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Arizona Department of Mines and Mineral Resources Mining Collection

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M.P. = 19

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

Date

15, 14

- 1. Mine Pinto Sulphide.
- 2. Mining District & County Summit Mining Dist.,
Gila County
- 3. Former name Iron Clad
- 4. Location 10 miles by road from
Miami, Ariz.
- 5. Owner F. Roscoe Henderson ✓
- 6. Address (Owner) Box 1888
Globe, Arizona
- 7. Operator Same
- 8. Address (Operator)
- 9. President
- 10. Gen. Mgr.
- 11. Mine Supt.
- 12. Mill Supt.
- 13. Principal Metals Copper, Gold, and Silver ✓
- 14. Men Employed Two
- 15. Production Rate Prospecting
- 16. Mill: Type & Cap.
- 17. Power: Amt. & Type
- 18. Operations: Present Prospecting. Native Copper encountered at bottom
of present winze just struck.
- 19. Operations Planned Continuing in winze where native found. Percipitating facilities
for extracting copper from water. See enclosed engineers
report. Then installing a small mill to concentrate the ores.
- 20. Number Claims, Title, etc. Fifteen unpatented claims. All actual mineral land. In a group.
- 21. Description: Topography & Geography See enclosed engineers report.
- 22. Mine Workings: Amt. & Condition Drift 310 feet to winze. Winze 75 feet deep. Water
encountered 45 feet on encline from drift level.
Inclination of vein 53 degrees. Drift equipped rails
and mine car. Note valuable gold encountered after
engineers report on this. Drift 326 ft. Winze 44 ft. deep.
Two drifts off this. Native encountered in lower drift.
Water in drift.
(over)

23. Geology & Mineralization See report.
24. Ore: Positive & Probable, Ore Dumps, Tailings Dumps, estimate 3000 tons. Gold \$2 to \$3 per ton.
Copper 1%, silver 2 oz.
Dump, estimate 1000 tons. Gold \$1.00 per ton.
Copper 1.5%, silver tr.
Hard to estimate tonnage in workings.
- 24.A Vein Width, Length, Value, etc. Ore body - First drift, width average $7\frac{1}{2}$ feet. All assay sheets from this drift. Note the high gold assays were encountered just before water ran us out. Second drift, Width average 8 feet. Native copper encountered in this. Note all of the ore from both drifts are milling grade ore.
25. Mine, Mill Equipment & Flow Sheet No mill at present
26. Road Conditions, Route Passable the year round. Excellent road to property.
Miami, Ariz. Superior Highway. App. six miles to road turning south. Sign on road. Saying Bellevue Mines, Harrison's Ranch, 66 Ranch, Hobbs Ranch. Follow road App. 5 miles.
Passing 3 houses taking left hand road at turns.
27. Water Supply Plenty of water available for domestic use and for mill use. See report.
28. Brief History See report.
29. Special Problems, Reports Filed Engineers report enclosed also assay sheets etc. Please return after copying.
30. Remarks The water from the first drift is high enough in copper to profitably precipitate it. A settling tank is required and a small mill is also needed. An adequate pump is also required. The ore is free milling.
This property is only twelve miles by excellent road from the International Smelter at Inspiration. Truck rates on small quantities of ore are \$1.50 per ton. This rate can be lowered by quantity production.
31. If property for sale: Price, terms and address to negotiate. The owner would be interested in either selling this property or would consider a lease and bond by reliable parties.
32. Signed *F. R. ...*
33. Use additional sheets if necessary.

Department of Mineral Resources
State of Arizona
Mine Owners Report

1 Mine

Pinto Sulphide
3 Mining District
Summit Mining District Gila County
4 Former Name
Iron Clad

2 Location
10 miles by road from Miami
Ariz

5 Owner
F. Roscoe Henderson
7 Operator

6 Address
Box 1888 Globe Arizona

Same
13 Men Employed

Two
14 Principal Minerals
Copper, Gold and Silver
15 Production Rate

Prospecting
18 Operations Present
Prospecting. Native Copper encountered at botton of present windze
just struck.

19 Operations planned
Continueing in windze where native found. ~~Reperititating~~ facilities
for extracting copper from water. See enclosed engineers report.

Then installing a small mill to concentrate the ores.

20 Number of claims
fifteen unpatented claims. All actual mineral land. In a group.

21 Description
See enclosed engineers report.

22 Mine workings
Drift. 310 feet to windze. Windze 75 feet deep. Water encountered
45 feet on encline from drift leve. Inclination of vein 53 degrees.
Drift equipped rails and mine car. Note valuable gold encountered
after engineers report on this.

Drift. 326 feet. Windze 44 feet deep. Two drifts off this. Native
encountered in lower drift. Water in drift.

23 Geology
See report.

24 Ore. Dumps

Dump estimate 3000 tons. Gold \$2 to \$3 per ton ~~gold~~. Copper 1 % silver 2oz

Dump " 1000 tons " \$ 1.00 " " " 1.5% " tr.

Hard to estimate tonnage in workings.

24 a Dimentions and values of Ore Body

First drift. Width average $7 \frac{1}{2}$ feet. All assay sheets from this drift. Note the high gold assays were encountered just before water ran us out.

Second drift. Width average. 8 feet. Native copper encountered in this. Note all of the ore from both drifts are milling grade ore.

25 Mine, mill equipment. No mill at present.

26 Road conditions. Passable the year round. Excellent road to property.

Miami Ariz. Superior Highway. app six miles. to road turning south.

Sign on road. Saying Bellevue Mines, Harrison's Ranch, 66 Ranch, Hobbs Ranch. Follow road app \approx 5 miles. Passing 3 houses taking left hand

road at turns.

27 Water supply

Plenty of water available for domestic use and for mill use. See report.

28 See report.

29 Engineers report enclosed also assay sheets etc please return after

copying

30 Remarks.

The water from the first drift is high enough in copper to profitably precipitate it. A settling tank is required and a small mill is also needed. An adequate pump is also required. The ore is free milling.

This property is only twelve miles by excellent road from the International Smelter at Inspiration. Truck rates on small quantities of ore are \$1.50 per ton. This rate can be lowered by quantity production.

31 The owner would be interested in either selling this property or would consider a lease and bond by reliable parties.

COPY

PRELIMINARY REPORT
GEOLOGICAL SURVEY ON THE
PINTO SULPHIDE GROUP OF CLAIMS

BY: L. Lee Boyer

March 24, 1939.

LOCATION AND TITLE: The Pinto Sulphide group of claims are situated in the Summit mining district on Pinto Creek, County of Gila, State of Arizona. The property lies in the Pinal mountain range about six miles south of Miami and approximately two and one half miles east of the old Gibson mine, as the crow flies. The property consists of fifteen unpatented mining claims each of twenty acres more or less. There are approximately three hundred acres in the group. The claims were located by Mr. F. R. Henderson in 1924 and recorded at the County Records office in Globe, Arizona. Right of title is clear to date.

HISTORY: The Pinto Sulphide group was formerly known as the Iron Clad and was first discovered about the time of the excitement, in the district, caused by the rich discovery of the Gibson mine, which at one time was considered the richest mine in the district. Several hundred thousand dollars in high grade copper ores was extracted at a very shallow depth, geologically speaking, the copper being of secondary nature.

ACCESSIBILITY: The Pinto Sulphide group is situated favorably as to transportation facilities. The main Phoenix-Globe highway runs within a fifteen minute drive of the property by automobile. There is a good gravel road running from the highway to the property. This road is maintained by the county.

TOPOGRAPHY: The topography of the country is undulating and for the most part rugged, the ridges running mainly northeast-southwest and rising to a maximum of 5500 feet A.S.L. At the location of the Pinto Sulphide property the elevation seems slightly higher than that of Miami and the old Gibson mine. The elevation at the bottom of Pinto Creek Canyon is 4864 feet A.S.L.

GEOLOGY: The Pinto Sulphide group of claims overly an area Pre-Cambrian in age considerably altered by weathering on the surface exposure. The geology of the country in the immediate vicinity is, for the most part, granodiorite and Pinal schist, consisting mainly of metamorphized siliceous rocks, all of the Pre-Cambrian age. Intrusions of quartz diorite and quartz diorite porphyry, also some andisite, are quite in evidence. A well defined contact strikes through the property almost directly north and south, the schist lying to the west and the granites to the east.

The country lying further to the west consists chiefly of schist and other gneiss rocks of the Archean age. The schist cleavage dips almost vertically and the folia are considerably contorted resting unconformably on the underlying foundation rocks, and traversed by innumerable veins of white metamorphic quartz, dotted here and there with patches of silver mica (or serisite). The country has been considerably influenced by numerous intrusive dikes causing radical shearing. Several faults are in evidence, all of which have played a major part in altering the upper strata of the paleozoic sedimentary formation, the geology is somewhat complex as to the age of the later intrusive rocks.

VEINS, DYKES, AND FAULTS: The vein or vein-dikes now being explored at the Pinto Sulphide group, I believe, is not a true fissure, although it cuts the formation and parallels the contact, which lies but a few hundred feet to the east. I believe this type could be better termed a vein-dike. This break is highly mineralized with friable quartz impregnated with pyrites and some chalcopyrites. It is quite difficult to determine the exact nature of a mineral occurrence of this kind, as, of course, there are no hard and fast lines between the magma solutions and the related quartz, but it may be accounted for by what is called magmatic differentiation.

Copper has been carried in solution as a sulphate through the cleavages and fractures and precipitated on the walls of the tunnel and drifts. Large masses of iron pyrites occur in this break, some of a plastic nature and some in true isometric form. Water must be present in all magmas, which is fluid more on account of solution than of heat, though important the latter is. My impression is that the differentiation of granitic or alkalic magmas into quartz veins take place at great depth.

After studying the geology of the area I have concluded that there has been later secondary deposition as most of the sulphides are of a plastic nature, due to inherent or tectonic pressure or perhaps both. In the winze several displacements were seen caused by later movements, most of which seem to cause more downward dips to the massive sulphide lenses. The general dip of the ore is about fifty-three (53) degrees west and raking about six (6) degrees north. The general course of the main break is north and south dipping to the west. The main tunnel is driven in a direction north 75 degrees west, crosscutting the country rock which strikes about north 29 degrees west. The vein or vein dike is nine feet, nine inches wide at the top of the winze. The main break may be traced for several hundred feet on the surface.

DEVELOPMENT AND EQUIPMENT: The development constitutes a working size tunnel driven into the mountain a distance of 310 feet; a winze has been sunk 75 feet at the end of the tunnel; three short drifts driven south from the winze and three drifts driven north from the tunnel all show high mineralization. A well defined fault paralleling the main break was encountered in the tunnel and one small feeder vein. Very little timber has been used as the ground stands quite well. The property at the time of my visit was equipped with a compressor, tigger hoist, air hammer, hose, track and ore car, hand tools and water pumps.

ASSAYS AND ANALYSIS: The assays and analysis were made by C. J. Tibbetts of the Superior Assay Office and Ore Testing Laboratory. The results are hereby submitted:

Samples--

- No. 1. Copper sulphate from north wall of tunnel.
2. South wall of tunnel at number two drift.
3. East wall of number three drift.
4. West wall of number three drift.
5. Face of number three drift.
6. Broken ore in face of number three drift.
7. Sulphide ore in number one drift of winze.

Assays are as follows:

	GOLD	COPPER
No. 1.	Nil	10.80%
2.	Nil	1.40%
3.	0.02%	4.70%
4.	0.01%	0.10%
5.	0.02%	0.40%
6.	0.01%	0.10%
7.	0.03%	1.06%

Sample number eight was water taken from the wenz. This proved to contain 6/100 of one per cent. copper. Nine samples were taken on surface exposures, all of which gave negative results.

CONCLUSION: My conclusions are that the Pinto Sulphide group of claims are favorably located as to transportation facilities, and for a mining camp. The property consists of about three hundred acres, which is ample for medium to large operations. There is a good mill site on the property and plenty of room for tailing disposal. Climatic conditions are ideal. Geological conditions are not unfavorable for the déposition of the precious metal solutions.

There is fine spring water for domestic purposes and water for milling may easily be supplied from the mine. Working conditions are favorable and skilled labor may be obtained in the district at a minimum wage per day.

From my survey of the property I believe this mineral occurrence should be persistent and continue to great depth, if however, the ore has not been cut off by the granite. This can best be determined by means of diamond drilling. The values so far encountered are not too encouraging. However, a secondary enrichment may be found on the primarines. I would not recommend the present method of exploration as the capital outlay required would constitute too great a gamble. I would recommend, however, one or two well placed diamond drill holes. This would, to a great degree, determine the possibilities. The test of the water indicates the possibility of precipitating the copper from the water by sulphuric leaching. There is enough sulphuric acid in the water, coming from the winze, to effect slow replacement.

The property merits a capital outlay at least in a sufficient amount to determine the possibilities by drilling. The Pinto Sulphide group is by no means a mine, but I consider it constitutes a fair mining risk. If commercial ore is discovered in large enough quantities all other main factors lend every encouragement toward the making of a mine.

Respectfully submitted,

L. Lee Boyer

COPY

INTERNATIONAL SMELTING COMPANY

Inspiration, Arizona
Feb. 25, 1930
File No. 700

Mr. F. R. Henderson.
Globe, Arizona

Dear Sir:-

During the latter part of the month of March, 1929 you shipped to us a carload of ore with the following analysis:

Cu.	Ag.	Au.	SiO ₂	Al ₂ O ₃	Fe	CaO	S.
3.66	2.75	.010	17.6	7.5	28.1	.5	33.5

We are writing to ask if you have available any more of this class of ore, and if so, would be glad to have you call at our office and have a talk with us with a view to supplying a further tonnage thereof.

Yours very truly

H. Allen
Chief Clerk

HA-W

COPY

El Paso, Texas
Jan 28, 1939.

Mr. Roscoe Henderson
Globe
Arizona

Dear Sir:

We are pleased to enclose assay certificate covering the small sample of ore which you recently sent us. We are also returning your \$1.00, as we shall make no charge for our service in this instance.

Of course, such a product as represented by your sample is extremely valuable and, if you have as much as a few hundred pounds of this material, we shall be glad to receive your shipment at El Paso. Kindly advise us whether or not you anticipate shipments of this class of product and we shall be pleased to submit our purchase terms and shipping instructions.

Yours very truly,

Ben Roberts.

enc.

COPY

M. A. RANDALL

ASSAYER AND CHEMIST

EL. PASO, TEXAS Jan. 26, 1939

ASSAY CERTIFICATE

FOR El Paso Smelting Works
MARKED Mr. Roscoe Henderson

My No.	Gold Ozs. per ton	Silver Ozs. per ton	Copper %	Insol. %
80-C 661	166.54	3.4	0.14	86.2

M. A. Randall--Assayer

COPY

THE COLORADO ASSAYING COMPANY
(Incorporated)

ASSAYERS AND CHEMISTS
2013 Welton Street
Denver, Colorado, Oct. 3, 1939

REPORT On determinations made for Mr. F. Roscoe Henderson
Globe, Arizona.

Metals	Amount per		Per Cent	Value per Ton	
	ozs.	Hds.		Dollars	Cents
Gold	.03			1.05	
Silver	3.90			2.77	
Copper			8.8%	10.56	

Gold at \$35.00 per ounce Silver at 71¢ per ounce
Copper at \$1.20 per unit

A. H. Holland
By Edmund Phillips

COPY

E. A. JACOBS

Certificate of Assay REGISTERED ASSAYER Cor. Main and Mesilla Sts.

Certificate No. 35849 Tucson, Arizona Jan. 14, 1939

Sample Submitted by Mr. E. Roscoe Henderson, Box 1888, Globe, Ariz.

Serial	Gold ozs. per ton Ore	Gold Value per ton Ore	Silver ozs. per ton Ore	Copper Per Cent Wet Assay
92932	11.32	\$396.20	3.3	0.45

Gold Figured \$35.00 Per oz. Troy

Charges \$2.50 Paid

Very Respectfully

E. A. Jacobs--Assayer

COPY

ASSAY AND ANALYSIS CERTIFICATE

Mr. Roscoe Henderson

Sept. 18, 1934

No. or Marks	FIRE ASSAY--PER TON				Total Value
	Gold oz.	Val. at \$35.00	Silver oz.	Val at .65	
#1	.08	\$2.80	.2	\$0.13	Winze in lower tunnel \$2.93

CHARGES \$1.00 Paid

Al L. Pellegrin & Son--Assayers

COPY

ASSAY AND ANALYSIS CERTIFICATE

Mr. F. Roscoe Henderson

Dec. 4, 1934

No. or Marks	FIRE ASSAY--PER TON				Total
	Gold oz.	Val. at \$35.00	Silver oz.	Val. at .65	
#1	.03	\$1.05	1.5	\$0.97	\$2.02

CHARGES - 1.00 Paid

A. I. Pellegrin & Son--Assayers

Length of tunnel

COPY

ASSAY AND ANALYSIS CERTIFICATE

Mr. F. Roscoe Henderson

Oct. 29, 1934

No. or Marks	FIRE ASSAY--PER TON				Total Value
	Gold oz.	Val. at #35.00	Silver oz.	Val. at .65	
No. A	.42	\$14.70	4.1	\$2.65 Ledge in lower tunnel	\$17.35
No. B	95.2	\$3333.20	31.5	\$20.47 Hand picked, washed and treated	\$3353.67
No. C	.24	\$8.40	3.4	\$2.21 Creek --	\$10.61
No. D	44.2	\$1547.00	20.5	\$13.32 Washed and treated with acid	\$1560.32

Now do you wonder at our surprise in your samples of only a trace of gold, The two highgrade samples were hand picked, washed several times then treated with acid, but the other two was sent as they came out.

CHARGES--4.00 Paid

A. L. Pellegrin & Son--Assayers

COPY

ASSAY AND ANALYSIS CERTIFICATE

Mr. F. Roscoe Henderson

Oct. 2, 1934

FIRE ASSAY--PER TON

No. or Marks	Gold oz.	Val. At #35.00	Silver oz.	Val. at.65		Total Value
#1	.06	\$2.10	1.8	\$1.15	Ledge in lower Tunnel	\$3.25
#2	.08	\$2.80	.5	\$0.30	Upper Tunnel	\$3.10

CHARGES 2.00 Paid

A. L. Pellegrin & Son - Assayers
P. O. Box 2510
Tucson, Arizona

COPY

INTERNATIONAL SMELTING COMPANY

MIAMI PLANT

ASSAY CERTIFICATE

NAME: F. R. Henderson

CLASS:

LOT: 1

Date 4/3/29

Smelter Lot	Per Ton of 2000 lbs. Oz. Silver	Per Ton of 2000 lbs. Oz. Gold	Per Cent Copper	Per Cent SiO ₂	Per Cent Al ₂ O ₃	Per Cent Fe	Per Cent CaO	Per Cent S
5539	2.75	0.010	3.66	17.6	7.5	28.1	0.5	33.5

F. G. Hawley
P Chief Chemist

COPY

March 11, 1940

ASSAY CERTIFICATE

Mr. F. R. Henderson

	Gold oz.	Silver oz.
Sample Ore	0.04 \$1.40	2.96 \$2.10
Specimen Copper Ore	9.2% - 180.4 lbs per ton - \$16.24 @ 9¢ per lb.	

Ross C. Finley

Assayer

Charges Paid

COPY

Date

11/12/24

AMERICAN SMELTING & REFINING COMPANY

HAYDEN PLANT

Handsamples

Name	Gold ozs. per ton	Silver ozs. per ton	Copper per cent	Insoluble per cent	Iron per cent
C. E. Himebaugh #1	Tr.	5.20	17.27	13.2	30.2
" " #2		0.40	1.95	36.5	26.8

COPY

Box 1888
Globe, Ariz.
June 14, 1940

Department of Mineral Resources

Capitol Building

Phoenix, Ariz.

Gentlemen:

Enclosed a report on my mining claims called the Pinto Sulphide group. Will you please return the engineers report and assay sheet enclosed as soon as you are through with them.

Will you please send me information on obtaining a government loan on this property for the purpose of buying and setting up a mill and percipitating plant.

Very truly yours,

F. Roscoe Henderson

06/03/86

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: PINTO SULPHIDE

ALTERNATE NAMES:

IRON CLAD
HENDERSON PROPERTY

GILA COUNTY MILS NUMBER: 88

LOCATION: TOWNSHIP 14 S RANGE 14 E SECTION 22 QUARTER E2
LATITUDE: N 33DEG 19MIN 33SEC LONGITUDE: W 110DEG 55MIN 10SEC
TOPO MAP NAME: PINAL RANCH - 7.5 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:

COPPER
SILVER

BIBLIOGRAPHY:

ADMMR PINTO SULPHIDE MINE FILE



Pinto Sulphide
THIS R 14 E Sec 22 E2

Henderson Ranch

Little Ranch

Elita Ranch

Black Rock Mine

Sulfite Mine

Pinal Ranch 75

M.F. Ranch

Bellevue Old Site

Red Rock Mine

ORRE

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1888

61-81

MENT OF MINERAL RESOURCES
STATE OF ARIZONA
34 HOME BUILDERS BUILDING
PHOENIX, ARIZONA

OW



PIENHO SULPHURIDE MINE

Co., Au., Ag

Chila

4 - 4

TRIS, R M. D

F. Roscoe Henderson, Box 1888, Globe *undelivered 6-12-96*