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ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES AZMILS DATA

PRIMARY NAME: SADDLE MOUNTAIN GROUP

ALTERNATE NAMES:
- LOLA CLAIMS
- DYE VEIN
- GILA COPPER SULPHIDE CO. PROP.

PINAL COUNTY MILS NUMBER: 376A

LOCATION: TOWNSHIP 5 S RANGE 16 E SECTION 3 QUARTER NE
LATITUDE: N 33DEG 01MIN 50SEC LONGITUDE: W 110DEG 41MIN 35SEC
TOPO MAP NAME: CHRISTMAS - 15 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
- LEAD
- ZINC
- SILVER
- GOLD
- IRON

BIBLIOGRAPHY:

ADMMR SADDLE MTN GROUP FILE
ROSS, CLYDE P., ORE DEPOSITS OF THE SADDLE MTN AND BANNER MINING DISTRCITS, AZ., USGS BULL. 771, 1925, P. 43-
CLAIMS EXTEND INTO SEC. 34-T4S-R16E
ADMMR U FILE, PINAL AG6
ADMMR SADDLE MOUNTAIN GROUP COLVO FILE

USGS Bull. 771 p. 43

SADDLE MOUNTAIN GROUP PINAL COUNTY

Mr. C. L. Whitelock, 494 S. Main, Payson, Utah, visited in the office to check files on Saddle Mountain Mine, Adjust Group and Standard Group all in Pinal County. Says he has three properties optioned. Said he obtained the option from Lee ~~Adkins~~ acton. 7-15-65

Coastal Mining Co. of Reno - P.O. Box 12647, Tucson 85711. Company is subsidiary of Hanna Mining Co. They were drilling Saddle Mountain claims of Lee ~~Adkins~~ Acton near Christmas. Victor Kroll in charge.

Reference: USGS Bull. 771, p. 43

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine Saddle Mountain Mine Date April 3, 1961

District Saddle Mountain District, Pinal Co. Engineer Lewis A. Smith

Subject: Mine visit with Raymond Dye.

Property consists of 15 patented claims.

Location: S 3, T 5 S, R 16 E and S 34, T 4 S, R 16 E.

Minerals: Lead, zinc, gold, silver

Owner:

History: The history through 1922 is described by Ross.2/

Work: The various workings, assays, shipments etc. are described in C. L. Orem's report. 1/ Mr. Raymond Dye has repaired the 70 foot shaft in the west part of the claims and has extended the north drift somewhat.

Geology: The general geology is adequately described by Clyde P. Ross. The shaft reopened by Dye, lies on the footwall of a vein which is 25-30 feet wide and which was formed on the footwall of a dike composed of andesite porphyry or quartz-mica diorite. Many deposits in the area are believed, by Ross, to be associated with the latter although he mentions the pair of andesite dikes. A crosscut at the bottom of this shaft reaches the hangingwall from whence drifts were driven from 30-35 feet both ways along the wall. The vein and dike strike about N 80° E and dip between 70° and 75° to the south. At the shaft the vein has two strong and smooth walls. The vein material consists of brecciated, sheared and highly altered andesite. The 5-8 feet, next to the hanging wall, is oxidized around variable-sized breccia fragments and masses up to 1 foot in diameter. The fragments contain disseminated blebs of sphalerite and galena (with occasional thin fibers of argentite and sparse chalcopyrite (or cupriferous pyrite). According to Ross the oxidized portions, around the breccia fragment borders, contain some anglesite, cerussite, and rarely chrysocolla. However, it is also probable that some massicot (PbO) and oxidized zinc minerals are also present along with considerable limonite. Residual blebs of galena and sphalerite are scattered in the oxidized material, but pyrite in the hangingwall zone has mainly been removed. This oxidized material is colored orange or red and this gives the outcrop a pinkish color. This along with the mottled appearance of the vein breccia ore outcrops are characteristic and could serve as indicators. Accessory minerals include calcite, chlorite, gypsum and sericite. The middle part of the vein is bleached gray and contains more pyrite and somewhat smaller zinc and lead sulphide blebs. It, however, carries some gold according to Mr. Dye. The breccia fragments are smaller and oxides are less prevalent. It also contains fine-grained quartz and is relatively compact. The footwall segment has yielded silver-lead bearing pockets and looks to be a little more oxidized than the other two divisions. In the area as a whole oxidization sometimes extends past the footwall for several feet. It was suggested that each division be sampled separately. The specimens from the hangingwall zone appear upon visual observation to have more zinc than lead and conversely the footwall area seems to have a little more lead, especially

1/ Report by C.L. Orem (See Department of Mineral Resources file.)
2/ Ross, C. P., U. S. Geol. Survey Bull. 771 (1925) pp 43-46

in the upper half of the shaft. In all three divisions the proportion of oxides at the top of the shaft is somewhat greater than is the case in the bottom. Orem's descriptions give a definite hint that this was true in some of the other workings. Small pockets of relatively high grade gold were noted by Ross and Orem. On the whole the oxidation in this mine appears to be relatively incomplete since sulphide residuals are found at the surface. A decrease in overall silver values, in some areas in depth could along with hot silver lenses indicate that there may have been an overlying silver enrichment present prior to the late Tertiary erosional epoch. Thus the high grade silver pockets and lenses which so far were largely in the upper part of most workings, may represent the feathering out of the enrichment along downward projecting tongues, expecially along fractures. Some sulphide blebs in the shaft ore are coated by scattered films which are believed to be argentite. In the Little Treasure mine, Ross reports that native silver in vugs and black films, probably argentite films, were found on the galena and sphalerite, along with red occasional specks which he states probably could be pyrargyrite. In neither case was he able to accumulate enough material for proper tests. (The silver may be in halogen compounds.) The samples from the lead-zinc hangingwall section show several ounces silver and some gold, and the combined lead-zinc assays indicate about 12 percent. This particular vein is strong, has well defined walls, and evidently has good length, (Mr. Dye has traced it for over 1000 feet) and it appears to be strong enough to reach a good depth. To the south is a narrow and fairly deep canyon and the vein dips toward this canyon. It was therefore suggested that an angled core drill hole from this canyon would be able to reach the vein at 100 or more feet below the bottom of the 75 foot shaft, depending upon the angle of the hole. At the present cost of shaft sinking it would seem rather expensive to sink the shaft as a means of determining the downward extension of the ore. The topography would permit other holes to the east for a considerable distance. If the vein continues downward the crosscut drilling could be supplemented by holes in the vein itself. Should the proportion of oxidation in the vein lessen as expected, the sulphide grade would be some better and ore would be more amenable to concentration. The ore would, if zonal deposition holds, be apt to contain proportionally more zinc in depth, since the temperature of zinc deposition is believed to be somewhat higher than lead and silver. It is hoped that appreciable silver values will continue downward.

The average elevation of much of the present mineralized area as roughly compared with the contact between the andesite and later volcanics (on Saddle Mountain and the Tablelands) indicates that many hundreds of feet of the Cretaceous was eroded away in addition to the later flows. Part of the Cretaceous was removed prior to the outpouring of the later flows. Thus the depth of erosion of the Cretaceous, within the Ash Creek Basin, could have reached as much as 1000 feet. Ross states that it is believed that the mineralization in this area probably occurred in early Tertiary. Therefore, it is certain that a considerable depth of the original deposits was also removed. The eroded part of these deposits would be apt to have contained more silver and lead mineralization on the average, than has been found in the present area, except for localized lenses. Conversely it would be expected that the proportion of zinc would be greater in depth. The presence of more fresh sphalerite in the deeper workings tends to confirm this. Some progressive lessening of the rate of oxidation can likewise be expected since it is generally believed that the climate in the region has relatively rapidly become more arid during the late

Tertiary (probably late Pliestocene and Quarternary). This is also influenced by the rate of degradation of the topographic surface due to the rapid back-cutting of the Gila River drainage area. This extensive erosion may have removed much of any silver enriched zone which might have existed and the drying up of the climate could have materially reduced the movement of the remaining silver downward. Also after a protracted erosional epoch the source material could have been materially reduced. This is to some degree varified by the absence of appreciable argentite in the present ores. Conversely the argentite could have been oxidized to silver halogens. Nevertheless the indicated decrease in silver values with depth excepting near surfaced local high-grade lenses, indicates the fingering out of any enrichment which may have existed above. Therefore, it would seem that the better hope for the future would lie in the development of the bare metal reserves to a point where they would warrant the building of a concentrating plant.

Of the mineralized areas, observed by Mr. Dye and me, the "Dye" vein area and one to the south would best lend themselves to future prospecting. The area to the south has a considerable surface extent (perhaps more than a fourth of a mile in diameter) in which much of the surface is well saturated with iron oxides and has bands of kaolinization spaced over it. This area appears to contain a number of veins some of which have been worked to varying degrees. Much work would be required to obtain a true picture of this area. For example it must be determined whether the values are disseminated or more confined in veins. Geophysical prospecting methods might prove useful in this case.

The presence of transverse faulting is noted by Ross and Orem. Time did not permit a study of these, but Mr. Dye pointed out that the east portion of the Dye vein appeared to have been somewhat stepped southward. Two lines of de-arrangement in the andesite bedding and shallow escarpments are seen in the area east of the "Dye" shaft.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine: SADDLE MOUNTAIN

Date: November 18, 1978

District: Banner (Christmas), Gila County

Engineer: Ken A. Phillips

Subject: Office Visit By Lee Acton, Owner

Location:

Minerals: Gold, Silver, Lead, Zinc, Copper

Mr. & Mrs. Lee Acton, P.O. Box 175, Kearny, Arizona 85237, Phone: 363-5826, reported he would like to sell or lease his mining property. He has owned the property since 1947 and no production has been made since that time. The property includes 15 patented claims to which patent was issued in 1902 to a Mr. Chidden.

Mr. Acton feels the property is principally valuable as an exploration, because he has no interest in mining it himself. Both Inspiration Consolidated Copper Company (in the 1960's) and Phelps Dodge (in 1974) have drilled on the property and Kennecott has drilled nearby. The Inspiration drilling produced a few feet of copper bearing core but the core assays were all below 1% copper. Bud Walker of Phelps Dodge had signed a lease at $1,000 per month and $350,000 had been appropriated to purchase the property, but access problems with the San Carlos Apache Indian Tribe discouraged Phelps Dodge from completing the purchase.

The property reported includes two veins chiefly valuable for gold and one for silver, lead, and zinc, which may be suitable for prospecting and development as a small mine. Old time rumors exist which tell of a production of 230,000 troy ounces of silver. A hand picked samples of 800 pounds yielded 5 troy ounces of gold. Hope Metal Mining Company (Dr. Arthur C. W. Bowen) is reported to have drifted on a vein and produced lead-silver ore.

KAP:mw

REPORT ON

THE SADDLE MOUNTAIN GROUP OF CLAIMS.

LOCATION.

This group consists of 15 patented mining claims, situated in the Saddle Mountain mining district, Pinal county, Arizona. It is located 2 miles southeast from the Arizona Eastern Railway at Finney which is 5 miles by rail from the smelter at Hayden. A 8 mile road connects the property with Winkelman which is reached by rail from Phoenix or by State and county highways from Tucson and Globe.

HISTORY.

This group of claims was among the first claims located in the district. They have produced considerable high grade ore in the early days.The shipping records are not available and the only evidence we have at present are assays taken while mining on the claims and the tales of old time miners of the district.

The entire material from one 60 foot shaft on the Lola claim was packed a mile by burros to Ash Creek and put thru a small gravity concentrator. Mr.N.H.Mellor,who was present when this mill was in operation,says the table at times showed considerable quantities of gold,indicating that very rich pockets of gold were taken from this old shaft.A few samples taken from the sides of the shaft and from the old mill tailings showed that only a portion of the gold and silver was removed by this method of extraction and degree of grinding.Mr.Mellor later cyanided one dump on the Philadelphia claim which averaged $20 per ton in gold and silver.Many small lots of high grade ore have been shipped from the numerous surface ore lenses by lessees in the past and Mr.T.S.Sanford and the writer shipped approximately $5000.00 gross ore from such lenses during the past 18 months.

CLIMATE.

As this property is located in the Dripping Spring Range at an elevation of between 2000 and 3000 feet the climate is very mild and out door work can be carried on every month in the year.

GEOLOGY AND ORE DEPOSITS.

The country rock in this district consists of a volcanic complex,composed of a large variety of Andesitic flows, breccias, conglomerates and porphyries cut by later quartz-porphyries and intrusive masses and dikes of diorite.These surface formations are held by F.L.Ransome in Professional Paper No.115,U.S.G.S.,to be underlain by Carboniferous limestone at not over 1000 feet depth.

The veins are persistent fault fissures in the andesite.Two,however,lie partly in the quartz porphyry and partly as contact fissures between the porphyry and andesite.The veins are numerous and many of them are easily traceable on the surface for several miles.They vary from a few inches to large altered,impreganted masses, 40 to 50 feet in width.

The ores so far exposed are mostly oxidized siliceous ores that carry silver, gold,lead,zinc,ironand copper. Silver and gold constitute the main values and as the silver occurs mainly in the sulphide form,reasonable rates are obtained from the copper smelter at Hayden,who desire the ore for its silica content.The gangue minerals are quartz,calcite,siderite,oxides of iron, gypsum and small amounts of barite.The oxidized zone is shallow,varying from 25 to 50 feet in depth,altho a little oxidation is found two hundred feet under the surface in some of the workings in the district. Below the oxidized zone,some of the ore shoots are composed largely of sulphides of lead,zinc and iron that carry gold and silver. Some of the veins are entirely quartz with disseminated sulphides scattered thru them,while others are chiefly altered andesitic material either carrying the sulphides in small lenses thru it,or, as brecciated pieces,the total forming an ore or vein breccia. Some of the veins show post mineral movement.

Accurate ore tests have been run on the sulphide ore of the district. They

from one to three feet of ore assaying from 7 to 18 oz silver and $1.20 to $10 gold. The entire material from this shaft was packed to a small concentrator on As h Creek, one mile below. East of this shaft a long crosscut tunnel has been driven to connect with an 80 foot shaft on a vein 3 to 5 feet in width that has produced several small shipments averaging approximately 60,Oz silver and small amounts of gold.

The lower group of claims has many small veins that show fair gold and silver values on the surface but the main vein on which this group is located shows a quartz vein 3 to 20 feet wide, which has produced several high grade ore shipments from the surface lenses. The Sleeper has one 150 foot shaft which has caved to the 50 foot level. Above this level three cars of ore averaging 23 to 30 oz silver and $2 to $3 gold were shipped last year. In places the higher grade ore was 4 feet wide and assayed $40 in gold and silver. The ore was soft and was mined almost entirely by picks with am occassional light blast in the harder ribs. On the side of this higher grade ore occurs one to three feet of lower grade material assaying from 9 to 18 Oz silver. The shaft and tunnel on the Philadelphia claim show 18 inches of 18 Oz silver ore, smaller widths of higher grade ore, and sevral feet of lower grade sulphide.

Many of the veins on this property offer an opportunity to develop considerable tonnage of milling ore with the additional assurance that such development will result in opening up many high grade ore lenses. Tere has been developed no deep systematic development work. Each lessee abandones his workings when it no longer showed a profit from the higher grade lenses. Such lenses are characteristically irregular. The property should be developed on the basis of the milling grade ore. The high grade lenses when encountered would then be velvet. The lessees had insufficient operating capital to work on this basis. The Adjust Mine, adjacent to this property has shown the ore and values to extend at least 200 feet below the surface in this district. The quartz-diorite porphyries in this district can be followed across the Gila river to Christmas and on over towards the 79 Mine showing that they cut the Carboniferous limestone below the andesitic surface formations. This is important when considering development possibilities with depth, as these porphyries on the above mentioned properties, are held to be genetically responsible for the large replacement deposits formed in the Carboniferous limestone. The iron pyrite in the deeper workings of the district has been found to carry the highest gold content. Assays of the solid iron sulphide from several of the veins on this property and the Adjust vein, both on the Adjust property and on the Ryan claim, showed values varying from $35 to $72 gold and 50 to 172 Oz silver per ton. This will become an important factor with deeper mining as the pyrite will be ther more persistent mineral with depth. The veins near the surface contain considerable gypsum which has been formed by the action of surface waters on pyrite, indicating the former presence of considerable pyrite in the original sulphides.

MINING METHODS AND PRODUCTIONS COSTS.

The district has produced approximately $300,000.00 of gross ore up to date, practically all of which has been high grade lenses that have been worked by selective mining and careful hand sorting. The costs by this method vary greatly according to size, width and value of the lenses mined. A milling grade of ore could be mined from most of the veins in this district for a small fraction of the costs of selective mining of the higher grade lenses. The vain material is soft, and easily and cheaply mined. The ore has been packed to the railroad on burrow and has cost an average of $4 per ton By constructing an aerial tramway this cost could be reduced to $0.15 per ton. Freight to the smelter has averaged 0.40 per ton and the smelting costs $5.50 prt ton.

RECOMMENDATIONS.

Considerable development should be done to determine the extent and value of the many surface bodies. While these ore bodies offer many promising opportunities and should be developed, the real need of this property and district is some deep development work. If possible a three compartment shaft, centrally located, vertical, should be equipped and sunk 500 foot level, and this large fissure vein system crosscut at this level. Adequate ore and waste pockets should be excavated and the shaft continued to the 1000 foot level and the vein system again explored in the favorable limestone horizon on that level.

Altho this would require considerable expenditure it will prove by far tha most economical development program in the end and may place this district well up on the list of Arizona's important producers.

Before such a program is carried out adjoining properties should be tied up under option if possible for such a development program if successful will increase

show that selective flotation gives a very high total recovery, 98% of the gold, 96% of the silver and 92% of the lead being extracted.

Plenty of water could be developed for milling purposes.An old shaft on the Concord (see accompanying Patent Plats) on Deer Creek has furnished plenty of water even during the driest seasons when all the creeks were dry.Should sufficient milling ore be developed to warrant a large mill,ideal mill sites are available on the Gila river and railroad which could be connected with the property by aerial tramway an airline distance of one mile with a drop of 600 feet.

ASSAY VALUES,DEVELOPMENT WORK, AND POSSIBILITIES.

Every claim shows numerous small prospect shafts,cuts and tunnels.Only the more important ones will be mentioned here.Nearly all the work was done on the high grade ore lenses by lessees with limited means and when the high grade ore lenses pinched or were faulted the work stopped.

The Concord claims has one 30 foot tunnel,the face of which sampled $30 in gold and silver across one foot.All along the surface the ore has been stripped from this vein by open cutting.Two shafts that were under water were not sampled. One 150 foot tunnel amnd 30 foot winze from it show where narrow high grade lenses and 2 to 3 feet of lower grade ore.Another 30 foot shaft on the upper vein showed 6 inches of 60 ounce silver ore in one lense.The three veins on this claim all show narrow lenses of ore that are generally very high grade.Samples carrying as high as 900 ounces silver have been taken from this claims.

On the Big Rock claim, one shaft,150 feet deep but open only to the 60 foot level,shows 18 inches to 4 feet of ore the full depth.18 inches of this ore was mined from the surface by an open cut,12 feet deep by 50 feet long,and averaged 20 ounces silver and $2 gold per ton.A large number of samples were taken during the mining on this claim and some showed the presence of rich gold pockets,but the ore as shipped averaged only $2 or $3 gold per ton.Deeper in the shaft the ore contained lead,zinc and iron sulphides that only assayed 6 to 10 ounces silver and $1 to $3 gold. A short distance to the east of this shaft a 100 foot tunnel has produced considerable ore 20 years ago and one car of $33 ore last year.Some of this ore was of very high grade.One width of 8 inches assayed 400 oz silver and many samples over a foot width assayed from 40 to 100 oz silver.An incline slip or fault along the vein cut off the ore 15 ft below this tunnel level and two shallow winzes failed to relocate it.This vein averages 4 to 8 feet in width and the bottom workings show 3 to 4 feet of milling ore that will average 10 ounces silver and a small amount of gold.A 60 ft crosscut on the hillside below will if extended 100 feet intersect this vein 200 ft below the surface under the 150 ft shaft,or a 700 ft drift along the vein from the ravine east of the present workings,would give 300 or 400 feet depth. Such a tunnel would develop the milling ore in the shaft and tunnel and explore a long distance of vein that shows numerous surface lenses.

The Pittsburg claim which overlaps the Big Rock shows several good ore lenses on the surface.The 100 ft shaft contained water and was sampled only near the surface. It showed from 1 to 3 ft of ore assaying 23 oz silver and $10 gold.

The Trenton claim has one 400 ft tunnel which cuts an ore shoot 75 ft long, assaying 15 oz silver and $1 gold.It shows much lead,zinc and iron sulphides and is 2 ft wide in the center of the tunnel level and tapers to either end.A winze on this ore lense may open up considerable milling ore as the tunnel seems to have cut near the top of a lense. One 30 ft open cut 500 ft below this tunnel level yielded eight tons that averaged slightly under $100 per ton;values varied from 30 to 168 oz silver and $7 to $14 gold. A 200 ft shaft on the summit above the 400 ft tunnel has produced one or two small shipments of very high grade ore.The veins are wider to the northwest and show milling grades of ore over fair widths where samples on the surface and in small cuts.

On the claims west of the Trenton there are a great many small surface workings. One of the more important of these is a 70 ft shaft,sunk along the foot wall of a 30 to 40 ft vein.On the 70 ft level the vein is crosscutted and a 60 ft drift to the west driven along the hanging wall.Above this lower drift a 20 ft shaft has been sunk from the surface. This vein in these workings shiws from 3 to 8 ft of lead,zinc and iron sulphides that carry from 2% to 15% lead, 4½ oz silver and $1.20 gold per ton. The large altered mass between the hanging and footwall lenses constains smaller amounts of sulphides disseminated thru it.One 60 ft shaft 500 ft east of these workings has

their value many times.

CONCLUSION.

This property contains sufficient surface ore bodies of a shipping and milling grade,that under competent management,with a progressive development policy,should produce sufficient ore,to,at least warrant a small modern plant,that will be very profitable to its owners.There are many excellent tunnel sites that make cheap development of these surface ores possible.

The property is readily accessible,being situated close to transportation, smelter and power facilties.

There are always deffinite causes for the deposition and concentration of ore. The chances of developing ore of commercial grade and quantity are determined by certain well defined characteristics.From the experience gained while working on the surface ore bodies of many veins of this district,the writer has become impressed with the potential opportunities it offers to open up important commercial ore bodies at depth.

It has an extensive and well mineralized network of strong persistent fissure veins that have already produced considerable quantities of high grade ore.It lies in a mining country that is noted for deep-seated mineral deposits,and is underlain by sedimentary formations at moderate depts that have proven some of the most productive ore horizons of the southwest.It contains igneous intrusions that are responsible for large and important ore bodies in these sedimentary beds in the adjoining districts. The surface and geological indications on this property warrant the assumption that an extensive development programe will,with reasonable certainty, develop sufficient ore to bring substantial returns on the investment.

(Signed) C.L.Orem.

About 1928 but not later than 1930