

**United States Department of the Interior  
National Park Service**

For NPS use only

**National Register of Historic Places  
Inventory—Nomination Form**

received APR 19 1985  
date entered

See instructions in *How to Complete National Register Forms*  
Type all entries—complete applicable sections

**1. Name**

historic Sheep Mountain Tunnel Mill/Crystal Mill 5GN 1627  
and/or common Crystal Mill

**2. Location**

street & number County Road 3, 7 miles southeast of Marble n/a not for publication  
city, town XX vicinity of Crystal  
state Colorado code 08 county Gunnison code 051

**3. Classification**

<b>Category</b>	<b>Ownership</b>	<b>Status</b>	<b>Present Use</b>
<input type="checkbox"/> district	<input type="checkbox"/> public	<input type="checkbox"/> occupied	<input type="checkbox"/> agriculture
<input checked="" type="checkbox"/> building(s)	<input checked="" type="checkbox"/> private	<input checked="" type="checkbox"/> unoccupied	<input type="checkbox"/> commercial
<input type="checkbox"/> structure	<input type="checkbox"/> both	<input type="checkbox"/> work in progress	<input type="checkbox"/> educational
<input type="checkbox"/> site	<b>Public Acquisition</b>	<b>Accessible</b>	<input type="checkbox"/> entertainment
<input type="checkbox"/> object	<input type="checkbox"/> n/a in process	<input checked="" type="checkbox"/> yes: restricted	<input type="checkbox"/> government
	<input type="checkbox"/> n/a being considered	<input type="checkbox"/> yes: unrestricted	<input type="checkbox"/> industrial
		<input type="checkbox"/> no	<input checked="" type="checkbox"/> other: Vacant
			<input type="checkbox"/> museum
			<input type="checkbox"/> park
			<input type="checkbox"/> private residence
			<input type="checkbox"/> religious
			<input type="checkbox"/> scientific
			<input type="checkbox"/> transportation

**4. Owner of Property**

name Dorothy Tidwell  
street & number Treasure Mountain Ranch, Star Route  
city, town Carbondale n/a vicinity of state Colorado 81623

**5. Location of Legal Description**

courthouse, registry of deeds, etc. Gunnison County Courthouse  
street & number 200 East Virginia  
city, town Gunnison state Colorado

**6. Representation in Existing Surveys**

title Colorado Inventory of Historic Sites has this property been determined eligible?  yes  no  
date Ongoing  federal  state  county  local  
depository for survey records Colorado Historical Society, OAHF  
city, town Denver state Colorado 80203

## 7. Description

<b>Condition</b>		<b>Check one</b>	<b>Check one</b>
<input type="checkbox"/> excellent	<input checked="" type="checkbox"/> deteriorated	<input type="checkbox"/> unaltered	<input checked="" type="checkbox"/> original site
<input type="checkbox"/> good	<input type="checkbox"/> ruins	<input checked="" type="checkbox"/> altered	<input type="checkbox"/> moved    date _____
<input type="checkbox"/> fair	<input type="checkbox"/> unexposed		

### Describe the present and original (if known) physical appearance

The Crystal Mill is a log and frame structure built in 1892 originally as a powerhouse. The building has a dramatic location on a rock outcrop on the Crystal River in mountainous terrain near Marble, Colorado. The mill is composed of three parts: the compressor house, the gear house, and the penstock.

The compressor house is hand peeled round log construction, V-notched at the corner joints. It is 20' by 50'<sup>1</sup> with board and batten gabled ends. The west wall, which faces an adjacent building (now in ruins), contains a door roughly in the center of the wall, a double hung window to the south end, and a small window on the north end of the wall. On the opposite (east) wall is another door, roughly in the center with one window on the north end of the wall. The south wall, only sections of which remain, probably contained no openings. The north wall has a window in the gable and an open portal into the gear house.

The small one-story gear house is board and batten with gabled ends, the pitch of its roof matching that of the compressor house. The structure was once supported by the penstock posts on the water side and the bottom log of the compressor equipment house on the land side. A door is located on the north wall which once led onto a railed platform (now gone). The west wall contains a small window, roughly in the middle.

Beneath the gear house are the remains of the penstock, constructed of rough milled beams using common mine timbering techniques. The horizontal braces, roughly 6" by 6", are bolted onto large 12" by 12" vertical beams.<sup>2</sup>

The water wheel and all mill machinery are no longer present. The dam system which once diverted water from the Crystal River to drive the mill machinery has not survived.

The present condition of the mill is deteriorated. However, recent restoration efforts (1984) have attempted to create support for the penstock and gear house. In 1976 a new roof and partial concrete footings were installed, along with a cable system which sought to prevent the mill from leaning further into the stream. (Undercutting by the river of the gearhouse and penstock had resulted in severe shifting of those portions of the structure and caused structural problems in the compressor house as well.)

<sup>1</sup>Silver Lance, December, 1892, p.3.

<sup>2</sup>Gary Long and Kathleen Hoeft, "Crystal Mill Report", September 9, 1984.

## 8. Significance

Period	Areas of Significance—Check and justify below			
___ prehistoric	___ archeology-prehistoric	___ community planning	___ landscape architecture	___ religion
___ 1400–1499	___ archeology-historic	___ conservation	___ law	___ science
___ 1500–1599	___ agriculture	___ economics	___ literature	___ sculpture
___ 1600–1699	___ architecture	___ education	___ military	___ social/
___ 1700–1799	___ art	___ engineering	___ music	___ humanitarian
<u>XX</u> 1800–1899	___ commerce	___ exploration/settlement	___ philosophy	___ theater
<u>XX</u> 1900–	___ communications	<u>XX</u> industry	___ politics/government	___ transportation
		___ invention		___ other (specify)

Specific dates 1892–1917 Builder/Architect Unknown

### Statement of Significance (in one paragraph)

The powerhouse at Crystal known as Crystal Mill is notable in Colorado for its association with the development of the metal mining industry. It may be unique in the state for its use of water to generate power for historic underground mining operations. The powerhouse was also locally significant in that it facilitated the mining process and allowed mining to continue in Crystal at the period of the Silver Crash when mining was not generally lucrative. Therefore the survival of the community of Crystal owes much of its existence to this power generating facility.

The log and frame building on the Crystal River for many years has incorrectly carried the label of "mill".<sup>1</sup> In fact the structure was built in 1892 for use as a powerhouse, containing machinery to generate power to run equipment for mining in the Sheep Mountain Tunnel. A turbine water wheel which generated over 90 horsepower was the propelling force which operated a compressor. The compressed air was carried through pipe lines to air drills.<sup>2</sup> The power to run the machinery was acquired by damming the Crystal River near the entrance to the Sheep Mountain Tunnel at the confluence of the north and south forks of the Crystal.

The project was part of the mining operation of the Sheep Mountain Mining and Tunnel Company. In addition to the mine at Sheep Mountain, the powerhouse supplied power for the Inez, Bear Mountain, and later the Black Queen<sup>3</sup> in the Crystal area. Electric lighting was also provided in the mines by a dynamo that was later installed in the powerhouse.<sup>4</sup>

The plant continued to produce power for the mines until 1917 when mining operations ceased.<sup>5</sup> At some point after 1917, all the existing equipment inside Crystal Mill was removed. This may have taken place during World War II when scrap metal and unused machinery was removed in most of the accessible mills and many mine-related structures in the state as part of the war effort. As a result, few historic mills in Colorado survive with their integrity of equipment intact.

Crystal Mill has been owned since 1954 by Treasure Mountain Ranch, Inc., who have demonstrated an interest in its preservation. It has come to represent to many Coloradans and tourists early day mining. Reportedly, it is one of the most highly photographed sites in the state and appears in many publications, calendars, and other printed matter. The mill's recent endangerment was a concern given state-wide attention. Fund-raising efforts were initiated and some stabilization work conducted.

<sup>1</sup>Known historically as Sheep Mountain Tunnel Mill and Crystal Mill, the structure has also been referred to as Lost Horse Mill and Dead Horse Mill.

<sup>2</sup>Duane Vandenbusche, The Gunnison Country (Gunnison: Gunnison, Inc., 1980), p. 247.

<sup>3</sup>The Silver Lance, December 29, 1892. Published at Crystal, Colorado, p.3.

<sup>4</sup>Ibid.

<sup>5</sup>Dorothy Tidwell, Treasure Mountain Brochure.

# 9. Major Bibliographical References

See footnotes.

# 10. Geographical Data

Acreeage of nominated property less than 1

Quadrangle name Snowmass Mountain

Quadrangle scale 1:24000

### UTM References

A 

1	3	3	1	7	9	6	0	4	3	2	5	2	0	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 and justification

The building and the land on which it sits.  
T11S, R87W, unsectioned.

### List all states and counties for properties overlapping state or county boundaries

state	n/a	code	county	code
state		code	county	code

# 11. Form Prepared By

name/title Tracey Thrasher Daily Edited: Gloria Mills

organization Preservation Officer, City of Gunnison date 1/19/85

street & number 515 North Boulevard telephone (303) 641-1951

city or town Gunnison state Colorado 81230

# 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 Barbara Sudler

title State Historic Preservation Officer date 4-15-85

### For NPS use only

I hereby certify that this property is included in the National Register

DeK Garrison date 7/5/85  
Keeper of the National Register

Attest: \_\_\_\_\_ date \_\_\_\_\_  
Chief of Registration

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Continuation sheet

Item number 10

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Addendum

Item #10 Geographical Data

Verbal Boundary Description and Justification

The nominated area includes the building and the surrounding rock outcropping which composes the dramatic setting for the powerhouse. The rock outcropping is bounded on three sides by the South Fork and the Crystal River and extends approximately 10' from the rear of the powerhouse (Crystal Mill).