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PRINTED: 09/05/2002

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: VENTANA MINE GROUP

ALTERNATE NAMES:

PIMA COUNTY MILS NUMBER: 74

LOCATION: TOWNSHIP 19 S RANGE 7 E SECTION 18 QUARTER NW
LATITUDE: N 31DEG 46MIN 10SEC LONGITUDE: W 111DEG 39MIN 59SEC
TOPO MAP NAME: BABOQUIVARI PEAK - 15 MIN

CURRENT STATUS: PAST PRODUCER

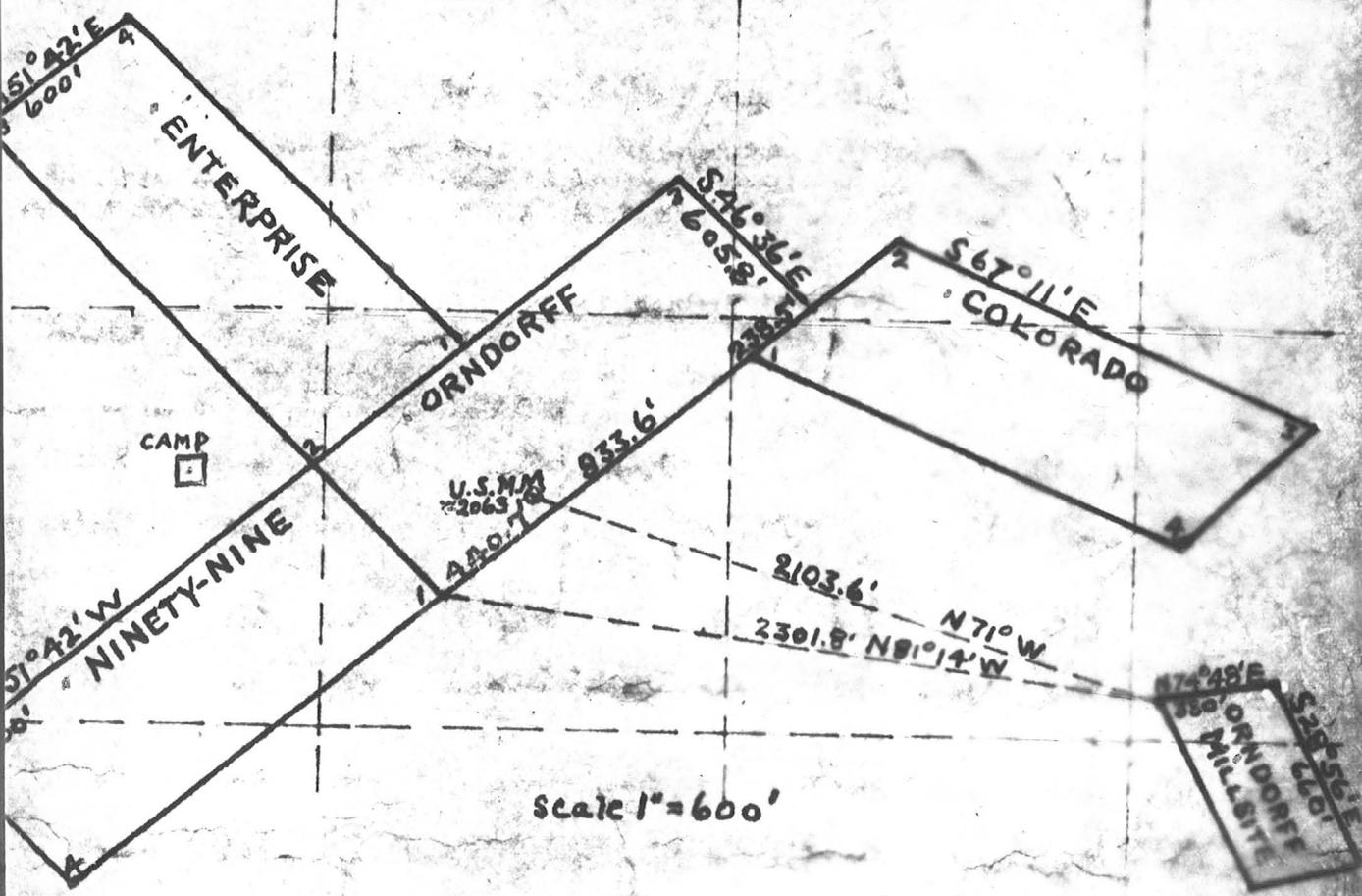
COMMODITY:

COPPER SULFIDE
SILVER
GOLD LODE
LEAD
ZINC

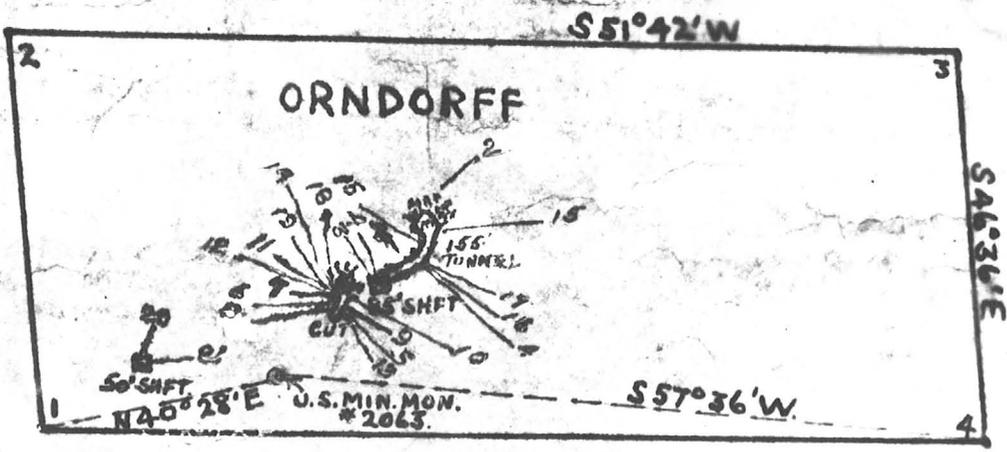
BIBLIOGRAPHY:

S.B. KEITH, AZBM BULL. 189, P. 110, 1974
ADMMR VENTANA FILE

SECTION 18, TWP. 19S, RANGE 7E.



scale 1" = 600'



scale 1" = 300'

VENTANA MINE
 MINERAL SURVEY #2063 A+B
 JUNE 12-14, 1905.

Walter Rogers, President, Romed, Inc., has sold approximately 200 tons of copper ore from the Ventana mine 23 miles southeast of Sells. However, the several veins he has worked near surface appear to pinch out with depth. Some core drilling has been contemplated. GW QR 2/72

MG WR 4/29/88: Provided file information on the Ventana mine, Pima County to the owner, Ms. Barbara Davenport Herzog. She wants to sell the patented property for about \$80,000. Ms. Herzog lives in Tucson.

Visited the Ventana prospect where Mr. Walt Rogers has five men prospecting by dozer on two quartz - Cu veins in schist. This dozing has been in progress for a couple of months, but until today not much of the geologic structure was made evident. It now appears that at least three 4 - 6 ft. quartz veins striking northwesterly should make intersection with a northeasterly striking quartz vein of 6 - 15 ft width. Mr. Rogers had a letter and the results of a sample submitted to Inspiration Copper Company; the analysis showed: Ag $6\frac{2}{9}$ oz; Cu 2%; Au 0 $\frac{10}{2}$ oz; Si 0 $\frac{74}{2}$ %; Al $0\frac{3}{2}$ $3\frac{4}{3}$ %; Fe $4\frac{5}{4}$ %; Ca 0 $1\frac{5}{5}$ %; S 0- $\frac{40}{40}$ %; the letter

stated that the smelter would make a net payment of \$28.75/ton for this material. It was suggested that two of the northwesterly striking veins previously uncovered be stripped and the clean mineralized quartz be shipped immediately. GW WR 11/10/71

Walter Rogers of the Ventana Cu prospect south of Sells, phoned to ask about the advisability of driving a drift on one of his veins. It was suggested he drive on the one having the best grade. The shipments he has made from on and near the surface have proven unsatisfactory. GW WR 12/13/71

They then moved to the Ventana copper property 23 miles southeast of Sells and began trenching several copper quartz outcrops. GW QR 9/71

Went to the Ventana Mine of Romed Co. (Walt Rogers), 23 miles SE of Sells, where a 10-12 feet wide fault in schist has been uncovered near the bottom of a wash on the west side of a hill on which most of the production has been made. The fault strikes N 65W and dips steeply to the NE; the hanging wall dips $\pm 80^\circ$, but the footwall inclines about 65° , therefore the structure is decreasing in width with depth. This structure has been excavated horizontally about 20 feet resulting in a 25 ton production of ore. However, the present face has only 2 streaks of Cu oxide mineralization each 4-6" thick. About 20 feet north of this larger fault is a 2 foot quartz vein highly mineralized, dipping steeply SW, which should intersect the big structure if the dips persist. It was suggested the large fault be uncovered (2-3 feet of soil and weathered schist) for a distance of about 150 feet up the hillside above the present cut. All of the production has come from surface cuts (bull-dozer) which has indicated the mineralization here is discontinuous and "pockety." GW WR 1/3/72

Went to the Ventana Mine of Romed Corp. and located 4 core drill holes. Two of the holes were on the north of the large ridge about 1500 ft. south of the camp. Here 4 large outcroppings of quartz trend N80 - 85E and dip steeply north. The thickest, perhaps 30 ft. across has the least lateral extent, hence may not be a vein, but a chimney-like deposit. The others are traceable with certainty for 150-200 ft. along their strikes; however very little mineralization was noted in any of the outcrops. The remaining two holes were placed to intersect previously mined structures at a depth of about 100 ft. GW WR 1/17/72

VENTANA

PIMA COUNTY

Rumored that Roy Smyrl had sold his interest in the Ventana Mine south of Sells.

GW WR 5/25/68

Accompanied Mr. Walter Rogers to his Ventana claims about 24 miles southeast of Sells and approximately 7-8 miles southwest of Baboquivari Peak. Here there are several injections of malachite-bearing quartz into schist. Some of these mineralized outcrops are 25 ft. in width. They strike N 50° E and dip 65° NW. In about the center of the main structure rhyolite has been intruded into the schist at varying depths below the quartz outcrops; thereby perhaps limiting the depth of mining, depending upon the age relations of the quartz and rhyolite. Mr. Rogers indicated he was going to start open-pit mining on top of the most accessible mineralized outcrop next week. He had a recent sample result which indicated this exposure had 1.11% Cu, 1.70 oz. Ag and .038 oz. gold per ton. When asked where he intended to dispose of this ore he said he was in touch with two smelters.

GW WR 4-30-71

Walter Rogers said he has purchased the Ventana mine and will begin exploration soon. GW QR 4-8-71

Mine visit - Ventana Mine, West Range Co. no one around - fresh tracks. GWI WR 5-10-71

Stopped at Mrs. Walter Rogers filling station in Wenden where she said Mr. Rogers camp at the Ventana mine, about 25 miles southeast of Sells, was almost destroyed by a brush fire June 6. GW WR 6-14-71

Stopped in Wenden at Mrs. Roger's filling station where she said Walt was still mining at the Ventana 20 miles south of Sells. GW WR 9/10/71

After taking wrong trails several times, finally arrived at the Ventana mine of Walt Rogers. Since the last visit he has done considerable dozing & blasting which uncovered perhaps 400 ft of quartz-copper lenses in schist. The intent now is to get a mill installed on a percentage basis and to open-cut the deposit with a slusher. The problem is to find enough water to operate a 100 T/d mill, (at least 90 gpm). Two wells, 160 & 265 ft have been drilled which yielded 5 gpm each. These wells are well up the mountain-side near the ore deposit; it was therefore suggested that a test be made near the west property line. The dip of the schist and the injected rhyolite are to the west which should tend to form an accumulation of water at some depth, perhaps 200-300 ft. Mr. Rogers said his ore assayed 1.25% Cu, 0.20 Au & 2.00 Ag/T. After leaving his place, 3 unsuccessful attempts were made to cross Sells wash and find Lee Cox (Magini) property. GW WR 10/5/71

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1
ARIZONA DEPARTMENT OF MINES & GEOLOGICAL RESOURCES
Mineral Building, Fairgrounds
Phoenix, Arizona

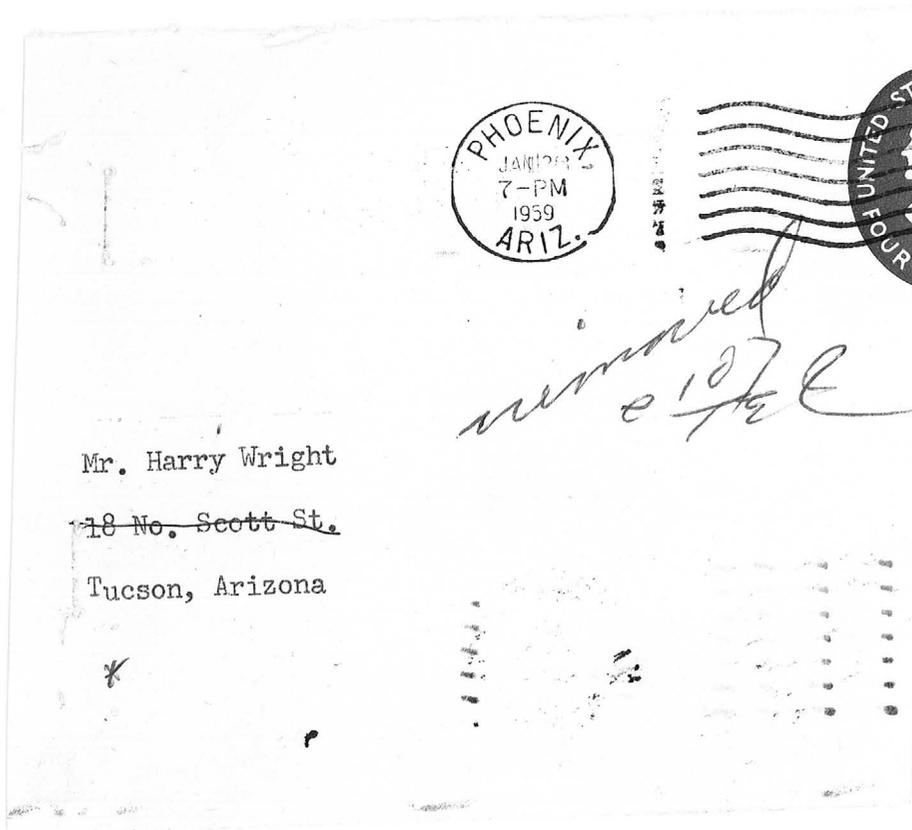
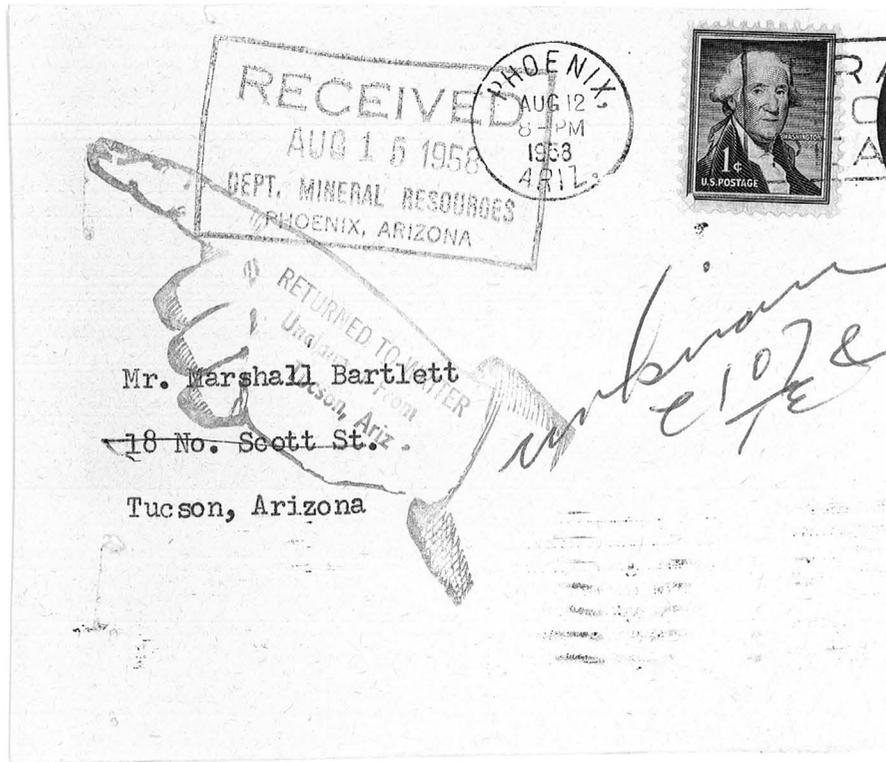
1. Information from: Papago Indians at Sells Texaco & others
Address: _____
2. Mine: Ventana 3. No. of Claims - Patented 4
Unpatented _____
4. Location: _____
5. Sec 18 Tp 19S Range 7E 6. Mining District Ventana, Babquivar
7. Owner: ?
8. Address: _____
9. Operating Co.: Ventana Mining Co. - Not Registered
10. Address: Trailer home in Sells.
11. President: Roy Smyrl 12. Gen. Mgr.: _____
13. Principal Metals: _____ 14. No. Employed: _____
15. Mill, Type & Capacity: _____
16. Present Operations: (a) Down (b) Assessment work (c) Exploration ?
(d) Production (e) Rate _____ tpd.
17. New Work Planned: 99- Enterprises may be name of
Company
Eng wanted to visit property but did not
18. Misc. Notes: because of rain on 1-26-68. Was informed
at Sells that Smyrl had moved trailer on that
date, and no one knew if he would be back.

*

Date: 1-26-68

GW Irvine
(Signature)

(Field Engineer)



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

August 12, 1958

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

Ventana (Pima County)	gold, silver, copper
(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

STATUS OF DORMANT MINES

MINE NAME:

" VENTANA "

LOCATION:

VENTANA MINING DIST, PIMA, COUNTY ARIZ

OWNER AND/OR LEASEE:

BARTLETT, McCLEARY & WRIGHT

ADDRESS:

MARSHALL BARTLETT, 752 NO. WALNUT, AVE. CASA GRANDE, ARIZ

APPROXIMATE PRODUCTION (Year of 1945):

COPPER NONE Lbs. LEAD NONE Lbs.

ZINC NONE Lbs. (OTHER) NONE

MINE WAS IN PRODUCTION IN 1946, CU-AU-AG CHECK THE CHIEF CAUSE OF YOUR DISCONTINUED PRODUCTION: FOUR CAR LOADS

- (A) Easily available ore worked out.
(B) Increased costs, but have quantity similar to past grade of ore.
(C) Too close a margin to develop more ore.
(D) Increase of smelter rates when O.P.A. discontinued High lumber costs, unstable administration

If you have ore ready to mine please give your estimate of the amount of metal (name each metal) that you could produce in one year (after allowing 60 days to get started) if there were premiums above present market prices. Name amount with a low premium, and amount at a high premium; such as:

Copper at 22 1/2¢ plus 5¢ premium... 69000... 1,000,000 Lbs.
Copper at 22 1/2¢ plus 10¢ premium 207000... 1,500,000 Lbs.

The above is the copper content, based on last shipment averages

If you do not have ore ready to mine please discuss the following:

- (A) Do you think a reasonable development program would produce a justified tonnage of commercial ore at above mine?

There is approx. 25,000 tons blocked, and property needs more development to expose larger tonnage

- (B) With a premium price (guaranteed for one year) could you carry out such a development program yourself? What premium?

10% premium

- (C) If you could not do this yourself, would a quick drilling program by some government agency (at government expense) be sufficient?

To some extent

- (D) Or would you prefer a loan plan similar to the arrangements during World War II?

How about a combination plan in two stages such as follows?

Stage 1: Government engineers review project and, if a little drilling appears to be justified and a preliminary key to the situation, such drilling program to be agreed upon by owner and government engineer, paid for by the government, but let by contract.

Stage 2: If results of drilling (or without drilling) justify underground development and/or production equipment, same to be obtainable via a mortgage loan on property.

Please discuss the above:

Stage # 1 is very interesting, also large bodies of ore now in sight on the surface, should be developed by mine workings.

SUGGESTIONS:

I am suggesting that the smelters buying the ores give the small operator more co-operation or the government should stock pile metal production. A uniform smelting rate should be set by the government. Lead production in Arizona has been handicapped, shippers have had to take the unfair settlement from one smelter out of this state.

DATE

Aug 22nd 1950

SIGNATURE

Marshall Bartlett

OVER

There should be a understanding on what is classed basic + silicious ore also, what % alumina is acceptable in copper, gold + silver ores.

The quickest way to increase war metal production of small mines is for the government to buy war metal ores out right at stock pile. I believe this kind of co-operation with the small mines would increase production of war metals to a much greater extent. The miner + prospector in the past has had accept settlement from the corporations that controll the metal industry. That kind of dealing takes the spirit of the prospector + the small miner the ones that have to find and develop new mineral resources

Signed

Marshall Barthelt

DEPT. MINERAL RESOURCES
RECEIVED
JUN 15 1946
PHOEN
ARIZONA

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

Date June 13th 1946

"VENTANA"

- Mine: ~~El Cobre~~
- Location: Sec. 18 Twp. 19S Range 7E Nearest Town Sells
Distance 25 Direction South Road Condition Fair
- Mining District & County: Ventana Mining Dist Pima County
- Former Name of Mine: Same
- Owner: Marshall Bartlett, Harry Wright, H.A. Mc Cleary
Address: 1876 Scott St, Tucson
- Operator: Marshall Bartlett
Address: Sells, Arizona
- Principal Minerals: Gold, Silver, Copper
- Number of Claims: 4 Lode Lode Placer
Patented 4 Unpatented None
- Type of Surrounding Terrain: Rugged

10. Geology & Mineralization: Large quartz fissure vein traversing the property, averaging 10' to 50' in width, with a strike of North 40° East and a dip of about 73° both walls in schist

11. Dimension & Value of Ore Body: 6000 Tons averaging \$19.33 per ton
in one block, 25000 Tons averaging \$10.00

*

12. Ore "Blocked Out" or "In Sight": *In sight \$1,000,000*

Ore Probable: *To be determined with further development*

13. Mine Workings—Amount and Condition:

No.	Feet	Condition
Shafts <i>2</i>	<i>80 x 40</i>	<i>Good</i>
Raises	_____	
Tunnels	<i>170</i>	<i>Good</i>
Crosscuts	<i>50</i>	
Stopes	_____	

14. Water Supply: *To be developed*

15. Brief History: *This property was worked in the Eighteenth century, ore was assented and run through an arrastra, some of the higher grade of ore was shipped for its copper value.*

*

16. Signature: *Marshall Bartlett*

17. If Property for Sale, List Approximate Price and Terms: *\$100,000 terms can be arranged*

MISCELLANEOUS

Notes:

Please keep this copy of engineers report in your files. And if ^{it} should happen that someone may be interested refer them to me at Gills, Arizona at this time I am building a house on the property and also sinking a shallow well on the property for water for camp use. My plans are to start shipping ore as soon as some of the camp and road conditions are straightened out.

Yours truly
Marshall Bartlett

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
MINE OWNER'S REPORT

Date June 13, 1946

- 1. Mine Ventana
- 2. Location Sec. 18, T 19 S, R 7 E, 25 miles north of Sells
- 3. Mining District & County Ventana Dist., Pima County
- 4. Former name El Cobre
- 5. Owner Marshall Bartlett, Harry Wright, H. A. McCleary
- 6. Address (Owner) 18 N. Scott St., Tucson
- 7. Operator Marshall Bartlett
- 8. Address (Operator) Sells, Arizona
- 9. President, Owinging Co.
- 9A. President, Operating Co.
- 10. Gen. Mgr.
- 14. Principal Minerals Gold, Silver, Copper
- 11. Mine Supt.
- 15. Production Rate
- 12. Mill Supt.
- 16. Mill: Type & Cap.
- 13. Men Employed
- 17. Power: Amt. & Type

18. Operations: Present I am building a house on the property and also sinking a shallow well on the property for water for camp use. My plans are to start shipping ore as soon as some of the camp and road conditions are straightened out.

19. Operations: Planned

20. Number Claims, Title, etc. 4 patented lode claims.

21. Description: Topography & Geography Rugged.

22. Mine Workings: Amt. & Condition 2 shafts - 80 & 40 ft. - good condition.
170' tunnel - good condition.
50' crosscut

*
..... Marshall Bartlett Signature

3. Geology & Mineralization

Large ofartz fissure vein traversing the property, averaging 10' to 15' in width with a strike of N 40 E and a dip of about 73° - both walls in schist.

4. Ore: Positive & Probable, Ore Dumps, Tailings

In sight \$1,000,000.

Ore Probable: To be determined with further development.

24A. Dimensions and Value of Ore body

6,000 tons averaging \$19.33 per ton in ore block.
25,000 tons averaging \$10.00.

25. Mine, Mill Equipment & Flow-Sheet

26. Road Conditions, Route

Fair

27. Water Supply To be developed.

28. Brief History

This property was worked in the 18th Century. Ore was assorted and ran through an arrastra. Some of the higher grade of ore was shipped for its copper value.

29. Special Problems, Reports Filed

Report in Dept. file by William Woodbury, E. M., dated October 20, 1937

30. Remarks

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

\$100,000 terms can be arranged.

32. Signature

Marshall Bartlett

33. Use additional sheets if necessary.

NAME OF MINE: VENTANA
OWNER:

COUNTY: Pima
DISTRICT:
METALS: Cu

OPERATOR AND ADDRESS		MINE STATUS	
Date:		Date:	
9/45	M. Bartlett, Sells	9/45	Developing
		1/46	Idle

*

ASSOCIATE
WILLIAM S. DUNIPACE

LAW OFFICES OF
Fred W. Fickett
38-40 WEST PENNINGTON STREET
Tucson, Arizona
PHONES 2065-2066

10-20-1937

*

REPORT ON
VENTANA GROUP OF MINING CLAIMS
PIMA COUNTY, ARIZONA

INTRODUCTION

This property lies in a section of the State, where geology and other conditions denote gold possibilities. While this property was patented during the year 1907, other than the required development work necessary to secure a patent was performed there has been no attention given it until the present owners acquired it which was about one and one-half years ago. The exploratory work conducted during this period of time is embraced in this report.

I am indebted to Mr. Ralph Hunt, for the sampling results contained herein. Due to the fact that it is impossible to include the certified assay certificates and smelter sheets, they are available on the premises for verification. The samples and their results as seen on the attached map were copied from assay certificates and are authentic.

Very truly yours,

(Sgd) William Woodbury, E.M.

PROPERTY & LOCATION

* The property extent comprises four (4) patented lode mining claims and one (1) patented mill-site, with the four (4) patented claims covering eighty (80) acres. The mill-site holds a parcel of ground 330 feet in width by 660 feet in length located on a water site. This patented property is of record in the office of the County Recorder, Pima County, Arizona, and known as follows: NINETY-NINE-- ORNDORFF -- COLORADO and ENTERPRISE -- under patent No. 2063-A. The name of the patent mill-site is, ORNDORFF patent

No. 2063-B. The property group is accessible and conveniently located. The property lies on the lower western slope of the Baboquivari Mountain Range, in Township 19- South- Section 18- Range 7 East, at an altitude of about 4300 feet where climatic conditions offer year round operations. There are two outlets as a base for supplies. With Tucson, Arizona, a well established town located 76- miles distant in a northeasterly direction and is on the main line of the Southern Pacific Railway, connects the property with an excellent highway to within one and one-half miles from the mine. Sells, Arizona, a small town on the Papago Indian Reservation, affords another outlet for a base of supplies and is the post-office for the mine and has both telephone and stage facilities. This town is located 26-miles in a northwesterly direction from the property.

HISTORY

It is apparent, that there is no early history identified with this particular property, and to the area within its location other than an attempt to develop ores of shipping grade. There has been no publicity or effort to dispose of the property due of course to conditions prevailing during that period, such as inaccessibility; antiquated metallurgical processes and innumerable obstacles encountered to prevent successful operations was the cause for this mine to remain dormant. With the present day improved conditions, this property has a possibility to become profitable under proper development and management.

*

GENERAL GEOLOGY

The most essential feature of the descriptive geology of this property is, the large fault fissure vein series traversing the property, both parallel and cross veins which outcrop prominently due to erosion and can be traced approximately 3-miles through the lode. The geologic structure consists of Rhyolite and a much altered Gneiss and Schist complex. The structure trends North-Northeast, and the Biotite Schist follow the course of the vein systems and occurs in association with the veins.

The vein systems have a strike of North 40 degrees East and a dip of about 75 degrees from the Horizontal in a North-westerly direction. There are four (4) parallel veins distinguishable and possibly more, and there are three (3) cross veins and perhaps more intersecting the parallel vein series. The vein systems maintain their widths the fissures having narrowed in places to 4-feet and widened to a thickness of 50 feet, so the minimum width is 4-feet and the maximum width is 50 feet and perhaps more.

An important feature which has apparently been responsible for the large surface deposit in the major working area, is that the four parallel vein series striking North 40 degrees East converge in this area with one cross vein intersecting at the same point and the ramification of these four parallel vein systems as they strike along their course on the southwesterly extremity of the lode. It appears, that the older schist complex is invaded by the Rhyolite and the vein structure intrude the rhyolite and are traceable northeasterly along their strike for a distance of 3000 feet

*

and to approximately 600 feet of depth on the declivity of the mountain outcrop to a canyon below, where they disappear in the formation. In tracing out these veins I observed that they were strong after striking through the mountain, and appeared to be highly mineralized. In each case they had maintained their width. It is apparent that the gneiss which follow the course of these veins, that there has been no local influence which sometimes occur, to rake them off their course. However, in all probability the gneiss is responsible to a great extent for the genesis of the ore making.

GANGUE MINERALS

The gangue minerals are: white quartz; magnetite; manganese; (small percentage): Chalcopyrites and galena, (small amount coming to the outcroppings). The metallic minerals are: gold; silver and copper. Gold predominating.

DEVELOPMENT

The development of the group has been practically concentrated to the area where there has been both enrichment and a large deposit of ore caused by the convergence of the veins as hereinabove mentioned. However, exploration work consisting of open-cuts, trenches, shallow shafts and other exposures has been performed over a length of 500 or 600 feet.

This work demonstrates the length and thickness of the veins throughout this length. This work apparently shows the existence of one continuous ore shoot over this distance.

* Samples taken at the various developed places attest to a very uniform grade of commercial ore to the depth of the lowest level, which is 85 feet below the surface.

There has been some work conducted on most of the claims of this group consisting of the usual prospect kind trenching both

the parallel and lateral veins so they can be sampled.

DEVELOPMENT

The development consists of the following: A cross-cut tunnel (misplaced) driven in for a distance of 132 feet off the vein and in wall material; an 85 foot shaft driven down from the surface and connecting with this tunnel; drifting about 23 feet from this tunnel has cut the vein about 9-feet of ore which will be plotted on the accompanying map; in the same area and on the same vein, 120 feet to the southwest an open-cut 10 feet in depth on the outcropping extending along the vein for at least 50 feet has exposed this surface deposit of ore over the following widths: 15'- 12'- 9'; 9⁺ and 8' with no walls showing. Shipments of 40 and 30 ton lots have been shipped from here, and sampling of other widths in place including a 10 ton lot is shown on the map attached. A 50 foot shaft in a southwesterly direction 200 feet from the above major workings has a 10' vein exposed of commercial ore. There are numerous other exposures along the surface covering the strike of the vein system such as trenches and other workings uncovering the veins so that samples could be taken.

This property has been very well sampled. In addition to the assay results shown on the map, there are some 100 samples in all which can be available on the premises. The shipments of ore is a conservative sample however, this property is not a shipping proposition.

* It is impossible for me to place a sound valuation on the mine in terms of tonnage and values. However, an estimate of a block of ore based on assumptions I believe will be within reason. Remaining within a safe margin of accuracy we will take a known ore shoot length of 500 feet to the 85 foot level and

taking a vein thickness of 9 feet, with the gravity of 15 cu. ft. to the ton we have 25,500 tons of ore that will average \$10.00 per ton in this one block. As I have related the vein in this area measures 15 feet in thickness and no walls in sight, so 9 feet as an average is very conservative.

It appears, that we have an open quarry project here before going to depth with a shaft. This of course must be verified through further extensive sampling. With the possibility of a large surface deposit for a shovel method of mining will offer economical operations. There is every possibility of developing an enormous tonnage within the one bench and I recommend that extensive exploration be conducted in both the northeasterly and southwesterly areas where the vein systems strike through and offering backs of at least 600 feet on the declivity of the hill.

METALLURGY

There will be no metallurgical difficulties encountered. The ore is applicable to the flotation process.

WATER

There is ample water available to supply a large reduction works. A patent mill-site includes a water right. Water must be developed and a pipe line approximately 1-mile long installed from the well to the mine. A plant for pumping this water to the top of a hill must also be equipped. There will be a lift of about 400 feet to the crest of the hill where a 200,000 gallon tank will supply the mill by gravity. This water right is located within 50 feet of a Government well at present sunk to only

a depth of 40 feet which contains ample water to furnish their demands. This is a natural water course, the water coming to within 4-feet of the surface of a canyon. Water can be procured in several places along this canyon and also on the lowlands 2- miles below the mine. This location is out of the question due to the fact, that water is 400 feet below the surface and the lift likewise, the distance to pump to the property cannot be considered. I do not recommend erecting a mill on the mill-site patent and transporting the ore from the mine to the mill. The cost of ore hauling at least 3- miles would be too expensive, while the cost of the erection of a pumping plant; developing water and the installation of the pipe line also, the purchase of a tank could be easily paid for within a short period of time from what it would cost to transport the ore from the mine to the mill. I believe, that the cost of maintaining a pumping plant to furnish water for a 200 ton unit mill, will not exceed 10 cents per ton of ore treated.

While under this heading, I wish to offer my opinion regarding the location of the reduction plant and also the major working shaft. The position of the working shaft however is a matter for the operating engineer to decide. Both reduction mill and major shaft are vital questions, and must be given considerable thought. As I have hereinabove discouraged the installation of the reduction plant on the patented mill-site because it is not practical.

* Of course my recommendation for open quarry operations is my own opinion and might not be approved by the management however, it is practical and offers economical mining so to derive rapid profits therefrom, to start operations. With my experience

operating in this manner, where the vein thickness averaged from 7' to 12' the cost did not exceed 75 cents per ton of ore. In all probability this cost of mining using this method on the property in question where we have larger vein widths, should not be over the cost mentioned above. The proper location of the mill as well as the major working shaft, undoubtedly plays an important part for future economical operations. Therefore, I recommend the location of the mill to be on a site well adapted and in close proximity to the major working shaft, so to reduce the transportation cost from both quarry and shaft operations. There are two advantageous points to decide upon and there are several other ways affording opportunities to develop the property. I suggest that the two operations be conducted at the same time. Of course, my proposal to start surface operations is based on going into production immediately whereby profits derived would carry the cost of mining and milling likewise, the cost attached to driving the shaft down to at least the 500' level, with drifting and cross-cutting on each 100' level and the blocking out of reserve ores.

With veins as large as this property possesses, development should proceed at once with depth driving into the vein. When the natural water level is reached, we can expect a change of ore. It is possible that the water encountered at that level and below will be sufficient to operate the mill thus discontinuing the pumping plant and a reduction in operating cost.

SAMPLING & RESULTS

The following samples and their results, consist of a portion of some 100 samples taken. Due to the fact, that it is impossible to include all of the assay certificates in this report, I wish to state, that they are available and the results recorded below and plotted on the map are authentic. The following results show some of them in ounces and others in value, in accordance with the assay certificates. On several samples copper has not been determined. The widths of samples taken were carefully measured and recorded. All of the samples were assayed by reliable offices and smelters.

The following is the key to the assay sheet registered below:

- Sample No. 1 - Taken from the Major open-cut.
- Sample No. 2 - Taken from the Major 85' shaft dump.
- Sample No. 3 - Grab sample of ore collar of 85' shaft.
- Sample No. 4 - Same as above.
- Sample No. 5 - Taken from Major open-cut across 9'0" wide.
- Sample No. 6 - " " " " " " 15'0" "
- Sample No. 7 - Car shipment to smelter.
- Sample No. 8 - Taken from Major open-cut across 9'0" "
- Sample No. 9 - Average of 10 ton sample. (Open-cut).
- Sample No.10 - Taken from Major open-cut across 11'0"" (Face)
- Sample No.11 - Average of 30 ton sample (Open-cut).
- Sample No.12 - Taken from Major open-cut across 8'0" wide.
- Sample No.13 - " " " " " " 12'0" "
- Sample No.14 - Average of a 40 ton lot (Open-cut).

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KEY Continued

Sample No. 15 - Taken from the 132' tunnel.

Sample No. 16 - " " " " " Width- 3'0"

Sample No. 17 - " " " " " " 4'0"

Sample No. 18 - Selected sample from bottom of Open-cut

Sample No. 19 - Taken from Major Open-cut across 9'0" wide

Sample No. 20 - Taken from 50' shaft 200' southwest from
major workings, bottom sample 10'0" wide

Sample No. 21 - Same as Sample No. 20 - 10'0" wide.

Sample No. 22 - Selected (Gray Pyrites?)

SAMPLE NO.	GOLD OZS	SILVER OZS	COPPER %	VALUE GOLD	VALUE SILVER	VALUE COPPER	TOTAL VALUE
1-	0.22	4.6		\$ 7.70	\$ 3.54		\$11.24
2-	0.12	4.6		4.20	3.54		7.54
3-				13.25	5.11		18.36
4-				5.50	2.00	\$ 3.75	11.25
5-			2.4	3.50	3.00	4.00	10.50
6-	0.22		2.0	7.70	3.50	4.00	15.20
7-		4.0	1.69	4.50	3.08	3.42	11.00
8-			1.69	7.00	3.00	4.67	14.67
9-				2.45	2.25	3.50	8.20
10-				3.50	3.00	3.50	10.00
11-				10.15	6.20	3.00	19.35
12-				4.20	4.62	5.40	14.22
13-				2.80	4.62	4.00	11.42
14-				3.50	3.25	3.50	10.25
15-				1.75	3.00		4.75
16-				2.80	4.62		7.42
17-				4.20	8.47		12.67
18-	0.49	10.71	3.9	17.15	8.24	7.61	33.00
19-	0.11	3.00	1.46	3.85	2.31	2.58	8.74
20-	All Metals						7.00
21-	"	"					11.00
22-	"	"					40.00

*

FLOTATION TEST NO. 2 VENTANA ORE

Test No. 2- was run for the purpose of checking the results obtained in Test No. 1- and in addition to determine the effect of the use of a strong sulfidizing agent on the flotation of the oxidized copper mineral.

Product	Weight	TEST NO. 2				Tons x Assay			% of Total		
		Tons in 100 ton Mill	Assay Au Oz/ton	Assay Ag Oz/ton	Assay Cu %	Au	Ag	Cu	Au	Ag	Cu
Heads	500.0	100.0	.124	3.36	1.56			156.0	100.0	100.0	100.0
Zan Cone	23.0	4.6	2.06	41.25		9.47	189.7		76.5	56.6	
Paraffin Oil Cone	16.0	3.2	.24	16.10		.77	51.5		6.2	15.3	*(29.0
Na2SS	20.0	4.0	.09	13.20	18.82	.36	52.8	75.3	3.0	15.7	48.4
Tails	441.0	88.2	.02	.47	.40	1.75	41.5	35.3	14.3	12.4	22.6
Totals	500.00	100.00				12.36	335.5		100.0	100.0	100.0

This test was made in exactly the same manner as was Test No. 1- with the exceptions that the xanthate concentrate was not cleaned, and the sodium sulfide at the rate of one-pound per ton of ore was added to the flotation machine after the paraffin oil concentrates was removed.

*This figure represents the percentage of the total copper that was in the xanthate and paraffin oil concentrates and was arrived at the difference.

The above figures indicate that in a 100 ton mill there could be produced 11.8 tons of concentrates assaying .91 ounces per ton of gold and 24.92 ounces per ton of silver, and 10.2 percent copper and containing- 85.7- 87.6- and 77.4 per-cent respectively of the total gold-silver and copper in the ore. By utilizing a cleaner operation it would be possible to obtain a much higher grade concentrate as is indicated in Test No. 1.

TREATMENT OF CONCENTRATES

An economic advantage may be gained by installing a moderate sized matting furnace with scinterring hearth to smelt the flotation concentrates following their beneficiation by the flotation process.

*The gold-silver and copper values from the ore will thus be collected in a high-grade copper matte - probably about 40% copper-- and thus eliminating the unprofitable constituents of the raw concentrates. This enables the shipping of a high-grade product, with consequent lower costs for haulage and freight to smelter.

CONCLUSIONS

My conclusions, regarding this property, are that it possesses exceptional merit and warrants exhaustive development. I have concerned myself with but one section of the property, where the major development was performed, yet there are other outstanding showings on the other claims of the property that warrant more definite exploratory work. I believe that with the opening of, this vein system along the lines herein proposed, that there will be disclosed such ore volume and values, that will make this a very profitable mining venture.

Respectfully submitted,

(Sgd) William Woodbury, E.M.
William Woodbury, E.M.

Tucson, Arizona
October 20, 1937

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