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(Mineral Co.)
56, 4N, 32E

Defender

The Defender property consisting of the Defender, Pine Crow, Vitamine, and Dunham's Dump, groups of 21 unpatented lode claims are situated 8 miles west of the abandoned camp of Marietta in Huntoon Valley and 21 miles southwest of Mina, the shipping point on the Hazen to Mina branch line of the Southern Pacific Railroad.

Rocks in the area consist of a series of folded and metamorphosed sedimentary rocks which have been invaded by granite. The metamorphic rocks are sandstone, limestone, and a feldspar-epidote-amphibole conglomerate.

Tungsten ore is exposed at a number of places along an eastward trending belt nearly 3 miles long. The ore croppings are limited to tactite lenses that occur in limestone on a granite contact. From east to west the ore shoots are referred to the Defender, Dough God, Pine Crow No.1, Pine Crow and the Denham's Dump prospects.

The Defender prospect on the east end of the belt consists of a dense garnet tactite body 200 feet long and 25 feet thick, that is bounded by granite on the north and east, by hornfels on the south and west. It is cut off on the west by a steeply dipping fault. The tactite is a replacement of a limestone bed that strikes N.60°W. and dips 40°S.

The Dough God prospect is ½ mile west of the Defender prospect. A 90 foot adit exposes a lense of tactite 45 feet in length and 2 to 3 feet in width. The tactite occurs in meta-sedimentary rocks that dip steeply southward. The Bishop Tungsten Co. milled 30 tons of ore taken from this adit.

The shipment assayed 0.82 percent WO_3, but the mill recovery was very low because of the fineness of the scheelite crystals. In this area parts of the garnet tactite contain fluorite.

The Pine Crow No.1 prospect, $\frac{1}{2}$ mile west of the Dough God, consists of a single cropping of tactite 10 feet wide, which is uncovered for a few feet long the strike.

The Pine Crow prospect is a wolframite-scheelite vein that lies several hundred feet northwest of the Pine Crow No.1 prospect. The vein occupies a steep west-dipping fault that strikes northerly at right angles to the tactite bodies in the main tungsten belt. The foot-wall is granite and the hanging wall metamorphic rocks.

The vein, consisting of 6 inches of quartz on the granite footwall is overlain by 5 feet of gouge and breccia. Scheelite and wolframite occur as high-grade streaks in the quartz and as nodules in the gouge. The quartz also contains small crystals of light blue beryl.

Samples taken from the various mineralized sections varied from 0.2 to 1.0 percent WO_3.

Production of tungsten has been small and only 100 tons have been shipped.

Desert Scheelite

The Desert Scheelite group of 5 unpatented lode claims situated on the east slope of the Pilot mountains about 20 miles southeast of Mina the shipping point.

Rocks in the area consist of limestone shale and conglomerates which have been intruded by granite. The sedimentary beds trend southwest and