



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



Prepared For:

Drummond Coal Co., Inc.
PO Box 1549
Jasper, Alabama 35502

Prepared By:

PELA GeoEnvironmental
P.O. Box 12
Lauderdale, MS 39335

August 18, 2011

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

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



INTRODUCTION

In August 2011, PELA GeoEnvironmental, Inc. (PELA) conducted a cultural resource survey for activities related to the Shoal Creek Mine in Walker and Tuscaloosa 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 total project area (Figure 1) consists of approximately six acres divided among four proposed well sites (one acre each) and one fan shaft location (two acres). Only one proposed access road did not previously exist, measuring approximately 390 feet in length. The project areas are located in Sections 25, 26 and 36 of Township 17 South, Range 8 West and Sections 19 and 30 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 1 through 7).

Terry Lolley served as Principal Investigator for this project and was assisted in the field by Curt Spikes. The fieldwork was conducted on August 16, 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 Tuscaloosa and Walker County maps (USDA 1911, 1914; ALDOT 1938), no structures were present within the project area at those times. Currently, there are no standing structures within or adjacent to the project area (Figure 1).

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.

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 450 to 600 feet above mean sea level. Several methane gas well locations are present in the vicinity (Figure 1). Existing access roads lead to each of the proposed project areas except for one. The primary vegetation consists of young and mature pines.

The Tuscaloosa County Soil Survey (Johnson 1991) and the Walker County Soil Survey (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 generally very dark gray shaly silt loam

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 (Figure 1). 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 12 transect shovel tests were excavated within the project area. Shovel test profiles were generally shallow. A large portion of the project area was sloped or within roadways. Subsoil across the project area was typically encountered at depths no greater than 16 centimeters below ground surface. Large amounts of shale and sandstone were observed in the shovel tests and on the ground surface.

Shovel tests were primarily in locations that consisted of secondary pine growth. A less disturbed soil profile was observed in an area of hardwoods along a proposed access road along the border of Sections 25 and 26. These tests generally consisted of 0-16 centimeters of dark yellowish-brown (10YR4/4) shaly silt loam, overlying

yellowish-red (5YR5/6) shaly clay loam 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 in the easternmost portion of the project area in Sections 19 and 30 (Figure 1). A proposed access road will follow the route of an existing access road (Figure 2). The proposed two acre fan shaft location is on the east side of the access road. This area is vegetated with sparse mature pines and some underbrush (Figure 3). The terrain slopes steeply to the north and northeast. Six shovel tests were excavated with negative results. No cultural material was observed from a visual survey of the existing road.

The survey continued in the western project area at the proposed locations of four one acre gob well sites and access roads (Figure 1). The proposed access road follows the route of an existing road (Figure 4) except for several hundred feet of proposed roadway north (Figures 1 and 5). The westernmost two proposed well locations were wooded and partially sloped (Figure 5). Shovel tests were excavated on non-sloped terrain and along the access road that crossed raw land. No cultural material was recovered.

The remaining two proposed well locations in Section 36 (Figures 1; 6 and 7) have been disturbed by preconstruction activity prior to the sites being associated with the mining operation and prior to the ASMC giving notice that gob well sites should now be permitted. Both of these areas were on moderate slope and have been filled and graded. No shovel tests were excavated due to the disturbances. The areas were visually examined but any cultural finds would have been out of context.

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

- ALDOT
1938 Tuscaloosa County Highway Map
1938 Walker County Highway Map
- Johnson, Kenneth W.
1981 *Soil Survey of Tuscaloosa County, Alabama*, United States Department of Agriculture, Washington.
- 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
1978 Tutwiler School 7.5 Minute Topographic Quadrangle.

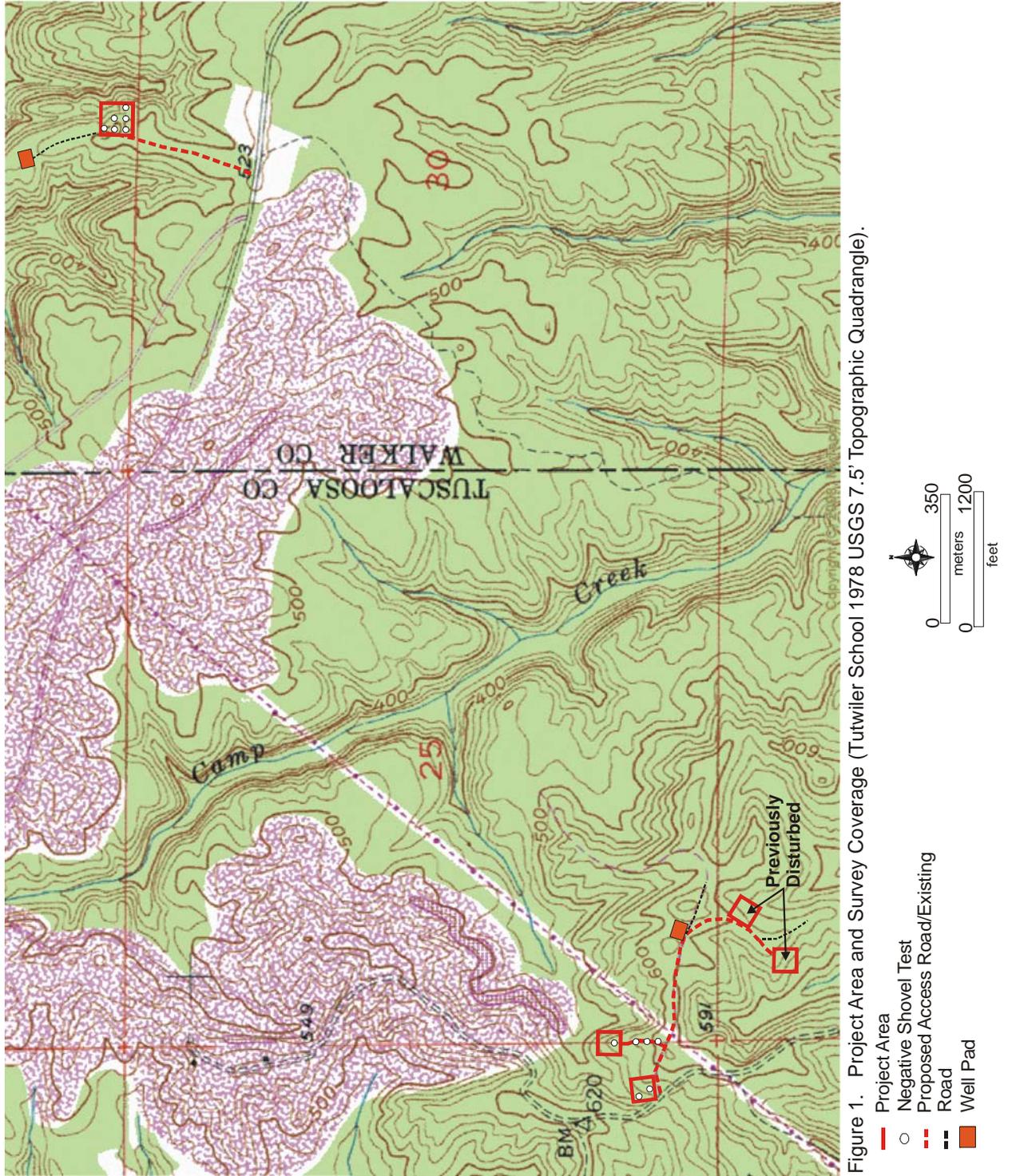


Figure 1. Project Area and Survey Coverage (Tutwiler School 1978 USGS 7.5' Topographic Quadrangle).



Figure 2. View of an Existing Access Road in the Eastern Project Area.



Figure 5. View of a Proposed Road Route and Well Location Facing North.



Figure 3. Proposed Fan Shaft Area Facing West.



Figure 6. Proposed Well Location in Section 36 Facing Southeast.



Figure 4. View of an Existing Access Road in the Western Project Area.



Figure 7. Proposed Access Road and Well Location in Section 36 Facing Southwest.

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