

The Alpine property consists of 7 unpatented lode claims situated on the summit and west flank of the Nightingale Range. The mine is on the steep west slope of a northward-trending ridge at the head of Cowels Canyon,

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4 miles east of the dry bed of Lake Winnemucca. Lovelock, the nearest supply and shipping point is 65 miles northeast.

No production was recorded from the Alpine mine until the property was acquired on a lease and option arrangement by the Rare Metal Inc. in the early part of 1943.

Rocks in the area consist of granodiorite and a thick sequence of metamorphosed argillaceous and calcareous sediments. The metamorphic sequence includes thin-bedded quartzites, slate argillite, hornfels, limestone, marble, and fine-grained biotite schist. These formations have a general strike N. 35° W. and dip at steep angles northeast or southwest. These beds are engulfed or surrounded by granodiorite. It is possible the sedimentary beds exposed remain as a float block in the granodiorite.

Adjacent to the granodiorite contact the sedimentary sequence has been metamorphosed in a zone of varying thickness. Areas of schist and limestone are invaded by several granodiorite tongues parallel to the bedding, thus forming irregular-shaped blocks separated by tongues of granodiorite. A few aplite dikes cut the metamorphic rocks, and some of these dikes grade into quartz and silicated minerals carrying scheelite.

Post mineral faults of small displacement are exposed underground and on surface.

Scheelite mineralization occurs only in the tactite which is composed of quartz, garnet, and minerals of the pyroxene and amphibole groups. Occasionally small amounts of pyrite, galena, and zinc are found in the ore.

The mine workings and the open cut above, exposed a mineralized block

70 feet wide and 120 feet long which was mined to a depth of 70 feet.

Development openings consist of a 130-foot crosscut adit from which a series of drifts were extended northwesterly. From these openings raises were put up to facilitate mining ore from the larger surface pit. Near the northwest part of the mine, a winze inclined 73° was sunk to a depth of 50 feet below the haulage level. From the bottom of the winze, drifts were extended northwest and southeast. Underground development totalled about 1,000 feet. A few small cuts were excavated south of the main workings. No mineralization of importance was disclosed in these cuts.

Production from the mine amounted to about 47,000 tons from which 564,000 pounds of concentrates were obtained that contained 70 percent WO_3 .

The property has been idle since 1945.

Red Hawk

The Red Hawk property consists of 10 unpatented lode claims situated in the southeast part of the Eugene Mountains, about 7 miles by road or 3 airline miles north of the Nevada-Massachusetts mine at Tungsten. The mine is on the east side of the mountain, 100 feet below the crest of the divide between Pole Creek and Mill Creek. Mill City, the shipping point on the Southern Pacific Railroad is 15 miles by road south.

In 1917, the claims were owned by Nagle and Campbell of Winnemucca, Nevada. They drove a 40-foot crosscut, and from the face drifted 35 feet along a steeply dipping 4-foot ore bed and sunk a 20-foot winze, on ore. A 40-ton shipment was made to the mill at Toulon, Nevada, that is reported to have milled 2.5 percent WO_3 . About 40 tons of the same grade ore was

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