

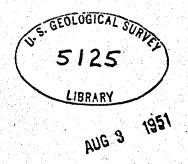
Nevada.

White, A.F., 1871,

THIRD BIENNIAL REPORT

OF THE

STATE MINERALOGIST. for 1869-1870



First report-for 1866 - 710 Elko Countie, Second " - 1867-1868 - " " 11 J

Before Mar. 5, 1869 - See Lander County.

ELKO COUNTY.

This county was organized by an act of the last Legislature from territory formerly included in Lander county, and is in the northeast corner of the State. Along the Humboldt river and its tributaries and about the head of the Owyhee and the tributaries of the Snake river, there are sections of agricultural and meadow lands. Generally the country is mountainous and elevated, and consequently the climate is colder than in many other parts of the State. The elevation of Elko, the county seat, is 5,030 feet above sea level. That of Mountain City, in Cope district, is 5,045 feet—probably two of the lowest points in the county. The mountains and country generally in the north and eastern parts of the county afford fine grazing facilities. Bunch grass and other feed is abundant. As far as has been tested, wheat, barley, indian corn, potatoes and the hardier vegetables do well in favorable localities. Timber is not generally abundant. The prevailing varieties are the nut pine, mountain mahogany in small quantities, some juniper and an occasional growth of inferior fir, white and yellow pine.

The popular vote of Elko county at the last general election was one thousand, two hundred and thirteen. There is a prosperous public school, and a Methodist and Presbyterian church at the county seat. Public

schools are also maintained at Carlin and Toano.

MINERAL HILL DISTRICT.

A party from Austin discovered the mines in this district about the 1st of March, 1869. The district was not organized, however, until the twenty-fourth day of that month. It is on the western slope of the Sulphur Mountains, which is the first range west of the Diamond Range, and connects with it a little south of Spring Valley District. There is a supply of wood and water in the district. Grass covers the hills. Pine Valley, a few miles west (called Garden Valley further south), afford some meadow land, and Pine Creek, which rises and sinks by turns, as it passes along the valley, can be used for milling purposes. The mineral belt is about two miles long and probably half a mile in width. It covers a hill nearly disconnected with other hills. Its course is north and south. The country rock, near the summit, is limestone. It overlies a dark calcareous slate, which shows at the base of the hill, especially on the northern end.

SILVER QUEEN.

Located June 7th, 1869. One thousand feet are claimed. Course, tearth: width, undetermined. A cut opens the mine to the depth of the stylest, and follows the ore seventy-five feet south: Theore is found

in seams and bunches through vein matter. It carries galena and some iron, with silver.

MANHATTAN.

Located July 11th, 1869. Eighteen hundred feet are claimed. A shaft follows the ore to the depth of twenty feet. The ore has 70 per cent. of galena and carbonate of lead. Assays show \$260 per ton, in silver.

VALLEJO.

Located July 21st, 1869. Six hundred feet are claimed. From the face of the hill, an open cut runs into the hill and, with a shaft, opens a fine body of ore. There are intruded masses of limestone. The ore is chloride, of a very high grade. Selected, it yields \$250 per ton.

ALHAMBRA.

Located August 16th, 1870. Six hundred feet are claimed. The ore lies irregularly, and, with the country rock, is much broken. It has the appearance of being a slide or overlap from some other vein. The ore is of a very high grade, yielding from \$100 to \$250 per ton, by assays.

MARY EVA.

Located August 2nd, 1870. Six hundred feet are claimed. A shaft, thirty feet in depth, and an incline, eighty feet from the bottom of the shaft, shows a body of vein matter about nine feet in width, with seams and bunches of ore interspersed, especially near the east wall which has a clay lining. The ore is very high grade. Specimens assay \$400 to \$500 per ton.

MAYFLOWER.

Located May 9th, 1870. One thousand feet are claimed. A shaft fifty feet in depth, and a drift south from the bottom sixty feet, shows a body of ore. It was cut by the shaft at the bottom. The drift runs through vein matter without finding the walls. About 40 tons of ore have been extracted. It carries a stain of copper, and a trace of gold.

STAR OF THE WEST.

Located July 1st, 1869. Four hundred feet are claimed. Dip of vein matter, east 50°; width six feet. An incline follows the vein to the depth of sixty feet. A level runs fifteen feet each side of the incline at the bottom, on the vein. Six and a half tons of ore closely selected, yielded by mill process, \$940 per ton.

LIVE YANKEE.

and foot are claimed. An open

tons, which by mill process yielded \$555.75 per ton. A tunnel from the face of the hill intersected the vein at a perpendicular depth of hity feet. A drift from the point of intersection follows the vein north fifteen feet. The vein is twelve feet wide, and dips east 50.

The Mary Ann, Give Out, Maggie and Great Republic, all located in June and July, 1869, and opened to the depth of from twenty to forty feet, show extensive bodies of ore, varying from \$200 to \$500 per ton, as

selected.

The Austin, located on the 24th day of June, 1869, is opened in several places by open cuts, to the depth of twenty, thirty and forty feet, and a large body of ore is found. It varies in width, but is generally about ten feet wide. It stands nearly vertical. At places a wall is seen of decomposed quartz and limestone, colored with oxide of iron. The ore carries copper and some galena, and is generally of good character, yielding about \$200 per ton, selected.

SPENCER.

Located June 28th, 1869. Eight hundred feet are claimed. This mine is opened by open cuts, and shows a fine body of ore, yielding about \$100

per ton. It dips west 60°.

The North Pole, Last Chance, Western Slope, Lost Lead and Crown Ledge, all located in June and July of 1869, and opened to various depths by cuts, show fine bodies of ore, yielding from \$40 to \$350 per ton, selected. Ore from the Last Chance, closely selected, yields \$304 per ton in silver, and \$42 per ton in gold. It all carried galena and carbonate of lead, some arsenic, iron and copper stain.

The Bullion, Thunder Storm, Wild Horse, Lost Ledge and Big Sandy, all located in July and August, 1870, and all opened from thirty to fifty feet, show fine bodies of ore; yielding, when selected, from \$75 to \$300 per ton. Ore from the Wild Horse, carefully selected, assayed over \$790 per ton. The ore in these mines, as in most others in this district, is found in seams and bunches, through extensive bodies of vein matter. It is a chloride.

GRASS VALLEY TUNNEL.

Located in March, 1870. One thousand feet are claimed, as an extension on all ledges in the northern part of the hill. The tunnel is driven in a southwesterly course from the base of the hill, two hundred and fifty feet, about two hundred feet below the surface. It passes through calcarcons slate all the distance. A dyke filled with quartzose rock was cut, and two or three seams of quartz from two to nine inches in width.

The Mineral Hill Milling Company's mill has ten stamps, six Wheeler's pans, three settlers, an engine of eighty-horse power, a Stadfeldt furnace, and capacity for reducing fifteen tons of ore in twenty-four hours.

Four miles north of the district there are a number of boiling springs.