# LA JARA CANYON: THE TESTING OF EIGHT SITES AND AN ISOLATED OCCURRENCE ALONG U.S. 64, RIO ARRIBA COUNTY, NEW MEXICO

Charles A. Hannaford

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Charles A. Hannaford

with a contribution by Janet E. Spivey

Submitted by Eric Blinman Principal Investigator

**ARCHAEOLOGY NOTES 255** 

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#### ADMINISTRATIVE SUMMARY

Between July 12 and July 29, 1998, the Office of Archaeological Studies, Museum of New Mexico, conducted limited testing at eight sites and an isolated occurrence along U.S. 64, Rio Arriba County, New Mexico. The limited testing program was initiated at the request of the New Mexico State Highway and Transportation Department (NMSHTD) to determine the nature and extent of cultural resources within an area of planned improvements to U.S. 64. Limited testing was conducted at LA 115082 (AR-03-02-03-735), LA 115081 (AR-03-02-03-734), LA 115076 (AR-03-02-03-729), LA 81675 (AR-03-02-03-511), LA 115074 (AR-03-02-03-727), LA 115068 (AR-03-02-03-721), LA 115065 (AR-03-02-03-718), IO-17, and LA 115067. LA 115067 is on private land and land controlled by the New Mexico State Highway and Transportation Department. The remaining seven sites and the isolated occurrence are located along the U.S. 64 right-of-way in the Jicarilla District of Carson National Forest.

LA 115082 (AR-03-02-03-735), LA 115081 (AR-03-02-03-734), LA 115076 (AR-03-02-03-729), LA 81675 (AR-03-02-03-511), and LA 115074 (AR-03-02-03-727) are only the marginal portions of these artifact scatters, which extend into the proposed construction zone. No subsurface features or cultural surfaces were detected. IO-17, consisting of two Anasazi sherds, was not associated with any subsurface cultural deposits.

Three sites date from the Historic period. LA 115068 (AR-03-02-03-721) is a simple artifact scatter, LA 115065 (AR-03-02-03-718) is the original Jicarilla Ranger District office, and LA 115067 is the Thomas A. Cordova homestead. The peripheral site areas within the construction zone contained no important subsurface deposits. Ethnohistoric overviews were conducted for the Jicarilla Ranger District office and the Cordova homestead.

The portions of the sites overlapping the proposed construction zone have been adequately documented, and no additional investigations are recommended. LA 115074 (AR-03-02-03-727) will not be affected by the proposed slope limits, and the new right-of-way fence along the edge of the artifact scatter, downslope from the Feature 1 overhang, is the only part of the project that intersects the resource. The 21 m of right-of-way fenceline crossing the edge of the artifact scatter should be hand-placed and monitored by an archaeologist.

NMSHTD Project No. TP-064-4(8)107, CN 2024 MNM Project 41.662 (La Jara Canyon) USFS Special Use Permit 2700-4

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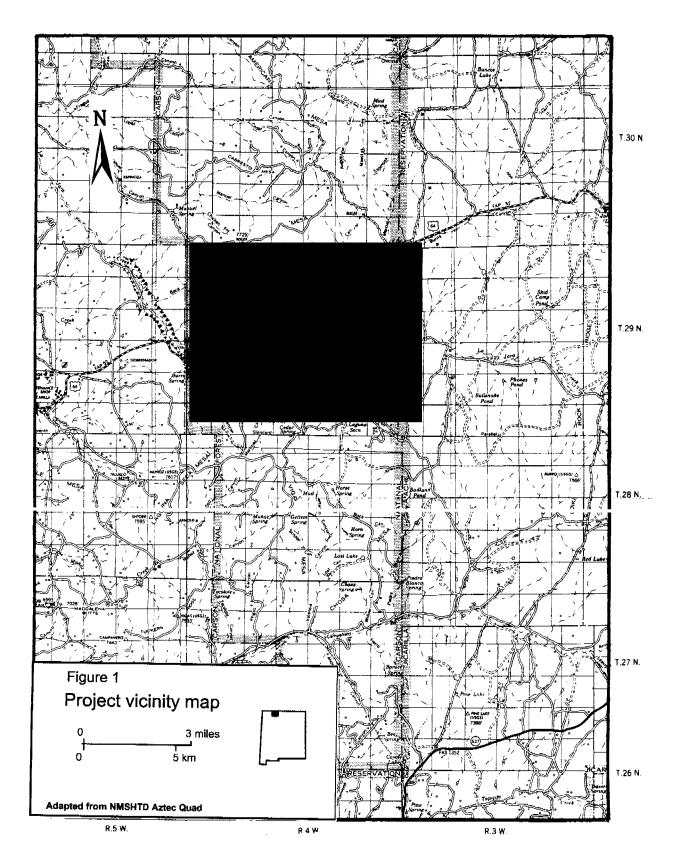
#### INTRODUCTION

At the request of Mr. F. Craig Conley, environmental program manager, New Mexico State Highway and Transportation Department, a limited testing program was conducted on the portions of eight sites and an isolated occurrence within the proposed construction zone of improvements to U.S. 64, Rio Arriba County, New Mexico (Fig. 1). Legal descriptions of the sites and the isolated occurrence are in Appendix 1 (removed from copies in general circulation). LA 115067 is on private land and land controlled by the New Mexico State Highway and Transportation Department. The remaining historic properties, LA 115082 (AR-03-02-03-735), LA 115081 (AR-03-02-03-724), LA 115076 (AR-03-02-03-729), LA 81675 (AR-03-02-03-511), LA 115074 (AR-03-02-03-727), LA 115068 (AR-03-02-03-721), LA 115065 (AR-03-02-03-718), and IO-17 are along the U.S. 64 right-of-way in the Jicarilla District of Carson National Forest. Fieldwork, which took place between July 12 and July 29, 1998, was conducted by Charles A. Hannaford, assisted by Peter Y. Bullock. Eric Blinman was principal investigator. Maps were drafted by Ann Noble, and the report was edited by Tom Ireland.

Limited testing was conducted at the historic properties to determine the nature and extent of the portions of the sites within the proposed project area. Testing was conducted under USFS Special Use Permit 2700-4 and followed the procedures outlined in *Testing and Site Evaluation Proposal* (SHPO Log No. 43648).

Before the fieldwork, the *National Register of Historic Places* and the *State Register of Cultural Properties* were consulted. No properties listed on, nominated to, or approved for submission to either inventory are within the proposed project boundaries.

This report complies with the provisions of the Historic Preservation Act of 1966 as amended.



#### **ENVIRONMENT**

Detailed overviews of regional physical and biological environments were developed during the course of the Navajo Reservoir study (Dittert et al. 1961; Harris 1963a, 1963b; Schoenwetter and Eddy 1964). The reader is referred to these sources for comprehensive environmental discussions relevant to the project area.

The project area is in the northeast sector of the San Juan Basin, a topographic depression on the eastern edge of the Colorado Plateau. The region is characterized by the Junction Land Form, typified by mesa topography intermingled with deep canyons and relatively narrow valley bottoms. The project area consists of valley bottomland along the north margin of Vaqueros and La Jara Canyons. Vaqueros Canyon is an ephemeral tributary of La Jara Canyon, which in turn is an ephemeral tributary of the San Juan River, the nearest perennial water source. Several small springs, Amarante Spring, Skousen Spring, and Bubbling Spring, occur along the La Jara Canyon flood plain. Additional springs in the area of the old Vaqueros ranger station form wet land pockets.

Elevation along the valley bottom descends from 2,134 m (7,000 ft) at the east end of the project in Vaqueros Canyon to 1,981 m (6,500 ft) at the west end of the project at the La Jara bridge. The steep canyon wall dominating the north margin of the valley rises to a height of 2,317 m (7,600 ft) in just over 1 km. The canyon profile is irregular, with alternating beds of resistant and soft sandstone forming cliffs, benches, and isolated formations.

The region is dominated by Tertiary sediments and intrusive volcanics. The San Jose Formation consists of gray, tan, and reddish brown sandstones, conglomerates, and shales. Dittert et al. (1961: 25) recognized two major geologic sources for lithic raw materials in the Navajo River District: terrace gravels and bedrock outcrops. The terrace gravels contained a variety of igneous, metamorphic, and sedimentary rocks. Sandstone outcrops provided abundant sources for building materials and grinding implements. Regional volcanic dikes provide another source of potential igneous material in the form of long linear outcrops.

Argiboroll-Rock Land association soils occur on the steep mesa side slopes and canyon walls. The shallow stony soils have a thin surface layer of brown rocky clay loam over a moderately thick reddish-brown clay. Outcrops of sandstone bedrock are common. Vermejo-Galisteo association soils occur on the valley bottoms and flood plains. The soils are characterized by fine-textured alluvium derived from the eroding sedimentary outcrops. The surface layer consists of a 13 to 25 cm layer of silty clay loam underlain to a depth of 1.5 m or more by dense clay. The soils are highly susceptible to water erosion, and the current channels of the Vaqueros and La Jara arroyos are deeply trenched.

The diverse landscape promotes the zonation of vegetation and wildlife, depending on such factors as slope, drainage, and exposure. Vegetation can be divided into mesa top, bench, and valley bottom localities. The deeper valley bottom soils support a cover of shrubs and mixed grasses. Large growths of sagebrush and greasewood currently dominate the project area. Cottonwood and willow grow along the current floodplain. The shallow rocky soils along the canyon slopes support rather dense growths of piñon, juniper, and scrub oak. North-facing exposures and sheltered rincons contain ponderosa pine, fir, and aspen. The mesa tops exhibit

dense growths of piñon, juniper, and in some cases extensive flats of sagebrush. The diverse vegetation supports a variety of wildlife, including over 100 species of birds, 30 mammals, and 30 reptiles. The zoned environment provides abundant fuel and construction woods, as well as a wide rang of economic, medicinal, and ritual plant and animal resources concentrated in rather short distances.

The project area has a semiarid climate. The regional station at Gobernador, at an elevation of 2,042 m (6,700 ft), records a mean annual precipitation of 31 cm (12.19 inches), and over 30 percent of the precipitation occurs during the summer months of June, July, and August. The growing season is between May 25 and September 30 with an average of 128 frost-free days, barely enough growing season to mature modern corn. Cold-air drainage in the narrow valley bottoms additionally constrains local farming efforts.

#### ARCHAEOLOGICAL BACKGROUND

The project is at the eastern edge of the upper San Juan Basin, an area described by Cordell (1992:1-7) as the "wellspring of the Anasazi and the home of the Navajo." The area is important in Navajo history as the region of the Dinetah, the source of Navajo culture. The geography and place names of Dinetah are associated with the Navajo creation story and clan migration legends. The lower La Jara canyon is known as Big Water, a respected or sacred place in Navajo clan traditions (Powers and Johnson 1987:4). The distinctive stone towers of the Dinetah, apparent Navajo defensive structures, were sites of some of the earliest archaeological investigations in the area (Kidder 1920; Stubbs 1930; Keur 1941; and Hall 1944).

The prehistory of the Navajo River District was initially investigated during the Navajo Reservoir Project, one of the earliest large-scale projects in the San Juan region (Dittert et al. 1961; Eddy 1966). The flood pool of the Navajo Dam was inventoried for cultural resources, resulting in the identification of 454 sites. An important contribution of the project was the delineation of a series of cultural-temporal phases for the area (Table 1). The La Jara section of the project included the confluence and lower portion of La Jara Canyon (about 16 km north of the project area). The La Jara section contained 44 sites consisting of 48 components: lithic (1), Los Pinos (3), Rosa (15), Rosa and Piedra (2), Dinetah (2), Gobernador (21), and indeterminate Navajo (4) (Dittert et al. 1961:74-82).

Table 1. Navajo Reservoir District phase sequence

Period and Phase Date				
Archaic				
Lithic	3000-500 B.C.			
Pueblo				
Los Pinos	A.D. 1-400			
Sambrito	A.D. 400-700			
Rosa	A.D. 700-850			
Piedra	A.D. 850-950			
Arboles	A.D. 950-1050			
Navajo				
Dinetah	A.D. 1550-1700			
Gobernador	A.D. 1700-1775			
Historic				
Lucero	A.D. 1870-present			

Hohmann and Irwin (1998:19) found eight previously recorded sites in the vicinity of the U.S. 64 highway corridor during their presurvey background check of files and records housed in the New Mexico Cultural Resource Information System (NMCRIS), the Jicarilla Ranger District Office, and the Carson National Forest Supervisor's Office. They recorded 19 newly discovered sites and 78 isolated occurrences during their survey of the U.S. 64 project. Nearby projects are mainly the results of survey associated with gas and oil exploration (Naylor 1977a, 1977b; Hooten 1978; Moore and Moore 1991; Kershner 1994a, 1994b; Sofranoff 1990), Jicarilla Ranger District projects (Jordan 1988; Tensfield 1992), and highway-related surveys

(Tensfield 1991; Hohmann and Irwin 1998). Hohmann and Irwin (1998:8-16) and Oakes (1985:10-15) provide comprehensive archaeological overviews of the region.

The author used the NMCRIS files in a records search of a 2.5 km strip paralleling the north and south sides of the U.S. 64 right-of-way. The total area measured 5 km wide by 14 km long and contained 81 sites consisting of 87 temporal components (Table 2). The site total includes the 27 sites documented by Hohmann and Irwin's survey of the highway corridor. The area contains the entire range of mesa top, bench, and valley bottom topography characterizing the region.

Table 2. Recorded site components near the U.S. 64 project area

Culture and Period	Frequency	Percentage
Archaic		
Late Archaic (B.C. 1800 to B.C. 800)	2	2.3
Anasazi		
BM II (A.D. 1 to 500)	3	3.5
BM III (A.D. 500 to 700)	I	1.2
BM III/P I (A.D. 500 to 900)	3	3.5
P I (A.D. 700 to 900)	42	48.3
P I-II (A.D. 700 to 1100)	4	4.6
P III (A.D. 1100 to 1300)	1	1.2
Unknown	1	1.2
Total	55	63.2
Navajo		
Pre-Gobernador (A.D. ? to 1692)	8	9.2
Gobernador (A.D. 1693 to 1793)	11	12.6
Unknown	1	1.2
Total	20	23.0
Historic (Apache/Hispanic/Anglo)		
U.S. Territorial (A.D. 1846-1912)	1	1.2
Statehood to WW II (A.D. 1912 to 1945	3	3.5
Historic Unknown	1	1.2
Total	5	5.8
Unknown	5	5.8
Grand Total	87	100.0

#### Paleoindian Period

Paleoindian remains, characterized by distinct and temporally diagnostic spear points, are dated between 12,000 and 7,500 B.P. The Paleoindian lifeway involved the hunting of now-extinct Pleistocene mammals and the hunting of small animals and the gathering of wild plants. Paleoindian sites of any period are regionally rare (Kearns 1992:16-19). No Paleoindian sites have been recorded in the vicinity of the project.

#### Archaic Period

The regional Archaic period dates roughly between 6000 and 800 B.C. Kearns (1992:9-35) presents a good overview of the nearly 500 documented preceramic sites representing the Archaic occupation of the Upper San Juan River. The Archaic period reflects replacement of the big-game hunting Paleoindian culture by an adaptive strategy based on the gathering and hunting of a variety of wild plant and animal foods characteristic of the post Pleistocene, modern environment. Maize appears in the Late Archaic, and this new resource eventually transforms the Archaic hunting and gathering groups into sedentary food producing communities.

Archaic sites are identified mainly by distinctive projectile point forms and occasional radiocarbon dates. Two Archaic sites are reported in the project area. Both sites are small chipped stone scatters with corner-notched points, suggestive of a Late Archaic occupation. The Late Archaic is identified with the period from roughly 1800 to 800 B.C., corresponding with the Armijo phase of the Oshara Tradition. Kearns (1992: 22) grouped the En Medio phase (ca. 800 B.C. to A.D. 400), sometimes considered Late Archaic, with the Basketmaker II period. Kearns documented 62 Late Archaic components, constituting 13 percent of the recorded preceramic components in the Upper San Juan River study area.

#### Anasazi Period

The Anasazi or Pueblo culture embodies the development of agricultural-based, ceramic-producing, sedentary village societies. The Anasazi occupation dates from ca. A.D. 1 to regional abandonment around A.D. 1050. The most intensive use of the project area was by the Anasazi (55 components representing over 60 percent of all recorded sites). An occupation peak occurred during the Pueblo I period. Pueblo I components (42) account for over 75 percent of the recorded Anasazi components.

#### Los Pinos Phase

The Los Pinos phase correlates with the Basketmaker II period of the Pecos Classification. The Los Pinos variant characterizes the initial transitional stage between hunter-gatherer and agricultural adaptations. Sites include large, shallow pit structures surrounded with a paving of river cobbles. Small quantities of polished plain brown ware pottery accompany the occupations. Twenty-four Los Pinos phase sites were recorded during the Navajo Reservoir survey with a cluster of eight sites at the head of the Pine River section (Eddy 1972:1818-23). The three local Los Pinos phase sites are represented by small artifact scatters.

#### Sambrito Phase

The Sambrito phase includes the Basketmaker III period of the Pecos Classification and is considered an amplification of the local sedentary village life. Seven components were identified during the Navajo Reservoir study (Eddy 1972:24). Five sites were discovered as components underlying later occupations and two additional components were tentatively assigned to the phase. Berry (1982) has questioned the utility of the Sambrito phase, arguing that distinctions in stratigraphy, architecture, and ceramics used to separate the Los Pinos and

Sambrio phases were dubious. He believed there was a regional hiatus from the end of the Los Pinos phase, until A.D. 600, the beginning of Rosa phase sites. Wilson has reaffirmed the existence of the Sambrito phase as a transition from the Los Pinos phase into the Basketmaker III period (Wilson and Blinman 1994:204). Only one Basketmaker III artifact scatter is recorded in the project area.

#### Rosa Phase

The Rosa Phase includes the early Pueblo I period of the Pecos Classification. Population expansion over the earlier phases is documented by the higher site frequencies. Some 159 components were assigned to this phase during the survey of the Navajo Reservoir. Habitation sites were visible as pithouse depressions associated with the mounded remains of surface structures. Sites with architecture ranged from single units to villages with six or more pit houses and associated surface structures. Diagnostic pottery includes Rosa Gray, Rosa Neckbanded, Rosa Black-on-white, and Rosa Brown. Forty-two components are recorded in the project area. Local settlement is represented by habitation sites (19) and artifact scatters (23) representing short-term seasonal or special-activity sites.

#### Piedra Phase

In the Navajo Reservoir District, the Piedra phase replaces the Rosa phase in the Late Pueblo I period (A.D. 850-950). The large population evident in the Rosa phase continues, with a noticeable demographic shift toward the upstream regions of the San Juan River. Large intercommunity kivas appear at some sites, along with stockades. Ceramics of the Piedra phase include Mancos Black-on-white, Piedra Black-on-white, Piedra Gray, and Piedra Neckbanded. Some 149 sites have Piedra or Arboles components, but only two Piedra components were recorded in the La Jara section of the Navajo Reservoir survey. Local sites are recorded primarily with reference to the Pueblo I Pecos Classification, and finer-tuned phase designations were often not given. The frequency of Pueblo I site occupations extending into the later portion of the period are not readily compiled from the NMCRIS records.

#### Arboles Phase

The Early Pueblo II period in the Navajo Reservoir District is designated the Arboles phase. Regional population decreased from the peak reached during the Rosa and Piedra phases. By the end of the phase the Navajo River District was largely abandoned. The phase is characterized by the appearance of masonry architecture and corrugated pottery. Settlement was concentrated in the upper stretches of the San Juan River, and no late sites were recorded in the La Jara section of the Navajo Reservoir survey. Four local components are recorded for the Pueblo I-II period, but specific phase designations were not given. Three sites are small artifact scatters, and one site has a small-sized surface mound. Another small artifact scatter has a Pueblo III designation, making it the latest Pueblo occupation in the project area.

#### Navajo Period

The Athabascan-speaking Navajo represent the next major group to occupy the Navajo River District. The earliest Navajo are thought to have migrated into the Southwest from the

north as early as A.D. 1500. The Navajos occupied the region until about 1780. The 20 recorded Navajo components account for 23 percent of all known sites in the project area, and the Navajo occupation represents the second most intensive use of the project area.

#### Dinetah Phase

The earliest period of Navajo occupation in the Upper San Juan Drainage is the Dinetah phase. Data suggest that the Navajo were in northwestern New Mexico by A.D. 1500 and probably had arrived by A.D. 1400 (Reed and Reed 1992:91-104). Early sites are characterized by light artifacts scatters with occasional evidence of brush structures, forked-stick hogans, and hearths. Dinetah Utility pottery is the most common ceramic type. The early Navajo are thought to have been primarily nomadic hunters and gatherers living in small bands. Six Dinetah phase sites were recorded during the Navajo Reservoir survey, and two of these were in the La Jara section. Eight Dinetah phase components have been recorded in the project area. The sites are represented by small artifact scatters with no visible architecture.

#### Gobernador Phase

The Gobernador phase (ca. A.D. 1680 to 1780) is defined as an intensive period of contact between the Navajo and Pueblo people (Jacobson et al. 1992:95-136). Site elements include forked-stick hogans, masonry pueblitos, ramadas, sweat lodges, and rock art panels. Ceramic assemblages consist of Dinetah Utility, Gobernador Indented, Gobernador and Frances Polychrome, and intrusive Puebloan pottery. The presence of corn and beans suggests that the Navajo were dependent on farming for subsistence. Gobernador phase sites were represented by 140 site components within the Navajo Reservoir, and another 26 indeterminate Navajo sites were thought to be actually associated with the phase. Sites were distributed throughout the reservoir, but were especially concentrated at the junction of the Pine and San Juan Rivers. Twenty-one sites were recorded in the La Jara section of the survey. Eleven Gobernador phase sites have been recorded in the project area. Ten sites are habitation sites with masonry architecture. Only one small artifact scatter was recorded.

Armed conflict during the Gobernador phase resulted in the construction of the distinctive network of defensive pueblito architecture apparently established for protection against the "hit and run" tactics of the Utes (Jacobson et al. 1992:105). LA 1684, LA 2138, and LA 55834 are a cluster of four pueblito sites outside of the right-of-way near the La Jara bridge. The sites are included with the thematic acceptance of 48 Navajo refugee sites in the *National Register of Historic Places* (Powers and Johnson 1987). The complex is an apparent key point in a regional network of line-of-sight pueblitos connecting a large territory. Built in 1705, LA 2138 is one of the earliest constructed pueblitos. The pueblitos may have served as one of the northern observation points for Ute movement, as well as later Spanish incursions into the area from Chama.

#### Historic Period

The Lucero phase covers the period of Spanish-American homesteading from A.D. 1870 to the present. Thirty components were recorded in the Navajo Reservoir District, including 22 homestead farms and 8 sheep camps. No sites were recorded in the La Jara section of the

Navajo Reservoir District. Five sites reflect historic use of the project area. One small artifact scatter was dated historic unknown (post A.D. 1539) based on the presence of historic period sherds. Another small artifact scatter was recorded as a possible Apache component dating from A.D. 1846 to 1912. The remaining three sites are within the current project and are discussed in this report. The sites represent statehood components (A.D. 1912 to 1945) in the form of a homestead, forest service ranger station, and small refuse scatter.

#### TESTING RESULTS

Limited testing was performed at eight sites and an isolated occurrence. The cultural resources are discussed from west to east along U.S. 64. The first five resources and IO-17 are prehistoric manifestations, while the last three, at the east end of the project, are sites.

#### Field Methods

Limited testing followed the procedures outlined in *Testing and Site Evaluation Proposal* (SHPO Log No. 43648). The testing program included a brief reconnaissance at each site to verify site limits with the original documentation. This was followed by systematic recording of surface artifacts within the right-of-way. A main site datum was established for each site and marked with rebar. Baselines marked in 3 m increments were extended from the datum, and a grid system was erected. This procedure ensured intensive and systematic surface inspection using 3 by 3 m grid units provenienced from the southwest corner. Surface artifacts were described individually within each grid unit and returned to the surface.

The nature and limits of the subsurface deposits were tested using 1 by 1 m and occasional 1 by 2 m test trenches. Test units were placed to sample possible activity areas or artifact concentrations defined during the surface investigation. Test units were hand-excavated in 10 cm levels until culturally sterile soil or bedrock was reached. All excavated material was screened through ¼ inch wire mesh. Lastly, hand-excavated auger holes were systematically staggered every 6 m along a series of transects to augment subsurface coverage. Auger holes were consistently dug to a depth of 1.0 m below the surface. Upon completion, all test units and auger holes were backfilled.

No artifacts or other types of samples were collected from the field during the limited testing program. The few surface artifacts encountered in the right-of-way were described individually within each grid unit and returned to the surface. The single sherd encountered in a subsurface test unit (LA 115074) was described and returned to the appropriate subsurface provenience. Test units verified that subsurface cultural deposits were nearly nonexistent in the site areas overlapping the right-of-way so that soil, pollen, and botanical samples were not warranted.

LA 115082 (AR-03-02-03-735)

Site Type: Artifact scatter.

Cultural Association: Anasazi Culture, Pueblo I period (A.D. 700-900).

Legal Description: See Appendix 1.

Land Status: USDA Forest Service, Carson National Forest, Jicarilla Ranger District.

Condition: The portion of the site extending into the right-of-way has been modified by two utility trenches (gas lines) paralleling U.S. 64. The general site area has been trampled by long-term grazing but is otherwise essentially intact.

Setting: LA 115082 is along an alluvial terrace on the north side of La Jara Arroyo (Fig. 2). Site elevation is 1,990 m (6,530 ft). The steep rocky talus slope north of the present highway provided a nearby source of sandstone building material and various fuel woods. Current site vegetation consists of a rather dense growth of big sage and greasewood. The valley bottom was undoubtedly a close source of arable land, but the present flood plain is deeply entrenched. Amarante Spring seeps from the south side of the valley (360 m southwest) and may have provided an additional local water source.

Original Description: The site was originally recorded as a low-density artifact scatter (Hohmann and Irwin 1998:73). The 15 observed artifacts included 9 ceramics and 6 pieces of chipped stone. Artifacts were evenly distributed across the site and intermingled with occasional pieces of oxidized sandstone. No surface features were visible. Identified ceramics included Bancos Black-on-white, Rosa Brown, Rosa Gray, and unidentified plain wares and gray wares. The ceramic assemblage suggested a Pueblo I occupation. Chipped stone artifacts consisted of obsidian, quartzite, and siltstone reduction debris. Tool use/maintenance is represented by an obsidian scraper and tertiary flakes.

Surface Collection: The 33 by 21 m investigated area includes all of the site boundary overlapping the proposed construction zone and an additional 2 m buffer strip, allowing for the examination of a full row of 3 m grids along the south boundary (Fig. 2). Artifacts were found in only 6 of the 77 examined grids. Recorded artifacts included three obsidian flakes and three sherds. Artifact density was restricted to one artifact in each of the six grids containing cultural material. The surface examination revealed very low artifact frequency within the right-of-way. Five artifacts were recorded along the edge of the right-of-way, which appears to be the northern periphery of the artifact scatter. No surface features were observed.

Test Units: Subsurface investigations included the excavation of two 1 by 1 m test pits and 17 auger tests.

Test Pit 1. Test Pit 1 was placed at the edge of the right-of-way. Four artifacts had been recorded in four contiguous grids at this locality. Surface vegetation was limited to a sparse cover of mixed grasses. Excavation ended at 20 cm below the surface in culturally sterile alluvial sandy clay. One layer of alluvium was encountered consisting of compact sandy clay with flecks of calcium carbonate appearing at 20 cm below the surface. An auger test showed continuation of the homogenous layer of sediment to a depth of 1.10 m below the surface. No artifacts, charcoal, or other cultural evidence was encountered. The test unit showed no subsurface depth to the light artifact concentration at this location.

Test Pit 2. Test Pit 2 was placed at the west edge of the site. A single gray ware body sherd was recorded from the surface of the surrounding 3 by 3 m grid. Surface vegetation consisted of a heavy growth of sage and greasewood. The unit was excavated into culturally sterile sandy clay loam at a depth of 20 cm below the surface. An auger test showed continuation of the compact sandy clay sediment to a depth of at least 1.0 m below the surface. No subsurface artifacts or other evidence of cultural activity was encountered.

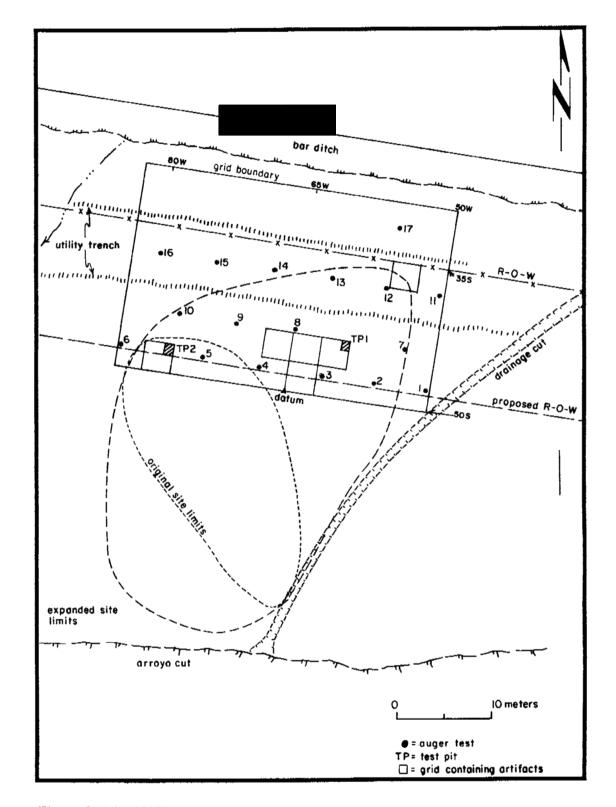


Figure 2. LA 115082 site map.

Auger Tests. Seventeen auger tests were systematically placed across the site (Fig. 2). The majority of the auger holes were dug at 6 m intervals along three staggered transects parallel to the right-of-way fence. The 1.0 m auger tests encountered the same soil profile exposed in the test units. No subsurface artifacts or cultural deposits were unearthed.

Material Culture: The six recorded surface artifacts in the right-of-way consisted of three pieces of chipped stone and three sherds.

Chipped Stone. The three pieces of chipped stone are flake fragments measuring about 10 by 10 mm. The one proximal fragment has a single-faceted platform. The three transparent obsidian flake fragments are characteristic of material originating from the Jemez Mountains. The small artifact scatter is intriguing because of the intrusive Jemez obsidian in the assemblage.

Ceramics. The three recorded surface sherds include two quarter-sized plain gray ware jar body sherds conforming with the proposed Pueblo I occupation. A third indeterminate decorated sherd is possibly Western Pueblo Polychrome, suggestive of Gobernador phase material. This small jar body sherd has fine sand/sandstone temper and a polished exterior with thick black paint.

#### Evaluation

The site area extending into the right-of-way is the low-density and surficial northern margin of the artifact scatter. Site limits were originally established at 28 m by 15 m but increased to 40 by 27 m (1,080 sq m) as a result of this investigation. Site reconnaissance found artifacts extending to the arroyo edge on the south, and the small drainage cut can be used as the east boundary. The systematically recorded artifacts from the grids show that the site measures 27 m east to west. The limited testing program has added little additional interpretive information; however, the Western Pueblo Polychrome sherd may mark a minor Gobernador phase reuse of the site. Three pueblitos are on the higher talus slopes north, south, and west of the site. A few Navajo related sherds were also recorded on LA 115081 directly east of the site. The site can be considered within the general resource perimeter of these pueblitos, and future researchers should be aware of possible Navajo reuse of the prehistoric sites.

Limited testing has determined that the site area within the right-of-way is not likely to yield additional information important to the understanding of local or regional history or prehistory. No further archaeological investigations within the construction zone are recommended.

#### LA 115081 (AR-03-02-03-734)

Site Type: Artifact scatter associated with possible fieldhouse and ramada.

Cultural Association: Anasazi culture, Pueblo I to Pueblo II (A.D. 700 to 1100).

Legal Description: See Appendix 1.

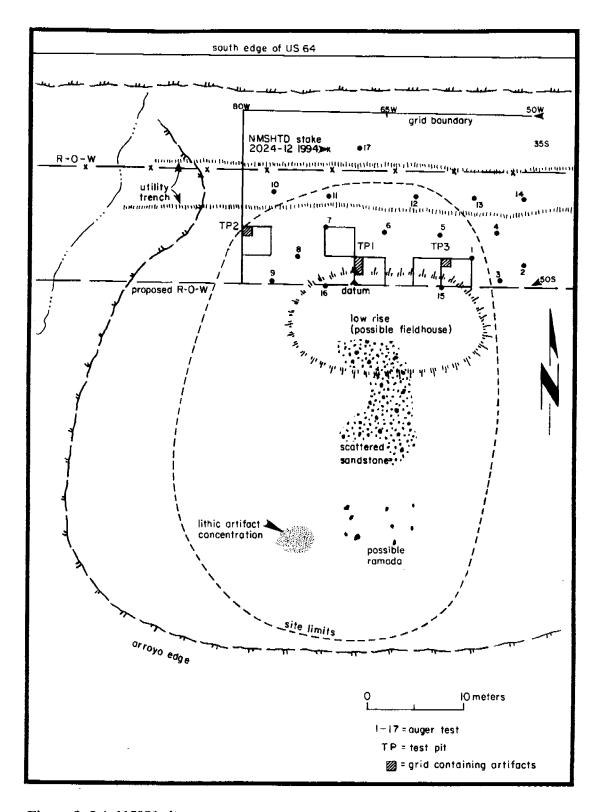


Figure 3. LA 115081 site map.

Land Status: USDA Forest Service, Carson National Forest, Jicarilla Ranger District.

Condition: The portion of the site extending into the right-of-way has been modified by two utility trenches (gas lines) paralleling U.S. 64. The main site area has been trampled by long-term animal grazing but is otherwise intact.

Setting: LA 115081 is along an alluvial terrace on the north side of the La Jara Arroyo (Fig. 3). Site elevation is 1,990 m (6,530 ft). The site is about 100 m east of LA 115082, and the sites have identical settings. The two sites are separated by an entrenched arroyo originating from runoff draining down from the steep talus slope immediately north of the highway. The site is covered by a dense growth of big sage and greasewood.

Original Description: The site was originally recorded as an artifact scatter associated with two probable stone structures (Hohmann and Irwin 1998:72-73). Both structure remnants were largely covered by alluvium, but exposed sandstone was interpreted as the masonry remains of a walled ramada and a fieldhouse. The associated artifact scatter consisted of 55 recorded artifacts, mainly south and west of the structures. The fifteen sherds included Rosa Brown Ware, plain gray ware, red ware, and possible Bancos or Chaco Black-on-white. The small ceramic assemblage suggested a Pueblo I to Pueblo II occupation. A single Dinetah Gray sherd was not considered representative of a Navajo component. The forty chipped stone artifacts consisted of quartzite, chert, siltstone, basalt, and chalcedony core reduction flakes.

Surface Collection: A grid system measuring 30 by 18 m was established over the portion of the site overlapping the proposed right-of-way (Fig. 3). Artifacts were found in only 5 of the 60 examined grids. Recorded artifacts consisted of six pieces of chipped stone, and only one grid contained more than one artifact. The artifacts were found mainly along the edge of the proposed right-of-way, which appears to be the northern periphery of the artifact scatter. Both architectural elements recorded during the original survey were found south of the right-of-way. No surface features were observed in the right-of-way.

Test Units: Subsurface investigations included the excavation of two 1 by 1 m test pits, a single 1 by 2 m test trench, and 17 auger tests.

Test Trench 1. Test Trench 1 (1 by 2 m) was placed at the edge of the right-of-way and directly north of the low alluvial knoll containing the possible fieldhouse. The sandstone building debris was scattered about 9 m south of the trench and right-of-way. Three pieces of chipped stone had been recorded in two grids in this area. Surface vegetation was mixed grasses. Excavation ended at 20 cm below the surface in culturally sterile alluvial sediment. Soil consisted of a single layer of compact sandy clay, and calcium carbonate flecks appeared at the 20 cm level. An auger test showed continuation of the alluvial sediment to a depth of at least 1.4 m below the surface. No artifacts or subsurface cultural deposits were encountered. The test trench verifies that buried architectural material does not extend into the proposed right-of-way.

Test Pit 2. Test Pit 2 was placed at the west edge of the site. A single Pedernal chert flake was recorded from the surface of the surrounding 3 by 3 m grid. The level terrain was covered by a growth of sage. The test pit was excavated into culturally sterile sandy clay at a depth of 20 cm below the surface. An auger test showed continuation of the sandy clay sediment to a

depth of 1.10 m below the surface. Clay content increased with depth. No subsurface artifacts or other evidence of cultural activity was encountered.

Test Pit 3. Test Pit 3 was placed at the edge of the right-of-way and adjacent to the eastern extent of the low alluvial knoll containing the buried architectural elements. Two pieces of chipped stone had been recorded in two contiguous grids in this area. Surface vegetation consisted of sage and mixed grasses. The test pit was excavated into sterile alluvial sandy clay at a depth of 20 cm below the surface. An auger test showed continuation of the homogenous layer of compact sandy clay to a depth of at least 1.20 m below the surface. No subsurface artifacts or cultural deposits were encountered.

Auger Tests. Seventeen auger tests were systematically staggered across the site (Fig. 3). The 1.0 m deep auger tests consistently encountered the same sandy clay sediment exposed in the test units. No subsurface artifacts or cultural deposits were discovered.

Material Culture: Recorded surface artifacts in the right-of-way consisted of six pieces of chipped stone. Material types included quartzite (2), Pedernal chert (1), and undifferentiated igneous material (3). The assemblage was composed of one whole quartzite flake with a cortical platform and five flake fragments of the other materials. The flakes averaged about 30 by 30 mm. The small assemblage represented by products of core reduction activities, but none of the flakes were utilized as tools.

Evaluation: The site area extending into the right-of-way is the low-density northern margin of the artifact scatter. Site reconnaissance concurred with the originally established site limits of 50 m by 25 m (Hohmann and Irwin 1998:76). The larger portion of the site including both architectural elements and the main artifact scatter is preserved south of the right-of-way. The limited testing has added little additional interpretive information. The site is probably related with Anasazi seasonal farming of the valley bottom. Of interest was the nonlocal chert from Pedernal Peak associated with the apparent fieldhouse.

Limited testing has determined that the site area within the right-of-way is not likely to yield additional information important to the understanding of local or regional history or prehistory. No further archaeological investigations within the construction zone are recommended.

#### LA 115076 (AR-03-02-03-729)

Site Type: Artifact scatter.

Cultural Association: Anasazi Culture, Pueblo I period (A.D. 700-900) and Navajo culture, Dinetah phase (A.D. 1550-1700).

Legal Description: See Appendix 1.

Land Status: United States Forest Service, Carson National Forest, Jicarilla Ranger District.

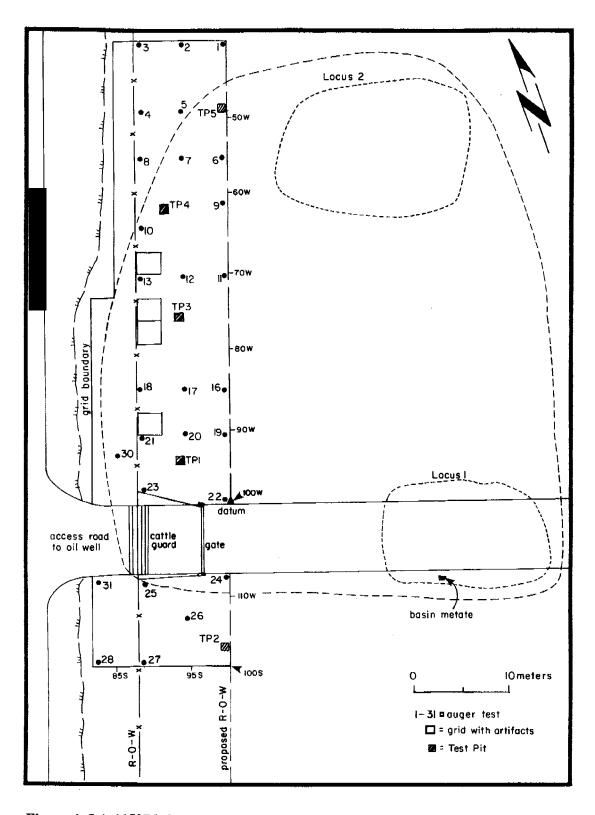


Figure 4. LA 115076 site map.

Condition: An access road to an oil/gas well cuts through the site from north to south. Artifacts were found along the shoulders of the road, and recent blading has exposed additional material. The site area away from the access road is essentially intact, but surface material has been exposed to long-term grazing.

Setting: LA 115076 is on an alluvial terrace on the north side of Vaqueros Canyon (Fig. 4). The confluence of Vaqueros canyon and La Jara Canyon is about 90 m south of the site. The steep rocky talus slope characterizing the north side of the canyon is directly north of the highway. Site elevation is 2,009 m (6,590 ft). The site is currently covered by a dense growth of big sage and greasewood. Piñon, juniper, and pine are abundant on the nearby talus slope. The junction of the two large canyons provides an abundant source of valley bottom farmland. Bubbling Spring seeps from the south side of the canyon (about 600 m southwest) and may have provided an additional water source.

Original Description: LA 115076 was originally described as a low- to moderate-density artifact scatter consisting of 70+ artifacts distributed in two principal loci (Hohmann and Irwin 1998:65-66). Locus 1 measured 42 by 7 m, and artifacts were distributed along a dirt access road. Artifacts included Dinetah Gray sherds, unidentified white ware, quartzite flakes, and a vesicular basalt slab metate. The Dinetah Gray sherds suggested that Locus 1 may have a Dinetah phase component.

Locus 2 was about 35 m to the east and measured 18 by 25 m. Artifacts included Rosa Brown sherds, unidentified white ware, and chert core reduction flakes. The Rosa Brown sherds suggested a Pueblo I occupation. Diffuse artifacts were observed on the surface between the two loci. No features were identified with either artifact scatter.

Surface Collection: A grid system measuring 81 m by 18 m was established over the portion of the site overlapping the proposed right-of-way (Fig. 4). Four pieces of chipped stone and one gray ware sherd were found in four of the 133 examined grids. Only one of the 3 by 3 m grids contained two artifacts. The surface collection confirmed low artifact frequency within the right-of-way. Both of the previously recorded loci are south of the project area. No features were noted during the surface examination.

Test Units: Subsurface investigations included the excavation of five 1 by 1 m test pits and 30 auger tests. Test units were systematically spaced in roughly 15 m intervals across the site.

Test Pit 1. Test Pit 1 was just east of the access road. Surface vegetation was mixed grasses surrounded by heavy growths of sage. Excavation ended at a depth of 50 cm below the surface in culturally sterile soil. One layer of soil was encountered. The layer consisted of compact sand mixed with abundant sandstone. The layer represents alluvial fan deposition originating from the nearby talus slope. An auger test encountered higher clay content and less rock at a depth of 1.50 m below the surface. This alluvial sediment is probably associated with valley bottom floodplain deposition. No subsurface artifacts or evidence of cultural activities were encountered.

Test Pit 2. Test Pit 2 was in the small area of the site extending west of the access road. Surface vegetation was a heavy growth of sage. The test pit was excavated into culturally sterile

soil at a depth of 30 cm below the surface. The single soil layer consisted of alluvial silty loam with no rock content. An auger test showed continuation of the layer to a depth of 1.3 m. Clay content increased with depth. No artifacts or subsurface cultural deposition were encountered.

Test Pit 3. Test Pit 3 was near the center of the site area overlapping the right-of-way. Two pieces of chipped stone were found on the surface just north of the test pit. Surface vegetation was mixed grasses. The test pit was excavated into culturally sterile soil at a depth of 30 cm below the surface. One layer of alluvium was encountered consisting of fine-grained sandy loam with no rock content. An auger test encountered thick clay from 50 cm to 1.0 m below the surface. No subsurface artifacts or cultural material were found.

Test Pit 4. Test Pit 4 was toward the eastern end of the site. Surface vegetation consisted of mixed grasses. Excavation ended 20 cm below the surface in culturally sterile soil. The single layer of sediment consisted of fine-textured sandy loam. An auger test showed that the layer of sandy sediment continued to a depth of at least 1.2 m below the surface. No subsurface artifacts or cultural deposits were unearthed.

Test Pit 5. Test pit 5 was at the east end of the site. The edge of Locus 2 was about 8 m south of the right-of-way. Surface vegetation in this area was mixed grasses. Excavation ended at a depth of 20 cm below the surface in culturally sterile soil. The soil consisted of a single layer of sandy clay, and an auger test showed that the thick layer of alluvial sediment extended to a depth of at least 1.2 m. No artifacts or evidence of subsurface cultural activities were found. The test pit revealed that there was no subsurface deposition in the site area directly adjacent to Locus 2.

Auger Tests: Thirty auger tests were systematically spaced across the site (Fig. 4). The auger tests encountered similar soil profiles and consistently encountered thick clay with flecks of calcium carbonate at a depth of 80 cm to 1.0 m below the surface. No artifacts, charcoal, or evidence of cultural activities were encountered during the auger tests.

Material Culture: The five surface artifacts found in the right-of-way consisted of four pieces of chipped stone and a single sherd.

Chipped Stone. The four pieces of chipped stone are represented by one chert flake and three igneous core reduction flakes. The complete flakes all had single platforms and averaged about 30 by 30 mm. The flakes lacked cortex and exhibited no evidence of utilization.

Ceramics. The single quarter-sized plain gray ware jar body sherd conforms with the proposed Pueblo I component assigned to Locus 2.

Evaluation: The site area overlapping the right-of-way is the low-density northern periphery of the two primary loci south of the project area. Site reconnaissance agreed with the originally established site limits of 100 by 70 m (Hohmann and Irwin 1998:65). However, artifact density was found to be very low in the project area, and defining precise boundaries around the low-density artifact loci was difficult. Testing revealed no subsurface cultural deposits in the right-of-way. The single gray ware sherd recorded in the project area conforms with the proposed Pueblo I component, but no additional Navajo sherds associated with the Dinetah component were encountered. The primary loci characterizing the site are preserved outside of the

construction zone, although Locus 1 is endangered by repeated blading episodes associated with the access road to the oil/gas well. A shaped sandstone basin metate measuring 20 by 8 by 5 cm had been exposed by recent blading (Fig. 4). A vesicular basalt slab metate was also found in the area during the original site recording (Hohmann and Irwin 1998:65). Locus 1 appears to be a Navajo component, and the presence of ground stone contrasts with the Pueblo I assemblage at Locus 2.

Limited testing has determined that the site area within the right-of-way is not likely to yield additional information important to the understanding of local or regional history or prehistory. No further archaeological investigations within the construction zone are recommended.

#### IO 17

Site Type: Two isolated sherds.

Cultural Association: Anasazi culture; Basketmaker III to Pueblo I period (A.D. 500-900).

Legal Description: See Appendix 1.

Land Status: USDA Forest Service, Carson National Forest, Jicarilla Ranger District.

Condition: The northern edge of the rise containing the two sherds has a steep shoulder cut associated with the original construction of the highway. The remaining portion of the rise is intact.

Setting: IO 17 is on a low rise on the north side of Vaqueros Canyon (Fig. 5). Site elevation is 1,829 m (6,000 ft). The isolated occurrence is situated on an alluvial fan near the base of the north talus slope. The currently entrenched Vaqueros Arroyo is about 30 m to the south. The confluence of Ruben Canyon and Vaqueros Canyon is 200 m east of the area. Site vegetation currently consists of sage and mixed grasses.

Original Description: IO 17 was originally recorded as a Piedra Gray jar sherd and a Rosa Brown jar sherd on a low sand dune hill (Hohmann and Irwin 1998:81). There was concern that the low dune could contain additional cultural material.

Surface Collection: Shoulder to shoulder transects covering a 30 m by 30 m area around the originally recorded sherds failed to find additional artifacts or other evidence of cultural activity.

Test Unit Descriptions: Subsurface investigations involved the excavation of one 1 by 1 m test pit and five auger tests.

Test Pit 1. Test Pit 1 was between the two isolated sherds. The test pit was excavated into culturally sterile soil at a depth of 30 cm. The single layer of soil consisted of compact brown sandy clay sediment. An auger test showed continuation of the sandy clay layer to a depth of at

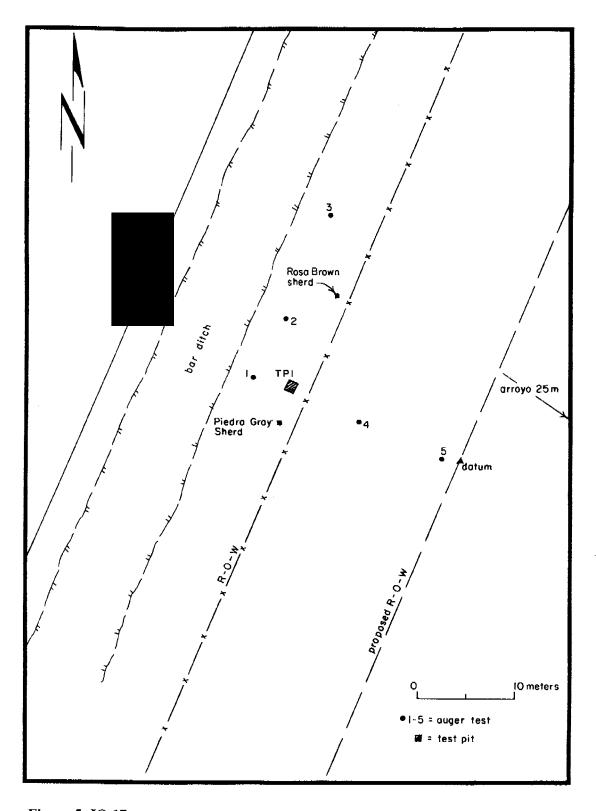


Figure 5. IO 17.

least 1.3 m. Calcium carbonate flecks became abundant from a depth of 70 cm to 1.30 m below the surface. No artifacts or cultural deposits were found.

Auger Tests. Five auger tests were placed west and south of the sherds. The auger tests were dug to a depth of 1.0 m below the surface and consistently encountered the soil profile exposed in the test pit. No artifacts or evidence of cultural activity were encountered.

Evaluation: The original recorders felt that a low sand dune hill containing IO 17 could mask additional buried cultural material. The low hill is actually an alluvial fan consisting of sediments deposited from a drainage on the steep north slope of the valley. The fan surface was cut by the original construction of U.S. 64, isolating the top of the fan and giving it the appearance of a low hill. Limited testing shows that the low hill does not contain subsurface cultural deposits. The surface sherds may have been redeposited from the higher valley slope, or represent general prehistoric activities along the valley bottom.

Limited testing shows that IO 17 does not have the potential for subsurface deposits and is not likely to yield additional information important to the understanding of local or regional history or prehistory. No further archaeological investigations within the construction zone are recommended.

#### LA 81675 (AR-03-02-03-511)

Site Type: Artifact scatter associated with possible buried structure.

Cultural Association: Anasazi culture, Pueblo I period (A.D. 700 to 900).

Legal Description: See Appendix 1.

Land Status: USDA Forest Service, Carson National Forest, Jicarilla Ranger District.

Condition: The 20 m by 20 m core site area has been cut east/west by a ditch preventing runoff from flooding the highway. The ditch is 4 m wide and 1 m deep, and most of the observed cultural material was exposed along the edges of the ditch. A deeply entrenched arroyo with a 5 m vertical face borders the east edge of the site. An unknown portion of the site may have been lost to erosion associated with this large arroyo. The entire site has probably suffered from sheet wash, attested to by the presence of the runoff control ditch. Only about a 6 m strip of the site area within the right-of-way remains intact. The southernmost site area within the right-of-way consists of steep shoulder cuts associated with the original construction of the highway.

Setting: LA 81675 is on an alluvial fan on the north side of Vaqueros Canyon (Fig. 6). Site elevation is 2,115 m (6,940 ft). The currently entrenched flood plain of Vaqueros Canyon is about 100 m south of the site. The rocky talus slope defining the north profile of the canyon is about 100 m to the north. The confluence of Ruben Canyon with Vaqueros Canyon is about .5 km west of the site. Current site vegetation consists of knee-high sage and mixed grasses. Potential farmland was available along the valley bottom, and the nearby talus slope provided a convenient source for various fuel woods.

Original Description: The site was originally recorded by Sofranoff (1990). Hohmann and Irwin (1998:48) concurred with the site description during their survey for the proposed highway improvements. The site was originally documented as a sparse sherd and lithic artifact scatter with burned adobe suggesting a buried structure. Rosa Gray Ware sherds suggested a Pueblo I occupation for the apparent habitation site.

Surface Collection: The 36 by 9 m investigated area included the intact portion of the site boundary overlapping the construction zone (Fig. 6). Artifacts were found in only two of the 35 examined grids. The two pieces of chipped stone were recorded in two contiguous grids along the right-of-way fence. The surface examination revealed very low artifact frequency within the construction zone. The two artifacts were most likely deposited by sheet wash from the core site area (18 m north of right-of-way) rather than cultural activities. No oxidized sandstone or other evidence of surface features was detected.

Test Units: Subsurface investigations included the excavation of two 1 by 1 m test pits and ten auger tests.

Test Pit 1. Test Pit 1 was on a small intact area on the western edge of the site. No surface artifacts were observed in the area. Surface vegetation was small sage and mixed grasses. Excavation ended at 20 cm below the surface in culturally sterile soil. Soil consisted of a single layer of compact brown clay. Flecks of calcium carbonate appeared at 20 cm below the modern surface. An auger test showed that the thick brown clay continued to a depth of 50 cm below the surface followed by sandy clay to a depth of 1.1 m below the surface. No subsurface artifacts or cultural deposits were discovered.

Test Pit 2. Test Pit 2 was on a small intact area on the eastern edge of the site. The two pieces of chipped stone were found in the nearby surface grids. Surface vegetation was mainly mixed grasses. Excavation ended at 20 cm below the surface in culturally sterile soil. The single layer of fine sandy clay sediment contained no artifacts or evidence of cultural activity. An auger test showed that the sterile alluvial sediment continued to a depth of at least 1.1 m below the surface.

Auger Tests. Ten auger tests were systematically staggered across the site (Fig. 6). The 1.0 m deep auger tests consistently encountered sterile alluvial clay or sandy clay sediment. No subsurface artifacts, charcoal-flecking, or other evidence of cultural activities was noted.

Material Culture: Two chert core flakes were found in the right of way. Both complete flakes had single platforms and measured about 20 mm by 20 mm. One flake had cobble cortex. The flakes were representative of core reduction activities, but neither flake exhibited evidence of utilization.

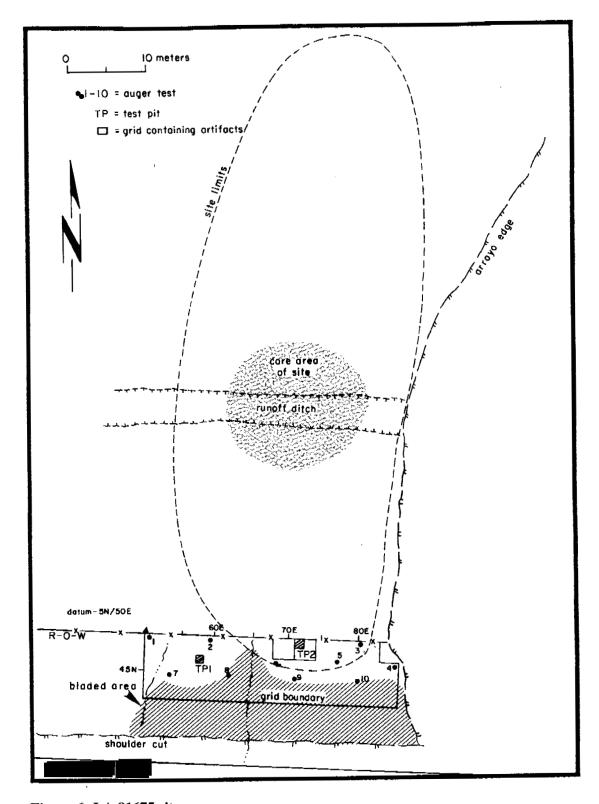


Figure 6. LA 81675 site map.

Evaluation: The portion of the site extending into the right-of-way is the low-density southern periphery of the artifact scatter. Site reconnaissance concurred with the originally established site limits. The larger portion of the site including the main 20 by 20 m core area is preserved north of the right-of-way. We could not find the burned adobe documented by earlier recorders, although occasional small, oxidized fragments of sandstone were noted. About 20 pieces of chipped stone were observed in the core site area, but no surface sherds were found. The limited testing has added little interpretive information. The site is apparently related with Anasazi seasonal farming, but the exact nature of the buried structure can not be ascertained from the scanty surface evidence.

Limited testing has determined that the site area within the right-of-way is not likely to yield additional information important to the understanding of local or regional history or prehistory. No further archaeological investigations within the construction zone are recommended.

#### LA 115074 (AR-03-02-03-727)

Site Type: Artifact scatter associated with two rock overhang shelters.

Cultural Association: Anasazi culture, Pueblo I period (A.D. 700 to 900).

Legal Description: See Appendix 1.

Land Status: USDA Forest Service, Carson National Forest, Jicarilla Ranger District.

Condition: The original construction of US 64 cut through the sandstone escarpment containing the site leaving a nearly vertical 5 to 6 m shoulder cut along the north boundary. An old two track road is evident in the area of the Feature 1 overhang. Recent refuse in the form of sanitary cans, beer cans, lard cans, and ceramic ironstone fragments covers the extent of the prehistoric site limits. The refuse combined with recent campfires shows recent, probably 1950s camping at the site. The apparent recent reuse of the shelters and general site area may have modified the interpretive value of the prehistoric deposits. This is especially evident at the Feature 1 rockshelter. This shelter is also the home of a large and active pack rat nest. Extensive rodent burrowing is evident around the shelter.

Setting: LA 115074 is on the ridge top and slopes of a north/south sandstone escarpment branching from the north side of Vaqueros Canyon (Fig. 7). Site elevation is 2,085 m (6,840 ft). The escarpment overlooks the currently entrenched flood plain of Vaqueros Canyon and provides excellent east/west views of the valley bottom. The rocky escarpment had thin soil development, but large sandstone outcroppings and boulders provided convenient short-term shelters. The escarpment is currently covered with an assortment of vegetation including a large ponderosa pine, aspen, juniper, scrub oak, sage, and mixed grasses.

Original Description: The site was originally recorded as a moderate density artifact scatter associated with two rock overhangs (Hohmann and Irwin 1998:59, 65). The 35+ observed artifacts included 15 Piedra Gray sherds and 23 lithic artifacts, including two one-hand mano fragments. The artifacts occurred in low to moderate densities around two rockshelters and

were thinly distributed along the escarpment between the shelters. Chipped stone artifacts were characteristic of core reduction activities utilizing siltstone, quartzite, chert, chalcedony and obsidian. One siltstone biface and one silicified wood projectile point were recorded. Feature 1 was a southeast-facing overhang (5 m by 2 m) with artifacts noted downslope from the shelter. Feature 2 was a west facing overhang (3 by 2 m) containing a Piedra Gray sherd, a one-hand mano, and additional artifacts downslope of the overhang. Piedra Gray sherds identified at the site suggested Pueblo I occupations.

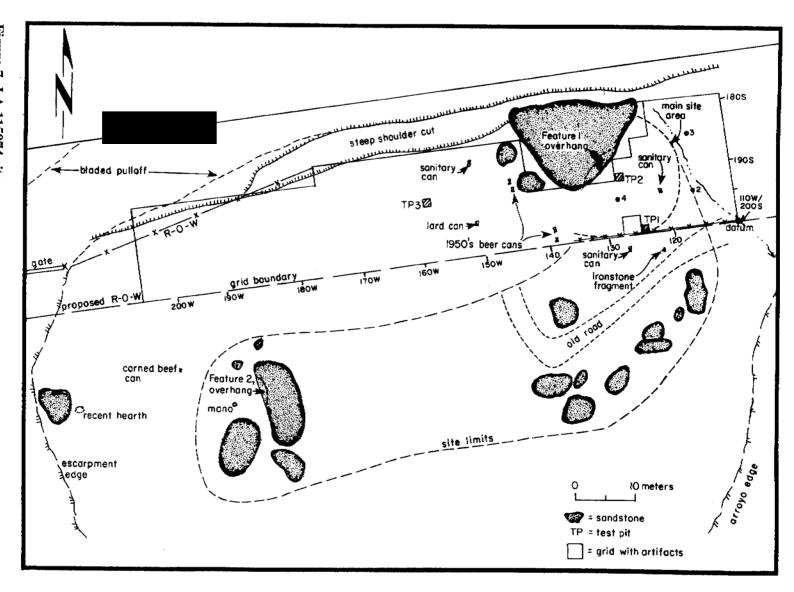
Surface Collection: A grid system measuring 96 m by 21 m was established over the portion of the site overlapping the right-of-way (Fig. 7). A total of 168 complete grids were inspected. Areas of partial grids not covered by sandstone were also examined for artifacts. Artifacts were limited to two plain gray ware sherds from a single grid located 6 m downslope from the Feature 1 overhang. The entire west slope of the escarpment was void of artifacts. The surface inspection verified that the general dispersed artifact scatter along with the Feature 2 overhang is preserved south of the right-of-way. The main portion of the site overlapping the right-of-way is about an 18 m east-west by 21 m north-south area around the Feature 1 overhang. This area is characterized by a very low-density surface artifact scatter on the southeast-facing slope below the overhang. A pinflag was found below the rockshelter, marking the probable location of a projectile point recorded during the original survey, but the projectile point was not found. No other surface features were found within the project area.

Test Units: Subsurface investigations included the excavation of three 1 by 1 m test pits and four auger tests. Subsurface testing focused on the main site area around the Feature 1 overhang. The western slope of the site was void of artifacts. The slope had the potential for 10 to 20 cm of soil development interspersed with abundant sandstone outcropping.

Test Pit 1. Test Pit 1 was along the edge of the right-of way and beside the grid containing the two surface sherds. The test pit is 6 m south of the talus slope surrounding the Feature 1 overhang. The pinflag marking the location of the projectile point recorded during the original survey is 6 m to the northwest. Surface vegetation consisted of sage and mixed grasses.

Bedrock was encountered at a depth of 20 to 25 cm below the surface. The single layer of sandy silt contained abundant natural sandstone escarpment debris, but no charcoal or evidence of cultural activity. Artifacts were limited to a quarter-sized plain gray ware jar body sherd and a recent sanitary can lid. Both artifacts were found in Level 1. The artifacts were recorded in the field and not collected. Test Pit 1 shows that subsurface deposits in the main site area downslope from the overhang are sparse, shallow, and mixed with recent material.

Test Pit 2. Test Pit 2 was found at the base of the talus slope about 3 m from the mouth of the rockshelter. Bedrock was encountered 30 cm below the surface. Fill was loose sandy loam with abundant sandstone debris from the escarpment. Cultural material was limited to occasional charcoal small fragments and four fist-sized oxidized sandstone fragments. The fill was mixed by numerous rodent burrows. The test pit showed scanty and shallow subsurface material in the area immediately in front of the shelter.



Test Pit 3. Test Pit 3 was placed away from the shelter on the level ridge crest. This was the only area of the ridge crest and western slope with the potential for soil development. A large ponderosa pine tree was nearby, and the surrounding surface area was covered by pine duff. Bedrock was encountered at 45 cm below the surface. Soil was a single layer of brown compact sandy clay with abundant natural sandstone debris. No subsurface cultural material was discovered.

Auger Tests. Auger Test 1 was placed in the Feature 1 overhang and encountered bedrock at a depth of 30 cm below the modern surface (Fig. 7). The sandy loam fill contained sparse charcoal flecks and no cultural staining. The remaining three auger tests were placed along the perimeter of the slope in front of the shelter. They encountered bedrock at a depth of 10 to 15 cm and revealed no subsurface cultural material.

Material Culture: The three sherds found in the right-of-way include two surface sherds and a single subsurface sherd from Level 1 of Test Pit 1. The three small plain gray ware body sherds are from jars and at least two vessels are represented. The sherds conform with the proposed Pueblo I occupation.

Evaluation: Reconnaissance agreed with the originally established 100 by 70 m site limits (Hohmann and Irwin 1998:65). Overhang Feature 2 and the majority of the diffuse artifact scatter is preserved south of the right-of-way. The site area extending into the right-of-way is limited to about a 21 by 18 m area around the Feature 1 overhang (Fig. 7). Surface artifacts are sparse in this area, and subsurface material is shallow and mixed with 1950s artifacts. Recent burned wood and a large tree limb with saw-cut limbs evidence recent use of the overhang. Cultural material has also been mixed by extensive rodent disturbance. The main importance of the overhang is limited to the artifact content associated with the Pueblo I occupation, but the interpretive value of the context has been compromised by the recent reuse of the shelter and the rodent burrows. The limited testing program has added little additional interpretive information. The few sherds affirm the Pueblo I occupation, which was most likely related with short-term procurement of local valley bottom resources.

The Feature 1 overhang shelter, talus slope, and downslope site area contain potentially significant cultural materials, and the site limits overlap a portion of the right-of-way. Construction activities within the right-of-way in the vicinity of the site are limited to fence installation and a 1 m slope cut along the existing shoulder. The slope cut is well outside the site limits, and the cultural resources will not be effected by this construction activity. The new right-of-way fence crosses the downslope edge of the artifact scatter. The downslope site area contains very few surface artifacts and no apparent subsurface cultural deposits, but the 21 m of right-of-way fence (113W to 134W) should be hand-placed, and installation should be monitored by an archaeologist. No further archaeological investigations in the right-of-way are recommended.

LA 115068 (AR-03-02-03-721)

Site Type: Historic artifact scatter.

Cultural Association: Anglo/Hispanic culture, statehood to World War II (A.D. 1912 to 1940).

Legal Description: See Appendix 1.

Land Status: USDA Forest Service, Carson National Forest, Jicarilla Ranger District.

Condition: The site is exposed to sheet wash but is intact.

Setting: The site is on the north side of Vaqueros Canyon and at the immediate base of the talus slope defining the north margin of the valley (Fig. 8). Site elevation is 2,134 m (7,000 ft). Extensive sandstone outcroppings are immediately north of the site, and the open valley bottom of Vaqueros Canyon spreads out to the south. The wide, open valley bottom was an immediate source of both farm and grazing land. Current vegetation consists of juniper, sage, and mixed grasses.

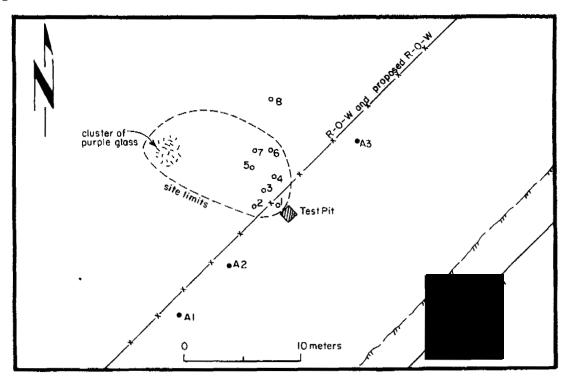


Figure 8. LA 115068 site map.

Original Description: The site was originally recorded as a small historic period artifact scatter consisting of 15 pieces of glass, historic ceramics, cans, and metal (Hohmann and Irwin 1998:54). The artifacts were thought to be associated with a possible hearth and to represent a temporary logging or ranching campsite.

Surface Collection: Surface artifacts were recorded by walking shoulder-to-shoulder transects and marking artifact locations with pinflags. Each artifact was assigned a point-specific provenience and analyzed in the field. The surface examination revealed that only one sanitary can lid was within the project area. The remaining artifacts composing the artifact scatter are preserved north of the right-of-way fence. No surface features were observed.

Test Units: Subsurface investigations included the excavation of one 1 by 1 m test pit and three auger tests.

Test Pit 1. The test pit was along the right-of-way fence and beside the sanitary can lid. It was placed downslope of the main artifact scatter. Surface vegetation was mixed grasses. Bedrock was encountered at a depth of 20 to 25 cm below the surface. The single layer of fill consisted of compact sandy clay with abundant natural sandstone debris from the talus slope. No subsurface artifacts or cultural deposits were found. The test pit shows that the artifact scatter is confined to the surface.

Auger Tests. Three auger tests were spaced across the east/west extent of the scatter (Fig. 8). The auger tests encountered bedrock from between 8 and 40 cm below the surface. The auger tests had similar soil profiles and found no subsurface artifacts or evidence of cultural activity.

Material Culture: The entire assemblage was composed of eight artifacts, including corned beef cans (2), sanitary cans or lids (3), can fragments (2), and a cluster of purple glass from a single bottle of indeterminate type (22 fragments). The base and lip of the bottle were not found. One sanitary can lid was within the right-of-way. The entire assemblage is composed of food and beverage containers that were discarded during one depositional event. The assemblage probably dates around the 1920s based on the end date for the purple glass and the beginning date for the sanitary cans. Historic ceramics recorded during the original documentation were not found.

Evaluation: Reconnaissance determined that the location of the site was inaccurately reported by the initial survey. The site is not in the open floodplain at the originally mapped location, but adjacent to the sandstone escarpment about 600 m to the southwest (see Appendix 1 for the corrected legal description). While searching for the site, a large landscape burn was encountered. Numerous examples of burned rock were found in the immediate vicinity of the site as clusters of loose rock and bedrock exposures. The proposed hearth at LA 115068 is most likely the consequence of this landscape burn rather than a cultural feature. The oxidized sandstone lacks formal characteristics of a hearth (organization of the rock into a ring, the concentration of ash or charcoal within the rock) and was identical to other fire-altered rock across the large landscape burn. The reconnaissance concurred with the general content of the artifact scatter. The site limits encompass the limits of the point-specific artifacts, excluding the oxidized sandstone.

The entire site, with the exception of a single sanitary can lid, is preserved north of the proposed right-of-way. The assemblage is composed of food containers dating from around the 1920s. This is contemporary with the nearby Cordova homestead and Vaqueros Ranger Station. The site is probably a brief camp or lunch stop associated with the nearby ranching/farming homesteads, or even a roadside-related activity. The original construction date of U.S. 64 was not determined.

Limited testing determined that the site area within the right-of-way is not likely to yield additional information important to the understanding of local or regional history or prehistory. No further archaeological investigations within the construction zone are recommended.

#### LA 115067

Site Type: Cordova homestead.

Cultural Association: Hispanic culture, early statehood period (1911 to the 1920s).

Legal Description: See Appendix 1.

Land Status: Private, and land managed by NMSHTD.

Condition: The only standing building is a log cabin that has been converted into a cattle pen. This was probably the tool shed depicted on the original homestead survey map. The main dwelling, henhouse, barn, and corral are no longer standing. Scattered architectural debris designates the general location of the razed buildings. The site area has been trampled by long-term cattle grazing. The area is currently the home of an active prairie dog village.

Setting: The site is on the alluvial valley bottom on the north side of Vaqueros Arroyo (Fig. 9). Site elevation is 2,134 m (7,000 ft). Vaqueros Canyon is wide and open in this area compared with the narrow and restricted western section. Vegetation in the valley bottom is mixed grasses with sage along the margins. The open grass-covered valley bottom was a source of grazing and farmland. Ponderosa pine is prevalent along the north and south sides of the valley. Several unnamed springs in the valley bottom form small wetland pools with cattails. One such spring is about 100 m west of the log cabin. The water provided by the wetlands was probably an important consideration for selecting the area for both the locations of the Cordova Homestead and the nearby Vaqueros Ranger Station.

Original Description: LA 115067 was originally recorded as a historic habitation consisting of a log cabin, well, and trash dump (Hohmann and Irwin 1998:54). The log cabin had been modified into a cattle pen with a cattle chute added to the northeast corner. About 30 historic artifacts included tin can fragments, glass, and an abandoned automobile.

Surface Collection: Systematic surface recording was carried out by archaeologists walking shoulder-to-shoulder transects of the narrow 9 m strip between the existing right-of-way fence and the edge of the road grade, and marking artifact locations with pinflags. This resulted in the recording of a single sheet metal fragment from a 1920s-vintage automobile frame south of the right-of-way fence (Fig. 9). The standing log cabin, the various razed homestead improvements, and most of the surrounding refuse are preserved south of the right-of-way fence. No surface features were observed in the project area.

Test Unit Descriptions: Subsurface investigations included the excavation of two 1 by 1 m test pits and three auger tests.

Test Pit 1. Test Pit 1 was just north of the standing log cabin and beside the automobile part found in the right-of-way. Surface vegetation was mixed grasses and sage. Excavation ended 20 cm below the surface. The single layer of sterile alluvial sediment consisted of fine sandy loam. An auger test showed that the layer extended to a depth of at least 1.2 m. Artifacts were limited

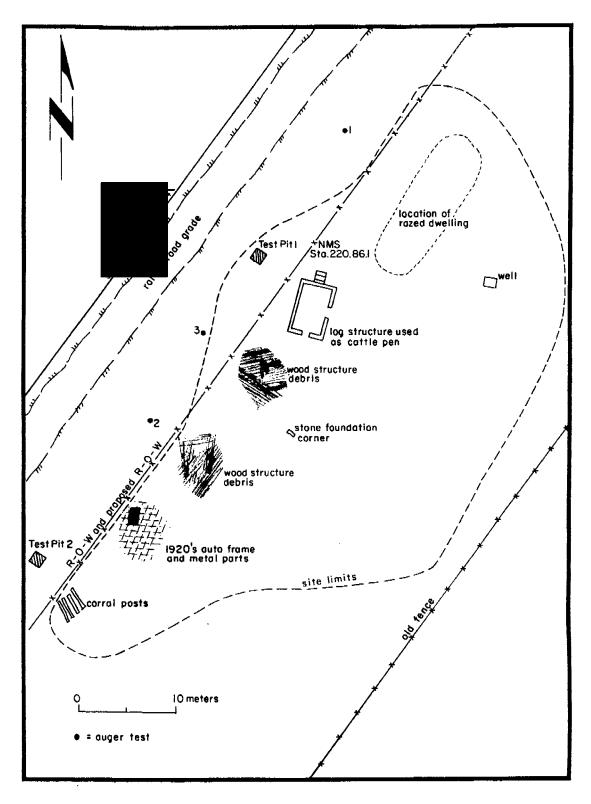


Figure 9. LA 115067 site map.

to a single femur fragment from a butchered sheep found in Level 1. The small bone fragment was not collected. No other evidence of cultural activity was discovered.

Test Pit 2. Test Pit 2 was at the west end of the site and north of the barn and corral shown on the 1916 homestead survey map (see Fig. 19). Surface vegetation was heavy sage. Excavation ended at 30 cm below the surface in culturally sterile fine sandy loam. An auger test showed that the layer extended to a depth of at 1.3 m. There was no evidence of manure from the corral, and no other cultural deposits were found.

Auger Tests. The three auger tests were placed north of three separate areas of scattered architectural debris, suggesting razed homestead improvements. No subsurface artifacts or cultural deposits were unearthed.

Material Culture. The single butchered sheep bone suggests that sheep were among the inventory of animals raised and used at the homestead. The automobile part is associated with the large framed 1920s vintage automobile abandoned south of the right-of-way. The exact date of the automobile was not determined. The automobile may date from the end of the ten-year (1911 to 1921) homestead occupation, or it may be associated with the subsequent owner of the property, Emmet Wirt, United States Land Commissioner, and owner of the Emmet Wirt Cattle Company.

Evaluation: The site area overlapping the right-of-way is the low-density northern margin of the historic artifact scatter associated with the homestead. Site limits were originally established at 28 m north-south by 33.5 m east-west but were expanded to 28 m north-south by 66 m east-west to include the location of razed buildings depicted on the 1916 homestead entry survey map (Fig. 19). All of the homestead improvements and most of the associated artifact scatter is preserved south of the right-of-way fence. The primary interpretive value of the site is with the historic records documenting the Cordova homestead (see the ethnohistroic overview by Spivey in this report). The main house was built in 1911, and the homestead patent was issued to Thomas A. Cordova in 1920. The improvements including the main dwelling, tool house (standing log cabin), henhouse, shed barn, and corral were in place as of the 1916 survey. Only the log tool house, subsequently converted into a cattle pen, remains standing (Fig. 10). Limited testing has determined that the site area within the right-of-way is not likely to yield additional information important to the understanding of local or regional history or prehistory. No further archaeological investigations within the construction zone are recommended.



LA 115065 (AR-03-02-02-718)

Site Type: Vaqueros Ranger Station.

Cultural Association: Anglo/Hispanic culture, statehood period (ca. 1912 to 1960s).

Legal Description: See Appendix 1.

Land Status: USDA Forest Service, Carson National Forest, Jicarilla Ranger District.

Condition: The Vaqueros Ranger Station was decommissioned in 1969, and all structures were either moved or dismantled. The site area is currently intact, although surface material is exposed to cattle grazing, and the area is the home of an active prairie dog community.

Setting: The site is on the alluvial valley bottom on the north side of Vaqueros Arroyo (Fig. 11). Site elevation is 2,131 m (6,990 ft). Sandstone outcroppings characterizing the north margin of the valley are just north of the highway. The wide, open valley bottom stretches out to the south. Vegetation in the valley bottom is mixed grasses with sage along the margins. Several unnamed springs form small wet land pools at the site. These pools were developed by the Vaqueros Ranger Station as water sources for irrigation.

Original Description: LA 115065 was originally recorded as a historic site complex referred to as the Vaqueros homestead (Hohmann and Irwin 1998:48-49). Site elements included two to three building foundations, a stone-lined well, irrigation ditches, and various other cultural features. The artifact scatter of about 30 artifacts suggested a date range of ca. 1880 through the 1960s. The site was the location of the original Jicarilla Ranger District Office.

Surface Collection: Systematic surface recording was carried out by archaeologists walking shoulder-to-shoulder transects of the site area between the existing right-of-way fence and the proposed right-of-way and marking artifacts with pinflags. The original paved access road to the ranger station was in the site area between the highway and the existing right-of-way fence. No artifacts were observed in this area. Four nails and a piece of window glass were found during the surface examination. Three nails and the window glass fragment were in the area of the barn shown in historic photographs of the site. Demolished construction debris in the form of cement fragments in the area of Test Pit 1 and the razed main dwelling were not quantified. The surface examination showed that most of the site elements are preserved south of the project area. No artifacts suggestive of the proposed 1880s beginning occupation date were observed.

Test Unit Descriptions: Subsurface investigations included the excavation of two 1 m by 1 m test pits and four auger tests.

Test Pit 1. Test Pit 1 was placed along the edge of the proposed right-of-way adjacent to an area of razed construction debris, the remains of the main dwelling constructed in 1912 (Fig. 11). The cement foundation footing of the adobe dwelling was encountered at a depth of 20 cm below the surface. The cement footing is 50 cm wide and was covered by 20 cm of demolished construction debris from the razed structure. The northwest corner of the structure extends 2 m into the proposed right-of-way. Auger Test 4, placed along the projected alignment 3 m west of the test pit, was sterile. The larger portion of the structure is preserved south of the project area, and construction debris was scattered over a 30 by 20 m area. The foundation footing was not visible from the surface, and the exact size of the dwelling could not be determined.

Test Pit 2. Test Pit 2 was placed along the edge of the right-of-way and in the vicinity of the sandstone wall alignment marking the location of the barn shown in historic photographs. Three surface nails and a piece of window glass were scattered in the area. The test pit was dug into sterile alluvial sandy loam at a depth of 20 cm. Six common nails and a piece of tarpaper were recorded from Level 1. No other construction debris was encountered. The test pit shows that no subsurface deposits associated with the dismantled barn extend into the right-of-way. The three auger tests paralleling the length of the sandstone wall, 9 m south of the right-of-way, were sterile (Fig. 11).

Auger Tests. As mentioned, the four auger tests placed in the area of the main dwelling and barn failed to locate evidence of subsurface deposits. The auger tests were dug to a depth of 1 m into the sterile alluvial sediment, and no subsurface cultural material was found.

Material Culture: The four nails and one window glass fragment found on the surface represent razed construction debris but add little to site interpretation. Material Culture: The four nails

and one window glass fragment found on the surface represent razed construction debris but add little to site interpretation.

Evaluation: The site area overlapping the proposed right-of-way is the northern margin of the dismantled structures from the Vaqueros Ranger Station. Reconnaissance confirmed the core site limits of 105 m by 60 m. The location of the surviving cattle guard along the existing right-of-way fence, a feature not shown on the original site map (Hohmann and Irwin 1998:52), guided the orientation of the site layout as depicted in the various historic photographs. The cement foundation footing of the dwelling built by forest ranger Paul Scott in 1912 was encountered in Test Pit 1, but the razed remnants of the other site elements are south of the project area.

The primary interpretive value of the site is in the historic records documenting the Vaqueros Ranger Station (see the ethnohistoric overview by Spivey in this report). The earliest structure was built by Paul Scott in 1912. The Vaqueros Ranger Station operated from 1919 to the 1960s. The site was decommissioned by the USDA Forest Service in the 1960s, and all structures were either moved or dismantled by 1969. The historic research found no evidence of an earlier 1880s occupation, as suggested by the original site recording (Hohmann and Irwin 1998:48). The 1882 survey map shows no structures in Section 1 (see Spivey, this volume). Little additional dating information was found by means of surface examination, but the historic documentation suggests that the construction of the main dwelling in 1912 initiates site occupation.

The placement of the new right-of-way fence will not effect the small segment of the foundation footing extending into the right-of-way. The site area within the proposed right-of-way is not likely to yield additional information important to the understanding of local or regional history or prehistory. No further archaeological investigations within the construction zone are recommended.

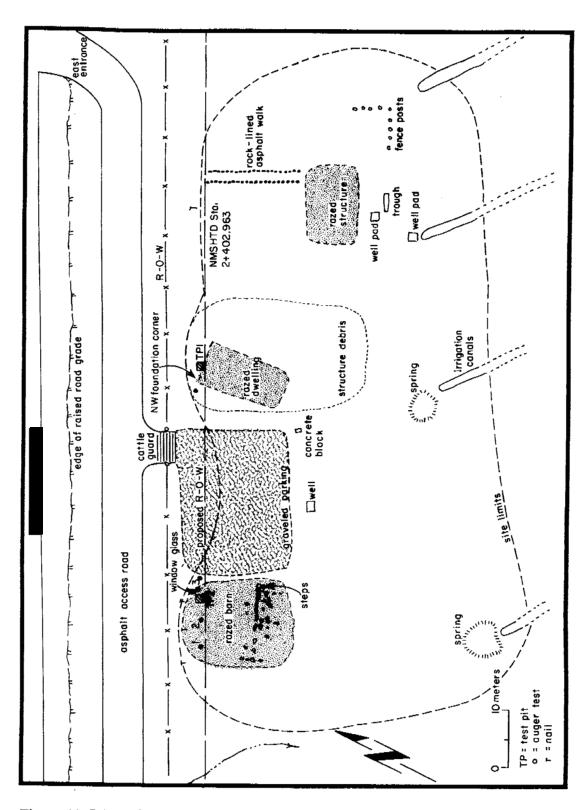


Figure 11. LA 115065 site map.

### ETHNOHISTORY OF LA 115065 AND LA 115067

# Janet Spivey

A brief ethnohistoric study of LA 115065 and LA 115067 was conducted in the summer of 1998 by Janet E. Spivey, OAS ethnohistorian. During this time data were collected to determine land ownership history, site functions, economic activities of owners, identification of features not archaeologically visible, past land-use strategies, and the placement of the site in a larger sociocultural context. Research methods included site visits, a study of land title records, historical documents and archival records, a review of pertinent published sources relating to the general history of the Jicarilla Ranger District of the Carson National Forest, and interviews with individuals with knowledge of the site areas.

Research on the historic sites was conducted at the Bureau of Land Management, where plat survey notes and surveyor general field notes were examined. Records at the Jicarilla Ranger Office in Bloomfield, New Mexico, and the Carson National Forest supervisor's office in Taos, New Mexico, were examined for references to the historic sites, especially LA 115065. The homestead patent for LA 115067 was obtained from the National Archives. Interviews were conducted with current and retired USDA Forest Service personnel with knowledge of the historic sites.

#### LA 115065

LA 115065 represents the remains of a historic site commonly referred to as the Vaqueros cabin or homestead. It is in the Jicarilla Ranger District of the Carson National Forest (Fig. 12). The Carson National Forest was established from the Taos Forest Reserve and part of the Jemez Forest Reserve on June 26, 1908. Proclamation 1082, dated August 24, 1910, added land known today as the Jicarilla Ranger District to the Carson National Forest. (Fig. 13).

Jicarilla Ranger District Resource Clerk Lorrie Ketterman and Jim Tensfield, a retired USDA Forest Service employee, identified LA 115065 (Vaqueros cabin) as the site of the old Jicarilla Ranger District office, known as the Vaqueros Ranger Station. Jim Tensfield became a part of the Jicarilla Ranger District in 1969. He stated that when he began working for the Jicarilla Ranger District, the adobe house and sheds were already gone, but the barn and the Jicarilla Forest Service office were still standing. Sometime during 1969 the USDA Forest Service destroyed the rest of the standing buildings. Photos of the Vaqueros Ranger Station were found at the Jicarilla Ranger District office. The earliest was dated 1954. Other photos were dated 1955, 1959, and 1961 (Figs. 14, 15, 16).

Also at the present Jicarilla District Ranger Station, in Bloomfield, New Mexico, were copies of the Carson National Forest publication known as the *Pine Cone*. The first issue of *the Pine Cone* was published on January 1, 1909. According to the June 1911 *Pine Cone*, the first Jicarilla Ranger District headquarters was on the San Juan River near the town of Carracas, New Mexico. An administrative site of 51 acres was at the Stottsteimer Ranch on Caraque Creek. On May 26, 1911, Assistant Forest Ranger M. D. Loveless assumed charge of the Jicarilla Ranger District. The district consisted of a strip 35 miles long averaging about six miles wide along the west

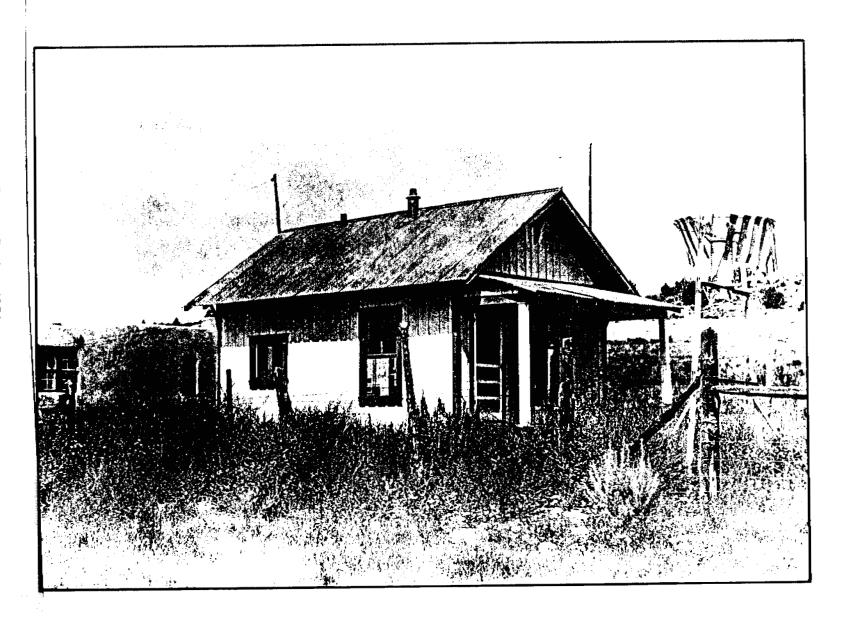


Figure 12. Vaqueros Ranger Station, 1954.

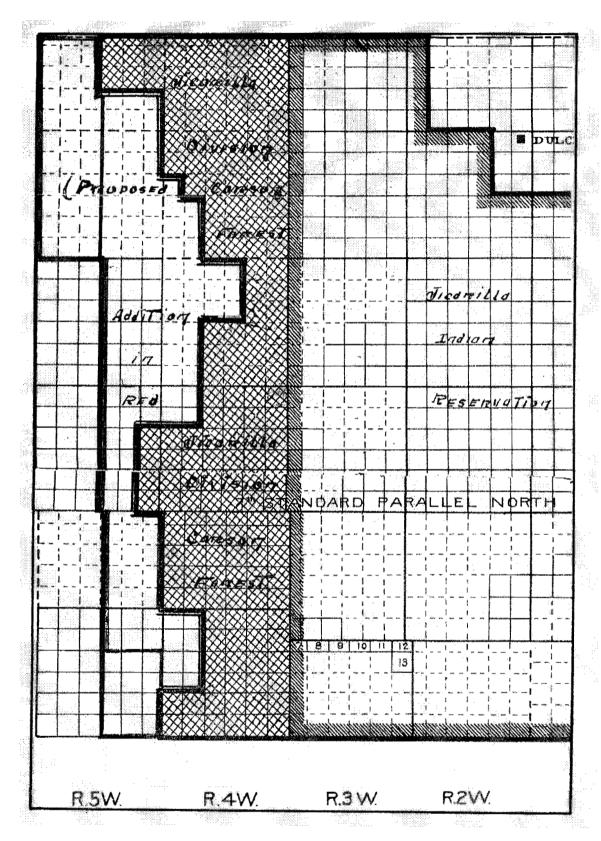


Figure 13. Proposed land addition map, 1910.



Figure 14. Vaqueros Ranger Station, 1954.

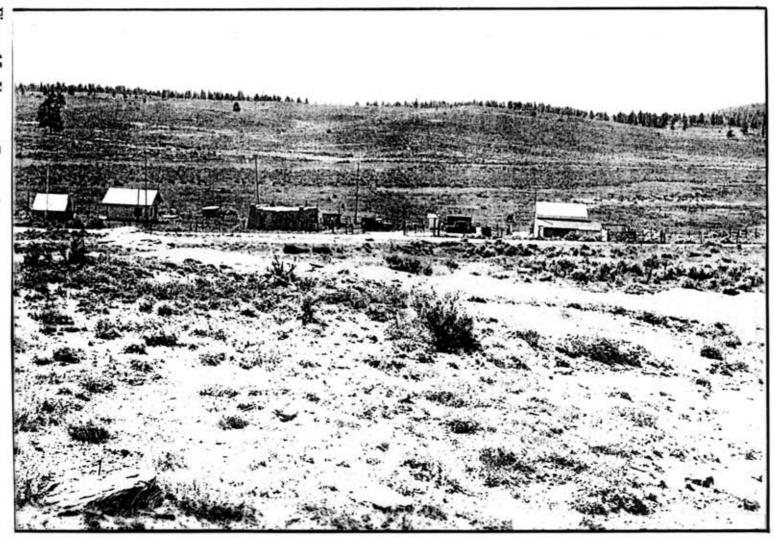


Figure 15. Vaqueros Ranger Station, 1955.

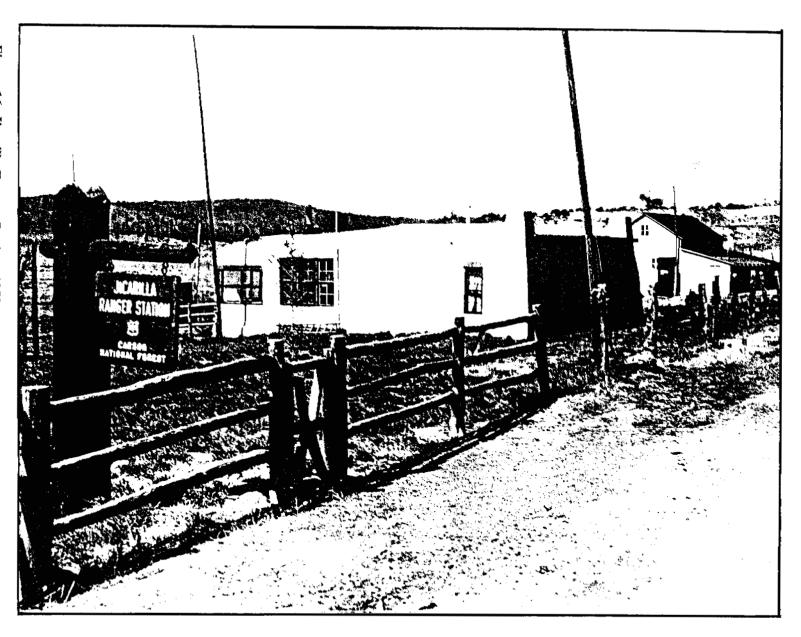


Figure 16. Jicarilla Ranger Station, 1959.

boundary of the Jicarilla-Apache Indian Reservation. There were 95 miles of boundary to post. About 15,000 sheep and 400 cattle used the land at various seasons. The Jicarilla Ranger District included almost two townships of good yellow pine, and the remainder was rough rocky country with a heavy stand of juniper and piñon.

A later issue of the 1911 *Pine Cone* listed Pagosa Junction, Colorado, as the headquarters for the Jicarilla Ranger District. According to Ketterman and Tensfield, Pagosa Junction is the former name of Pagosa Springs.

The January 1912, *Pine Cone* stated that Supervisor Aldo Leopold had returned from a short trip to the Jicarilla Ranger District. Leopold reported that Forest Guard Hagar had rented excellent quarters at Rosa, New Mexico. According to a list of USDA Forest Service rangers who served on the Jicarilla Ranger District, in 1912 Paul Scott was the first to serve at the Burns Ranger Station, followed by Charles Hagar. Apparently sometime in 1912, the name of the Jicarilla Ranger District headquarters at Rosa was changed to the Burns Ranger Station, the first name given to LA 115065. The Burns Ranger Station was probably named after nearby Burns Canyon. T. D. Burns came to the Chama and Tierra Amarilla areas as early as 1867. Burns supplied beef to the Ute Indian Agency in Tierra Amarilla and by 1900 had established a network of stores that ranged up to southern Colorado. Burns built an elaborate house in Tierra Amarilla in 1876 and later added a store to the front of it. It is likely that Burns Canyon was named after T. D. Burns. (Wilson and Kammer 1989:72).

Unfortunately, the *Pine Cone* issues for 1915-16 were missing, and there was no mention of the Jicarilla Ranger District headquarters until 1919. The November 10, 1919, *Pine Cone* stated that the name of the Burns Ranger Station had been changed to the Vaqueros Ranger Station, probably after Vaqueros Canyon. Ranger H. L. Ground was in charge of the Jicarilla Ranger District in November 1919.

The next mention of the Vaqueros Ranger Station was in the March 18, 1927, Pine Cone, which stated that Ranger Bolander had stayed in Taos for the winter of 1926-27. Ranger Charles Askins, who served at the Vaqueros Ranger Station between 1929 and 1930, wrote an article in 1986 called "The Race for Old Three Toes" (Fig. 17). In this article he wrote that the Vaqueros Ranger Station was made of adobe and located a hundred miles from the Carson Forest headquarters in Taos. There was no radio or telephone, and Askins had no contact with the Carson headquarters. The Vaqueros Ranger Station was only a quarter mile from the Jicarilla Apache Reservation. The reservation head quarters was in Dulce, about 17 miles from the ranger station. Every three weeks Askins would saddle up, take a pack mule, and ride to Dulce to buy supplies and get the mail. The Apache Indians ran 2,600 horses on the Jicarilla District. Ranger Askins rode an average of 300 miles monthly during grazing season. The permittees who lived off the forest were granted an allotment from 30 to 100 cows to be grazed on the forest land during the summer. Four miles west of the ranger station lived Askin's friend, Louie Lynch, a foreman for the Emmet Wirt Cattle Company. Emmet Wirt was the Indian trader at Dulce. Lynch lived in a long, low adobe shack with four rooms, all of which adjoined his corrals. He had three children, two sons and a daughter. His wife had died during a flu epidemic (Askins 1986:39).

According to Jim Tensfield, the USDA Forest Service had constructed all the buildings at the Vaqueros Ranger Station, including the adobe house. The 1882 survey conducted by George

Swartz for the surveyor general of New Mexico does not show any structures or ranches in Section 1. However, Section 4 has a ranch in the SE 1/4. Tensfield and Ketterman stated that Paul Scott built the adobe house at the Burns Ranger Station in 1912. This information suggests that there was no existing house used by the Burns Ranger Station and that the USDA Forest Service built all the structures.



Figure 17. Forest Ranger Charles Askins.

Research on LA 115067 was conducted at the BLM State Office in Santa Fe, the Jicarilla Ranger Station of the Carson National Forest, the Rio Arriba County Courthouse, and the National Archives.

The BLM records indicate that Homestead Patent 281, in Section 1, of T 29N, R 4W, belonged to Tomas A. Cordova (Fig. 18). According to Homestead Patent 281, obtained from the National Archives, Tomas A. Cordova of Dulce, New Mexico, applied for a homestead entry within Sections 1 and 12 of T 29N, R 4W, containing 160 acres, on February 13, 1913.

In a testimony of the claimant, dated May 15, 1919, Cordova stated that he was 35 years old and was born in New Mexico. He was married and had four children. Cordova stated he first established actual residence on the land in April 1911 and built his house in May and June 1911. From 1911 to May 15, 1919, he cultivated from 5 to 25 acres and then had under cultivation 25 acres of wheat, oats, corn, beans, peas, and potatoes. Most of the time Cordova had harvested good crops. He stated that the east end of his claim contained his farming land and improvements, which consisted of the following: one log house 16 by 60 feet containing four rooms with a board roof, one barn 16 by 48 feet made of lumber, one chicken house 6 by 8 feet, one shed 12 by 30 feet, and one well 25 feet deep and 8 feet across. All acres were fenced. The improvements were valued at \$1,000.

According to documents in the patent file on Homestead 281, the land Cordova applied for was on the Carson National Forest. On March 13, 1912, the acting secretary for the Department of Agriculture in a letter to the secretary of the interior requested that the tract of land (List No. 3-1792) be restored to entry under the Act of June 11, 1906. The request stated that the land was unsurveyed and contained 160 acres for which Tomas A. Cordova applied on September 7, 1911, alleging settlement in 1906. Lee Harris, USDA Forest Service land supervisor, conducted a survey of Cordova's land in 1912. In May 1916, C. A. Long conducted a USDA Forest Service survey of the Tomas A. Cordova land that was still in the Carson National Forest. Long described Tomas A. Cordova's improvements as follows: a frame barn, 14 by 36 feet, valued at \$1500; a pole corral, 60 by 60 feet, valued at \$50; a frame wagon shed, 12 by 12 feet, valued at \$10; a log henhouse, 8 by 12 feet valued at \$10; a log tool house, 12 by 14 feet, valued at \$25; a log and adobe dwelling, 12 by 90 feet, valued at \$300; a well, 30 feet deep, with a force pump, valued at \$150; and about three miles of good barbed wire fencing, valued at \$300. The total value of improvements was \$995. The description of the claim was as follows: "This claim is located in a wide open valley draining southwest. The soil is a brown adobe, deep and fertile. About 15 acres are under cultivation producing good crops of hay, small grain, beans, and vegetables. There is no timber or evidence of mineral on the claim. A well on the claim furnishes an abundance of water for all domestic purposes and for watering of stock. About 90% of the area can be farmed. Dulce, New Mexico, the nearest post office, trading place and railway station, is about 25 miles in a northeasterly direction, and is reached by a rough wagon road" (Fig. 19).

The date of the final affidavit of Cordova's homestead entry is May 15, 1919. On that date the USDA Forest Service, District 3, in Albuquerque, New Mexico, wrote a letter to the U.S. Land Office in Santa Fe. The letter from Acting District Forester John Kerr stated that the USDA Forest Service would enter no protest against issuance of a patent to Tomas A. Cordova, Dulce, New

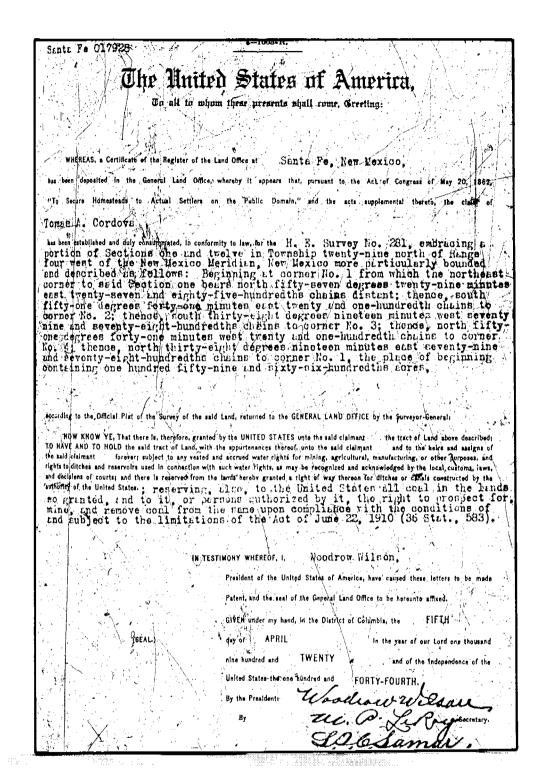


Figure 18. Thomas A. Cordova homestead patent.

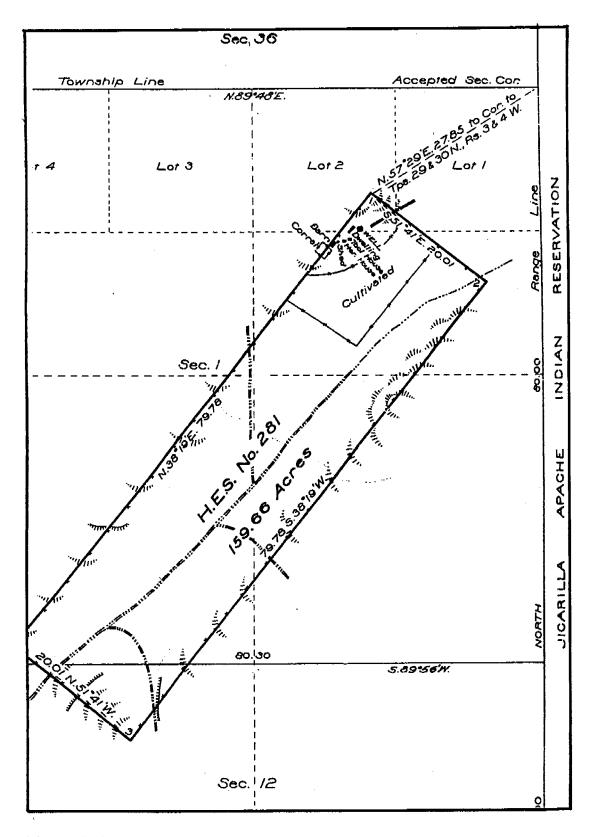


Figure 19. C. A. Long survey map, 1916.

Mexico for H.E. 017928, embracing the 159.66 acres known as Homestead 281, in Secs. 1, 12, T 29N, R 4W, NMPM, in the Carson National Forest.

The final affidavit by Tomas A. Cordova on May, 15, 1919, was filed in the U.S. Land Office in Dulce, New Mexico, and signed by Emmet Wirt, United States commissioner. The Cordova patent was approved and officially signed by President Woodrow Wilson on April 5, 1920. Rio Arriba County Courthouse records showed that Tomas A. Cordova and his wife sold the 159.66 acres of land in homestead patent 281 to Emmet Wirt on February 4, 1921.

#### RECOMMENDATIONS

Limited testing of eight sites and an isolated occurrence has determined that the areas overlapping the right-of-way are not likely to yield information beyond that already documented. LA 115082 (AR-03-02-03-735), LA 115081 (AR-03-02-03-734), LA 115076 (AR-03-02-03-729), LA 81675 (AR-03-02-03-511), and LA 115074 (AR-03-02-03-727) are marginal portions of Anasazi sites associated primarily with valley bottom agricultural activities. LA 115074 (AR-03-02-03-727) will not be affected by the proposed slope limits, and the new right-of-way fence along the edge of the artifact scatter downslope from the Feature 1 overhang is the only place the project effects the resource. The 21 m right-of-way fenceline crossing the edge of the downslope artifact scatter from 113W to 134W should be hand-placed and monitored by an archaeologist. IO 17 (USDA Forest Service land) was found not to have subsurface deposits and retains its designation as a simple isolated occurrence consisting of two sherds. LA 115068 (AR-03-02-03-718) and LA 115065 (AR-03-02-02-718) are historic sites on USDA Forest Service land, the remains of a simple artifact scatter and the original Jicarilla Ranger District Office, LA 115067, on private land, is the remains of the Thomas A. Cordova homestead. No further archaeological investigations within the construction zone are recommended for the eight sites and the isolated occurrence.

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