N. Nevada field trip (1932)-10- 0430 000 A. M. Smith + C. Stoddard 323) Item 4

Bald Mountain

Tungsten

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Water Canyon, in which is located the now defunct post office of Joy, courses westerly down Bald Mountain, White Pine County, and continues through foothills heavily wooded with Juniper and pinon, into the north end of Newark Valley. In a small tributary ravine on the north side of Water Canyon is located a group of claims owned by Al Dees, a seasoned old prospector of the district.

The formation consists of Paleozoic limestone sediments containing thin strata of shale and quartzite, and intruded both by monzonite porphyry stocks and sills. The area is crossed by faults, striking both north and west. Metamorphism has occurred on contacts between the igneous and sedimentary rocks, and such metaminerals as garnet, epidote and scheelite are found. Secondary mineralization has taken place along the faults in places, gold occurs; and erosion of these veins has formed the placers in the ravines.

A contact metamorphic deposit of scheelite in greenish altered limestone on one of Dees claims has a NE strike and dip to the southeast, conforming to the bedding of the sediments. Dees stated that numerous analyses had returned an average of about 2 per cent scheelite (calcium tungstate) from this ore, and at one point, near a short upper tunnel, it also contained \$7.00 in gold. Dees stated that the property had been examined and sampled by Primos Chemical Company of Philadelphia who found an average content of 2 per cent scheelite. A large area of the surrounding surface soil and gravel pans scheelite, which is said to be in sufficient quantity to interfere somewhat with placer mining, difficulty being experienced in separating fine gold from the heavy scheelite concentrata.

Mercury

Northeast of the tungsten prospect, distant 3 miles, and at an elevation of about 9,000 feet near the top of Bald Mountain, Al Dees has 3 mercury claims lo-

Bald Mountain, Mercury, continued.

cated. The metal occurs as cinnabar in brecciated limestone and quartzite, near a contact with a rhyolite intrusion. There is also opalite, and evidence of deposition and alteration of rock by former hot springs. Reports indicated that this may be a very good undeveloped prospect, but its isolation and the absence of roads may hinder development. Dees exhibited some very fine samples of cinnabar said to have been obtained from there.

Placer

Placer gold has been found in several ravines on the western slope of Bald Mountain. The principal workings were carried on in a southern tributary to Water Canyon, and are outlined by pits and gravel tailings beds extending up the ravine for about a mile. The first work was done by Chinese about forty years ago, with what results is not recorded. White men have mined in the ravine occasionally since, but no substantial production was made after the Chinese left.

The best and coarsest gold was recovered near the foot of the Canyon, at which point Chas. Bourne, mined in 1897, according to report, and recovered the equivalent of good wages. The channel is narrow and the gravel averages about 10 feet deep to bedrock. The scarcity of water has made placering difficult and the mining season short.

In the canyon at the Dees scheelite prospect there is also an occurrence of gold placer. The channel is narrow and the gravel about 12 feet deep to bedrock; the gold is finely divided, rather rough and angular, and mixed with scheelite.

Dees has prospected it somewhat, but the gold recovered to date has been little.

In a canyon immediately north of Water Canyon and parallel to it are gold mining claim locations owned by Pat Sullivan of Elko. Sullivan has placered a little of the top soil, but his principal work has been upon gold veins occurring in a reddish, iron-stained formation, where working alone, he still mines at times.

Bald Mountain, continued.

Silver and Gold

The best known property in the Bald Mountain District is the Bourne Mine, located on the southeast plank of Bald Mountain. It was discovered about 1894 by Charles Bourne, an eccentric prospector, who extracted a fortune in rich silver ore from a shaft, working only a few men. Bourne eventually lost his money and the mine, and in revenge blew up the shaft with a heavy charge of dynamite before departing.

The mine then came into the possession of Max Arnboldt, a well known farmer of Jiggs, Elko County, who started a tunnel to tap the ore bearing area beneath the shaft.

In 1931 Arnboldt leased the mine to George Brandt of Elko, who drove the tunnel ahead, and discovered a body of ore rich in both silver and gold. Using a 4-ton auto truck, Brandt has been hauling this ore to Elko, from where an occasional small lot is shipped to smelters. Shipments are stated to have assayed as much as 600 ozs. in silver and \$39. in gold per ton.

Wm. Moore, a farmer in Newardk Valley near the Bourne Mine, is said to have records showing that the Bourne Mine had shipped a total of \$65,000 in gold and silver from the years 1894 and 1896. One shipment of 15 tons during this period netted \$22,000.

The Nevada mine is located on a divide between Copper Basin and the Bourne Mine basin. According to F. C. Lincoln, it is credited with production of \$20,000 in silver chloride ore.

Copper

The Copper Basin mine is located very high up on the southeast plank of Bald Mountain. In the Seventies several claims were located, one of which was patented. A small amount of copper carbonate ore was shipped, but there is no record of the amount produced. The property is now said to be owned by Robt. Skaggs

Bald Mountain, Copper, continued. and George Brandt of Elko, Nevada.

The ore occurs in a lime-quartzite formation as a large vein following the bedding of the sedimentaries.

The Red Bird Mine is located in small hills on the north side of Water Canyon, and is owned by Jack Merritt of Elko. Merritt, although, disabled physically, extracted ore from surface workings for many years, by which means he supported his family. The ore is said to contain high values in both copper and gold.

Elko District

Bentonite

near (66)

A bentonite clay deposit is located about \(\frac{1}{4} \) mile east of the Jiggs-Elko road, 12 miles N. of Jiggs and 25 miles S. of Elko. It occurs in a low hill on the east side of Smith Creek. The formation consists of Tertiary—probably Miocene—lake sediments, principally clays, in which the bentonite is found as a stratum. Although the clay beds are broken and tilted at varying angles in many areas, at this place they lie quite flat.

Several adits have been run in on the bentonite bed, some 25 feet above the creek level, and loading bunkes were built. It was last operated in 1927 by an Oakland, Calif., company, which shipped several carloads from Elko to the coast. The bentonite is of good quality. Locally it is called mineral soap, and has excellent detergent properties. The property is owned by Richard Bellinger, of Elko, Nevada.