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Mike and Linda Wordeman
13704 Neck Yoke Rd.
Rapid City, SD 5770

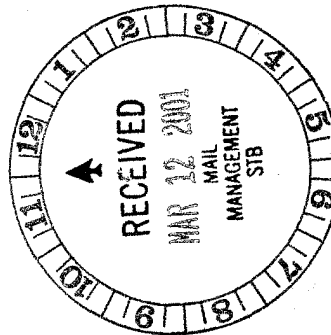
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February 26, 2001

Surface Transportation Board
Section of Environmental Analysis
1925 K Street, NW
Washington, DC 20423-0001



Dear Sirs:

You invited comments to your six-volume Draft Environmental Impact Statement for the Dakota, Minnesota and Eastern Railroad. As landowners and business owners who will be severely impacted by this proposal if adopted, we feel we must comment. During the process of reviewing the study we found maps outdated and very difficult to read, information inaccurate and inconsistent, and on some issues information was not provided at all. Various chapters are difficult to follow because of the numbering system. Some references were actually about another topic or area rather than the topic you were being referred to.

In volume IV page 4.4-18 the following statement is made. "Alternatives B & C would not cross any land identified as business or industrial. No impacts are expected to occur to these lands during construction, as no businesses or industries are located in close proximity to the proposed rail line corridor."

As owners of a 620-head cow/calf operation with an approximate value of \$600,000.00 and approximately \$326,000 worth of equipment to maintain the operation, we definitely consider our 6987 acre ranch operation a business. Just as a structure and customers are essential to any business in a city, the uninhabited grasslands of the prairie and good water are absolutely essential to our business. With that in mind we would like to point out the numerous ways the proposed rail line would affect our business.

1. A 400-foot ROW approximately 2.8 miles long will divide our ranch land in half from the southwest to the northeast. On the south side of highway 40, 640 acres including our state lease will be completely cut off from water. The water that is supplied by Battle Creek to these pastures is being diverted due to the ROW and the ROW cuts our underground water lines to these pastures. In T3S, R10E, section 32 the ROW affects a spring, which is one source of water to section 32. In T3S, R10E, section 31, the fill for the ROW affects a pond rendering it useless as a water source eliminating the only pond that is a consistent water source. The ROW also crosses our underground water line to stock tanks in this same area, therefore eliminating any reliable water source to the 4400 acres north of highway 40. That would mean 5000 of the 6987 acres would be without reliable water sources. At considerable expense, nearly nine miles of underground water lines were put into place to provide water to these areas. Without the existing lines, we have no assurance whether adequate wells can be drilled to provide water in these areas. If wells can be drilled, it would require electricity to be run to several locations to power wells, as windmills are no longer a reliable source of water. Electric wells would increase our operating expenses as well.

In the landowner mitigation section of the DEIS, the railroad's answer to water access is "effective crossings are the most logical answer." The study does not address the nature of cattle. If we have 5000 acres completely cut off from reliable water, a crossing is not the answer. The nature of cattle is to graze where water is relatively close. If no water source is close, the cattle simply will not use the area to graze. In our case that grassland would basically be rendered useless. The study certainly does not address adequate answers for replacing water sources to areas that are cut off from the current water sources.

2. The issue of crossings for livestock and day to day operations is of serious concern to us. Because several of our pastures are cut in half by the ROW, moving cattle and equipment is a major concern and expense. In a telephone conversation with Elisabeth Hollmann on Friday, November 3, 2000, she explained one of the options for cattle crossings is a 10'by10' culvert under the tracks. Anyone who has worked with cattle knows that driving 620 head of cattle through a 10'by 10' culvert under a rail track is a very unlikely scenario. Then, add a train traveling 45mph over the culvert and the situation becomes impossible. We still use horses to drive our cattle because of the rough terrain and that adds another dimension to the problem. Have any studies been done to determine the effectiveness of these types of crossings?

The ROW divides our calving pasture in section 31 in half. No type of crossing in this pasture will prove useful. Driving a calving cow through an underpass is not a feasible plan. This calving pasture would become totally useless.

The proposed crossings also affect moving equipment to fields, hayfields, and fence lines that are in need of repair. Moving a 16-foot windrower or a tractor that is 14 feet high through a 10' diameter culvert is not mathematically feasible. We would lose access to 140 acres of prime hay land due to the proposed ROW in section 31 and more hay land in section 25 due to cut and fill.

Another concern about crossings, if they are workable crossings, is the maintenance of these crossings? I could not find any reference in the DEIS for maintenance of crossings. Obviously, if the landowner is the responsible party it involves time and equipment, all an expense to our business.

The at grade crossing proposed at highway 40 will cost our business valuable time at the very least. Highway 40 is used on a daily basis to check cattle, move hay, and do day to day chores. Delays due to train traffic may even make the difference between saving a cow or not, and that is our source of income.

3. Fire caused by trains is another major concern. As we have stated, the prairie is a basic necessity for our business. Trains are a known source of fires. With the ROW nearly cutting our property in half, the possibility of losing some or all of our pastureland to fire is real. The policy that DM&E currently have on damages due to fire seems inadequate. What, if any, is their policy for relocating cattle to other pasture, possibly many miles away, if our pasture is burned out?

Our son, who manages the ranch, recently helped fight a fire near Hermosa, SD that was started by the DM&E. Nearly 2500 acres of pastureland was burned in this fire. If they do no more to control fire on the proposed line than they do on the current line, we have very definite reasons to be concerned. Please review the enclosed news article on this fire.

4. Over 50 miles of fencing has been established for maximum productivity of the land. The adoption of the DM&E proposal will disrupt the carefully designed pastures and grazing patterns of the cattle. This corridor, if accepted, will force us to redesign and rebuild fences throughout the entire ranch. Moving a fence or adding a fence has a domino affect throughout the entire ranch. The rate for replacing fences in 2000 was \$8000 per mile.

5. Our ranch headquarters are another financial concern for our business. The headquarters consist of two homes, one is the ranch manager's home, the other is the hired man's home, a cattle working barn, a stall barn and machinery shed, 3 other machinery shed and shops and an extensive corral system. The corrals are within 200 feet of the ROW, the cattle working barn 250 feet and the other buildings are at the farthest approximately 450 feet from the ROW. Ironically none of these buildings are on the maps provided in the DEIS. Were out of date maps used for this study or were maps not showing buildings deliberately used by the DM&E? The cattle working system of corrals and barns will be entirely useless due to the proximity of the railroad. The use of other building is questionable also because of noise, vibration, and poor air quality produced by the railroad. The replacement cost of these buildings, well

systems, septic systems, power access, and landscaping would be enormous.

Because of uncertainty with regard to the proposed rail line through our property, many business improvements have been put on hold. It does not seem prudent to make additional capital improvements to our property if the value of those improvements will be jeopardized by the construction of a rail line.

We hope we have provided enough evidence for you to consider our ranch a business. We deal with profits, losses, cash flow, taxes, markets, suppliers, employees, and just about any other concern any other business deals with. The proposed DM&E rail line will very seriously adversely affect our business. I seriously question DM&E's assertion that "the opportunity to obtain rail service may attract businesses to the area along these alternatives for future development. Property values may increase in areas suitable for commercial development." (Volume III-B, page 4.4-18) At least where property values are concerned in our case, we believe the values will decrease. Farm and ranch land values are higher when the lands are contiguous.

The second phase of our concern is the severe environmental impact the railroad would impose.

1. We now have the good fortune of looking at beautiful uninterrupted vistas. The Badlands lie to the east and the Black Hill to the west, with Battle Creek winding through our land. The proposed rail line will literally cut the two views in half. If the proposal is adopted the view will be railroad to the east and railroad to the west. This wide-open beautiful landscape is what visitors to South Dakota often comment on. We feel that it is very important to protect the very thing that draws visitors and new residents to South Dakota. See attached photos.

2. The proposed rail line will without a doubt impact air quality. In volume III-B, chapter 4, page 4.4-32 and 4.4-33 the following statement is made, "SEA identified no detailed studies that provided information on the amount of coal dust lost from rail transportation or the potential problems it would create." Surely, as long as railroads have been transporting coal, studies have been conducted on coal dust and air quality changes. Why were these studies not looked into and included? Another statement that causes concern is, "based on this anecdotal evidence, SEA does not believe fugitive coal dust poses a significant environmental concern." Why do we want our clear, clean air jeopardized when a study is based on "anecdotal evidence"? The Clean Air Act must be considered and enforced during this process. The Supreme Court recently ruled that clean air takes precedence over industry profitability.

Volume III-B, chart on page 4.4-37, shows emission increase was calculated by using 20 MNT/year, when the DM&E indicated in its application it intends to transport up to 100 MNT of coal per year. Why calculate figures based on 20 MNT when clearly the intent is to haul 100 MNT? The information in this chart, therefore, is clearly inconsistent and misleading to the people that will be directly affected by these emissions. Studies need to be done on the impact of the air quality when 100 MNT is being hauled.

3. "The Surface Transportation Board considers residences, schools, libraries, hospitals, retirement and nursing home as sensitive to noise and therefore considers these as noise sensitive receptors." (Volume III-A page 4.1-36) Why, with this definition in place does table 4.4-19 for alternative C, (page 4.4-61 in Volume III-B) indicate that there are zero noise receptors in Custer County? We know for a fact that there are two homes on our property in Custer County near highway 40 that are within 350 feet and 475 feet of the ROW. Are these not considered noise receptors? The information on this matter is very inconsistent. Another table (page 4.4-67) indicates 1 noise receptor in Custer County. Yet another on pages 4.4-69 and 4.4-73 again states zero noise receptors in Custer County. Why the discrepancies, and are any of these figures correct? Perhaps the fact that maps used in this study failed to show homes and other buildings contributes to these inconsistencies.

4. In a very short period of time we have observed numerous wildlife on Custer Ranch. Turkey, pheasant, grouse, heron, hawk, owl, golden and bald eagle, bobcat, antelope, deer, coyote, badger, prairie dog, fish, and numerous varieties of songbirds are all present on the Custer Ranch property. Certainly a rail line

and 36 trains per day will have impacts on survival by altering feeding patterns and nesting habits. Obviously, wildlife will be killed on the tracks as well. We have observed a pair of golden eagle that nest in the power line that crosses our property. This nesting sight is within approximately 150 feet of the proposed ROW. We could find no references to this eagle's nest in the environmental study. There is an eagle's nest recorded in T3S, R9E, section 35, which would indicate that there are two eagle nests located very close to the ROW. Will the close proximity of the rail line adversely alter the nesting habit of these golden eagles? See attached photos.

5. Map 123, Volume V, Project Maps indicates that six wetland areas on Custer Ranch property will be either directly crossed by the ROW or affected by cut and fill for the ROW. Wetlands are excellent nesting areas for wildlife as well as excellent wildlife habitat. Wetlands also help maintain and improve the water quality of streams, rivers and lakes. Ground water can be adversely affected by activities that alter wetland hydrology. The DEIS states that wetlands will be temporarily or permanently lost due to the proposed ROW. What, if any, protections are there for designated wetlands, or how will the DM&E replace them? The areas affected are in 5 in section 31, 1 in section 32, and 1 in section 36, our state lease. The Clean Water Act protects wetlands, yet the rail line in Alternative C is proposed to be built directly over wetlands destroying them.

6. Channel changes along Battle Creek create several adverse affects. Some changes make water inaccessible for livestock watering. Channel changes and construction runoff will result in erosion and sedimentation lowering the water quality.

7. The pollution from possible fuel spills during construction and operation could seriously affect the quality of water along Battle Creek. They would also create a distinct possibility of ground water contamination. Is there any guarantee the DM&E will not be hauling hazardous waste? In the Executive Summary, page ES-101 & 102 statements include "This plan shall include Applicant-sponsored training in hazardous materials response for appropriate tribal personnel." With nearly 3 miles of ROW passing through our property there are serious concerns about this issue. I do not believe that any plans to deal with hazardous waste contamination were addressed in the DEIS. If so, what are they? If Tribal personnel need training in hazardous waste contamination, what about any other landowner affected by the proposed ROW? Page 4.4-29 asserts that derailments are unlikely. Where are the studies on coal like derailments? We understand that by law even "unlikely" events be studied for their impact on the environment.

8. We are including a letter received on February 23, 2001 from USD Archeological Lab in Vermillion, SD with references to archeological finds on our property. There were 11 sites along the proposed ROW that were evaluated. We understand that as of January 4, 2001, the reports on these findings had not been completed and were not included in the DEIS. We do not understand how an environmental impact study can be evaluated when all reports have not been submitted. We cannot be expected to respond to a study that was never included in the EIS and we are entitled to comment prior to approval of this plan. Volume 1, General Project Information, US Army Corps of Engineers, 404 Permit Application, page 7 (2.5) Historical, Archeological and Cultural Resources, states "Should the contractor encounter and existing historical, prehistoric, archeological, paleontological, or other cultural resource within the construction area, the contractor will take steps to preserve all such resources as they exist and will contact the appropriate State Historic Preservation office for guidance and coordination." In the past, however, the DM&E has not taken the necessary steps to protect historical, archeological and cultural resources. In 1998, the Price Site-- near Mankato, Mn. was destroyed by DM&E Railroad workers.

We would like to know what safety measures are proposed for the at grade crossing at highway 40 in Custer County, South Dakota. We could not find any specifics on safety devices or safety measures that would be implemented at this crossing. The traffic on this highway has increased dramatically in recent years. It is a main traffic route for traffic from the reservation into Rapid City, SD. This is also a route used by tourists to and from the Badlands National Park. Serious measures need to be taken to protect the

people who regularly use this roadway if this proposed ROW is adopted.

The tax revenue figures supplied to the DEIS for counties are misleading. How were these figures in table 4.4-43 arrived at? How do the figures in the study compare to revenues generated by existing rail lines? Are they reasonable? Does the study take into account that the valuation of many acres of ranchland along the proposed ROW will most likely decrease in value? This would have to be calculated into the formula in order for the figures to be accurate. Was the ROW acreage subtracted from the existing property taxes when the calculations were done? At best, the calculations need to be explained, and we seriously doubt their accuracy. The economic impact presented to the DEIS is very one-sided in favor of the DM&E. Studies need to be done on each county to assess the negative economic impact to each county so fair comparisons can be made to evaluate the true economic gains or losses.

One of the major reasons we purchased the Custer Ranch is the pristine quality of the land contained in the ranch. The proposed line for the DM&E will devastate the pristine quality of the Custer Ranch and our quality of life.

Because the executive summary page 87 and Volume IV, Chapter 7, page 17, states that the Applicant shall be guided by the Land Use Mitigation Policy and plan negotiated with the Landowner Advisory Board we feel we must comment on this policy.

The DM&E landowner program is not consistent with reasonable assurances to protect the environment or the assets of contiguous landowners. The term **Best Efforts** in a contract is commonly found where performance is a necessity. At no time does the DM&E railroad state they will use their Best Efforts to "control noxious weeds" or protect the assets of the contiguous landowners. The DM&E references payment for labor "the maximum hourly rate for labor that DM&E will reimburse is two (2) times the federal minimum hourly wage". Their compensation formula is less than we currently compensate the employees of the Custer Ranch, and less than Custer County charges landowners for the labor for spraying. The DM&E will have to pay whatever costs are incurred to fix or correct any problems created by the DM&E and to maintain reasonable environmental protection. The DM&E policy is not consistent with reasonable compensation rates currently being paid by others today.

The DM&E does not mention compensating the land owner for policing their land for noxious weeds, reporting the presence of noxious weeds to them, or compensating the land owner for the equipment needed or any general and administrative expenses related to these services. The DM&E's intentions seem clear:

1. They pay the landowner considerably less for labor than they would pay the county or commercial sprayers per hour for spraying.
2. They do not pay landowners anything for policing railroad property.
3. They do not pay landowners for use of equipment for policing or spraying.
4. They do not pay the landowner any of their general and administrative expenses.

The DM&E requires "written sworn statements" and still reserves the right not to pay, while landowners are not provided with any assurance that the DM&E has the money to pay or any guarantee they will pay. The lack of performance bonds, irrevocable letter of credit and/or being named as loss payees in the insurance policies is obviously missing. The assurance of payment is reasonable in any contract. The DM&E have also been negligent in providing this reasonable contract stipulation.

How does the landowner know that the DM&E has the financial capability to pay the landowner for their services without being provided the financial statements of the DM&E? Where are the financial statements of the owners of the DM&E? How do we determine that they are an entity we want to extend credit to? The DM&E is a for profit business that understands the risk of extending credit without this type of information. Why is the DM&E trying to take advantage of the landowners? Can they be trusted? The managing partner of the Custer Ranch would be negligent in his fiduciary responsibilities if he would

enter into this agreement, as would any individual or organization that would recommend approving this agreement for anyone to sign.

The lack of reasonableness continues to be obvious throughout the Landowner Program. Some additional examples are:

1. Appendix 2 Fencing Criteria, page 3 item b: "If no repairs are made within 60 hours of DM&E's receipt of the request" (for fence repair) This landowner's inventory is livestock and livestock are highly mobile. Waiting 60 hours creates considerable economic risk to landowners as well as other liability issues.

2. "In the event landowner observes a fence in need of repair, landowner shall have the affirmative duty and obligation to take reasonable action to minimize damages to landowners property and livestock." The DM&E is proposing to run 36 trains per day along their fence, and nowhere in any of these documents is the DM&E agreeing that it is their "affirmative duty and obligation to take reasonable action to minimize damages to landowners property and livestock". Traveling this proposed route thirty-six times a day at 45 miles per hour should provide the DM&E adequate time and opportunity to police their property and protect the landowner from any losses due to the DM&E failing to assume reasonable care.

3. Appendix 4, Control of Noxious Weeds, page 1, item 2: the DM&E propose that they will "inspect annually" in an effort to control noxious weeds. County extension offices will assure you that an annual inspection for noxious weeds is not sufficient environmental protection to safeguard against noxious weeds. Noxious weeds become detectable at different times of the year due to the numerous different types of weeds and weather conditions. The notification time frame the DM&E has to respond, as per the contract, would allow noxious weeds sufficient time to seed and spread to contiguous landowners property. The DM&E need a reasonable environmental protection plan.

The DM&E railroad's expectations regarding what is called the "Landowner Program" is unconscionable.

The DEIS is not complete, is not accurate, and is very deceptive. It also has several material issues that can not be mitigated.

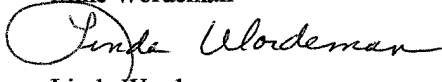
We are requesting that we be sent complete copies of any subsequent drafts and the final EIS.

We are in favor of Alternative A--the no-build alternative. We also reserve the right to make further comments in regards to these issues.

Sincerely,



Mike Wordeman



Linda Wordeman

Frost to fire

Train sparks 2,500-acre blaze

By Heidi Bell Gease
Journal Staff Writer

Don't bother asking Darwin and Berny Schock over for coffee today. They'll be busy fixing fence lines on their property south of Hermosa, where fire crews Saturday kept a 2,500-acre grass fire from consuming their house.

"We're grateful to a lot of people. It could have taken the barn and the house," Berny said Saturday evening, after volunteer firefighters from throughout the area had the blaze mostly extinguished.

In the process, fire crews had to snip a few fence wires to move from pasture to pasture.

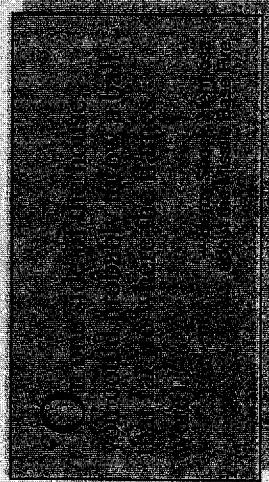
"We'll have to fix fence tomorrow," Berny said Saturday, but that was OK with her.

Sparks from a passing train ignited what has been dubbed the Missile Base Fire, which burned private land south of Hermosa. It's named for nearby Missile Base Road.

No one was injured, and no structures burned Saturday, but Dave Lindblom of the Hermosa Volunteer Fire Department said the fire burned around an abandoned house and came within 100 feet of the Schocks' home.

"On one side of the house, you could probably throw a ball that far (to where the flames were)," Berny said.

A Dakota, Minnesota & Eastern Railroad train sparked three fires along a two-mile stretch starting one mile south of Hermosa.



The train crew reported the first fire about 12:10 p.m., Loren Lintz of the Hermosa Volunteer Fire Department said.

The fire spread quickly, pushed by winds of 30 miles per hour or more. More than 15 fire crews from as far away as Johnson Siding and Ellsworth Air Force Base fought the blaze, keeping it on the east side of the railroad tracks. The fire did cross a gravel road at one point.

Berny was in Custer when she heard about the fire. She immediately drove home. "You could see the fire by Coolidge Inn already," she said. "You could see the smoke."

She arrived to find friends already had started packing things up and hauling them out of the house.

"They were taking everything they knew what to take, pictures and important things," including her sewing machines, she said. Several horses were taken to a neighbor's place.

"We've never had one this close," she said. "I'm sure we'll be up most of the night, watching the fire."

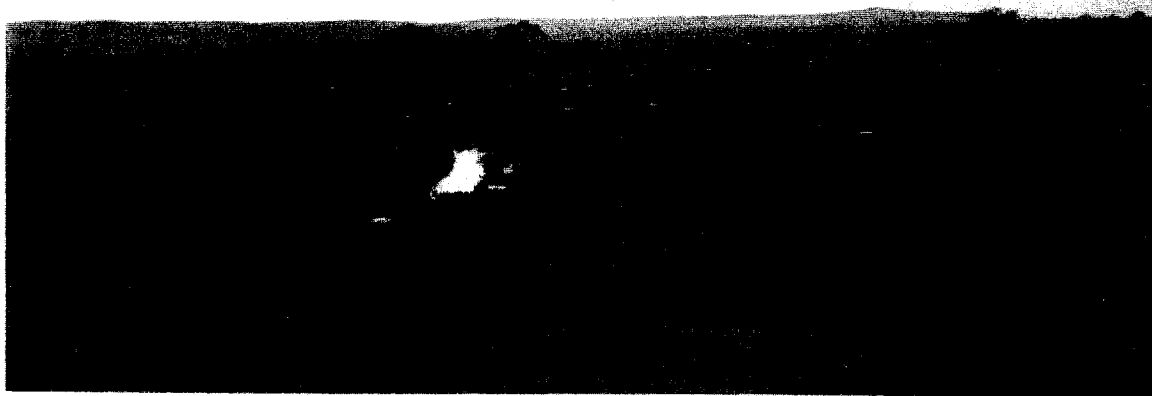
Crews had the fire contained about 2 p.m., Lintz said. The fire was considered 90

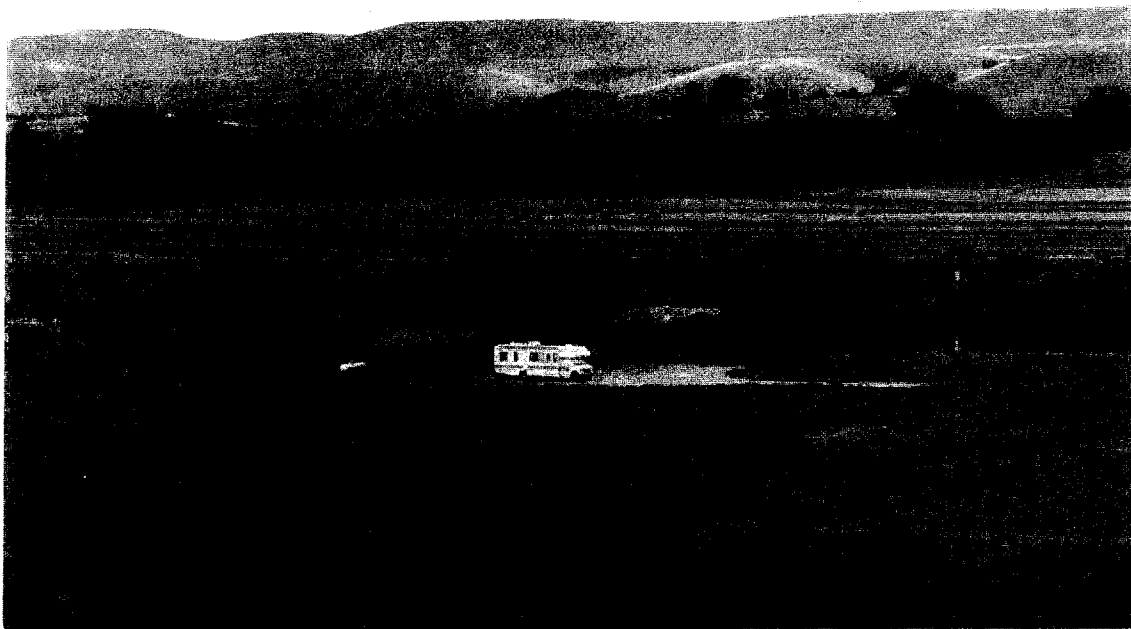
See **Missile Base**, Page A2.

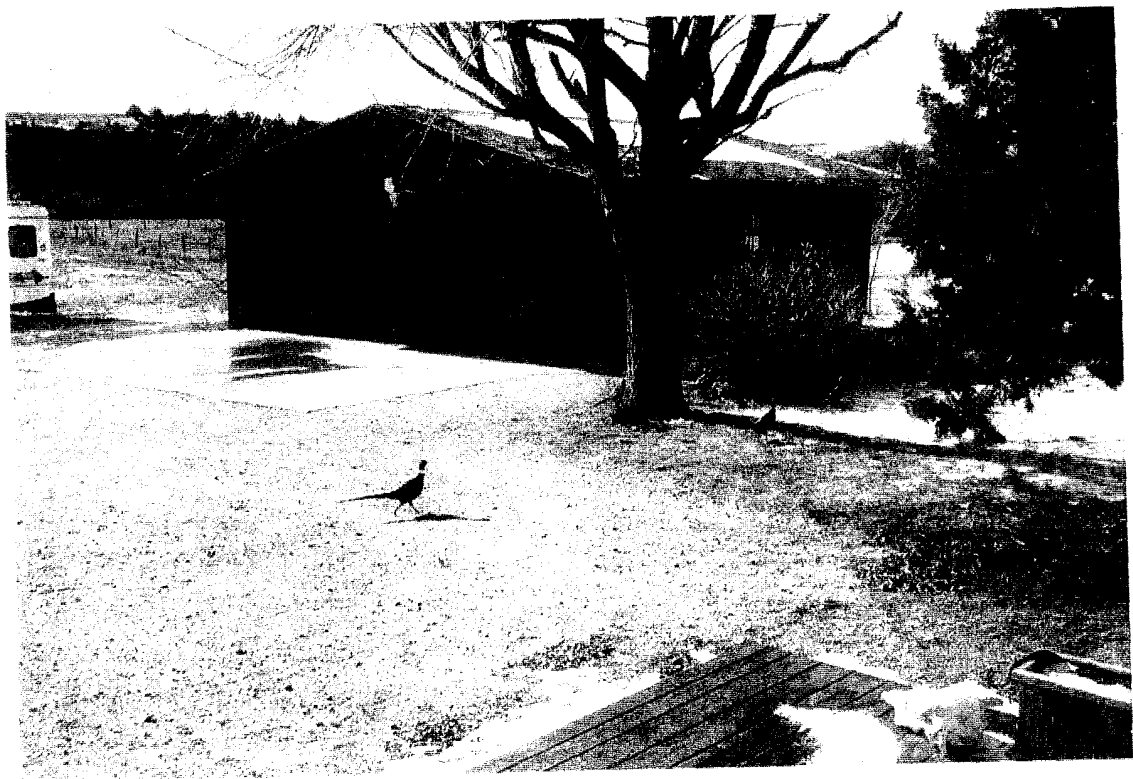
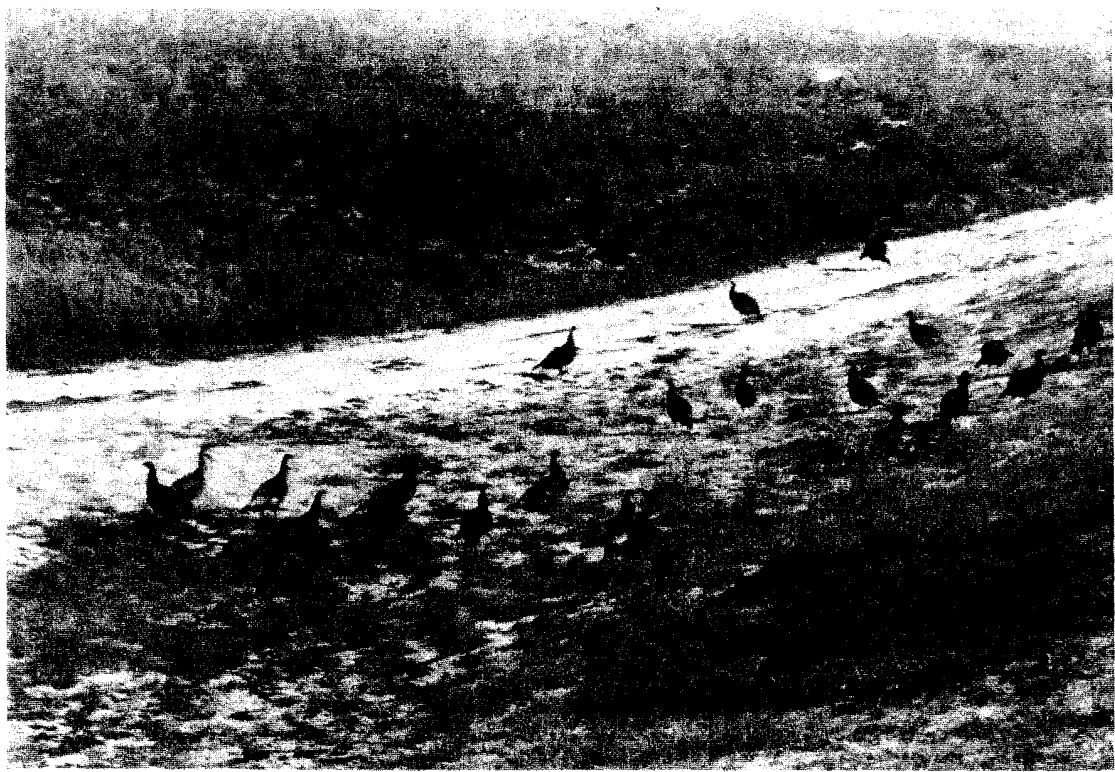


Don Polovitch/Journal staff

Kevin Strand and Mike McGee of Hermosa knock down flames Saturday on the north edge of the fire along the railroad tracks. The fire burned tall grass along the tracks that parallel Highway 79 for about a mile. The main part of the fire burned several miles to the south and east. Smoke can be seen in the background.









ARCHAEOLOGY LABORATORY

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February 20, 2001

Rob and Jennie Wordeman
HC 89 Box 298
Hermosa, SD 57744

Dear Mr. & Mrs. Wordeman:

I understand from Bill Ranney that you have purchased the JD Ranch and want an itemization of the archaeological sites discovered on that property. We found eleven sites as summarized in the table below. [In the P/H column, P indicates a prehistoric/aboriginal site while H indicates a historic/Euro American site.] I am enclosing a discussion of our findings at each of these sites. We are unable to send you our full report on these sites until the draft report is approved; it is now in the hands of the reviewers.

SITES FOUND ON CUSTER RANCH DURING DM&E RR SURVEY
Listed in Order From Wyoming State Line to Wall, SD

Field #	Site #	P/H	Type	Features	Notes
0128	39CU1850	P	Occupation		Late Paleo/Early Archaic Pt.
0129	39CU1851	P	Lithic scatter/stone circles	2 stone circles	
0130	39CU1852	P	Cairn/lithic scatter	1 cairn	
0217	39CU1899	P	IF		(biface fragment)
0131	39CU1853	P/H	Lithic scatter: historic dump		may remain buried
0150	39CU1855	P	Lithic scatter		
0145	39CU1854	P	Lithic scatter		
0149	39CU1856	P	Lithic scatter		
0148	39CU1857	P	Lithic scatter		
0147	39CU1858	H	Depressions	1 dugout, 1 depression, 1 privy	
0146	39CU1859	P	Lithic scatter		

Please call us if you have any further questions. My number is 605-677-5598.

Sincerely,

Nancy J. Hodgson
Supervisor and Project Archaeologist
nhodgson@usd.edu

Sites found on Custer Ranch During EIS Survey Along Proposed DM&E Route

39CU1850

The Electric Eagle site, 39CU1850, is an extensive area of six lithic concentrations, three lithic features, a stone circle, and a cairn. Between each concentration are scattered surface artifacts. Stone Tools and flaking debris extend for about a kilometer on the top and sides slopes of a bluff along the south side of Battle Creek Valley. The bluff is composed of sandstone and silicified sediment conglomerates that outcrop on the north side of the site that slopes toward the valley wall. The south side of the site gently slopes down into a high rolling prairie.

The six lithic concentrations are; areas A, B, C, D, E, and F. Area A, on the west edge of the site, contained 12 pieces of chipped stone flaking debris. In Area A, there was one reduction fragment, five cortical flakes, five interior flakes and flake fragments, and one piece of shatter. The lithic materials were mainly chert and silicified sediment, with one quartzite flake. There was no artifact collection.

Area B is 200 meters to the northeast of Area A. In Area B, surveyors observed one scraper, one uniface, one utilized flake, seven cortical flakes, 22 interior flakes and flake fragments, and seven pieces of shatter. The most common lithic materials in the flaking debris were chalcedony, quartzite, chert, and silicified sediment. Surveyors collected the scraper (CN005), the uniface (CN006), and the red chert utilized flake (CN007).

Area C, the densest concentration of artifacts, is 160 meters from Area B to the east-southeast. In Area C, there were over 100 cortical flakes, interior flakes, finishing flakes, reduction fragments, and pieces of shatter. The dominant material was silicified sediment, with smaller numbers of cherts. Surveyors collected a Late PaleoIndian projectile point base (CN002).

Area D is 195 meters east of Area C. In Area D, outside Features 1 and 2, there were 11 cortical flakes, seven interior flakes, 11 reduction fragments, one piece of shatter, and 11 pieces of FCR. The dominant lithic materials were chert and silicified sediment, with some specimens of quartzite and chalcedony. During a site revisit, surveyors observed additional artifacts: one projectile point base, one core, one groundstone fragment, one retouched flake, 12 cortical flakes, and two interior flakes. They collected the projectile point base (CN003) and the core (CN004).

Area E is 140 meters east of Area D. In Area E, surveyors observed one retouched flake, two quartzite cortical flakes, three interior flakes (chert and chalcedony), and one quartzite reduction fragment. They collected the retouched flake (CN001).

Area F is 120 meters east of Area E. Area F is an outcrop of cobbles eroding out of the edge of the bluff. In Area F, there was one chert cortical flake and one piece of silicified sediment shatter. There was no artifact collection.

Feature 1 is a cluster of large cortical and reduction flakes on the bluff edge in Area D, measuring 4 meters north-south by 7 meters east-west. This feature is next to a cowpath in a slight erosional depression. In Feature 1, surveyors observed one retouched flake, eight cortical flakes, nine interior flakes, and one reduction fragment. The dominant lithic materials were silicified sediment and chert, with one specimen of chalcedony.

Feature 2 is a FCR concentration, three meters in diameter, on a lower, eroded shelf below Feature 1. It is located primarily on bedrock with small pediments of intact soil. In Feature 2, surveyors observed one large reduction flake, three interior flakes and flake fragments, and two cortical flakes. The dominant lithic materials were silicified sediment and chert, with one specimen of chalcedony.

Feature 3 is a large concentration of FCR (more than 35 specimens) on a bedrock exposure between Area D and Area E. Lithics found in Feature 3 consist of one end scraper, five interior flakes and flake fragments,

two pieces of shatter, one tested cobble, and numerous fragments of fire-cracked rock. The dominant lithic materials were silicified sediment and chert, with one flake of chalcedony.

Feature 4 is a roughly circular arrangement of seven stones, measuring 4 meters in diameter. Cattle may have displaced additional stones around the feature. Feature 4 is south of Area B.

Feature 5, the cairn, is a pile of 24 large cobbles, measuring 1.5 meters in diameter and 40 centimeters high.

Between Area D and Area E, surveyors observed one core, four cortical flakes, nine interior flakes and flake fragments, three reduction fragments, two pieces of shatter, one tested pebble, two tested cobbles, and an FCR concentration (Feature 3).

On the small knoll, surveyors observed two chert cortical flakes, one chert interior flake, one silicified sediment cortical flake, one piece of silicified sediment shatter, and one piece of quartzite shatter.

Surveyors excavated 40 shovel tests and five one meter by one meter test units. Artifacts were found in 18 of the 40 shovel tests and all five of the test units produced subsurface material. Most of the artifacts found in the shovel tests were flakes and flaking debris, with the exception of one artifact. This artifact is a Late PaleoIndian point base.

Test Unit 1 yielded one biface fragment, one scraper, and 40 flakes. Lithic materials consisted of chert, silicified sediment, chalcedony, and quartzite, with a few pieces of Scenic Chalcedony and moss agate.

Test Unit 2 yielded one biface fragment, 35 flakes and flake fragments, and one fragment of unidentified burnt bone. Lithic materials consisted of chert, silicified sediment, and chalcedony, plus a few pieces of Scenic Chalcedony, quartzite, and clear quartz.

Test Unit 3 yielded one uniface, 51 flakes, one piece of shatter, and two fragments of unidentified burnt bone. Lithic materials consisted of chert, silicified sediment, and chalcedony, with a few pieces of clear quartz.

Test Unit 4 yielded one core, 27 flakes, and one fragment of mammalian tooth enamel. Lithic materials consisted of chert and silicified sediment, with two pieces of chalcedony.

Test Unit 5 yielded one uniface fragment and 15 flakes. Lithic materials consisted of chert and silicified sediment, with one piece of quartzite.

Forty shovel tests and five test units were placed at the site during the revisit. Shovel Tests 1 through 9 were placed in Area C in a transect from the top of a local summit overlooking Battle Creek valley downslope towards the east and then angling to the north. Only three of the tests produced artifacts.

Shovel Tests 11 through 30 were placed in roughly three east-west transects, south of the local summit and south of Areas B and C, back from the bluff edge. Thirteen of the 20 tests contained cultural material. Of these tests, the ones farther back from the bluff edge and in the vicinity of the stone circle (Feature 4) (tests #17, #18, #19, #20, and #23) yielded buried material in levels deeper than 30 cm.

Shovel Tests 31 through 40 were placed in two transects on the ridge summit above Area D and east of the knoll with the cairn. One transect went downslope from the crest northwards towards the bluff edge above Battle Creek. The other transect was oriented east-west along the foot of the sideslope leading toward the bluff edge, but upslope of the exposed bedrock shelves that characterize the immediate bluff edge. Two of the 10 shovel tests produced cultural material (tests #35 and #39). Both contained artifacts in levels as deep as 25 cm. A buried A horizon that is absent, or went undetected, beneath the ridge summit, appears about midslope heading towards the bluff edge, in several of the tests along the bluff, and in the initial two cutbank profiles.

The Electric Eagle site, 39CU1850, is an extensive occupation containing several discrete features, a cairn, and a stone circle. The recovery of a PaleoIndian projectile point base and Archaic point base from the surface and a PaleoIndian projectile point base from a shovel test indicate that this site hosted several different occupations that span a considerable amount of time. The dense accumulation of surface and buried lithics, representing all stages of production, from cobbles for tool manufacture to finished tools, reinforces this interpretation, as do the stone circle and cairn, which are probably later additions. The test units and shovel tests suggest that one or more cultural levels are in the topsoil on the summit of the ridge, and that one or more components are buried progressively deeper downslope from the summit by aeolian deposition and local accumulations of sheetwash.

The morphology of the circular stone feature suggests that it is associated with habitation and/or spiritual activity. It may represent a habitation, as suggested by the cultural material representing everyday secular activities, including resource processing and tool manufacturing. Information obtained by the Native American monitors from their spiritual elders, however, suggests that such features may have been the focus of religious activity, such as fasting or prayer – regardless of their original function – and cairns may have been sites of religious activity, marking burials or containing ordinary objects (such as unmodified stones and roots) imbued with power. While the two activities appear incompatible, they are probably not coterminous.

39CU1851

39CU1851 is a prehistoric site consisting of two possible stone circles and one tested cobble. The site is located on the summit of a nose slope of a terrace spur along the south side of Battle Creek. A larger T2 terrace lies to the north and higher undifferentiated terraces lie to the south. A low order intermittent tributary of Battle Creek flows on the east side of the spur. The ground cover is a pasture of short grass prairie vegetation. Ground surface visibility is 55 percent.

Stone Concentration 1 consists of a roughly circular cluster of large cobbles and small boulders 3.5 meters east-west by 4.5 meters north-south.

Stone Concentration 2, about 15 meters north, is a similar cluster of large cobbles and small boulders 2.5 meters in diameter.

Surveyors observed a tested cobble of brown and gray banded chert, but they did not collect it.

A shovel test excavated to 30cm revealed a uniform very dark grayish brown (10YR 3/2) clay loam alluvium. There were no buried soils exposed in the profile and the spoil contained no cultural material.

The two relatively well-defined clusters of stones have similar individual size and overall dimension to stone circles, and are in a topographic setting typical of stone circles. The lack of organized structure within the cluster, i.e. the absence of a stone-free central zone surrounded by a circular arrangement of stones, may be the result of cryoturbation or disturbance by grazing animals.

The tested cobble may be associated with the stone clusters. The fact that stone circles generally have a low artifact density may account for the absence of other cultural material, despite the relatively high degree of ground surface exposure. It is also possible that someone walking along the ridge simply picked up the cobble, tested it for lithic quality, and then threw it away.

39CU1852

39CU1852 consists of a cairn and sparse lithic scatter on the northern, scalloped edge of a T3 terrace remnant on the south side of Battle Creek. It is situated on a triangular extension into the valley with former channels on the T2 terrace occurring at the foot of the T3 terrace scarp. The ground cover is a pasture of short grass prairie vegetation. Ground surface visibility is 60 percent.

The cairn is a concentration of 11 cobbles in a 50 cm diameter area. The cobbles are deeply sodded, and subsurface probing with a pin flag suggested the presence of a second layer of cobbles below the surface.

Surveyors observed a dark purple quartzite tested cobble, a light brown silicified sediment tested cobble, and a brown chert cortical flake. They made no artifact collection.

A shovel test excavated to 30 cm revealed a uniform very dark grayish brown (10YR 3/2) clay loam. The fine-grained soil matrix (clay loam) indicates that the surface was buried by low-energy overbank flooding of Battle Creek. There were no buried soils exposed in the profile and the spoil contained no cultural material.

The cairn is not in a topographical position typical of EuroAmerican survey or property markers. Information obtained by the Native American monitors from their spiritual elders suggests that cairns may have been sites of religious activity, marking burials or containing ordinary objects (such as unmodified stones and roots) imbued with power. The lithic scatter indicates as well that some early-stage tool manufacturing took place here. While the two activities appear incompatible, they would not likely have been coterminous. Indeed, it is possible that someone walking along the ridge simply picked up the cobbles, tested them for lithic quality, and then threw them away – the source of the cortical flake being a cobble that surveyors simply did not find.

39CU1899

39CU1899 is the location of a single expedient tool on the T3 terrace of Battle Creek Valley to the east of 39CU1852 on the south side of the creek. The artifact was in a two-track road near a pasture gate. The ground cover is a pasture of short grass prairie vegetation. Ground surface visibility on the road is 100 percent, and visibility in the pasture is 60 percent.

Surveyors observed and collected a single light purple Scenic Chalcedony retouched interior reduction flake (CN001). The flake is broken along the longitudinal axis. The distal margin has a small break and retouching to the dorsal surface. The right lateral margin has retouching that created a soft series of denticulates.

Surveyors did not perform a shovel test because the find spot was in a heavily disturbed area in terrain not typically occupied for more than ephemeral activities. They believed it was quite possible that the tool derived from some other location outside the survey corridor – perhaps carried in the treads of a vehicle.

The isolated find of a retouched flake suggests that someone used the tool at or near this location. However, the absence of other cultural material in this area and the location of the find in terrain not conventionally used for occupation suggest that the activity here was either a brief episode of resource processing or the simple loss or discard of a tool.

39CU1853

39CU1853 is a prehistoric lithic scatter and an historic dump on terraces along Battle Creek. The prehistoric artifacts are on the second (T2) and third (T3) terraces in the creek valley. The scatter is on the south side of Battle Creek, between the active channel belt to the north and east, an intermittent tributary to the south and southeast, and a higher terrace to the west. There are two levels to the T2 surface, T2a and T2b. Within the limits of scatter, the T2a surface occurs in the angle formed by the confluence of the tributary with Battle Creek. Multiple abandoned meandering stream channels of Battle Creek as well as tributaries characterize the T2 surfaces. There is also an historic dump here, on the bank of Battle Creek near a ford on the eastern end of the site. The T2 surfaces are in a plowed field growing alfalfa, while short prairie grasses cover the higher T3 terrace. The T1 terrace of Battle Creek supports cottonwood trees and other riparian trees and shrubs. Ground surface visibility is 50 percent.

Herman N. Steele received a patent for 162.43 acres from the United States on April 5, 1890. By 1893, the land had been foreclosed and Thomas B. Littledale purchased the land at auction in 1901. In 1902,

Littledale sold the land to Charles Upham and Ching Arnold. Charles deeded his one-half interest in the land to his wife Cora on November 2, 1917. In 1930, Cora died and her son Harris deeded his interest in the land to Ching Arnold. The next year Ching died and left the land to his wife Eleonor. In 1940, Eleonor sold the land to Cleda M. Malloy. That same month the Malloys sold the land to Norman and Eleanor Walton. Eleanor turned the contract of sale over to Hazen Keith in 1943 when Norman died. In 1948, Hazen died and his wife Lula inherited everything. In 1951, Lula sold the land to Eleanor (Walton) and Lee Wilsey. In 1972, the Wilseys sold the land to the Brophy Land and Cattle Company.

The Brophy Land and Cattle Company sold the land to J.M. Ranch Company (Curtice Randall, president) on January 16, 1973. J.M. Ranch Company deeded over the land on March 19, 1975 to Curtice H. and Craig Randall, also known as the Randall Brothers. On November 14, 1986 Curtice Randall deeded the land to Clarence L. Werner of Omaha, Nebraska. Werner transferred the deed to Spanish Five, Inc. on July 7, 1990 who in turn transferred the land to Rimfire, Inc. (based out of Colorado) on February 17, 1995. Rimfire deeded the land to J.D. Ranch Operating Partnership on April 4, 1995. J.D. Ranch Operating Partnership underwent a name change through a deed transfer on April 5, 1995, now referred to as J.D. Real Estate. J.D. Real Estate deeded the land to Custer Ranch, Rapid City, SD, on January 4, 2000.

Historic artifacts observed in the dump include more than 50 pieces of glass, assorted flat and barbed wire, one terra cotta flowerpot, one *Pepsi* bottle neck and rim, brick fragments, one *Pyrex* bleach bottle fragment, one "D" cell battery, large mammal sawed bone fragments, one car bumper, one *Coca-Cola* bottle base, one beer bottle, 7-UP bottle fragments, one paint can, two coffee cans, one quart jar, one *Schlitz* beer can, one *Karo* corn syrup bottle, one galvanized tin wash tub, one kerosene can, one water heater, and leather glove parts. Surveyors collected one bottle finish and one bottle fragment.

The prehistoric artifacts were concentrated in two areas, one on the T2a terrace surface where Test Unit 1 was excavated, and the other on the surface of the T3 terrace and part of an adjacent T2b surface. There were artifacts on both the ground surface and within Test Unit 1. Surveyors found 19 lithic artifacts on the surface and two lithic artifacts in Levels 2 and 6 of Test Unit 1, including a projectile point from Level 2 (10-20 cm).

Surveyors observed one uniface, one retouched flake, three retouched pebbles, seven interior flakes, three cortical flakes, three pieces of shatter, and one possible grinding slab on the surface of the site. They collected one flake and the uniface. Lithic materials included dark brown chalcedony, red chert, maroon chert, brown chert, light brown silicified sediment, and clear quartz.

In Test Unit 1 excavators recorded the following artifacts: Level 1 (0-10 cm), one piece of FCR; Level 2 (10-20 cm), a projectile point; Level 3 (20-30 cm), bison tooth enamel and charcoal from the gravelly layer; Level 6 (50-60 cm), a snail shell and a flake, Level 7 (60-80 cm), snail shells and bivalves. The projectile point in Level 2 may have come from either the plow zone or the underlying paleosol, Ab2. The flake in Level 6 was in Stratum 3, Ab3.

Test Unit 2 was on T2b, slightly higher than T2a, and thus slightly older. Test Unit 2 exposed four major strata with two paleosols and several substrata. Stratum 1 (0-25 cm) was an Ap horizon of dark yellowish brown (10YR 4/4) silt loam to very fine sandy loam and a B horizon of dark brown (10YR 4/3) silt loam to very fine sandy loam. Stratum 2 (25-41 cm) was a fine sandy loam with a dark brown (10YR 3/3) Ab horizon and a dark brown (10YR 4/3) Bb horizon. Stratum 3 (41-56 cm) was a medium sandy loam with a dark grayish brown (10YR-2.5Y 4/2) Ab horizon and a brown (10YR 5/3) Bb horizon. Stratum 4, from 56 cm to the bottom of Test Unit 2 at 70 cm, consisted of two layers of brown to yellowish brown (10YR 4/5 and 10YR-2.5Y 3/2) coarse sand with an intervening layer of brown loamy sand. There were krotovina scattered throughout the test unit.

Excavators did not find any artifacts in Test Unit 2, but they collected several very small bivalve and snail shells from Levels 6 and 7 as faunal specimens for paleoenvironmental reconstruction.

The stratigraphy of the two test units does not correlate clearly by layers. When the topography and the soil core stratigraphy are considered the overall pattern of the terrace deposits become clearer; however, the

many old channel scars and the two sub-terraces of T2 make detailed correlation difficult. Most of the soil cores have 20 to 40 cm of sandy soil at the surface, a deposit on top of a paleosol with weak modern soil development. Layered overbank deposits, with some paleosols on previously stable surfaces, continue for 70 to 200 cm in all of the soil cores and the test units. These deposits range from silts to gravelly sand. A few of the cores revealed fine-grained, dark, organic-rich channel fill deposits under the overbank sediments while others simply came down on rounded stream channel gravels. The results indicate that T2 is a complex terrace developed by meandering channel deposits and overbank sediments from both Battle Creek and intermittent side drainages.

Surveyors placed two shovel tests on the part of the site on T3. There was only a thin soil cover over terrace cobbles and boulders. The spoil contained no cultural material.

T3 is an older terrace than T2, but the relative age of the two site components is unknown because all artifacts on T3 were on the surface.

The presence of FCR and artifacts covering the range of lithic processing stages, from shatter to finished tools, suggests that this was an occupation site with episodes of tool rejuvenation and production in support of food resource procurement and processing. The discovery of a possible grinding slab supports this interpretation.

39CU1855

39CU1855 is a sparse lithic scatter found on the T1 terrace of Battle Creek valley north of the creek. The scatter is in the central part of a former meander scar that forms this terrace remnant. The artifacts are in an old feedlot and cultivated field. It is possible that the artifacts are a secondary deposit.

Surveyors found three artifacts on the surface: a flake, a flake fragment, and a piece of shatter. The lithic materials were brown banded chert and gray & tan silicified sediment. They made no collection.

Surveyors excavated one shovel test to a depth of 50 cm. The profile exposed 44 cm of dark brown (10YR 3/3) to very dark grayish brown (10YR 3/2) laminated sandy loam overlain by 16 cm of very dark grayish brown (10YR 3/2) loam. Material is alluvium modified by a weakly expressed soil with an A (0-16 cm) - C (16->50 cm) profile. There was no evidence of buried soil and the spoil contained no cultural materials.

This sparse lithic scatter, if it is in its original location, appears to be a briefly used lithic flaking station. It is not likely that a substantial site exists here, as the abundant exposures of soil in a dynamic alluvial setting have yielded no other cultural materials on the surface, in the tests, or in nearby stream cutbanks. It is certainly plausible, but not provable, that the artifacts found here are secondary flood deposits.

39CU1854

39CU1854 is a lithic procurement site on the upper eroded side slope and toe slope of a high undifferentiated strath terrace on the north side of Battle Creek valley. The site has two activity areas. Area A is on the upper side slope overlooking the valley and on the toe slope. This includes a narrow nose slope area, lower than the strath terrace, that is formed by several small incised low order drainageways to the west. Area B is on a distinct nose slope overlooking the valley to the east of Area A. Battle Creek lies to the south.

Surveyors observed a large lithic scatter and procurement area consisting of numerous chert and quartzite pebbles and cobbles, many of them tested. Artifacts in Area A included one core, one pebble core, six cortical flakes, two flakes, two pieces of shatter, five tested cobbles, and two tested pebbles. Artifacts in Area B included one uniface, two cores, one flake, two reduction fragments, two tested cobbles, and one tested pebble. Surveyors collected the uniface in Area B, but made no collection in Area A. The lithic materials were mainly gray chalcedony, tan and gray silicified sediment and various colors of chert (red, brown, gray, gray and brown banded, and brown banded).

A shovel test was excavated within the site area. The profile revealed 20 cm of grayish brown (10YR 5/2) gravely silty clay overlain by 10 cm of dark grayish brown (10YR 4/2) gravely clay loam. Material is modified by a soil that exhibits an A (0-10 cm) - 2Bw (10->30 cm) profile. The material is likely colluvium consisting of reworked alluvium and material derived from weathered bedrock. There were no buried soils exposed in the profile and the spoil contained no cultural material.

The presence of artifacts associated with early stage lithic processing and the absence of finished tools suggests that this locality was a lithic procurement area. The extensive exposure of soil on an eroded ground surface, and a soil profile with gravel deposits indicating substantial surface degradation, suggests that an undisturbed subsurface cultural matrix is very unlikely.

39CU1856

39CU1856 is a small lithic scatter on a short, narrow descending spur formed by two short, steep first order drainageways cutting headward into a high undifferentiated strath terrace on the north side of Battle Creek valley. The scatter is on the crest of the spur. Gravel outcrops are frequent along the shoulder slopes of the ridge. The ground cover is a pasture of short grass vegetation. Ground surface visibility is 65 percent.

They made no artifact collection. The most common lithic material in the flaking debris was tan and gray silicified sediment, but also included brown chert and gray & light brown quartzite.

A shovel test excavated on the ridge summit in the heaviest concentration of artifacts exposed 19 cm of yellowish brown (10YR 5/4) sandy loam overlain by 11 cm of dark yellowish brown (10YR 3/4) silty clay. The soil has an A (0-11 cm) - Bw (11->30 cm) profile. Material is probably colluvium derived from alluvium, weathering products, and possibly some aeolian deposits. There were no buried soils exposed in the profile and the spoil contained no cultural material.

The presence of artifacts associated with early stage lithic processing and the absence of finished tools suggests that this locality was a lithic procurement area. The extensive exposure of soil on an eroded ground surface amidst gravel deposits indicates substantial surface degradation. This suggests that an undisturbed subsurface cultural matrix is very unlikely.

39CU1857

39CU1857 is a large lithic scatter, with two stone circles and a possible hearth, on a summit of moderate width of an unnamed high terrace on the north side of Battle Creek valley. The terrace is incised to the northeast by a southeast flowing unnamed intermittent tributary to Battle Creek and Battle Creek valley is to the southwest. A gravel bed is eroding out of the side slope of the ridge. This layer appears to be at least 20 feet below the ridge summit. A two-track runs the length of the ridge and through the site. There was randomly discarded historic litter on the two-track. The ground cover is a pasture of short grass prairie vegetation, with some prickly pear cacti and sagebrush. Ground surface visibility is 50 percent.

Surveyors found 69 surface and subsurface lithic artifacts, two stone circles and a small cluster of large cobbles. Most of the surface artifacts were on or near the two-track road that bisects the site. The three features are in close proximity to one another on the east side of the two-track pasture road.

Feature 1 is a stone circle, approximately three meters in diameter and composed of seven cobbles, with one stone displaced. The feature is 3.5 m north-northeast of the second circle, Feature 3.

Feature 2 is a small cluster of three cobbles that surveyors identified as a possible hearth. The feature is 6.5 meters southeast of Feature 3.

Feature 3 is a stone circle, approximately five meters in diameter, also composed of seven cobbles, none of them displaced.

Surveyors observed 46 lithic artifacts on the surface, consisting of one projectile point fragment, one biface fragment, one uniface fragment, three cortical flakes, 22 flakes, 12 pieces of shatter, three tested cobbles, and three pieces of FCR. They collected the point fragment. The lithic materials are 24 chert (tan; brown, reddish brown and white banded; red and yellow mottled; white), 10 silicified sediment (tan; gray, tan and gray banded; red and tan banded), 5 chalcedony (red, brown and gray; gray and clear; brown), and 4 quartzite (dark brown).

There is a small scatter of historic debris in the two-track road at the northwestern corner of the site, consisting of numerous fragments of pale green heavily patinated bottle glass and a few pieces of clear flat glass. The pale green glass is probably from a single bottle, while the clear flat glass could be either window glass or pieces from a panel bottle.

The initial shovel test placed in the middle of the site revealed a slightly coarsening upward profile of brown (10YR 5/3) clay to dark brown (10YR 4/3) silty clay to dark brown (10YR 3/3) silty clay loam. It was altered by the surface soil that exhibits an A (0-5 cm) - Bw1 (5-19 cm) - Bw2 (19->30cm) profile. The Bw1 horizon has some organic matter mottled throughout, along with krotovina, and a B2 horizon. There were no buried soils exposed in the profile and the spoil contained no cultural material.

Surveyors placed twenty-three auger probes on either side of the two-track during the site revisit to determine the vertical extent and density of the artifact scatter. Soil profiles were similar to the initial shovel test. Only four of the auger probes contained cultural material, and these were in the vicinity of the three stone features. One of the probes revealed a thicker soil profile at the southeast end of the site (on the nose of the ridge finger), with a thick AB horizon:

Because the positive auger probes showed cultural material only in the upper 5 to 10 cm, four one meter by one meter test units were excavated for horizontal exposures rather than to acquire deep profiles. The units were placed in the vicinity of the stone features and the positive auger probes. Test Unit 3 was placed directly over Feature 2 to determine if this was a possible hearth.

The four test units all yielded shallowly buried artifacts and showed similar soil profiles: brown (10YR 5/3) to light yellowish brown (10YR 5/4) very fine sand, silt loam, and silty clay loam was overlain by dark brown (10YR 3/3) silty clay loam. The A horizon modifying the silty clay loam varies in thickness from 5 to 8 cm, and the Bw1 horizon modifies underlying material to a depth of at least 20 cm. The units all showed krotovina and dessication cracks filled with topsoil. No evidence of a hearth was discovered in Test Unit 3. The three cobbles were left *in situ* on pedestals until the level was completed, then the stones were lifted to see if any charcoal was present. No evidence of burning was present, so the stones were returned to their pedestals and the unit was backfilled.

The artifact assemblage exposed in the two-track suggests that the area was a campsite at which the occupants processed lithics from initial reduction to tool completion. The presence of cultural material in several auger tests and all of the test units indicate at least a partly undisturbed subsurface cultural matrix. Although the units showed evidence of natural disturbance (krotovina and dessication cracks), the artifacts appear to be relatively in place, since the majority of material was in the upper 5 cm, indicating little vertical movement.

The small historic scatter is probably the result of a single discard event, age undetermined.

The morphology of the circular stone features suggests that they are associated with habitation, as suggested by the presence of cultural material representing everyday secular activities, including resource processing and tool manufacturing. However, information obtained by the Native American monitors from their spiritual elders suggests that such features may have been the focus of religious activity, such as fasting or prayer - regardless of their original function. These two activities may appear incompatible, but they would not likely have been coterminous.

39CU1858

39CU1858 consists of two depressions and an associated historic artifact scatter on the lower side slope of a high undifferentiated terrace on the south side of an unnamed intermittent tributary of Battle Creek. The scatter is in an area where the terrace side slope is gullied by numerous small drainageways. The ground cover is short grass vegetation. Ground surface visibility is 65 percent.

The land patent for this site was given to John Victor on September 20, 1912. The total acreage for this patent was 160 acres although no patent number was given. John Victor deeded the land to C.R. Daugherty for a consideration on March 3, 1919. Daugherty transferred the land to Edward H. Wedmore on April 26, 1919. Edward and his wife, Lillie Wedmore indebted themselves to Hanger and Calleson. The loan was taken out in eight notes on June 7, 1919. A Notice of Levy was issued pertaining to the Wedmores on December 20, 1923. Hanger and Calleson sued the Wedmores of the mortgage amount plus interest on February 8, 1924 however interveners bought the land from the sheriff. The interveners were listed as such: Anderson, Tennant, Ulman, Martin, Albert Bade (executor of estate of Robert Triebel), Cortney, Law, and Lockwood. On June 16, 1924 Albert Bade divided Robert Triebel's estate. On March 4, 1925 the estate was officially divided among the heirs of Triebel and a later lawsuit (taking place on June 3, 1925) was made to dispute any other claim to this land other than Triebel's heirs. No claimants came forward as per the July 25, 1925 *les pendiens* record.

The land was sold to the Trustee of Yankton, Bradley F. Lockwood, on April 25, 1925 by Fannie Kylius, Ida Bade, Albert Triebel, Bertha Bartsch Hunhoff, Ida Bartsch Learing, Martha Bartsch Volmer, O.J. Anderson, Annie E. Tennant, John Ullman, Mary L. Martin, Dan Cortney, and Helen Law. Lockwood transferred the deed of the property from himself as Trustee to himself as an individual on May 8, 1930. Lockwood sold the land on April 29, 1944 to the Brophy brothers (Arthur and Francis). The Brophy brothers sued Triebel's kin on October 26, 1944 for any claims they made on the land, of which there were none. Francis and Lois Brophy deeded over their claim to the land on January 7, 1946 to Arthur and Grace Brophy. Arthur and Grace Brophy deeded over their claim on February 11, 1957 to Terril H. and Charles R. Brophy. Charles and his wife Valda, and Terry and his wife Shirley deeded over their claims to the Brophy Land and Cattle Company (based in Hermosa) on June 23, 1959. The Brophy Land and Cattle Company sold the land to J.M. Ranch Company (Curtice Randall, president) on January 16, 1973. J.M. Ranch Company deeded over the land on March 19, 1975 to Curtice H. and Craig Randall, also known as the Randall Brothers.

On January 14, 1986 Duane Lammers and Roger and Veronica Schaub each filed a Quit Claim Deed in difference to the Randall Brothers. On November 14, 1986 Curtice Randall deeded over the land to Clarence L. Werner of Omaha, Nebraska. Werner transferred the deed to Spanish Five, Inc. on July 23, 1990 who in turn transferred the land to Rimfire, Inc. (based out of Colorado) on February 17, 1995. Rimfire deeded the land to J.D. Ranch Operating Partnership on April 4, 1995. J.D. Ranch Operating Partnership underwent a name change through a deed transfer on April 5, 1995, now referred to as J.D. Real Estate. J.D. Real Estate deeded over the land to Custer Ranch based out of Rapid City on January 4, 2000.

Feature 1 is a dugout cut back into the side slope of the strath terrace with dry-laid limestone slabs on one side. There was an artifact scatter immediately to the south.

Feature 2 is a depression approximately 5 feet in diameter and 18 inches deep downslope and to the east of the dugout, where the ground surface levels out. There are large cobbles and boulders on the downslope side.

Surveyors observed a cast iron stove part, eight pieces of aqua panel bottle glass, fragments of a whiteware plate, a tin pail, eight brick fragments, and window glass fragments in the artifact scatter next to Feature 1. They collected two side-cut bricks and one of the plate fragments, both embossed maker's marks.

Surveyors did not excavate shovel tests here. Although subsurface cultural material is undoubtedly present, the surface exposure of features and artifacts and the information supplied by the landowner (see below) provide enough information to meet the two main goals of Level II testing: a) to demonstrate site eligibility; and b) to guide the organization of a treatment plan if the site eventually requires mitigation.

The presence of one dugout and one depression, along with the stamp from the brick, suggests that this locality was the site of an early farmstead. Artifacts suggest a late 19th century occupation. Early historic plat maps show the general locations of several homesteads in this area that belonged to the Bower family, early settlers in Custer County. Although the patent record is dated 1912 and does not show the Bower name, it does not preclude the possibility that this site was one of the Bower residences and that they did not prove up on their claim here. If additional historic research shows the site to belong to the Bower family, this is one of the earliest homesteads in the area.

39CU1859

39CU1859 is a small lithic scatter on the summits of two narrow spurs eroded on the side slope of an undifferentiated high strath terrace on the north side of an unnamed intermittent tributary of Battle Creek. Site boundaries also involve part of the strath terrace summit and shoulder slope above the spurs. The Black Hills are visible to the west. Gravel outcrops along the side slope of the terrace. The ground cover is a pasture of short grass vegetation. Ground surface visibility is 65 percent.

The site has two activity areas. Area A is on a spur that descends from the northern nose of the terrace remnant. Area B is on a very short spur off the side of the remnant.

In Area A, surveyors observed seven reduction fragments. In Area B they observed one cortical flake, one tested cobble, and two tested pebbles. They also found a reduction fragment on a two-track road outside these artifact clusters. They made no artifact collection. The lithic materials were purple, red, brown, yellow, and light brown cherts and tan silicified sediment.

A shovel test excavated near Area A revealed 13 cm of brown (10YR 5/3) silt overlain by 17 cm of dark yellowish brown (10YR 3/6) silt loam. The material may be alluvium, but is more likely aeolian silt. It is modified by a soil that exhibits an A (0-17 cm) – Bw (17->30 cm) profile. There were no buried soils exposed in the profile and the spoil contained no cultural material.

The predominance of reduction fragments, tested cobbles and pebbles, and cortical flakes indicates that early stage lithic processing was the main activity here.