

<u>Mine</u>	<u>Location</u>	<u>Ownership</u>
4286 Crosby	Sec. 21, T. 24N., R. 24E.	Southern Pacific Land Co.
317 Wadsworth	Sec. 127, T. 20N., R. 23E.	Rare Metal, Inc.
313 Ellen B	Sec. 97, T. 16N., R. 20E.	W.S. Hill

*Washoe Co.*  
*S 21, 24N, 24E* **Crosby** *S of 286*

The Crosby property consists of 80 acres of deeded land situated on the west slope of the Nightingale Range about 10 miles northeast of Nixon and about 54 miles northeast of Reno, the supply center.

The 80 acres comprising the property are owned by the Southern Pacific Railroad Land Co. The acreage was leased to Fred Crosby and Carl Stoddard in 1942 for a period of 23 years. During the summer of 1942, a sub-lease was obtained by the Gold Hill Dredging Co. A few trenches were excavated along the mineralized sections of the tactite zone, but no ore was produced. In 1952, the Adaven Mining Co. sub-leased the property. Three scheelite-bearing tactite bodies were explored by open cuts and it is reported 1 shipment was made.

Dr. W.N. Makroff, a partner in the Cal-Alta Co., acquired a sub-lease in October 1953. The lower adit was extended and crosscuts were driven to explore the South ore zone. A raise was extended to a surface pit. Ore from this work was stockpiled.

A crosscut adit was driven into the North ore zone and from the face a drift was extended along the granite-tactite contact. A raise was driven to connect with a surface pit. From the top of this raise a small body of ore was mined.

It is reported 150 tons of sorted ore containing 1.23 percent  $WO_3$  was shipped to the Gatchell mill at Red House. \_\_\_\_\_

Early in 1954, work was started on the construction of a dry mill. This was not a successful venture and no concentrates were shipped.

Rocks exposed in the southern part of the property consist of marbleized limestone, hornfels and argillite that strike northwest and dip steeply northeast or southwest. Granodiorite underlies the northern part. A crescent-shaped body of tactite 750 feet long and about 150 feet wide has been formed along the contact between intrusive granodiorite and a calcareous sedimentary formation. To the west the tactite pinches out and to the east it is limited by a wedge of silicified aplite and a circular barren quartz plug about 750 feet in diameter.

The contact between tactite and the sedimentary rocks that are only slightly metamorphosed is faulted along most of its length. In the central part, the shear zone is about 50 feet wide, but only a few feet wide on the west end. Breccia fragments of mineralized tactite occur in the fault zone.

Small lenses containing scattered crystals of scheelite occur sporadically along the limestone-tactite and the granodiorite-tactite contacts. The largest lens mined occurred along the north tactite-granodiorite contact. Originally opened in a surface pit, it was later explored underground by crosscutting, drifting and raising. From the drift, a raise was extended 32 feet to the bottom of the ore body. The ore body was stoped for a length of 30 feet, a height of 30 feet and a 10-foot width. The scheelite mineralization occurred in narrow bands and close sorting was necessary to produce ore of shipping grade. The estimated



grade of the ore body was 0.4 percent  $WO_3$ , from which shipments averaging 1.23 percent  $WO_3$  were made.

The south ore zone occurred along a tectite-limestone contact. From this zone, a lense 30 feet in length, 3 feet wide was mined by open cut to a depth of 50 feet. Underground workings failed to find a downward extension of this ore body.

In the central part of the tectite body only scattered small low-grade sections occur along the contact.

Development openings on the property consist of a number of shall<sup>ow</sup>/pits and trenches, a 115-foot crosscut adit in the north area from which a 95-foot drift was driven southeasterly along the granodiorite contact. Exploratory crosscuts were extended from the drift, also a 32-foot raise to the ore zone. About 75 feet of sub-level drifting was done and the ore mined to surface.

Underground workings in the south ore zone consisted of a 94-foot crosscut adit, from which a 100-foot drift was extended along a weakly mineralized stringer 2 crosscuts 50 and 80 feet in length extending northeasterly from the drift into the tectite, and a 40-foot raise from the drift to the bottom of the surface pit.

The material mined in the stoped areas contained 0.4 percent  $WO_3$ .

#### Wadsworth

The Wadsworth property consists of approximately 400 acres of deeded land situated in the southern Virginia Mountains 4 miles west of Wadsworth on the Truckee River. The tracks of the Southern Pacific Railroad are only a few hundred feet from the mine. Reno, the supply point, is 35 miles west.

The property, comprising about 400 acres, was purchased by the Rare Metal Inc., from the Southern Pacific Railroad Land Co. and private land owners in



WASHOE COUNTY

WAG

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Item 42

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S 21, 24N, 24E

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USBM Unpubl. data, 1963



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*Washoe County - general*

*Item 43*

MATERIALS SURVEY

ANTIMONY

Compiled for the  
MATERIALS OFFICE  
NATIONAL SECURITY RESOURCES BOARD

by the  
UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF MINES

with the cooperation of the  
GEOLOGICAL SURVEY

March 1951



has been mined from stibnite veins and stringers, but most of the activity has been directed to the search for veins of scheelite that are distinct from the antimony veins.

A small quantity of native antimony was found in the Oreana tungsten mine in a scheelite-beryl pegmatite. The mine is on the west flank of the Humboldt Range near Oreana.

Some antimony ore was produced from the Mineral Basin district 25 miles southeast of Lovelock during World War I. Stibnite also occurs on the east slope of the Seven Troughs Range, about 30 miles northwest of Lovelock. The stibnite occurs as irregular masses in gouge Tertiary volcanics.

Washoe County: The Stibnite mine is in the Spanish Springs district northeast of Reno. Production and reserves are small. The Donatelli deposits are south of Spanish Peak and northeast of Sparks. A quartz-stibnite vein in volcanic rocks is about 500 feet long and up to 2 feet wide. Some of the ore is high-grade, but the vein has not been well-developed.

White Pine County: The Enterprise, Pappy, and Mackenzie claims are about 20 miles southeast of Ely on the west flank of the Shell Creek Range near its south end. Narrow veins of chalcedony, stibnite, and antimony oxides are in limestone and inter-bedded shale. In places the veins merge upward into blankets of chalcedony that lie on the present surface. The ore is low-grade; production and reserves are small. Antimony veins also occur in the Ruby district and in a small mine northeast of Simonsen, which is northeast of Eureka.

The Stibnite mine is on the west side of Prospect Mountain 7 miles from Eureka. Several high-grade shoots are reported to occur over a length of 3,000 feet; the vein is in limestone.

The Antimony Queen mine is 10 miles southwest of Cherry Creek on the west flank of the Egan Range. The antimony ore occurs sporadically in a silicified zone in limestone.

Other Counties: Antimony occurs with lead and silver in the New Deal mine and the Yarmouth mine near Searchlight in Clark County. The Blue Eagle group of antimony claims is in the Antelope district in Eureka County. Two parallel veins are each 2 to 6 inches wide and contain some high grade antimony. Antimony is a minor constituent in ore of the complex type in the Mineral Hill district, also in Eureka County.

There is a small antimony deposit 10 miles east of the Rock Hill station on the Tonopah-Goldfield Railroad in Esmeralda County. The Mattmueller mine is in the same county in the Lida Valley district