



**Figure 4.9 Tribal Site No. 6, looking south/southeast.**

The location of the site according to GPS data is marked by the pin flag, as indicated by the arrow.

**Tribal Interpretation:** The Tribal field crews interpreted this place as being a possible gravesite.

**Additional Information:** Because the July 2013 field visit was unable to identify any item or feature that might confirm or change the original interpretation, it is not possible to offer additional information at this time. Assuming for the time being that an exposed bone does exist at this place, there remains an absence of pertinent data that the discovery is American Indian in origin or even human. To verify the association of this find, a revisit would be necessary if any project activity were to be conducted near this locale in the future, at a time when ground visibility is improved, to include a determination that the exposed item is indeed a human bone. However, the applicant intends to avoid this location, and the potential grave site is outside the ore body boundary.

#### 4.1.7 Tribal Site No. 7

Tribal Site No. 7 (Site No. 12 in SSN 2013) is located immediately west of and below Tribal Site No. 6 in a larger north–south flowing drainage (Figure 4.10; Appendix G). It also lies in the [REDACTED], Township 29N, Range 51W. This place includes a small cliff, formed by a vertical exposure of Arikaree sandstone, on the east bank of the drainage.

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
	Docket #: 04008943
	Exhibit #: NRC-056E-00-BD01
	Admitted: 8/18/2015
	Rejected:
	Other:

Identified: 8/18/2015  
Withdrawn:  
Stricken:



**Figure 4.10 Tribal Site No. 7, looking northeast.  
The height of the rock exposure is about 4.5 m.**

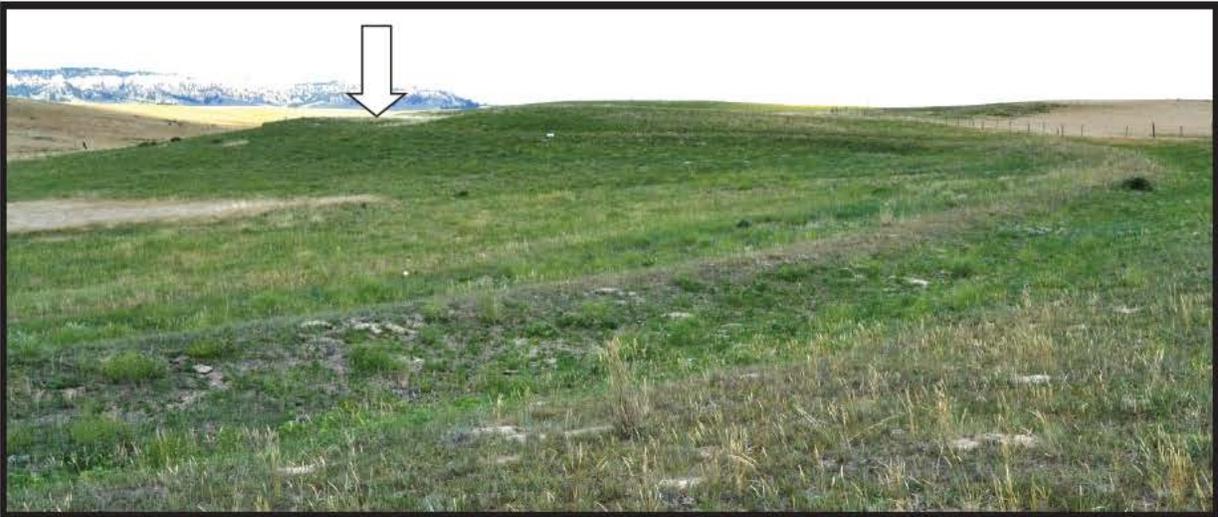
**Tribal Interpretation:** This feature is interpreted by the Tribal field crews as a possible cultural site, specifically a buffalo jump location.

**Additional Information:** SC&A located this site and includes notation of its natural cliff feature, exposed by the down cutting of the drainage and erosion of the sandstone by water action. There is another similar cliff on the west bank about 200 m south of this cliff, and other similar exposed cliffs were observed in this part of the MEA during the field visit. An inspection of the immediate vicinity below the cliff did not reveal evidence of a past cultural event, e.g., exposed bison bone or cultural artifacts. It should be noted, though, that at the time of the July 2013 field visit, the bed of the drainage just below the cliff was covered by a thick mat of vegetal debris, recently deposited by the past spring and early summer runoff.

## **4.2 Three Crow Expansion Area**

### **4.2.1 Tribal Site No. 8**

Tribal Site No. 8 (Site No. 13 in SSN 2013) is located on the slope of a north-flowing drainage in the far east-central part of the TCEA (Figure 4.12; Appendix H). It lies in the [REDACTED] Township 31N, Range 52W. It consists of a mound of earth (about 10 m east/west by 7m north/south by 2 m tall), situated within an area where borrow material has been scooped from the east-facing slope, creating a relatively level excavated surface about 20 m east/west by 25 m north/south.



**Figure 4.11 Tribal Site No. 8, both views looking north with the Red Cloud Buttes in the distance.**

**Top:** View toward the flat area where the mound is located (arrow). A terraced contour is visible in the foreground, circling to the right and back to the left on the hillside toward the location marked by the arrow. **Bottom:** Close-up view of the mound of borrow fill.

**Tribal Interpretation:** The Santee Sioux Nation field crew interpreted this to be a suspicious mound of earth of undetermined function, but they also observed that it could be a “gravel site,” a place where rock material was previously excavated.

**Additional Information:** When SC&A staff located this mound, staff observed large concave contours that are plainly evident extending both north and south from the borrow area (see Figure 4.11 – Top) and are found upslope from the mound to the east. These features are typical of a historic soil borrow area that is probably associated with extensive contouring and terracing of early agricultural fields in this area. Similar mounds of soil and associated field contour systems are visible east of the TCEA boundary. According to a local informant, the Soil Conservation Service constructed these features throughout the Crawford area in the 1950s and 60s to curb erosion and aid moisture retention in areas being returned to grassland.

### **4.3 Summary of Documentation Results**

Field crews from the Crow and Santee Sioux Nations conducted a pedestrian field inventory of the entire CBR MEA and selected parts of the TCEA in late November through early December 2012. A written report, prepared by the SSN THPO, was submitted to the NRC in early 2013. The report included a tabular presentation of 13 places of potential religious or cultural significance for these two Tribes. The report table includes GPS data for site locations, a site number (1–13), and descriptive designators for each recorded place that reflect potential function and/or cultural significance. An appendix to the SSN report includes a series of maps indicating areas covered by the pedestrian survey and locations of the recorded places at the MEA and TCEA. The field methodology employed by the Tribal crews did not include formal documentation of the places using written forms or by photography.

Using the GPS data points collected by the Tribal crews, the SC&A survey team found it easy to find the physical location of each of the places on the landscape and to identify the features observed by the Tribal crews. The lone exception to this observation is the place designated as a possible gravesite (designated Tribal Site No. 6 in this report), where dense vegetative growth greatly reduced visibility of the ground surface.

For the present analysis, the 13 places identified by the Tribal crews were reduced in number to eight places, as a result of combining six co-located similar features into a single site (Tribal Site No. 1) and renumbering the places as Tribal Sites Nos. 1–8, in order of the field visitation (see Table 4.1 above). Each of these eight places was identified on the landscape, carefully inspected by pedestrian coverage of the site environs, and documented through field notes, sketch maps, and photographs, as the situation dictated (Table 4.2).

As noted, the objective of the field portion of the present effort involved locating each of the 13 places identified by the Tribal crews and documenting, as necessary, the possible cultural features identified during the earlier Tribal field effort. As discussed in Section 3.1, the original intent of the current investigation was to complete an NSHS Archaeological Site Form for each of the 13 places; however, following the field phase it became apparent that none of these places warranted that level of documentation.<sup>5</sup> As discussed above and summarized in Table 4.2, two of the places are Euro-American historical features, but they are more properly termed “isolated finds” rather than “sites.” Two other places were originally identified as having potential religious or cultural significance for Tribes, but no evidence of past cultural activity associated with the described functions could be identified in the field. These two sites are tentatively classified as potential “cultural heritage places.” The remaining nine Tribal places

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<sup>5</sup> Apart from the Archaeological Site Survey Form, the State of Nebraska does have a standard format for recording isolated cultural artifacts or other occurrences (Nebraska State Historic Preservation Office, 2006). Consequently, such finds, if encountered in the project area, are noted but not formally recorded on a standardized form. By definition, isolated cultural finds are not eligible for the NRHP.

are attributed either to natural geomorphic/geological features (seven of the nine sites) or as resulting from cattle watering and recent geologic exploration activities (one each).

**Table 4.2 Summary of the Field Documentation Results from the July 2013 Field Visit**

Tribal Site Number	Tribal Interpretation	Alternative Interpretation	Justification
1 (SSN Nos. 3-8)	Six stone circles/campsite	Natural erosion of Arikaree sandstone cobbles on a hilltop	Circular patterning of cobble areas is difficult to discern; absence of cultural artifacts or other evidence of cultural features. Erosion of more resistant sandstone formations forming hilltops is a commonly observed geomorphic phenomenon in the general area.
2 (SSN No. 1)	Stone cairn/directional site	Historic Euro-American stone cairn marking the northeastern corner of an 1891 160-acre homestead	The stone cairn is located at the northeast corner of the homestead (previously recorded historic Site [REDACTED]) and has a metal stake embedded in the stones. Additional historic-period metal artifacts are found near the cairn.
3 (SSN No. 2)	Sacred site/possible dance area associated with conduct of an earlier Sundance	A depression feature that has been formed over time by range cattle using the concave feature as a watering hole and wallow.	An absence of cultural artifacts or features indicating a camp that would have been associated with a Sundance place. Plentiful evidence of usage of the feature by numerous cattle. Continued such usage over the years has enlarged and deepened the depression as mud adhering to the animal's legs is carried off. This pasture is part of an 1891 homestead.
4 (SSN No. 10)	Stone figure/lone tipi	This place has an alignment of five stones; however, the arrangement is associated with the edge of a reclaimed and revegetated mud pit and exploratory drill site. The stones align along the northern perimeter of the reclaimed area.	CBR database shows this place as the exact placement of a previous drill site associated with exploration of the subsurface geology in this vicinity. There is an absence of cultural artifacts in the vicinity.

Tribal Site Number	Tribal Interpretation	Alternative Interpretation	Justification
5 (SSN No. 9)	Hearth	A localized pocket of eroding and disintegrating Arikaree sandstone cobbles	The substrate of this particular hilltop includes plentiful sandstone cobbles of varying sizes, as indicated by recent CBR drill sites. Absence of evidence of cultural usage (no artifacts in the vicinity, absence of charring or heat effects on the cobbles, and lack of charcoal flecks in the fill).
6 (SSN No. 11)	Gravesite	The item could not be located due to dense vegetative cover	Pending location and full evaluation of the exposed bone, there is no confirmation that it is human or is associated with an earlier American Indian presence.
7 (SSN No. 12)	Cultural site/buffalo jump	An eroded geologic feature	No evidence of past cultural event. Other similar small-to-large Arikaree sandstone cliff locales were also observed in the general area.
8 (SSN No. 13)	Mound	A mound of borrow soil	This mound of dirt is located in an historic borrow area, probably associated with the widespread adjacent evidence of 1950s–60s Soil Conservation Service contouring and terracing efforts in the general area. Similar dirt mounds and associated field contouring were observed east of the TCEA.

## 5 MANAGEMENT RECOMMENDATIONS

### 5.1 National Register Considerations

The SSN report contained a recommendation that none of the 13 places identified by the Crow and Santee field crews was considered to possess a level of significance that would qualify any of them for listing on the NRHP, although detailed evaluations leading to this conclusion were not included. One objective of the present investigation was to create not only the necessary documentation to support such evaluations but also to assess potential NRHP significance within the regional context. Since none of the eight Tribal Sites (as the 13 places were grouped) documented by the field survey is considered to warrant recording as an historic or archaeological site, the question of potential eligibility for listing on the NHRP is not pertinent. Tribal Site No. 2 (SSN No. 1, stone cairn) is a previously undocumented element of the historic homestead recorded as [REDACTED] during the ARCADIS inventory of the MEA (Graves et al., 2011). This site was evaluated as part of that investigation and recommended as not being eligible for the NHRP. The NE SHPO concurred with this recommendation. Thus, Tribal Site No. 2 would be similarly considered not eligible for such listing.

Two of the places recorded by the Tribal field crews, Tribal Site No. 6 (SSN No. 11, gravesite) and Tribal Site No. 7 (SSN No. 12, buffalo jump), remain as *potential* places of Tribal religious or cultural significance, even though there is no extant evidence for American Indian affiliation at this time. Two of the sites, Tribal Site No. 2 (SSN No. 1, cairn) and Tribal Site No. 8 (SSN No. 13, mound), are clearly associated with the Euro-American historic period. The remaining sites, Tribal Site No.1 (SSN Nos. 3-8], 3 (SSN No. 2), 4 (SSN No. 10) and 5 (SSN No. 9) are considered to have no cultural association, either American Indian or Euro-American, except that Tribal Site No. 4 is the result of recent CBR project activity.

### 5.2 Treatment

The SSN report provided a recommendation that each of the 13 separate places identified by the Tribal field crews be avoided during future CBR project activities and established a buffer zone for each place consisting of either a 100-foot or 200-foot radius (see Table 2.2 above). The report also recommended that Tribal monitors be present during any future ground-disturbing activities “in and around” any of the 13 places identified during the Tribal field inventory.

Based on the findings and conclusions of the July 2013 field visit, SC&A makes the following recommendations for treatment:

- Tribal Site No. 1 – No further consideration for cultural resources.
- Tribal Site No. 2 – Avoid as part of historic Site 42DW366.
- Tribal Site No. 3 – No further consideration for cultural resources; avoid as part of ongoing cattle ranching operation.
- Tribal Site No. 4 – No further consideration for cultural resources.
- Tribal Site No. 5 – No further consideration for cultural resources.

- Tribal Site No. 6 – Maintain 100-foot radius buffer zones as recommended by Tribes; provide for a Tribal monitor if any future construction occurs near of this site.
- Tribal Site No. 7 – Maintain 100-foot radius buffer zones as recommended by Tribes; provide for a Tribal monitor if any future construction occurs near this site.
- Tribal Site No. 8 – No further consideration for cultural resources.

## 6 REFERENCES

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*National Historic Preservation Act of 1966*. 16 U.S.S. §470, and amendments.

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**Appendices A through H, including aerial photos and US. Geological Survey topographic maps, contain information related to the locations of potential historic resources and have been redacted pursuant to 10 C.F.R. § 2.390(a)(3), the National Historic Preservation Act, Section 304 (16 U.S.C. § 470w-3(a)), and Nebraska Revised Statutes § 84-712.05(13).**