CHAPTER 5. RESULTS

Between October 5, and November 8, 2010, WCRM conducted the field portion of the archaeological data recovery at 10BV246. This work was completed with a field crew of seven supervisors and technicians. Three features within Locus 1 were manually excavated during this effort and the remainder of the site was remapped. In addition the field crew also completed the Class III+ documentation of Feature 8 during the field session of 2010. Archival research was initiated in July 2010 and was completed in May 2011. In addition, five obsidian biface fragments were also collected; these will be discussed in a separate report.

The following chapter will summarize the results of the both the field and archival investigations at 10BV246. These data will then form the basis of interpretations and conclusions to be presented in Chapters 6 and 7.

5.1. HISTORIC RESEARCH

WCRM conducted archival research between May 2008 and May 2011 at a number of repositories following the methods described in the previous chapter. Generally, the archival research sought information concerning the history of John Leopard and his family, the general settlement of the AES study area during the early 20th century and how it compared to contemporary settlement in other parts of the West, and the Mormon settlement and homesteading patterns as they expressed themselves in Bonneville County and southeastern Idaho. General Land Office maps and records, historical society journals and manuscript collections, newspapers, census, draft, and state records, Bonneville County files, maps, photographs, secondary studies of the settlement and agricultural businesses in southeastern Idaho, and cultural resource site records and reports from the region and other Western states were researched to complete the archival history task. A summary of the libraries and archives visited during the research is presented in Table 3.

Table 3. Archives and Libraries Visited or Accessed

Location	Repository	Holdings
Idaho Falls, ID.	Idaho Falls Public Library	Blatter's Taylor Mountain Homesteaders: The Compiled Histories of the Settlers of Bingham and Bonneville Counties of Southwest [sic] Idaho, Clark's Bonneville County in the Making, and Ingram's Beautiful Bonneville, County of Contrasts.
	Museum of Idaho	Metsker's Atlas of Bonneville County, Idaho, Land Title Co.'s 1976 Bonneville County Land Directory, miscellaneous files from eth Idaho National Laboratory, and selected secondary publications listed above.
	Bureau of Land Management Upper Snake Field Office	General Land Office plats, field notes, serial, and patent records.
	Bonneville County Assessor, Recorder, and Treasurer Offices	Land ownership, taxation, improvement, and sale records.
	Idaho Department of Water Resources, Eastern Regional Office	Ground water and water rights records.
	LDS Temple Visitor Center	Information about the Leopards, the Colett family (Leopard's neighbor) and the LDS church in the southeast Idaho area.
Washington, D.C.	National Archives	Land Patent Case Files

Location	Repository	Holdings
Boise, ID.	Idaho State Archives Research Center	Idaho birth and death records, newspaper clippings files, copies of Idaho Yesterdays, A Century of Progress in New Sweden, the Daughters of the Utah Pioneers' Histories of the Iona, Lincoln and Ucon Wards, Bonneville County, Idaho with Biographies of Many of Their Pioneers, Lovell's Captain Bonneville's County, Otteson's Unsung Heroes and Settlers, Bonneville County, Idaho, Stringham's The People of the Hills, After Fifty Years; Compiled from the Records of the New Sweden Irrigation District, and Wahl's Letters From Honeyhill: A Woman's View of Homesteading, 1914-1931.
	Idaho State Historic Preservation Office	Homestead site record forms and cultural resource reports for Bingham, Bonneville, Caribou, and Jefferson counties).
Denver, CO.	Western History and Genealogy Department, Denver Public Library	Secondary source materials such as Jackson's The Mormon Role in the Settlement of the West, Patent's Homesteading: Settling America's Heartland, and census records.
	Colorado Office of Archaeology and Historic Preservation	Copies of Homestead site record forms and cultural resource reports for comparative purposes.
Salt Lake City, UT.	Utah State Historical Society	This facility was not visited in person. Rather, WCRM used on-line access to search the holdings of the Society for genealogical information and for publications regarding Mormon homesteading and communities. This data came primarily in the form of articles in the <i>Utah Historical Quarterly</i> .
	University of Utah Library	The university of Utah has a digital collection of the <i>Journal of Mormon History</i> that offered some articles regarding Mormon homesteading and community.
	Family History Center	The Center was contacted for information on the John Leopard family. The Center had no information on Leopard in regard to membership in the Mormon Church. They did have information on the Collet families who appear to have migrated from Utah to Idaho before settling on the land in the AES study area.
New Bloomfield, MO.	New Bloomfield Area Historical Society	This is the local museum in Leopard's home town area. They were contacted for information about the family and Leopard's younger years. No data was forthcoming.

The following results will be organized according to five broad categories of evaluated data: federal and state records, including GLO, census, vital statistic, and U. S. Department of Agriculture information, maps and photographs, primary and secondary source farming, ranching, and settlement data, and informant communications. Although summary data will be presented, for the most part, interpretations will be held until Chapter 6.

5.1.1 Primary and Secondary Source John Leopard and Homestead History Review

Idaho Falls Repositories

The books and records held by the Idaho Falls Public Library, the Museum of Idaho, the Bureau of Land Management Upper Snake Field Office, the Bonneville County Assessor, Recorder, and Treasurer Offices, and the Idaho Department of Water Resources Eastern Regional Office contained minimal amounts of information related to the John Leopard Homestead Site. Data at these repositories offered limited information that was used to address the research questions about the demographics of the Leopard Homestead site (Domain A), the Domain C questions about the project area being an example of a "failed homestead," and Research Domain D vis a vis comparative information for the Mormon homesteads in the region, and to a much lesser extent Research Domain C about the function of Feature 1 on the Leopard farm. Due to the rather general nature of the questions within the Research Domains most of the secondary sources such as Blatter's Taylor Mountain Homesteaders: The Compiled Histories of the Settlers of Bingham and Bonneville Counties of Southwest [sic] Idaho, Clark's Bonneville County in the Making, or Ingram's Beautiful Bonneville, County of Contrasts that gave general descriptions of the homesteading and early settlement of the AES study area proved to be of some utility. The records of the Bureau of Land Management, the real estate sources of the Museum of Idaho, and the Bonneville County records all provided some background on the ownership and land use patterns of the AES study area, but less than extensive information about John Leopard and his homesteading efforts. Collectively the sources prompted the view that the Mormon settlers enjoyed extensive support from family and church while the other settlers experienced much greater difficulty in the homestead process. Further research found that Lou Wiggins's 2005 volume, Settlement of Idaho by Utah Pioneers: Bonneville County, did not have information about Leopard or his neighbors and was based largely on information available from other sources.

Boise Repositories

In Boise WCRM researched the holdings of the Idaho State Archives Research Center (Idaho State Historical Society) and the SHPO. At the Research Center WCRM focused the research on the state's birth and death records and other data in an attempt to learn more about John Leopard and his family and their careers in Idaho. The data indicated that Leopard did not stay in Idaho for a long time or become a permanent resident of the state. Other research at the Center secured further data from newspaper clippings and secondary sources such as *Idaho Yesterdays*, or the Daughters of the Utah Pioneers' *Histories of the Iona, Lincoln and Ucon Wards, Bonneville County, Idaho with Biographies of Many of Their Pioneers* to support comparisons between Leopard's experiences and those of his Mormon neighbors and to create images of Idaho farming and ranching contemporary with the Leopard Homestead site. Finally, WCRM examined selected manuscript collections to secure further data to help draw a composite picture of Idaho homesteads during the early 20th century. WCRM also gathered data from the Idaho SHPO in the form of site record forms and cultural resource reports to find comparative data about homesteads in southeastern Idaho. The information found in Boise proved useful for addressing Research

Domains A, B, and D. The data did not offer anything germane to Research Domain C concerning the function of Feature 1 at the John Leopard Homestead Site.

Utah State Historical Society (Salt Lake City)

WCRM examined the guides and catalogs to the collections of the Utah State Historical Society and found a number of articles from the Utah Historical Quarterly regarding Mormon settlement patterns and pioneer communities for use in the analysis of those in southeastern Idaho. No other relevant information was found on-line for the current study. The data proved valuable for addressing the questions posed in Research Domain D.

The Utah Historical Quarterly articles include:

- "Homesteading in Zion." v. 28, 1960.
- "Community and Memory in Grouse Creek." v. 71, 2003.
- "Interdependence and Change: Mutual Irrigation Companies in Utah's Wasatch Oasis in an Age of Modernization, 1870-1930." v. 71, 2003.
- "Smoke Farming: Smelting and Agricultural Reform in Utah, 1900-1945." v. 72, 2004.
- "The Folklore of Dixie Past and Present." v. 74, 2006.
- "Iosepa: The Hawaiian Experience in Settling the Mormon West." v. 76, 2008.
- "Building Community by Respecting Linguistic Diversity: Scandinavian Immigrant in Nineteenth-Century Utah." v. 78, 2010.

University of Utah Library (Salt Lake City)

Through the Internet WCRM examined the collections of the University of Utah State library and found that the library held a digital copy of the *Journal of Mormon History* that included some articles about the Mormon homesteading patterns and the Mormon community structure (Research Domain D). The Journal of Mormon History articles include:

- "Mormon Migration and Settlement after 1875." V. 2, 1975.
- "The Mormon Ward: Congregation or Community?" v. 5, 1978.
- "The Mormon Settlement of Southeastern Idaho, 1845-1900." V. 20, 1994.
- "Colonizing the Muddy River Valley: A New Perspective." V. 22, 1996.

National Archives (Washington, D.C.)

WCRM ordered copies of homestead patent case files for John Leopard's homestead, Reed Colett's homestead, and Edgar Colett's homestead, two of Leopard's neighbors. These were used for addressing questions from all four Research Domains because WCRM determined through oral informants and genealogical research that the Colett families likely were members of the Mormon Church. These data proved useful to varying extents for the examination of questions related to all four Research Domains.

Denver Repositories

WCRM researched the holdings of the Denver Public Library for Mormon homesteading and settlement information. Some information was found in publications such as Jackson's The Mormon Role in the Settlement of the West, as well as genealogical data (see below). WCRM also used cultural resource data from the Colorado Office of Archaeology and Historic Preservation for comparative analyses with the material culture recovered from the John Leopard Homestead Site. Further discussion of the cultural

resources information can be found below. These data were most useful in addressing Research Domains A and B and to a much lesser degree Research Domain C.

5.1.2 Genealogical Review

Family History Center (Salt Lake City)

WCRM contacted the Family History Center in Salt Lake City and also used the related Internet site Family Search (https://www.familysearch.org/). The researchers sought information about John Leopard and his neighbors, the Coletts. The Center had no information or record of John Leopard but they did have files on both Reed and Edgar Colett that led WCRM to believe the Coletts were members of the Mormon Church. This information proved useful for addressing the questions associated with Research Domain D.

New Bloomfield Area Historical Society (New Bloomfield, MO.)

WCRM contacted the New Bloomfield museum looking for information about the family and Leopard's younger years. This is the local museum in Leopard's home town area. The museum apparently did not to have any information about the Leopard family as they did not respond to WCRM's requests for information.

Ancestry.com (On-line)

WCRM found information about John Leopard and his neighbors through the on-line genealogical search site Ancestry.com. The site proved fruitful with data about Leopard and his brother Samuel that included their family history in Missouri, their World War I draft records and records that indicated that Samuel left the AES study area within a decade of the time he patented his homestead. Unfortunately, information about John Leopard, owner of the site excavated by WCRM, proved non-existent after he patented the land in 1919. WCRM also looked for records of the Coletts, neighbors of Leopard, and found extensive information on both of the gentlemen. Much of the data proved duplicative of that gained through the Family History Center and Family Search site as discussed above.

5.1.3 Other On-line Sources

WCRM also investigated other on-line sources looking for information relevant to all four of the Research Domains. The digital atlas of Idaho, maintained by Idaho State University (Pocatello), had two useful articles about farming and the Mormon settlement of southeastern Idaho (Anonymous 2010, U.S.D.A. 2010). WCRM also found a brief article by Robert D. Marcum (2010) about the Mormon settlement of Idaho in the on-line resources of Brigham Young University which proved useful for general background on that topic.

5.1.4 Oral History

LDS Temple Visitors Center, Idaho Falls

WCRM spoke with four informants at the LDS Temple Visitors Center in Idaho Falls and another individual in Idaho Falls suggested by the Visitor Center informants. All of this was done on July, 20, 2010. The four informants at the Visitors Center included Elder and Sister Higley and Elder and Sister Hillman. These individuals had no knowledge of John Leopard or his brother, Samuel, or their homesteads. They did know of the Coletts and shared information that the Colett family had used alternative spellings for their last name, including Collett and Collette. Coletts remain in southeastern

Idaho as farmers and in other agriculturally related occupations. WCRM also contacted Van Campbell in Idaho Falls at the recommendation of the Hillmans. Mr. Campbell, known for familiarity with local history, had no recollections of John Leopard or the other early 20th century homesteads in the AES study area. Mr. Campbell did refer WCRM researchers to secondary sources about Bonneville County history that were examined at the Idaho State Archives in Boise. WCRM unsuccessfully attempted to reach members of the Colett family during 2011. Otherwise, the information gathered tended to support the interpretations about the persistence of Mormon settlers in southeastern Idaho across multiple generations. These data are relevant to addressing the issues identified in Research Domain D.

5.1.5 Comparative Data on Early 20th Century Western Homesteads

WCRM searched the records and reports on file with the Idaho SHPO, the Colorado Office of Archaeology and Historic Preservation, the Arizona SHPO, and the South Dakota SHPO to secure comparative data on other early 20th century homesteads in the West. The homestead information from the research in the Idaho SHPO's office is summarized in Tables 4 and 5 below.

Table 4. Southeastern Idaho Homestead Site Form Summary

Site Number	Site Type	Characteristics
10BM165	Homestead	This site measured 0.4 acre. The site form did not describe the artifact assemblage or the features. The features included 3 pits, 2 stone foundations, a stone wall remnant, and another unlabeled possible stone feature based on the site map. The site form lists the date range as 1900-1920. The site summary in the report says the site features included a dugout, basalt block foundations, and a trash scatter.
10 BM180	Homestead	This site measured 2150 square feet. The site form and summary describe the artifacts as including "amber, clear, and purple glass" fragments, a section of rain gutter, wire nails, butchered bone, sanitary cans, and lumber scraps. The glass items that were identified included canning jars, a lamp chimney, and a whiskey bottle. The features included a building foundation and a trash scatter. The recorders dated the site from 1910 to 1930.
10BM181	Homestead	This site measures 0.9 acre. The site form says that the site includes five stone and/or dugout foundations, a cistern, and a trash scatter. The trash included canning jars, medicine bottles, and other glass fragments ("aqua, purple and clear"), window glass, farm implement parts, kerosene lamp parts, metal pots/pans, a bedframe, bicycle and wagon wheels, and building part fragments (shingles, lumber). The recorders dated the site from 1900 to 1920.
10BM186	Homestead	The recorders measured this site at 0.4 acre. The recorders dated the site from 1910-1930. The features include dugout ruins, rock foundations, stone-lined walkways, and a flower bed. The artifacts include clear, aqua and amethyst bottle glass. There are also nails and wood remnants. The site is adjacent to U.S. Highway 26.
10BM189	Homestead	This site measures 0.8 acre. The site form dates the site to the period from 1900 to 1930 based on the artifact assemblage. The assemblage includes "aqua and purple" bottle glass fragments, canning jars, alcohol bottles and window glass. Other material at the site included wire nails, sheet metal and can fragments (sanitary and "solder-top") and remains of shiplap siding. The features include an outhouse, a rock foundation and 2 pits.

Site Number	Site Type	Characteristics
10BM397	Homestead	This site measured 1.8 acres and the form dates the homestead site to 1880 through 1925. The artifact assemblage included hole-in-cap, lap seam, sanitary cans, tobacco cans, sardine cans, "purple" bottle glass, window glass, barrel hoops, and bailing wire. The recorders noted 2 features: 1) cistern, and a 2) pit depression.
10BM719	Homestead	This site measured 1.9 acres and includes 2 foundations, 2 dugouts, a rock alignment and 11 rock clusters suspected to be fence post cairns. The recorders dated the site from 1920 through an unknown date. The artifact assemblage included a variety of glass fragments, ceramics, sanitary, hole in top, hole in cap, and solder-top cans, and a few building-related artifacts. This site was recorded in 2004 and the level of detail is much better than that in the foregoing forms.
10BM765	Homestead	This site measures 3.1 acres. The site includes three building foundation ruins, 1 rock alignment, 1 rock cluster, and 2 cairns (rock). The artifact assemblage included a variety of glass fragments, ceramics, hole in cap cans, auto parts, cut bone, clothing (rubber shoe) and a few building-related artifacts. The recorders offered a very long date range from 1845 through 1966.
10BV096	Homestead	This 0.25 acre site was identified as a homestead by the recorders, apparently based on the artifacts and the presence of a dugout feature. They dated the site to the period 1900 through 1920 based on the artifact assemblage. The artifacts include fragments of "purple and aqua" glass, a kerosene can, a lard pail, sanitary and solder-top cans, and .22 cartridge cases marked .22 W.R.F. They also observed a handful of bottles that were machine made as well as a ceramic fragment. This form is a recording from the late 1980s and some detail is missing.
10BV097	Homestead	This site covers 1.4 acres and the recorders dated it to the period from 1900 through 1930. There are some issues with the description of the site. In the site summary they report the site to be rather extensive including the remains of several dugouts, and structure foundations but the site map and Part C description indicate only one foundation and dugout combined. The artifact assemblage includes canning jars, alcohol bottles, fragments of 3 distinct ceramic vessels, farm equipment parts, domestic and food service artifacts (knives, forks, etc.), building parts, clothing items, and .22 rimfire cartridge cases among other things.
10BV120	Homestead	This 1.3 acres site is one of the most extensive in the set of forms provided by SHPO for our comparative needs. The site's features include the foundations for a 2-room dwelling, possibly of log construction, an outhouse pit, five depressions thought to be related to outbuildings, and two refuse dumps. The recorders dated the site to the period 1925-1940. They also noted the presence of Japanese artifacts. The artifact assemblage is one of the largest and most varied among all the forms we received form SHPO. The site includes ceramic artifacts from a minimum of 5 vessels, bottle glass, including elements of Kerr canning jars, and other artifacts indicate that this site is likely associated with a more prosperous homestead.
10CU95	Homestead	This site covers 3.5 acres and is unusual in the forms from SHPO because it indicates the presence of standing architecture. The buildings include a bunk house, a line camp building, a cheese storage building, a

Site Number	Site Type	Characteristics
		cheese house, and a barn. The artifact inventory on the site form is rather incomplete and only indicates the presence of ceramics, cans, glass, and metal artifacts. The recorders dated the site from the early 19 th century to the 20 th century.
10CU138	Homestead	This site covers approximately 0.5 acre and the recorders dated it to the period 1885 through 1905 based on the artifact assemblage. The assemblage includes bottle glass ("purple, brown, green, and aqua"), metal, cans (hole-in-top, ones without tops), cut bone, and iron cookware fragments. They noted two constructed features; an oven and a stone foundation. The recorders were unable to determine whether or not the site was a homestead or as they put it, "an industrial site." In the text of the report the recorders postulate that the site was a lime kiln.
10CU152	Homestead	Bob Peterson and a WCRM crew recorded this site in 1991. The site covers 1.7 acres. WCRM did not assign a date range to the site. The site included glass, metal, wire nails, crockery, rubber, kitchen utensils, bone, wire, and various domestic items. The cans recorded were sanitary cans and the nails were wire nails arguing for a post-1900 occupation date. Building parts including tarpaper and stove pipe fragments were noted on the site. The crew recorded 7 features including foundations, a rock wall, and a road, a cistern associated with Feature 3 a lumber scatter, a pit, and 2 pits or depressions.
10CU288	Homestead	This 0.08 acre site includes 2 standing buildings and a foundation (shop, shed, and grain storage bin), and 3 farm implements. The recorders dated the site to the period 1930-1950 based on the artifact assemblage. The recorders gave no details on the assemblage aside from the 3 farm implements.
10JF390	Homestead	This site covers 0.9 acre and is primarily a trash scatter with hundreds of artifacts and two other features; 1) a depression, and 2) a swale. The artifact assemblage led the recorders to date the site to the period from 1910 through the 1930s. The artifact assemblage includes nearly 1,500 artifacts. The assemblage is dominated by "purple" (629) and "clear" (752) bottle glass fragments. Both cut and wire nails were observed along with 3 cartridge cases (both shotgun and rimfire) as well as other diagnostic artifacts. This site was recommended not eligible but the form does not indicate that any archival research was done for the site.
10JF391	Homestead	This site is a relatively simple homestead site covering 0.6 acre. The site includes a foundation, a depression and a trash scatter. The recorders determined the site dated to the period from 1880 through 1920. The artifact assemblage is dominated by bottle glass including clear (73), green (7), purple (4), milk (3), and aqua (1) glass. Other artifacts include ceramic fragments (65), a canning jar lid, ceramics, a horse shoe, and a metal pin.
10BM168	Sheep Camp	This site is essentially a small trash scatter that included 10 to 15 sanitary cans and tobacco tins as well as three colorless glass bottles (2 wine, 1 chili powder). The recorders dated the site from 1920 through 1940. There is no clear explanation about it being a sheep camp rather than a trash scatter.
10BM170	Sheep Camp	As with site 10BM168, this site is a small trash scatter of bottle glass and cans, including sardine cans, and some concrete chunks. The date range

Site Number	Site Type	Characteristics
		given is 1910-1930. Again there is no clarification on the site form as to why it was assigned the site type of sheep camp.
10BM173	Sheep Camp	The site form describes a small can scatter of sanitary (primarily), "solder-top," and tobacco cans. The form says there are 30 plus cans. The recorders dated the site from 1920 through 1940. There is no clear explanation about it being a sheep camp.
10BM183	Sheep Camp	As with the previously listed sheep camps, this site is a small trash scatter of 20 or so cans and some aqua and amethyst glass fragments and an aqua "Kerr" canning jar. The recorders dated the site 1900-1920. There is no clear explanation about why it was considered to be a sheep camp.
10BM196	Trash Dump	The recorder's described this site as a World War I trash dump that included toys, bicycle parts, auto parts, china and crockery/earthenware fragments, can fragments, and bottle glass/bottles. Thee recorders dated the site 1919-1940 with the opening date coming from an auto license plate.
10CU289	Farmstead	This site includes three buildings but the recorders did not list or describe any archaeological characteristics, either features or artifacts. They dated the site ca. 1940-present.
10CU290	Splash Dam	This site is a wooden dam made of small logs to impound water for use to water livestock. The recorders did not assign a date range to the site.
10JF389	Homestead Trash Dump	This site, a trash dump, covers over 0.5 acres, and has been dated ca. 1900-1920. Of all the sites reviewed, this site has one of the most abundant and varied artifact assemblages. The artifacts included bottle glass, ceramics, barrel hoops, steel rings, bricks, tobacco tins, metal fragments, and paint can. The form does have information about local bottling companies.

In addition to the forms for the Idaho homesteads WCRM also reviewed selected reports for studies that recorded homesteads as discussed in Table 5.

Table 5. Cultural Resource Reports from Southeastern Idaho at Idaho SHPO

Author	Date	Title	Summary
DeMorris, Raena B. and Jim Sharpe	2009	Cultural Resources Evaluation: Caribou Lower Valley Transmission Line, Caribou County, Idaho.	This report held almost no background or analysis of the homesteads and tended to be a circular citation document for the background.
Harding, William M.	2005	Archaeological Investigations at the Camas National Wildlife Refuge, Jefferson County, Idaho.	This report has a short, but sound overview of regional agricultural settlement from homesteading to irrigation projects to agricultural experiment stations beginning in the late 19 th century.
Haynes-Peterson, Robert G.	1998	A Cultural Resources Inventory of the Cox's Well Emergency Fire Rehab Areas, Bingham, Power,	This report was an emergency response report and contains very little background data or

		and Blaine Counties, Idaho.	analysis of the recorded homesteads.
Henrikson, Lael Suzann	1990	Cultural Resources Survey of Proposed Fiber Optic Line Between Irwin and Riley, Idaho, for Silver Star Telephone Co.	This survey recorded one eligible homestead but offered almost nothing for background or analysis.
Hill, Richard D.	1988	Cultural Resource Inventory Report for the Twin Buttes State Exchange Selected or Public Lands, Phases I and II Serial No. I-23542.	This report has a short overview of regional agricultural settlement and homesteading as well as some well-defined site types with characteristics.
Hoffert, Thomas and Cathryn Williamson	2006	Final Report on a Class III Cultural Resource Inventory: Klemple Fuel Management Projects.	This report included summaries of three homestead-related sites from the early 20 th century and other features similar to those found at the Leopard site.
Polk, Michael R.	1989	A Cultural Resources Survey of the Proposed Dry Ridge Phosphate Mine, Caribou County, Idaho.	Found no homestead sites, but did find sites that would support homesteading such as phosphate kilns to produce fertilizer.
Williamson, Cathryn and Thomas Hoffert	2006	Final Report on a Class III Cultural Resource Inventory: Liberty Fuel Management Project, Bingham County, Idaho.	The report had a short homesteading background for the early 20 th century and did record one site possibly related to homesteading in the form of a wire and brush corral.

WCRM reviewed reports of archeological testing programs that took place in Colorado for use as comparative data for the interpretation of the Leopard site. As with the other Idaho sites and reports this activity supported addressing issues raised in Research Domains B and C and to a lesser degree Research Domain D. These selected reports are summarized in Table 6.

Table 6. Cultural Resource Reports from Colorado OAHP

Author	Date	Title	Summary
Charles, Mona, Randy Nathan and Philip Duke	1996	Evaluative Testing of Eight Archaeological Sites in the Pinon Canyon Maneuver Site, Las Animas County, Colorado.	This report included data from the archaeological testing of one site homesteaded after the Civil War that remained occupied to near the end of the 19 th century.
Charles, Mona, Thann Baker, Christine Markussen, Randy Nathan and Philip Duke	2005	Evaluative Testing of 5LA3421: A Multi-component Prehistoric and Historic Site in the Pinon Canyon Maneuver Site, Las Animas County, Colorado.	This study included the testing of a site that had a historic homestead component that dated to the 1910s and 1920s; contemporary to the Leopard site based on archival data.
Horn, Jonathon C.	2004	Landscape-Level History of the Canyons of Ancients National Monument Montezuma and	This report offers somewhat detailed descriptions of the dryland farms and ranches of

		Dolores Counties, Colorado.	the early 20 th century that are useful for comparisons to the leopard site and others in the AES study area.
Reed, Alan D., comp.	2001	The TransColorado Natural Gas Pipeline Archaeological Data Recovery Project Western Colorado and Northwestern New Mexico.	treatment of multiple homesteads contemporary with

To further broaden the comparative perspective WCRM also reviewed preservation office homesteading publications from Arizona and South Dakota. In their 1994 study of South Dakota homesteading Allyson Brooks and Steph Jacon, devoted a series of sections to the early 20th century that they organized by decades. They do a good job of explaining the mechanization of farming, the introduction of machinery, especially tractors during the early 20th century, and the impacts those things had on the farm and homestead. Pat Stein's study of Arizona homesteads also offers useful insights and information for the interpretation of homesteading during the period, especially understanding the function and meaning of some of the features found at the Leopard site and others in the AES study area. WCRM used these sources to help address issues raised in Research Domains B and C.

5.2. FIELD INVESTIGATIONS

Field investigations were conducted at 10BV246 between October 5, and November 8, 2010. Key tasks completed included:

- Remapping the entire site and updating the site surface record.
- Excavation of Features 1, 7, and 8 in Locus 1.
- Class III+ recording of Feature 8
- Photographic documentation of site features, surface overviews, and excavations.
- Collection of obsidian artifacts documented during the 2008 inventory of the overall AES APE.

With limited exceptions, tasks were completed as specified in Ringhoff and Stoner (2010); however, some modifications and enhancements were executed to accommodate the nature of the data encountered. All variances are specified in Table 7 below. Results of the field investigations and subsequent material culture analyses will form the body of the remainder of the chapter.

Table 7. Status of completed versus proposed treatments at 10BV246.

Location	Recommended Treatment	Completed Treatment	
10BV246 - General site	Detailed mapping of entire site using total station transit.	Detailed mapping of entire site using total station transit.	
10BV246 - General site	Collection of a representative sample of diagnostic historic artifacts.	Collection of a representative sample of diagnostic historic artifacts.	
10BV246 – Feature 1 (dugout)	Linear series of up to six 1 x 1 m units to be excavated by hand, with at least one placed outside the feature.	Grid of 27, 1 x 1 m units (including one placed outside the feature) excavated by hand. Initial 6 units placed in a line along middle of feature, with additional units added as necessary to expose entire extent of feature's wood floor (an unexpected discovery).	
10BV246 – Feature 7 (possible privy)	One 1 x 1 m unit placed over feature and excavated by hand to a sufficient depth to determine if feature is cultural.	One 1 x 1 m unit placed over feature and excavated by hand in ten arbitrary 10 cm deep levels, with a 1.25 m deep auger test placed at the bottom. No cultural materials were revealed.	
10BV246 – Feature 8 (historic refuse concentration)	Set up a surface grid of 1 x 1 m units to cover entire feature and do a Class III+ artifact inventory for each unit. Collect a representative surface sample of the feature's artifacts. Excavate by hand one 1 x 1 m unit to determine presence or absence of subsurface materials.	Set up a surface grid of twelve 1 x 1 m units to cover entire feature and did a Class III+ artifact inventory for each unit. Collected a representative surfact sample of the feature's artifacts. Excavated by hand one 1 x 1 m unit to determine presence or absence of subsurface materials; no subsurface cultural materials were identified.	
Multiple sites and IFs throughout the area previously inventoried by WCRM	Collect 11 obsidian bifacial tools. The twelfth artifact was discovered during the 2010 field work.	Collected 5 obsidian bifacial tools, including one newly identified. Seven obsidian bifacial tools could not be relocated.	

5.2.1 Site Mapping

Initial site mapping took place at the start of the field session with a crew of three persons using a Topcon Total Station. This effort re-documented all previously identified features and artifact concentrations and limited additional surface artifacts. In addition, four new features were also recorded at this time. No modifications were made to the site boundary, however, since all resources were within those boundaries established at the time of the 2008 inventory. Subsequent mapping was completed on an ongoing basis throughout the field sessions as excavations were completed, or expanded, and as diagnostic artifacts were encountered during the course of the excavations. Figures 6 and 7 present the updated site plan; other figures will be included in feature and excavation unit descriptions later in this section.

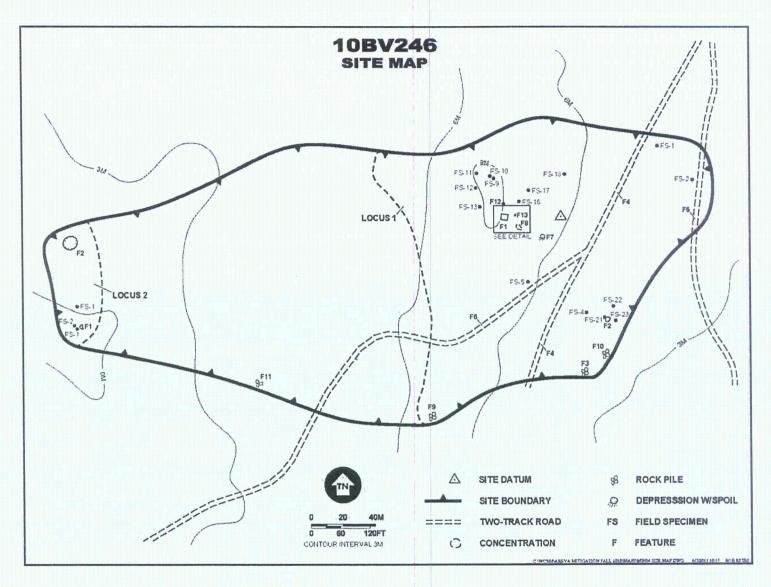


Figure 6 Updated 10BV246 site map.

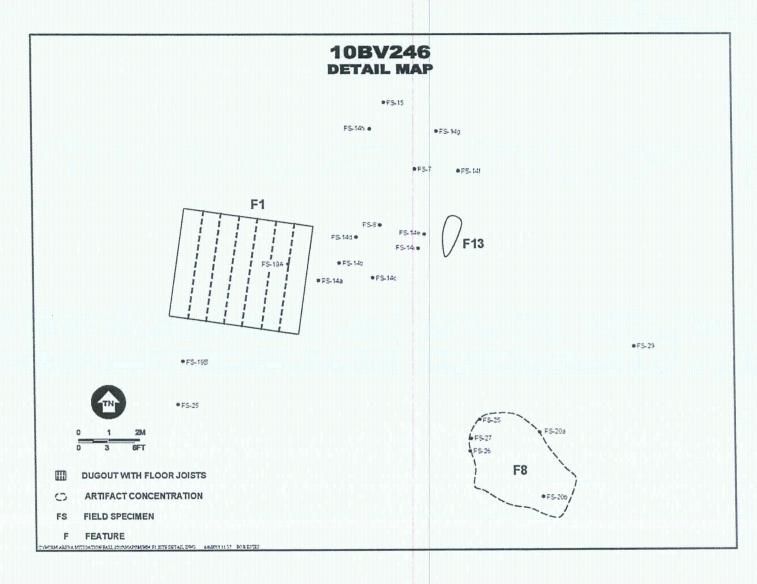


Figure 7. Detail of Feature 1 location, 10BV246

During the course of the mapping task, four additional surface features were recorded within the site (Table 8). All of these features were in Locus 1. Since they were limited to surface manifestations and included no diagnostic materials, they were considered to be of minimal information potential. As such, they were described, plotted, and photographed, but no further investigations were undertaken. In addition, a series of 20 new field specimens were also recorded across the site at this time; 18 were identified in Locus 1 and two were identified in Locus 2 (Table 9). Each field specimen was described, plotted, and photographed. Finally, in order to allow AES to proceed with tasks outside of 10BV246, a 30-m buffer was placed around the site boundary using lath flagged with blue and orange flagging.

Table 8. Additional surface features recorded during site mapping activities.

Feature Number	Description
Feature 10	Feature 10 was defined as a small rock pile in the southeastern corner of 10BV246
Feature 11	Feature 11 was defined as a 3 feet in diameter cairn comprised of 11 local volcanic rocks arranged in a roughly circular shape. These rocks ranged from 6 inches to 1.1 feet in size and the surfaces were covered with light green and yellow/orange lichen.
Feature 12	Feature 12 was identified as a 1.5 X 2.6 feet concentration of eight can lids 5 m north of Feature 1. All of the lids were internal friction types; no marks were noted on any of the items. Lid diameters ranged from 5 to 7.5 inches.
Feature 13	Feature 13 was identified as a 4.3 X 2.3 feet concentration of approximately 50 nails east-northeast of Feature 1. This feature included wire nails of various sizes; some of which were bent. The presence of bent nails confirms that they were removed from a structure once present. This feature was limited to its evident surface manifestation; no subsurface materials were associated.

Table 9. Additional Field Specimens recorded during site mapping activities.

Locus	FS	Description
Locus 1	11	Canco pail
Locus 1	12	Small Canco pail
Locus 1	13	Acme skillet
Locus 1	14	Redwing stoneware crock fragments
Locus 1	15	.22 caliber cartridge
Locus 1	16	Remington cartridge
Locus 1	17	Suspender fastener
Locus 1	18	Trunk hardware
Locus 1	19	Graniteware coffee pot
Locus 1	20	White improved earthenware fragments (Standard China) in Feature 8
Locus 1	21	Lead glazed stoneware crock fragments near Feature 2
Locus 1	22	Lead glazed stoneware crock fragments
Locus 1	23	Lead glazed stoneware crock fragments
Locus 1	24	White improved earthenware sherd (Unit 8)
Locus 1	25	Copenhagen lid (Unit 7)
Locus 1	26	Unidentified button (Unit 8)
Locus 1	27	Copenhagen lid (Unit 8)
Locus 1	28	Wire fork
Locus 2	1	Wash tub
Locus 2	2	Canco pail

5.2.2 Obsidian Artifact Collection

As per the request of Idaho SHPO, an effort was made to collect 12 obsidian artifacts that included 11documented during the 2008 inventory and one discovered during the remapping of 10BV246. Two of these were from 10BV246 and the remaining ten were either artifacts from other documented sites or were isolated finds. Of these five artifacts were relocated, including one from 10BV246, five from MW12, and one isolate (IF-18). In spite of intensive investigations of the area surrounding the other artifact locations, however, those artifacts could not be relocated. Analysis of the obsidian artifacts is currently underway and, as noted earlier, will be presented under a separate cover.

Table 10. Prehistoric artifact collection status.

Site or IF	FS	Collected?	Comments
MW02	4/	No	Not relocated.
10BV246	3	No	Not relocated.
10BV246	4	Yes	
MW07	3	No	Not relocated.
MW12	4	Yes	
MW12	5	Yes	
MW12	7	No	Not relocated.
MW12	9	No	Not relocated.
MW12	10	Yes	Newly identified FS, located where
			FS-9 should have been found.
IF-4	-	No	Not relocated.
IF-14	944948	No	Not relocated.
IF-18	-	Yes	

5.2.3 Excavation Results

After the re-mapping of the site and relocation of artifact concentrations and features, excavations were undertaken at Features 1, 7, and 8. The primary focus of the excavations was Feature 1. Originally slated for six 1×1 m units, field results dictated more extensive coverage in order to completely expose a wood floor within the feature. Although 12×1 m units were set up over Feature 8, as per the approved treatment plan, excavations were limited to a single unit. The remainder of the unit grid was used for the basis for surface artifact sampling. Finally, Feature 7 was investigated through the excavation of a single 1×1 m unit in order to define if the feature was cultural in origin.

5.2.3.1 Feature 1

Feature 1 was originally identified as an approximately 5.1 m x 4 m x 0.8 m deep, depression possibly indicative of a historic dugout. It is located 5 m east (upslope) of the Feature 8 trash dump and approximately 12 m east of Feature 7 (a possible privy). This feature was targeted in Ringhoff and Stoner (2010) to be the primary focus of field investigations during the current data recovery project.

Excavation Results

A total of six 1 X 1 m excavation units (Units 1-6) were initially set up over the presumed midline of Feature 1 (Figure 8). Unit 1 was then excavated in five arbitrary 10 cm levels until the wood plank floor of a structure was encountered (Plate 3). The stratigraphy identified in this unit was subsequently used to guide the excavation of almost all of the other units with the exception of Unit 5. Although Unit 1 contained a moderate density of artifacts, its fill was characterized by post abandonment deposits and some bioturbation (Figure 8). Since neither roof nor wall fall were noted, and stratigraphic development appeared to be limited, a modified strategy was used in Units 2-4. Units 2 and 4 were excavated as full cuts to within 10 cm of the floor. Unit 3 was initially excavated in three levels but then shifted to the full cut strategy. The full cut levels captured the material culture remains within the fill but expedited excavation (and exposure) of the floor.

Of the original units, four (Units 1 - 4) exposed planking of a wood floor approximately 70 to 90 cm below the sloping Modern Ground Surface (MGS) (Figure 9). Unit 5 was determined to be outside of the structure and was excavated in four arbitrary 10 cm levels and abandoned after the basal level (Level 4) was confirmed to be below the level of the wood floor. Unit 6 was plotted further outside the structure immediately east of Unit 5 and was not excavated.

Based upon the initial excavation results, it was determined that the structure was obviously larger than expected and could not be characterized by just the first set of excavation units. After agency consultation, it was then decided to set up a series of 22 contiguous units around the original four that had exposed the wooden floor (Units 20-41). Like Units 2-4, the units were generally excavated in either a single full cut level or in two levels, with the first terminating 10 cm above the floor. Excavations encountered a moderate density of historic artifacts and numerous faunal remains in relatively intact to severely bioturbated post abandonment sediments.

The wooden floor was then exposed in part or in full at the base of each of the 22 excavation units, until the entire floor was delineated (Plate 4). Although severely deteriorated, the floor was easily identifiable and still rather flat (Figure 10). Overall, this floor defined an almost square structure approximately 4×4 meters in size, dug slightly into the sloping ground surface. Although numerous artifacts were encountered within the fill overlying the floor, very little was definitely associated with the floor itself. In fact, the only materials assigned Field Specimen numbers were a cast iron bed frame and parts of a wood stove. A partially articulated sheep skeleton was also either on the floor or in the fill immediately above it (Plates 5 and 6).

Stratigraphic Interpretation

Feature 1 included three strata above the wood floor (Strata 1, 2a, and 2b, and 3) that are essentially all Aeolian deposited silt loams with limited locally derived volcanic gravels. The three strata differ mainly in degree of consolidation and carbonate content. Stratum 4 was identified beneath the floor. This contains higher clay content than the other strata likely due to translocation of clay sized particles and compaction beneath the Feature 1 structure floor. Rodent burrows and bioturbation were common throughout these sediments and may account for the presence of the many jackrabbit bones recovered from the feature fill.

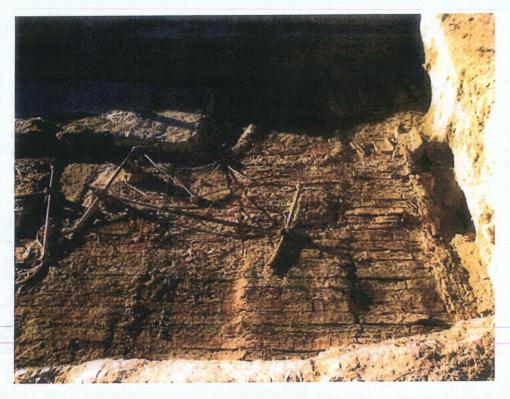


Plate 3. Initial view of Feature 1 floor, 10BV246.

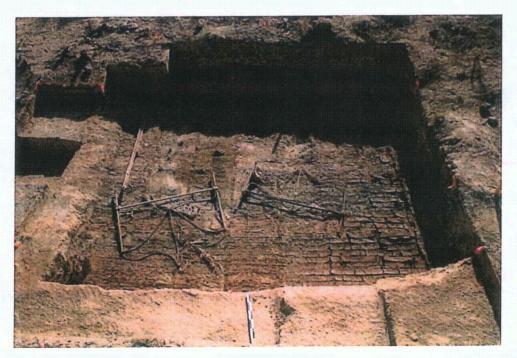


Plate 4. Exposed Feature 1 floor, 10BV246.



Plate 5. Bed frame on exposed Feature 1 floor, 10BV246.



Plate 6. Faunal remains on exposed Feature 1 floor, 10BV246.

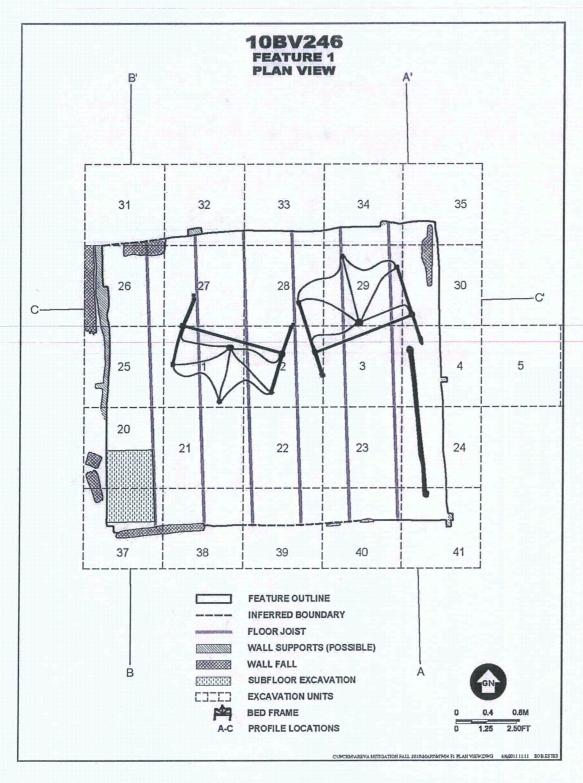


Figure 8. Plan map of Feature 1, 10BV246.

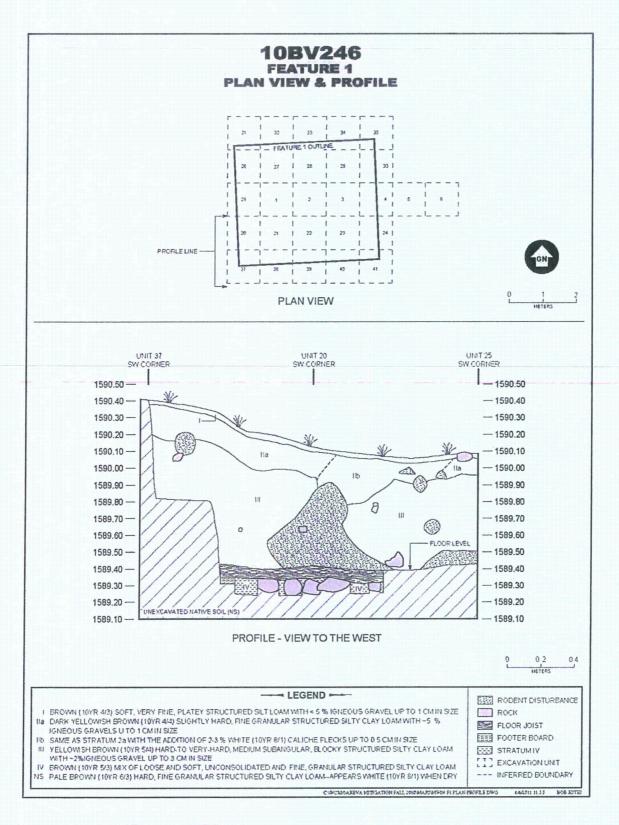


Figure 9. Profile of Feature 1, 10BV246.

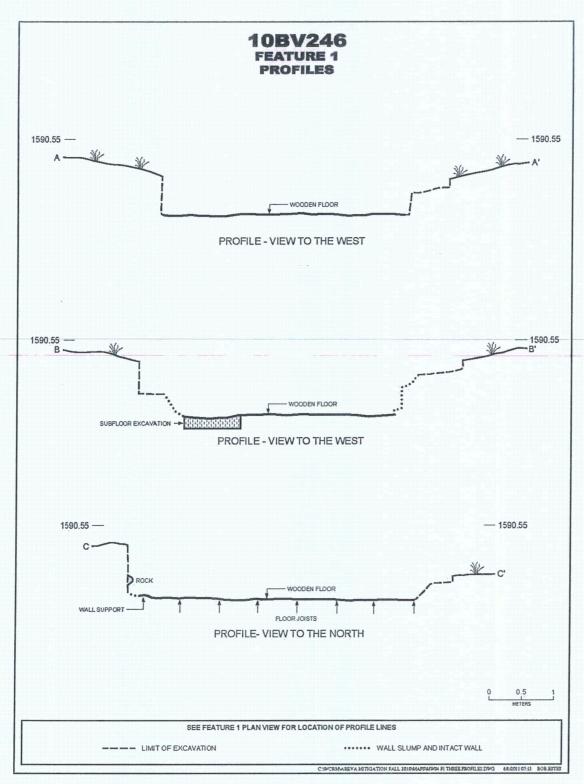


Figure 10. Architectural profile/cross-section of Feature 1, 10BV246.

Material Culture

The vast majority of artifacts from 10BV246 were recovered from the Feature 1 excavations. In total, more than 2000 items were collected; however, most of these were non-diagnostic lot finds. Diagnostic materials included limited numbers of cans parts, crockery, and small caliber munitions (Tables 11 – 14); most of these were only functionally diagnostic and generally typical of frontier life. Almost no temporally diagnostic materials were encountered in any context; however, the few that were noted (amethyst glass and a World War I era Red Cross badge) are both consistent with John Leopard's patent testimony indicating his presence between 1916 and 1919. The Red Cross's Second War Fund drive took place during May of 1918 (Anonymous 2005; Anonymous 2011). The War Fund pin is illustrated in Plate 7 below. No materials, however, were encountered to suggest any occupation earlier than this time period.



Plate 7. World War I era Red Cross Badge from Feature 1, 10BV246.

Table 11. Diagnostic metal artifacts from Feature 1, 10BV246.

Provenience	Level	Material Type	Artifact Type	Description	Date or Date Range	Total
Unit 22	2	Ferrous metal	tin can	Runkel Bros external thread lid		1
Unit 22 Total						
Unit 23	2	Brass	telecommunications equipment, other	P. C. Co. Transmission Line brass tag		1
Unit 23						1
Total		other or	personal adornment,	Red Cross 2nd War Fund		
Unit 38	2	combo	other	Badge	1918	-1
Unit 38 Total						. 1
Grand Total						3

Table 12. Diagnostic metal artifacts from Feature 1, 10BV246.

Provenience	Level	Function	Color	Bottle finish Date Range	Total
Unit 3	2	food storage tools equipment	and White (milk glass)	Finish absent	
Unit 3 Total					
		glass - bottle (unclassit	fiable	Crown cap with	
Unit 35	2	container)	Colorless	ledge]
Unit 35 Total					
		written communication	n -		
Unit 36	1	ink, mucilage	Amethyst	Finish absent	
Unit 36 Total					
		food storage tools	and White (mill	k	
Unit 4	1	equipment	glass)	Finish absent	1
Unit 4 Total					J
Grand Total					4

Table 13. Diagnostic ceramic artifacts from Feature 1, 10BV246.

Provenience	Level	Glaze	Ware Type	Shape	Total
Unit 4	0	Salt glaze	Stoneware	Crock	1
Unit 4 Total					1
Unit 5	1	Salt glaze	Stoneware	Crock	1
Unit 5 Total					1
Unit 6	GSS	Salt glaze	Stoneware	Crock	2
Unit 6 Total					2
Grand Total					4

Table 14. Diagnostic munitions from Feature 1, 10BV246.

Provenience	Level	Cartridge Type	Caliber/Gauge	Total
Unit 24	1	Centerfire	.25 caliber	1
			.32 caliber	1
Unit 24 Total		544 2		2
Unit 3	3/4	Centerfire	.45 caliber	1
Unit 3 Total				1
Unit 36	1	Rimfire	.22 caliber	2
		Centerfire	12 gauge	. 1
Unit 36 Total				3
Unit 5	1	Rimfire	.22 caliber	1
Unit 5 Total				1
Grand Total				7

As already noted, most artifacts recovered from Feature 1 were non-diagnostic lot finds (Table 15). Of more than 2000 items, however, the majority were wire nails, nail fragments, probable structure elements and faunal remains. The wire nails and other structural elements in the assemblage are likely associated with the abandonment and disassembly of the Feature 1 superstructure. The fauna is potentially more interesting and will be discussed further below.

Table 15 Lot find data from Feature 1, 10BV246.

Context	Material	Artifact	Total
10 cm	Steel	bottle cap	1
		handle (unidentifiable as to luggage, tin can, bucket)	1
		nail, cut	2
		nail, indeterminate	330
		nail, roofing	1
		nail, wire	495
		staple	1
		tack	2
		tin can	2
		wire	1
	Steel Total		836
	Bone	bone, uncut	273
	Bone Total		273
	Tar paper	tarpaper, rolled roofing	17
	Tar paper Total		17
	Glass	glass - bottle/jar - unclassifiable	2
		glass fragments, amethyst	19
		glass fragments, colorless	37
	Glass Total		58
	Shell	button	13
	Shell Total		13
	Paint	paint	3
	Paint Total		3
	other or combo	building materials or parts, other	2
		button	4
		Macrobotanical Remains	1
		shoe sole	1
		window glazing	1
	other or combo Total		9
a.	Coal	coal/coke cinders/clinkers	8
	Coal Total		8
	Copper	rivet	3
		washer	1
	Copper Total		4
	Ferrous metal	buckle	1

Context	Material	Artifact	Total
		button	2
		collar button/stud	1
		handle (unidentifiable as to luggage, tin can, bucket)	3
		metal fragments, other	81
		metal: unclassifiable, intact	1
		multiple use artifact, other	1
		rivet	1
		rivet, clothing	5
		snap	2
		wire	1
	Ferrous metal Total		99
	Aluminum	bottle cap	1
		salt cellar or salt shaker	1
	Aluminum Total		2
	Carbon	charcoal	2
	Carbon Total		2
	Ceramic	semi-vitreous earthenware/"ironstone"	1
		stoneware	2
		white improved earthenware (WIE)	25
	Ceramic Total		28
	Leather	leather	4
		personal adornment, other	23
		personal artifacts, uncategorized other	18
	Leather Total		45
	Concrete	concrete	2
	Concrete Total		2
	Wood	building materials or parts, other	2
		lumber, milled	5
	Wood Total		7
	Galvanized metal	wire	1
	Galvanized metal Total		1
	Paper	wallpaper	5
	Paper Total		5
	Zinc	jar, food	2
	Zinc Total		2
	Fibers	personal artifacts, uncategorized other	3
	Fibers Total		3
	Sulfur	artifact fragment, function unknown	1
	Sulfur Total		1
	Eggshell	Macrobotanical Remains	11
	Eggshell Total		11
	Rubber	button	1

Context	Material	Artifact	Total
	Rubber Total		1
10 cm Tota	ı	a set for	1430
Fill	Steel	barrel/parts	2
		buckle	1
		metal fragments, other	2
		nail, cut	3
		nail, indeterminate	23
		nail, roofing	2
		nail, wire	80
		rivet	17
		staple	2
		tin can	25
		wire	1
	Steel Total		158
	Bone	bone, uncut	193
	Bone Total		193
	Tar paper	tarpaper, rolled roofing	17
	Tar paper Total		17
	Glass	glass - bottle/jar - unclassifiable	2
		glass fragments, amethyst	17
		glass fragments, aqua	3
		glass fragments, colorless	35
		glass fragments, white	3
	Glass Total		60
	Shell	button	6
	Shell Total		6
	other or combo	faunal remains, other	1
		Macrobotanical Remains	1
		slag	1
	other or combo Total		3
	Coal	coal/coke cinders/clinkers	1
	Coal Total		1
	Copper	pipe	1
		rivet	8
		washer	16
	Copper Total		25
	Ferrous metal	coffeepot	1
		metal fragments, other	23
		metal: unclassifiable, intact	2
		multiple use artifact, other	1
		rivet	1
		rivet, clothing	1

Context	Material	Artifact	Total
		staple	1
		tack	1
		tubing	1
		washer	2
		wire	6
	Ferrous metal Total		40
	Ceramic	semi-vitreous earthenware/"ironstone"	1
		stoneware	2
		white improved earthenware (WIE)	55
	Ceramic Total		58
	Leather	leather	1
	Leather Total		1
	Concrete	concrete	2
	Concrete Total		2
	Cork	liner (crown cap)	1
	Cork Total		1
	Wood	lumber, milled	3
	Wood Total		3
	Galvanized metal	wire	2
	Galvanized metal Total		2
	Paper	wallpaper	14
	Paper Total		14
	Fibers	personal artifacts, uncategorized other	1
	Fibers Total		1
	Eggshell	Macrobotanical Remains	3
	Eggshell Total		3
	Brass	buckle	1
	Brass Total		1
Fill Total			589
Floor	Steel	box, tobacco	1
		nail, indeterminate	1
		nail, wire	8
		screw, machine	1
		tin can	15
	Steel Total		26
	Bone	bone, uncut	42
	Bone Total		42
	Glass	glass - bottle/jar - unclassifiable	2
		glass fragments, colorless	5
		jar, food	3
	Glass Total	J,	10
	Shell	button	2
	Siten		2

Context	Material	Artifact	Tota
	Shell Total		:
	other or combo	bottle cap	
		glass - bottle/jar - unclassifiable	
		shoe materials, combination	
	other or combo Total		
	Ferrous metal	bottle cap	
		button	2
		coffeepot	1
		handle (unidentifiable as to luggage, tin can, bucket)	
		metal fragments, other	3
		rivet, clothing]
		tin can	13
	Ferrous metal Total		23
	Iron (cast)	bed frame	3
		bolt/nut (the two are fused together)	1
		bottle opener	
		caster/wheel (furniture)	- 1
		stove cover	1
	Iron (cast) Total		11
	Aluminum	bottle cap	1
		salt cellar or salt shaker	1
	Aluminum Total		2
	Enamelware/granite ware	bowl, serving	1
	Enamelware/granite ware	Fotal	1
	Ceramic	white improved earthenware (WIE)	8
	Ceramic Total		8
	Leather	leather	1
		personal adornment, other	1
		personal artifacts, uncategorized other	1
		shoe sole	1
	Leather Total		4
	Wood	building materials or parts, other	4
	Wood Total		4
	Galvanized metal	wire	1
	Galvanized metal Total		1
	Zinc	jar, food	2
	Zinc Total		2
Floor Total			140
MGS	Enamelware/granite ware	coffeepot	1
	Enamelware/granite ware T		1
	Ceramic	white improved earthenware (WIE)	1
	Ceramic Total	mprovod cartion rate (TIL)	1

Context	Material	Artifact	Total
	Galvanized metal	wire	1
	Galvanized metal Total		1
MGS Total			3
Subfloor	Steel	nail, indeterminate	11
	Steel Total		11
	Bone	bone, uncut	12
	Bone Total		12
	Wood	building materials or parts, other	1
	Wood Total		1
Subfloor To	tal		24
Grand Total			2186

^{*}Bone totals do not necessarily reflect counts provided in the faunal analysis section due to different analytical methodologies applied in the Lot find (rough counts) and systematic faunal analysis.

If one excludes structural remains and fauna from the artifact counts, only a small assemblage of less than 600 household and/or other domestic materials were recovered, almost all of which were in postabandonment fill (Table 16). As depicted in schematic Figure 11, the floor and fill assemblages exhibit no real spatial or vertical patterning by which to infer function. Among the few artifacts encountered on the actual floor was an (already described) bed frame. This artifact could suggest the structure functioned as a habitation; however, historic records suggest a frame house was present on the property by mid-1916. It is, therefore, possible this was either a temporary residence or was a storage structure associated with the house (or perhaps both). The moderately ornate frame was quite typical of the early 20th century and can still be occasionally encountered in antique stores today. Other temporal diagnostics in this assemblage include 36 fragments of sun-colored amethyst glass which (again) tie the occupation of the site to pre-1920 but there are no indications to suggest the site was occupied much earlier than this date.

Table 16. Distribution of lot find artifacts excluding building materials and fauna.

Context	Material	Artifact	Total
10 cm	Steel	bottle cap	1
		handle (unidentifiable as to luggage, tin can, bucket)	1
		tin can	2
	Glass	glass - bottle/jar - unclassifiable	2
		glass fragments, amethyst	19
		glass fragments, colorless	37
	Shell	button	13
	other or combo	button	4
		shoe sole	1
	Coal	coal/coke cinders/clinkers	8
	Copper	rivet	3
	Ferrous metal	buckle	1
		button	2
		collar button/stud	1
		handle (unidentifiable as to luggage, tin can, bucket)	3
		metal fragments, other	81
		metal: unclassifiable, intact	1
		multiple use artifact, other	1
		rivet	1
		rivet, clothing	5

Context	Material	Artifact	Total
		snap	2
	Aluminum	bottle cap	1
		salt cellar or salt shaker	1
	Carbon	charcoal	2
	Ceramic	semi-vitreous earthenware/"ironstone"	1
		stoneware	2
		white improved earthenware (WIE)	25
	Leather	leather	4
		personal adornment, other	23
		personal artifacts, uncategorized other	18
	Zinc	jar, food	. 2
	Fibers	personal artifacts, uncategorized other	3
	Sulfur	artifact fragment, function unknown	1
	Rubber	button	1
10 cm Tota		outton	273
Fill	Steel	barrel/parts	2
	2001	buckle	1
		metal fragments, other	2
		rivet	17
			25
	CI.	tin can	
	Glass	glass - bottle/jar - unclassifiable	2
		glass fragments, amethyst	17
		glass fragments, aqua	3
		glass fragments, colorless	35
		glass fragments, white	3
	Shell	button	6
	other or combo	slag	1
	Coal	coal/coke cinders/clinkers	1
	Copper	rivet	8
	Ferrous metal	coffeepot	1
		metal fragments, other	23
		metal: unclassifiable, intact	2
		multiple use artifact, other	1
		rivet	î
		rivet, clothing	1
			1
	.	tubing	1
	Ceramic	semi-vitreous earthenware/"ironstone"	1
		stoneware	2
		white improved earthenware (WIE)	55
	Leather	leather	1
	Cork	liner (crown cap)	1
	Fibers	personal artifacts, uncategorized other	1
	Brass	buckle	1
Fill Total			215
Floor	Steel	box, tobacco	1
		tin can	15
	Glass	glass - bottle/jar - unclassifiable	2
		glass fragments, colorless	5
		jar, food	3
	Shell	button	2
	other or combo	bottle cap	1
		glass - bottle/jar - unclassifiable	2
		shoe materials, combination	1
	Farmona mat-1		1
	Ferrous metal	bottle cap button	2
		DUITON	2

Context	Material	Artifact	Total
		coffeepot	2
		handle (unidentifiable as to luggage, tin can, bucket)	1
		metal fragments, other	3
		rivet, clothing	1
		tin can	13
	Iron (cast)	bed frame	3
	· · · · · · · · · · · · · · · · · · ·	bottle opener	5
		caster/wheel (furniture)	1
		stove cover	1
	Aluminum	bottle cap	1
		salt cellar or salt shaker	1
	Enamelware/granite		
	ware	bowl, serving	1
	Ceramic	white improved earthenware (WIE)	8
	Leather	leather	1
		personal adornment, other	1
		personal artifacts, uncategorized other	1
		shoe sole	1
	Zinc	jar, food	2
Floor Total			82
	Enamelware/granite		
MGS	ware	coffeepot	1111
	Enamelware/granite ware Total		
	Ceramic	white improved earthenware (WIE)	1
MGS Total			2
Grand Total	TO SHOW THE TAX TO SHOW THE		572

	U	nit 31	U	nit 32	Ur	nit 33	Ur	nit 34	Ur	nit 35		
iii	1	0.1%	2	0.1%	23	1.2%	15	0.8%	39	2.1%		
loor	0	0.0%	1	0.6%	2	1.2%	3	1.8%	6	3.6%		
	U	nit 26	U	nit 27	Uı	nit 28	Ur	nit 29	Uı	nit 30		
ill i	28	1.5%	34	1.8%	134	7.2%	131	7.1%	80	4.3%		
loor	0	0.0%	3	1.8%	3	1.8%	11	6.7%	10	6.1%	5 30	
	U	Init 25	l	Jnit 1	U	Init 2	U	nit 3	U	nit 4	Un	nit 5
ill	30	1.6%	95	5.1%	136	7.3%	51	2.7%	86	4.6%	95	5.19
loor	1	0.6%	2	1.2%	29	17.6%	18	10.9%	7	4.2%	0	0.09
	U	Init 20	U	nit 21	U	nit 22	Uı	nit 23	U	nit 24	Un	it 36
ill .	60	3.2%	63	3.4%	78	4.2%	128	6.9%	129	7.0%	72	3.99
loor	30	18.2%	2	1.2%	7	4.2%	12	7.3%	3	1.8%	0	0.0
	Unit 37		Unit 38		Unit 39		U	nit 40	υ	nit 41		
ill	24	1.3%	40	2.2%	61	3.3%	171	9.2%	216	11.6%		
loor	1	0.6%	1	0.6%	3	1.8%	5	3.0%	5	3.0%	24 July	

Figure 11. Schematic representation of artifact distribution within Feature 1.

Faunal Analysis

Among the more surprising components in the material culture from Feature 1 was a rather large faunal assemblage. An assemblage of approximately 600 items was submitted to Andrea Gregory, Director of Paleoenvironmental Services at Archaeological Consulting Services Ltd., in Tempe, Arizona. Identifications were then made using the ACS comparative specimens collection, as well as published reference materials in the ACS library. For purposes of the analysis, the frequency of each taxon was counted using number of identifiable specimens (NISP). In addition to counts of NISP, minimum number of elements (MNE) was recorded to more accurately analyze fragmentation.

Taxa

Based upon the results of this analysis, the taxa with highest frequencies were domesticated animals, including particularly domestic sheep/goat which may have been raised on-site, as well as significant numbers of jackrabbits. In addition, chicken, cottontail, carnivore, pika, and rodent were also present, although in much lower frequencies (Table 17). The distribution of animals is consistent with a Historic period sheep/goat ranching homestead, which showed a general reliance on domesticated animals supplemented with wild animals such as jackrabbit. The presence of most body portions as well as eggshell, likely associated with chickens, suggests that chickens were likely present at the site in whole form, either as chickens kept in yards or pens or purchased and cooked as whole fryers. The range of elements, particularly those from non-meat bearing elements such as sternum, vertebral, sacral, and innominate fragments, further supports the hypothesis that the birds were relatively complete when they entered the site.

Table 17. Taxa represented at 10BV246.

Taxon	MNE	%
Class Mammalia	1	0.19%
Family Bovidae	1	0.19%
Family Leporidae	2	0.38%
Family Muridae (including Cricetidae)	1	0.19%
Gallus gallus	11	2.06%
Large bird	3	0.56%
Large Mammal	25	4.69%
Lepus sp.	186	34.90%
Medium bird	2	0.38%
Medium/Large Mammal	16	3.00%
Microtus sp.	5	0.94%
Onchonta princeps	2	0.38%
Order Artiodactyla	97	18.20%
Order Carnivora	3	0.56%
Order Lagomorpha	10	1.88%
Order Rodentia	7	1.31%
Ovis/Capra	110	20.64%
Reithrodontomys sp.	1	0.19%
Small Animal	7	1.31%
Small Mammal	33	6.19%
Small/Medium Mammal	1	0.19%
Spermophilus sp.	1	0.19%
Spermophilus/Ammospermophilus sp.	2	0.38%
Sylvilagus sp.	6	1.13%
Grand Total	533	100.00%

Spatial Association

No differential patterning was noted between material associated with fill versus floor contexts within Feature 1 in terms of taxonomic frequencies or element patterning. Jackrabbit remains were found within the same contexts as butchered sheep/goat remains, making it unlikely that these represent only intrusive animals and bolstering the argument that jackrabbits were a supplement to the diet of the homesteaders. All butchered elements, however, were associated large mammals and/definitive sheep in floor contexts or immediately above floor contexts; no butchered elements were recovered from fill (Table 18 and 19). The same was also true of burned bones.

Table 18. Taxa exhibiting burning or butchering.

Taxon	Modification	MNE	%
Large Mammal	Burned	1	1.33%
Large Mammal Total	and the same of th	1	1.33%
Order Artiodactyla	Burned	22	29.33%
	Butchered	3	4.00%
Order Artiodactyla To	otal	25	33.33%
Ovis/Capra	Butchered	49	65.33%
Ovis/Capra Total	的特別的問題的問題的問題的問題	49	65.33%
Grand Total		75	100.00%

Table 19. Spatial Associations of Bone Modifications

Modification	Context	MNE	%
Burned	10 cm or less above floor	20	3.75%
	Floor	3	0.56%
Burned Total		23	4.32%
Butchered	10 cm or less above floor	42	7.88%
	Floor	10	1.88%
Butchered Total		52	9.76%
Dissolved	10 cm or less above floor	6	1.13%
Dissolved Total		6	1.13%
Fractured	10 cm or less above floor	9	1.69%
	Fill	12	2.25%
	Floor	9	1.69%
	Subfloor	1	0.19%
Fractured Total		31	5.82%
Fresh Breaks	10 cm or less above floor	14	2.63%
	Fill	88	16.51%
	Floor	9	1.69%
	Subfloor	1	0.19%
Fresh Breaks Total		112	21.01%
Immature	Fill	30	5.63%
	Floor	3	0.56%
Immature Total		33	6.19%
None	10 cm or less above floor	93	17.45%
	Fill	43	8.07%
	Floor	10	1.88%
	Subfloor	7	1.31%
None Total		153	28.71%

Modification	Context	MNE	%
Polished	10 cm or less above floor	1	0.19%
	Fill	1	0.19%
Polished Total	A STATE OF THE STA	2	0.38%
Root etched	10 cm or less above floor	34	6.38%
	Fill	10	1.88%
	Floor	8	1.50%
	Subfloor	2	0.38%
Root etched Total		54	10.13%
Stained	10 cm or less above floor	3	0.56%
	Fill	2	0.38%
	Floor	2	0.38%
Stained Total		7	1.31%
Unfused	10 cm or less above floor	13	2.44%
	Fill	39	7.32%
	Floor	5	0.94%
Unfused Total		57	10.69%
Weathered	10 cm or less above floor	1	0.19%
	Floor	2	0.38%
Weathered Total		3	0.56%
Grand Total		533	100.00%

Faunal Analysis Summary

The taxa with highest frequencies from 10BV246 were domesticated sheep/goat and jackrabbits. The distribution of animals revealed by the analysis is expected for a sheep/goat ranching homestead, which would show a general reliance on raised sheep/goat, supported by chicken, possibly turkey, and apparently significant numbers of jackrabbits. The lack of saw butchering marks and the presence of all elements associated with sheep/goat indicate that commercial butchering was not the primary means by which occupants obtained meat, but rather through local or individual butchering at the homestead. The occupants of the homestead were likely using all portions of the carcass, as would have been typical of farming and ranching families. Jackrabbit remains were found within the same contexts as butchered sheep/goat remains, supporting the hypothesis that jackrabbits were an important dietary supplement. Chickens may have been kept in yards and pens in small numbers.

Feature 1 Summary

Prior to excavation, Feature 1 had been identified as a possible dugout. The results of the excavations confirm this general association. Feature 1 represents an approximately 4 X 4 m structure with an intact (albeit) deteriorated wood plank floor. This structure was not deeply excavated; it is cut less than a meter into the surrounding matrix. Nevertheless, it was still cut into the east sloping terrain. From a technical perspective, it then does represent a dugout structure although not perhaps in the classic sense of deeply excavated houses noted in other parts of the West (Plate 8).



Plate 8. Representative Image of a Classic High Plains Dugout structure (Minnesota Historical Society).

It is possible that this feature represented an initial residence prior to the construction of a frame house noted in Leopard's patent and recorded on a 1917 GLO plat of the section. This proposed initial function is based largely upon the presence of a bed frame and wood stove parts on the floor of the structure. Notably, the Feature does not appear on the GLO plat; both frame structures and a cistern are depicted on the opposite side of a historic road (site Features 4 and 6). An alternative function could have been as a storage structure or as a more specialized structure associated sheep herding activities on site. The large faunal assemblage, dominated by sheep, probable sheep, and rabbits were almost exclusively associated with Feature 1. As already noted, the association of the fauna does not appear to be incidental since it was heavily weighted towards floor and near floor context. In addition, all burned and butchered remains were also exclusively from these contexts, with butchered remains being comprised of only sheep/goats and probable sheep. Temporal association for the feature appears to be quite narrow. Diagnostic materials date to the early 20th century (most likely to circa 1915 to 1920)

5.2.3.2 Feature 7

Feature 7 was tentatively defined at the time of the original inventory as a possible privy location. Since it was, however, in a location of extensive rodent and other animal bioturbation, this function could not be confidently demonstrated. In order to clarify its function, a single 1 X 1 m excavation unit was centered over the feature (Unit 19). This was excavated to a depth of 1 m though a series of ten arbitrary levels (Figure 12). Soils within the unit were consistently sterile silty loams with calcium carbonate inclusions; color ranges were 10YR 5/3 to 5/6. A 4.1' deep auger probe was then excavated through the base of the unit. This again yielded sterile soils with comparable texture and color to the overlying levels. Altogether, soils throughout the unit and auger test appeared to be consistently bioturbated and there was no evidence of the hypothesized privy.

Material Culture

No cultural materials were identified within the unit. A small assortment of small mammal bones (rabbit) were noted at the MGS but these were likely incidental and almost certainly of natural origin.

Feature 7 Summary

Based upon the available evidence, Feature 7 appears to be a disturbed animal burrow rather than a privy (or other cultural feature). Since no evidence was recovered to suggest a cultural origin, and no material culture remains were identified, Unit 19 was abandoned after excavation of the auger test and no further work was undertaken in this location.

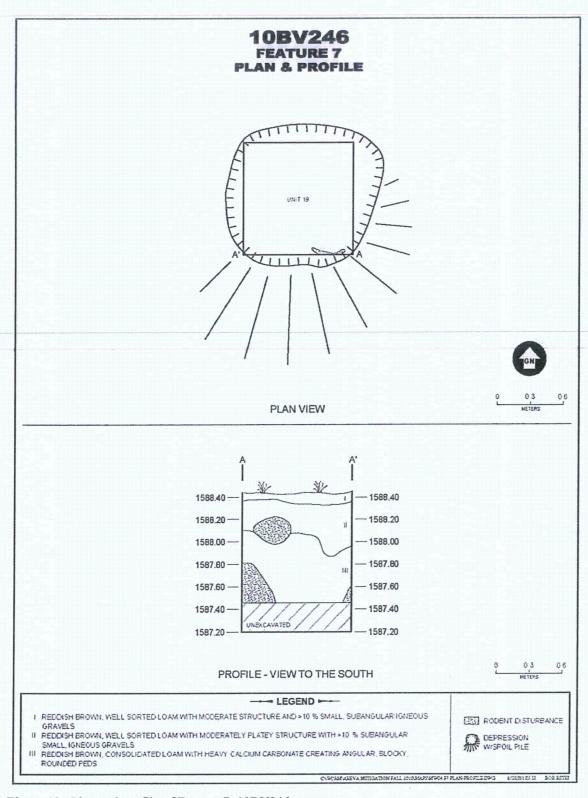


Figure 12. Plan and profile of Feature 7, 10BV246.

5.2.3.3 Feature 8

Feature 8 was defined at the time of the original inventory as a trash scatter measuring approximately 9.8 feet in diameter located 16.4 feet down slope of Feature 1. As per the approved treatment plan, this feature was slated for Class III+ level recordation of the surface assemblage and then excavation of a single 1 X 1 m excavation unit (Unit 11) to characterize the stratigraphy and deposition and assess the potential for subsurface deposits.

Class III+ Sampling Results

The initial Class III+ analysis of Feature 8 documented a moderate to sparse density of surface artifacts typical of the early 20th century. This assemblage was comprised of domestic and household artifacts with lesser quantities of recreational artifacts (tobacco tins). Overall, the assortment of materials does lend some support to the idea that Feature 1 may have functioned as at least a short term habitation. The limited nature of the assemblage, however, certainly would not suggest an occupation of more than a few years.

Table 20. Results of Feature 8 Class III+ analysis.

Unit#	Artifact Category	Artifact Type	Count
7	Tin Cans	Venthole	2
		External Friction Lid	1
		Sanitary	1_
		Upright Pocket Tobacco	1
		Pail lug	1
		Indeterminate fragments	3
	Miscellaneous	Tiny fragment of blue and white enamel flaked from an enamelware vessel	1
8	Tin Cans	Hole-in-Cap	4
		Venthole	2
		External Friction Lid (1- Copenhagen Tin FS-27)	2
		Sanitary	2
		Upright Pocket Tobacco	1
		Pail with lugs and bail	1
		Indeterminate fragments	3
	Ceramics	Indeterminate fragments	2
	Miscellaneous	Shell two-hole sew through button (FS-26)	1
		Shard of amethyst glass	1
9	Tin Cans	Venthole	3
		External Friction Lid (Copenhagen Tin FS-25)	1
		Lard pail with lugs for bail	1
		Indeterminate fragments	3
	Ceramics		
10	Tin Cans	Sanitary	8
		Hole-in-Cap	4
		Venthole	4
		External Friction Lid	1
		Stamped can end fragment	1
		Can end	1
		Indeterminate fragments	1
	Glass	Milk glass body fragment	1
11	Tin Cans	Hole-in-Cap	7
		Venthole	7
		Sanitary	4
		Stamped can end fragment	3
		External Friction Lid	1

Unit#	Artifact Category	Artifact Type	Count
		Upright Pocket Tobacco (cover)	1
		Indeterminate fragments	5
	Ceramics	White Improved Earthenware fragment	2
	Glass	Colorless flat fragment	1
12	Tin Cans	Sanitary	10
		Hole-in-Cap	9
		Venthole	9
		Internal Friction Lid	2
		External Friction Lid	1
		Pail with lugs for bail	2
		Upright Pocket Tobacco	1
		Indeterminate fragments	15
	Ceramics	White Improved Earthenware fragment	6
	Glass	Colorless fragments	8
	Miscellaneous	1/8" Diameter Copper Wire fragment	1
13	Tin Cans	Sanitary	2
		Venthole	2
		Hole-in-Cap	1
		External Friction Lid	1
		Bail for pail	1
14	Tin Cans	Venthole	8
		Sanitary	5
		Hole-in-Cap	3
		External Friction Lid	1
		Indeterminate fragments	6
		Bail for pail	1
	Ceramics	White Improved Earthenware fragments	11
15	Tin Cans	Hole-in-Cap	4
		Sanitary	4
		Venthole	3
		Stamped can end	1
		Indeterminate fragment	1
	Ceramics	White Improved Earthenware fragments	6
	Glass	Colorless fragments	2
16	Tin Cans	External Friction Lid	1
		Hole-in-Cap	1
17	Tin Cans	Venthole	2
		Stamped can end	2
		Indeterminate fragment	1
	Glass	Colorless fragments	2
18	Tin Cans	Venthole	1
		Stamped can end	1
		Bail for pail	1
	Ceramics	White Improved Earthenware fragments	18
		White Improved Earthenware base fragment marked " DARD/ HIN.	
		" (FS-20)	1
	Glass	Colorless fragment	1

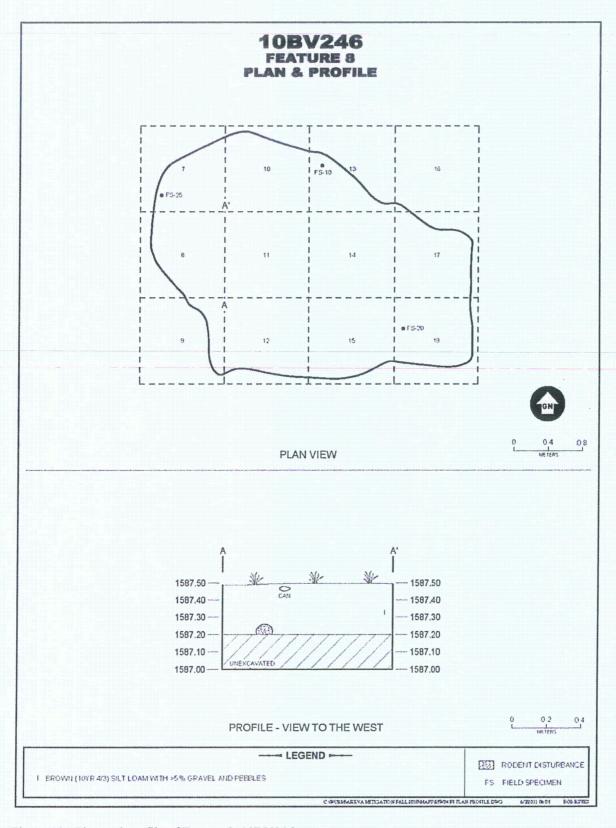


Figure 13. Plan and profile of Feature 8, 10BV246.

Excavation Results

Unit 11 was excavated in three arbitrary levels to a depth of slightly greater than 30 cm below MGS. The soil encountered within the three levels was a 10 YR 4/3 silty loam with a low incidence of gravel inclusions (Figure 13). Artifacts were concentrated in the upper 20 cm of the feature, with only a single white improved earthenware sherd noted in Level 3. The remainder of Level 3 was otherwise completely sterile and there appeared to be no potential for additional buried deposits. The thin nature of the deposit suggests that the feature was probably only used for a limited period of time. The lack of stratigraphy, however, likely also indicates this usage was (more or less) continuous for that brief usage.

Stratigraphic Interpretation

Deposits of loess derived from the Snake River Plain blankets large areas of southeastern Idaho including the AREVA APE (Mahar 2005). These fine grained aeolian sediments were deposited at the end of the Pleistocene Epoch and in the study area range in thickness from a few centimeters to several meters. Feature 8 exhibits a single massive silt loam stratum with low gravel content derived from local basaltic outcrops. The depth of the loessal soil is unknown

Material Culture

A total of 224 artifacts were recovered from Feature 8. With the exception of a single two-hole shell button from Unit 8 and a white improved earthenware sherd with a partial illegible maker's mark from Unit 13, all materials were recovered from Unit 11. These two artifacts were identified as Field Specimens and collected from the MGS. The remaining materials represent a relatively typical early to mid-20th century domestic assemblage (Table 21). The density of artifacts, however, is relatively light. When considered along with the thin nature of the deposit and lack of internal stratigraphy, this again suggests a short duration/use history for the dump.

The artifact assemblage is dominated by a variety of can fragments, colorless container glass fragments, and white improved earthenware sherds. Unfortunately, like many small trash scatters across the West, it also includes very few temporally diagnostic artifacts. In fact, the only such diagnostic artifact was a single fragment of sun-colored amethyst glass from Level 1. Although this could suggest a pre-1920 association for the feature, a single fragment of glass cannot be taken as definitive evidence. Faunal remains included several small animal and bird bones (probably chicken) (see Appendix B for additional details on the faunal analysis). These were likely consumed by the residents of 10BV246 but (unfortunately) the frequency is too low to indicate whether or not chickens were raised on site.

Table 21. Material culture remains recovered from Feature 8, 10BV246.

Unit	Level	Artifact	Total
Unit 11	MGS	glass fragments, colorless	1
		tin can	28
		white improved earthenware (WIE)	2
	MGS Total		30
	1	coal/coke cinders/clinkers	2
		glass fragments, amethyst	1
		glass fragments, colorless	6
		lumber, milled	. 6 1

		staple	2
		tin can	60
		white improved earthenware (WIE)	6
		wire	1
	1 Total		79
	2	bone, uncut	6
		bottle stopper	1
		coal/coke cinders/clinkers	10
		footwear, other	1
		glass fragments, colorless	34
		nail, wire	1
		staple	3
		tin can	29
		white improved earthenware (WIE)	26
Trans.	2 Total		111
	3	white improved earthenware (WIE)	1
	3 Total		1
Unit 11 T	Fotal	CONTROL OF A CONTR	222
Unit 13	MGS	white improved earthenware (WIE) w/"ardina" mark	1
	MGS Total		1
Unit 13 T	Total	Captures district solding and acceptance of the	1
Unit 8	MGS	Two-hole shell button	1
	MGS Total		1
Unit 8 To	otal		1
Grand To	otal		224

Feature 8 Summary

Feature 8 represents a small early to mid-20th century trash dump. This dump is comprised of a thin mantle of trash extending to a depth of no more than 20 cm below the MGS. As such, it is essentially a surficial deposit. Like many similar trash scatters of the early to middle part of the century, it is includes few (if any) temporally or functionally diagnostic artifacts. Although logically associated with Feature 1, since it is only a few meters down slope of that feature, the limited nature of the deposit makes it difficult to establish any direct associations.

Based upon the available evidence, the feature certainly constitutes a 20th century domestic trash scatter but it appears to have been used for a relatively limited duration. The total sample of artifacts is less than 225 items (plus approximately 250 additional surface artifacts identified during the Class III+ analysis) and the material culture categories represented are quite limited. The general lack of internal stratigraphy suggests a short duration as well, rather than a dump that was revisited over time. Since John Leopard disappears from the historic record after the patenting of the property, this could support the position that he abandoned the associated homestead soon after it was successfully patented.

CHAPTER 6. ASSESSMENT OF RESEARCH DESIGN

WCRM developed a set of research questions grouped into four Research Domains based on factors that included: 1) the previous research and research concerns for the region; 2) research from other early 20th century Western homesteads; 3) the historic context statement developed for the Class III survey; and 4) that reflected the historic values held by the John Leopard Homestead Site as expressed by the physical resources known to exist there (Ringhoff et al. 2008). The historic context for this project and site is defined as Homesteading and Agricultural Settlement on the Snake River Plain, 1910-1960. The context and associated resource are related to the NRHP areas of significance of Agriculture, Commerce, Communications, Community Planning and Development, Ethnic Heritage, and Social History (National Park Service 1991:8).

The recorders and reviewers felt the site to have been a small homestead only occupied for a short time based on the physical remains at the site. The archeological record of the initial recording did not offer conclusive evidence as to whether Leopard farmed or ranched the land and for how long. The minimal remains of a built environment at the homestead did nothing to clarify the homestead's agricultural function. WCRM interpreted Locus 1 to be the remains of the residential component centered on a dugout. WCRM adopted Hardesty's (1994:86) approach to understanding the critical nature of household size and composition when studying settlers of the West. Hardesty further explained his idea by saying the physical remains of living areas are key to exploring this topic. All these considerations about the demography and functions of the site helped WCRM define the Research Domains and related questions in Research Domains A and B.

The regional overview also noted that many of the homesteads of the late 19th century were abandoned or consolidated into larger, often corporate, ranches. The pattern did not appreciably change by the 1910s when John Leopard settled his half section. Success in the 1910s-20s period meant that an individual was extremely hardy and/or backed by outside support, such as the Mormon Church. The Great Depression presented the farmers and ranchers with even greater hardships. These problems led many homesteaders to give up and move away, often selling out to their neighbors, often the larger ranchers. Typically, researchers consider these homesteads to have "failed." However, this was not always the case when settlers saw the land as a commodity which would provide a return, not as a home. These individuals never intended to make their homestead into a permanent home. This pattern has been identified in other arid and semiarid parts of the West; the homesteaders sold out to larger ranching operations after proving up (patenting) their homesteads for a profit (Church and Clark 2007:260-261). WCRM incorporated these considerations into Research Domain C (Ringhoff and Stoner 2010:15-16).

As discussed in the brief overview of regional history in Chapter 2, southeastern Idaho's ranching and farming heritage began in the mid-19th century when Mormon colonists entered the area to farm and raise livestock. The pioneers quickly recognized the need for irrigation if agricultural settlement were to succeed (Otteson 2005: 18-19). The Mormon cooperative colony approach to settlement equipped members of the LDS church to succeed where others would fail. Mormon ideology is reflected in land use and the built environment, as seen in the symmetrical plans of Mormon townsites and the rural landscapes associated with their rural agricultural settlements. This element of the regional heritage led to the development of Research Domain D that considered the possibilities of the Leopard Site being related to the Mormon settlement patterns or that it could be a counterpoint to the Mormon model.

To assure the data recovery efforts stayed focused on the research domains WCRM developed a series of data needs and data expectations for each Research Domain. The data expectations explained the manner that the needed data would be utilized to answer the questions, building the linkages between the data and the questions.

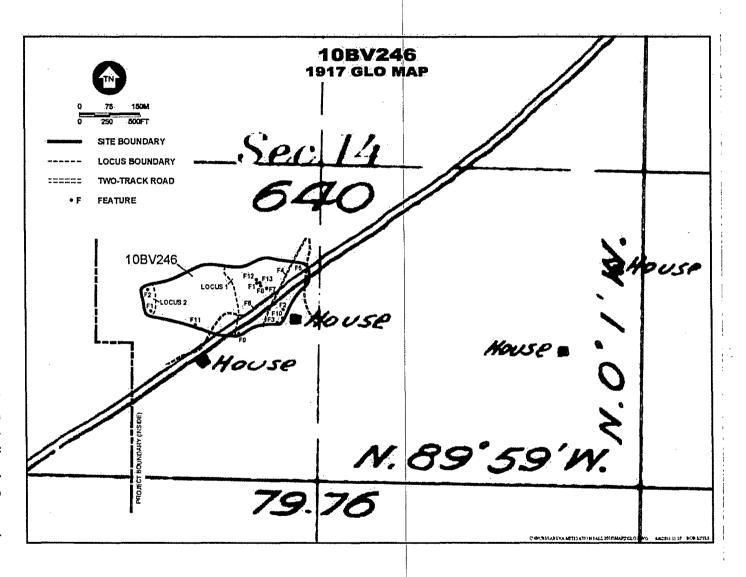
6.1 Research Domain A focuses on the demographics of the John Leopard Homestead Site (10BV246) and includes four research questions. The answers to and interpretations of these questions relied heavily on the archival material gathered during the course of the project. The Research Domain A questions include:

What was the time period of 10BV246's occupation or occupations? Does the artifact assemblage reflect any patterns that can be tied to larger known patterns in the region, from economic rises and falls to climate changes? Does the archaeological and historical evidence suggest that this was a "failed" homestead as opposed to a consciously temporary investment of time and labor designed to consolidate multiple parcels? Is there a connection between this site's occupation and legislation postdating the 1862 Homestead Act, like the 1894 Desert Land Act, the 1909 Enlarged Homestead Act, or the 1916 Stock Raising Homestead Act?

6.1.1 Archival Interpretations

Archival evidence for addressing question 1 indicates the only occupant of the John Leopard Homestead Site was John Amer Leopard, the homesteader who gained the original patent from the federal government. Leopard began his residency on the land on February 10, 1916 however, over the three years of his proving-up he took leaves of absence as allowed by the provisions of the Homestead Act then in force (National Archives, Washington, D.C., General Land Office Homestead Patent Records, Record Group 49, John A. Leopard Patent Case File, Patent 71785; hereafter cited as Patent 71785). The field notes for the cadastral survey of the township from May and June of 1916 as well as the plat dated February 28, 1917 indicate the presence of two houses in the half-section of Leopard's claim (Figure 14). Unfortunately the surveyors did say whether the houses were occupied or who the occupants were (GLO Records 2011). WCRM searched for subsequent owners of the land in records of Bonneville County and the Idaho State Historical Society Research Center and found no evidence of further occupation of the land after Leopard received the patent in the fall of 1919. The Museum of Idaho's records also offered no indications of occupation of the land after 1919.

Simply put, the archival answer to the second question as to the demographic makeup of the site and whether or not the site was a single household, is that it was a single household made up of a single male. Leopard said in his "Testimony of Claimant" in the final proof for his homestead that he was a single, native-born American from Missouri (Patent 71785). This is further supported by his World War I draft registration card (Plate 9) (World War I Selective Service System Draft Registration Cards, 1917-1918). John Amer Leopard appears in the 1900 census as a member of his father's household in Missouri and in no other census records for the early 20th century (1900 Manuscript Census). Review of state and local directories in Idaho Falls and at the Historical Society in Boise did not list Mr. Leopard.



Homestead Parcel (west ½ of Section 14), General Land Office, 1917. Figure 14. Section of Township Plat for Township 3North, Range 34 West Including the Leopard

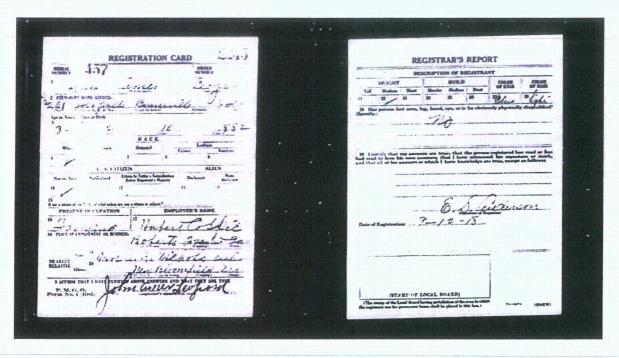


Plate 9. John A. Leopard draft registration card from Ancestry.com and the National Archives and Records Administration.

In answering the third question, the archival records found by WCRM indicate that occupation of the site covered only a limited number of years. The archives further indicate that even during those years the resident did not live at the site year around. John Leopard testified that he moved to the site in February of 1916 and that during the ensuing three and two-thirds years he took four leaves of absence. The first was from August of 1916 through February of 1917.

Leopard's second leave took place from July through October of 1917. He left the homestead for a third time at the end of May 1918 and returned about September 1, 1918. His final leave occurred from November of 1918 through March, 1919 (Patent 71785). The 1920 census does not list John Amer Leopard as being a resident of Idaho or any other state while other settlers in the AES study area were listed by the enumerators. For example, Leslie Washington, one of the persons who offered testimony in support of Leopard's homestead application, was still present in the area (1920a Manuscript Census). The sketchy records available for the land from 1919 through 1945 do not mention any occupation of the land. For example, by 1940 Idaho Livestock Lands, Inc. owned the Leopard Homestead tract along with hundreds of other acres in and around the AES study area. They used this vast acreage used for grazing (Metsker 1940). WCRM found no information about the Idaho Livestock Lands company in the records of the Idaho Secretary of State's office. A few years later, in 1945, Irving E. and Ethel J. Clayton sold the Leopard Homestead land, along with numerous other tracts, to D.F. Richardson. The deed for the sale indicated that by 1945 there were no improvements on the land (Bonneville County Recorder, Idaho Falls, ID., Deed Book 51, Page 157; hereafter cited as Deed Book 51).

The archival record regarding the relationship between John Leopard, the occupant of the homestead at site 10BV246, and other settlers in the larger rural community of the region contains very little to document contacts between Leopard and his neighbors. The General Land Office records indicate that

Leopard's brother, Samuel Smith Leopard, claimed and then patented 320 acres of land west of John's homestead in October of 1920 (GLO Records 2008). Like his brother, Samuel Leopard also took leaves of absence and left the area at times. For example, he and his wife were in Los Angeles in April 1920 when the census was taken; apparently returning to Idaho over the summer to finish the patenting process (1920b Manuscript Census). Presumably, as brothers, the two Leopards had contact with each other and likely helped on projects such as clearing the land, planting, or harvesting large fields. The other neighbors, such as members of the Washington family, testified on behalf of John Leopard for his homestead application (Patent 71785), but no other connections between the Washingtons and Leopard could be found during the period.

The relationship between John Leopard and the dominate Mormon culture of early 20th century Bonneville County and southeastern Idaho will be explored in greater detail in the interpretations of Research Domain D that follow. However, on the personal level, efforts were made to determine whether or not Leopard was a member of the Mormon Church. WCRM visited the LDS Temple Visitors Center in Idaho Falls and spoke with four informants at the Center. The individuals knew nothing of John Leopard or the Leopard family (Sister Hillman, Personal Communication, 20 July 2010; Elder Hillman, Personal Communication, 20 July 2010; Sister Higley, Personal Communication, 20 July 2010; and Elder Higley, Personal Communication, 20 July 2010). Similarly, contacts with the Family History Center in Salt Lake City found no information to indicate that John Leopard held a membership in the Mormon Church. That factor aside, it may be surmised that Leopard, living in Bonneville County during the 1910s, had business and social interactions with members of the Mormon Church even though the evidence suggests he was not a Mormon himself.

6.1.2 Archaeological Interpretations

Obviously, archaeological data cannot address whether John Leopard actually lived at 10BV246, however, they certainly support the position that the site represented a single household occupied for a very short period of time. No evidence exists to suggest multiple occupations over time. As noted in Chapter 5, if one excludes structural debris, the material cultural assemblage is actually quite sparse and is comprised of a light density of domestic remains and consumables. It is equally worth note that this assemblage includes almost no storage or canning jars which (again) are more indicative of a long term/stable presence. The data also support the presence of a single male at the site since the assemblage includes no items associated with either women or children.

The most common items in the material culture assemblage (faunal remains) certainly may provide a clue to the occupant's level of interaction with the surrounding community. These remains tend to suggest that a primary occupation at the site was sheep herding/ranching. In addition, they demonstrate on-site butchery of sheep, rabbit hunting, and (possibly) raising of chickens. While this evidence is consistent with someone being involved in the local community as a producer (raising and selling livestock), there is little to suggest much participation as a consumer. Instead, we have indications of on-site butchery of sheep which implies the occupant was both living off the land and consuming his own goods. The frequency of rabbit bones also demonstrates locally focused subsistence. Indeed, while there is ample evidence of the occupant purchasing items from the national/commercial economy, data supporting interactions with neighbors beyond herding activity is lacking. Rather, the data primarily convey a site that was less of a long term homestead and perhaps more a focal point for an economic activity.

6.2 RESEARCH DOMAIN B

Research Domain B focuses on the chronological setting of the John Leopard Homestead Site (10BV246) and includes four research questions. The answers and interpretations to these questions relied heavily on the archaeological material gathered during the course of the project. The four questions include:

Was the Feature 1 dugout a domicile? If so, does it appear to have been temporary, for occupation while a bigger house was constructed elsewhere? Was there a superstructure, suggesting later use as a cellar? What can we discern about the design, construction techniques, and materials used in the dugout feature?

6.2.1 Archival Interpretations

WCRM found only limited data that addresses the first research question in this domain. The information found that John Leopard moved to the site in February of 1916 and stayed on the land until August. Leopard took a leave of absence from August until the next February. He stayed on the homestead until July when he took a second leave until October, 1917. He spent the winter and early spring of 1918 on the land. Leopard left the homestead for the summer of 1918 (May 31 to about September 1, 1918). Leopard took his fourth leave from November of 1918 through March, 1919 (Patent 71785). By the time the federal government took the census in 1920 Leopard longer resided on the land or in Idaho (1920a Manuscript Census).—As discussed above, by the time of the Irving E. and Ethel J. Clayton 1945 sale of the Leopard Homestead land no improvements remained on the land (Deed Book 51). Overall, the archival data indicates that the homestead was occupied for only a very short period of time during the late 1910s. No archival evidence for domestic occupation of the John Leopard site after 1919 has been found, including sources in libraries and archives in Idaho Falls and Boise.

Archival information found by WCRM about the economic cycles and the climatic changes could not be considered to be site-specific. Rather, the data covers larger, regional areas. When Leopard and many of his neighbors first settled their claims during the commodity price boom of World War I and the government had price guarantees in place farmers across the country put more acres in cultivation and increased the size of their herds. The war ended in 1918 and the next year the federal government ended the guarantees. Commodity prices tumbled as farmers continued to produce as much as they could in an attempt to offset the falling prices with increased output. The downward spiral began at the end of World War I and it would not reach bottom until the 1930s (Morain 2011). By then it appears that the Leopard homestead was used only for grazing as part of a larger ranch. During the 1910s, when the Leopard and other AES study area homestead claims had been filed, the climate had been somewhat wetter than average. As if the falling commodity prices of the early 1920s weren't enough, the available climatic data indicates southeastern Idaho and much of the West experienced a dry cycle that began during 1919 in Bonneville County (Biondi et al 1999; Morgan et al 2008; Otteson 2005: 72; and Slaughter and Reading 2011). Connie Otteson, Bonneville County historian, described the situation as:

The biggest blow to community's viability, however, was a devastating drought from 1919 to 1923, when the dry farms lived up to their names. Many families had been land-hungry and mortgaged their farms to add acreage and buy expensive machinery. The insurance and finance companies carried the debt for the first two years, but by the third year, there was no chance (Otteson 2005: 159).

Even though the severity of the drought lessened, it nonetheless continued into the 1930s. On the Great Plains the 1930s became known as the Dust Bowl, but throughout the West the dry conditions, as well as the market conditions, acted to force farmers off marginal lands. The homestead testimony of Leopard's neighbor Reed Colett mentioned a factor that had been overlooked in the development of this research domain, the impacts of wildlife on the farmers. Colett stated that during his first year on the homestead (1914-1915) his crops were eaten by rabbits (National Archives, Washington, D.C., General Land Office Homestead Patent Records, Record Group 49, Reed Collet Patent Case File, Patent 682406; hereafter cited as Patent 682406).

WCRM also researched farm sales from the late 1910s through the 1920s in an attempt to build a composite view of the items typically associated with a homestead or farm in southeastern Idaho during that period. Many of the auction notices were general in nature, offering little in the way of specifics. However, one from 1926, found in the Hazel D. McGee folder of the Early Idaho Farm and Ranch Life collection at the Idaho State Archives Research Center detailed the items of a small rural household as can be seen in Plate 10 below.

The archival data regarding question 3 implies that the Leopard homestead, as well as his brother's neighboring parcel in Section 15, represented temporary time and labor investments so the brothers could secure patents to the lands and then sell the ground to others. This is supported by information by the Bonneville County records. In particular, John Leopard did not record his own patent with the county. Instead Shepard & Company, a local real estate company, handled the paperwork relative to the patent at the county courthouse (Bonneville County Recorder, Idaho Falls, ID., Recorder's Reception Book 18, Page 75). On the other hand, neighbors Reed and Edgar Collet handled their own paperwork. However, they had their own issues. For example, on the same day he recorded his patent (17 May 1920), Edgar Collet deeded 80 acres to Washington I. Collet (Bonneville County Recorder, Idaho Falls, ID., Recorder's Reception Book 18, Page 213). Reed had a mortgage on his land with the Miller Cahoon Company within six months of receiving his patent (Bonneville County Recorder, Idaho Falls, ID., Recorder's Reception Book 4, Page 308). WCRM's review of the county records noted a large number of tax sales on the recently patented homesteads by the early 1920s (Bonneville County Recorder, Idaho Falls, ID., Recorder's Reception Book 5, Pages 202-203). Later sources, such as Metsker's Atlas of Bonneville County, Idaho (Metsker 1940) or the 1945 Clayton sale further supports the supposition that the land had been patented as a land speculation venture or that Leopard had been nothing more than an entryman working for others to gain title to the ground. In fact, Leopard's World War I draft registration indicates that he worked as a farm hired hand for Hubert Cupice at the same time he was proving up his homestead claim (World War I Selective Service System Draft Registration Cards, 1917-1918).

PUBLIC SALE

the account of my health I will sell all my live stock, from machinery and household goods at public auction at my place 15 mile north and 112 miles west of Progress, on

Priday, November 19 1926

Sale sturts at 10 o'clack.

Free lanch at Noon

3 HEAD OF HORSES

I brown mare, age 7, weight 1250, 1 brown horse age 8, weight 1350, 1 black horse, age 8, weight 1300.

ewoo s

I Juraey cow, ago 5 giving 2 gallons per day, fresh some time in February, I red cow tage 5, giving 2 gallons per day, fresh in the apring 1, black cow, ago 3, giving 2 gallons of milk per day.

<u> 14 HEAD OF HOGS</u>

4 Sows, all bred, some due at time of bale; 1 boor, 2 weared pigs; 4 ready to wear.

FARM MACHINERY

13-in. Whoma wagon, 3 inch tire; 1.3% wagon parrow thro, low wheels; 2 hay ruck, 1 new; 3. Champion mower, 5 foot all good shape; I Champion rake, to foot, good shape; I seed windrower; 1 Avery 2-way plow, 14 inch; 1.John Deere, 14 in. walking plow; I harrow; I land drag; I corrugator 1 4-foot friunc; 1 No. 2 slip scraper; 1 sage rail; 1 collivator for one horse; 1 garden plow; I bob stelgh; I blacksmith outfit; 2 sets work harnoss; 1 Vega cream separator; 8 60-gallon oil tank; 15 tons of alfalfa bay.

Housewold Goods

I Good Luck range; I heating stove; I dining table; I kitchen inble; I kitchen cabinet; 2 rocking chairs; 5 contra; 2 beds with springe; I mattrees, good; I sundary cot and mattrees; I dresser; I rug; I wringer and banch; I baby bed; I high chair; I Coleman light complete; I Write sowing machine, new.

TERMS—All sums of \$25.06 and under mash, ther that amount a great of six months will be given on notes with approved accuraty, bearing 10 per cent off for cash on time sales.

J. W. LUNSFORD, Owner Pierce & Johnson, Aucts. Remedy & Dellay, Clerks

Plate 10. Idaho State Archives Research Center, Boise, ID., Public Auction Notice found in Early Idaho Farm and Ranch Life, Manuscript Collection 0445, Hazel D. McGee folder.

Review of the archival evidence to address question 4 found that John Amer Leopard used the provisions of the Enlarged Homestead Act of 1909 to secure the patent to the site treated under the present plan. The original Homestead Act of 1862 passed Congress during the Civil War when the line of Western settlement was near the Missouri River; the settlers had yet to cross the 100th Meridian, the eastern edge of arid high plains. East of the meridian adequate annual precipitation occurred to support traditional farming. In those areas 160 acres was considered a large farm with more than enough land to support a family. West, on the semiarid Great Plains, the 160-acre homesteads proved too small to allow successful farming or ranching. Congress finally recognized the need for change in 1909 and passed the Enlarged Homestead Act. The new law doubled the allowable size of homesteads from 160 to 320 acres and required that 1/8 of the land (40 acres) be continuously cultivated in agricultural crops. To further encourage settlement Congress reduced the "proving up" period from the five years to three years in 1912. The five year period had been specified in the original and 1909 Enlarged Homestead acts (Gates 1968; Pisani 1996).

6.2.2 Archaeological Interpretations

The archaeological evidence indicates that 10BV246 was occupied for a relatively short period of time; perhaps as little as five years (circa 1916 to 1920). As already noted, there are no data to suggest any sort of long-term-presence-or-investment-in-the-property.-Although-GLO-records-indicate-a-two-structures-were-present at the location, and Leopard's patent testimony suggest a frame house, stable, and cistern were built in 1916, the field data demonstrate only a small structure and minimal artifact accumulation. It is at least possible that two rock piles (Features 3 and 9) could represent footings for the GLO plotted structures since they are both on the correct side of a historic road (Feature 4 and 6) and a cistern is nearby. These rock piles, however, were completely lacking in associated artifacts.

With respect to whether the site represents a "failed homestead" or "temporary investment designed to consolidate parcels," there is simply insufficient archaeological evidence to address this subject. If two frame structures were once present on the site, they have left no definitive surface signatures. This could indicate that structures were simply built (or moved) on site to demonstrate the occupant's investment, while occupation was actually in the small Feature 1 structure. In this case, the logical conclusion would be that the site was part of an effort to consolidate parcels. This could then suggest that the reason no artifacts are associated with Features 3 and 9 is that there never was a substantial homestead. Unfortunately, this is all highly speculative since the data are so sparse. Given the sort duration of occupation, one could just as easily argue that this was obviously a "failed homestead" that was abandoned almost as soon as it was constructed. Of course this also raises the essential question regarding what really constitutes a failed homestead if the property proves to still be of economic benefit to the patent holder, if only through the financial benefit of consolidation. This, however, is well beyond the information potential of the minimal archaeological data.

6.3 RESEARCH DOMAIN C

Research Domain C focuses on the on the function of the dugout identified as Feature 1 of the John Leopard Homestead Site (10BV246). The Research Domain includes three research questions, one of which is a two part question. The answers and interpretations to these questions relied heavily on the archaeological material gathered during the course of the project. The three questions include:

Who lived at Locus 1 of 10BV246? Was this a single household, and if so, what was its demographic makeup? Does the archaeological and historical evidence suggest multiple

occupations over time? What was the relationship between the occupants of 10BV246 and other settlers in the larger rural community of the region?

6.3.1 Archival Interpretations

The archival data available to address the three questions posed in this research domain is limited and inconclusive at best. The only description of the built environment of the Leopard homestead comes from the homestead case file available from the National Archives. In the case file Leopard and his witnesses describe the built environment in 1919 as having a 12' x 14' frame house with a shingle roof, a 14' x 16' frame stable, and a concrete lined cistern that measured eight by eight feet (Plate 9). The testimony said that Leopard built the house in the latter part of February, 1916, soon after he filed the homestead claim on the 10th of that month (Patent 71785). The measurements for the two buildings given in the testimony differ by only two feet in each direction and are very similar to the dimensions of Feature 1. The handful of dimensioned lumber fragments found around Feature 1 are consistent with Leopard's description of the house and stable being frame buildings (see Plate 11). From the testimony that the house and stable were frame buildings it can be surmised that Leopard used dimensioned lumber and wire nails to build his farm following the then commonly accepted practice of balloon-frame construction. Later deeds to the land do not describe any buildings on the Leopard property limiting the archival investigation of this Research Domain.

6.3.2 Archaeological Interpretations

Archaeological data from 10BV246 suggest that Feature 1 was likely used as a temporary (and short term) residence. Unfortunately, the data are insufficient to conclusively demonstrate whether Feature 1 represented a formal domicile or how consistently it was occupied. Although the presence of a bed might suggest someone lived in the structure, bed frames are also stored in storage structures, and Leopard's own patent testimony indicates he was not present on the property all the time. Likewise, while a plank floor is often indicative of a residence; such floors can also be found in storage rooms/cellars and in other areas where one wanted to limited intrusion of such things as vermin and burrowing animals. Other material culture (faunal remains) found on the floor and in near floor contexts could suggest meat processing, and perhaps other herding related activities in or immediately around the feature as well.

The presence of a small trash dump down slope of the structure (Feature 8) possibly provides better evidence of an individual occupying the structure since domestic refuse was being discarded just feet from Feature 1. Since, however, the assemblage is rather sparse little can be said about the duration of the occupation.

With respect to questions of design and construction techniques, too little of the structure has survived. Based upon the available evidence, the structure was constructed by first excavating a shallow pit into the sloping terrain. A wood floor was then placed within this pit; this floor occupied a slightly smaller area than the pit itself. Unfortunately, there was only minimal evidence of wall fall and roof debris so the formality of the remaining construction is open to speculation. Since so few homesteads have been investigated in the surrounding area and the vast majority of such sites have been recommended as not eligible for inclusion in the NRHP, there is also no real comparative local data set at this time.

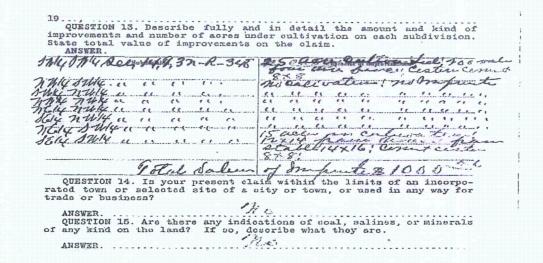


Plate 11. Section of Leopard Homestead Testimony Showing the Improvements from Patent 71785.

6.4 RESEARCH DOMAIN D

Research Domain D focuses on the on the relationship of the John Leopard Homestead Site (10BV246) and its occupants with the Mormon Church and Mormon settlers in the region. The Research Domain includes three research questions. The answers and interpretations to these questions relied heavily on the archival information gathered during the course of the project. The three questions include:

Is group identity with the LDS church discernable in the artifacts, features, and landscape of 10BV246's Locus 1? Does the historical evidence suggest that the site's occupants were members of the LDS church? How does this household compare to larger patterns in the Snake River Plain, in terms of Mormon settlement from the 1850s to the present?

6.4.1 Archival Interpretations

The first question in this Research Domain relies on the assumption that John Leopard was a member of the Mormon Church and the archival evidence gathered over the course of the research strongly suggests that Leopard was not a church member. Equally, the same archival and oral informant data give a negative answer the second question of this domain. This is based on information from the Idaho Falls Temple Visitor's Center and from the LDS Family History Center in Salt Lake City. The informants knew nothing of John Leopard or the Leopard family (Sister Hillman, Personal Communication, 20 July 2010; Elder Hillman, Personal Communication, 20 July 2010; Sister Higley, Personal Communication, 20 July 2010; and Elder Higley, Personal Communication, 20 July 2010). WCRM received a similar answer from the Family History Center.

To successfully address the third question a discussion of the settlement of southeastern Idaho and the Snake River Plain, especially the role of the Mormon Church in that settlement, is necessary. To comprehend the differences between Mormon and non-Mormon settlers in the AES study area and southeastern Idaho some background on the Church's role in the peopling of the region is necessary. The Mormon Church first encouraged settlement in what became Idaho during the 1850s as Brigham Young and the Church leadership sent Mormon settlers out from Salt Lake City to California, Nevada,

southeastern Utah, and to the north. The Church established Fort Limhi on a tributary of the Salmon River in future Idaho during 1855. The Mormon War of 1857-58 led to the abandonment of these outlying settlements. A few years later in 1860 the Church leadership decided to establish a string of settlements in the Cache Valley, including Franklin. When Congress established the Idaho Territory in 1863 Franklin was in the new territory. Because the federal government had set aside large areas of Utah aside as reservations, Mormon interest is settling Idaho intensified after 1863. The Church used Franklin as a center for colonizing other parts of territory. That year a Mormon settlement began at Bear Lake and the next year seven other villages grew up along the Bear River in Idaho. These included Bennington, Bloomington, Fish Haven, Liberty, Montpelier, Ovid, and St. Charles. The next year four more Mormon communities were established in Idaho including Cherry Creek, Rushville, Weston, and Woodruff. By the end of Civil War in 1865 The Mormon Church had 16 settlements scattered around southeastern Idaho centered along the Bear and Malad Rivers (Bitton 1979; Coates, et al. 1994: 49-50, 52).

The Mormon migration into Idaho grew during the 1870s as 13 new villages were founded along the Bear and Malad Rivers and they expanded into the Raft River valley as well as Goose, Warm and Rock Creeks. These villages, as those founded earlier, generally followed the Mormon village plan that copied Church founder Joseph Smith's city of Zion plan of large, square blocks, wide streets, and the farms lying around the village. While not located in Idaho, a description of the model Mormon village settlement of the late 19th century can be found in Jackson and Jackson (2008). During the early 1870s a narrow gauge railroad, the Utah Northern, was built into southeastern Idaho, through Eagle Rock (later Idaho Falls) and on north toward the mining camps of Montana. The presence of the rail connections from southeastern Idaho to the transcontinental railroad at Ogden, Utah further stimulated Mormon and non-Mormon settlement in the region throughout the remainder of the 19th century (Coates, et al. 1994: 53-55; see also Jackson 1978). One of the key settlements the Mormons established near the AES study area, Rexburg, dates to this period. During the early 1880s a large migration came into the area and in 1883 Bishop Thomas Ricks selected Rexburg to be a headquarters community and soon here after the towns' population swelled to 1,400 people while numerous other communities were founded by church members (Sherlock 1975: 58). By 1900 the Church had a solid line of settlements from Pocatello, Idaho for approximately 150 miles north along the Snake River to Victor (Figure 15). After the turn of the century only a handful of new Mormon villages sprang up, but the number of Latter Day Saints continued to grow in the region as more and more Mormons moved into southeastern Idaho (Coates, et al. 1994: 53-55; Arrington 1979).

A pattern emerged during the late 19th century that influenced Mormon migrations into the 20th century. Utah became a place of out-migration to the other areas, including Idaho. During the 1880s more and more Mormons arrived in Utah and found opportunity lacking. Church leaders recognized this and the impacts the migration patterns had on the Mormon village system. Countering these trends was another reason the church leaders took such an active interest in encouraging settlement into the territories around Utah, including Idaho (Simmonds 1980; Sherlock 1975:54-55). Along with their religious beliefs, the Mormon settlers brought a unique economic system with them to the new lands of southeastern Idaho. Brigham Young, the late 19th century leader of the church, hoped to minimize the influences of outsiders on the Mormons and encouraged the establishment of cooperatives, including cooperative stores and to

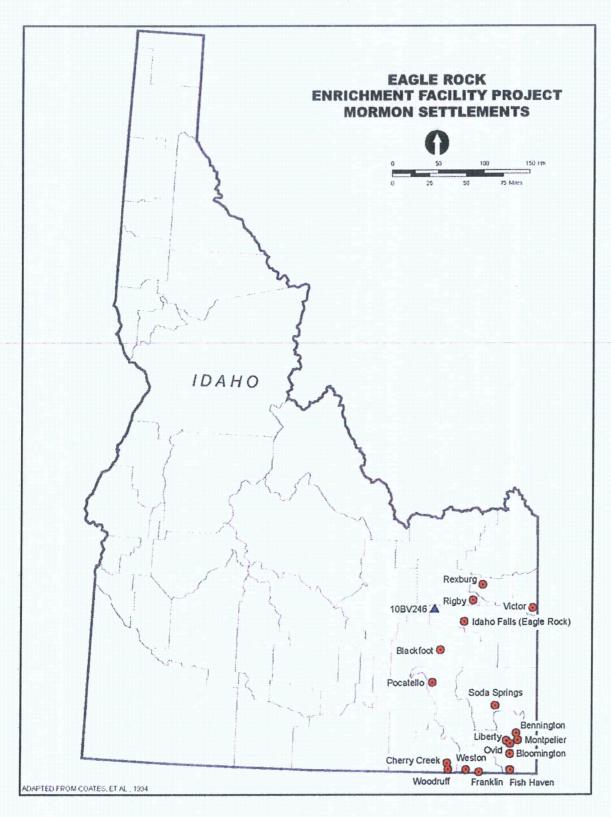


Figure 15. Historic Mormon settlements in eastern Idaho.

the extent possible producing facilities, such as lumber mills or tanneries (See: Garrett 2005). While some of these production cooperatives eventually failed after railroads such as the Oregon Short Line or the Utah Northern brought in cheaper goods produced elsewhere, the cooperative stores remained viable well into the 20th century. The economic system fostered a sense of inter-dependence between church members and this sense extended into other arenas, such as farm building and politics. (Coates, et al. 1994: 56-58).

In southeastern Idaho, as with other places where Mormons settled, they understood the power of the ballot box and block voted. Congress attempted to disenfranchise the Mormons through the 1882 Edmunds-Tucker Act that prohibited polygamists from voting, serving on juries or holding public office. During 1884 the Idaho legislature took anti-Mormonism one step farther when they passed the Test Oath Act that required an oath of all voters that they did not practice, believe in, or belong to an organization that practiced polygamy. This led to arrests and imprisonment of Mormons, settlers leaving the area, and many men removing their names from church records. Such persecution led to the Mormons being more secretive and more inwardly focused as a group; that pattern continued into the 20th century (Coates, et al. 1994: 58-60).

Another description of the Mormon sense of community and the social interactions within a community, while in Utah, can be found in Kristen Rogers' study of Grouse Creek (Rogers 2003). Without going into all the details of Rogers' data, her arguments can be summarized briefly in a way that gives a sense of a Mormon community and its various functions. Founders of Mormon towns used the common ideology of devotion and cooperation of the residents. Grouse Creek, as other Mormon settlements relied on the cooperative aspects as they came to rely on each other for education, health care, recreation, welfare assistance, and tasks as funeral preparations. They did not turn to the government or other institutions for these necessities. Frequently they used mutual companies to build infrastructure facilities such as water companies. Quoting Utah historian Dean May, Rogers relates the key to understanding the Mormon system is to understand that through their interactions and mutual help they built a "web of obligation and attachment that held most emotionally and physically to the town" (Rogers 2003: 144-146).

The Mormon Church understood both the possibilities for expansion of their territories and the vulnerable position the existing claims of Church members were put into when Congress passed the first Homestead Act in 1862. The Mormon leadership convened the School of the Prophets, a special institution that originated in the early years of the Church in the Midwest, to instruct the priesthood on how to deal with the land offices. The School of Prophets developed procedures for the Latter Day Saints to follow and disseminated those to the ward bishops who in turn passed them down to their congregations. The orders instructed the claimholders to prove up title to homesteads as quickly as possible. Lee (1960: 30), in his study of Mormon homesteading, found that as a result of this educational campaign, Mormon confirmed their land titles in record time under the laws of the late 1860s.

From this beginning, the Church started a program of continuing support for their homesteaders. Understanding the need for all members to be informed, the Church started a program to disseminate land office information. Mormon leadership constantly reported on the homestead law, its amendments, and the General Land Office's pertinent regulations as well as editorializing on the need to prove up as quickly as possible through the pages of the *Deseret News* (Lee 1960:30-31). As Lee said, "All official notices of the land office also reached the readers of the *Deseret News*" (Lee 1960: 31). Another

evidence of the emphasis of the Church placed on homesteading can be seen in the fact that Church President Brigham Young assigned William Clayton, his personal secretary, to handle the homesteading paper work for the outlying Mormon settlements during the 1870's. Later the Church assigned Charles W. Saynor, a Mormon land attorney, to succeed Clayton. They handled the paperwork from entry papers to relinquishments to final proof affidavits. They also publicized interpretations of General Land Office administrative regulations (Lee 1960: 30-31).

In addition to the instructions the Church of Jesus Christ of Latter-day Saints passed on to its membership about the filing procedures for homestead entries the Church also established a system of claim dispute resolution within the community rather than taking the disputes to the federal government. Mormons in good standing did not use the land office machinery for settling land disputes with other Mormons. Instead they took the matter to the ward and stake priesthood courts that mediated the dispute. The Church also developed a trusteeship system for those who claimed less than the 160 acres provided by the law. As Lee described it:

The local ward bishop would enter the prescribed one-hundred-and-sixty-acre tract as a trustee of the Saints whose small irrigated plots were located within the larger tract's bounds. Mormon farm allotments, of course, did not correspond with the traditional subdivisions of the government survey. After the title passed from the federal government the bishop then deeded small parcels to those holding possession under the Mormon land system (Lee 1960:35).

Another prerequisite of the Homestead Act that the Church addressed involved compliance with the residency requirement. The 1862 law required five years' continuous residence on the claim as a condition of patenting. Non-Mormons and well as Mormons had inventive ways around this requirement. Eventually William Clayton recommended that claimants who lived in the villages take their wagons out to their tracts and periodically spend a day or two on the claim to try to achieve nominal compliance with the law (Lee 1960: 32-33). As can be seen from the foregoing discussion, the Latter Day Saints developed homesteading practices that assured they took full advantage of the opportunities offered the federal land system and maximized the chances for success of the Church members.

WCRM identified two likely Mormon homesteaders who claimed and patented land in the AES study area contemporary with the Leopard Homestead. For comparative purposes WCRM researched the National Archives for the homestead case files for these two claims. Support for the assumption that the Collets were members of the Mormon Church comes from the information gathered from the oral informants at the Idaho Falls Temple Visitors Center discussed above and from the Church's Family History Center. One claimant, Reed Colett, received his patent to the north one-half of Section 13, Township 3 North, Range 34 East on June 4, 1919. This land was located east of Leopard claim. Edgar R. Collet received his patent to the eastern on-half of Section 14, Township 3 North, Range 34 East on February 12, 1920. His claim was immediately east of Leopard's. Additionally, WCRM developed some genealogical background data on the two homesteaders to determine whether or not they had anything exceptional in their background.

The 1920 census listed Reed Collet as living in Idaho Falls and being 26 years old. He had been born about 1894 in Utah to parents also born in Utah. He was married and had one child in 1920, a 4 and one-half year old daughter. He listed his occupation as barber and he owned a barbershop in Idaho Falls (Manuscript Census 1920c). The Mormon Church's Family History Center's on-line Family Search.org

also listed Reed Collett with the same information and the date of marriage to Vera Olsen as October 3, 1915 (Family Search 2011a). Collet registered for the World War I draft, listing his occupation as farmer for himself (World War I Selective Service System Draft Registration Cards, 1917-1918) (Plate 12). It will be recalled that Leopard listed his occupation as farming, but as a hired hand for Hubert Cupice.

The 1920 census listed Edgar Ross Collet as a resident of Mountain Home, Idaho and being married to Lucy V. Collet. He was listed 29 years old, having been born in Spanish Fork, Utah about 1891. His brother, John, also lived in the household in 1920. Coincidently, Edgar also listed his occupation as a barber (Manuscript Census 1920d). The Mormon Church's Family History Center's on-line Family Search.org also listed Edgar R. Collett with the same information and the date of marriage to Lucy Thompson as June 2, 1919 (Family Search 2011b). Edgar Collet, as Leopard and Ross Collet, registered for the World War I draft. His draft card indicated that he was farming for himself (World War I Selective Service System Draft Registration Cards, 1917-1918) (Plate 13).

Reed Collet's homestead case file offers some information about his homestead in comparison to that on John Leopard. The Collets moved to the claim in August of 1914 and built a house on the land in October of that year. Collet stated that the family lived in a tent while the house was under construction. As a reflection of the Mormon distrust and concerns about the government Collet listed only minimal specifics about the house and no other buildings in his testimony. He had a two room frame house and two cisterns on the claim. During the proving up period he took four leaves of absence as allowed by the Homestead Law at the time; not dissimilar to Leopard's record in that area. Colett's witnesses offered the same information about the improvements and leaves (Patent 682406).

The Edgar R. Collet homestead case file indicated that he served in the U.S. Army from December 15, 1917 through February 20, 1919. The file indicates he served in the Medical Corps at Fort Lee, Virginia. The remainder of the case file contains information similar to that in the others for comparison to that on John Leopard's homestead. The Collets moved to the claim in November, 1915 and built a house on the ground within the month. Collet gave no further information on his house and did not list it in the improvements to the claim. Again, this would seem to be indicative of the Mormon distrust and concerns about the government. During the proving up period he took three leaves of absence as allowed by the Homestead Law at the time, including the leave for military service. Colett's military service set him apart from the other two homesteaders discussed in this study. His witnesses offered the same information about the improvements and leaves (National Archives, Washington, D.C., General Land Office Homestead Patent Records, Record Group 49, Edgar R. Collet Patent Case File, Patent 734393).

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Plate 12. Reed Collet draft registration card from Ancestry.com and the National Archives and Records Administration.

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Plate 13. Edgar R. Collet draft registration card from Ancestry.com and the National Archives and Records Administration.

As can be seen from the foregoing discussion, Mormon settlers and homesteaders were unique in their experience as they settled the West. The Mormon experience should be interpreted as more of a colony settlement, such as the cooperative group that settled, built irrigation systems, and established the cities of Greeley or Longmont, Colorado. The members of these groups worked together to provide for the common infrastructure elements, cooperatively built their farm buildings and public buildings and facilities and supported each other in other ways. The most noticeable differences would be the lack of centralized support in things such as working through the legal requirements to gain title to the homestead and the lack of cooperative mercantile institutions that the Mormon Church developed to help their settlers. John Leopard and his brother, on the other hand, lacked any of these kinds of assistance when proving up their claims. The Leopards seem to be more akin the mythical rugged individual that conquered the frontier whereas their Mormon neighbors appear more similar to land developers supported by large companies and well-developed logistical systems.

6.4.2 Archaeological Interpretations

Archaeological data provide no apparent indicators of identity with the LDS church. Material culture is limited to relatively sparse assemblages of domestic refuse, hunting related items, building debris, and both domestic and wild faunal remains. Instead, the presence of multiple tobacco tins and coffee pot fragments in both Feature's 1 and 8 would tend to argue against LDS membership for the resident. Use of both coffee and tobacco represent violations of traditional LDS prohibitions regarding consumption of such products. Since there are no recorded homestead excavations in the surrounding area, there also proves to be no real data set upon which to compare settlement patterns, beyond that established in the historical records. It should also be noted, as mentioned earlier, that almost all of the recorded homestead sites in the surrounding counties have been recommended not eligible for inclusion in the NRHP and have been subject to no further investigations. As a result, while this site's surface manifestation is comparable to a variety of other sites in the vicinity, it stands alone as the only site for which there is a robust (excavated) archaeological record.

CHAPTER 7. RECOMMENDATIONS AND CONCLUSIONS

WCRM conducted data recovery fieldwork of site 10BV246 between October 5, and November 8, 2010; analyses were then completed between November and May 2011. Three previously documented features (Features 1, 7, and 8) within the eastern locus of the site were manually excavated during this effort. In addition, five obsidian biface fragments were collected; these will be discussed under a separate cover. Archival research was initiated in July 2010 and was completed in May 2011.

The project was designed to assist the AREVA Enrichment Services LLC (AES) in meeting their obligation to mitigate adverse impacts to the eligibility of significant cultural resources within the AES APE. The Leopard Homestead Site (10BV246) was determined eligible by the Nuclear Regulatory Commission, the lead federal agency, and the Idaho SHPO concurred with this evaluation in September 2009. The determination was based on the recommendations made by WCRM (Ringhoff et al 2008).

With respect to the NRHP eligibility evaluation, the results demonstrate some limitations to traditional inventory level evaluations of eligibility based upon the individual resource as the unit of consideration. Initial evaluation resulted in consideration of the site as a uniquely eligible resource that led to the development of a set of site specific research questions and methodologies that proved not to be nearly as applicable as originally expected. Instead, much of the data recovered, the bulk of which was archival, addresses behavior patterns and activities at a larger, regional scale and proved more applicable to the comparative research questions.

7.1 RESEARCH ASSESSMENT

The project research design included four Research Domains (A-D). WCRM then developed a set of research questions grouped into those Research Domains based on factors that included: 1) the previous research and research concerns for the region (i.e. INEEL 2004); 2) research from other early 20th century Western homesteads; 3) the historic context statement developed for the Class III survey; and 4) that reflected the historic values held by the John Leopard Homestead Site as expressed by the physical resources known to exist there (Ringhoff et al. 2008). The treatment plan reflected the data that WCRM anticipated to be present at the site based on the results of the original recording and that the questions could be addressed from both the cultural resource and archival/oral history information found during the course of the project.

Limitations in archaeological data came from both a lack of artifacts and limited range of types and classes of artifacts found by the excavations, especially the lack of expected and key diagnostic artifacts, such as domestic ceramic, home preserving, and tin cans. Indeed, faunal remains proved to be the most common materials; these were notable by the heavy presence of sheep (and probable sheep) and rabbits. Unfortunately, since no other 20th century homestead excavations have been conducted in the surrounding region, there proved to be a lack of a comparative data set against which one could analyze and interpret the results. In fact, almost all other homestead sites in the surrounding eastern Idaho counties have been recommended as not eligible for inclusion in the NRHP and have been subject to no further work. As such, the current archaeological results must generally stand on their own, pending future investigations at other homestead sites.

Archival data also had some limitations that were not anticipated at the beginning of research. The Bonneville County records did not offer the detail that was originally hoped for and the disappearance of John Leopard from the archival record after the homestead went to patent proved to be limiting in regard

as to what could be said about Leopard and his associations and interactions with the rural community around him as well as the greater Bonneville County community and the locally dominate Mormon culture. Another limiting factor came from the dearth of oral history information about John Leopard and his homestead. The nearly complete absence of a photographic record of regional homesteads and especially the Leopard homestead in the archives searched further limited the data available. Despite these issues, WCRM completed a study that does contribute to our understanding of early 20th century homesteading and settlement in Bonneville County and southeastern Idaho as well as completing a limited synthesis of the vast amount of information about Mormon homesteading practices in the region.

7.2 GENERAL RECOMMENDATIONS

The results of the current project establish a variety of potential areas for future research that are discussed below and broader considerations of eligibility, evaluation, and future homestead mitigation projects. Some areas for future investigation may include:

- Utilization of the archaeological data from 10BV246 in future projects that include Mormon and non-Mormon homesteads built for permanent residency. Such comparisons could lead to more robust future analyses of the differences in the lifestyles and values of the two groups and their related communities.
- Identification of sources of archaeological and documentary data that would allow comparisons to be drawn between the homesteads and rural communities of native-born settlers with those of first-generation immigrants that may clarify the nature of ethnicity and ethnic persistence in historic rural, agriculture communities. This would need to be explored for immigrant/ethnic groups and for non-ethnic groups to determine if there are differences or similarities between the groups in the rural West.
- Comparison of 20th century homesteads and those of the late 19th century to define any
 commonalities across the various time periods within the rural context. These can help further our
 understanding of whether the adaptations made by some of the homesteaders after 1900
 compared to the earlier homesteaders were successful in adapting to the changes in agrimarketing and national markers.

These areas of research, however, would require homestead sites to be subject to more intensive future eligibility evaluations that collect more extensive data than has often been the case in the past. This does not necessarily mean that more such sites should be determined eligible. Rather, a more robust body of data needs to be developed in the process of reviewing inventories and making eligibility determinations.

7.3 RECOMMENDATIONS TO FUTURE RESEARCHERS

While little survived of the John Leopard Homestead Site and little (indeed) seems to have ever been present, the resources investigated did provide an interesting glimpse into one category of homesteading that aimed at securing title to tract of land for its sale to others. Although it is only one example of this once-common use of the homestead laws, the study did recover data that furthers our collective knowledge of southeastern Idaho homesteads and settlements during the early 20th century. The mitigation measures WCRM undertook at the John Leopard Homestead, therefore, accomplished the goal of mitigating the adverse effects to the NRHP eligibility of the historic property. In addition, however, it also forms the basis of a series of suggestions for others to consider when faced with devising and conducting a treatment program at other rural dryland Western homesteads in the future. Based upon the current results, three specific strategies are considered to be especially valuable.

The first strategy is to search for and compile information from Depression-era research projects, such as the Civil Works Administration interviews or the Works Progress Administration Historical Records Survey that deal with homesteading and Western settlement from the late 19th and early 20th centuries. This work would be done at regional and state levels to develop composite images, not anecdotal ones, of the daily lifeways of the farmers and ranchers, the relationships between the local and ethnic groups and other groups in the West. This effort would provide a baseline for comparisons between the "norm" and any individual homesteads being studied in the future.

The second strategy involves the use of social and geographical mobility study methodologies that have been used in other places and for other industries as well as agriculture to study Western homesteading after 1900. Recently University of Michigan researchers Yu Xie and Alexandra Killewald reviewed and critiqued some of the current possibilities in their 2010 report *Historical Trends in Social Mobility: Data, Methods and Farming* (Xie and Killewald 2010). Such sociologically-based studies can offer insights in to the larger dynamics of homesteading and the agricultural settlement of the West from a different perspective that could lead to re-interpretations and re-evaluations of the available archaeological data through summaries of homesteads across large regions.

The third strategy involves analysis of the historic landscape and reconstruction of the changes to the natural topography and built environment over time by starting with baselines at known dates, such as the General Land Office cadastral survey field notes or U.S. Geological surveys since the late 19th century. From that data a reconstruction of the historic ecosystem at the time of initial settlement could be developed and then using digitized historic, as available, and current aerials to analyze the evolution of the rural landscape. From this the information cultural resources can be examined to establish the relationships of known resources to the landscape and thus give fuller descriptions related to the landscape elements and the relationship of the cultural resources to the larger, ever-evolving landscape.

7.4 CONCLUSION

Based upon the quality and extent of the data collected and evaluated, the work completed under this treatment plan has adequately captured the values and information held within the site. Therefore, these treatments fulfill both the intent of the plan and the legal responsibilities of AES and the NRC to mitigate the adverse effects of the AREVA enrichment project upon the NRHP eligibility of the John Leopard Homestead Site (10BV246). No further work is recommended at this site.

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