AR Consultants, Inc.

Archaeological and Environmental Consulting P.O. Box 820727, Dallas, Texas 75382-0727

> Phone: (214) 368-0478 Fax: (214) 361-6762 E-Mail: arcdigs@aol.com

A

CULTURAL RESOURCES SURVEY

OF

LAKEVIEW POD A
ADJACENT TO

TIMBER BRANCH,

DENTON, TEXAS

Jesse E. Todd, MS, MA

Submitted to:

Carter & Burgess, Inc. 777 Main Street Fort Worth, Texas 76102

Prepared by:

AR CONSULTANTS, INC. P.O. Box 820727 Dallas, Texas 75382

Cultural Resources Report 2003-42 November 4, 2003

A

CULTURAL RESOURCES SURVEY

OF

ADJACENT TO

TIMBER BRANCH,

DENTON, TEXAS

Jesse E. Todd, MS, MA

Submitted to:

Carter & Burgess, Inc. 777 Main Street Fort Worth, Texas 76102

Prepared by:

AR CONSULTANTS, INC. P.O. Box 820727 Dallas, Texas 75382

Cultural Resources Report 2003-42 November 4, 2003

ABSTRACT

On October 24, 2003, AR Consultants, Inc. (ARC) conducted a pedestrian archaeological survey along Timber Branch which marks the western boundary of and drains the proposed Lakeview Pod A development. Timber Branch is located south of Hwy 380 and located east of Geesling Road and north of Blagg Road, Denton County, Texas. The cultural resources survey was done for Carter & Burgess, Inc. of Fort Worth, Texas acting as agents for Centex Corporation.

Historical records and the Texas Archeological Site Atlas did not show any prehistoric or historic sites within the study area. After an intensive pedestrian survey and 5 shovel tests, no sites and no significant cultural resources were found nor were any artifacts collected.

Based on the field investigation, it is AR Consultant's recommendation that no further cultural resource investigations are warranted on this property. The Texas Historical Commission should be advised if buried cultural resources are uncovered during construction, work should cease immediately in that area until proper investigations can be carried out.

TABLE OF CONTENTS

Abstract		i
Table of Co	ontents	ii
List of Figu	res	ii
	1	1
Natural Set	ting	4
Culture His	tory	6
Research D	esign Methodology	8
Results		9
Recommen	dations	11
References	Cited	12
	LIST OF FIGURES	
Figure 1.	Enlarged (200%) portion of the Denton East, TX 7.5' USGS	
	map showing the proposed Lakeview Pod A	
	developmental area and locations of shovel tests	2
Figure 2.	Aerial view of the study area	0

INTRODUCTION

On October 24, 2003, AR Consultants, Inc. (ARC) conducted a pedestrian archaeological survey along Timber Branch that is part of the western boundary of the proposed Lakeview Pod A development. The drainage is located south of Hwy 380, west of Geesling Road, north of Blagg Road and west of the Elm Fork of the Trinity River in Denton County, Texas (Figure 1). The cultural resources survey was done for Carter & Burgess, Inc. of Fort Worth, Texas acting as agents for Centex Corporation.

The purpose of this investigation was to locate any cultural resources present within the tract and make recommendations about their significance and how they might be impacted by construction. The survey was requested by the Texas Historical Commission after a project review. The development is being built under the authority of a nation wide permit and an individual permit from the Fort Worth Division of the U. S. Army Corps of Engineers is not required. Other relevant federal legislation includes the National Historic Preservation Act of 1966, as amended (PL-96-515), the National Environmental Policy Act of 1969, as amended (PL-90-190), the Archaeological and Historical Preservation Act of 1974, as amended (PL-93-291), Executive Order No. 11593, "Protection and Enhancement of the Cultural Environment" and Procedures for the Protection of Historic and Cultural Properties (36CFR800). The Antiquities Code of Texas does not apply for this investigation, but this report has been prepared to be reviewed by the Texas Historical Commission as the Section 106 review agency.

This report was written in accordance with the guidelines for short reports adopted by the Texas Historical Commission, Archeology Division, and developed by the Council of Texas Archeologists (ND). The following report contains a brief description of the natural environment and then a summary of previous archaeological investigations in the area as known from published sources. This is followed by the research design and the methodology used. This is followed by description of the results of the field investigation. The last chapter presents recommendations that arise from the study. A list of references cited concludes the report.

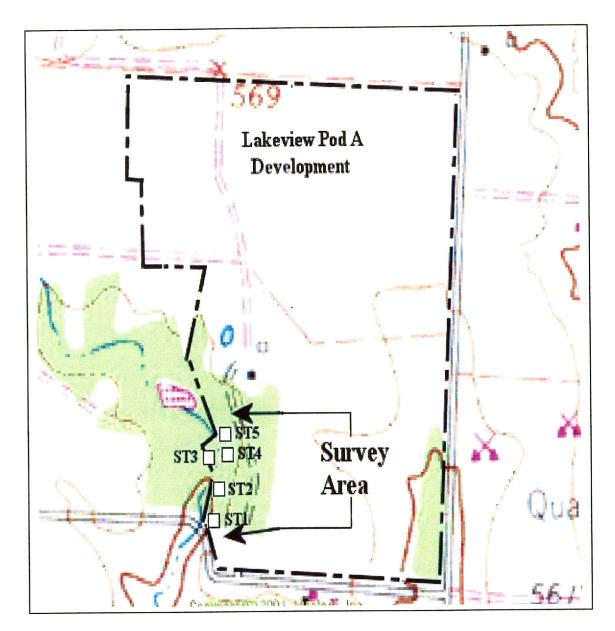


Figure 1. Enlarged (200%) portion of the Denton East, TX 7.5' USGS map showing the proposed Lakeview Pod A developmental area and locations of shovel tests.

Administrative Information

Sponsor:

Centex Corporation with Carter & Burgess, Inc. acting as

agent

Review Agency:

Archeology Division of the Texas Historical Commission

Principal Investigator:

Jesse Todd, MS, MA

Field Crew:

Lance K. Trask and Todd

Date:

October 24, 2003

Survey Man Days:

2

Area Surveyed: Sites Recorded:

1 acre None

Curation Facility:

No artifacts collected

NATURAL SETTING

Denton County is located in North Central Texas. It is split by the sandy soil of the Eastern Cross Timbers. The western half of the county consists, on the surface, of the black soil of the Grand Prairie and the eastern half consists of the rich, black soil of the Blackland Prairie. The county is drained by the Elm Fork of the Trinity River and several major creeks. The average rainfall is approximately 33 inches while the temperature ranges from 34 degrees in January to a maximum of 96 degrees in July (Odom 2002).

The study area lies in the Blackland Prairie portion of Denton County which includes much of east central Texas (Diamond, Riskind, and Orzell 1987:Figure 1). The area is characterized as an herb-dominated community. Major vegetation in the prairie included tall native grasses, before farming occurred. Trees in drainages are dominated by cedar elms. Understory vegetation includes various types of grasses, green briars and various species of brushes.

Soils within the study area belong to both the Birome-Gasil-Callsiburg and Navo-Wilson Associations. The Navo-Wilson Association consists of nearly level to gently sloping loamy soils and the Birome-Gasil-Callisburg Association soils are gently sloping to moderately steep and loamy (Ford and Pauls 1980:General Soil Map). Soils east of, and including, Timber Branch belong to the Birome-Gasil-Callisburg Association while the soils west of Timber Branch belong to the Navo-Wilson Association. The specific soil type in Timber Branch' drainage valley is Callisburg fine sandy loam with 3 to 5 percent slopes (Ford and Pauls 1980:Sheet 22). The subsoil can be found as shallow as 5 inches below the surface (Ford and Pauls 1980:64).

The soils in the study area are underlain by the Cretaceous-aged Woodbine sandstone which in turn is overlain by Quaternary-age fluvatile terrace deposits (Bureau of Economic Geology 1967). Timber Branch is mapped as an intermittent stream in both the soil map (Ford and Pauls 1980:Sheet 24) and the Denton East, TX 7.5' USGS map. There are no springs in the area (Brune 1981).

Fauna are varied and abundant with at least 49 species of mammals, 39 species of snakes, 17 species of reptiles and other species (Blair 1950:101 – 102). Common forms of fauna include deer, raccoon, opossum, rabbit, lizards and turtles. Armadillos have invaded the area within the past 50 years. Various authors, including Lynott (1979), believed that the prairie was inhabited by now extinct bison and antelope.

A consensus about the paleoenvironmental conditions of North Central Texas over the past 12,000 years has not been reached. Discussions by Prikryl (1993), Ferring and Yates (1997), Humphrey and Ferring (1994), and Brown (1998) offer disparate interpretations based on different analytical approaches. The following discussion relies heavily on Ferring's investigations and focuses upon the past two thousand years. Correlating

periods of rapid alluviation with higher precipitation and slow alluviation with drier conditions, Ferring has concluded that the Late Holocene [5000 yr BP to the present] was a wet period with moderate alluviation, except for a dry period between 2000-1000 yr BP [AD 1-1000]. It was during this dry period that the West Fork Paleosol was established on the stable surfaces of the river meanders along the Upper Trinity and its tributaries. This interpretation is supported by changing patterns seen in stable isotope analysis. Brown (1998) offers a differing interpretation based on isotopic analyses of mussel shells from a prehistoric site (41DL270) on Denton Creek. He concludes that the period from 1500-2500 yr BP was cooler and/or wetter and that before and after the environment was warmer and drier, but he points out that this interpretation may only be applicable for the Elm Fork tributary and not the region.

CULTURE HISTORY

The history and prehistory of this part of Denton County are summarized in several reports prepared by the University of North Texas (Lebo and Brown 1990; Brown and Lebo 1991; Ferring and Yates 1998). Prehistoric Native American settlement in Denton County began at least 10,000 years ago as attested to by the presence of distinctively shaped dart points (Crook and Harris 1957) at the Lewisville site and the Aubrey Clovis site (Ferring 1989). Moreover, artifact collectors report the presence of Clovis, Folsom, Scottsbluff and other Paleo-Indian points from the surface of sites in the region. The presence of exotic, i.e., non-local, lithic resources indicates that these early people traveled a territory where higher quality lithics were available or were involved in a system of raw material trading. These early people hunted now-extinct large game, but probably also foraged off the land.

The subsequent period, the Archaic, lasted from 7,000-6,000 B.C. to possibly as late as A.D. 700-800. The Archaic peoples lived throughout the counties but particularly along the major and minor stream valleys where they were able to hunt and gather native foods. Dart points, grinding stones, fire-cracked rock, and scrapers are common artifacts found on Archaic sites. The earliest Archaic peoples continued making and using exotic cherts for dart points, but as time passed, there was a shift toward the use of local lithics for chipped stone tools. These local materials are described as Uvalde Gravels (Menzer and Slaughter 1971; Byrd 1971). Large Archaic sites are generally located on terraces or ridges that overlook the Elm Fork of the Trinity. Smaller lithic scatters have been recorded in upland areas throughout the county. These sites appear to be Archaic in age, but none have been thoroughly studied.

About A.D. 700-800, a major change is found in the artifacts and settlement patterning of the prehistoric sites. This is attributed to the drying up of the smaller tributaries. During this period, which is known as the Late Prehistoric, Caddoan pottery from East Texas appears as trade material along with the indigenous Nocona Plain pottery. It has been suggested that farming may have been practiced. Arrowheads appear about this same time and apparently the bow and arrow had been added to the hunting tools.

At the end of the Late Prehistoric period, there appears to have been a general abandonment of the north-central Texas area based on an absence of sites with trade goods that might have been obtained from French, Spanish or English traders (Skinner 1988). This simplistic interpretation is tied to a general drying trend and attempts to factor in negative information generated by professional and avocational archaeologists who have conducted numerous site surveys throughout the region (Peter, Cliff and Green 1996:2). There is very little evidence of historic era Native American occupation anywhere in the region although historic accounts indicate that groups were present in the early 1800's.

The history of man's presence in North Central Texas continues with the first written accounts by the French and Spanish explorers. There is tantalizing evidence to the south in Dallas County of possible visits by Spanish explorers. Current research, however, seems to indicate that Anglo settlers were the first non-Indians to visit the survey area. Established European settlement in Denton County began before the mid-1800's with the establishment of the Peter's Colony after Texas independence. These early settlers were farmers who selected bottomland along the Elm Fork of the Trinity. The town of Little Elm was established with a post office in 1845 (Bridges 1978). Commercial farming was not important until after the Civil War, and the early settlers were essentially selfsufficient. Besides the plants and animals they grew, wild animals and plants were commonly consumed. Denton became the county seat in 1856. By 1875, cotton, corn, and wheat were the main cash crops. Up to half of these crops were grown by tenant farmers who either paid rent to the land owner for their house, tools, and seed or by tenants who gave the landowner a third of the grain and a quarter of the cotton or other cash crops. By the turn of the century, all of the major communities had been established and some had passed away.

Previous Investigations

In January of 1983, the U. S. Army Corps of Engineers contracted with the University of North Texas to conduct an archaeological survey (Lebo and Brown 1990) south of the study area. In Lebo and Brown's report, titled *Archaeological Survey of the Lewisville Lake Shoreline, Denton County, Texas*, they discuss their recording of several prehistoric and historic archaeological sites along the shoreline of Lake Lewisville, but no sites were recorded along the shoreline southwest of the study area. The Federal Highway Authority conducted a survey along Hwy 377/380 which is north of the survey area in May of 1992, but no archaeological sites were discovered in the vicinity of the survey area (TASA 2003).

AR Consultants, Inc. conducted several archaeological surveys west of the study area and in the vicinity of the towns of Navo and Cross Roads, Denton County, Texas in upland settings adjacent to drainages (Skinner 2002; Todd and Skinner 2002a and b) but did not discover any archaeological sites.

RESEARCH DESIGN AND METHODOLOGY

Research Design

The purpose of the research design outlined below was to insure that fieldwork made a contribution to the better understanding of prehistoric and historic settlement in this part of Denton County. Furthermore, a records review indicated no evidence of historic occupation in the area. As a result, we proposed the two research problems presented below.

It was predicted that this location in the upland prairie had little or no likelihood of having been occupied prehistorically due to absence of potable water, the low biotic diversity and the absence of Uvalde gravels.

A second, and even more basic, research problem guided the survey work. Simply stated the question asked,

How did past people use the land, and what record of this use did they leave behind?

Most frequently, small-scale surveys of this type gather information in response to this more open-minded research question, which guides almost all archaeological surveys.

Methodology

Prior to the field survey, records were checked with Texas Historical Commission's Archeological Sites Atlas (2003). Historic maps, including the 1918 Soil Map of Denton County (Carter and Beck 1918) and the R. King Harris' highway map of Denton County (1936) were also reviewed. No historic farmsteads were shown on the maps, however.

The surveyors systematically inspected Timber Branch's banks and channel by walking 15 meter wide transects adjacent to the bank for a distance of 100 meters from the stream channel. Since the study area is in an alluvial setting, shovel testing was done at 100 meter intervals or less to provide coverage as suggested by the Council of Texas Archeologists (2002) and accepted by the Texas Historical Commission. In addition, the surveyors reconnoitered areas likely to contain cultural materials outside of the area-of-potential effect. Sandy soil was screened and inspected for cultural materials. The clayey matrices were inspected for artifacts as were the pit walls. The clay was not screened. Notes on vegetation, soil, surface conditions, geology were taken as well.

Backhoe trenching was not done because of the depth to the subsoil which was well within shovel testing range.

RESULTS

Timber Branch's valley is approximately 20+ meters wide adjacent to Blagg Road, and the valley wall has a 45 degree slope leading to a channel that is less than a meter wide and deep. The substrate consists of mostly clay but with some sand and hematite rock. The slopes are covered with sand and hematite gravel. Ground visibility is better than 50 percent. A forested area 30+ meters wide was adjacent to both banks of the drainage north of Blagg Road and this forested area continued to the length of the survey area. Ground visibility exceeded 40 percent in the forested area and eye-height visibility was 80 percent. Trees in the forested area include oak and evergreen trees. Almost all of the evergreen trees were adjacent to the west bank. Understory vegetation included grama grass, spear grass, prickly pear and saw greenbriar. Shovel test 1 was placed approximately 50 meters north of Blagg Road on the east bank. The shovel encountered 18 centimeters of yellowish red (5YR4/6) clay with traces of very fine sand overlying yellowish red (5YR5/8) clay to a depth of 39 centimeters below the ground surface. Beneath the yellowish red clay, a reddish brown (5YR4/4) clay extended to 47+ centimeters. No cultural materials were found in the shovel test.

Less than one hundred meters north of shovel test 1, Timber Branch's channel changed to more than a meter wide and deep and the walls were vertical. The substrate is clay. Shovel test 2 was placed 100 meters north of shovel test 1. Forty-seven centimeters of dark yellowish brown (10YR4/4) silty clay that overlaid strong brown (7.5YR4/6) very fine sandy clay to 73 centimeters which overlaid dark yellowish brown (5YR5/8) very fine sandy clay to 87+ centimeters below the surface. The shovel test was augered below 52 centimeters. No cultural materials were discovered in the shovel test.

Shovel test 3 was placed on the west side of Timber Branch. The upper soil zone consisted of 33 centimeters of dark grayish brown (10YR4/2) clay with traces of very fine sand. The second soil zone was very dark grayish brown (10YR3/2) clay. The lowest soil zone which extended from 69 to 79+ centimeters below the surface contained brown (7.5YR4/4) clay. The shovel test was augered below 49 centimeters. Augering was discontinued at 79 centimeters because the soil was so fine that it would fall out of the auger before it reached the surface. No cultural materials were found in the shovel test.

North of shovel test 3, shovel test 4 encountered 38 centimeters of brown (7.5YR5/2) loamy clay to 38 centimeters below the surface. Below the silty clay there was a zone of brown (7.5YR4/4) very fine sandy clay that extended to 55 centimeters below the surface which overlaid yellowish red (5YR5/8) clay with 20 percent brown (7.5YR4/4) clay mottling that extended to 67+ centimeters below the surface. The shovel test was augered below 55 centimeters. No cultural materials were found in the shovel test.

The last shovel test, 5, encountered four different soil zones. The first soil zone extended to 35 centimeters below the surface and contained brown (10YR4/3) loamy clay. Beneath the loamy clay, dark brown (7.5YR3/3) clay extended to 57 centimeters below the surface. The third soil zone consisted of strong brown (7.5YR4/6) clay that extended to

67 centimeters. The last soil zone was strong brown (7.5YR5/8) clay that contained traces of fine sand and extended to 73+ centimeters below the surface. The shovel test was augered below 57 centimeters. No cultural materials were discovered in the shovel test.

Timber Branch's banks and channel was intensively investigated but no cultural materials were found, and there was no quartzite gravel in the stream channel, only hematite rock. Modern trash was along the bank and in the channel and it consisted of bricks, pieces of concrete, stove parts and refrigerators.

Conclusions

No cultural materials were discovered in the pedestrian survey or in the shovel testing along the banks of Timber Branch. There were no locations likely for occupation above flooding, no quartzite gravel and the stream is intermittent. All these probably contributed to the lack of sites.

As mentioned in the Previous Investigations, surveys in similar settings west of the Elm Fork of the Trinity River have resulted in the lack of sites.

Based upon Ford and Paul's description of the Callisburg soil and the results of the shovel tests, the A-horizon has been removed, probably due to erosion abetted by disturbances in the uplands adjacent to Timber Branch (see Figure 2) and the B-horizon is exposed on the surface. The erosion of the sediment should have exposed any sites along the drainage.

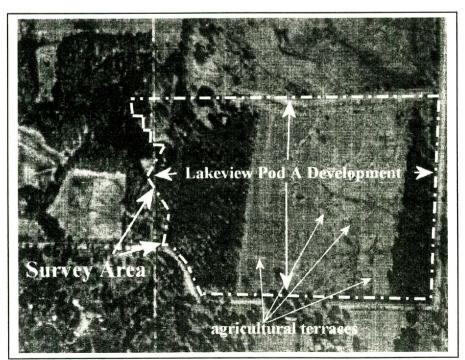


Figure 2. Aerial view of the study area.

RECOMMENDATIONS

The purpose of this archaeological survey was to determine if significant cultural resources were present within Timber Branch which drains the proposed Lakeview Pod A development area. The area was inspected using pedestrian survey and 5 shovel tests were done. No prehistoric or historic cultural resources were found.

In addition the 1918 and 1930 soil maps showed no historic residence within the study area nor did the Texas Archaeological Site Atlas (2003).

AR Consultants recommends that there is a low chance for cultural resources within the survey area. We further recommend that construction supervisors be advised that buried archaeological materials could be uncovered during construction, although we deem it very unlikely. If this situation should arise, work should immediately cease in that area and the Archeology Division of the Texas Historical Commission should be advised of the discovery.

REFERENCES CITED

Bridges, C. A.

1978 History of Denton, Texas: from Its Beginning to 1960. Texian Press, Waco.

Brown, David O.

1998 Late Holocene Climates of North-Central Texas. *Plains Anthropologist* 43(164):157-172.

Brune, Gunnar

1981 Springs of Texas, Vol. 1. Branch-Smith, Inc. Fort Worth.

Bureau of Economic Geology

1967 Geological Atlas of Texas, Sherman Sheet. The University of Texas at Austin.

Carter, William T., Jr. and W. M. Beck

1918 Soil Map Texas, Denton County Sheet. U.S. Department of Agriculture, Bureau of Soils and Texas Agricultural Experiment Station.

Council of Texas Archeologists

ND Guidelines for the Content of Cultural Resource Management Reports. Manuscript on file with the membership.

Archeological Survey Standards for Texas. Newsletter of the Council of Texas Archeologists 28(1):8-9.

Crook, Wilson W., Jr. and R. King Harris

1957 Hearths and Artifacts of Early Man near Lewisville, Texas and Associated Faunal Material.

Bulletin of the Texas Archeological Society 28:7-79.

Ferring, C. Reid

The Aubrey Clovis Site: A Paleoindian Locality in the Upper Trinity River Basin, Texas. Current Research in the Pleistocene 6:9-11.

Ferring, C. Reid and Bonnie C. Yates

1997 Holocene Geoarchaeology and Prehistory of the Ray Roberts Lake Area, North Central Texas. University of North Texas, Institute of Applied Sciences.

Ford, Alan and Ed Pauls

1980 Soil Survey of Denton County, Texas. USDA, Soil Conservation Service in cooperation with Texas Agriculture Experiment Station.

Harris, R. King

1936 Sites located on a General Highway Map of Denton County, Texas. Manuscript in possession of authors.

Humphrey, J.D. and C. Reid Ferring

1994 Stable Isotopic Evidence for Latest Pleistocene and Holocene Climatic Change in North-Central Texas. *Quaternary Research* 41:200-213.

Lebo, Susan A. and Kenneth Lynn Brown

1990 Archaeological Survey of the Lewisville Lake Shoreline, Denton County, Texas. University of North Texas, Institute of Applied Sciences.

Menzer, F. J. and Bob H. Slaughter

1971 Upland Gravels in Dallas County and Their Bearing on the Former Extent of the High Plains Physiographic Province. *Texas Journal of Science* 22(2-3):217-222.

Oaks, F. Lawerence

1999 Letter dated December 9, 1999 to David C. Riddle, Ph.D., from the Executive Director of the Texas Historical Commission.

Odom E. Dale

2002 Denton County. Handbook of Texas Online. Texas Historical Commission website.

Peter, Duane E., Maynard Cliff, and Melissa Green

1996 Draft Archeological Survey Standards: Blackland Prairie (Region 3) and Cross Timbers (Region
 4) North-Central Texas. Paper prepared for the Council of Texas Archeologists, Spring Meeting,
 Austin.

Prikryl, Daniel J.

1990 Lower Elm Fork Prehistory: A Redefinition of Cultural Concepts and Chronologies along the Trinity River, North-Central Texas. Austin: Texas Historical Commission, Office of the State Archeologist Report 37.

1993 Regional Preservation Plan for Archeological Resources, Prairie-Savanna Archeological Region. Section 3 In Archeology in the Eastern Planning Region, Texas: A Planning Document, edited by Nancy A. Kenmotsu and Timothy K. Perttula, pp. 189-204, Texas Historical Commission, Department of Antiquities Protection, Cultural Resource Management Report 3.

Skinner, S. Alan

1988 Where Did All the Indians Go? The Record, Fiftieth Anniversary Edition, 42(3): 101-104.

2002 An Archaeological Survey of the River Bend Demonstration Plot. AR Consultants, Inc., Cultural Resources Report 2002-32.

Texas Archeological Sites Atlas

Search for recorded sites on the Denton East, TX 7.5' USGS map. Texas Historical Commission internet sine.

Todd, Jesse and S. Alan Skinner

2002a Archaeological Survey of the Peninsula Water Reclamation Plant, Cross Roads, Texas. AR Consultants, Inc., Cultural Resources Report 2002-25.

2002b An Archaeological Survey of a Water Treatment Plant near Doe Creek, Denton, Texas. AR Consultants, Inc., Cultural Resources Report 2002-50.