

United States Nuclear Regulatory Commission Official Hearing Exhibit	
In the Matter of:	CROW BUTTE RESOURCES, INC. (License Renewal for the In Situ Leach Facility, Crawford, Nebraska)
ASLBP #:	08-867-02-OLA-BD01
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Withdrawn:	
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Nebraska. Historically, the Oglala and Brulé Sioux Indian tribes occupied northwestern Nebraska. By the beginning of the 19th century, the Oglala settled in the Black Hills and the Brulé settled around the headwaters of the Upper White and Niobrara Rivers and by the 1830s, the hunting grounds of the Brulé and Oglala extended south to the Platte River Valley (Koch 2000). The fur trade in northwest Nebraska (1825 to 1850) was originally centered along the Niobrara and White rivers (Koch 1999). One of the early Euro-American traders, James Bordeaux, established a small permanent post during the winter of 1837 along Bordeaux Creek, a location verified in the 1950s by archaeologists who revisited the Bordeaux post and identified both the post and storage house from hewn-log replicas reconstructed near the Museum of the Fur Trade east of Chadron, Nebraska (Koch 2000). Between 1840 and 1890, large numbers of emigrants crossed Nebraska on their way west—first following the California gold rush and then with hopes of settling and then more chasing the Black Hills gold rush—causing many confrontations between tribal groups and Euro-Americans passing through to other areas. The Treaty of Fort Laramie in 1851 allowed the United States to establish roads and military posts in Indian Territory in exchange for annuity goods (Koch 2000). Sustained settlement in the region began in the 1880s after the passing of Pre-emption, the Homestead Act of 1862. In the years immediately leading up to the passage of the Homestead Act, there were five separate treaties in which Native American tribes gave up (or “ceded”) land in Nebraska to the U.S. government, which set the stage for an explosion of European settlement (Koch 2000). Throughout this period, conflicts between native tribes and white settlers set the stage for the final confinement of Indians on reservations and opened up the northern Nebraska Panhandle to Euro-American settlement and large cattle ranching operations. By 1878, the Lakota, Brule and Oglala Sioux had been moved from their Nebraska agencies to reservations in South Dakota, ending their way of life.

In 1877, Sioux County was organized as a large territory north of Cheyenne County, and then in 1885 the Nebraska legislature divided Sioux county into four smaller counties—present day Sioux, Dawes, Box Butte, and Sheridan Counties (Louis Berger Group 2005). Dawes County was named in honor of then Nebraska Governor James W. Dawes. Meanwhile, ranchers capitalized on the suitability of the high plains for grazing cattle as ranchers in Texas began to drive their cattle north onto the Nebraskan plains to mature and fatten their herds. Ranchers that settled the area found thousands of acres of unsettled open range and good sources of water in local rivers such as the Niobrara and White Rivers. Based on the idea that cattle will not walk more than 15 miles a day for water, and the ranch being the primary watering hole for the cattle, meant a typical ranch extended out seven miles from the ranch station (Louis Berger Group 2005). These early open range ranches were little more than outposts often consisting of a temporary sod or log house, a small shelter for horses, and perhaps a small outbuilding (Louis Berger Group 2005). The arrival of the Chicago and Northwestern Railroad and Fremont, Elkhorn & Missouri Valley (FE&MV) Railroad to Chadron in August 1885 initiated a flood of settlers into Dawes County (Louis Berger Group 2005). As the ranchers feared, the arrival of the railroad brought settlers claims that quickly dissected the rangelands. Anticipating the arrival of settlers, ranchers began to protect their rangelands by fencing them in. In 1902, the Justice Department began investigating the illegal fencing of public domain and issued an edict that all illegal fences on some 800 ranches had to be removed within 60 days but took no action until 1906, when several ranchers were convicted and sent to a year in prison (Louis Berger Group 2005). After several hard winters and large cattle die-offs, Nebraskan ranchers switched from open range ranching to “ranch farming,” which was a more labor intensive operation that centered on the ranch itself (Louis Berger Group 2005). Mechanization also had an impact on the make-up of the ranch with the arrival of threshers, tractors and other machinery, old barns were replaced by metal sheds and other prefabricated buildings. The early settlers who came to northwestern Nebraska typically selected home sites where they could build their dwellings. Along timber covered rivers, log and lumber houses were common, and in the few places where stone outcroppings occur, stone was quarried for numerous house and outbuilding structures. Often, people made houses out



of adobe, or built walls constructed of tightly pounded dirt formed to make solid walls. Across the Plains, early homesteaders commonly constructed temporary dugouts by digging into a hill. Dugouts were small, some no more than ten feet square, but they provided quick shelter. Dry conditions and increased competition for land made homesteading difficult in northwestern Nebraska that resulted in numerous short-lived occupations throughout the area. Nonetheless, farming and ranching remains an important element of the regional economy today.

#### *Fort Robinson*

Fort Robinson, located in northwestern Nebraska's Dawes County, is a National Register property, historically significant as it was an important stage point for early military occupation of the area. Fort Robinson once housed the famous Buffalo Soldiers and was the scene of Crazy Horse's death and the 1879 Cheyenne Outbreak that claimed the lives of 64 Cheyenne. The Fort Robinson and Red Cloud Agency, located 1.5 miles east of the Fort, were focal points of Indian-White conflict on the Northern Plains during the final years of Sioux and Cheyenne resistance (1873 to 1890) (Lissandrello 1976). As the need for a military presence near the Red Cloud Indian Agency grew, Fort Robinson began in 1874 as the U.S. Army outpost known as Camp Robinson and just four years later was designated Fort Robinson. Located along the White River, near the recently established Indian reservation and new railroad line, the advantageous location allowed Fort Robinson to expand its area and military power.

Crazy Horse, military leader of the Oglala Sioux who had courageously held out against the U.S. government's attempts to confine the Lakota, fought in many famous battles such as the Fetterman Massacre (1866) and the Battle of the Little Bighorn (1876), and was killed at Fort Robinson (Sandoz 1942). When Crazy Horse finally sought surrender to help his starving and exhausted people he began meeting with U.S. troops under General Crook stationed at Fort Robinson. Unfortunately, during his attempt to peacefully surrender, concerns over Crazy Horse's real intentions, due to a scout mistranslating his words, Crook ordered Lieutenant Lee (Officer of the Day), to apprehend Crazy Horse (Sandoz 1942). On September 5, 1877, Crazy Horse arrived at the Fort and Lee immediately turned him over to Captain James Kennington, in charge of the post guard, who escorted Crazy Horse to the post guardhouse. Crazy Horse soon realized he was being arrested and attempted to escape. Following a brief scuffle, Crazy Horse was bayoneted by a member of the guard and died from his wounds later that evening (Sandoz 1942).

Fort Robinson was also the scene of the 1879 Cheyenne Outbreak. The U.S. government had moved the Northern Cheyenne tribe to a reservation with their Southern Cheyenne kinsmen in Indian Territory (later Oklahoma) in 1877. Following a year of suffering from poor food and diseases, 350 Cheyenne left Indian Territory, without permission, and headed north (Steinacher and Carlson 1999). Under the leadership of chiefs Dull Knife and Little Wolf the Cheyenne endured several clashes with army troops and local civilians, but made it to Nebraska where Little Wolf and his followers continued north to join the Sioux leader Sitting Bull in Canada and Dull Knife's group went into hiding in the vast Sand Hills to try to obtain refuge with Dull Knife's friend and Sioux leader, Red Cloud (Steinacher and Carlson 1999). Unfortunately, Red Cloud and his people had already been removed to Dakota Territory and only soldiers remained near the old Red Cloud agency that was located near present-day Chadron, Nebraska. It was here that an army patrol intercepted Dull Knife and his people, and on October 24, 1878, escorted them to Fort Robinson (Steinacher and Carlson 1999). The Cheyenne remained somewhat peacefully at the Fort until pressure by Kansas officials to arrest and return some of Cheyenne warriors down south worried the Cheyenne who were very determined to not go back to the southern reservation ultimately escalated into an escape attempt (Steinacher and Carlson 1999). On January 9, 1879, the imprisoned Cheyenne used weapons they had



hidden to escape their prison barracks and a running fight ensued along the White River valley where at least twenty-six Cheyenne warriors were killed and some eighty women and children were recaptured and returned to the Fort (Steinacher and Carlson 1999). Over the next few weeks, those Cheyenne not captured were killed or taken prisoner at a camp on Antelope Creek located northwest of Fort Robinson, except for Dull Knife and some of his family who made it north to join Red Cloud's group. In all, sixty-four Indians and eleven soldiers lost their lives during the escape attempt (Steinacher and Carlson 1999).

African Americans who served in the Union Army during the Civil War were consolidated into two regiments, the Ninth and Tenth, in 1866 (Steinacher and Carlson 1999). The Ninth and Tenth regiments were collectively given the nickname "Buffalo Soldiers" by the Plains Indians because of the perceived similarity of the soldiers' curly hair to that of the buffalo (Steinacher and Carlson 1999). Fort Robinson became the Buffalo Soldiers' regimental headquarters and home while the Ninth participated in the 1890 to 1891 Wounded Knee campaign to suppress the Sioux Ghost Dance movement at Pine Ridge Agency in South Dakota (Steinacher and Carlson 1999).

After the Indian Wars, Fort Robinson served as a frontier outpost with soldiers doing everything from fixing the telegraph line to keeping the peace between ranchers and homesteaders as settlers moved into the area (Lissandrello 1976). After World War I, the Fort became the world's largest Quartermaster Remount Depot (1919), housing thousands of horses and mules that during World War II were greatly expanded (Lissandrello 1976). Also during World War II, the War Dog Reception and Training Center was activated (1942) at Fort Robinson and dogs were trained for a multitude of military duties (Lissandrello 1976). Two years later, a prisoner of war camp was erected near the site of the original Red Cloud Agency and members of Rommel's Afrika Korps, Hitler's Youth Army, and Hitler's Band, were moved to the camp and were kept busy maintaining grounds and buildings, mending fences, and working in the stables or at the K-9 training center until 1946 (Lissandrello 1976; Louis Berger Group 2005). In 1948, Fort Robinson was declared surplus and handed over to the US Department of Agriculture ending 74 years of continuous military operations (Lissandrello 1976).

#### *History of Uranium Discovery*

The Crow Butte ore body lies in what has been named the Crawford Basin (Collings and Knode 1984). H.M. DeGraw of the Nebraska Geological Survey reviewed several thousand oil and gas logs in the Nebraska Panhandle and outlined several major fluvial systems within the basal Tertiary, the Oligocene Chadron Formation. The Wyoming Fuel Company reviewed the DeGraw study, reinterpreted the logs, and developed a Chadron sandstone isopach based on widely spaced oil and gas exploration holes (Collings and Knode 1984). This study indicated an extensive fluvial sandstone system at the base of the Tertiary overlying the Cretaceous Pierre Shale. This fluvial sandstone is the Basal Sandstone Member of the Chadron Formation of Oligocene age and in the Crawford and Chadron areas, exploration holes revealed oil and gas in the sandstone. Based on this information, in the spring of 1978, Wyoming Fuel Company acquired a regional lease position from Sioux Minerals, Ltd. and Wulf Oil Corporation, of about 64,000 acres along the Chadron Formation outcrop of northwest Nebraska (Collings and Knode 1984). One year later, Wyoming Fuel Company and Ferret Exploration Company formed a joint venture and Wyoming Fuel Company, designated as project operator, undertook a regional exploration drilling program (Collings and Knode 1984). The White River Group is Oligocene in age and consists of the Chadron and Brule Formations. The Chadron is the oldest Tertiary Formation of record in northwest Nebraska and uranium mineralization, consisting of coffinite, occurs exclusively within the Basal Chadron Sandstone Member (Collings and Knode 1984). The uranium mineralized trend was determined to be approximately 12 miles long and up to 3,000 feet wide with



uranium reserves expected to exceed 30 million pounds U308, thus in 1983 uranium mining began in northwestern Nebraska (Collings and Knode 1984).

#### 1. Known Site Density

Based on background research, ARCADIS anticipated discovering modern and historic trash debris or dumps, historic foundations and structures, and prehistoric lithic scatters or isolated finds situated sporadically across the MEAUP.

#### 2. Known Cultural Themes

The file search revealed known cultural affiliation of previously recorded historic sites in the project area as spanning the Expansion (1890-1919) period through the Modern period (1956-present), and were primarily associated with homesteading, ranching, and farming activities and occupation.

### VII. Survey Methodology

#### A. Extent of Survey Coverage

The block area was inventoried using pedestrian transects spaced at a maximum of 30 meter intervals. Gridded north-south or east-west oriented transects were guided by handheld Global Positioning System (GPS) devices. In all portions of the project area, special attention was given to areas of enhanced visibility, such as ant mounds, animal trails and burrows, deflated areas, disturbed areas, and cut-banks.

#### B. Collection Strategy

No artifacts were collected during the MEAUP cultural resource investigation. Field notes, photographs, and other project documents are on file at the ARCADIS office in Buffalo, Wyoming.

#### C. Site Mapping

When artifacts or features were encountered, the immediate areas were surveyed intensively to delineate the extent and distribution of associated materials. This was accomplished by covering the area with informal landform guided transects and/or more formal spaced transects (usually 2-5 meter spacing). A prehistoric site is defined as 2 or more artifacts within 30 meters of one another or the presence of a feature. A historic site is, at a minimum, defined as an item or items older than 100 years, a feature, or abandoned farm/ranch yards, school houses, trash dumps, and other structural/building/object sites.

Cultural materials were classified as sites or isolated finds, documented on appropriate Nebraska Cultural Property forms, and their locations plotted on 7.5' USGS topographic maps. To precisely map the location of the sites and isolated finds, GPS data were collected with a Trimble GeoXT or Trimble GeoXM handheld unit and differentially corrected using Trimble Pathfinder 4.0 software. Site datums were typically a GPS point.

Site plan view maps were created with Trimble GeoXT and GeoXM handheld GPS units. Data were downloaded, post-processed, and exported as ArcMap shapefiles. Site maps were then drafted in ArcMap using templates, corrected data, and USGS 7.5' base maps. Maps contain, but are not limited to, a datum, a

site boundary, artifact locations, concentration areas, feature locations, contour lines, vegetation changes, existing and proposed infrastructure, disturbances, and drainages. Environmental attributes, such as topography, vegetation, and disturbances were also mapped (when noteworthy) with the GPS unit and supplemented by underlying the appropriate 7.5' USGS Orthophoto Quads in ArcMap during the drafting process.

Site overview photographs were taken at each site location with a digital camera. In addition, all interesting historic artifacts were either drawn to scale or photographed using high resolution digital photography. Close-up and overview photos of features, disturbed areas, buildings, and any other important site attributes are also provided.

Historic artifacts were inventoried in the field using a simple tally based on descriptive and English customary measurement categories.

Features were measured, described, digitally photographed, and mapped with the GPS unit. Scaled feature plan view maps were also drawn, particularly if intact morphology could be discerned. Features were assigned an alphanumeric reference beginning with 'F' (e.g., F2).

#### **D. Testing Strategy**

Limited evaluative testing (i.e., shovel testing, auger testing) was not conducted as part of this investigation. Historic features and artifacts were present on the surface at all of the sites recorded and shovel tests would not offer additional information to aid in a NRHP determination. Locations along drainages and creeks where a higher, though still limited, probability of discovering buried prehistoric sites offered excellent bare ground visibility and bare cut-banks to observe subsurface strata.

#### **E. Weather and Ground Conditions**

Weather was cold and windy for most of the survey with a brief stint of snowfall and snow cover. Survey was not conducted when frost or snow cover exceeded 20 percent ground coverage. Other than delaying the ability to complete inventory before the 2010 year end, the weather and ground conditions did not alter field methods. Note-taking was abbreviated in the field at times due to extreme cold temperatures or during extreme wind, but daily field notes were supplemented and elaborated at each day's end.

### **VIII. Inventory Results**

#### **A. Cultural Resource Findings**

A total of 17 sites and five isolated finds occur within the survey area. There are 15 newly discovered historic sites that include six home/farmsteads (25DW359, 25DW360, 25DW361, 25DW365, 25DW366, 25DW370) three debris scatters (25DW357, 25DW363, 25DW369), two cisterns (25DW358, 25DW364), one corral (25DW367), one bridge (25DW362), one dugout (25DW368), and one quarry (25DW371). ARCADIS updated two previously recorded historic sites that include two home/farmsteads (25DW242, 25DW243). The five historic isolated resources (2368-I004, 2368-I004, 2368-I011, 2368-I013, 2368-I019, 2368-I023) contain artifacts representing a pattern of early land utilization and ranching, dating from the Expansion period (1890-1919) through the WWII-era (1940-1946). Of the 17 total sites located within the project area, none are recommended eligible for inclusion on the NRHP, but two homestead site's



25DW242 and 25DW243, should be avoided by the proposed undertaking. Each of the sites and isolated finds are described below in relation to the proposed undertaking.

Prehistoric resources are most often evaluated for their eligibility on the NRHP under Criterion D, for their potential to yield information important to prehistory, but all four criteria are considered (as specified in Title 36 of Codes of Federal Regulations 36 CFR 60.4). No prehistoric resources were discovered.

Historic resources may be evaluated under any of the Criteria. However, in the absence of structural features, documented association with significant historic events, or the important contributions of persons significant in history, historical resources more than 50 years old are evaluated under essentially the same criteria as prehistoric resources. Historic manifestations in Nebraska are evaluated for eligibility on the NRHP paralleling the framework provided by *Section 5* of the manuscript *National Historic Preservation Act Archaeological Properties Section 106 Guidelines*, by the Nebraska SHPO, dated 2006. Isolated finds, by definition, are considered not eligible for the NRHP.

## B. Site Descriptions

### Newly Recorded Sites

#### 25DW357 (2368-S001)

Site 25DW357 is a historic debris scatter located in Section 20 T29N R50W, in a pasture on the southwest slope of a large hill one mile north of River Road and 1.25 miles east of Hollibaugh Road (**Figures 12 and 15**). The site measures 260 feet by 65 feet and covers an area of 9,548 square feet. Vegetation consists of mixed grasses affording a 70 percent bare ground visibility. Sediments are composed of fine sands with caliche to an unknown depth. Impacts to the site include historic ranching and farming activities throughout the area, wind and water erosion, grazing, and possible razing. The site datum is a GPS point taken at a fencepost centrally located along the northern site boundary.

Cultural materials consist of a historic debris scatter located along an east to west trending fence line. Additional materials were observed north of the fence line, but are not located within the current project boundary and were not recorded as part of this undertaking. Materials observed include one bottle finish (**Figure 13**), three fragments of a purple dinner plate with diamond hatching and floral embossed rim design, 17 pieces of undecorated white bone china, five clear glass fragments, five whiteware fragments, two milk glass bottle base fragments from two separate bottles, one green glass fragment with a double ring finish, four aqua glass fragments, one gold-decorated china fragment with rose decoration (**Figure 14**), one clear bottle glass fragment, one aqua bottle based fragment which reads "D. NEBR. S", one red brick fragment, one machine-cut nail, one metal spring, and several pieces of scrap metal of unknown origin. Diagnostic debris materials at this site include purple or amethyst glass, aqua glass, milk glass, and green glass. During the late 19th century, some of the glass sand brought to the United States tended to produce pale green colored glass (Adkison 2002; Fike 2002). In order to make the pale green glass items clear, manganese was added during glass production. Unknown to the manufacturers, manganese reacts to ultra-violet rays and over time causes the clear glass to turn purple. Manganese was primarily imported from Germany so by World War I supplies were restricted and, by 1917; alternative methods for producing clear glass were being used (Adkison 2002; Fike 2002; IMACS 1984). Amethyst glass dates from approximately 1880 to 1917 (Fike 2002; Horn 2005; IMACS 1984). White milk glass was commonly used for medicine, cosmetic, toiletry, food and specialty containers, and dates from the 1890s to 1960 (Fike 2002; IMACS



1984). Green glass was very versatile and used for many purposes that included wine and mineral bottles and dates from the 1860s to present day (Fike 2002; IMACS 1984). Aqua glass was very versatile and used for many purposes and dated from 1800 to 1910 (Fike 2002; IMACS 1984).

This historic debris scatter represents a secondary context for artifacts commonly recorded in the area, but the National Register criteria does not dismiss resources as insignificant simply because there are numerous examples of the type. National Register eligibility for any property, including historic period archeological sites, depends on integrity and significance. Integrity for a historic period archaeological site is based on the presence of features and whether or not they can tell us something about the location. Based on the artifacts recorded, site 25DW357 is a single dump event with materials dating to from the early to mid 1900s. Historic debris site 25DW357 does not retain enough integrity to qualify for the National Register. Lack of integrity alone, however, does not automatically exclude this site as eligible for the National Register. Significance was assessed following intensive survey and a historic records search that included a files search and architectural/structures property search conducted through the Nebraska SHPO; review of the National Register of Historic Places (NRHP) database for Dawes County, Nebraska; review of the National Historic Landmark inventory (NHL); review of General Land Office (GLO) Plats; and local literature review; that revealed sustained Euro-American historic occupation in this area occurred between 1890 to present day, and no leases or purchasers were found that can be associated with an important person or persons of "significance in history" or having an uncommon ethnic affiliation. Finally, there are no features associated with site 25DW357. Therefore, site 25DW357 does not possess enough significance to qualify for the National Register. Site 25DW357 is a common historic site likely associated with historic and early modern ranching or farming activities in the region that ARCADIS recommends **not eligible for listing on the NRHP and no further work is necessary.**

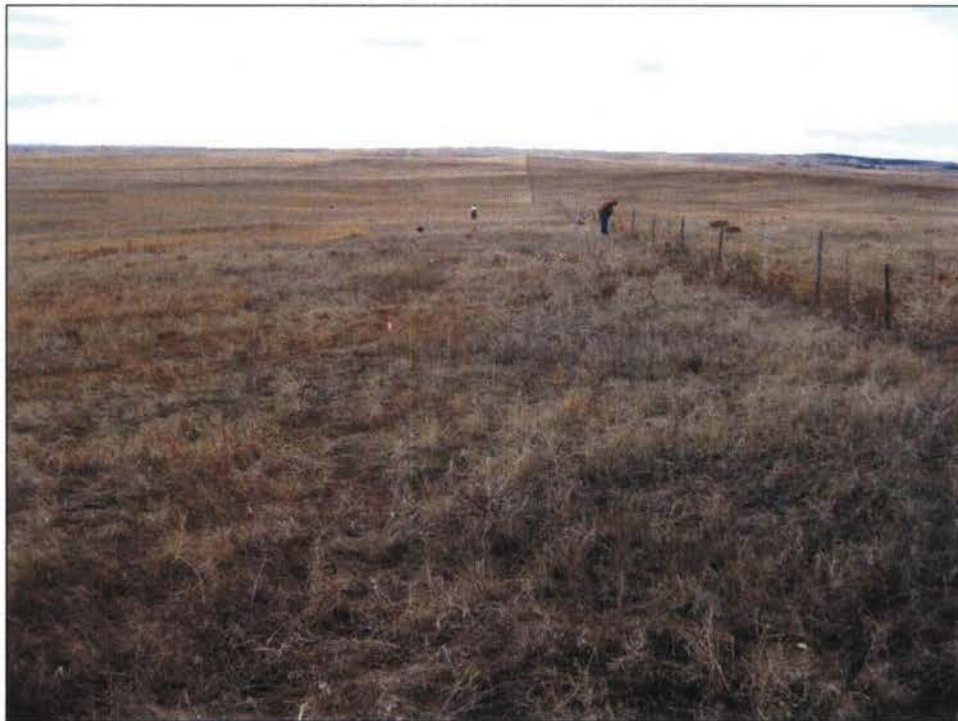


Figure 12. Overview of site 25DW357, facing west. Photograph taken by Shane Rosenthal, on 11/18/2010.



Figure 13. Site 25DW357, bottle finish. Photograph taken by Shane Rosenthal, on 11/18/2010.

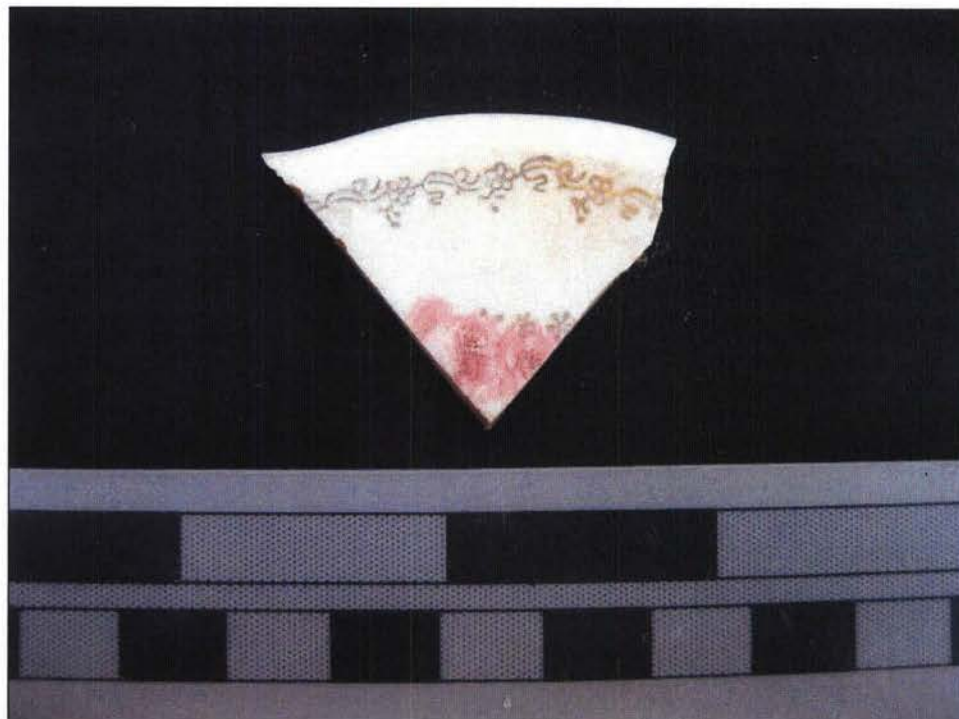


Figure 14. Site 25DW357, plate rim. Photograph taken by Shane Rosenthal, on 11/18/2010.



## 25DW358 (2368-S002)

Site 25DW358 is a historic cistern located in Section 19 T29N R50W, on a hilltop east of Hollibaugh Road (**Figures 16 and 19**). The site measures 78 feet by 48 feet and covers an area of 3,250 square feet. Vegetation consists of mixed grasses affording a 70 percent bare ground visibility. Sediments are composed of fine sandy loam. Impacts to the site include historic ranching and farming activities throughout the area, wind and water erosion, and grazing. The site datum is a GPS point at the southeast corner of the cistern feature.

Cultural material consists of one cistern foundation (Feature F1) located 26 feet east of one well collar (Feature F2) (**Figures 16 and 18**). Feature F1 is a poured concrete cistern that measures 16 feet north to south and 9.5 feet east to west. The foundation is constructed from a wooden-planked form with no cold seams. The walls of the feature measure approximately five inches in width. A hooked metal bar protrudes from the eastern wall, but it is unclear if this signifies concrete reinforcement or a wall anchor. The cistern walls sit flush with the ground surface and are badly deteriorated. The northeast corner has partially collapsed. A partial wall support sits on the western wall and was separately poured with cold joists. Feature F1 is located 131 feet north of a standing fence. Feature F2 is a galvanized metal culvert with a central pipe and concrete fill that is likely a well collar (**Figures 17 and 18**).

This historic cistern consists of two features commonly recorded in the area, but the National Register criteria does not dismiss resources as insignificant simply because there are numerous examples of the type. National Register eligibility for any property, including historic period archeological sites, depends on integrity and significance. Integrity for a historic period archaeological site is based on the presence of features and whether or not they can tell us something about the location. Site 25DW358 is a single ranch cistern and intensive survey of the area did not reveal other features such as a habitation foundation. Historic cistern site 25DW358 does not retain enough integrity to qualify for the National Register. Lack of integrity alone, however, does not automatically exclude this site as eligible for the National Register. Significance was assessed following intensive survey and a historic records search that included a files search and architectural/structures property search conducted through the Nebraska SHPO; review of the National Register of Historic Places (NRHP) database for Dawes County, Nebraska; review of the National Historic Landmark inventory (NHL); review of General Land Office (GLO) Plats; and local literature review; that revealed sustained Euro-American historic occupation in this area occurred between 1890 to present day, and no leases or purchasers were found that can be associated with an important person or persons of "significance in history" or having an uncommon ethnic affiliation. Finally, the features associated with site 25DW358 lack a unique design and any other unusual physical characteristic. Therefore, site 25DW358 does not possess enough significance to qualify for the National Register. Site 25DW358 is a common historic site likely associated with historic and early modern ranching or farming activities in the region that ARCADIS recommends **not eligible for listing on the NRHP and no further work is necessary**.





Figure 16. Site 25DW358, Feature F1, cistern. Photograph taken by Shane Rosenthal, on 11/18/2010.



Figure 17. Site 25DW358, Feature F2, well collar. Photograph taken by Shane Rosenthal, on 11/18/2010.



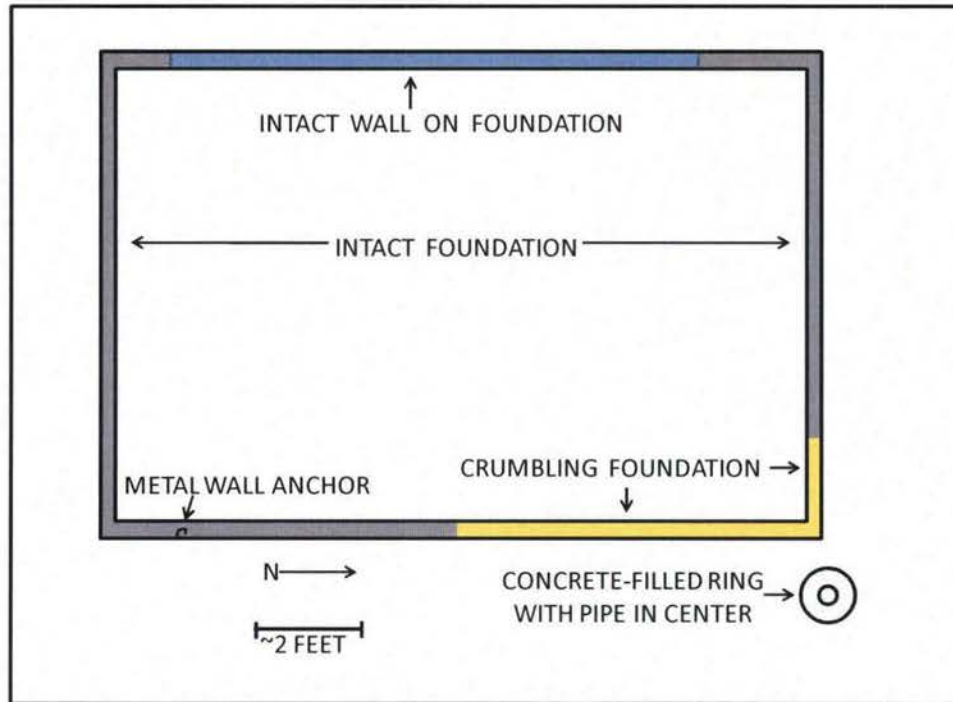


Figure 18. Site 25DW358, Feature drawing. Drawing by Ashley Howder, on 1/18/2011.



## 25DW359 (2368-S003)

Site 25DW359 is a historic foundation and associated dugout and debris located in Section 19 T29N R50W, ten meters east of Hollibough Road (**Figures 20 and 25**). The site measures 50 feet by 50 feet and covers an area of 2,500 square feet. Vegetation consists of mixed grasses affording a 70 percent bare ground visibility. Sediments are composed of fine sandy loam as observed along slopes, road cut, and in dugout feature. Impacts to the site include historic ranching and farming activities throughout the area, wind and water erosion, and grazing. The site datum is a GPS point taken at the southwest corner of the foundation feature.

Cultural material consists of historic debris, one foundation (Feature F1), and one dugout (Feature F2). Historic domestic debris was scattered within the foundation and surrounding area and consists of seven pieces of a metal bed frame with leaf decorations, 14 aqua glass shards, one milk glass shard, a one inch galvanized pipe and two elbow sections of pipe, one large two inch by twelve inch milled board measuring 16 feet long, 30 fired clay bricks, scattered barbed wire, and several small metal scraps of unknown use. Diagnostic debris materials at this site include aqua glass and milk glass. White milk glass was commonly used for medicine, cosmetic, toiletry, food and specialty containers, and dates from the 1890s to 1960 (Fike 2002; IMACS 1984). Aqua glass was very versatile and used for many purposes and dated from 1800 to 1910 (Fike 2002; IMACS 1984).

Feature F1 is a historic foundation composed of non-reinforced poured concrete measuring 23 feet east to west and 21 feet north to south (**Figures 21-23**). The foundation is poorly preserved, and the concrete has degraded into smaller blocks. Linear alignments of concrete blocks form the north and west walls, with no concrete alignment observed along the south portion. The east foundation concrete slabs remain largely upright. The foundation is surrounded on the north, east, and west sides by a shallow depression measuring five feet in average width. Aqua and milk glass fragments were observed along the east wall near two upright one inch and  $\frac{3}{4}$  inch diameter pipes. The bed frame, a large brick scatter, barbed wire, and milled lumber fragments were observed within the depression at the southwest corner of the foundation. Additionally, concrete blocks and a large milled lumber board are scattered southeast of the southeastern foundation corner. The concrete scatter discontinues 55 feet southeast of the foundation at a cottonwood tree.

Feature F2 is a dugout feature located five feet northeast of the northeastern foundation corner of F1 and is a continuous expansion of the depression which surrounds F1 (**Figures 23 and 24**). The dugout measures 18 feet southwest to northeast, 15 feet northwest to southeast, and is approximately 3.5 feet at its deepest depth. The site's location is currently used for ranching activities, and two fence lines run 50 feet west of the foundation and 92 feet south of the foundation.

The original function of the structures recorded at site 25DW359 is unknown, though the presence of the bed frame may suggest domestic use. Dugouts are common across the Plains and often represent the only remains of early-settlement semi- subterranean sod houses. Often, more permanent homes were built near these dugouts as sturdier materials became available. However, dugout depressions may also represent the location of semi-subterranean cellars.

Historic homestead site 25DW359 was probably occupied from the early to mid-1900s. This historic homestead consists of features and debris commonly recorded in the area, but the National Register criteria does not dismiss resources as insignificant simply because there are numerous examples of the type.



National Register eligibility for any property, including historic period archeological sites, depends on integrity and significance. Integrity for a historic period archaeological site is based on the presence of features and whether or not they can tell us something about the location. Site 25DW359 is probably an early historic homestead that does not retain enough integrity to qualify for the National Register. Lack of integrity alone, however, does not automatically exclude this site as eligible for the National Register. Significance was assessed following intensive survey and a historic records search that included a files search and architectural/structures property search conducted through the Nebraska SHPO; review of the National Register of Historic Places (NRHP) database for Dawes County, Nebraska; review of the National Historic Landmark inventory (NHL); review of General Land Office (GLO) Plats; and local literature review; that revealed sustained Euro-American historic occupation in this area occurred between 1890 to present day, and no leases or purchasers were found that can be associated with an important person or persons of "significance in history" or having an uncommon ethnic affiliation. Finally, the features associated with site 25DW359 lack a unique design and any other unusual physical characteristic. Therefore, site 25DW359 does not possess enough significance to qualify for the National Register. Site 25DW359 is a common historic site likely associated with historic and early modern ranching or farming activities in the region that ARCADIS recommends **not eligible for listing on the NRHP and no further work is necessary.**



Figure 20. Site 25DW359, Site overview, facing southeast. Crew members on left at Feature 2. Crew member on right at Feature 1. Photograph taken by Shane Rosenthal, on 1/19/2011.