

AT BALDY CAMP IN NEW MEXICO

The Aztec a Heavy Gold Shipper



A Panoramic View of Baldy Camp, New Mexico, Showing Mines and Mill and Excellent Housing Conditions of the Aztec Gold Mines Company.

The discovery of large and rich new ore bodies by the Aztec Gold Mines Company and others now operating at Baldy Camp in northern New Mexico, together with the fine shipping record from the Aztec mine the past year, has led to a strong mining revival throughout the Baldy Mountain region and a number of strong companies are now active, in both lode and placer mining.

Shipping returns of \$124,245.20 for gold bullion sent by the Aztec company to the Denver mint from August, 1922, to June, 1923, have called attention far and wide to this rich old district as an attractive field for development along the lines of the most modern prospecting, mining and reduction methods.

Baldy camp is located at an altitude of 10,000 feet on the eastern slope of Baldy Mountain, only eight miles from Ute Park on the Santa Fe branch line from Raton, and is favored with a mild winter climate, an abundant water supply for milling and domestic use, ample timber for mining and fuel purposes, and other natural resources something of which may be seen in accompanying pictures.

Five Miles of Development

The well known Aztec mine, which was discovered and operated in the early '60's by Matthew Lynch and Tim Foley, who took out a fortune for themselves, and which has been worked at a profit by a number of companies since their time, by Dutch and English interests among others, has a production record of many millions and shows no less than five miles of underground workings, namely, tunnels, drifts, and raises, none of which are below the depth of 300 feet on the vein. The principal ore bodies developed to date are within a length of some 1,200 feet, and show a width of two to thirty feet, yielding consistent values of \$5 to \$70 per ton as run over the plates, and with occasional paystreaks and chambers yielding quantities of high grade, rich in wire gold.

Records of the mine show many shipments that brought as high as \$20,000 per ton, and long mill runs that averaged \$68 a ton saved on the plates. In one four-year period, prior to the period of litigation which arose over this prize property in 1872, a production of \$1,500,000 was realized.

Perfect drainage is afforded by the tunnels, and air conditions are good throughout the workings. It is estimated by experts who have made a thorough study of the ground to the point of steady production.

and vein system that so far not more than one-fifth of the mineral area of the Aztec vein system has been developed.

Ore in Sedimentary Formation

Neither the geology nor the metallurgy are to be considered complex. The veins lie in blanket form between sandstone and shales, and with a dip of approximately 20 degrees from the horizontal.

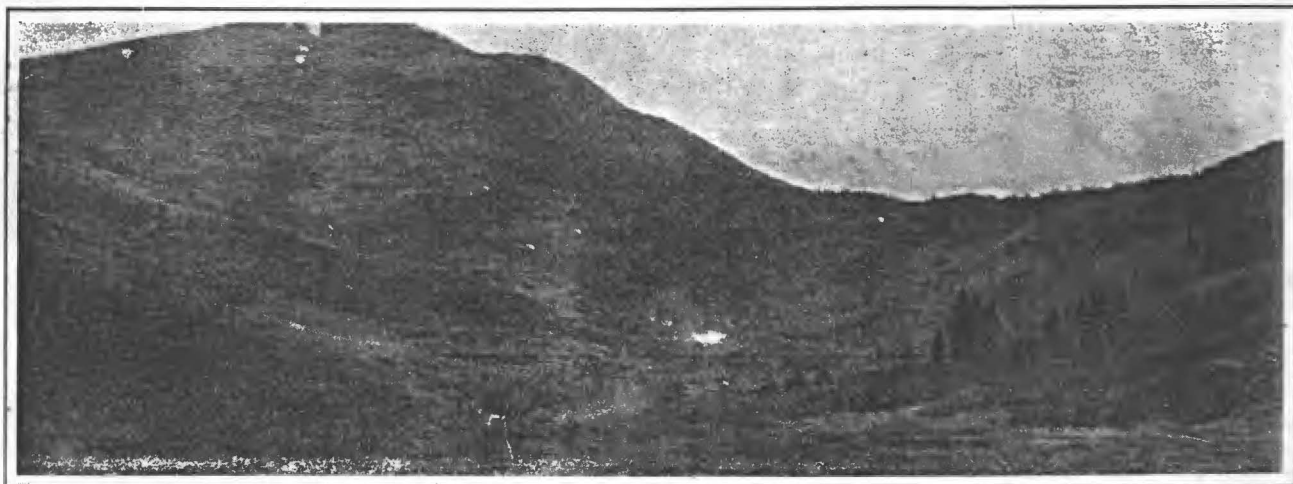
The ores are metamorphosed sand stones and carboniferous shales, also talcs created by the grinding of the two surfaces. In places the shales show some oils, but that condition is not regular enough to hinder in the milling. The carbonaceous matter, however, has interfered seriously with all attempts at cyanidation, but fortunately, the ore can be very successfully treated by amalgamation and concentration—eighty per cent of the gold can be recovered by amalgamation, and an additional from seven to ten per cent by table concentration. The absence of sulphur and zinc makes this a good free-milling ore.

New and Modern Mill Planned

The property was formerly equipped with an old type, light weight stamp mill of small capacity, and for that reason any ore below \$20.00 per ton in value was discarded. The result was that thousands upon thousands of tons of lower grade ores were thrown over the dumps, "gobbed" in the mine as stope filling, and blocked out and left standing.

The present company has designed a mill, based on the result of considerable study of ore characteristics, and to be electrically operated and in every respect up to date. The power plant will be eight miles below on the railroad where coal is to be had at the bottom figure. The result should be obvious, especially so in view of the fact that the Aztec mine has thousands upon thousands of tons of ore that will run upwards of five dollars per ton, as well as large reserves of a much higher grade, together with plenty of room for developing new ore zones.

An elaborate and complete system of sampling two ore dumps containing eighty-five thousand tons, went to show gross values of from nine to fourteen dollars per ton that with the new mill should net around one-half million dollars profit. These large dumps and several other smaller ones alone will keep the mill going for several months, during which time the mine workings would be developed.



Southern Slope of Baldy Mountain. Baldy Camp is seen near Center and just above it is Extensive Property of the Black Horse Gold Mines Co.

From the present indications it will require a score or more of years to handle the ore already known as readily available in the Aztec mine, a large portion of which may be classed as high grade, and all free milling gold ore, exceptionally easy to mine and to treat, in no sense refractory, and under the present direction with the proposed up to date appliances for handling the ore, satisfactory results are assured. At several places there are bodies of milling ore from 2 to 8 feet wide in sight, and two 3-foot pay streaks show values of \$49 to \$235 to the ton.

A Complete Assaying Plant

Plans for the new mill are now well under way, a modern amalgamating-concentrating plant that will have a daily capacity of 250 tons. It will incorporate the use of two Lane slow-speed Chillian mills, one ball mill, Senn Batea amalgamators, a classifying system, and table concentration.

Electric power will be brought from the proposed power plant at Ute Park over a company line that will supply

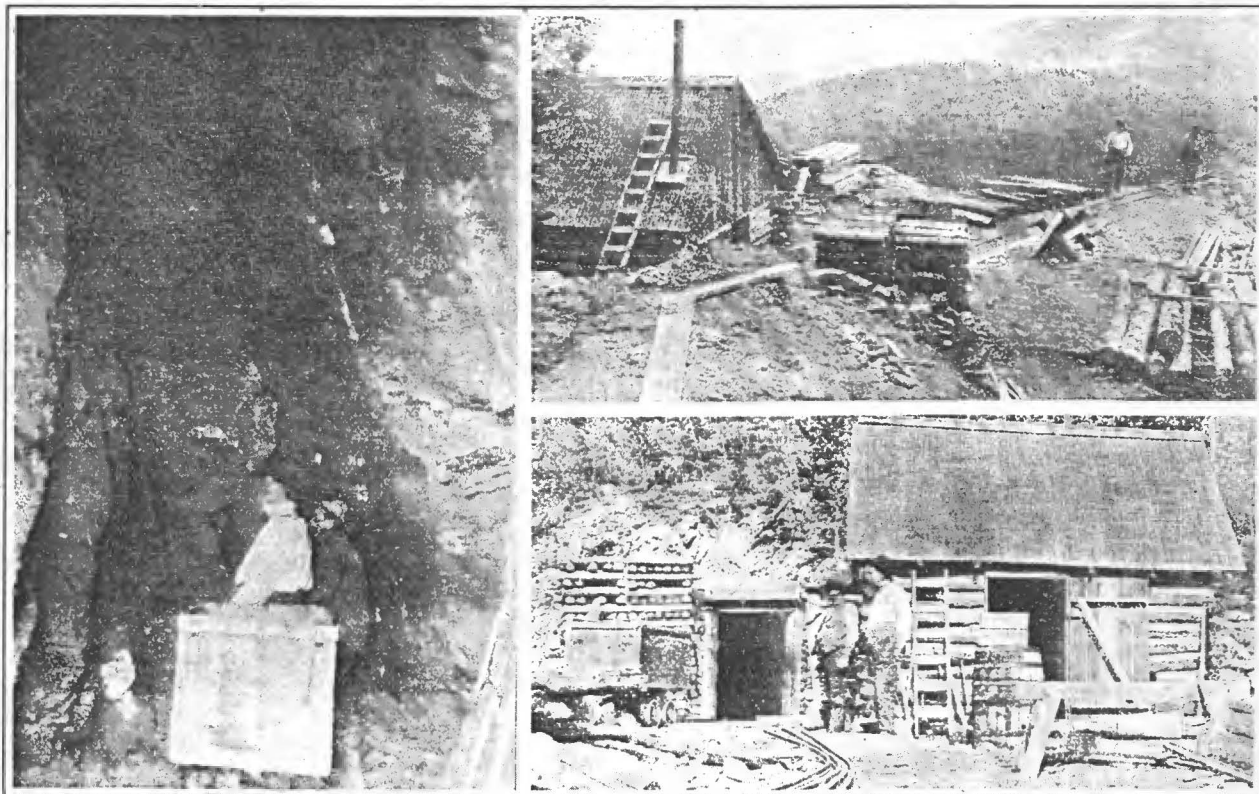
lights and power for the whole camp—as well as for the mine and mill.

Not least among the Aztec company buildings, shown in accompanying photograph, is the assay laboratory, furnished with motor, crusher, pulverizer, oil furnace, retort furnace, melt furnace, button balance, Ainsworth pulp balance, balance for wet assaying, and other modern equipment. M. W. Gorman, assayer, states that they make their own cupels, and as for the bullion, it is melted into 250 oz. and 500 oz. bars for shipment to the mint.

The Black Horse Mine

Rich Gold Measures Developed

Another very active property at Baldy camp is the Black Horse group, adjoining the Aztec and sharing the natural



At Left—An Interior View of Large Ore Reserves in the Black Horse Gold Mine; at Upper Right—the Black Horse Dumps at Portal of Upper Tunnel; at Lower Right, Portal and Shops of Upper Tunnel. A New Tunnel is now being started on the Lode to Undercut Present Workings 800 Feet.

facilities of the Baldy Mountain region, likewise the advantages of good roads and the nearby railway.

The Black Horse property comprises five claims covering a length of 4,500 feet along the vein system and a mill site on Black Horse Creek, a total of 72½ acres all thickly timbered with pine and spruce trees that promise an ample supply of mine timbers for years to come.

Two Parallel Veins

The Black Horse vein system lies just below the old Mystic lode—the original discovery of the district—and consists of two separate parallel fissure veins that range from two to six feet in width and are found about 90 feet apart the full length of the property.

Development work to date includes 3,000 feet of drifts and stopes on the veins, radiating from the main shaft which is 350 feet deep and has workings on four levels. Estimates of conservative engineers place the value of development, equipment and roads at not less than \$250,000.

Strictly Free Milling Ore

The Black Horse ore is strictly a free milling gold ore, free from sulphur and zinc, the prevailing values showing \$10 to \$100 a ton recovered on the plates, and assays of samples from several thousand tons of dump ore indicate large profits to be realized from treatment by modern milling methods.

Grab samples taken from the veins proper and dumps at intervals from October, 1922, to April, 1923, and assayed by Dearden and Gorman, show values as follows:

Number	Oz. Gold	Value per Ton
No. 1—Dearden	3.8	\$65.14
No. 2—Dearden	1.8	28.00
No. 1—Gorman58	13.80
No. 2—Gorman52	10.40
Whole Vein—Gorman	1.74	34.80
Dump No. 1—Gorman	4.32	86.40
Dump No. 2—Gorman	4.80	92.00
Old Mill Concentrates		23.20

Lower Tunnel Planned

This property is reported by engineers as ideal for tunnel operations and it is now planned to drive a lower tunnel that will undercut present workings some 900 feet, affording backs for overhead stoping as well as efficient drainage and ventilation.

Since taking over the Black Horse group the new Black Horse Gold Mining Company has rebuilt the bunk and boarding houses and shops, and has cleaned out and re-timbered the mine workings for a length of 950 feet, at the same time exploring the ore reserves. One stope measuring 350 feet in length and 60 feet in height, shows three feet of ore stated to average \$8.50 to the ton, making \$40,000 worth of milling ore in sight in this one place, and another stope shows an ore body 110 feet long by 80 high and three feet wide that assays \$10 a ton, so that not less than \$60,000 should be taken from these two stopes alone.

Officers and Directors

W. T. Emberton of Aguilar, Colorado, is president of the Black Horse Gold Mining Company, with George M. Tombling of Trinidad as secretary, and B. B. Sipe, also of Trinidad, as treasurer. Other directors are: Emmett A. Clements of Trinidad, Charles Dunham of Tulsa, Oklahoma, and Stanley O. Hampton, of Baldy, New Mexico, who is in charge of mining operations. The company is capitalized in the sum of \$1,000,000, par value of shares being \$1 the share, with 750,000 shares in the treasury and 250,000 shares outstanding. The property was secured by Mr. Tombling from the Maxwell Land Grant Company on lease and bond and was transferred in turn to the Black Horse Company.

The Baldy Mountain Placer

A new Ferguson amalgamator of 500 yards daily capacity and a Stearns portable steam-shovel have just been installed by the Baldy Mountain Placer Company on their placer ground, which comprises 170 acres just below the Black Horse and Aztec mines. These beds have been

worked profitably for many years and should now prove a bonanza when handled by modern methods.

Harold G. Nichols of Walsenburg is president of this placer company, James K. Hunt of Raton, superintendent, and Thomas Lamb of Denver, manager. Twenty men are employed.

There is much open ground for both placer and lode mining in this district as well as at Elizabethtown, just over on the west slope of Baldy Mountain, and the activities of these and other companies and mineseeers this season point to a genuine and permanent rehabilitation of the region made possible by capitalized development.

PAGOSA SPRINGS SURVEY UNDER WAY

The topographical survey of the southeast part of the San Juan Mountains, known as the Pagosa Springs Quadrangle, is progressing nicely under the general supervision of Glenn S. Smith, topographer in charge of the Rocky Mountain Division. Field work commenced July 10 on the Pagosa Springs quadrangle, with B. A. Jenkins in charge, and Lee Morrison, formerly with the International Boundary Commission, as assistant.

When the topographical survey is completed, the geological survey will follow, and it is expected that the work on this quadrangle will be completed so that a complete geological map of that district can be issued by the government early next year.

The work in this district is awaited with much interest by mining men, as the mineralization seems promising and there are known to exist seven major faults and consequent minor faulting, with favorable conditions for the deposition of mineral in commercial quantities.

Work was also commenced on the Evergreen quadrangle, which is to be tied into the Georgetown quadrangle, and a new map issued including both under the name of the Denver Mountain Parks Quadrangle. This work is in charge of H. H. Hodgson and seven assistants from Washington.

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