

**Expert Witness Report
of
Douglas H. M. Boggess, MA, RPA**

**Pursuant to
Rule 26(a)(2)(B)
of the Federal Rules of
Civil Procedure**

***Case 6:01-cv-00072 MV/WPL
Subfile ZRB-2-0014***

**United States District Court
District of New Mexico**

June 30, 2014

This report is submitted pursuant to Rule 26(a)(2)(B) of the Federal Rules of Civil Procedure.

I. Qualifications

My name is Douglas H. M. Boggess. I hold a Bachelor of Arts degree in Anthropology and Classical Studies, awarded in 1989 by Emory University, and a Master of Arts Degree in Classical Archaeology, awarded in 2000 by the University of Arizona. I am listed on the Register of Professional Archaeologists (No. 15445), and am permitted by the State of New Mexico under the provisions of 4.10.8.10 NMAC to serve as a Principal Investigator and Project Director as well as a Historian. I hold additional permits as a Field Supervisor and Principal Investigator with several Federal and local agencies, including the Bureau of Land Management, the United States Forest Service, the Bureau of Indian Affairs, Navajo Nation, and the City of Santa Fe. I have served on New Mexico's Cultural Properties Review Committee as a Historical Archaeologist since my appointment by the governor on March 15, 2011.

I have worked as a consulting archaeologist for 25 years. For the last 14 years I have been employed by Lone Mountain Archaeological Services, Inc. (Lone Mountain), located in Albuquerque, New Mexico, as a Project Manager, Historical Archaeologist, and Senior Principal Investigator. I have

conducted numerous studies of prehistoric and historic archaeological resources in New Mexico, as detailed in my appended *Curriculum Vitae* (Section VII below). The opinions I have presented in this report are based on my experience as an archaeologist. I have never served as an expert witness at trial or by deposition.

II. Scope of Engagement

I have authored this report as a salaried employee of Lone Mountain. Mr. and Mrs. Bawolek (defendants) have contracted with Lone Mountain, for the amount of \$7,650.50 (tax included), to provide this expert witness testimony concerning the temporal affiliation of historic archaeological sites on the defendants' property. This report is intended to be expert witness testimony in the matter of United States of America and State of New Mexico, ex rel. State Engineer, Plaintiffs and Zuni Indian Tribe, Navajo Nation, Plaintiffs in Intervention v. A & R Productions, et al., Defendants, case 6:01-cv-00072 MV/WPL (hereinafter the Zuni Adjudication).

I intend that this expert witness report be used solely for the purpose of litigation. I may, pursuant to Rule 26(e)(1) of the Federal Rules of Civil Procedure, supplement, update, or modify this report at a later date based upon additional documents or information.

This report is limited to my observations of archaeological sites found on the Bawolek's property and any archival and historic data I could locate concerning these sites.

III. Data or Information Used for this Report

The temporal and cultural affiliation of the archaeological sites examined was determined by field recording and historical research. Sites are identified in accordance with the numbering and naming convention employed in New Mexico, using a Laboratory of Anthropology (LA) number. The sites relevant to this document are: LA 179149, LA 179150, LA 179151, LA 179152, and LA 179153.

Field recording in this case followed the standards specified for recording a newly discovered archaeological site (as opposed to a previously recorded archaeological site) as described in 4.10.15.11 NMAC. These standards ensure that the data collected during the initial site recording are sufficient to characterize a site, and include a physical description; temporal and cultural affiliation; functional character (i.e., refuse dump vs. habitation site); and, for any future management purposes, an assessment of a site's eligibility for nomination to the National Register of Historic Properties (NRHP) under the four criteria developed by the Secretary of the Interior. Additional details regarding site recording are provided in the discussion of methodology in Section V of this document.

Historical research included the consultation of both primary and secondary sources. The primary sources include the General Land Office patent records currently maintained by the Bureau of Land Management at <http://www.glorerecords.blm.gov/>, historic aerial photographs maintained by the Earth Data Analysis Center (EDAC) at the University of New Mexico, and the deed records at the clerk's office in the Valencia County Courthouse in Los Lunas, New Mexico. It should be noted that the Bawolek property falls within Cibola County, New Mexico, but pertinent records from prior to the creation of Cibola County in 1981 are housed in Valencia County. Historical Archaeologists typically collect oral histories as a form of primary source, but in the case of Fence Lake, New Mexico, most of the original settlers have died. The Fence Lake Reunion Committee, a group of then-residents and former residents, formed a book committee and collected oral histories. The collection was self-published in 1987 in a volume entitled *Fence Lake, New Mexico Area Families & History*, initially compiled by Beverly and Michiel Wilson. Oral histories may be inaccurate, but, in keeping with the practices of Historical Archaeology, are used if the informants' recollections are collaborated through reference to other sources or with the implicit caveat that these are reported recollections. Other sources and reference material, such as articles or guides used to establish the dating of particular artifacts, are listed in a bibliography provided in the discussion of methodology in Section V.

IV. Summary of Opinion

I recorded five archaeological sites located on the Bawoleks's property in Township 5 North, Range 17 West, Sections 1 and 3 and Township 6 North, Range 17 West, Section 35. These include four home sites and a refuse dump. The home sites are comprised of foundations; partially standing structures; artifacts associated with domestic activities; and, in one instance, a maintained home. The historic-period occupations at the home sites appear to range in their potential beginning dates from A.D. 1931 at the earliest to 1937 at the latest. Three of these four homes were maintained by members of an extended family who settled and lived in the Fence Lake area concurrently (Table 1). Two of the four home sites were likely used until no later than between 1951 and 1953, when these sections of land were assembled into a single ranching property. One home site may have continued in use to the early 1960s, and the remaining home site continues to be maintained. The refuse dump site may reflect activity relating to the two home sites in use after 1953, or perhaps one of the earlier home sites (Tables 2 and 3). While the land appears to have been used for ranching over a long period of time, historic data suggests that pinto bean farming took place in the 1930s in Section 1 and at least in 1950 in the north half of Section 3. The archaeological and historical data, therefore, shows as many as four homes in use concurrently between 1937 and potentially as late as 1951, with two of the homes in use between 1951 and as late as 1964, and one continuing in use (Tables 2 and 3).

Table 1. Chain of Ownership for Bawolek Property

	Township 5 North, Range 17 West, Section 1	Township 5 North, Range 17 West, Section 3	Township 6 North, Range 17 West, Section 35
Occupation may begin	A.D. 1931	A.D. 1931 to 1934	A.D. 1931 to 1933
Patent issued	Luther Cone, 1936	Elbert Gill, 1937	Jesse Jagers, 1936
Land transfers, 1930s		N½ to Daniel Gill, 1937	To Velma (Gill) Wilson, 1939
Land transfers, 1940s	To J. I. Dyer and J. W. St. Clair, 1940	N½ to Media (Gill) Bell and Arthur L. Thomas, Jr., 1946;	To Arthur L. Thomas, Jr, 1947

V. Methodology

The five site locations to be recorded were identified on a map provided to Lone Mountain by the Bawoleks. I conducted an initial visit to the property on May 2, 2014 and returned with Lone Mountain archaeologists, Andrew Zink and Stephanie Waldo, on May 12, 2014. The provided map included locations identified as Ruin 1 through 3, House 1 through 3, and Dump 1 through 3. Over the course of the two field days, I visited each of these locations and conducted an evaluation of the potential temporal affiliations of each location. Locations that had artifacts or archaeological features that were more than 50 years old (pursuant to 4.10.8. C and 4.10.8.M NMAC) were identified as archaeological sites and documented as such.

An archaeological feature is a human-constructed element on the landscape. It may be a rock art panel; a firepit; a discard pile of fire-cracked rock; a cluster of refuse that appears to represent a single episode of deliberate dumping in that location; a rock cairn; or the remains of or even a standing building or other structure, such as a corral. Any elements of a site that were clearly not more than 50 years old were not identified as features.

The recorded archaeological sites included the map locations identified as Ruin 1 through 3, Dump 2, and House 1. Artifacts and features) were marked on each site and site boundaries were determined by the distribution of these marked cultural materials. Sites were recorded using a Laboratory of Anthropology Site Record form.

A sketch map was drawn of each site, and site locations were plotted on the appropriate USGS quadrangle. GPS readings were taken to verify the accuracy of the field plot and were taken from a datum located on each sketch map. Features were described on feature forms. These forms were intended to record the general size, shape, and condition of the feature. Photographs were taken showing the setting of each site and all features.

A representative sample of artifacts from each site was recorded using Lone Mountain artifact analysis forms. Prehistoric artifacts were noted as encountered but as this work was a thematic recording of historic remains, prehistoric artifacts were not analyzed in detail, nor should any prehistoric remains be viewed as completely recorded on these sites.

V.1 Analysis of Historic Artifacts

Historic Artifacts found on these sites were categorized as cans, glass, ceramics, and metal and miscellaneous items. Analytical assumptions concerning each of these classes of artifacts are presented below.

V.1.1 Cans

Rock (1988, 1993) formed the basis for this analysis. Materials used in can construction include tin-plated steel; aluminum tops and bottoms with steel bodies after 1955; aluminum tops, bottoms, or bodies after 1959; stainless steel after 1964; and some entirely out of aluminum after 1963.

A wide variety of seam types were employed on the sides and ends of cans that only disappear completely once manufacturing becomes far more standardized at the end of World War II. These seam types can include soldered plumb (sometimes by hand), lap joints, and the lock side seam (these three types were very common in the nineteenth century and less so in the twentieth century). In 1888, a double seam side seam was introduced and came to be a standard seam on American cans (Rock 1988:6). Similar seams can be found on the ends of cylindrical cans, and stamped ends can occur beginning in the late 1840s and continue throughout the periods encountered during this project.

The descriptive terms employed for the tops of cans has been a problem for many archaeologists attempting to date their can assemblages (Rock 1988:18-19; Figure 1). For this analysis, "sanitary" cans are those currently in use. Sanitary cans have double seam side and end seams. They

came into use in 1904, became common in the 1920s, and continue to the present. "Hole-in-cap" cans (often labeled as "hole-in-top", "vent hole" "solder dot" and a variety of other misleading terms) are those cans with a disk approximately 1 inch in diameter soldered to the top of the can. This disk has a small hole in its center through which steam could escape during the cooking process. Once cooking was completed the hole would be soldered shut. This sort of top appeared on the very first cans in 1810 and continued in production until 1945. "Hole-in-top" cans, like hole-in-cap cans above, had a central hole at one end through which the can was filled, but a cap lacking a vent hole was crimped over the filler hole. This type of can was introduced in 1835, was often used for condensed milk, and like the hole-in-cap can, disappeared from production around 1945. "Vent hole" (also labeled as "solder dot," "matchstick filler hole," and "hole-in-top") cans typically have stamped ends. The cans have a vent hole at the top closed with a dot of solder. These cans were most often used for evaporated milk. This can type was introduced around 1900 and fell out of use in the mid-1980s. Thus, if one describes an assemblage of "solder dot" cans, one might be discussing an 1810 to 1945 can dump or a 1900 to ca. 1985 can dump.

Other assumptions concerning more specialized can types are listed in Table 4.

Table 4: Temporally Diagnostic Can Types

Diagnostic	Dates
Cylindrical Oil Can	1932/1936 to present
Soda Cans	1954 to present
Upright Tobacco Tins (shirt pocket)	1901/1907 to present
Aerosol Cans	1947 to present
One-Piece-Base-and-Body Seafood Can	1880 to present
Depressed-Lid Seafood Can	1884 to present
Key-and-Strip Seafood Can	1895 to present
Tapered Meat Cans	1875 to 1920
Paint Can	1906 to present
Lard Pail	Ca. 1900 to 1955
Short 1 lb coffee can	Ca. 1917 to 1963
Tall 1 lb. coffee can	1963 to present
Punch Top (Church-Key-Opened) Beer Cans	1935 to 1941, 1947 to 1962

Diagnostic	Dates
Cone-top Beer Cans	1935 to 1941, 1947 to mid-1950s
Pull Tab Beer Cans	1962 to 1983
Push Button Beer Cans	1972 to 1977
Attached Pull Tab	1972 to present
Scotch Peel Tab	1980 to present
Slip (Friction) Lid	1850 to present
Hinge Lid	1870 to present
Threaded Cap	gunpowder 1860s, other products 1890s to present

V.1.2 Glass and Bottles

Fragments of glass are described as “shards”. Over time, glass may fragment into increasingly tiny pieces. For this reason, estimates of the quantities of glass shards are made on archaeological sites during initial discovery. Without making collections and counting glass artifacts under controlled circumstances (careful sorting), exact counts of shard assemblages, especially those over 100, are unlikely to be accurate. More intact bottle or jar fragments may have sufficient integrity to have temporally diagnostic attributes. Glass shards were first described according to color (Table 5), and if enough temporally diagnostic attributes remained, these are recorded.

Glass is colored by the addition of mineral additives and the relative purity of the glass batch. Sources vary as to when certain colors appear and disappear. In addition dates given for the disappearance of certain glass colors should be understood to the date a certain manufacturing technique fell out of use and not the date that the object became part of the archaeological record.

Disappearance dates for colored glass are further complicated by more recent glassmakers deliberately coloring glass with additives to achieve an appearance that may seem anachronistic to the archaeologist (e.g., Depression glass). The following dates in Table 5 were assumed for the glass colors encountered on the Bawoleks’s property.

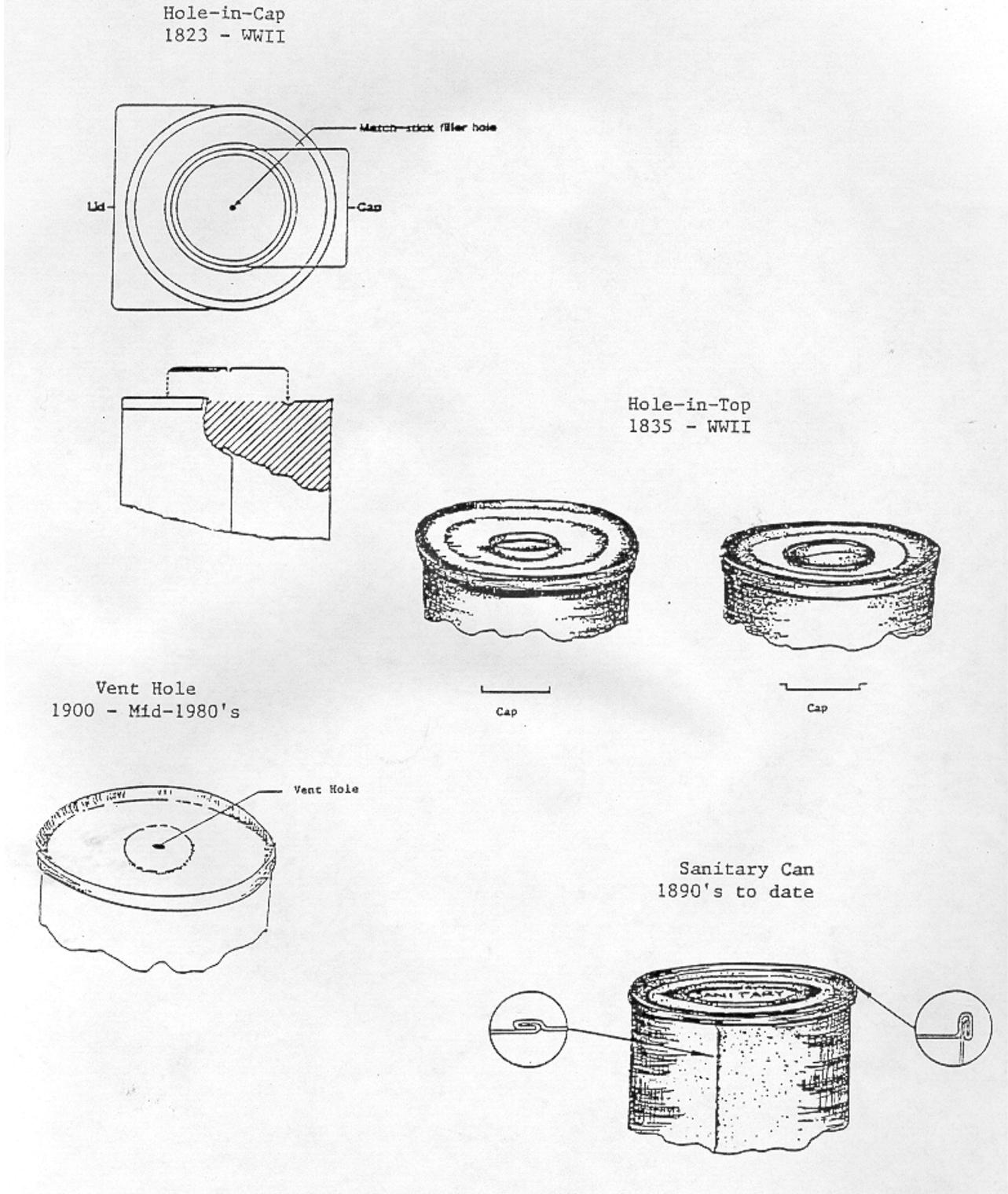


Figure 1: Can Tops (Rock 1993).

Table 5: Dates Assumed for Glass Colors Included Herein

Color	Dates
Manganese decolorized (Amethyst)	Ca. 1875 to early 1930s
Aqua	1880 to late 1920s
Cobalt	1815 to present
Green	1860 to present
Amber/Brown	1873 to present
Clear	1880/1920 to present
Milk Glass	1870 to 1950s

Manganese decolorized glass is clarified glass that becomes light amethyst to dark purple when exposed to sunlight. According to Kendrick (1963:54-56), this glass was produced in the United States between A.D. 1880 and 1914, with the conventional wisdom being that World War I interrupted the importation of German manganese into the United States. The dates for this glass color in much of the archaeological literature then become A.D. 1880 to 1917 (Lockhart 2006:54). Lockhart's research suggests that manganese decolorized glass became popular in the mid-1870s and continued to be manufactured, albeit in limited form, until the early 1930s. Some glass manufactured after 1920 will remain clear (except for patination) despite exposure to the elements. In addition, it should be noted that glass may become patinated (opalized), but this chemical process should not be taken by itself as an indication of antiquity (Demmy 1967). The degree of patination on glass depends on many chemical processes and I have seen similar amounts of patination on modern and 2,000 year old Roman glass.

Bottles and bottle fragments containing temporally diagnostic attributes were characterized using Newman (1970). The features most applicable to these five sites and their dates are summarized in Table 6.

As bottle manufacture had become increasingly uniform by the 1930s and has remained much the same in observable attributes to the present day, I found makers' marks to be the most informative bottle attribute during this work, though these were rarely present.

Table 6: Temporally Diagnostic Features on Bottles (Newman 1970)

Diagnostic Feature	Date
Seams	
Side seam all the way to the top of the bottle and ring seam around base	1920 to present
Round seam on base, may be off center	1903 to present
Glass Color (see Table 5 above)	
Closure Type	
Crown Cap	1895 to present
Continuous Thread Top	1919 to present
Embossing	
"Federal Law Prohibits..."	1935 to 1964
Makers' marks	(Toulouse 1971)

V. 1.3 Historic Ceramics

Ceramic fragments are called “sherds.” Historic sherds were classified and dated broadly using ware and surface treatments. When present, makers' marks can provide a more precise date, though I only saw one maker's mark on a sherd during this work. Historic ceramics are identified as “semi-porcelain,” “porcelain,” and “crocker.” Historic ceramics, in keeping with their Chinese models, were decorated using transfer prints, molded relief, hand-painting (over and under the glaze), and decals. In the 1850s, ironstone began to take over the market. This ironstone typically only had a white glaze and was decorated using mold relief and not the transfer prints, etc. that had dominated the market prior to 1850. Although this material is "ironstone," it retains the porosity of earthenware, and was popular in the American market between 1850 and the 1890s. The ironstone encountered on the Bawolek property is the harder, nonporous stoneware produced by American potters since they began to achieve market share in the 1890s and is referred to as “semi-porcelain.” Throughout the 20th century, the popularity of various transfer prints, molded relief treatments, and other decorative treatments that had initially passed out of widespread use between the 1850s and 1890s has varied. Several sherds encountered are consistent with fiestaware. Fiestaware is a semi-porcelain tableware with brightly colored glazes, especially popular in the 1930s through the 1950s (Huxford and Huxford 2001). Porcelain is typically used for more formal household items such as tea sets and decorative

knickknacks. Porcelain doll-head fragments were encountered at LA 179150. Crockery did not contain sufficient diagnostic features to be temporally sensitive except that the sherds, such as those with salt glazes and Albany glazes, are likely contemporary with other elements of the artifact assemblages.

V. 1.4 Other Metal and Miscellaneous Objects

Many artifacts within this category defy easy placement within a temporal range other than broadly 1880 to present. Many miscellaneous metal and other miscellaneous artifacts are not readily datable or are items of hardware that have been in use for decades at a time (such as wire nails, A.D. 1891 to present), though in one case, a Ford wheel at LA 179151 provided a potential date range of manufacture between A.D 1926 and 1935. While less useful for dating, the artifacts categorized as “miscellaneous” can be used to make an assessment of site function. For example, an artifact assemblage that has machinery parts and lacks artifacts resulting from household activities (such as cans, glass, and ceramics) is more likely to have an industrial function than a domestic.

V.2 Sources Consulted

In the preparation of this testimony I have referred to the following primary and secondary sources

Arizona Historical Society

http://www.arizonahistoricalsociety.org/wp-content/uploads/library_Allen-Katherine.pdf,
accessed May 27, 2014

Bureau of Land Management-General Land Office (BLM-GLO records)

<http://www.gloreports.blm.gov/>, accessed May 5, 2014

Cibola County Record Books (CCB)

n.d. County Clerk’s Office, Cibola County Courthouse, Grants, NM.

Cox, Teresa Bruner

2000 “Rimrock Revisited: an Ethnographic Study of the Homesteader Community of Fence Lake, New Mexico”. <https://soai.repo.nii.ac.jp/index.php>, accessed May 14, 2014.

Demmy, George D.

1967 Glass Dating, an Archaeologists Evaluation of the Concept. *Historical Archaeology* 1 (1): 49-51.

Earth Data Analysis Center, University of New Mexico (EDAC)

<http://rgis.unm.edu>, accessed May 22, 2014

Henry, Leslie R.

1965 *Model T Ford Restoration Handbook: Authentic Photos- Specifications - Step-by-Step Restoration Procedure*. Lincoln Publishing, Lockport, NY.

Huxford, Bob and Sharon Huxford

2001 *Collectors Encyclopedia of Fiesta*, Ninth Edition. Collectors Books, Paducah, KY.

Kendrick, Grace

1963 *The Antique Bottle Collector*. Reprinted in 1971 by Old Time Bottle, Salem, OR.

Kovel, Ralph and Terry Kovel

1986 *Kovel's New Dictionary of Marks: Pottery and Porcelain 1850 to the Present*. Crown Publishers, Inc., New York.

Lockhart, Bill

2006 The Color Purple: Dating Solarized Amethyst Container Glass. *Historical Archaeology* 40(2):45-56.

Maxwell, D. B. S.

1993 Beer Cans: A Guide for the Archaeologist. *Historical Archaeology* 27(1):95-113.

Moloney, James H.

1999 *Early Ford V-8s, 1932 to 1942 Photo Album*. Iconografix, Hudson, WI.

National Park Service (NPS)

2002 How to Apply the National Register Criteria for Evaluation. *NPS Bulletin* 15.

Newman, T. Stell

1970 A Dating Key for Post-Eighteenth Century Bottles. *Historical Archaeology* 4:70-75.

Rock, James T.

1988 *Tin Canisters and Their Identification*. Manuscript on file at Lone Mountain Archaeological Services, Inc., Albuquerque, NM.

1993 *Can Chronology*. Manuscript on file at Lone Mountain Archaeological Services, Inc., Albuquerque, NM.

Toulouse, Julian Harrison

1971 *Bottlemakers and Their Marks*. The Blackburn Press, Caldwell, NJ.

Valencia County Record Books (VCB)

n.d. County Clerk's Office, Valencia County Courthouse, Los Lunas, NM.

Wilson, Beverly and Michiel Wilson (compilers)

1987 *Fence Lake, New Mexico Area Families & History*. Fence Lake Book Committee, Fence Lake, NM

Wrangler

http://www.wrangler.com/store/WRG_STORE_US/en_US/content/about_us/history.html, accessed May 16, 2014

V.3 On the Presentation of Archaeological Data.

Once these archaeological sites had been recorded in the field, they were registered with New Mexico's Archaeological Records Management Section (ARMS) to obtain a unique state site number (a Laboratory of Anthropology [LA] number). Any historic buildings that remain intact, including those recorded as features on archaeological sites, are given a unique Historic Cultural Properties Inventory (HCPI) number by ARMS. The site narratives I have prepared for inclusion in Section VI follow an outline that is intended to satisfy New Mexico's documentation standards as found in 4.10.15.11 NMAC. These include:

- 1) a brief statement offering a description of the archaeological site and its setting;
- 2) a description of all of the artifacts documented on the site;
- 3) an overview of the internal structure of the site including any clusters or concentrations of the artifacts described above, a listing of the archaeological features found on the site along with mention of the association between the artifacts described above in the assemblage section and the features; also included in this section is a consideration of the stratigraphic structure of the site and its potential to contain buried cultural deposits;
- 4) a summary of the historic information found concerning the site;
- 5) a statement detailing any sources of past or current disturbance and a statement assessing the overall integrity of the site;
- 6) a concluding statement listing the temporal and cultural affiliation in the terms required by ARMS for their database, and an evaluation of the site's eligibility for listing on the NRHP, as required by 4.10.15.11.C.4 NMAC.

V.3.1 Evaluation of NRHP Eligibility

Sites were evaluated as to their NRHP eligibility status. This eligibility is measured according to four criteria developed by the National Park Service under the direction Secretary of the Interior (see NPS Bulletin 15, *How to Apply the National Register Criteria for Evaluation*). Historic sites are evaluated according to all four NRHP criteria. This evaluation not only includes an assessment of the potential for buried cultural deposits (Criterion D), but considerations of the site's ability to be placed in a Historic context (A), the local, regional, or national historic significance of any individual that may be affiliated with the site (B), and whether any built features show distinctive or characteristic historic workmanship (C). On each site, the possibility of buried cultural deposits was assessed by a variety of means. Observations were noted regarding the likelihood of buried cultural deposits based on several characteristics. A site with a privy or a dugout or cellar is likely to contain buried deposits at least within that cultural feature, and while artifacts with a light dusting of sand across their surface is not a clear indication of buried cultural deposits, more deeply buried artifacts are. Other indications of potential site depth include stratigraphic soil profiles exposed along road cuts and arroyos or cultural materials in the back-dirt piles of rodent burrows and ant hills.

VI. Supportive Findings and Other Information

Lone Mountain visited nine locations identified by the defendants as potentially relevant sites (Figure 2). Five of these were determined to be archaeological sites that were more than 50 years old. These were registered with ARMS and given unique LA numbers (Table 7, Figure 3). Narratives describing each archaeological site are presented below.

Table 7: Summary of Archaeological Findings

Bawolek Property Location No. (Figure 2)	Site No. (Figure 3)	Location	Assessment of Historic dates
Ruin 1	LA 179149	T 5N, R 17W, Section 1, SE¼	A.D. 1931 to 1951
Ruin 2	LA 179150	T 6N, R 17W, Section 35, SE¼	Ca. A.D. 1933 to 1964
Ruin 3	LA 179151	T 5N, R 17W, Section 3, SE¼	Ca. A.D. 1933 to 1953
House 1	LA 179153	T 5N, R 17W, Section 3, NE¼	A.D. 1937 to 2014
House 2		T 6N, R 17W, Section 35, SE¼	2000s+
House 3		T 6N, R 17W, Section 35, SE¼	1990s+
Dump 1		T 5N, R 17W, Section 3, NW¼	1990s+
Dump 2	LA 179152	T 5N, R 17W, Section 3, SE¼	A.D. 1940 to ca. 1962
Dump 3		T 5N, R 17W, Section 3, NE¼	A.D. 1972 to 1977

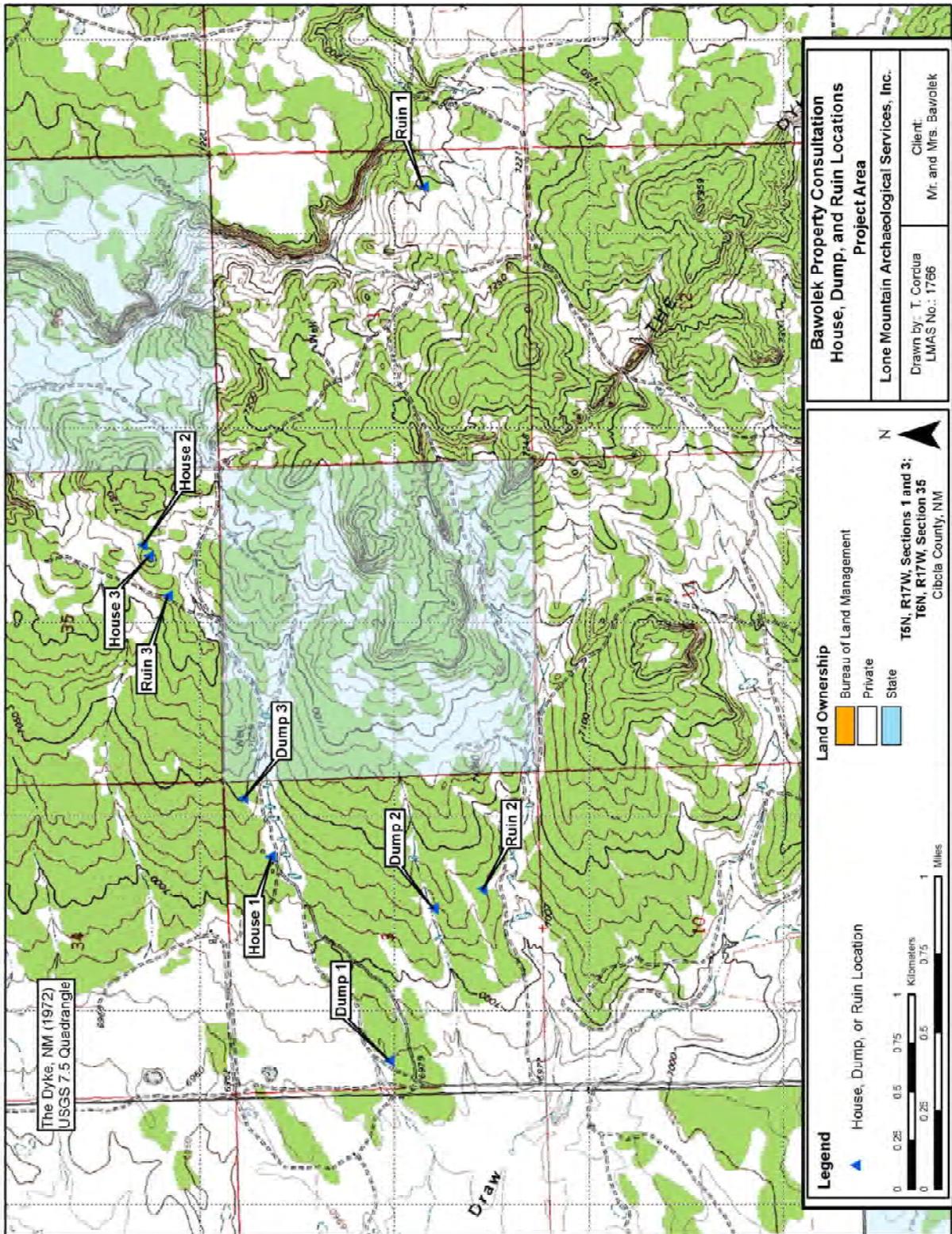


Figure 2: Bawolek Property; House, Dump, and Ruin Locations.

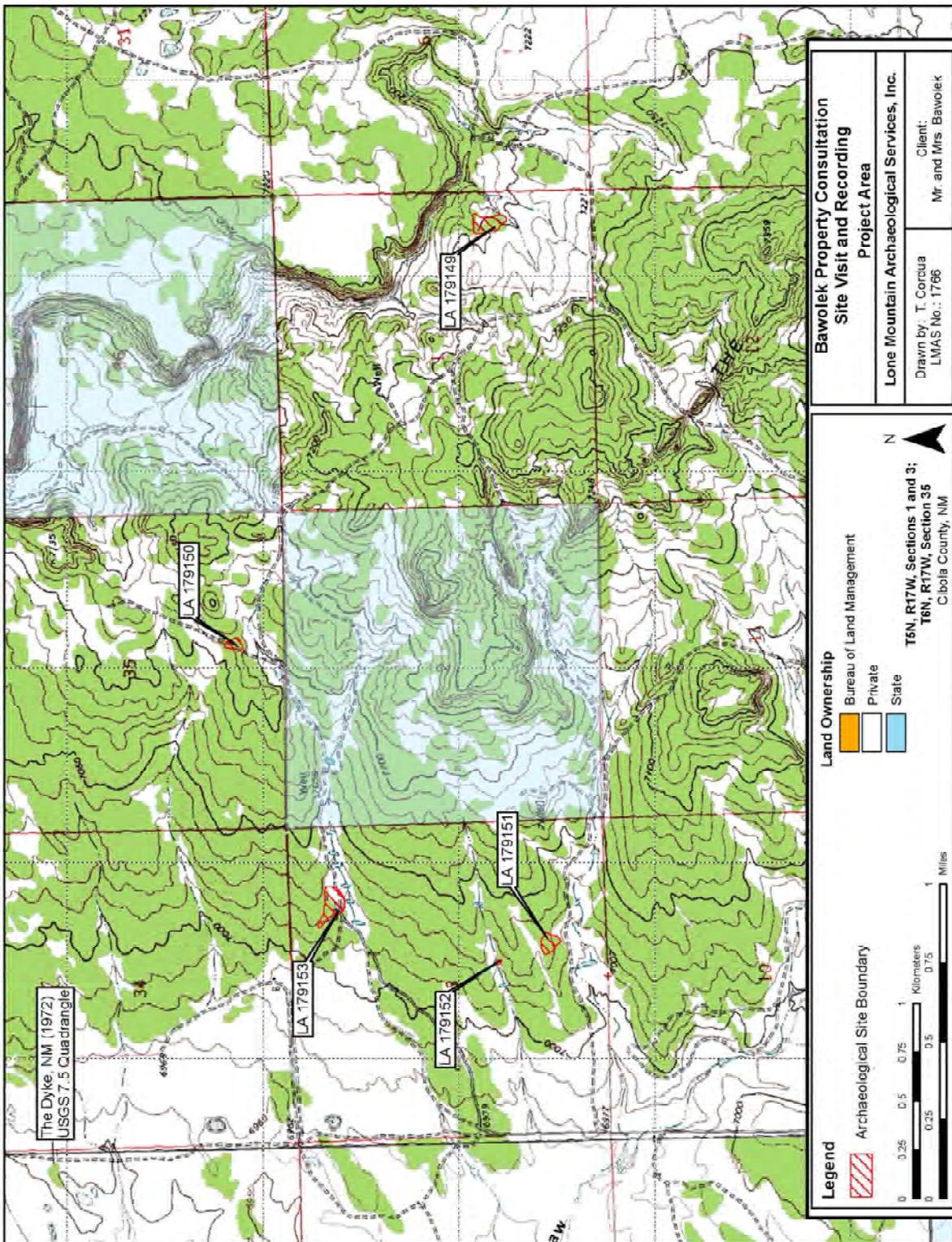


Figure 3: Bawolek Property; Archaeological Site Locations.

VI.1 LA No. 179149

Field No and Name(s): 1766-001

Affiliation: Pueblo III Anasazi/Ancestral Pueblo (A.D. 1150 to 1300) and Anglo-Euroamerican NM

Statehood-WWII to Recent (A.D. 1931 to 1951)

Eligibility: Eligible, Criteria A and D

Location: Township 5 North, Range 17 West, Section 1

Description

This historic homestead site is located on a low hill top and consists of the remains of a stone home and several other features with an associated artifact scatter (Figures 4 through 9). A large clearing is present to the west of the site that may have been associated agricultural fields, and a linear depression may have been an access road. Vegetation on the site consists of piñon, juniper, grasses, forbs, and some patches of pale wolfberry. Surface visibility is between 51 percent and 75 percent.

Overall Site Assemblage.

Lone Mountain observed hundreds of artifacts at this location. There are some prehistoric potsherds on this site, including three corrugated grayware and three St. John's Polychrome sherds (Figure 5). A representative sample of these artifacts was subject to in-field analysis in order to identify the temporal affiliation of the historic component of this site. The historic component includes cans, glass, ceramics, and a variety of other metal and miscellaneous items.

Cans are 70+ sanitary cans, 10+ vent-hole cans (typically used for condensed milk), three hole-in-top cans, 15+ lard pails, paint cans, a cylindrical oil can, and hundreds of can fragments and bits of rusted tattered metal derived from cans. The oil can was introduced between 1932 and 1936 (Rock 1988). Many cans were rotary opened. The rotary can opener was introduced in 1925 (Rock 1988).

Glass artifacts occur as clear (100+), brown or amber (20+), cobalt (10+), aqua (1), and milk glass (20+). The presence of clear glass, together with the absence of amethyst and the low frequency of aqua glass, is most informative concerning the dating of the site. Modern clear glass tends to date from the 1920s to the present and supplants glass made clear by the addition of manganese, which becomes amethyst colored when exposed to sunlight, and glass made with iron impurities, which produces an aqua color. Milk glass is a milk-colored glass, typically used for cold cream jars. There is one complete clear glass patent medicine bottle labeled "Chamberlains." This was a patent medicine company whose remedies addressed digestive complaints, children's coughs, and included pain liniments. There is also a complete amber glass jar with an Owens-Illinois mark (Figure 9) indicating a date of manufacture in the Okmulgee, Oklahoma plant likely in 1936, as the Okmulgee plant had closed by the early 1940s (Toulouse 1971:395).

Historic pottery sherds include white-glazed porcelain, white-glazed semi-porcelain, and crockery. Porcelain includes plate sherds with a thin blue line along the rim and a plate sherd with a light gray band around the rim. There was one sherd of white-glazed semiporcelain with a light brown leaf pattern and two sherds of white-glazed semiporcelain with molded edges. Crockery is tan (n=10), brown-glazed (n=1), and white-glazed. There were no makers' marks or other clearly dateable elements observed on the pottery, but the variety of ceramics is indicative of a domestic assemblage.

Metal and miscellaneous items include steel or iron barrel hoops, a galvanized metal wash tub, numerous bits of metal hardware and scraps thereof, two pieces of a spring-wound geared device (possibly a clock), a bicycle fender, 50+ pieces of barbed wire and wire nails, a piece of leather (likely part of a shoe), and a Bakelite button. The artifact assemblage observed at this site, independent of any archival data, would argue for date between A.D. 1930 and 1960, in the absence of artifact types seen before and after those dates.

Features and Site Structure

Lone Mountain found two artifact concentrations (possible refuse deposition locations), five features, and a large, diffuse scatter of artifacts. The five features are the remains of a rock home, two wood and stone features, and two linear arrangements of juniper posts or roofing elements. The artifacts found in association with these concentrations and features are described in the discussion of the overall assemblage (above) and with respect to their specific proveniences on the site (below).

Concentration 1 is a can dump covering an area measuring 7 m in diameter, with some outlying artifacts. Artifacts in this can dump include 14 sanitary cans, eight vent-hole cans, five lard pails, one oil can labeled “SAE 30,” four clear glass shards, and two white-glazed semiporcelain sherds with a molded edge. There are no artifacts in this concentration that exclusively reflect a 1930s or World War II use of the site; this can dump may postdate World War II.

Concentration 2 is a more diffuse cluster of artifacts in an area measuring 12 m by 5 m. This concentration contains seven rotary-opened sanitary cans, two vent-hole cans, one hole-in-top can, 10 tattered can fragments, 13 clear glass shards, one cobalt glass shard, one milk glass shard, three brown glass shards, one white porcelain plate sherd with a light gray strip around the edge, two white-glazed crockery sherds, one white-glazed semiporcelain sherd with a light brown floral design, a leather shoe fragment, and a metal spool

Feature 1 (the “Rock House”) is a collapsing building made of roughly-shaped sandstone slabs lain with adobe mortar (Figure 6). The building measures 8 m by 10 m and the walls (both standing and fallen) indicate a height of at least 3.5 m. The roof does not remain in place. There are at least 26 irregularly stacked courses of stone. Portions of all four walls have collapsed outward. There appears to have been an entrance on the east wall. There are more than 50 pieces of milled lumber scattered throughout the structure with wire nail fasteners. These may be elements of flooring or roofing.

Artifacts within the feature include more than 10 wire nails and scraps of metal, an aqua glass shard, 20+ shards of clear glass, four shards of milk glass, a porcelain plate sherd with a blue line on the rim, one Albany glaze crockery sherd, and one yellow Bakelite button. Eolian sands have accumulated within the structure and there is some potential for buried cultural deposits. A rodent nest is present in the southeast corner. The feature is estimated to be 60 percent intact.

Feature 2 is 4-m by 4-m cellar or partial dugout that has been excavated into the slope edge (Figure 7). The feature is delineated by two sets of upright and nearly upright axe-cut and sawn log posts. There are 10 posts on the east side and five upright posts on the south side. Additional nearby sawn and axe-cut posts are no longer in place and were likely part of this feature. The interior of the feature is a shallow depression. Animal burrows suggest that there is at least 50 cm of fill within this feature. Associated artifacts are a "Ball" jar lid, some miscellaneous scraps of metal, and a shard of milk glass. The bicycle fender is located near this feature. The feature is estimated to be 40 percent intact and has a high potential for buried cultural deposits.

Feature 3 is a 4-m by 5-m arrangement of two rows of fence posts or roofing elements (Figure 7). The wood (more than 30 pieces) has been sawn and axe cut. The arrangement of these posts suggests that these may be the rafters of a roof (possibly the roof of Feature 2) that has been removed from a nearby structure and lain here. There are no associated artifacts other than wire nails present in some pieces of wood. The feature is weathering and is no more than 30 percent intact.

Feature 4 is a 4-m by 3-m wood and stone structure (Figure 8). Up to eight courses of irregularly stacked stones make up the west wall, a single course forms the base of the south wall, and additional stones may have made up the north wall. There are horizontal wooden elements with bits of chickenwire attached with wire nails and a possible small doorway on the eastern wall. The doorway is suitable for a chicken-sized animal and this structure may have been a chicken coop. Some animal

burrowing is apparent on the west side of the feature, which is estimated to be no more than 40 percent intact.

Feature 5 is a 10.0-m by 5.5-m arrangement of 25+ horizontally laid out axe cut and sawn posts next to an upright post that is the last post in a fence line crossing the east side of the site (Figure 9). This particular feature may be an assortment of unused fence posts. Most wooden elements are clustered at the southern end of the feature, with some cut tree branches at the northern end of the feature.

Sediments on this site are colluvial and eolian sands. There are numerous partially buried artifacts across the site and potential for more deeply buried cultural deposits within Features 1 and 2.

Archival and Historic Data

LA 179149 falls on lands patented by Luther R. Cone on August 1, 1936 (BLM-GLO records) under the 1909 Homestead Act, which allowed for 320-acre homesteads as opposed to 160-acre homesteads. According to the requirements for obtaining a patent, Luther R. Cone had to have been at least 21 years old, the head of a household, had to live on the property at least seven months of the year, had to have made improvements (such as building a house), and had to have farmed the property for at least three to five years (the original five year “proving up” requirement for homesteads had been reduced to three years in 1912). If someone had spent six months of the year on a property the proving up time was extended to four years, and if only five months of a year was spent in residence, a five year period was required. In the early 1930s, more extended absences were excused, but had to be made up with longer “proving up” periods (Merlan 2010:20-21). This suggests that Mr. Cone had to have been on this property by no later than the summer of 1933.

The history of the Cones in Fence Lake attributed to Luther Cones’s wife, Vera Cone, in Wilson and Wilson (1987:52) cites a three year proving up period, but then Mrs. Cone describes arriving in Fence Lake in May of 1931, and indicates that they sold the property in 1940 “after nine

years of raising pinto beans, picking up piñons to sell and carrying the mail...” (Wilson and Wilson 1987:52). This would place the Cones on the property by 1931, five years prior to the issuing of the patent. Mrs. Cone notes that they lived first in a half-dugout (possibly Feature 2), then a log cabin, and by 1935, they had built the rock house (Feature 1). Mrs. Cone recalls having a stock tank, but water for family use was hauled from a Mr. Hubble’s well, three miles distant. The Cones sold the property to the local store owner, J. I. Dyer and his son-in-law, J.W. St. Clair, in 1940 (Wilson and Wilson 1987:52; VCB B-6:608).

J. I. Dyer brought his family to the Fence Lake area in the mid-1930s, acquiring two sections of land to the south of Fence Lake and some property within the town. J.I. Dyer lived in the Fence Lake area until 1951 (Wilson and Wilson 1987:63). Artifacts at the site may very well reflect both the Cone ownership and the Dyer/St. Clair ownership.

According to Wilson and Wilson (1987:242), Homer and Ruth Long Jackson, residents of Amarillo, bought a Dyer section of land in 1952. The Valencia County deed records show that Homer and Ruth Jackson, Ruth’s father, Paul E. Long, and Ruth’s brothers, Marvin and Loyd, all early 1930s-era homesteaders, bought this section (Section 1) in 1951 (VCB 84:532) and by 1953, had assembled a ranch that also included Sections 3, 11, and 14 within this township and range, as well as Section 35 within the township to the north. The Long family left the area for Deming in 1960, with Paul Long first transferring Sections 1, 3, and 35 to his daughter, Ruth, on May 24, 1960 (VCB 34:173). Ruth lost her husband in 1957 and had since married E. L. Hunter. Ruth Hunter then sold all of these sections to Robert. L. Cox (“Bert”), of Quemado, New Mexico on December 5, 1960 (VCB 127:48). Valencia County courthouse records indicate that Cox held grazing leases on tens of thousands of acres of land (e.g., VCB 233:372) and Wilson and Wilson (1987:53) indicate that Bert Cox’s headquarters was near Quemado at the “Goze” place. Unlike other Fence Lake property owners who had come to the area

from Texas, Bert Cox was born in Hillsboro, New Mexico and his family had settled in the Salt Lake area south of Fence Lake in 1903.

Cox sold these three sections to Douglas M. Bruton on July 10, 1973 (VCB 248-843). Douglas Bruton was the son of Major Bruton, an early 1930s Fence Lake homesteader, and had been a police officer in Roswell, New Mexico, prior to being injured and returning to Fence Lake in 1968 (Wilson and Wilson 1987:49). Douglas Bruton sold the land to the Allen family on May 18, 1979 (VCB 258:9264,9282). The current land owners acquired this piece of property in 1998 from the Allen family (CCB 13:1344).

Site Condition

LA 179149 is affected by sheetwash and winds, with most elements of the site subjected to deterioration from weathering. The site is in good condition, remaining between 51 percent and 75 percent intact.

Conclusions

LA 179149 has artifacts and archival data indicating Pueblo III Anasazi/Ancestral Pueblo (A.D. 1150 to 1300) and Euroamerican NM Statehood-WWII to Recent (A.D. 1931 to 1951) temporal and cultural affiliations. The site is a good example of an early homestead for the Fence Lake area, represents the earliest Euroamerican settlement of the area, and is associable with an identifiable family (though not one of known historic significance). The homestead no longer retains sufficient integrity to be a characteristic example of the workmanship of this era and appears to contain buried cultural deposits. LA 179149 is therefore recommended eligible for nomination to the NRHP under Criteria A and D.

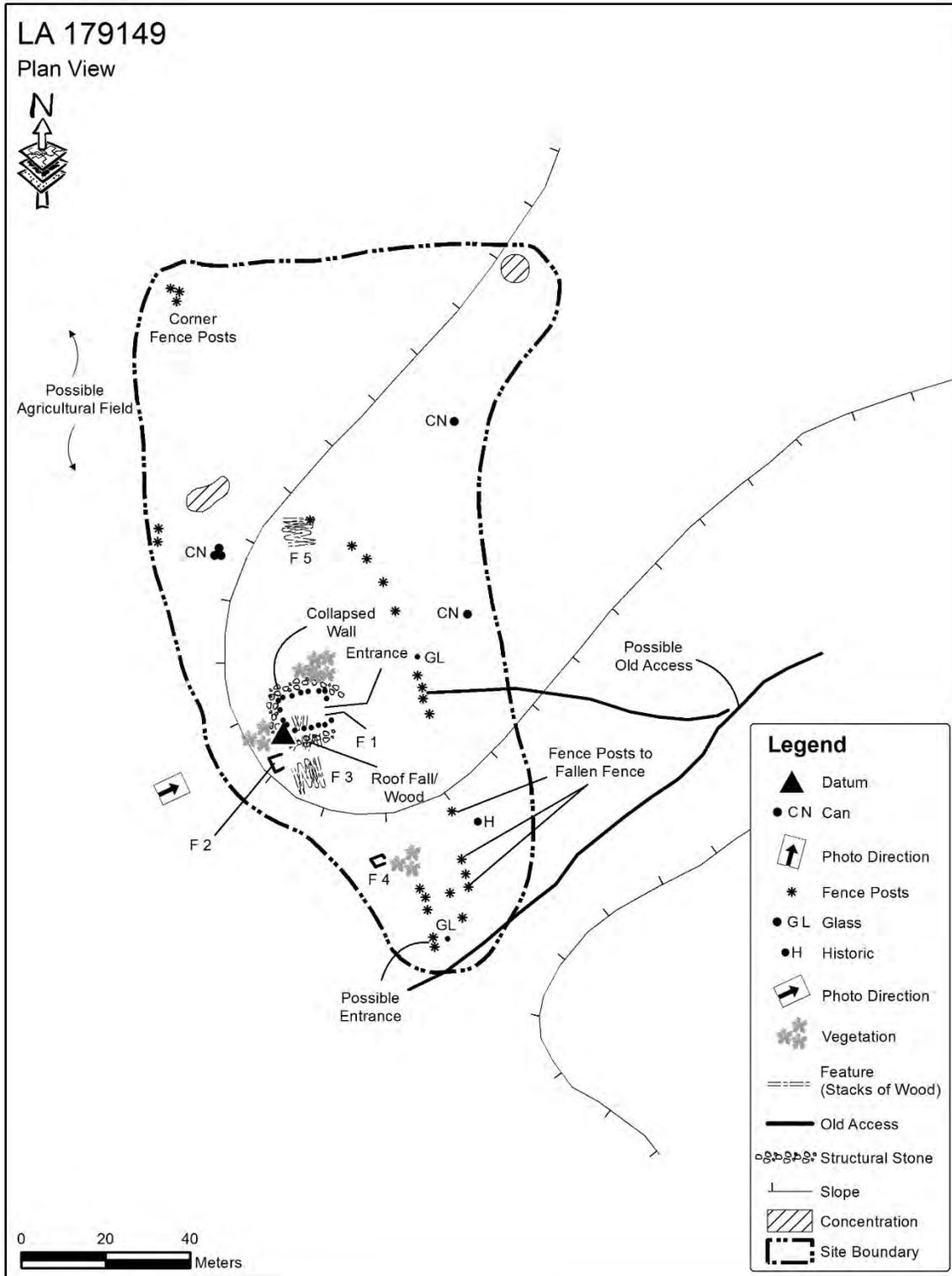


Figure 4: LA 179149 Site Overview.



Figure 5: LA 179159 Site Overview Facing North (top) and Prehistoric Sherds (bottom).



Figure 6: LA 179149 Feature 1 Facing North (top) and Southeast (bottom).



Figure 7: LA 179149 Feature 2 Facing North (top) and Feature 3 Facing East (bottom).