

*Nye County - general*

*Item 40*

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## MATERIALS SURVEY

# ANTIMONY

Compiled for the

MATERIALS OFFICE  
NATIONAL SECURITY RESOURCES BOARD

by the

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GEOLOGICAL SURVEY

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250 feet deep. It is reported to have produced over 1,000 tons of antimony about 1890. The main ore shoots were reported to be 2 to 4 feet wide and 60 feet long, averaging about 20 percent antimony and including bodies of nearly pure stibnite up to  $3\frac{1}{2}$  feet wide.

Other antimony deposits of the same type in addition to the above, occur near Battle Mountain and south of Austin. Antimony-containing ores of the complex type in which antimony is minor and commonly objectionable, occur in the Bullion and Cortez districts. The copper deposits of the Battle Mountain district contain a little antimony; the principal valuable mineral of the Austin district is tetrahedrite, containing silver as well as antimony.

Mineral County: The Lucky Boy mine near Hawthorne is primarily a gold mine, but the vein contains some high-grade concentrations of antimony.

The Hartwick property is 3 miles southwest of Luning. Antimony occurs in limestone near a granite contact. The ore also contains gold, silver, and lead.

The Smith prospects are 5 miles east of Luning. The ore is in limestone; the width of the vein ranges up to 4 feet. The Mary E. mine is between Hawthorne and Mina near the Pamlico road. The ore is in sedimentary rocks associated with intrusive andesite. Lead accompanies the antimony; the grade is low.

The Happy Return mine is  $3\frac{1}{2}$  miles northeast of Rawhide. The vein is 90 feet long and up to 1 foot wide and is in granite. Production and reserves are small. The Bismark claims are 8 miles southwest of Hawthorne in the Willow Creek region. The antimony ore contains some silver. One of the principal minerals of the Candelaria district is jamesonite, containing lead and antimony. Past production was considerable but recent attempts to revive mining in the district were not successful.

Nye County: The Silver Divide mine is on the east flank of ~~Toiyabo Range~~ about 60 miles north of Tonopah. Brecciated and partly silicified zones of thin-bedded limestone contain stringers and pods of high-grade stibnite. The over-all grade of the zones probably does not exceed 5 percent, but a large part of the antimony can be recovered in a high-grade, hand-sorted product. The total output has been about 200 tons of antimony, all produced since 1935. Reserves are small to moderate. TION R.42E

The White Capps mine in the Manhattan district is in the south part of the Toiyabo Range, 35 miles north of Tonopah. Stibnite is a constituent of ores mined primarily for gold; arsenic minerals are also abundant. Stibnite is found in many parts of the mine, but in



some places it greatly exceeds the other minerals. One orebody had an average width of  $2\frac{1}{2}$  feet, and a length of only 7 feet but a depth of more than 100 feet; the antimony content was 5 to 6 percent. Production and reserves are relatively small.

Deposits of antimony occur in the Reveille district about 70 miles east of Tonopah. Other deposits are on Willow Creek about 55 miles northeast of Tonopah; antimony also occurs in the same region in Hot Creek Canyon near Tybo and elsewhere in other parts of Nye County.

Stringers and pods of antimony minerals occur in limestone in the Grantsville district south of Ione, in the central part of the Shoshone Range. A little ore has been produced. Antimony-containing ores of the complex type occur in the Union and Belmont districts as well as at Tonopah. Production and reserves of antimony are not known.

Pershing County: Several of the most productive antimony mines of Nevada are in Pershing County.

The Sutherland mine, in the Black Knob district, is on the east flank of the Humboldt Range, about 16 miles by road northeast of Lovelock. Stibnite and antimony oxides occur in a quartz vein which has several subsidiary splits; it has inconspicuous outcrop but widens and lengthens at depth, although it eventually pinches out. The average length is about 175 feet, its width is several inches up to 3 feet, and its depth is about 200 feet. The country rock consists of contorted shale and calcareous shale. The past production is about 1,500 tons of antimony. Little high-grade ore remains, but dumps and ore of milling grade remaining in the mine probably contain 800 to 1,000 tons of antimony.

The Bloody Canyon mine is in the Star district near the north end of the Humboldt Range. Two quartz-stibnite veins are restricted to the uppermost rhyolite flow of a volcanic series. The orebodies are up to 150 feet long, 12 feet wide, and 100 feet deep; the veins narrow above and below the flow. Production has probably been approximately 800 tons of antimony. The known orebodies have been almost completely worked out, but the old dumps may be of milling grade, containing possibly 250 to 500 tons of antimony.

The Black Warrior mine is on the east flank of the Humboldt Range 1 mile south of Unionville. The bedrocks and the ore controls are similar to those of the Bloody Canyon mine; the high-grade antimony ore is restricted to parts of the veins that are in the uppermost rhyolite flow of a series. Total production has probably been in the order of a few hundred tons of antimony. Very little ore remains in the mine, but the old dumps may be of milling grade.