AN ARCHAEOLOGICAL SURVEY OF SUEMAUR EXPLORATION & PRODUCTION LLC's SKULL AND CROSSBONES PROSPECT IN GALVESTON COUNTY, TEXAS



By

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AN ARCHAEOLOGICAL SURVEY OF SUEMAUR EXPLORATION & PRODUCTION LLC'S SKULL AND CROSSBONES PROSPECT IN GALVESTON COUNTY, TEXAS

BVRA Project Number 08-07

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ABSTRACT

An archaeological survey of Suemaur Exploration & Production, LLC's Skull and Bones Prospect was conducted on February 26, 2008 by BVRA in eastern Galveston County, Texas with negative results. The investigation examined a proposed drill site and a portion of a proposed 10-inch pipeline, an area consisting of 4.04 acres. Virtually all of the project area is located in a low marshy setting with little high ground. Two shovel tests were excavated in wet sand, and no cultural materials were observed or collected. It is concluded that the project area was not a suitable setting for a prehistoric campsite. It is, therefore, recommended that construction be allowed to proceed as planned.

ACKNOWLEDGMENTS

I appreciate the assistance given by others during this project. At Dixie Environmental Services Co., LP, Tanya Matherne and Jackie Gilliam provided maps and logistical support. William A. Martin, Staff Archaeologist at the Texas Historical Commission, discussed the project with the Principal Investigator and Ms. Matherne. Jean Hughes at the Texas Archeological Research Laboratory (TARL) on the campus of The University of Texas at Austin checked the site records for previously recorded sites in the project area. I am especially grateful to Suemaur Exploration & Production, LLC representatives Jim Devilin, Andy Grubb, and George Clark for providing project information and construction details and to Andrew Duca of C. H. Fenstermaker & Associates for providing engineering plans. Phil Bishop was the Project Archaeologist and conducted the field survey. Ally Freer, a DESCO biologist, accompanied the Project Archaeologist and assisted him with the location of the project area footprint using a Trimble Geo-Explorer XH Backpack GPS unit with sub-meter accuracy. Lili G. Lyddon created the cover and figures.

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INTRODUCTION

Suemaur Exploration & Production, LLC of Corpus Christi, Texas plans to conduct drilling and production activities in order to develop oil and gas reserves underlying private property in the extreme eastern end of Galveston County. Texas (Figure 1). This area is known as the Skull and Crossbones Prospect, and it includes the proposed construction of a boarded drill site, boarded access road, and approximately 17,990 feet of 10-inch pipeline. This pipeline will connect the proposed drill site on the coast with the proposed Central Gas Sales Facility to the north, which is associated with the Lafitte's Gold Prospect (Moore 2008). The pipeline will follow existing and proposed roads to connect the Central Gas Facility with the drill site. From State Highway 87, a boarded road will be constructed for a distance of 865 feet with a width of 20 feet to the proposed drill site. If the well is successful, additional aggregate will be added to its surface, and the underlying culverts will be updated to allow the mobilization of heavy equipment to the drill site. While drilling operations are active, the drill site will occupy a footprint of approximately 3.67 acres and will be 400 feet by 400 feet in size. Suemaur will use a lined berm and borrow ditch around the drill site for containment. If the well is successful, the temporary board pad will be replaced with one constructed of compacted clay, sand, and gravel. These materials will be stabilized as required with a cement additive. The permanent pad may be raised as much as 12 inches to 18 inches from the ground surface. The project area is depicted on the 7.5' USGS topographic guadrangle High Island (2994-422) (Figure 2).

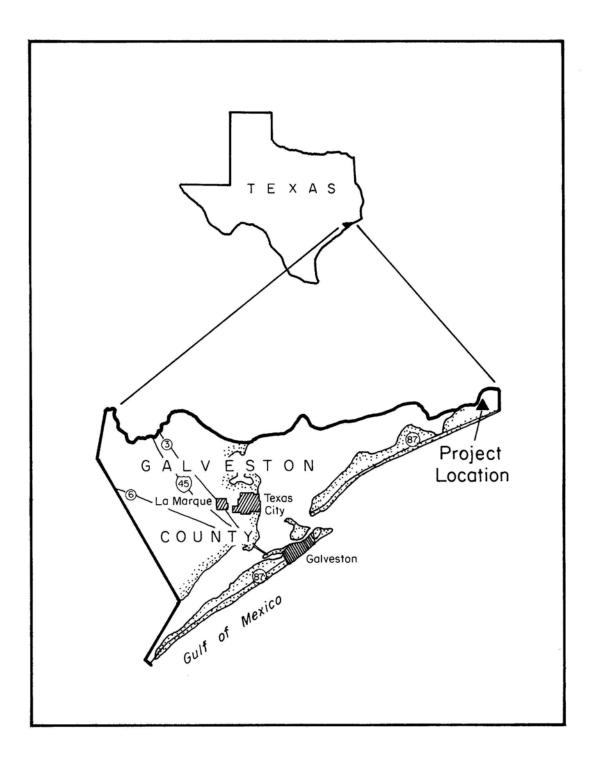


Figure 1. General Location

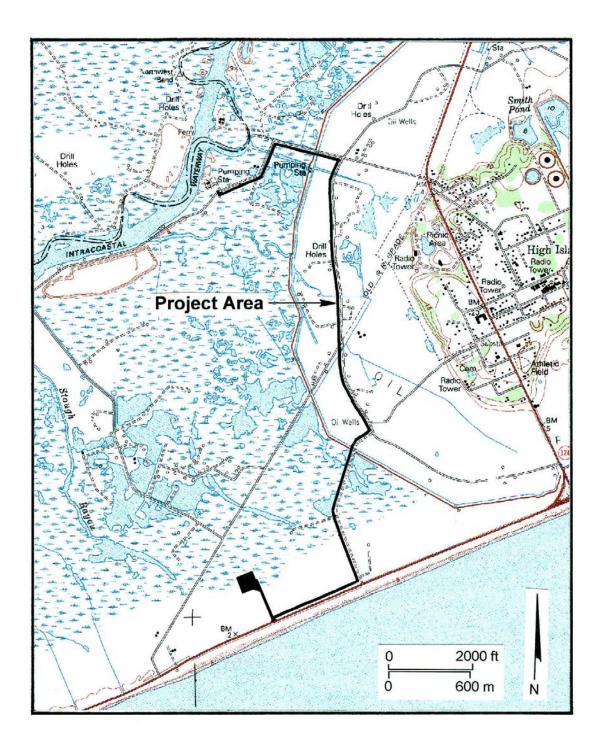


Figure 2. Project Area on Topographic Map High Island

ENVIRONMENTAL SETTING

The following information is taken from the soil survey for Galveston County (Crenwelge et al. 1988:1). Galveston County is located in the southeast part of Texas along the Gulf of Mexico and has a total area of 424,961 acres. Generally, the land surface is characterized as broad and nearly level with elevations ranging from sea level to about 45 feet in the northwest part of the county. The modern climate of Galveston County consists of hot and humid summers and mild winters. In winter, the average temperature is 47 degrees Fahrenheit, and the average daily temperature is 33 degrees. In summer, the average temperature is 83 degrees, and the average daily temperature is 87 degrees. Total annual precipitation is 39.73 inches. Of this amount, 23 inches (60%) usually falls in April through September. The area investigated is depicted on Sheet 6 of the Galveston County soil survey. The entire area surveyed is located within the soil type described by Crenwelge et al. (1988:48-49) as Veston loam, slightly saline-strongly saline complex (Vx). This complex consists of nearly level, poorly drained saline loamy soils that have loamy subsoil. They are found on coastal marsh flats. In a typical profile, the surface layer is dark gray loam about 10 inches thick. At 60 inches, the loamy soil changes to a clay loam and clay at 65 inches. This soil is slowly permeable, and surface runoff is very slow. Vx soils flood frequently by storm tides, and the water table is within two feet of the surface most of the year. Figure 3 depicts the marshy conditions in the project area at the proposed drill site, and Figure 4 depicts the existing access road that was built up in order to traverse the marshy area.



Figure 3. View of Drill Site (looking northwest)



Figure 4. Access Road

ARCHAEOLOGICAL BACKGROUND

The areas most likely to contain significant prehistoric sites are the shorelines along the mainland and the inland bays and streams where Indians gathered to consume Rangia cuneata, ovsters, and brackish water clams. As they discarded the used shells, large middens accumulated. This was a seasonal practice, as they camped on the shell heaps until they moved to other areas. Evidence for campsites consists of pottery, animal bone, flakes, and flint tools such as arrow points. Shell middens have been recorded along the coast and in inland settings, and these sites are a common occurrence in the area. Since the prehistoric Indians probably traversed the entire area within the project area boundaries, any elevated landform above water is likely to contain evidence of their presence. A recent survey by archaeologists from Prewitt and Associates (Gadus and Moss 2001), for example, documented shell middens along the Gulf Intracoastal Waterway from High Island to the Brazos River Diversion Channel in Brazoria, Chambers, and Galveston counties. The potential for offshore sites has to be viewed as high based on the presence of the McFaddin Beach site (41JF50) in adjacent Jefferson County.

Historic accounts of Indian activity in the area suggest that the area was intensively utilized during different seasons of the year. Explorers such as Cabeza de Vaca observed the local Indians moving about the area where they subsisted on various foods and animals that were available at that time. He noted that in the winter they inhabited an island (possibly Galveston Island) where they ate roots and fish and slept on mats on shells with a few skins for cover. In the spring they returned to the mainland or seashore where they collected berries and oysters. In the summer they moved back to the island where they ate wild potatoes along with a few buffalo and deer (Gilmore 1974: Table 1.

PREVIOUS INVESTIGATIONS

A check of the site records by Jean Hughes, Assistant Curator of Records at TARL in Austin, Texas, revealed no previously recorded archaeological sites in the project area. In the 1950s, Thomas Nolan Campbell (1957) reported on the Caplen site (41GV1), and his work represents the first professional study of a prehistoric site in the county. Prehistoric cemeteries have been documented in the area and include the Caplen site (41GV1) located just south of the Gulf Intracoastal Waterway on Bolivar Peninsula, the Jamaica Beach site (41GV5) and the Mitchell Ridge site (41GV66) located on Galveston Island facing West Bay. Aten (1965) conducted excavations at the Jamaica Beach site and found human remains believed to be associated with the coastal Karankawa. Work by Ricklis (1994) at Mitchell Ridge identified habitation features such as hearths, pits, a house floor, activity areas, and four burial areas with about 52 individuals present. A check of the Archeological Sites Atlas revealed that one linear survey has been conducted in the project area and vicinity. The Texas Department of Transportation (TxDOT) performed this study in 2005 with negative results. The project area paralleled old State Highway 87 on its north side and part of a twotrack road. This report is not on file at the Texas Archeological Research Laboratory, and a copy could not be obtained from TxDOT.

In addition to the detailed monograph by Ricklis (1994) and an in-depth report by Gadus and Moss (2001), the interested reader is referred to two major works that discuss in detail the archaeology of Southeast Texas. These are Aten's (1983) exhaustive work entitled *Indians of the Upper Texas Coast* and *The Archeology and Bioarcheology of the Gulf Plain* (Story et al. 1990).

METHODS

Prior to entering the field, the Principal Investigator discussed the project with the lead reviewer for this project, William A. Martin, Staff Archaeologist of the Texas Historical Commission, Archeology Division. It was decided at this meeting that the proposed drill site and 2500 feet of pipeline are the only areas that needed to be investigated. Next, relevant reports involving previous archaeological research in the area and elsewhere in the county were reviewed in order to become familiar with the kinds of sites known to occur in the area. Phil Bishop and Ally Freer walked over as much of the project as possible given the wet conditions of the marshy setting. The project footprint was not flagged. Therefore, the field survey crew located the corners of the drill site and the pipeline route using a Trimble Geo-Explorer GPS unit with sub-meter accuracy. The area was examined by a pedestrian survey, two shovel tests, and shovel probes. The two shovel tests were excavated along the proposed access road from State Highway 87 to the proposed drill site and were dug through wet sand to 60 cm. Both were negative. The field survey crew also looked for the presence of historic sites that might be visible in the form of features. The project was documented through field notes and digital photographs.

RESULTS AND CONCLUSIONS

A review of site records at the Texas Archeological Laboratory in Austin, Texas revealed no previously recorded archaeological sites in the project area, and the area has not been examined by professional archaeologists. The proposed drill site is not viewed as a likely setting for a prehistoric site because of the marshy conditions and distance to the nearest stream (East Bay Bayou). This study revealed that portions of the project area had been disturbed through oil and gas activities. This study was performed according to the minimum survey standards as outlined by the Texas Historical Commission, Archeology Division.

RECOMMENDATIONS

No archaeological sites were found in the project area. Therefore, it is recommended that Suemaur Exploration & Production, LLC. be allowed to proceed with construction as planned. Should evidence of an archaeological site be found during construction, all work in the area of the find must cease until the situation can be evaluated by the Texas Historical Commission, Archeology Division and the United States Army Corps of Engineers. In the event that additional areas are added to the project, the Texas Historical Commission must be notified as additional survey(s) by a professional archaeologist may be necessary.

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