

Baldy, Ute Park, New Mexico.

July 31st, 1927.

Mr. Hunt,
Raton, N.M.

NM Mine File No. 461

My Dear Sir:-

I am an employee of the Maxwell Land Grant Company on the Aztec Mine property at Baldy, since last March. I have followed mine and mill work for 25 years. Geology, Mineralogy and survey mapping are my hobbies, all my leisure time, about 6 hours out of every 24, I devote to the study of the geology of this neighborhood, Baldy Mountain and its ridges, Black Horse, Aztec and French Henry, mapping cross sections, showing formations, intrusions, dikes, dips, faults and mineral zones, etc. particularly, Aztec Ridge. Being an employee of the company, I have assumed, naturally, that my interest in the geological formation of the company's property would meet with their approbation, hence have never applied for a special permit as any discoveries that I might make or any map that I may draw would be freely and with pleasure given to the company.

The Aztec Gold Deposit, is in some particulars unique, no known similar occurrence elsewhere, the nearest similitude are the "Beach Deposits" of the Yukon River at Nome, Alaska, which is in process of formation at the present time and the Witwatersrand formation in South Africa, an ancient river deposit.

THE ORE DEPOSITS OF THE AZTEC MINES.

The ore deposits are contained on the contact between two sedimentaries, a sandstone and a shale. Although these two sedimentaries lie in the same plane, they are unconformable, not of the same series nor same age.

Owing to a paucity of fossils in local sedimentaries I have been unable to determine their geological age, but assume that the regional formations are Laramie.

The underlying shale is ferruginous, and non-carbonaceous, practically barren of fossils. These shales were not deep sea deposits but probably were laid down in shallow waters, or at least tidless seas, later elevated ~~into~~ above sea level and eroded into a broad, undulating plain.

The overlying sandstone, argillaceous, non-ferruginous, is an estuary deposit of a stream from a placer region, emptying into an inland sea, and contains "flour gold" derived from the pre-existing placer region upstream.

The sedimentaries were broken into regional blocks and tilted to a general angle of about 20 degrees. Lateral pressure caused the sandstone with its burden of superimposed formations to slide over the upper surface of the shale. Rock friction developed contact metamorphism, sufficiently to give plasticity to the sandstone, permitting the contained placer gold to gravitate downward and redeposit in the hollows of the contact surface of the shale, where it is found today.

Maxwell Papers, UNM

On the surface in the vicinity of the mine are abundant examples of intrusions and regional metamorphism, but in the mine I found very little intrusions and only slight contact metamorphism. I have also failed to find in the mine (Aztec) any evidence of the pre-existence meteoric, thermal, or soluble circulating waters, that MIGHT have been an agent of ore depositions. Therefore I feel confident that the genesis of the Ores in the Aztec mines were derived directly from placer gold in the overlying sandstone.

I am also interested in the history of the region, pre-historic as well as modern, I find evidence that the aborigines obtained their gold from this region, from Moreno Valley and Ute Creek. I have no maps or literature pertaining to these subjects. there is none here at the mine. and I will appreciate the favor if you will inform me how and where I may obtain such, are there any old discarded maps or drawing at the Company's office that could be loaned me, also where can I get a copy of the pamphlet giving a short history of the Maxwell Land Grant, which I am told was issued some years ago,

Respectfully,

Don Harrington

millwright at Aztec Mill.