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13. ABSTRACT *(Maximum 200 words)*

In May 1996, an archeological inventory was undertaken by a crew from the Midwest Archeological Center, National Park Service, in the extreme southwestern portion of the Pinon Canyon Maneuver Site (PCMS). The PCMS is located about 40 miles northeast of Trinidad, Colorado. The purpose of this inventory was to identify an archeological resource whose temporal and cultural affiliations might allow it to be associated with the 1870s Hogback Stage Station. The survey area included 230 acres of lowland and upland settings on the north and south sides of a prominent linear feature known as the Hogback. The fieldwork resulted in locating and recording eight previously unrecorded sites and thirty-one isolated finds (IFs). About 190 acres were surveyed in the up lands south of the Hogback. Resources identified in that area include four twentieth-century trash scatters, 27 historic IFs, and two prehistoric IFs. About forty acres were surveyed north of the Hogback on the north side of Van Bremer Arroyo. Cultural resources located in this area include two historic sites, two multicomponent sites (Late Prehistoric and twentieth-century), and two historic IFs. In addition, the MWAC crew shovel-tested one historic site (5LA3547) to determine its association with the 1870s Hogback Stage Station. None of the resources located or tested could be associated with the stage station.

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Archeological Inventory in the Vicinity of Brown's Sheep Camp (5LA5824) in the U. S. Army Pinon Canyon Maneuver Site, Las Animas County, Colorado

By

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Prepared for and funded by:
Directorate of Environmental Compliance and Management
Fort Carson, Colorado
Department of Defense, U. S. Army

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Preface

The survey reported in this manuscript is an important part of the Fort Carson Cultural Resources Management Program whose goal is to maintain the largest possible area for military training while protecting significant cultural resources. The cultural resources program incorporates prehistoric and historic archeological issue, architectural issues, Native American concerns, public education, community relations, environmental and mission enhancement, curation, and compliance into a comprehensive management program. Guided by a Cultural Resources Management Plan, the program takes a long-term systematic approach to meeting identification, evaluation, and resource protection requirements embodied in the National Historic Preservation Act. Under a cooperative agreement the National Park Service, Midwest Archeological Center provides assistance in meeting Fort Carson's cultural resources goals.

Fort Carson began cultural resource studies on the Pinon Canyon Maneuver Site in 1983, immediately following the purchase of these lands. The program takes a multidisciplinary approach, combining archeological theory and historical methods with geological, geomorphological, botanical, and statistical techniques and procedures in order to focus its efforts to locate, evaluate, and protect significant cultural resources. Professional studies and consultations with Native American tribes have resulted in the identification of over 684 properties on Pinon Canyon Maneuver Site that are eligible for nomination to the National Register of Historic Places. All major prehistoric and historic cultural periods recognized on the Great Plains and Rocky Mountains are represented by the cultural resources on Fort Carson and the Pinon Canyon Maneuver Site. Sites of the Paleoindian, Archaic, Ceramic, and Protohistoric periods are present, as are sites from the Fur Trade era, 19th century Hispanic and Euroamerican settlement, early 20th century homesteading and ranching, and World War II and Cold War-era military sites.

The Cultural Resources Management Program is in the Directorate of Environmental Compliance and Management (DECAM), which is tasked with maintaining Fort Carson's compliance with federal, state and local environmental laws and mandates. The DECAM holistic management philosophy considers that all resources are interrelated. Decisions affecting one resource will impact other resources. The decisions we make today affect the condition of Department of the Army lands and resources for future training, research, and recreation. Mission requirements, training resources, wildlife, range, soil, hydrology, air, and recreation considerations all influence cultural resource management decisions. Integrating cultural compliance into a comprehensive planning process reduces the time and effort expended on the compliance process, minimizes conflicts between resource protection and use, allows flexibility in project design, minimizes costs, and maximizes resource protection.

Federal laws protect the resources on the Pinon Canyon Maneuver Site and Fort Carson; theft and vandalism are federal crimes. Protective measures ensure that Army activity does not inadvertently impact National Register sites. Fort Carson does not publicize site location information, and sites are not developed for public visitation. Similar resources are located in the Picketwire Canyonlands, where public visits can be arranged through the U.S. Forest Service, Comanche National Grasslands in La Junta, Colorado.

Fort Carson endeavors to make results of the cultural resource investigations available to the public and scientific communities. Technical reports are on file at the Fort Carson Curation Facility and Colorado State Historic Preservation Office and are available through the National Technical Information Service, Springfield, Virginia. Selected reports have been distributed to public libraries in Colorado.

Three video programs produced by Fort Carson are periodically shown on Public Broadcasting Stations. Fort Carson continues to demonstrate that military training and resource protection are mutually compatible goals.

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January 1998

Technical Abstract

In May 1996, an archeological inventory was undertaken by a crew from the Midwest Archeological Center, National Park Service, in the extreme southwestern portion of the Pinon Canyon Maneuver Site (PCMS). The PCMS is located about 40 miles northeast of Trinidad, Colorado. The purpose of this inventory was to identify an archeological resource whose temporal and cultural affiliations might allow it to be associated with the 1870s Hogback Stage Station. The survey area included 230 acres of lowland and upland settings on the north and south sides of a prominent linear feature known as the Hogback. The fieldwork resulted in locating and recording eight previously unrecorded sites and thirty-one isolated finds (IFs). About 190 acres were surveyed in the uplands south of the Hogback. Resources identified in that area include four twentieth-century trash scatters, 27 historic IFs, and two prehistoric IFs. About forty acres were surveyed north of the Hogback on the north side of Van Bremer Arroyo. Cultural resources located in this area include two historic sites, two multicomponent sites (Late Prehistoric and twentieth-century), and two historic IFs. In addition, the MWAC crew shovel-tested one historic site (5LA3547) to determine its association with the 1870s Hogback Stage Station. None of the resources located or tested could be associated with the stage station.

Popular Abstract

In 1996, archeologists with the National Park Service–Midwest Archeological Center conducted a "site survey" in the southwestern corner of the Pinon Canyon Maneuver Site (PCMS). Located about 40 miles northeast of Trinidad, Colorado, the PCMS is a facility of the U. S. Army used to train mechanized units. The survey focused on areas north and south of a volcanic dike called "the Hogback." The primary goal of this work was to locate the site of a historic 1870s stage station associated with the Barlow and Sanderson Southern Overland Mail and Express Company. Aside from isolated objects scattered over the survey area, the fieldwork resulted in the identification of eight previously unrecorded sites. These include six historic sites and two sites with prehistoric and historic occupations. At least one of the prehistoric occupations north of the Hogback dates to the Late Prehistoric period (post–A.D. 500). None of the sites investigated could be associated with the stage station, however.

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I. Introduction

In May of 1996, a team from the National Park Service's Midwest Archeological Center (MWAC) undertook an archeological survey in the southwestern portion of a military reservation operated by the U. S. Army. The reservation is utilized by the Army as a mechanized infantry training area and is known as the Pinon Canon Maneuver Site (PCMS). The PCMS is located approximately 40 miles northeast of Trinidad, Colorado (Figure 1).

The purpose of this trip was to conduct an archeological survey of the Brown's Sheep Camp site environs, and to locate the 1871–1876 Hogback Stage Station or at least identify sites that could be the locations of that station. The Hogback Stage Station was established in 1871 at the western end of the hogback by the Barlow and Sanderson Southern Overland Mail and Express Company in conjunction with development of a new stage road that ran along the north side of the hogback. Though the objective was to survey at least 640 acres, that proved impossible given the number of resources identified within the allotted two weeks field time.

Environment

Shelford (1974:328, 330) places the PCMS region in the short-grass grassland of the Northern Temperate Grassland, *needlegrass–pronghorn–grama grass* biome (Figure 2). He characterizes the biome by the presence of perennial grasses and, historically, a population of large grazing mammals and burrowing animals. The principal grasses in the short-grass grassland are *Bouteloua gracilia* (blue grama), *B. hirsuta* (hairy grama), *Buchloe dactyloides* (buffalo grass), and *Hilaria jamesii* (galleta). Sage (*Artemisia* sp.) occurs as well. Historically, the dominant animal was the bison. This animal, along with other grazing species, maintained the mixed-grass prairie. Other important species were the pronghorn antelope, buffalo, wolf, coyote, fox, badger, black-tailed jack rabbit, skunk, and weasel. Prominent rodents include the grasshopper mouse, pocket gopher, pocket mouse, Richardson's ground squirrel, and prairie vole. Common birds are the horned lark, western meadowlark, lark bunting, and (historically) the prairie chicken. Principal reptiles are the plains garter snake, the western rattlesnake, and bullsnake. Grasshoppers are the most outstanding of the insect groups (Shelford 1974:345–346).

For an excellent detailed overview of landforms and environment specific to the PCMS locality, the reader is directed to Schuldenrein (1985). The specific area of concern for this report is the southwestern margin of the PCMS at a gap in the western end of a prominent landform known as the "Hogback." The Hogback is a limestone-and-shale ridge that has been pierced by a massive basaltic dike. The dike is about nine miles in length and has a maximum width of about one-half mile. The Brown's Sheep Camp site is located about 800 ft northwest of the gap. At the gap in the Hogback south of the Brown's Sheep Camp site, the Hogback rises 260 ft above the surrounding plain. Vegetation in this area consists of grasses and low shrubs with patches of pinon–juniper savanna on the crest of the hogback. To the north of the site is a high dissected plain of short-grass grassland.

The nearest permanent source of water at Brown's Sheep Camp is the Van Bremer Arroyo, which drains into the Purgatoire River. The stream carries flowing water the year around for most years and is one of the prime reasons for Brown's Sheep Camp's existence.

Historical Background

Prior to the 1860s, the general PCMS area was the home of Native Americans. By the nineteenth century, these were predominantly bands of the Comanche, although various bands of the Apache are known to have occupied the area earlier. Some use of the region was made by the Ute, Assiniboine, and Cheyenne upon occasion as well. Though the Spanish and, after 1821, the Mexican government claimed this territory as their possession, the fierce Comanche (and Apache before them) guarded their territory jealously, harassing incursions and preventing colonization by Americans and Spanish. The only Euroamericans in this area prior to 1850 were Spanish and American military exploration parties, (typically) American fur trappers and traders such as those at Bent's Fort near present-day La Junta, or (again, typically) American merchants carrying goods to or from Santa Fe, New Mexico (Murray 1979).

With the conclusion of the Mexican–American War in 1848, however, this situation began to change. A few cattle ranchers drifted into the region in the 1850s, but settlement increased dramatically during the following decade. Most commonly, settlers were of Hispanic heritage and came from nearby New Mexico. Many of these settlements were villages of the traditional "plaza" variety, i.e., a group of individuals who were related to one another and led by the senior male head (the *patron*) of an important family (Murray 1979:41–46).

The early economy of the region was agrarian and focused on subsistence farming as well as the raising of sheep and/or cattle. Haynes and Bastion (1987:Chapt. 1, pp. 13–14) indicate that sheep ranching predominated during the 1860s and 1870s, with grazing throughout the PCMS. Although Samuel Brown established his camp at this time, sheep ranchers tended to be New Mexicans. The ranchers were integrated into the newly established Mexican communities through kinship ties. Early cattle ranchers tended to be non-Hispanics and most were from Texas. In contrast to the highly organized Hispanic communities, the (largely) Euroamerican cattlemen tended to be more independent and, until the establishment of cattlemen's organizations in the 1870s, demonstrated very little structure socially (Murray 1979:46). Some communities, of course, reflected aspects of both cultural heritages.

Lack of easily accessed markets kept the population of the region small until the mid-1870s, when several events radically altered its economic complexion. The two major events that led to expansion of the regional economy and consequently its attractiveness for settlement were the construction of a viable railway system and the demand for coal on the part of mining communities to the north and west.

Early Euroamerican settlement of the region was marked architecturally by structures built in the Hispanic Adobe tradition (Adams 1974). Both Hispanics and Anglos employed the use of adobe to build homes and major outbuildings. Adobe is especially suited to the relatively treeless area. It is cheap and easy to manufacture, and it is a hard building material composed of local mud with straw as a binding agent.

Through the early 1870s, commercial transportation was based on animal-drawn conveyances. For the most part, the routes of travel in the PCMS area followed or paralleled the Sante Fe Trail. This limited form of transport restricted access to both nearby and distant markets. Communication between communities was based upon the U. S. Mail, with letters and packages conveyed by contract carriers and stage lines (Murray 1979:57–58).

One of the early stage lines operating in the PCMS area was the Barlow and Sanderson Southern Overland Mail and Express Co. (Hardesty et al. 1995). This business won the mail contract in 1866 to carry mail from Bent's Fort to Santa Fe. Early routes bypassed the PCMS, but in 1871 the company established a new route with four stops within the boundary of the maneuver area. The last stop, a waterhole at the west end of the Hogback, was Hogback Stage Station (Haynes and Bastion 1987:Chapt. 1, p. 13).

In 1876, the Atchison, Topeka, and Sante Fe Railroad built a standard-gauge line into Pueblo. That same year, the Denver and Rio Grande Railway Co. reached the railroad town of El Moro. With the connection of Pueblo and El Moro to the San Luis Valley, Denver, and over the Raton Pass (in 1878) to points south, a stage line was no longer needed. Despite the competition, however, Barlow and Sanderson continued to run through the PCMS area at least through part of 1876. The line was finally abandoned in September owing to the drop in passenger traffic (Haynes and Bastion 1987:Chapt. 1, p. 15).

The railroad brought the pace of development for the Raton region as a whole to a fever pitch. The economy began to change and expand, and with it came irreversible social transformations (Murray 1979:58). Most of the large-scale development focused on coal mining in or near the established towns at the foot of the mountains. Since mining required a large labor force, the regional population boomed. Suddenly, there were relatively large and accessible markets for the ranchers and farmers living in the PCMS area. The railroads brought contact with the distant markets of the East, and the expanding labor force in towns around the regional coal mines resulted in the development of local sources for selling regional agricultural products.

The railroad also brought new materials and formal architectural influences from outside the region. With the influx of Anglo settlers, regional building traditions were modified. Anglo and Hispanic traditions were conjoined to create a new "Territorial style." In essence, the Territorial style combined several elements of classical design with traditional Hispanic building forms. Territorial influences included the application of simple wood pediments above windows and doors, gabled or bowed (boxcar) roofs, large windows with several window lights, wood flooring, and the replacement of logs or ax-cut structural elements with sawn lumber.

Many builders were influenced by pattern book architecture, which arrived by rail, and the Anglo sod houses of the Great Plains. Even with these influences, however, buildings still tended to reflect the knowledge and skill of their individual builders. On ranches, Hispanic foremen often constructed buildings based upon the knowledge and skills available to them, and upon what their Anglo employers told them to construct (Haynes and Bastian 1987). Much of the architecture of the PCMS during the latter part of the nineteenth century was a highly vernacular blend of Hispanic and Anglo building forms and traditions.

In the PCMS area, the cattle industry was the primary business pursuit, and it remains so to this day. Early ranching ventures placed little investment capital in land, emphasizing the expansion of cattle herds instead. Although the industry followed the general patterns of economic rise and decline demonstrated by the Plains area as a whole, there were conditions unique to the area that ameliorated the devastating hardships and business collapse that occurred in the more northern portions of the country. Murray (1979:61–66) identifies these conditions as including:

1. Early settlers who gained control of the best sites for ranching operations early after their arrival and who especially sought after those lands that had access to or control of water.

2. Hispanic ranchers who were able to quickly adapt to the Anglo economic system and who were not displaced from the range.

3. Water sources and large areas of public domain that were fenced much faster than in the northern plains. Murray's impression is that the range was cut up into well-defined ranches by 1882, a situation that did not occur until ten or fifteen years later in Wyoming and Montana.

4. Better control over the land and water, which allowed ranchers to invest in higher quality cattle earlier than northern ranchers.

5. The milder climate, which made the business much less risky.

Sheep ranching developed in parallel with the cattle industry but managed to avoid the boom–bust cycle that the cattle ranchers experienced. Sheep ranchers had a strong Hispanic sheep-raising tradition. This and the early control of grazing lands helped both the Anglo and Hispanic ranchers to move to mixed sheep and cattle operations earlier and more peacefully than in other western locations (Murray 1979:65-66).

The increasingly industrial population of the early-twentieth-century Front Range towns and the nation as a whole maintained a steady demand for agricultural products. Consequently, prices for farm and ranch products remained high. This was certainly the case during World War I, the war bringing rapid increases in farm and ranching commodities. The prosperity of the time brought with it the heaviest period of settlement for the PCMS in the history of the area. Most of the new settlers were dryland farmers.

Prosperity also brought a greater ability for ranchers and farmers to purchase manufactured goods. By the onset of the war, the automobile and light truck had largely displaced the stagecoach on mail routes. They also provided greater access to the town markets and a general decrease in the social isolation experienced by ranchers during the late nineteenth century. The increased mobility also allowed homesteading in areas that previously had been quite remote (Murray 1979:92–94).

This economic trend ended with the 1921 recession and disastrous reductions in demand and prices for wheat, beef, mutton, wool, and hides. Hard times were generally the situation for the next two decades, resulting in foreclosures and consolidation of holdings throughout this period. A few farmers were able to survive by switching to cattle and sheep ranching. Smaller ranches were incorporated into larger ranches. This general wholesale abandonment of smaller holdings accounts for many of the numerous small historic archeological sites in the general vicinity of Brown's Sheep Camp site today. During the 1940s and 1950s, most of the PCMS ranchers who had raised sheep sold their flocks and turned to cattle ranching (Friedman 1985:108–132; Haynes and Bastion 1987:Chapter 1, pp. 18–19; Murray 1979:101–102).

Previous Cultural Resource Investigations

This review will consider only those studies relating to historical sites in the PCMS. No historical archeological investigations were undertaken in the PCMS area prior to its acquisition by the U. S. Army in 1983. Once that occurred, however, it was necessary for the U. S. Army to identify and assess the significance of its cultural resources. This process was initiated in 1983 and 1984, when the University of Denver (U.D.) undertook an archeological survey and made test excavations in three management areas of the PCMS. Hundreds of archeological sites were recorded over the next couple of years, among which were 198 with historic components. Although draft reports were prepared by the U.D. team (Lintz 1985; Anderson et al. 1986), no final report on this work was completed. Instead, the U.D. data was incorporated into reports prepared by other institutions and companies.

An evaluation of the U.D.-recorded sites that have historic components was completed by Paul Friedman as a part of the 1983 to 1985 Powers Elevation history and oral history investigation of the PCMS (Friedman 1985). The purpose of Friedman's work was to establish a framework from which to understand historic sites in the maneuver area. Friedman's archival research identified 95 historic sites. Most of these were ranches and homesteads, but the list of sites also included small numbers of sites related to stage stations, roads, towns, cemeteries, and schoolhouses. One of these was Brown's Sheep Camp. In addition, Friedman noted that the U.D. survey had identified historic archeological sites identical in function to those identified during his archival research. The U.D. sites also included stone and/or wooden features, rock shelters, and rock art that represent temporary activities and/or camps associated with the raising of livestock.

In 1985, Gilbert/Commonwealth, Inc., contracted with the National Park Service to undertake an architectural overview of the PCMS (Haynes and Bastian 1987). Forty-nine sites were subsequently evaluated, most of which were homestead and ranch sites. Again, the Brown's Sheep Camp site was described and recommended as one of seven sites eligible for nomination to the National Register of Historic Places (Haynes and Bastian 1987:Chapter 5, pp. 17–26).

In 1987, Larson–Tibesar Associates of Laramie, Wyoming, conducted an archeological survey in the PCMS (Andrefsky and Sanders 1987; Hilman 1988). The final report for that work (Andrefsky 1990) synthesized that work and all previous archeological efforts within the PCMS.

In 1989, standing structures at Brown's Sheep Camp were documented by a team from the National Park Service (NPS) Historic American Building Survey (HABS). That team was uncertain as to the exact construction dates for the structures but identified the three-room building at the west edge of the complex, listed as HABS No. CO–90–A, as the Original Residence. The investigators suggest that it may have been erected in 1882 by Underwood Rogers prior to selling the property to Samuel T. Brown (McFadden and Wiatr 1989:2).

Western Cultural Resource Management, Inc., excavated Lockwood Stage Station (5LA5454) in 1991 (Hardesty et. al 1995). This site, situated in the northeastern portion of the PCMS, represents the remains of a swing station operated by Barlow and Sanderson between 1871 and 1876. The excavations were directed toward questions of site chronology, the Angloamerican–Hispanic frontier, southeastern Colorado as a periphery of the American world system, and lithic and glass tool technology.

The following year, the National Park Service undertook an archeological investigation study at Brown's Sheep Camp as an element of a remote-sensing training course sponsored by the Interagency Archeological Services Division (De Vore et. al 1992). The exercise employed low- and high-altitude aerial photography, ground-penetrating radar, magnetometer, electrical resistance meters, and a conductivity meter. These methods consistently located anomalies in three locations that were interpreted to have potential as cultural features.

In September 1996, an archeological and architectural team from the Midwest Archeological Center returned to Brown's Sheep Camp (Hunt et al. 1998). The goals of the study were: (1) to provide information necessary to the stabilization and rehabilitation of the historic buildings; (2) to determine the dates of construction and modification of the adobe structures; (3) to "ground-truth" (locate and identify) anomalies located during the 1992 remote-sensing surveys at the site; and (4) to determine whether physical evidence existed to support a possible association of one or more of Brown's Sheep Camp structures with an 1870s stage station. Archeologists were able to confirm two of three anomalies identified during the earlier remote-sensing training exercises. All features appear to be associated with twentieth-century ranching. The architectural investigations resulted in the identification of a site structure that was certainly related to the early 1880s ranching homestead. Researchers concluded that additional material culture and historical research would be required to discern whether it is also associated with the 1871–1876 stage station.

II. The Archeological Investigation

Goals and Methodology

The U. S. Army obtained the services of MWAC archeologists to inventory and record previously unidentified archeological resources around the Brown's Sheep Camp site (5LA5824), especially those resources associated with or potentially associated with the 1871–1876 Hogback Stage Station. The areas selected for archeological inventory were previously unsurveyed tracts in or near the gap in the Hogback, that gap being positioned about a quarter mile south of Brown's Sheep Camp. Maps of surveyed tracts and locations of previously recorded sites were obtained from Marilyn Mueller at Fort Carson. All sites previously recorded in the vicinity of Brown's Sheep Camp were identified on a 7.5' USGS quadrangle map. Copies of site records for historic sites were obtained and reviewed.

The survey was directed by MWAC Archeologist William Hunt (principal investigator and crew leader). The survey crew included MWAC Archeologist Alan Smith and MWAC Archeological Technicians Julie Field and Karin Roberts.

The survey was a large-scale survey, as defined in the PCMS procedures manual (Dean 1992:IV-1). It had the ideal goal of examining a minimum of 640 acres. Unfortunately, this goal was not achieved, since the funding level provided for a period of fieldwork of only two weeks, including travel time to and from the research area. This and the large number of cultural elements encountered (eight sites and 32 isolated finds) allowed only 230 acres to be inventoried.

The basic methodological approach was to establish a series of 10-m-wide north–south transects. A Brunton compass was utilized to orient the surveyors as to the correct direction of travel. At the start of each pass, the crew leader established distances between surveyors/transects by pacing. Once a survey pass had been initiated, it was the responsibility of the crew leader to insure that crew members maintained correct spacing and travel direction. During the survey, ground surfaces were inspected for prehistoric and historic artifacts, as well as for depressions, rises, and vegetation changes that might indicate the presence of cultural features. The pedestrian survey was undertaken in the spring in order to take advantage of the relatively short surface vegetation. In all but very small portions of the survey areas, the ground surface was generally well exposed to view. Shovel testing was therefore not required during the pedestrian survey to identify site extents or to identify subsurface deposits.

Shovel testing was utilized on one site (5LA3547) to determine feature location and chronological association. Distances between shovel test locations were determined by taping. Shovels were used to hand-excavate 40-cm-diameter test holes. Excavation continued to 60 cm below the surface (cmbs) or until subsurface hardpan or clays were encountered, whichever came first. The fill from each test was passed through ¼-in hardware cloth in order to facilitate artifact recovery. MWAC Shovel Test Forms were used to document tested locations and artifacts encountered. Information recorded included the locations tested, fieldwork dates, excavators' names, soil changes observed, cultural objects encountered, and other descriptive information as necessary. All test holes were backfilled upon completion of documentation.

Sites were mapped using a Brunton compass and a tape measure. Site and isolated find definitions followed the PCMS Guidelines (Dean 1992).

Upon site discovery, documentation of the resource required production of site maps and completing PCMS site forms, in addition to photographing the site and visible features, and collecting culturally and temporally diagnostic objects where necessary. A mapping datum was established near site centers using a 45-cm (18-in) long section of rebar. All mapping direction references were made with 0 degrees set on magnetic north and distance given in meters from the rebar datum. The datum was also tied into as many permanent data, cultural features, or natural features as possible and practical. All newly identified sites had their UTM location recorded using GIS equipment owned by the U. S. Army.

Site maps were created from field records using AutoCAD v.11. Information incorporated into the site map will include the site boundary, datum position, prominent artifact concentrations, and major cultural features (roads, tracks, buildings, etc.) on or immediately proximal to the site.

Based upon the information gathered during the survey, the field director evaluated each site's significance, determined its eligibility for inclusion in the National Register of Historic Places, and/or whether subsurface testing was required to make such evaluation and determination. National Register recommendations were formulated within the thematic context of the PCMS multiple property document.

Artifacts collected during the course of this project were temporarily curated for analysis at the Midwest Archeological Center (MWAC). All materials collected are identified by Midwest Archeological Center accession number 633. With completion of analysis and report preparation, all artifacts and records generated during the course of field and laboratory work were delivered to the curatorial facility at Fort Carson, Colorado.

Cultural Resources

The fieldwork resulted in locating and recording eight previously unrecorded sites and thirty-one isolated finds (IFs). About 190 acres were surveyed in the uplands south of the Hogback. Resources identified in that area include four twentieth-century trash scatters, 27 historic IFs, and two prehistoric IFs. About forty acres were surveyed north of the Hogback on the north side of Van Bremer Arroyo. Cultural resources located in this area include two historic sites, two multicomponent sites (Late Prehistoric and twentieth century), and two historic IFs. In addition, the MWAC crew shovel tested one historic site (5LA3547) to determine its association with the 1870s Hogback Stage Station. Each of these resource types are discussed below.

New Sites

5LA7113

This site, temporary field number 1 in the survey, is a Euroamerican historic camp/dump (Figure 3). It is located on the flat uplands south of the Hogback and east of the south entrance road. This site appears to be a temporary camp of some sort, perhaps nothing more than for an occupation of an hour or more. Artifact density is considered light, as the site is composed of only seven historic objects. These include a sanitary can opened with a knife, an enamel basin, a galvanized metal pail, three flattened tobacco tins, and one lard can lid. All occur on the surface. In sum, 5LA7113 is not considered significant and is therefore recommended not eligible for nomination to the National Register of Historic

Places. This recommendation is based on the fact that the likelihood of there being extant subsurface elements is low to none, as there has been severe impact on the site by military mechanized infantry training, with subsequent soil loss and erosion.

5LA7114

Recorded as temporary field number 2, this site is represented solely by a low limestone slab enclosure (Figure 4). The enclosure is situated at the top of a low hill immediately next to that hill's north-facing slope. It is constructed of small flat (limestone) slabs identical to the stone that is exposed over the entire area west of the circle. Short projections from the wall may represent an opening on the north side. Outside dimensions of the circle are 2.90 m east–west by 3.10 m north–south. The width of the walls is about 70 cm. The depression at the center of the feature is 1.15 m in diameter. This may be a prehistoric feature associated with the Apishapa phase of the Central Plains tradition. The Apishapa culture is noted for its use of stone construction on the treeless western plains (Gunnerson 1989). Unfortunately, there are no artifacts of any kind to help clarify the feature's chronological associations. There is a possibility that the feature may be of twentieth-century derivation. Ground disturbance next to the feature is severe, with all soils around the feature completely removed by military maneuvers and erosion. This, along with trash deposits on the plains surrounding the site and the gun emplacements immediately across the valley, leads one to plausibly infer that the "enclosure" may be a recently excavated foxhole. These factors led this investigator to recommend that 5LA7114 is not eligible for nomination to the National Register of Historic Places.

5LA7115

This historic dump was recorded as temporary field number 3 (Figure 5). The entire top of the hill above the site has been bladed off, and there is a large modern quarry area to south. Other landscape modifications include a stepped hillside and shallow channels running up the face of the hill. The only feature at the site other than these disturbances is an earthen embankment. This is located at the south margin of the site. The embankment encloses a 13.15-m-by-18.65-m dry pond bed. While artifacts are visible in some number over the site, the archeological resource remains entirely surficial. Further, impacts to the location in the form of loss of soil via the operation of heavy machinery and erosion have been severe. Aside from 15 fragments of boards, historic objects noted include 50 bottle-glass fragments (49 clear, 1 red), 205 fragments of flat window glass, 2 wire nails, one 11.4-cm-diameter hole-in-cap lid, 13 sanitary cans, 2 snap-on can lids, one tobacco tin, one sardine tin, a baking powder can, 5 lengths of ferrous wire, a ferrous metal fragment, 2 unidentified ferrous fasteners (collected, map reference No. 48), a ferrous brace, 8 crown caps, one 28.6-cm-diameter bucket, 2 rubber hose fragments, a piece of unidentified ferrous metal, a section of cast-iron pipe, bedsprings, barbed wire, a white metal tag marked "LAS ANIMAS CO./1119" (collected, map reference No. 61), and a gas can filler cap. These artifacts and site details suggest that the site is probably a Euroamerican camp related to cattle raising or possibly quarrying. Clear glass bottles suggest the site dates to the end of World War II.

In sum, while artifacts are visible in some number over the site, the archeological resource remains entirely surficial. Further, impacts to the location in the form of loss of soil via the operation of heavy machinery and erosion are extremely high. The lack of integrity and recent age of 5LA7115 leads to the conclusion that the site is not eligible for nomination to the National Register of Historic Places.

5LA7116

This site was recorded as temporary field number 4 and is a relatively modern camp composed of a tin can scatter and a 1-m-diameter fire hearth (Figure 6). Considerable ground disturbance has taken place immediately adjacent to the site. The entire hilltop north of site has been bladed off and a hilltop barrow is located about 100 m to the southeast. Thirty-seven artifacts were noted. These include 5 common wire nails, 3 condensed milk cans punctured with knives, 24 sanitary cans, a snuff can lid (dated 1989), 2 sardine cans, a coffee can, 2 can lids, 2 cut boards, and 2 empty ammo clips. An artifact concentration in the northwest section of this site incorporates the fire hearth with 20 sanitary cans within it. Nevertheless, this site is not considered significant. The partially buried hearth located at the western terminus of the site is apparently the only subsurface element in the site. Heavy machinery impacts and soil erosion make buried deposits in other portions of the site very unlikely. It is also very probable that the deposit is entirely modern and reflects an encampment by a small military unit during a training exercise. It is therefore recommended that site 5LA7116 is not eligible for nomination to the National Register of Historic Places.

5LA7117

This small historic camp and/or dump site was recorded as temporary field number 6. The site is located south of the main road and approximately 20 m east of a dry pond dam (Figure 7) and within an area heavily disturbed by military mechanized unit training and subsequent soil erosion. The rebar datum was established on the northwest end of the site. Fifty-nine objects were recorded at this location. These include 46 bottle fragments, of which 39 are clear glass. Six of the clear specimens retain raised markings, one of which bears an Owens–Illinois trademark. Four bottle fragments are brown glass and five are green. There is also a single clear-glass lid to a jelly jar. Construction materials include one flat (window) glass fragment, 11 wire (7 common and 4 finishing) nails, 2 small concrete fragments, a brick fragment, a red concrete/stucco chunk, three lengths of ferrous wire, some barbed wire, and a ferrous-metal reinforcement. This site also contains a rubber object, three cast-iron fragments, and an enameled handle from a metal container. A circa World War II time frame for this site is estimated on the basis of the bottle bearing an Owens–Illinois base mark dating to 1941 (Toulouse 1971:403).

5LA7118

Recorded as temporary field number 7, this is a multicomponent prehistoric and historic scatter located 150 m east of the east fence of Brown's Sheep Camp (Figure 8). Mechanized military training impacts in this location demonstrate hardpan at 2 to 8 cmbs. Altogether, 177 prehistoric and 28 historic artifacts were observed.

Prehistoric artifacts were abundant. Debitage included 127 flakes (80 hornfels, 6 chalcedony, 29 gray flint, 1 obsidian, 11 chert), 29 retouched flakes (8 quartzite, 8 hornfels, 3 chalcedony, 3 gray flint, 7 chert), and 6 pieces of shatter (1 chert, 1 quartzite, 2 gray flint, 2 hornfels). In addition, 16 tools were identified: 8 biface fragments (1 quartzite, 4 gray flint, 1 hornfels, 2 chert); 4 combination hammer/grinding stones (2 hornfels, 1 sandstone, 1 quartzite); a concretion core; 2 chert scrapers; and 2 chert projectile points. Collected materials include 1 gray flint biface fragment (map reference No. 12), 5 hornfels biface fragments (map reference Nos. 22, 81, 123, 151, and 165), 2 chert biface fragments (map reference Nos. 33 and 126), a sandstone hammer/grinding stone (map reference No. 67), a core (map reference No. 68), a quartzite hammer/grinding stone (map reference No. 101), a Late Prehistoric–period chert corner-notched

projectile point (map reference No. 128), a Late Prehistoric–period chert side-notched projectile point (map reference No. 133), and a chert scraper (map reference No. 168).

In addition, the prehistoric component is represented by two non-architectural features. One (map reference No. 62) is a concentration of burned rock covering an area about 1.45 m in diameter. Another is a fire-cracked rock feature (map reference No. 90) 0.7 m in diameter.

This component appears to represent a short-term occupation area based on the categories of tools present and the non-architectural features. Its cultural affiliation is Late Prehistoric (post–A.D. 500), based on projectile point form (Frison 1991:111, Fig. 3.35j,k).

Historic materials include 15 bottle-glass fragments (12 clear, 1 with molded text; 1 amber; and 2 green). One fragment of flat window glass (collected, map reference No. 168) and 5 common wire nails were noted. Cans included one 8.5-cm-in-diameter-by-16.4-cm-high sanitary can and one sardine can. Also noted were 2 ferrous-sheet-metal fragments, a ferrous-metal brace, a metal cap from an oil can, and a bucket ear. Historic materials here appear to be incidental, possibly representing a short-term camp.

The prehistoric component is considered a significant archeological resource. The site has received only moderate disturbance by traffic during military mechanized unit training. The prehistoric component contains temporally diagnostic artifacts and non-architectural features. These qualities led to a recommendation that the prehistoric archeological component of 5LA7118 is eligible for nomination to the National Register of Historic Places under Criterion D in that it has potential to yield important information regarding the prehistory of the PCMS including the period(s) of occupation, site function, subsistence strategies, seasonality, and environmental reconstruction.

The historic component, on the other hand, is scattered, entirely surficial, incidental in nature, and not considered significant. It is recommended that the historic component of site 5LA7118 be considered ineligible for nomination to the National Register of Historic Places.

5LA7119

Recorded as temporary field number 8, this site is a prehistoric lithic scatter and a historic Euroamerican dump with associated scatter (Figure 9). A plastic witness post (map reference No. 46) was noted at the extreme southeast portion of the site on the north edge of Van Bremer Arroyo. The site has experienced moderate disturbance via mechanized military training and there has been additional impact on the prehistoric component by pre–military civilian use of the site as a dump (probably the occupants of Brown's Sheep Camp).

The site incorporates a lithic scatter, a historic artifact scatter with concentrations, and a modern dump in a wash emptying into Van Bremer Arroyo. Although no prehistoric features were noted, prehistoric artifacts were in abundance. Piece-plotted artifacts include 23 flakes (17 hornfels, 1 gray flint, 3 chert, 2 quartzite), 2 bifaces (1 chalcedony, 1 chert), and 3 scrapers (1 gray flint, 2 chert). Additional objects occur at the site but were not recorded in the limited time available. Collected materials include a chert biface (map reference No. 7), 3 scrapers (map reference Nos. 10, 13, and 20), and a chert biface fragment (map reference No. 71).

Thirty curved glass fragments were recorded in five colors: 21 clear, 7 with raised text; 3 amber; 2 green; 2 milk-glass; and 2 yellow "Depression" glass dinnerware fragments. Two fragments of stoneware were found, one of which is a fragment from a doorknob. Also recorded were one porcelain and 11 whiteware fragments. Other historic objects piece-plotted include 2 wire nails (1 common, 1 finishing), 5 sanitary can fragments, 2 ferrous-metal fragments, a fragment of red brick, and six bundles of ferrous wire. Also noted were battery posts, fence staples, a ferrous-metal bucket, a ferrous-metal tent ring, a non-ferrous-metal ferrule, a woman's leather shoe, and a horseshoe, as well as modern appliances and machinery.

Three fragments of whiteware with maker's marks were collected. Two pieces (map reference No. 35) display dark green marks consisting of a vase over "[E]DWIN M. KN[OWLES]/CHINA CO." One of these has an additional line "30–2–3". These marks are similar to three illustrated by Lehner (1988:237, marks 5–7) that were used by that company in the 1920s and 1930s. It is likely that the first number (30) in the string refers to the year of manufacture or ware introduction, e.g., 1930. The third piece is a porcelain fragment (map reference No. 74) marked with a faint green "[LI?]CHTENBURG/[castle]/ ... [G]erma[ny]." The manufacturer of this vessel could not be determined.

Based on the range of artifacts present at the site and the ceramic mark dates, the historic component is associated with pre– and post–WWII cattle ranching and recent army training activities.

Despite the lack of recovery of diagnostic objects and the consequent inability of the archeological team to identify the prehistoric component's cultural affiliation(s) and temporal association(s), it is recommended that the prehistoric component of 5LA7119 is eligible for nomination to the National Register of Historic Places. It meets Criterion D, inasmuch as the component has the potential to yield important information regarding the prehistoric occupation of the PCMS, including such topics as the period of occupation, site function, subsistence strategies, seasonality, and environmental reconstruction.

Similarly, the historic component has had long-term usage as a historic dump, and its contents reflect ranch life from ca. 1930 through the 1960s. Its proximity to Brown's Sheep Camp (5LA5824) suggests that the historic component of 5LA7119 is associated with that site. The diversity of this component's material culture, its long-term use, and its association with another site which has been determined significant suggest that the historic component of 5LA7119 is significant as well. It is recommended that the site be considered eligible for nomination to the National Register of Historic Places under Criterion D in that it has the potential to yield important information regarding the historic-era occupation of the PCMS.

5LA7120

This historic road was recorded as temporary field number 9 (Figure 10). It consists of a two-lane dirt track that runs along the northern edge of the Hogback. The west end of the road lies south of Brown's Sheep Camp. From that point, it extends for an undetermined distance east-southeast, paralleling the foot of the Hogback in the general direction of the Purgatoire River. An aerial photograph of the area taken in 1938 demonstrates the existence of this road at that time along the full length of the escarpment. This may be a very early wagon road. It is certainly associated with the ranching era and may be a segment of the Bartels & Sanderson stage road. The road has not been maintained and has been eroded by runoff from the Hogback. Due to its historic association with the Bartels & Sanderson stage line, 5LA7120 is considered significant under Criterion A in that the road is associated with events that have

made a significant contribution to the broad patterns of our history. It is therefore recommended that the site be considered eligible for nomination to the National Register of Historic Places.

Previously Recorded Sites

5LA5824

Paul Friedman (1985:225-231) listed Brown's Sheep Camp as his Archival Site #2, calling it Wilson's Ranch and Brown's Sheep Camp. In his historic overview for the site, he recognized its significant associations with the ca. 1871-1876 Hogback Stage Station, Underwood Rogers 1882 homestead, S.T. Brown's late 19th and early 20th century sheep ranch, and Judge (later Governor of Colorado) J.D. Gunter's post-1914 cattle ranching operation. The significance of the site led Friedman to consider it eligible for nomination to the Nation Register of Historic Places.

In 1989, standing structures at the site were documented by a team from the National Park Service (Historic American Building Survey 1990). That team was uncertain as to the exact construction dates for the structures but suggested that this three-room building at the west edge of the complex may have been one of the original ranch structures erected in 1882.

In 1992, Brown's Sheep Camp served as the site for the remote–sensing training sponsored by the National Park Service Interagency Archeological Services Division. Although no archeological site form has been completed for the site to date, National Park Service Archeologist Steven De Vore, an archeologist with the Intermountain Region, completed a nomination for the site as a district (De Vore n.d.a).

In 1996, the archeological team from MWAC conducted a pedestrian survey of the area immediately contiguous to Brown's Sheep Camp. During this effort, a small limestone building foundation and a scatter of historic material was located and recorded immediately north of the Brown's Sheep Camp perimeter fence on the north side of an old northwest to southeast road. This historic material was recorded as temporary field number 5 (Figures 11 and 12). Surface artifacts, particularly building materials, were primarily concentrated in the area of the former building. These include fragments of glass containers, construction materials, transportation-related objects, and other objects of miscellaneous or unidentified function. Only five curved glass fragments were found at the site. These include 1 clear ring neck fragment, 2 amber fragments (one is a bottle base that exhibited a cut-off scar), and 1 fragment of milk glass. Other glass included a fragment of flat clear window glass and a clear fragment thought to be from a lamp chimney. A single sanitary can lid was noted. Construction materials included 89 common wire nails and wire nail fragments, 11 boards (one of which is burned), 9 sheet-metal fragments, 1 cast-iron pipe, a rectangular limestone foundation/footer stone, 2 strap hinges, 1 leaf hinge, and 1 burned adobe/daub fragment. In addition, portions of the building's limestone foundation are visible on the ground surface. Transportation-related objects include a spring (possibly from an unidentified piece of agricultural equipment), 1 cast-iron handle, 1 ferrous back plate, 2 carriage bolts with washers and nuts, 1 fan belt, 1 iron brace (wagon part?), 2 iron bars (wagon part?), 1 ferrous rod, 1 bolt, 2 nuts, 4 barbed-wire fragments, and a horseshoe. Objects of unidentified function include a cast-iron fragment, and 14 ferrous wire fragments. The artifacts in general suggest an association with 1930s farming/ranching. This factor and the site's physical position immediately north of Brown's Sheep Camp suggest that this accumulation of material probably represents a 1930s–era Brown's Sheep Camp outbuilding.

5LA3547/4636

This site was initially recorded by Meg Van Ness in 1985 during a solo visit to the location rather than as a part of a formal archeological survey of the area. At that time, Ms. Van Ness was working for the University of Denver. This site was referred to as 5LA3547 and considered to be the "possible [site of] BSC [Brown's Sheep Camp] stage station." The University of Denver identified it as a cultural resource which required additional survey and evaluation as to its significance and eligibility for the National Register of Historic Places (Anderson et al. 1986:594, 683, 838; Colorado Cultural Resource Survey form).

In 1987, it was revisited by a Larsen–Tibesar Association crew under the direction of Richard Carrillo. Apparently the crew was unaware that the site had been previously recorded, as it was re-recorded as 5LA4636. The completed Colorado Cultural Resource Survey form identified this as the Hogback Stage Station. A later (ca. 1916-1930) ranching occupation was also recognized. On the basis of its relationship with the stage station, this site was evaluated as eligible for the National Register. A "melted adobe" mound on the north side of a dirt trail through the site was interpreted as the actual station house.

The site was included in a population of historic sites with domestic and support architecture, and was also included in the analysis of 275 historic sites analyzed in the PCMS with the goal of determining site typology and chronology (Andrefsky 1990). It was included in a group of 110 homestead sites characterized as Homestead Type 1. This homestead type was "perceived as representing basic units, with little or no evidence of site complexity beyond possibly the initial formation stages" (Carillo and Kalasz 1990:XX-22). Such sites are interpreted as "possibly representing Angloamerican attempts at homesteading [which] never evolved beyond a rudimentary level of site formation...or...non-Angloamerican homesteads which were operating within an optimum level of adaptation to the PCMS environment" (Carillo and Kalasz 1990:XX-23).

5LA4636 was included as a contributing resource in the Pinon Canyon Maneuver Site Euroamerican Archeological District, however. Nomination forms for the district were completed by De Vore probably about the same time the nomination form for Brown's Sheep Camp was completed (De Vore n.d.b). A search of the National Register of Historic Places web site (http://www.nr.nps.gov/scripts/Autobahn.exe/Execute?Program=REPORT-DOCSEARCH&DSI=1270053191) failed to locate the district within the National Register properties listing for Las Animas County, and it is likely that the nomination has not been completed and/or submitted.

For this reason, a decision was made to return to the site and conduct limited shovel testing on the structural mound. As was the case with other unfenced resources in this general area, there had been severe impact on 5LA3547 in the 1995–1996 fall/winter by troops during Army mechanized training maneuvers. Most of the site was compacted at that time and the remainder is covered with a variety of military trash.

In the 1938 aerial photographs, a structure at the same location as the low mound appears to be a house with an outhouse located just east of its southeast corner. Materials on the ground surface include common wire nails, a blue glass bead, logs (some with notches), and a few pieces of curved glass 5 m south of the mound. Like other site markers used in this survey, the datum is a length of rebar and a lathe, both painted fluorescent orange. The lathe is marked "MWAC 96" on one side, and the site number

is on the other. From the new datum, four shovel test locations were measured out, each 2 m apart and spanning the length of the mound (Figure 13). These were in an alignment with the MWAC 96 datum at about 4 degrees off north. Shovel Test 1 (ST1) was 5 m from the datum, ST2 was 7 m from the datum, ST3 was 9 m, and ST4 was 11 m. All shovel tests were at least 30 cm square and dug to 60 cm or hardpan, whichever came first. Excavation was by 20-cm levels, with depth measured from the surface. Fill from each level was passed through ¼-in hardware cloth. Artifacts from each level were noted and replaced in the holes from which they were derived.

ST1 was dug to just below 60 cm. The upper 20 cm of fill in this unit was very hard, having been compacted by heavy machinery. It was a sandy–gravelly loam, very light gray in color, and very dry. Cultural material encountered in this level included 2 flat glass sherds, wood fragments, a metal fragment, and 1 butterscotch-colored tertiary flake. Much softer fill was encountered in the second level of ST1. This was a light gray–brown sandy loam beginning at 20 cmbs. The fill was characterized by calcareous mottling, probably along root hairs. Only a few gravels were noted in this level. No artifacts were observed. Level 3 (40 to 60 cmbs) of ST1, the last level of the unit, continued to be relatively soft and somewhat moist (at least in comparison with level 1). It was somewhat harder to pass through the screen, however, as the clay content increased quite a bit in this level. The fill can generally be characterized as a light gray–brown loamy clay. No gravel occurred in this level and the calcareous mottling ended at 50 cmbs. Shoveling additional material from just below this level suggests that this latter fill type continues to an unknown depth.

ST2 was dug to only 40 cm, as hardpan was encountered at 38 cmbs. The upper 10 cm was very hard, although not quite as compact as the first 20 cm of ST1. The fill here is a very gravelly–sandy loam and very light gray–brown color. Wood fragments and tar paper were encountered immediately at the surface, and the thin layer containing these materials (tar paper immediately over wood) increased in depth towards the north. Artifacts recovered from this level include 2 pieces of clear curved glass, 1 piece of purple fabric, threads from a coral-colored fabric, 5 nail fragments (1 common wire nail head), 1 burned wood fragment, and numerous wood and tar paper fragments. The light gray, gravelly–sandy loam continued into the upper 10 cm of the second 20-cm level. At 30 cmbs, however, a layer of wood was encountered. Below this was very light gray–brown, very hard calcareous mottled fill. Although the hole was dug to 40 cmbs, artifacts occurred only above the board layer. Items noted for the second 20-cm level include a shell button, wire nail, and nail fragment. The button had a "fish-eye" well and was of the size suitable for a shirt. Similar buttons are illustrated in 1900–1930s era Sears catalogs (Sears, Roebuck and Co. 1969a, 1969b, 1970a, 1970b, 1979).

ST3 was excavated to 60 cmbs. The first layer encountered was a light gray–brown compacted fill. This continued to 14 cmbs, where boards were encountered. Below the boards was a very soft yellow–brown fill that gradually blended into a soft gray–brown sandy loam with calcareous mottles. No mottling was observed below 36 cmbs. The proportion of clay in this fill layer increased with depth. Artifacts were observed only in the first 20-cm level, most of these appearing to be derived from the fill above the boards. These included a silver-plated copper teaspoon with an Art Deco pattern on the handle, an indigo glass seed bead and larger turquoise bead, a 2-cm-diameter copper washer, a hard-rubber pipe stem, a cupric-metal pin with four clear rhinestones, 2 shirt-size white glass buttons, 22 wire nail fragments, a clench nail, 13 fragments of a rectangular tin can, 21 other tin can fragments, a copper bolt, a ferrous-metal rivet head, egg shell, 2 fragments of clear flat glass, 3 fragments of clear curved glass, 2 pieces of tar paper, 1 leather fragment, and a cardboard "DIAMOND" match box lid.

ST4 had a stratigraphic profile similar to that noted for ST3 with the exception of encountering the wood layer at a somewhat shallower level (8 cmbs). Again, artifacts were recovered only from the fill immediately above the wood. These included only 3 common wire nails and 5 wire nail fragments.

In sum, wood was encountered in each test hole, probably representing the wooden floor of a structure. Artifacts, primarily construction material, household goods, and personal objects, were recovered only from fill above the wood level. Shovel testing revealed that the mound is not associated with the station, however, as all artifacts were from the early twentieth century. The best temporal estimate for the structure is circa 1920–1940. A new site form reflecting this determination has been completed.

Isolated Finds

Isolated finds were defined per PCMS guidelines. Prehistoric isolated finds are less than 5 unmodified flakes or a single tool, each of which is separated from the nearest other item by no less than 20 m. A historic isolated find is any locality exhibiting 4 or fewer artifacts (Dean 1992:IV–11 to 12). Isolated finds, by their very nature, contain extremely limited information. As such, the Colorado State Historic Preservation Office has determined that isolated finds are not eligible for nomination to the National Register of Historic Places.

Thirty-one isolated finds were recorded during the course of this survey. Twenty-nine were historic and two were prehistoric. Table 1 identifies each isolated find by field number, state isolated find number, historic/prehistoric association, and object(s) included within the find. Prehistoric finds (5LA7239 and 5LA7240) were not diagnostic objects and could not be dated. Historic finds range in date from post–1880 to perhaps as late as 1994. The overwhelming majority appear to relate to the ranching era and probably relate to activities focusing on care of herds.

III. Conclusions and Recommendations

Survey of 230 acres of lowland and upland areas in the Pinon Canyon Maneuver Site in the vicinity of the Hogback resulted in the successful identification of eight previously unrecorded sites and 31 isolated finds. Resources identified in an upland setting south of the Hogback include four twentieth-century trash scatters, 27 historic isolated finds, and two prehistoric isolated finds. In a lowland setting north of Van Bremer Arroyo, the archeological crew recorded one historic site, two multicomponent prehistoric/historic sites, and two historic isolated finds. In addition, the MWAC crew identified the archeological remains of a previously unrecognized outbuilding associated with the Brown's Sheep Camp site (5LA5824). One historic site (5LA3547) was also shovel tested to clarify its relationship with the 1870s Hogback Stage Station.

Estimates were made of each site's significance with regard to the National Register of Historic Places criteria. These data are provided in Table 2 along with the basis of that estimation and the context of significance (if any). Previous evaluations of sites 5LA5824 and 5LA3547 as significant sites eligible for nomination to the National Register remain unchanged and are not addressed in the table.

The stated goal of the inventory, however, was not to identify additional archeological resources *per se*, but to locate the site of the Hogback Stage Station. This it failed to do. In fact, all of the resources located and/or tested during this work could be excluded from such an association. It did remove 5LA3547 from consideration, however, which had been mistakenly identified by previous surveyors as the stage site. The best estimate of the station location remains the Brown's Sheep Camp site with its 1880s structure buried within the northeast corner of the Main Dwelling (Hunt et al. 1998).

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Table 1. Isolated finds.

Field Number	State Number	Era/Date	Identification	Comments
IF1	5LA7230	historic; post–1890s	condensed-milk can	See Rock 1987:46–47.
IF2	5LA7231	historic; post–1890s	tobacco tin	Flattened; see Rock 1987:61–63.
IF3	5LA7232	historic; post–1890s	tobacco tin	Flattened; see Rock 1987:61–63.
IF4	5LA7233	historic	sheet metal	Rectangular ferrous fragment.
IF5	5LA7234	historic; post–1890s	condensed-milk can	See Rock 1987:46–47.
IF6	5LA7235	historic; post–1890s	tobacco tin	Flattened; see Rock 1987:61–63.
IF7	5LA7236	historic	harmonica	
IF8	5LA7237	historic; 1880–1915	medicine bottle	Sun-altered purple glass; marked "Dr. King's New Life Pills"; see Fike 1987:53; Munsey 1970:55. Collected.
IF9	5LA7238	historic; 1905–1916	glass bottle	One broken beer-shaped aqua bottle of unknown function marked "A. B. CO." on base; see Toulouse 1971:30.
IF10	5LA7239	prehistoric	basalt flake	

Table 1. Continued.

Field Number	State Number	Era/Date	Identification	Comments
IF11	5LA7240	prehistoric	black flake	
IF12	5LA7241	historic; post–1904	sanitary can lid	See Rock 1987:22.
IF13	5LA7242	historic; post–1904	sanitary can	See Rock 1987:22.
IF14	5LA7243	historic; post–1890s	tobacco can	See Rock 1987:61–63.
IF15	5LA7244	historic; post–1906	can lid	Multiple friction closure; see Rock 1987:70.
IF16	5LA7245	historic	sheet metal	Galvanized patch.
IF17	5LA7246	historic; post–1906	can lid	Multiple friction closure; see Rock 1987:70.
IF18	5LA7247	historic	beer bottle	Amber glass fragments.
IF19	5LA7248	historic	can lid	Rectangular with rounded corners, rolled edge, wire hinge on long edge.
IF20	5LA7249	historic; post–1890s	tobacco can	See Rock 1987:61–63.

Table 1. Continued.

Field Number	State Number	Era/Date	Identification	Comments
IF21	5LA7250	historic; post–1904	sanitary can	Flattened with one end cut out; remaining end's seam overlaps can sides; see Rock 1987:22.
IF22	5LA7251	historic; post–1906	paint can lid	See Rock 1987:70.
IF23	5LA7252	historic	shovel blade	
IF24	5LA7253	historic; 1994?	sanitary can	Flattened; lid marked "EST 794/C/HEDISF"; opened with knife by puncturing lid at edge and cutting to center; see Rock 1987:22.
IF25	5LA7254	historic; post–1906	can lid	Multiple friction closure type; 19-cm diameter; marked at center "TO OPEN INSERT COIN (curved)/UNDER EDGE (straight)/OF COVER AND TWIST (excurved) wide"; see Rock 1987:70.
			wire bundle	Smooth, ferrous.
		post–1904	sanitary can	12 cm high by 9.7 cm diameter; lid cut open about 0.5 cm from edge and folded back; nail hole in center of lid; see Rock 1987:22.
		post–1904	sanitary can	12 cm high by 6.8 cm diameter; knife-opened; antioxidation coat on exterior; see Rock 1987:22.
IF26	5LA7255	historic	medicine bottle	Aqua glass fragments.
IF27	5LA7256	historic; post–1904	food can lid	Opened with knife or can opener, bent back and snapped off; nail hole in center; see Rock 1987:22.

Table 1. Concluded.

Field Number	State Number	Era/Date	Identification	Comments
IF28	5LA7257	historic; post–1906	lard bucket	13 cm diameter by 12 cm high with sheet-metal bucket ears; see Rock 1987:70.
IF29	5LA7258	historic; post–1866	sardine can	10 cm by 7.5 cm by 2 cm deep; see Rock 1987:58.
IF30	5LA7259	historic	stoneware	3 fragments.
IF31	5LA7260	historic; 1880–1915	shoe leather purple glass flat glass ceramic porcelain	 See Munsey 1970:55. Green-glazed pot fragment. 1 fragment[1].

[1]Historic; this concentration was not recorded as a site owing to its proximity to the road.

Table 2. Evaluation of site significance and eligibility for nomination to the National Register of Historic Places.

Site Number	Temporary Site Number	Significant/N.R.H.P. Eligible	Criteria	Comments
5LA7113	1	No	NA	The likelihood of there being extant subsurface elements is low to none, as there has been severe impact on the site by military mechanized infantry training, with subsequent soil loss and erosion.
5LA7114	2	No	NA	There are no artifacts associated with this site to allow its cultural–temporal associations to be discerned. Further, in the entire area around the site there has been heavy impact via military mechanized training and subsequent soil erosion.
5LA7115	3	No	NA	While artifacts are visible in some number over the site, the archeological resource remains entirely surficial. Further, impacts to the location in the form of loss of soil via the operation of heavy machinery and erosion are extremely high.
5LA7116	4	No	NA	A partially buried hearth located at the western terminus of the site is apparently the only subsurface element in the site. Heavy machinery impacts and soil erosion are significant and preclude buried deposits in other portions of the site. It is also very likely that this resource is entirely modern and reflects an encampment by a small military unit during a training exercise.
5LA5824	5	Yes	A, B, C, D	A National Register form was completed by Steve DeVore, RMRO Archeologist, in 1992.

Table 2. Continued.

Site Number	Temporary Site Number	Significant/N.R.H.P. Eligible	Criteria	Comments
5LA7117	6	No	NA	The site has been heavily disturbed by military mechanized unit training and subsequent soil erosion.
5LA7118 (prehistoric component)	7	Yes	D	The site has received only moderate disturbance by traffic during military mechanized unit training. The prehistoric component contains temporally diagnostic artifacts and non-architectural features. These qualities suggest that the prehistoric archeological resource has potential to yield important information regarding the prehistory of the PCMS including the period(s) of occupation, site function, subsistence strategies, seasonality, and environmental reconstruction.
5LA7118 (historic component)	7	No	NA	The historic component is scattered, incidental in nature and not considered significant.
5LA7119 (prehistoric component)	8	Yes	D	No diagnostic objects were observed, precluding the identification of this component's cultural affiliation(s) and temporal association(s). However, rich cultural deposits on the surface suggest the probability of buried archeological resources. If these occur, the site has the potential to yield important information regarding the prehistoric occupation of the PCMS, including such topics as the period of occupation, site function, subsistence strategies, seasonality, and environmental reconstruction.

Table 2. Concluded.

Site Number	Temporary Site Number	Significant/N.R.H.P. Eligible	Criteria	Comments
5LA7119 (historic component)	8	Yes	D	The site has had long-term usage as a historic dump and its contents reflect ranch life from ca. 1930 through the 1960s. Its proximity to Brown's Sheep Camp (5LA5824) suggests that the historic component of 5LA7119 is associated with that site. The diversity of this component's material culture, long-term use, and association with another site which has been determined significant suggests that the historic component of 5LA7119 is significant as well.
5LA7120	9	Yes	A	Due to its historic association with the Bartels & Sanderson stage line, 5LA7120 is considered significant under Criterion A in that the road is associated with events that have made a significant contribution to the broad patterns of our history. It is therefore recommended that the site be considered eligible for nomination to the National Register of Historic Places.

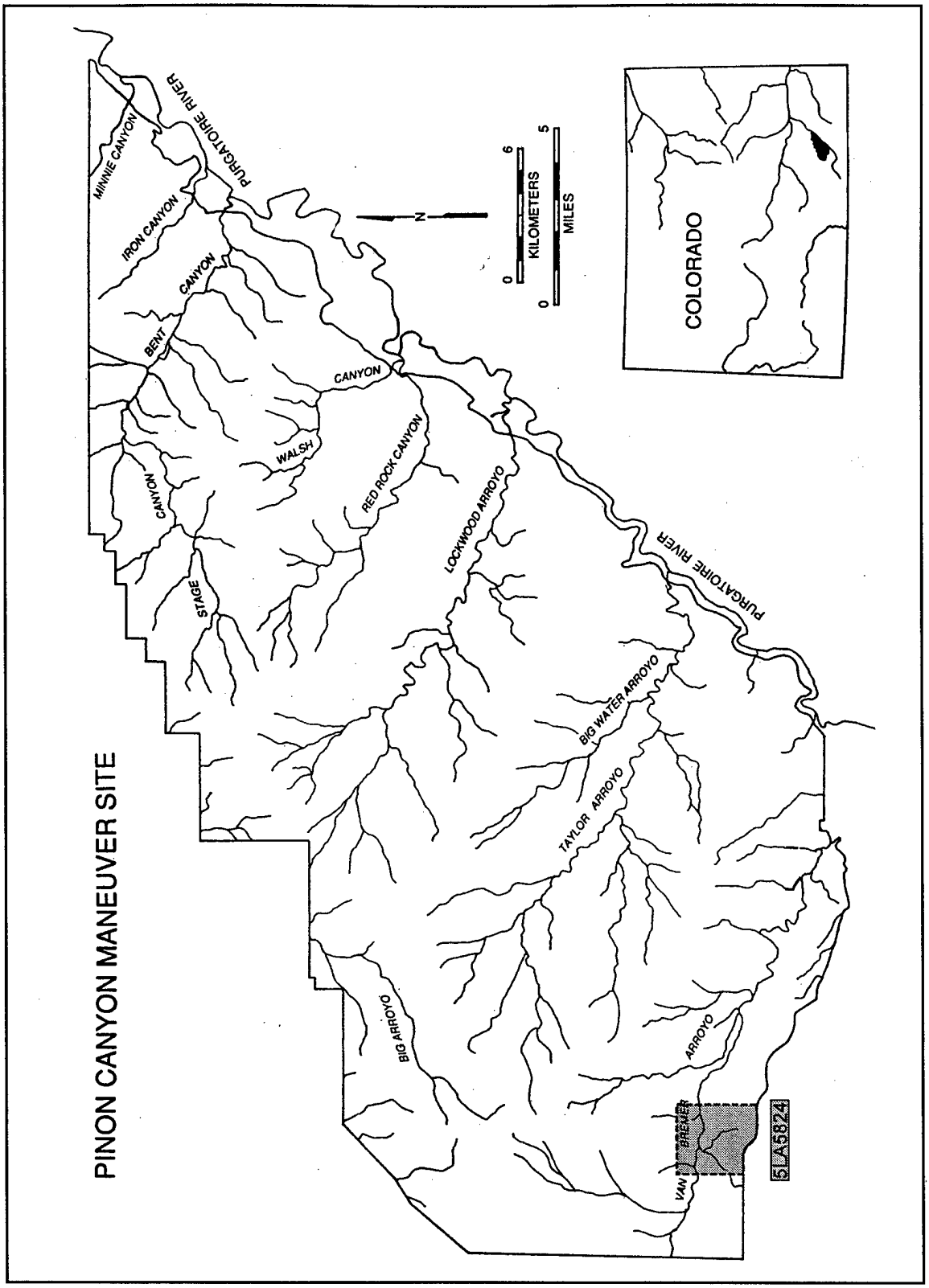

Figure 1. Map of Pinon Canyon Maneuver site showing location of the study area.

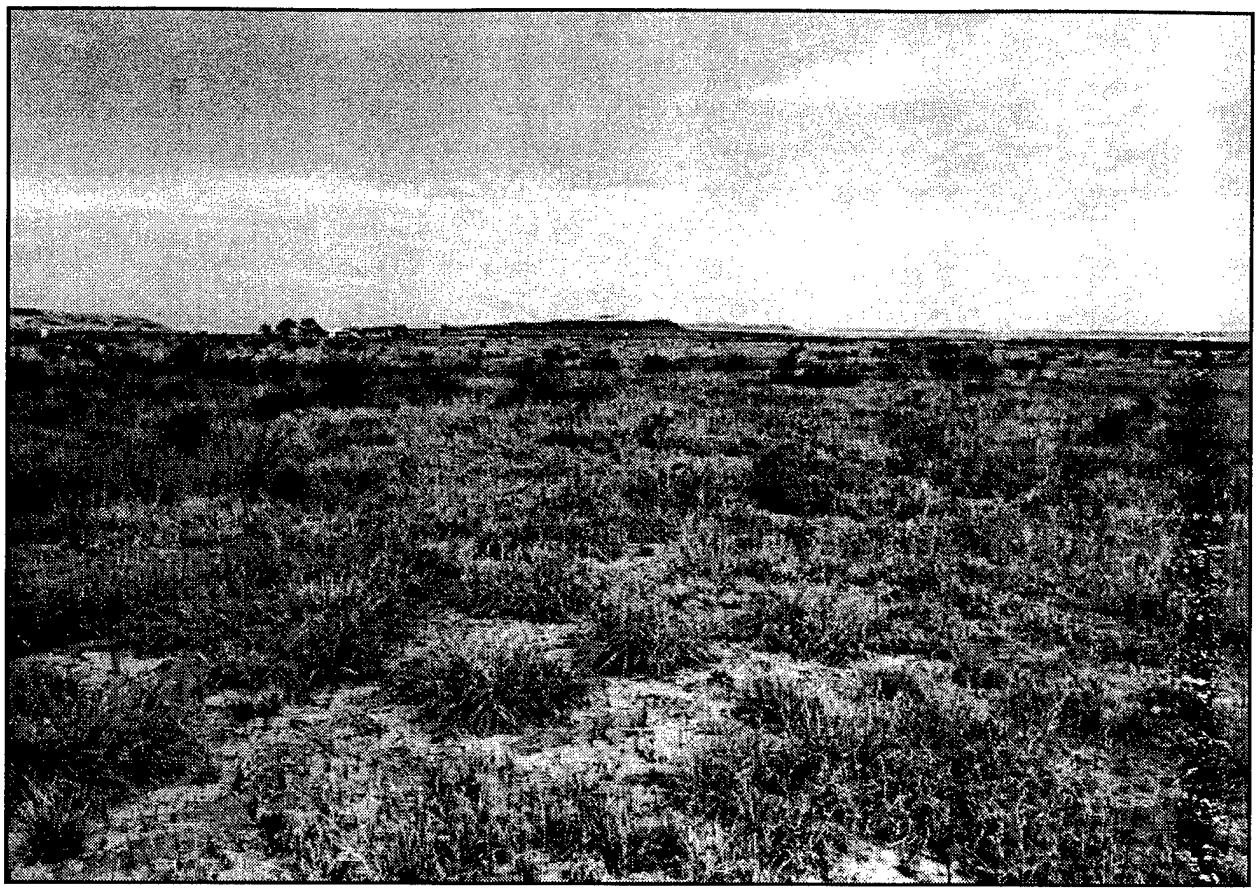

Figure 2. Short-grass grassland of the Northern Temperate Grassland, *needlegrass-pronghorn-grama grass* biome at the Pinon Canyon Maneuver Site.

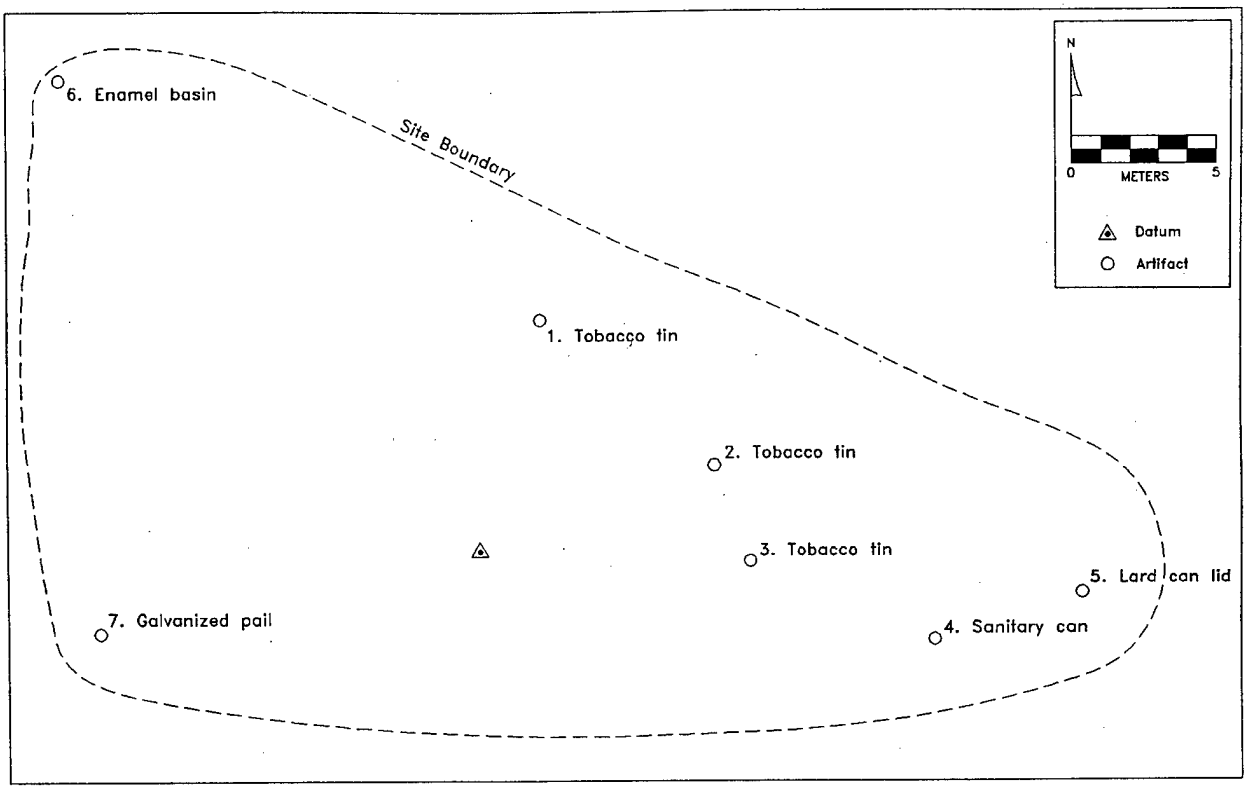

Figure 3. Site map for 5LA7113 showing location of individual artifacts and site boundary.

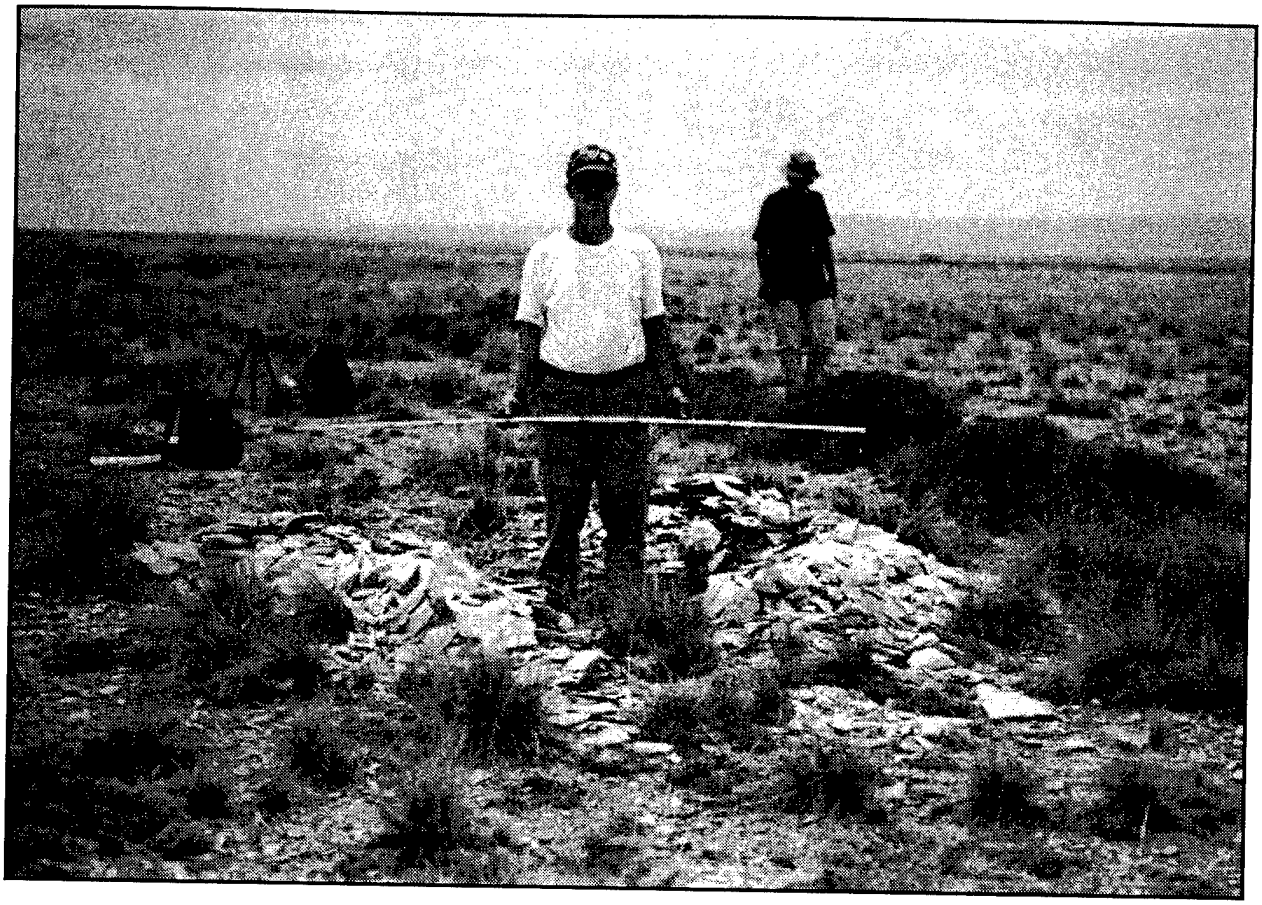

Figure 4. William Hunt standing in the limestone enclosure of 5LA7114.

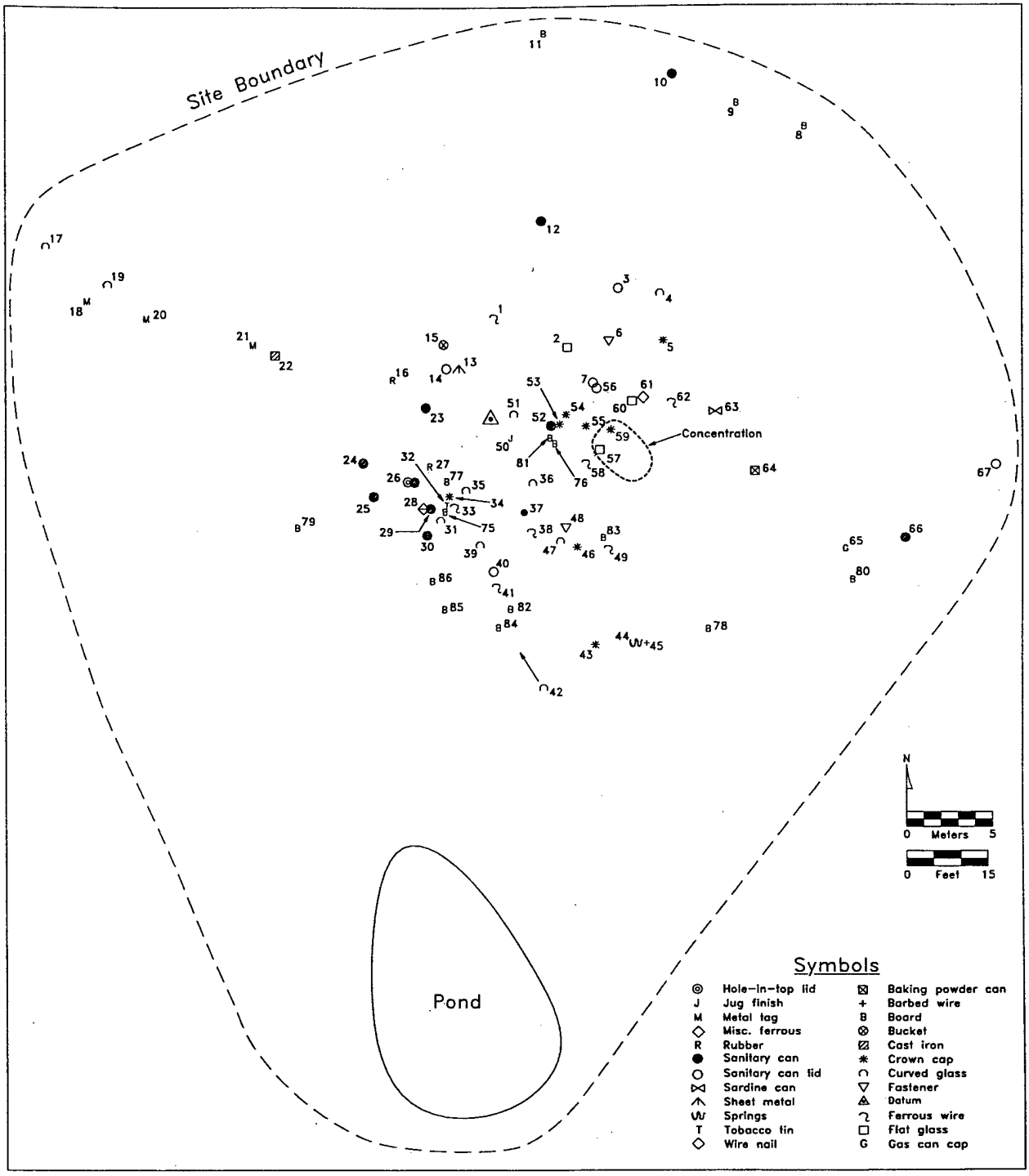

Figure 5. Site map for 5LA7115 with piece-plotted artifacts, artifact concentration, and inferred site boundary.

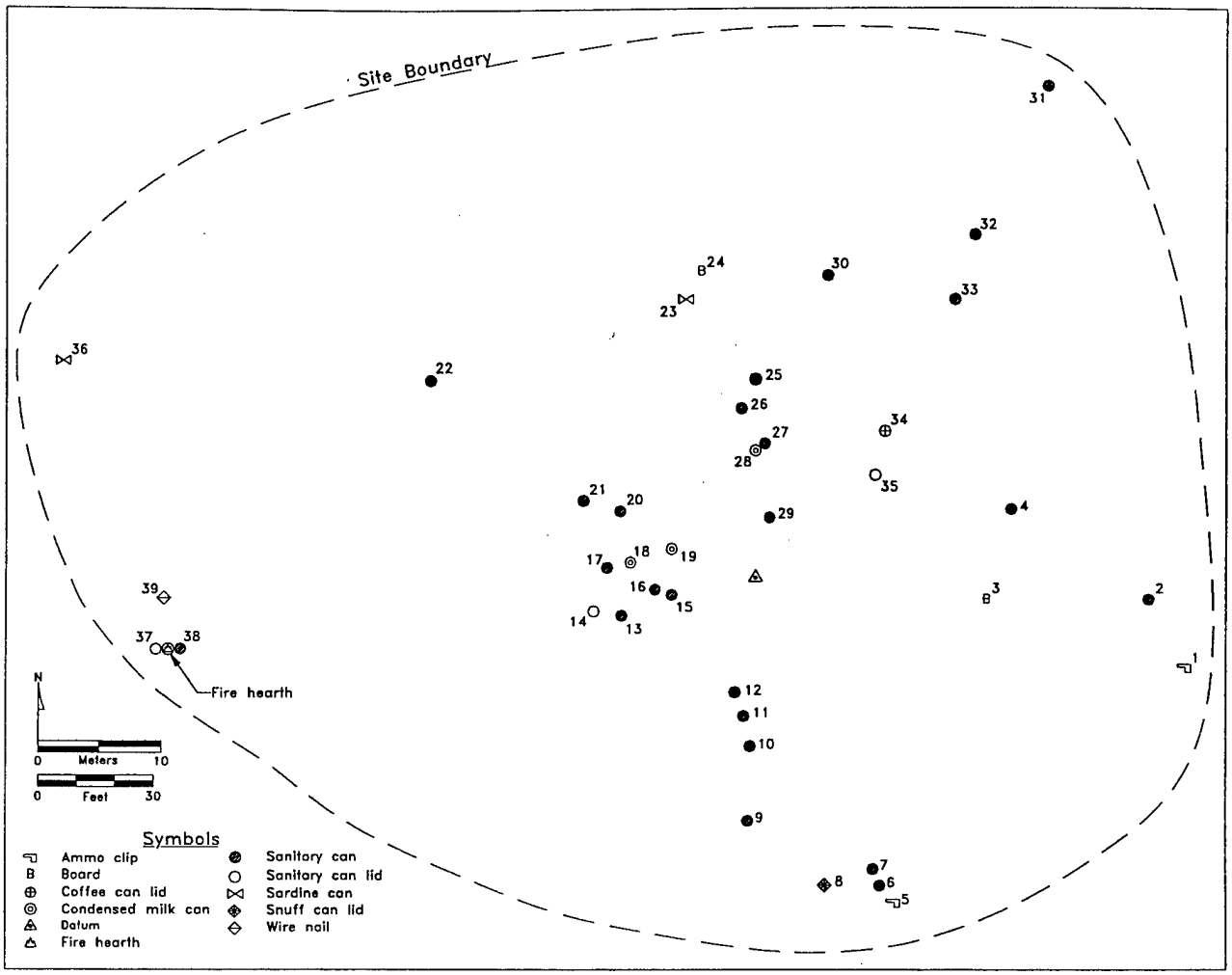

Figure 6. Artifacts and fire hearth positions in 5LA7116.

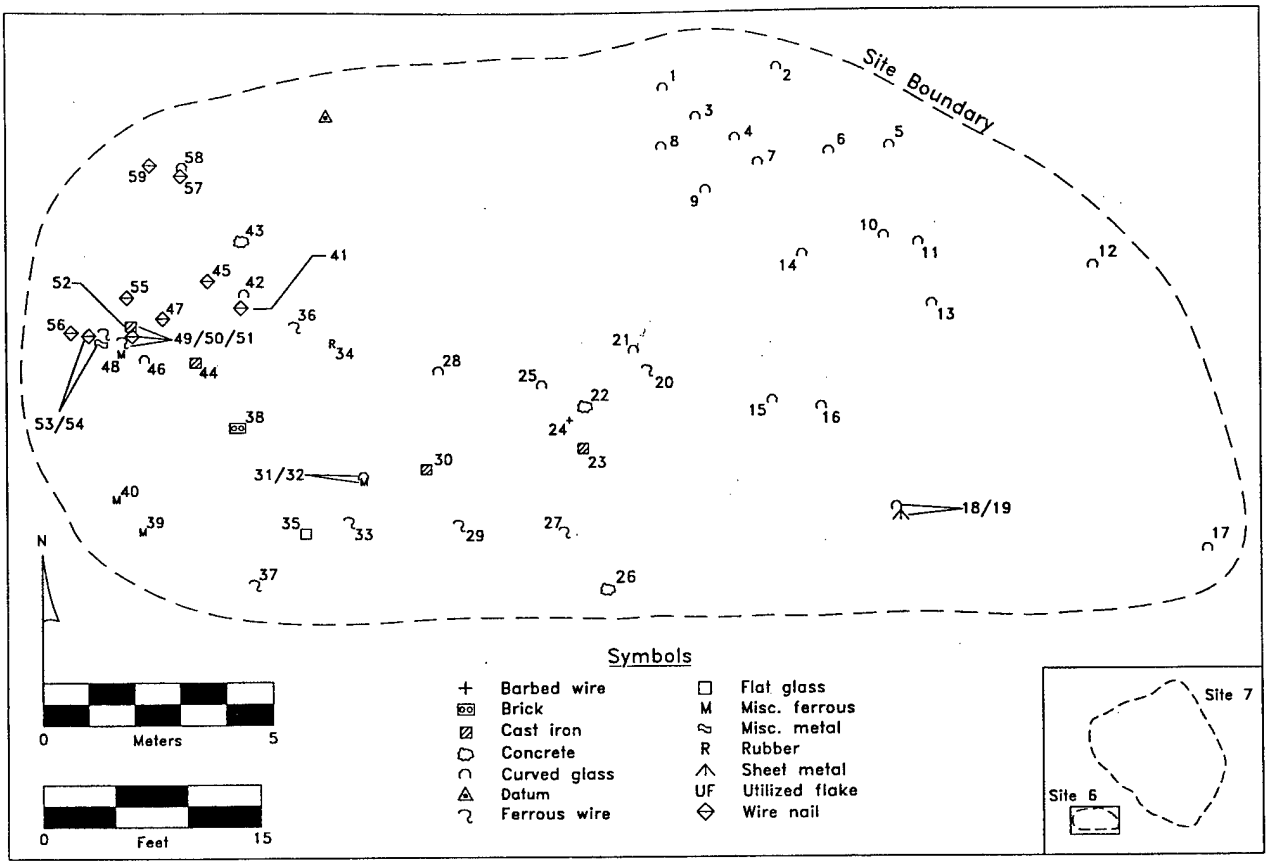

Figure 7. Site map for 5LA7117 showing artifact locations and site boundary.

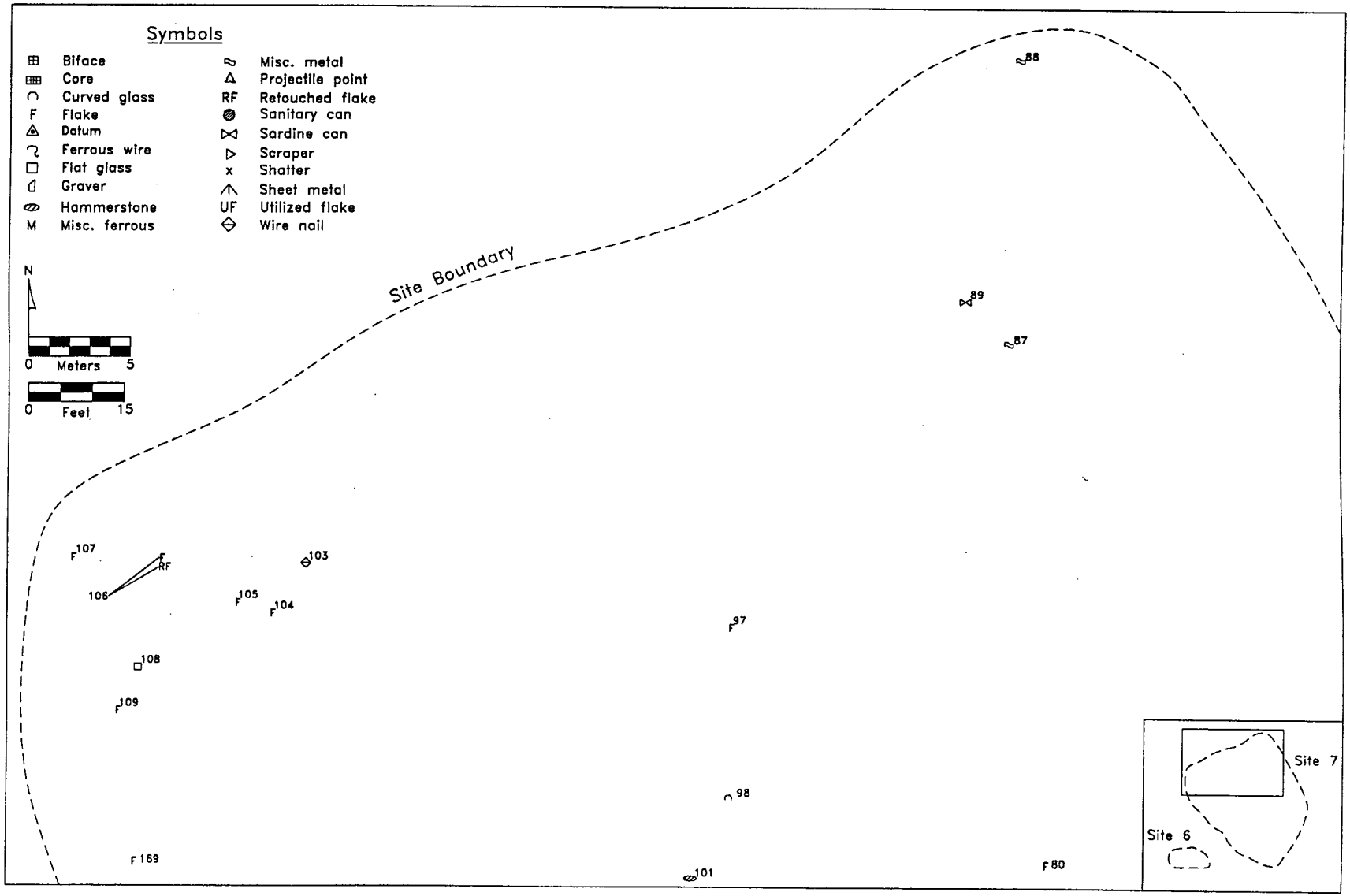

Figure 8. Site 5LA7118 and objects recorded within the site boundaries.

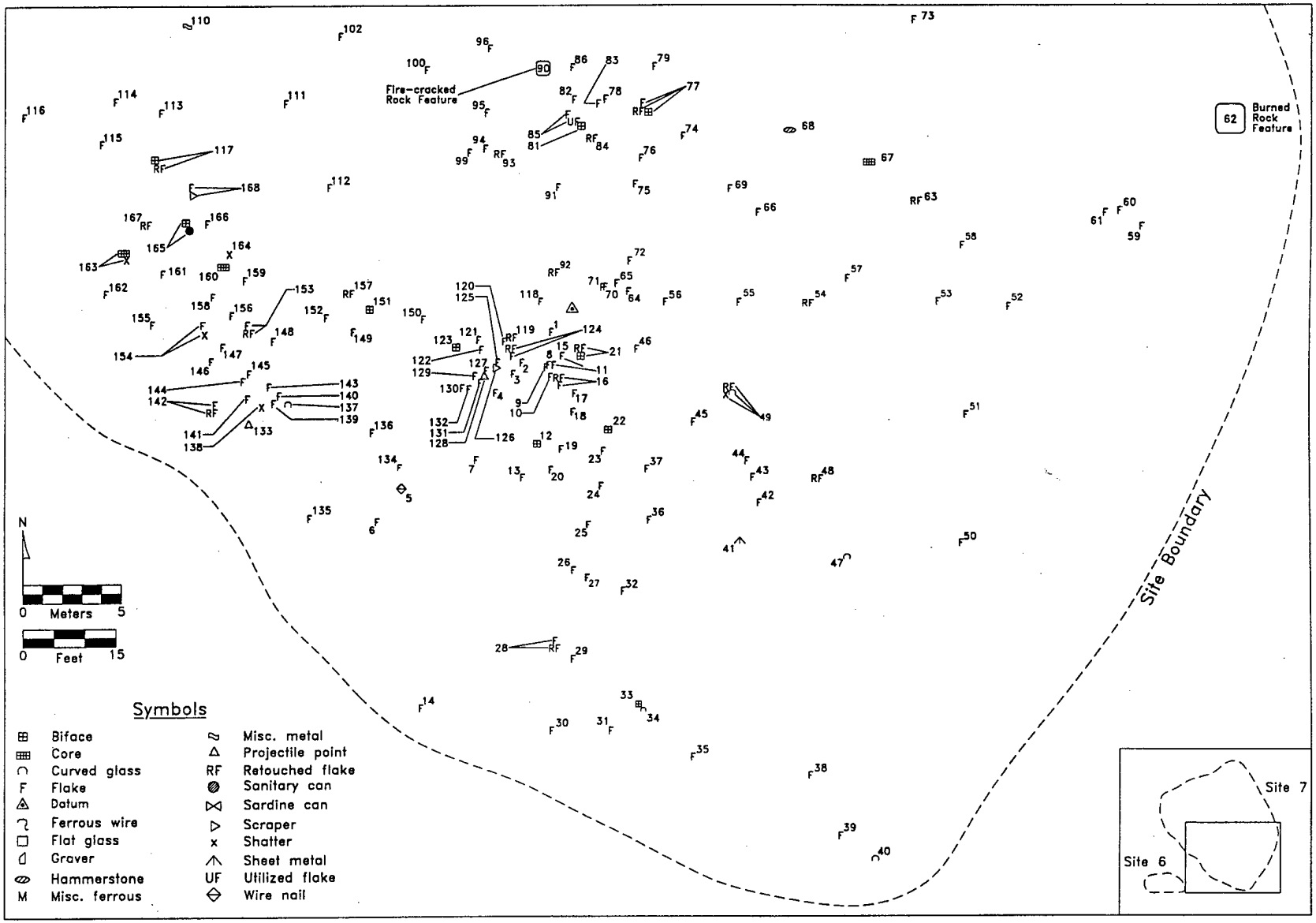

Figure 8, continued.

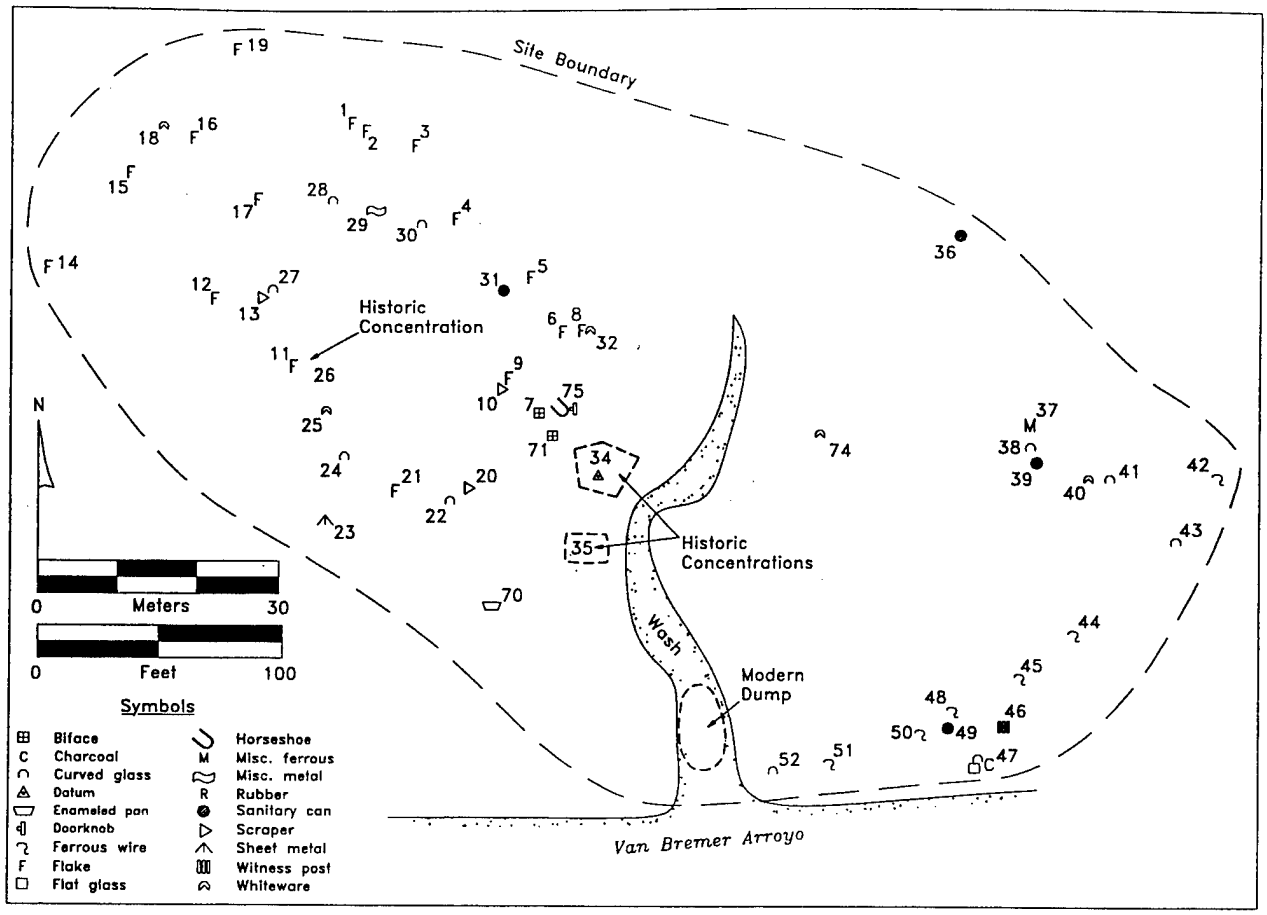

Figure 9. Site map of 5LA7119 showing historic artifact concentrations and selected historic and prehistoric artifacts.

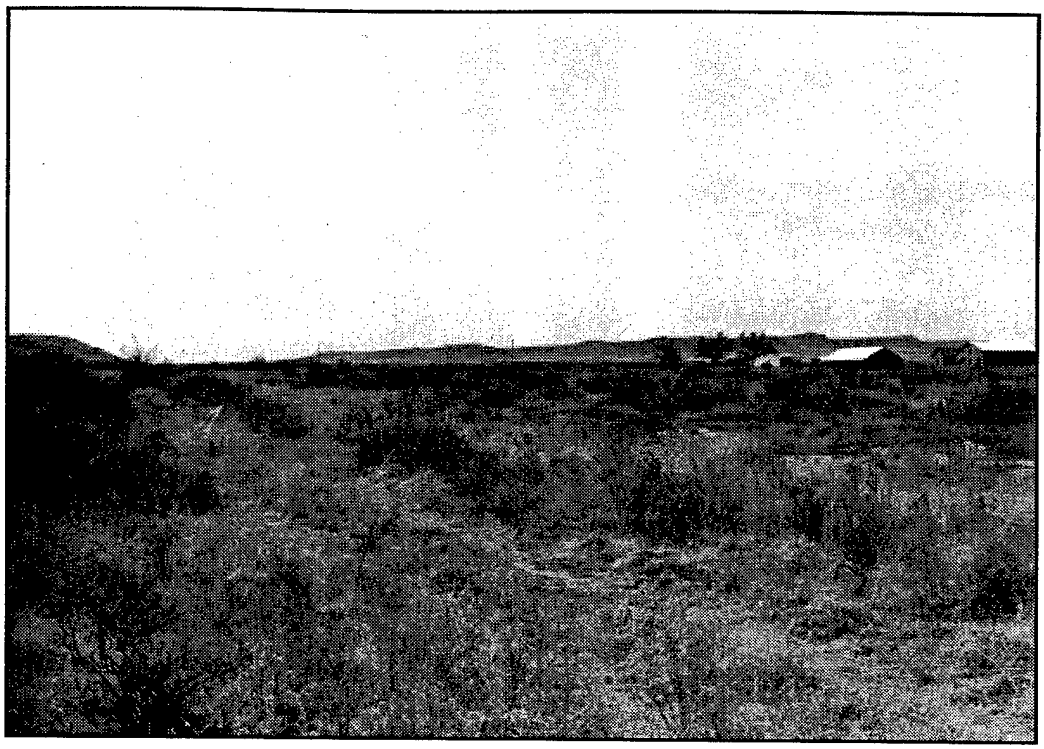

Figure 10. Historic road (5LA7120), possibly associated with the Hogback Stage Station.

Figure 11. Recording a small limestone foundation and associated artifacts north of fenced boundary of Brown's Sheep Camp.

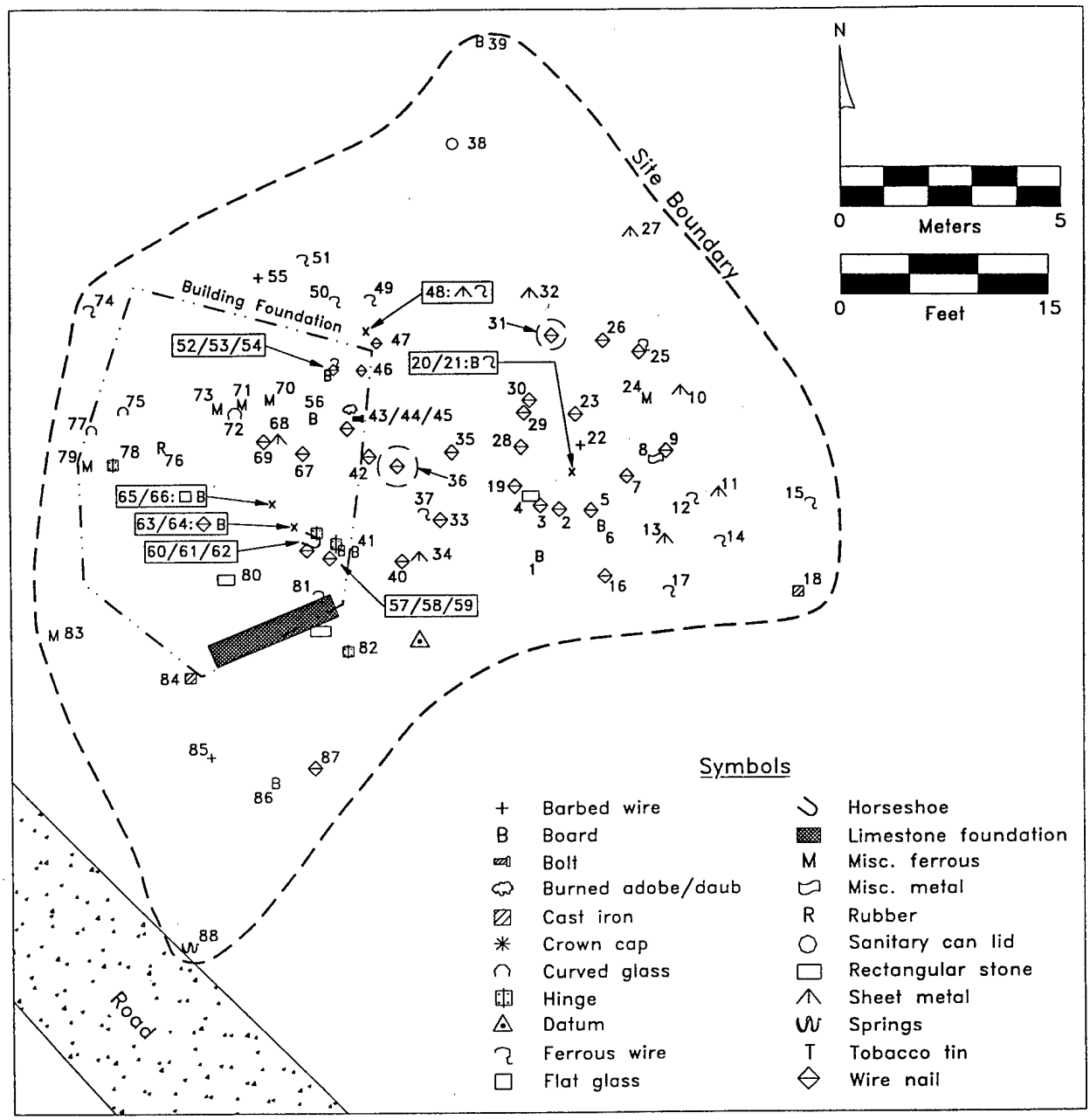

Figure 12. Map of structure foundation and associated artifacts and abandoned road north of fenced boundary of Brown's Sheep Camp.

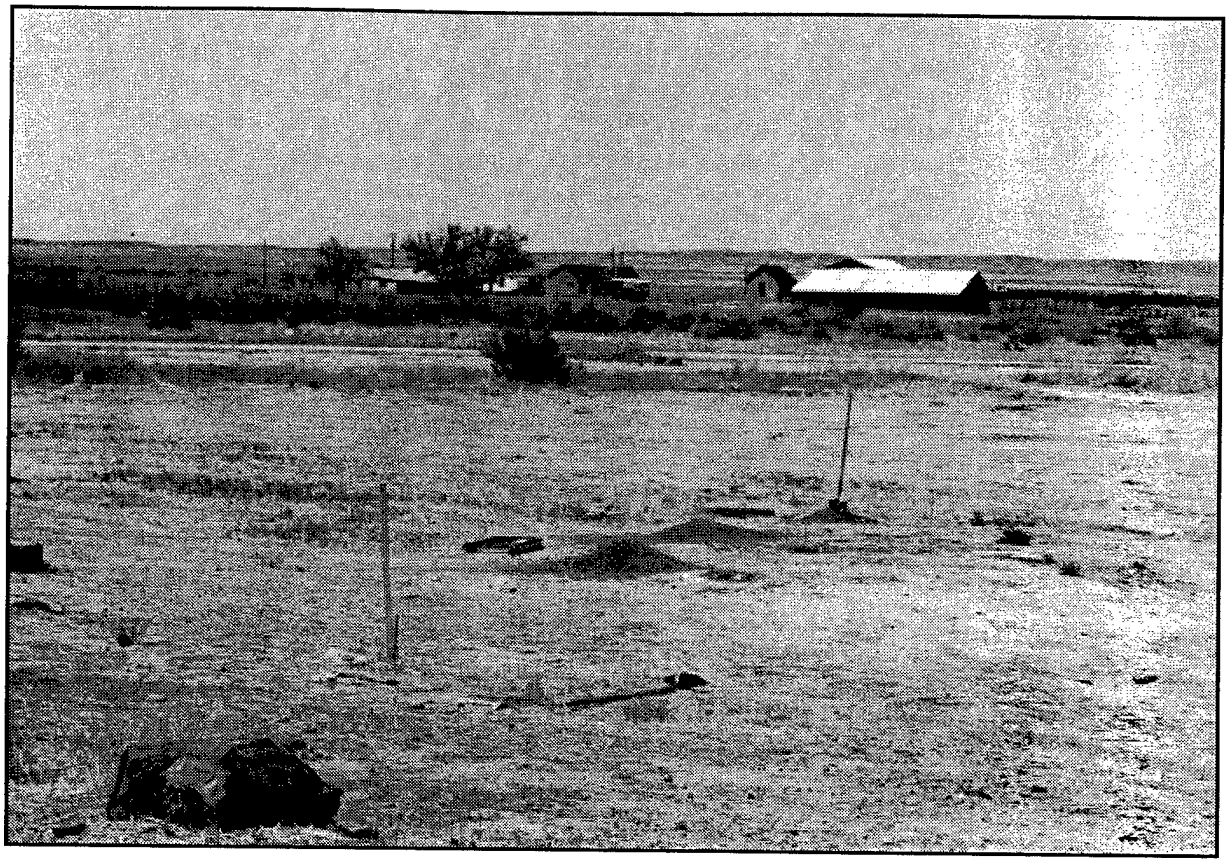

Figure 13. Datum and shovel test locations over structural feature at 5LA3547. Brown's Sheep Camp site in background.