

History of the Lead Belt Mine, Butte County, Idaho

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INTRODUCTORY NOTE

This report was prepared under a cooperative agreement with the U.S. Forest Service, Region IV, as part of a project to identify and describe inactive and abandoned mines in the state of Idaho. Work on this project included preparing detailed histories of mines in Region IV that had significant recorded production. The information in this report is taken from published and unpublished sources in the Idaho Geological Survey's mineral property files. Unless otherwise noted, most mine production data are drawn from the U.S. Geological Survey's (USGS) annual volumes on *Mineral Resources of the United States* (1882-1923) and the equivalent volumes produced by the U.S. Bureau of Mines (USBM) (*Mineral Resources of the United States*, 1924-1931, and *Minerals Yearbook*, 1932 to the present). Information on underground workings and mine equipment is generally from the annual reports of the Idaho Inspector of Mines (IMIR), published from 1899 to 1979. After 1974, the Mine Inspector's office was known as the Mine Safety Bureau, a section of the Idaho Department of Labor and Industrial Services. Detailed accounts of mine operations are mostly drawn from the annual reports prepared by the companies for the State Inspector of Mines; these reports were required by law, and the information contained in them formed the basis of the Mine Inspector's annual reports. Reports of recent developments are taken from the Idaho Geological Survey's (IGS) annual reports on mining and minerals in Idaho (from 1984 to present) or from similar reports produced by the Survey's predecessor, the Idaho Bureau of Mines and Geology (IBMG) from 1975 to 1984. Other published sources are referenced in the text. A complete bibliography is included at the end of the report. Where direct quotations are taken from source materials, the original spelling and grammar are preserved.

History of the Lead Belt Mine, Butte County, Idaho

Victoria E. Mitchell¹

The Lead Belt Mine is located at an elevation of 7,200 feet near the head of Leadbelt Creek, a tributary of Antelope Creek, in the Lava Creek mining district in Butte County (Figures 1 and 2). At various times, the mine has also been known as the Antelope, the Big Dipper, and the Weiler Group, as well as by individual claim names. The main ore mineral was galena, which occurred as clots scattered irregularly through manganiferous calcite veins in limestones (McHugh and others, 1991). The country rocks were mapped by Skipp and Bollman (1992) as Middle Canyon Formation (Figure 3).

The Lead Belt was located about 1890, but little work was done on it for the next 15 years (Umpleby, 1917). In 1908, the Antelope Mining Company, Ltd., made several shipments of silver-lead ore from the Climax and the Silver King claims. (See Table 1 for companies operating at the mine.) The property had 1,030 feet of workings at that time.

According to Umpleby, three carloads of ore were shipped from the mine in 1910. When he visited the area in 1912 (Umpleby, 1917), the Lead Belt was the only mine on Leadbelt Creek. This contradicts Anderson (1929), who states that the adjoining Butte-Antelope Mine was located at about the same time as the Lead Belt. Umpleby probably considered all the workings in the area to be part of the Antelope Mining Company's holdings; it is possible, though not provable, that Antelope did own both properties. In 1912, the Lead Belt had about 2,000 feet of workings. These

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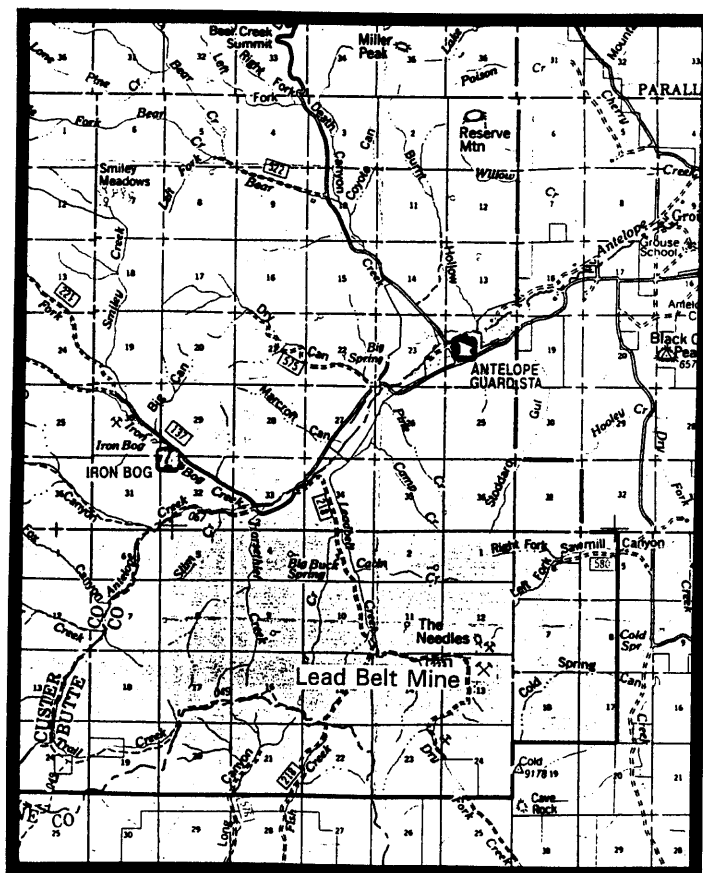


Figure 1. Location of the Lead Belt Mine and vicinity, Butte County, Idaho (U.S. Forest Service Challis National Forest map, scale $\frac{3}{8}$ inch = 1 mile).

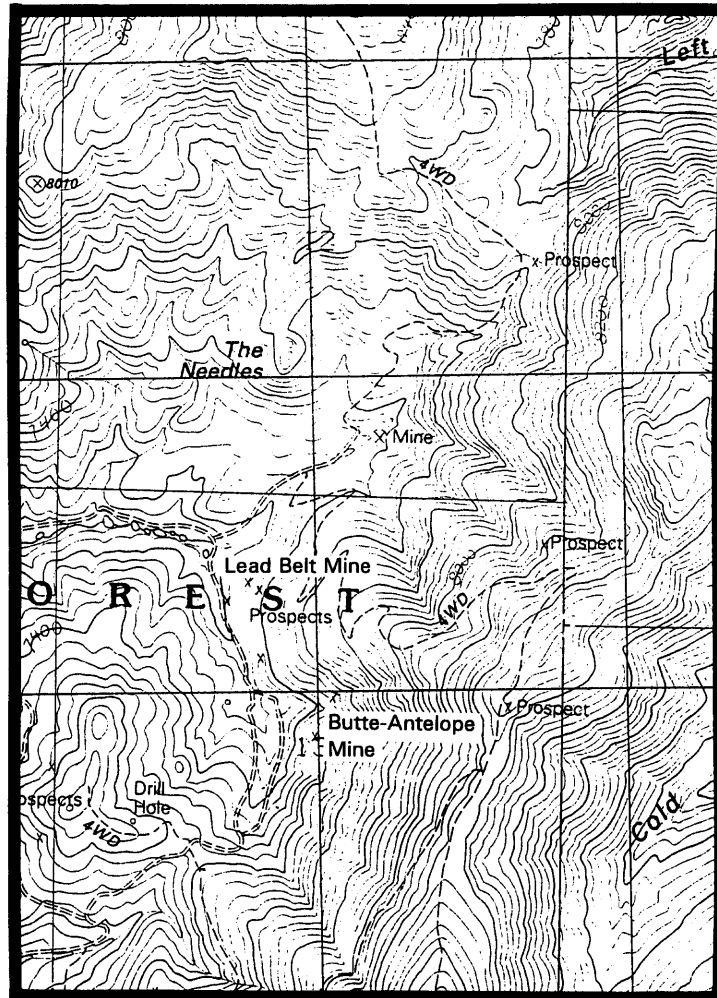


Figure 2. Topographic map of the Lead Belt Mine area (U.S. Geological Survey
Blizzard Mountain North 7.5-minute topographic map).

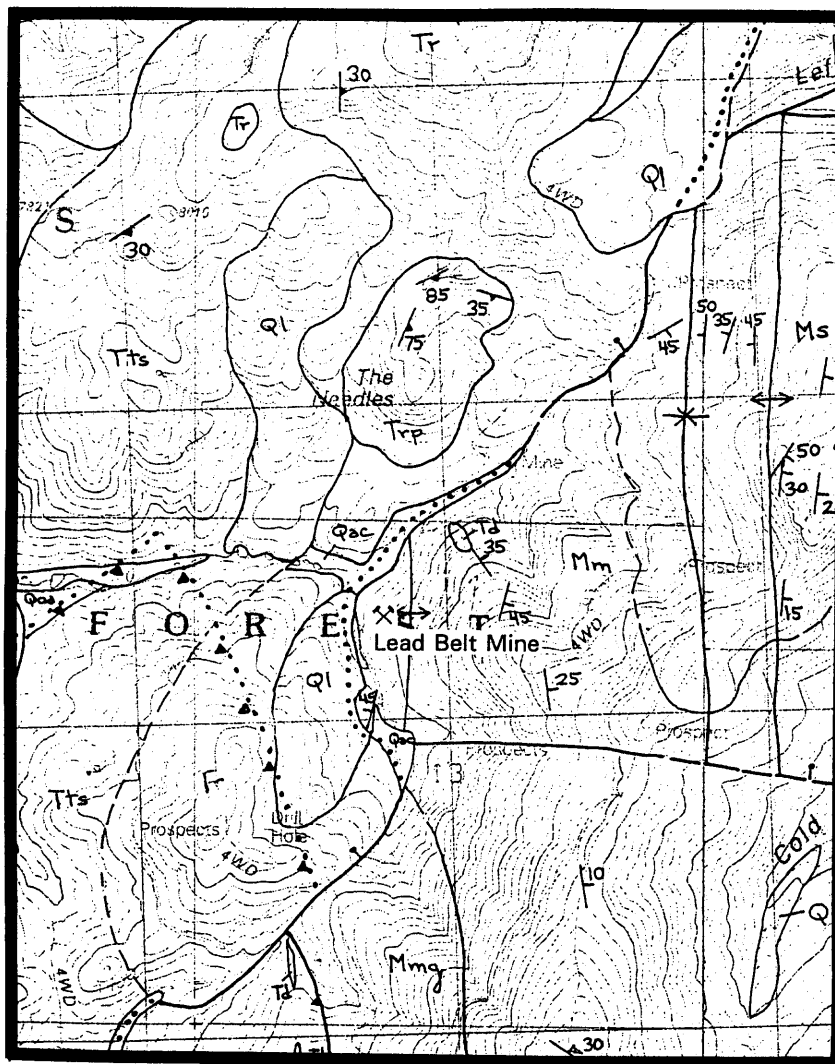


Figure 3. Geologic map of the Lead Belt Mine area. Mm = Middle Canyon Formation; Mmg = McGowan Creek Formation; Ms = Scott Peak Formation; Trp, Tr, Td, and Tts = units within the Challis Volcanics; Ql = landslide deposits; Qoa and Qac = alluvium. (Plate 1 from Skipp, Betty, and Dennis D. Bollman, 1992, U.S. Geological Survey Open-File Report 92-280.)

Table 1. Companies operating at the Lead Belt Mine.

Company Name	Officer	Date Incorporated	Charter Forfeited	Year(s) at Mine
Antelope Mining Company, Ltd.	1	1	1	1908- ²
Idaho Improvement Co.	H.W. Weiler	1	1	1913
Original Lead Belt Mining Co. (Lead Belt Mining Co., Ltd.)	M.B. Wheeler	May 26, 1916	1921	1916-1921
Needle Mining & Milling Co.	W.A. Brodhead, Secretary	Nov. 14, 1919; reinstated Jan. 10, 1929	Dec. 1, 1920; 1929	1921-1929
Lead Belt Mines Syndicate	1	1	1	1929- ²
Lead Belt Mines Co.	C.S. Cresser	1	1	1930- ²
I.J. and Edith Monger	---	---	---	(1989) ³

¹Information not available in IGS's files.

²Last date of company operations at the mine is unknown.

³Owner of record in 1989 (McHugh and others, 1991). Length of ownership is unknown.

included a shaft and a tunnel on the creek at an elevation of about 7,150 feet and two small shafts and a tunnel 600 feet farther up the creek. However, all the machinery and tracks had been removed from the property and the workings were largely inaccessible (Umpleby, 1917).

Considerable road building and development work were done on the property (referred to as the Weiler Group) in 1913, and a large tonnage of oxidized lead ore was shipped. According to Umpleby (1917), the mine shipped twenty-one 50-ton carloads of ore which averaged 16 percent lead and 16 ounces of silver per ton. Most of this ore is not reflected in the production records for the mine.

The mine shipped ore every year from 1914 to 1919. In 1914, oxidized ore was produced from a 70-foot shaft. "A number of cars of good lead-silver ore" were shipped by Weiler & Son during 1915 (IMIR, p. 76). The property was operated by the Original Lead Belt Mining Co. in 1916. New discoveries during the year included additional resources of better grade ore than had previously been found, and the mine shipped the richest carload of ore in its history. The mine, under lease and bond, produced "considerable" oxidized lead ore in 1917, and several hundred tons was shipped in 1919.

The Needle Mining & Milling Co. produced one shipment of lead ore from the Lead Belt in 1921. Single lots were also shipped in 1922 and 1924. Darlington and Fowler acquired a lease and option on the Lead Belt in 1925 and were said to be working the property. No further mention was made of their operation.

A 1923 article in the *Salt Lake Mining Review* stated that the mine had been developed to a depth of 140 feet and for a length of 300 feet underground, while the vein was traceable at the surface for a distance of 1,000 feet. Total production from the mine was said to have exceeded 150 cars of ore (7,500 tons) carrying 10 to 30 percent lead, an ounce of silver to the unit of lead, and \$1 of gold per ton (0.05 ounce per ton at the then-current gold price of \$20.67 an ounce). Some shipments were said to run as high as 3 ounces of silver per unit of lead and several ounces of gold per ton.

Anderson (1929) visited the district in 1928. At that time, the workings reported by Umpleby (1917) were all inaccessible. According to Anderson, the most recent workings were some distance below the shaft in the valley floor. These consisted of a short tunnel with a raise to the surface and a winze of unknown depth. The vein was irregular and "more or less chimney-like" (p. 70). Some ore from these workings had been concentrated by hand jigs. Anderson noted that numerous small cuts and drifts were scattered about the property. He also said that the Lead Belt Mines Syndicate began a diamond drilling program in 1929. One carload of silver-lead ore was shipped in 1929. The mine also produced ore in 1941.

The mine was visited by an Idaho Geological Survey geologist in 1994 as part of a program to evaluate inactive and abandoned mines in southern Idaho. Figure 4 shows one of the adits on the property at that time.

Total recorded production for the mine between 1908 and 1941 was 2,289 tons of ore. From this ore, 57 ounces of gold, 42,575 ounces of silver, 3,996 pounds of copper, and 660,518 pounds of lead were recovered. However, these totals do not reflect the twenty-one carloads of ore Umpleby said was produced in 1913 nor do they approach the 7,500 tons of ore reported by the *Salt Lake Mining Review* to have been shipped before 1923.



Figure 4. Adit at the Lead Belt Mine, 1994 (photograph by Falma J. Moye, Idaho Geological Survey).

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