

COLORADO CULTURAL RESOURCE SURVEY

OAHP1405

Cultural Resource Re-evaluation Form

Rev. 9/98

(page 1 of 3)

1. Resource Number: 5ST881 2. Temp. Resource Number: _____
3. Attachments
(check as many as apply)
 Photographs
 Site sketch map
 U.S.G.S. map photocopy
 Other Feature Descriptions
 Other Artifact Inventory
4. Official determination
(OAHP USE ONLY)
 Determined Eligible
 Determined Not Eligible
 Need Data
 Nominated
 Listed
 Contributing to N.R. District
 Not Contributing to N.R. Dist
5. Resource Name: Iowa Hill Placer Mine
6. Purpose of this current site visit (check as many as apply)
 Site is within a current project area
 Resurvey
 Update of previous site form(s)
 Surface collection
 Testing to determine eligibility
 Excavation
 Other Evaluation for development as a public heritage resource.
Describe The site was selected for inclusion in an inventory of historic sites in the Breckenridge area.
7. Previous Recordings: The site was recorded in 2000 as the Iowa Hill Hydraulic Placer Mine by Eric Twitty. Recordation surpassed Class III standards.
8. Changes or Additions to Previous Descriptions: The site was re-recorded as the Iowa Hill Placer Mine and several new features were included. The Feature Numbers have been reorganized and a new map rendered.
9. Changes in Condition: An interpretive trail and sign posts have been constructed on-site, depicted on the site plan.
10. Changes to Location or Size Information: The site was originally recorded as 300 by 606 meters, and is currently 475 by 610 meters, totaling 289750 square meters and 72 acres.
11. Changes in Ownership: None
12. Other Changes, Additions, or Observations: A revised interpretation and description based on material evidence and archival information is provided in Chapter 7 of the report noted below.
13. National Register Eligibility Assessment:
Eligible Not eligible Need data
Explain: See the attached sheets.
14. Management Recommendations: See the attached sheets.
15. Photograph Types and Numbers: _____
16. Artifact and Field Documentation Storage Location: Town of Breckenridge
17. Report Title: Mining the Golden Horseshoe: An Inventory of Select Historic Sites Around Breckenridge, Summit County, Colorado
18. Recorder(s): Eric Twitty 19. Date(s): August 30, 2002
20. Recorder Affiliation: Mountain States Historical

Colorado Historical Society, Office of Archaeology & Historic Preservation
1300 Broadway, Denver, CO 80203
303-866-3395

Eligibility Recommendations

The Iowa Hill Placer Mine retains a high degree of archaeological integrity from operations during the late 1890s, and architectural integrity from activity during the mid-1870s. The site is also important on local, state, and national levels. For these reasons, the site is recommended eligible for NRHP and the SRHP under Criteria A, B, and C.

In terms of *Criterion A*, the Iowa Hill Placer Mine is associated with important frontier, economic, social, and engineering themes and trends discussed in Chapter 8 of the report noted above. Some of the themes and trends the site is associated with are specific. On statewide and local scales, the Iowa Hill mine was a profitable and early operation in the central Rocky Mountains, and as such, it contributed to the development of the region's mining industry and associated settlement. The site contributed to the development and understanding of hydraulic engineering for both mining and non-mining uses, which had lasting implications for Colorado. The Iowa Hill mine also served as an example of how to use hydraulic mining and booming methods to process gold-bearing gravel in economies of scale.

On a broad scale, the mine was a successful constituent in a wave of organized hydraulic placer mining that peaked in the West during the 1880s. In this role, the site participated in the development of the West's highly important hydraulic mining industry. By the late 1890s, the mine served as an example of how to apply advanced hydraulic and mechanical engineering to process gold-bearing gravel in economies of scale.

The Iowa Hill Placer Mine is associated with an event important to mining engineering. In 1904, engineer Lemuel Kingsbury adapted Wilfley tables, conventionally used to concentrate metal ores in mills, to concentrate gold-bearing sands recovered from the mine's sluices. Kingsbury's adaptation of the Wilfley table was innovative and important because it permitted the recovery of greater amounts of gold from what would have been discarded as placer tailings.¹

In terms of *Criterion B*, the Iowa Hill Placer Mine site is directly associated with persons significant to Colorado's past. Specifically, in 1898, a group of investors hired Lemuel Kingsbury to bring the mine into production in an organized, planned manner. As an engineer, Kingsbury was accomplished and had some history in the development of Colorado's mining frontier, as well as introducing several important placer mining methods. Kingsbury began his ascent to prominence in 1880 when he joined the rush to the Roaring Fork Valley, which ultimately resulted in the establishment of Aspen. At that time, Kingsbury prospected and staked approximately 20 claims on Conundrum Creek several miles south of Aspen. When a small rush developed, Kingsbury and fellow prospectors organized the town of Highland City. Little is known of Kingsbury until the late 1890s, except that he was recognized as a mining engineer when he arrived in the Blue River drainage. At this time, a group of investors secured Kingsbury to first examine the Iowa Hill Placer Mine, then bring it into production. He also served as manager of the Brooks & Snider Mine, which was one of the Breckenridge area's richest producers. Iowa Hill became one of his primary concerns, and he developed a complex system to enhance hydraulic mining and booming. He also initiated the practice of bank-blasting to loosen huge volumes of gravel. Bank-blasting, traditionally used for railroad construction, involved driving an adit into dense, consolidated gravel, packing the adit with hundreds to thousands of pounds of explosives, and setting off the charge. At Iowa Hill, Kingsbury adapted machinery used for concentrating hardrock ores to concentrate gold-bearing placer tailings. Kingsbury continued as manager at Iowa Hill for the Summit Banner Placer Mining Co through 1906. Around this time, he also took the position of manager for the Buffalo Gold Placer Mining Company near Dillon. There, Kingsbury introduced the progressive use of a steam shovel to mine gravel when the mine's water supply proved inadequate for traditional hydraulic mining methods. The steam shovel permitted processing of gravel in economies of scale and was later adopted by other water-poor mining companies in the West.²

In terms of *Criterion C*, the Iowa Hill Placer Mine site not only embodies the distinct characteristics of a successful, hydraulic placer mine, but also offers an assemblage of features that represent aspects of hydraulic mining. While most of the site's equipment and structures have been removed, leaving archaeological evidence, the scope and nature of the former mining operation can easily be ciphered out of the extant remains. Some of the features include characteristic hydraulic workings, sluice beds, a prospect shaft driven to find the lower limit of gold-bearing gravel, a blacksmith shop platform, what was probably a guard station platform, a reservoir for booming, and a network of ditches. The Summit Banner Reservoir (Site 5ST994), which is a component of the greater Iowa Hill mine, contributes to the overall intactness of the mine's water system.

The Iowa Hill Placer Mine is also important under Criterion C because hydraulic placer mines were relatively rare in North America, and sites that retain integrity are even less common. Despite the rarity of hydraulic placer mining, the industry had lasting and significant impacts in terms of gold production, water engineering, and mining engineering.

The Iowa Hill mine includes a highly intact log boardinghouse erected around 1876. The structure possesses elements of classical architectural style, and it is one of the earliest standing buildings in Summit County. The structure also serves as an example of early boardinghouses erected by mining companies in the central Rocky Mountains.

¹ "Mining News" *MSP* 9/9/05 p182.

² *Colorado State Mining Directory*, 1898:301; Griswold and Griswold, 1996:562; "Mining News" *EMJ* 5/26/06 p1022; "Mining News" *EMJ* 6/24/11 p1272; "Mining News" *MSP* 7/7/06 p25.

The Iowa Hill Placer Mine is an important contributing element to the historic fabric and visual landscape in the Breckenridge area. Because the site retains a high degree of archaeological integrity and occupies around 71 acres of ground, it contributes to the waning set of placer mining sites in the Breckenridge area. The mine's two, deep incisions and broad tailings fans are prominent from afar, and are landmarks that reinforce the Breckenridge area's placer mining ambiance.

Management Recommendations

Management recommendations for the Iowa Hill site include several actions. First, the Town of Breckenridge should continue maintaining the boardinghouse. Second, development of the site as a heritage resource should continue. The system of interpretive walking trails and signs should be expanded to include each of the mine's principal components; the boardinghouse should be restored with furnishings and supplies; and samples of equipment should be installed. Such development would present little detrimental impact and increase public understanding and appreciation of the history of hydraulic mining and the role it played in Summit County and Colorado.

Colorado State Mining Directory Denver, CO, 1898.

Griswold, Don L. and Griswold, Jean Harvey *History of Leadville and Lake County, Colorado* Colorado Historical Society, Denver, CO, 1996.

"Mining News" *Engineering & Mining Journal* 1875-1920. "Mining News" is a feature in each issue where activities in prominent mining districts are documented.

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