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CULTURAL RESOURCES INVESTIGATIONS: HULL SHOALS LAKES  
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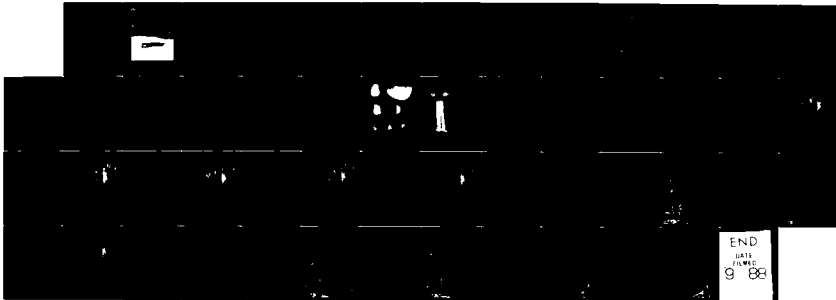
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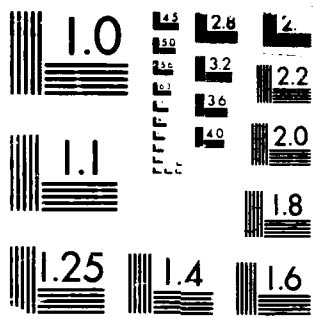
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Little Rock District

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ORDER NO. 0001

# CULTURAL RESOURCES INVESTIGATIONS

## BULL SHOALS LAKES, ARKANSAS

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LITTLE ROCK DISTRICT, CORPS OF ENGINEERS

1986

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		Salem Plateau
		White River
		Whiteware
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A reconnaissance level survey was conducted within 14 disparate parcels of land in the vicinity of Bull Shoals Lake. The project area consisted of 451 acres of land proposed for Government exchange. The effort included a background and literature study, pedestrian survey, and a reconnaissance level site evaluation. A total of nine sites, eight prehistoric lithic scatters, and one historic period site were recorded. No sites were judged eligible for nomination to the National Register of Historic Places and no further archeological investigations are recommended for these lands.		

ARCHEOLOGICAL ASSESSEMENTS REPORT NO. 54

Cultural Resources Investigations  
at  
Bull Shoals Lake, Arkansas

by

Aubra Lane Lee

Report Submitted  
to the  
US Army Engineer District, Little Rock

Contract Number  
DACW03-86-D-0068  
Order No. 0001

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1986

ABSTRACT

A reconnaissance level survey was conducted within 14 disparate parcels of land in the vicinity of Bull Shoals Lake. The project area consisted of 451 acres of land proposed for government exchange. The effort included a background and literature study, pedestrian survey, and a reconnaissance level site evaluation. A total of 9 sites, 8 prehistoric lithic scatters and 1 historic period site, were recorded. No sites were judged eligible for nomination to the National Register of Historic Places and no further archeological investigations are recommended for these lands.



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CULTURAL RESOURCES INVESTIGATIONS  
AT  
BULL SHOALS LAKE, ARKANSAS

INTRODUCTION

Project Authorization

The work detailed below was conducted under the authority of and in compliance with the National Historic Preservation Act of 1980 (Public Law 96-515). In order to meet these compliance regulations, the U.S. Army Engineer District, Little Rock contracted with Archeological Assessments, Inc. to complete a reconnaissance level cultural resources survey of selected portions of Bull Shoals Lake, Arkansas. This work was authorized under Contract No. DACW03-86-D-0068, Order Number 00001.

Project Area Location

The portions to be inspected for suspected cultural resources are located in federally owned lands located near Bull Shoals Lake in north-central Arkansas. The area to be surveyed consisted of 14 discontinuous tracts and comprise a total of 451 acres. Collectively, these tracts are designated the project area with Bull Shoals Lake comprising the more inclusive study area (Figure 1).

Goals and Orientation

This effort is to be a traditional cultural resources survey of the aforementioned tracts. The goals of this effort were to locate, describe, and evaluate previously unrecorded archeological sites in the areas examined. The results of this work were to be used to determine the relative significance of each site located within a regional framework. These determinations guided recommendations on whether these sites were to receive more intensive archeological investigations.

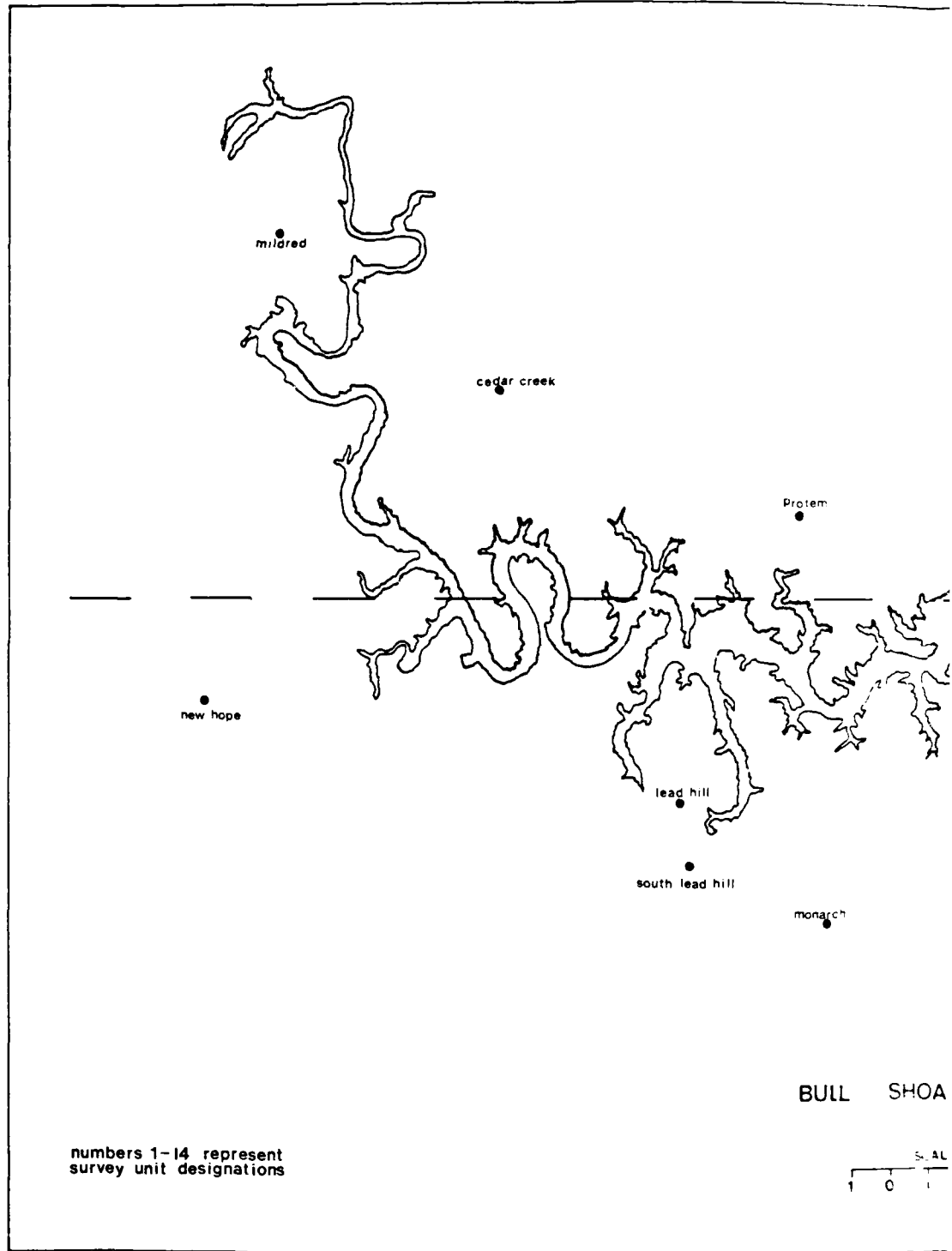
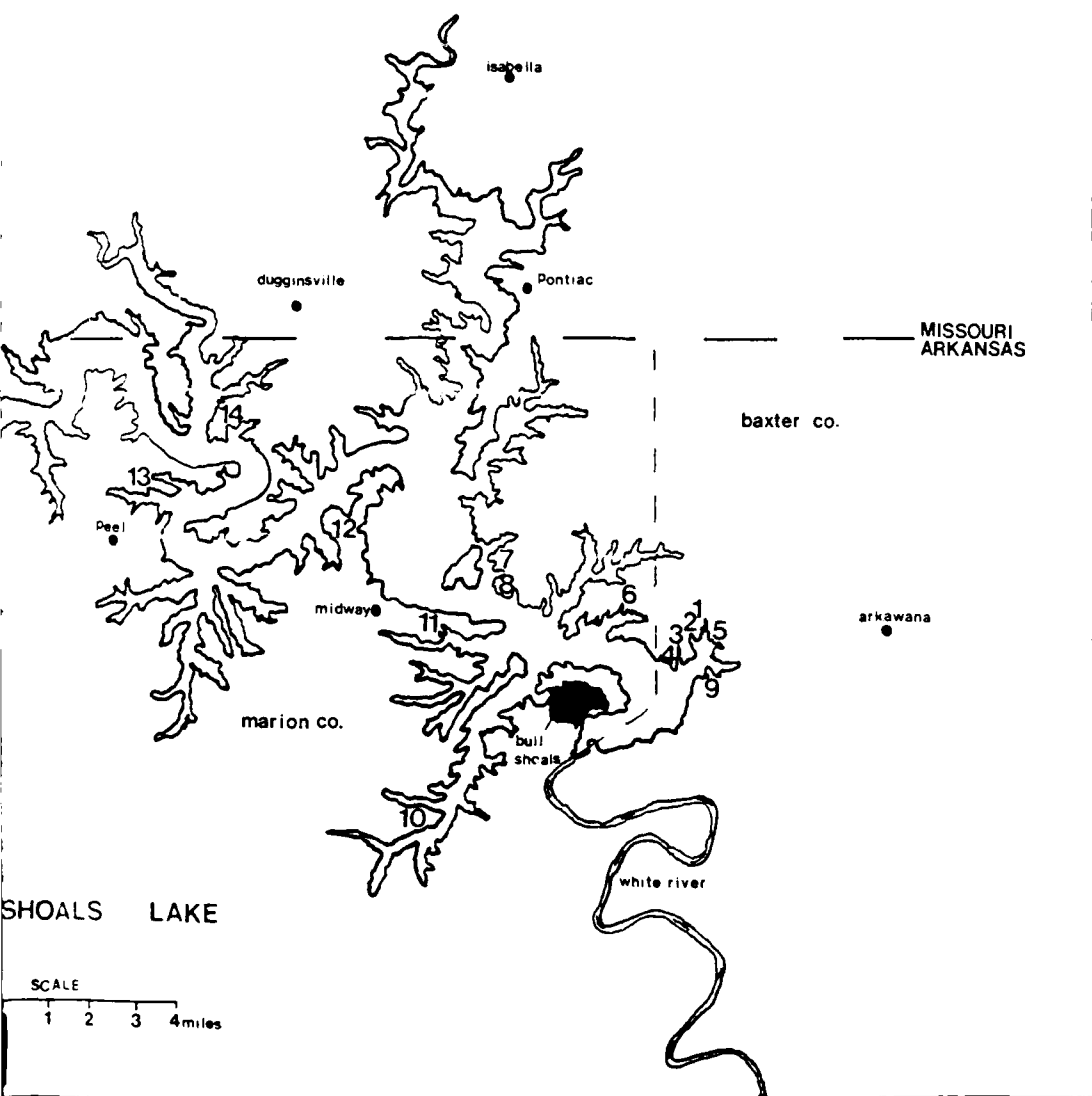


Figure 1. General Location Map of Project

/



SHOALS LAKE

SCALE  
1 2 3 4 miles

ject Area and Survey Units.

2 /

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## SUMMARY OF INVESTIGATIONS

Several activities were conducted during this project. These activities included a records check and literature review, an intensive pedestrian survey, and laboratory identification of recovered materials.

### Background and Literature Research

These investigations began with a review of records containing previously recorded sites within the project area. The search of these files concentrated upon the location of prehistoric sites and descriptions (Office of the State Archeologist) and information on historic period sites (Arkansas Preservation Program). The Office of the State Archeologist was requested by letter to search its files for sites within the vicinity of the project area. The results of this search were conveyed to Archeological Assessments, Inc. by letter from Jerry Hilliard, Registrar, Arkansas Archeological Survey, April 21, 1986. Four previously recorded archeological sites existed within the proximity of various of these parcels (3BA086, 3MR117, 3M4134, 3M4135) but none were located within the project area. A records search of the files of the Arkansas Historic Preservation Program was also requested by letter but the results of this effort have not yet been reported. However, since these files are composed primarily of information regarding standing structures the results of this search are expected to be negative.

A literature review was conducted to synthesize data pertinent to previous archeological investigations in the study area by Aubra L. Lee. These investigations revealed that a large number of previously recorded sites existed in various topographic settings such as ridgetops, stream terraces, stream floodplains, hillslope benches, upland plateaus, and bluff areas. The majority of the floodplain and stream terrace sites are inundated by Bull Shoals Lake.

### Pedestrian Survey

The pedestrian survey was conducted within previously defined tracts near Bull Shoals Lake. Methodologies applied to these units varied in relationship to conditions found within the particular unit. In general, the survey consisted of pedestrian transects of varying widths with shovel test intervals corresponding to the transect width. Descriptive data pertaining to site setting, nature of the deposit, and artifact types recovered were recorded.

The pedestrian survey was conducted from April 28, 1986 to May 2, 1986. Aubra L. Lee served as field supervisor with field assistance provided by Robert O. Abbott, John D. Northrip, and David Jarecke. The 14 tracts were assigned individual survey unit numbers. The exact locations of the survey

units are marked on 7.5 minute quadrangle sheets and data describing these units and the way in which they were surveyed are presented on individual survey unit forms included with this report.

The survey methods applied to these areas consisted of parallel transects using 25 and 50 meter intervals between transects. Shovel testing was also conducted at 25 or 50 meter intervals with the shovel tests measuring 30 centimeters square with a maximum depth of 35 cm below ground surface. The backdirt from these tests was troweled to recover artifacts. Access to the survey units was accomplished by using road transportation, or in some cases, gaining access from private land owners. Access permission was granted in all cases.

When a site was located, surface or subsurface, the shovel test interval was reduced to 10 meters to determine the horizontal and vertical limits of each site. A select surface collection of each site was obtained when possible to collect a representative sample of artifact types present. Artifacts were given proveniences that included survey unit number, surface or subsurface, and shovel test number. Site limits and locations of all shovel tests were plotted onto site maps. Arkansas Archeological Survey site forms have been completed and are on file at the Little Rock District and the Office of the State Archeologist. A summary description of all sites along with a listing of materials recovered accompanies this report.

#### Laboratory Analysis

All recovered artifacts were processed under the direction of Anne Frances Gettys. The artifacts were initially grouped into two categories: prehistoric and historic. Prehistoric lithic artifacts were then subdivided into artifacts, flakes, and debris. Historic period artifacts were identified as to raw material class, described, and an attempt was made to establish a chronological range for all identifiable historic artifacts.

#### Data Analysis

Data related to site characteristics were placed into a computerized data base management system (dBASE II). These data included site number, (state and field), quadrangle sheet location, landform type, cultural affiliation, nature of deposits, areal extent, depth, and site condition. This systematic approach was used to generate the tables presented below discussing site distribution and site evaluation. Data related to recovered artifacts were also entered into this system for subsequent manipulation for the interpretation of site distribution.

## THE ARCHEOLOGICAL CONTEXT

### Previous Archeological Investigations

Bull Shoals Lake is located in the Interior Highlands Physiographic province; more specifically upon the Salem Plateau. The surface rock consists of dolomite and limestone from the Ordovician Age, the younger strata being eroded away. Elevations on the plateau range from 500 to 1000 feet above mean sea level (amsl) with a stream pattern that gradually dissects the uplands leaving a hilly relief that seldom exceeds 200 feet in variation (Yates and Collum 1973; Rea 1955).

Archeological research in the immediate vicinity of the project area was initiated in the late 1940s when three sites were tested by Lynn Howard (1963). These sites are the Picnic site (3MR041), near Oakland, Arkansas, the Newton site (3MR013), and the Anglin Bottoms site (3MR012), south of Oakland, Arkansas. The sites revealed an occupation that ranges from the Woodland to the Mississippian Period. Gus Crumpler visited 3MR056 in 1951 and reported over 20 burials, a large collection of projectile points, pottery, shell beads, modified bone tools, slate ear spools, and ground stone axes (Crumpler 1969).

The first systematic survey in the area was conducted by the Arkansas Archeological Survey. The White River basin was divided into different watershed reaches and sites contained within these units were tabulated. Two of these reaches pertained directly to Bull Shoals Lake and had a combined total of 229 sites with 74 attributed to the Archaic Period, 7 to the Woodland, 6 to the Mississippian, 6 to the Historic, and 142 unclassifiable sites (Spears, Myer, and Davis 1975).

A five percent sample survey of the Bull Shoals Lake shoreline was conducted by the Arkansas Archeological Survey in 1977. This resulted in the location and description of 64 newly recorded sites and a study of 199 previously recorded sites. From this sample, it was projected that as many as 6200 sites may well exist within the confines of Bull Shoals Lake. Six of the sites were recommended for further investigation. The sites are: 3MR114, 3MR117, 3MR139, 3BO219, 3BO220, and 23OZ076. Furthermore, it was stated that the constantly fluctuating level of the lake was contributing to deleterious effects upon cultural resources located within the study area (Novick and Cantley 1979).

### Culture-Historical Framework

The culture period synopses presented below were extrapolated from Chapman (1975), Novick and Cantley (1979), and Perttula (1983). From this, it is hoped that a fairly concise view of the Paleo-Indian, Dalton, Archaic, Woodland, and Mississippian cultures will be presented. The period descriptions will focus on societal level, economy, and artifact assemblages.

Paleo-Indian (12,000-8,000 B.C.). This period is thought to represent a band level society based on a highly nomadic hunting tradition. These hunters followed the migrating herds of late Pleistocene megafauna inhabiting North America. Point types associated with this group are Clovis and Cumberland Fluted. Associated with these points are snubbed-end scrapers, side scrapers, knives, drills, groovers, graving tools, abraders, and grinding stones.

Dalton (8,000-7,000 B.C.). The period is now thought to be a transitional state between the earlier Paleo-Indian and later Archaic cultures. They continued the nomadic, band level society; but, they hunted the new, smaller Holocene fauna. In addition, an expanded tool complex seems to indicate foraging for floral species. The Dalton point is considered highly diagnostic of this period. Other point types associated with the Dalton point are the Graham Cave Fluted and Plano-like projectile points. Additional artifacts associated with these points are: adzes, spokeshaves, steep-edged scrapping and cutting tools, bone needles and awls, snubbed-end scrapers, mortars, manos, and grinding slabs.

Archaic (7,000-1,000 B.C.). The Archaic Period represents a gradual shift to a semi-nomadic hunting and gathering tradition with an intensification of regional exploitation of ecozones. During this period, point style proliferation and variation is interpreted as a regionalization of band level society. New additions to the tool complexes such as adzes, bannerstones, fishhooks, and gorgets seem to support this hypothesis. The period may be broken into a three-part series: early, middle, and late. Diagnostic types of the Early Archaic are the Rice Variants, Agate Basin, Graham Cave Notched, Hidden Valley, and Nebo Hill. Diagnostics of the Middle Archaic are the Big Sandy Notched, Table Rock Stemmed, Smith Basal Notched, and Jackie Stemmed, in addition to ground and chipped stone axes. The Late Archaic projectile point assemblage is exemplified by Eley Stemmed, Sedalia Lanceolate, Table Rock Stemmed, Smith Basal Notched, Stone Square Stemmed along with Clear Fork Gouges and Sedalia Diggers.

Woodland (1,000 B.C.- A.D. 900). This period represents a hypothesized population increase based on semi-sedentary horticulture. This horticulture was based upon the gathering of and/or nurturing of Sunweed, Sunflower, and Chenopodium among others. This economic base allowed for increased trade and regional interaction. Pottery and the bow and arrow were introduced during this timeframe. Pottery was plain or decorated with a style range from cord-marked to dentate stamped. Increased ceremonialism is evident in the occurrence of burial mounds, specialized artifact classes, and personal adornment. Projectile points are large, corner and side notched, convex based, and contracting stem styles. Full-grooved axes make their appearance in this period.

Mississippian (A.D. 900-1,700). This period represents a chiefdom level society based on maize agriculture. There is an increase and stratification of the population. Specialized classes and unequal wealth distribution are

hallmarks of the society(s). Ceremonial mound centers were constructed and inhabited by a priestly order with support villages scattered about the landscape. Also, specialized extraction camps, exotic trade, and discrete activity areas are noted. Shell was introduced as a tempering agent for an elaborate ceramic complex along with an increase in personal adornment items. A rather incomplete tool complex for this area was described by Crumpler (1969:19) as containing bone tools, slate ear spools, ground stone axes, shell beads, and drills.

Historic Period. The Ozark region has been occupied since the period of initial contact between local aboriginal populations and European explorers (A.D. 1500-1825). After control of this area passed to the United States, wave after wave of Anglo-American settlers came in and through the area. The population increased with the settlers depending on farming (plantation, tenant, and marginal upland), logging, and mining for their livelihoods. This expansion period is characterized by rapid population growth centers in corridors paralleling different transportation modes (riverine and railroad) and later decline and abandonment (A.D. 1825-1930). Most of the area near the project area was not densely populated until after the turn of the 20th century. Historical sites projected to be located in this study are farmsteads, and logging and mining camps (Stewart-Abernathy and Watkins 1982).



RESULTS OF FIELD WORK

Areas Examined

The 451 acres examined during this effort were divided into 14 separate Survey Units; each consisting of a particular parcel or parcels of land proposed for exchange. Observations made during the examination of these Survey Units are included with this report as Appendix I.

Table 1. Parcel Locations

Parcel Number	Legal Location	Survey Unit
1	sw/se Sec 8 nw/ne Sec 17 T20N, R14W	5
2	sw/sw/sw Sec 16 se/se Sec 17 n1/2, n1/2, ne/ne Sec 20 nw/nw/nw Sec 21	9
3A	se/ne Sec 7 part of Sec 8 T20N R14W	2
3B	s1/2, sw/ne & n1/2, nw/se Sec 8 T20N, R14W	1
4	n1/2, n1/2, sw & nw/nw/ne Sec 18 T20N R14W	3 & 4
5	nw/nw Sec 11 T20N R15W	6
7	se/ne/sw Sec 6 nw/ne Sec 7 T20N R15W	7
7A	se Sec 7 T20N R15W	8
8	s1/2, se Sec 26 T20N R16W	10
9	sw Sec 1 T20N R16W	11

Table 1. Parcel Locations (cont'd)

Parcel Number	Legal Location	Survey Unit
10	se/ne Sec 33 T21n R16W	12
11B	ne/sw. & se/sw Sec 23	15
12	sw/n. & nw/sw Sec 29	14

Survey Units 1 (Parcel 3B), 3 (Parcel 4), 4 (Parcel 4), 5 (Parcel 1), 6 (Parcel 5), 9 (Parcel 2), 11 (Parcel 9), and 13 (Parcel 11B) contained no cultural materials. Survey Unit 2 (Parcel 3A) contained 1 site, Survey Unit 7 (Parcel 7) contained 2 sites, Survey Unit 8 (Parcel 7A) contained 2 sites, Survey Unit 10 (Parcel 8) contained 1 site, Survey Unit 12 (Parcel 10) contained 2 sites, and Survey Unit 14 (Parcel 12) contained 1 site.

Sites Recorded

A total of 9 sites were located and described in this effort. A total of 5 sites contained only prehistoric materials, while a total of 3 sites contained both prehistoric and historic materials. One site contained only historic period cultural materials. Table 2 contains a short description of each site. Full site descriptions are given on the appropriate Arkansas Archeological Survey site forms which have been filed with the Arkansas Archeological Survey and are included with this report.

Table 2. Site Descriptions

Site Number	Parcel	Description and Recommendations
3BA151	3A	Low density, surface lithic scatter located on a very steep and eroded side slope. No diagnostics were recovered, only flakes and flaked chunks. No further work is recommended.
3MR148	7	Low density, surface lithic scatter on a highly eroded side slope. Bedrock exposed. No diagnostics recovered and no concentrations observed. No further work is recommended.

Table 2. Site Descriptions (cont'd)

Site Number		Description and Recommendations
3MR149	7A	Low density, surface lithic scatter with some historic debris. Located upon an eroded saddle in a cedar glade. Recovered 1 point fragment, 1 drill fragment, biface fragments and flakes, and historic ceramics. Bedrock exposed. No further work is recommended.
3MR150	7A	Low density, subsurface deposit on crest of an interfluvial projection. 2 artifacts recovered; no diagnostics. No further work is recommended.
3MR151	8	Low density, surface lithic scatter on slope that is highly eroded. Area impacted by road construction, powerline right-of-way and erosion. No diagnostics recovered; no subsurface material from tests. No further work is recommended.
3MR152	10	Low density, lithic surface scatter with some historic ceramics on eroded saddle area. Bedrock exposed. No diagnostics; only flakes and biface. No concentration observed. No further work is recommended.
3MR153	10	An historic site consisting of oval foundation of native stone and 2 surface trash areas. Bedrock exposed. No subsurface material. No further work is recommended.
3MR154	12	Low density, surface lithic scatter with some historic ceramics on highly eroded slope. Bedrock exposed. Recovered two point fragments, bifaces, flakes, and debris. No concentration observed. No further work is recommended.
3MR155	7	Low density, surface lithic scatter located on a impacted side slope. Site has been impacted by land leveling, road construction, and structure removal. No observed concentrations on exposed land. No further work is recommended.

## Recovered Artifacts

All prehistoric material recovered consisted of lithic artifacts. These artifacts range from bifaces, drill, and flakes to hammerstones and projectile points. Historic period artifacts consisted of whiteware and earthenware ceramics along with glass bottle fragments. Maker's marks are recorded on 1 piece of historic ceramic from 3MR149. Glass color was either amethyst or clear and was collected from 3MR153. Table 3 presents chronologically diagnostic materials from sites 3MR149, 3MR153, and 3MR154. Figures 2 and 3 provide photographic data showing the range of artifact types recovered.

Table 3. Chronologically Diagnostic Materials

Site/Artifact	Date Range	Reference
<b>3MR149</b>		
Stone Square Stemmed Point	Middle to Late Archaic Periods	Chapman 1975:257
Dalton Serrated(?) Point	Dalton Period	Chapman 1975:245
Whiteware with marker's mark (Alfred Meakin)	1875 - present	Godden 1964:425
<b>3MR153</b>		
Amethyst glass	Pre-1915	Kendrick 1966:57
<b>3MR154</b>		
Burkett Stemmed Point	Late Archaic to Middle Woodland	Chapman 1980:306
Milk glass lid liner	1869 - present	Toulouse 1977:135

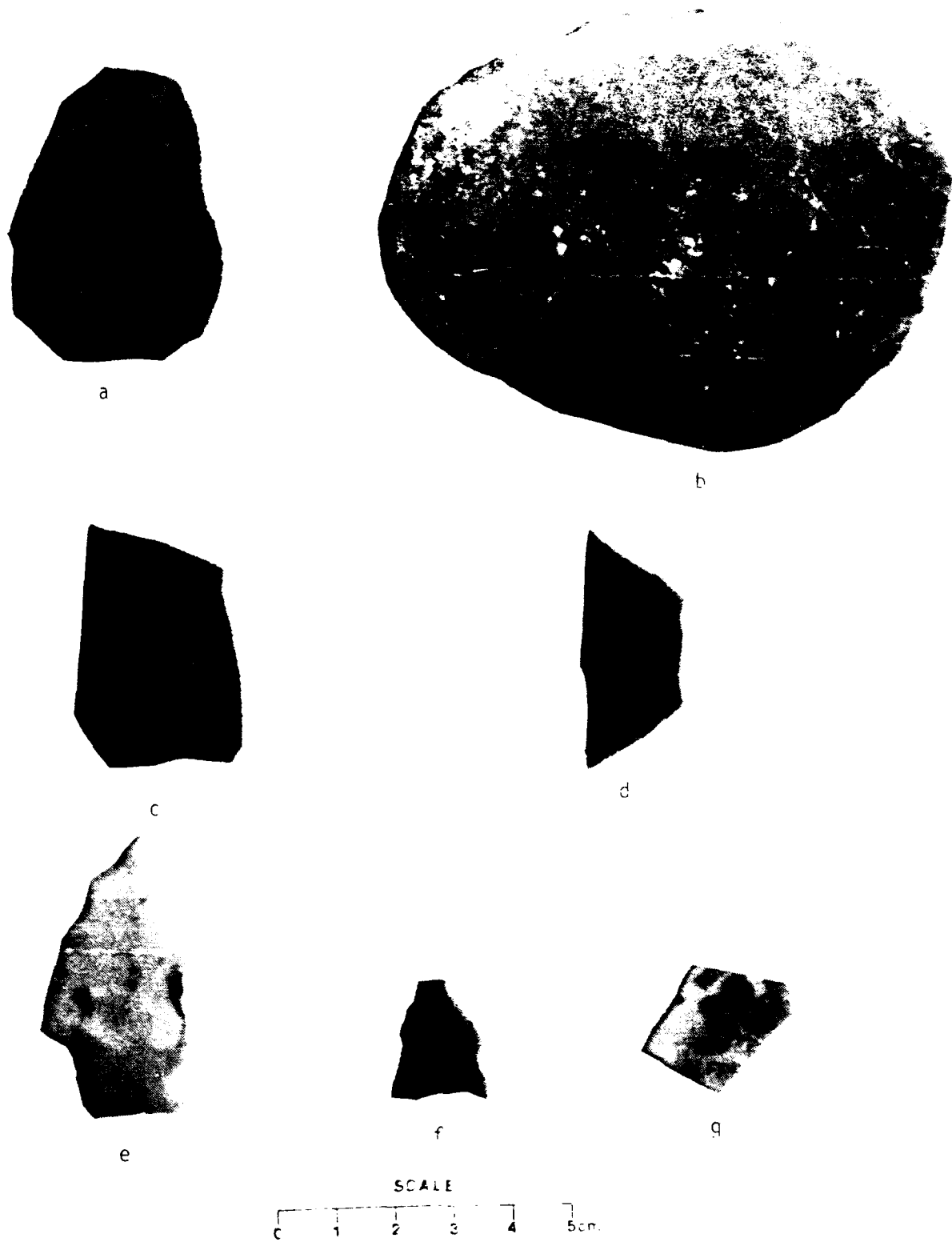


Figure 2. Lithic and Ceramic Artifacts.  
 a- heat fractured oval biface; b- possibly ground and pecked stone;  
 c,d- burned earthenware; e- stone square stemmed point type; e-  
 Dalton serrated (?) point type; f- Whiteware with marker mark.  
 3MR152 (a-d); 3MR149 (e-g).

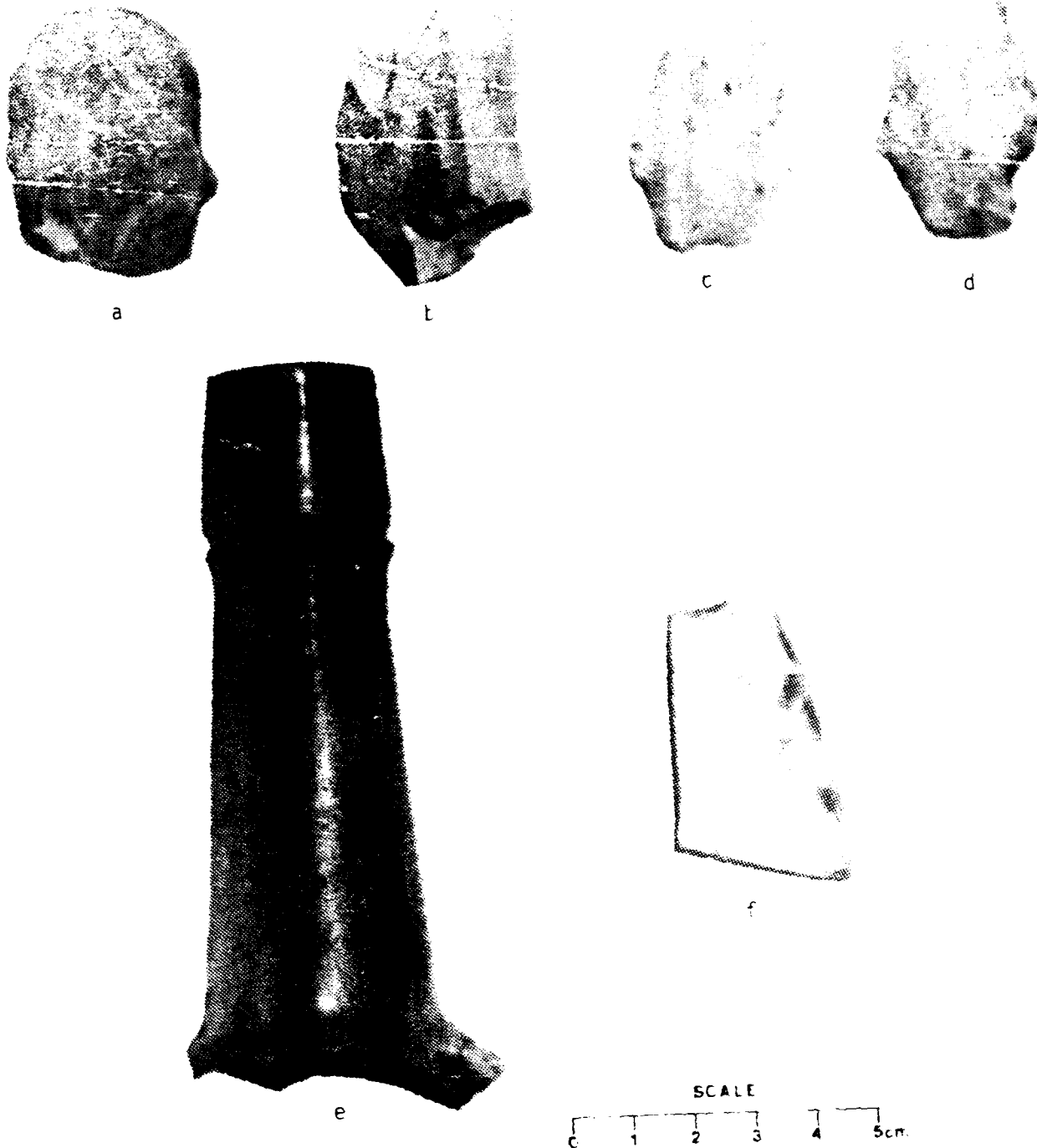


Figure 3. Lithic and Ceramic Artifacts.

a- round/oval biface; b- ovate biface; c- untyped point;  
 d- Burkett Stemmed point type; e- bottle neck and rim, hand  
 applied (?) amethyst; f- clear vessel fragment (AYN, HISK).  
 3MR154 (a-d); 3MP153 (e-f)

## RECOMMENDATIONS

The cultural resources survey conducted in 14 survey units near Bull Shoals Lake, Arkansas, resulted in the location of 9 previously unrecorded sites. These sites have a chronological range beginning in the Archaic Period and ending with the Historic Period.

Survey Unit Evaluation. A total of 14 units were surveyed at the initial reconnaissance level. Survey Unit Numbers 1, 3, 4, 5, 6, 9, and 11 contained no cultural materials. Survey Unit 2 contained one site, Unit 7 contained two sites, Unit 8 contained two sites, Unit 10 contained one site, Unit 12 contained two sites, and Unit 14 contained one site. It is therefore recommended that no further site location activities be conducted within these areas.

Site Evaluation. Of the 9 sites recorded for these parcels none were judged to contain intact deposits and it is our judgment that further work at any of these sites will not result in the recovery of further significant scientific or cultural data. Therefore, no further archeological investigations are recommended for these sites.

REFERENCES CITED

- Chapman, Carl H.  
 1975 The Archaeology of Missouri I. University of Missouri Press, Columbia.
- 1980 The Archaeology of Missouri II. University of Missouri Press, Columbia.
- Crumpler, Gus Y.  
 1969 The Wilderson Indian graveyard. Central States Archaeological Journal 16(1):12-21.
- Godden, Geoffrey a.  
 1964 Encyclopaedia of British Pottery and Porcelain Marks. Bonanza Books, New York
- Howard, Lynn E.  
 1963 Archeological survey in Bull Shoals region of Arkansas. Bulletin of the Arkansas Archeological Society 4(6):1-11.
- Kendrick, Grace  
 1966 The Antique Bottle Collector. Edwards Brothers, Inc., Ann Arbor
- Novick, Lee and Charles Cantley  
 1979 Bull Shoals Lake: An archeological survey of a portion of the Bull Shoals Lake Shoreline. Arkansas Archeological Survey Research Report No. 16. Fayetteville.
- Perttula, Timothy  
 1983 The Loftin Site and Phase in Western Ozark Prehistory. In The Loftin Component, pp.40-62. The Missouri Archeologist No. 44. Columbia.
- Rea, Ralph R.  
 1955 Boone County and its People. Press-Argus, Van Buren.
- Spears, Carol, Nancy Myer and Hester A. Davis  
 1975 Watershed Summary of Archeological and Historic Resources in the White River Basins, Arkansas and Missouri. Arkansas Archeological Survey Research Report No. 5. Fayetteville.
- Stewart-Abernathy, Leslie C. and Beverly Watkins  
 1982 Historical Archeology. In A State Plan for the Conservation of Archeological Resources in Arkansas, edited by Hester A. Davis, pp. HA1-HA97. Arkansas Archeological Survey Research Report No. 21.



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Toulouse, Julian Harrison  
1977 A Collector's Manual with Prices: Fruit Jars. Thomas Nelson,  
Inc., Nashville

Yates, Joe and Ranny Collum (editors)  
1973 Atlas of Arkansas. Arkansas Department of Planning, Little Rock.

APPENDIX 1

Survey Unit: 1

Quad Sheet: Bull Shoals

Terrain: consists of crest and side slopes of a small interfluvial projection. Topography ranges from undulating to very steep with severe erosion present.

Vegetation: upperstory consists of oak, hickory, elm, and cedar; understory consists of small trees, briars, vines, and sassafras.

Soil Description(s): In Roadcut: light brown sand/silt, 0-4cm; yellow red clay with rock, 4-20cm. Side slope: gray black silt loam with gravel, 0-19cm; yellow brown silt loam with gravel, 19-27cm. 840' amsl: brown silt loam with rock, 0-9cm; yellow red clay with rock, 9-25cm.

Sites Recorded: 0

Isolated Finds: 0

Ground Visibility: poor to fair due to heavy ground cover. This situation is modified on the slopes where large discontinuous areas of ground surface have been exposed by erosion.

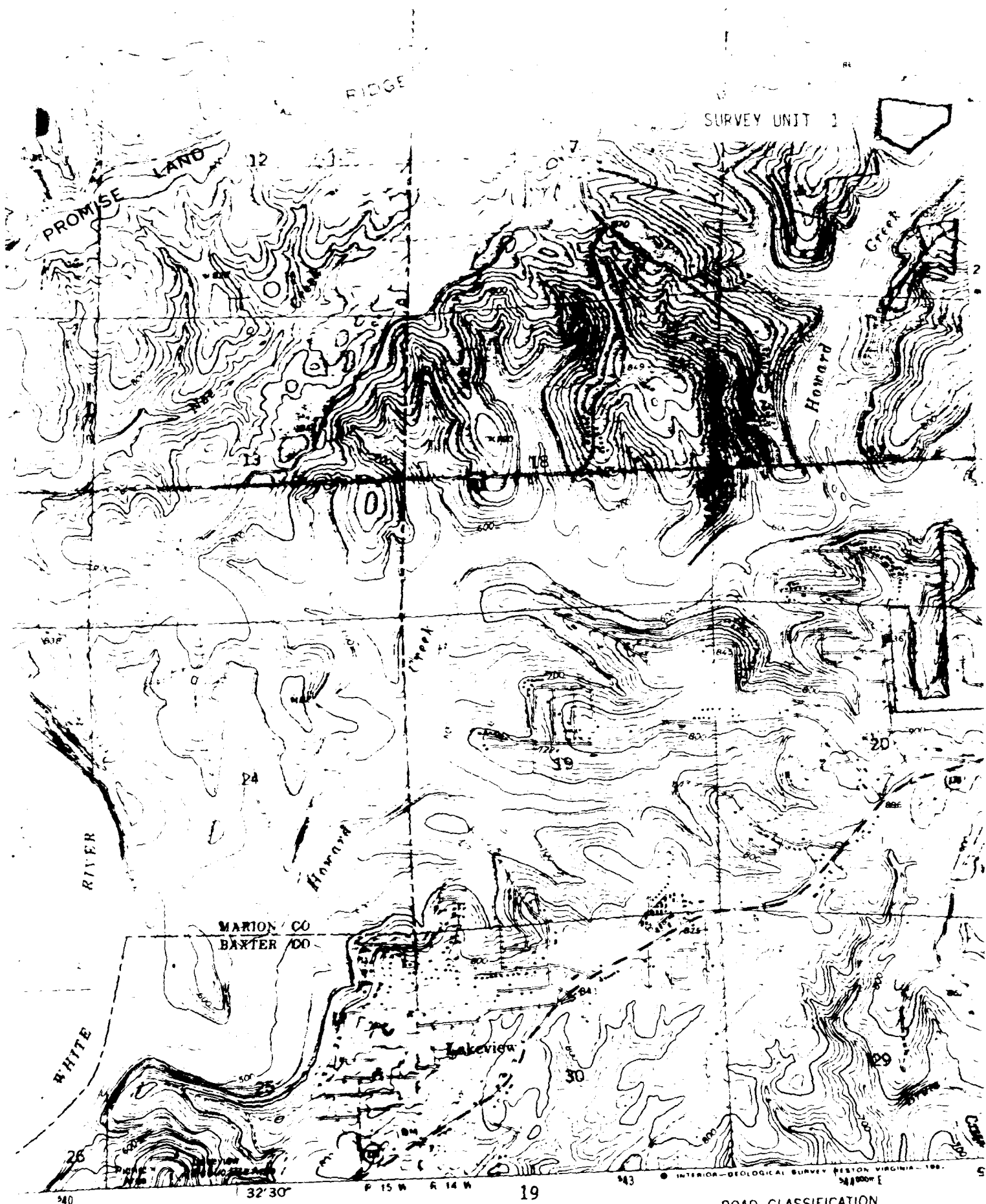
Special Hinderances to Site Location: heavy ground cover and severe erosion.

Special Observations: survey area has experienced deflation due to erosion. Bedrock or separate beds are exposed on slopes.

Survey Strategy: utilized parallel transects with 50 meters between surveyors. Transect orientation is west to east and vice versa. Shovel test interval of 50 meters or when surface was exposed, the whole area was scrutinized for cultural materials.

Surveyor(s): Lee and Abbott

Date: 04/29/86



ROAD CLASSIFICATION

Primary highway  
hard surface

Light duty road hard or  
improved surface

1 MILE

INTERIOR GEOLOGICAL SURVEY WASHINGTON, VIRGINIA 22500

Survey Unit: 2

Quad Sheet: Bull Shoals

Terrain: consists mainly of steep side slopes of an interfluvial projection. Other areas consist of portions of interfluvial toe and side slope intermittent drainages.

Vegetation: cedar, oak, elm, hickory upperstory; understory consists of small trees, grass, briars, and vines.

Soil Description(s): Profile #1: dark brown silt loam, 0-5cm; yellow red clay with gravel, 5-20cm. Profile #2: brown silt loam with gravel, 0-3cm; limestone bedrock, 3cm-.

Sites Recorded: BS02-01

Isolated Finds: 0

Ground Visibility: poor to fair due to ground cover with ground surface exposure on steep side slopes.

Special Hinderances to Site Location: heavy ground cover, severe slope erosion, tree fall detritus, and some impacts from subdivision development.

Special Observations: slope erosion has produced "glade" areas on side slopes. These areas have exposed bedrock with sparse ground cover of grass.

Survey Strategy: parallel transect with 50 meter intervals between surveyors. Shovel test interval of 50 meters where possible. Exposed ground surface was closely scrutinized for cultural debris.

Surveyor(s): Northrip and Jarecke

Date: 04/29/86



**ROAD CLASSIFICATION**

Primary highway  
hard surface

Light-duty road hard or  
improved surface

1 Mile

Survey Unit: 3

Quad Sheet: Bull Shoals

Terrain: consists of steep side slopes west of intermittent unnamed tributary of Howard Creek.

Vegetation: cedar, oak, elm, hickory, sweetgum upperstory with sparse understory of small trees, some vines, sassafras, and grass.

Soil Description(s): silt loam with sand and gravel, 0-4cm; bedrock, 4cm-.

Sites Recorded: 0

Isolated Finds: 0

Ground Visibility: poor to good due to differential ground cover from slope wash or erosion.

Special Hinderances to Site Location: severe slope erosion and ground cover.

Special Observations: high percentage of exposed bedrock in area. This rock is decomposing, causing surface stone to be scattered over large areas. Nodules of chert observed along with exposed beds of the same.

Survey Strategy: parallel transects with 50 meters between surveyors. Transect orientation east to west and vice versa. Shovel test interval of 50 meters when possible. Glade areas closely scrutinized for cultural debris.

Surveyor(s): Lee, Northrip, Abbott, Jarecke

Date: 04/29/86





Survey Unit: 4

Quad Sheet: Bull Shoals

Terrain: consists of a small portion of interfluvial projection west side slope. Area is relatively level and only moderately steep.

Vegetation: cedar with oak, hickory, and elm upperstory. Understory consists of sparse small trees, vines, briars, sassafras and poison ivy.

Soil Description(s): silt loam with gravel, 0-5cm; bedrock, 5cm-.

Sites Recorded: 0

Isolated Finds: 0

Ground Visibility: fair due to increased surface exposure by slope erosion.

Special Hinderances to Site Location: severe slope erosion and isolated areas with heavy ground cover.

Special Observations: slopes are heavily deflated with many glade areas and other areas of exposed bedrock. Residual soil forms a thin veneer that overlays the bedrock.

Survey Strategy: parallel transects with 25 meters between surveyors. Shovel test interval of 25 meters when possible; otherwise, exposed ground surface was closely scrutinized for cultural debris.

Surveyor(s): Lee, Abbott, Jarecke, and Northrip

Date: 04/29/86



SURVEY UNIT 4

MARION CO  
BAXTER CO

Lakeview

ROAD CLASSIFICATION

Primary highway  
hard surface

Light duty road hard or  
improved surface

INTERIOR GEOLOGICAL SURVEY RESTON, VIRGINIA 1981  
344000m

1 MILE

Survey Unit: 5

Quad Sheet: Bull Shoals

Terrain: consists of upland slope, toe, and side slopes of an interfluvial projection extending into now flooded Howard Creek. An unnamed tributary of Howard Creek is located immediately east of survey unit.

Vegetation: cedar, with mixed hardwood upperstory and sparse understory of small trees, vines, sassafras and poison ivy.

Soil Description(s): Profile #1: dark brown silt loam, 0-4cm; brown silt loam with rock, 4-11cm; yellow red clay with gravel, 11-21cm. Profile #2: dark brown silt with gravel, 0-6cm; yellow red clay with gravel, 6-17cm. Profile #3: brown silt with gravel, 0-4cm; bedrock, 4cm - .

Sites Recorded: 0

Isolated Finds: 0

Ground Visibility: fair to good

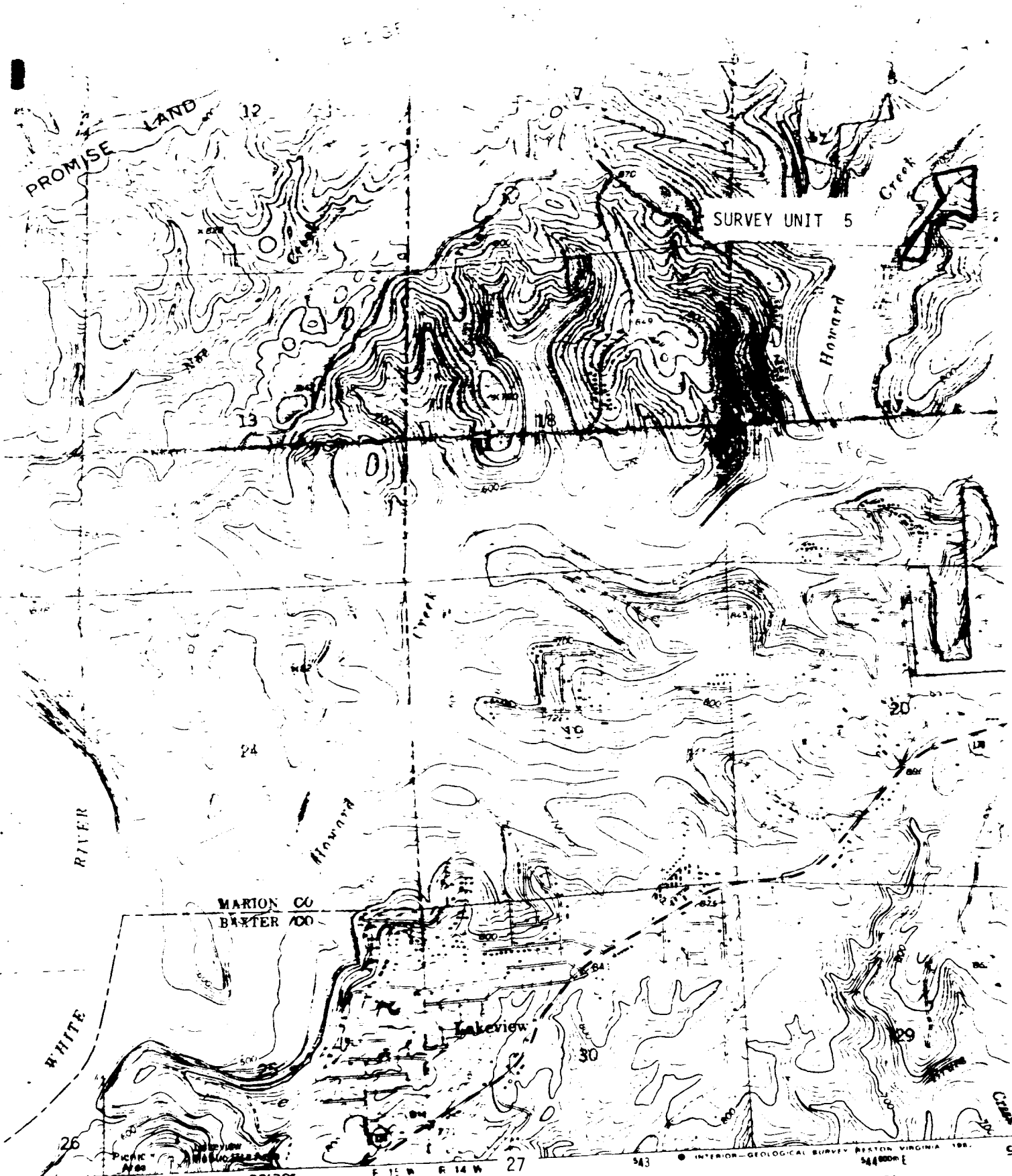
Special Hinderances to Site Location: severe slope erosion, ground cover in areas, and road construction.

Special Observations: areas have been impacted by road construction. Also, utilization by hunters or campers has contributed to erosion in localized areas.

Survey Strategy: parallel transects with 25 meters between surveyors and a shovel test interval of 25 meters when possible. Areas of exposed ground surface were closely scrutinized for cultural debris.

Surveyor(s): Lee, Abbott, Northrip, and Jarecke

Date: 04/29/86



SURVEY UNIT 5

MARION CO  
BAXTER TWP

Lakeview

WHITE RIVER

Howard

Creek

WHITE

ROAD CLASSIFICATION

Primary highway  
hard surface

Light duty road hard or  
improved surface

1 MILE

INTERIOR- GEOLOGICAL SURVEY RESTON VIRGINIA 1981  
544800m E

Survey Unit: 6

Quad Sheet: Bull Shoals

Terrain: consists of crest, saddle, and side slopes of an interfluvial projection bounded on the south by Sister Creek and two unnamed tributaries of Sister Creek on the east and west.

Vegetation: cedar and mixed hardwood upperstory with sparse understory of small trees, grass, sassafras, poison ivy, and vines.

Soil Description(s): Profile #1: silt loam with sand, 0-3cm; brown silt loam with rock, 3-8cm; yellow red clay with rock, 8-21cm. Profile #2: brown silt loam with rock, 0-4cm; yellow red clay with rock, 4cm -. Profile #3: silt loam with sand, 0-5cm; bedrock, 5cm -.

Sites Recorded: 0

Isolated Finds: 0

Ground Visibility: poor due to heavy ground cover.

Special Hindrances to Site Location: heavy ground cover, slope erosion, road construction.

Special Observations: northern end of survey unit has had additional impacts from road construction and usage which promotes accelerated slope erosion.

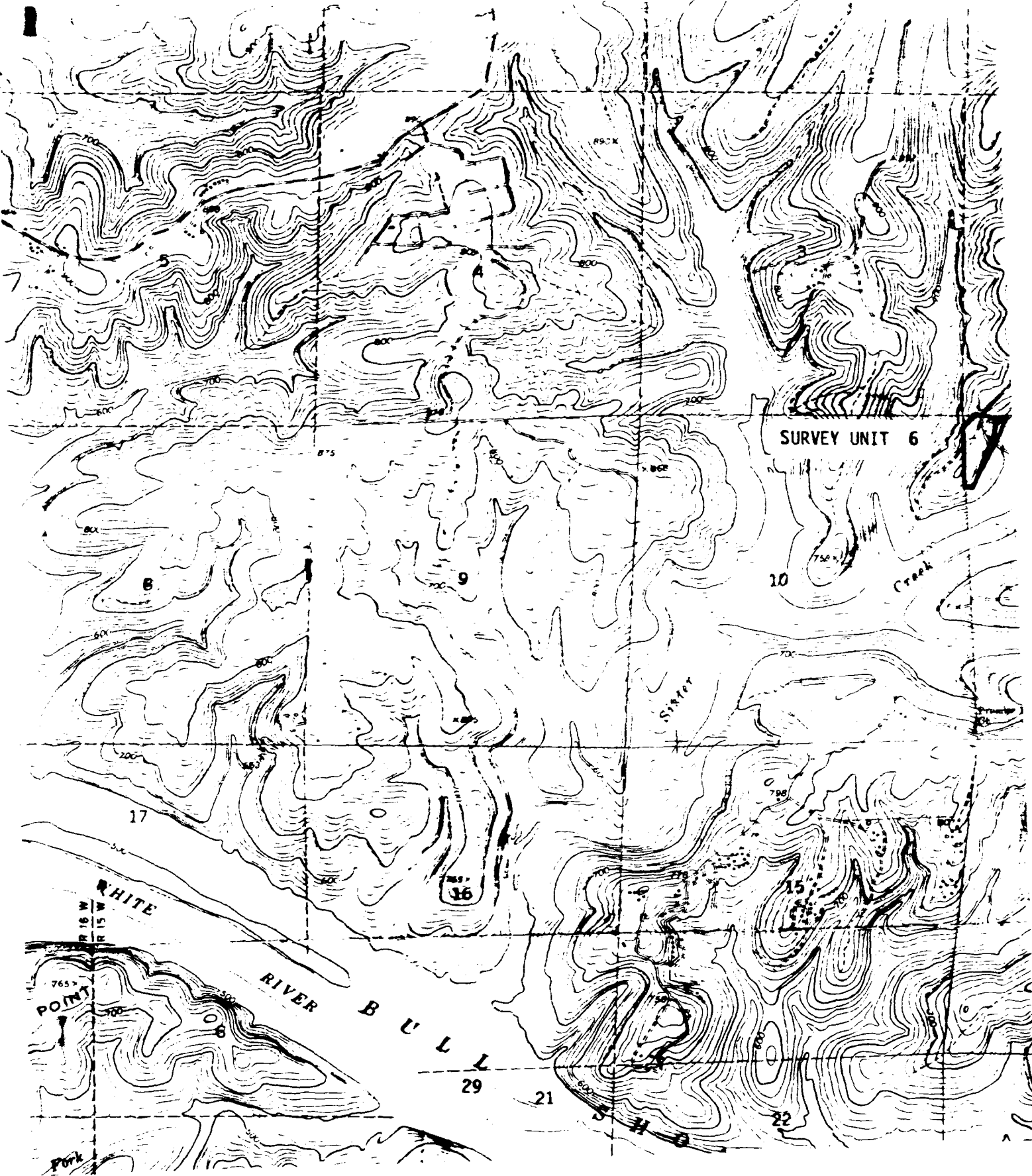
Survey Strategy: parallel transects with 25 meters between surveyors and a shovel test interval of 25 meters. Transect orientation north to south and vice versa. Areas of exposed ground surface were closely scrutinized for cultural debris.

Surveyor(s): Lee, Northrup, Abbott, and Jarecke

Date: 04/30/86

32

34



SURVEY UNIT 6

WHITE RIVER BULL

Creek

Sinter

POINT

Fork

29

21

22

17

9

10

15

36

1  
Survey Unit: 7

Quad Sheet: Cotter NW

Terrain: consists of crest, saddle, and side slope of large interfluvial projection. Topography ranges from rolling to steep (on side slopes). Survey unit contains numerous side slope drainages. Glade areas observed in all portions of survey unit.

Vegetation: mixed hardwood and cedar upperstory with sparse understory that consists of small trees, vines, briars, sassafras, and poison ivy.

Soil Description(s): Profile #1: dark brown silt loam, 0-4cm; brown silt loam, 4-13cm; yellow red clay, 13-22cm. Profile #2: brown silt loam, 0-7cm; yellow red clay, 7-19cm. Profile #3: brown silt loam, 0-4cm; bedrock, 4cm -.

Sites Recorded: BS07-01 and BS07-02

Isolated Finds: 0

Ground Visibility: poor to good due to differential ground cover from slope.

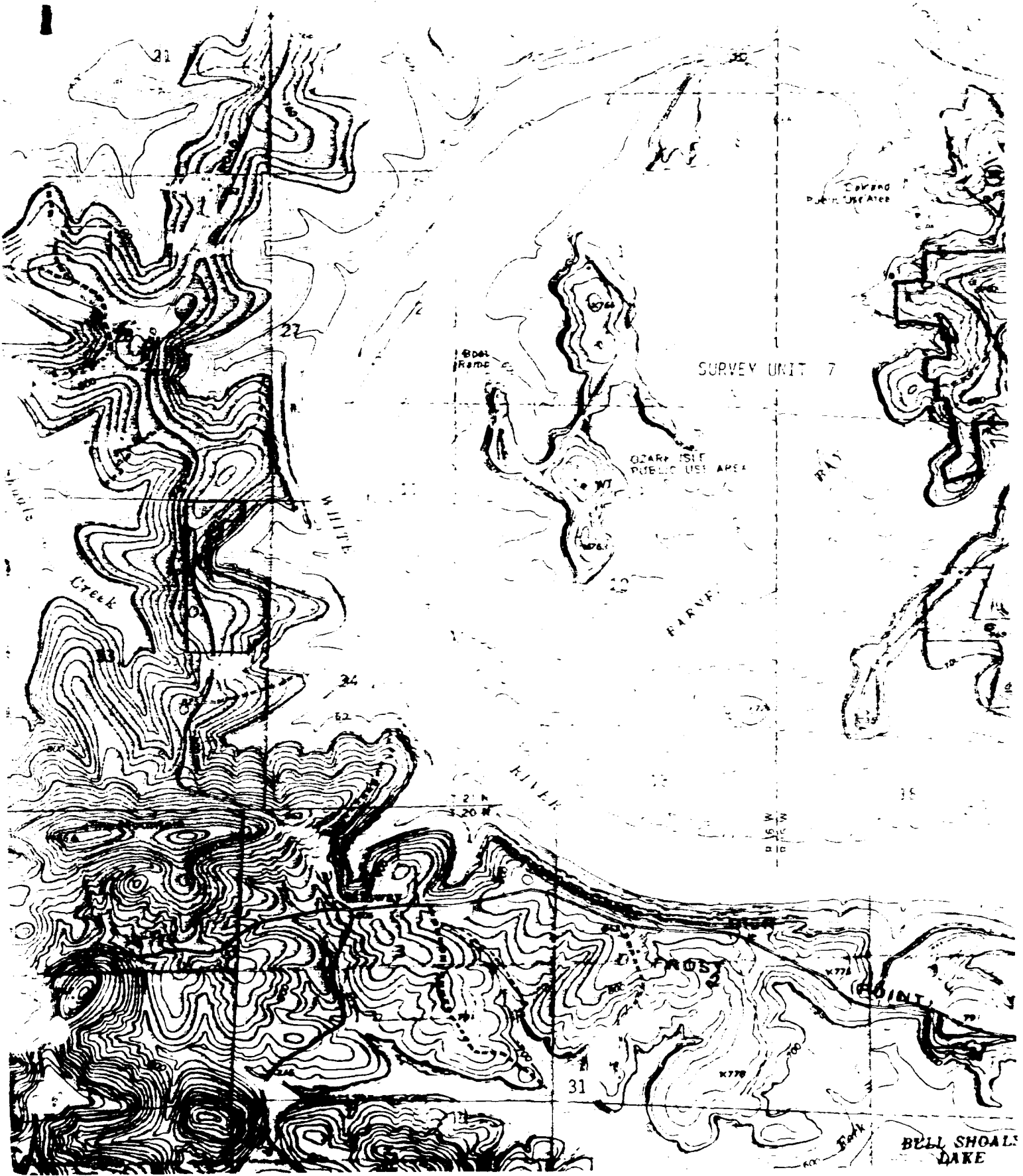
Special Hindrances to Site Location: slope erosion, road construction and usage, house construction and subsequent removal.

Special Observations: survey unit contained Oakland subdivision. Numerous recent house foundations were observed. Structures had been removed with the concrete foundations still in place. These areas were leveled before construction.

Survey Strategy: parallel transects with 50 meters between surveyors. Shovel test interval of 25 meters. Areas of exposed ground surface were closely scrutinized for cultural material. Transect orientation: north to south and east to west.

Surveyor(s): Lee, Abbott, Northrip, and Jarocke

Date: 04/30/86



CAYWOOD  
PUBLIC USE AREA

800'  
IRONIC

SURVEY UNIT 7

OZARK STATE  
PUBLIC USE AREA

HARVEY

WILLIAMS  
RIVER

21 N  
320 W

15 W  
16 C  
17 W

D. WOODS

POINT

BELL SHOALS  
LAKE



Survey Unit: 8

Quad Sheet: Bull Shoals and Cotter NW

Terrain: consists of crest, side slopes, and toe of upland slope. Topography ranges from rolling to very steep. Surface stone and boulders exposed in many areas from slope erosion.

Vegetation: mixed hardwood and cedar upperstory with varying density understory of small trees, vines, briars, sassafras, grass, and poison ivy.

Soil Description(s): Profile #1: dark brown silty loam, 0-12cm; light brown silty loam, 12-30cm; yellow orange clay, 30-35cm. Profile #2: brown silty loam, 0-10cm; yellow orange clay, 10-21cm. Profile #3: dark brown silt loam, 0-6cm; bedrock, 6cm -.

Sites Recorded: BS08-01 and BS08-02

Isolated Finds: 0

Ground Visibility: poor to fair due to differential slope erosion.

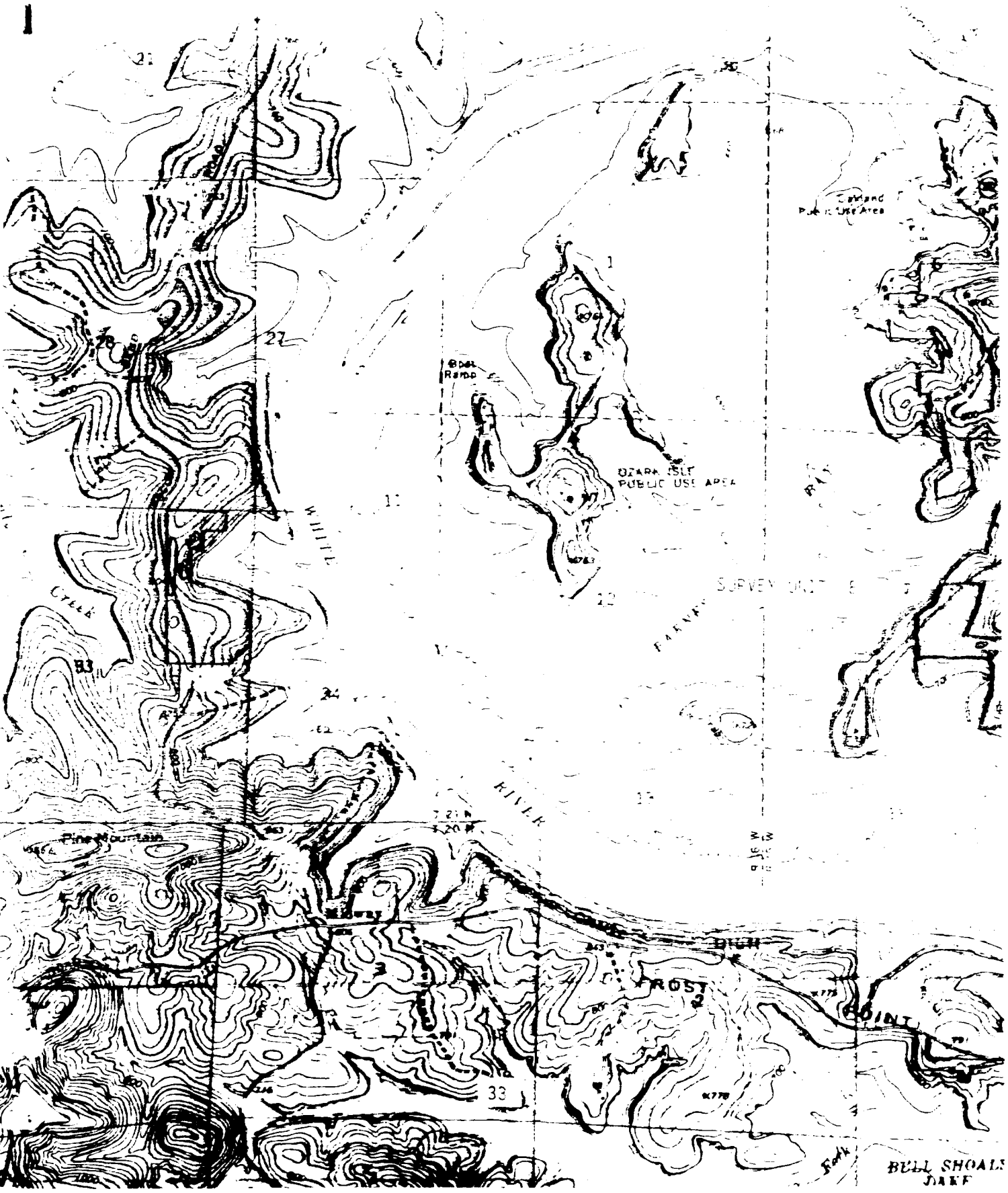
Special Hinderances to Site Location: heavy ground cover, severe slope erosion, and road construction and usage.

Special Observations: survey unit has more soil in place than previous survey units although erosion on the side slopes is similar to the other units.

Survey Strategy: parallel transects with 5 meters between surveys and a shovel test interval of 5 meters. Areas of erosion, roots, surface were closely scrutinized for cultural material.

Surveyor(s): Lec. Northrup, Abbott, Jaremc

Date: 04/30/88



Survey Unit: 9

Quad Sheet: Midway and Bull Shoals

Terrain: consists of crest, toe, and side slope of an interfluvial projection south of Howard Creek. Topography ranges from gently rolling to very steep. Several small unnamed intermittent drainages cross the survey unit.

Vegetation: consists of mixed hardwoods and cedar upperstory with an understory of varying density that consists of small trees, vines, shrubs, grass, poison ivy and sumac.

Soil Description(s): silt loams, clay loams, and bedrock.

Sites Recorded: 0

Isolated Finds: 0

Ground Visibility: poor due to heavy ground cover outside developed areas of survey unit.

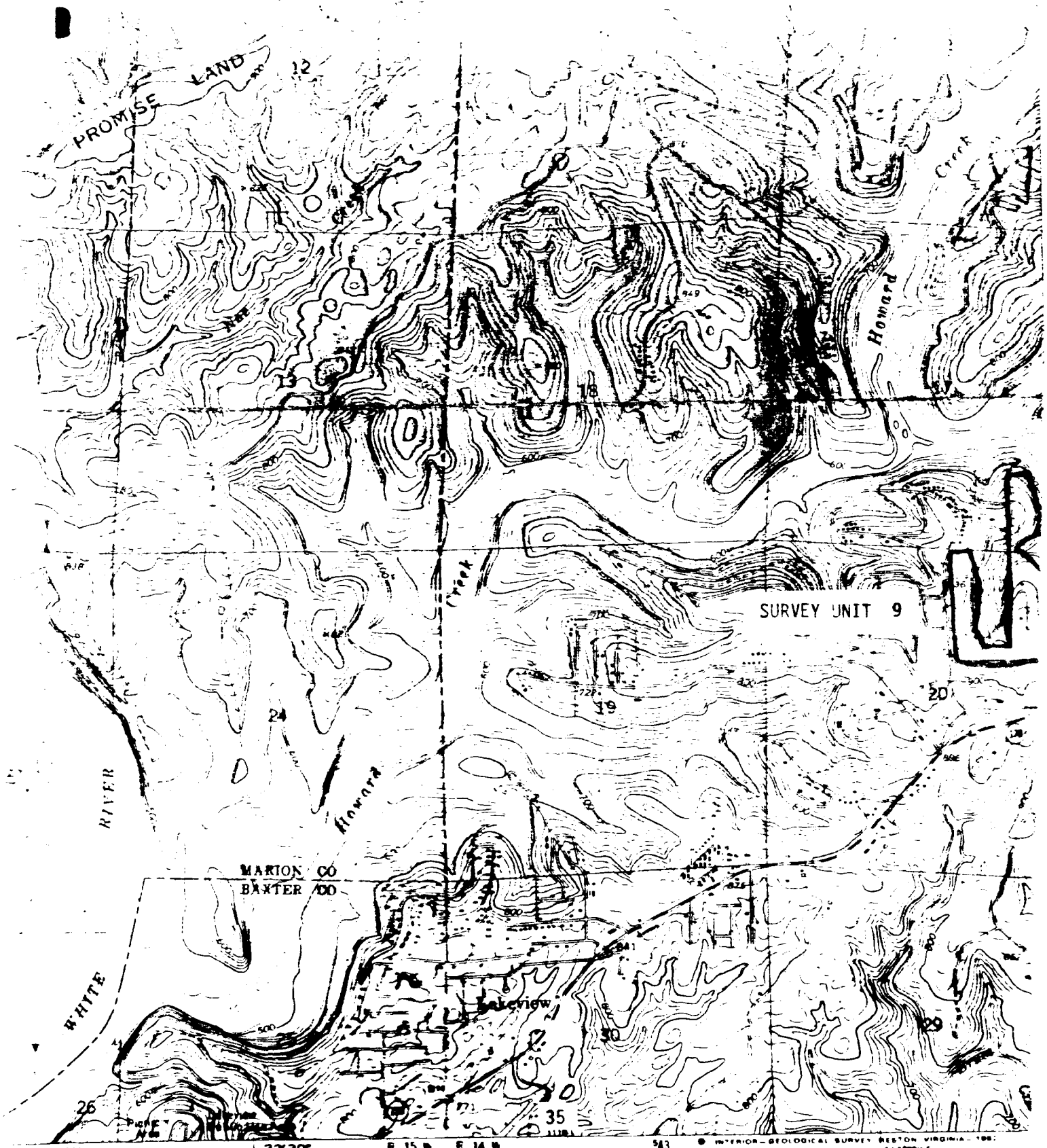
Special Hinderances to Site Location: slope erosion, road construction, residential construction, and utilities placement.

Special Observations: area has experienced a growth since 1980; many residential structures have been constructed thus heavily impacting many portions of the survey unit. Power line right-of-ways have caused additional impacts.

Survey Strategy: parallel transects with 25 meter intervals between surveyors and a shovel test interval of 25 meters. Did not shovel test areas contained within private residences.

Surveyor(s): Lee, Abbott, Hartwig, and Jerooke

Date: 05-01-88



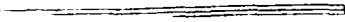
SURVEY UNIT 9

ROAD CLASSIFICATION

Primary highway,  
hard surface

Light-duty road hard or  
improved surface

1 MILE



Survey Unit: 10

Quad Sheet: Cotter SW

Terrain: consists of crest and eastern downslope of an interfluvial projection. Backslopes are very steep and eroded. Two relatively flat "benches" were observed. Lower-most one is severely eroded.

Vegetation: consists of mixed hardwood and cedar upperstory with an understory of varying density consisting of small trees, shrubs, vines, briars, poison ivy and oak.

Soil Description(s): Profile #1: gray black silt, 0-7cm; brown silt loam, 7-16cm; shale lense, 16-19cm; yellow mottled brown silt clay, 19-34cm. Profile #2: brown silt loam, 0-9cm; shale lense, 9-12cm; yellow mottled brown silt clay, 12-27cm; yellow red clay, 27-36cm. Profile #3: dark brown silt loam, 0-5cm; brown silt loam, 5-13cm; yellow red clay, 13-24cm. Profile #4: brown silt loam, 0-4cm; bedrock, 4cm -.

Sites Recorded: BS10-01

Isolate Finds: -

Ground Visibility: poor to good due to differential ground cover and surface exposure from various effects.

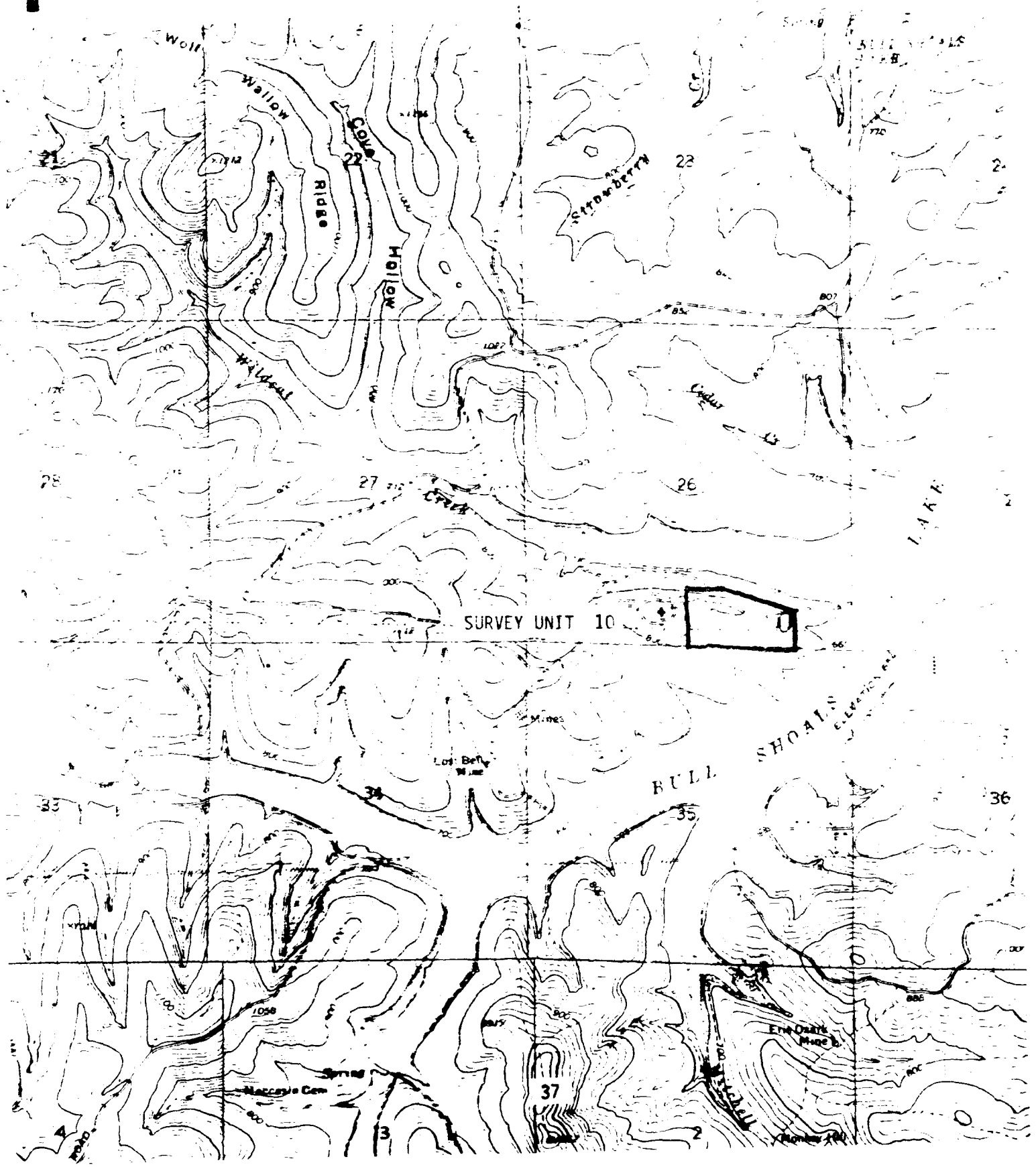
Special Hindrances to Site Location: ground cover, road construction and work, power line construction, and slope erosion.

Special Observations: no real "road" has been established, but lines unimproved dirt road are present along ridge-tops.

Survey Strategy: parallel transects with 50 meters between surveys and a shovel test interval of 5 meters. Transect orientation east to west and vice versa. Areas of exposed ground surface were closely scrutinized for cultural debris.

Surveyors(s): Lee, Abbott, Northrup, and Johnson

Date: 11/1/81



Survey Unit: 11

Quadrant Sheet: Cotton NW

Terrain: consists of severely eroded side slope of an interfluvial projection of Frost Point. Terrain steep and area crossed by several side slope, intermittent drainages.

Vegetation: consists of mixed hardwoods with sparse cedars. Understory very thin and consists of small trees, shrubs, sassafras, and poison ivy.

Soil Description(s): Profile #1: brown silt loam, 0-8cm; yellow red clay, 8-14cm; bedrock, 14cm -. Profile #2: brown silt loam, 0-6cm; bedrock, 6cm -.

Sites Recorded: 0

Isolated Finds: 0

Ground Visibility: poor except in areas where slope erosion has exposed ground surface.

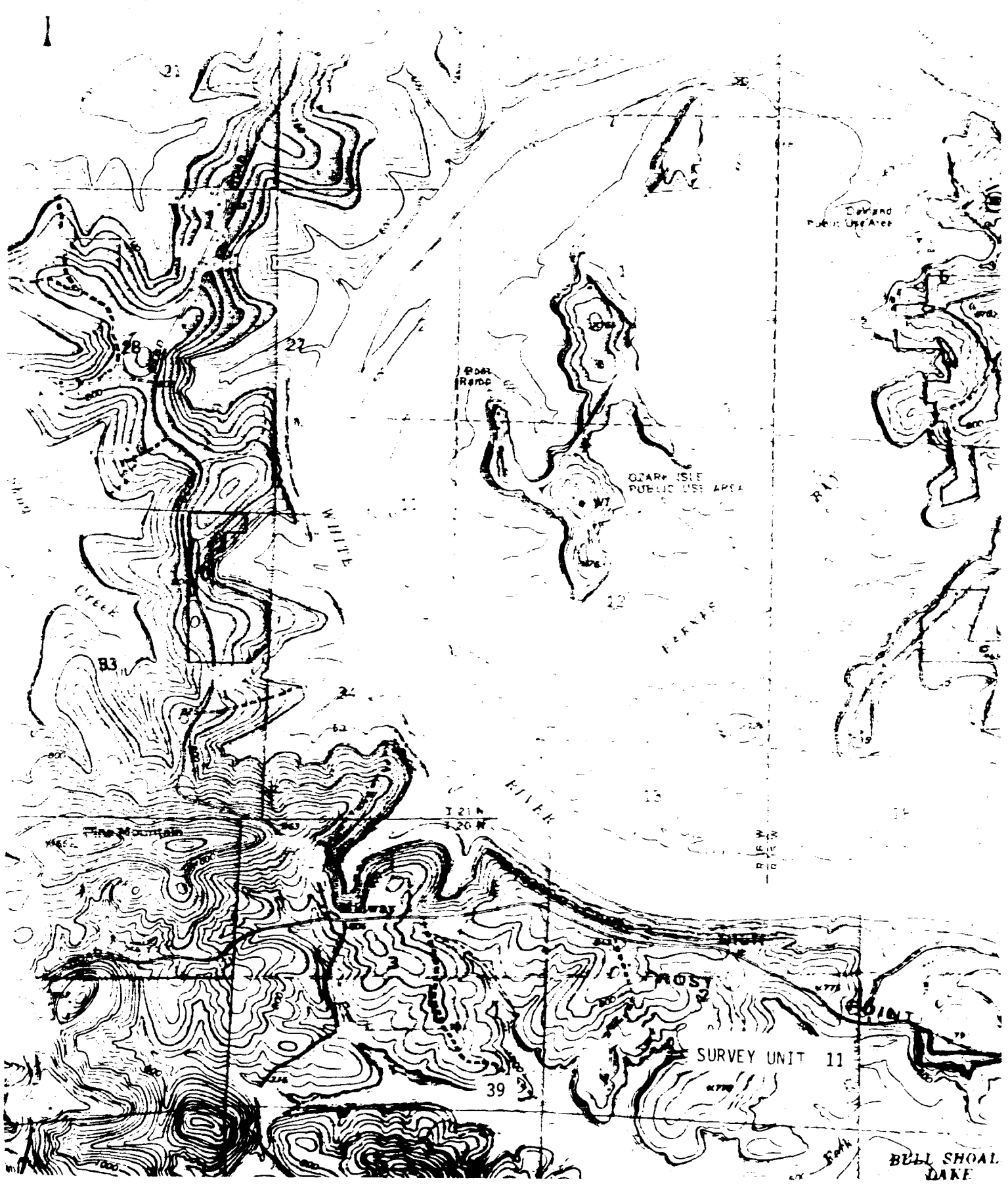
Special Hindrances to Site Location: heavy ground cover and slope erosion.

Special Observations: most of survey unit has experienced severe slope erosion. Residual soil is very thin and nonexistent at lowest elevations.

Survey Strategy: parallel transects with 50 meters between surveyors and shovel test interval of 50 meters when possible. Exposed ground surface closely scrutinized for cultural debris.

Surveyor(s): Lee, Northrup, Arnett, and Jarboe

Date: 05/1/80



DEWAND  
PUBLIC USE AREA

Boat  
Ramp

GARY ISLE  
PUBLIC USE AREA

HARVEY  
RIVER

21 N  
20 W

2 N  
15 E  
10 W

SURVEY UNIT 11

BULL SHOAL  
LAKE

WILLIE  
CREEK

Creek

Top Mountain

ROST

POINT

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Survey Unit: 12

Quad Sheet: Cotter N

Terrain: consists of two topographic highs and their eastern interfluvial projections. Topography ranges from relatively level in the saddle area to very steep and rugged on the eastern portion of the survey unit.

Vegetation: consists of mixed hardwoods and cedar with an understory of small trees, shrubs, grass, sassafras, and poison ivy.

Soil Description(s): Profile #1: gray silt loam with rock, 0-9cm; brown silt loam with rock, 9-14cm; yellow red clay, 14-23cm. Profile #2: gray silt loam with rock, 0-4cm; bedrock, 4cm -.

Sites Recorded: BS12-01 and BS12-02

Isolated Finds: 0

Ground Visibility: poor to good due to differential ground cover.

Special Hinderances to Site Location: heavy ground cover, road construction, and severe slope erosion.

Special Observations: saddle area between two topographic highs is severely eroded as are the side slopes. Numerous "glade" areas are present and are covered by cedar groves.

Survey Strategy: parallel transects with 50 meters between surveyors and shovel test interval of 3 meters. Transect orientation: north-south.

Surveyor(s): Lee, Abbott, Northrup, and Jerecke

Date: 05-01-86



Survey Unit: 13

Quad Sheet: Peel and Cotter N.

Terrain: consists of relatively flat portion of an interfluvial projection immediately south of Little Fool Creek.

Vegetation: mixed hardwoods and cedar with an understory of varying density which consists of small trees, shrubs, some vines, sassafras and poison ivy.

Soil Description(s): Profile #1: gray silt loam with rock, 0-5cm; brown silt loam with rock, 5-13cm; yellow red clay, 13-30cm. Profile #2: gray silt loam with rock, 0-4cm; bedrock, 4cm -.

Sites Recorded: 0

Isolated Finds: 0

Ground Visibility: poor to fair due to differential ground cover.

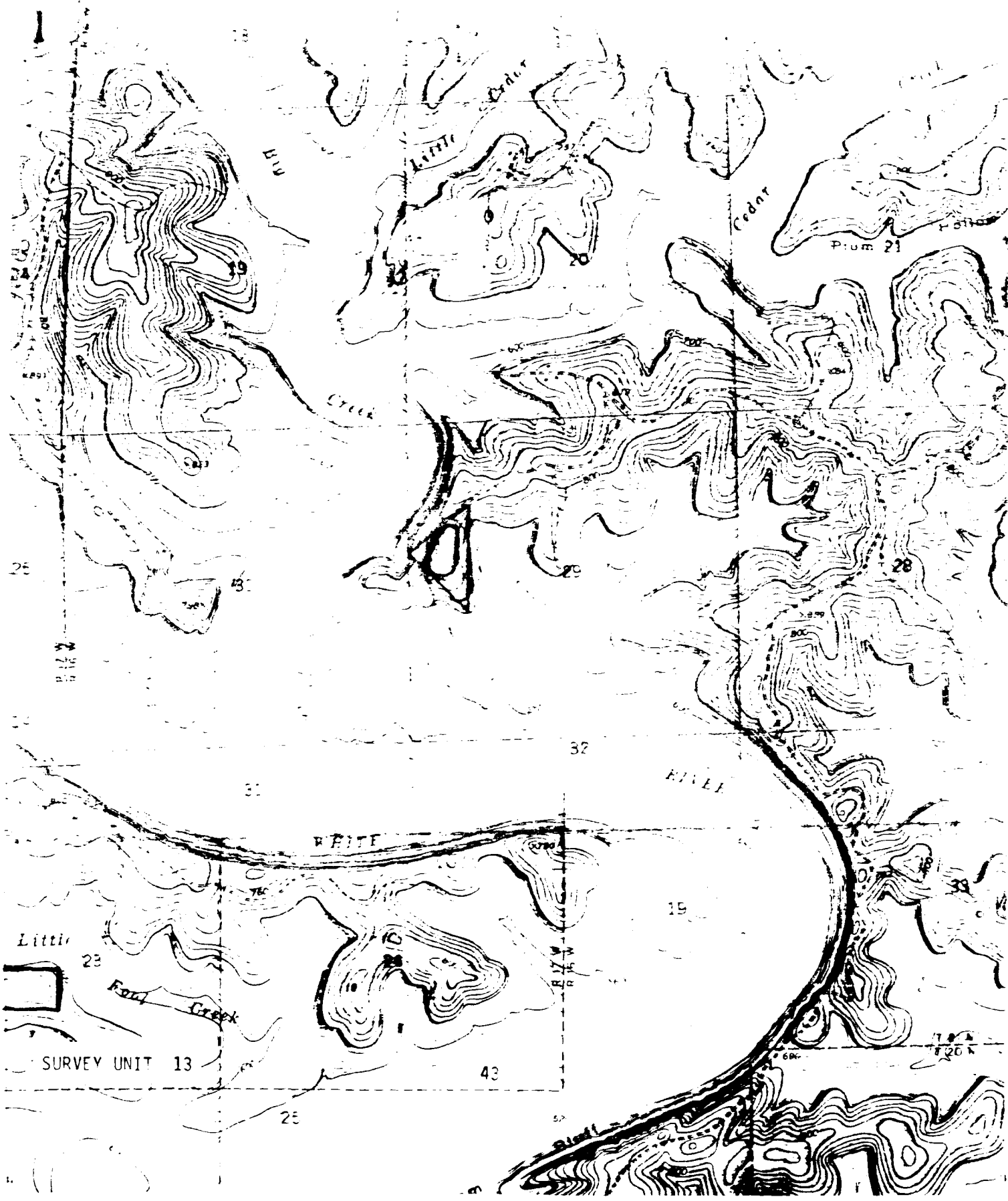
Special Hinderances to Site Location: ground cover and slope erosion.

Special Observations: none

Survey Strategy: parallel transects with 50 meters between surveyors and a shovel test interval of 50 meters. Areas of exposed ground surface were closely scrutinized for cultural debris.

Surveyor(s): Lee, Northrup, Abbott, and Jarocke

Date: 05-02-89



SURVEY UNIT 13

Littie

Fork Creek

WHITE

RIVER

LITTLE

Crater

Pit

Pitum 21

25

31

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38

23

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43

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48

Survey Unit: 14

Quad Sheet: Cotter N

Terrain: consists of relatively flat bench, moderately steep toe and steep side slopes of an interfluvial projection east of Big Creek.

Vegetation: mixed hardwood and cedar upperstory and an understory of varying density that consists of small trees, shrubs, grass, and sassafras.

Soil Description(s): dark brown sandy loam, 0-7cm; light brown sandy loam, 7-15cm; yellow red sandy clay, 15-30cm.

Sites Recorded: PS14-01

Isolated Finds: 0

Ground Visibility: poor due to differential ground cover.

Special Hindrances to Site Location: heavy ground cover, road construction, and slope erosion.

Special Observations: site PS14-01 extends southwest of survey unit and probably contains intact silt and deposits. Site area inside survey unit badly deflated.

Survey Strategy: parallel transects with 50 meters between transects and a shovel test interval of 5 meters. Areas of exposed ground surface were closely scrutinized for cultural debris.

Surveyors: Abbott, Gentry, and Jarreau

Date: 05/11/87



ATE  
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