

COCHITI MINING DISTRICT.

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The Cochiti Mountains and Mining District are situated in Sandoval County, New Mexico. Sunbeam, Colla Canon the location of the following described tunnel portal & is about twenty six (26) miles north of west from Domingo, a station on the main Santa Fe R.R thirty seven (37) miles north of Albuquerque. The altitude of Sunbeam is near seven thousand (7000) feet. Colla Canon is a deep, steep sided trench about the center of the mineralized district and it furnishes the lowest point of attack on the ore bearing, mineral veins of the district.

We find here two principal main or mother veins running nearly due north and south, together with connecting cross veins. The east vein dipping to the west known as the Washington vein and the west vein dipping to the east known as the Lone Star vein. There is another important vein dipping to the west known as the Albemarle vein, running in a south westerly direction from or near to the Lone Star Mine on the west main vein into Peralta Canon a distance of nearly two miles. This vein at the Albemarle Mine produced more than One Million Dollars (\$1,000,000.00.) but it will not be further described here as its general features are in every respect the same as the Washington and Lone Star veins.

From Pino Canon, north, the two veins are united in one large vein. From Pino Canon, south, they are divided into two separate veins by about six hundred (600) feet of surface ground, until at a distance of one and one half miles or thereabouts, Colla Canon is reached. To the south from this canon, an extrusive eruption introduced an apparent core of rhyolite called Peralta Peak and forced the east vein some distance further to the east. After losing the influence of this eruptive force, the east vein in its southerly course unites with the west vein near Peralta Canon to again form one large vein from there to the south. (1)

The united mother veins can be traced for a long, very long distance in a nearly direct line but it does not carry values everywhere, that cannot be expected. The intersection of the main and cross veins and greater depth will expose larger values. The continuity of the main veins insures extension to unknown depths.

In the course of the veins to the north all geological evidence found in the district is fully exemplified. The axial base of the mountain was in all probability, granite. Upon this was superimposed some stratified cretaceous sandstone now altered to quartzite, the evidence of this is not very extensive, as it was afterwards broken up by an intrusive eruption or seismic disturbance and much of it eroded. This was followed by the extrusive eruption of the rhyolites varying in ascending order from the hard slaty, clink stone, phonolitic variety to the soft pumiceous tuff and more dense tuff conglomerates. Following this there is a period of intrusive eruption of mineralized andesites, monzonites, epidotes &c, &c that fractured and broke up the overlying rhyolites in the vicinity of and covering the mineral ore bearing veins ready for the erosive action, that in the presence of abundance of water afterwards took place. The large quantities of light, spongy pumiceous tuff as rounded gravel now found in various sheltered spots leaves no question open as to this fact. Apparently there was little or no erosive force among or upon the mineral bearing veins outside of the deeper gulches and the summits of the higher hills. These are of a later date. (2)

The principal work at Sunbeam is an attack upon the east vein, from the lowest possible point of its course, north. The same description will apply to the west vein without any serious variation.

At the tunnel portal there is much rhyolite interspersed with quartz croppings. In the tunnel the vein of more or less quartz for fifty or more feet is now vertical with a fine gouge or selvage of a foot or more of grey clay. On this hanging wall side late work has opened up a body of mineralized with iron pyrite, ore coming in across the breast. From near the portal east of north near two hundred (200) lineal feet a cross cut has been driven through an immense deposit of mineralized with iron pyrite, andesite or birds eye porphyry. This has not now any



evidence but from its mineralization, its iron capping with some copper in other places near and its general appearance, it will in my opinion be in depth a producer of disseminated copper. The cross cut tunnel appears to be approaching another large ore vein to the east, the course of which is at present uncertain.

From the portal to the north within a distance of two hundred (200) lineal feet there is other ore croppings, followed by a space covered with tuff gravel &c. At about one thousand (1000) lineal feet from the south end line of the Sun claim, an open cut exposes the vein with much calc spar as well as quartz, from thence on some two (2) or three hundred (300) lineal feet the vein is still traceable with quartzite on the surface and on the west side. Upon the ridge much work has been done and a cross vein intersecting the main vein, with considerable strong iron capping followed. Still going north, work, showing good ore has been done in many places until the Washington Hill is reached.

This tunnel was designed as a trunk line of entrance and exit for the ores of the whole district, as well as a drain for the water found in the mines to the north, to be utilized in Colla Canon for milling and other purposes.

The tunnel property includes eight (8) mining claims viz. The Sun, The Sun Shade, The Sunset, The Sunlight, The Venture, The Southern Cross, The Old Cabin, and The Twin Peaks all located solely for their mineral bearing or ore producing value. Some houses, blacksmith shop, tools, rails, cars &c. All the claims have much large pine timber. A road to the R.R. has been constructed. Tunnels, drifts and other mining work will give a total of near two thousand (2000) lineal feet.

All previous work points to an ore value of at least Ten (10) to Fifteen Dollars (\$15) per ton. The value being evenly divided between silver and gold.

The treatment for the extraction of the values is very simple. Fine grinding and leaching with cyanide of potassium will save a very large per centage, possibly ninety five (95) per cent or better of the value.

Both mother veins have produced largely from their northern extremity, south, but deep work has not been prosecuted. The rich surface ores were mined assorted and shipped to the smelting works, some running as high as One Hundred Dollars (\$100.00.) per ton by the car load. The money from the surface ores was absorbed by ----- or was expended in useless surface improvements and luxuries instead of penetrating to greater depths for what in my opinion will be found to be high grade ore. Evidences of this are and have been plentiful.