



**A Phase I Cultural Resource Assessment
For Shannon Mine No. 2 In Jefferson County,
Alabama**



Prepared For:

Drummond Company, Inc.
PO Box 1549
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Prepared By:

PELA GeoEnvironmental
P.O. Box 12
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May 8, 2012

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

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



INTRODUCTION

In May 2012, PELA GeoEnvironmental, Inc. (PELA) conducted a cultural resource survey for Drummond Company, Inc.'s proposed additions to Shannon Mine No. 2 in southwest Jefferson County, Alabama. 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 (Figure 1) is comprised of approximately 29 acres along the northwest side of a mine haul road. The project area also includes a sediment pond area, proposed access road, and three drainage paths. The survey was conducted in Sections 28 and 29 of Township 19 South, Range 5 West on the McCalla (USGS 1980) 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 2 through 6).

Terry Lolley served as Principal Investigator for this project and was assisted in the field by Jimmy Mawk. The fieldwork was conducted on May 4, 2012.

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 Tapestry lists any historic properties within the project area. The 1908 Jefferson County Soil Survey map, the 1932 Yolanda 15' topographic quadrangle, and the 1939 and 1967

Jefferson County Highway maps (ALDOT) indicated no structures within the project area at those times.

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 Services at the Moundville Archaeological Park, Moundville, Alabama. An examination of the site file maps and site forms indicated five previously recorded sites in the vicinity (Figure 1). Sites 1Je214, 215, 216, and 217 each consisted of lithic scatters greatly disturbed from clear cutting and road construction (Meyer 1990). Site 1Je452 was also recorded as a lithic scatter in a disturbed area. The report for 1Je452 was not readily available for reference. A third survey was also conducted south of the project area with no findings (Morgan 1985). Additional surveys in the vicinity with no findings included Lolley (2008) and Watkins (2011; no report reference available). None of the sites recorded within or adjacent to the project area was recommended as eligible or potentially eligible to the NRHP.

FIELD METHODS

The project area lies within the Warrior Basin physiographic district. Elevation for the project area ranges from 470 to 650 feet above mean sea level. This portion of the county consists of many areas of current and previous surface and subsurface mining operations. The project area is characterized by moderate to very steep slopes vegetated with pines and hardwoods.

Active surface mining is present on the south side of the haul road within the project area. A cellular tower and well pad are located within a portion of the southwestern project area. A

bulldozed road was observed from the cellular tower to the well pad access road. In the northeastern portion of Section 29 and the northwestern portion of Section 28, a powerline corridor and underground water and gas utilities were observed. This corridor has been disturbed in the past and clear cut.

The Jefferson County Soil Survey (Spivey 1981) indicates one primary soil types within the project area. In general, the soil within the project area is poorly suited to cultivation due to the likelihood of severe erosion and lack of topsoil.

Montevallo-Nauvoo association, steep. This is a well-drained, moderately steep to very steep soil on highly dissected ridgetops, side slopes, and lower slopes. The surface layer is very dark gray shaly silt loam approximately 12 centimeters thick. The subsoil is yellowish-brown very shaly silt loam. Weathered shale and sandstone are common.

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 that were not obviously disturbed were visually examined for cultural material.

A standard 30 meter interval transect pattern was employed where appropriate (Figure 1). Portions of the project area did not require investigation due to previous disturbances, roads, existing drainages, and steep slope. Shovel tests were excavated at 30 meter intervals along any transects. 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. All roads within the project area were traversed and examined for cultural material. A total of 54 transect shovel tests were excavated in the project area.

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 was initiated in the southwestern portion of the project area along a narrow ridge line below a cellular tower. Two transects were traversed northeast of the tower on both sides of a bulldozed road (Figure 2). This area was sparsely wooded with mature pines and hardwoods. These transects terminated at the access road for a well pad location.

Northeast of the well pad access road, a powerline and underground water and gas corridor extended the remaining length of the project area parallel to the haul road (Figure 3). The northwest side of the corridor was steeply sloped. Transects were traversed along level terrain between the corridor and the haul road (Figure 4). Locations along this transect not tested were due to slope. The width of the corridor had been clear cut and no shovel testing was performed within the corridor due to buried utilities and the ground surface disturbance that would be associated with that construction.

The next area examined was a proposed access road that will extend from the haul road to the proposed sediment pond to the north (Figure 1). Shovel tests were excavated along the access road route where slope did not preclude excavation (Figure 5). At the terminus of the proposed access road, the sediment pond area was tested along both sides of a small drainage. No cultural material was recovered.

Three proposed drainage paths were also present on the project map provided by the Client. These drainage paths extend from the haul road to the proposed sediment pond (Figure 1). The two westernmost paths are primarily situated along steep slope and were only tested where the terrain was appropriate. The easternmost path (Figure 6) was tested where slope was minimal from the haul road to an existing drainage. Since the remainder of this path will follow an existing drainage, no testing was necessary within the drainage itself.

Soils within the project area were compact, shaly, and exhibited shallow surface layers where subsoil or rock was not exposed. Generally, the surface soil layer was brown (10YR4/3) shaly silt loam no greater than 15 centimeters in thickness. The subsoil was a shaly yellowish-brown (10YR5/6) silt loam.

A vehicular and pedestrian survey for standing structures indicated there were no standing structures within or adjacent to the project area (Figure 1).

RECOMMENDATIONS

This survey was conducted by PELA GeoEnvironmental, Inc. (PELA) for Drummond Company, Inc. in compliance with Federal and State regulations. Based on the field methods

employed, no cultural resources were identified during the field investigation and the project area should be cleared from further cultural resource concerns.

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

- Alabama Department of Transportation
1939 Jefferson County Highway Map.
1967 Jefferson County Highway Map.
- Lolley, Terry L.
2008 *A Phase I Cultural Resource Assessment for the Proposed Shannon Mine No. 2, Jefferson County, Alabama*. Performed for Twin Pines Coal, Inc. PE LaMoreaux & Associates, Inc. Lauderdale, Mississippi.
- Meyer, Jeff
1990 *An Archaeological Reconnaissance Survey of a Proposed Strip Mine Impact Area in West Jefferson County, Alabama*. Performed for Black Diamond Coal Mining Company. University of Alabama, Alabama State Museum of Natural History, Division of Archaeology, Moundville, Alabama.
- Morgan, Eddie
1985 *Cultural Resource Evaluation of the Proposed Oswayo #5 Mine Site, Jefferson County, Alabama*. Performed for Black Diamond Coal Mining Company.
- Spivey, Lawson D., Jr.
1981 *Soil Survey of Jefferson County*. United States Department of Agriculture, Washington D.C.
- United States Department of Agriculture
1908 Soil Survey Map of Jefferson County, Alabama.
- United States Geological Survey
1932 Yolanda 15' Topographic Quadrangle.
1980 McCalla 7.5 Minute Topographic Quadrangle.

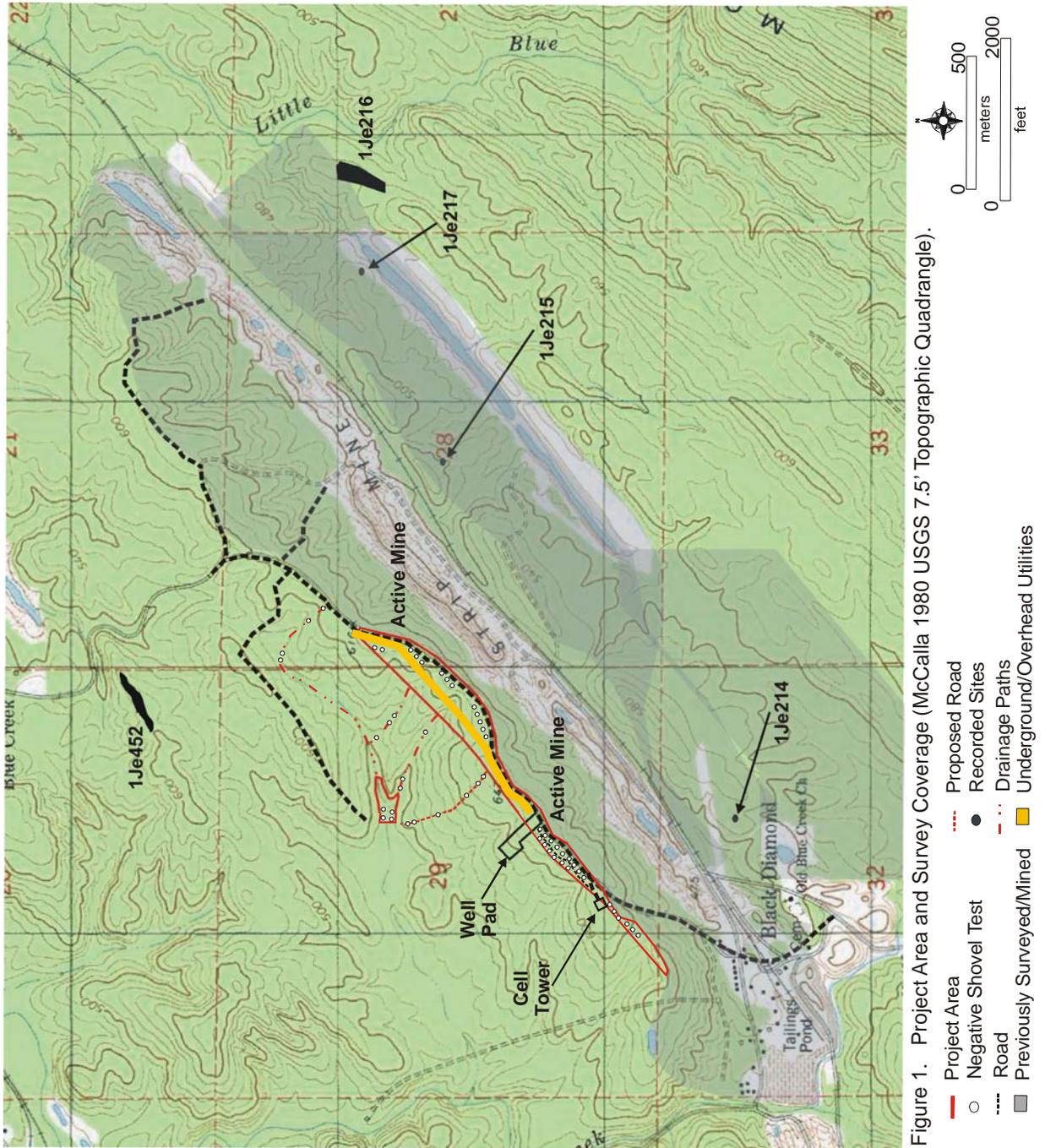




Figure 2. Bulldozer Road Facing Northeast.



Figure 3. View of the Utility Corridor Facing Southwest.



Figure 4. View of the Area between the Haul Road and Bulldozer Road.



Figure 5. View Along the Proposed Access Road Facing North.



Figure 6. View Along the Top of Slope at the Easternmost Drainage Path Facing Northwest.

University of Alabama Museums

Office of Archaeological Research



March 20, 2012

Terry Lolley
PELA GeoEnvironmental
PO Box 12
Lauderdale MS 39335

Dear Terry:

As per your request, this letter is to establish an agreement with you to provide curation services to PELA GeoEnvironmental on an as-needed basis. 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 National Park Service, U.S. Fish and Wildlife Service, U.S. Soil Conservation Service, U.S. Army Corps of Engineers, Tennessee Valley Authority, National Forest Service, etc.

Please be advised that once a year we must be notified of all reports in which we were named as the repository. Project collections must be submitted within one calendar year of completion. Small projects may be compiled for periodic submission. The AHC survey policy specifies which materials must be curated (Administrative Code of Alabama, Chapter 460-X-9). Renewal of this agreement is contingent upon compliance.

We appreciate having the opportunity to assist you with curation services and look forward to working with you in the future.

Sincerely,

A handwritten signature in black ink that reads "Eugene Futato".

Eugene M. Futato RPA
Deputy Director