



**A Phase I Cultural Resource Assessment
For The Shoal Creek Mine Revision 25
In Jefferson, Tuscaloosa and Walker
Counties, Alabama**



Prepared For:

Drummond Coal Co., Inc.
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December 23, 2011

A handwritten signature in black ink that reads "Terry Lolley".

Terry L. Lolley, M.A., R.P.A.
Archaeologist



INTRODUCTION

In December 2011, PELA GeoEnvironmental, Inc. (PELA) conducted a cultural resource survey for five proposed borehole locations related to the Shoal Creek Mine in Jefferson, Tuscaloosa, and Walker and Counties, Alabama. The project was performed for Drummond Coal Co., Inc. The purpose of this investigation was to locate and document any prehistoric or historic archaeological resources present, and to obtain sufficient data about those resources to allow PELA to make any recommendations for avoidance or mitigation of adverse impacts to any sites from the proposed activities.

The project area (Figures 1 and 2) consists of five approximately one acre proposed borehole locations. The project area is located in Sections 8 and 9 of Township 18 South, Range 7 West on the Burchfield Store (USGS 1983) topographic quadrangle and Sections 3 and 32 of Township 17 South, Range 7 West on the Tutwiler School (USGS 1978) topographic quadrangle. Graphics documenting the present state of the area with regard to terrain, general flora, and previous land-use are provided within this report (Figures 3 through 7).

Terry Lolley served as Principal Investigator for this project and was assisted in the field by Jimmy Mawk. The fieldwork was conducted on December 21, 2011.

LITERATURE AND DOCUMENT SEARCH

Prior to the fieldwork, a background literature review was performed. Neither the National Register of Historic Places (NRHP) nor the Alabama Register lists any historic properties within the project area.

Based on an examination of earlier maps (USDA 1911, 1915; USGS 1934), no structures were present within the project area at those times. The nearest stranding structures to the project area are manufactured homes (Figures 1 and 2).

The primary source of information for the research was the Alabama State Archaeological Site Files (ASASF) maintained at the University of Alabama's Office of Archaeological Research at the Moundville Archaeological Park, Moundville, Alabama. An examination of the site file maps and site forms indicated there were no recorded prehistoric or historic sites within or adjacent to the project area. The nearest recorded site is located west of Borehole 5 (Figure 2). This site, 1Wa176, was recorded as an unknown aboriginal surface lithic scatter (Mauldin 1996).

Previous surveys in the vicinity include Hendryx (1995), Mauldin (1996), and Smith (1996). These were all performed for surface mining projects. A portion of the Hendryx survey area encompasses the Borehole 1 location.

FIELD METHODS

The project area lies within the Warrior Basin of the Cumberland Plateau physiographic district. Land surface elevation for the project area ranges from 280 to 430 feet above mean sea level. Each of the proposed borehole locations is adjacent to existing roads. Aside from Borehole 4, the locations are situated on narrow ridges and upper slopes.

The Jefferson County (Spivey 1982), Tuscaloosa County (Johnson 1991), and Walker County Soil Surveys (Stevens 1992) indicated one primary soil series within the project area.

The **Montevallo-Nauvoo association, steep** is represented by soils on strongly dissected sandstone and shale plateaus. Slopes range from 5 to 55 percent. The surface layer is approximately 12 centimeters thick, overlying yellowish-brown very shaly silt loam subsoil. This was the dominant soil type mapped in the project area.

The survey was conducted in accordance with procedural standards set by the Alabama Historical Commission. Land coverage requirements were achieved by physically walking and visually examining the project area. Any roads and areas of ground surface exposure were visually examined for cultural material.

A standard 30 meter interval transect and shovel test pattern was employed where previous ground disturbance or slope did not preclude excavation. Excavated shovel tests consisted of standard 30 centimeter (cm) diameter cylindrical holes excavated to the top of the underlying subsoil. Shovel test soils were passed through a 1/4" wire mesh screen to recover any cultural materials, which may have been present.

A total of 14 shovel tests were excavated within the project area. Shovel test profiles were generally shallow. A large portion of the project area was sloped or adjacent to roadways. Subsoil across the project area was typically encountered at depths no greater than 14 centimeters below ground surface. Large amounts of shale and sandstone were observed in the shovel tests and on the ground surface. These tests generally consisted of 0-14 centimeters of dark yellowish-brown (10YR4/4) shaly silt loam, overlying yellowish-red (5YR5/6) clay subsoil.

LABORATORY METHODS AND COLLECTION CURATION

All project records and cultural material collected from cultural resource surveys are periodically transported for curation at the Office of Archaeological Research, Erskine Ramsay Archaeological Repository, at the University of Alabama Museums, Moundville.

SURVEY RESULTS AND EVALUATION

The survey began at the proposed Borehole 1 location (Figures 1 and 3). Two shovel tests were excavated on each side of the road. The ridge was narrow and sloped to the north and south. No cultural material was observed from a visual survey of the existing road or from shovel testing.

The survey continued to the proposed Borehole 2 location (Figures 1 and 4). This location sloped steeply to the east. Two shovel tests were excavated along the eastern edge of the road. No cultural material was recovered. The structures that still exist along this road are manufactured homes.

The proposed Borehole 3 location (Figures 1 and 5) is situated north and east of roadways. Four shovel tests were excavated on a slightly sloping ridge north to south. A manufactured home is located to the east. No cultural material was recovered.

The proposed Borehole 4 location (Figures 2 and 6) is situated south of a road and north of the Black Warrior River. Three shovel tests were excavated on a slight slope. No cultural material was recovered.

The proposed Borehole 5 location (Figures 2 and 7) is situated on a steep slope east of a road and graded area. One shovel test was excavated near the bottom of the slope on the most level terrain. No cultural material was recovered.

RECOMMENDATIONS

This survey was conducted by PELA GeoEnvironmental, Inc. (PELA) for Drummond Coal Co., Inc. in compliance with Federal and State regulations. As stated in the introduction, the purpose of this investigation was to locate and document any prehistoric and historic archaeological resources present, and to obtain sufficient data about those resources to allow PELA to make any recommendations for avoidance or mitigation of adverse impacts to any sites from the proposed activities. No cultural resources were identified. It is PELA's recommendation that the project areas be cleared from further cultural resource investigations due to the lack of any resources that are potentially eligible or eligible for the NRHP.

There is always the possibility of undetected cultural resources such as graves and other features not identified through standard survey methods. If any potential cultural features are revealed through the course of development of the project area, an archaeologist should be contacted to ascertain the nature of these features before development continues.

REFERENCES

Johnson, Kenneth W.
1981 *Soil Survey of Tuscaloosa County, Alabama*, United States Department of Agriculture, Washington.

Spivey, Lawson D., Jr.
1982 *Soil Survey of Jefferson County, Alabama*. United States Department of Agriculture, Washington D.C.

Stevens, Robert
1992 *Soil Survey of Walker County, Alabama*, United States Department of Agriculture, Washington.

United States Department of Agriculture (USDA)
1911 Tuscaloosa County Soil Map.
1915 Walker County Soil Map.

United States Geological Survey
1934 Searles 15 Minute Topographic Quadrangle.
1981 Tutwiler School 7.5 Minute Topographic Quadrangle.
1983 Burchfield Store 7.5 Minute Topographic Quadrangle.

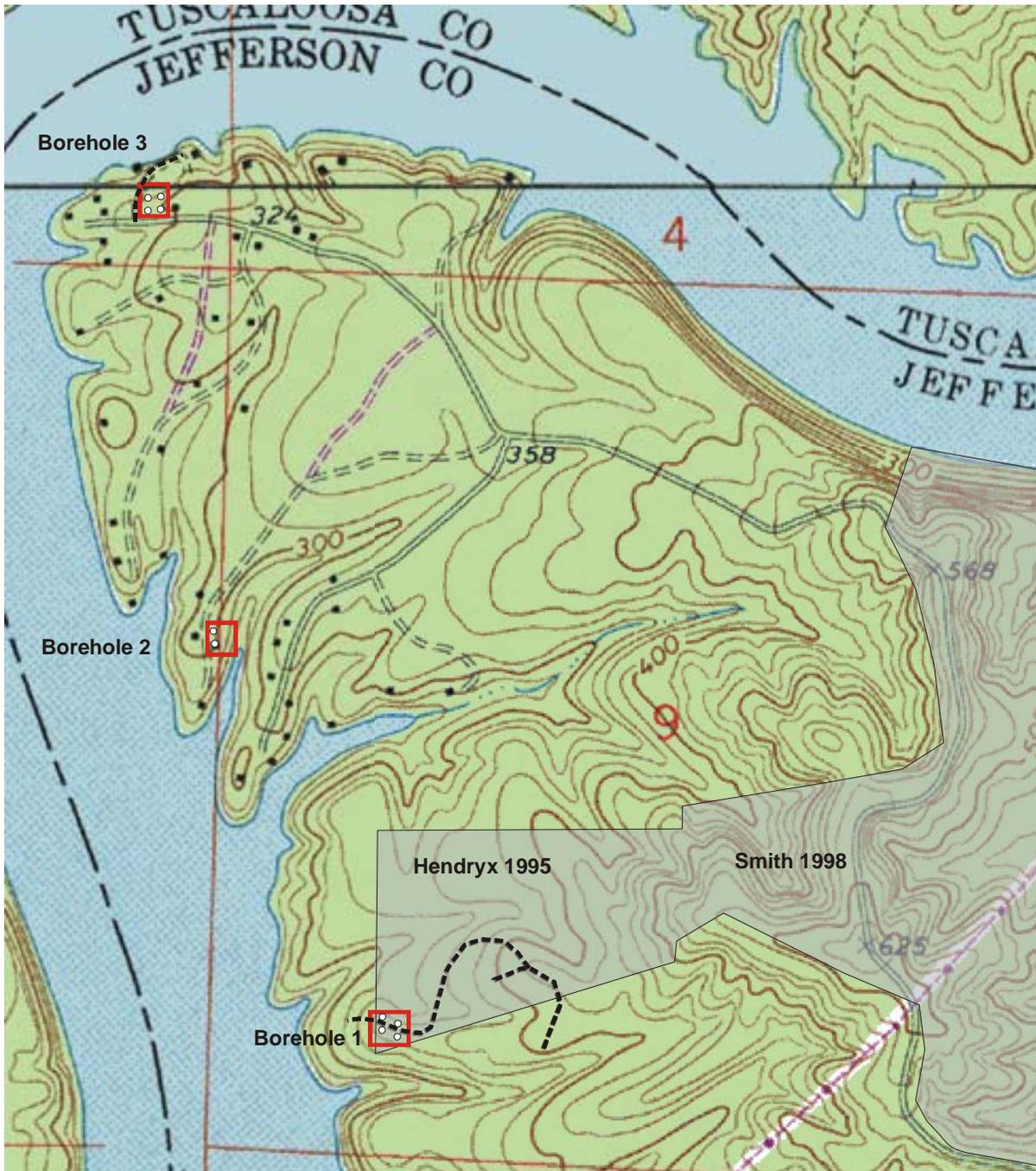


Figure 1. Project Area and Survey Coverage (Burchfield Store 1983 USGS 7.5' Topographic Quadrangle).

- Project Area
- Negative Shovel Test
- - - Road
- Previously Surveyed

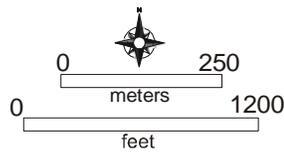




Figure 2. Project Area and Survey Coverage (Tutwiler School 1981 USGS 7.5' Topographic Quadrangle).

- Project Area
- Negative Shovel Test
- Road
- Previously Surveyed
- Recorded Sites

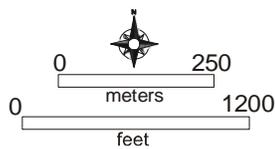




Figure 3. View Borehole Location 1 Facing North.



Figure 6. View of Borehole Location 4 Facing South.



Figure 4. View Borehole Location 2 Facing East.



Figure 7. View of Borehole Location 5 Facing East.



Figure 5. View Borehole Location 3 Facing East.

University of Alabama Museums
Office of Archaeological Research

THE UNIVERSITY OF
ALABAMA
MUSEUMS

March 21, 2011

Terry Lolley
PELA GeoEnvironmental
PO Box 12
Lauderdale MS 39335

Dear Terry:

As per your request, this letter is to confirm our agreement to provide curation services for PELA GeoEnvironmental. As you know, we are recognized by a variety of Federal agencies as a repository meeting the standards in 36 CFR Part 79 and have formal agreements to provide curation under these guidelines to agencies such as the Corps of Engineers, National Park Service, Tennessee Valley Authority, U.S. Soil Conservation Service, the U.S. Fish and Wildlife Service, etc.

We appreciate being able to assist you in this matter and look forward to helping in the future.

Sincerely,



Eugene M. Futato, RPA,
Interim Director