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STATE OF NEVADA

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Bureau of Mines

BOX C, UNIVERSITY STATION

MACKAY SCHOOL OF MINES
RENO, NEVADA

October 3, 1947

EXTRACTS FROM "REPORT ON LEADVILLE MINE",
WASHOE COUNTY NEVADA
by
John A. Burgess, April 8, 1926

LOCATION: Township 37N, R23E, MDM, 38 miles northerly from Gerlach, Nevada.

HISTORY: Located in 1915 - purchased by John Harnan - sold to Leadville Mining Company in 1920 - destroyed by fire 9-2-25.

PRODUCTION RECORD: 1920-26 inc. - tons, 47,292 - tons concentrates, 7,491 - concentrate assay, 90.6 oz. silver, 11.5% lead, 21.7% zinc, 0.05oz. gold, 2% copper, 25% sulfur, 15% insoluble, 3% lime.

GROSS PRODUCTION: 1,000,000 oz. silver - 3,500,000 lbs. lead.

GROSS VALUE: $1,150,000, net, $948,000.

AVERAGE MILL ORE: 21 oz. silver - 3½% lead - 5½% zinc. 1926 - 300 tons ore shipped to smelters - 90 oz. silver - 11½% lead - 21.7% zinc.

AVERAGE CREW: 50 men - about 30 tons a day - miners and mill men pay, $6.00 a shift.

AVERAGE COST: Mining, $7.80 - mill, $2.61 - general, $ .82 - total, $11.00.

GEOLOGY: Country rock, andesite, overlain by tuffs and breccia and glassy flow rock. The andesite, intruded by large dikes of diorite porphyry containing large crystals of feldspar. These dikes

outcrop as craggy buttes about 50 feet thick. Two of these dikes, about 600 feet apart, "approach the Leadville ore body from the southeast, then bend along the vein to the west and crossing the vein continue in a northwesterly direction."

THE LEADVILLE VEIN: The Leadville ore body lies in a steep fissure with an east-west strike and dip to the north. The fissure may be one of a number of parallel fissures, which together would form a fault system. One parallel fissure to the south forms the South or Swingle Vein, with the chance that other parallel fissures exist. The ore shoot extends for about 900 feet horizontally along the drifts and has a steep pitch to the west.

The width of the main ore body as stoped for milling purposes was 5 to 4 feet, in some places 6 feet. If mined selectively as by lessors the width would be 1 to 5 feet. A raise on the 800 drift shows solid sulphide ore averaging 8 inches in width.

THE SWINGLE VEIN: Same type as the Leadville Vein and certainly containing small amounts of ore. So far as opened up it is smaller and of non-profitable grade but worthy of further exploration. A crosscut tunnel of 400 feet cuts the vein at a depth of 140 feet and east and west drifts show a well defined fissure containing ledge matter.

MINE WORKINGS: The main workings on Leadville Vein are a haulage tunnel of 2000 feet in length with a two compartment 800 feet winze having a 75° inclination. The head of this winze is 250 feet below the vein outcrop. In 1926 the 700 level was being mined - the 800 being opened up.

(Aparently the vein was stoped by open stopes and stulls

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and apparently the drifts needed timber sets and judging from his report caving ground makes the workings inaccessible in time).

POSSIBILITY OF FINDING ORE WEST OF THE MAIN ORE SHOOT: "Because of caving in of the old drifts, I was unable to see the way the old ore shoot terminated to the west. I do not think the shoot is cut off by a fault. The terminus seems more like the crossing of a dike. One of the lower level drifts should be driven west to again expose whatever it is that terminates the ore shoot, and there is at least a chance that ore might be found extending beyond the break."

WATER: The mine makes very little water. Three springs furnish 30 gallons a minute for milling. A ball mill was used for grinding the ore for flotation. (No fineness of grinding is given.)

CONCLUSIONS: The shaft should be sunk to the 900 and 1000 foot levels as required. "I should expect to see the ore shoot continued to these levels and deeper."

"The Leadville Mine has had a wonderfully consistent ore shoot from the surface to the 700 foot level. The production by the Leadville Company was made from between the 220 and 700 foot levels. (Of the shaft, a vertical distance of 600 feet.)

"There is no apparent reason why the ore shoot should not continue with equal strength to considerably deeper depths; and there is the additional chance of finding ore on parallel fissures as previously mentioned."

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