Geologie type .

Secs. 17 and 18. T. 7 N. R. 30 K. June Beboock (1958). 1906 by Guy E. Pritchard. intimony production .

The Lucky Boy mine is in the Hawthorne mining district along the Lucky Boy Pass road on the west flank of the Wossuk Mountains, 6 miles southwest of Hawthorne (see U. S. Geological Survey, Powell Mtn. 15-minute quadrangle map).

The Lucky Boy mine was discovered in 1906 by Guy E. Pritchard while working on the road over Lucky Boy Pass. The Lucky Boy Consolidated Mines Co. (J. H. Miller, president) was organized, and operated the mine from 1910 to 1934. Reportedly (Couch, 1943, p. 105), 3,049 tons of ore, valued at \$76,913, were shipped. Values were in silver, gold, and lead. There has been considerable lessing since 1934. In 1957, the mine was owned by June Babcock, of Hawthorne and was under lease to B. R. Garnett.

The mine is developed by extensive workings. There are three shafts: the Hubbard shaft which is ever 1,500 feet deep and inclined at 70 degrees; the Woodward shaft which is 470 feet deep and inclined at 70 degrees; and the Spencer shaft which is 450 feet deep and vertical. The main (Miller) adit is 6.700 feet long. It connects with all three of the shafts; it connects with the Hubbard shaft at the 1400-foot level. The Miller adit is caved at 3,200 feet. A 400-footeddit connects with the Hubbard shaft on the 150-foot level.

A 1- to 8-foot vein, striking N. 85° E. and dipping 70°-85° S., fellows the intrusive contact between limestone and granodiorite. The ore in the vein occurs lenses that rake steeply west. A skarn zone containing considerable scheelite, epidote, garnet, and hornblande occurs in the limestone clong the contact.

The ore shoots contain tetrahedrite, chalcopyrite, galena, asurite, and malachite in quarts and miner calcite and barite. An ore shoot in the Miller adit within 100 feet of its west end, near the Hubbard shaft, contained 30 percent antimony (White, 1942, p. 59). During the examination made for this study no antimony minerals other than tetrahedrite were observed in the mine or on the dumps.

This mine probably has no potential as a source of antimony.

TABLE ____. Analyses of Samples from the Lucky Boy Mine.

No.	Description	Au oe.	Ag 02.	8b 7	Pb 1	Cu 7	Zn Z
54	Grab sample, dump, Hubbard shaft.	None	169.94	0.9	6.8	0.9	5.0
.66	Grab sample, dump, Miller adit.	None	34.34	0.7	Trace	***	***
167	Vein, 100 feet from shaft on 100-ft. level, Hubbard shaft.	None	275.98	1.1	***	100 100	40 W W