

DISTRICT	Potosi
DIST_NO	3680
COUNTY	Humboldt
If different from written on document	
TITLE	Tour of Pinson Ave Mine; Potosi District; Humboldt County, Nevada
If not obvious	
AUTHOR	Ivosevic, S; Reece, L; Miller, B.
DATE OF DOC(S)	1976
MULTI_DIST Y / (N?)	
Additional Dist Nos:	
QUAD_NAME	Adam Peak 7 $\frac{1}{2}$ '; Red House Flat West 7 $\frac{1}{2}$ '
P_M_C_NAME	Pinson Mine; Homestake - Goldfield Corp. Joint Venture
(mine, claim & company names)	A Zone; Ogoc - Pinson Pit
COMMODITY	Gold
If not obvious	
NOTES	4865 Property summary; correspondence; geology
	3 pgs

Keep docs at about 250 pages if no oversized maps attached  
(for every 1 oversized page (>11x17) with text reduce  
the amount of pages by ~25)

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Memo by: Stanley W. Ivosevic  
Date: May 16, 1976  
Subject: TOUR OF PINSON AU MINE, POTOSI DISTRICT, HUMBOLDT COUNTY,  
NEVADA

Au

Nevada

Humboldt County

POTOSI DISTRICT

(Vic. Granite Creek, Osgood

Mountains)

Sec. 32, T. 38 N., R. 42 E.,

M.D.B.&M.

Examined May 15, 1976  
by S. W. Ivosevic  
with Larry C. Reeve,  
Cordex Mine Geologist

Introduction: The Pinson mine is on an 8 sq mi block of claims and leases held by Cordex. Cordex's most significant ore body there is the Pinson "A" zone, nearly contiguous with and slightly northeast of the old Ogee and Pinson pit. Approximately 100,000 tons of ore were taken from the old pit, which ore body probably was discovered in outcrop. The present mine plan calls for taking the pit walls.

Subcropping beneath the alluvium, the "A" zone is blind. A Homestake-Goldfield Corporation joint venture (?) drilled two diamond drill holes which narrowly missed the "A" zone. Whit De La Mare also did some prospecting there but narrowly missed it with his drilling. Cordex discovered the "A" zone with the last hole of a 17 hole program, most around the old pit, conducted by John Livermore and Pete Galli.

Subsequently, they developed an ore body there of 1.7 mill tons of 0.2 troy oz/T gold ore. They have revised the figure to 1.7 oz/T to allow for an assumed 10 percent dilution by masses of unmineralized rock within the ore zone. The ore body can be mined at a stripping ratio of 7:1 by extending the rim of the pit exactly to the crest of the ridge of the hill to the southeast, beneath which the "A" zone dips 45°.

The Pinson "A" zone is tested with a 210-ft-long adit, which has a total of 333 ft of workings. It slants through the ore zone from the hanging (north) wall at the portal southwestward to the footwall at the face. A reverse circulation method of drilling evaluates the ore effectively. A large portion of fines are recovered thereby which ordinarily are driven into cavities in the rock. Dilution by fines from caving and reaming in soft low-grade horizons are offset by greater recovery of high-grade jasperoid.

Metallurgical testing has shown that less than 80 percent recovery can be expected by heap leaching, because much of the very fine-grained gold is encapsulated in silica. Recovery can only be improved by grinding finer than minus 320 mesh in which case a slurry situation is involved. The mine is operable at a minimum price of gold of \$150/oz.

Geology: (The geology is more complex than shown in Hotz and Willden, 1964, U.S.G.S. Prof. Paper 431, pl. 1.)

The Ogee-Pinson pit is on an ore body localized by the structural preparation at the intersection of a NNE fault and a NE fault. These are in the hanging (east) wall of the throughgoing Getchell fault. The NNE fault reflects the trend of the Getchell fault to that point from the north. The NE fault represents the trend of the Getchell fault beyond



to the south.

The "A" zone occupies the full width of the fractured zone of the NE fault. The "B" zone is <sup>in the fault</sup> beyond to the northeast. An assessment hole farther northeast just nipped the corner of the hanging wall, intersecting a little mineralization. At the time of this examination, a hole was being drilled a mile northeast of the mine and intended to intersect that mineralization well into the hanging wall.

The Pinson "A" zone is 1,000 ft long, extends about 300 ft down dip, and is 60 ft wide. Bedding is generally preserved in the ore zone. Post-ore movement on the host fault brecciates the ore and cuts it internally. Reeve notes that this is distinguished from other disseminated gold deposits in that it is predominantly structurally controlled.

The ore is in thin intercalated beds of siltstone and argillaceous limestone of the Comus Formation in the hanging walls of the host faults. Horizons of (white) tremolite- (locally) garnet calc-silicated horizons in the Comus Formation are unmineralized; so is a calc silicate horizon at the bottom of the ore in the north end of the Ogee-Pinson pit. (Presumed) cordierite porphyroblasts in the Preble Formation in the foot wall distinguish this unit from the Comus Formation. The black, "carbonaceous" appearance of the Preble Formation here is not unique to the ore zone; it is the prevailing habit of the Formation.

Mineralization: The ore is micron-sized gold with very fine-grained pyrite. Beneath the bottom of the ore zone the structure continues as a narrower zone of marcasitic material. Both are supergene leached; no unoxidized ore is present.

Hydrothermal alteration includes jasperitization, kaolinization, and leaching of some limestone in the Comus Formation and includes bleaching of the Preble Formation. Slips of clay gouge bound the ore zone and also occur within it in places, in one place partially localizing the leached limestone. Highest gold values are associated with jasperoid, particularly the burgandy variety. (Note that the outcrop of jasperoid at the old pit is only a scab.) Kaolin occurs as interlaced 2-mm seams in fractured jasperoid. Hydrothermal leaching of limestone leaves a coarse, open, rhombic network of fine septa of silica.

The ore is thoroughly oxidized by unencapsulated pyrite. Apparent supergene leaching along fractures in parts of the ore zone leaves coarse, bouldery structures which are very difficult to drill. The less mineralized rock, being unsilicified, is pulverulent and clayey, probably as a result of supergene processes.

The mineralized zone continues at least 3 mi southwest, in the hanging (east) wall of the Gatchell fault. It is covered with valley fill beyond that point. Anomalous gold occurs immediately south of the property, but nothing significant has been developed there. De La Mare regards an approximately 1,000-ft-diameter, circular area <sup>there</sup> of clay alteration, with associated shear controlled copper mineralization, as being a porphyry copper prospect.

References: See file entitled, "Patosi District, Humboldt County, Nevada".



HOUSTON OIL & MINERALS CORPORATION

Bruce W. Miller  
Mackay School of Mines  
University of Nevada  
Reno, Nevada 89557

Dear Bruce,

Enclosed is a copy of my report on the Pinson mine. It is from oral information from Larry Reeve during a tour permitted by John Livermore. I was not affiliated with any company at the time.

I enjoyed our conversations in Reno on June 27.  
Good luck on your thesis & gold report.

Wayne Ivasevic  
7/11/77