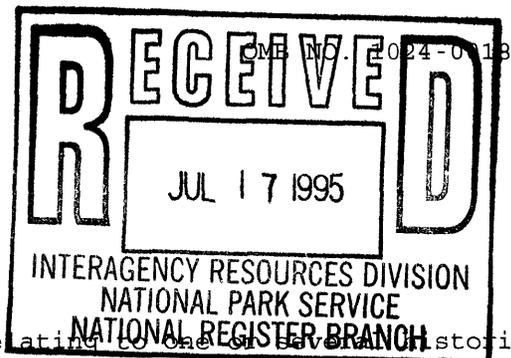


United States Department of the Interior
National Park Service

**NATIONAL REGISTER OF HISTORIC PLACES
MULTIPLE PROPERTY DOCUMENTATION FORM**



This form is for use in documenting multiple property groups relating to one or several historic contexts. See instructions in Guidelines for Completing National Register Forms (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. For additional space use continuation sheets (Form 10-900-a). Type all entries.

A. Name of Multiple Property Listing:

Mining Sites in the Nogal Mining District of the Lincoln National Forest, New Mexico

B. Associated Historic Contexts:

Early Settlement Patterns and Community Development in the Nogal Mining District of Lincoln County, New Mexico, 1860 to 1959

Changing Mining Technology in the Nogal Mining District, Lincoln County, New Mexico, 1860 to 1959

C. Geographical Data:

The Nogal Mining District, as demarcated by geologist George B. Griswold, is that area surrounding the town of Nogal. The District extends southward from U.S. Highway 380 to the Lincoln/Otero County line. The Nogal Mining District is bounded to the east by Highway 37, and to the west by the Sierra Blanca mountain divide. Within this District, six sub-districts are identified, including the Schelerville area to the west, the Vera Cruz area situated just north of the Highway 37 boundary, the Nogal area between the town of Nogal and Nogal Peak, the Parsons area south of Nogal Peak, the Bonito area just north of Bonito Lake, and the Alto area west of the town of Alto. Most of the Nogal Mining District is encompassed by the Lincoln National Forest. All of the Nogal Mining District lies in Lincoln County, New Mexico.

D. Certification:

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this documentation form meets the National Register documentation standards and sets forth requirements for the listing of related properties consistent with the National Register criteria. This submission meets the procedural and professional requirements set forth in 36 CFR Part 60 and the Secretary of the Interior's Standards for Planning and Evaluation.

See letter from E. DeBloo's dated 7/17/95

Signature of certifying official

Date

State or Federal agency and bureau

I, hereby, certify that this multiple property documentation form has been approved by the National Register as a basis for evaluating related properties for listing in the National Register.

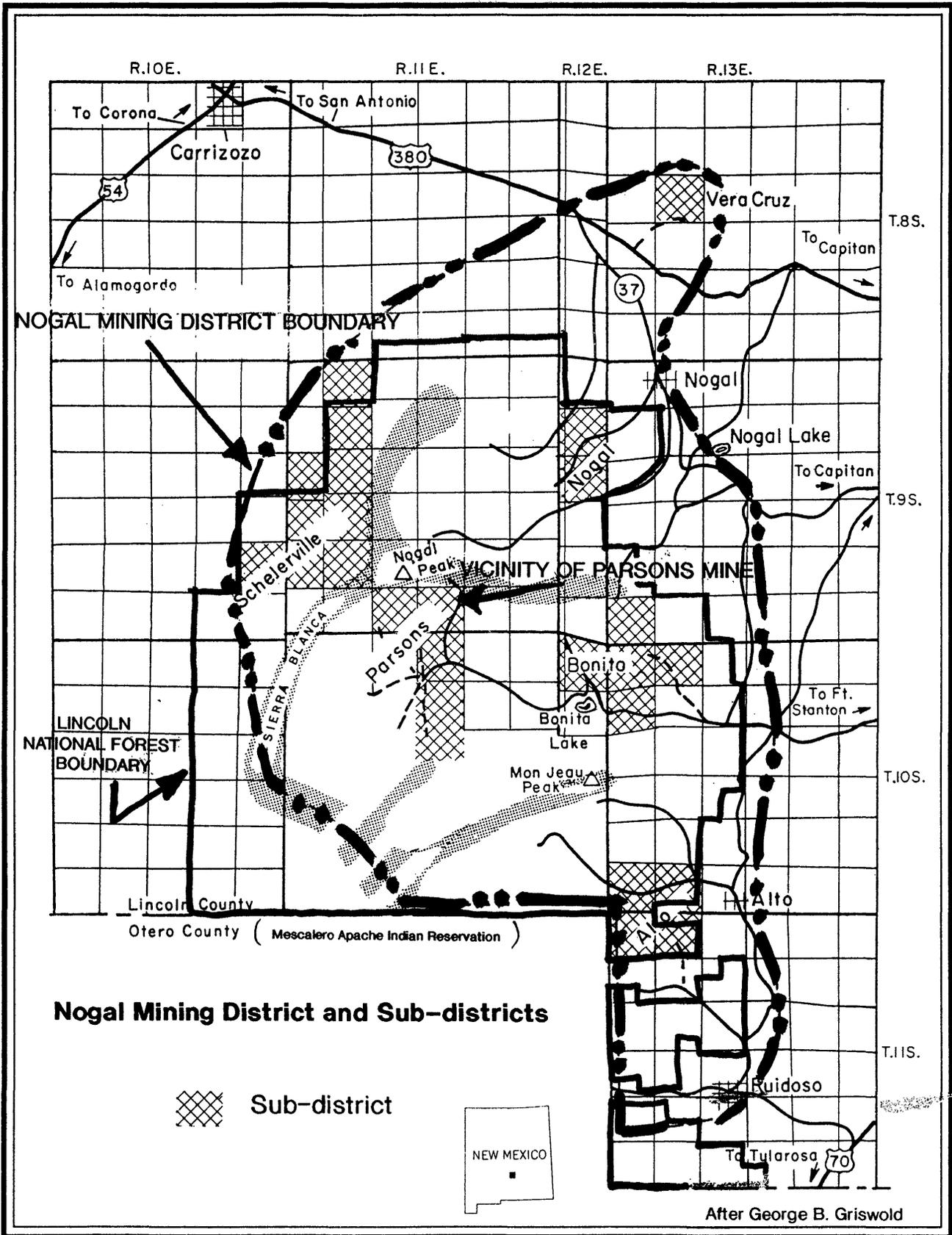
Edson H. Beall

Entered in the
National Register

Signature of the Keeper of the National Register

6/22/95
Date

for



E. Statement of Historic Contexts

Discuss each historic context listed in Section B.

Early Settlement and Community Development in the Nogal Mining District of Lincoln County, NM 1860-1959:

INTRODUCTION

This multiple property nomination includes significant mining sites on the Lincoln National Forest within the Nogal Mining District. Each of these mining settlements initiated the development of new communities. Settlers lured to mining towns such as Nogal, Parsons and Bonito eventually displaced the native Mescalero Apache population.

From 1848 through 1965 New Mexico is credited with a gold production of 2,267,000 ounces. This figure, however, does not take into account millions of dollars worth of placer gold mined prior to 1848. Although a number of districts within Lincoln County produced significant amounts of gold, the White Oaks and Nogal Districts produced the most (Koschmann n.d.: 3).

History of the Nogal Mining District:

Despite the scarcity of water and the threat of Mescalero Apache attack, early prospectors discovered placer gold in 1865 at Nogal, then known as Dry Gulch. Billy Gill's discovery of a quartz lode three years later helped to establish the town of Nogal and the Nogal Mining District (Jones 1964: 61; Caperton 1970: 17). Bonito City grew out of a silver mining camp. The Hopeful Lode gold claim spawned the town of Parsons (See map, page 4a).

Although mineral prospecting was encouraged by the presence of the U.S. Calvary at nearby Fort Stanton, no systematic mining in the Nogal District occurred while the District was part of the Mescalero Apache Reservation. Ensuing ore discoveries, however, caused the Reservation boundaries to shrink in 1882 (Opler 1950: 30). The capture of understandably hostile Apache bands by Generals Miles and Crook opened the way for area settlement in 1886 (Mullens 1926: 10).

As communities developed at or near the mines, the region saw a corresponding growth in utility and transportation networks. Around 1900, the El Paso and Southwestern Railroad was constructed by the Phelps-Dodge Mining Corporation, replacing horse-drawn conveyances as the sole means of transportation in this rugged region. In 1902, Phelps-Dodge connected to and acquired the El Paso and Rock Island railroad (Williams 1979: 42).

The new El Paso and Rock Island route, touted in several Nogal District mining reports, provided the region with stations at both Walnut and Capitan (McGhee 1915: 42), and stimulated the growth of Carrizozo as a railroad town. By 1915, an electrical line over seventeen miles long connected the American and Parsons mines with the Alto Light and Power Company in White Oaks. Coal no longer had to be hauled 18 miles by wagon over rough mountain roads (McGhee 1915: 6).

Although known mainly for its gold production, the Nogal District also produced silver, copper, and lead. From 1903 to 1926, gold production was steady. In 1924, the Southern Pacific acquired the El Paso and Southwestern railroad. By the depression years of the 1930s, all of the feeder lines of the former El Paso and Southwestern route were abandoned (Williams 1979: 42). Throughout the 1930s, only small-scale mining activity was reported. The district was practically idle from 1941 through 1959 (Koschmann n.d.: 3).

The boom and bust years of mining activity have left their mark on the Nogal District landscape. As mining ceased, tiny towns clustered around mineral deposits all but disappeared. The abandoned town of Parsons (1888-1926) supported a population of several hundred people and a variety of businesses (Sherman 1975: 168). The Parsons Mine (patented as the Hopeful Lode) and the community it spawned are the subject of an individual National Register of Historic Places nomination included with this Multiple Property submission.

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Section number E Page 3

Frontier Settlement Patterns

Mining activity lured both Anglo and Hispanic settlers to the Nogal District despite the scarcity of water and threat of attack by native Apache groups. Settlers built communities and transportation networks to support mining enterprises.

At least six mining communities in the Nogal District boasting populations greater than 150 inhabitants in the mid-nineteenth century no longer exist or pale in size (Williams 1979: 53). The town of Parsons, spawned by the Parson Mine, included boardinghouses, a general merchandise store, livery stable, school, blacksmith and justice of the peace (Sherman 1975: 168). The two-story, eighteen-room, Parsons Hotel was constructed around the turn of the century to house visiting stockholders and various guests. Mary Roberts Rinehart (1876-1958), American author of detective fiction, and Mr. Studebaker (of Studebaker wagon fame) were among the many guests (Sherman 1975: 168).

The intricate pattern of frontier settlement, relocation, construction, and abandonment as it relates to the extraction of ore from the earth needs to be more fully examined. The Mescalero Apaches, for example, were relocated to accommodate the miners' demands. Thriving communities were abandoned as nearby mining resources were depleted or deemed unprofitable. The Nogal District mine sites in general, and the Parsons Mine in particular, provide excellent tools for research into these topics.

Changing Technologies in the Nogal Mining District

Early placer (surface) miners used water run through elongated troughs called sluice boxes or rockers to wash the alluvial gravel. Heavier minerals, also known as values, were trapped in the slats or "riffles" in the bottom of the box (Luecke n.d.: 32-38).

Early on, ore crushing and separation was accomplished manually or with the help of animal-driven machinery. Mercury was used in the field to amalgamate the gold particles. Later, a slurry of gold ore was passed over mercury-coated copper plates. This process, known as amalgamation, caused the particles of free gold to coalesce. This method was replaced early in the twentieth century in the United States by a process utilizing a solution of alkaline cyanide to extract the gold. Crushed ore was conveyed to leaching tanks containing cyanide. Once the ore relinquished the mineral gold, the gold was retrieved in precipitate boxes (Noble and Spude 1992: 29-30).

Mines in the Nogal District typify many of the changing mining technologies employed by miners across the United States. From placer mining to cyanide amalgamation plants, these early technologies testify to the ingenuity and tenacity of frontier miners. Before the processing plants, miners built their own sluice boxes and assay kits. Before the advent of railroads, these workers pulled huge, cast-iron machines up rough canyons using teams of horses. Before the construction of a power line, coal was hauled long distances over mountain roads by wagon.

Remnants of machinery, abandoned mine adits, homesites, and other artifacts present at sites included within this multiple property nomination provide clues for further research into the engineering aspects of these early mining efforts. From its inception as a placer pit, through its development as a full-scale extraction and milling plant, Parsons Mine in particular represents a fine example of the full range of techniques employed over time to extract and mill gold ore.

|x| See continuation sheet

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Changing Social Attitudes

A study of the early settlement of the Nogal District by miners and mine-related enterprises presents a remarkable opportunity for further research into changing social attitudes. What remains of the Nogal District mining settlements, studied in conjunction with historic documentation and oral histories, could be used to determine attitudes towards natural resources as they relate to different time periods and ethnicity.

SUMMARY: POTENTIAL RESEARCH QUESTIONS

Of the thirteen known ore extraction and/or ore processing property types located on the Lincoln National Forest within the Nogal Mining District, the Parsons Mine site represents the most well-preserved example of both property types. Wooden posts, pieces of tram rail, extensive waste piles, adits, apple orchards, metal pipes, remnants of mine shafts and hoists, parts of vehicles and machinery, glass, barrels, prospecting pits, ore cart remains, old roadbeds, concrete foundations, ore buckets, and other artifacts are featured at some of the remaining twelve known mining sites in varying degrees of concentration.

All phases of the ore extraction and ore milling process are evident at the Nogal District sites. At the Parsons Mine site, two prospect pits, four adits, three boilers, numerous concrete foundations and metal pipes, an ore separator, a water collection pond, a metal safe, cyanide waste dumps, various smaller features, and scattered artifacts remain. The entire evolution of the ore extraction and milling process could be reconstructed using a combination of archaeological evidence and historical documentation provided by the Parsons Mine and other Nogal District sites. The Parsons Mine site in particular would make an ideal interpretive center for visitors.

Although much of what remains of the Nogal District mining sites is in a state of ruin, the potential for valuable research exists. Analyses of artifacts and structural remains of sites within Nogal District, coupled with archival research, has the potential to yield information pertaining to the following research questions: Where did these miners come from? How did they learn their trade? Did different mining techniques reflect ethnicity? How were natural resources viewed by the native Apaches? How did these views differ from those held by incoming settlers? If natural resources are placed on a continuum as being either non-renewable or expendable, where did the attitudes of each group fit into this continuum? Would it have been possible for the native population and the settlers to co-exist peacefully if mining had not been profitable? How has the extraction of ore from the earth changed over time? How have views concerning the presence of toxic waste dumps as a mining by-product changed? How have views concerning the conservation of natural resources changed over time? How do these views relate to ethnicity?

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Section number E Page 5

PHOTOGRAPH:

PHOTOGRAPH #1 SUBJECT: Placer mining
 DATE: Circa 1900
 PHOTOGRAPHER: Unknown
 COURTESY OF: Mr. Ralph Forsythe, Carrizozo, NM

F. Associated Property Types

I. Name of Property Type: Ore Extraction

II. Description:

These property types are involved with the discovery and extraction of mineral ores. The following would typically be associated with this property type: hand-operated or machine-driven prospecting efforts, the construction of open cuts, tunnels, adits, and/or shafts, shoring systems including timbering and headframes, hoisting systems, and the tools and machinery used to extract, transport, and store the ore. The extractive end of the mining process would initiate also the presence of waste or tailing piles, and the construction of assay offices, worker housing, saw mills, and other maintenance and administrative facilities.

III. Significance:

The establishment of ore extraction property types in the Nogal Mining District heralded a resettlement of the frontier. Native Mescalero Apaches were displaced to make way for the prospectors, miners, and subsequent mining operations evinced by this property type. This property type represents the first step in a complex and evolutionary technological process.

IV. Registration Requirements:

In order to qualify for listing, the ore extraction resources must retain integrity of location and setting, and must retain a sense of feeling and association with early mining efforts. Something as seemingly mundane as a prospector's pit would thus qualify as exemplifying early regional settlement, and the beginnings of an evolving mining technology. If integrity of design, workmanship, and/or materials has been lost due to neglect or vandalism, the property may still yield important archaeological information. Adits, remnants of tramway systems, timbering and headframes, and other artifacts would still contribute to our understanding of these early extraction methods, and would illuminate the irrevocable changes to the landscape these extraction methods wrought.

|_x| See continuation sheet for additional property types

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Section number F Page 7

I. Name of Property Type: Ore Processing

II. Description:

This property type is associated with an intermediate stage in the mining process, after the ore is extracted yet before the ore is refined. Animal-driven arrastras were used initially to crush the extracted ore. Historically, this method went through a series of refinements to include various amalgamation and concentration processes. Associated with this property type is an array of structures and objects designed to ready the ore for refinement, including crushers, separators, amalgamation plants, cyanide concentrators, and smelters. One would expect to find (either on the surface or archaeologically) a wide variety of material culture associated with these milling processes, including vats, rollers, power-generating equipment, furnaces, pipes, and waste dumps.

III. Significance:

Ore processing facilities typically represented a long-term presence on the landscape, and one that reflected changing trends in mining technology. Animal-powered machines gave way to steam-generated, then electrical-powered mills. The presence of an ore processing site often meant that an abundance of natural resources existed, including adequate timber and an ample water supply. The success and relative permanence of milling sites often promoted the growth of transportation networks and nearby communities.

IV. Registration Requirements:

An ore processing property type should convey to the researcher a sense of what techniques were being employed to render the ore marketable. The quality of workmanship used in the construction of the milling plants and the materials used should be apparent, or should be documented in historic photographs or written descriptions. Different phases of mining technologies should be ascertained. If designs upon the landscape have become obliterated over time, the property still must convey the potential for viable archaeological research. The site must maintain its integrity of setting and location, and transmit an association with the boom and bust cycles of mining activity.

|_x| See continuation sheet for additional property types

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Section number F Page 8

I. Name of Property Type: Refining

II. Description:

Refineries convert processed ore into a state of purity suitable for industrial, manufacturing, or currency exchange use. Similar to smelters, refineries often acted in tandem with smelting operations. These complexes usually involved large investments of capital and labor, and serviced areas beyond the immediate locale.

III. Significance:

Refineries represent the final stage of mineral processing. Usually engineered as professionally-designed complexes, refineries typify the culmination of cutting-edge mining technology for each time period. Refineries respond to supply and demand, reflecting regionwide and nationwide trends in metal ore and alloy use.

IV. Registration Requirements:

Refineries must retain integrity of location, design, setting, workmanship, feeling and association, or demonstrate the potential to provide information for further research. Because refineries typically represent large expenditures of labor and capital, physical structures are likely to remain. This evidence may be used to further our understanding of the development of mining technologies. Refinery sites should also harbor important archaeological information.

See continuation sheet for additional property types

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Section number F Page 9

I. Name of Property Type: Mining Landscapes

II. Description:

Historic mining landscapes are those geographical areas modified by the extraction and processing of natural mineral resources. With this economic activity came a transformation of settlement patterns, transportation routes, and vegetation. Inherent in mining landscapes are such features as prospecting pits, adits, tailing piles, roads and pathways, mill buildings, machinery, claim markers and other identifying structures and objects.

III. Significance:

Mining landscapes were melded in direct response to the surrounding natural environment. Viable quantities of ore, the availability of water and timber, temperate climate and access to transportation links were necessary components of a successful operation. Encapsulated in the industrial use of these landscapes are the values and traditions of those who shaped the land. Historic photographs of early mining efforts show landscapes nearly denuded by timbering activities. Until recently, many landscapes were left ravaged by surface mining, with little effort made to reforest. The natural resiliency of these landscapes merits our attention.

IV. Registration Requirements:

To qualify as an historic landscape, mining areas must possess some degree of integrity in the following areas: location, design, setting, materials, workmanship, feeling and/or association. The demise of a successful mining operation often means that properties are left exposed to the elements, vandalized, burned, neglected or otherwise partially or wholly obliterated from the surface. It is imperative, then, that a landscape retain its location, its historic setting, and its intangible sense of feeling evoked by the boom and bust cycles of mining. Landscapes which have lost nearly all surface manifestations of mining activity may still provide important archaeological information.

G. Summary of Identification and Evaluation Methods

Discuss the methods used in developing the multiple property listing.

Summary of Identification and Evaluation Methods:

The multiple property listing of the Nogal Mining District resources is based on a number of field surveys and extensive archival research conducted between 1991 and 1993. Between May 13-17, 1991 the Museum of New Mexico's Office of Archaeological Studies (OAS) conducted an archaeological survey of seventeen abandoned mine sites for the Abandoned Mine Lands Bureau (AMLB) of the Energy, Minerals and Natural Resources Department (EMNRD). The survey was undertaken to determine what cultural resources would be affected by proposed adit closures.

Subsequent field surveys by U.S. Forest Service archaeologists supplemented this documentation. In addition to extensive surveying and mapping on the ground, historic research and oral histories were compiled between September and October of 1993.

Physical remains at the Parsons Mine site in particular continue to convey crucial information about the extraction and refinement of gold ore. Using the thirteen known mining sites on the Lincoln National Forest within the Nogal Mining District, frontier settlement patterns, changing mining technologies, and evolving social attitudes toward natural resources could be researched.

Archaeological evidence, verified by historic photographs, continues to identify the nature and the time period of the mining activities which occurred at the Parsons Mine. A complete summary of archaeological evidence remaining at the Parsons Mine site is listed in the individual National Register of Historic Places nomination of Parsons Mine included with this multiple property submission. Enough remains on the surface to develop this historic mining landscape into an interpretive site for visitors.

An evaluation of the property based on the surveys and research reveals that the Parsons Mine is significant under Criterion A for its contribution to regional patterns of frontier settlement and economic development. The Parsons Mine site is significant under Criterion D for its ability to yield knowledge about early mining technologies, and the communities these mines supported.

H. Major Bibliographical References

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See continuation sheet

Primary location of additional documentation:

- | | |
|---|---|
| <input type="checkbox"/> State historic preservation office | <input type="checkbox"/> Local government |
| <input type="checkbox"/> Other State agency | <input type="checkbox"/> University |
| <input checked="" type="checkbox"/> Federal agency | <input checked="" type="checkbox"/> Other |

Specify repository: USDA Forest Service Supervisor's Office, Alamoqordo, NM 88310
Museum of New Mexico, Albuquerque, NM 87107

I. Form Prepared By

name/title: Jean Fulton/Archaeologist
organization: USDA Forest Service date: October 1993
street & number: 1101 New York Avenue telephone: (505) 434-7272
city or town: Alamoqordo state: NM zip code: 88310
NPS Form 10-900B OMB No. 1024-0018

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