



CONTACT INFORMATION
Mining Records Curator
Arizona Geological Survey
3550 N. Central Ave, 2nd floor
Phoenix, AZ, 85012
602-771-1601
<http://www.azgs.az.gov>
inquiries@azgs.az.gov

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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 AND 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 ~~held as a parcel~~ 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--CRNDORF-- COLORADO AND ENTERPRISE-- under patent No. 2063-A. The name of the patent mill-site is CRNDORFF patent No. 2063-B. The property group is accessible and ~~convenient~~ 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 this property due of course to conditions prevailing during that period, such as inaccessibility, antiquated ~~metallurgical~~ 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 the 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 follows 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 Northwesterly 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 Southwestly ~~extremity~~ extremity of the lode. It appears that the old Schist complex is invaded by the Rhyolite and the vein structure intrudes the Rhyolite and are traceable Northeastly along their 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 materials 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 both enrichment and a large deposit of ore caused by the convergence of the veins as herein above stated mentioned. However, exploration work consisting of open cuts, trenches, shallow shafts and other exposures has been performed over a length of 500 to 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.

The development consists of the following: A crosscut 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 ten ton lot is shown on the map attached. A 50 foot shaft in a northwesterly direction 200 feet from the above major workings South 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 shootlength of 500 feet to the 85 foot level and taking a vein thickness of 9 feet, with a gravity of 15 cu. ft. to the ton we have 25,500 tons of ore that will average \$10.00 a 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 a 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 metallurgic 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 pipeline 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 like wise, the distance to pump to the property cannot be considered. I do not recommend erecting a mill on the millsite 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 pipeline also, the purchase of a tank could be easily be paid for within a short 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 herein above discouraged the installation of the reduction plant on the patented millsite because it is not practical.

Of course my recommendation for open quarry operation is my own opinion and might not be approved by the management, however, it is practical and offers economical mining so as 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 the 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 advantage 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 attached to driving the shaft down to at least the 500' level, with drifting and crosscutting 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 costs.

SAMPLING AND RESULTS

The following samples and their results consist of a portion of some 100 samples taken. Due to the fact that it is impossible all of the many 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 width 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 - Crab sample of ore collar of 85' shaft.
- Sample No. 4 - Same as above.

Key continued.

- 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" wide.
- Sample No. 9 - Average of 10 ton sample (open cut).
- Sample No. 10- Taken from major open cut across 11'0" wide.
- 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 40 ton lot (open cut).
- Sample No. 15- Taken from 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 open cut (major) across 9'0".
- 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.
- Sample No. 22- Selected (gray pyrites?)

| Sample No. | Gold Oz. | Silver Oz. | Copper % | Value Gold | Value Silver | Value Copper | Total Value |
|------------|------------|------------|----------|------------|--------------|--------------|-------------|
| 1 | 0.22 | 4.6 | | \$ 7.70 | \$ 3.53 | | \$11.24 |
| 2 | .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 | .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 | | | | 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 | 3.47 | | 12.67 |
| 18 | .49 | 10.71 | 3.9 | 17.15 | 8.24 | 7.61 | 33.00 |
| 19 | .11 | 3.00 | 1.46 | 3.85 | 2.31 | 2.58 | 8.74 |
| 20 | All metals | | | | | | 7.00 |
| 21 | " " | | | | | | 11.00 |
| 22 | " " | | | | | | 40.00 |

C O P Y

ARIZONA TESTING LABORATORIES

Phone 3-6272 823 E. Van Buren PO Box 1888

PHOENIX

(Chemists - Engineers)

For ~~Mr. F.D. Schenmer~~ *Vandana Miner*
Prescott, Arizona

Date September 22,
1950

Sample of Ore

Submitted by: same

ASSAY CERTIFICATE

Gold figured at \$35.00 per ounce

Silver figured at \$00.90 per ounce

| Lab. No. | Identification | GOLD | | SILVER | | Percentages |
|----------|----------------|-------------|---------|-------------|---------|-------------|
| | | Dz. per Ton | Value | OZ .per Ton | Value | Copper |
| 78837 | V - 1 | 0.18 | \$ 6.30 | 4.10 | \$ 3.69 | 2.9 |
| 78838 | V - 2 | 0.08 | 2.80 | 1.20 | 1.08 | 3.0 |
| 78839 | V - 3 | 0.04 | 1.40 | 4.80 | 4.32 | 5.1 |

V - 1 Sample taken across back of underground stope near fault

V - 2 Sample taken at random from surface above underground workings

V - 3 Sample taken on sidehill on Bonanza claim. Selected.

Registered Assayer

Certificate
Expires
CLAUDE E. MCLEAN
Dec. 31, 1950

(Note: Later checking of rejects of these samples showed that above results were about 15% high, or vice versa. F.D.S.)

Arizona, U.S.A.

Respectfully submitted,
ARIZONA TESTING LABORATORIES
(Signed) Claude E. McLean

Charges \$8.50 Paid Mail

C O P Y

TREATMENT OF CONCENTRATES

An economic advantage may be gained by installing a moderate sized matting furnace with scintering 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 lower costs for haulage and freight to smelter.

CONCLUSIONS

My conclusions are, regarding this property, that it possess 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 mine 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.

Tucson, Arizona
October 20, 1937

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

Five
There are ~~four~~ additional ~~unpatented~~ unpatented claims adjoining this mine, which will be included with the sale of the property. We can furnish a clear deed to the Ventana Mine.

McCleery - Wright - Bartlett, (Owners).

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 | | |
|--------------------|--------|--------------|--------|--------|-------|-------|--------------|-------|--|
| | | Tons in | Assay | | | Au | Ag | Cu | |
| | | 100 Ton Mill | Au oz. | Ag oz. | Cu % | Au | Ag | Cu | |
| Heads | 500.0 | 100.0 | .124 | 3.36 | 1.56 | | | 156.0 | |
| Zan Cone Paraffin | 23.0 | 4.6 | 2.06 | 41.25 | | 9.47 | 189.7 | | |
| Oil Cone | 16.0 | 3.2 | .24 | 16.10 | | .77 | 51.5 | | |
| Na ₂ SS | 20.0 | 4.0 | .09 | 13.20 | 18.82 | .36 | 52.8 | 75.3 | |
| Tails | 441.0 | 88.2 | .02 | .47 | .40 | 1.75 | 41.5 | 85.3 | |
| Totals | 500.0 | 100.0 | | | | 12.36 | 335.5 | | |

| Product | TEST No. 2 | | |
|--------------------|------------|-------|----------|
| | % of Total | | |
| | Au | Ag | Cu |
| Heads | 100.0 | 100.0 | 100.0 |
| Zan Cone Paraffin | 76.5 | 56.6 | |
| Oil Cone | 6.2 | 15.3 | (29.0+) |
| Na ₂ SS | 3.0 | 15.7 | 48.4 |
| Tails | 14.3 | 12.4 | 22.6 |
| Totals | 100.0 | 100.0 | 100.0 |

This test was made in exactly the same manner as was Test No. 1 with the exceptions that 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 oil 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 percent respectively of the 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.

C O P Y

ARIZONA TESTING LABORATORIES

Phone 3 - 6272

823 E. Van Buren

P.O.Box 1888

PHOENIX - ARIZONA

For ~~Mr. Fred D. Schenauer~~
Prescott, Arizona

Vulcan Mines

Date October 2, 1950

Sample of Ore
Submitted by: Same

ASSAY CERTIFICATE

Gold figured at \$35.00 per ounce Silver figured at \$00.90 per ounce

| Lab. No. | Identification | G O L D | | S I L V E R | | Percentages |
|----------|----------------|-------------|---------|-------------|---------|-------------|
| | | Oz. per Ton | Value | Oz. per Ton | Value | Copper |
| 78939 | V - 4 | 0.12 | \$ 4.20 | 3.20 | \$ 2.88 | 2.10 |
| 78940 | V - 5 | 0.16 | 5.60 | 4.20 | 3.78 | 2.20 |
| 78941 | V - 6 | 0.04 | 1.40 | 2.00 | 1.80 | 2.20 |

V - 4 Sample taken in open cut at or near top of hill above underground workings

V - 5 Sample taken in under ground stope, three cuts across back of stope

V - 6 Sample taken from float and ore in place on slope of hill south of well, and shaft in canyon above well.

Registered Assayer

Certificate
Expires
CLAUDE E. MC LEAN
December 31,
1950

(Note) Later checking of rejects gave results of about 10% lower than the above.F.D.S.)

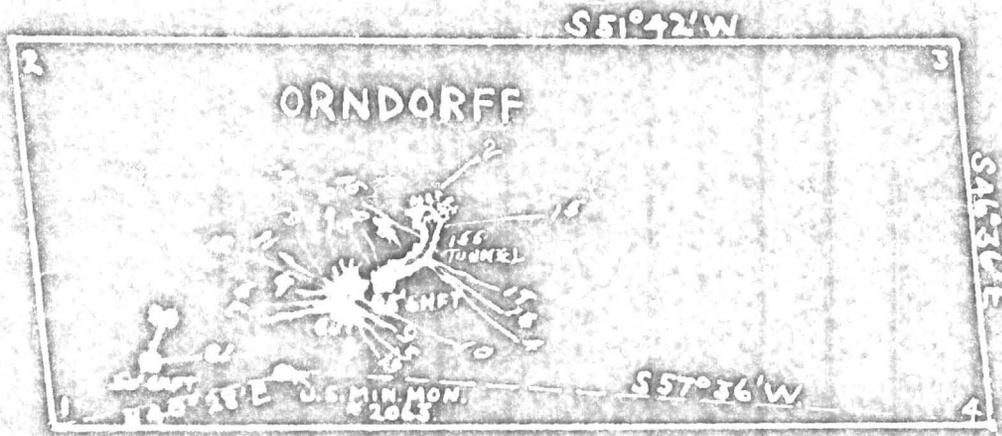
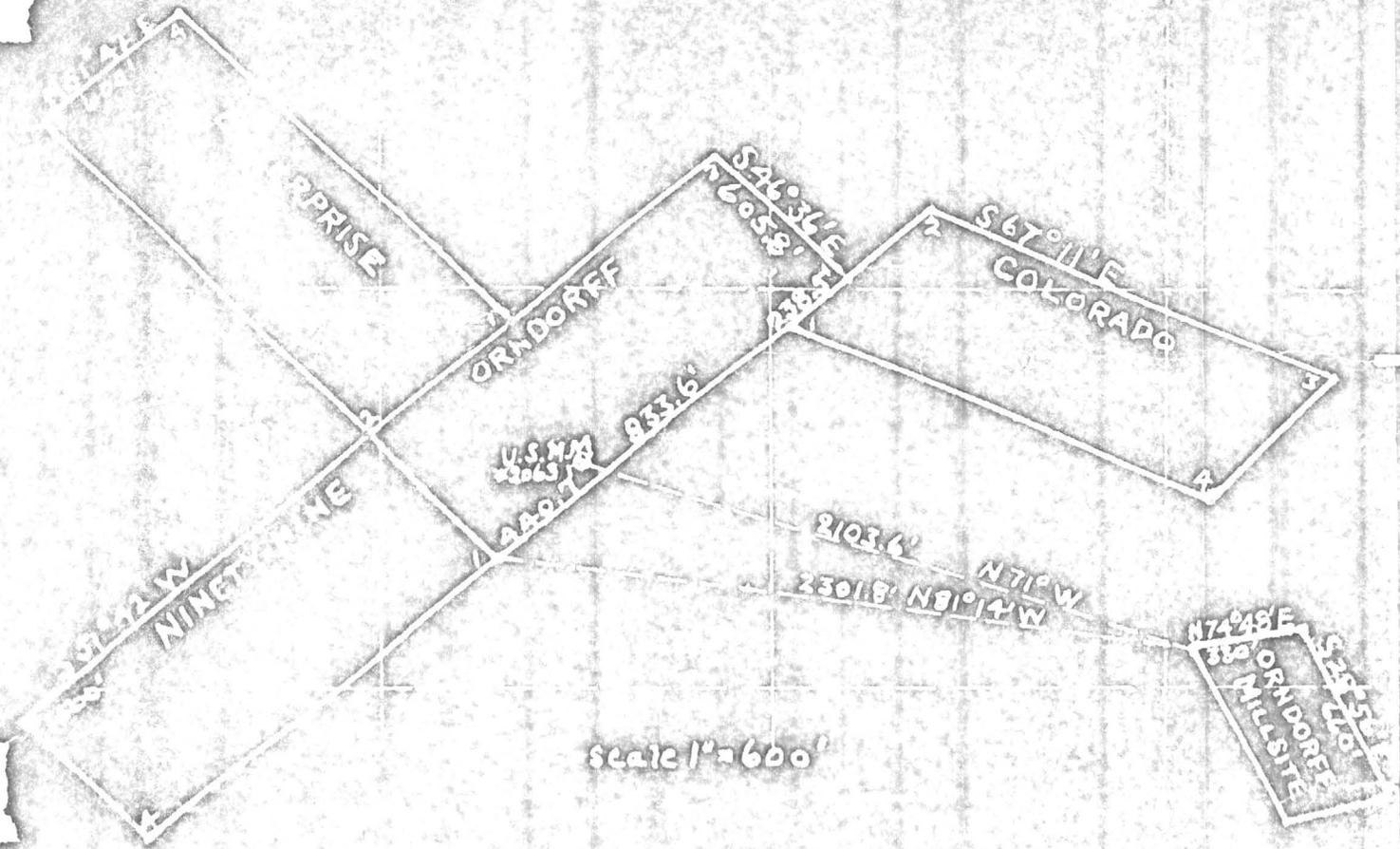
Arizona, U. S. A.

Charges \$7.50 Mail

Respectfully submitted,
ARIZONA TESTING LABORATORIES
Signed: Claude E. McLean

C O P Y

SECTION 18, TWP 19S, RANGE 7E



VENTANA MINE

MINERAL SURVEY #2063 A+B

JUNE 12-14, 1905.