

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

**NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY -- NOMINATION FORM**

FOR FEDERAL PROPERTIES

FOR NPS USE ONLY	
RECEIVED	JUN 8 1987
DATE ENTERED	JUL 19 1987

SEE INSTRUCTIONS IN *HOW TO COMPLETE NATIONAL REGISTER FORMS*
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

1 NAME

HISTORIC

Stibnite Historic District

AND/OR COMMON

Stibnite Mining District

LOCATION

STREET & NUMBER

U.S. Forest Road 412

N/A NOT FOR PUBLICATION

CITY, TOWN

Yellow Pine

VICINITY OF

CONGRESSIONAL DISTRICT

First

STATE

Idaho

016

Valley

CODE

085

CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE
<input checked="" type="checkbox"/> DISTRICT	<input type="checkbox"/> PUBLIC	<input type="checkbox"/> OCCUPIED	<input type="checkbox"/> AGRICULTURE
<input type="checkbox"/> BUILDING(S)	<input type="checkbox"/> PRIVATE	<input checked="" type="checkbox"/> UNOCCUPIED	<input type="checkbox"/> MUSEUM
<input type="checkbox"/> STRUCTURE	<input checked="" type="checkbox"/> BOTH	<input type="checkbox"/> WORK IN PROGRESS	<input type="checkbox"/> COMMERCIAL
<input type="checkbox"/> SITE	PUBLIC ACQUISITION	ACCESSIBLE	<input type="checkbox"/> EDUCATIONAL
<input type="checkbox"/> OBJECT	N/A IN PROCESS	<input type="checkbox"/> YES: RESTRICTED	<input type="checkbox"/> ENTERTAINMENT
	N/A BEING CONSIDERED	<input checked="" type="checkbox"/> YES: UNRESTRICTED	<input type="checkbox"/> GOVERNMENT
		<input type="checkbox"/> NO	<input checked="" type="checkbox"/> INDUSTRIAL
			<input type="checkbox"/> MILITARY
			<input checked="" type="checkbox"/> OTHER: National Forest

AGENCY

REGIONAL HEADQUARTERS: (If applicable)

Payette National Forest

STREET & NUMBER

P.O. Box 1026

CITY, TOWN

McCall

N/A VICINITY OF

STATE

Idaho 83638

LOCATION OF LEGAL DESCRIPTION

COURTHOUSE,
REGISTRY OF DEEDS, ETC.

Valley County Courthouse

STREET & NUMBER

219 Main Street

CITY, TOWN

Cascade

STATE

Idaho 83611

6 REPRESENTATION IN EXISTING SURVEYS

TITLE

Idaho State Archeological Survey

DATE

1980

FEDERAL STATE COUNTY LOCAL

DEPOSITORY FOR
SURVEY RECORDS

Idaho State Historical Society

CITY, TOWN

Boise

STATE

Idaho

7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
<input type="checkbox"/> EXCELLENT	<input checked="" type="checkbox"/> DETERIORATED	<input type="checkbox"/> UNALTERED	<input checked="" type="checkbox"/> ORIGINAL SITE
<input type="checkbox"/> GOOD	<input checked="" type="checkbox"/> RUINS	<input checked="" type="checkbox"/> ALTERED	<input type="checkbox"/> MOVED
<input type="checkbox"/> FAIR	<input type="checkbox"/> UNEXPOSED		DATE <u>N/A</u>

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The Stibnite Historic District is a collection of historic sites associated with tungsten and antimony mining that supplied strategic minerals needed for the U.S. and Allied efforts during World War II. Remotely located in the rugged mountains of central Idaho, the district's elevation ranges from 6,000 to 8,000 feet at the summits of adjacent ridges. The central valleys of the district are drained by the East Fork of the South Fork of the Salmon River and its tributaries.

During World War II, when the district achieved significance, the war-induced boom in construction produced almost continuous expansion and change. The wartime rush to get into production led to the expansion and modification of almost every available building for new uses. This included log and frame buildings constructed during the 1930s period of mining. Rapid wartime expansion of the mill at Stibnite (Site 5) took place as well as at the Yellow Pine mine (Site 1) two miles to the north. The mine and mill buildings were primarily balloon frame, constructed with board and batton siding and galvanized gable or shed style roofs typical of mining buildings in the West. Eventually supporting a community of 1500 people by the end of 1943, the company town had five residential districts including Monday Camp (Site 3), Midnite Camp, Fiddle Creek, Adkin's Flat and Forest Grove (Site 4). In addition to bunkhouses and house tents, over one-hundred simple wood frame houses with clap-board siding and steep gable roofs were built during this period. Many of the houses did not have foundations. Forest Grove was the service center for Stibnite during World War II and its wood frame buildings included a large recreation hall, school, hospital and service station. The store and post office were located at Stibnite.

The mining process for tungsten and antimony during the War years originated at the Yellow Pine Mine where the tungsten ore body lay beneath a thick cover of gravel almost directly below the East Fork. The number one shaft was begun in April and the first tungsten ore was milled in August, 1941. During 1942 the underground mine was in intensive production and the overburden above the tungsten was stripped preparatory to open-pit operation. By May of 1943 the mine was abandoned in favor of 100 per cent open-pit operations. Before the open pit mining operation could be started it was necessary to divert the flow of water from the East Fork. The Bailey tunnel was started in 1942 and completed early in 1943. It diverted water above the pit approximately 4,000 feet to Sugar Creek. The large open-pit was mined in benches 30 feet high. Churn and wagon drills were used to make holes in which dynamite was placed to blast down the benches. The broken rock was loaded by power shovels onto dump trucks and hauled to the milling plant at Stibnite two miles south. A spiral road with a six per cent grade connected the bottom of the pit to an exit on the south end. From the ore bin, the ore would be crushed twice and then ground in ball mills. Through the use of chemicals and air the minerals would be separated by floatation. At the surface of the floatation cells the minerals were skimmed off and sent through a process of thickening. A selective floatation process could produce either tungsten or antimony concentrates. Waste sands or tailings were carried to a storage area at the south end of the valley. The concentrates were then hauled by truck over mountain roads to the rail head 80 miles away at Cascade. During the war years the road was kept open even with the area's harsh and long winters. The Union Pacific Railroad then shipped the concentrate to manufacturers. Low-grade tungsten product was shipped to the Metal's Reserve Corporation at Salt Lake City, Utah, the United States Vanadium Corporation near Bishop, California or to the purification plant of the Bradley Mining Company at Boise for further refinement. Stibnite also had an airstrip with flights connecting to Bradley Field in Boise.

8 SIGNIFICANCE

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW				
<input type="checkbox"/> PREHISTORIC	<input type="checkbox"/> ARCHEOLOGY-PREHISTORIC	<input type="checkbox"/> COMMUNITY PLANNING	<input type="checkbox"/> LANDSCAPE ARCHITECTURE	<input type="checkbox"/> RELIGION	
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> ARCHEOLOGY-HISTORIC	<input type="checkbox"/> CONSERVATION	<input type="checkbox"/> LAW	<input type="checkbox"/> SCIENCE	
<input type="checkbox"/> 1500-1599	<input type="checkbox"/> AGRICULTURE	<input type="checkbox"/> ECONOMICS	<input type="checkbox"/> LITERATURE	<input type="checkbox"/> SCULPTURE	
<input type="checkbox"/> 1600-1699	<input type="checkbox"/> ARCHITECTURE	<input type="checkbox"/> EDUCATION	<input checked="" type="checkbox"/> MILITARY	<input type="checkbox"/> SOCIAL/HUMANITARIAN	
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> ART	<input type="checkbox"/> ENGINEERING	<input type="checkbox"/> MUSIC	<input type="checkbox"/> THEATER	
<input type="checkbox"/> 1800-1899	<input type="checkbox"/> COMMERCE	<input type="checkbox"/> EXPLORATION/SETTLEMENT	<input type="checkbox"/> PHILOSOPHY	<input type="checkbox"/> TRANSPORTATION	
<input checked="" type="checkbox"/> 1900-	<input type="checkbox"/> COMMUNICATIONS	<input type="checkbox"/> INDUSTRY	<input type="checkbox"/> POLITICS/GOVERNMENT	<input type="checkbox"/> OTHER (SPECIFY)	
		<input type="checkbox"/> INVENTION			

SPECIFIC DATES 1939-1945 BUILDER/ARCHITECT N/A

STATEMENT OF SIGNIFICANCE

The Stibnite Historic District is exceptionally significant to the nation through its association with the production of strategic minerals needed during World War II. The mine's production of tungsten and antimony is significant as an example of America's mobilization for the War. From 1941 to 1945 Stibnite mined and milled more tungsten and antimony than any other mine in the United States. During this wartime period Stibnite produced 40 per cent of the nation's domestic supply of tungsten and 90 per cent of its antimony.

War had broken out in Europe with Hitler's invasion of Poland on September 1, 1939. Earlier that year the Strategic Mineral Investigations Enabling Act was passed by Congress enabling the secretaries of War, Navy and Interior to act jointly through the Army and Navy Munitions Board to determine which materials should be considered strategic and critical and determine the amounts to be purchased. Both antimony and tungsten were listed as strategic materials and defined as those essential to the national defense and placed under strict conservation and distribution control measures. The U.S. Bureau of Mines and the U.S. Geological Service immediately set out to develop the nation's strategic reserves.

The existence of gold-antimony mineralization near the present site of Stibnite had been known since the Thunder Mountain gold rush in 1900. Albert Hennessy staked the first claims in the area in 1914. Later, these claims were acquired by J.J. Oberbillig's United Mercury Mining Company of Boise and in 1927 optioned to the Bradley Mining Company of San Francisco. The company also had a large interest in Alaska's Juneau gold mines and the Bunker Hill lead-silver mine in north Idaho. The Bradley Mining Company started mining and milling gold at Stibnite in the 1930s. Separating the gold and antimony ores was difficult and gold profits were minimal from these early years.

During the winter of 1930-40, a Bureau of Mine's drilling program disclosed large bodies of high-grade antimony under the East Fork valley near Stibnite. In February 1940, examination of the site's drill cores lead to the discovery of tungsten-bearing sheelite ore by Donald E. White, a geologist of the Federal Geological Survey. Due to the essential need for both tungsten and antimony the Bradley Mining Company initiated an all-out effort to mine and mill the minerals. Underground mining was begun at the Yellow Pine mine in April, 1941 and the first tungsten ore was milled in August, 1941.

All tungsten and antimony ores and concentrates were under complete allocation and end-use control by the War Production Board. Tungsten is used as a hardener with other metals to make them withstand extremely high temperatures. It was used during the War in armor piercing shells, and in the filaments of lamps, radio, radar and x-ray tubes, as well as for high-speed tools. Antimony is used primarily as a hardening and strengthening ingredient in lead alloys. Its war uses included bullets, shrapnel, bearings and storage batteries. It has strong flame-resistant qualities which were used

9 MAJOR BIBLIOGRAPHICAL REFERENCES

Bailey, H.D. "Stibnite Idaho." Pamphlet on File, Idaho State Historical Society, Boise, Idaho (1978).

Bradley, John D., Joseph A. Mecia and Robert E. Baker. "Yellow Pine Mine." Engineering and Mining Journal. (1943).

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY 2,828

UTM REFERENCES

A	11	633285	4976560	B	11	630715	4972945
	ZONE	EASTING	NORTHING		ZONE	EASTING	NORTHING
C	11	633360	4972460	D	11	630985	4976440
	ZONE	EASTING	NORTHING		ZONE	EASTING	NORTHING
	11	632640	4972000		11	631700	4977560
	ZONE	EASTING	NORTHING		ZONE	EASTING	NORTHING

VERBAL BOUNDARY DESCRIPTION The boundary of the nominated property is delineated by the polygon whose vertices are marked and situated as follows:

- | | |
|----------------------|----------------------|
| A. 11 633285 4976560 | E. 11 630715 4972945 |
| B. 11 633360 4972460 | F. 11 630985 4976440 |
| C. 11 632640 4972000 | G. 11 631700 4977560 |
| D. 11 629000 4971360 | |

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE	CODE	COUNTY	CODE
N/A			
STATE	CODE	COUNTY	CODE
N/A			

11 FORM PREPARED BY

NAME / TITLE

John L. Bertram, City Planner

ORGANIZATION

Planmakers

DATE

9-30-86

STREET & NUMBER

417 S. 13th

TELEPHONE

(208) 336-1438

CITY OR TOWN

Boise

STATE

Idaho

12 CERTIFICATION OF NOMINATION

STATE HISTORIC PRESERVATION OFFICER RECOMMENDATION

YES

NO

NONE

Kenneth J. Lewis
Deputy STATE HISTORIC PRESERVATION OFFICER SIGNATURE

In compliance with Executive Order 11593, I hereby nominate this property to the National Register, certifying that the State Historic Preservation Officer has been allowed 90 days in which to present the nomination to the State Review Board and to evaluate its significance. The evaluated level of significance is National State Local .

FEDERAL REPRESENTATIVE SIGNATURE

Erwin J. DeBlasio

TITLE

AGENCY FEE...

DATE

MAY 27 1987

FOR NPS USE ONLY

I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER

[Signature]

DATE

7/19/87

DIRECTOR, OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION ATTEST:

DATE

KEEPER OF THE NATIONAL REGISTER

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Work in the pit went on a 24-hour basis and the mill increased its capacity from 450 to 800 tons per day by 1944. Electric power in the early war years relied on several deisel power plants and a hydro-electric power plant. In 1943, the Idaho Power Company constructed a power line 110 miles to connect Stibnite to a steady source of hydroelectric energy.

Today, the district still maintains its mining association due to the remains of the large open pit mine or glory hole (Site 1) and the remains of several mining structures, foundations, and tailings. Typical of mining activity, once the mining operation closed in 1955, most of Stibnite's buildings were dismantled or salvaged for the materials in them. All of Stibnite's houses have either been torn down or moved to the nearby town of Yellow Pine 14 miles away or to other sites. The remaining mine and mill building, their usefulness over, have been left to decay. This natural decay has been accelerated in this region of deep winter snows, sub-zero temperatures and periods of thaw and frost heaves. The remaining buildings are primarily in ruins or in partial collapse. Stibnite's wood frame board and batton buildings were of an architectural style and construction typical of the wartime period.

INVENTORY:

Smithsonian #

1. SMP-3 Yellow Pine Open Pit Mine. The Glory Hole was excavated during World War II for tungsten and antimony. The pit was excavated by blasting benches and hauling the ore up a spiral road. Contributory.
2. PY-412 Olson Cabin. Log cabin built in conjunction with 1930's mining activity. Provided housing during World War II. Partially collapsed opening of Bailey Tunnel is located nearby. Contributory.
3. PY-413 Monday Camp Site. Built originally in the 1930s the camp was expanded during World War II operations. The site housed warehouses, a generator, shop building and boarding house. Scattered building remains and foundations are evident. Contributory.
4. PY-420 Forest Grove Site. This area was both a residential neighborhood and the service center for Stibnite during World War II. Contributory.
5. PY-421 Stibnite - Meadow Creek Site. This was the center of milling operations during World War II. The site included ore bunkers, the crushing mill and ball mill, dormitories and store. Contributory.
6. PY-422 Mountain Chief Cabin. Log cabin constructed by miners during the early days of mining activity. Utilized for housing during war years. Contributory.

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7. Pioneer Metals Processing Facility. Built in 1981 the plant's four buildings and five leach pads utilize the cyanide heap leach gold recovery technique. Non-contributory.

The boundaries of the district encompass all mining sites and their environs. The mine pit, milling plant, and tailing operations, along with the residential areas, all contribute to the significance of the district. Consideration was given to a district boundary formed by the elevation of the topography but a polygon bounded by straight lines was selected as it could conform to the existing boundaries of patented mining claims.

The district is located on Payette National Forest lands, which include some less than fee-simple holding under patented mining claims.

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during the War to treat wooden flight decks of aircraft carriers as well as in flame proofing fabrics.

Stibnite maintained peak production during the War years to provide those essential minerals needed. From August 1941 to December 1945 Stibnite produced 831,829 WO₃ units of tungsten. (A unit of WO₃ is 20 pounds of tungsten trioxide.) During the War years Stibnite produced more tungsten than any other mine in the United States and was the source of 40 per cent of the domestic output. By the end of 1945 Stibnite's tungsten ore was exhausted. From 1941 to 1945 Stibnite produced 10,828 tons of antimony (Sb). Stibnite was the nation's principal domestic producer supplying 90 per cent of the United State's output. The U.S. Bureau of Mine's 1945 Minerals Yearbook states that the Yellow Pine mine produced more tungsten and antimony than any other mine in the United States during the War years.

During the War, the company town of Stibnite grew to a population of 1,500. Stibnite became an incorporated village and was governed by an elected Village Board of five members. Although there was no union, the Bradley Mining Company was progressive in its employee relations. On a seniority basis, company houses, with free utilities, were furnished at a very low cost. Also, medical and hospital care were available for a modest fee. The Stibnite Mercantile Company was owned by thirty citizen-employees. At the Forest Grove residential area (Site 4) the company built a large recreation hall that contained a gym, theaters, bowling alleys, cafe, library, club rooms and church room. The company also built a school and modern hospital staffed by a full-time doctor and registered nurses.

With its massive open-pit mine, tailing areas and the various ruins of mining buildings, the Stibnite Historic District still possesses enough physical integrity to reflect on the historic significance the mine played in supporting the success of World War II.

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PAGE 4

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- Clark, Neil M. "Want to Get Away From it All?" Saturday Evening Post, (December 8, 1951).
- Cole, John W. and H.D. Bailey. U.S. Dept. of the Interior Bureau of Mines. "Exploration, Development, Mining and Milling of a Unique Tungsten Ore Body at the Yellow Pine Mine, Stibnite, Idaho." Information Circular No. 7443 (April 1948).
- Cooper, John R. "Geology of the Tungsten, Antimony and Gold Deposits Near Stibnite, Idaho." Contribution to Economic Geology, 1947-50 U.S. Geological Survey Bulletin 969 F (1951).
- _____, "Stibnite - Its Mining Operation Camp and Recreation Facilities and School Annual" (1946-1947). Pamphlet on File at Idaho State Historical Society (n.d.).
- Montgomery, James, Consulting Engineers, "Cultural Resources Inventory/ Assessment Package--Stibnite Mining Project." Boise, Idaho (1981).
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- U.S. Department of Interior Bureau of Mines. "Minerals Yearbook" for the Years 1940-1945. U.S. Government Printing Office, Washington, D.C.
- Wells, Merle W. "Gold Camps and Silver Cities," Idaho Department of Lands, Bureau of Mines and Geology Bulletin No. 22, Moscow, Idaho. (1983).

Item Number 10 Continued

E. 11 630715 4972945
F. 11 630985 4976440
G. 11 631700 4977560