

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

PH 0687 251

FOR NPS USE ONLY

RECEIVED OCT 24 1978

DATE ENTERED DEC 27 1978

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

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

1 NAME

HISTORIC

Modoc Mill

AND/OR COMMON

Modoc Mill

2 LOCATION

STREET & NUMBER

Adjacent to Duck Lake

NOT FOR PUBLICATION

CITY, TOWN

CONGRESSIONAL DISTRICT

.4 mile north of Ward vic

VICINITY OF

2

STATE

CODE

COUNTY

CODE

Colorado

08

Boulder

013

3 CLASSIFICATION

CATEGORY

OWNERSHIP

STATUS

PRESENT USE

DISTRICT

PUBLIC

OCCUPIED

AGRICULTURE

MUSEUM

BUILDING(S)

PRIVATE

UNOCCUPIED

COMMERCIAL

PARK

STRUCTURE

BOTH

WORK IN PROGRESS

EDUCATIONAL

PRIVATE RESIDENCE

SITE

PUBLIC ACQUISITION

ACCESSIBLE

ENTERTAINMENT

RELIGIOUS

OBJECT

IN PROCESS

YES: RESTRICTED

GOVERNMENT

SCIENTIFIC

BEING CONSIDERED

YES: UNRESTRICTED

INDUSTRIAL

TRANSPORTATION

NO

MILITARY

OTHER:

None

4 OWNER OF PROPERTY

NAME

C.G. Wolcott

STREET & NUMBER

5952 Germaine Lane

CITY, TOWN

LaJolla

VICINITY OF

STATE

California 92032

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE,
REGISTRY OF DEEDS, ETC.

Boulder County Courthouse

STREET & NUMBER

Pearl Street

CITY, TOWN

Boulder

STATE

Colorado

6 REPRESENTATION IN EXISTING SURVEYS

TITLE

Colorado Inventory of Historic Sites (07/03/0043)

DATE

Ongoing

FEDERAL STATE COUNTY LOCAL

DEPOSITORY FOR
SURVEY RECORDS

Colorado Historical Society; 1300 Broadway

CITY, TOWN

Denver

STATE

Colorado 80203

7 DESCRIPTION

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

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

Located near Duck Lake about .4 mile north of Ward, Colorado, the Modoc Mill is a single detached structure made of stone, wood, and tin. The building is irregular in shape, but is four stories in height, each story set back from the one above so as to permit the ore being processed to flow downward from level to level. The structure has five bays in each side and an undetermined number on the front and back--undetermined because of deterioration and vandalism. The foundation which conforms to the slope of the hillside is coursed rubble laid in mortar. The building frame consists of fir posts 12" x 12" while the upper part of the structure is sheathed in corrugated tin. The roof has two gables. There are two projections from the front of the mill, the upper one being somewhat similar to a dormer. The windows and doors, now gone, had wood surrounds which are still in place.

The individual stories still reflect the work of processing ore. The fourth or uppermost story which received ores from the mine is made of hewn logs used as floor joists supporting a lumber flooring made of 2" x 6" pieces. The gravity bins situated on this story held the ore until it was fed into the jaw crusher (now partially destroyed) situated between the fourth and third stories. The third story holds the upper section of the stamping apparatus manufactured by Griffen and Wedge of Zanesville, Ohio. There are thirty stamps, each weighing 950 pounds, arranged in three banks of ten; the entire apparatus is eighteen feet high and supported by posts of Douglas fir, 12" x 36", placed on granite and cemented in place. Once the stamps had pulverized the ore, it then passed over apron plates and Cook Amalgamator tables where some gold was collected by amalgamation with mercury. Both the plates and tables, however, have been destroyed except for three copper-plated bumping tables. Finally, the first story holds the seating for a 14-inch bore piston engine which sits on the sandstone foundation. Nearby lies a 9-foot O.D. flywheel which transmitted power from the engine to the line shafting running throughout the mill.

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 checked="" type="checkbox"/> ARCHITECTURE	<input type="checkbox"/> EDUCATION	<input 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 checked="" 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 checked="" type="checkbox"/> INDUSTRY	<input type="checkbox"/> POLITICS/GOVERNMENT	<input type="checkbox"/> OTHER (SPECIFY)
		<input type="checkbox"/> INVENTION		

SPECIFIC DATES 1889-present BUILDER/ARCHITECT Unknown

STATEMENT OF SIGNIFICANCE

The Modoc Mill is significant for its association with the mining industry which contributed so much to Colorado's early development; and for its architecture and machinery which embody the distinctive characteristics of a type, period, and method of construction, in this case the industrial architecture and engineering peculiar to stamp mills of the late nineteenth and early twentieth centuries.

The mining industry of Boulder County developed very early in the course of the Pike's peak Gold Rush of 1859, and the county came to be regarded as the northeastern extremity of a gold belt stretching in a great arc across the region. The Modoc Mine, however, dated from the early 1870s, possibly 1870; the record is unclear. In any event the property lay about a quarter mile south of Duck Lake at the mouth of Chipmunk Gulch. The ores were pyritic--that is, combinations of very low grade copper and iron sulphides holding gold. Mining continued on a desultory basis for some years, water below ground and winter above always hampering operations. About 1888 a group of new investors leased the mine, obtained a bond, acquired the property, and obtained a corporate charter for the Modoc Mining Company. It was this enterprise, allegedly with funds embezzled from a Pennsylvania bank, that erected the Mill about 1889-1890. Yet mining continued to be desultory and operations at the mill sporadic largely on account of low grade ores and high cost working. Still, in 1906 a Professor Lindemann then in charge reported that the mine was 356 ft. deep, had 6,000 feet of drifts, and had developed 122,000 tons of ore reserves. Yet this mineral must have been extremely low grade--or Lindemann's comments sheer buncombe--for the mine never developed into a great producer. Both mine and mill closed for the last time in 1920. While the spectacular successes of the industry are the ones most remembered, it was the experience of the Modoc enterprise that was more typical of the industry as a whole, particularly in Boulder County, which was never an important mining center. Today, the Mill ruins and other stone structures stand as ghostly reminders of the frustrated dreams of forgotten men.

Architecturally, the Mill is a particularly interesting vestige of a bygone industry. The stone foundation, the wood and tin above, the four-level plan along the hillside, and the stamping apparatus and related equipment all present a fine example of a concentration mill--that is, one that increased the amount of valuable metal in a mineral which was then shipped out for further reduction, in this case most likely smelting in Denver. The readily apparent design for the movement of ore, the great mass of the construction material, and the simple, no frills architecture in an age

9 MAJOR BIBLIOGRAPHICAL REFERENCES

Percy S. Fritz, The Mining Districts of Boulder County, Colorado, (unpublished thesis, University of Colorado, 1927).
 A.K. Koschmann, et al., Principal Gold-Producing Districts of the United States, Geological Survey Professional Paper 610, (Washington, 1968).
 Charles A. Wolcott Papers, University of Colorado Archives, Boulder, Colorado.

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY 1 acre

QUADRANGLE NAME Ward

QUADRANGLE SCALE 1:24000

UTM REFERENCES 440 620

A

1	3	4	5	6	4	4	3	6	6	4	0
ZONE				EASTING				NORTHING			

B

ZONE				EASTING				NORTHING			

C

ZONE				EASTING				NORTHING			

D

ZONE				EASTING				NORTHING			

E

ZONE				EASTING				NORTHING			

F

ZONE				EASTING				NORTHING			

G

ZONE				EASTING				NORTHING			

H

ZONE				EASTING				NORTHING			

VERBAL BOUNDARY DESCRIPTION

South of Duck Lake, North of Brainerd Lake Road, Township 1 North, Range 73 West, Section 1, southwest 1/4 northeast 1/4.

(see accompanying U.S.G.S. quadrangle map)

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

STATE	CODE	COUNTY	CODE
STATE	CODE	COUNTY	CODE

STATE	CODE	COUNTY	CODE
-------	------	--------	------

11 FORM PREPARED BY

NAME / TITLE

Robert Rosenberg

ORGANIZATION

DATE

STREET & NUMBER

4901 S. Cactus Wren (602) 883-2569 Home; (602) 622-5208 Work

TELEPHONE

CITY OR TOWN

Tucson

STATE

Arizona 85706

12 STATE HISTORIC PRESERVATION OFFICER CERTIFICATION

THE EVALUATED SIGNIFICANCE OF THIS PROPERTY WITHIN THE STATE IS:

NATIONAL

STATE

LOCAL

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

STATE HISTORIC PRESERVATION OFFICER SIGNATURE

Arthur C. Johnson

TITLE

State Historic Preservation Officer

DATE

October 13, 1978

FOR NPS USE ONLY

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

KEEPER OF THE NATIONAL REGISTER

DATE

12-27-78

ATTEST:

CHIEF OF REGISTRATION

DATE

12-27-78

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

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

FOR NPS USE ONLY	
RECEIVED	OCT 24 1978
DATE ENTERED	DEC 27 1978

CONTINUATION SHEET Modoc Mill ITEM NUMBER 8 PAGE 2

given to the ornate all reflect a type of industrial architecture once common in western mining regions. Despite its fair condition the Modoc Mill survives today as the only mill relatively intact both internally and externally in Boulder County. The structure remains as a vestige of the mining industry that once struggled here in the late nineteenth and early twentieth centuries.