E. Garfield, Phoenix

OPERATOR AND ADDRESS:		LEASE STATUS	
DATE:		DATE:	
	Box 167		
~~5/1/44~~	John W. Buhler, Mayer, Ariz.	5/1/44	Dormant
6/15/44		6/15/44	Developing
		4/45	Idle
		8/46	Developing
		1/47	Idle

Date: 1-20-47

Name of Mine Matchless

Location Near Mayer Ariz.

~~Operator~~ Owner John P. Holman

Address 810 E. Garfield, Phoenix Ariz

Metals Produced Lead-Silver

Developing ☐ Shipping ☐

Financing ☐ Planning Operations Soon ☑

Idle ☑ This card report made by John W. Buhler, former lessor, to whom card was mailed. John W. Buhler

MATCHLESS

Pb, Ag

Yavapai 13 - 5 T 12½ N, R 1 W

John P. Holman, 810 E. Garfield, Phoenix '47

May 27, 1957

MATCHLESS MINE YAVAPAI COUNTY

No information on this property.

MARK GEMMILL

See: BIG BUG DISTRICT - GENERAL REPORT (file)
(Geology files)
~~District~~

Mr. John P. Holman

810 East Garfield

Phoenix, Arizona

Retd 203-KS

ARIZONA DEPARTMENT OF MINERAL RESOURCES
MINERAL BUILDING, FAIRGROUNDS
PHOENIX, ARIZONA

April 7, 1958

To the Owner or Operator of the Arizona Mining Property named below:

Matchless Mine (Yavapai County)	Lead and silver
(Property)	(ore)

We have an old listing of the above property which we would like to have brought up to date.

Please fill out the enclosed Mine Owner's Report form with as complete detail as possible and attach copies of reports, maps, assay returns, shipment returns or other data which you have not sent us before and which might interest a prospective buyer in looking at the property.

Frank P. Knight

FRANK P. KNIGHT,
Director.

Enc: Mine Owner's Report

GEOLOGICAL AND ENGINEERING REPORT

OF THE

MATCHLESS MINE

BY

A. F. MERCIER

November 23, 1943

LOCATION

Matchless Mine is located four and one-half miles North and West of Mayer, Yavapai County, Arizona, on the South side of Big Bug Creek. It is reached by good road from Mayer which connects a mountain road one and one-half miles long and ten feet wide recently constructed by Mr. Buhler.

WATER

There is an abundance of water from a well equipped by power pump of an electric controlled type located directly across the road from the camp, as shown on Plate 1.

SHIPPING FACILITIES

A four and one-half mile haul to Mayer to a loading ramp has simplified the hauling of all ores shipped.

CLIMATE

Weather conditions can at no time prevent operation either summer or winter.

GEOLOGY

The rocks containing the vein system are composed primarily of diorite porphry. The vein matter consists of a type of horn-blend, or granitose schist. The veins are deep seated and are shears in the diorite, both the hangwall and footwall are diorite. A perpendicular plug of porphry, as described in a cross-section marked "AB" and shown on Plate 2, indicates the reason for the mineralization of the area. The Matchless Vein is a companion vein to the well defined Hen-

rietta Vein which is 600 feet west of the Matchless Vein, and can be followed for a distance of three miles. The Henrietta Mine is on the henrietta Vein directly north, one-half mile from where there is a joint vein connection between the Henrietta Vein and the Matchless Vein. One spur of the Matchless Vein is opened at a tunnel site 2800 feet north of the Matchless Mine shaft. The oxidized zone at this point in the vein, which is 5 feet wide from wall to wall, indicates the increase in depth of the ore body, confined to the hangwall, of from about 1 inch every 5 feet as an increase in width from the top of the shaft to the 40 foot level there is an increase of from 2 inches to 8 inches. 1500 feet south in a draw on the Big Johnny Claim the ore vein width has increased to 3 feet, the elevation drop is 300 feet from the Matchless shaft. Both North and South indicates a steady trend of widening which is proportionate to 1 inch every 5 feet. The dip of the Matchless Vein at the shaft is 3 degrees West. The strike is North generally Westerly and Southeasterly.

The porphry plug, which is an intrusion, has fathered the vein making system. A monzenite porphry granodiorite contact, crossing in the direction of the mineral flow during the mineral making period. This is shown on Plate 1. Present elevation of the porphry, where a shaft has been sunk 40 feet, is 5700 feet. The level of the Matchless Mine is 5300 feet and on the East slope of the porphry plug. A cross vein crops 150 feet South of the Matchless shaft. This cross vein has a 40 degree dip at the top of the pass South west of the Matchless shaft and gradually straightens to a more vertical position as it crosses the Matchless Vein and is within the perimeter of the sulphide zone, as described on Plate 2.

MINERALIZATION

The mineral contained in the area is due to a base dynamic action at the time of the intrusion of the porphry dyke, or plug. The amorphisim which brought on the disintegration of the lime in contact of the area which released the acidic material from the joint granites forming the diorite porphry vein system by fracturing sufficiently to oxidize all of the mineral in the base rocks, as well as the sedimentarys, reforming and establishing a group of sulphides in a quartz magma filling the vein which was followed by a long period of oxidation which resulted in leaving a tremendous body of oxide ore which is replaced by a calcite iron compound, or limonite. There were points of resistance to the oxidation which has left, for the present, perimeters of sulphides exposed on the surface of the present day which is the result of erosion through the upper regions of the veins. It naturally follows that the oxidized areas will be greater in the direction of the rake of the ore in the veins which in this instance is to the North. Considering the position of the Matchless shaft the drifting should be to the South for two obvious reasons, one the cross-vein; the other, the presence of sulphides in the South. The Matchless Vein Exposed consists of an ore on the hangwall consisting of galena and lead carbonates. It is my opinion, arrived at from evidence on the ground, that the cross-vein will develop into a considerable width of galena and carbonate ores. As the veins are deep seated, which has been proven by mining on both ends of the vein, which are companions of the Matchless Vein, We can anticipate copper following the lead values. The bottom of shaft number 2 at 40 feet was beginning to show copper pyrites and chalcocite

with the lead. A vein made up of fine grained monzenite carrying chalcopyrite, chalcocite, bornite, silver and gold 14 inches wide, can be found in the shaft and on the dump of the Big Johnny 1500 feet South of the Matchless shaft and on the Matchless Vein. The same type of rock occurs on the Matchless contact with the Henrietta. A slide, as shown on Plate 1, has covered the Matchless contact vein making it difficult to see that it follows through, but on the North side of the Henrietta property and on the East side of the Henrietta Vein, 2 miles to the North just below the present Henrietta camp, the same ore with the same width of 18 inches is present. All this indicates the constant mineral deposition on both sides, North and South, of the porphry plug. I would say without fear of contradiction that the porphry plug fathers the mineral deposition of the Henrietta Vein and Matchless Vein.

REMARKS

The result of increase in the sidth of the ore of 1 inch every 5 feet giving an ore width of 8 inches at 40 feet would indicate a 10 inch vein at 50 feet of a better grade of sulphide ore. A drift to the South and raising to the shaft number 2, furnishing an air shaft and then following to the draw, as indicated on Plate 2, would give an average of one ton a day of sorted ore that would grade better than 50 percent lead and from 7 to 10 ounces in silver. As a beginning this would assist the development and financing of the further sinking of the shaft another 50 feet, or to the 100 foot level, thereby increasing the width of the ore and establishing a greater value in lead plus copper with an undoubted increase in silver and gold value. If this could be followed a very valuable

mine would be developed. Following are two assays which bring out the point in question as to ore value. I insert a copy of the values as shipped by E. C. Hill, through C. P. Wingfield, shipped to R. H. Hetherington, Ore Buyer, Prescott, Arizona, as added evidence of value. Sample number 1 was taken in shaft number 2 after digging out the bottom sufficiently to get a sample. Sample number 2 is off the dump. If the ore on the dump was hand sorted, it would leave approximately 4½ tons that would average better than 50% in lead, with a minimum of 10 ounces of silver. I say this because the limonite have replaced the lead carbonates in the oxidized series of the ore at this level. The lead carbonates will be picked up as the shaft gets deeper. Therefore, for the present, all ores should be sorted and nothing but galena shipped. This would leave a smaller body of ore, but a much higher grade, and for the present, the carbonates could be stacked for future milling.

RESPECTFULLY SUBMITTED,

(Signed) A. F. Mercier, Geologist.

A P P E N D I X

R. H. HETHERINGTON
ORE BUYER

Prescott, Arizona.
April 20, 1912.

Bought of C. P. Wingfield.

102 sacks ore.

Assay	Conditions	Rate	Value per ton
Silver 12.2 ozs.	95%	.58	$6.72
Lead 52%	1000 lbs.	.03	$27.00

(Above is copied from invoice of sale referred to on page 5.)

W I C K E N B U R G O R E M A R K E T

ASSAY CERTIFICATE

John C. Herr, Assayer

Wickenburg, Arizona, November 19, 1943

Owner's Mark on Sample	Gold	Silver	Lead
Sample #1	0.01 oz.	3.50 ozs.	13.10%
Sample #2	0.01 oz.	7.40 ozs.	38.00%

(Above is copied from assay reports referred to on page 5.)

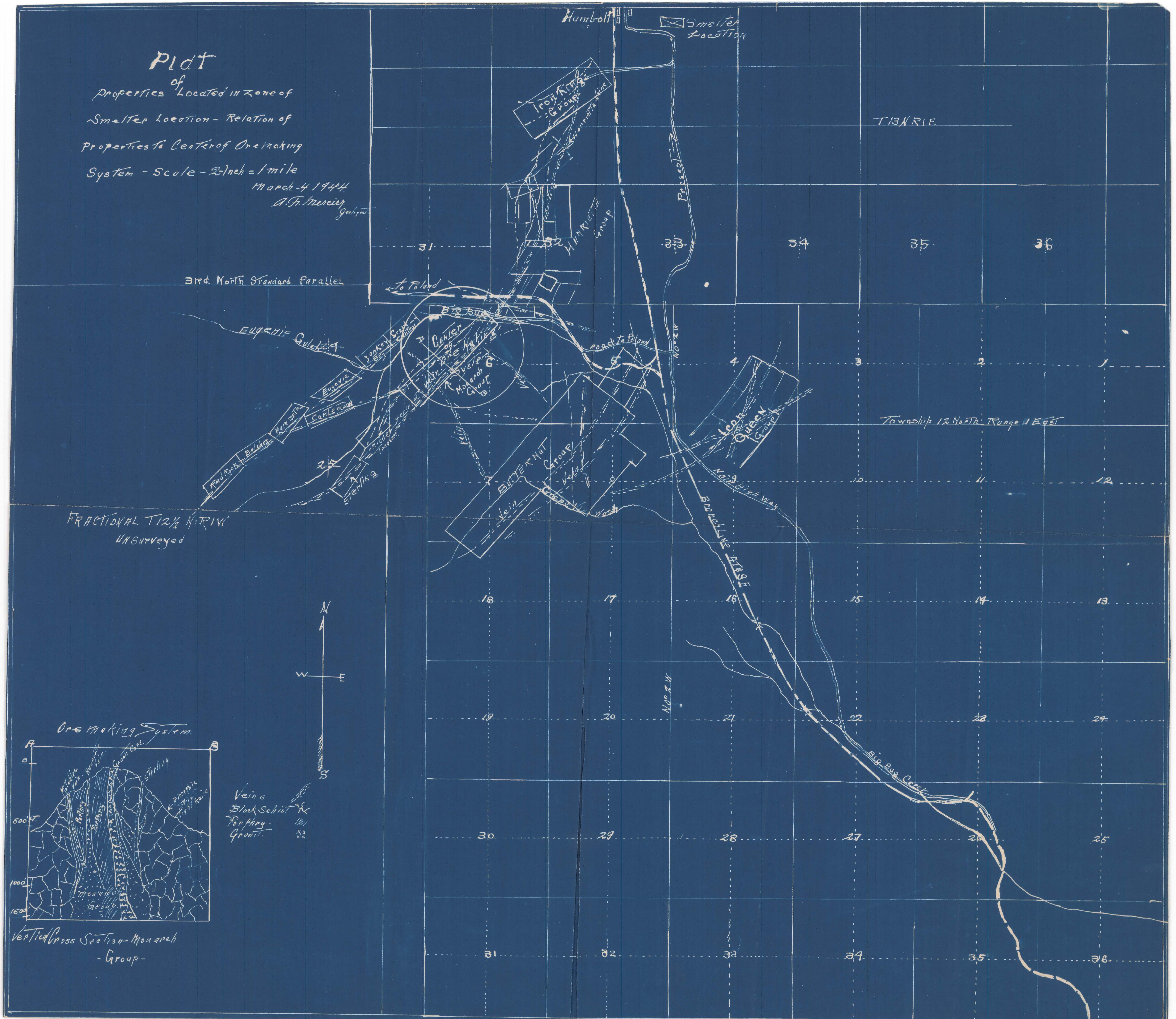
G I R O U X A S S A Y O F F I C E

Mayer, Arizona. September 29, 1943

Matchless Mine 20' level Gold 0.05 oz. Silver 7.67 oz. Lead 33.10 %

Matchless Mine 40' level " 0.06 oz. " 23.40 oz. " 46.30 %

(Above are samples taken by Mr. Buhler)



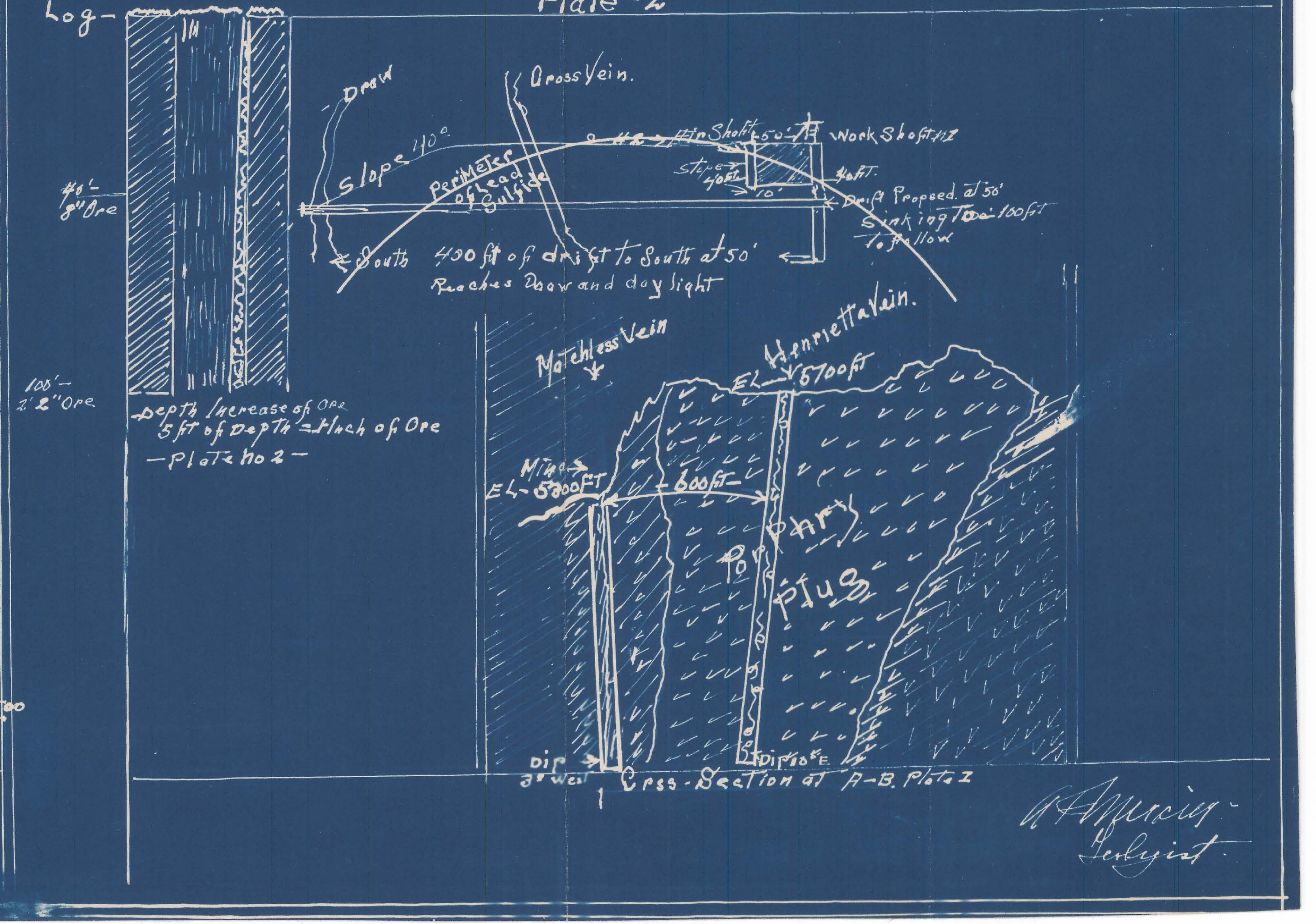
Plat of Properties Located in Zone of Smelter Location - Relation of Properties to Center of Ore making System - Scale - 2 Inch = 1 mile
March-4 1944.
A. F. Mercier Geologist
Humbolt
Smelter Location
Iron King Group
T13N R1E
Prescott
Henrietta Group
31
32
33
34
35
36
3rd. North Standard Parallel
To Poland
Big Bug
Eugenie Gulch
Center of Ore making System
Monarch Group
Road to Poland
Eugenie
Red Rock
Belcher
Mammoth
Contention
Sterling
Butternut Group
Vein
Lemon Queen Group
Township 12 North Range 1 East
Main Highway
Branch Line A T & S F
FRACTIONAL T12½ N. R1W
Unsurveyed
4
3
2
1
5
6
10
11
12
18
17
16
15
14
13
19
20
21
22
23
24
30
29
28
27
26
25
N
W
E
S
Big Bug Creek
Ore making System
A
B
500 Ft.
1000
1500
Sterling
Monarch Group
Vertical Cross Section - Monarch Group
Veins
Black Schist
Porphry
Granit

Plate-1


Granit Contact Vein
Blockey Diorite Porphry
EL-5700-Ft
Porphry
Henriette Vein
To Henriette Mine 1/2 Mile
Contact Matchless Henriette Vein
40° Dip
Diorite Porphry
Slide
Matchless Mine EL
Matchless Vein
Road
Draw
Tunnel Site
Matchless
Hill
Placer
Big Bug Creek
Water Well
Pump House
To Maijer 4-Miles
Camp
EL-4700
Legend
Ore Vein
Porphry
Diorite
Diorite Porphry
500 1000 1500
1 inch = 500 ft
Scale
Matchless-Vein and Road System Including Formation.
Geologist

Plate No I

Plate-2


Log
40' 8" Ore
100' 2' 2" Ore
Depth Increase of Ore 5 ft of Depth = 1 inch of Ore
Plate No 2
Draw
Cross Vein.
Slope 40°
Perimeter of Lead Sulfide
Work Shaft
40 ft.
Drift Proposed at 50'
Sinking Too 100 ft to follow
South 400 ft of drift to South at 50' Reaches Draw and day light
Matchless Vein
Henriette Vein.
EL-5700 ft
Mine EL-5200 FT
600 ft
Porphry Plug
Dip 80° West
Dip 80° E
Cross-Section at A-B. Plate I
Geologist