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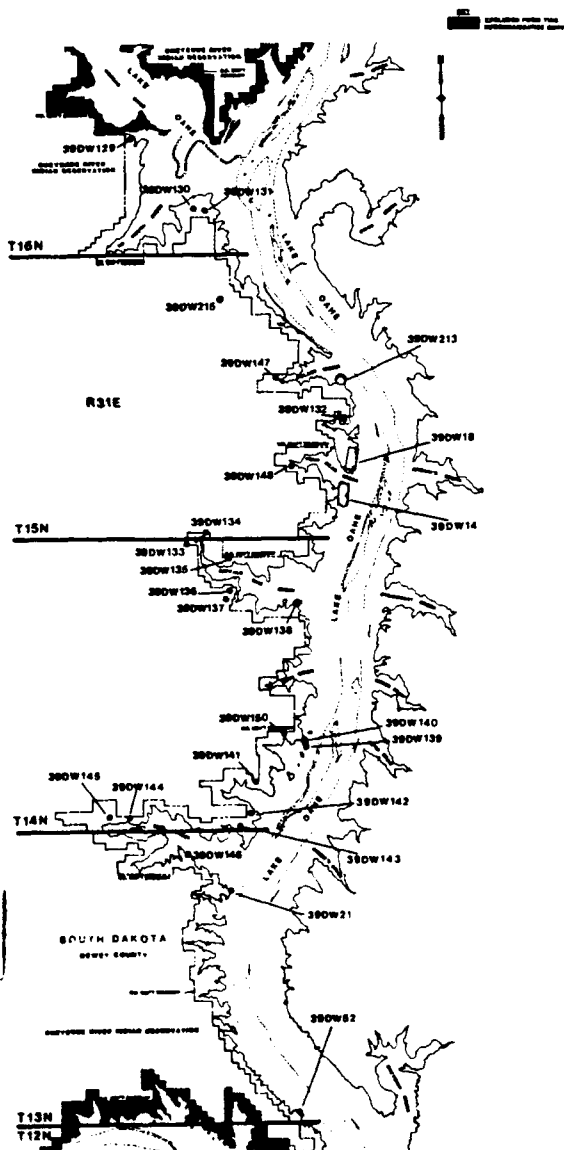


②

Cultural Resources Reconnaissance In Dewey County, South Dakota From Below The Moreau River To The Forest City Recreation Area

Volume 2: Support Documentation

DTIC
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FEB 06 1992



Archeology Laboratory, Augustana College
Sioux Falls, South Dakota

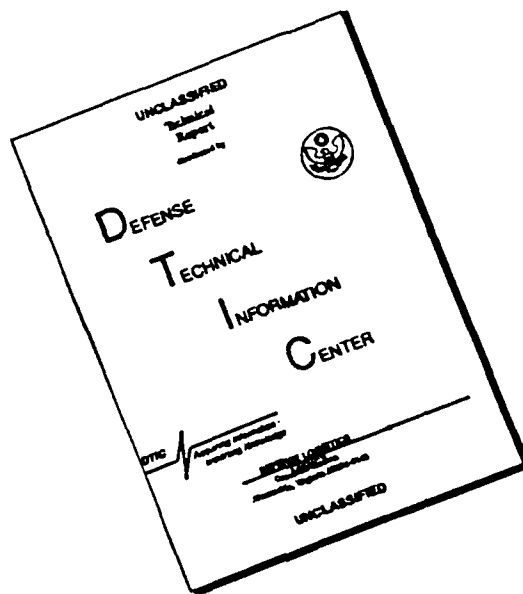
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REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) CULTURAL RESOURCE RECONNAISSANCE IN DEWEY COUNTY, SOUTH DAKOTA, FROM BELOW THE MOREAU RIVER TO THE FOREST CITY RECREATION AREA		5. TYPE OF REPORT & PERIOD COVERED Final: June 1988 - September 1989
7. AUTHOR(s) Edward J. Lueck, Kerry Lippincott and R. Peter Winham		6. PERFORMING ORG. REPORT NUMBER Contract Series: 46
9. PERFORMING ORGANIZATION NAME AND ADDRESS Archeology Laboratory, Augustana College 2032 South Grange Avenue Sioux Falls, South Dakota 57105		8. CONTRACT OR GRANT NUMBER(s) DACW45-88-C-0261
11. CONTROLLING OFFICE NAME AND ADDRESS U.S. Department of the Army Omaha District, Corps of Engineers 215 North 17th Street Omaha, Nebraska 68102-4978		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		12. REPORT DATE September 1989
		13. NUMBER OF PAGES 493 (Vol. 1=244; Vol. 2=249)
		15. SECURITY CLASS. (of this report)
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report)		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
Archeology	Dewey County	Grand/Moreau Archeological Region
Artifact Scatters	Earthlodge Villages	Lake Oahe
Besant	Extended Middle Missouri	Late Paleoindian
Cairns	Extended Coalescent	Late Prehistoric
Cultural Resources	Geomorphology	Loess
20. ABSTRACT (Continue on reverse side if necessary and identify by block number)		
An intensive cultural resources reconnaissance (Class II Inventory) survey was conducted by the Archeology Laboratory, Augustana College, along the west bank of Lake Oahe in Dewey County, South Dakota, within the Grand/Moreau Archeological Region, from below the mouth of the Moreau River to the Forest City Recreation Area. Twenty-eight prehistoric sites were recorded during the survey, four of which are outside the project boundaries. The sites consist of four earthlodge villages, six artifact scatters, seven cairns, three cairns with artifact		

19. KEY WORDS (cont.)

Missouri River
Moreau River
National Register of Historic Places
Pierre Shale
Riggs Ware
South Dakota
Talking Crow

20. ABSTRACT (cont.)

scatters, a cairn and depression locality, a cairn with evidence of gravel prospecting pits, a depression, a stone circle and cairn locality, and four isolated projectile point finds. Twenty-nine isolated finds, ranging from single flakes to recent Euro-American materials, were also recorded.

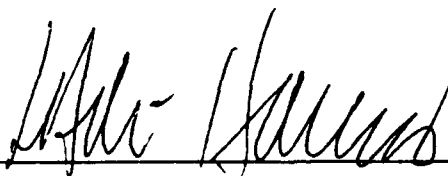
The village sites, all of which are being adversely impacted, represent the most significant resources observed during the survey. These sites are potentially eligible for nomination to the National Register of Historic Places.

CULTURAL RESOURCE RECONNAISSANCE
IN DEWEY COUNTY, SOUTH DAKOTA
FROM BELOW THE MOREAU RIVER TO THE FOREST CITY RECREATION AREA

VOLUME 2
SUPPORTING DOCUMENTATION

by
EDWARD J. LUECK,
KERRY LIPPINCOTT
and
R. PETER WINHAM

With contributions by Robert Brakenridge, L. Adrien Hannus,
Steven D. Ruple and Joseph Tiffany


Principal Investigator

SEPTEMBER 1989

Prepared For
U.S. ARMY CORPS OF ENGINEERS, OMAHA DISTRICT
CONTRACT NUMBER DACW45-88-C-0261

ARCHEOLOGY LABORATORY, AUGUSTANA COLLEGE
2032 SOUTH GRANGE AVENUE
SIOUX FALLS, SOUTH DAKOTA 57105

ARCHEOLOGICAL CONTRACT SERIES NUMBER 46

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<i>A-1</i>	



APPENDICES

- A USGS maps showing the location of all sites and isolated finds within the project area.
- B. South Dakota State Site Forms/River Basin Survey Forms.
- C. Field notes (abridged).
- D. Artifact catalog sheets.
- E. Photographic log.
- F. Archive description.
- G. Scope-of-work.
- H. Proposal submitted by the Archeology Laboratory.
- I. List of isolated finds.

APPENDIX A

USGS Maps Showing the Location of all Sites and Isolated Finds
Within the Project Area

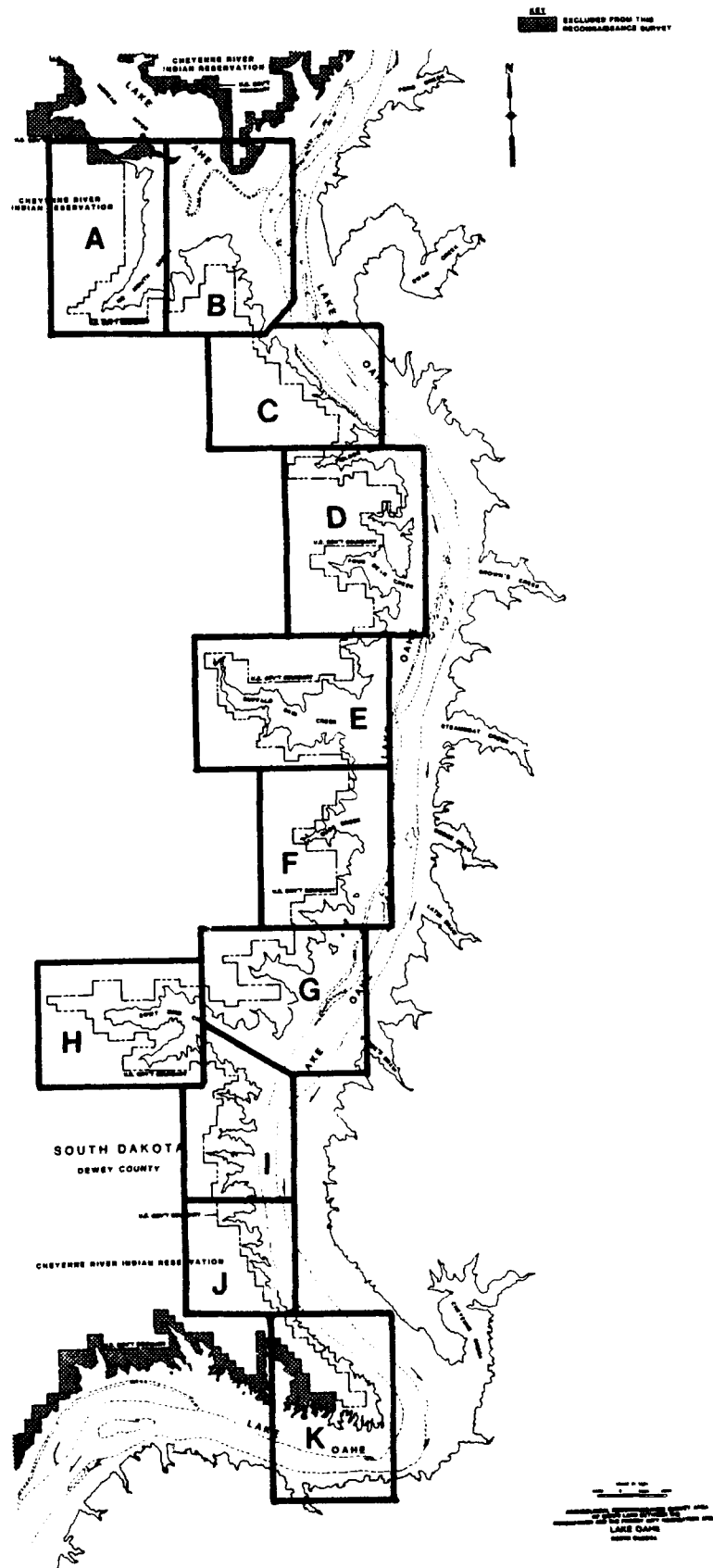


Figure A.1. Location of U.S.G.S. Map Areas A-K, Dewey County, South Dakota. Showing sites (39DWXX) and isolated finds (numbered dots) located on the survey and the project boundaries.

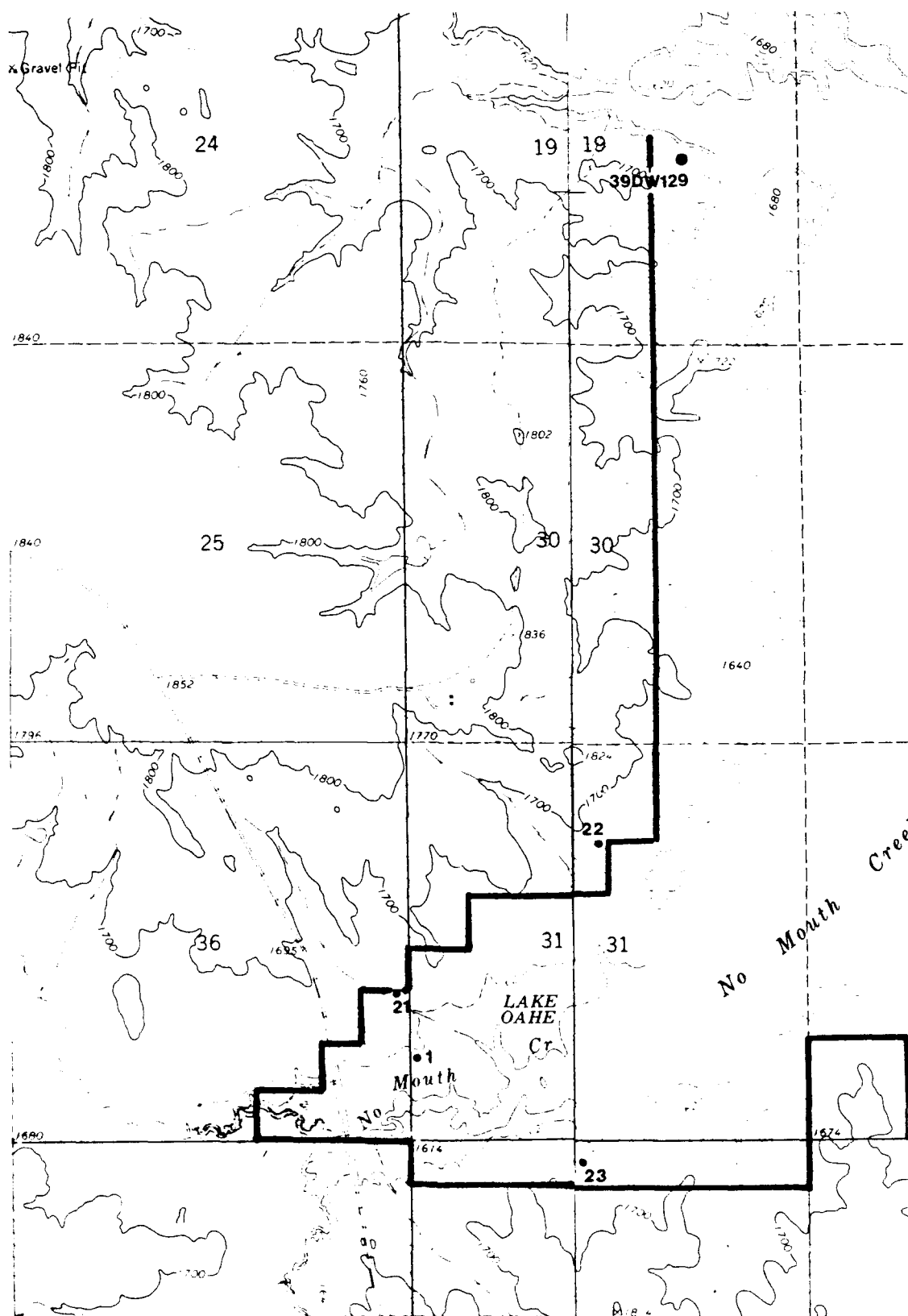


Figure A.2. U.S.G.S. Map Area A.

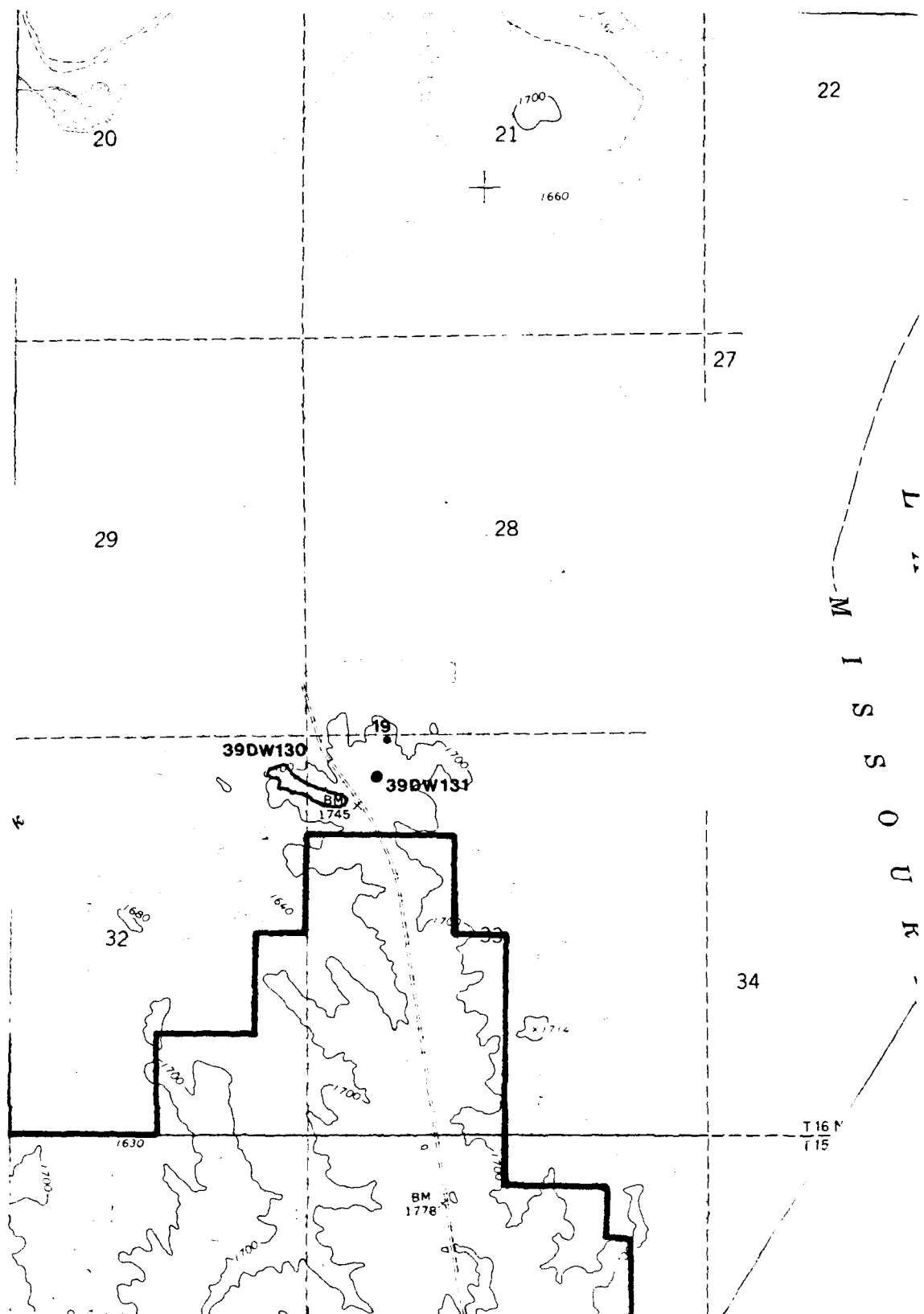


Figure A.3. U.S.G.S. Map Area B.

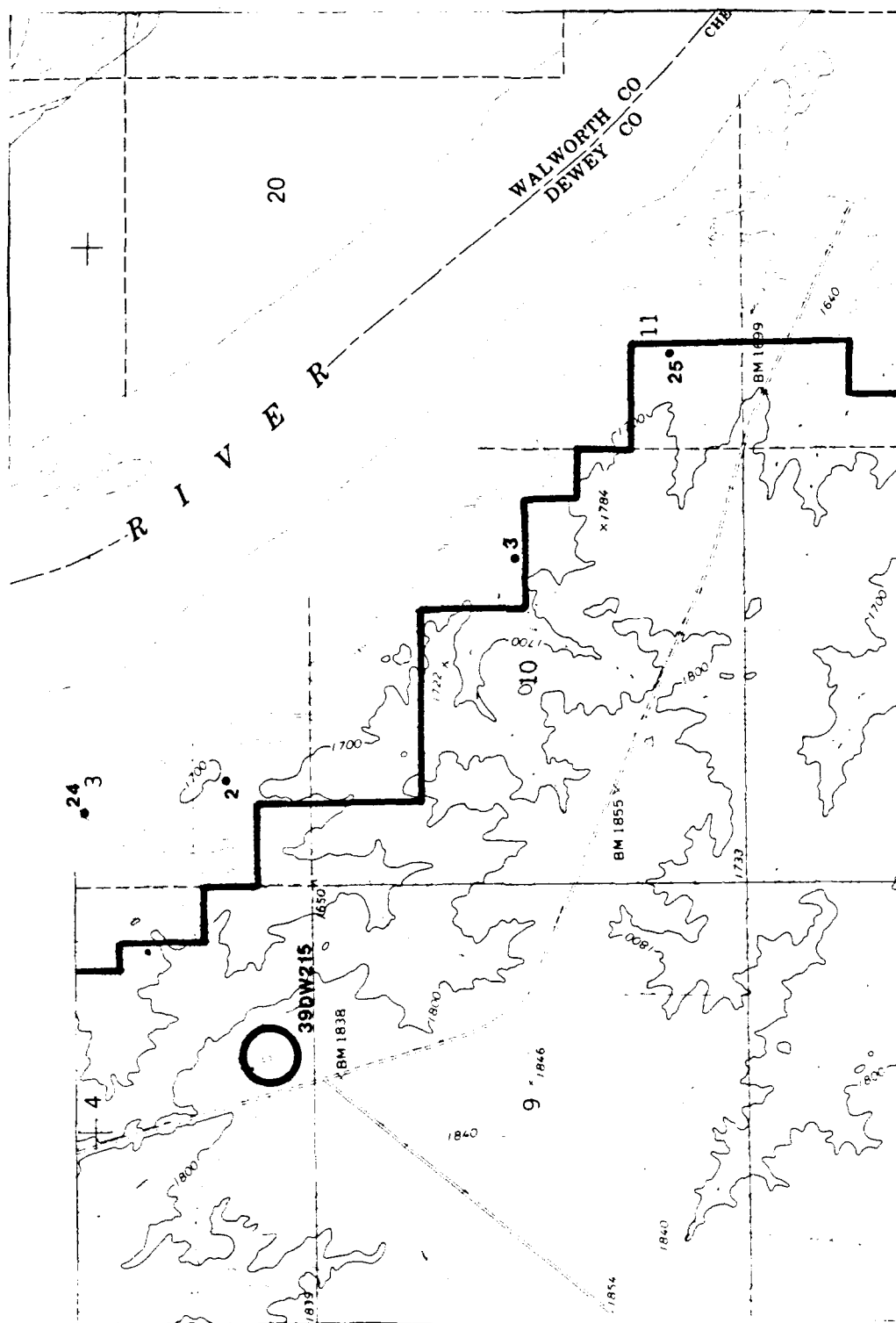


Figure A.4. U.S.G.S. Map Area C.

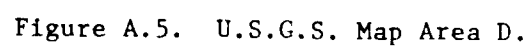


Figure A.5. U.S.G.S. Map Area D.

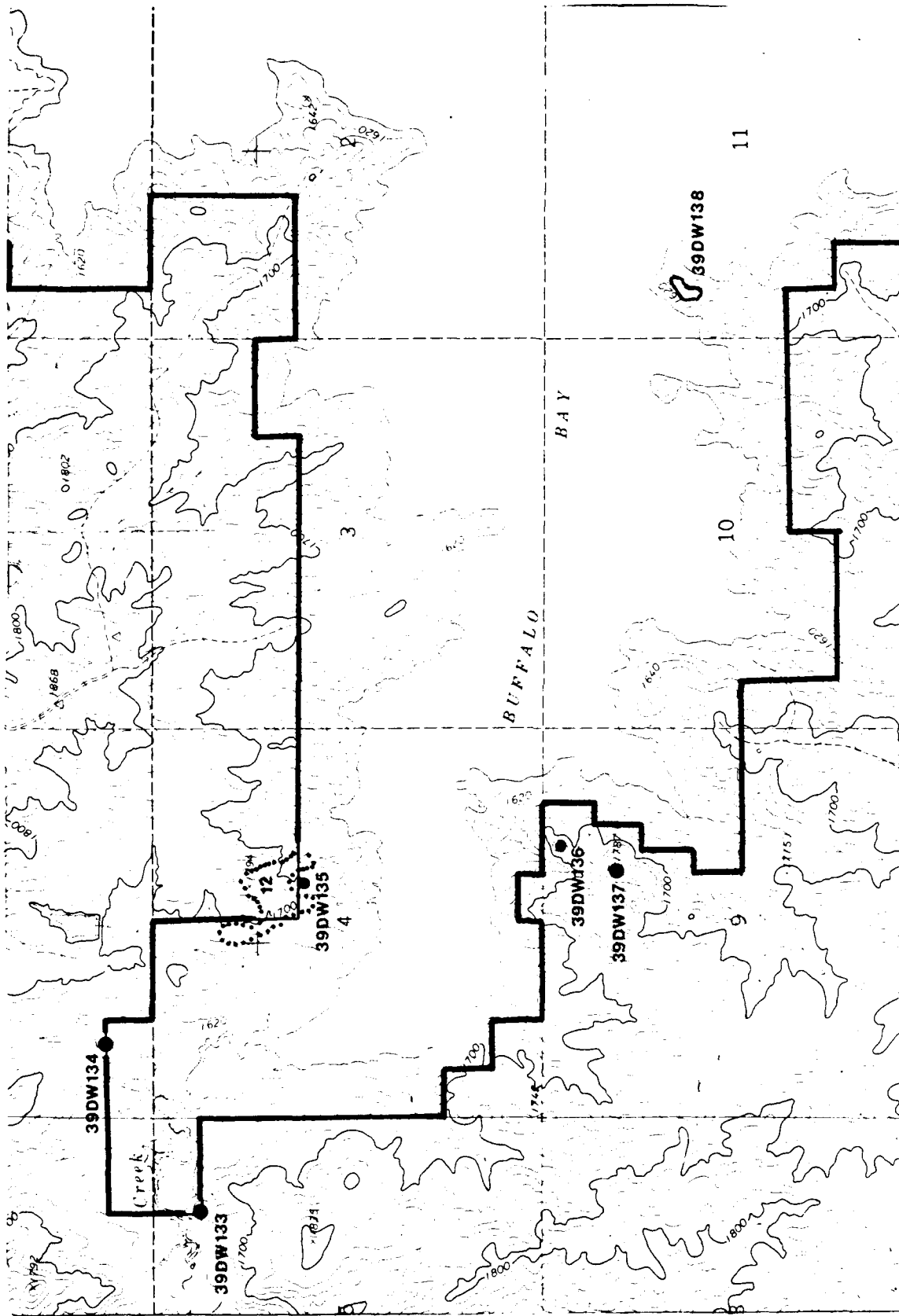


Figure A.6. U.S.G.S. Map Area E.

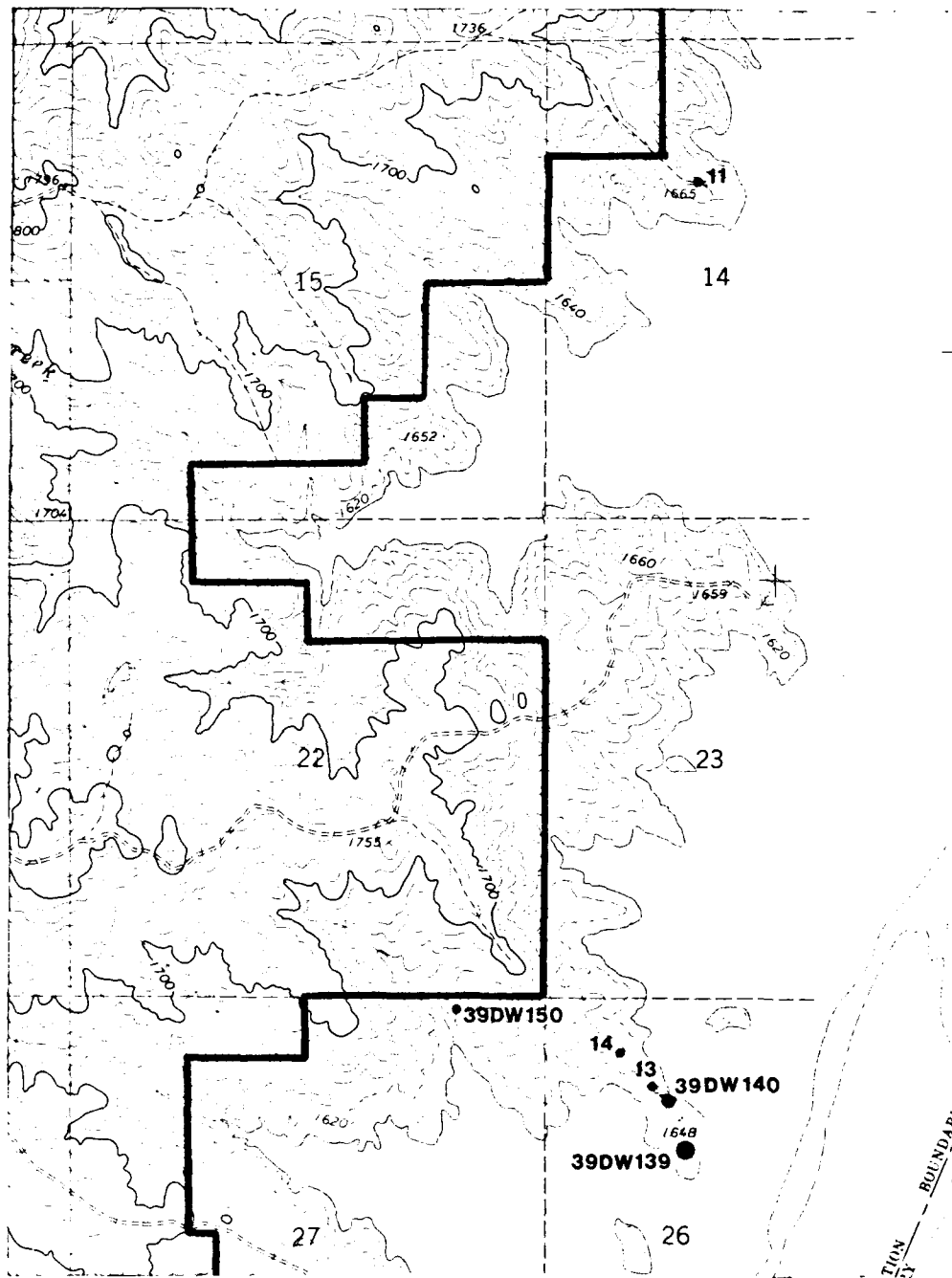


Figure A.7. U.S.G.S. Map Area F.

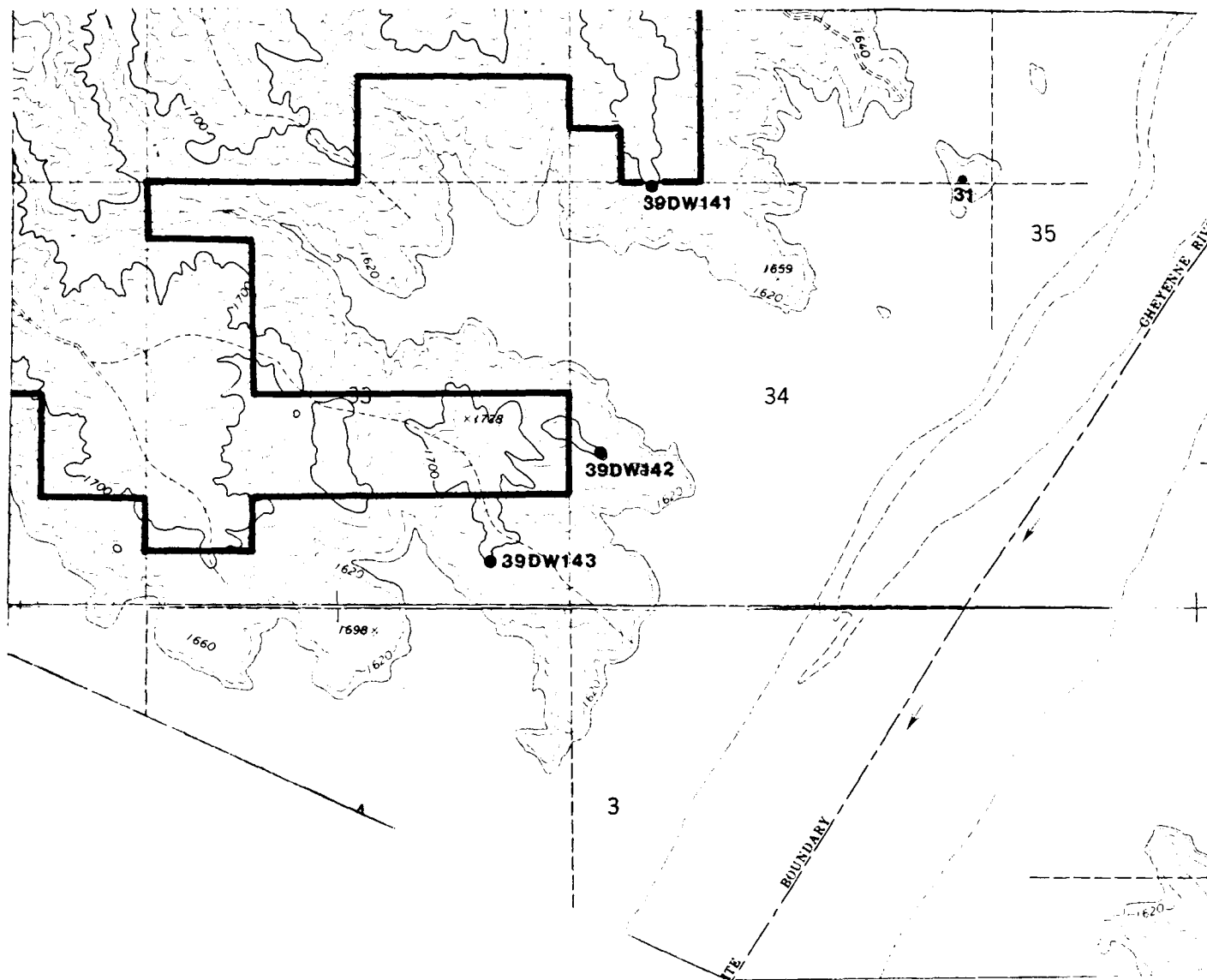


Figure A.8. U.S.G.S. Map Area G.

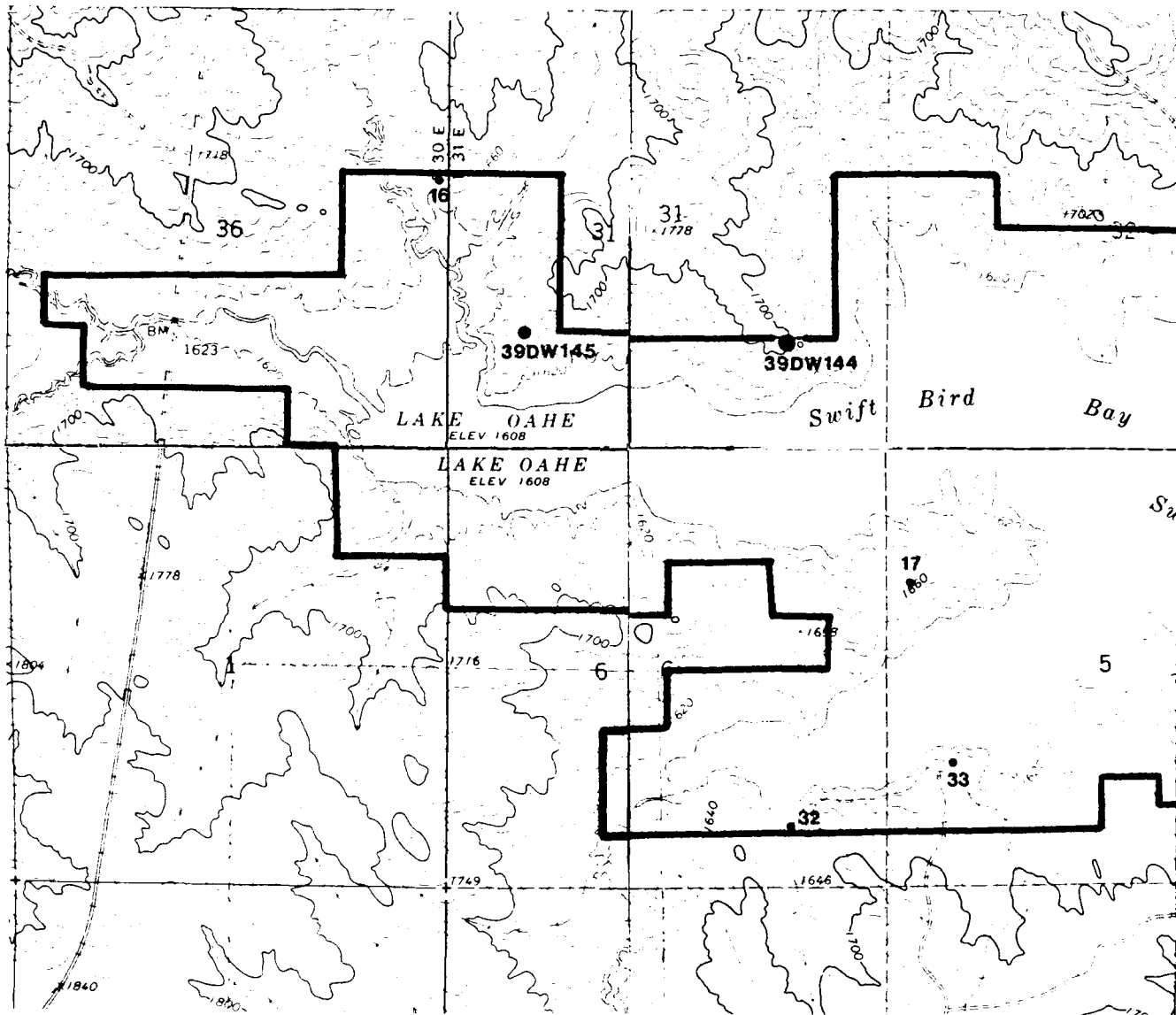


Figure A.9. U.S.G.S. Map Area H.

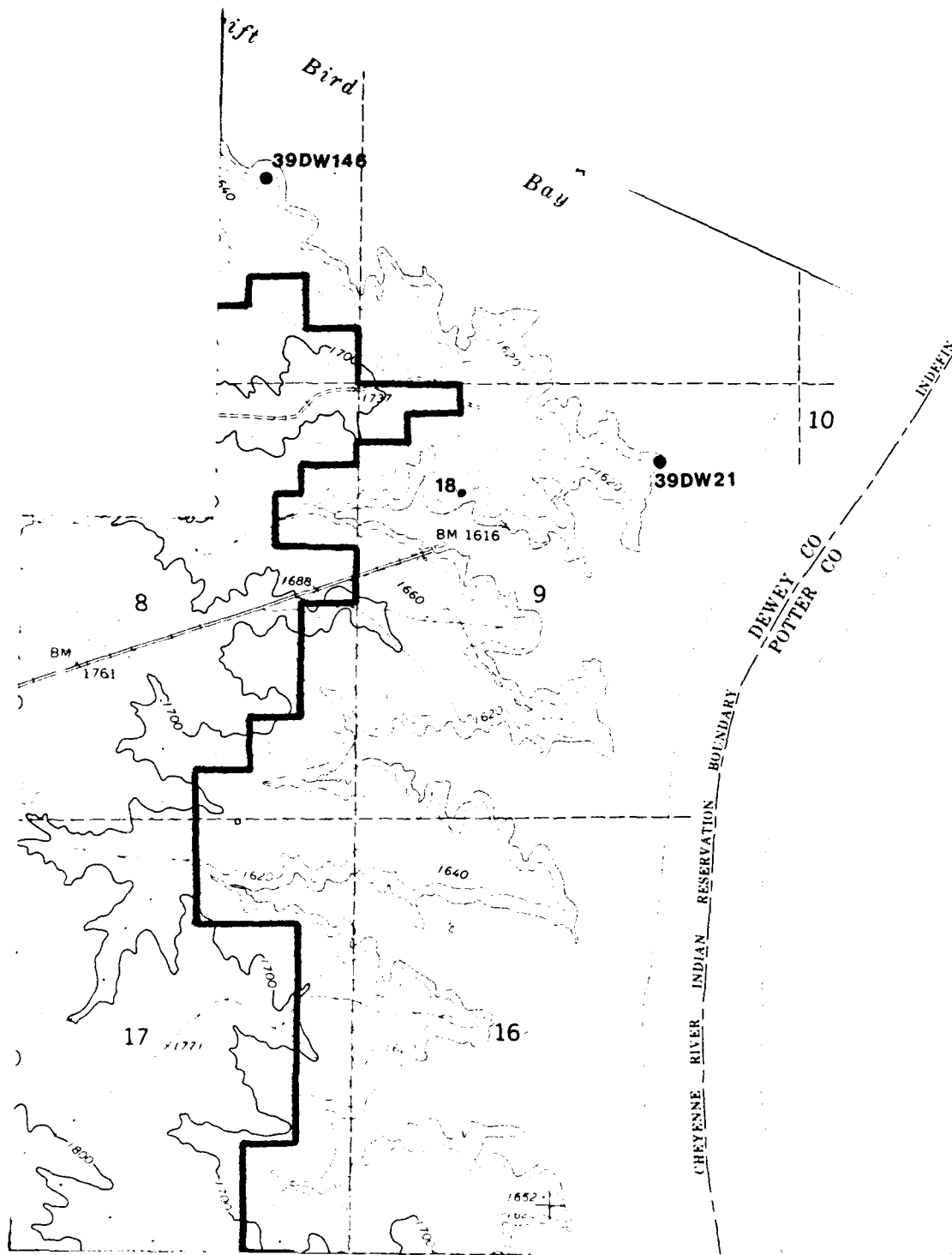


Figure A.10. U.S.G.S. Map Area I.

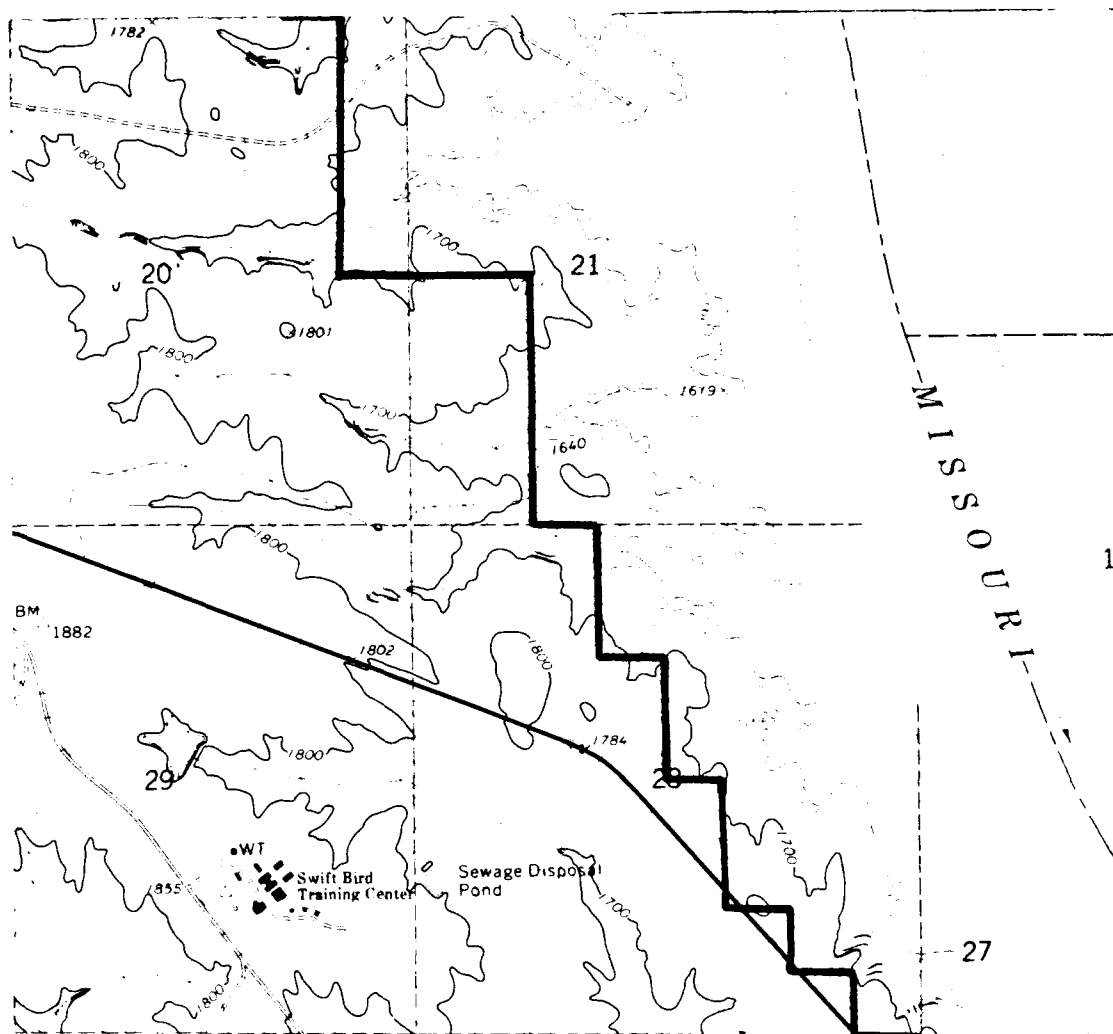


Figure A.11. U.S.G.S. Map Area J.

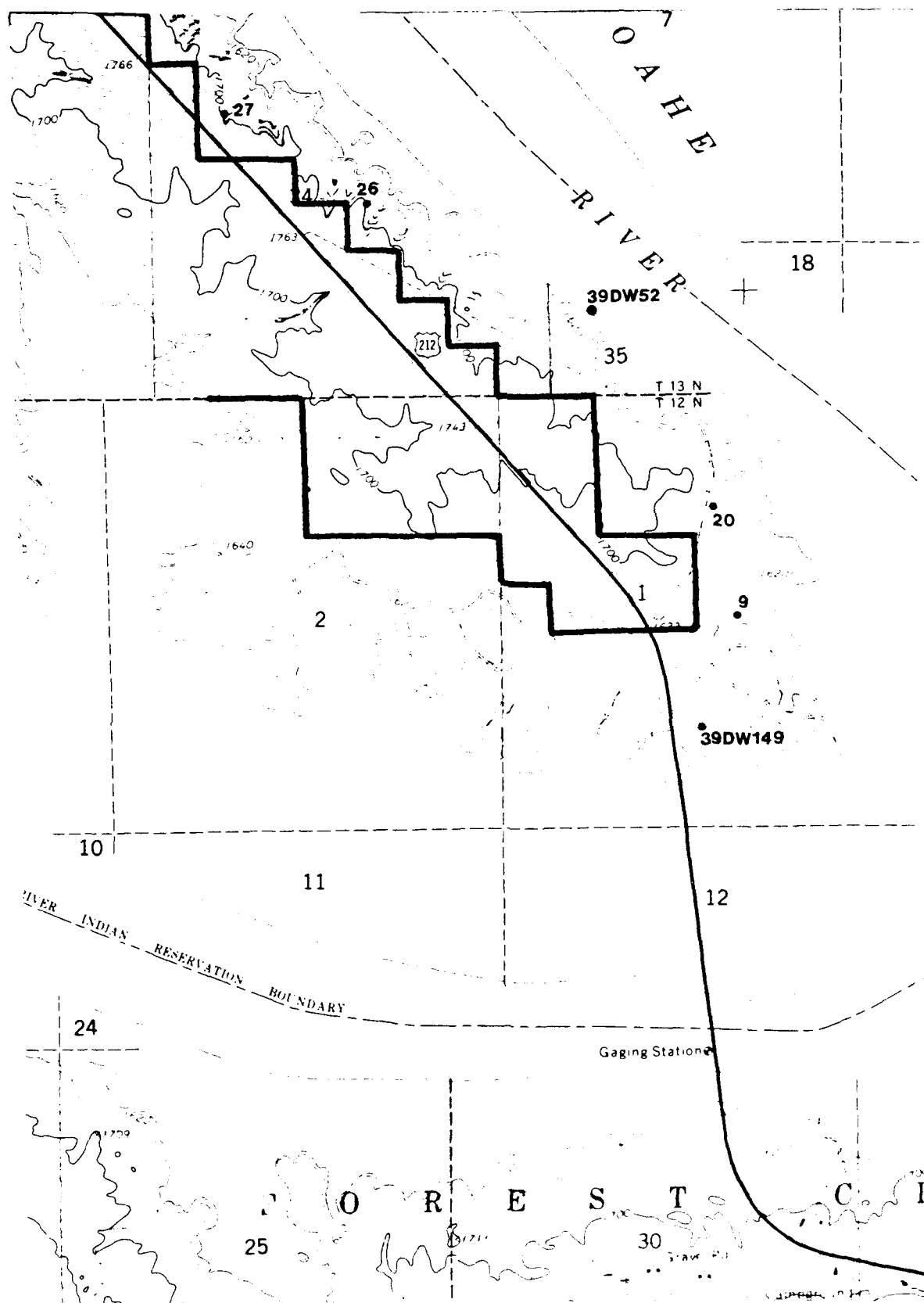


Figure A.12. U.S.G.S. Map Area K.

APPENDIX B

South Dakota State Site Forms/River Basin Survey Forms

STATE OF SOUTH DAKOTA

ARCHAEOLOGICAL RESEARCH CENTER

UPDATE

----- SITE FORM - GENERAL DATA -----

Site No. 39 DW14 Site Name _____ County DEWEY
Map Reference FOUR BEAR CREEK UTM Zone 14 / 399570 E / 5008700 N
Arch. Region _____
~~Physiog. Area~~ GRAND-MOREAU Topog. Position TERRACE
Elevation 1640 ~~m~~/ft Substrate SILT, GRAVEL
Vegetation SHORT GRASS Land Use PASTURE
Ground Surface Visibility (%) 5-30 Condition 'D' Crm Status 'E'
Site Dimen. N-S 700 E-W 250 ~~m~~/ft; Area 17.5 ~~ha~~/ac.; Depth 50+ ~~cm~~/in
Nearest Water Type PERMANENT STREAM Name MISSOURI RIVER
Distance 750 ~~m~~/ft Elevation 0 ~~m~~/ft Direction E Bank R

----- SITE FORM - LOCATIONAL DATA -----

Township 15N Range 31E Section 25, 36
Legal Location: S25 SW $\frac{1}{4}$ SW $\frac{1}{4}$ S36 NW $\frac{1}{4}$ NW $\frac{1}{4}$ and N $\frac{1}{2}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$

----- SITE FORM - CULTURAL DATA -----

Site Type EARTHLODGE VILLAGE Time Period A.D. 900-1700
Cultural Affiliation Extended Coalescent

----- SITE FORM - ACCESSION DATA -----

Acc. No. - Descr. Ceramics, bone

----- SITE FORM - MISCELLANEOUS DATA -----

Comments No shovel tests in 1989-surface manifestations and cutbank exposures
were sufficient.

Recorded by KERRY LIPPINCOTT/PETER WINHAM Date 7/8 88 and 10/88

Project USACE Dewey Co. Survey

(Use Continuation Form When Necessary)
(See Site Form Reference Guide for Allowable Data Types)

Site No. 39 DW14 Site Name _____ County DEWEY

Landowner/Tenant USACE Address Omaha, NE

Attitude toward survey Good toward excavation N/A

Access to Site From Gettysburg take 212 west, go 7.5 miles west of Lake Oahe, go 11 miles north, then east ca. 5 miles to site (walking) - or by boat.

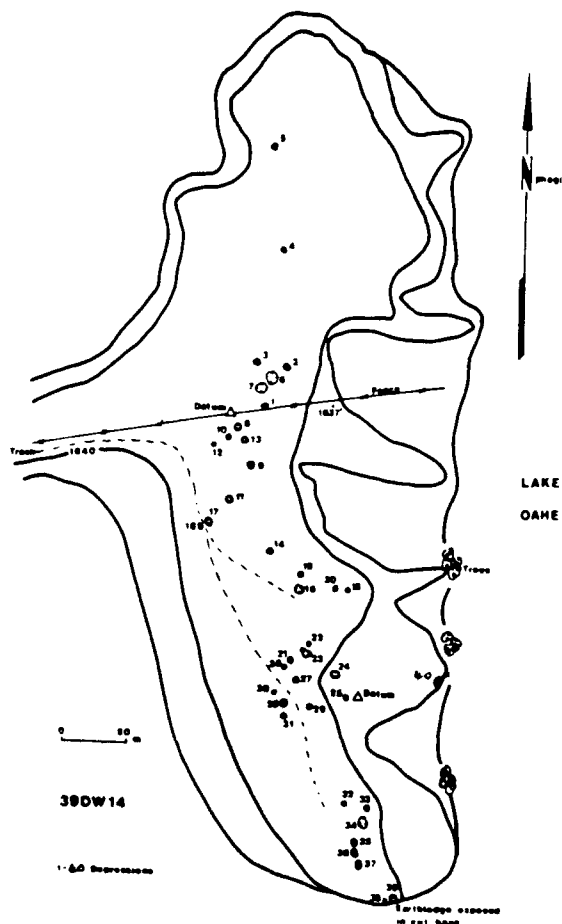
Photo reference(s) B1:23-25 C1:17-21

Bibliographic reference(s) Lueck, Lippincott and Winham 1989. Cultural Resource Survey, Dewey County, SD from Moreau River to Forest City Recreation Area. Contract # DACW45-88-C-0261

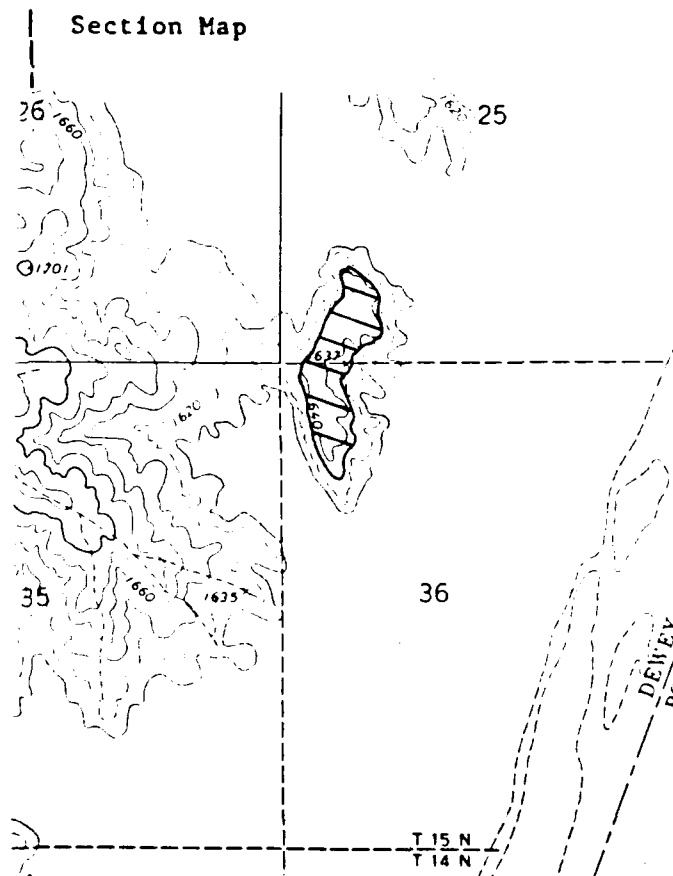
What was observed at site Numerous depressions, slumping of cut bank through earthlodge, sparse scatter of cultural materials.

Collection/Evaluation Procedure Tools, diagnostic, display items.

Sketch map



Section Map



SMITHSONIAN INSTITUTION
RIVER BASIN SURVEY

Reservoir Gabo Site No. 39184 R3
State South Dakota County DeWitt

No. 2, C.C., 1943, sheet 95 *

1. Map reference (arr. no. 3900-120) 2. Type of site _____

3. Cultural affiliation _____

* 4. Location Right side No. 2.

SW 1/4 Sec. 25 & NW 1/4 Sec. 36 T. 15 N R. 31E

* 5. Owner and address _____

* 6. Previous owners _____

7. Tenant _____

8. Informants AAA aerial photo

9. Previous designations for site ?

10. Site description Lodge rings on surface of tableland, little material on surface.

* 11. Position of site and surroundings In tableland ca. 150' above river.

12. Area of occupation ca. 300' x 2000'

13. Depth and character of fill Unknown

14. Present condition In grass

15. Previous excavations None known

* 16. Material collected As 1

17. Material observed Very little on surface

18. Material reported and owner None

19. Recommendations for further work Above full pool line.

20. Photograph Nos. _____

21. Maps of site _____

Recorded by Paul L. Cooper 9/2/49 Date 9/2/49

SMITHSONIAN INSTITUTION
RIVER BASIN SURVEYS

AF-1-
(Rev. 1/26/50)

(3)

CONTINUATION FORM

Site No. 39 DW-14 Feature No. Survey Form 9/2-49

Item No.

- 2 UNFORTIFIED VILLAGE
- 4 AT FOUR BEAR CREEK 15 MILES NORTH
OF WHITLOCK'S CROSSING
- 5 CLAUDE FIELDER CHYENNE AGENCY
- 6 ALLEN FIELDER (FATHER)
- 11 ON TOP OF GLACIAL MURINE
- 13 4" OF LOESS
- 16 POT SHERDS, 1 POINT

Recorded by FARRELL & HOFFMAN Date AUG 8, 1952

SPECIMEN CATALOG FORM

AP-7
(NW/49)

(3)

Site No. 39DW14

Dewey County, South Dakota

Remarks	Cat. No.	Description	Location	Field No.	Date Collected
	Cat* 39DW14-1 through 11 collected by P. L. Cooper.				
	1	Rim shard	Surface.	1	9-2-49
2 thru 8	8	Body shards	"	"	"
	9	Worked stone	"	"	"
	10	Sandstone abrader	"	"	"
		fragment			
	11	" "	"	"	"

SPECIMEN CATALOG FORM

AF-7
(4/4/49)Site No 39DW14

Remarks	Cat. No.	Description	Location	Field No.	Date Collected
cat # 39DW14-12 and 13 collected by W.R. Farrell.					
	Lot 12	7 body sherds	Surface.	—	1952
	13	Scraper	"	"	"

UPDATE

----- SITE FORM - GENERAL DATA -----

Site No. 39 DW18 Site Name _____ County DEWEY

Map Reference FOUR BEAR CREEK UTM Zone 14 / 399870 E/ 5009570 N

Arch. Region _____
~~Physiog. Area~~ GRAND-MOREAU Topog. Position TERRACE

Elevation 1640 m/ft Substrate SILT LOESS

Vegetation CULTIVATED Land Use HAY MEADOW/PASTURE

Ground Surface Visibility (%) 10 Condition 'D' Crm Status 'P'

Site Dimen. N-S 700 E-W 300 m/ft; Area 21.0 ha/xx.; Depth 0 cm/in

Nearest Water Type PERMANENT STREAM Name MISSOURI RIVER

Distance 800 m/xx Elevation 0 m/ft Direction E Bank R

----- SITE FORM - LOCATIONAL DATA -----

Township 15N Range 31E Section 25

Legal Location: E $\frac{1}{2}$ NW $\frac{1}{4}$

----- SITE FORM - CULTURAL DATA -----

Site Type EARTHLODGE VILLAGE Time Period A.D. 900-1700

Cultural Affiliation Extended Coalescent?

----- SITE FORM - ACCESSION DATA -----

Acc. No. - Descr. _____

----- SITE FORM - MISCELLANEOUS DATA -----

Comments Eleven shovel tests in 1989: three positive (bodysherds) and eight
negative

Recorded by KERRY LIPPINCOTT Date 7-21, 7-25, 8-15 1988

Project USACE Dewey Co. Survey

(Use Continuation Form When Necessary)
(See Site Form Reference Guide for Allowable Data Types)

Site No. 39DW18 Site Name _____ County DEWEY

Landowner/Tenant USACE Address Omaha, NE

Attitude toward survey Good toward excavation N/A

Access to Site From Gettysburg take 212 west, go 7.5 miles west of Lake Oahe, go 11 miles north, then follow roads E/NE/E to gravel pits and site - or take boat.

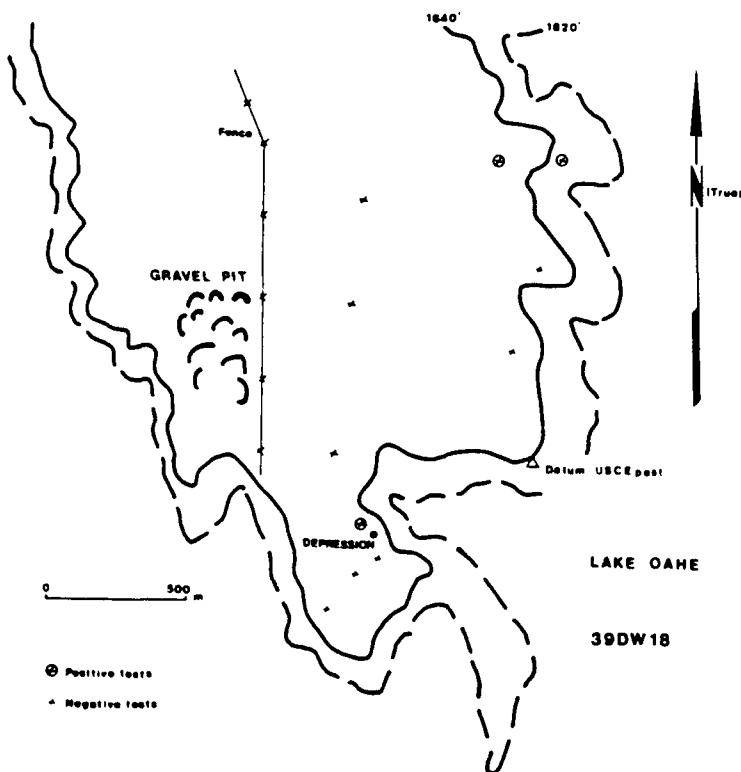
Photo reference(s) B2:3-5 C1:23-25

Bibliographic reference(s) Lueck, Lippincott and Winham 1989. Cultural Resource Survey, Dewey Co, SD from Moreau River to Forest City Recreation Area. Contract # DACW45-88-C-0261

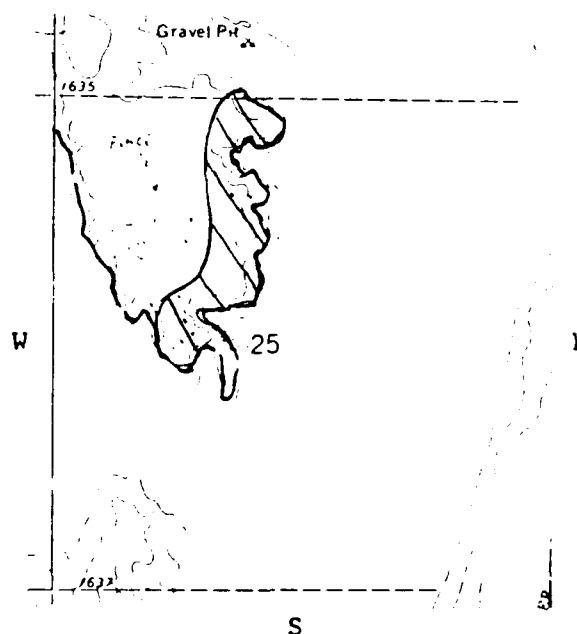
What was observed at site A small depression, sparse scatter of ceramic/lithic/bone

Collection/Evaluation Procedure No collection

Sketch map



Section Map



RIVER BASIN SURVEY

Reservoir Oahe Site No. 39 DW18 DE 2
 State South Dakota County Dewey

1. Map reference _____ 2. Type of site Area of occupation
 3. Cultural affiliation ?
 4. Location 1/2 mile from river, 1/4 mile north of Four Bears Creek.
To west of highway.
 Sec. 11 T. 14 N. R. 31 E.
 5. Owner and address Sam Mound, Cheyenne Agency (7)
 6. Previous owners _____
 7. Tenant _____
 8. Informants Howard Lottwood, Gettysburg, S.D.
Previously unlisted. Not the original Four Bears Site, the location of which is that of 39 DE 1 on Buffalo Skin Creek. House rings present in numbers, distinct, but not very deep. Wide-scattered refuse. May be very old site. No ditch observed.

11. Position of site and surroundings On very high flat more than 300' west of road, 3/4 mile from Missouri River

Unusual in being so high, far from the river.

12. Area of occupation Large
 13. Depth and character of fill Gravel
 14. Present condition Pasture
 15. Previous excavations None
 16. Material collected Pottery fragments, crudely chipped stone
 17. Material observed Scanty on surface
 18. Material reported and owner Howard Lottwood, Gettysburg, S.D.
 19. Recommendations for further work Probably to be flooded. An extensive site. Should be investigated further.

20. Photograph Nos. _____

21. Maps of site _____

Recorded by Dorothy E. Fraser Date August 2, 1949

State South Dakota

County Dewey

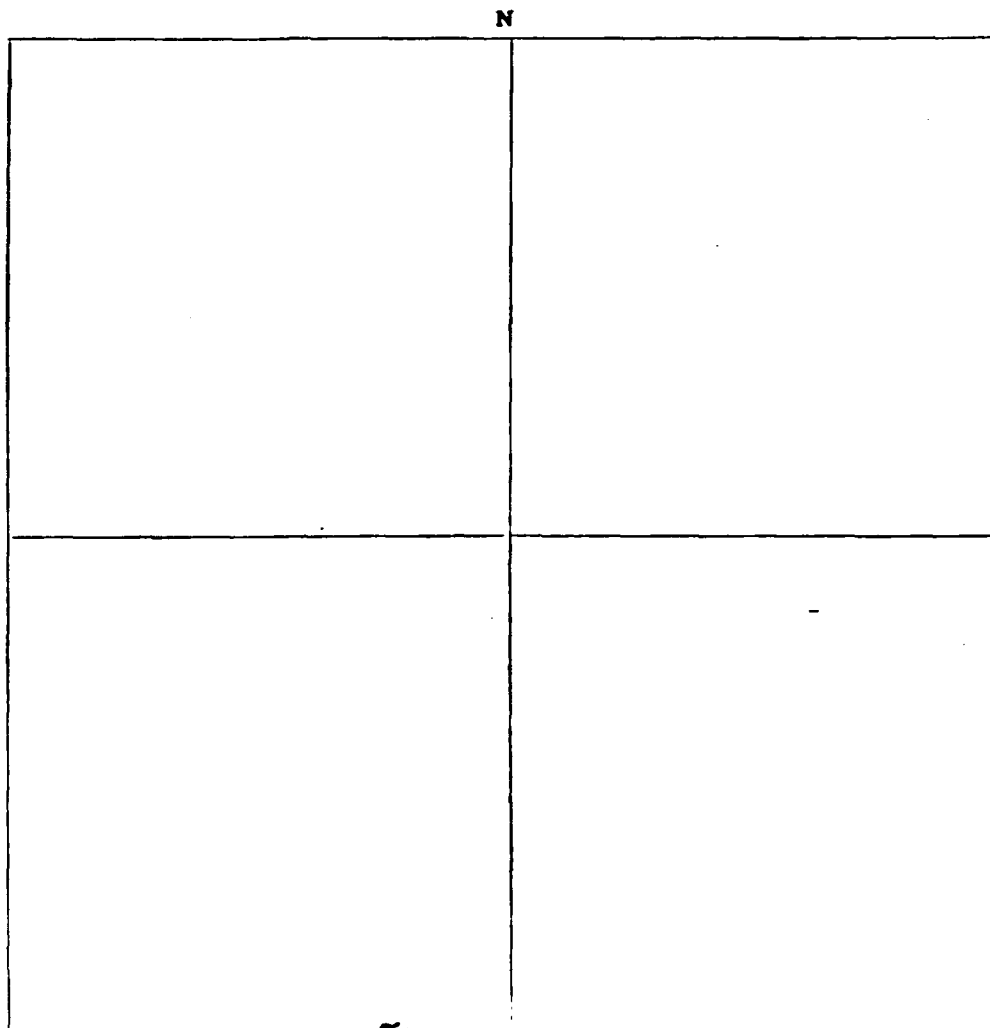
Reservoir Oahe

Site No. 39

DW18

(2)

Site No. 39 DW18 ~~DB-2~~ Mapped by _____ Date 8-2-'42



Scale _____

When entire square represents a section, 1" = 1000'

22. Approach to site: On road north from Whitlock Crossing. Possible to drive up draw to high flat where site is located.

23. Remarks:

A n extension (?) on lower level directly across highway to east.

SMITHSONIAN INSTITUTION
RIVER BASIN SURVEYS

AF-1
(Rev. 4/26/50)

CONTINUATION FORM

Site No. 390012 Feature No. Survey Form 2/2/49 R5

Item No.

1 Mo. R., C.E., 1948, sheet 95 (cat. no. 3900-120).
AAA aerial photo, 1938, BMX-165-89 (cat. no. 3900-A-12).

4 Correct location - NW $\frac{1}{4}$ Sec. 25 T15N R31E

8 Site referred to should be 39002

19 Site appears to be at elevation of ca. 1650' MSL, once above full
pool line.

Recorded by Paul L. Cooper 648 Date July 1952

(2)

Catalog[#]

Identification

(39DW18-29-

Lamphis siliginosa (Barnes) (?).

SPECIMEN CATALOG FORM

AP-7
(11/1/49)

1

Site No. 39DW18

Dewey County, South Dakota

Remarks	Cat. No.	Description	Location	Field No.	Date Collected
Cat* 39DW18 - 1 through 29 collected by Dorothy Fraser.					
	1 thru 5	Rim shards	Probably surface.	1	August, 49
	6	Near-rim shard	" "	"	"
	7 thru 23	Body shards	" "	"	"
	24	Projectile point base	" "	"	"
	25	Modified? flake	" "	"	"
	26	Worked? stone	" "	"	"
	27	Scraper-like flake	" "	"	"
	28	Animal bone fragment	" "	"	"
	Lot* 29	2 shell fragments	" "	"	"

SMITHSONIAN INSTITUTION
Missouri Basin Project

Change in Specimen Status

Site No. 39DW18

Cat. No.	Description	Disposition	Date
28	Identified, unworked animal bone.	Transferred to the Univ. of Neb. State Museum.	9/22/52
29	Mollusk shell	" " "	11/15/54

STATE OF SOUTH DAKOTA

ARCHAEOLOGICAL RESEARCH CENTER

UPDATE

----- SITE FORM - GENERAL DATA -----

Site No. 39 DW21 Site Name _____ County DEWEY

Map Reference PATCH SKIN BUTTES SE UTM Zone 14 / 395490 E / 4995630 N
Arch. Region _____
~~Physiog. Area~~ GRAND-MOREAU Topog. Position TERRACE

Elevation 1600 m/ft Substrate PIERRE SHALE

Vegetation None Land Use BARREN

Ground Surface Visibility (Z) 100 Condition 'X' Crm Status 'N'

Site Dimen. N-S 60 E-W 30 m/ft; Area 0.18 ha/xx; Depth 1 cm/in

Nearest Water Type PERMANENT STREAM Name MISSOURI RIVER

Distance 300 m/ft Elevation 0 m/ft Direction E Bank R

----- SITE FORM - LOCATIONAL DATA -----

Township 13N Range 31E Section 9

Legal Location: C SE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$

----- SITE FORM - CULTURAL DATA -----

Site Type ARTIFACT SCATTER Time Period unknown and A.D. 1861-

Cultural Affiliation Unknown and Historic Euro-American

----- SITE FORM - ACCESSION DATA -----

Acc. No. - Descr. Grinding stone, shell bead

----- SITE FORM - MISCELLANEOUS DATA -----

Comments Site below normal reservoir level but exposed because of low water level. Much broken bone, a grinding or nutting stone and shell bead (collected). Also observed were
Historic Euro-American items - stove parts, nuts, bolts, coat hanger, etc.
Site outside project area.

Recorded by KERRY LIPPINCOTT Date 8-13-88

Project USACE Dewey Co. Survey

(Use Continuation Form When Necessary)
(See Site Form Reference Guide for Allowable Data Types)

Site No. 39DW21 Site Name _____ County DEWEY
Landowner/Tenant USACE Address Omaha, NE
Attitude toward survey: Good toward excavation N/A
Access to Site Under water at normal pool operating level

Photo reference(s) _____

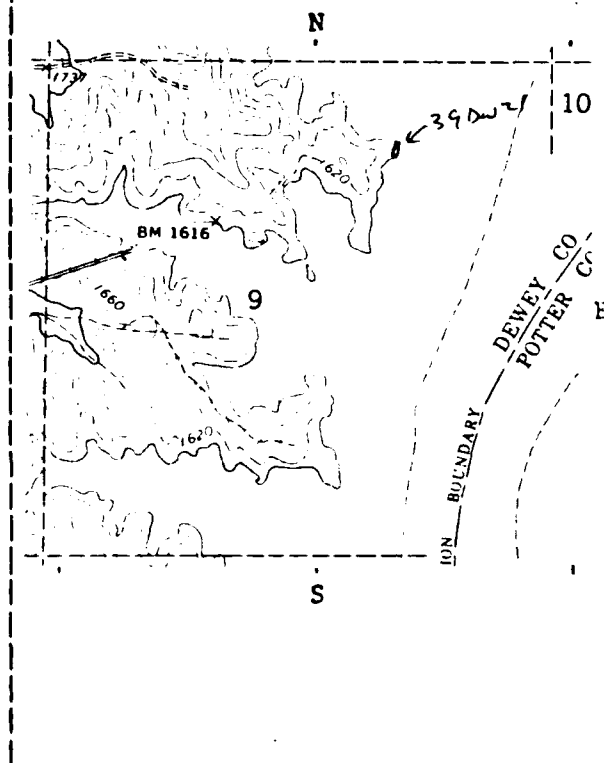
Bibliographic reference(s) Lueck, Lippincott and Winham 1989. Cultural Resource Survey, Dewey Co, SD from Moreau River to Forest City Recreation Area. Contract # DACW45-88-C-0261

What was observed at site See comments

Collection/Evaluation Procedure Tools, diagnostic, display items only

Sketch map

Section Map



SMITHSONIAN INSTITUTION
RIVER BASIN SURVEY

Reservoir Gage Site No. 39DW-21-R4
State South Dakota County DeWey

- * 1. Map reference Map R. CE 47 sheet 93 Type of site _____
2. Cultural affiliation _____
- * 3. Location on right bank (south) of Swift Bird Creek,
1000' from river on very high bluff, near road
from Mobridge to Littleton 9 T. 13 N. R. 31 E
4. Owner and address _____
5. Previous owners _____
6. Tenant _____
7. Informants _____
8. Previous designations for site none except (Ld)
- * 9. Site description On a fairly level plain at the mouth of
Swift Bird Creek. Old wagon road runs through
site.
10. Position of site and surroundings Hills rise to west, bluff falls to
river on east. Creek bottom to north.
11. Area of occupation unknown
12. Depth and character of fill some clay, mostly unknown
13. Present condition under heavy sod
14. Previous excavations none visible
15. Material collected sherds, gunnise, lithic artifacts.
16. Material observed very few but some bone scraps.
17. Material reported and owner _____
18. Recommendations for further work slightly above high water
mark
19. Photograph Nos. _____
20. Maps of site _____
- Recorded by Frank W. Calhoun Date Aug. 31, 1951

State

County

Reservoir

Site No.

SMITHSONIAN INSTITUTION
RIVER BASIN SURVEYS

AF-1
(Rev. 4/26/50)

CONTINUATION FORM

Site No. 9 DW-21

Feature No. Survey Form Aug 31, 1951

Item No.

1. C.E.M.C.R. 1947 Sheet 93 (Cat # 3900 126/2)
AAA AIR PHOTO BNK 128 181 (CAT # 39 DW-A-17)

4 NE 1/4 of NE 1/4 of Sec 9

10 SEVERAL CONTEMPORARY MOOSE BASEMENTS
ON SOUTHERN PORTION OF SITE

Recorded by FARRELL & HUTIMAN

Date AUG 5, 1952

SMITHSONIAN INSTITUTION
RIVER BASIN SURVEYS
Continuation Form

3

Feature No. _____ Site No. 39DW21 R6

Item No.

9 What is possibly the same site is listed in Bowers' (mss. "History")
as Swift Bird Creek (site), #54, located in Sec. 36, T11, R 30.
This location is completely erroneous.

Site No. _____

Feature No. _____

Reservoir _____

Recorded by Harold C. Hamaker 10/5/57

62-911600

SPECIMEN CATALOG FORM

AF-7
(4/4/49)

3

Site No. 39DW 21

Remarks	Cat. No.	Description	Location	Field No.	Date Collected
Cat # 39DW 21- 1 through 3 collected by W.R. Wedel.					
	1	Rim sherd	Random surface.	1	8-31-51
lot	2	9 body sherds	" "	"	"
	3	Scoria	" "	"	"

SPECIMEN CATALOG FORM

AF-7
(4/4/49)Site No. 39DW21

Remarks	Cat. No.	Description	Location	Field No.	Date Collected
cat # 39DW21-4 and 5 collected by W.R. Farrell.					
	lot 4	3 body sherds	surface.	-	1952
	5	Scoria fragment	"	"	"

STATE OF SOUTH DAKOTA

ARCHAEOLOGICAL RESEARCH CENTER

UPDATE

----- SITE FORM - GENERAL DATA -----

Site No. 39 DW52 Site Name _____ County DEWEYMap Reference PATCH SKIN BUTTES SE UTM Zone 14 / 397650 E/ 4988060 N

Arch. Region _____

~~Physiog. Area~~ GRAND-MOREAU Topog. Position TERRACEElevation 1620 ~~m~~/ft Substrate SILTVegetation NONE Land Use RESERVOIR BEACHGround Surface Visibility (%) 100 Condition 'X' Crm Status 'N'Site Dimen. N-S - E-W - m/ft; Area - ha/ac.; Depth 0 cm/inNearest Water Type PERMANENT STREAM Name MISSOURI RIVERDistance 50 m/~~ft~~ Elevation 0 m/ft Direction E Bank R

----- SITE FORM - LOCATIONAL DATA -----

Township 13N Range 31E Section 35Legal Location: NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$

----- SITE FORM - CULTURAL DATA -----

Site Type DESTROYED Time Period _____

Cultural Affiliation _____

----- SITE FORM - ACCESSION DATA -----

Acc. No. - Descr. _____

----- SITE FORM - MISCELLANEOUS DATA -----

Comments Only seven bone fragments noted in area of site 39DW52. Visited area with Karen Nitzschke (site's original discoverer) who indicated that original context had been completely eroded away.

Recorded by KERRY LIPPINCOTT Date 8-88Project USACE Dewey Co. Survey

(Use Continuation Form When Necessary)
(See Site Form Reference Guide for Allowable Data Types)

Site No. 39DW52 Site Name _____ County DEWEY

Landowner/Tenant USACE Address Omaha, NE

Attitude toward survey Good toward excavation N/A

Access to Site Eroded away.

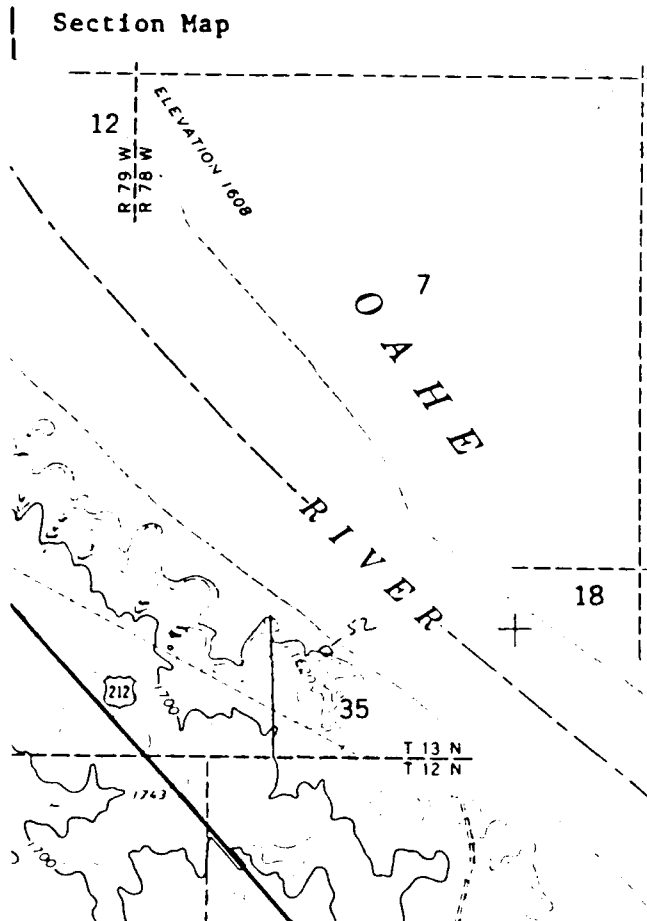
Photo reference(s) _____

Bibliographic reference(s) Lueck, Lippincott and Winham 1989. Cultural Resource Survey, Dewey Co, SD from Moreau River to Forest City Recreation Area. Contract # DACW45-88-C-0261

What was observed at site Site destroyed, seven ? associated bone fragments only.

Collection/Evaluation Procedure No collection

Sketch map



NEAREST WATER: NAME Missouri River DISTANCE 25 ft DIRECTION S
TOPOGRAPHIC POSITION swale between two ridges
SIZE IN METERS 2-3 DEPTH OF SITE 18" below surface
SUBSTRATE loess above gumbo below
PRESENT VEGETATION grass GROUND SURFACE VISIBILITY (%) 100
CONDITION eroding
SURFACE COLLECTIONS? NO YES x BY Karen Nitzschke DATE 10-83
EXCAVATIONS? NO x YES BY DATE
WHAT WAS FOUND
WHERE ARE COLLECTIONS
ACCESSION NUMBER(S)
PUBLICATIONS CONCERNING SITE

complete both sides and return to
SOUTH DAKOTA ARCHAEOLOGICAL RESEARCH CENTER, BOX 152, FORT MEADE, SOUTH DAKOTA 57741

SITE NO. 39 DW52
SEC 35 T 148 N R 31 E
PHOTO COPY OF 7.5" QUADRANGLE
OR SKETCH MAP OF SITE

----- SITE FORM - GENERAL DATA -----

Site No. 39 DW129 Site Name _____ County DEWEY

Map Reference MOREAU SE UTM Zone 14 / 392720 E/ 5020820 N
Arch. Region _____
~~Physiog. Area~~ GRAND-MOREAU Topog. Position RIDGE CREST

Elevation 1680 m/ft Substrate SILT

Vegetation SHORT GRASS Land Use PASTURE

Ground Surface Visibility (%) 40 Condition E Crm Status ' '

Site Dimen. N-S 1.3 E-W 1.1 m/ft; Area 0.01 ha/ft.; Depth 0 cm/in

Nearest Water Type Intermittent stream Name _____

Distance 0 m/ft Elevation 0 m/ft Direction N Bank R

----- SITE FORM - LOCATIONAL DATA -----

Township 16N Range 31E Section 19

Legal Location: NE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$

----- SITE FORM - CULTURAL DATA -----

Site Type CAIRN Time Period _____

Cultural Affiliation _____

----- SITE FORM - ACCESSION DATA -----

Acc. No. _____ - _____ Descr. _____

----- SITE FORM - MISCELLANEOUS DATA -----

Comments Isolated red chert shatter noted 60 meters west of the cairn.

23 stones in cairn.

Recorded by Kerry Lippincott Date 7-11-88

Project USACE Dewey Co. Survey

(Use Continuation Form When Necessary)
(See Site Form Reference Guide for Allowable Data Types)

Site No. 39 DW 129 Site Name _____ County DEWEY

Landowner/Tenant USACE Address Omaha, NE

Attitude toward survey Good toward excavation N/A

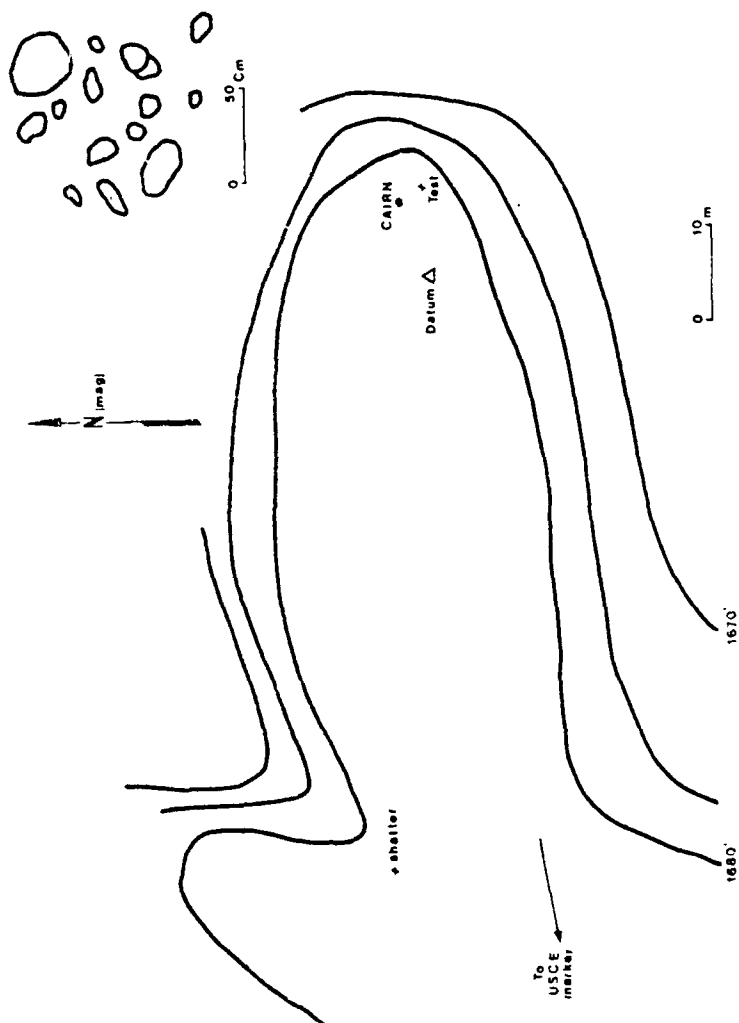
Access to Site From Gettysburg go west on 212, cross Lake Oahe, go 7-8 miles, turn north, go 16-17 miles, keep north 1 mile, walk east to site 1.5 miles.

Photo reference(s) C1: 1-2.

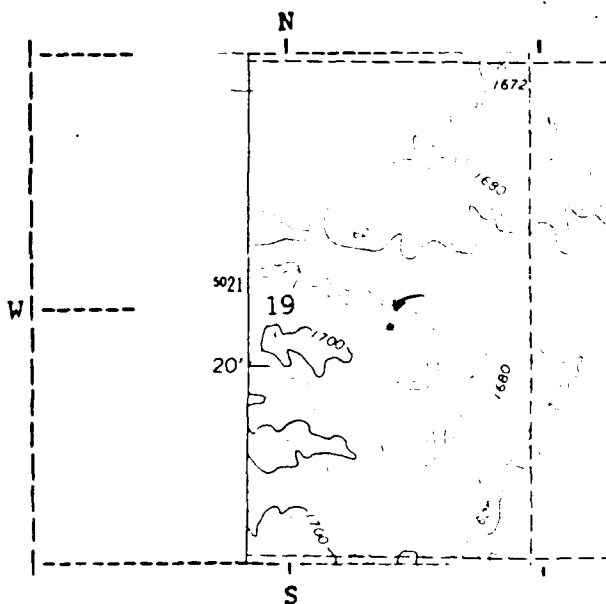
Bibliographic reference(s) Lueck, Lippincott and Winham 1989. Cultural Resource Survey, Dewey County, South Dakota from Moreau River to Forest City Recreation Area. Contract # DACW45-88-C-0261

What was observed at site Cairn of 23+ rocks.

Collection/Evaluation Procedure No collection



Section Map



----- SITE FORM - GENERAL DATA -----

Site No. 39 DW 130 Site Name _____ County DEWEY
Map Reference MOREAU SE UTM Zone 14 / 394740 E/ 5018230 N
Arch. Region _____
~~Physiographic Area~~ GRAND-MOREAU Topog. Position RIDGE TOP
Elevation 1760 m/ft Substrate SILT
Vegetation SHORT GRASS Land Use PASTURE
Ground Surface Visibility (%) 30 Condition D Crm Status 'N'
Overall Site Dimen. N-S 110 E-W 340 m/ft; Area 3.7 ha/xx.; Depth 0 cm/in
Lithics 30 165 0.49
Nearest Water Type PERMANENT STREAM Name MOREAU RIVER
Distance 1080 m/xx Elevation 0 m/ft Direction N Bank R

----- SITE FORM - LOCATIONAL DATA -----

Township 16N Range 31E Section 32, 33
Legal Location: S32 E½ NE¼ NE¼ NE¼ S33 W½ NW¼ NW¼ NW¼

----- SITE FORM - CULTURAL DATA -----

Site Type ARTIFACT SCATTER/PITS Time Period Unknown/20th century
Cultural Affiliation Unknown/Historic Native American

----- SITE FORM - ACCESSION DATA -----

Acc. No. ____ - ____ Descr. _____

----- SITE FORM - MISCELLANEOUS DATA -----

Comments After recording as possible eagle trapping pits, Tony Rivers - former Cheyenne River Tribal chairman-indicated that these pits were dug by his father with a shovel while exploring for gravel deposits 60 years ago. Shovel test was negative.

Recorded by Kerry Lippincott Date 7-12-88
Project USACE Dewey Co. Survey

(Use Continuation Form When Necessary)
(See Site Form Reference Guide for Allowable Data Types)

Site No. 39 DW130 Site Name _____ County DEWEY

Landowner/Tenant USACE Address Omaha, NE

Attitude toward survey Good toward excavation N/A

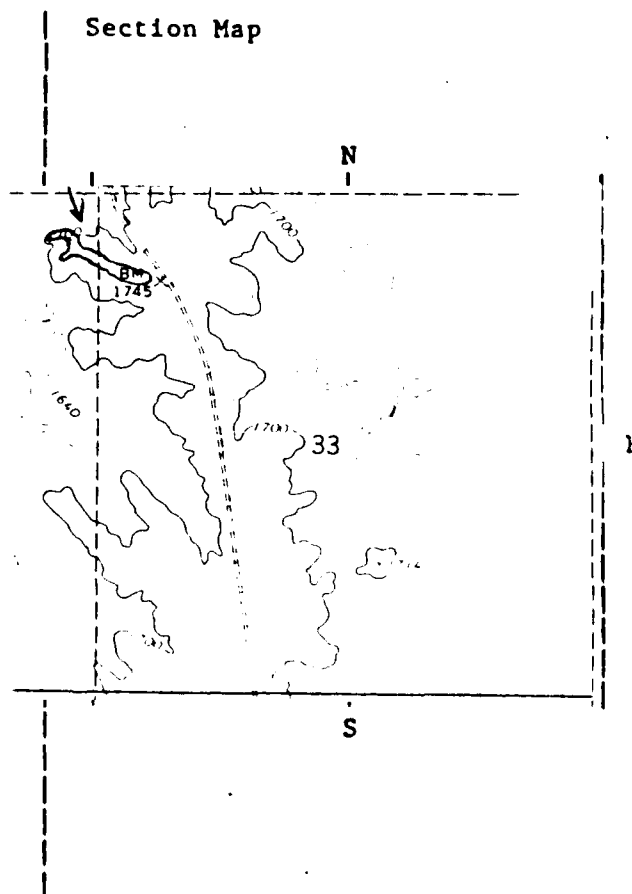
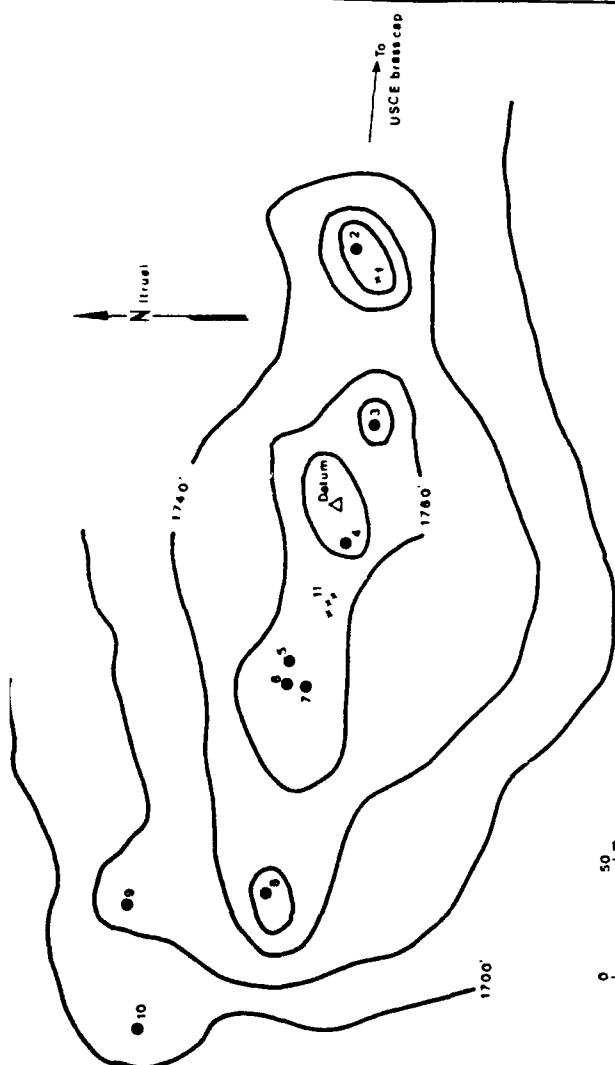
Access to Site From Gettysburg take 212 west, go 7.5 miles west of Lk. Oahe, go N 15 miles, walk NE ca. 2 miles to site.

Photo reference(s) B1: 5-12 C1: 3-8

Bibliographic reference(s) Lueck, Lippincott and Winham 1989. Cultural Resource Survey, Dewey County, South Dakota from Moreau River to Forest City Recreation Area. Contract # DACW45-88-C-0261.

What was observed at site Several small "pits" and sparse lithic scatter.

Collection/Evaluation Procedure No collection



----- SITE FORM - GENERAL DATA -----

Site No. 39DW 131 Site Name _____ County DEWEY
Map Reference MOREAU SE UTM Zone 14 / 395040 E/ 5018270 N
Arch. Region _____
~~Physiog. Area~~ GRAND-MOREAU Topog. Position HILL TOP
Elevation 1780 ~~m~~/ft Substrate SILT
Vegetation SHORT GRASS Land Use PASTURE
Ground Surface Visibility (%) 30 Condition 'E' Crm Status 'P'
Site Dimen. N-S 7.2 E-W 19.75 m/~~KK~~; Area 0.01 ha/ac.; Depth 1 cm/in
Nearest Water Type PERMANENT STREAM Name MOREAU RIVER
Distance 1200 m/~~KK~~ Elevation 0 m/ft Direction NNW Bank R

----- SITE FORM - LOCATIONAL DATA -----

Township 16N Range 31E Section 33
Legal Location: SE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$

----- SITE FORM - CULTURAL DATA -----

Site Type ARTIFACT SCATTER Time Period _____
Cultural Affiliation _____

----- SITE FORM - ACCESSION DATA -----

Acc. No. ____ - ____ Descr. _____

----- SITE FORM - MISCELLANEOUS DATA -----

Comments Shovel test was negative.

Recorded by KERRY LIPPINCOTT Date 7-13-88

Project USACE Dewey Co. Survey

(Use Continuation Form When Necessary)
(See Site Form Reference Guide for Allowable Data Types)

Site No. 39 DW 131 Site Name _____ County DEWEY

Landowner/Tenant USACE Address Omaha, NE

Attitude toward survey Good toward excavation N/A

Access to Site From Gettysburg take 212 west, go 7.5 miles W of Lake Oahe then go N 15 miles, walk NE ca. 3 miles to site.

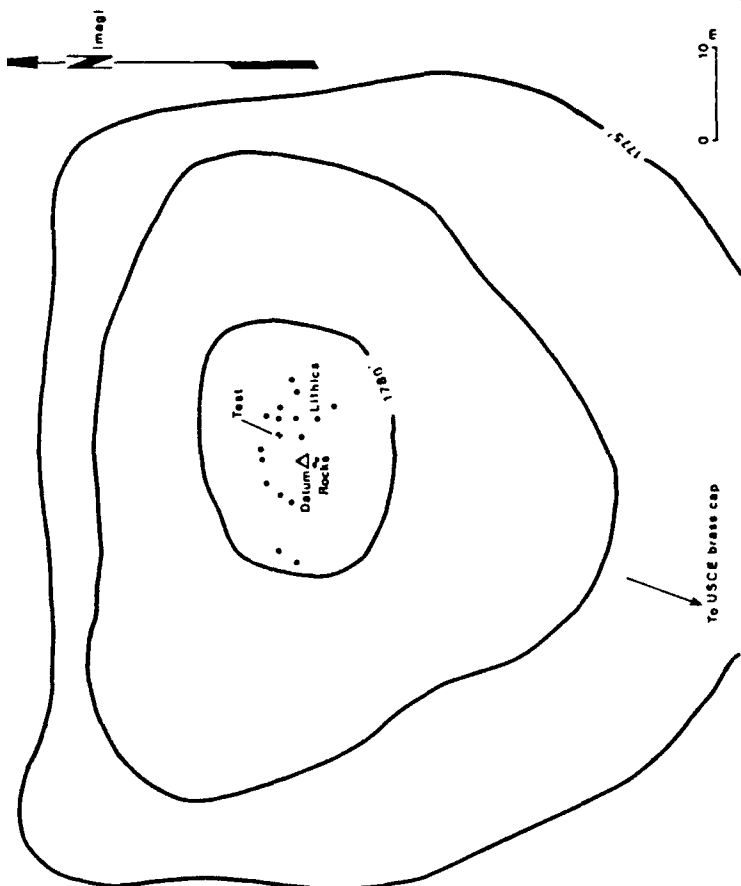
Photo reference(s) B1: 13-14 C1:9

Bibliographic reference(s) Lueck, Lippincott and Winham 1989. Cultural Resource Survey, Dewey County, South Dakota from Moreau River to Forest City Recreation Area. Contract # DACW45-88-C-0261

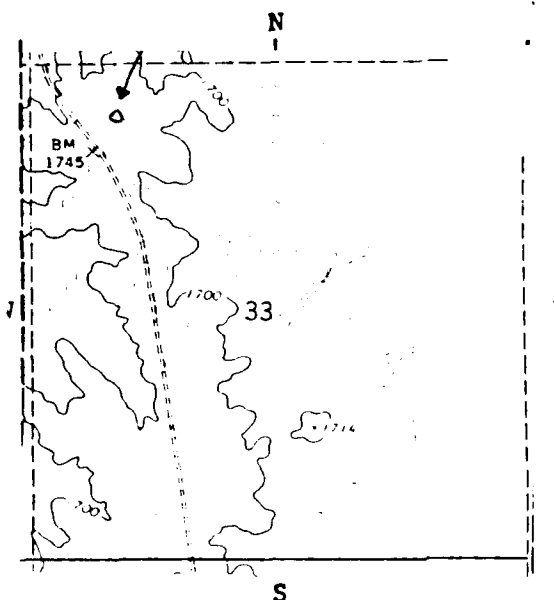
What was observed at site 16+ lithic items.

Collection/Evaluation Procedure No collection

Sketch map



Section Map



----- SITE FORM - GENERAL DATA -----

Site No. 39 DW132 Site Name _____ County DEWEY

Map Reference FOUR BEAR CREEK UTM Zone 14 399880 E/ 5011240 N
Arch. Region _____
~~Physiog. Area~~ GRAND-MOREAU Topog. Position TERRACE EDGE

Elevation 1660 ~~m~~/ft Substrate SILT

Vegetation SHORT GRASS Land Use PASTURE

Ground Surface Visibility (%) 20 Condition 'E' Crm Status ' '

Site Dimen. N-S 4.3 E-W 4.4 m/~~ft~~; Area 0.01 ha/ac.; Depth 0 cm/in

Nearest Water Type PERMANENT STREAM Name MISSOURI RIVER

Distance 1000 m/~~ft~~ Elevation 0 m/ft Direction E Bank R

----- SITE FORM - LOCATIONAL DATA -----

Township 15N Range 31E Section 24

Legal Location: NE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$

----- SITE FORM - CULTURAL DATA -----

Site Type DEPRESSION Time Period A.D. 1861-

Cultural Affiliation Historic Native American/Euro-American

----- SITE FORM - ACCESSION DATA -----

Acc. No. - - - Descr. _____

----- SITE FORM - MISCELLANEOUS DATA -----

Comments Probably a gravel test pit

Recorded by KERRY LIPPINCOTT Date 7-20-88

Project USACE Dewey Co Survey

(Use Continuation Form When Necessary)
(See Site Form Reference Guide for Allowable Data Types)

Site No. 39 DW132 Site Name _____ County DEWEY

Landowner/Tenant Private Address _____

Attitude toward survey _____ toward excavation Unknown

Access to Site From Gettysburg take 212 west, go 7.5 miles west of Lake Oahe, go 11 miles north, then E/NE ca 5 miles to site (walking).

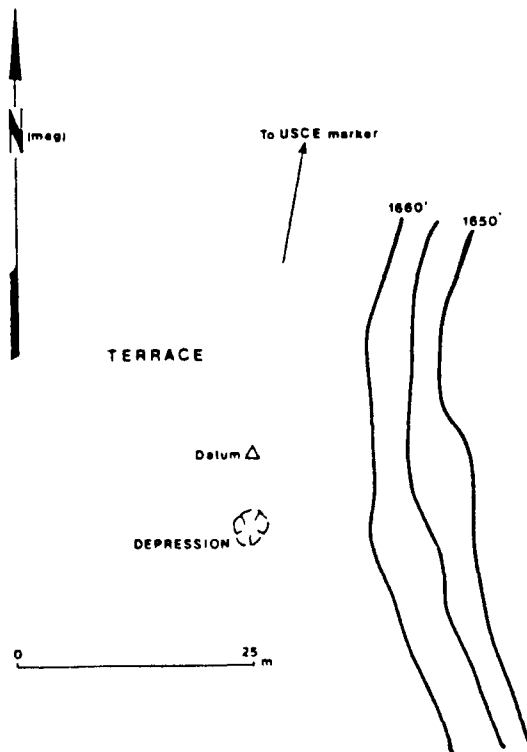
Photo reference(s) B1:22 C1:16

Bibliographic reference(s) Lueck, Lippincott and Winham 1989. Cultural Resource Survey, Dewey Co, SD from Moreau River to Forest City Recreation Area. Contract # DACW45-88-C-0261

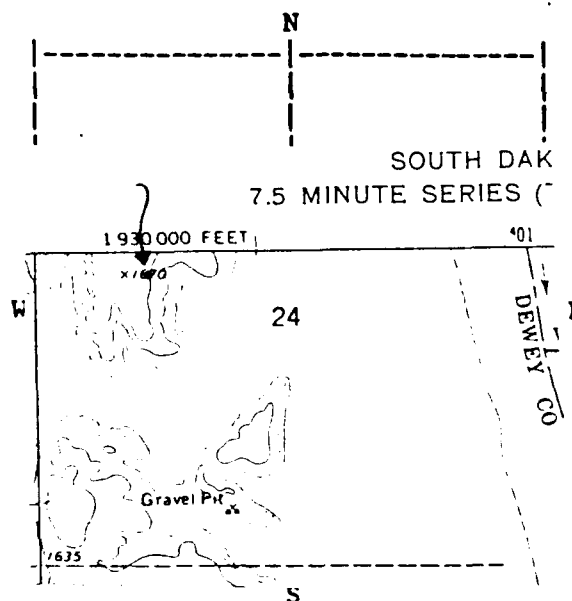
What was observed at site Depression

Collection/Evaluation Procedure No collection

Sketch map



Section Map



----- SITE FORM - GENERAL DATA -----

Site No. 39 DW 133 Site Name _____ County DEWEY
Map Reference FOUR BEAR CREEK UTM Zone 14 / 394180 E / 5007000 N
~~Phys. Area~~ Arch. Region GRAND-MOREAU Topog. Position TERRACE
Elevation 1660 ~~m/ft~~ Substrate SILT
Vegetation SHORT GRASS Land Use PASTURE
Ground Surface Visibility (%) 40 Condition 'E' Crm Status 'N'
Site Dimen. N-S 22 E-W 6 ~~m/ft~~; Area 0.01 ha/ac.; Depth 1 cm/in
Nearest Water Type INTERMITTENT STREAM Name BUFFALO CREEK
Distance 70 ~~m/ft~~ Elevation 1620 ~~m/ft~~ Direction NW Bank R

----- SITE FORM - LOCATIONAL DATA -----

Township 14N Range 31E Section 05
Legal Location: W $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ and E $\frac{1}{2}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$

----- SITE FORM - CULTURAL DATA -----

Site Type ARTIFACT SCATTER Time Period 1500 B.C. - A.D. 900
Cultural Affiliation Late Prehistoric

----- SITE FORM - ACCESSION DATA -----

Acc. No. - Descr. Lithics

----- SITE FORM - MISCELLANEOUS DATA -----

Comments Shovel test was negative.

Recorded by KERRY LIPPINCOTT Date 7-26-88

Project USACE Dewey Co. Survey

(Use Continuation Form When Necessary)
(See Site Form Reference Guide for Allowable Data Types)

Site No. 39 DW 133 Site Name _____ County DEWEY

Landowner/Tenant USACE Address Omaha, NE

Attitude toward survey Good toward excavation N/A

Access to Site From Gettysburg take 212 west, go 7.5 miles west of Lk. Oahe, then go north 9 miles, walk east ca. 1.5 miles to site.

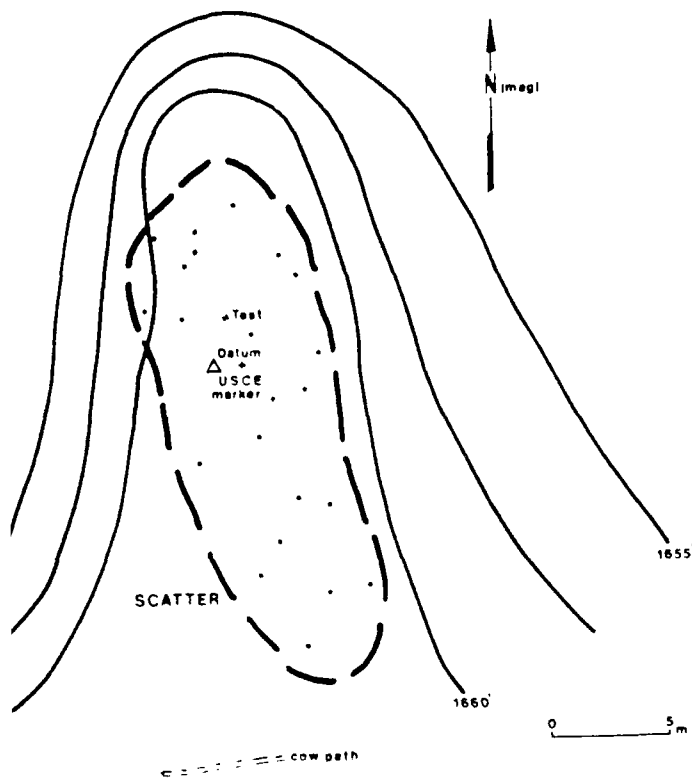
Photo reference(s) B2: 6-7 C1:26

Bibliographic reference(s) Lueck, Lippincott and Winham 1989. Cultural Resource Survey, Dewey Co, SD from Moreau River to Forest City Recreation Area. Contract # DACW45-88-C-0261

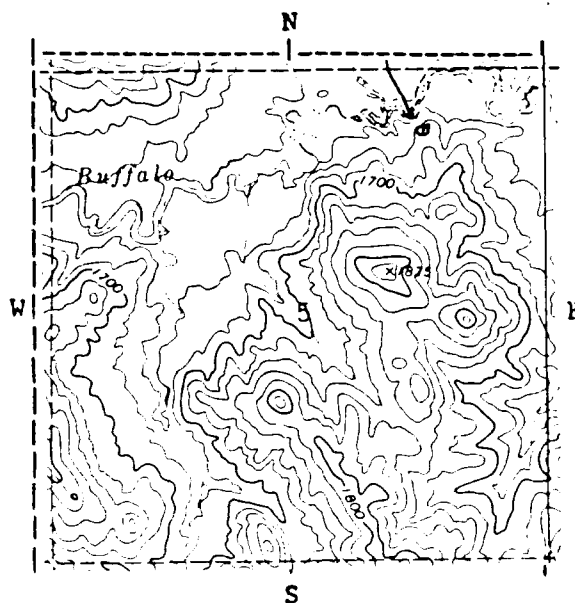
What was observed at site Lithic scatter 22+ items.

Collection/Evaluation Procedure Tools, diagnostic, display items only

Sketch map



Section Map



----- SITE FORM - GENERAL DATA -----

Site No. 39 DW134 Site Name _____ County DEWEY
Map Reference FOUR BEAR CREEK UTM Zone 14 / 394890 E / 5007400 N
Arch. Region _____
~~Displaying Area~~ GRAND-MOREAU Topog. Position TERRACE
Elevation 1650 ~~m~~/ft Substrate SILT
Vegetation SHORT GRASS, CACTUS Land Use PASTURE
Ground Surface Visibility (%) 30 Condition 'E' Crm Status 'N'
Site Dimen. N-S 11.5 E-W 35 m/~~xx~~; Area 0.04 ha/~~xx~~; Depth 1 cm/in
Nearest Water Type INTERMITTENT STREAM Name UNNAMED TRIBUTARY TO
BUFFALO CREEK
Distance 100 m/~~xx~~ Elevation 1630 ~~m~~/ft Direction W Bank L

----- SITE FORM - LOCATIONAL DATA -----

Township 15N Range 31E Section 33
Legal Location: E $\frac{1}{2}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$

----- SITE FORM - CULTURAL DATA -----

Site Type ARTIFACT SCATTER Time Period A.D. 900-1700
Cultural Affiliation Extended Coalescent ?

----- SITE FORM - ACCESSION DATA -----

Acc. No. - Descr. Lithic and ceramic and bone

----- SITE FORM - MISCELLANEOUS DATA -----

Comments Shovel test was negative.

Recorded by KERRY LIPPINCOTT Date 7-26-88

Project USACE Dewey Co. Survey

(Use Continuation Form When Necessary)
(See Site Form Reference Guide for Allowable Data Types)

Site No. 39 DW134 Site Name _____ County DEWEY

Landowner/Tenant USACE Address Omaha, NE

Attitude toward survey Good toward excavation N/A

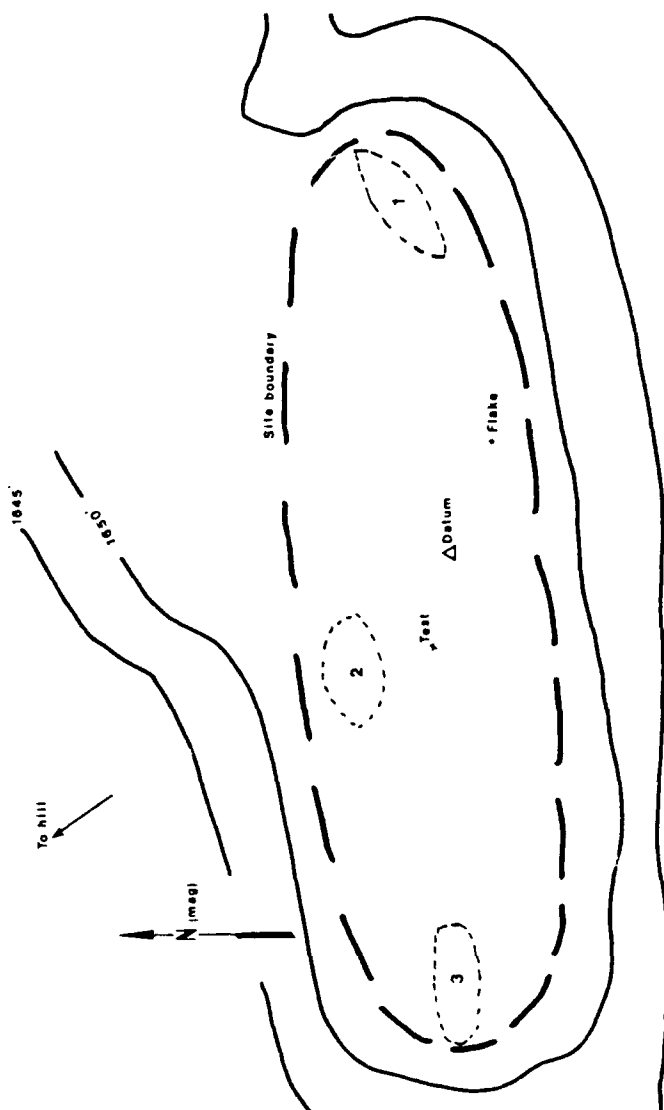
Access to Site From Gettysburg take 212 west, go 7.5 miles west of Lk. Oahe then go north 9 miles, walk east ca. 2 miles to site.

Photo reference(s) B2: 8-9 C1:27

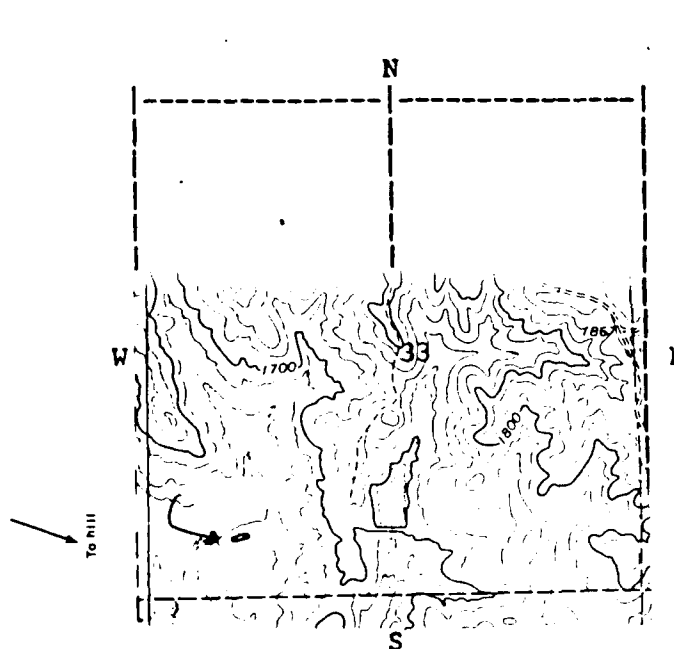
Bibliographic reference(s) Lueck, Lippincott and Winham 1989. Cultural Resource Survey, Dewey Co, SD from Moreau River to Forest City Recreation Area. Contract # DACW45-88-C-0261

What was observed at site Three artifact scatters.

Collection/Evaluation Procedure Tools, diagnostic, display items only



Section Map



----- SITE FORM - GENERAL DATA -----

Site No. 39 DW135 Site Name _____ County DEWEY
Map Reference FOUR BEAR CREEK UTM Zone 14 / 395530 E/ 5006560 N
Arch. Region _____
~~Physiog. Area~~ GRAND-MOREAU Topog. Position UPPER VALLEY SLOPE
Elevation 1700 m/ft Substrate SILT
Vegetation SHORT GRASS Land Use PASTURE
Ground Surface Visibility (%) 60 Condition 'D' Crm Status ' '
Site Dimen. N-S 55 E-W 15 m/ft; Area 0.08 ha/acre; Depth 1 cm/in
Nearest Water Type INTERMITTENT STREAM Name _____
Distance 400 m/ft Elevation 1620 m/ft Direction NW Bank L

----- SITE FORM - LOCATIONAL DATA -----

Township 14N Range 31E Section 04
Legal Location: NE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$

----- SITE FORM - CULTURAL DATA -----

Site Type ARTIFACT SCATTER / CAIRN/
ROCK PILES Time Period _____
Cultural Affiliation _____

----- SITE FORM - ACCESSION DATA -----

Acc. No. ____ - ____ Descr. Lithics

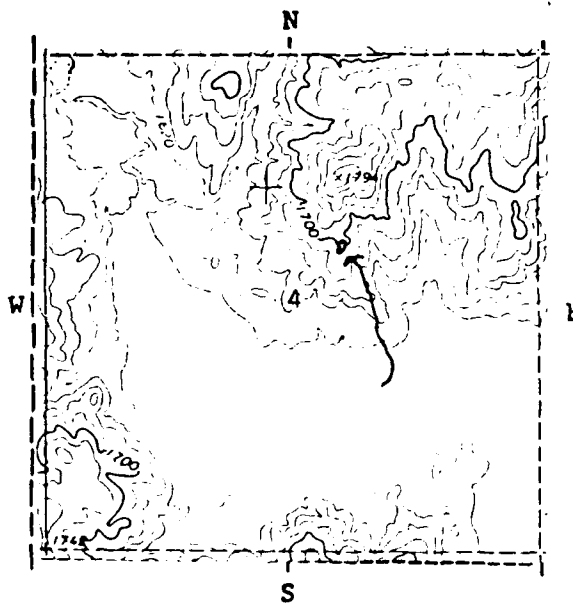
----- SITE FORM - MISCELLANEOUS DATA -----

Comments The two shovel tests were negative.

Recorded by KERRY LIPPINCOTT Date 7-26-88

Project USACE Dewey Co. Survey

(Use Continuation Form When Necessary)
(See Site Form Reference Guide for Allowable Data Types)



----- SITE FORM - GENERAL DATA -----

Site No. 39DW136 Site Name _____ County DEWEY
Map Reference FOUR BEAR CREEK UTM Zone 14 / 395670 E/ 5005500 N
Arch. Region _____ Topog. Position HILL TOP
~~Physiog. Area~~ GRAND-MOREAU
Elevation 1740 m/ft Substrate SILT
Vegetation SHORT GRASS Land Use PASTURE
Ground Surface Visibility (%) 30 Condition 'E' Crm Status ' ' ' ' ' '
Site Dimen. N-S 1.8 E-W 1.8 m/KK; Area 0.01 ha/ac.; Depth 0 cm/in
Nearest Water Type INTERMITTENT STREAM Name BUFFALO CREEK
Distance 500 m/KK Elevation 0 m/ft Direction NE Bank R

----- SITE FORM - LOCATIONAL DATA -----

Township 14N Range 31E Section 09
Legal Location: NE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$

----- SITE FORM - CULTURAL DATA -----

Site Type CAIRN Time Period _____
Cultural Affiliation _____

----- SITE FORM - ACCESSION DATA -----

Acc. No. _____ - _____ Descr. _____

----- SITE FORM - MISCELLANEOUS DATA -----

Comments _____

Recorded by KERRY LIPPINCOTT Date 7-27-88

Project USACE Dewey Co. Survey

(Use Continuation Form When Necessary)
(See Site Form Reference Guide for Allowable Data Types)

Site No. 39 DW136 Site Name _____ County DEWEY

Landowner/Tenant Private Address _____

Attitude toward survey _____ toward excavation N/A

Access to Site From Gettysburg take 212 west, go 7.5 miles west of Lk. Oahe, then go N 8 miles, walk east ca. 2.7 miles to site.

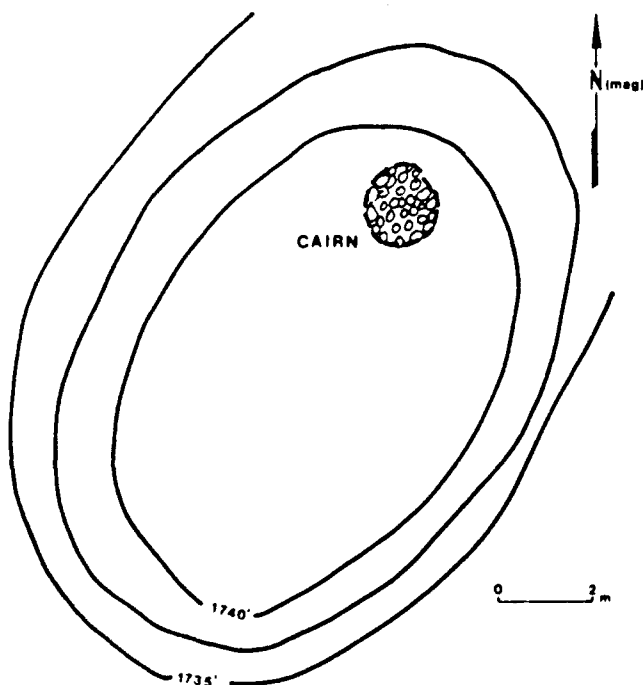
Photo reference(s) B2:16-17 C1:31

Bibliographic reference(s) Lueck, Lippincott and Winham 1989 Cultural Resource Survey, Dewey Co, SD from Moreau River to Forest City Recreation Area. Contract # DACW45-88-C-0261

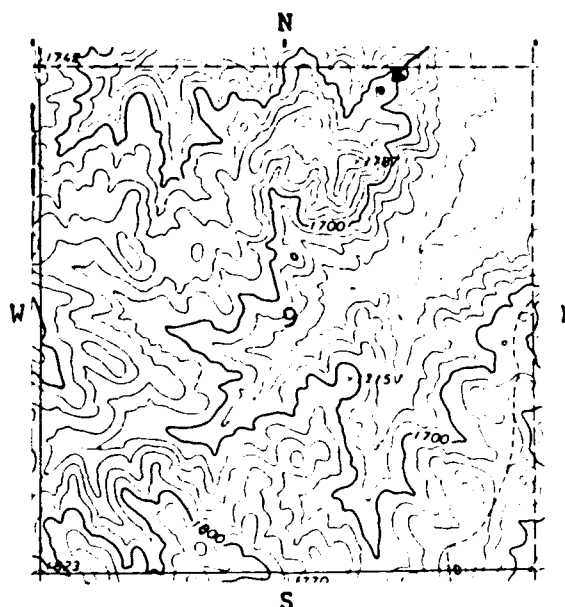
What was observed at site Stone cairn

Collection/Evaluation Procedure No collection

Sketch map



Section Map



----- SITE FORM - GENERAL DATA -----

Site No. 39 DW137 Site Name _____ County DEWEY
Map Reference FOUR BEAR CREEK UTM Zone 14 / 395570 E/ 5005250 N
Arch. Region _____
~~Physiog. Area~~ GRAND-MOREAU Topog. Position RIDGE TOP
Elevation 1780 ~~m~~/ft Substrate SILT
Vegetation SHORT GRASS Land Use PASTURE
Ground Surface Visibility (X) 30 Condition 'E' Crm Status 'P'
Site Dimen. N-S 40 E-W 60 m/~~ft~~; Area 0.24 ha/~~ac~~; Depth 0 cm/in
Nearest Water Type INTERMITTENT STREAM Name _____
Distance 360 m/~~ft~~ Elevation 1620 ~~m~~/ft Direction E Bank L

----- SITE FORM - LOCATIONAL DATA -----

Township 14N Range 31E Section 09
Legal Location: S½ NW¼ NE¼

----- SITE FORM - CULTURAL DATA -----

Site Type STONE CIRCLE / CAIRNS Time Period _____
Cultural Affiliation _____

----- SITE FORM - ACCESSION DATA -----

Acc. No. _____ Descr. _____

----- SITE FORM - MISCELLANEOUS DATA -----

Comments _____

Recorded by KERRY LIPPINCOTT Date 7-27-88

Project USACE Dewey Co. Survey

(Use Continuation Form When Necessary)
(See Site Form Reference Guide for Allowable Data Types)

Site No. 39DW 137 Site Name _____ County DEWEY

Landowner/Tenant Private Address _____

Attitude toward survey _____ toward excavation N/A

Access to Site From Gettysburg take 212 west, go 7.5 miles west of Lk. Oahe, then go N 8 miles, walk east ca. 2.7 miles to site.

Photo reference(s) B2: 18-23 C1:32-34

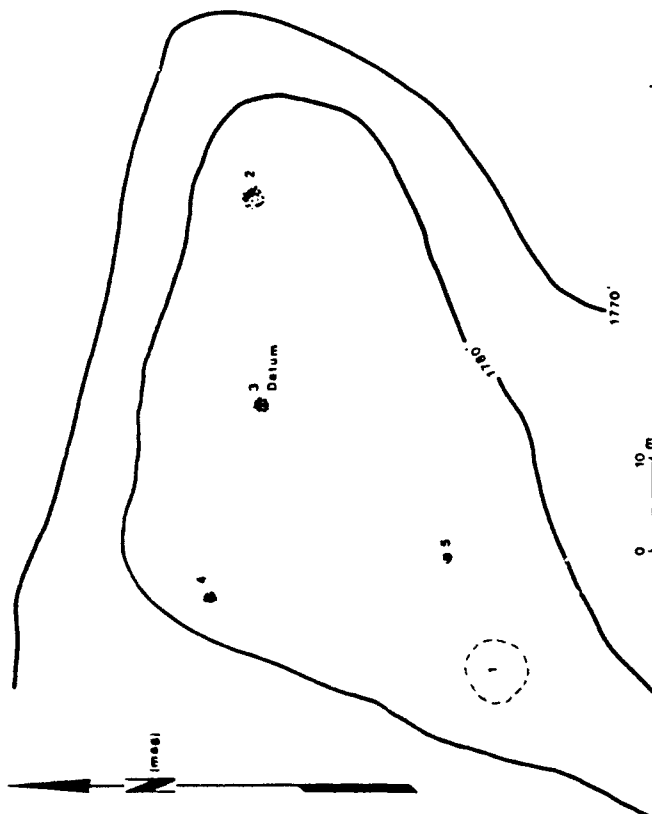
Bibliographic reference(s) Lueck, Lippincott and Winham 1989. Cultural Resource Survey, Dewey Co, SD from Moreau River to Forest City Recreation Area. Contract # DACW45-88-C-0261

What was observed at site One stone circle and four stone cairns.

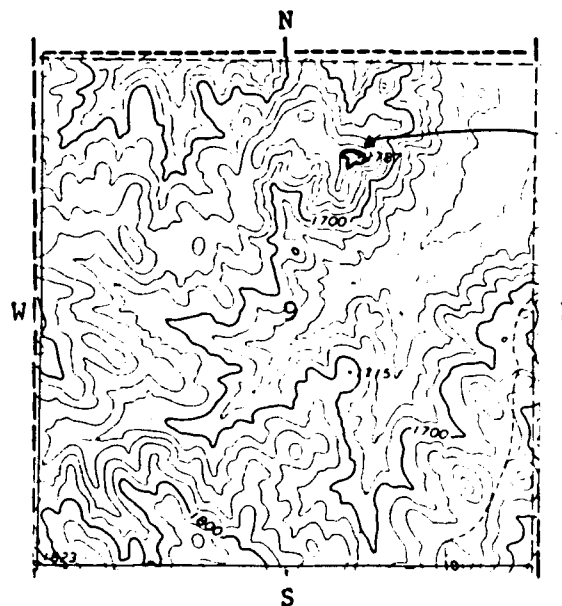
Circle is 6.7m N-S x 6.6m E-W. Cairns are 3m diam; 2m diam; 1.85m x 1.2m and 1m x 0.75m.

Collection/Evaluation Procedure No collection

Sketch map



Section Map



STATE OF SOUTH DAKOTA

ARCHAEOLOGICAL RESEARCH CENTER

SITE FORM - GENERAL DATA

Site No. 39DW138 Site Name _____ County DEWEY
Map Reference FOUR BEAR CREEK UTM Zone 14 / 397960 E / 5004940 N
Arch. Region _____
~~Mapping Area~~ GRAND-MOREAU Topog. Position TERRACE RIDGE REMNANT
Elevation 1640 m/ft Substrate SILT
Vegetation SHORT GRASS Land Use PASTURE
Ground Surface Visibility (%) 30 Condition 'E' Crm Status 'P'
Site Dimen. N-S 40 E-W 85 m/ft; Area 0.34 ha/ac.; Depth 1 cm/in
Nearest Water Type PERMANENT STREAM Name MISSOURI RIVER
Distance 0 m/ft Elevation 0 m/ft Direction E Bank R

SITE FORM - LOCATIONAL DATA

Township 14N Range 31E Section 11
Legal Location: C SW $\frac{1}{2}$ NW $\frac{1}{2}$

SITE FORM - CULTURAL DATA

Site Type DEPRESSIONS, CAIRNS Time Period _____
Cultural Affiliation _____

SITE FORM - ACCESSION DATA

Acc. No. _____ - _____ Descr. _____

SITE FORM - MISCELLANEOUS DATA

Comments Depressions may be recent gravel test pits.
Cairns have the following number of stones: 11; 24; 29; 17; 13; 43
A shovel test was negative.

Recorded by KERRY LIPPINCOTT Date 7-28-88

Project USACE Dewey Co. Survey

(Use Continuation Form When Necessary)
(See Site Form Reference Guide for Allowable Data Types)

Site No. 39DW138 Site Name _____ County DEWEY

Landowner/Tenant USACE Address Omaha, NE

Attitude toward survey Good toward excavation N/A

Access to Site From Gettysburg take 212 west, go 7.5 miles west of Lk. Oahe then go north 7 miles, walk east 4.2 miles then north 0.7 miles to site.

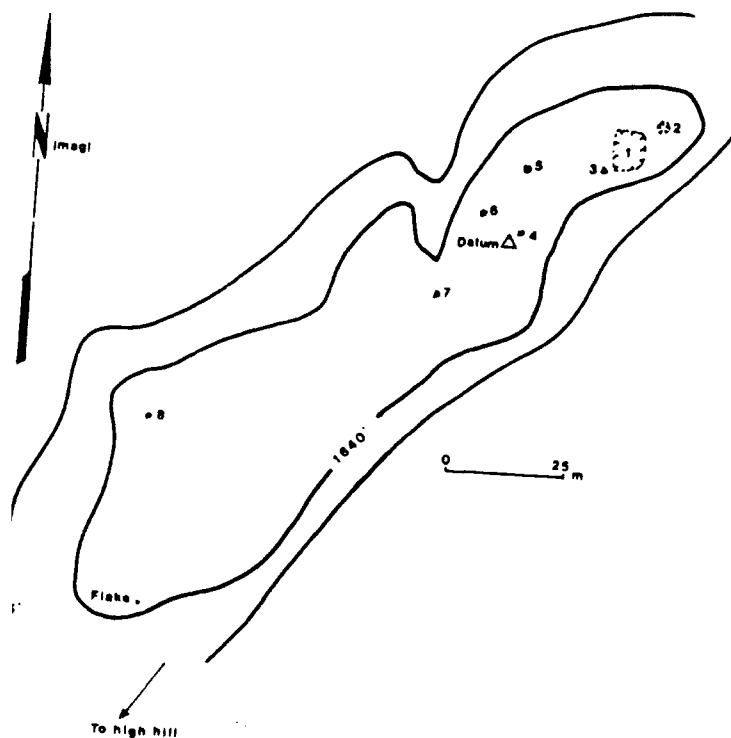
Photo reference(s) B2:24-25 C1:35

Bibliographic reference(s) Lueck, Lippincott and Winham 1989. Cultural Resource Survey, Dewey Co, SD from Moreau River to Forest City Recreation Area. Contract # DACW45-88-C-026

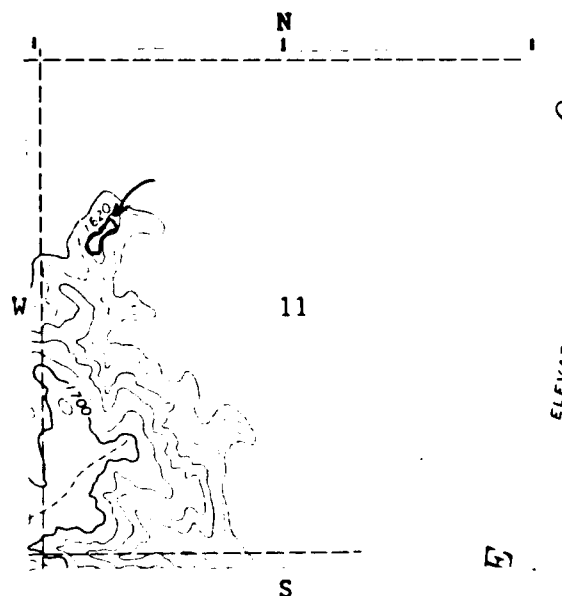
What was observed at site Depressions and cairns, one flake.

Collection/Evaluation Procedure _____

Sketch map



Section Map



----- SITE FORM - GENERAL DATA -----

Site No. 39 DW139 Site Name _____ County DEWEY

Map Reference FOUR BEAR CREEK UTM Zone 14 / 398165 E/ 5000140 N

Arch. Region GRAND-MOREAU Topog. Position RIDGE CREST

Elevation 1640 m/ft Substrate SILT

Vegetation SHORT GRASS Land Use PASTURE

Ground Surface Visibility (%) 30 Condition 'D' Crm Status 'P'

Site Dimen. N-S 52 E-W 25 m/ft; Area 0.13 ha/acre; Depth 10-50 cm/ft

Nearest Water Type PERMANENT STREAM Name MISSOURI RIVER

Distance 350 m/ft Elevation 0 m/ft Direction E Bank R

----- SITE FORM - LOCATIONAL DATA -----

Township 14N Range 31E Section 26

Legal Location: W $\frac{1}{2}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$

----- SITE FORM - CULTURAL DATA -----

Site Type ARTIFACT SCATTER + CAIRN Time Period _____

Cultural Affiliation _____

----- SITE FORM - ACCESSION DATA -----

Acc. No. ____ - ____ Descr. Lithics

----- SITE FORM - MISCELLANEOUS DATA -----

Comments 15 stones in cairn.

Cutbank exposures were substituted for a shovel test.

Recorded by KERRY LIPPINCOTT Date 8-6-88

Project USACE Dewey Co. Survey

(Use Continuation Form When Necessary)
(See Site Form Reference Guide for Allowable Data Types)

Site No. 39 DW139 Site Name _____ County DEWEY

Landowner/Tenant USACE Address Omaha, NE

Attitude toward survey Good toward excavation N/A

Access to Site From Gettysburg take 212 west, go 7.5 miles west of Lk. Oahe, go N 5 miles, walk E ca. 4.4 miles to site.

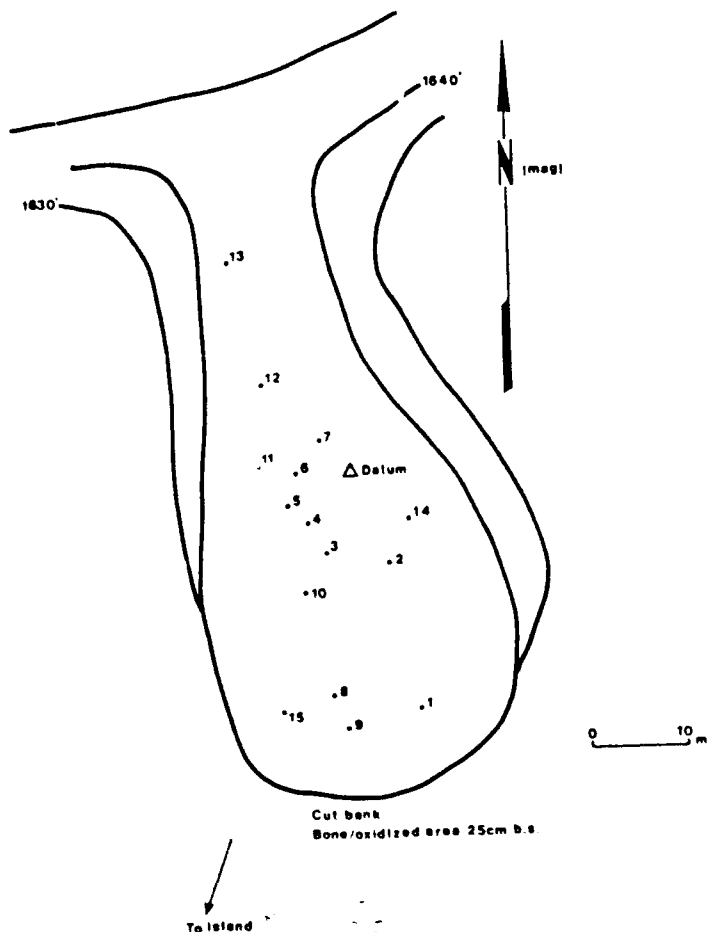
Photo reference(s) B3:3-4 C2:12

Bibliographic reference(s) Lueck, Lippincott and Winham 1989. Cultural Resource Survey, Dewey Co, SD from Moreau River to Forest City Recreation Area. Contract # DACW45-88-C-0261

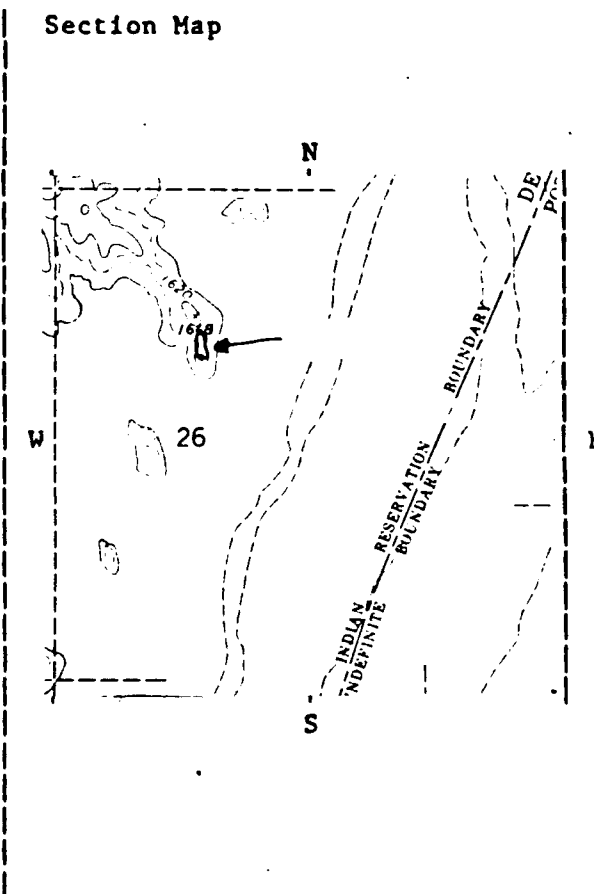
What was observed at site 15+ lithic/bone artifacts. Cairn 1.2m N-S x 1.0m E-W.

Collection/Evaluation Procedure Tools/diagnostic/display items only

Sketch map



Section Map



----- SITE FORM - GENERAL DATA -----

Site No. 39 DW140 Site Name _____ County DEWEY

Map Reference FOUR BEAR CREEK UTM Zone 14 / 398100 E/ 5000300 N
Arch. Region _____
~~Physiog. Area~~ GRAND-MOREAU Topog. Position RIDGE CREST

Elevation 1640 ~~m~~/ft Substrate SILT

Vegetation SHORT GRASS Land Use PASTURE

Ground Surface Visibility (%) 30 Condition 'E' Crm Status ' '

Site Dimen. N-S 1.2 E-W 2.0 m/~~ft~~; Area 0.01 ha/~~ac~~; Depth 1 cm/in

Nearest Water Type PERMANENT STREAM Name MISSOURI RIVER

Distance 480 m/~~ft~~ Elevation 0 m/ft Direction E Bank R

----- SITE FORM - LOCATIONAL DATA -----

Township 14N Range 31E Section 26

Legal Location: SW $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$

----- SITE FORM - CULTURAL DATA -----

Site Type CAIRN - ISOLATED SHATTER Time Period _____

Cultural Affiliation _____

----- SITE FORM - ACCESSION DATA -----

Acc. No. ____ - ____ Descr. _____

----- SITE FORM - MISCELLANEOUS DATA -----

Comments 21 stones in cairn. A shovel test was negative.

Recorded by KERRY LIPPINCOTT Date 8-6-88

Project USACE Dewey Co. Survey

(Use Continuation Form When Necessary)
(See Site Form Reference Guide for Allowable Data Types)

Site No. 39 DW140 Site Name _____ County DEWEY

Landowner/Tenant USACE Address Omaha, NE

Attitude toward survey Good toward excavation N/A

Access to Site From Gettysburg take 212 west, go 7.5 miles west of Lk. Oahe, go N 5 miles, walk east ca. 4.4. miles to site.

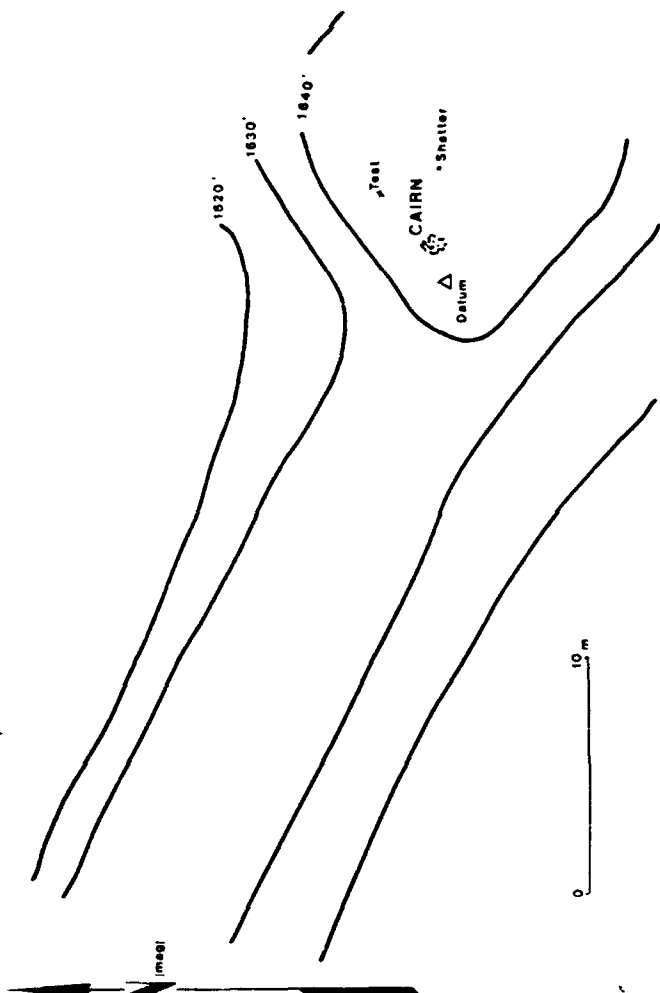
Photo reference(s) B3:5-6 C2:13

Bibliographic reference(s) Lueck, Lippincott and Winham 1989. Cultural Resource Survey, Dewey Co, SD from Moreau River to Forest City Recreation Area. Contract # DACW45-88-C-0261

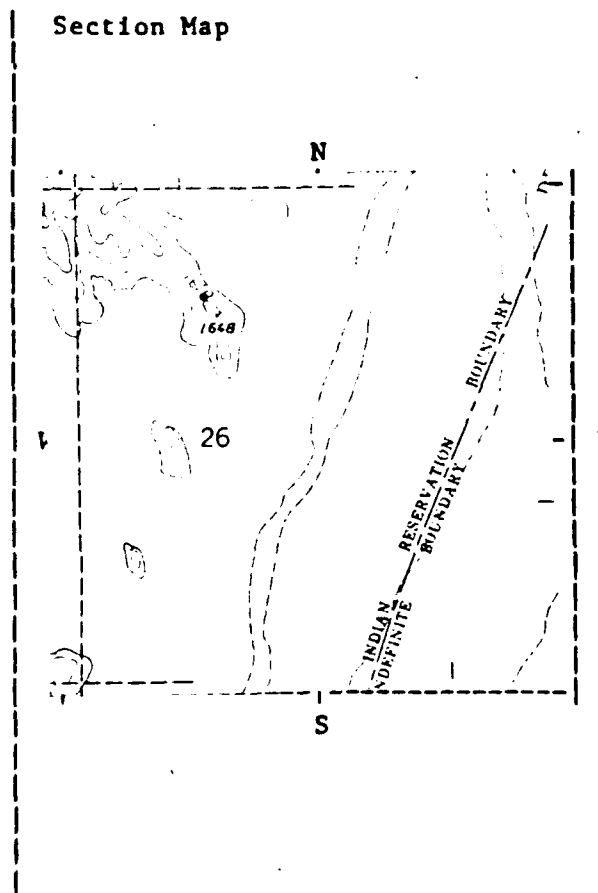
What was observed at site One cairn (1.2m N-S x 1.0m E-W). Gray TRS shatter.

Collection/Evaluation Procedure No collection

Sketch map



Section Map



----- SITE FORM - GENERAL DATA -----

Site No. 39 DW 141 Site Name _____ County DEWEY
Map Reference FOUR BEAR CREEK UTM Zone 14 / 396350 E/ 4999065 N
Arch. Region _____
~~Physiog. Area~~ GRAND-MOREAU Topog. Position RIDGE CREST
Elevation 1700 ~~m~~/ft Substrate SILT
Vegetation SHORT GRASS Land Use PASTURE
Ground Surface Visibility (%) 20 Condition 'E' Crm Status ' '
Site Dimen. N-S 1.6 E-W 1.6 ~~m~~/ft; Area 0.01 ha/ac.; Depth 1 cm/in
Nearest Water Type INTERMITTENT STREAM Name _____
Distance 370 ~~m~~/ft Elevation 1620 ~~m~~/ft Direction W Bank L

----- SITE FORM - LOCATIONAL DATA -----

Township 14N Range 31E Section 34
Legal Location: NW $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$

----- SITE FORM - CULTURAL DATA -----

Site Type CAIRN Time Period _____
Cultural Affiliation _____

----- SITE FORM - ACCESSION DATA -----

Acc. No. - Descr. _____

----- SITE FORM - MISCELLANEOUS DATA -----

Comments 30 stones in cairn. A shovel test was negative.

Recorded by KERRY LIPPINCOTT Date 8-7-88
Project USACE Dewey Co. Survey

(Use Continuation Form When Necessary)
(See Site Form Reference Guide for Allowable Data Types)

Site No. 39DW141 Site Name _____ County DEWEY

Landowner/Tenant USACE Address Omaha, NE

Attitude toward survey Good toward excavation N/A

Access to Site From Gettysburg take 212 west, go 7.5 miles west of Lake Oahe then go N 4 miles and walk E 3.7 miles to site.

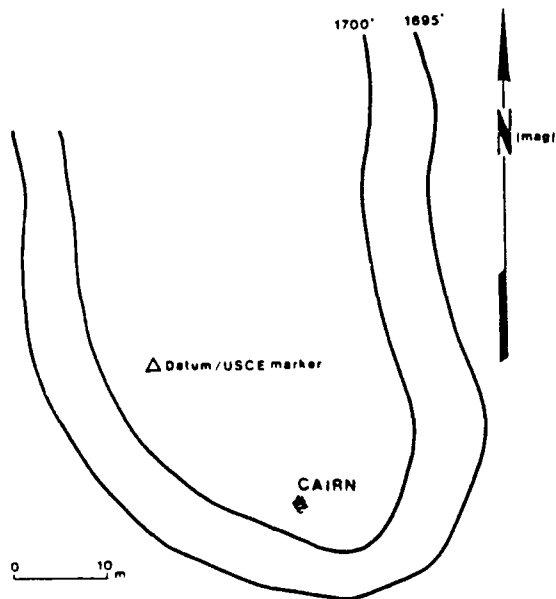
Photo reference(s) B3:7-8 C2:14

Bibliographic reference(s) Lueck, Lippincott and Winham 1989. Cultural Resource Survey, Dewey Co, SD from Moreau River to Forest City Recreation Area. Contract #DACW45-88-C-0261

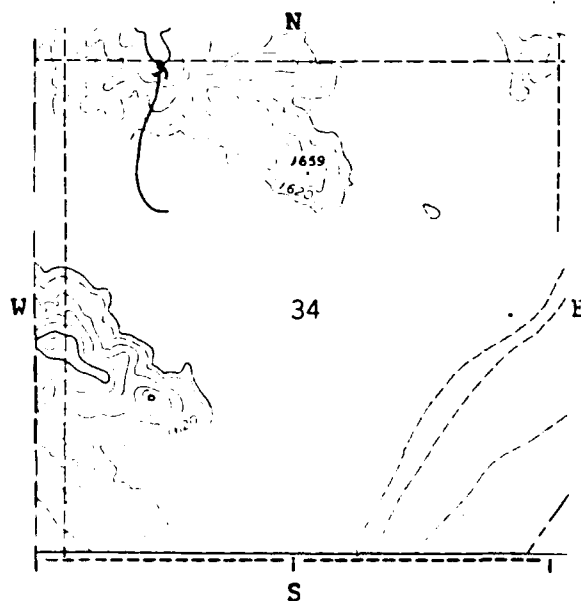
What was observed at site One cairn

Collection/Evaluation Procedure No collection

Sketch map



Section Map



----- SITE FORM - GENERAL DATA -----

Site No. 39 DW142 Site Name _____ County DEWEY
Map Reference FOUR BEAR CREEK UTM Zone 14 / 396160 E/ 4998040 N
Arch. Region _____
~~Phys. Reg. Area~~ GRAND-MOREAU Topog. Position HILL TOP
Elevation 1710 ~~m~~/ft Substrate SILT
Vegetation SHORT GRASS Land Use PASTURE
Ground Surface Visibility (%) 50 Condition 'E' Crm Status ' '
Site Dimen. N-S 1 E-W 0.9 ~~m~~/ft; Area 0.01 ha/ac.; Depth 1 cm/in
Nearest Water Type PERMANENT STREAM Name MISSOURI RIVER
Distance 960 ~~m~~/ft Elevation 0 m/ft Direction E Bank R

----- SITE FORM - LOCATIONAL DATA -----

Township 14N Range 31E Section 34
Legal Location: NE $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$

----- SITE FORM - CULTURAL DATA -----

Site Type CAIRN Time Period _____
Cultural Affiliation _____

----- SITE FORM - ACCESSION DATA -----

Acc. No. - Descr. _____

----- SITE FORM - MISCELLANEOUS DATA -----

Comments 13 stones in cairn. A shovel test was negative.

Recorded by KERRY LIPPINCOTT Date 8-7-88

Project USACE Dewey Co. Survey

(Use Continuation Form When Necessary)
(See Site Form Reference Guide for Allowable Data Types)

Site No. 39 DW 142 Site Name _____ County DEWEY

Landowner/Tenant USACE Address Omaha, NE

Attitude toward survey Good toward excavation N/A

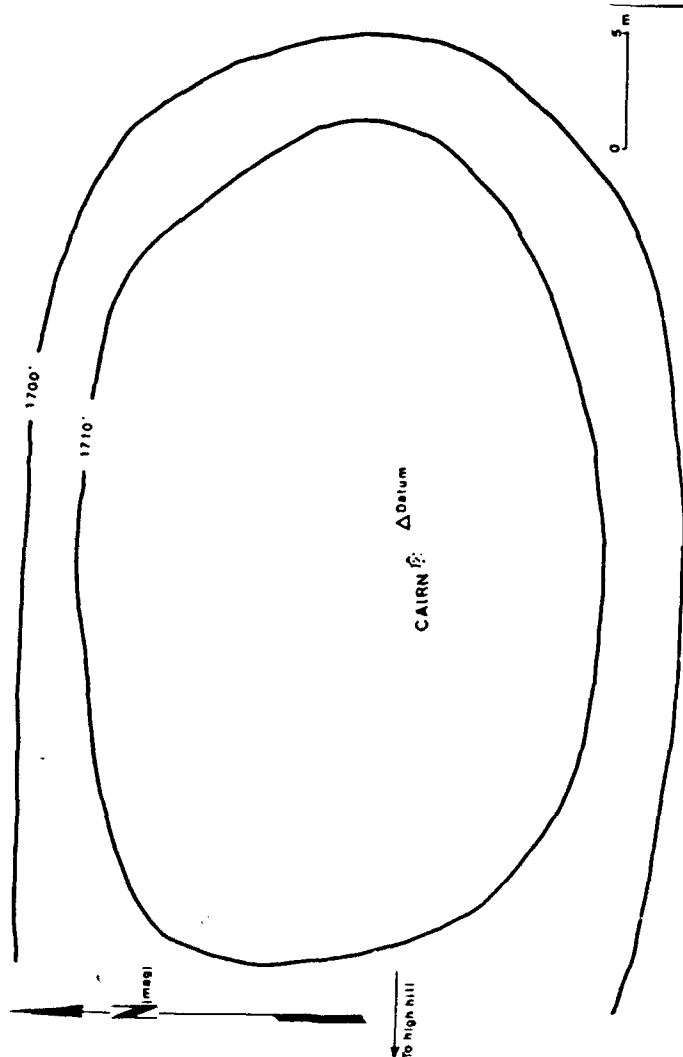
Access to Site From Gettysburg take 212 west, go 7.5 miles west of Lk. Oahe then go N 3.5 miles. Walk E 3.8 miles to site.

Photo reference(s) B3:9-10 C2:15

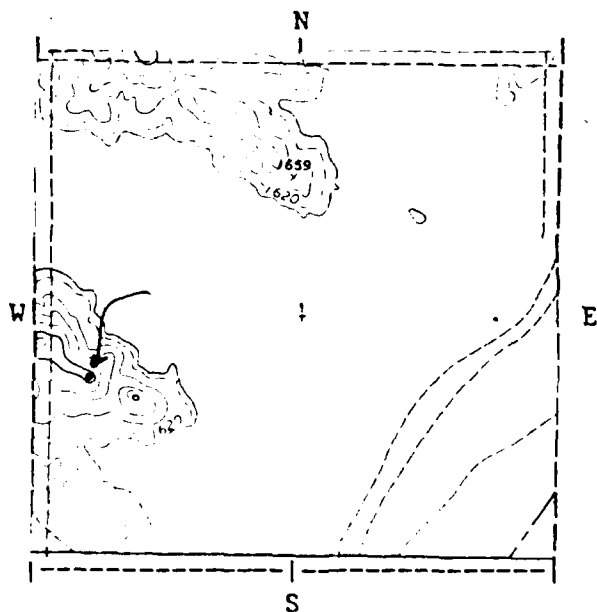
Bibliographic reference(s) Lueck, Lippincott and Winham 1989. Cultural Resource Survey, Dewey Co, SD from Moreau River to Forest City Recreation Area. Contract # DACW45-88-C-0261

What was observed at site One cairn

Collection/Evaluation Procedure No collection



Section Map



----- SITE FORM - GENERAL DATA -----

Site No. 39 DW143 Site Name _____ County DEWEYMap Reference FOUR BEAR CREEK UTM Zone 14 / 395740 E/ 4997620 N

Arch. Region _____

Physiog. Area GRAND-MOREAU Topog. Position RIDGE CRESTElevation 1700 ~~m~~/ft Substrate SILTVegetation SHORT GRASS Land Use PASTUREGround Surface Visibility (%) 60 Condition 'D' Crm Status 'N'Site Dimen. N-S 50 E-W 1 m/~~ft~~; Area 0.01 ha/ac.; Depth 1 cm/inNearest Water Type PERMANENT STREAM Name MISSOURI RIVERDistance 1250 m/~~ft~~ Elevation 0 m/ft Direction E Bank R

----- SITE FORM - LOCATIONAL DATA -----

Township 14N Range 31E Section 33Legal Location: NE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$

----- SITE FORM - CULTURAL DATA -----

Site Type CAIRN Time Period _____

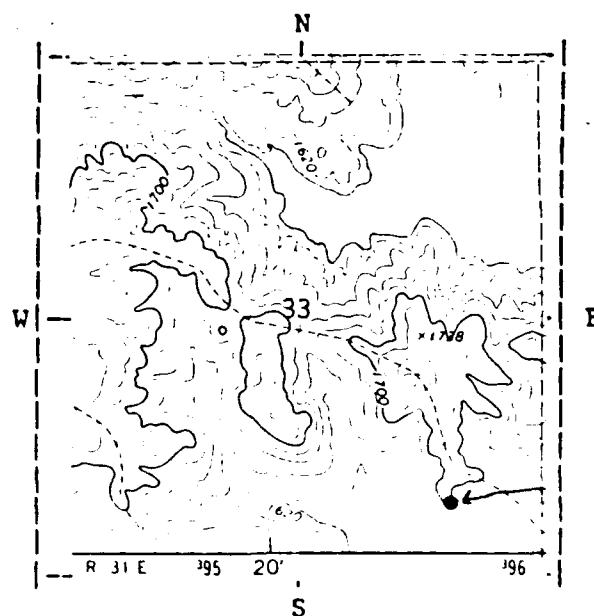
Cultural Affiliation _____

----- SITE FORM - ACCESSION DATA -----

Acc. No. - Descr. _____

----- SITE FORM - MISCELLANEOUS DATA -----

Comments 11 stones in cairn. A shovel test was negative.Recorded by KERRY LIPPINCOTT Date 8-8-88Project USACE Dewey Co Survey(Use Continuation Form When Necessary)
(See Site Form Reference Guide for Allowable Data Types)



----- SITE FORM - GENERAL DATA -----

Site No. 39 DW144 Site Name _____ County DEWEY

Map Reference FOUR BEAR CREEK UTM Zone 14 / 392450 E/ 4997910 N

Arch. Region Grand-Moreau Topog. Position VALLEY BLUFF

Elevation 1705 m/ft Substrate SILT

Vegetation SHORT GRASS Land Use PASTURE

Ground Surface Visibility (%) 20 Condition 'D' Crm Status 'N'

Site Dimen. N-S 25 E-W 40 m/ft; Area 0.096 ha/ft.; Depth 1 cm/in

Nearest Water Type INTERMITTENT STREAM Name SWIFT BIRD CREEK

Distance 300+ m/ft Elevation 0 m/ft Direction S Bank L

----- SITE FORM - LOCATIONAL DATA -----

Township 14N Range 31E Section 31

Legal Location: NW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$

----- SITE FORM - CULTURAL DATA -----

Site Type ARTIFACT SCATTER/CAIRN Time Period _____

Cultural Affiliation _____

----- SITE FORM - ACCESSION DATA -----

Acc. No. _____ Descr. _____

----- SITE FORM - MISCELLANEOUS DATA -----

Comments 9 stones in cairn. A shovel test was negative.

Recorded by KERRY LIPPINCOTT Date 8-8-88

Project USACE Dewey Co. Survey

(Use Continuation Form When Necessary)
(See Site Form Reference Guide for Allowable Data Types)

Site No. 39 DW144 Site Name _____ County DEWEY

Landowner/Tenant USACE Address Omaha, NE

Attitude toward survey Good toward excavation N/A

Access to Site From Gettysburg take 212 west, go 7.5 miles west of Lk. Oahe then go north 3.5 miles. Walk E 1.2 miles to site.

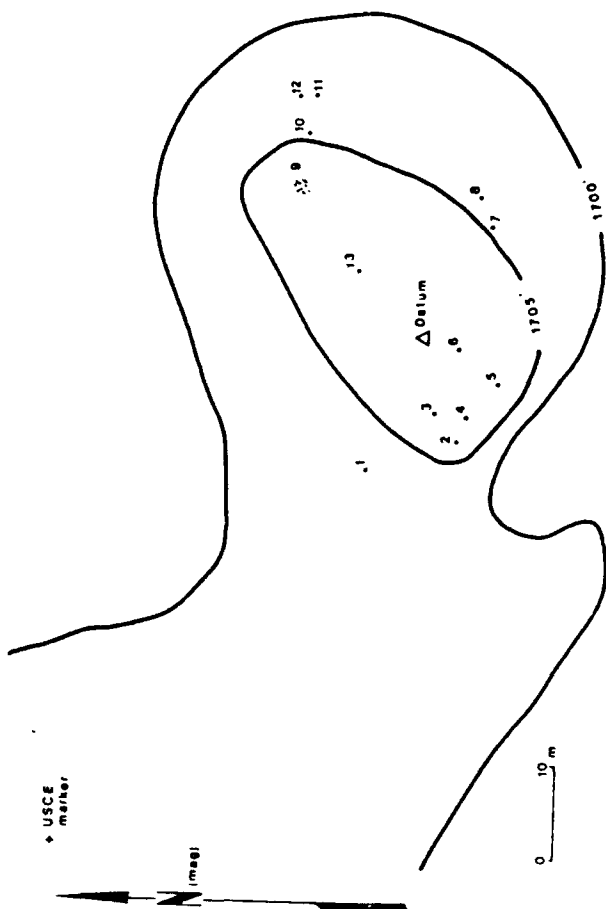
Photo reference(s) B3:13-14 C2:17

Bibliographic reference(s) Lueck, Lippincott and Winham 1989. Cultural Resource Survey, Dewey Co, SD from Moreau River to Forest City Recreation Area. Contract # DACW45-88-C-0261

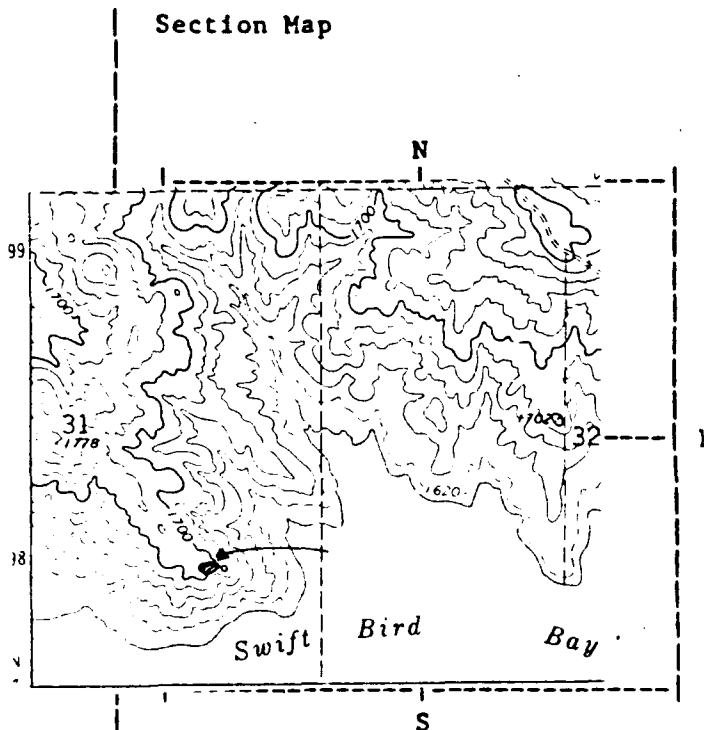
What was observed at site Small cairn and 12+ lithics. (Cairn 2.7m N-S x 2.1m E-W, open in center like small stone circle).

Collection/Evaluation Procedure No collection.

Sketch map



Section Map



----- SITE FORM - GENERAL DATA -----

Site No. 39 DW145 Site Name _____ County DEWEY
Map Reference PATCH SKIN BUTTES UTM Zone 14 / 391490 E/ 4997970 N
Arch. Region _____
~~Biogeog. Area~~ GRAND-MOREAU Topog. Position RIDGE CREST
Elevation 1680 ~~m~~/ft Substrate SILT
Vegetation SHORT GRASS Land Use PASTURE
Ground Surface Visibility (Z) 60 Condition 'E' Crm Status 'N'
Site Dimen. N-S 0.9 E-W 0.8 ~~m~~/ft; Area 0.01 ha/ac.; Depth 1 cm/in
Nearest Water Type INTERMITTENT STREAM Name _____
Distance 200 ~~m~~/ft Elevation 1615 ~~m~~/ft Direction W Bank L

----- SITE FORM - LOCATIONAL DATA -----

Township 14N Range 31E Section 31
Legal Location: SW $\frac{1}{2}$ SE $\frac{1}{2}$ NW $\frac{1}{2}$ SW $\frac{1}{2}$

----- SITE FORM - CULTURAL DATA -----

Site Type CAIRN Time Period _____
Cultural Affiliation _____

----- SITE FORM - ACCESSION DATA -----

Acc. No. - Descr. _____

----- SITE FORM - MISCELLANEOUS DATA -----

Comments 7 stones in cairn. A shovel test was negative.

Recorded by KERRY LIPPINCOTT Date 8-10-88
Project USACE Dewey Co. Survey

(Use Continuation Form When Necessary)
(See Site Form Reference Guide for Allowable Data Types)

Site No. 39 DW145 Site Name _____ County DEWEY

Landowner/Tenant USACE Address Omaha, NE

Attitude toward survey Good toward excavation N/A

Access to Site From Gettysburg take 212 west, go 7.5 miles west of Lk. Oahe then go north 3.5 miles. Walk east 0.6 miles to site.

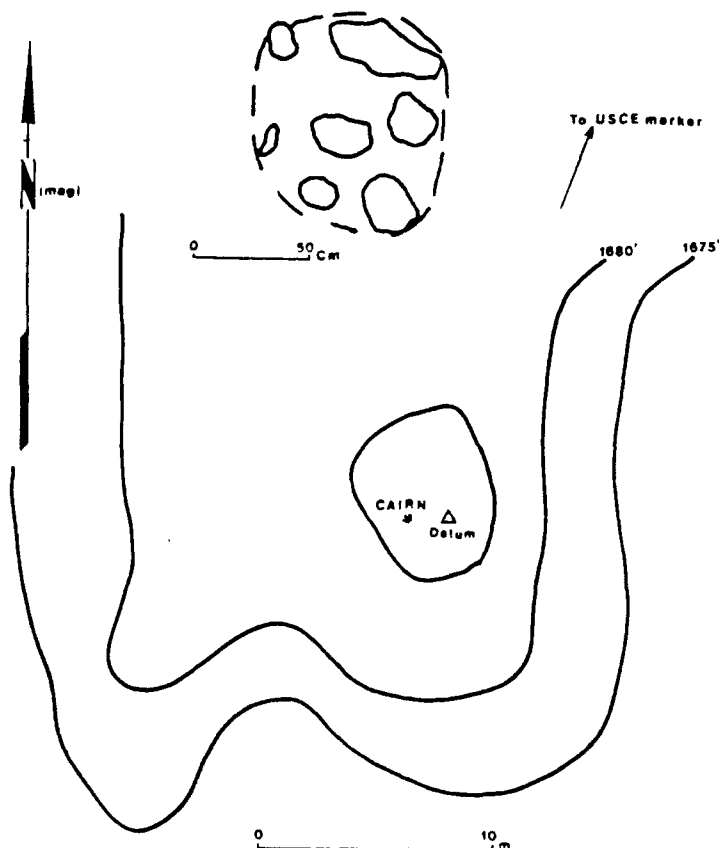
Photo reference(s) B3:15-16 C2:18

Bibliographic reference(s) Lueck, Lippincott and Winham 1989. Cultural Resource Survey, Dewey Co, SD from Moreau River to Forest City Recreation Area. Contract # DACW45-88-C-0261

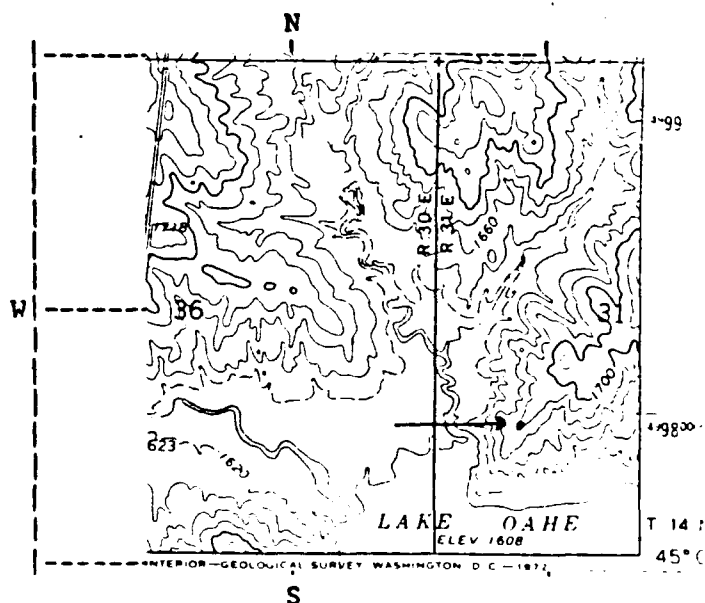
What was observed at site One cairn

Collection/Evaluation Procedure No collection

Sketch map



Section Map



----- SITE FORM - GENERAL DATA -----

Site No. 39 DW146 Site Name _____ County DEWEY
Map Reference PATCH SKIN BUTTES SE UTM Zone 14 / 394040 E/ 4996660 N
Arch. Region _____
Hydrog. Area GRAND-MOREAU Topog. Position HILL TOP
Elevation 1630 m/ft Substrate SILT
Vegetation SHORT GRASS Land Use PASTURE
Ground Surface Visibility (%) 30 Condition 'E' Crm Status 'N'
Site Dimen. N-S 0.9 E-W 1.2 m/ft; Area 0.01 ha/ac.; Depth 1 cm/in
Nearest Water Type INTERMITTENT STREAM Name SWIFT BIRD CREEK
Distance 0 m/ft Elevation 0 m/ft Direction N Bank R

----- SITE FORM - LOCATIONAL DATA -----

Township 13N Range 31E Section 5
Legal Location: NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$

----- SITE FORM - CULTURAL DATA -----

Site Type CAIRN Time Period _____
Cultural Affiliation _____

----- SITE FORM - ACCESSION DATA -----

Acc. No. - Descr. _____

----- SITE FORM - MISCELLANEOUS DATA -----

Comments 11 stones in cairn. A shovel test was negative.

Recorded by KERRY LIPPINCOTT Date 8-13-88
Project USACE Dewey Co. Survey

(Use Continuation Form When Necessary)
(See Site Form Reference Guide for Allowable Data Types)

Site No. 39 DW 146 Site Name _____ County DEWEY

Landowner/Tenant USACE Address Omaha, NE

Attitude toward survey Good toward excavation N/A

Access to Site From Gettysburg take 212 west, go 4 miles west of Lk. Oahe then go north 2.5 miles, walk north 1 mile to site.

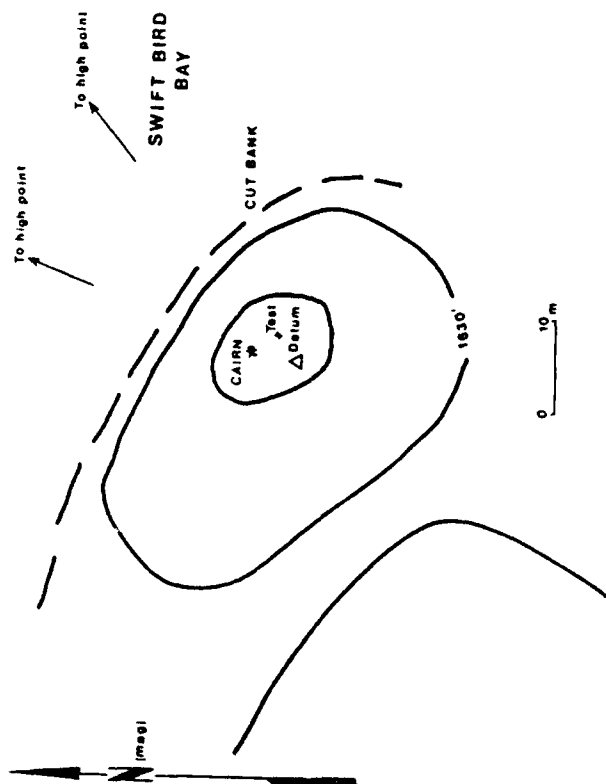
Photo reference(s) B3:25 B4:1 C2:31,33

Bibliographic reference(s) Lueck, Lippincott and Winham 1989. Cultural Resource Survey, Dewey Co, SD from Moreau River to Forest City Recreation Area. Contract # DACW45-88-C-0261

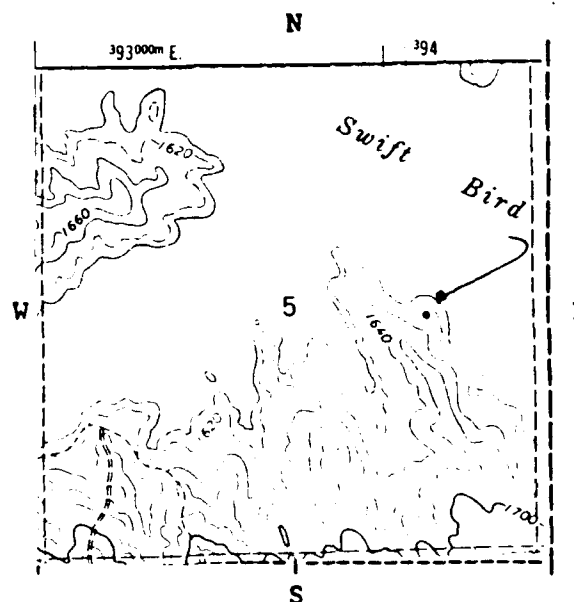
What was observed at site One cairn

Collection/Evaluation Procedure No collection

Sketch map



Section Map



----- SITE FORM - GENERAL DATA -----

Site No. 39 DW 147 Site Name _____ County DEWEY

Map Reference MOREAU SE UTM Zone 14 / 397450 E/ 5012645 N
Arch. Region _____
Physiog. Area GRAND-MOREAU Topog. Position VALLEY FLOOR

Elevation 1640 m/ft Substrate SILT

Vegetation SHORT GRASS Land Use PASTURE

Ground Surface Visibility (%) 30 Condition D Crm Status N

Site Dimen. N-S 1 E-W 1 m/ft; Area .01 ha/ft.; Depth 1 cm/ft

Nearest Water Type INTERMITTENT STREAM Name Unnamed

Distance 251 m/ft Elevation 1608 m/ft Direction SW Bank L

----- SITE FORM - LOCATIONAL DATA -----

Township 15N Range 31E Section 15

Legal Location: NW 1/4 SE 1/4

----- SITE FORM - CULTURAL DATA -----

Site Type ISOLATED FIND Time Period 1500 B.C. - A.D. 900

Cultural Affiliation BESANT?

----- SITE FORM - ACCESSION DATA -----

Acc. No. _____ Descr. Projectile point fragment

----- SITE FORM - MISCELLANEOUS DATA -----

Comments _____

Recorded by KERRY LIPPINCOTT Date July 19, 1988

Project USACE Dewey Co. Survey

(Use Continuation Form When Necessary)
(See Site Form Reference Guide for Allowable Data Types)

Site No. 39 DW 147 Site Name _____ County DEWEY

Landowner/Tenant USACE Address Omaha, NE

Attitude toward survey Good toward excavation Unknown

Access to Site From Gettysburg go west on 212, cross Lake Oahe, go 7-8 miles, turn north, go 12 miles north. Take right (east-gravel road) and go 1 mi. E, 2 mi. N, then 0.75 mi. E, then cl. 5 mi. NE, N and E, into Tony Rivers yard. Follow 2-track(s) & old road grade c. 1.6 mi. S & SE to ridge top. Follow ridge S to the base of its southwesternmost terminus, a low knoll on the Fielder Creek Valley floor.

Photo reference(s) None

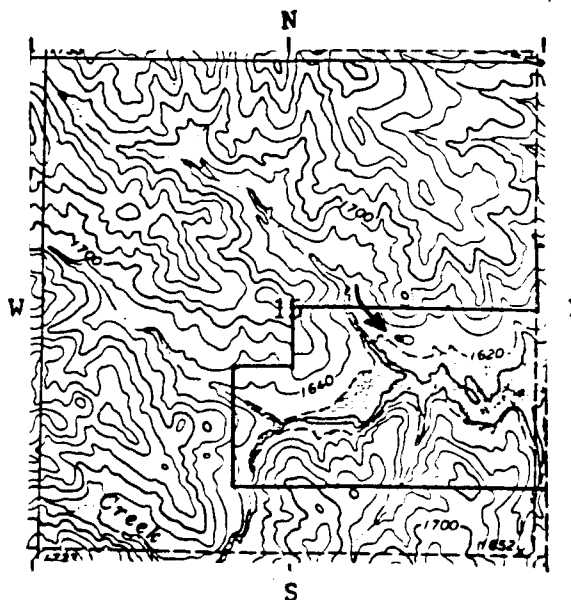
Bibliographic reference(s) Lueck, Lippincott and Winham 1989. Cultural Resource Survey, Dewey County, South Dakota from Moreau River to Forest City Recreation Area. Contract # DACW45-88-C-0261

What was observed at site Projectile point fragment

Collection/Evaluation Procedure Diagnostic item

Sketch map

Section Map



----- SITE FORM - GENERAL DATA -----

J F E Site No. 39 DW 148 Site Name _____ County DEWEY
Map Reference FOUR BEAR CREEK UTM Zone 14 / 397945 E/ 5009685 N
Arch. Region GRAND-MOREAU Topog. Position VALLEY FLOOR
~~Physiog. Area~~
Elevation 1620 ~~m~~^{xx}/ft Substrate SILT
Vegetation SHORT GRASS Land Use PASTURE
Ground Surface Visibility (%) 80 Condition D Crm Status N
Site Dimen. N-S 1 E-W 1 m/~~ft~~ Area .01 ha/~~ac~~; Depth 1 cm/~~in~~
Nearest Water Type INTERMITTENT STREAM Name FOUR BEAR CREEK
Distance Indeter^{minate}-m/~~ft~~ Elevation 1605 ~~m~~/ft Direction NE Bank R

----- SITE FORM - LOCATIONAL DATA -----

Township 15N Range 31E Section 26
Legal Location: SW $\frac{1}{4}$ NW $\frac{1}{4}$

----- SITE FORM - CULTURAL DATA -----

Site Type ISOLATED FIND Time Period PRE.- 5000 B.C.
Cultural Affiliation LATE PALEOINDIAN

----- SITE FORM - ACCESSION DATA -----

Acc. No. - - - - - Descr. Projectile point fragment

----- SITE FORM - MISCELLANEOUS DATA -----

Comments _____

Recorded by KERRY LIPPINCOTT Date July 22, 1988
Project USACE Dewey Co. Survey

(Use Continuation Form When Necessary)
(See Site Form Reference Guide for Allowable Data Types)

Site No. 39 DW 148 Site Name _____ County DEWEY

Landowner/Tenant USACE Address Omaha, NE.

Attitude toward survey Good toward excavation Unknown

Access to Site From Gettysburg go west on 212, cross Lake Oahe, go 7-8 mi.; turn N & go 12 mi., then 1 mi. E, then 0.5 mi. SE, on gravel roads. Take 2-track left (N) ca. 0.5 mi., then ca. 2.3 mi. E & SE to Four Bear Creek. Cross creek and walk SE along beach ca. 402 m.

Photo reference(s) None

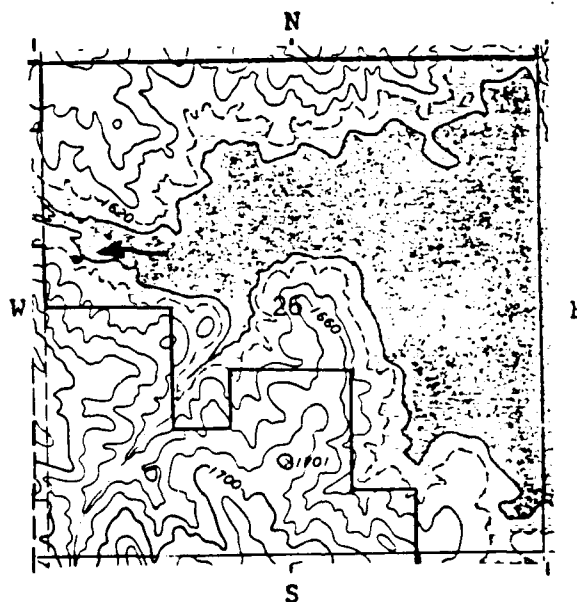
Bibliographic reference(s) Lueck, Lippincott and Winham 1989. Cultural Resource Survey, Dewey County, South Dakota from Moreau River to Forest City Recreation Area. Contract # DACW45-88-C-0261.

What was observed at site Projectile point fragment

Collection/Evaluation Procedure Diagnostic item

Sketch map

Section Map



----- SITE FORM - GENERAL DATA -----

IF 10 Site No. 39 DW 149 Site Name _____ County DEWEY
Map Reference PATCH SKIN BUTTES SE UTM Zone 14 / 398045 E/ 4986410 N
Arch. Region _____
~~Physiographic Area~~ GRAND-MOREAU Topog. Position TERRACE
Elevation 1622 m/ft Substrate SILT
Vegetation SHORT GRASS Land Use PASTURE
Ground Surface Visibility (%) 60 Condition D Crm Status N
Site Dimen. N-S 1 E-W 1 m/ft; Area .01 ha/ft.; Depth 1 cm/ft
Nearest Water Type PERMANENT STREAM Name MISSOURI RIVER
Distance c 728 m/ft Elevation 0 m/ft Direction SE Bank R

----- SITE FORM - LOCATIONAL DATA -----

Township 12N Range 31E Section 1
Legal Location: SW $\frac{1}{4}$ SE $\frac{1}{4}$

----- SITE FORM - CULTURAL DATA -----

Site Type ISOLATED FIND Time Period 1500 B.C. - A.D. 900
Cultural Affiliation LATE PREHISTORIC

----- SITE FORM - ACCESSION DATA -----

Acc. No. - Descr. Projectile point fragment

----- SITE FORM - MISCELLANEOUS DATA -----

Comments _____

Recorded by KERRY LIPPINCOTT Date July 24, 1988
Project USACE Dewey Co. Survey

(Use Continuation Form When Necessary)
(See Site Form Reference Guide for Allowable Data Types)

Site No. 39 DW 149 Site Name _____ County DEWEY

Landowner/Tenant USACE Address Omaha, NE.

Attitude toward survey Good toward excavation Unknown

Access to Site From Gettysburg go west on 212, cross Lake Oahe, take first right (into recreation area) and go around first bay (a total of about 0.2 mi.). Item was about midway down the E side of the bay.

Photo reference(s) None

Bibliographic reference(s) Lueck, Lippincott and Winham 1989. Cultural Resource Survey.

Dewey County, South Dakota from Moreau River to Forest City Recreation Area. Contract # DACW45-88-C-0261.

What was observed at site Projectile point fragment

Collection/Evaluation Procedure Diagnostic item

Sketch map

Section Map



----- SITE FORM - GENERAL DATA -----

UFIS Site No. 39 DW 150 Site Name _____ County DEWEY
Map Reference FOUR BEAR CREEK UTM Zone 14 / 397395 E/ 5000610 N
Arch. Region GRAND-MOREAU Topog. Position VALLEY FLOOR
~~Biological Area~~
Elevation 1625 m/ft Substrate SILT
Vegetation SHORT GRASS Land Use PASTURE
Ground Surface Visibility (%) 90 Condition D Crm Status N
Site Dimen. N-S 1 E-W 1 m/ft; Area .01 ha/xx.; Depth 1 cm/xx
Nearest Water Type INTERMITTENT STREAM Name Unnamed
Distance c. 69 m/ft Elevation 1615 m/ft Direction SW Bank L

----- SITE FORM - LOCATIONAL DATA -----

Township 14N Range 31E Section 27
Legal Location: NE $\frac{1}{4}$ NE $\frac{1}{4}$

----- SITE FORM - CULTURAL DATA -----

Site Type ISOLATED FIND Time Period 1500 B.C. - A.D. 900
Cultural Affiliation BESANT (Corner-notched)

----- SITE FORM - ACCESSION DATA -----

Acc. No. - - - - - Descr. Projectile point

----- SITE FORM - MISCELLANEOUS DATA -----

Comments _____

Recorded by KERRY LIPPINCOTT Date Aug. 6, 1988
Project USACE Dewey Co. Survey

(Use Continuation Form When Necessary)
(See Site Form Reference Guide for Allowable Data Types)

I F 15 Site No. 39 DW 150 Site Name _____ County DEWEY

Landowner/Tenant USACE Address Omaha, NE

Attitude toward survey Good toward excavation Unknown

Access to Site From Gettysburg go west on 212, cross Lake Oahe, go 7-8 mi., turn N, go 7.2 mi. N. Take 2-track ca. 4.2 mi. SE, E and SE to end of high ridge. Walk ca. 345 m WSW to valley floor.

Photo reference(s) None

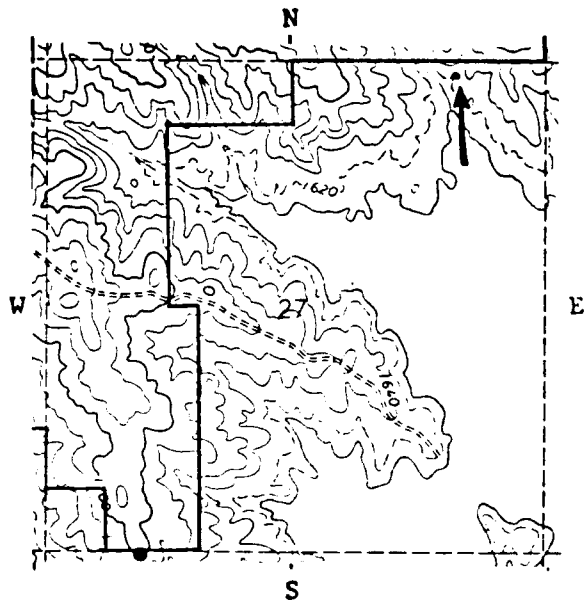
Bibliographic reference(s) Lueck, Lippincott and Winham 1989. Cultural Resource Survey, Dewey County, South Dakota from Moreau River to Forest City Recreation Area. Contract # DACW45-88-C-0261.

What was observed at site Projectile point

Collection/Evaluation Procedure Diagnostic item

Sketch map

Section Map



STATE OF SOUTH DAKOTA

ARCHAEOLOGICAL RESEARCH CENTER

UPDATE

----- SITE FORM - GENERAL DATA -----

Site No. 39 DW213 Site Name _____ County DEWEY

Map Reference MOREAU SE UTM Zone 14/ 399740 E/ 5012380 N

Arch. Region _____ Topog. Position TERRACE

~~Physiographic Area~~ GRAND-MOREAU

Elevation 1680 ~~m~~/ft Substrate GRAVEL, LOESS

Vegetation SHORT GRASS Land Use PASTURE

Ground Surface Visibility (%) 30 Condition 'D' Crm Status 'P'

Site Dimen. N-S 120 E-W 60 m/~~ft~~; Area 0.72 ha/~~ac.~~; Depth 25+ cm/~~in~~

Nearest Water Type PERMANENT STREAM Name MISSOURI RIVER

Distance 350 m/~~ft~~ Elevation 0 m/~~ft~~ Direction NE Bank R

----- SITE FORM - LOCATIONAL DATA -----

Township 15N Range 31E Section 13

Legal Location: W $\frac{1}{2}$ SE $\frac{1}{2}$ NW $\frac{1}{2}$ SW $\frac{1}{2}$

----- SITE FORM - CULTURAL DATA -----

Site Type EARTHLODGE VILLAGE Time Period A.D. 900-1700

Cultural Affiliation Extended Coalescent/ Extended Middle Missouri

----- SITE FORM - ACCESSION DATA -----

Acc. No. - Descr. Bone, ceramic

----- SITE FORM - MISCELLANEOUS DATA -----

Comments Most material exposed in major slump blocks at north end of original site location. Negative shovel test placed south of Feature 2.

Recorded by KERRY LIPPINCOTT Date 7-20-88

Project USACE Dewey Co. Survey

(Use Continuation Form When Necessary)
(See Site Form Reference Guide for Allowable Data Types)

Site No. 39 DW213 Site Name _____ County DEWEY

Landowner/Tenant USACE Address Omaha, NE

Attitude toward survey Good toward excavation N/A

Access to Site From Gettysburg take 212 west, go 7.5 miles west of Lake Oahe, go 1 1/2 miles north, then ENE ca. 5.2 miles (walking) to site - or take boat.

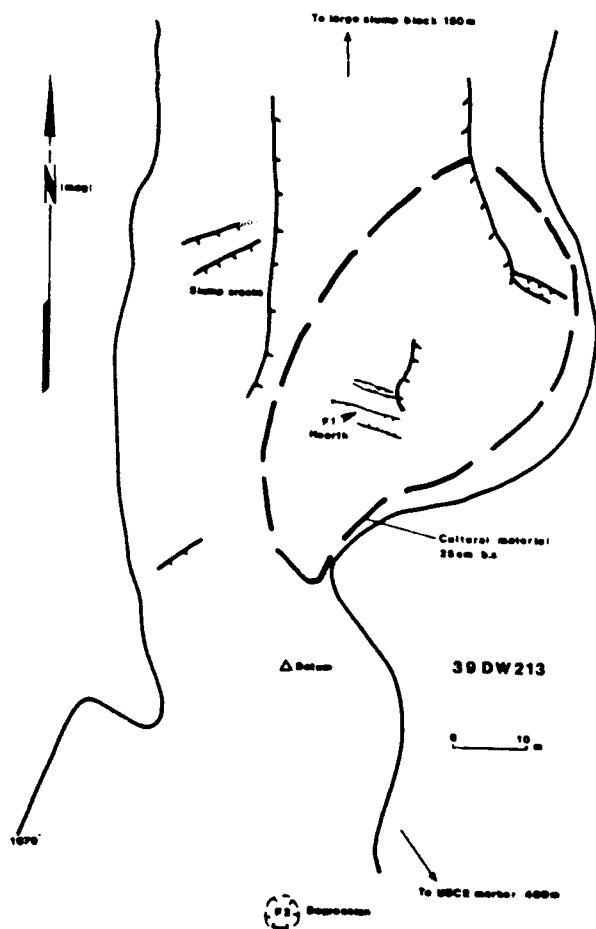
Photo reference(s) B1:17-21 C1:11-15

Bibliographic reference(s) Lueck, Lippincott and Winham 1989. Cultural Resource Survey, Dewey Co, SD from Moreau River to Forest City Recreation Area. Contract # DACW45-88-C-0261

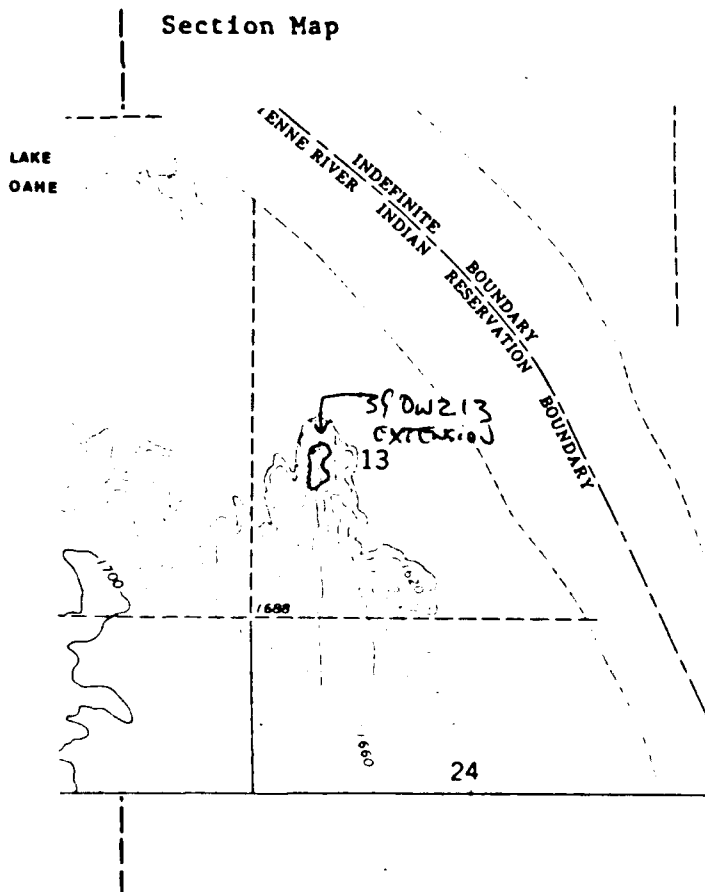
What was observed at site Buried firehearth, a depression, bone, ceramic, lithics.

Collection/Evaluation Procedure Tools, diagnostic, display items only.

Sketch map



Section Map

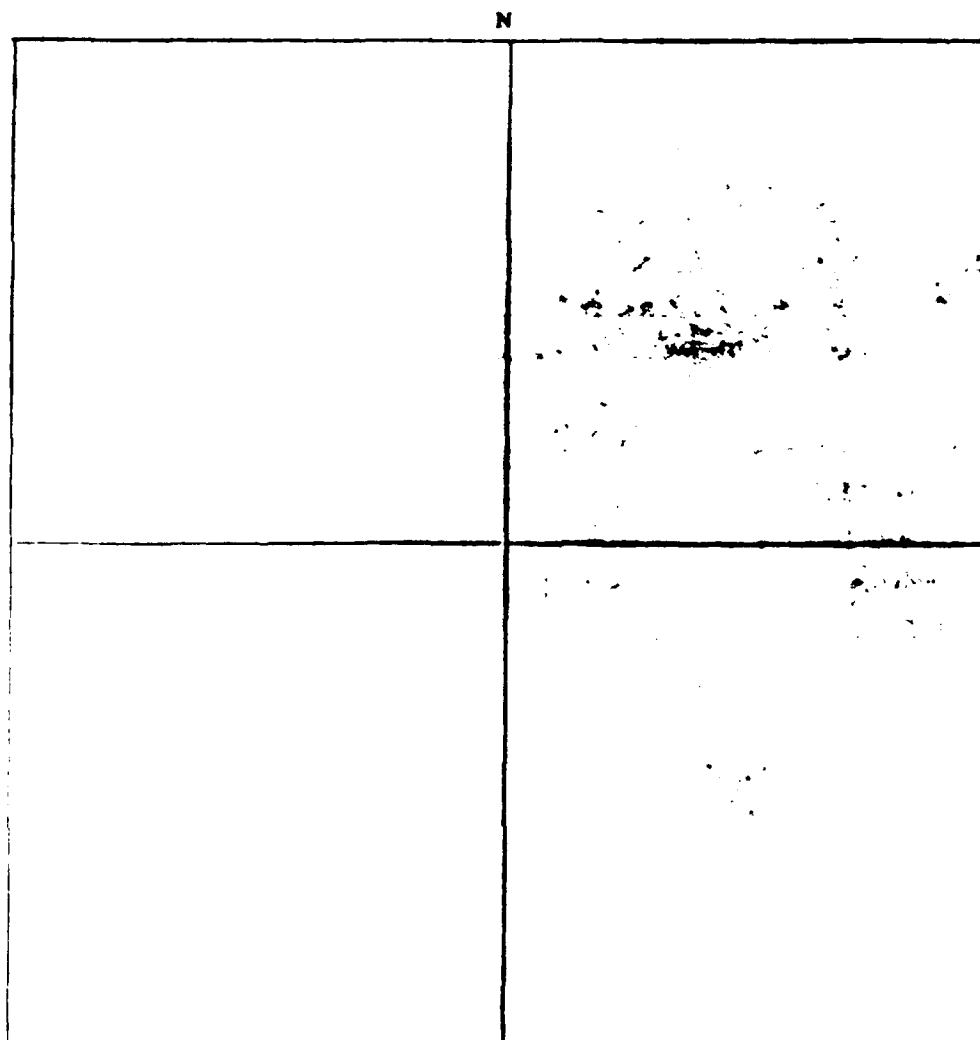


ANTHROPOLOGICAL INSTITUTION
RIVER BASIN SURVEY

- Reservoir DAHE Site No. 39 DW-213 R2
- State SOUTH DAKOTA County DEWEY
- AAA AIR PHOTO DNX 165 89 (CAT # 39 DW-A-12)
CE.M.O.R 1948 SHEET 95 (CAT. # 3900 120/2)
1. Map references _____ 2. Type of site VILLAGE
 3. Cultural affiliation _____
 4. Location 1/2 MILE NW FROM ST STEPHEN'S MISSION
ON FIELDER'S CREEK ON WEST SIDE MISSOURI RIVER
SW 1/4 SW 1/4 S. 13 & NW 1/4 NW 1/4 Sec. 24 T. 15N R. 31E
 5. Owner and address FRANCIS FIELDER ARMY FORWARD AGENT
 6. Previous owners _____
 7. Tenant LEASEE FRANK SMITH CHEYENNE AGENCY
 8. Informants _____
 9. Previous designations for site ABUT 100
 10. Site description SERIES OF A LODGE PILES ELONGATED ALONG
FLAT SURFACE ELEVATED AT 1655'
 11. Position of site and surroundings ON GLACIAL MERRING PROMINENTLY
HIGH ABOVE RIVER
 12. Area of occupation 500 YDS NS; 50 YD EW
 13. Depth and character of fill DEPTH UNKNOWN GRAVELLY
 14. Present condition RANGE LAND
 15. Previous excavations ROAD BLDGERS (? WPA DEPRESSION) DUG
TESTING FOR GRAVEL
 16. Material collected POT SHARDS
 17. Material observed BROKEN BONE
 18. Material reported and owner _____
 19. Recommendations for further work ABOVE PRESENT LIMIT
 20. Photograph Nos. NO
 21. Maps of site NO
- Recorded by FARRELL & HOFFMAN Date AUG 11, 1952

South Dakota County DEWEY Reservoir DAHE Site No. 39 DW-213

Site No. 39DW 213 R3 Farrell Date 8/11/52



Scale

When entire square represents a section, 1" = 100'

22. Approach to site: ACCESS TO SITE ONLY FROM SMITH'S
RANCH YARD . THEN NORTH MILE (APPROX)

23. Remarks

2703

SPECIMEN CATALOG FORM

AF-7
(4/4/49)Site No. 39DW 213

Remarks	Cat. No.	Description	Location	Field No.	Date Collected
	Cat# 39DW 213-1 through 5		collected by W.R. Farrell		
Lat	1	2 rim sherds	Surface.	—	1952
Lat	2	12 body sherds	"	"	"
	3	Worked stone	"	"	"
	4	Pebble	"	"	"
	5	Charred post or pole fragment	"	"	"

UPDATE

----- SITE FORM - GENERAL DATA -----

Site No. 39DW215 Site Name _____ County DEWEY
Map Reference MOREAU SE UTM Zone 14 / 395680 E / 5015420 N
Arch. Region GRAND-MOREAU Topog. Position TERRACE
~~Physiog. Area~~
Elevation 1840 ~~m~~/ft Substrate -
Vegetation SHORT GRASS Land Use DEVELOPED/PASTURE
Ground Surface Visibility (Z) 5-30 Condition 'D' Crm Status 'P'
Site Dimen. N-S - E-W - m/ft; Area - ha/ac.; Depth - cm/in
Nearest Water Type INTERMITTENT STREAM Name _____
Distance 500 ~~m~~/ft Elevation 1740 ~~m~~/ft Direction NW Bank R

----- SITE FORM - LOCATIONAL DATA -----

Township 15N Range 31E Section 4
Legal Location: SW $\frac{1}{4}$ SE $\frac{1}{4}$

----- SITE FORM - CULTURAL DATA -----

Site Type VILLAGE Time Period A.D. 900-1700
Cultural Affiliation _____

----- SITE FORM - ACCESSION DATA -----

Acc. No. - Descr. _____

----- SITE FORM - MISCELLANEOUS DATA -----

Comments Site not in project area - observations made in passing.

Recorded by KERRY LIPPINCOTT Date 7-14-88

Project USACE Dewey Co. Survey

(Use Continuation Form When Necessary)
(See Site Form Reference Guide for Allowable Data Types)

Site No. 39DW215 Site Name _____ County DEWEY

Landowner/Tenant Private/Tony Rivers Address _____

Attitude toward survey Good toward excavation Unknown

Access to Site _____

Photo reference(s) _____

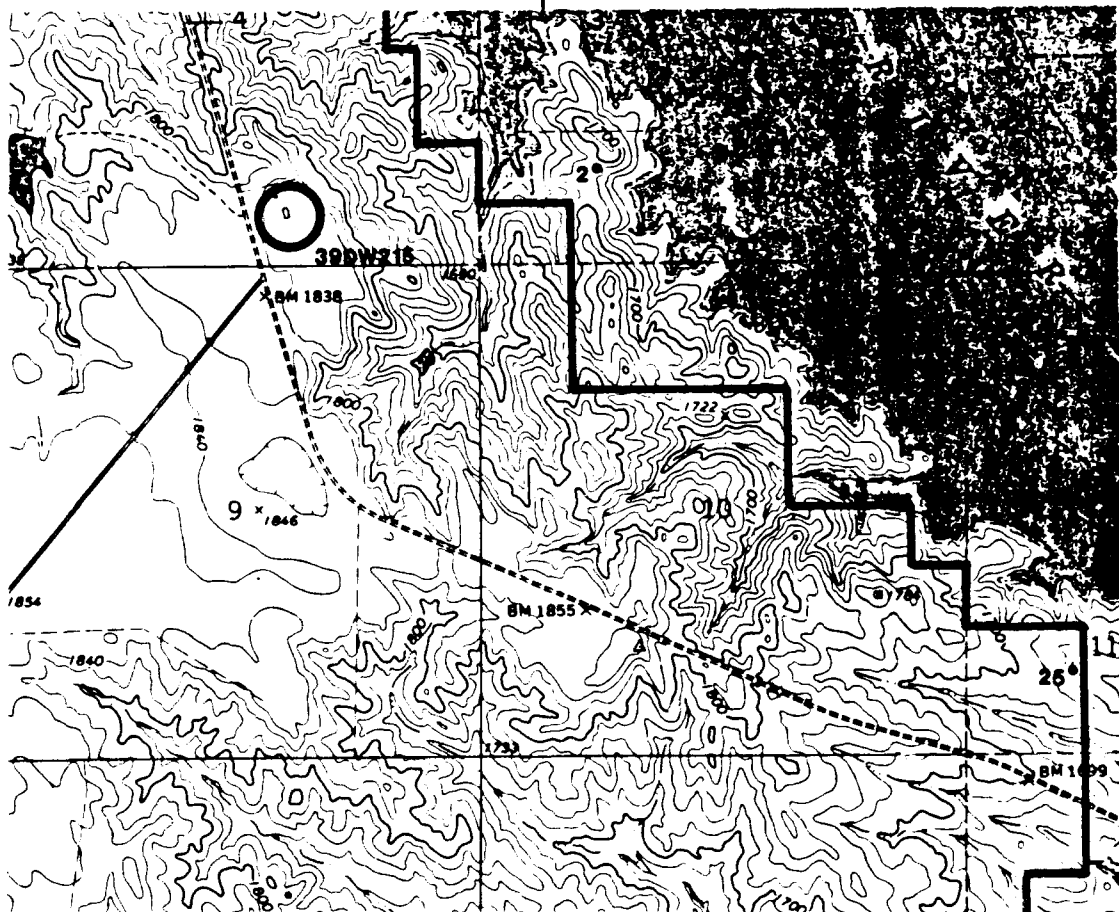
Bibliographic reference(s) Lucek, Lippincott and Winham 1989. Cultural Resource Survey, Dewey Co, SD, from Moreau River to Forest City Recreation Area. Contract # DACW45-88-C-0261

What was observed at site Debitage and bone fragments away from disturbed areas around dwelling.

Collection/Evaluation Procedure No collection

Sketch map

Section Map



SMITHSONIAN INSTITUTION
RIVER BASIN SURVEY

3

- Reservoir DANE Site No. 39 DW 215 R2
- State SOUTH DAKOTA County DEWEY
- AAA AIR PHOTO GNS 128 194 (CATE 39 DW A-10)
CEN. D. S. S. 96 1947 CATE 3900 6462
1. Map reference _____ 2. Type of site VILLAGE
 2. Cultural affiliation _____
 4. Location 3.2 MILES NORTH OF THE CENTER OF THE BRIDGE
OVER FIELDER CREEK ON HIGH PLAIN AT MONG
SW 1/4 OF ANTHONY RIVERS A. H. T. 15N R 31E
 5. Owner and address ANTHONY RIVERS Box 625 MORRIS Co. DAK
 6. Previous owners TRIBE
 7. Tenant _____
 8. Informants _____
 9. Previous designations for site NONE
 10. Site description ABOUT 20 EARTH LODGE RINGS
 11. Position of site and surroundings ON PLAIN 1857' ELEVATION
ALONG SIDE OF ROAD TO MORCAU
 12. Area of occupation 75 YDS DIA.
 13. Depth and character of fill UNKNOWN
 14. Present condition MR RIVERS IS BLDG AT SITE INDIAN
HOUSE & CARRAGE ON SITE
 15. Previous excavations YES
 16. Material collected NONE
 17. Material observed _____
 18. Material reported and owner _____
 19. Recommendations for further work ABOVE PILL LEVEL
 20. Photograph Nos. NO
 21. Maps of site NO
- Recorded by FORRELL & H. H. HADY Date AUG 11, 1952

State SOUTH DAKOTA County DEWEY

Reservoir DANE

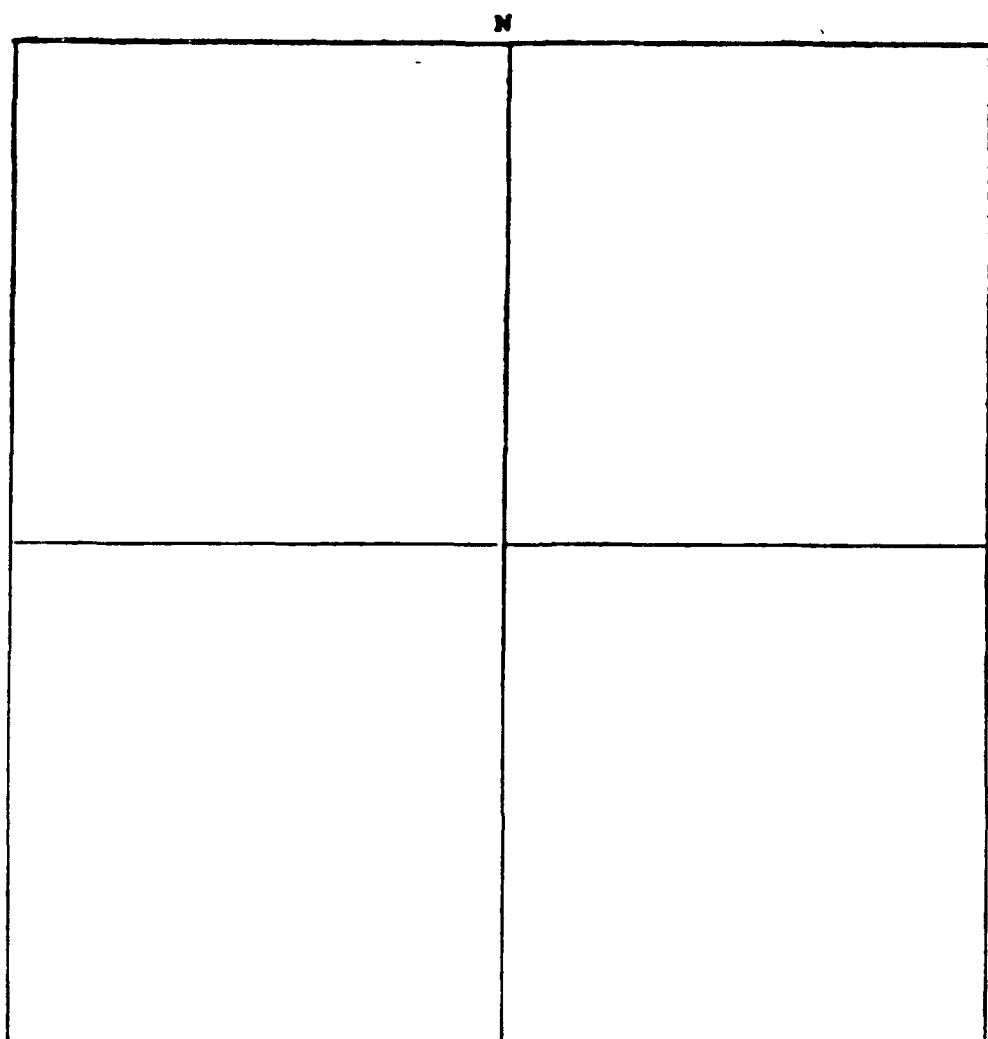
Site No. 39 DW 215

Reservoir DANE

Site No. 39 DW 215

3

39DW215 R.3 ~~Farrell~~ 8/11/52



Scale

When entire square represents a section, 1" = 1000'

22. Approach to site: ROAD WEST RIVER FROM MOBRIDGE
TO CHEYENNE AGENCY. 3.2 MILES NORTH
OF FIELDER'S CREEK.

23. Remarks:

SPECIMEN CATALOG FORM

AF-7
(4/4/49)Site No. 39DW 215

Remarks	Cat. No.	Description	Location	Field No.	Date Collected
		cat* 39DW 215-1 collected by W. R. Farrell.			
		1 Fish bone	Surface.	—	1952

Cat. No.	Description	Disposition	Date
_____	A lot of identified fish bones collected prior to 1955.	Transferred to the University of Nebraska State Museum.	12/15/55

SMITHSONIAN INSTITUTION
RIVER BASIN SURVEY

- Reservoir Oahe Site No. 39DW237 R3
State South Dakota County Dewey
1. Map reference C.E. Mo. R., 1947, sheet 92. Type of site Temporary camp
2. Cultural affiliation Uncertain
3. Location At foot of bluff, about 25 feet north of steel bridge on U.S. Highway 212,
SE¹₄, SW¹₄ Sec. 35 T. 13N R. 31E
4. Owner and address In Cheyenne River Indian Reservation
5. Previous owners
6. Tenant
7. Informants Robert Natchke, Whitlocks Crossing, S. Dak.
8. Previous designations for site None
9. Site description Small amount of midden material scattered on slope along foot of bluff, about 6' above water line. Apparently material washed out of bank by flood waters in April 1952. Looks like debris from temporary camp.
10. Position of site and surroundings See #1 above
11. Area of occupation Material occurs in area about 100' N-S by 20' E-W.
12. Depth and character of fill Undetermined
13. Present condition Area subject to slope wash.
14. Previous excavations None
15. Material collected Sample of material collected by Robert Natchke in April 1952, and presented to MHI 10/3/53, includes 2 rim sherds, 1 brushed neck sherd, 1 simple stamped body sherd, 1 knife or point, and 3 knives (one of plate chalcidony).
16. Material observed Small sherds and unworked flakes
17. Material reported and owner None other than material above (#16)
18. Recommendations for further work Some testing might be done in connection with work at 39DW238; otherwise no further work seems worthwhile.
19. Photograph Nos. None
20. Maps of site See C.E. Mo. R., 1947, map, sheet 92, for location.
Recorded by Richard P. Wheeler Date October 1 and 3, 1953

State South Dakota County Dewey Reservoir Oahe Site No. 39 DW 237

SMITHSONIAN INSTITUTION
RIVER BASIN SURVEYS

AF-7
(Rev. 2/12/53)

SPECIMEN CATALOG

SITE NO. 39DW237

Cat. No.	DESCRIPTION	LOCATION	Field No.	Date Found	Notes
cat #39DW237-1 through #6 collected by Bob Natchke, Whitlock's Crossing, South Dakota, in 1952, and donated through R. P. Wheeler 10-3-53.					
1	2 rim sherds, probably same pot	Surface.	1	↑	
2	2 body sherds	"	"	"	
3-5	Blades	"	"	"	
6	Point or small blade	"	"	"	

SMITHSONIAN INSTITUTION
RIVER BASIN SURVEY

Reservoir Oake Site No. 39DW238, Natchke site R3
State South Dakota County Dewey

1. Map reference C.E.Mo.R., 1947, sheet 92 2. Type of site Stratified occupation site in slumped river bank
3. Cultural affiliation Two lowest levels, "Woodland;" upper levels unknown
4. Location In section of slumped bank, right side of Missouri River, 300' south of steel bridge on U.S. Highway 212,
SE 1/4, SW 1/4 Sec. 35 T. 13N R. 31E
5. Owner and address In Cheyenne River Indian Reservation
6. Previous owners _____
7. Tenant _____
8. Informants Robert Natchke, Whitlocks Crossing, S. Dak., for whom the site has been named.
9. Previous designations for site None
10. Site description At least five superimposed lenses of occupation debris found in section of slumped bank. Lowest lens occurs 14.5' above water level. Originally slump section lay at top of cutbank, some 30.0' higher.
11. Position of site and surroundings _____
12. Area of occupation Undetermined
13. Depth and character of fill See vertical section,
14. Present condition Site covered by great flood of April 1952. Further work can be done here prior to refilling of the reservoir.
15. Previous excavations One prior to the initial facing operation by Lee Madsion, Bob Natchke, and L. A. Mueller on October 1, 5, and 7, 1953.
16. Material collected See continuation sheet.
17. Material observed See continuation sheet.
18. Material reported and owner One large, heavy projectile point found in 1952 by Natchke was lent to the MNM for photographing. Made of translucent brown chalcedony, measures 10 x 11 mm., weighs 6.37 gms. has slightly concave thinned, ground base.
19. Recommendations for further work Since this is the first known site containing pottery and artifacts identifiable as Woodland, and furthermore is a stratified deposit, further work in the near future is strongly recommended.
20. Photograph Nos. See accompanying site photograph, also photograph of point belonging to Natchke.
21. Maps of site See C.E. Mo. R. map (1947), sheet 92, for location of site; see vertical section

Recorded by _____ Date _____

Richard P. Wheeler

October 9, 1953

State South Dakota

County Dewey

Reservoir

Oake

Site No.

39DW 238, R3

SMITHSONIAN INSTITUTION
RIVER BASIN SURVEYS

AP-1
(Rev. 4/26/50)

CONTINUATION FORM 39DW238-RA

Site No. 39DW238, Hatchke site ~~Feature 104~~ Material from superimposed lenses,
found in April 1952 and in
Item No. October 1953

In a vertical section of slumped bank, 14.0' N-S and 5.5' high, with
the base 14.5' above water level, four superimposed occupation levels were
cross sectioned. These levels, designated lenses 1 through 4, from the
bottom, produced the following material:

lens 1 (bottom), 0.2' thick, contained charcoal and gray ash, and
~~thin~~
2 rim sherds (of one vessel) with plain lip and vertically cord roughened
flaring rim decorated with a single row of exterior punctates; 2 vertically
cord roughened body sherds; 2 flake scrapers (?); a cobble hammer or pestle
of schist; a piece of scoria; 24 identifiable animal bones and numerous bone
scraps; and 13 animal teeth.

lens 2, 0.35' thick, separated from lens 1 by 1.1' of sterile loess,
~~ash and charcoal, and~~
contained one saucer-shaped, unlined hearth (see Feature 1 form); 4 thick,
all-over cord roughened body sherds (of one vessel); 1 rough blade; 1 flake
scraper (?); 6 unworked flakes; 3 bone awls; 1 toothed flesher of bone; 1
worked scapula fragment; 13 identifiable animal bones and numerous bone
scraps; and 2 animal teeth. One large corner notched triangular projectile
points (see site survey form) and 13 thick cord roughened body sherds (which
correspond to
the sherds listed above) were found at the site in April 1952 by Robert
Hatchke and ^{are} believed to have come from lens 2. The sherds were donated to
the MHP on October 3, 1953, through R. P. Wheeler. Many of them have been
fitted together to form ~~parts of~~ a large conoidal jar (see MHP collections).

lens 3, 0.45' thick, separated from lens 2 by 0.45' of sterile loess.
Produced only three items in addition to charcoal and ash: a broken plate

Recorded by Richard P. Wheeler Date October 2, 1953

SMITHSONIAN INSTITUTION
RIVER BASIN SURVEYS

47-1
(Rev. 4/26/50)

CONTINUATION FORM

39DW238-R5

Site No. 39DW238, Matchke site Feature No. Material from superimposed lenses,

Item No. found in April 1952 and October 1953
(continued)

chalybeitic knife, 1 worked (?) bone, and 1 unworked flake.

lens 4, 0.2' thick, separated from lens 3 by 2.55' of sterile loess.

was marked by ash and charcoal but contained no artifacts.

A section of the slope slumped back, 2.0' to the south, contained two
lenses of occupation debris. The lower one, 0.2' thick, was traced north-
ward and proved to be a continuation of lens 4 in the main vertical sec-
tion. This lens was overlain by 1.0' of sterile loess and by another lens
of ash and charcoal, designated lens 5, 0.3' thick. No artifacts were
recovered from lenses 4 and 5 in this section.

A cobble hammer was found on the surface of the slump, between lens 1
and the water surface.

Recorded by Richard P. Wheeler

Date October 9, 1953

SMITHSONIAN INSTITUTION
RIVER BASIN SURVEYS
GENERAL FEATURE FORM

39DW238-R6

Feature No. 1 Site No. 39DW238, Natchke site
Square No. _____ State South Dakota
Reservoir Oahe County Dewey

1. Definition A saucer-shaped, unlined hearth in lens 2 (second from the bottom in the series). See accompanying sketch.

2. Location

a. Horizontal approximately in the center of the vertical section, 14' N-S
by 5.5' high, exposed in 1953

b. From surface _____ c. From datum _____

3. Dimensions

a. Maximum length 2.5' Direction N-S

b. Maximum width _____ Direction _____

c. Vertical thickness 0.6' in cross section

4. Fill mixture of gray ash and charcoal

5. Preservation good

6. Associations

a. Features none found

b. Specimens in same lens which produced thick, over-all cord roughened body sherds, a large corner notched triangular projectile point (owned by Robert Natchke), bone tools, and animal bones and teeth.

7. Neg. Nos. 39DW238-1 and 39DW238-2.

8. Remarks The pottery associated with the hearth and other material in lens 2 may be identified as a variety of Woodland. Another variety of Woodland underlies this material and three lenses of occupation debris overlie it. The cultural and temporal relationships of these occupations remain to be worked out. Further work at the site may solve these problems.

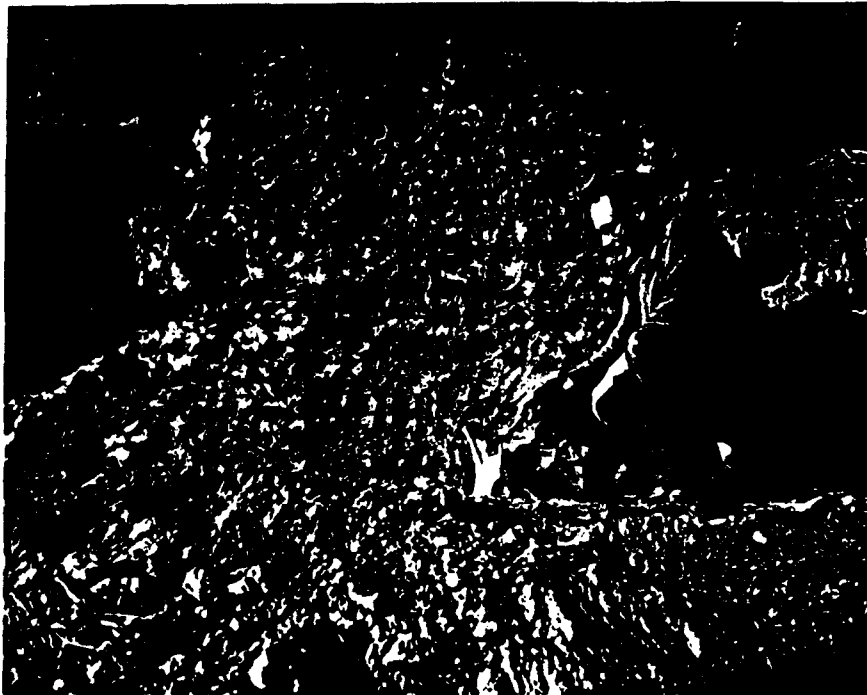
Recorded by Richard P. Wheeler Date October 9, 1953

Site No. 39DW238, Natchke site

Feature No. 1

Reservoir

Oahe



File 100-1

File 100-1

File 100-1

Vertical section showing lenses
1, 2 and 3, the lowest of a
series of beds, and a
thin bedded layer, the
base of the section.
The section is composed of
lenses of sandstone and
shale, the sandstone being
the lighter color and the
shale the darker color.
The section is about 10 feet
thick and is located in the
center of the block.

File 100-1

File 100-1



39DW238-3

Oahe Reservoir

Site 39DW238

Portion of vertical face cut
by MBP Oahe Survey party in
1953 showing recently gouged-
out hearth (feature 1) in
Lens. 2.
Photo SSW.

Field No. W54 - L1 - 1
4x5 plus-x

Arch. Richard P. Wheeler
Photo by R. Wheeler 6/4/54

39DW238-4

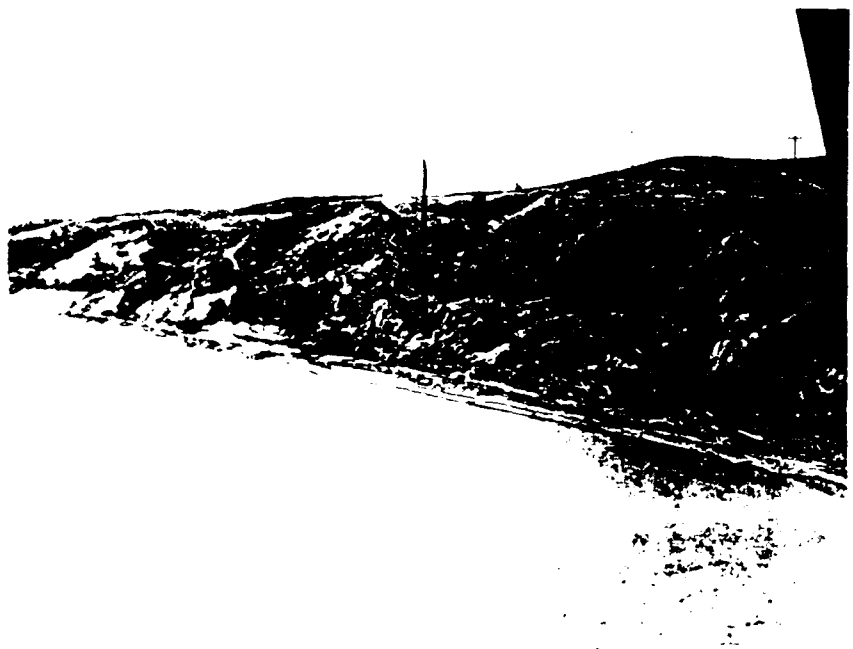
Oahe Reservoir

Site 39DW238

View of site (indicated by
arrow) in slumped section
of bluff along right side
of Missouri River. Taken
from steel bridge on U. S.
highway 212.
Photo SSE.

Field No. W54-L1-3
4x5 plus-x

Arch. R. P. Wheeler
Photo by R. Wheeler 6/4/54



SMITHSONIAN INSTITUTION
RIVER BASIN SURVEYS

AP-7
(Rev. 2/12/53)

SPECIMEN CATALOG

SITE NO. 39DW238

Cat. No.	DESCRIPTION	LOCATION	Field No.	Date Found	Notes
Cat #39DW238-1 collected by Bob Natchke, Whitlock's Crossing, South Dakota, in 1952, and donated through R.P. Wheeler 10-3-53.					
1	45 cord roughened body sherds, restorable? pot section	From Lens 2?	2	↑	
Cat #39DW238-2 through #33 collected by R.P. Wheeler.					
2	Hammer-anvil stone	surface of cut bank.	4	10-1-53	
3	Chalcedony knife	Lens 3 (from bottom)	5	10-1-53	
4	Worked? bone	Level 3.	8	10-8-53	
5	Stone flake	Lens 3.	11	10-9-53	
6	5 body sherds, cord roughened	Lens 2 (second from bottom).	1	10-1-53	
7	Used? pebble	" "	"	"	
8	Small core	" "	"	"	
9	Flake scraper	" "	"	"	
10	Worked scapula fragment	" "	"	"	
11	Bone awl	" "	"	"	
12	7 animal bones	" "	"	"	
13	Flake scraper	Lens 2.	10	10-9-53	
14	"	" "	"	"	
15	Modified? flake	" "	"	"	
16	Flake scraper	" "	"	"	
17	Stone flake	" "	"	"	
18	Bone awl	" "	"	"	
19	Bone flake fragment, serrated	" "	"	"	
20	5 animal bones	" "	"	"	

SMITHSONIAN INSTITUTION
RIVER BASIN SURVEYS

AP-7
(Rev. 2/12/53)

SPECIMEN CATALOG

SITE NO. 39DW238

Cat. No.	DESCRIPTION	LOCATION	Field No.	Date Found	Notes
21	Stone flake	Level 2.	7	10-8-53	
22	Bone awl	"	"	"	
23	2 animal bones	"	"	"	
24	Fish bone	"	"	"	
25	Modified flake	Level 1 (bottom).	3	10-1-53	
26	" "	" "	"	"	
27	Scoria	" "	"	"	
28	Broken schist rubbing stone	" "	"	"	
29	13 animal bones	" "	"	"	
30	2 cord roughened, punctated rim sherds	Level 1.	6	10-8-53	
31	2 body sherds	"	"	"	
32	13 animal bones	"	"	"	
33	11 animal bones	Level 1.	9	10-9-53	

AF-7
Revised
3/29/57

SITE NO.: 39DW238

AF-7
Revised
3/29/57

3

[illegible]

SMITHSONIAN INSTITUTION
RIVER BASIN SURVEYS

AF-11 11/2/48

BONE IDENTIFICATION

Reservoir Oahu Ft. Randall Site No. 39 DW 238
Genus Antilocapra Species americana
Common Name Antelope

Catalog Lot No.	Element	Mature			Immature			Individuals Represented
		Rt.	Lt.	Ax- ial	Rt.	Lt.	Ax- ial	
32	jaw		1					1
	scapula	1	1					1
	1st phalanx	2						1
29	"	1						1
	humerus distal		1					1
	radius prox		1					1
	ulna		2					2
	scapula		1					1
12	humerus distal	1	1					1
	radius prox		1					1
	femur distal		1					1
	tooth		1					1
33	scapula		1					1
	jaw		1					1
	atlas		1					1
20	1st phalanx		2					1
	metacarpal prox		1					1
23	"		1					1

SMITHSONIAN INSTITUTION
RIVER BASIN SURVEYS

AF-11 11/2/48

BONE IDENTIFICATION

Reservoir Oake Ft. Randall Site No. 3912W 238
Genus Bison Species bison
Common Name Bison

Catalog Lot No.	Element	Mature			Immature			Individuals Represented
		Rt.	Lt.	Ax- ial	Rt.	Lt.	Ax- ial	
32	Femur prox		1					1
	Tibia "	1						1
	metacarpal		1					1
29	metatarsal prox	1	1					1
	astragalus	1						1
	calcaneum		1					1
12	1st phalanx	1						1
	tooth	1						1
20	2nd phalanx	1						1

25

Bone Identification
October 24, 1954

Site No. 39DM238

Identification of material for River Basin Surveys

39DM238-24 Catfish -- pectoral spine

APPENDIX C

Field Notes (abridged)

Abridged Field Notes of Kerry Lippincott
Field Director, Dewey County Survey

July 10, 1988

Loaded field gear. Drove from Sioux Falls to Gettysburg, SD and checked into the Sage Motel. Unloaded equipment. Ed Lueck and William Ranney arrived and a short discussion regarding the survey plans ensued.

July 11, 1988

Weather is partly cloudy and cool (thankfully). An organizational meeting with the crew was held to discuss the survey procedures. A charge account for gasoline was established at the CENEX station. Drove out to the north end of the project property. Stopped where road, Corps boundary and No Mouth Creek coincide. Stopped to talk to someone at Aberle farm/ranch but no one was home. Got set to begin the survey; started in SE corner of Section 36 and tried to follow the Corps boundary to the north and east. Found two pieces of semi-purple glass, one thick and one thin. Ed says they may be from a liquor bottle. Continued on. Concrete and brick foundation, ?/24/59 - actually off Corps property. Turned the corner and walked to north along ridgetop and upper ridge ends along boundary of No Mouth Creek. Ed walked the boundary line and occasionally found Corps markers to confirm the property line, but also found other fence posts several hundred feet inside the boundary line as shown on the map. Bill and I walked the ridges and upper side slope. Will survey the lower side slopes, draws and shoreline on the way back.

Walked to the north end of the property, with little excitement, but found a rock cairn, DW88-1 (39DW129), on a ridge end on the way back. Visibility was 40 percent; Corps marker approximately 48 m south and 145 m west bearing 260°. Turned around; headed back to the truck.

Continued on. Ed walked the shoreline and cutbank of the reservoir high strand. I walked the upper ridge edge and Bill walked in-between. At the peninsula that sticks out at the SE corner of Section 19, found extensive area of bulldozed disturbance - former gravel operation or claim work by bulldozer. Found one rather circular depression but it is probably recent. Still has a noticeable berm around the edge of the depression. Shovel test in berm produced gravel and sandy silt/loess

soil. Shovel test in center of depression almost pure sand with small amount of gravel. Buckbrush and skunkbrush growing in the center. Continued on doing looping sinuous transects up the draws and around lower ends of ridges. Found isolated TRS biface fragment (IF #1). Headed back to the truck. Stopped again to ask permission at Aberle place. He is not home, but will be in the morning. Got landowners names from here to the south from his wife. They are Tony Rivers, Amy Fielder, Claymore Le Compte, Leonard Claymore and son. Headed back to town.

July 12, 1988

Weather is cloudy, cool and breezy. Drove to yesterday's starting point where No Mouth Creek crosses the road. Stopped to talk to Al Aberle for permission to cross his property. Permission granted. Headed east towards the ridge at the mouth of No Mouth Creek - a contradiction in terms. Ed walked the property boundary, I was on the inside and Bill filled in in-between. Area consists of hills and ends of ridges. Quite a bit of scrubby oak vegetation on hill slope mixed in with the bunch grasses, silver sagebrush, cactus and assorted forbs. Overall ground visibility on the Pierre Shale about 40 percent.

Kept walking on around a couple of small bays and then to the medium peninsula in Section 32 and then out onto the larger peninsula at the intersection of Sections 29, 28, 32 and 33. Planned to stop at the roadway as marked on the map, but started finding enigmatic depressions on the ridgetops. Pinned three or four and decided to have lunch. Site DW88-2 (39DW130) was recorded, mapped and photographed - a series of depressions and a little debitage on the ridge crest and subsidiary ridges. Started back to the south and east. Ed was along the strand line, I was one transect down from the outward boundary and Bill was in the middle. In a flat run-off channel of Pierre Shale found a wooden salt or mineral block holder, raised on four 6x6 legs. Headed back to the truck and towards town, but stopped to talk to a guy who turned out to be the hired man for K&K (Bill Kellogue(?) and Loren Killian), farmers in Gettysburg. Will call later to ask permission. Then met another car coming down the road; it was the next guy to the south, Claymore Le Compte. Asked and received access permission. Finally got to Tony Rivers's place to ask permission. Permission granted, but stop in each day we are working in the vicinity.

July 13, 1988

Weather is clear, quiet and warm. Bill Ranney stayed in today with a sore knee. Will go to Pierre to look at the archives. Ed and I drove to the regular starting point - bridge over No Mouth Creek - and started on the small parcel of land on the west side of the road. Did a half dozen passes E-W down in the creek bottom and the first terrace and a couple of passes on the north side of the creek, between it and Aberle's farm road. All weedy. Nothing culturally significant. Drove over close to yesterday's stopping point and parked the truck on the old highway. Walked up to begin surveying. Stopped to record brass cap. Found a site almost before we were ready to begin surveying - a small lithic scatter right on the peak of the hill, designated DW88-3 (39DW131). It is on top of the very highest point of the ridge complex that forms the south side of the mouth of No Mouth Creek and the Moreau River confluence with the Missouri.

Began to survey ridges and fingers. Coming back up the second ridge we recorded a gravel test on top of a ridge spur, DW88-4. Continued walking the ridges out along the Missouri. Then turned around and headed back to survey the shoreline and ridge ends. Stopped at the road and headed back to the truck for lunch.

Chatted with Tony Rivers out looking for cows. Ed and I walked the narrow ridge top; then he continued on to do the narrow shoreline and ridge while I went back to move the truck 3/4 mile south and walk to meet up with him. Continued surveying through the afternoon, taking one ridge at a time. Stopped at the long ridge in the NE, Section 4. Went back to the truck. Stopped to inform Tony Rivers that we will be back tomorrow and then headed back to town.

July 14, 1988

The weather is clear, breezy and warm, promising to be hot. Drove to Tony Rivers's place and through his backyard to gain access south of yesterday's stop. Drove down a long ridge and stopped at Indian Allotment brass cap. Started walking. Parked in dished out shale blow out and walked mostly north to meet with yesterday's ending point. Corps boundary markers are consistently inside the line on the map. Reached yesterday's stopping point and several tracks along the beach and lower slopes. Walked lower slopes and beach to south end of the

ridge where we started. Ed found the front end of a wooden wagon and wooden wheels with metal rims at the end of the large point. Took a break and walked back up to the truck to replenish the water, then headed south along the upper zone. Walked just a short distance from the truck and found an isolated flake (IF #2).

Walked the major ridge and knobs plus the upper portion of a subsidiary ridge down to the next major draw - center of Section 10. Lots of walking but no material. In fact, there is an amazing, noticeable dearth of anything in this whole area. Not even any recent junk or trash from fishermen. The afternoon was hot and windy. Walked the low transects back to the truck. Stopped to examine previously recorded site 39DW215 (outside project area) on the hill overlooking the river valley. Several pieces of mottled brown chalcedony debitage and several pieces of broken bone. In the area away from the disturbance surrounding the present house, barn or outbuilding where it is heavily disturbed and covered up with old hay bales. Ed walked in the road and found bone fragments and a small scraper (collected).

July 15, 1988

Ed left this project for about a week. I went to Pierre and stopped at the Corps offices and the dam. Got the official boundaries on large USGS quads.

July 16, 1988

Stopped at Tony Rivers to inform him of our progress and whereabouts. Drove old highway down to the end of the point in NW of Section 14. Started to survey north to meet up with the last stopping point. After the second ridge north of the road, found a feed or mineral/salt block trough in the hollow of a draw, actually off the Corps property. Bill's right knee continues to cause discomfort. Walked up to Thursday's stopping place. The revised, official boundaries are a great help. Will walk back on the shoreline and lower slopes. In a cattle path at upper margin of the shoreline found a solitary brown chalcedony distal flake fragment retouched along left lateral margin (IF #3).

To the end of the long point, NE, Section 14. Bill said there appears to be a cap of wind blown loess with possible incipient soil

development in it on top of the Pierre Shale all the way to the end of this long point. Continued on along the shoreline and lower ridge ends. Found a badger skeleton and collected it for Bill. Bill's leg is hurting so we stopped surveying when we got back to the truck. Talked to Tony Rivers on his way to look for cows. He was once tribal chairman for the Cheyenne River Sioux tribe. He says that both DW88-2 (39DW130) and DW88-4 were dug by his father about 60 years ago while he was looking for gravel. Had been dug with a shovel before the current road went through there. So much for eagle trapping pits! Bill's knee has forced him to stop working.

July 17, 1988

Weather is partly cloudy, breezy and cool. Drove to just across the bridge in order to do the narrow strip between the road and the shoreline in sections 35, 34, 27 and 28. Walked up to junction of old road and shoreline at south boundary of Section 35, T13N to start surveying. Saw a red fox. Did one ridge west of the old road and was practically trespassing in someone's backyard. On the next ridge someone has a trailer house, shed, sweat lodge, and basketball hoop established on Corps property so I avoided that area. On a flat area east of the road are two buffalo skulls and a buffalo skin (dried out). Decided to head back along the beach so I can come down the old road and inform residents of my purpose before I get shot at. Dark clouds coming up on the west. Walked back along the beach. Walked three transects in the vicinity of 39DW52 (previously recorded), but only found seven bone fragments and a recent fishing lure to confirm its existence. Continued on along the shoreline. Walked the beach line back to the truck. Started to sprinkle.

Drove around to the trailer house and talked to the highway flag girl for permission to cross the property. Permission granted but forgot to ask the names - Elaine Le Beau. Started surveying again. Walked down and back up a series of ridges. Did both sides but not the wooded draws in-between. At the end of about the sixth ridge found two railroad ties, several hundred Pierre Shale nodules and three or four buffalo skins, plus a couple of aluminum cans. Continued on and found a car in a gully - a white Ford Fairlane. License # is BLJ472, Walworth County, South Dakota, 1986. Continued on across a wide side slope and

several more ridges. Did the last ridge in Section 34. Dropped down to the beach and walked up to the fence line. Turned around and started walking the upper beach line. Walked back down to the small island in the center of Section 34. Still an island, but it has been reduced and planed off to pure Pierre Shale. No potential for intact deposits. Continued on back to the truck. Nothing of interest along the shore.

July 18, 1988

The weather is clear, calm and cool. Started by trying to ask permission at the next two places up the road, but no one was at home so I went back down Highway 212 and parked along the road. Started at yesterday's section fence. Surveyed edges of the long ridge and side slopes or benches, sometimes as many as three benches or subsidiary terraces on each ridge. Did the end slope out as far as where it turns into Pierre Shale. Those surfaces must have a short lifespan so are not surveyed except in passing. Continued on, more ridges. Lots of ridges and lots of up and down!

Reached the head of a small bay, turned around and headed down the beach. Reached the fence and went back to the truck and headed back to town. These have been two of the most unproductive days of surveying in my life! Have walked upwards of 20-25 major ridges, descending into the river bottom (before Oahe) and have found absolutely nothing. There were some fairly decent surfaces on which to find something, but it was not there. The fair surface visibility leads me to believe that a Pierre Shale surface has a fairly short life span and everything that was ever here has eroded away. Will see if this prediction comes true on some of the flatter areas upstream.

July 19, 1988

The weather is clear, calm and cool. Peter Froelich has joined me. Drove to the July 16th stopping point - the third ridge west of the long point north of Fielder Creek. Started to survey to the west. Walked up to a fence corner and take in a small lobe. Pete found an isolated, broken projectile point, IF #4 (39DW147), at the downslope edge of a rounded hillslope. Continued on. Walked up to the fence corner at center of Section 15 and then up the left and right fork of Fielder Creek. Crossed both draws and turned the corner to go straight east.

Several high hills with attendant ridges and fingers. Lunched at top of hill with 1700' contour. Surveyed several short draws that cut back to the south and then to the long east-west ridge that takes us over to the edge of the river bank. Came out exactly at a Corps marker on the section line. Walked up to reconnoiter the location of 39DW213 (previously recorded). Too big to adequately cover today. Much of archeological and geomorphological interest. Started walking back from end of point, shoreline and ridge end. Walked as far as Fielder Creek dust bag holder. Ten-foot high round wooden post with 16' long 2x6 cross piece with two pieces of barbed wire as hinges for nonexistent dust bag.

Continued on. Found a retouched flake of white chert along the upper margin of the beach in the second draw (IF #5). Headed back to the truck. Need to ask permission from Randy Le Beau (blue house on west side of highway); he lives in Pierre, no phone. Or ask his father, Mike Le Beau, who lives in Pierre and does have a phone.

July 20, 1988

The weather is cool, clear and breezy. Drove to the vicinity of previously recorded 39DW213 and prepared for surficial reconnaissance. Quickly toured the previously identified site area (mostly outside Corps land - SW $\frac{1}{4}$, SW $\frac{1}{4}$, Section 13 and NW $\frac{1}{4}$, NW $\frac{1}{4}$, Section 24) which showed circular buckbrush patterns, not convincing earthlodge rings and certainly nowhere near the 100 recorded by SIRBS. Recorded the known cultural material at the north end of this terrace remnant. Mapped the area of slump block cracks at end of the point with a compass and tape. Continued on with the survey. Surveyed along the shoreline and found 12 pieces of broken bone fragments and one fragment of mussel shell along the shoreline in an area marked on the map. Surveyed the upper terrace in SW $\frac{1}{4}$, SW $\frac{1}{4}$, Section 13. Found dubious depressions but no cultural material in the badger hole backdirt and anthills. Put in a shovel test close to one obvious depression (39DW213-Feature 2). Test results were negative. Began to survey to the south. Recorded a dust bag holder adjacent to the Corps boundary. Round wooden post 10 feet high, 2x6 cross bars - same pattern as before. Walked south along boundary and terrace edges. Found a moderately deep circular depression of unknown origin along the terrace edges (possible gravel quarry test pit), designated DW88-5 (39DW132). Probably a recent pit - of unknown

purpose. Continued on and found a Corps marker fallen down which means that the above site (39DW132) is off Corps property.

Continued walking the property line and ridges and ridge slope until we got to the head of the drainage - NW, SE, Section 23. Turned around and headed back along the upper beach line and lower terrace until bluffs got too steep and then it was along the upper and lower beach line. Saw a couple of places for Bob Brakenridge to examine - stratified Pierre Shale, glacial till and loess. Recorded isolated find - single stamped bodysherd (IF #6). Went back to the truck.

July 21, 1988

Weather is clear, calm and warm. Drove to the entrance to the gravel quarry, parked and headed back about 1/3 mile to yesterday's stopping point. Just got started and found a possible retouched flake (IF #7) along a slight ledge at the base of a hill, just above high water strand line. Visibility was 80 percent. Walked up to the fence corner and began to survey the NW $\frac{1}{4}$, Section 25. Walked along the west boundary and down to the area of recent gravel quarrying. Fence line that separates the quarry side has been breached in at least one place and heavy equipment is parked at the east side of the fence. Only along the rim of this peninsula is there intact native vegetation. The majority of the surface has the appearance - non-native grass and forbs in a mosaic pattern - of having been previously cultivated. Some possible depressions at the SE end of the peninsula, but they are also in areas of possible previous cultivation. Walked along both sides of the fence line and two-track trail without finding any cultural material. Got up to the narrow end of the peninsula and surveyed out in that. Walked out on the NE corner peninsula system. The hole marked with the gravel quarry symbol on the map has been extremely mucked around with. Probably no original surface left. Some 10-15(?) year old cottonwood trees growing in the bottom of some of the abandoned quarry pits. Northeasternmost peninsula unit also appears to have been cultivated, except along the very edge of the upper surface. No cultural material; even the old quarry appears not to have any associated debris. How long ago was it operational? Lots of gravel still there. Walked back to get the last unsurveyed area in the NW

corner of the peninsula or along the west edge of the section line. One large slump block along north edge. Other area appears to have been cultivated except for a ring around the margin where there is overall visibility of 20 percent. Walked back to the truck for lunch. Pete and I walked in opposite directions along the peninsula shoreline. Found no artifacts or other signs of previous human existence. Met on the far side and called it a day at 3:30. Stopped at a couple of places for permission to cross on the way back to town. Permission granted for Clay Claymore and Charles Smith. Tried two other places, but no one was at home.

July 22, 1988

Weather is clear, warm and breezy. Drove to the head of Four Bear Creek. Started to survey back to the east towards yesterday's stopping point. Decided that the actual Corps line is about 100 m south of the existing fence line. Area is rolling semi-eroded prairie - a couple of prominent hills at the wider west end of this stretch. More up and down with gullies at the east end. The east end line is down below the reservoir high water mark. Found one Corps marker that confirms the approximate 100 m difference in the property line. Turned around and walked the shoreline and low ends back to the head of the property. Lots of doves and grouse in the weeds almost along the high water mark. Got back to the 40 acre(?) area at the "creek" in Four Bear Creek. Nothing of cultural significance so far. This 40 acre area must have had a grass fire about 2 years ago. Much better surface visibility (50-60 percent) than on the north side of the Creek.

After lunch started on the south side of Four Bear Creek following the jigs and jogs. The grass fire has been over on this side too. Good visibility - 60-70 percent. Found a feed bunk - wooden, 16' long and 14" wide and 2' high. Placed at the bottom of a hill almost at reservoir high water mark. Continued on out to the long ridge in the center of Section 26. Like many others, this would be a good place for some kind of site - cairn, stone circle, lithic scatter - but there is nothing here. Surveyed up to the section line fence; then turned around and hit the beach. Collected an isolated lanceolate projectile point segment along upper beach edge, IF #8 (39DW148). Continued on along the

beach towards the truck. Stopped on the way back to town to ask permission from Louis Le Bray. Permission granted.

July 23, 1988

Weather is clear, breezy and warm. Drove a new route through the Fielder farmstead, down the ridge and across country to get to the upper terrace that supports 39DW14 (previously recorded). Began by pin-flagging the obvious depression and surface artifacts. Two house depressions - one on the south end and one on a finger along the east side - have been partially destroyed by bank slumpage. South side house is at least half gone; east side house approximately $\frac{1}{4}$ of the circumference missing due to wave action and bank slumpage. Some apparent pot-hunting/picnicking activity. Found a plate chalcedony knife fragment in the slumpage below the east side house. This site is too big to map adequately and accurately with our current equipment. Began to perform regular survey from yesterday's stopping place. Headed south from the fence line approximately $\frac{1}{2}$ -mile; turned the corner and got up onto the "1700" ridge. First part of the area has also been burned so have very good surface visibility (60-70 percent). Area is rolling ridge ends. Lunch on top of "1700" ridge.

Continued on jog around the head of a small bay. Had to determine property line because the water is so low it provides a poor reference for the supposed shoreline. Have probably surveyed too wide a corridor. An apparent Corps marker out of place (?) does not help matters either. From the township line followed the property line south to the first of the twin humps. Surveyed the end of the point. Could be a good place for some kind of site. Have good visibility there due to blow outs, erosion and overgrazing (two salt and two mineral blocks in the area). But, we found nothing cultural. Continued on to first major ridge and then down to the shoreline and headed back along the beach. Clouds came up and wind shifted to the north. Went back to 39DW14 to take pictures of houses eroding into the reservoir and of the overall site north and south. Started to rain as we got out the last gate.

July 24, 1988

Weather is cool, calm and partly cloudy. Drove to recreation area at the end of the bridge and parked on top of the ridge overlooking the

area to be surveyed to the north. Found old cartridge case in a two-track (IF #9) along the crest of a ridge. Visibility was 95 percent. On top of the next ridge found a series of three probable billboard post depressions, DW88-6. Visibility was 90 percent. No shovel test was conducted here due to possible sensitive nature of the site. Continued on. Surveyed ridge crests and upper ridge slope. Pretty steep. Got up to the upper ridge and found a dried out buffalo hide with the hair on it. Walked on down the head ridge and then headed east along the property line. Back to the truck. Began surveying the ridge in Old Agency Park or Campground. Area has been heavily utilized by campers and fishermen. Glass, aluminum and plastic beverage containers, various metal and plastic fishing and camping gear. Area has been sown to crested wheatgrass, probably cultivated. Walked ridges and two-track trail. Otherwise, heavily vegetated. Found small, unnotched, triangular projectile point in two-track, IF #10 (39DW149).

Continued to survey up to Corps 1945 benchmark and then followed boundary east and back to the truck. Pete walked the upper shoreline. Neither of us found anything. Back to the truck and moved over to the west side of the road. After lunch surveyed the west side of the bridge area. SD State Game, Fish and Parks Department has heavily impacted the area with boat launching ramps, parking area, campgrounds and road. Few remaining areas are low. The usual beverage containers and trash. Nothing of cultural resource interest. Headed back to Gettysburg.

July 25, 1988

Weather was clear, calm and warm. We were joined by Ed Lueck. Drove to gravel pile site 39DW18 (previously recorded) to more thoroughly evaluate the site conditions. Walked 30 m transects and performed shovel test. Confirmed that the majority of the surface has been disturbed. Lack of cactus, presence of kochia, salsify, alfalfa and mosaic of introduced species. Shovel test indicated a loose, nonrooted soil. Shovel test along southern margin of the terrace top produced no cultural material, but does show that a narrow ring of native vegetation and tight sod soil still exists. Southern area has more apparent depressions, but they may be an artifact of cultivation. Along the eastern margin of the terrace, begin to find pottery bodysherds, mottled gray silicified sediment flake, fire-cracked granite

and small burned and unburned bone fragments in both the disturbed and undisturbed areas. Performed approximately a dozen shovel tests with positive results in only three; rest were negative. Took overall photos of the apparent site area.

Drove over to 39DW14 to perform cutbank and upper beach survey. Ed felt that a plane table or transit might be a more effective way of mapping the area. Shovel test at the north limit uncovered a pottery bodysherd. Other surface materials include a red jasper flake and mottled gray silicified sediment flakes, pottery bodysherds and a trailed rim or shoulder sherd, and plate chalcedony biface fragment. Possible surface expression of fire-cracked rock and possible feature, in addition to several house and other smaller depressions. Need to map the whole area accurately [mapped by Winham on 10-23-88].

Recorded a John Deere horse drawn single bottom plow and tongue (IF #11) at the end of a long point. Drove over to a long point overlooking Buffalo Bay. Wide property boundary. Walked to the east with a three-man crew. Surveyed to Saturday's stopping point. NW $\frac{1}{4}$, Section 2. Turned around and headed back. On the low end of the ridge where we had started there was an Indian Allotment brass cap (1915). Walked the last ridge crest and went back to the truck.

July 26, 1988

Weather is clear, calm and warm. Drove to the south side of the head waters of Buffalo Creek. Started to survey head waters and remainder of north side. Recorded a site right away, designated DW88-7 (39DW133). Site is on top of a round ridge end or upper terrace remnant - lithic items, fire-cracked rock, tooth enamel. No cultural material in shovel test. Visibility was 40 percent.

Found another cluster of material on a floodplain ridge (along the top of a long, low sloping ridge on north side of Buffalo Creek floodplain) - lithics, ground stone and ceramic. Actually identified three clusters. Corps marker not visible. No cultural material in shovel test. Designated DW88-8 (39DW134). Visibility was 30 percent.

Continued on. Walked across a ridge down into the draw and onto the next side hill. Ed was on the uphill side and along the line found an Indian Allotment brass cap (1915) and then another one (1915). Pete and I ran into a series of large piles of large rock along the side

slope (IF #12). Hard to identify their age or purpose; no apparent pattern and rocks are not well sodded in and have voids among uppermost rocks. Walked around the corner and found a couple more large rock piles of large rocks and then some smaller cairns of small rock, well sodded in and without any voids. Will decide what to do after lunch.

Ed found a hot spot of lithic material at the lunch spot, on top of a flat, broader stretch in a descending ridge. Rock cairns, lithic debitage and lithic artifacts, including two scrapers, were recorded and designated DW88-9 (39DW135). The cairns are judged to be recent even though some appear to be of smaller, well sodded-in rocks. Otherwise there are probably dozens of rock cairns in the vicinity and nearby area. No cultural material was located in a shovel test.

Pete walked on top of the hill - 1794'. Rock alignment with VLB(?) or SLB(?), plus another 2 dozen cairns. Continued on. Walked side slopes and minor ridges to yesterday's stopping point. Took a break on the beach; walked back along the beach lower and middle ridge ends. Temperature is 100°F.

July 27, 1988

Clear and warm, promising to be hot. Drove to 1787' high point on south side of Buffalo Bay. Began to survey beach towards the head of the bay. A couple of rock cairns at the car parking place. Will record at the end of the day.

Found another rock cairn at high point of a rounded hill. Designated DW88-10 (39DW136) (off the property). Visibility was 30 percent.

Continued on to survey area. Corps fence post agreed with the lines on the map. Walked west and north to get to yesterday's first site. Temperature already uncomfortable. Walked low side and end. Ed walked the stream channel and cutbank at the upper end, back to the starting point. Continued on around the head of the bay and followed the line in front of the abandoned log cabin with wood addition. Some interesting stuff, but it is off the Corps property. Lunched in the shade of the cabin. Ed followed the line and found an Indian Allotment brass cap (1914). Continued on to major drainage, but it is hot. Back to the truck to record cairns which increase to cairns, plus one stone circle (DW88-11 [39DW137], off the property).

July 28, 1988

The weather is warm, partly cloudy and breezy. Drove to point overlooking south side mouth of Buffalo Bay. Started to survey back west to yesterday's stopping place. Began with the long point and found some inexplicable phenomena. Located along the upper surface along and at the end of a long ridge jutting out into the current reservoir were rock cairns (some had no center rock), possibly recent, hearth depressions and one flake. Recorded as DW88-12 (39DW138). No Corps marker. Shovel test performed with negative results. Visibility was 30 percent. Buffalo Creek is an apparent oasis so its no wonder that there are more sites along it.

Continued on. Reached yesterday's stopping draw. Turn around and then surveyed the beach and lower area. Mostly low and a narrow corridor. Walked around the site ridge and back up to the truck for lunch. Weather is hot, oppressive and calm. Walked across the grain of the ridge ends to the south and west into the drainage of Buck Creek. Get 3/4 of the way up the creek when it becomes too brutal to make sense to continue. Headed back along the beach and low bench. Back to the truck. Nothing cultural. Slow trip back to town through road construction.

July 31, 1988

Weather is clear, calm and warm with 106° predicted! Took scenic pictures of the bridge and survey area and Patch Skin Buttes on the way to survey. Drove to south side of Buck Creek. Began to survey back west towards Thursday's stopping point. Got to low point of the stopping point and turned around. Went back to the truck after having done all the territory to yesterday's stopping point, plus up to the small bay in NE of Section 22. Drove over to the large point in the NW of Section 23. Parked at a low spot in the neck and began walking serpentine zigzags along the north side of the two-track and down to the ends of the ridge. Out to the end of the point. Found an old roadbed and three Corps brass caps (1948) set in concrete at the triangular symbol on the map. Ed has pinned three possible suspicious depressions to be checked later. Dropped down onto the beach. Walked around the shoreline. Found a shed antler base at the top of the slump. May have

been pushed in or may have been buried; it is approximately 0.5 m below the surface. Back to the truck for lunch.

Surveyed the south side of the road, about $\frac{1}{2}$ of the area of the whole point. Shovel tested the four depressions Ed located earlier. Three are small, approximately 3 m across, and have the same soil profile. Dark prairie soil followed by blocky, clayey Pierre Shale subsoil. The fourth is smaller and deeper and better defined, 2.7 m diameter and filled with buckbrush. Surface to 25 cm is brown silty soil; 25-30 cm is darker, ashy-feeling silt. Bottom of test at approximately $1\frac{1}{2}$ shovel blade depth. All shovel tests were backfilled.

August 6, 1988

Ed, Pete and I returned to this survey after a week at another project. Drove to the head of the bay with two islands. Started to survey the beach, east and north to last week's stopping line. Got up to the stopping point across the ridge ends; saved the tips for the return trip. Rain seems to have softened up the ground for walking. Overall surface visibility of about 20 percent. Took an excursion out onto the connected island for a photo opportunity. Pete surveyed the next point at 1648' and found snakes, spiders and a site. Independently, Ed noted a considerable depth of loess at the end of the point. Good place for a site (also snakes). The site, designated DW88-13 (39DW139), is an artifact scatter located at the end of a long and increasingly narrow point. Rather than a shovel test, the slump bank was inspected. Is an oxidized area at 25 cm; other bone was noted in the cutbank.

Another site, DW88-14 (39DW140), a rock cairn and TRS shatter, was recorded at the northwest drop off of contour. Results of the shovel test were negative. Visibility was 30 percent.

An isolated brown TRS primary flake (IF #13) was recorded, with ground visibility at about 25 percent, at a low spot in the narrow isthmus. At the southwest end of the ridge before it turns into an isthmus, a mottled gray TRS shatter was recorded (IF #14). Visibility was about 30 percent.

After lunch we continued along the Pierre Shale terrace of an ephemeral stream. Visibility was 90 percent. A complete projectile point of speckled white chalcedony was located, IF #15 (39DW150). Next

we went to the 1654' ridge end and back along the low line. Walked out onto the connected island. Good soil development along the loess cutbank. No cultural materials observed. Zero visibility on the upper surface. Ed put in two shovel tests with negative results.

Located the front end of a wooden wagon, one hub, one metal spindle and a turning apparatus on the way back to the truck.

August 7, 1988

The weather is cloudy, windy and warm. Drove to the peninsula on the north side of Swift Bird Bay. Began to survey back (center of Section 23) west and north, then back east to yesterday's 1659' point. Walked the property line, wide boundaries to the head of the draw, and down the north side of an unnamed bay - more wide boundaries. Found a cairn, assigned number DW88-15 (39DW141), on top of a hill edge close to the property line. Ground visibility was 20 percent. A shovel test yielded negative results. Continued on to the point and had lunch.

Walked back along the low line and beach. Easier for already having done the wide margin. Back to the truck. Pete moved the truck to the end of the property while Ed and I surveyed the narrow south border of an unnamed creek. Pete found a cairn, which was assigned number DW88-16 (39DW142). It is on top of a separate hill even though on the topo it looks like the end of a ridge. Visibility was 50 percent. A shovel test produced negative results. Headed back to the truck and stopped to ask permission at the south trailer house - Len Ducheneaux. Permission granted. His sister, Karen Nitzschke, lives in the green house further south. Stopped at South Whitlock to talk about boat rental. No rentals this year. Talked to the guide about a personal tour.

August 8, 1988

The weather is cloudy and relatively cool. Drove to Bob's Bait Shop for breakfast and then to a high overlook to take pictures of Swift Bird Bay and down the river. Started surveying back to the east from where the dotted line crosses the property line in SW, Section 33. Pete won a beer bet by finding a cairn and TRS shatter, which was designated DW88-17 (39DW143). It is at the end of a point where visibility was 60 percent. No cultural material was found in a shovel test. Continued on

and found an Indian Allotment brass cap. Walked out onto the point at NW corner of Swift Bird Bay. Walked several ridge remnants, ends, side slope and beach back to the truck, where we had lunch.

Continued on west. Ed found an Indian Allotment brass cap (1915) in the fence line off the center of Section 32. Went down a couple of low ridges, a couple of right angle corners, and headed into the home stretch when we found a site on top and along the edge of a high terrace or ridge end. The site, DW88-18 (39DW144), is a small stone circle and TRS debitage is also present. Ground surface visibility was 20 percent. The shovel test was negative. We continued on, reached the fence line, and turned around. We were uncertain as to the motives of two unknown perpetrators shooting a rifle and pistol on the south side of Swift Bird Bay. We returned along the low line and headed back to the truck. Lined up a boat ride to the islands. Talked to Karen Nitzschke, permission granted.

August 10, 1988

Left Gettysburg and drove to where the road crosses Swift Bird Creek. Began to survey the north side of the creek, heading east to Monday's stopping point. Walked a narrow margin and then a wide one where an ephemeral stream entered the creek. Found two large flakes in the interfluvial (IF #16). Ground visibility was 50 percent. Continued on, but very thoroughly covered the area between the two streams because it had the 'look' of high site potential topography. Over on to the next highland and found a cairn (on top of a slight rise in a descending ridge system). The site was designated DW88-19 (39DW145). Visibility was 60 percent. The shovel test was negative.

Continued on to the north-south fence, Monday's stopping point. Turned around to survey back to the west along the low line. Back into the interfluvial and found an Indian Allotment brass cap (1928). Went back to the fence line and crossed over to west side of the road. Found a standard baked clay brick with 'RIDGE' on one side. Went back to the truck after finding a Corps stake that showed we had surveyed too wide on the high side. Drove to our appointment at South Whitlocks for a boat ride. Boated to Island #1, the southernmost one, where very little is left. Mostly eroded shale and gravel, probably 100 sq. feet of intact surface. Boated to Island #2. Larger surface with the terrain

of a hill, whereas #1 was more like a level surface remnant. Nothing but extinct badger holes on the surface. Buried soil on south side. Otherwise a cap of loess over a medium thick gravel lens. No cultural material so we boated back to shore.

Returned in the truck to this morning's starting point - road crossing with Swift Bird Creek - and began to survey the west side of the road, south of the creek. Reached the west end of south side. Fenced enclosure with both wooden and steel posts and hog wire and barbed wire, 100' E-W by 30' N-S. Walked creek bottom part of the way back and found some broken bone in the cutbank in a layer of Pierre Shale gravel (?). Possibly of geomorphological interest. Went back to the road. It had become so hot that we called it a day. Talked with Bob Lundquist, the State Trapper, - has access to a boat.

August 12, 1988

The weather started out clear and pleasant, but quickly became hot and humid. Got an early start, but were slowed down by highway construction. Started to walk from overlooking hill back west to gravel road and Swift Bird Creek on the south side of Swift Bird Bay. Then headed back to the road. In a two-track trail off the gravel road was a historic fragment of glazed stoneware with a green painted leaf. Continued on the flat back towards the starting point. Took pictures of a rattlesnake in the tall grass. Went back to the truck for a water break - early in the morning for such a break. Finished with the Patch Skin Butte Quad. Started to survey across the ridge slopes and ends. Crossed the combined wooden stake and white PVC pipe post fence line and out onto the south side of Swift Bird Bay peninsula. Surveyed this area from the top down, in narrow transects. Went around the end and down the south side of the peninsula. Ed found a large, dark gray basalt cobble with large flakes removed from either end (IF #17). It was located on top of a ridge in a wide saddle where visibility was 30 percent.

Continued on and reached the crossing of Swift Bird Creek tributary. Found a willow tree and had lunch in the shade. Headed back along the low line and then went back to the truck after finding nothing culturally significant. Moved the truck down to the south side of Swift Bird Bay. Headed back to the west along the high line. Found a

homemade mobile home. It appears to be still potentially mobile. Got to the end edge and turned around. Walked the low line. Found a hay yard, approximately 50 m². One elongated stack of hay and a metal building. Continued on the low line to the end point, opposite the fence line across the Bay. Went back to the truck.

August 13, 1988

Weather is cloudy and cool. Drove to the end of the old highway, west side, Section 9. Began to survey back to the west and north towards yesterday's end point. Fairly wide boundaries requiring much zigging and zagging. Used former roadbed as the end point on the south side of Swift Bird Bay. Turned towards the west with ridge ends and slopes. Ed says he spent a lot of time surveying the upper surfaces. Got to yesterday's stopping point opposite the fence line on the far shore. Took a break. Stopped to record a cairn, designated DW88-20 (39DW146). The cairn is on top of a hill at the end of a lower side ridge (subsidiary) where visibility was 30 percent. The shovel test was negative. Continued on and had lunch and then arrived at end of south point. Searched for remains of 39DW21 (previously recorded). Found abundant buffalo bone fragments, mandibles, teeth, lower extremities broken bone, antelope maxilla. One possible grinding stone and a shell bead but no lithics or ceramics. Considerable historic material at the extreme end of the point - springs, nuts, bolts, pitch fork tines, whiteware, cast iron stove parts. Lots of recent footprints so it is heavily collected. Continued on the low line and found a mineralized bone (IF #18) along the upper beach edge. Went back to the truck for a water break and strategy session. It is hot and humid. Headed south to do the next peninsula or two. Separate at the top of the hill. Ed found an Indian Allotment brass cap (1915). Incorrect strategy; I had to walk back along the shoreline, get the truck and pick Ed up. I found nothing cultural.

August 14, 1988

Weather is clear, calm, warm and humid. It rained last night and turned the road to soup. Drove to midpoint of the remaining survey area. Wet Pierre Shale. Started to survey to the north. Crossed the first drainage and went past the end of the long narrow point. Ed found

an Indian Allotment brass cap (1915). Up to the head of the second drainage, turned around and headed down the low line and the beach. Lunched at the end of the long narrow point. Marks on the map indicated a variety of metal cow feeders (modern style) and salt block holders. Went back to the truck and made an executive decision. Since we cannot finish the whole survey area today, will go down and do the easy last ridge and will do the other two tomorrow. Started in the middle of the point. May have passed a rock cairn in the making. Looks like the clear out from Mr. Ducheneaux's sweat lodge so I only recorded it in passing - 3 m across and .5 m high. Several hundred fire-cracked coals.

August 15, 1988

Weather is clear and warm. Drove down the old highway roadbed to the upper end of the big, wide point - NE, Section 20. Started at the north and headed south. Began with the upper and middle transect. Reached the end of the roadbed and crossed the draw over onto the last peninsula. Reached the SE end of the last point and the head of the last draw. Topographic comments have been spartan because almost everything since the north of Swift Bird Bay has been pretty much the same - relatively wide peninsulas with subsidiary side ridges, all based on Pierre Shale, with relatively heavy grass, cactus and sagebrush vegetation. Lots of bare Pierre Shale exposures at the base of the slopes. Today's ridges, more so than the previous, appear to have a three-step terrace development, but even on the 'terrace' ledges the side slope is too steep to reasonably expect to find any kind of site, except a rock cairn. Yesterday's addition of metal calf feeders were a break in the monotony of random beverage containers. All of this would just as well have been surveyed through the windshield of a truck.

Headed back to the truck along the low line. 106°F at lunch time. Drove to 39DW14 to do some mapping, but had equipment problems. Drove to 39DW18 and mapped in the Corps stake and a supposed depression. Stopped on the way back to town to speak with Karen Nitzschke.

End of survey.

APPENDIX D

Artifact Catalog Sheets

Archeology Laboratory of the
Center for Western Studies

FIELD CATALOG SHEET

County: Dewey
Site No: 39DWi4
Accession No:

CATALOG NO	DESCRIPTION	LOCATION	DEPTH	DATE	COMMENTS
1	Bone fragments - Non-I.D.	Slump from earth-lodge in bank exposure	-	10/23/88	Exposure #39
2	Ceramic bodysherd, plain polished exterior, grit-tempered. Diamond or square shaped design on exterior. 5.48 mm thick.	"	-	10/23/88	
3	Ceramic rimsherd. Straight and parallel-sided, with flat slightly over-thickened lip. Rim 6.1 mm thick, grit-tempered.	"	-	10/23/88	Talking Crow Straight
4	Bison scapula, likely a hoe. Glenoid articulation and portion of blade of scapula. 30 cm length.	"	-	10/23/88	
5	Badlands knife fragment. Bifacial reduction on left lateral margin. Plate chalcedony. 49.65 mm length, 35.8 mm width, 5.75 mm thickness. 10YR 8/1	Surface slump. East ridge house.	-	7/23/88	
6	Ceramic rimsherd fragment. Badly eroded, grit-tempered. 6.52 mm thick.	Depression 9	-	10/23/88	

FIELD CATALOG SHEET

Archeology Laboratory of the
Center for Western Studies

County: Dewey
Site No: 39DW14
Accession No:

<u>CATALOG NO</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>	<u>DEPTH</u>	<u>DATE</u>	<u>COMMENTS</u>
7	Ceramic bodysherd. Split with interior surface remaining. Grit-tempered. 6.27 mm thick.	" "	-	10/23/88	
8	Ceramic rimsherd, portion of exterior surface missing. It is straight with a flat lip. Diagonal tool impressions on lip. Rim 7.00 mm thick.	Depression 9	-	10/23/88	Talking Crow Brushed

Archeology Laboratory of the
Center for Western Studies

FIELD CATALOG SHEET

County: Dewey
Site No: 39DW21
Accession No:

<u>CATALOG NO</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>	<u>DEPTH</u>	<u>DATE</u>	<u>COMMENTS</u>
1	Bead, shell disc, perforated. 12.80 mm diameter, 1.74 mm thick.		Surface	8/13/88	
2	Granite cobble, heavy grinding on one surface. Utilized as mano.		Surface	8/13/88	

Archeology Laboratory of the
Center for Western Studies

FIELD CATALOG SHEET

County: Dewey
Site No: 39DW133
Accession No:

<u>CATALOG NO</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>	<u>DEPTH</u>	<u>DATE</u>	<u>COMMENTS</u>
1	Fragment of plate chalcidony. Minor bifacial flaking on left lateral margin. 27.2 mm length, 33.60 mm wide, 7.60 mm thick, 10YR 8/1.	NE 1/4, Section 5, T14N, R31E	Surface	7/26/88	
2	Primary reduction flake with unifacial retouch on left lateral margin. 5YR 6/1, Light gray chert. 16.40 mm length, 13.70 mm wide, 2.90 mm thick.	"	"	7/26/88	
3	Biface, distal and midsection. 29.80 mm length, 22.48 mm wide, 6.90 mm thick. 7.5YR N5/, Gray fine-grained quartzite.	"	"	7/26/88	
4	Biface fragment. 7.5YR N3/ Very dark gray chert. 27.90 mm length, 21.30 mm wide, 5.80 mm thick.	"	"	7/26/88	
5	Projectile point, unnotched triangular. Missing the proximal tip. Late Prehistoric. 5YR 5/1, Gray fine-grained quartzite.	"	"	7/26/88	

Archeology Laboratory of the
Center for Western Studies

FIELD CATALOG SHEET

County: Dewey
Site No: 39DW134
Accession No:

<u>CATALOG NO</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>	<u>DEPTH</u>	<u>DATE</u>	<u>COMMENTS</u>
1	Ceramic bodysherd. Polished from burnishing surface. Smoothed-over simple stamped design. 3.14 mm thick, grit- tempered.	SW $\frac{1}{4}$, SW $\frac{1}{4}$, Section 33, T15N, R31E	Surface	7/26/88	Area 3
2	Biface fragment. 10YR 5/2 Silicified sediment. 27.40 mm length, 35.70 mm wide, 8.60 mm thick.	"	"	7/26/88	Area 1

Archeology Laboratory of the
Center for Western Studies

FIELD CATALOG SHEET

County: Dewey
Site No: 39DW135
Accession No:

CATALOG NO	DESCRIPTION	LOCATION	DEPTH	DATE	COMMENTS
1	Badlands knife fragment, bifacial flaking on right lateral margin. 10YR 8/1, Plate chalcadony. 34.00 mm length, 39.10 mm wide, 8.28 mm thick.	SW $\frac{1}{4}$, NE $\frac{1}{4}$, Section 4, T14N, R31E	"	Surface 7/23/88	Lithic concentration
2	Transverse scraper, Type B. 5YR 3/2, Dark reddish-brown chalcadony.	"	"	Surface 7/23/88	"
3	Tertiary flake with slight unifacial retouch on distal and lateral margins. 10YR 5/1, Gray chert. 34.70 length, 20.00 mm wide, 4.10 mm thick.	"	"	Surface 7/23/88	"
4	Tertiary flake with slight unifacial retouch on distal margin. 10YR 5/1, Gray chert. 33.30 mm length, 29.30 mm wide, 7.95 mm thick.	"	"	Surface 7/23/88	"
5	Transverse scraper, Type A. 5YR 2.5/2, Dark reddish-brown chalcadony.	"	"	Surface 7/23/88	"

FIELD CATALOG SHEET

Archeology Laboratory of the
Center for Western Studies

County: Dewey
Site No: 39DW139
Accession No:

<u>CATALOG NO</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>	<u>DEPTH</u>	<u>DATE</u>	<u>COMMENTS</u>
1	Core, TRS (heat-treated). Flake material removed bifacially. 99.70 mm length, 109.40 mm wide, 31.40 mm thick, 10YR 7/1.		Surface	8/6/88	Cat. #13

Archeology Laboratory of the
Center for Western Studies

FIELD CATALOG SHEET

County: Dewey
Site No: 39DW213
Accession No:

<u>CATALOG NO</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>	<u>DEPTH</u>	<u>DATE</u>	<u>COMMENTS</u>
1	Tertiary flake, fine unifacial flaking on left lateral margin. 10YR 7/1, Light gray TRSS. 36.60 mm length, 27.35 mm wide, 4.82 mm thick.	Slump block and surface	25 cm bs	7/20/88	
2	Tertiary flake, fine unifacial retouch on portion of right lateral margin. 10YR 7/1, Light gray TRSS. 32.43 mm length, 23.83 mm wide, 6.00 mm thick.	"	"	7/20/88	
3	Ceramic bodysherd, surface burnished over simple stamping. 5.64 mm thick, grit-tempered.	"	"	7/20/88	
4	Ceramic bodysherd, surface burnished over simple stamping. 5.00 mm thick, grit-tempered.	"	"	7/20/88	
5	Ceramic bodysherd, surface burnished over simple stamping. 4.48 mm thick, grit-tempered.	"	"	7/20/88	
6	Ceramic rimsherd. Rim is straight and parallel-sided with a slightly thickened flat lip. Decorated with diagonal tool impressions. Exterior surface has vertical striations. 5.1 mm thick, grit-tempered.	"	"	7/20/88	Talking Crow Brushed

Archeology Laboratory of the
Center for Western Studies

FIELD CATALOG SHEET

County: Dewey
Site No: 39DW213
Accession No:

CATALOG NO	DESCRIPTION	LOCATION	DEPTH	DATE	COMMENTS
7	Vessel shoulder fragment 4.7-5.8 mm thick. Exterior is smoothed surface over simple stamped, decorated with narrow, deep trailed lines. Grit-tempered.	Slump block and	25 cm bs	7/20/88	
8	Ceramic bodysherd. Very thin (3.0 mm). Decorated with two parallel, shallow trailed lines. Grit-tempered.	"	"	" 7/20/88	
9	Primary flake, TRSS.	"	"	" 7/20/88	
10	Ceramic bodysherd, no decoration. Grit-tempered. 3.8 mm thick.	"	"	" 7/20/88	
11	Bone awl, likely produced on splint of bison ribs. 140.26 mm long, 9.26-9.34 maximum thickness.	Slump block	"	" 7/20/88	
12	Ceramic rim/shoulder fragment, grit-tempered. 5.34-7.00 mm thick. Rim appears to be parallel-sided and straight.	Slump block South face NE of datum	28 cm bs	10/23/88	Talking Crow ware
13	Bison scapula hoe fragment. 30 cm long and 7 cm wide.	Slump block	25 cm bs	7/20/88	

FIELD CATALOG SHEET

Archeology Laboratory of the
Center for Western Studies

County: Dewey
Site No: 39DW213
Accession No:

CATALOG NO	DESCRIPTION	LOCATION	DEPTH	DATE	COMMENTS
14	Tabular fragment of Bijou Hills quartzite. One surface ground smooth. Likely used as a grinding slab.	Slump block	25 cm bs	7/20/88	
15, 16	A rim/shoulder fragment of two conjoined specimens. It is from a large vessel. It is thick, 8.4 mm, on the shoulder, 9.5 mm at the rim base. Paste contains large angular grit particles. Exterior surface is smooth. Rim appears to be flaring outwards.	North facing slump block ENE of datum.	17 cm bs	10/23/88	Riggs ware.
17	Ceramic bodysherd, some polishing from burnishing of exterior surface. Smoothed-over simple stamped. 5.00 mm thick.	"	"	10/23/88	

FIELD CATALOG SHEET

Archeology Laboratory of the
Center for Western Studies

County: Dewey
Site No: 39DW215
Accession No:

<u>CATALOG NO</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>	<u>DEPTH</u>	<u>DATE</u>	<u>COMMENTS</u>
1	Transverse scraper, Type A. 5YR 3/2, Dark reddish-brown chalcedony.		Surface	7/14/88	

FIELD CATALOG SHEET

Archeology Laboratory of the
Center for Western Studies

County: Dewey
Site No: IF 1
Accession No:

<u>CATALOG NO</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>	<u>DEPTH</u>	<u>DATE</u>	<u>COMMENTS</u>
IF 1	Biface, distal tip and midsection. 10YR 6/2, light brownish-gray TRSS. 39.00 mm length, 23.80 mm wide, 6.20 mm thick.		Surface	7/14/88	

FIELD CATALOG SHEET

Archeology Laboratory of the
Center for Western Studies

County: Dewey
Site No: 39DW147
Accession No:

<u>CATALOG NO</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>	<u>DEPTH</u>	<u>DATE</u>	<u>COMMENTS</u>
1	Projectile point, side-notched? Basal portion missing. Besant? 10YR 4/2, Dark grayish-brown fine-grained quartzite.		Surface	7/19/88	

FIELD CATALOG SHEET

Archeology Laboratory of the
Center for Western Studies

County: Dewey
Site No: 39DW148
Accession No:

<u>CATALOG NO</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>	<u>DEPTH</u>	<u>DATE</u>	<u>COMMENTS</u>
1	Projectile point, midsection. Had a constricting base. Parallel oblique flaking on dorsal surface. Late Paleoindian. 10YR 2/2, Very dark brown chalcedony, heavily patinated.	Shoreline		7/22/88	

FIELD CATALOG SHEET

Archeology Laboratory of the
Center for Western Studies

County: Dewey
Site No: IF 9
Accession No:

<u>CATALOG NO</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>	<u>DEPTH</u>	<u>DATE</u>	<u>COMMENTS</u>
IF 9	Copper cartridge, internally primed center fire, utilized in altered Springfield breech loaders. Caliber 50 (see below). 1866-1868 46.25 mm length 16.50 mm base diameter		Surface	7/24/88	

FIELD CATALOG SHEET

Archeology Laboratory of the
Center for Western Studies

County: Dewey
Site No: 39DW149
Accession No:

<u>CATALOG NO</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>	<u>DEPTH</u>	<u>DATE</u>	<u>COMMENTS</u>
1	Projectile point, triangular unnotched, Late Prehistoric. 5YR 8/1, White quartz.		Surface	7/24/88	

Archeology Laboratory of the
Center for Western Studies

FIELD CATALOG SHEET

County: Dewey
Site No: 39DW150
Accession No:

<u>CATALOG NO</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>	<u>DEPTH</u>	<u>DATE</u>	<u>COMMENTS</u>
1	Projectile point, corner-notched Besant 7.5YR, N7/, Opaque, light gray agatized chalcedony.		Surface	8/6/88	

FIELD CATALOG SHEET

Archeology Laboratory of the
Center for Western Studies

County: Dewey
Site No: IF 18
Accession No:

<u>CATALOG NO</u>	<u>DESCRIPTION</u>	<u>LOCATION</u>	<u>DEPTH</u>	<u>DATE</u>	<u>COMMENTS</u>
IF 18	Phalanges, fossilized.		Surface	8/13/88	

APPENDIX E

Photographic Log

PHOTOGRAPHIC RECORD
Archeology Laboratory, Center for Western Studies

Project Dewey County Survey

Color Slides Black & White Prints X

Roll No. 1

Date	Photog's Initials	Exposure No.	Subject	Looking Toward	Neg. Cat. No.
7/11/88	EL	1, 2	39DW129 (DW88-1).	East	1, 2
7/12/88	WR	3, 4	View west from datum to mapping station #2. 39DW130 (DW88-2).	West	3, 4
"	WR	5, 6	39DW130 (DW88-2). Feature 7.	West	5, 6
"	WR	7, 8	39DW130 (DW88-2). Feature 8.	WSW	7, 8
"	WR	9, 10	39DW130 (DW88-2). Feature 9.	North	9, 10
"	WR	11, 12	39DW130 (DW88-2). Ed at Feature 3. Feature 2 left background.	ESE	11, 12
7/13/88	KL	13, 14	39DW131 (DW88-3). Lithic scatter.	SE	13, 14
"	KL	15, 16	DW88-4. Gravel test.	N	15, 16

PHOTOGRAPHIC RECORD
Archeology Laboratory, Center for Western Studies

Project Dewey County Survey

Color Slides Black & White Prints X

Roll No. 1

Date	Photog's Initials	Exposure No.	Subject	Looking Toward	Neg. Cat. No.
7/20/88	PF	17	39DW213. Close-up of Feature 1. In profile of slump block.	North	17
"	PF	18	39DW213. Overview of slump with Feature 1.	NE	18
"	PF	19	39DW213. Slumpage of site area.	North	19
"	PF	20	39DW213. Slumpage of site.	NE	20
"	PF	21	39DW213. Slumpage of point on north of site. From site.	NNW	21
"	PF	22	39DW132 (DW88-5). Depression ca. 200 m east of old farm machinery, lumber, and trailers.	South	22
7/23/88	PF	23	39DW14. House depression on south of site eroding into reservoir.	SSW	23
"	PF	24	39DW14. House depression on east of site eroding into reservoir.	South	24
"	PF	25	39DW14. Same as above. From shore.	West	24a

PHOTOGRAPHIC RECORD
Archeology Laboratory, Center for Western Studies

Project Dewey County Survey

Color Slides Black & White Prints X

Roll No. 2

Date	Photog's Initials	Exposure No.	Subject	Looking Toward	Neg. Cat. No.
7/24/88	PF	1, 2	DW88-6. Three probable billboard post depressions on ridgetop.	West	0, 1
7/25/88	PF	3	Taken from top of oldest gravel pile area where sherds and flakes were found near edge of flat. 39DW18.	East	2
"	PF	4	39DW18. From top of gravel pile area to SSE.	SSE	3
"	PF	5	39DW18. Edge of flat on east side of area. Where flakes, bones and sherds were found.	South	4
7/26/88	EL	6, 7	Overview of 39DW133 (DW88-7). Brunton over datum and Corps marker.	North	5, 6
"	EL	8, 9	Overview of 39DW134 (DW88-8). Brunton over datum.	West	7, 8
"	EL	10, 11	IF12. Overview of 11 of the 12 rock piles.	NE	9, 10
"	EL	12, 13	39DW135 (DW88-9). Overview of lithic scatter and three rock piles on ridge.	South	11, 12
"	EL	14, 15	39DW135 (DW88-9). Close-up of northern- most rock piles on ridge - tape & 1 m.	SW	13, 14

PHOTOGRAPHIC RECORD
Archeology Laboratory, Center for Western Studies

Project Dewey County Survey

Color Slides Black & White Prints X

Roll No. 2

Date	Photog's Initials	Exposure No.	Subject	Looking Toward	Neg. Cat. No.
7/27/88	EL	16, 17	39DW136 (DW88-10). Rock pile outside of Corps land. Corps stake in background, next knoll.	ENE	15, 16
"	EL	18, 19	39DW137 (DW88-11). Stone circle and four cairns. Overview. view.	NE	17, 18
"	EL	20, 21	39DW137 (DW88-11). Stone circle. 36 m SW SW of second cairn from east. 6.6 m E-W, 6.7 m N-S. 65 rocks.	SW	19, 20
"	EL	22, 23	39DW137 (DW88-11). Eastern two stone cairns.	ESE	21, 22
7/28/88	EL	24, 25	39DW138 (DW88-12). Overview of 5 of 6 rock cairns, small and large depressions.	NE	23, 24

PHOTOGRAPHIC RECORD
Archeology Laboratory, Center for Western Studies

Project Dewey County Survey

Color Slides _____ Black & White Prints X

Roll No. 3

Date	Photog's Initials	Exposure No.	Subject	Looking Toward	Neg. Cat. No.
8/6/88	EL	1, 2	Cutbank on point, bone and charcoal at 4 & 7 ft. bs; oxidized soil at ca. ½ ft. All in indentation in bank, left center. Looks like recent pot- hunting (footsteps, melon rinds, disturbed soil).	North	1, 2
"	EL	3, 4	Overview of 39DW139 (DW88-13). Above/on cutbank in preceding shot.	SE	3, 4
"	EL	5, 6	Overview of 39DW140 (DW88-14). Cairn(s), flake.	SE	5, 6
8/7/88	EL	7, 8	Overview of 39DW141 (DW88-15). Cairn.	SE	7, 8
"	EL	9, 10	Overview of 39DW142 (DW88-16). Cairn.	ESE	9, 10
8/8/88	EL	11, 12	Overview of 39DW143 (DW88-17). Cairn, lithic item.	South	11, 12
"	EL	13, 14	Overview of 39DW144 (DW88-18). Lithic scatter.	SE	13, 14
8/10/88	EL	15, 16	Overview of 39DW145 (DW88-19). Cairn.	SSW	15, 16
8/11/88	EL	17-20	Unrelated survey		17-20
8/12/88	EL	21, 22	View of IF32, homemade trailer house.	South	21, 22
"	EL	23, 24	Same as above shot.	North	23, 24
8/13/88	EL	25	View of 39DW146 (DW88-20). Cairn.	ENE	24a

PHOTOGRAPHIC RECORD
Archeology Laboratory, Center for Western Studies

Project Dewey County Survey

Color Slides Black & White Prints X

Roll No. 4

Date	Photog's Initials	Exposure No.	Subject	Looking Toward	Neg. Cat. No.
8/13/88	EL	1	View of 39DW146 (DW88-20). Cairn.	ENE	0

PHOTOGRAPHIC RECORD
Archeology Laboratory, Center for Western Studies

Project Dewey County Survey (Geomorphology)

Color Slides Black & White Prints X

Roll No. 5

Date	Photog's Initials	Exposure No.	Subject	Looking Toward	Neg. Cat. No.
10/22/88	PW	4-8	Walth Bay.	--	4-8
10/23/88	PW	9-16	39DW213.	West	9-16
"	PW	17-23	39DW14.	--	17-23

PHOTOGRAPHIC RECORD
Archeology Laboratory, Center for Western Studies

Project Dewey County Survey (Geomorphology)

Color Slides Black & White Prints X

Roll No. 6

Date	Photog's Initials	Exposure No.	Subject	Looking Toward	Neg. Cat. No.
10/24/88	PW	1, 2	Locality 4.	--	1, 2
"	PW	3, 4	Locality 4.	--	3, 4
"	PW	5, 6	Locality 6.	NW	5, 6
"	PW	7, 3	Locality 6.	NE	7, 8

PHOTOGRAPHIC RECORD
Archeology Laboratory, Center for Western Studies

Project Dewey County Survey

Color Slides X Black & White Prints

Roll No. 1

Date	Photog's Initials	Exposure No.	Subject	Looking Toward	Neg. Cat. No.
7/11/88	WR	1, 2	39DW129 (DW88-1).	--	
7/12/88	WR	3	View west from datum to mapping station #2. 39DW130 (DW88-2).	West	
"	WR	4	39DW130 (DW88-2). Feature 7.	West	
"	WR	5	39DW130 (DW88-2). Feature 8.	WSW	
"	WR	6	39DW130 (DW88-2). Feature 9.	North	
"	WR	7	Thrown out		
"	WR	8	39DW130 (DW88-2). Ed at Feature 3. Feature 2 left background.	ESE	
7/13/88	KL	9	39DW131 (DW88-3). Lithic scatter.	SE	
"	KL	10	DW88-4. Gravel test.	N	
7/20/88	PF	11	39DW213. Close-up of Feature 1. In profile of slump block.	North	
"	PF	12	39DW213. Overview of slump with Feature 1.	NE	
"	PF	13	39DW213. Slumpage of site area.	North	
"	PF	14	39DW213. Slumpage of site.	NE	
"	PF	15	39DW213. Slumpage of point on north of site. From site.	NNW	

PHOTOGRAPHIC RECORD
Archeology Laboratory, Center for Western Studies

Project Dewey County Survey

Color Slides X Black & White Prints

Roll No. 1

Date	Photog's Initials	Exposure No.	Subject	Looking Toward	Neg. Cat. No.
7/20/88	PF	16	39DW132 (DW88-5). Depression ca. 200 m east of old farm machinery, lumber, and trailers.	South	
7/23/88	PF	17	39DW14. House depression on south of site eroding into reservoir.	SSW	
"	PF	18	39DW14. House depression on east of site eroding into reservoir.	South	
"	PF	19	39DW14. Same as above. From shore.	West	
"	PF	20	39DW14. View of site from fence cutting through middle - to north. Gravel quarry across bay in left background.	North	
"	PF	21	39DW14. Overview from center of site (along fence).	South	
7/24/88	PF	22	DW88-6. Three probable billboard post depressions on ridgetop.	West	
7/25/88	PF	23	Taken from top of oldest gravel pile area where sherds and flakes were found near edge of flat. 39DW18.	East	

PHOTOGRAPHIC RECORD
Archeology Laboratory, Center for Western Studies

Project Dewey County Survey

Color Slides X Black & White Prints _____

Roll No. 1

Date	Photog's Initials	Exposure No.	Subject	Looking Toward	Neg. Cat. No.
7/25/88	PF	24	39DW18. From top of gravel pile area to SSE.	SSE	
"	PF	25	39DW18. Edge of flat on east side of area. Where flakes, bones and sherds were found.	South	
7/26/88	EL	26	Overview of 39DW133 (DW88-7). Brunton over datum and Corps marker.	North	
"	EL	27	Overview of 39DW134 (DW88-8). Brunton over datum.	West	
"	EL	28	IF12. Overview of 11 of the 12 rock piles.	NE	
"	EL	29	39DW135 (DW88-9). Overview of lithic scatter and three rock piles on ridge.	South	
"	EL	30	39DW135 (DW88-9). Close-up of northern- most (of 3) rock piles on ridge - tape & 1 m.	SW	
7/27/88	EL	31	39DW136 (DW88-10). Rock pile outside of Corps land. Corps stake in background, next knoll.	ENE	
"	EL	32	39DW137 (DW88-11). Stone circle and four cairns. Overview.	NE	

PHOTOGRAPHIC RECORD
Archeology Laboratory, Center for Western Studies

Project Dewey County Survey

Color Slides X Black & White Prints

Roll No. 1

Date	Photog's Initials	Exposure No.	Subject	Looking Toward	Neg. Cat. No.
7/27/88	EL	33	39DW137 (DW88-11). Stone circle. 36 m SW of second cairn from east. 6.6 m E-W, 6.7 m N-S. 65 rocks.	SW	
"	EL	34	39DW137 (DW88-11). Eastern two stone cairns.	ESE	
7/28/88	EL	35	39DW138 (DW88-12). Overview of 5 of 6 rock cairns, small and large depressions.	NE	
7/31/88	EL	36	Overview - bridge.	WNW	
7/31/88	EL	37	Overview - south end of project	NW	

PHOTOGRAPHIC RECORD
Archeology Laboratory, Center for Western Studies

Project Dewey County Survey

Color Slides X Black & White Prints _____

Roll No. 2

Date	Photog's Initials	Exposure No.	Subject	Looking Toward	Neg. Cat. No.
7/31/88	EL	1, 2	Overview - south end of project.	NWN	
"	EL	3	Narrow ridges north of Frank D. Ducheneaux memorial chapel.	NW	
"	EL	4	Patch Skin Buttes.	North	
8/6/88	EL	5	River and project area.	SW	
"	EL	6	River and project area.	NNE	
"	EL	7	River and project area.	SSW	
"	EL	8, 9	Strata on point of land.	SSW	
"	EL	10	Overview of point of land.	East	

PHOTOGRAPHIC RECORD
Archeology Laboratory, Center for Western Studies

Project Dewey County Survey

Color Slides X Black & White Prints _____

Roll No. 2

Date	Photog's Initials	Exposure No.	Subject	Looking Toward	Neg. Cat. No.
8/6/88	EL	11	Cutbank on point, bone and charcoal 4 & 7 ft. bs; oxidized soil at ca. ½ ft. All in indenta- tion in bank, left center. Looks like recent pot hunting (footsteps, melon rinds, disturbed soil).	North	
"	EL	12	Overview of 39DW139 (DW88-13). Above/on cutbank in preceding shot.	SE	
"	EL	13	Overview of 39DW140 (DW88-14). Cairn(s), flake.	SE	
8/7/88	EL	14	Overview of 39DW141 (DW88-15). Cairn.	SE	
"	EL	15	Overview of 39DW142 (DW88-16). Cairn.	ESE	
8/8/88	EL	16, 17	View of project area, mouth of Swift Bird Bay.	ESE	
"	EL	18	Overview of 39DW143 (DW88-17). Cairn, lithic item.	South	
"	EL	19	Overview of 39DW144 (DW88-18). Lithic scatter.	SE	
8/10/88	EL	20	Overview of 39DW145 (DW88-19). Cairn.	SSW	

PHOTOGRAPHIC RECORD
Archeology Laboratory, Center for Western Studies

Project Dewey County Survey

Color Slides X Black & White Prints

Roll No. 2

Date	Photog's Initials	Exposure No.	Subject	Looking Toward	Neg. Cat. No.
8/10/88	EL	21	View of buried soil on big island.	NW	
"	EL	22-24	View of larger of two islands.	West	
8/11/88	EL	25, 26	Unrelated survey.		
8/12/88	EL	27, 28	View of south end of Corps project area.	NW	
"	EL	29, 30	Rattlesnake.	South	
"	EL	31	View of IF32, homemade trailer house.	South	
"	EL	32	Same as above shot.	North	
8/13/88	EL	33	View of 39DW146 (DW88-20). Cairn.	ENE	

PHOTOGRAPHIC RECORD
Archeology Laboratory, Center for Western Studies

Project Dewey County Survey

Color Slides X Black & White Prints _____

Roll No. 3

Date	Photog's Initials	Exposure No.	Subject	Looking Toward	Neg. Cat. No.
	KL	1	Patch Skin Buttes and south end of project area.	--	
	KL	2, 3	South end of project area.	--	
	KL	4	Patch Skin Buttes and south end of project area.	--	
8/12/88	KL	5, 6	Rattlesnake	--	
	KL	7	Medicine Rock sign.	West?	
	KL	8	Medicine Rock	NW	
8/15/88	KL	9	39DW14.	SE	
"	KL	10	39DW14.	East	
"	KL	11, 12	Down Buffalo Skin Creek.	SE	
"	KL	13, 14	Down Swift Bird Creek.	SE	
	KL	15, 16	Medicine Rock sign?	West?	

APPENDIX F

Archive Description

All original field records, maps, profiles and photographic negatives are the property of the U.S. Army Corps of Engineers. They will be stored with the artifacts at the South Dakota Archaeological Research Center.

LIST OF ARCHIVAL MATERIALS

1. Daily log and site notes and forms
2. Original field plans and profile drawings and descriptions
3. All black-and-white negatives and color slides
4. Original mylar site maps/plans
5. Various correspondence
6. Specialists' reports (prehistoric ceramics, geomorphology, historic material)
7. Miscellaneous records
8. Research notes

APPENDIX G

Scope-of-Work

SCOPE OF WORK
CULTURAL RESOURCE RECONNAISSANCE
FROM BELOW THE MOREAU RIVER TO THE FOREST CITY RECREATION AREA

ARTICLE I

1. The work to be accomplished by the Contractor shall consist of a cultural resource reconnaissance (Class II Inventory) between the Moreau River and Forest City Recreation Area in Dewey County, South Dakota. The reconnaissance area is located on Oahe project lands, from the waterline to the takeline, below the mouth of the Moreau River between the N 1/2 of Section 30, T. 16 N., R. 31 E., to the north section line of Section 2, T. 12 N., R. 31 E., (this end will include the entire Forest City Recreation Area). The survey will also include all islands within the lake between the aforementioned locations. The reconnaissance area represents approximately 5 percent (ca. 8,3000 acres) of the entire Lake Oahe Project. The Lake Oahe project consists of approximately 161,084 acres of land which are above the average normal operating pool of 1610 feet above mean sea level (a.m.s.l.). Maps of the reconnaissance areas are attached as Exhibit A.

2. The purpose of this reconnaissance is to meet the Omaha District's obligations to Federal preservation legislation and associated implementing regulations. The most pertinent for this investigation are: Public Law 86-523, Reservoir Salvage Act of 1960 as amended by P.L. 93-291; Public Law 89-665, National Historic Preservation Act of 1966 as amended by P.L. 96-515; Public Law 91-190, National Environmental Policy Act of 1969 as amended by P.L. 94-52; Public Law 95-341, American Indian Religious Freedom Act, Executive Order 11593; implementing regulations 36 CFR Parts 60, 63, 66 (draft), and 800. The cultural resources reconnaissance shall be conducted in a professional manner. Cultural resources are defined as any site, building, district, structure, object, data, or material significant in history, architecture, archeology, or culture.

3. The cultural resources reconnaissance shall consist of (a) an exhaustive search and comprehensive review of existing literature and historical records for the entire reconnaissance area; (b) a thorough field examination of the project lands; (c) data analysis; (d) preparation of a comprehensive investigation report (e) journal article and (f) public education program.

a. Literature and Records Search. Information for the literature and records search shall be obtained from but shall not be limited to, the following sources:

(1) Published and unpublished reports and historic documents such as books, journals, maps, theses, dissertations, and manuscripts;

(2) Files and data at the South Dakota State Library, Robinson Museum, South Dakota State Archives, University of South Dakota, South Dakota Archaeological Research Center at Fort Meade, Midwest Archeological Center of the National Park Service at Lincoln, University of Nebraska at Lincoln, U.S. Army Corps of Engineers, Bureau of Indian Affairs, Military Archives, the National Archives, the Smithsonian Institution, and historical societies near the project locale;

(3) County Registry of Deeds land records;

(4) Consultations with other qualified professionals known to have knowledge of cultural resources in the project area and with amateur archeologists and individuals knowledgeable in local history and prehistory and with Native Americans and Euro-Americans.

b. Field Examinations. The contractor shall conduct a thorough on-the-ground investigation of all selected project lands at and above the waterline (ca. 1610 a.m.s.l.) to the government takeline. All hatched areas in Exhibit A are excluded from the survey area. The investigation shall be of sufficient detail and intensity to clearly establish the existence, location, and approximate spatial boundaries of all cultural resources. The interval between individual survey crew members shall be contingent on ground terrain and surface visibility. The maximum recommended interval is 30 (150 ft.) meters. The intervals utilized shall ensure maximum but cost-efficient resource identification.

(1) The field investigation shall include a pedestrian examination from the waterline and beach, and outbanks to the Corps boundary (takeline). The purpose of the cutbank and shoreline investigation is to locate deeply-buried sites, provide information about the geological and environmental history of the project area, and assess the natural and human impacts. The geomorphology of the area will also be investigated. The geomorphological study must be discussed along with the other research topics in the proposal. The inspection may be conducted from a boat in areas which are not accessible on foot or where the increased horizontal distance from the cutbank afforded by the boat would be advantageous to the interpretation of features and soil strata. A boat may be useful to reach areas not easily accessible by roads.

(2) All aspects of the field examination shall be conducted by or under the direct supervision of a qualified archeologist. In addition, all historic or potential historic site areas shall be examined in the field by a qualified historical archeologist. If there are standing, or remnants of standing historical structures (foundations, ruins) visible, they shall be examined by a qualified architectural historian.

(3) Prehistoric sites shall be examined by a qualified prehistoric archeologist. All boundary definitions, cultural component identification, mapping, and recommendations for future testing of prehistoric sites shall also be conducted by or under the direct supervision of a qualified prehistoric archeologist.

(4) Geomorphological work shall be accomplished by a qualified geomorphologist/soils geologist. Data obtained for the survey area will be described and analyzed to develop hypotheses for the prediction of human settlement of this segment of Lake Oahe for all cultural periods and define areas of potential cultural remains.

(5) Historic sites shall be identified as to builder(s), occupants, or series of occupants, numbers of structures, and date of abandonment. If the above information cannot be obtained, it shall be so stated in the report and a list shall be included of all records repositories consulted

(e.g. registry of deeds, early maps (specify), Federal Land Office, ect.). All boundary definitions, mapping, soil coring, or recommendations for future investigations of historic archeological sites shall also be the responsibility of the qualified historical archeologist.

(6) Subsurface testing shall be confined to shovel testing and small diameter soil coring. The shovel testing is mandatory. It shall be limited, however, to areas with heavy vegetative cover in which surface visibility (of 20 percent or less) is not considered adequate for the location of cultural resources. Its use shall be confined to the verification of presence or absence of cultural resources and to establish boundaries for cultural resource sites. Small diameter soil coring shall be utilized at the supervisory archeologist's discretion. It shall normally be utilized at to confirm the presence or absence of cultural bearing stratum or features and to aid in the delineation of site boundaries. Subsurface testing to evaluate National Register significance is not a requirement of this contract. All shovel test areas shall be backfilled.

(7) The Contractor shall pick up and retain only those surface artifacts necessary for the Contractor to define the cultural component(s) in a particular site or which the Contractor feels may be of use in interpretive displays. All cultural material recovered from subsurface testing will be retained. All artifacts retained shall be carefully washed, catalogues, recorded, and stored during the field investigation.

(8) The field examination shall be conducted in close coordination with the Contract Administrator, South Dakota Field Archeologist, Oahe Project Manager and Chief of Natural Resources, Technical Officer, and the Cheyenne River Indian Sioux tribe. Field crews shall be subject to periodic onsite inspection by Corps representatives, without prior notice. The Contractor shall not enter upon private property without prior knowledge of the Oahe Project Manager. Arrangements for securing rights-of-entry upon privately-owned or leased lands are the responsibility of the Contractor. These arrangements shall be coordinated with the Oahe Project Manager. All vehicular traffic within the project area shall be restricted to existing roads and two-track trails.

(9) The Contractor shall keep clear, legible, standard field records available and current for periodic review by the Technical Officer. These records shall include, but shall not necessarily be limited to: field notebooks, Official South Dakota site survey forms, field maps, and photographs. One copy of each of the above field records shall be included in the cultural resources report as an appendix.

(10) Sites located in the field shall be delineated on the Government-furnished U.S.G.S. quadrangle sheets, Boating and Recreation maps, and aerial photographs. Professional quality site maps will be made for each site located under this contract. This will require use of a survey compass and metric tape or transit or alidade and metric rod. Each site will be marked by a site datum which will consist of 1 1/2 foot long 3/4 inch rebar or wooden stakes. All survey datums must be tied into a COE takeline marker, or other permanent Federal survey marker where possible; otherwise, the datum will be tied into some well-defined permanent feature. These will be indicated on all site maps. Rough sketch maps are not

acceptable.

(11) If during the course of this contract, the contractor becomes aware of the imminent degradation, destruction, or damage of apparently significant cultural resources or human remains, the Contracting Officer's Representative shall be notified immediately and a determination will be made by the Government of any action taken.

(12) Contractors wishing to set up field camps in State or Federal campgrounds shall be charged the normal user fees.

c. Analysis. Analysis shall be conducted of all data collected as a result of the literature search and field investigation. Analysis of data shall be directed toward the identification of site components and site boundaries. In addition, recommendations for future testing needs for sites shall be developed during this phase.

(1) The testing requirements developed shall specifically address information that is required for a determination of eligibility to the National Register of Historic Places. Areas within the site will be identified for possible test excavations.

(2) Analysis of artifacts and data shall be conducted by or under the direct supervision of a qualified professional of the appropriate discipline (prehistoric archeologist for prehistoric artifacts and historical archeologist for historic artifacts). All diagnostic artifacts shall be documented with good quality black and white photographs which include a size scale or technical scaled line drawings.

(3) All artifacts shall be permanently stored at a repository located within the boundaries of South Dakota mutually agreed to by the contractor and the Government. The contractor is responsible for shipping all collected artifacts and records. If the artifacts are stored with the South Dakota Archaeological Research Center, the contractor must complete all work involved with accessioning before the material is turned in. The archeological data and records must be made accessible to future researchers. All artifacts and data will be stored in containers clearly marked "Property of U.S. Army Corps of Engineers, Omaha District."

(4) Geomorphological analysis will describe the soils and geological formations and determine their distribution within the survey area. Depositional sequence and age of various strata should be determined from radiometric data where possible. Hypotheses should be generated which correlate the depositional sequences with human occupation for all currently recognized cultural periods as well as cultural variants (if possible). In particular, determination of areas which have potential to contain human cultural remains in an undisturbed condition should be defined.

d. Comprehensive Investigation Report. The Contractor shall prepare a comprehensive investigation report which details the work done, the study rationale, the investigation results, recommendations for additional work, and realistic management recommendations. The report shall include, but shall not be limited to, the following sections:

(1) Report Documentation Page, DD Form 1473. Complete all but sections 2 and 3. This form will be supplied by the Corps of Engineers.

(2) Title Page. The study type, location (project name and counties), report date, name of contractor, author/Principal Investigator, and Corps of Engineers contract number.

(3) Abstract. A brief synopsis of the work conducted, number and types of cultural resources identified and overall significance, and an overview of the management recommendations, which shall not exceed 150 words.

(4) Introduction. Identify the sponsor and contractor, the purpose for the investigation, discuss the type of investigation performed and location, indicate the disposition of the artifacts, and original records or other data. Discuss the report organization.

(5) Regional Location and Environment. A detailed description of the reconnaissance area including physical features and terrain, past and present vegetation and fauna, field conditions, past and present land uses, weather conditions during field work and weather patterns for the study area in general. The study area must be discussed within the larger framework of the physical region defined by the Grand/Moreau Management Study Units outlined in the "Management Plan for Archeological Resources in South Dakota, Part I: Study Units" and "South Dakota Historic Contexts: Historical and Architectural Resources."

(6) Previous Work. An enumeration and description of all previous cultural resources investigations conducted within the reconnaissance area, names of principal investigators, dates of the studies, study results, and an overview of the general adequacy and deficiencies of the past work.

(7) Overview. A detailed overview of the history and prehistory of the reconnaissance area, as revealed by the literature and records search. The relationship of the cultural history and prehistory of the reconnaissance area to the regional cultural history and prehistory of the study area shall be presented.

(8) Research Orientation. Develop and present theoretical and/or substantive goals and the methodology to be used in achieving them. Address problems and testable hypotheses that are realistic for this level of study. Research orientation should initially address the Research Questions and Goals for the Grand/Moreau Management Study Units outlined in the "Management Plan for Archeological Resources in South Dakota, Part I: Study Units" and "South Dakota Historic Contexts: Historical and Architectural Resources."

(9) Methods. Present the procedures used to accomplish the research design. Discuss how the field work was organized, scheduled, and undertaken. Detail the laboratory procedures and the methods used to analyze artifacts and other data recovered from the field.

(10) Inventory. Address all cultural resources or potential cultural resources identified by the literature search and/or the field

investigation.

(a) Sites identified during the literature and records search which could not be relocated during the field investigation shall be addressed and the following information shall be provided: (i) site name; (ii) reported location(s); (iii) site description(s); (iv) reference sources; (v) probable reason for not being able to locate it in the field (inundation, erosion, construction, agriculture, ephemeral nature of the resource, discrepancies in location, etc.) and recommendations.

(b) The information provided in this section for cultural resources or potential cultural resources located or relocated during the course of the field investigation shall include, but shall not be limited to: site name (if any), site number, County, State, site type (lithic scatter, farmstead, mound, etc.), component(s) or probable component(s), elevation, property owner(s) and address(es), tenant and address, a verbal description of the topographic position of the site, site size (or presumed size), strata and depth (if known), present vegetation, ground surface visibility at time of field investigation (in percent), nearest water (name and distance and pool elevation), condition (address current, projected, or past known impacts); if surface collections have been made, by whom and when, a review of artifacts collected; a description of any previous investigations at the site, location of artifacts, other material reported by owner, site specific recommendations, and remarks. The site specific recommendations shall include, but shall not be limited to, any recommendations for testing for National Register eligibility, if needed. The exact purpose of the recommended testing shall be indicated; e.g., to determine a site's aerial extent or depth, to verify or determine components present, to assess research potential, and/or to determine site integrity. The recommendations section shall also include any interim measures which can be taken to preserve the resource until it can be tested for National Register significance (stop cultivation, fence, etc.). If the Contractor determines that sufficient information was gathered during the course of this investigation to allow a determination of eligibility for inclusion in the National Register of Historic Places, then the Contractor shall complete a draft of the National Register nomination forms.

(c) A series of tables must be presented which cross references the inventory data by (i) legal location, (ii) cultural period, (iii) site number, (iv) cultural affiliation, where possible, (v) site type and (vi) management category.

(d) The maps shall include an overall site map of all sites in the reconnaissance area and individual site maps. The relationship of the sites on the site map shall be clearly established in relationship to legal and topographic features of the area. The maps shall be clear, professional quality maps that can be used to easily relocate the sites and site features. All site maps will be scaled drawings utilizing adequate land surveying techniques. Site maps will include all of the following features: (i) north arrow, (ii) scale, (iii) contour lines (not greater than 10' intervals), (iv) nearby vegetation such as trees, groups of shrubs, (v) foundations, ruins, (vi) individual artifacts or artifact scatters and (vii) distance and direction to nearest COE marker or other permanent Federal survey marker. The submission of sketch maps is not acceptable for use in

the report.

(11) Geomorphology - Discussion should minimally address soil formation and the potential for buried cultural resources.

(12) Study Area Recommendations. Synopses of the recommendations offered for individual resources and of adverse effects to cultural resource within the study area, their frequency of occurrence, and the impacts.

(13) References. Use the American Antiquity format for every publication, work, or interview cited in the report.

(14) Appendices. Official South Dakota site forms and field notes, maps, photographs, and a list of all artifacts collected. All locational data shall be restricted to state site forms which will be bound separately.

(15) Article. The Contractor shall submit a suitable article for submission to Plains Anthropologist, American Antiquity, other professional or popular journal on the results of the reconnaissance survey. This article shall include the following information in the abstract; name of sponsor, contract number, and brief description of the nature of the contract. The draft of the article shall be submitted no later than 30 calendar days after the draft copy of the report is sent for review. The article may focus on any facet of the research, but shall include the above information. The purpose of the article is to ensure a wider dissemination of the information derived from the study. The contractor is encouraged to communicate with the local people, especially Native Americans, to inform them of the purpose of the investigation specifically and archeology in general.

(16) Public Education. The contractor shall prepare and submit either a slide program with script or an edited video program, not to exceed 20 minutes in presentation, describing in terms understandable to the general public, the methods, purpose or results of the reconnaissance survey. A draft of the program shall be submitted no later than 30 days after the draft copy of the report is sent for review.

ARTICLE II. CONTRACTOR, INSTITUTIONAL, OR CORPORATION QUALIFICATIONS

1. The minimum professional qualifications for the Principal Investigator, prehistoric and historical archeologists, and key consultants (e.g. architectural historian) are those given in 36 CFR Part 61, Appendix A - Professional Qualifications. Consultants and supervisory personnel not covered in this CFR who are hired or subcontracted for their special knowledge and expertise must carry academic and experiential qualifications in their own fields of competence. The guidelines in paragraph (b) of this regulation will apply. Such qualifications are to be documented by means of vitae or resume attachments submitted with the proposal or at a later time if the consultant has not been retained at the time of proposal.

2. Any change in personnel after the award of contract must be approved by the Contracting Officer or Authorized Representative. A person replacing a vacated position must have a comparable background and knowledge of the study area to maintain the same level of expertise and quality of

performance. Failure to make an acceptable replacement could result in termination of the contract.

3. The Contractor must provide or demonstrate access to the following capabilities:

a. Adequate permanent field and laboratory equipment necessary to conduct operations defined in the scope of work. However, the qualification may be waived under circumstances of extreme need through negotiation.

b. Adequate laboratory and office space and facilities for proper treatment, analysis, and storage of specimens and records likely to be obtained from the project. This does not necessarily include such specialized facilities as pollen, geochemical, or radiological laboratories, but does include facilities sufficient to properly preserve or stabilize specimens for any subsequent specialized analysis.

3. Persons working under this contract are considered to be carrying out official agency duties under the Federal land manager's direction, associated with the management of archeological resources and therefore are exempt from obtaining an Antiquities Permit per Section 5(c) of 32 CFR Part 229 - Protection of Archaeological Resources Uniform Regulations. The District shall ensure that Sections 5 and 8 are met through qualifications submitted in the proposal and contract documents respectively. Section 7 is not applicable Indian sites and religious sites will not be harmed or destroyed under this contract.

ARTICLE III. REPORT SPECIFICATIONS

1. Ten (10) copies of the completed reconnaissance survey report, in draft form, shall be submitted to the Omaha District Office. The draft will be edited for major spelling and grammatical errors prior to submittal for review and comment or it will be returned for correction. The draft report will be submitted 180 calendar days after the contractor is notified to proceed. The Government shall have a maximum of 45 calendar days to review and comment. The contractor shall have 45 calendar days to include the review comments into the final report and submit the final original report with all negatives, photographs, maps, charts, tables, and standard drawings to the Government. The final edited text shall be prepared on 8-1/2 X 11 inch bond paper, single spaced, and be "camera ready." The Government will reproduce the final report for distribution to appropriate state and Federal agencies per ER 1105-2-50 and interested parties. The contractor will receive 25 copies for personal use.

2. Neither the contractor nor his representatives will release or publish any sketch, photograph, report, or other material of any nature obtained or prepared while this contract is in effect without specific written approval of the Contracting Officer's Representative.

ARTICLE IV. GENERAL SAFETY REQUIREMENTS

The Service Contract General Provisions Section 41, Service Contract Act of 1965, as amended, subparagraph (g) requires the contractor not to permit work under this contract in unsanitary or dangerous locations.

Proper health and safety standards (29CFR1925) are to be followed for the duration of the contract. These standards are to be used in conjunction with the "U.S. Army Corps of Engineers Safety and Health Requirements Manual," (EM 385-1-1, April 1981). The contractor will use the above to control or report hazards and injuries associated with equipment usage, surveying, and excavation methodologies.

INSPECTION AND ACCEPTANCE

1. The Government may, at any reasonable time, inspect the progress of the work. Such inspection, however, shall not be performed in such a way as to unduly affect the progress of the work. Final acceptance of the work will be made upon successful completion of the work required under the contract.
2. Several coordination meetings with the Contractor and the Technical Officer shall be scheduled as necessary. At least two meetings shall take place with representatives from the South Dakota State Historic Preservation Office. These meetings will not require additional travel by the Contractor.

DELIVERIES AND PERFORMANCE

1. Performance Period. The contractor shall complete the entire work and service, to the Government's satisfaction, not later than 270 calendar days from the contract award date.
2. Deliveries. The Contractor shall deliver all reports at no additional cost to the Government to the following address:
U.S. Army Corps of Engineers
Omaha District, ATTN: OCMRO-PD
215 North 17th Street
Omaha, NE 68102-4910

APPENDIX H

Proposal Submitted by the Archeology Laboratory

TECHNICAL PROPOSAL TO
CONDUCT A
CULTURAL RESOURCE RECONNAISSANCE
OF THE RIGHT (WEST) BANK OF LAKE OAHE
IN
DEWEY COUNTY, SOUTH DAKOTA
FROM BELOW THE MOREAU RIVER TO THE FOREST CITY RECREATION AREA

FOR
THE U.S. ARMY CORPS OF ENGINEERS
(DACW45-88-R-0006)

SUBMITTED TO

U. S. ARMY, CORPS OF ENGINEERS, OMAHA DISTRICT

APRIL 19, 1988

ARCHEOLOGY LABORATORY OF THE CENTER FOR WESTERN STUDIES
AUGUSTANA COLLEGE, SIOUX FALLS, SOUTH DAKOTA

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APPROVAL:

L. ADRIEN HANNUS

PRINCIPAL INVESTIGATOR

DATE: APRIL 19, 1988

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ATTACHMENT 1: PERSONNEL VITAE

This project calls for a reconnaissance survey of approximately 8,300 acres (12.97 sq. miles) of Oahe Project lands in Dewey County, SD, from below the mouth of the Moreau River to, and including, the Forest City Recreation Area. The survey area also includes all islands within the reconnaissance area and lands above the normal operating pool level of 1610 feet above sea level. This area is within the Grand/Moreau Management Study Unit/Archeological Region as outlined in the "Management Plan for Archeological Resources in South Dakota, Part I: Study Units " [Buechler 1984:draft and as amended, CSDA 1986].

Because of the nature of this project and its location within an area where a variety of previous investigations have taken place, the activities outlined in this proposal are designed to address specific issues raised by the previous work and to focus on the evaluation of the cultural resources located in the project area with regard to their research potential, National Register eligibility status and management priorities.

Investigation

The cultural resources reconnaissance will include:

- 1) An exhaustive search and comprehensive review of existing literature and historical records for the entire reconnaissance area;
- 2) Consultations with professionals, amateurs, members of the Cheyenne River Sioux tribe, and others knowledgeable in the local history and prehistory of the area;
- 3) Pedestrian examination of cutbanks/shoreline, using a boat when necessary (e.g., for access to islands), to locate deeply buried sites and record geomorphological data to provide geological/environmental information and assess natural and human impacts;
- 4) Use of a qualified archeologist to conduct all aspects of the survey;
- 5) Evaluation of all historic sites by a historical archeologist who shall undertake field examination of sites to establish such factors as significance and historic setting/age;
- 6) Examination of all standing historical structures by a qualified architectural historian;

7) Subsurface testing confined to small diameter coring and shovel testing (mandatory in areas of heavy vegetation cover in which surface visibility [of 20 percent or less] is not considered adequate for the location of cultural resources);

8) Geomorphological study of the project area;

9) Collection of artifacts restricted to 'diagnostics', items useful in interpretive displays and material from subsurface tests.

Analysis

Goals of analysis, utilizing data from all aspects of the project, shall include 1) the identification of site components and site boundaries; 2) testing the hypotheses, set out below, for site location in the project area (based on prior work by the Archeology Laboratory of the Center for Western Studies (ALCWS)); 3) redefining hypotheses of settlement patterns for this region using the survey data; and 4) developing recommendations for future testing needs.

Reports

The following reports will be prepared.

- 1) Comprehensive Investigation report
- 2) Journal article
- 3) Public education program

Schedule

Finished report within 270 days (9 months)

Draft report within 180 days (6 months)

Review 45 days (1½ months)

Final preparation 45 days (1½ months)

As required in the scope of work, close contact will be maintained with the Corps of Engineers contract administrator, the South Dakota Field Archeologist, Oahe Project Manager and Chief of Natural Resources, Technical Officer and the Cheyenne River Indian Sioux Tribe. Reports and field notes held by the contractor will be available for inspection at all times.

Ten copies of the Final Draft Report will be submitted within 180 days after receipt of Notice to Proceed. A journal article and short

video or slide presentation will be submitted within 30 days of submittal of the draft report.

All work done on this project will be carried out according to the highest professional standards. Survey and report preparation will follow standards outlined by the Council of South Dakota Archaeologists, the South Dakota Historic Preservation Center, and those indicated in the scope of work.

Purpose of Survey

The stated purpose of this reconnaissance is to meet the Omaha District's obligations to Federal Preservation legislation and associated implementing regulations as follows:

Public Law 86-523, Reservoir Salvage Act of 1960 as amended by P.L. 93-291 (Archaeological and Historic Preservation Act of 1974 - Moss Bennett Act).

Public Law 89-665, National Historic Preservation Act of 1966 as amended by P.L. 96-515.

Public Law 91-190, National Environmental Policy Act of 1966 as amended by P.L. 94-52.

Public Law 95-341, American Indian Religious Freedom Act.

Executive Order 11593

Implementing regulations:

36CFR Part 60: National Register of Historic Places.

36CFR Part 63: Determinations of eligibility for inclusion in the National Register of Historic Places.

36CFR Part 66(draft): Recovery of scientific, prehistoric, historic, and archeological data: methods, standards, and reporting requirements.

36CFR Part 800: Protection of Historic and Cultural Properties.

The personnel of ALCWS have worked continuously with these and other regulations for over a decade and have produced reports which exceed the requirements. Copies of all the laws and implementing regulations are on file at the Archeology Laboratory.

The project lands are located on the west bank of Lake Oahe Reservoir in Dewey County. The survey area extends from near (south of) the confluence of the Moreau River with the Missouri River (Oahe Reservoir) south to Forest City Recreation Area at the point where the river bends almost due west.

The climate of this region is typically continental, with cold winters and warm to hot summers. Conditions are limiting or marginal for most crops. The average annual precipitation is approximately 16.5 inches. The terrain is quite variable, with steep breaks as well as level terraces often located above the reservoir.

The following general cultural overview for the Middle Missouri subarea is drawn from recent reports prepared by ALCWS (Winham, Nowak and Butterbrodt 1984; Winham and Lueck 1987) and emphasizes the broader regional perspective needed to interpret the archeology of the Missouri Trench. This overview is followed by a discussion of the project area based on an extrapolation of the information derived from recent projects undertaken by ALCWS in the specific project vicinity (Winham and Lueck 1983, 1987; Winham, Lippincott and Lueck 1988).

The Middle Missouri subarea has long been a major focal point for human occupation and exploitation of the Northern Plains, providing a major, diverse resource base and transportation route along the Missouri River valley. Identified archeological sites in the subarea represent six major, often overlapping, periods: 1) the Paleoindian period (10,000 - 6,000 B.C.), 2) the Plains Archaic or Foraging period (6,000 - 0 B.C.), 3) the Plains Woodland period (A.D. 1 - 900), 4) the Plains Village period (A.D. 900 - 1862), 5) the Early Historic period (A.D. 1700 -1860), and 6) the Late Historic period (A.D. 1860 - present).

Paleoindian Period (10,000 - 6,000 B.C.)

Knowledge of the Paleoindian period is derived primarily from kill/butchering sites and small ephemeral encampments scattered throughout the High Plains where the implements of nomadic hunters have been found in association with the bones of mammoth and extinct forms of bison. Technologically, the period is characterized and partially defined by its most representative artifacts, the fluted and unfluted

lanceolate projectile points and knife forms. The variability in point types and the wide distribution over the Plains suggest a highly mobile lifestyle (Wormington 1957; Irwin and Wormington 1970; Irwin-Williams et al. 1973; Frison 1978).

This period is, as yet, very poorly represented in the Middle Missouri subarea with the exception of the Walth Bay (39WW203) and Travis 2 (39WW15) sites located near Mobridge, both of which contained Agate Basin-like points (Ahler et al. 1974; Ahler et al. 1977), and the Moe site (32MN101), located in North Dakota, which contained Clovis points (Schneider 1975). It was previously thought that the Medicine Crow site (39BF2), located near Ft. Thompson, contained a Paleoindian component (Irving n.d.), but recent work with the assemblage indicates that its occupation probably did not begin until the Early Plains Archaic period (Ahler 1980).

Although the paucity of such sites suggests limited utilization of the Middle Missouri Trench by Paleoindian groups, it is also possible that many of these very early sites were destroyed or deeply buried during the formation of the Missouri (Brakenridge and McCreedy 1988:452). To date, the most completely investigated Paleoindian site in South Dakota is the Lange/Ferguson site (39SH33), a Clovis-age mammoth butchering locale in the White River Badlands (Hannus 1985b).

Plains Archaic Period (6,000 - 0 B.C.)

The Plains Archaic or Foraging period represents a nomadic, broad-spectrum foraging adaptation to the Plains, which is probably a readjustment of the Paleoindian lifeway resulting from the extinction of many species of Pleistocene megafauna and the changing Plains environment which required a radical shift in subsistence practices. These subsistence practices appear to include generalized resource exploitation based on both large and small game hunting and an apparent increase on the reliance of plant resources, with a shift away from specialized big game hunting. Technologically, there appears to be a related shift to more regionally restricted patterns of tool manufacture which is most apparent in the appearance of many different styles of notched and stemmed projectile points.

The few Archaic sites known from the Middle Missouri subarea were deeply buried, a condition which may explain the relative scarcity of

these sites compared to later periods, although it is assumed that the population density during later periods was also much larger than during the Archaic. Early Archaic components are represented at Travis 2 and Medicine Crow by transitional lanceolate point varieties (Ahler et al. 1977; Ahler 1980), while later Middle Archaic McKean/Hanna types are found at Walth Bay and Medicine Crow as well as at the McBride Mounds site (39BF219) near Ft. Thompson (Ahler et al. 1974; Irving 1958; Neuman 1964).

The Late Plains Archaic evolves on the Northern Plains with manifestations of the Pelican Lake point complex replacing McKean. No well defined Pelican Lake sites have as yet been dated in South Dakota, although the Pelican Lake Corner-Notched point type is found frequently in surface collections in the Black Hills (Haug 1976) and in outwashed cultural deposits in the White River Badlands (Hannus et al. 1983; Hannus et al. 1984).

Three Archaic sites have been identified in the Indian Creek Recreation Area near Mobridge on the east bank of Lake Oahe (Winham and Lueck 1983). One of these sites, 39WW42, was dated to 3230±120 B.P. and appears to be related to the Pelican Lake point complex.

Plains Woodland Period (A.D. 1 - 900)

Sites assignable to the Plains Woodland period, the third major prehistoric period, are rather common in the Middle Missouri subarea. Known sites include both mound (tumuli) and habitation (semipermanent camp) locations. The Plains Woodland tradition is usually viewed as a time of innovation during which many new technological, economic, and social elements make their appearance, probably diffusing into the subarea from the Eastern Woodlands. Subsistence patterns are similar to those of the preceding Plains Archaic tradition, although a high dependence on bison hunting is now apparent and suggests the return to a more specialized hunting pattern. Incipient horticulture may also have been a component of Plains Woodland subsistence, although current evidence is inconclusive. Other innovations of importance include ceramics, the first documented use of semipermanent dwellings (i.e., Hoffman 1968), the bow and arrow, and mortuary ceremonialism as evidenced by elaborate burial mounds. All of these factors suggest a

more complex, stable and sedentary lifeway than was present during the preceding periods.

The Woodland period manifestation in the Middle Missouri subarea is primarily represented by what has been classified as the Sonota complex (Neuman 1975), which appears to be a blending of Plains Archaic tradition traits associated with bison hunting specialization, as reflected in the Besant point types, and the diffused characteristics of the Eastern Woodland tradition (Nowak 1981). The Besant point apparently evolves from the earlier Pelican Lake point complex (cf. Kehoe 1974). The Besant point is recognized by the characteristic atlatl dart point configuration, having shallow notches and rounded shoulders; the basic type is known as Besant Side-Notched. With the technological transition from atlatl to arrow between A.D. 420 and A.D. 750, the Samantha Side-Notched, the smaller corresponding arrow point of the Besant technocomplex, replaces the Besant Side-Notched (Reeves 1970:89, 90).

Haberman (1979) has reported a small, temporary aceramic occupation site (39ST80) assignable to the Sonota complex which yielded two Besant-like points. The site is situated on the uplands at the edge of the Missouri breaks about 48 miles south of the project area.

Plains Village Period (A.D. 900 - 1862)

The Plains Village period, in terms of the number of sites known, is the most predominant cultural phenomenon in the Middle Missouri subarea. The period encompasses the Late Prehistoric and Early Historic time frames, and is broken down by Lehmer (1971) into a number of taxonomic units. Using Lehmer's system, the Plains Village period includes the prehistoric Middle Missouri tradition and the prehistoric and historic Coalescent tradition, which are comprised of seven variants: 1) Initial Middle Missouri (A.D. 900 - 1400); 2) Extended Middle Missouri (A.D. 1100 - 1550); 3) Terminal Middle Missouri (A.D. 1550 - 1675); 4) Initial Coalescent (A.D. 1400 - 1550); 5) Extended Coalescent (A.D. 1550 - 1675); 6) Post-Contact Coalescent (A.D. 1675 - 1780); and 7) Disorganized Coalescent (A.D. 1780 - 1862). While the major framework of Lehmer's taxonomic scheme for the Plains Village period is still usable, continuing research in the subarea makes it

clear that revisions are needed, particularly in unit definition and chronology.

Plains Village tradition sites are best known as extensive earthlodge villages, both fortified and unfortified. Other, less well-known, site types include isolated earthlodges, campsites, burial grounds, and activity areas. Such sites were once common along both sides of the Missouri River throughout most of the subarea, particularly on level terraces and bottomlands. Prominent features of the tradition include semisedentary settlement and subsistence based on horticulture, hunting, particularly of bison, and gathering of wild plants. The innovations noted for the preceding Plains Woodland period (i.e., increased sedentism, horticulture, ceramic manufacture, the bow and arrow, and substantial dwellings) all manifest themselves in more fully developed and complex forms during this period. It is evident that the overall social complexity in Native American lifeways reached its height in the subarea during the Plains Village period.

Fully developed village culture is first seen in the subarea with the emergence of the Initial Middle Missouri variant. Groups of this variant are thought to have entered the subarea from the east, ostensibly under the distant influences of Mississippian culture (Lehmer 1971; Wedel 1961). The Initial Coalescent variant arises from the next major population movement into the subarea. This migration of peoples from the Central Plains is interpreted to be the result of environmental stress, principally drought. In Lehmer's (1971) view, the product of these movements of village peoples was a "coalescence" of village lifeways into later Coalescent variant groups, resulting from culture contacts, conflicts, and exchange of ideas. This process ultimately led to the development of the historically known Arikara, Mandan, and Hidatsa village tribes.

During the Protohistoric and Early Historic time frames (ca. A.D. 1675 - 1800), the development of the Euroamerican/Native American fur trade caused fundamental changes in Plains Village lifeways, as well as the lifeways of all other Northern Plains groups. The acquisition and trade of European manufactured goods became a major aspect of village economies, eventually leading to drastic alterations throughout the entire village social structure (Ewers 1954; Wood 1972, 1974; Deetz 1965). Epidemic diseases introduced into the subarea at this time also

had a disastrous effect on traditional village culture, resulting in severe population reduction and extreme cultural disruption. As a result of these historical processes of change, the Plains Village period came to an end in A.D. 1862 with the amalgamation of the surviving Arikara, Mandan and Hidatsa into a single village at Like-a-Fishhook, their last traditional earthlodge settlement (Smith 1972). Two sites inundated near the project area, the Rosa site (39P03) and the Four Bear site (39DW2), are considered ancestral to the Arikara [Post-Contact Coalescent archeologically] (Hurt 1959; 1962).

Early Historic Period (A.D. 1700 - 1860)

With the advent of the fur trade and the introduction of European manufactured goods and the horse, a new Native American force arose on the Northern Plains - nomadic Equestrians. These relative newcomers began to rapidly replace Plains Villagers as the dominant cultural entity in the subarea. During the early 1700s nomadic tribes began moving onto the Northern Plains from the east under the pressures of the expanding Euroamerican frontier and intertribal warfare. These Plains Equestrians became historically known groups such as the Sioux, Cheyenne, Crow and Assiniboin. After 1780, as smallpox decimated the village tribes, the mounted nomads (especially the Sioux), who were less hard hit by the epidemic, were able to dominate the Middle Missouri well into the Historic period. However, sites relating to these groups are rarely identified and little archeology is directly attributable to them.

Occurring along with the rise of the Plains Equestrian groups, was the development of the Euroamerican/Native American fur trade, which actively operated in the Middle Missouri during most of the nineteenth century. Euroamerican fur trading posts, at one time, were a common type of archeological site in the region. However, these sites, like all other types of sites, have suffered from dam and reservoir construction, and few intact examples exist today.

Individuals who may have been closely associated with the fur trade in and near the project domain include licensed traders located near the mouth of the Little Cheyenne River in 1830 (The Wi-Iyohi 1954 7(11):8), from 1836 to 1839, and in 1843 (The Wi-Iyohi 1967 21(2)). The American Fur Company maintained a satellite to Fort Tecumseh at the Little

Cheyenne River, "...probably at the timber at its mouth...(with)...J. Holiday...the trader there in 1830..." (The Wi-Iyohi 1954 7(11):8). Other licensees who traded on the Little Cheyenne River and may have used a post there are Pratte, Choteau & Company in 1836; William Sublette in 1843; LeClerc & Garvin in 1837; and Berain & Provanché in 1838 (The Wi-Iyohi 1967). An unidentified individual has unofficially penciled in the location for a Trading Post 1832 at the same location on the 1904 Historical Atlas of South Dakota (by E. Frank Peterson) filed at the South Dakota State Historical Society. It should be noted that the 1967 article of The Wi-Iyohi cited above does not positively identify a post as having been at the mouth of the Little Cheyenne River. Mattison (1954) also does not mention such a post.

Late Historic Period (A.D. 1860 - Present)

Toward the end of the fur trade era U.S. military occupation of the Middle Missouri began. A number of Indian agency posts and forts were established along the Missouri (Athearn 1967). The purpose of the military was to subjugate and pacify the native population in order to secure the region for permanent Euroamerican settlement. While not as numerous as the fur posts, U.S. military establishments were once rather common in the region.

Military expeditions associated with the general region reflect a military presence designed to first subdue or control the activities of Indian groups to promote the fur trade, then to protect miners headed for the gold rush in Montana and Idaho in the late nineteenth century, and, lastly, to protect frontier settlements (Athearn 1967:214-215, 268, 276). The military presence also included a chain of forts along the Missouri River and across the Dakota Territory. The army posts nearest the current project lands were just upriver and downriver from the project domain. The Grand River Agency (1870 to 1875) was located near the mouth of the Grand River; the Cheyenne River Agency Post II and Fort Bennett I and II (active 1870 to 1891) were all located about 5 miles below the mouth of the Cheyenne River; and Fort Sully No. 2 or New Fort Sully (1866 to 1894) was located about 13 miles below the Little Bend Recreation Area (Mattison 1954).

Fort Sully was named after General Alfred H. Sully. Sully led a military expedition in 1863 and again in 1864 along the east side of the

Missouri River. The 1863 expedition was in pursuit of Santee Sioux who had fled from Minnesota in the Indian uprising which began in 1862; the 1864 expedition was an attempt to engage and defeat not only the Santee, but also the many Teton Sioux, Yanktonais, and Cheyennes involved in the uprising by that time (Robinson 1973).

Both of Sully's expeditions passed across from the project area at the Whitlocks Bay Recreation Area. In 1863, Sully's expedition arrived at the mouth of the Little Cheyenne River near Forest City, which is inundated about a mile east of the project area. The expedition subsequently proceeded up the Little Cheyenne River to Bismarck (Robinson 1973:301). In 1864, Sully's company was again in the vicinity of the mouth of the Little Cheyenne River. Captain John Fielner, a topographical engineer, was shot and killed by three Indians as he drank from the creek at the crossing of the Little Cheyenne River. Though warned not to leave the column, Fielner and two other soldiers had gone to look at the Medicine Rock in the SE $\frac{1}{4}$ of Section 16, T118 N, R78W, about 2 miles east of the project area. Fielner's death was the first to occur in the 1864 campaign (Robinson 1973:310). When General Sully learned of this attack he sent Captain Miner and Co. A Dakota Cavalry after the Indians. The cavalry overtook the Indians after pursuing them for about 15 miles. Sully had the Indians decapitated and left their heads on poles on the hills nearby where they had been dispatched (Robinson 1973:310).

A number of reservations were formed to hold subjugated Indian groups (the Cheyenne River Indian Reservation borders the current study area). Reservation archeological sites consist of the remains of Indian agencies, including structures left from military, missionary, and Bureau of Indian Affairs occupation. Structural remains such as "dugouts" and cabins once occupied by the Native American population are also present. Native American burials from the Reservation period may also be encountered, commonly occurring as multiple grave depressions.

Once the subarea had been secured by the military, Euroamerican settlers began occupying the region. Early Euroamerican settlement sites consist of the remains of small communities, post offices, homesteads, and farm/ranch yards. Cemeteries of this period are also present, usually as small community or family plots.

Euroamerican settlement of the area began largely after the Civil War in 1868, when military posts providing protection from the Indians were reestablished (Chittick 1973:91). The areas were surveyed by the General Land Office in 1882 and 1884, for the most part. Euroamerican settlement of the region was complete by the early 1900s, and land use and settlement patterns had become more or less fixed, continuing until the present day. However, abandonment has occurred in the region for several reasons. Many towns which were created along the Missouri River when it was the major route of transportation were abandoned when competitive transportation became available. Railroads were the first major competitors; these were primarily built in the period from 1878 to 1885. Extensive hard-surface highway systems have had a depressing effect on the railroads similar to the effect of the railway system on river transportation (Alley 1979).

Periodic drought periods in the area, particularly the drought of the 1930s, have contributed to a cumulative form of abandonment represented by increases in the average farm size, reversal of a trend towards urbanization, and a major reversal in a trend of increasing population since the 1930s (Chittick 1973). The drought of the 1930s and the Great Depression were major factors behind the creation of the flood control and irrigation systems of which the large reservoirs such as Oahe are a part.

Previous Investigations

Relevant to the proposed project are the results of previous surveys of portions of Lake Oahe conducted for the U.S Army Corps of Engineers by several organizations (ALCWS, Larson-Tibesar, University of Nebraska-Lincoln, University of North Dakota-Grand Forks). Pertinent investigations conducted by ALCWS include: the recently completed survey of portions of Stanley and Dewey counties (Winham and Lueck 1987); a survey of the Cheyenne River Arm of Lake Oahe (Winham, Lippincott and Lueck 1988); the testing of sites along the east bank of Lake Oahe (Winham and Lueck 1983); a survey of four areas of the Ft. Pierre National Grasslands in Stanley County (Winham, Nowak and Butterbrodt 1984); the analysis of material from Moreau Village in Dewey County (Winham 1984); and several surveys conducted just off the Missouri River trench (e.g., Lueck, Butterbrodt and Winham 1984). ALCWS has also

worked directly with the Cheyenne River Sioux tribe and the BIA on several surveys (Winham and Butterbrodt 1984; Winham 1985),

Apart from the above projects, undertaken during the last 10-15 years, archeological and historical investigations in this area have been diverse and primarily concerned with salvaging material prior to reservoir construction and inundation. The work of W.H. Over (see Sigstad and Sigstad 1973) represents the beginning of systematic research in the Oahe Reservoir, which received more archeological attention than downstream reservoirs. However, the early Lake Oahe research emphasized sites of relatively late groups who lived in fixed villages (see Lehmer 1971).

Archeological studies and appraisals of the Oahe Reservoir performed under the Smithsonian Institution-River Basin Surveys (SIRBS) program include those by Cooper (in the 1940s); Lehmer (from 1950-51); Bowers (from 1963-1964); Hoffman (in 1966); and several others. Historical studies were completed by Mattes and Mattison. Pertinent references to the SIRBS investigations can be found in Cooper (1953), Jensen (1965), Lehmer (1954), Mattes (1947) and Mattison (1954). The level of site documentation revealed by these surveys and excavations is varied and many of the previously recorded sites are now inundated by the reservoir.

Project Expectations

Based on our prior work in the area, we will focus on the following broad-based research goals, which we believe have the greatest potential of being able to be addressed:

- 1) examination and delineation of areas with deeply buried and potentially early sites (pre-village);
- 2) further examination of the correlation of site types and settlement patterns with soil types and landforms.

The recovery of more site-specific data may permit evaluation of several less broad-based topics. These include:

- 3) further research into a number of generally defined prehistoric and historic cultural patterns in the Middle Missouri subarea;
- 4) further evaluation of the Extended Middle Missouri, Extended Coalescent and Post-Contact Coalescent variants in the region;

5) obtaining additional information on site variability in the Plains village periods;

6) studies of lithic utilization; and

7) documentation of historic site types and settlement patterns.

In regard to the potential to address topics 1) and 2) (above), it should be noted that the project area has the same and/or similar soils and soil associations (see Kalvels and Boden 1979) to those examined and evaluated by ALCWS during a 1985-1986 surface survey at locations 4 to 6 miles north of the proposed project area, in Dewey County, and ca. 21 miles southwest of the proposed project area, in Stanley County (Winham and Lueck 1987). Similar soil associations were also evaluated by ALCWS during 1982 excavations in the West Whitlocks Recreation Area, across from the south end of the project area, and in the Indian Creek Recreation Area, about 14 miles north of the project area.

Deeply buried soils which are Holocene silt caps on terrace remnants comprise about 4 percent (ca. 335 acres) of the project area. These lie on what appear to be MT3 cut terraces at the very south end of the project area and at the mouth of Four Bear Creek. These areas, on White's Landscape Unit 5 (White 1987:13), have the potential for deeply buried deposits several hundred to thousands of years old (White 1987:16; Coogan 1987; Brakenridge and McCready 1988:434, 454-455). Evidence of this potential is demonstrated by Paleoindian remains at the Walth Bay site (39WW203), located on the east bank, about 7 miles north of the project area (Coogan 1987:24-31; Ahler et al. 1974), and at the Travis 2 site (39WW15), situated on the east bank, about 14 miles north of the project area (Ahler et al. 1977).

ALCWS also found a strong correlation between deep soils/Landscape Unit 5 and the location of village sites in Dewey and Stanley counties (Winham and Lueck 1987:235-237; Winham 1985; Winham and Butterbrodt 1983). One objective of our proposed geomorphological study, therefore, will be to define areas with deeply buried soils, and correlate those areas with White's (1987), Brakenridge and McCready's (1988), and Coogan's (1987) expectations. Relatively deep cutbanks and slump blocks on the mainstem have been recorded in Whitlocks Bay (Winham and Lueck 1983) and in Dewey and Stanley counties (Winham and Lueck 1987), and were also noted by Lueck along the east bank of Lake Oahe when he participated in the University of Nebraska's 1978 survey (Falk and

Pepperl 1986). There is, therefore, a good potential to examine the vertical stratigraphy in the project area and to locate deeply buried cultural deposits.

As part of the analysis of the landscape-oriented study proposed here, ALCWS will evaluate the association of all types of sites and isolated finds with soil types/landscapes. This study will expand on our recent analysis of site locations in Stanley and Dewey counties (Winham and Lueck 1987:13).

Because the landscape and soil associations are essentially the same as those present in the 1987 Stanley/Dewey County study area, we are approaching this project with the expectation that site density and locational patterns will be similar to those observed in 1987. The proposed Dewey County project area will allow a decisive test of the patterns observed previously in the Stanley/Dewey County project area. These patterns include:

a) Earthlodge village sites will be associated with Landscape Unit 5 (Lowry silt loam - LwA and LwB). Preliminary information supporting this theory is provided by site 39DW215, recorded on Agar silt loam near the project area; and site 39DW213, located at least partly on Lowry silt loam, in the project area.

b) Reservation and historic occupations will be found primarily on Landscape Units 1-3.

c) Aboriginal lithic scatters, isolated finds, and stone cairn sites will be primarily associated with Landscape Units 1-3.

d) Few sites will be found in Landscape Unit 4.

e) A higher ratio, per portion of the project area, of aboriginal lithic scatters and/or isolated finds will be found in the gravelly Schamber-Sansarc complex and Schamber gravelly sandy loam soils than any other soil types (see Winham and Lueck 1987:237, 239). However, a mere 65 or so acres of these soils are represented in the project area.

f) Aboriginal isolated finds will be randomly distributed among the soil types.

The potential to address the less broad-based topics listed above (pp. 13-14, topics 3-7) is viewed as more limited than the potential to address topics 1 and 2. Within such limitations there is the potential to further evaluate lithic utilization in this region through time; and

to evaluate Plains Village period settlement in the area, as evidenced by inundated/excavated and reported Extended Coalescent variant and Post-Contact Coalescent variant sites nearby, including the Payne site (39WW302) (Wilmeth 1958); the Swan Creek site (39WW7) (Hurt 1957); the Four Bear site (39DW2) (Hurt et al. 1962); and the Rosa site (39P03) (Hurt 1959). Extended Coalescent components and one Extended Middle Missouri component are represented at several sites about 4 miles north of the project area, including 39DW219, 39DW220, 39DW223, 39DW225 and 39DW226 (Winham and Lueck 1987).

There is too little evidence to place reasonable expectations for the location of Archaic and Woodland remains, as they are not well represented in the immediate vicinity. A Late Plains Archaic (Pelican Lake) projectile point was found at site 39WW64 (Pepperl 1983), near Mobridge. The Middle Woodland Sonota complex is based in large part on burial mounds at four sites located about 8 miles north of the project area - Swift Bird (39DW233), Arpan (39DW252), Stelzer (39DW242) and Grover Hand (39DW240) (See Neuman 1975). A possible Woodland component may also be represented at 39P030 (Winham and Lueck 1983).

Historic use of the area is also represented by a number of inundated sites. Native American sites formerly on the Cheyenne River Indian Reservation include several church and/or cemetery sites (St. Stephens Mission and cemetery, and Calvary Church - 39DW14), and the Moreau Community Center (39DW219). Ascension Church (39DW254) is located near the north end of the project area (see Mattison 1954). Medicine Rock site (39P0203) is about 2 miles east of the project area. Reservation period family occupations in and near the project area also seem likely. Euroamerican presence is known from the nearby inundated sites of Old LeBeau (39WW7), New LeBeau, Scranton Post Office, Whitlocks Crossing (39P012), original Forest City (39P09), and Forest City (see Mattison 1954). Several campsites from the Lewis and Clark expedition of 1804-1805 are also inundated near the project area (Mattison 1954).

Obvious related Historic Contexts (Wood and Erpestad 1985) which may have representations in or near the project area are as follows:

- 1) Architectural remains of pre-earthlodge village groups (Unit No. I - Topic: Pre-Sioux Habitation - Study Unit: Single Unit) - Extended Coalescent and Post-Contact Coalescent Variants in particular.

2) Dakota/Lakota Indian occupation remains (Unit No. II - Topic: Sioux Era - Study Unit A, Indigenous Sites and Structures 1750 to Present; and B, Government-Constructed Sites and Structures, 1851 to Present).

3) Remains of log cabins, dugouts, soddies and claim or allotment shelters, small frame farm houses, and early farm buildings (Unit No. IV - Topic: Permanent Rural and Urban Pioneer Settlement - Study Unit A, Claim Structures 1858 to 1893; also Unit V - Topic: Depression and Rebuilding 1893-1929 - Study Unit E, Changing Rural Patterns and Impact of New Farm Technologies).

4) Indian schools (Unit No. II - Topic: Sioux Era - Study Unit: Government-Constructed Sites and Structures 1851 to Present).

5) Mission buildings (Unit No. II - Topic: Sioux Era - Study Unit: Christian Missions 1750 to Present).

Research problems associated with the Historic Contexts noted above (see Wood and Erpestad 1985) that appear to have some potential to be addressed include:

- 1) patterns of resettlement for the Sioux after 1876;
- 2) how government constructed sites and structures fit into the larger framework of nineteenth and twentieth century government-Indian history;
- 3) what elements of permanent pioneer settlement/claim structures fit a broad history of American settlement, and the role of the claim structures in the history of the site;
- 4) what differences, if any, exist between "ranches" and "farms";
- 5) how agricultural activity affected farm design(s).

The general research aims for this project are, on the one hand, methodological and, on the other hand, analytical. The project is essentially a survey to locate and record archeological sites and other evidence of past human activity. In accomplishing this task the goal will be to provide 100 percent intensive pedestrian coverage of the area, recording sufficient information to allow accurate reconstruction of survey conditions - e.g., transect spacing and ground surface visibility. The survey will be conducted in compliance with the suggestions and requirements set out in the scope of work, with any deviations explained/justified and fully recorded.

Analytically the research approach will focus on defining site boundaries, site components/chronology, and site locational characteristics. In terms of a "non-site" approach to research in the area, the results of the archeological survey will be incorporated with the geomorphological data relating to the formation of the present landscape to present what can be termed a "landscape-oriented" assessment of the study area as opposed to a "site-oriented" assessment. A broad definition of "landscape-oriented" involves the concepts of landscape and region as the focus of study rather than the individual archeological site. In a strictly site-oriented study, a survey which located no sites would be considered at best to have produced a negative data base. Applying the broader landscape-orientation, the same survey information assumes greater importance; namely, explanations must be developed either in terms of cultural or natural processes to account for a lack of sites.

Specific research questions that can potentially be addressed in the project area are many (see Buechler 1984); those more realistically expected to be addressed during this investigation have been discussed in the preceding section. Research will be conducted in a manner which will allow comparisons with similar studies completed or underway for other areas of the Missouri Trench. When possible, the results of such studies will be cross-referenced with the results of the proposed investigation, and any similarities or differences discussed. For instance, when possible, lithic item counts will be undertaken to determine density variation of flake and material types across the

sites. This information will then be compared with the results from other surveys along the Missouri Trench.

Site significance will be discussed in relation to the research questions, integrity of the sites, and their comparability with similar sites in the area in order to address the management of the cultural resources located. All sites identified will be ordered with reference to their significance (above), current state of preservation and future threats (e.g., erosion). Specific recommendations will be made for individual sites and/or archeological districts from a management standpoint, and the rationale for the explanations clearly presented.

ALCWS and the associated consultants for this project have undertaken numerous investigations directly relating to this area of the Middle Missouri. As a result of this previous work and the expertise and interests of our personnel, a detailed body of published and unpublished literature relating to this project has already been compiled. Therefore, the proposed literature and records search will be able to concentrate on certain specific aspects of the project.

Although our reference collection contains many of the important references for this area, we will also undertake specific literature reviews of the archives housed in Pierre and at the State Archeological Research Center in Rapid City, South Dakota. Additional records searches at the County Court House in Timber Lake and at the BIA Offices in Eagle Butte and Aberdeen will be conducted during or after the field survey for any historic sites located.

Based on the offeror's experience in numerous similar literature/records searches, specific knowledge of historic and prehistoric sites/activities can be obtained through one or more of the following sources: 1) printed oral histories; 2) accounts gathered by interviews; 3) map and plat map (or plat book) examinations; and 4) records and maps produced by professional investigations. Land records and deeds searches can also produce specific locational and temporal information. Most useful in identifying historic buildings of the settlement period are Government Land Office (GLO) survey maps, plat maps, and Corps of Engineers maps of the Missouri River. Oral histories, whether written or unwritten, provide considerable substance but are rare and/or difficult to obtain. Interviews with local artifact collectors frequently prove an invaluable source for locating sites. Land records and court records are usually accurate and accessible (though time-consuming to examine), but do not provide direct proof that specific landowners indeed occupied the land, even if homestead requirements presumed that they did. Newspapers of a period may provide a wide range of information about individuals, but infrequently have information of sufficient detail to document the exact locality of specific events.

The general format for the literature search will be as follows:

1. A list of the legal description of lands in the project area will be compiled. Additional pertinent literature sources will be drawn from references on hand in the Archeology Laboratory and available at The Center for Western Studies (CWS). Names of affiliates and informants, both Native American and non-Indian, known to ALCWS personnel, will be compiled to be contacted. The Mobridge and Gettysburg areas have been centers for both amateur archeologists and artifact collectors; therefore, this project will emphasize oral history research with both the Native American and non-Indian local population. Important informants for this project include Tim Nowak, Bob Alex and Marion Travis. Possible informants associated with the Cheyenne River Reservation include Leroy and Elroy DuBray, Harry DuBray, Arlee High Elk and Wayland Lilly.

2. Data from previous surveys and excavations conducted in and near the project area will be evaluated and histories/early accounts of the region examined.

3. The following repositories/sources will be consulted or visited:

a) Lincoln, Nebraska: the Midwest Archeological Center of the National Park Service; Love Library (University of Nebraska-Lincoln); the Division of Archeological Research and Department of Anthropology library, University of Nebraska-Lincoln (UNL); the Nebraska State Museum library; the Geography Department library (UNL); and the Nebraska State Historical Society.

b) Vermillion, South Dakota: the Anthropology Department and I.D. Weeks Library, University of South Dakota; the W.H. Over Museum; and the South Dakota Historical Preservation Center.

c) Pierre, South Dakota: the Robinson Museum; the South Dakota Department of Education and Cultural Affairs; the South Dakota State Historical Society; the Office of School and Public Lands; the State Library; the office of the U.S. Army Corps of Engineers Archeologist (South Dakota Area); and the Archives Resources Center. Government Land Office survey maps, field notes for the survey, and rare books and reports (uncirculated) are available under supervision at these offices.

d) Rapid City, South Dakota: records and sources at the State Archaeological Research Center will be examined and discussions about the project area will be held with Bob Alex, State Archaeologist.

4. Land records and deeds will be examined in the Dewey County Courthouse at Timber Lake. Names of all the landowners/patentees will be gathered when buildings are shown on the property and/or for historic sites located during the survey. Oral histories, written and unwritten, will be reviewed for the names of past landowners and tenants of lands in project domain. Land records will also be checked at the Bureau of Indian Affairs offices in Eagle Butte and Aberdeen.

5. Oral history accounts, particularly those that concern places of residence, locations of Indian sightings and/or areas of occupation and use will be compared for similarities and relationships with written accounts, previously known sites, and sites located by the field survey associated with this investigation. This procedure may involve additional records searches to identify owners, if not occupants, of property where building remains are first identified during the field survey.

6. Correspondence may be carried out with additional repositories such as the Military Archives, National Archives and Smithsonian Institution when investigations suggest that this would be useful.

Definitions

All cultural material located will be recorded as either a site complex, a site, an isolated find or a find spot.

A site complex is defined as two or more sites which overlap in areal distribution.

A site is defined as a discernible focus of cultural activity (more than four artifacts/one or more features) with a definable boundary.

An isolated find is defined, for this survey, as four or less artifacts in isolation, or a very sparse, widespread scatter with a density of no more than 1 item every 2500 square meters.

A find spot is defined as the location of any cultural material considered less than 50 years old, or of dubious human modification/use (such as isolated bone fragments). This category will be recorded in the field record but not in the report.

Project Team

Dr. L. Adrien Hannus will be Principal Investigator for this project, with Edward J. Lueck and R. Peter Winham serving as co-Project Directors. One or both of the Project Directors will be in the field at all times to act as Field Director and to serve as liason with the project's consultants.

The literature search will be undertaken primarily by Edward J. Lueck who has worked at all the major repositories in the region and has established a number of valuable contacts.

Additional personnel may be hired to complete the proposed three-person field crew. These crew members will have had formal training in archeological fieldwork and experience in the Northern Plains. Accounting and administration, as well as other aspects of project organization, including report editing and preparation will be supervised by Lynette Rossum.

Complementing the project team are five specialists: 1) Steven Ruple - historical archeology/architectural history; 2) Dr. Robert Brakenridge - geomorphology; 3) Bill Soeffing - computer programing and faunal analysis; 4) Dr. Joseph Tiffany - prehistoric ceramics; and 5) Rebecca Johnson - technical artifact illustration.

Survey and Testing Procedures

The majority of this investigation will be a pedestrian survey, examining the project area and cutbanks on foot. A boat will be used to provide access to islands and other project areas as needed. During the pedestrian survey all project areas will be intensively surveyed by transect walking where possible, with the maximum transect intervals being 30 m except in areas of extremely steep and/or dissected topography where the survey will focus on accessible areas.

The survey area will be partitioned into 'daily survey blocks' (generally covering some 2.0-3.5 miles along the reservoir) in relation to the topography, based on natural features/barriers, such as steep-sided drainages. The field crew will walk transects generally parallel to the shore or at right angles to the shoreline, depending on the topography. They will also check accessible cutbank/shoreline areas. In areas where the terrain prohibits either of the above survey procedures, at the discretion of the field director, other survey procedures will be employed. The main purpose of this approach is to avoid unnecessary delays to the survey caused by having to cross difficult terrain (such as drainages) more than is absolutely required. The crew will work out of field camps either at the Forest City Recreation Area or Gettysburg.

Shovel tests will be employed when there is little or no ground surface visibility (less than 20% surface visibility), or when there is a high site probability but no surface indications of a site. All such tests will be backfilled immediately. At known sites limited shovel testing will be employed to evaluate site boundaries if they are not otherwise defined. Based on previous surveys in the project vicinity it is expected that surface visibility will generally be good or excellent. Exceptions will occur on the edges of Landscape Unit 5 (old terraces) and in the Forest City Recreation Areas.

Once a site has been located the following information will be obtained:

- a) Size and boundaries of the site will be established, if possible, within the project area.
- b) Site components and complexity will be established by mapping of features, lithic and ceramic concentrations and other materials. All final site mapping (planview, profiles, artifact concentrations, etc.)

will be ground-truthed, drawn to scale, and submitted as formal, technical, drafted detail maps on mylar/PMT originals in India ink.

c) When possible, lithic item counts will be undertaken to determine density variation of flake and material types across the site (This information will be recorded in the field on forms-see below).

d) Only artifacts necessary to determine the cultural component or components at a site or those that may be used in interpretive displays will be collected - such as diagnostic tools, rimsherds, and trade goods. All cultural material recovered through subsurface testing will be retained.

e) Stratigraphic sequences visible in cutbanks will be recorded and photographed.

f) Threats to sites from erosion or other factors will be determined. If any damage to apparently significant cultural resources or human remains is observed, the Contracting Officer will be notified immediately.

g) Sites will be located on Government-furnished maps (U.S.G.S. quadrangle sheets and Boating and Recreation maps) and aerial photographs.

h) Site area maps will be produced using a Brunton compass and metric tape. We follow formal civil engineering procedures for scale mapping.

i) Site datum points will be established at each site using 18" long, 3/4" wooden stakes. These datum points will be tied into Federal survey markers where possible, or some well-defined permanent feature.

j) B/W photographs of each site, with some color photographs of selected sites, will be taken to show location and any specific features of the site.

k) Near the end of the field survey Ed Lueck will coordinate with the historical consultant, Steven Ruple, who will visit historic sites to provide specialized reports and subsequently analyze any artifacts collected from those sites.

Note: A more intensive survey will be undertaken in areas where the records search indicates a site (prehistoric or historic) is located. If the site is not relocated, an explanation will be provided as to why this was the case.

With regard to the research design (discussed above), the following information will be recorded:

a) Prehistoric Sites

Boundary definitions. These will be determined with reference to distribution of cultural material/features, selective subsurface shovel testing and local relief/terrain conditions. Definite changes in the density of cultural material will be recorded (although many factors can skew this) on the site map.

Components. The existence of multiple components at a site can generally be determined only through the presence of diagnostic artifacts relating to more than one component. If such artifacts are located, they will be collected for detailed analysis and for future comparative studies. All collected items will be point-plotted on the site map.

If features/cultural layers are exposed in the cutbanks which can provide information on "occupational phases," they will be recorded in detail (profiles, etc.). If sufficient charcoal is present for a radiometric date and is in imminent danger of eroding away, a sample will be collected for possible later submittal.

Site Location. Most of the attributes that will be used in a site locational analysis will be derived from maps and aerial photographs, so it is important to have the sites accurately located. U.S.G.S. topographic maps and aerial photographs will be used for this purpose.

In-field locational data collected will relate to any features not indicated on maps, such as springs, small terraces, site orientation/visibility, and slope.

b) Historic Sites

All historic sites will be initially recorded by Edward Lueck, who meets the minimum professional requirements for a historic archeologist. In addition to supervising contract work involving historic sites, research and records searches in South Dakota, North Dakota, Nebraska and Iowa, Lueck has additional historical archeological experience working with materials from along the Missouri River Trench. His M.A. thesis (Lueck 1980, 1984) focused on cemetery remains from two Arikara contact period (Post-Contact Coalescent) sites near the project area, the Larson site (39WW2), located about 13 miles north of the project

area and the Leavenworth site (39SL4), located about 27 miles south of the project area. Other experience includes investigations of transportation artifacts from Fort Union Trading Post (Lueck 1975), and the cataloging of artifacts from historic sites in Nebraska, under the supervision of Gayle Carlson and Terry Steinacher, while employed by the Nebraska State Historical Society.

All historic site records will be reviewed by consulting historic archeologist/architectural historian, Steven Ruple, who will visit the project area for two to four days on completion of the field survey to provide professional assessment of the historic sites. Ruple will visit all standing structures and any other historic sites which he deems significant.

All historic sites will be fully recorded - from dumps and depressions to foundations and standing structures. The approach to collecting information will be similar to that taken with the prehistoric sites, in that boundaries will be defined, diagnostic material collected, site location accurately determined and any significant factors relating to the site's location recorded. In addition, all historically recent sites (less than 50 years in age) will be annotated on field maps and documented with photos.

An important aspect of the investigation of the historic sites will be the records search for the property where such sites are located, if these localities are not discovered prior to the field survey.

c) Geomorphology

For this study we will distinguish between the general, regional and site/locality specific approach to geomorphological analysis. Maps, aerial photographs and stratigraphic profiles exposed in the lake cutbanks will be used as the primary data from which to develop a general model of landscape development in the study areas. Such studies will be compared with others (e.g., Ahler et al. 1974; Coogan 1987; Brakenridge and McCready 1988), and with some site-specific stratigraphic data (e.g., Winham and Lueck 1983), to provide data with which to discuss potentials for buried sites and areas where deposits have been eroded away. This proposal provides for the processing of two radiocarbon dates as part of the geomorphological evaluation.

Dr. Robert Brakenridge will serve as the project's geomorphologist. He is scheduled to visit the project area for a minimum of 4 days to inspect cutbank profiles/exposures, cultural resource site locations and the general landscape. Brakenridge recently completed a geomorphological investigation for ALCWS encompassing a portion of the Cheyenne River Arm of Lake Oahe. His report contains an important assessment of the potential for buried archeological deposits. Much of Dr. Brakenridge's research has been performed in connection with cultural resource management projects along impounded river valleys. He has specifically addressed the practical problems encountered by archeologists attempting to design sampling programs and predictive models in alluvial terrain in which sites of different ages are buried (see attached vita).

Field Data Sheet

The key to any comparative research/data collection is a standardized method of data recording. The site data sheet will contain all the field data required by the South Dakota State Site Form as well as specific field data designed to address the research orientations described above.

The data categories collected in the field include: legal location; location on aerial photos and boating and recreation maps; access to site; site owner; type of resource/component; site description; site size; features present; scale plan map; terrain; slope; soil; vegetation; nearest water; site condition/impacts; National Register evaluation; research potentials; assemblage description; and subsurface evaluation (based on exposures, shovel testing/coring, topography).

Note: Further information on each site, based on the analysis of the collected data, will be provided in the report.

Most of the site data form is self-explanatory; however, the information recorded for some categories will vary with the type of site being recorded. The lithic data will be estimated for extensive scatters and individual features will not be recorded in detail at sites with over five features (such as large stone circle sites). The form to be used in the field allows for easier computer encoding both for the South Dakota ARIES (Archaeological Resources Inventory for Electronic Systems) system (see codes in SDARC 1984) and for the computer manipulations specific to the research design for this project.

SITE # 39DW _____ TEMPORARY NUMBER _____ NAME _____
COUNTY: DEWEY _____ SITE TYPE _____
TIME PERIOD _____ CULTURAL AFFILIATION _____
LOCATION: S _____ T _____ R _____ $\frac{1}{4}$ _____ $\frac{1}{4}$ _____ $\frac{1}{4}$ _____ $\frac{1}{4}$ _____
ELEVATION _____ UTM _____ E _____ N _____
QUAD MAP NAME _____ OWNER _____
DIRECTIONS TO SITE _____

PHYSIOGRAPHIC AREA: MISSOURI TRENCH

NEAREST WATER SOURCE: TYPE: Intermittent stream _____ Missouri River _____

Other Permanent stream _____ Other (specify) _____

DISTANCE _____ (m) DIRECTION _____ NAME _____

ELEVATION OF NEAREST WATER SOURCE _____ (m)

NEAREST WATER BANK 'L' 'R' 'N' 'B' UNKNOWN

TOPOGRAPHIC DESCRIPTION: MACRO TERRAIN: _____

MICRO TERRAIN: _____

SLOPE: Flat _____ Gentle _____ Moderate _____ Fairly Steep _____ Steep _____

SUBSTRATE/SOIL: _____

VEGETATION COVER: _____

GROUND SURFACE VISIBILITY _____ % CURRENT LAND USE _____

SITE CONDITION 'E' 'D' 'I' 'X' NOT KNOWN

IMPACTS PRESENT EFFECT

Severe - Moderate - Slight - Present

SHORELINE EROSION

ANIMAL BURROWS

VANDALISM

SLOPE WASH

OTHER _____

SITE DIMENSIONS; _____ N-S _____ E-W _____ Area (ha)

DEPTH OF DEPOSITS: Surface _____ 0-10cm _____ 10-50cm _____ Over 50cm _____

HOW DEPTH DETERMINED _____

SURFACE FEATURES _____

RESEARCH POTENTIAL

Subsistence ___ Dating ___ Activity areas ___ Lithic analysis ___
Paleoenvironment ___ Stratified deposits ___ Trade ___
NATIONAL REGISTER ELIGIBILITY 'N' 'P' 'E' 'R' NOT KNOWN

LITHICS

	<u>DEBITAGE</u>		<u>PATTERNED TOOLS</u>	
	Number	%	Number	Types
Chalcedony				
Tongue River Silica				
Chert				
Quartzite				
Quartz				
Petrified wood				

Overall density of surface deposit:

In Core Area _____ items m²

In peripheral area _____ items m²

RECOMMENDATIONS/COMMENTS _____

SITE PLAN MAP - Check list for map:

Corps boundary ___ Shoreline ___ Site limits:known ___ potential ___
Intrasite variability ___ Collected items plotted ___ Scale ___ North ___
Impacts ___ Observed features plotted ___ Core area delimited ___

PHOTOGRAPHS B/W ___ Color ___ COLLECTED ARTIFACTS Yes ___ No ___

SAMPLES Yes ___ No ___ Type _____

FEATURE DESCRIPTIONS (Note - each observed feature will be photographed and described/measured - such as rock cairns, stone circles, pits).

Analysis will be undertaken on the data collected by the literature/records search and the field survey. It is projected, based on an evaluation of previous surveys in similar soils and landforms, that relatively few sites and diagnostic artifacts will be located; hence, the focus on the total landscape and geomorphology discussed above.

Steve Ruple, historical archeologist, will analyze the historic artifacts. Prehistoric lithic materials will be analyzed by Dr. L. Adrien Hannus with additional collaboration by Dr. Pat Shipman and Richard Hughes, as discussed below. The prehistoric ceramic specimens will be evaluated by Dr. Joseph Tiffany, formerly assistant State Archeologist of Iowa. Dr. Tiffany will be supported in his analysis by L. Adrien Hannus and Edward Lueck. Any faunal remains that are collected will be examined by William Soeffing (zoologist). Soeffing, who is Instructor of Biology and Computer Science at Sioux Falls College, will also cooperate with Peter Winham in handling computer programming and data manipulation for this project.

Standardized analytical and descriptive procedures that will be applied to the recovered data are described below. These analyses are aimed at providing readily comparable data sets.

1. Diagnostic materials collected during the survey and recorded during the literature search will be studied with the goal of identifying site component(s). The analysis will include measurements and descriptions of diagnostic material (projectile points, historic artifacts) with comparative studies for each item. All diagnostic artifacts will be illustrated by technical scaled line drawings.

a. Diagnostic Lithics

Morphology will be addressed by accomplishing a series of measurements - minimally these will include length, width and thickness. For patterned artifacts more extensive sets of measurements will be taken. For projectile points, 12 discriminate dimensions will be measured and four form observations will be made (following Ahler 1971). The projectile points will be compared with similar examples from other Plains sites to establish cultural/technological association. For

transverse scrapers, five measurements will be taken (following Lee and Lovick 1979). In addition to obtaining measurements, transverse scrapers will be typed by class (Lee and Lovick 1979; Nowak 1981).

Morphology will be further documented by providing exact scale (1:1) technical illustrations, with cross-sections, of each specimen. Examples of this standardized approach can be found in many ALCWS reports (e.g., Winham, Lippincott and Lueck 1987; Winham, Lippincott, Hannus and Lueck 1987).

All lithic material will be evaluated for utilization. Description of utilized lithic materials (both chipped and ground stone) will be undertaken using both macro- and microscopic examination techniques. Patterns of wear - edge dulling, polish, percussion/abrasion - will be recorded and other indicators of use, such as heat treatment, will be noted. Production techniques will be examined through the inspection of flake scars and striking platforms (and debitage), and by recording the presence/absence of cortex. There is an expanding recognition that many so-called unretouched flakes have actually been utilized and then discarded (Cotterell and Kamminga 1987). Similarly, there are examples of projectile points being reshaped, resharpened and eventually reworked to perform other functions, such as drilling or cutting tasks. The process by which lithic artifacts pass through several phases of modification and reuse, both in terms of their form and function, has been called the "Frison effect" (Jelinek 1976). Documentation of patination (oxidation rind) will also be accomplished.

Raw material types will be determined on the basis of macro- and low power microscopic observations. Material type identification will follow types described in Ahler (1977). Several material types are distinctive, but some that were once thought to be readily recognizable have been shown to have alternate sources that are often virtually indistinguishable (e.g., Knife River flint and Scenic chalcedony - see Nowak and Hannus 1981).

The preceding lithic analyses are routinely accomplished by ALCWS for evaluating questions of site function, seasonality, and possibility of prehistoric trade networks and patterns.

Two specialized studies are also proposed for this project: 1) SEM analysis of transverse scrapers, and 2) obsidian hydration analysis of obsidian specimens recovered. Under a recent cooperative arrangement,

Dr. Pat Shipman from John Hopkins University, School of Medicine, will perform SEM analysis on the working edges of selected examples of transverse scrapers recovered during the proposed survey. The transverse scraper is a ubiquitous artifact frequently recovered from sites in the Plains region. The frequent assumption is that tasks specific to hide-working and plant preparation were accomplished with this tool type. Data obtained from SEM analysis of edge wear/utilization will 'tighten' our current understanding of this common tool and better define both tool use and potential site specific activity areas.

Additionally, specimens of obsidian recovered during the current project will be submitted to Richard Hughes, geochemist, University of CA, Berkeley, for obsidian hydration analysis as part of an on-going cooperative venture for source area identification of obsidian in Plains sites.

b. Ceramics

Dr. Joseph Tiffany will perform the ceramic analysis; L. Adrien Hannus and Edward J. Lueck will collaborate with him. All ceramic sherds with distinctive/diagnostic features will be illustrated and metrically and stylistically described utilizing standard terminology. Manufacturing and firing techniques will be discussed, as will any secondary vessel treatment and any evidence for use (e.g., burning).

Comparative studies using formalized attribute keys will be made of diagnostic sherds which can be assigned to formal types. If necessary diagnostic sherds will be compared to collections at the State Archeological Research Center in Rapid City, South Dakota.

c. Faunal Material

The recovery of faunal remains is expected to be limited. William Soeffing will examine any faunal materials collected. All faunal material will be sorted into culturally modified (tools) and unmodified specimens. The culturally modified specimens will be illustrated and fully described. The unmodified material will be counted and weighed and then further sorted into potentially identifiable and unidentifiable specimens.

The identifiable specimens will be described as fully as possible according to taxon, element and other details. All faunal material will be examined for evidence of burning, deliberate breakage and applicable post-discard taphonomic alterations (animal gnawing, fluvial displacement, sediment loading, etc.).

2. Evaluation of the recorded manifestation of the site in the field will aim to:

- a) Determine the potential boundaries of the site. Is the topographic location of the site conducive to its being larger than the surface material indicates?
- b) Determine activity areas - artifact concentrations, features.
- c) Evaluate research potential. Is the site single or multiple component? Is there a potential for buried cultural material? Has the site produced diagnostics? Is there any evidence that carbon samples would be present (fire hearths, heat-altered lithic material)? What is the integrity of the site? What specific research questions could be addressed at this site and how would they be addressed?
- d) Specify the nature of additional work to be carried out at the site to determine National Register Eligibility if necessary - i.e., basically to confirm or negate the ability of the site to address specified research questions.
- e) Evaluate the effect any adverse impacts have had/may have on the site.
- f) Assess site significance. The recent surveys in the Lake Oahe region have produced a large body of data with which to evaluate site significance (ALCWS, Larson-Tibesara, UNL, UND). The data from the previous surveys will be utilized in assessing the sites located during the current project.
- g) Integrate several of the above analyses into a management plan for the areas.

3. Analysis of site structure, function and variability will be accomplished.

The majority of the site specific data collected in the field and that generated by the specific analytical work proposed above, will be input into a computer for basic data manipulation and summary using the

SPSS (Statistical Package for Social Sciences) program. The exact nature of the analytical work undertaken with the data will depend on the nature of the data itself - numbers of sites of specific types located, numbers of diagnostic artifacts, assessment of the representativeness of the surface material recorded to the site as a whole and so forth.

It is anticipated that, because of the nature of the project (surface survey) and limited collection policy, the majority of the data manipulations will be simple tables, scattergrams and graphs. More detailed comparative studies/hypothesis testing relating to site location and lithic assemblages/site function may be evaluated through tests of significance. The main aim of this work would be to determine what additional data are required to verify or refute any "patterns" that are indicated by such analyses.

The offices and laboratory facilities of ALCWS are based on the campus of Augustana College in Sioux Falls, South Dakota. Additional space is available for use by ALCWS in the Biology Department, where a range of additional equipment is also available. All basic analytical procedures can be accomplished by Laboratory personnel at Augustana College. Additional facilities/equipment available for use within the Biology Department include high-powered microscopes, a mass spectrometer (Micromass 602E, Isotope Ratio Mass Spectrometer), a scanning electron microscope (ISI, Super-III A) and additional laboratory space and equipment. Access to a computer (PDP 1170) is also available. Report preparation is carried out using an IBM displaywriter system.

ALCWS maintains equipment to outfit several survey crews and three testing/mitigation crews. Two 4x4 Broncos are used as field vehicles and a Topcon (TL60SE) theodolite is used for detailed surveying work.

The archival and library facilities are excellent, with the Center for Western Studies being a major archival research center for the Great Plains.

All accounting/bookkeeping records are organized by Lynette Rossum and processed through the Augustana computer and payroll system - essentially being double checked in the process. Access to all records is available to qualified individuals at any time.

The permanent staff of ALCWS is comprised of three persons who have acted as Principal Investigators for a variety of projects and an administrator/editor/lab technician; additional personnel are employed as required. All permanent Archeology Laboratory staff have post-graduate study, with senior staff (project directors) holding multiple graduate degrees. The Laboratory personnel have a wide variety of expertise and have worked extensively in the Great Plains Region and beyond.

Specialists are regularly employed to provide their expertise in such aspects as soils, geomorphology, other environmental studies, ceramics, architectural studies, and historical searches.

Direct field experience among the key Laboratory personnel covers the states of South Dakota, Colorado, Iowa, Illinois, Kansas, Montana, Minnesota, New Mexico, Nebraska, North Dakota, Texas, Utah and Wyoming.

Included among the numerous projects undertaken are some of the largest projects in North America -- i.e., the Northern Border Pipeline survey and a 150 square-mile block area survey in Wyoming.

All staff are skilled with the use of basic archeological survey and excavation equipment, and some with specialized exploratory methods, such as resistivity and proton-magnetometer surveys. Soil screening and flotation recovery methods are used frequently.

Statement of Firm's Previous Experience

The Archeology Laboratory of the Center for Western Studies is primarily involved in archeological, paleoenvironmental, ethno-historical, architectural, and historical/oral historical studies and museum consulting in the Great Plains Region and its peripheries. The Laboratory undertakes research and contract work and collaborates closely with the Center for Western Studies, a major archival center for the Great Plains, and the Biology Department of Augustana College.

Through its association with the Center for Western Studies and Augustana College, the personnel at the Laboratory also undertake cooperative research and teaching projects. The present key personnel of the Archeology Laboratory were brought together in 1979 to conduct cultural resources work on the Northern Border Pipeline, one of the major CRM projects in North America. The Laboratory at Augustana College was established in 1982 and expansion of its facilities has continued since that time.

The Laboratory personnel and appointed research associates have a diverse international archeological background. Dr. L. Adrien Hannus, the principal archeologist, has undertaken research primarily in the Great Plains, as well as in Egypt and Mesoamerica. Peter Winham, assistant director, has extensive field and academic experience in Great Britain, Europe and the Great Plains. Research undertaken by Laboratory personnel and research associates ranges from computer simulation studies of the extinction of Pleistocene megafauna to settlement location analyses, lithic analyses and studies of mortuary practices. A recent addition to Laboratory capabilities is in the area of paleo-preparation techniques, including moldmaking and resin casting of scientific specimens.

Special research interests of the Archeology Laboratory are: various studies relating to information derived from CRM work along the Missouri River Trench in North and South Dakota; paleoenvironmental reconstruction of the Great Plains through stable isotope analysis (C_{13}) and archeological soils studies; long-range geomorphologic and climatic reconstructions at the Lange/Ferguson (39SH33) Clovis mammoth kill/butchering site in southwestern South Dakota; documenting quarry locales in the White River Badlands drainages in southwest South Dakota, including locations of alternative sources of a Knife River Flint-like material (brown chalcedony); and synthesizing the prehistory of the Lower and Upper Big Sioux archeological regions in South Dakota.

A multitude of additional projects have been undertaken for local and regional energy and water development companies, soil conservation groups, the U.S. Army Corps of Engineers, the South Dakota Department of Game, Fish and Parks, Bureau of Reclamation, Bureau of Indian Affairs, the South Dakota and Nebraska offices of Historic Preservation and the Historic South Dakota Foundation. ALCWS has also received awards from the National Geographic Society, the Burlington Northern Foundation, the L.S.B. Leakey Foundation and the Gannett Foundation. These projects have involved the complete gamut ranging from background literature searches, surveys and test excavations, to full scale excavation/analysis of the recovered materials with final production of quality analytical reports.

A very extensive range of survey projects has been accomplished by the individuals at the Archeology Lab. A selection of the most recent larger-scale projects of a similar nature/scope to that proposed here includes the following:

While working as the Archeology Lab at South Dakota State University:
[1979-1982]

Project name: Northern Border Pipeline Survey.
Entity for which work done: Northern Plains Natural Gas Company
Type of work: A 100% survey of a 183 mile/300 ft. pipeline
right-of-way, with subsequent evaluation/testing/
mitigation of resources located.
Name of contact: Karl H. Frantzen, NEICo, 218 South 108th Ave.,
Omaha, NE 68103 (402) 691-2365
Location: McPherson, Edmunds, Brown, Spink, Clark, Codington, Hamlin,
Deuel and Brookings counties, South Dakota.
Person Weeks on Project: Over 1500 person weeks.
Bibliography: Hannus et al. 1982; Hannus 1985a

Projects undertaken since the Archeology Laboratory of the Center for
Western Studies was established in 1982.

Project name: Survey of a Portion of the West Bank of
Lake Francis Case, Lyman County, South
Dakota.
Entity for which work done: U.S. Army Corps of Engineers, Omaha
Type of work: Class II Cultural Resource Survey.
Name of contact: Rich Berg, Corps of Engineers, 1612 USPO &
Courthouse, Omaha, NE 68102 (402) 221-4603
Location: Lyman County, South Dakota.
Person Weeks on Project: 50 person weeks.
Bibliography: Lueck 1983; Winham and Lueck 1984

Project name: Ft. Pierre National Grasslands Survey of
Selected Areas.
Entity for which work done: U.S. Forest Service
Type of Work: Class III Cultural Resource Survey.
Name of Contact: Bob Mountain, U.S. Forest Service, Box 417, Pierre,
SD 57501 (605) 224-5517
Location: Stanley County, South Dakota.
Person Weeks of Project: 10 person weeks.
Bibliography: Winham, Nowak and Butterbrodt 1984

Project name: Pass Creek and West Horse Creek Survey.
Entity for which work done: South Dakota Historical Preservation Center
Type of work: Survey and evaluation of archeological sites (in this case specifically quarries) along two drainage systems.
Name of contact: Paul Putz, Historical Preservation Center, Box 417
Vermillion, SD 57069 (605) 677-5314
Location: Jackson and Shannon counties, South Dakota.
Person Weeks on Project: 12 person weeks.
Bibliography: Hannus, Nowak and Winham 1984; Nowak, Hannus, Butterbrodt, Lueck and Winham 1984; Lueck and Butterbrodt 1984; Keller, Froelich and Winham 1984

Project name: Scotia Canal Class III Cultural Resources Survey.
Entity for which work done: Bureau of Reclamation
Type of work: Literature search, intensive survey and comprehensive report.
Name of contact: Jeff Kenyon, Bureau of Reclamation, Missouri Basin Region, P.O. Box 2553, Billings, MT 59103
(406) 657-6233
Location: Valley, Greely and Howard counties, Nebraska.
Person Weeks on Project: 22 person weeks
Bibliography: Lueck, Hannus and Ritter 1984

Project name: Minnehaha County Survey.
Entity for which work done: South Dakota Historical Preservation Center
Type of work: Literature search, oral history, intensive survey, sample survey, comprehensive report.
Name of contact: Paul Putz, Historical Preservation Center, Box 417, Vermillion, SD 57069 (605) 677-5314
Location: Minnehaha County, South Dakota.
Person Weeks on Project: 22 person weeks.
Bibliography: Winham, Lueck and Hannus 1985

Project name: Cultural Resource Investigation of Sites within the Vicinity of the Lange/Ferguson Site.
Entity for which work done: South Dakota Historical Preservation Center
Type of work: Class II Survey.
Name of contact: Paul Putz, Historical Preservation Center, Box 417, Vermillion, SD 57069 (605) 677-5314
Location: Shannon, Pennington and Custer counties, South Dakota.
Person Weeks on Project: 6 person weeks.
Bibliography: Hannus and Winham 1985

Project name: Moody, Lincoln and Union Counties Survey.
Entity for which work done: South Dakota Historical Preservation Center
Type of work: Literature search, oral history, intensive survey, sample survey, comprehensive report.
Name of contact: Paul Putz, Historical Preservation Center, Box 417,
Vermillion, SD 57069 (605) 677-5314
Location: Moody, Lincoln and Union counties, South Dakota.
Person Weeks on Project: 20 person weeks.
Bibliography: Hannus, Winham and Lueck 1986

Project name: Lake County Survey.
Entity for which work done: South Dakota Historical Preservation Center
Type of work: Literature search, oral history, intensive survey, sample survey, comprehensive report.
Name of contact: Paul Putz, Historical Preservation Center, Box 417,
Vermillion, SD 57069 (605) 677-5314
Location: Lake County, South Dakota.
Person Weeks on Project: 20 person weeks.
Bibliography: Lueck, Winham and Hannus 1987

Project name: Cultural Resource Reconnaissance of U.S. Army Corps of Engineers Lands Alongside Lake Sakakawea in Mountrail County, North Dakota.
Entity for which work done: U.S. Army Corps of Engineers, Omaha
Type of work: Class II Inventory.
Name of contact: Becky Otto, Corps of Engineers, 1612 USPO & Courthouse, Omaha, NE 68102 (402) 221-3070
Location: Mountrail County, North Dakota.
Person Weeks on Project: 70 person weeks.
Bibliography: Winham, Lippincott and Lueck 1987

Project name: Cultural Resource Reconnaissance of U.S. Army Corps of Engineers Lands Alongside Lake Sakakawea in Dunn County, North Dakota.
Entity for which work done: U.S. Army Corps of Engineers, Omaha
Type of work: Class II Inventory.
Name of contact: Becky Otto, Corps of Engineers, 1612 USPO & Courthouse, Omaha, NE 68102 (402) 221-3070
Location: Dunn County, North Dakota.
Person Weeks on Project: 80 person weeks.
Bibliography: Winham, Lippincott, Hannus and Lueck 1987

Project name: Cultural Resource Reconnaissance Along Portions of
Lake Oahe in Stanley and Dewey Counties, South Dakota.
Entity for which work done: U.S. Army Corps of Engineers, Omaha
Type of work: Class II Inventory.
Name of contact: Rich Berg, Corps of Engineers, 1612 USPO &
Courthouse, Omaha, NE 68102 (402) 221-4603
Location: Stanley and Dewey counties, South Dakota.
Person Weeks on Project: 60 person weeks.
Bibliography: Winham and Lueck 1987

Project name: Cultural Resources Reconnaissance Along the Cheyenne
River Arm of Lake Oahe in Dewey, Haakon, Stanley and
Ziebach Counties, South Dakota.
Entity for which work done: U.S. Army Corps of Engineers, Omaha
Type of work: Class II Inventory.
Name of contact: Rich Berg, Corps of Engineers, 1612 USPO &
Courthouse, Omaha, NE 68102 (402) 221-4603
Location: Dewey, Haakon, Stanley and Ziebach counties, South
Dakota.
Person Weeks on Project: Approx. 85 person weeks.
Bibliography: Winham, Lippincott and Lueck 1988

Project name: An Archeological Sample Survey of Selected Lands in the
Buffalo Creek Drainage, Dawson and Custer Counties,
Nebraska.
Entity for which work done: Nebraska State Historical Society
Type of work: Sample/Predictive Survey.
Name of contact: Terry Steinacher, Fort Robinson Museum
P.O. Box 304, Crawford, NE 69339
Location: Dawson and Custer counties, Nebraska
Person Weeks on Project: 45 person weeks.
Bibliography: Winham, Holen, Lueck, Hannus 1988

Project name: Lower Big Sioux Archeological Survey
Entity for which work done: South Dakota Historical Preservation Center
Type of work: Literature search, oral history, reconnaissance
survey, comprehensive report.
Name of contact: Paul Putz, Historical Preservation Center, Box 417,
Vermillion, SD 57069 (605) 677-5314
Location: Lincoln County, South Dakota.
Person Weeks on Project: 20 person weeks.
Bibliography: Lueck, Hannus, Watzek and Winham 1988

Key Personnel/Background Knowledge (Vitae attached)

L. Adrien Hannus - Principal Investigator

Dr. L. Adrien Hannus, Director of the Archeology Laboratory at Augustana College, will serve as Principal Investigator. This proposal is supported by his 18 years of archeological experience which has focused on the Plains region. Hannus has taught and specialized in the prehistoric and historic cultural dynamics of the Plains area since 1970. His specific educational experience includes an M.A. in cultural anthropology with a focus on Action Anthropology [Chicago School -- i.e., Fox Project]. Hannus has worked closely with Karl Schlesier, and with both the Southern Cheyenne and Dakota traditionalists. His doctoral studies concentrated on early human populations in the New World, embracing the areas of cultural anthropology and archeology. Both programs of study concerned the Plains area (understood to fully incorporate all five subareas: Northwestern, Middle Missouri, Northeastern, Central and Southern).

Hannus has worked out of a base in South Dakota and Nebraska for the last 18 years, conducting research and CRM projects and teaching courses in the prehistoric Plains cultures as well as the contemporary period. Specialized areas of teaching and research include early human populations in the New World [specifically Clovis], historic Native American cultures of the Plains, and lithic analysis.

Hannus has accomplished cultural and archeological fieldwork in Wyoming, Montana, Colorado, Utah, Kansas, Texas, Nebraska, North and South Dakota, Iowa and Illinois, with the principal focus on the Northwestern, Northeastern, Middle Missouri and Central subareas of the Plains. He also served as Environmental Archeologist for InterNorth, Omaha, NE, during which time he supervised and conducted CRM surveys in Nebraska and the Central Plains.

R. Peter Winham - Co-Project Director

Peter Winham earned undergraduate and postgraduate degrees in archeology from Southampton University in England and has a diverse background in archeological method and theory. He worked in several European countries as well as England, and came to the United States in 1980 to work on a large archeological project in Carbon County, Wyoming as Crew Chief. He authored or co-authored 13 reports for that project, and then was hired to undertake resistivity survey work on the Northern Border pipeline project in South Dakota in 1981.

Since arriving in South Dakota, Peter Winham has worked with Adrien Hannus, first at the Archeology Laboratory at South Dakota State University in Brookings and then, when Hannus moved the Laboratory, at Augustana College, Sioux Falls.

Winham is now Assistant Director of the Archeology Laboratory, acting as director when Hannus is absent. He has also served as Principal Investigator or Co-PI on numerous projects. During the course of working at the Laboratory, Winham has authored many contract and research reports, written journal articles and presented papers and lectures. His focus of interest is both the technical side of "doing" archeology and a number of specific topics in the field of prehistoric archeology - including stone circle sites and lithic analysis.

Edward J. Lueck - Co-Project Director

Lueck has performed numerous cultural resource surveys throughout the Plains region, with a focus on the Central Plains/Middle Missouri and bordering areas. Lueck, with Peter Winham, has authored numerous reports relating to the Missouri River and has conducted the literature and records searches for several surveys along the river. He has also served as Field Director on several projects. He obtained his M.A. from the University of Nebraska/Lincoln.

Lynette Rossum - Grant Administrator/Report Editor/Laboratory Technician

Lynette Rossum's primary task at ALCWS is to manage all administrative/bookkeeping aspects of the operation, but she has also completed both academic and field training in a variety of aspects of archeology. On several projects, she has been a crew member, and she undertakes many aspects of laboratory work related to processing artifacts, flotation of soil samples and so on. Her vitae outlines her background in both office management and archeology.

Crew Members

If additional crew member(s) are hired for this project they will be chosen from persons having both an academic and practical background in the archeology of the Middle Missouri region. Several persons are currently on file with ALCWS (Dr. Kerry Lippincott; William Ranney; Peter Froelich, Kurt Watzek). There will be no problem in meeting all personnel requirements for this projects.

Rebecca Johnson - Illustrator

ALCWS employs a part-time professional technical illustrator, Rebecca Johnson, who will prepare the artifact illustrations for this project. Examples of her work can be seen in most publications of the Archeology Laboratory of the Center for Western Studies.

Consultants The following persons have been identified/contacted and have agreed to consult on this project:

Dr. Robert Brakenridge - soils and geomorphology

Steven Ruple - historical archeology/architectural history

Bill Soeffing - computer and faunal analysis

Joseph Tiffany - prehistoric ceramics

In addition, specialized analysis will be undertaken by Pat Shipman - Scanning Electron Microscopy; Richard Hughes - obsidian hydration analysis; and Jim Buckley - radiocarbon dating (Teledyne Isotopes).

Dr. Robert Brakenridge - Geomorphologist

Dr. Brakenridge is Assistant Professor in the Department of Geological Sciences at Wright State University, Dayton, Ohio, where he teaches courses in sedimentology, surficial geology and soils, historical geology, stratigraphy and planetary geology.

Dr. Brakenridge has worked on numerous archeological projects of the type outlined here (see vitae), and will bring to this project not only his particular expertise but also great enthusiasm. His training as a student under C. Vance Haynes gives him eminent qualifications for integrating geomorphological information into the archeological framework. He recently completed geomorphological investigations for ALCWS (Cheyenne Arm of Lake Oahe) and the Oklahoma Archaeological Survey.

Steven Ruple - Historical Archeologist/Architectural Historian

Steven Ruple is completing his doctorate in Anthropology at the University of Tennessee. He specializes in historical archaeology, North American archaeology, folk architecture and field techniques, among other subjects (see vitae). He served as archeologist in charge of excavations at the Carnton Mansion slave quarters in Franklin, Tennessee and recently (1986/1987) supervised excavations at Fort Randall for the U.S. Army Corps of Engineers. From 1977 through 1983 he was employed as Historical Archaeologist at the South Dakota Historical Preservation Center. His work included the evaluation of all historic period archeological sites brought to the attention of the Center and assisting in standing structure restoration and preservation.

Joseph A. Tiffany - Ceramics

Dr. Joseph Tiffany collaborated on several projects with ALCWS while he was Associate Iowa State Archaeologist. He has extensive experience in the evaluation of prehistoric ceramics and will collaborate with L.A. Hannus and Edward Lueck in their analysis of ceramic material recovered during this survey. Dr. Tiffany is currently teaching classes in archeology at California State Polytechnic University and acting as a consultant for CRM projects.

Bill Soeffing - Computer Programming/Data Analysis and Faunal Analysis

Bill Soeffing is a zoologist on the faculty of the Natural Sciences Department at Sioux Falls College. He also serves as a computer science instructor and consultant. Additionally, Soeffing has participated in numerous archeological projects (39SH33 [Lange/Ferguson], 39FA65 [Ray Long], and 13L02 [Blood Run]) as a crew member and in accomplishing computer and faunal analyses. Computer modeling and simulation are his special interests.

Vitae - Key Personnel

Dr. L. Adrien Hannus
R. Peter Winham
Edward J. Lueck
Lynette Rossum
Dr. Robert Brakenridge
Steven Ruple
Dr. Joseph Tiffany
Bill Soeffing

8.

REPORTS, ARTICLES AND PUBLIC EDUCATION

The report format will follow that stated in the scope of work. Summary tables will be prepared for all sites with reference to site impacts, research potentials/National Register eligibility, site components and management priority. The site maps would appear with the narrative descriptions.

Journal Article and Public Education Slide Program Outline/Format

ALCWS personnel take seriously the commitment to disseminate information not only to professional archeologists but to the community as a whole. Both tape/slide programs and video programs have been prepared by each of the Co-Principal Investigators for other projects (these include public lecture programs, museum display programs, and videos for SD Public TV, OWL-TV, KELO-TV). A tape/slide program is proposed for this project that would encompass all aspects of the field-work and results of the analyses.

A technical article about this project, suitable for publication in a professional, peer reviewed journal, will be submitted within 30 days of the draft report. Several previous articles produced by ALCWS have been published in South Dakota Archeology.

9.

WORK SEQUENCE DIAGRAM AND SCHEDULES

A survey of this nature has several 'unknown' quantities that could alter any time estimates i.e., accessibility to and from the project area and ease of walking within the project area. The number and type of sites located will determine the time spent recording sites; and, the weather is a major factor when a boat is utilized.

Based on our experiences in previous surveys in this region the number of sites expected will be in the order of three sites a square mile. A coverage of a square mile every 4.5 - 6.0 man-days is considered applicable to this area taking into account the expected site density and general survey conditions (fair to good access).

The logistics of the project will involve a 3 man-crew, a boat and a 4x4 wheel vehicle. We project that a period of 24 working days will be required in the field to accomplish the above work.

The work sequence diagram, over, shows the sequence of 15 tasks to be accomplished within the stated timeframe, namely: 180 days (25.7 weeks) from project award to the submission of the draft report; 45 days for review and 45 days for submission of final report. We propose to complete the fieldwork by the end of September, 1988 to ensure timely completion prior to any major adverse weather conditions. If the contract is awarded by June 1, 1988, fieldwork will be completed by September 30, 1988.

The number of working days assigned to each person on this project for the main tasks are listed below:

<u>TASKS</u>	1-3	4-8	9-10	11-12	13-15	<u>TOTAL WORKING DAYS</u>
HANNUS	-	23	-	4	2	29
WINHAM	2	26	-	18	4	50
LUECK	3	23	2	10	2	40
ROSSUM	3	5	1	10	4	23
JOHNSON			3			3
RUPLE		6	3			9
SOEFFING				1.5		1.5
BRAKENRIDGE		4	3			7
TIFFANY			0.5			0.5

WORK SEQUENCE DIAGRAM

TASKS (Left column)

1. INITIATE CONTRACT
2. BACKGROUND ORGANIZATION
3. BACKGROUND LITERATURE SEARCH
- Tasks 1-3 = 8 man-days - 10 days (3 working days).
4. FIELD SURVEY MOBILIZATION
5. FIELD SURVEY
6. IN FIELD LITERATURE/RECORDS SEARCH/ORAL HISTORY/ARTIFACT PROCESSING
7. SPECIALIST SITE EVALUATIONS
8. RETURN TRAVEL
- Tasks 4-8 = 87 man-days - 36 days (26 working days).
9. FINAL LITERATURE SEARCH
10. SPECIALIST REPORTS
- Tasks 9-10 = 12.5 man-days - 5 days (3 working days).
11. DATA ANALYSIS - COMPUTER DATA MANIPULATION
12. REPORT PREPARED AND DRAFT SUBMITTED
- Tasks 11-12 = 43.5 man-days - 26 days (18 working days).
13. JOURNAL ARTICLE
14. SLIDE/TAPE PRESENTATION
15. FINAL REPORT PREPARED AND SUBMITTED
- Tasks 13-15 = 12 man days - 4 days (4 working days).

WEEKS

JUNE	J					A					S					O					N					NOV 25				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25					
1	X																													
2		X																												
3			X																											
4						X																								
5						XXXXXXX																								
6							X																							
7								X																						
8									X																					
9											X																			
10													X		X															
11																XX	XX	XX	XX	XX										
12																					XX	XX		XX	XX					

Journal article and slide presentation - within 30 days of draft report
 Final report within 45 days of receipt of review comments

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APPENDIX I

List of Isolated Finds

ISOLATED FINDS-DEWEY COUNTY SURVEY 1988

#	T	R	S	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	DESCRIPTION
1	16	31	31	NW	NW	SW	SW	Biface, distal tip and midsection. Light brownish-gray Tongue River silicified sediment.
2	15	31	3	NE	NE	SW	SW	Silicified wood secondary flake.
3	15	31	10	SW	SW	SE	SE	Brown chalcedony retouched flake fragment.
4	Became 39DW147							
5	15	31	14	NW	NW	SE	SW	White chert flake, retouched along both margins, heat-treated.
6	15	31	24	NW	NW	NE	NW	Simple stamped bodysherd, 0.55 cm thick.
7	15	31	23	NW	NE	SE	SE	Possible retouched flake of Pierre Shale.
8	Became 39DW148							
9	12	31	1	NE	NW	NW	SE	Copper cartridge, internally primed center fire, utilized in altered Springfield breech loaders. Caliber 50 (1866-1868). 46.25 mm in length, 16.50 mm base diameter.
10	Became 39DW149							
11	15	31	35	SW	SE	SE	NE	John Deere single bottom horse-drawn plow and wooden tongue.
12	14	31	4	SE	SE	NE	NW	40-50 piles of rocks and initials outlined in rock (VLB (?) and SLB) on hilltop, and rock alignments.
13	14	31	26	NE	SE	NW	NW	Brown Tongue River silica primary flake.
14	14	31	26	SW	NE	NW	NW	Mottled gray Tongue River silica shatter.
15	Became 39DW150							
16	14	30	36	NE	SE	SE	NE	Grey Tongue River silica secondary flake and banded red and brown Tongue River silica large primary flake.

ISOLATED FINDS-DEWEY CO. SURVEY 1988

#	T	R	S	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	DESCRIPTION
17	13	31	5	C	NW	SW	NW	Large dark gray basalt cobble with large flakes removed from both ends.
18	13	31	9	SE	SE	NW	NW	Fossilized phalanges (paleontological).
19	16	31	33	NE	NE	NW	NW	Gravel test pits.
20	13	31	01	NW	NW	SW	NE	Holes probably left after removal of uprights for a billboard.
21	16	30	36	SE	NE	NE	SE	Pieces of purple glass (? liquor bottle) and bone fragments.
22	16	31	31	SE	SE	NE	NW	Concrete and brick foundation fragments (outside survey area).
23	15	31	6	NW	NE	NE	NW	Wooden salt holder or feed bunk.
24	15	31	3	SW	SE	SW	NW	Wooden wagon front axle with wooden wheel and metal rims.
25	15	31	11	SE	NE	SW	SW	Wooden salt holder or feed bunk.
26	13	31	34	NW	NW	NW	SE	Recent ? sweat lodge remains - carpet fragments, railroad ties, buffalo hides...
27	13	31	34	NW	NE	SW	NW	White Ford Fairlane, 1986, license Walworth County, BLJ 472.
28	15	31	14	NW	NE	SE	SW	Dust bag holder, wooden posts and cross beam.
29	15	31	24	NW	NW	NE	NW	Dust bag holder, wooden posts and cross beam.
30	15	31	26	NW	SW	NE	SW	Wooden salt holder or feed bunk.
31	14	31	27	SW	SE	SE	SE	Wooden wagon front end, axle, one hub, metal spindle and turning mechanism.
32	13	31	6	SW	NW	SE	SE	Homemade mobile home.
33	13	31	5	SW	SE	NW	SW	Hay yard with a haystack and metal building.