



ARCHAEOLOGICAL EVALUATION OF SITE 31ON667  
AT MARINE CORPS BASE CAMP LEJEUNE,  
ONslow COUNTY, NORTH CAROLINA



Contract Number: N62470-06-D-7102  
Task Order Number: 0010

Prepared for

Naval Facilities Engineering Command Atlantic (NAVFACANT)  
Norfolk, Virginia

and

Marine Corps Base Camp Lejeune (MCBCL)  
Jacksonville, North Carolina

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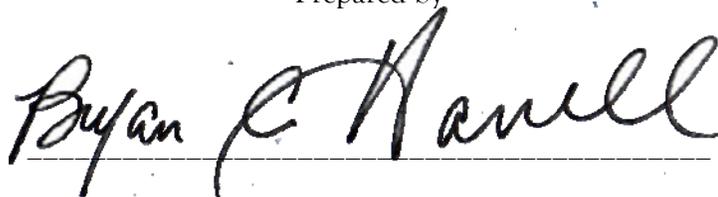
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Norfolk, Virginia

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Jacksonville, North Carolina

Prepared by



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## Management Summary

In April 2007, Southeastern Archaeological Research, Inc. (SEARCH) conducted an archaeological evaluation of site 31ON667 at Marine Corps Base Camp Lejeune (MCBCL) in Onslow County, North Carolina as per the contract between the Naval Facilities Engineering Command Atlantic (NAVFACANTLANT) and SEARCH.

The site evaluation was conducted in anticipation of a proposed construction project that would include four clamshell structures to accommodate operational space and individual equipment storage for four Marine Special Operations Battalion (MSOB) Companies. In addition, the project would require construction of an asphalt parking lot, restroom facilities, electric and telephone utilities, a stormwater management pond, security fence and security lighting. Construction of these proposed facilities would require clearing, grubbing, stumping and grading within an area of approximately three acres.

In order to evaluate 31ON667, SEARCH conducted a systematic Phase I survey and Phase II evaluation of the remaining southwestern portion of the site. The Phase I survey consisted of 112 shovel tests with 72 shovel tests containing cultural material. The survey resulted in the identification of several features, six concentrated artifact loci, and the reorganization of the site boundary. Subsequent Phase II testing focused on five of the six loci to evaluate the NRHP eligibility of the site.

Site evaluation demonstrated problems (i.e. historic disturbance, previous construction projects, and shoreline erosion) concerning the context of site 31ON667. Although site 31ON667 maintains several intact features, the site's overall integrity has been greatly compromised by previous disturbance, both historic and modern. Furthermore, there are several NRHP eligible sites in the local area that exhibit definable research questions, epitomizing the concept of NRHP eligibility. As a result, it is unlikely that preservation or further testing of site 31ON667 will recover data that will add new or important information to information provided in this evaluation and previous surveys of site 31ON667 or to data provided by similar, local sites currently determined eligible for listing in the NRHP. Based on the current survey and evaluation, it is the opinion of the Principal Investigator that site 31ON667 is not eligible for listing in the NRHP.

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## INTRODUCTION

In April 2007, Southeastern Archaeological Research, Inc. (SEARCH) conducted an archaeological evaluation of site 31ON667 at Marine Corps Base Camp Lejeune (MCBCL) in Onslow County, North Carolina as per the contract between the Naval Facilities Engineering Command Atlantic (NAVFACANT) and SEARCH (Figure 1). Anne V. Stokes, Ph.D., RPA served as Project Manager. Bryan C. Harrell, M.S., RPA served as Principal Investigator and Field Director. Chris Sypniewski served as Crew Chief and Jacob Shidner, Ryan VanDyke, and Keith Pickles served as Archaeological Technicians. Lab analysis was conducted by Debra Wells, M.A., RPA, Nandor Sadovszky, Jon Simon Suarez, and William Morgan.

The Principal Investigator for this project meets the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation* (48 FR 44716-42) and is listed on the Register of Professional Archaeologists. This investigation was conducted to comply with Section 106 of the National Historic Preservation Act (as amended) and its implementing regulation 36 CFR Part 800 (*Protection of Historic Properties*). Report information and formatting is consistent with the *Guidelines for Preparation of Archaeological Survey Reports in North Carolina*, released by the North Carolina Office of State Archaeology (OSA) in 1982 and revised in 1988.

Site 31ON667, situated on the east side of New River, is located along the northern edge of Courthouse Bay approximately 1,100 m north of Jarretts Point and 500 m northwest of Harveys Point (Figure 2). Originally identified by former MCBCL Archaeologist Robert Abbott, site 31ON667 was systematically surveyed in 1998 by Louis Berger & Associates (LBA) for the proposed Riverine Center of Excellence (RCE) (Voigt and Simpson 2000). During the survey, LBA revised the boundaries of 31ON667 and identified previously unrecorded sites 31ON690 and 31ON715 located in close proximity to 31ON667. Voigt and Simpson determined that sites 31ON667 and 31ON715 were not eligible for listing in the National Register of Historic Places (NRHP), while 31ON690 contained culturally significant deposits and was potentially eligible for listing in the NRHP. The North Carolina State Historic Preservation Office (NC SHPO) concurred with LBA's recommendations.

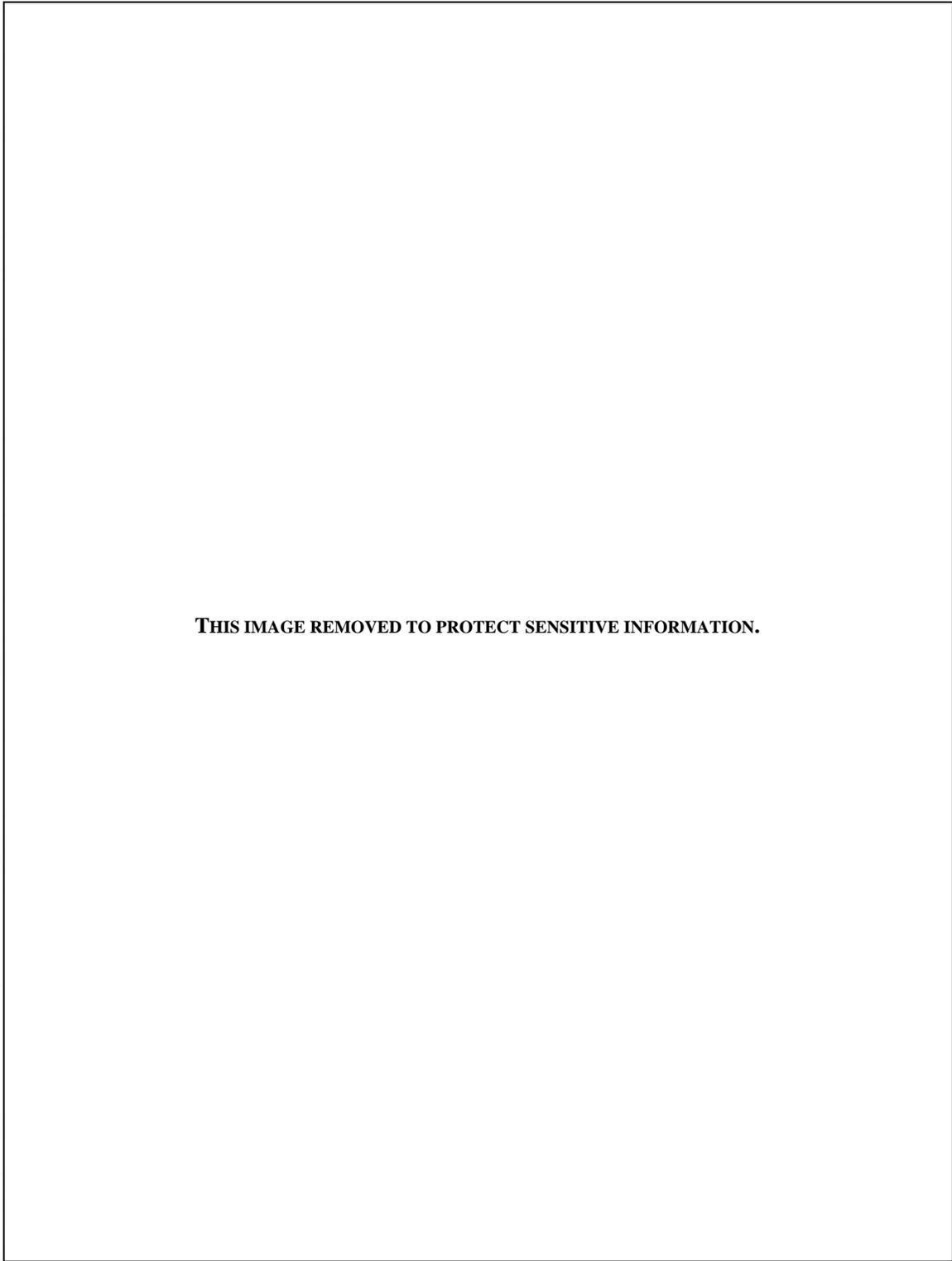
Following the LBA survey, but prior to construction associated with the RCE, TRC Garrow, as part of a contract dedicated to revisiting sites identified by Abbott, surveyed the local area and combined the three sites under the original 31ON667 number, expanding the site to approximately 17 acres and recommending on the site form that 31ON667 was potentially eligible for listing in the NRHP. No report was produced for the survey and no official determination of eligibility was conducted for the site. As part of an agreement between former Assistant State Archaeologist Mark Mathis and MCBCL, RCE construction was allowed to proceed based on LBA's original recommendations and NC SHPO concurrence as long as the project was monitored by an archaeologist. Furthermore, subsequent proposed construction affecting 31ON667 would warrant a Phase II investigation to evaluate the NRHP eligibility of the remaining 9.6 acres of the site

[e-mail correspondence, Rick Richardson (rick.richardson@usmc.mil) to Thomas Barbee, October 31, 2001].

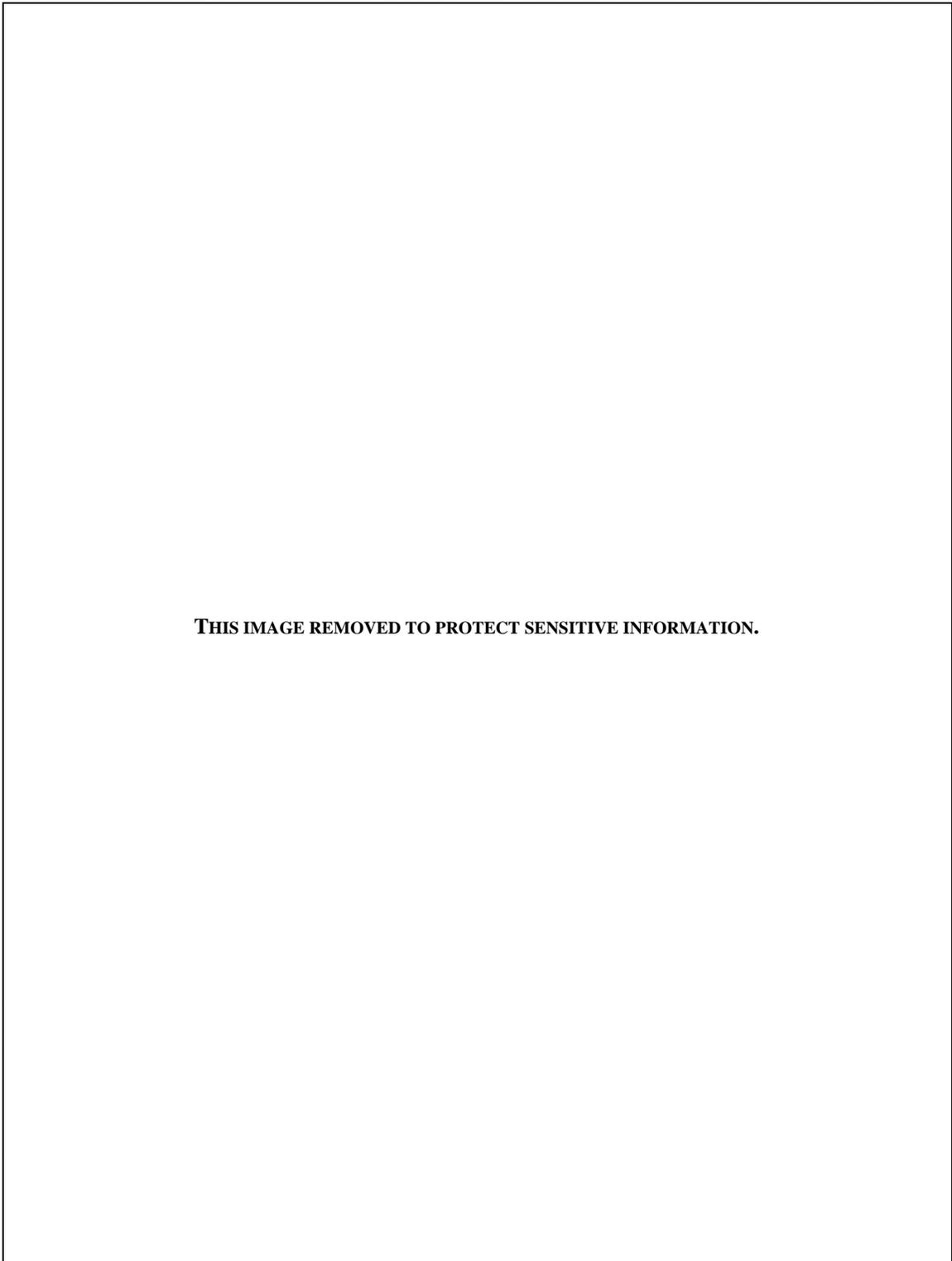
The current site evaluation was conducted in anticipation of a proposed construction project that would include four clamshell structures to accommodate operational space and individual equipment storage for four Marine Special Operations Battalion (MSOB) Companies. In addition, the project would require construction of an asphalt parking lot, restroom facilities, electric and telephone utilities, a stormwater management pond, security fence and security lighting. Construction of these proposed facilities would require clearing, grubbing, stumping and grading within an area of approximately three acres.

In order to evaluate 31ON667, SEARCH conducted a systematic Phase I survey and Phase II evaluation of the remaining portion of the site. The Phase I survey consisted of 112 shovel tests with 72 shovel tests containing cultural material. The survey resulted in the identification of six concentrated artifact loci and the reorganization of the site boundary. Subsequent Phase II testing focused on five of the six loci to evaluate the NRHP eligibility of the site.

Site evaluation demonstrated problems (i.e. historic disturbance, previous construction projects and shoreline erosion) concerning the context of site 31ON667. Although site 31ON667 maintains several intact features, the site's overall integrity has been greatly compromised by previous disturbance, both historic and modern. Furthermore, there are several NRHP eligible sites in the local area that exhibit definable research questions, epitomizing the concept of NRHP eligibility. As a result, it is unlikely that preservation or further testing of site 31ON667 will recover data that will add new or important information to information provided in this evaluation and previous surveys of site 31ON667 or to data provided by similar, local sites currently determined eligible for listing in the NRHP. Based on the current survey and evaluation, it is the opinion of the Principal Investigator that site 31ON667 is not eligible for listing in the NRHP.



**Figure 1. General Project Location, Marine Corps Base Camp Lejeune, Onslow County, North Carolina.**



**Figure 2. Site 31ON667 Location, Marine Corps Base Camp Lejeune,  
Onslow County, North Carolina.**

## ENVIRONMENTAL OVERVIEW

### Paleoenvironment and Sea-Level Change

Archaeologists generally agree that human migration into North America occurred during the late Pleistocene epoch as the landscape was slowly transitioning out of the full Wisconsin glacial period 18,000 to 12,000 years Before Present (BP). The environmental landscape that these people encountered was much different than the environmental landscape of today. During the full Wisconsin glacial period, North Carolina, like most of the Southeast, was much cooler and drier with an average sea level approximately 120 meters lower than current sea-level stands (Bense 1994:18, Rohling et al. 1998:162). Vegetation included cold-weather species like spruce and jack pine (Delcourt and Delcourt 1981), confirmed by palynological studies of the Dismal Swamp in northeastern North Carolina (Whitehead 1972). As humans slowly trickled into North America, temperatures were increasing as interglacial conditions began to prevail.

By 10,000 BP, glacial conditions ceased, marking the beginning of the Holocene. The Early Holocene (10,000–8500 BP) was a period of warmer, drier summers and rapid sea level rise. The large dominant forest belts that had existed for millennia began breaking into smaller biotic communities (Bense 1994:22). Also, the megafauna that had characterized the Pleistocene epoch were becoming extinct. The Middle Holocene (8500–4000 BP), known as the Altithermal or Hypsithermal, was much drier and hotter than previous periods as the tropical air mass moving out of the Caribbean and Gulf of Mexico influenced summer weather patterns (Bense 1994:22). During this period, swamp and peat habitats developed as various species of pine expanded across the central and southern Coastal Plain (Watts 1980).

As a generalization, during the Late Holocene (4000 BP–present), the climate, water levels, and plant communities of North Carolina attained essentially modern conditions by 3000 BP and have been fairly stable through all phases of habitation by ceramic-using cultures.

### Geology and Natural Environment

Basal geologic formations found beneath Camp Lejeune include three Tertiary age formations composed primarily of hardened and fossiliferous limestones and sands. The Belgrade Formation, with its heavy shell and sand content, underlies most of the eastern portion of Camp Lejeune east of Verona in the north and New River Inlet to the south. A small area of Castle Hayne fossiliferous bryozoan-echinoid limestone is found near French Creek and along the western edge of the Greater Sandy Run Training Area. Finally, the River Bend Formation, composed of fossiliferous molluscan-mold limestone, occurs throughout much of the western portion of Camp Lejeune (Wagner 1995:2) (Figure 3). These geologic formations are overlain by surficial soils deposits, likely the result of Pleistocene and Holocene erosional and depositional episodes.



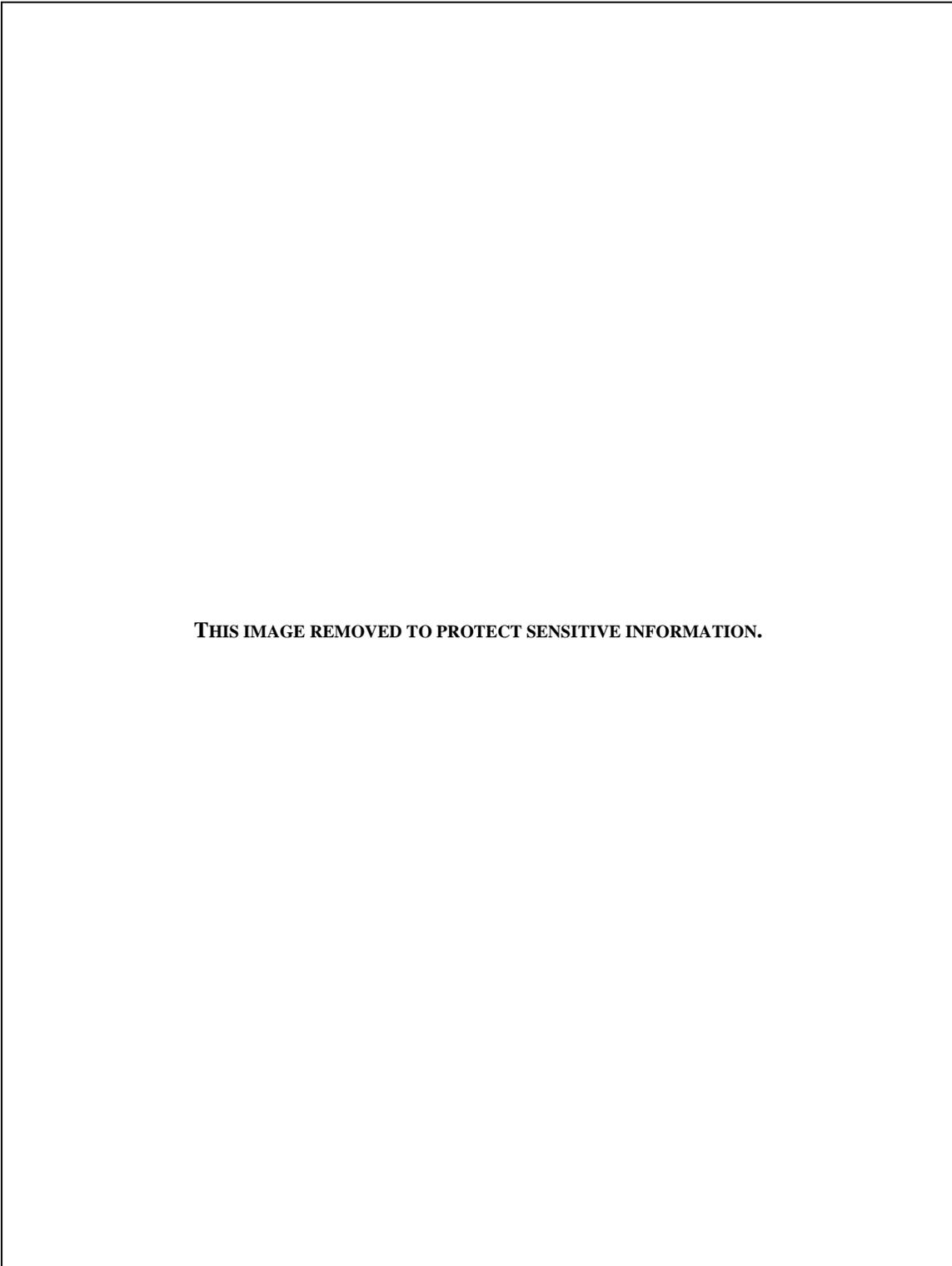
Figure 3. Geologic Formations beneath Marine Corps Base Camp Lejeune, Onslow County, North Carolina (North Carolina Geological Survey 1985).

Soils within the project area include Bohicket silty clay loam, Muckalee loam, Wando fine sand, 1-6% slopes and Urban land. Bohicket silty clay loam is a nearly level, very poorly drained soil associated with tidal marshes. The soil is formed from clayey marine sediments and is typically clayey throughout profile. Muckalee loam is a nearly level, poorly drained soil associated with flood plains. The soil is formed from loamy and sandy alluvial sediments and typically has a loamy surface layer. Wando fine sand, 1-6% slopes is a nearly level to gently sloping, well drained soil associated with uplands. The soil is formed from sandy marine sediments and is typically sandy throughout profile. Urban land is also found in the area and is typically composed of 70 percent structures, concrete, asphalt, sidewalks, etc. (Barnhill 1992) (Figure 4).

The project area is located within the White Oak River Basin, which is composed of four river systems or subbasins (NCDENR 2002). The largest of these is the New River subbasin, containing the city of Jacksonville and MCBCL. The New River subbasin is drained by numerous creeks and runs that move water into the main river and eventually into the Atlantic Ocean located twenty miles down river from Wilson Bay. The project area is located along the northern shoreline of Courthouse Bay, a moderate-sized, embayment along the eastern shore of the New River (see Figure 2). The Atlantic Ocean is located approximately 7 km down river of the project area.

The project area possesses a variety of local ecosystems indicative of the larger Carolina Flatwoods ecoregion. Local ecosystems associated with the project area include lowland-hardwoods forests and pine-hardwood forests. The lowland-hardwood forests are typically found in bottomlands associated with swampy drainages and floodplains. The local lowland-hardwood forest includes water oak (*Quercus nigra*), laurel oak (*Quercus laurifolia*), American holly (*Ilex opaca*), and red maple (*Acer rubrum*). The understory is composed of various types of shrubs and small, immature plants, including but not limited to dahoon holly (*Ilex cassine*), wax myrtle (*Morella cerifera*), swamp azalea (*Rhododendron viscosum*), cinnamon fern (*Osmunda cinnamomea*), and dog hobble (*Leucothoe* sp.). Faunal assemblages vary widely with swamp type, and can include fish (if permanently flooded), amphibians, reptiles, a variety of migratory and sedentary birds, several species of rodents, and medium-sized mammals like raccoons (*Procyon lotor*) and otters (*Lutra canadensis*). Large mammals are less common, though not unprecedented, swamp denizens (Reid and Simpson 1998:12).

The pine-hardwood forests, associated with the remaining sites, are a transitional community between the hardwood forests of the lowlands and the upland pines ecosystem. Within this community, loblolly pine (*Pinus taeda*) and pond pine (*Pinus serotina*) are mixed within the hardwood forest. These environmental zones are subject to seasonal flooding, unlike pure hardwood stands that are typically flooded for much longer periods. Typical fauna include white-tailed deer (*Odocoileus virginianus*), turkey (*Meleagris gallopavo*), and gray squirrels (*Sciurus carolinensis*) (Reid and Simpson 1998:12).



**Figure 4. Specific soils within the Project Area, Marine Corps Base Camp Lejeune, Onslow County, North Carolina.**

## BACKGROUND RESEARCH

### Previous Research and Fieldwork

There have been a series of regional studies that have benefited the work conducted in and around Onslow County and MCBCL. These studies have provided a baseline of information and remain the cornerstone of early North Carolina archaeology.

In 1953 and 1954, William Haag (1958) conducted an archaeological survey of the North Carolina coast from the Neuse River to the Virginia Border. The survey, sponsored by the Office of Naval Research, resulted in the recording of numerous archaeological sites throughout the Pamlico, Albemarle, and Currituck sounds, and the creation of a seriated ceramic typology for the northern coast (Ward and Davis 1999:195). Although the chronology was applicable only to that area, it provided key comparative data for subsequent work in other regions and helped to develop an overall cultural chronology for the Coastal Plain.

In 1960, Stanley South (1976) evaluated sites in New Hanover and Brunswick counties, southeast of MCBCL, in an effort to understand the relationship between historic, aboriginal ceramics recovered from Brunswick Town and local prehistoric pottery from the southern Coastal Plain. South (1976:14) recognized five separate types, three based on temper. The three temper-based types include the Hanover series (sherd, clay, or grog tempered), Cape Fear series (sand tempered), and Oak Island series (shell tempered). While the validity of Oak Island series has been called into question (Mathis 1999), the Hanover and Cape Fear series are frequently recovered from Woodland period sites at MCBCL.

In 1964, Joffre Coe published *The Formative Cultures of the Carolina Piedmont*. Although Coe's work focused on archaeological cultures west of the Fall Line, the Paleoindian and Archaic data proved valuable for the Coastal Plain, demonstrating similar chronologies and diagnostic tool assemblages in both regions. The Woodland cultures, however, which tend to be region specific, are applicable only to the Piedmont (Phelps 1983:10).

Thomas Loftfield, during his dissertation research in the 1970s, conducted an archaeological survey of southern coastal areas of North Carolina between the Pamlico Sound to the north and the Cape Fear River to the south. The survey extended as far inland as the upper reaches of the White Oak, Newport, North, and New rivers (Loftfield 1976:103). Loftfield identified five ceramic series that included New River (coarse sand tempered), Carteret (sherd, clay, or grog tempered), White Oak (shell tempered), Adam's Creek (fine sand tempered), and Onslow (gravel-sized, crushed quartz tempered). In an effort to create a relative chronology, Loftfield (1976:173-174) seriated the five ceramic series noting a temporal trend in tempering and surface treatment.

David Phelps (1983:2) published an impressive work in 1983 in an attempt to produce "an initial model of culture history for the region," offering a comprehensive examination of North Carolina Coast and Coastal Plain archaeology. Synthesizing the works from

archaeologists like Coe (1964), South (1976), Loftfield (1976) and others, Phelps's model has maintained integrity with minimal modification over the past 20 years and has become a primary source for understanding prehistoric cultural development throughout the Coastal Plain region.

The most recent attempt to synthesize the vast amount of archaeological information across the state has come from Ward and Davis (1999). Their book, *A Time Before History*, provides an overview of cultures from the Paleoindian period to Contact and covers North Carolina from the mountains to the coast. For the Coastal Plain region, they incorporate much of the data from the aforementioned authors with an updated view provided by various academic and cultural resource management surveys conducted since Phelps's synthesis in 1983.

Over the past 25 years, several large cultural resource management surveys conducted at MCBCL have added to the prehistoric and historic context of not only MCBCL, but also the Coastal Plain region and North Carolina in general.

In 1981, Thomas Loftfield with the help of Tucker Littleton conducted an archaeological and historical reconnaissance of Camp Lejeune (Loftfield 1981; Loftfield and Littleton 1981). The purpose of the survey was to identify areas that would have the highest probability of containing archaeological sites (Loftfield 1981:1). The archaeological survey was composed primarily of surface survey of exposed and disturbed ground surfaces within specific environmental zones. The survey also included an extensive review of the civilian history of the Camp Lejeune area, greatly adding to the general history of Onslow County (Loftfield and Littleton 1981).

In 1992, Brockington and Associates, Inc. conducted an intensive sample survey and data recovery at Camp Lejeune (Poplin et al. 1992). The survey resulted in the identification of 76 previously unrecorded archaeological resources, including archaeological sites and isolated finds. Poplin et al. used data from this and other surveys to refine the soils based probability model for Camp Lejeune.

In 1998, Louis Berger and Associates, Inc. (LBA) conducted a cultural resources study of Mainside Camp Lejeune (Reid and Simpson 1998). The purpose of the survey was to provide additional information for archaeological resource management at MCBCL by examining variables such as Danger Areas, Red Cockaded Woodpecker Habitat, Artifact Depth Potential, Disturbed Zones, and Complete Archaeological Surveys. A key component of the survey was the graphic representation of these variables on a base-wide scale.

Also in 1998, LBA (Voigt and Simpson 2000) conducted a survey for the mechanized assault course, Range F-245, and the Riverine Center of Excellence (RCE). During the survey of RCE, LBA systematically surveyed site 31ON667, refining the site boundaries and identifying previously recorded sites 31ON690 and 31ON715 in close proximity to 31ON667. Voigt and Simpson determined that sites 31ON667 and 31ON715 were not eligible for listing in the National Register of Historic Places (NRHP), while 31ON690

contained culturally significant deposits and was potentially eligible for listing in the NRHP. The North Carolina State Historic Preservation Office (NC SHPO) concurred with LBA's recommendations.

In 1999 and 2000, TRC Garrow, as part of a contract dedicated to revisiting sites identified by former MCBCL Archaeologist Robert Abbott, surveyed the local area and combined the three sites under the original 31ON667 number, expanding the site from less than one acre to approximately 17 acres and recommending on the site form that 31ON667 was potentially eligible for listing in the NRHP. No report was produced for the survey and no official determination of eligibility was conducted for the site.

## Prehistoric Overview

### *Paleoindian Period (11000–8000 BC)*

The most widely accepted model for the peopling of North America argues that Asian populations migrated to the western hemisphere over the Bering land bridge that linked Siberia and Alaska, some 12,000 years ago. However, data are mounting in support of migrations that date to before 12,000 years ago. Regardless of the precise timing of the first occupation of North America, it does not appear that North Carolina was inhabited by humans prior to about 12,000 years ago.

Phelps (1983:19) divided the Paleoindian period into Early (12000–10000 BC) and Late (10000–8000 BC) subperiods. Recent work throughout the Southeast (Anderson 1995), however, has identified Early (10550–8950 BC), Middle (8950–8550 BC), and Late (8550–8050 BC) subperiods. For the Coastal Plain region, these dates are tentative at best as few, if any, radiocarbon dates have been associated with Paleoindian sites (Reid and Simpson 1998a:31). The lack of identified Paleoindian sites in this region is probably the result of rising sea levels, submerging many sites in riverine basins and offshore locales (Phelps 1983:21).

Evidence of Paleoindian occupation is based primarily on the recovery of various types of lanceolate fluted and non-fluted projectile points. Within the Southeast, these types include Clovis, Cumberland, Dalton, Quad, and Suwannee. Perkinson (1971, 1973), in a state-wide survey of fluted Paleoindian projectile points, reported sixteen fluted points for the entire Coastal Plains region. Through the course of various archaeological surveys, the number of Paleoindian sites has increased substantially, but remained less than fifty by 1983 (Phelps 1983:18).

Early and Middle Paleoindian projectile point variants in the North Carolina Coastal Plain include the Hardaway blade and Hardaway-Dalton. Late Paleoindian variants include Hardaway side-notched. Some archaeologists view the Hardaway complex as a manifestation of the Early Archaic period, suggesting that the Hardaway types are the result of synchronic tool modification as opposed to diachronic change. Most agree, however, that the other tools, such as side- and end-scrapers, found in association with Hardaway Complex points are very similar to a Paleoindian tool assemblage (Ward and Davis

1999:42). As such, the Hardaway Complex could be a transitional Late Paleoindian/Early Archaic assemblage.

Settlement models derived from data recovered in the Piedmont suggest a Paleoindian settlement system focused on high-quality lithic material (Gardner 1977). This model, however, may not be applicable to the lithic-deprived Coastal Plain. Reid and Simpson (1998:33) suggest that a settlement model proposed by Dent (1995) for the Chesapeake region, which includes the Coastal Plain of Virginia, Maryland, and Delaware, is more applicable to the Coastal Plain of North Carolina. The model proposes two sites types: regional residential bases and locations, reminiscent of Binford's (1980) foraging system. The residential bases serve as the "hub of subsistence activities," while the locations function as extractive sites (Binford 1980:9).

Little is known about Paleoindian subsistence in the Southeast. Most of the information regarding subsistence is based on evidence from sites in the western United States. This model essentially holds that Paleoindian groups were highly mobile, big-game hunters. The problem, much like settlement systems, is whether this model is applicable to sites in North Carolina, specifically the Coastal Plain. Flora and fauna remains recovered from a Paleoindian hearth at Shawnee Minisink in Pennsylvania include hawthorne plum, hackberry, wild grapes, and unidentified fish (Department of Anthropology, American University n.d.).

#### *Archaic Period (8000–1000 BC)*

Early Archaic (8000–6000 BC) sites, like Paleoindian sites, are typically identified through a series of diagnostic projectile points. As noted, some archaeologists view the Hardaway complex as a transitional Late Paleoindian/Early Archaic lithic assemblage, a viewpoint that is open to debate (Ward and Davis 1999). There are, however, a series of points, based on definitive stratigraphic context in the Piedmont, categorized as Early Archaic, including Palmer Corner Notched and Kirk Corner Notched types. Other tools include end-scrapers, side-scrapers, blades, and drills along with various bone and antler tools (Reid and Simpson 1998a:34). This general tool assemblage is also found at archaeological sites within the Coastal Plain (Phelps 1983:22).

Early Archaic sites are typically small with a settlement pattern indicating frequent relocation within both floodplain and upland ecosystems (Steponaitis 1986:371). Daniel (1998:194) suggests that movement was most likely predicated on the availability of knappable stone, as opposed to a drainage basin adaptation proposed by Anderson and Hanson (1988). Phelps (1983:24), however, suggests that Early Archaic site location in the lithic-poor Coastal Plain was based on stream accessibility.

Little is known about Early Archaic subsistence. Based on the recovery of bone and antler tools, however, white-tailed deer appears to have been an important species, both for tools and diet, for Early Archaic peoples. Additional terrestrial and aquatic fauna such as small mammals and fish, as well as available floral resources such as nuts and seeds, are suggested dietary staples based on the location of sites within different environmental niches.

The Middle Archaic (6000–3000 BC) is marked by the appearance of the Stanly Stemmed projectile point, along with the Morrow Mountain Stemmed and Guilford Lanceolate points (Ward and Davis 1999:73). The tool assemblage expands to include atlatl weights, grooved axes, and notched pebbles. Middle Archaic settlement and subsistence patterns were very similar to the previous Early Archaic, as groups continued to utilize local resources as they occupied upland terraces and floodplains.

While earlier periods were marked primarily by morphological change of projectile points, the Late Archaic (3000–1000 BC) is marked by the advent of pottery. Some of the earliest vessels are carved from steatite. Fiber-tempered, clay ceramics were produced at roughly the same time, predating steatite vessels in some areas (Sassaman 1993:180). The earliest expression of fiber-tempered ceramics in the Coastal Plain is the Stallings series (Ward and Davis 1999:76). Exterior surface treatments included punctations, incising, and finger pinching. Stallings pottery is found throughout the southern Coastal Plain, but is rare north of the Neuse River, leading Phelps (1983:26) to subdivide the Coastal Plain into north and south subregions. The Thom's Creek series, which is similar to the Stallings series in terms of exterior surface treatments, is a sand-tempered ceramic also associated with the Late Archaic.

Late Archaic groups, however, did not abandon lithic technology. In the North Carolina Coastal Plain, the broad-bladed, broad-stemmed Savannah River type is the diagnostic projectile point of the period. Late Archaic groups also continued to use atlatl weights and grooved axes seen during the Middle Archaic.

During this period, settlements seem to shift from the upland terraces and riverine valleys to estuaries and the mouths of major rivers (Ward and Davis 1999:75). In South Carolina, Georgia, and Florida, large coastal shell rings and shell sheet middens have been associated with the Late Archaic. These types of sites are rare along the North Carolina coast (Reid and Simpson 1998a:39). Late Archaic sites in this area are reminiscent of earlier site types including large, residential base camps and smaller resource extraction locations.

#### *Woodland Period (1000 BC–AD 1650)*

The Woodland Period is marked by cultural regionalization typically reflected in ceramic assemblages, leading to a division of the Coastal Plain into northern and southern subregions. The northern Coastal Plain extends from the Neuse River north to the Virginia state line, while the southern Coastal Plain extends from the Neuse River south to the South Carolina state line. Onslow County and MCBCL are located in the southern Coastal Plain subregion. As a result, the Woodland chronology and description that follows focuses primarily on that region.

In the southern Coastal Plain, the Early Woodland (1000–300 BC) Period is known as the New River phase and is identified by the recovery of New River ceramics. Identified by Lofffield (1976), New River pottery is medium to coarse sand tempered with, in order of frequency, cord-marked, net-impressed, and plain surfaces. The Hamp's Landing series, a

limestone- or marl-tempered ceramic, has also been associated with Early Woodland contexts (Hargrove and Eastman 1997:92). Surfaces are typically plain, simple stamped, fabric impressed, or cord marked. Lithic tools include the Gypsy point, thought to be a derivation of the Savannah River type, and the Roanoke triangular point (Phelps 1983:29).

Little is known about Early Woodland settlement patterns during the New River phase; however, Phelps (1983:32) speculates that it was similar to that of the Late Archaic period. Reid and Simpson (1998:41) suggest that the Woodland settlement pattern proposed by Gardner (1982) in the Virginia Coastal Plain may be applicable to the southern Coastal Plain of North Carolina. The settlement model included two site types: large base camps and smaller resource extraction camps.

Subsistence data for the Early Woodland is also lacking. Archaeologists infer, based on the limited recovery of fauna remains and the locations of sites, that Early Woodland groups continued a generalized hunting and gathering lifestyle with an increased utilization of shellfish and other marine and riverine resources (Reid and Simpson 1998:42).

The Middle Woodland (300 BC-AD 800) Period, known as the Cape Fear phase, is marked by the recovery of Cape Fear and Hanover ceramic series. Cape Fear ceramics are medium sand tempered with "an occasional large particle of quartz sand" (South 1976:18). Surfaces were cord marked, fabric impressed, or net impressed. Hanover ceramics are tempered with crushed sherds and/or lumps of fired clay. Exterior surfaces were cord marked or fabric impressed. The Hanover series is identical to the Carteret series developed by Loftfield (1976:154). Information concerning the remainder of the Cape Fear phase artifact assemblage is limited. However, Roanoke points, biface blades, abraders, celts, and shell pendants and gorgets have been associated with the Middle Woodland Mount Pleasant phase in the northern Coastal Plain (Phelps 1983:33).

Settlement patterns during the Middle Woodland have been described as "dispersed," marked by "a relatively high rate of residential mobility..." (Herbert 2002:302). Loftfield (1976) notes a shift from upland areas to bottomland sites, perhaps in response to increased plant cultivation, and estuaries. The number of shell midden sites also increases during this period. The most visible sites, however, are low, sand burial mounds associated with Cape Fear groups. These circular, low burial mounds contain secondary burials and cremations (Ward and Davis 1999:206). The mounds are typically found on low, sand ridges some distance from habitation sites. Artifacts recovered from the McLean Mound in Cumberland County included stone smoking pipes, pottery sherds, antler points, shell and bone beads, celts, and paint pigments (Ward and Davis 1999:207).

Subsistence data for the Middle Woodland southern Coastal Plain is limited. During the same period in the northern Coastal Plain, subsistence reflects a greater dependence on estuarine resources than in previous periods. Phelps (1983:33) suggests that small camps located in the estuaries were used as shellfish collecting stations with hunting and fishing relegated to minor activities. Subsistence patterns in the south may be similar.

The Late Woodland/Contact (800–1650 AD) Period in the southern Coastal Plain is referred to as the Oak Island or White Oak phase, named for the associated ceramic types identified by South (1976) and Loftfield (1976), respectively. Phelps (1983) has identified these groups as Siouan speakers, while Loftfield (1990) suggests that, at least as far south as Onslow County, these were Algonkian speakers. Regardless of the language, these would be the people that met European explorers from the east. White Oak and Oak Island series have been used interchangeably. Both types are shell tempered with plain, cord-marked, fabric-impressed, net-impressed, and simple-stamped exterior surfaces. Information regarding lithic tools is sparse. However, Loftfield (1988) has identified what he believes to be an oyster knife. The "knife," which is used to open oysters, is a small, pebble tool with a series of flakes removed. Additional artifacts include nutting stones and stone and clay pipes.

Late Woodland sites increase in number throughout the estuaries in the southern Coastal Plain. Like their neighbors to the north, White Oak groups lived in long houses. Two types of long house have been identified: a small, rectangular type measuring 24 x 12 feet and a larger type measuring over 50 x 18 feet. Some houses were even partitioned with interior walls (Loftfield and Jones 1995:130). Mass secondary ossuaries were also common during the White Oak phase. More than 150 individuals in bundled and mixed burial contexts were recovered from the Flynt site (31ON305) in Onslow County (Ward and Davis 1999:218).

Subsistence data from Late Woodland contexts are more plentiful than from previous periods. Recent work by Loftfield (1988) and Loftfield and Jones (1995) have shown a subsistence regime built around estuarine environments. White Oak groups were primarily subsisting on oysters and small fish throughout the year and clams on a seasonal basis. Although deer and other small mammals were recovered from these sites, quantities suggest that they played a small role in the overall subsistence strategy. Recovered flora included the remains of hickory nuts and acorns with minor quantities of corn, sunflower, and squash (Reid and Simpson 1998:46).

## Historic Overview

### *Onslow County*

Historians have speculated that the earliest European contact with the Native Americans living in what is now Onslow County may have occurred during the 1524 exploratory voyage of Giovanni da Verrazzano (Loftfield and Littleton 1981:19). The plan to reconnoiter the Atlantic coast included a brief foray into the southern coast of North Carolina between Bogue and New River Inlets. After Verrazzano's French superiors failed to utilize the explorer's discoveries, the entire North Carolina coast lay open to colonization efforts by other countries. It has been speculated that the Walter Raleigh and John White expeditions of the 1580s may have included exploration of present-day Onslow County. Following the failure of the Raleigh settlements and the subsequent establishment of the first permanent English colony in Jamestown, in Virginia in 1607, European settlement began to trickle into North Carolina. By the end of the 17<sup>th</sup> century,

settlements had appeared on the coast but Europeans did not begin to expand into the hinterlands until after the Tuscarora War (1711-1712) (Watson 1995:2-3).

The land now encompassing Onslow County had been a part of several different counties prior to its formation in 1731. The county was formed out of Carteret and New Hanover Precincts, both of which were once part of the larger Bath County which was established in 1696 (Watson 1995:3-4). Onslow County was named in honor of a distinguished English politician, Sir Arthur Onslow, who had never actually visited the area or owned land there (Onslow County Historical Society 1983:1).

Initial settlement of Onslow County and the New River region began in the second decade of the eighteenth century and focused on sounds, rivers, and other waterways that provided the most efficient means of transportation. Numerous land grants were issued, but nearly half were to individuals who did not live in the area. Therefore the area remained largely unsettled throughout the century. In the 1730s, approximately 100 people lived in the New River region (Watson 1995:18). One of the earliest roads was constructed in 1723 and stretched from the Beaufort area to the White Oak River. Several years later, a ferry was in operation across the New River (Loftfield 1981:37, 59-61). The first courthouse in the county was located on Jarret's Point at Court House Bay (present-day Camp Lejeune) although it later moved to several private residences (Watson 1995:9). In 1737, a new courthouse, along with a prison, stocks, and a whipping post, was constructed at what is now Paradise Point (also in present-day Camp Lejeune). Seven years later, after the courthouse burned, a new one was built in Johnston that later was destroyed in a hurricane. The seat of government ultimately rested at Wantland's Ferry (now know as Jacksonville) (Watson 1995:10).

Onslow County's early economy was based on agriculture, forest products, fishing, and limited manufacturing (Loftfield 1981:62-64). Agricultural pursuits were focused on corn, peas, and livestock. Abundant pine forests nourished the growth of the naval stores industry in the county. Due to the county's geographic location near the Atlantic and the New River, fishing was an important occupation. Milling was the principal manufacturing industry in the region. Between 1764 and 1775, two new mills appeared in the county per year (Watson 1995:13-14). These various economic activities attracted settlers to Onslow County in the decades before the American Revolution. By 1776, there were an estimated 1,400 people living in the county. A significant number were indentured servants and some were free blacks. Nearly half of the inhabitants during this period were slaves (Watson 1995:18-19).

Onslow County was a staunch supporter of the American Revolution. Residents were spurred into action by external events such as the Boston Tea Party, the Intolerable Acts, and military actions in neighboring provinces. Local issues—including gubernatorial authority, currency shortages, and the proper jurisdiction of colonial courts—also contributed to the growing anti-British sentiment in Onslow. During the war, numerous men from the county served in the state militia and the Continental Army. However, there remained a sizable number of loyalists who cooperated with the British during several raids in Onslow County (Loftfield 1981:105; Watson 1995:28).

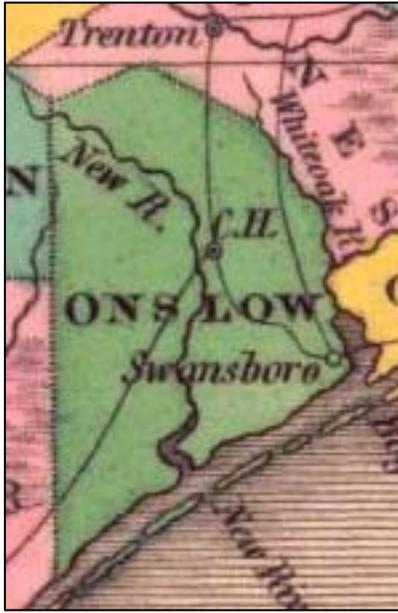


Figure 5. 1824 map of Onslow County (Finley 1824). The location noted as “C.H.” (Court House) later became Jacksonville.

Population growth in Onslow County between the Revolutionary War and the Civil War was slow relative to North Carolina as a whole. During the early nineteenth century, a significant portion of the population was lost on account of out-migration to Georgia, Tennessee, and the Gulf Coast states where land was more plentiful (Watson 1995:30-31). Those who remained lived in emerging towns and villages including French’s Mill, Foy’s Store, Rich Lands, Stones Bay, and Swansborough (later Swansboro) (Watson 1995:32-34). After the Revolution, slavery became a much more integral part of Onslow County society with the number of slaves doubling between the late eighteenth century and the mid-nineteenth century (Loftfield 1981:113; Watson 1995:36-37).

The community that became Jacksonville was firmly established in the pre-Civil War era. Wantland’s Ferry changed its name in 1819 to Onslow Court House (Figure 5) and in 1842 it was again changed to Jacksonville (Watson 1995:29). The town was named for

Andrew Jackson who had recently served as President of the United States (Watson 1995:33). One of the first institutions of public education in Onslow, a female seminary, was constructed in Jacksonville in 1851. It admitted males several years later and became the Jacksonville Male and Female Seminary (Watson 1995:42).

The backbone of Onslow County’s economy in the antebellum era remained, as in years before, agriculture and naval stores (Watson 1995:47). Farms varied in size from small family plots to large plantations. Some wealthy planters engaged in both farming and naval stores (Watson 1995:48-49). Landings along the New River facilitated the export of goods to the markets of the eastern United States coast and the West Indies (Watson 1995:47, 55). Tobacco, which would later become a primary crop in Onslow, was at this point grown only in small amounts. Cotton had become a valuable crop (Watson 1995:88). Naval stores production was nearly as important as agriculture. By 1840, the county ranked fourth in naval stores production among all counties in North Carolina. Aside from agriculture and naval stores, which were dominant, the county’s economy was somewhat diversified. Shipbuilding, fishing, and milling each had a visible presence in the decades before the Civil War (Watson 1995:49-51).

Citing decades of northern infractions against the Constitution, personal liberty laws, and the rights of the Southern people, North Carolina seceded from the United States in 1861 and joined the Confederate cause. Like many other counties in the region whose economy was closely linked to slavery, Onslow stood firmly behind the movement to secede (Loftfield 1981:132-133). Almost one-fifth of the total white population of the county served as soldiers during the conflict. The county itself witnessed its share of Federal incursions. In November of 1862 the Union gunboat *Ellis* steamed up the New River to

Jacksonville where it captured two small schooners and intercepted the mail from nearby Wilmington. Upon its escape, the boat ran aground where it was shelled until the Federal force retreated. The main focus of the Federals in the closing years of the war was the saltworks in the area. Onslow citizens suffered tremendously from hunger, poverty, and inflation during and after the war (Watson 1995:70-71).

The aftermath of the Civil War left Onslow County in an economically depressed condition that generally persisted into the twentieth century. The number of people relying on government support increased in the years following the war. In the 1860s and 1870s, the county poorhouse was a major expense in the county budget. Although agriculture was still the mainstay of the county's economy, the value of Onslow County's farms had dropped by 75 percent. Soil depletion, and extensive cultivation in other states, had diminished cotton production. Experiments with different crops, including peanuts and rice, were attempted in the 1870s but both failed to become the new cash crop. Tobacco, however, was successful, and by the beginning of the twentieth century it had improved, but not necessarily invigorated, the county's economy (Loftfield 1981:158). After the arrival of the railroad in the late 1880s, northern capital—and some from the South—was attracted to Onslow County's timber resources. Interest in the industry became much deeper in the twentieth century (Watson 1995:85-89). As prominent as the lumber industry became in the New River region, it was extractive and therefore did not bring economic prosperity to Onslow County (Loftfield 1981:163).

During the closing decades of the nineteenth century, Jacksonville's population was growing as a result of the lumber industry and the town's location on the railroad. In 1883, legislation enlarged its corporate limits and in the following decade a commission-style government was installed. At the turn of the century, Jacksonville, the largest town in Onslow County, could count three corn mills, a cotton gin, nine boardinghouses, and a carriage maker's shop. In 1891, the Wilmington, Onslow, and East Carolina Railroad, which ran from Wilmington to Jacksonville, was completed and began hauling lumber (Watson 1995:94). The population had more than doubled from 170 residents in 1890 to 309 in 1900 (Watson 1995:98). As these population figures illustrate, Jacksonville was yet a small town.

Aside from agriculture, several other industries that were present in Onslow County in the first half of the twentieth century were dependent on its natural environment. Naval stores had a long history in the area, but by World War I the industry in the county, as well as the rest of North Carolina, was drawing to a close due to the depletion of turpentine resources. In its wake, the lumber industry grew to new proportions and became one of the most significant manufacturing industries in the county (Watson 1995:115). Swansboro grew as a result of the expansion of the lumber industry. New homes and commercial buildings appeared there in the 1920s. In the early twentieth century, there were at least three large sawmills on the New River at Jacksonville (Onslow County Historical Society 1983:43). Fishing, long a traditional source of income for Onslow County residents, was an important component of the local economy throughout the twentieth century (Watson 1995:115). Along the shores of the New River, resorts and hunting camps were established as the tourist industry began to lay roots in the county (Loftfield 1981:166). Despite these

developments, there was no question that agriculture was of paramount importance. On the eve of World War II, Onslow County was, as it had been through its history, rural and relatively isolated.

As it was becoming clear that the United States would be drawn into World War II, Onslow County attracted interest from the defense industry. The county's proximity to the coast and the availability of land were strong incentives. Holly Ridge, which was an insignificant crossroads settlement, became the location of the 3,200-acre Camp Davis in 1940. One thousand buildings were constructed in several months time in order to facilitate the arrival of trainees. An antiaircraft training facility, the camp was operated by the War Department during World War II. Soldiers at Camp Davis, noting Holly Ridge's amazing growth, often referred to it as "Boom Town" (Watson 1995:106-107; Onslow County Historical Society, 1983:23). Military training facilities were also created at Topsail Island and Fort Fisher. Following the war, Camp Davis was turned over to the Marine Corps (Watson 1995:132-133).

### *Camp Lejeune*

The construction of Camp Lejeune during World War II was perhaps the most significant event in the history of Onslow County since the Civil War. Despite the fact that hundreds of individuals were displaced in order for construction to proceed, the New River region quickly became the most populous area in the county following the base's construction. Jacksonville emerged as the urban center of Onslow as the base created numerous new jobs and became a major employer in the central part of the county. The establishment of Camp Lejeune brought economic prosperity and modernization to Onslow County. The largest Marine base in the United States, Camp Lejeune also garnered prestige for the state of North Carolina as a whole (Watson 1995:133-134).

Camp Lejeune, originally known as Marine Barracks at New River, was established in 1941. With war raging in Europe and the United States growing more involved everyday, the need for a new Marine training facility became apparent. The War Department had determined that existing bases at Quantico, Virginia and Parris Island, South Carolina were not large enough to accommodate the training of troops. In February of 1941, the War Department's request for a new facility was approved by the House Naval Affairs Committee which then ordered the Secretary of the Navy to proceed with finding a location suitable for a base. Marine officers searched the coast from Norfolk, Virginia to Corpus Christi, Texas before deciding that the New River area was the most desirable (Watson 1995:133-134). The new base spanned 110,000 acres, or 170 square miles, and included 14 miles of oceanfront (Onslow County Historical Society 1983:51-52).

The construction of the base was a massive undertaking such as Onslow County had never seen. Three firms out of Charlotte were employed to fill contracts for over \$14 million, the largest defense contract ever awarded in the South at that time (Carraway 1946:17-18). Eight thousand individuals from around the region were employed in the effort that began in April of 1941 and continued throughout the war (Carraway 1946:18-23). Initial construction began on the north side of New River between Hadnot Point and French's

Creek (Watson 1995:134). The Civilian Conservation Corps assisted with building roads and draining swamplands (Carraway 1946:18-23). As construction progressed and troops began to arrive, the base was renamed Camp Lejeune in honor of Lt. Gen. John A. Lejeune, a World War I veteran and former commandant of the Marine Corps (Onslow County Historical Society 1983:51-52).

The effect in Jacksonville was felt immediately. Several days after construction began, the local newspaper described the scene. "Already Jacksonville is crowded. Hundreds more people are expected tomorrow and the day after" (*Onslow County News and Views* 1941a). Census figures illustrate the incredible surge in population that the county experienced. In 1940, the census counted 17,939 in Onslow County. By the end of the decade, that number had more than doubled to 42,157 (Watson 1995:105).

Following the attack on Pearl Harbor and the United States' entry into World War II, the already remarkable pace of construction at Camp Lejeune was increased (Watson 1995:134). By the end of the war, the base was the most modern of its kind in the nation. After President Franklin D. Roosevelt issued Executive Order 8802 barring discrimination in defense programs in 1941, the first African American troops arrived to train at the Montford Point area of Camp Lejeune (Carraway 1946:51). Women were trained at the base in nearly all facets of the military (except fighting) beginning in 1943 (Watson 1995:135). The camp hospital was completed in the same year. There was also a dog training school where hundreds of canines were prepared for war duty (Carraway 1946:35-36). Recreational facilities were expanded midway through the war and included nine movie theaters, a stadium, and a 36-hole golf course (Carraway 1946:23-27). At the end of the war, the base had stocked fish ponds, a bird sanctuary, and recreational beachfront (Carraway 1946:31-37).

Camp Lejeune brought enormous residential growth to the Jacksonville area. Before the construction of Camp Lejeune, Jacksonville had a population of 873. In 1950, its population had risen to 3,960 and by 1960, it reached 13,491 (Watson 1995:106).

For Camp Lejeune to become a reality, hundreds of individuals who were living within the area encompassed by the new base were forced to relinquish rights to their land and property. Many residents of the area, which was predominantly rural and agricultural, had lived there for generations and established productive farms. Some had established small businesses, such as the tourist cabins that were beginning to appear around Paradise Point in the 1930s. Churches and cemeteries dotted the landscape. The needs of the national military, however, required that all of these places be emptied. Approximately 720 families living within the New River region had to vacate (Watson 1995:135). Those residing in the northern part of the planned base were given an evacuation deadline of June 1, 1941 (*Onslow County News and Views* 1941b) while those in other areas that were not slated for immediate construction had until early fall of that year (*Onslow County News and Views* 1941c). Throughout 1941, the US Navy conducted appraisals of land and structural property across the area planned for the base in order to compensate the owners (*Onslow County News and Views* 1941d). There was also the task of documenting and removing hundreds of graves, some of which were solitary burials and others full-fledged cemeteries,



**Figure 6. Civilians living within the area designated for Camp Lejeune were required to evacuate. Their property was appraised and checks distributed. Lonnie Spicer (center) owned 32.2 acres in the area for which he received \$1,487.06 from U.S. Navy officials in 1941 (Murrell 2001).**

in order to make way for military training. Whites were subsequently re-interred in nearby Montfort Point and blacks in Verona (Onslow County Old Cemetery Society 1997).

“The order to evacuate came as a paralyzing shock,” wrote historian and longtime resident of Onslow County Joseph Parsons Brown, leaving residents “stunned and hopeless and without money.” For this land that had recently become some of the most desirable real estate in the country, the military offered an average of twelve dollars per acre (Brown 1960:188). While not all residents living within the region were opposed to the establishment of a base, many voiced objections to the price offered for their property and the time frame within which they had to leave. The September 1 evacuation deadline conflicted with the way of life of many inhabitants of the New River region. E.B. Smith, a prominent citizen of Marines (a town in the boundaries of the planned base) expressed his opinions in the local newspaper. “You see, our farming isn’t over September 1,” Smith said, “pigs aren’t fat and tobacco ain’t mature” (*Onslow County News and Views* 1941e). As a result of complaints, those who were farming in the area were permitted to harvest their crops before they vacated. Still, dissatisfaction concerning the amount of compensation persisted. To combat this resistance, the government chose to condemn the property of those who refused to leave it (Loftfield 1981:168-169). Later in 1941, a group of residents submitted a petition calling the methods of the Navy “cursory, farcical, and un-American” (*Onslow County News and Views* 1941c).

Nevertheless, the thousands of acres that became Camp Lejeune were turned over to the military (mostly through condemnation procedures) and the inhabitants had to find

another place to live. The North Carolina Defense Relocation Corporation, which was created by the Farm Security Administration and the State Department of Agriculture, helped displaced individuals find new farms in Onslow and nearby counties. The organization also provided temporary housing for both white and black residents of what was to become Camp Lejeune (*Onslow County News and Views* 1941f). Compensation was slow in arriving, especially for those whose principal investment was their land. While some, such as Lonnie Spicer (Figure 6), received compensation in the same year that they evacuated, most waited two years before they received their checks (Brown 1960:187). Although it created much needed jobs and economic development, the transformation that came with the creation of Camp Lejeune was nonetheless difficult for many residents of Onslow County.

## RESEARCH METHODS

### Field Methods

The Phase I survey of site 31ON667 consisted of pedestrian survey and systematic subsurface testing within the existing portion of the previously defined site boundary. Shovel tests (ST) excavated during this project measured 30 to 50 cm in diameter and were excavated at 30-m intervals along transects spaced 30 m apart. When cultural material was encountered in a shovel test, additional testing was conducted at 15-m intervals. No shovel tests were excavated within improved roadways or in areas with standing water.

Based on general soil profiles provided in the soil survey of Onslow County, shovel tests were excavated by natural soil strata until pale brown to strong brown clay subsoil was encountered. In areas where clay subsoil was deeper, shovel test excavations were arbitrarily terminated at 100 cmbs, unless artifacts were recovered in the lower strata of the test pit. Negative shovel tests were flagged with pink flagging tape, while positive shovel tests were flagged with pink and blue. The cultural content, soil strata and texture, predominant Munsell color, and environmental setting were recorded in field notebooks. All excavated soil was screened through 1/4-inch mesh hardware cloth.

Upon completion of the Phase I survey, a Phase II evaluation was conducted at site 31ON667, focusing in areas associated with relatively high artifact densities. Testing included the excavation of two 1-x-2-m test trenches and four 1-x-1-m test units. Test unit excavation followed standard archaeological practice. All units were excavated in 10-cm arbitrary levels within natural soil strata. Once culturally sterile soils were encountered, excavation continued for a minimum of two additional 10-cm levels or until clay substrate was encountered. Soil from general excavation levels was screened through 1/4-inch hardware cloth, while soil identified from features is typically screened through 1/8-inch hardware cloth.

During Phase I survey and Phase II evaluation, locations of positive shovel tests and test units were recorded using a Trimble GeoXT GPS receiver. Locational information was also documented on USGS quadrangle maps and 2005 aerial photographs provided by MCBCL. After data collection, locational information was post-processed for accuracy and imported into an ArcGIS 9.2 shapefile in accordance with the geospatial guidelines issued by MCBCL.

All artifacts recovered during the archaeological survey were returned to the laboratory facilities at the SEARCH office in Jonesville for cleaning and processing. Artifacts were washed clean of sand and dirt and allowed to air dry. Materials were then rebagged and organized by field specimen numbers (FS#) and provenience (Appendix A).

### Historic Research

In addition to the primary and secondary sources listed in the References Cited section of this report, research for this project was conducted at the Onslow County Library and the

Camp Lejeune Public Works Department, both in Jacksonville, North Carolina. Research was also conducted at the Onslow County Historical Museum in Richlands, North Carolina.

## **Artifact Analysis**

### *Ceramic Artifacts*

In addition to counts and weights, ceramics recovered during the excavation were analyzed to determine the type, paste, temper, surface treatment, and vessel type. Paste, temper, and surface treatment were examined both macroscopically and microscopically. Microscopic analysis was conducted at low magnification under white light with a 70X Bausch and Lomb Stereo Zoom Microscope. Small pieces of each sherd were broken to expose fresh surfaces for paste and temper characterizations. Temper type generally includes fiber, sand, grit, clay, limestone, and shell. Particle size for sand and grit temper categories is based on the Wentworth scale. The scale includes: very small sand (< 0.125 mm), fine sand (0.125–0.25 mm), medium sand (0.25–0.5 mm), coarse sand (0.5–1 mm), very coarse sand (1–2 mm), granule (2–4 mm), and pebble (> 4 mm). Temper densities include none, light (< 25%), moderate (25–50%), and heavy (> 50%).

Aboriginal ceramics in the southern North Carolina Coastal Plain are well documented (e.g., Davis and Child 2000; Hargrove and Eastman 1997; Herbert 1999, 2002; Loftfield 1976, 1981; Mathis 1999; Phelps 1983; Sanborn and Abbott 1999; South 1976), and the cultural affiliations evidenced by recovered ceramics are discussed in the Results section.

### *Lithic Artifacts*

Lithic artifacts were organized by provenience and separated into two categories, waste flakes (debitage), and tools or tool fragments. Lithic material was examined both macroscopically and microscopically for possible use wear. Microscopic analysis was conducted at low magnification under white light with a 70X Bausch and Lomb Stereo Zoom Microscope. Presence or absence of thermal alteration was also recorded for each specimen.

In addition to thermal alteration,debitage was analyzed by flake size and form. Flakes were subjected to flake size analysis using categories that begin at less than 0.5 cm and continue in half centimeter increments (e.g. 1.-1.5, 1.5-2.0, 2.0-2.5). Flake form categories used in this analysis follow those proposed by Sullivan and Rozen (1985). Flake form categories consist of complete flakes, proximal flake fragments, medial/distal flake fragments, and non-orientable fragments (or shatter). Complete flakes must display a striking platform and have intact lateral and terminal margins. Proximal flake fragments must have at least a striking platform and single interior surface. Medial/distal flake fragments are characterized by a single interior surface but no striking platform. Finally, non-orientable fragments consist of debris that have no discernible margins, striking platform, or interior surface.

Flake form and size categories were tallied for the sample and the results were compared to experimentally derived assemblages in order to interpret possible site activities (Austin 1997, 1999). Ideally, samples with higher percentages of non-orientable flakes and larger flake size categories reflect core reduction activities. Samples exhibiting higher percentages of complete flakes and medial/distal flake fragments, and smaller flake size categories typically reflect debitage associated with patterned tool production. While core reduction and bifacial tool production may result in lithic assemblages with different signatures, both activities were often carried out in the same locale resulting in a "mixed" assemblage.

### *Historic Artifacts*

SEARCH uses Architecture (A), Clothing (C), Furniture (F), Kitchen (K), Miscellaneous (M), Personal (P), Arms (R), Tobacco (T), and Activities (Z) artifact categories as a framework to rebuild site function and temporal placement. These categories are follow South's (1977) use of a categorization system based on the assumed function of an artifact and are useful for approaching the analysis of historic artifacts.

Examples of the Activities category include artifacts representing leisure time, such as marbles, fish hooks, gaming pieces, and children's tea sets, as well as work-related artifacts such as axes, harness parts, horseshoes, and plow parts. Architecture covers a broad range of structural items such as brick, mortar, nails, and window glass, to name a few. Clothing artifacts consist of various fasteners and apparel related items. Furniture artifacts traditionally include hardware, and Kitchen artifacts involve food preparation and eating. The Miscellaneous category contains artifacts, such as unidentifiable glass, rubber, or rusted iron fragments, that cannot be placed in a more descriptive category since they lack information regarding their function. The Personal category includes items used primarily by and for an individual. Artifacts in the Arms category include all types of weapons and ammunition.

The Kitchen category contains the most comprehensive and detailed classification of artifacts. Ceramics and bottle glass constitute two of the largest artifact types within the Kitchen category. Both of these materials are very durable, survive long term exposure to soil and the natural environment and, due to the breakable nature of these vessels, enter the archaeological record regularly. Few of these artifacts are routinely adapted to other uses and therefore, material from both the Ceramic and Kitchen Glass classifications can be used to help place an archaeological site temporally.

Archaeologists often use the mean date of manufacture as a way of determining relative site age. Mean dates are achieved by calculating the mean of the beginning and end dates of manufacturing for each specific type and style. Site specific criteria such as the count of each type are then averaged to produce an overall date range for the assemblage. The following formula was initially created to be used to calculate mean ceramic dates (MCD) where MCD is

$$Y = \frac{\sum_{i=1}^n x_i \cdot f_i}{\sum_{i=1}^n f_i}$$

where:

$x_i$  = the median date for the manufacture of each ceramic type

$f_i$  = the frequency of each type

$n$  = the number of ceramic types in the sample (1997:217).

It has been extended in this case to calculate all mean dates available due to recent research in bottle glass dating techniques which allow for a clearer understanding of the temporal limits of glass manufacturing techniques.

South's (1977) classification for ceramics has been shown to work effectively on archaeological sites. Classifications are based on differences in paste texture and hardness as well as glaze color and method of decoration. Changes in these criteria can be used to date ceramic artifacts and help determine the age of the site. Changes in the pottery industry were spawned by a need to provide better, stronger, and/or fancier wares to a larger market. The driving force of this change was the desire to produce a European form of porcelain that could be produced quickly and inexpensively and therefore distributed to a mass market. New decorative techniques included the advent of transfer print which allowed popular patterns to be essentially printed or stamped directly onto unfired ceramic bodies using oiled paper stencils and engraved copper plate templates.

George Miller's (1980) studies have revealed that surface treatments such as slip/glaze color, painting method and color, and embossed designs are the best indicators of ceramic types and periods of manufacture. These elements are incorporated in the coding and analysis procedure at SEARCH's lab. Ceramic analysis also included the identification of sherds by rim, base, or body. Archaeologists noted vessel form whenever possible and if the sherd was from a hollowware or flatware vessel. Notes were made of any vessel that could be mended or cross mended between proveniences. Maker's marks on ceramics were recorded and researched using the internet and printed reference books in an attempt to identify manufacturer, location and date of manufacture. The following sources were consulted: Barber (2001), Godden (1996), Kowalsky & Kowalsky (1999), and the Florida Museum of Natural History's Digital Type Collection at [http://www.flmnh.ufl.edu/histarch/gallery\\_types/](http://www.flmnh.ufl.edu/histarch/gallery_types/) (2006).

Bottle glass artifacts within this group are categorized whenever possible by method of manufacture, in addition to color and function. Characteristics indicative of various manufacturing methods include the presence or absence of mold seams and basal scars, various lip finishes, and embossing. Color can be diagnostic and it can also be indicative of function and manufacturing technique and therefore was noted during analysis. Vessel shape is often a function of use and is noted to help determine site activities. Bottle function was noted when observable. The following sources were examined for

information about bottle manufacturing and dating: Jones and Sullivan (1989); and the Bureau of Land Management's Historic Glass Bottle Identification & Information Website at [http://www.blm.gov/historic\\_bottles/index.htm](http://www.blm.gov/historic_bottles/index.htm) (2006).

### *Assessment of Significance*

In order to evaluate the eligibility of cultural resources for inclusion in the NRHP, several criteria have been established to determine site significance. A resource is considered significant if it can meet at least one criterion as stated below.

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. That are associated with events that have made a significant contribution to the broad pattern of our history; or
- B. That are associated with the lives of persons significant in the past; or
- C. That embodies the distinctive characteristics of a type, period, or method of construction, or presents the work of a master, or that possess high artistic value, or that represents a significant and distinguishable entity whose components may lack individual distinction; or
- D. That may have yielded, or may likely to yield information important to history or prehistory.

## RESULTS

Site 31ON667, situated on the east side of New River, is located on a low, wooded terrace along the northern edge of Courthouse Bay approximately 1,100 m north of Jarretts Point and 500 m northwest of Harveys Point. Vegetation is composed of mature oaks, pines, and various thick shrubs and briars. Surface visibility was relatively constant as few areas, except along the shoreline, offered exposed ground surface. The site has been disturbed to varying degrees by several unimproved two-track paths, military training (fighting positions) trash dumping, previous construction, and shoreline erosion.

Originally identified by former MCBCL Archaeologist Robert Abbott, site 31ON667 was systematically surveyed in 1998 by Louis Berger & Associates (LBA) for the proposed Riverine Center of Excellence (RCE) (Voigt and Simpson 2000). During the survey, LBA revised the boundaries of 31ON667 and identified previously unrecorded sites 31ON690 and 31ON715 located in close proximity to 31ON667.

According to Voigt and Simpson (2000:59), site 31ON667, measuring slightly less than 7.5 acres, was relocated on a wooded terrace along the southern portion of the RCE survey area overlooking Courthouse Bay. They noted that although "pockets" of intact soils existed at the site, nearly all of the artifacts were identified in plowzone/disturbed contexts (Voigt and Simpson 2000:59). Prehistoric artifacts included Hanover and White Oak ceramics, chert and rhyolite flakes, and a pipe fragment. LBA also identified shell midden eroding along the southern shoreline and in shovel tests located within 30 m north of the shoreline. Historic artifacts included a variety of architectural debris, metal, bottle glass, and historic ceramics (redware, stoneware, and whiteware).

Site 31ON715 was identified as a small, historic site located 90 m north of 31ON667. Artifacts included oyster shell, whiteware, and wire fragments, possibly associated with a early twentieth century farm that existed in the area. Voigt and Simpson (2000:62) noted that all the artifacts were recovered from the surrounding plowzone.

Site 31ON690, located 45 m northwest of 31ON667, was identified as a small, concentration of Early Woodland Hamp's Landing and New River ceramic sherds with minor quantities of Middle Woodland Hanover ceramics and Late Woodland White Oak ceramics. Based on the recovery of most of the Early Woodland ceramics within Stratum B, Voigt and Simpson (2000:62) suggested the possibility of a buried, intact Early Woodland occupation at the site.

As a result of the survey, Voigt and Simpson (2000:65-66) determined that sites 31ON667 and 31ON715 were not eligible for listing in the National Register of Historic Places (NRHP), while 31ON690 contained culturally significant deposits and was potentially eligible for listing in the NRHP. The North Carolina State Historic Preservation Office (NC SHPO) concurred with LBA's recommendations.

Following the LBA survey, but prior to construction associated with the RCE, TRC Garrow, as part of a contract dedicated to revisiting sites identified by Abbott, surveyed the

local area and combined the three sites under the original 31ON667 site number, expanding the site to approximately 17 acres. No report was produced for the survey and no official determination of eligibility was conducted for the site; however, TRC recommended on the North Carolina site form that 31ON667 was potentially eligible for listing in the NRHP. As part of an agreement between former Assistant State Archaeologist Mark Mathis and MCBCL, RCE construction was allowed to proceed based on LBA's original recommendations and NC SHPO concurrence as long as the project was monitored by an archaeologist. Furthermore, subsequent proposed construction affecting 31ON667 would warrant a Phase II investigation to evaluate the NRHP eligibility of the remaining 9.6 acres of the site (e-mail correspondence, Rick Richardson to Thomas Barbee, October 31, 2001).

The current site evaluation was conducted in anticipation of a proposed construction project that would include four clamshell structures to accommodate operational space and individual equipment storage for four Marine Special Operations Battalion (MSOB) Companies. In addition, the project would require construction of an asphalt parking lot, restroom facilities, electric and telephone utilities, a stormwater management pond, security fence, and security lighting. Construction of these proposed facilities would require clearing, grubbing, stumping and grading within an area of approximately three acres.

### **Phase I Survey**

In order to evaluate 31ON667, SEARCH conducted a systematic Phase I survey and Phase II evaluation of the remaining 9.6 acres of the site. The Phase I survey included systematic subsurface testing and an extensive pedestrian survey. A total of 112 shovel tests were excavated across the site at 30-m and 15-m intervals with 72 shovel tests containing cultural material. During the pedestrian survey, SEARCH archaeologists identified an eroding shell midden along the southern shoreline of the project area, consistent with LBA's previous RCE survey.

As a result of the Phase I survey, the 31ON667 site boundary was also changed (Figure 7). SEARCH archaeologists did not recover any additional cultural material in the remaining intact portion of the site to the north. TRC had previously identified this area as positive for cultural resources. Conversely, SEARCH extended the site boundary to the south to include positive shovel tests close to the shoreline and to incorporate the eroding midden to the southeast. The site was truncated slightly across the northeast boundary, excluding three "positive" shovel tests, each containing a single oyster shell. It is believed that these remains are not necessarily cultural in nature and do not accurately reflect the extent of previous occupation. The result is a site boundary more consistent with LBA's previous boundaries for sites 31ON690 and 31ON667 (Voigt and Simpson 2000:56). Under the current configuration, site 31ON667 measures approximately 185 m north-south and 285 m east-west across the long axes for a total area of 33,667 m<sup>2</sup> or 8.3 acres.

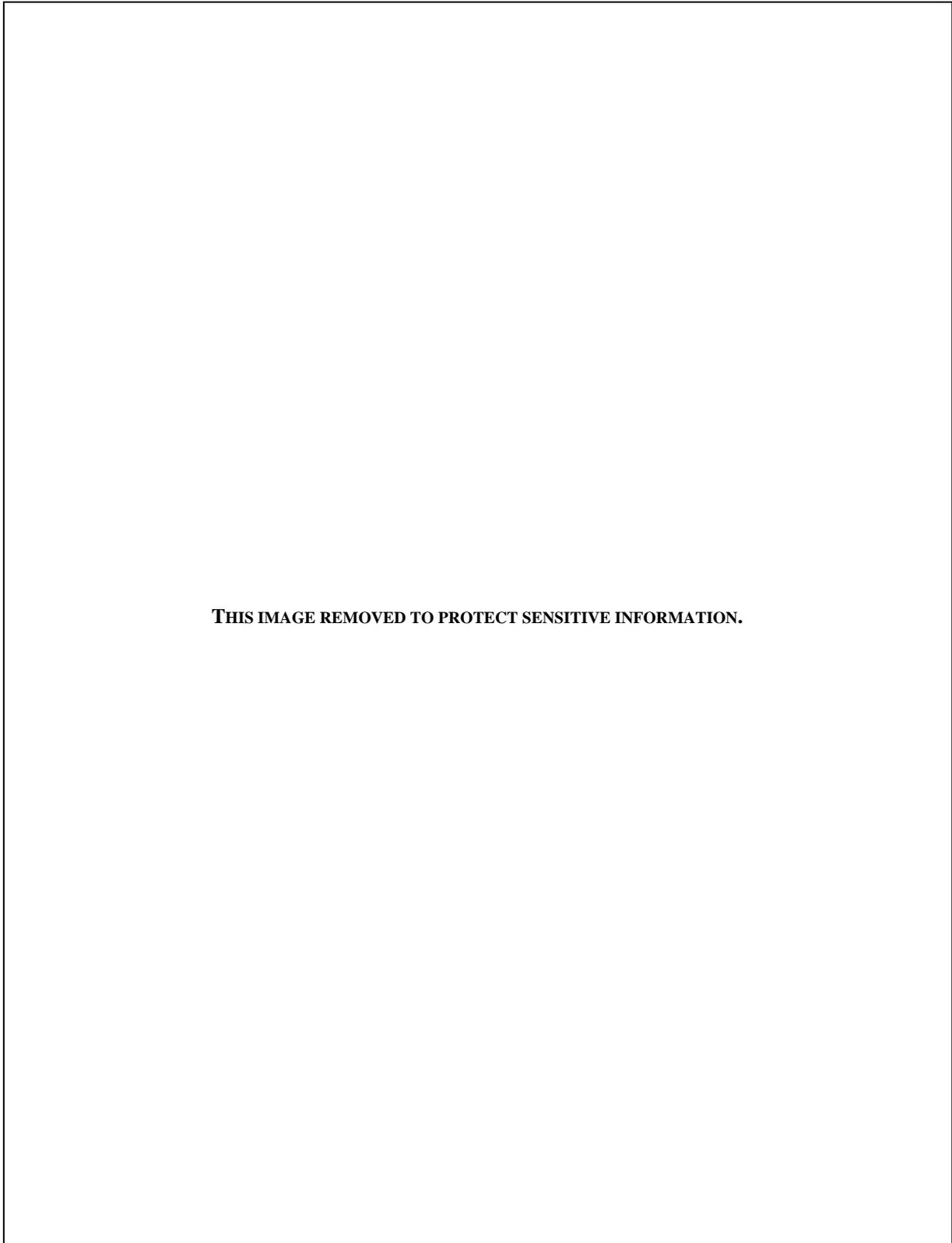


Figure 7. New Site Boundary and Shovel Test Locations for site 31ON667.

Prehistoric artifacts recovered during Phase I survey include 77 ceramic sherds and 15 lithic artifacts. Ceramic types include Hamp's Landing (n=2), New River (n=1), Cape Fear (n=14), Hanover (n=32), Onslow (n=1), and several possible White Oak sherds (n=4). In addition to these identifiable types, 23 unclassified aboriginal ceramic sherds were recovered during the survey. Lithic artifacts were sparse and included one quartzite flake, one quartz flake, two fire cracked rock, one sandstone angular shatter, three quartz angular shatter, six possible cultural lithics, and one possible lithic tool.

A total of 124 historic artifacts were also recovered during the Phase I survey. Artifacts include one architectural aggregate fragment, 62 brick fragments, 10 window glass shards, 18 nails, one mortar fragment, 20 bottle glass shards, five whiteware sherds, three ironstone sherds, one porcelaineous stoneware sherd, one pearlware sherd, one shotgun shell fragment, and one porcelain doll part.

In addition to the prehistoric and historic artifacts, SEARCH archaeologists recovered 28 unidentified animal bone fragments, 93 small charcoal fragments, one ammunition belt clip, one piece of non-electric wire, one small piece of plastic, nine unidentified iron/steel fragments, one unmodified stone, 6,670 g of oyster shell, and 145.3 g of clam shell.

Five features were also identified during survey. Shell midden was identified in the vicinity of shovel tests N930 E1090 and N940 E1090 north of the eroding shell midden along Courthouse Bay. One shell pit, confirmed through Phase II testing, was identified in shovel test N1015 E985. Three possible shell pits were also identified in shovel tests N955 E1075, N985 E835, and N1030 E865.

Analysis of general artifact category distributions led to the identification of six concentrated artifact areas or loci (Figures 8, 9, and 10). Artifact Locus 1 is a relatively large concentration of historic artifacts located in the southeast quadrant of the site. Artifacts in this area include historic ceramics, brick, glass, shell, and charcoal. Artifact Locus 2 is a dense collection of shell, charcoal, and prehistoric ceramics centered at shovel test N1015 E985. Artifact Locus 3, located in the northwest quadrant of the site, is a small concentration of four shovel tests containing shell and prehistoric ceramics. Artifact Locus 4 is a small concentration of prehistoric ceramics, lithics, and shell located in the southwest quadrant of the site. Artifact Locus 5, also located in the southwest quadrant, contains six shovel tests and is a small artifact concentration composed of prehistoric ceramics. Finally, Artifact Locus 6, located in the southeast quadrant east of Locus 1, is a concentration of shell, lithics, charcoal, and shell. Shovel tests in this area identified shell midden and a possible shell pit.

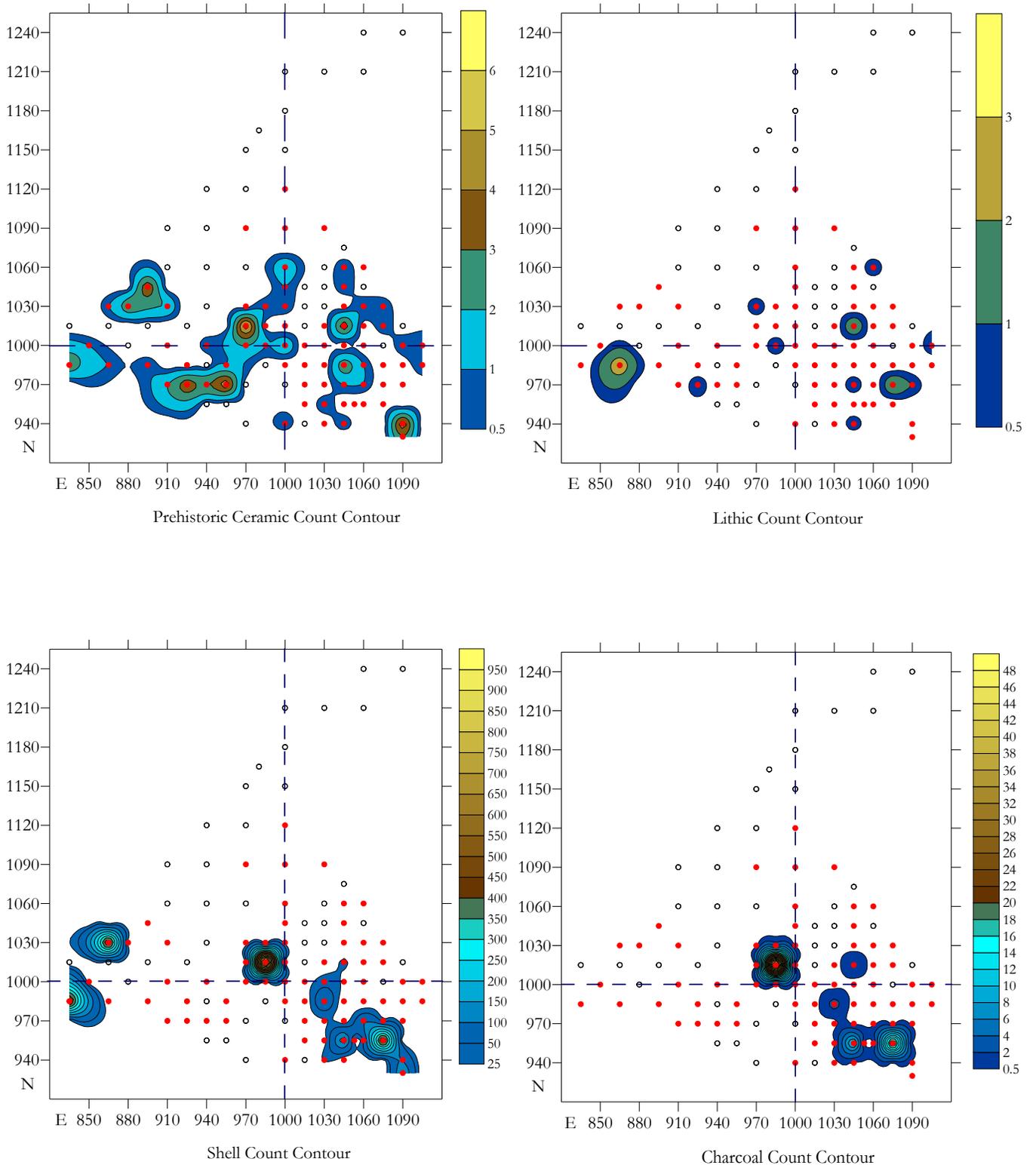


Figure 8. Phase I Prehistoric Ceramic, Lithic, Shell, and Charcoal Contours by Count

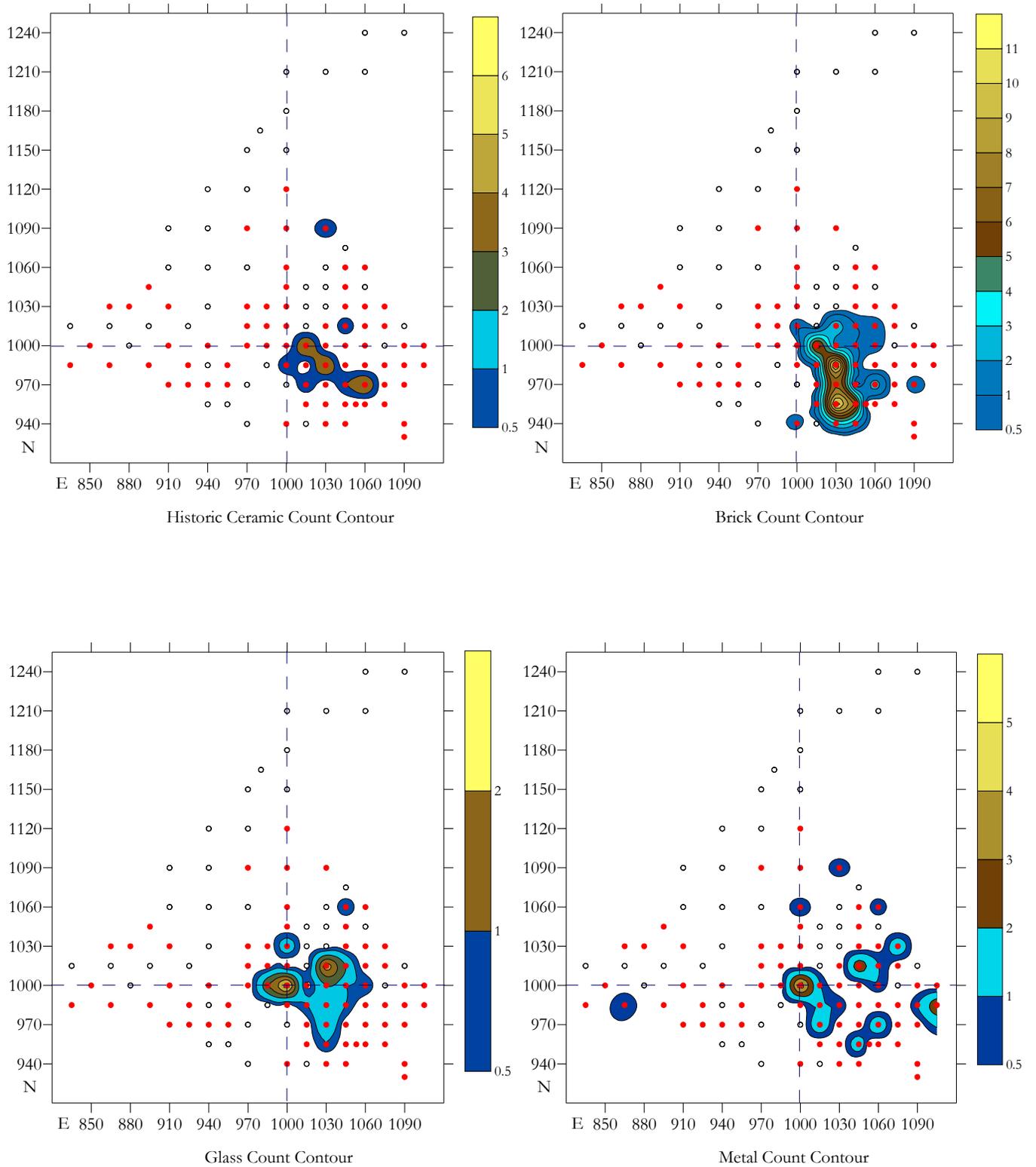


Figure 9. Phase I Historic Ceramic, Brick, Glass, and Metal Contours by Count

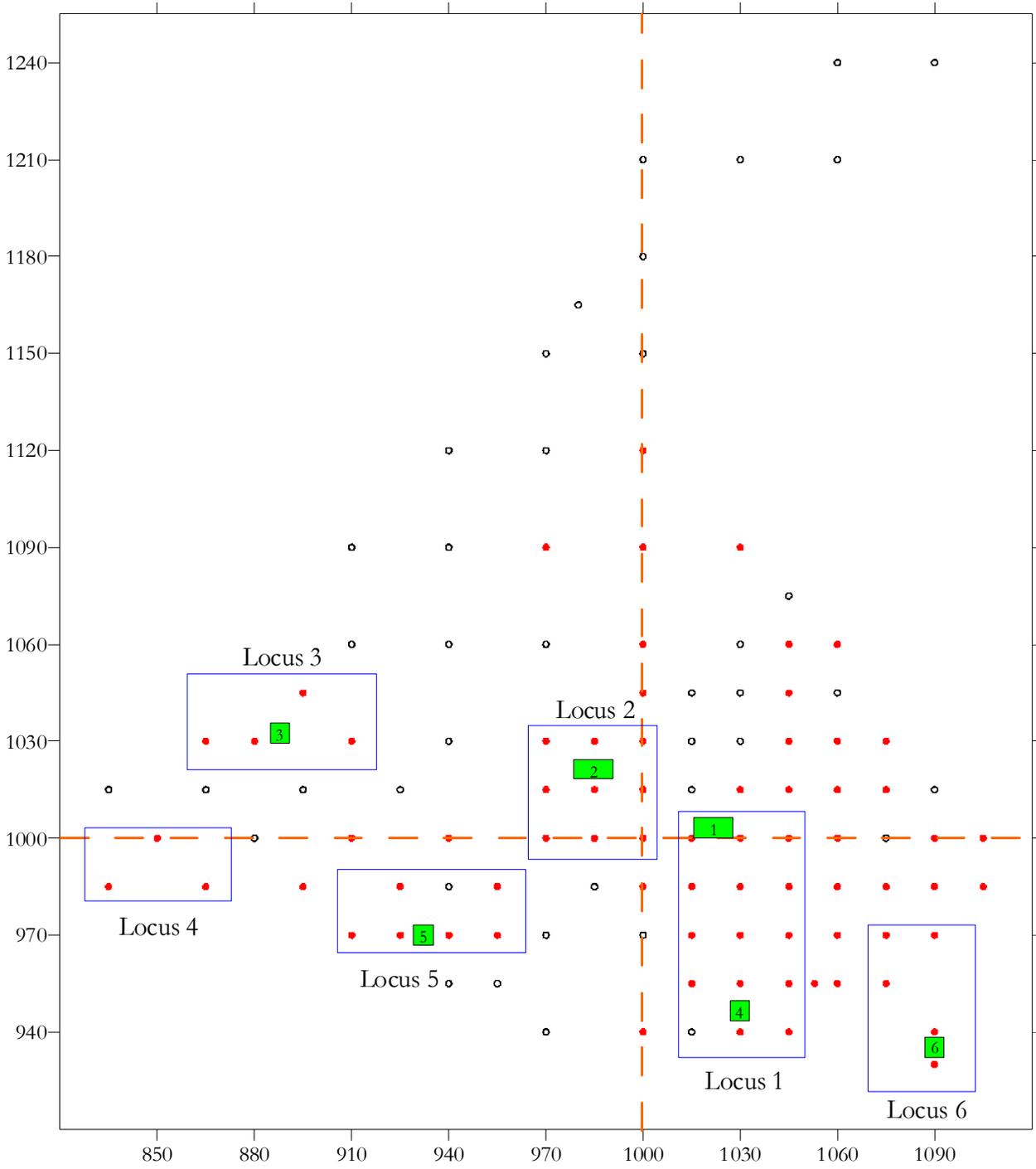


Figure 10. Artifact Loci based on Phase I Survey. Excavation units are in green with unit numbers inset.

## Phase II Evaluation

Subsequent Phase II testing focused on five of the six loci to evaluate the NRHP eligibility of the site (see Figures 9 and 12). TU 1, located in the northern portion of Artifact Locus 1, was excavated between shovel tests N1000 E1015 and N1000 E1030 (see Figure 10). Artifacts from these shovel tests include numerous brick fragments, one wire nail, two bottle glass shards, one whiteware fragment, one clam shell, and 172.1 g of oyster shell. TU 1 was excavated to a depth of 115 cmbd and included six soil strata (Figure 11). Stratum I, extending from 10 to 30 cmbd, is light olive brown (2.5Y 5/4) medium grain, slightly compact sand. Stratum II is light yellowish brown (2.5Y 6/4) medium grain, slightly compact sand extending from 30 to 38 cmbd. Stratum III, extending from 38 to 67 cmbd, is very dark grayish brown (10YR 3/2) compact sand with a small 1 to 2 cm yellowish brown band approximately 54 cmbd and a small, shell pocket just above the Stratum III and Stratum IV interface. Based on texture and content, Stratum III appears to be part of buried plowzone. Stratum IV is well developed in Stratum V and may represent burnt tree remains as a burnt and rotting tree stump was identified in profile along the north wall. The soil is mottled black (10YR 2/1) and grayish brown (2.5Y 5/2) heavily compact, fine sand extending from 67 to approximately 79 cmbd across the eastern two-thirds of the unit. Stratum V, interfacing with Stratum III in the western one-third of the unit, is very dark brown (10YR 2/2) fine grain, heavily compact sand extending from 67 to 106 cmbd. Finally, Stratum VI, extending from 106 to 115 cmbd, is dark brown (10YR 3/3) moderately compact, fine sand.

Artifacts were recovered in all soil strata except Stratum VI. Stratum I artifacts ( $n=44$ ) include one Hanover Fabric Impressed sherd, one White Oak Fabric Impressed sherd, one possible cultural lithic, eight brick fragments, two wire nails, one window glass shard, three beer/soda pull tabs, 13 non-electrical wire (possible barbwire), one rimfire cartridge, one staple, one crayon fragment, nine unidentified iron/steel fragments, two pieces of plastic, and 95.9 g of shell. Stratum II artifacts ( $n=27$ ) were less frequent and include one White Oak Fabric Impressed sherd, three chert thinning flakes, 12 brick fragments, five window glass shards, two nail fragments, one bottle glass shard, one whiteware sherd, one metal eyelet/grommet, one unidentified iron/steel fragment, 2.3 g of clam shell, and 138.7 g of oyster shell.

Stratum I lacked datable, diagnostic historic artifacts, making Mean Ceramic Date (MCD) and overall Mean Date (MD) impossible to calculate. The beer/soda pull tabs, however, provide a Terminus Post Quem (TPQ) date of A.D. 1962. The whiteware sherd recovered from Stratum II provided a MCD and MD of A.D. 1885 and TPQ of A.D. 1820.

Stratum III artifacts ( $n=1,300$ ) were more plentiful and included a variety of prehistoric and historic material. Prehistoric artifacts include five Cape Fear Fabric Impressed sherds, four Cape Fear Plain sherds, 53 unidentified Cape Fear series sherds, eight Hanover Fabric Impressed sherds, two Hanover Plain sherds, 13 unidentified Hanover series sherds, three unidentified Onslow series sherds, two White Oak Fabric Impressed sherds, 31 residual aboriginal sherds, one lithic debitage, one rhyolite flake, and seven possible cultural lithics.

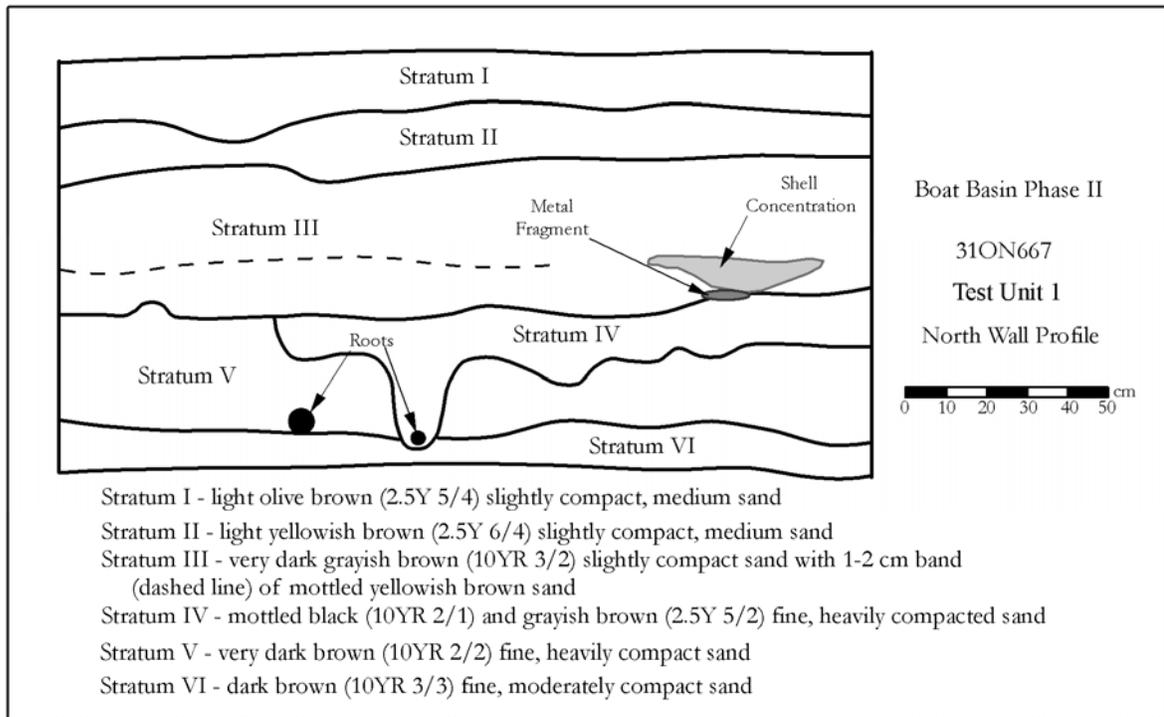


Figure 11. Profile Drawing and Photograph, North Wall, Test Unit 1.

Historic artifacts account for over 70 percent ( $n=937$ ) of the artifacts recovered from Stratum III. Architectural Group artifacts include 678 brick fragments, 65 nails/nail fragments, 108 mortar fragments, 17 window glass shards, and two lead roofing shields. Kitchen Group artifacts include one unidentified slipware, six whiteware sherds, two ironstone, one unidentified refined earthenware sherd, 49 bottle glass shards, three globe or bottle glass shards, one pressed glass shard, and two canning jar lids/rings. One shotgun shell cap fragment represents the only Arms Group artifact recovered from Stratum III.

Stratum III contained a wide range of datable material including ceramics, bottle glass, and a shotgun shell cap. MCD, MD, and TPQ for each level are provided in Table 1. The TPQ from Level 1 and Level 2 is based on the recovery of unidentified plastic within the level matrices, while Level 3 TPQ is based on the recovery of solarized glass.

**Table 1. Calculated Dates for Unit 1, Stratum III.**

Provenience	MCD	MD	TPQ
Level 1	1885	1879	1930
Level 2	1856	1877	1930
Level 3	1854	1872	1880
Overall Stratum	1862	1874	N/A

In addition to prehistoric and historic artifacts, one graphite fragment, 195 unidentified iron/steel fragments, two unidentified lead fragments, one unidentified leather fragment, one unidentified metal fragment, two small pieces of plastic, two small pieces of rubber, two small seeds, and 14.2 g of charcoal were also recovered from Stratum III. Recovered faunal remains included 27 animal bone fragments, 118.2 g of clam shell, and 5,294.4 g of oyster shell.

Artifacts ( $n=183$ ) decrease significantly in Stratum IV. Prehistoric artifacts ( $n=50$ ) include four Cape Fear Plain sherds, four Cape Fear Fabric Impressed sherds, seven Hanover Fabric Impressed sherds, three White Oak Fabric Impressed sherds, and 32 residual aboriginal sherds.

Historic artifacts are the most plentiful artifact category in Stratum IV ( $n=74$ ). Architectural Group material includes 20 brick fragments, two mortar fragments, 18 nail/nail fragments, and five window glass shards. Kitchen Group artifacts include 18 bottle glass shards, five shards of bottle/globe glass, one goblet rim shard, and three whiteware sherds. Clothing Group artifacts include one glass button and one tubular glass bead.

For Level 1, MCD is A.D. 1838 based on the recovery of early whiteware types; however, MD is A.D. 1859 once datable bottle glass is incorporated into the calculation with a TPQ of A.D. 1880 based on the recovery of solarized bottle glass. No historic ceramics were recovered from Stratum IV, precluding the calculation of MCD. MD and TPQ are A.D. 1989 and A.D. 1880, respectively.

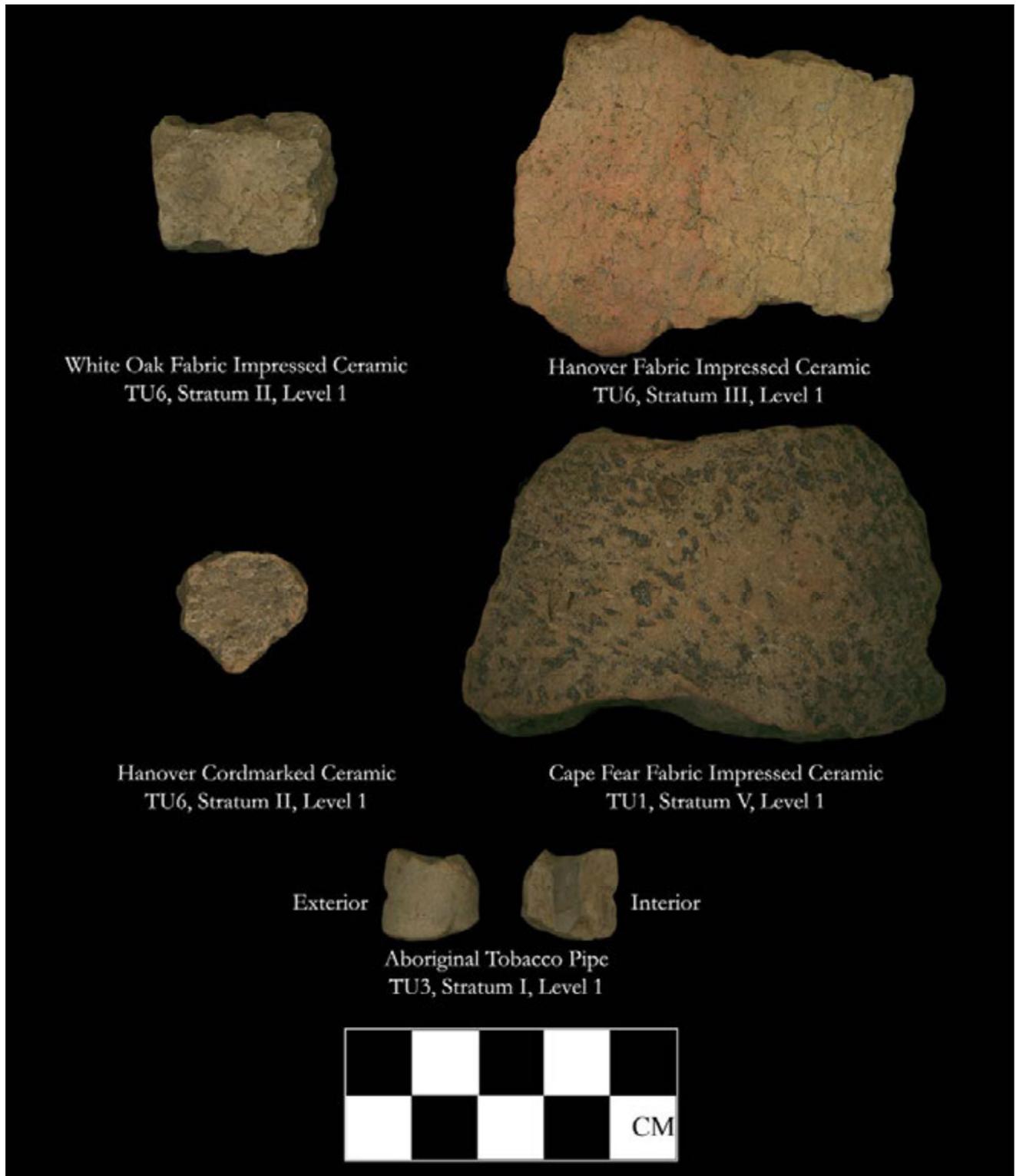


Plate 1. Prehistoric Artifacts recovered from site 31ON667.



Plate 2. Historic Artifacts recovered from site 31ON667.

Additional artifacts recovered from Stratum IV include two animal bone fragments, five charred peach pit fragments, 46 unidentified iron/steel fragments, one unidentified non-iron/steel metal, one unidentified piece of plastic (possibly a toy gear), four small fragments of wood, 8.4 g of charcoal, and 394.8 g of shell.

Stratum V artifacts ( $n=7$ ) are limited and include one Cape Fear Fabric Impressed sherd, one Cape Fear series sherd, four White Oak Fabric Impressed sherds, and one globe/bottle glass shard.

TU 2, located in Artifact Locus 2, was excavated north of shovel test N1015 E985 (see Figure 10). Artifacts in this shovel test included a large quantity of oyster shell, Cape Fear and Hanover ceramics, animal bone fragments, and charcoal. TU 2 was excavated to a depth of 100 cmbd and included four soil strata and one shell pit feature (Figure 12). Stratum I, extending from 7 to 29 cmbd, is olive brown (2.5Y 4/3) medium to fine, slightly compact sand with variable organics and root mat. A large shell pit was located between Stratum I and Stratum II. The pit, extending approximately 60 cmbd, is composed primarily of shell with limited black soil matrix. The upper portion of the pit extended across most of the unit and after excavation could be seen in the north, east, and south walls. Stratum II is black (2.5Y 2.5/1) very compact, fine sand extending to a depth 76 cmbd beneath the shell pit in the eastern portion of the unit and approximately 39 cmbd in the western half of the unit. Stratum III is light yellowish brown (2.5Y 6/4) very compact, fine sand. The stratum grades into Stratum II approximately 40 cm from the east wall, extending to approximately 58 cmbd in the western half of the unit. Stratum IV, extending to 100 cmbd, is light gray (2.5Y 7/2) moderately compact, fine sand mottled with strong brown (7.5YR 5/8) sandy clay inclusions.

Artifacts ( $n=35$ ) recovered from Stratum I include three Cape Fear Fabric Impressed sherds, 17 Cape Fear series sherds, three Hanover Fabric Impressed sherds, four brick fragments, one mortar fragment, two bottle glass shards, two unidentified iron/steel fragments, one small animal bone fragment, and 250.1 g of shell.

The remaining artifacts ( $n=96$ ) were recovered from the shell pit and the surrounding matrix. Artifacts include two Cape Fear Fabric Impressed sherds, two Cape Fear Plain sherds, 18 Hanover Fabric Impressed sherds, one Hanover series sherd, nine unidentified iron/steel fragments, 0.6 g of charcoal, three unidentified shell fragments, 60 animal bone fragments, and 129.4 kg of discarded oyster and clam shell.

TU 3 was excavated between shovel tests N1030 E880 and N1045 E895 in Artifact Locus 3 (see Figure 10). Artifacts from these shovel tests include five Hanover Cordmarked sherds and two unidentified tempered, fabric impressed sherds. TU 3 was excavated to a depth of 60 cmbd and included three soil strata (Figure 13). Stratum I, extending from 9 to 20 cmbd, is very dark gray (2.5Y 3/1) medium grain, slightly compact sand with medium to large roots. Stratum II, with minor root disturbance, is olive brown (2.5Y 4/3) medium to fine grain, compact sand extending from 20 to 40 cmbd. Stratum III is light yellowish brown (2.5Y 6/4) medium to fine grain, compact sand, extending from 40 to 60 cmbd.

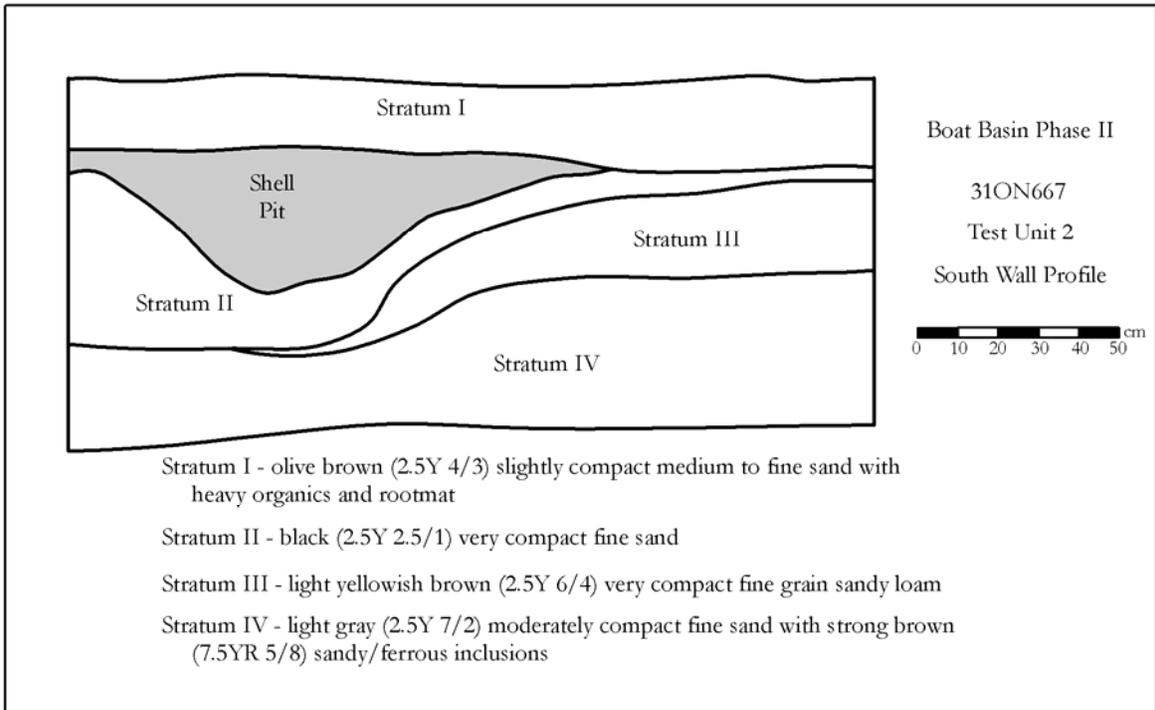


Figure 12. Profile Drawing and Photograph, South Wall, Test Unit 2.

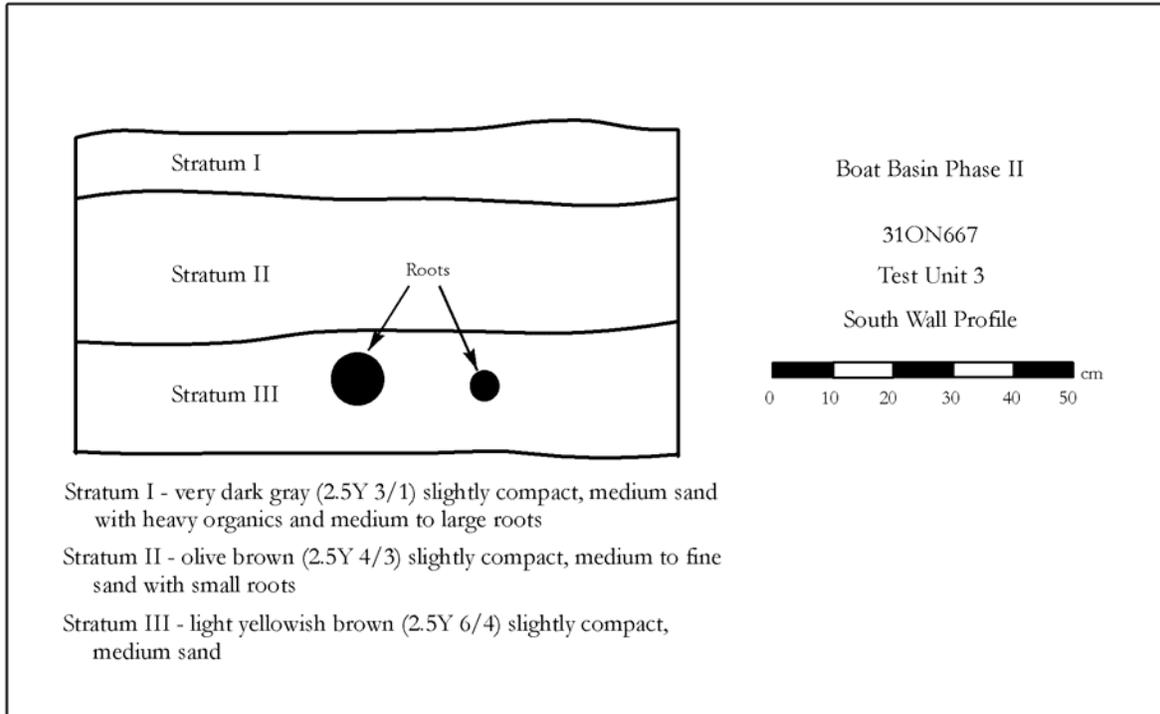


Figure 13. Profile Drawing and Photograph, South Wall, Test Unit 3.

Artifacts ( $n=31$ ) were recovered from Strata I and II, but were relatively sparse. Stratum I artifacts include one Cape Fear series sherd, one Cape Fear Fabric Impressed sherd, and one small aboriginal pipe fragment. Stratum II artifacts ( $n=28$ ), recovered to a maximum depth of 40 cmbd, include 10 Cape Fear series sherds, 14 Cape Fear Fabric Impressed sherds, and four possible cultural lithics.

TU 4 was excavated between shovel tests N940 E1030 and N955 E1030, located at the southern end of a historic artifact concentration in Artifact Locus 1 (see Figure 10). Artifacts from these shovel tests include 14 brick fragments, one bottle glass shard, one Onslow series sherd, and 55.7 g of shell. TU 4 was excavated to a depth of 59 cmbd and included two soil strata (Figure 14). Stratum I, extending from 4 to 29 cmbd, is light olive brown (2.5Y 5/4) medium to fine grain, slightly compact sand with moderate root disturbance within upper soil levels. Stratum II, extending from 29 to 59 cmbd, is light yellowish brown (2.5Y 6/4) medium to fine grain, slightly compact sand.

All artifacts ( $n=227$ ; 430.2 g of shell) were recovered from Stratum I and demonstrate a mixed prehistoric and historic assemblage. Artifacts include two Hanover series sherds, one White Oak Fabric Impressed sherd, 201 small brick fragments, three mortar fragments, 12 bottle glass shards, two small flat glass shards, four unidentified metal fragments, and two small turtle shell fragments.

TU 5 was excavated in Artifact Locus 5 between shovel tests N970 E925 and N970 E940 in the southwestern portion of the site. Artifacts from these and surrounding shovel tests demonstrated a concentration of prehistoric ceramics in the area (see Figure 10). TU 5 was excavated to a depth of 81 cmbd and included two soil strata (Figure 15). Stratum I, extending from 11 to 52 cmbd, is dark grayish brown (2.5Y 4/2) medium to fine grain, slightly compact sand with minor root disturbance. Stratum II, extending from 52 to 81 cmbd, is light yellowish brown (2.5Y 6/4) medium to fine grain, slightly compact sand.

Artifacts ( $n=51$ ; 164.8 g of shell) were recovered from both soil strata with nearly all (98%) artifacts recovered from Stratum I. Stratum I artifacts ( $n=50$ ) are prehistoric in nature and include one Cape Fear Plain sherd, nine unidentified decorated Cape Fear sherds, nine Hanover Fabric Impressed sherds, two unidentified decorated Hanover sherds, two unidentified decorated Onslow sherds, one White Oak Fabric Impressed sherd, 19 residual aboriginal sherds, seven possible cultural lithics, and 98.1 g of shell. Stratum I also included a small shell pocket in the southern portion of the unit, evident in the south wall approximately 42 cmbd. Stratum II artifacts, also prehistoric in nature, include one Hanover Fabric Impressed and 66.7 g of shell.

TU 6 was excavated in Artifact Locus 6 between shovel tests N930 E1090 and N940 E1090 north of the eroding midden along the Courthouse Bay shoreline in the southeastern corner of the site (see Figure 10). Artifacts from these shovel tests include numerous oyster shell, one Hanover Fabric Impressed sherd, three unidentified aboriginal ceramic sherds, and one brick fragment. All artifacts were recovered above 40 cmbs. TU 6 was excavated to a depth of 80

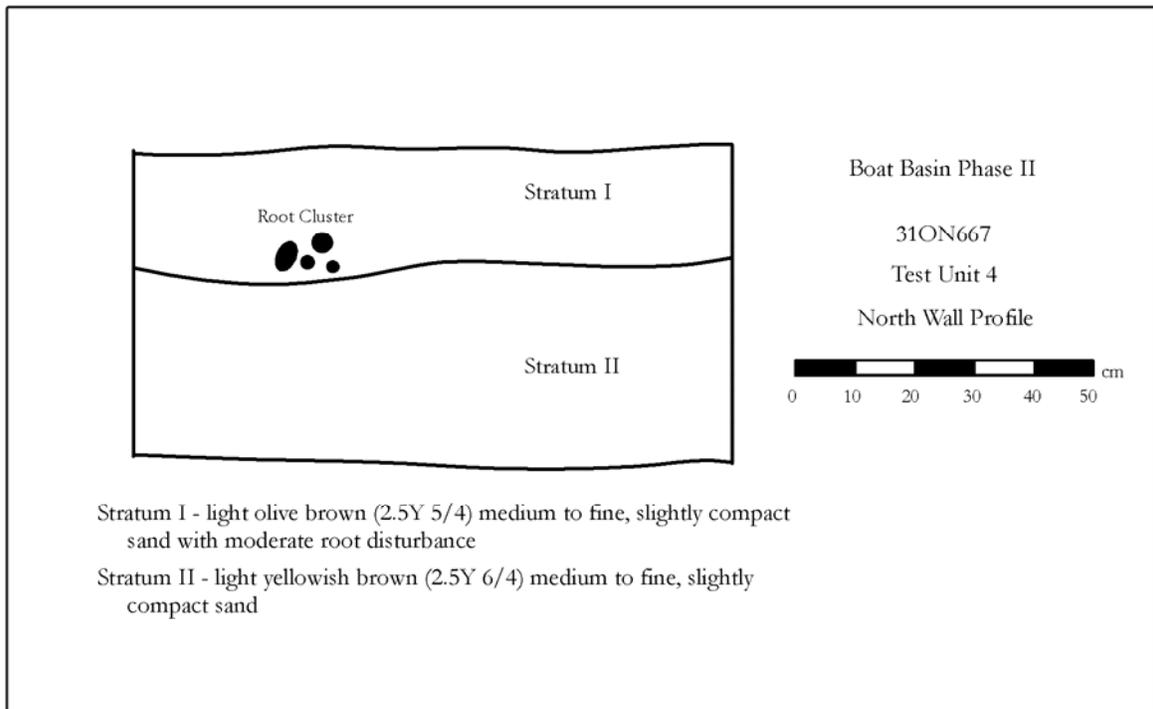


Figure 14. Profile Drawing and Photograph, North Wall, Test Unit 4.

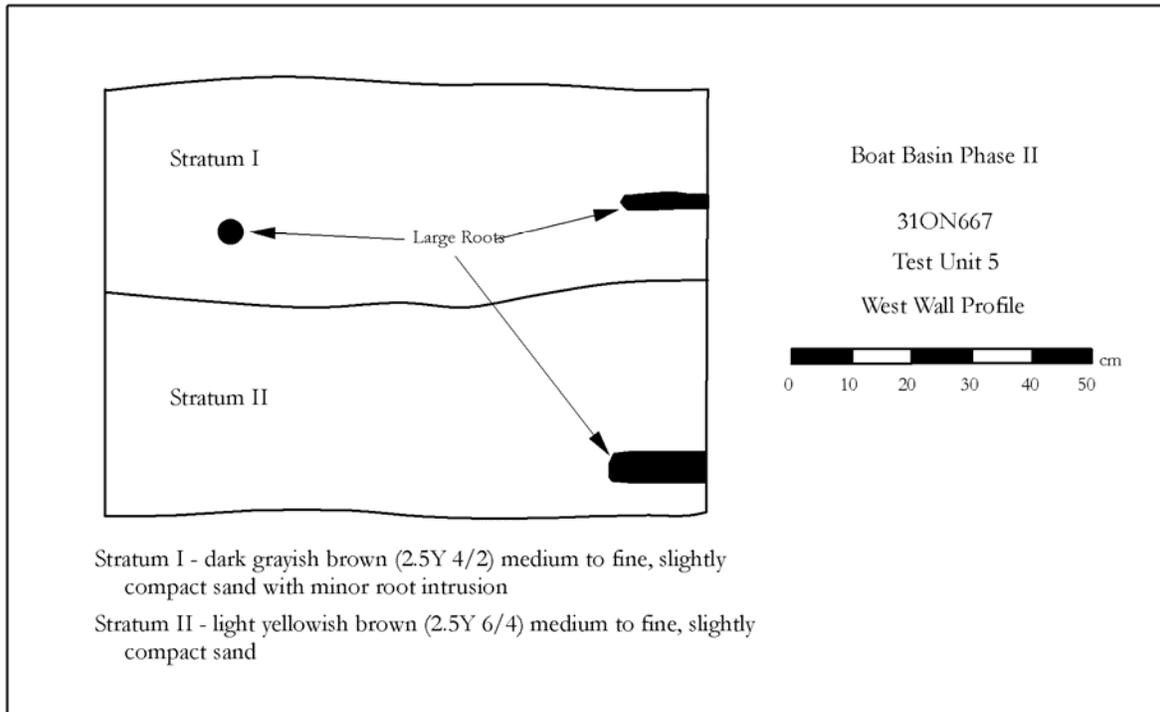


Figure 15. Profile Drawing and Photograph, West Wall, Test Unit 5.

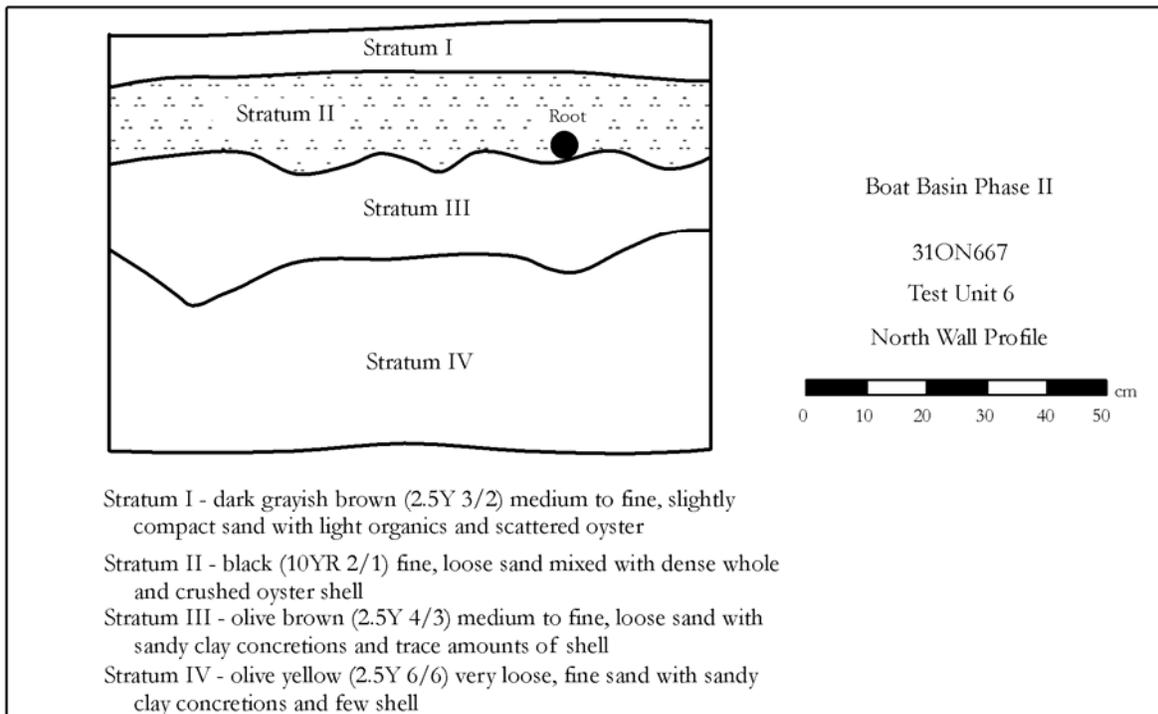


Figure 16. Profile Drawing and Photograph, North Wall, Test Unit 6.

cmbd and included four soil strata (Figure 16). Stratum I is dark grayish brown (2.5Y 3/2) slightly compact, medium grain sand with scattered oyster extending from 10 to 20 cmbd. Stratum II, extending from 20 to 32 cmbd, is black (10YR 2/1) fine, loose midden mixed with oyster and quahog shell. Stratum III is olive brown (2.5Y 4/3) medium to fine loose sand with sandy iron concretions and trace amounts of shell extending from 32 to 50 cmbd. Stratum IV, extending from 50 to 80 cmbd, is olive yellow (2.5Y 6/6) very loose, fine sand with sandy iron concretions.

Artifacts ( $n=122$ ; 19.4 kg of shell) were recovered from all four soil strata with the majority occurring in Strata II and III. Stratum I artifacts ( $n=25$ ) indicate a mixture of historic and prehistoric material and include one Cape Fear Plain sherd, 10 Hanover Fabric Impressed sherds, one window glass fragment, five small brick fragments, three small pieces of mortar, two unidentified metal fragments, one cinder/clinker, one U.S. nickel, one unidentified animal bone fragment, and 3.1 kg of discarded shell. Artifacts associated with the shell midden in Stratum II ( $n=63$ ) are primarily prehistoric and include one Cape Fear Fabric Impressed sherd, six unidentified decorated Hanover sherds, two Hanover Cordmarked sherds, 21 Hanover Fabric Impressed sherds, three White Oak Fabric Impressed sherds, 14 residual aboriginal sherds, one quartzite thinning flake, one quartz thinning flake, one rhyolite thinning flake, 11 unidentified animal bone fragments, and 13.7 kg of discarded shell. Stratum III artifacts ( $n=28$ ) were also prehistoric in nature and include two Cape Fear Fabric Impressed sherds, 17 Hanover Fabric Impressed sherds, three Hanover Plain sherds, and six residual aboriginal sherds. Finally, Stratum IV artifacts were limited and included six Hanover Fabric Impressed sherds.

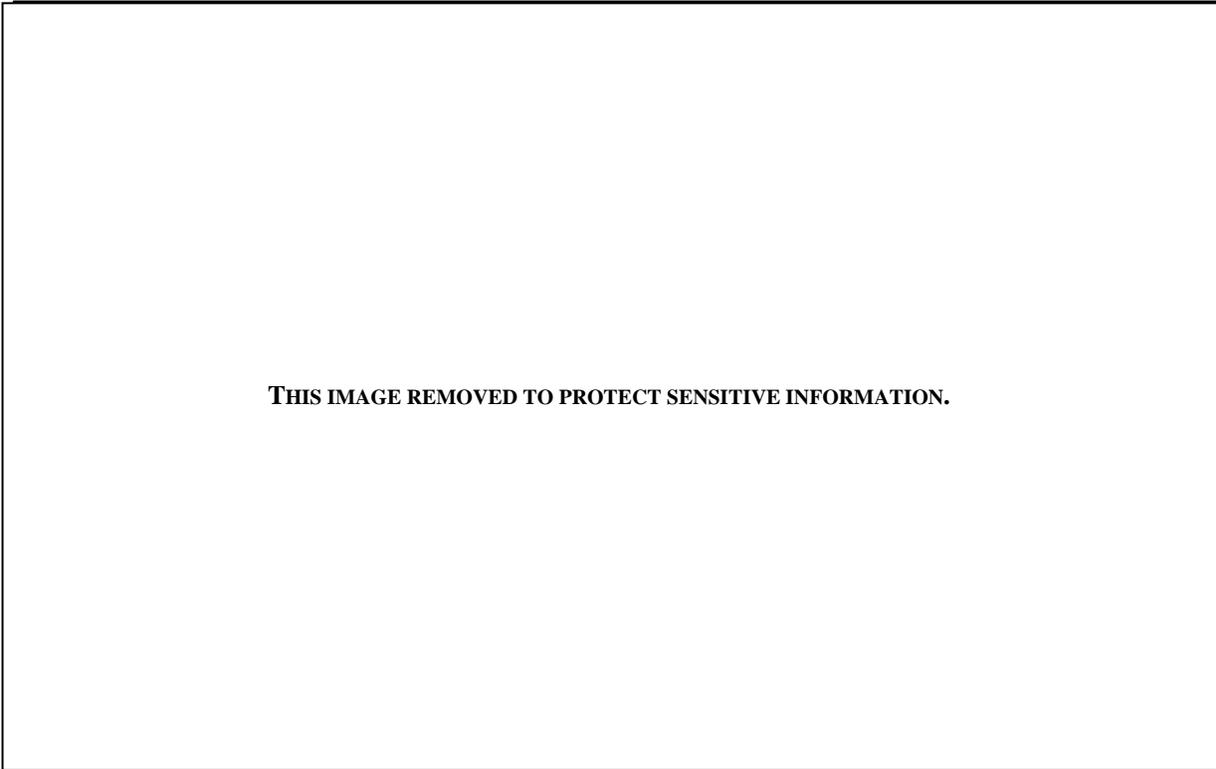
## Discussion

Based on the data recovered during Phase I survey and Phase II evaluation, site 31ON667 is a small- to moderate-sized, multi-component prehistoric and historic site, consistent with previous evaluations conducted by LBA in 1998 and TRC in 2000. The vast majority of the site is limited to a low, southerly sloping wooded terrace overlooking Courthouse Bay.

The prehistoric component, composed of a variety of artifacts including aboriginal ceramics, a small pipe fragment, limited lithic material, and faunal remains, is the largest component in terms of area, extending across most of the site. However, prehistoric artifact densities were relatively low compared to the historic component. Although a very small amount of early Hamp's Landing ceramic sherds were recovered during survey and testing, the small amount of Cape Fear and White Oak period ceramics sherds combined with a relatively high density of Hanover period sherds indicate a primary occupation occurring during the late Middle Woodland to early Late Woodland period. Furthermore, these later ceramic types are associated with all of the features identified during the survey. The identification of one confirmed and three possible shell pits, along with shell midden located above and across the southeastern shoreline, indicate a possible small to medium habitation site, although no evidence of structures, such as postholes, were identified at the site. Furthermore, the level of disturbance that has occurred at the site makes intra-site spatial analysis difficult, hindering an accurate determination of site function.

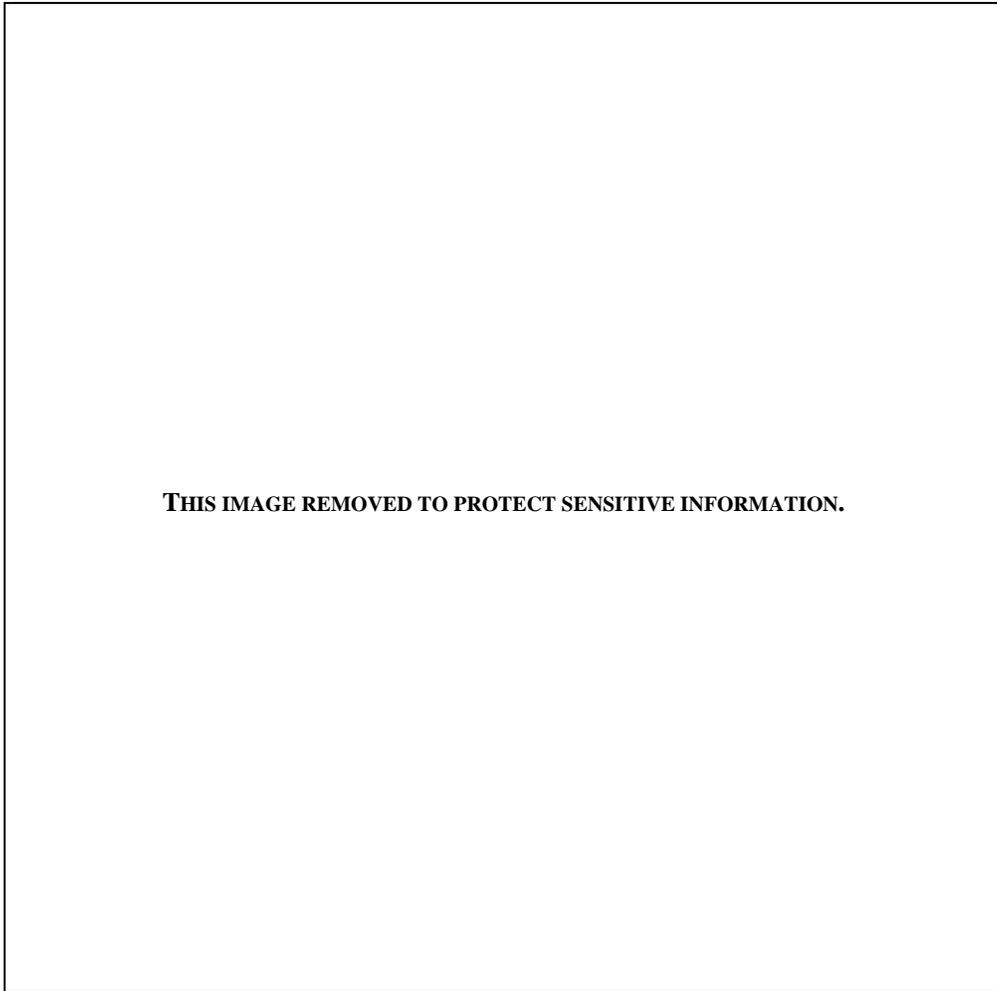
The proximity of several ossuaries (31ON308, 31ON309, 31ON379, 31ON898, and 31ON903) to 31ON667 has always meant the possibility of recovering human remains at the site. The closest ossuary at 31ON898, north along Courthouse Road, resulted in the recovery of at least 158 individuals (Abbott 2003a). As many as 20 burials have been recovered from 31ON309, located west of 31ON898 and northwest of 31ON667. As a result, all bone material recovered from the site was checked and rechecked by lab personnel proficient at identifying and discriminating non-human and human bone material. All bone material recovered during survey and testing was identified as non-human. Furthermore, no burials or cremation pits were identified during survey and testing.

The historic assemblage is more concentrated, confined primarily to the southeast quadrant of the site. The assemblage as a whole, which includes architectural debris, various types of glass, and late historic ceramics, indicates a late nineteenth/early twentieth century occupation. Little is known about this specific area during that period of time. Nevertheless, some information is available. Prior to the development of Camp Lejeune in 1941, the project area was located between the villages of Gillett to the west and Marines to the east. The 1921 soils map (Jurney et al. 1921) shows numerous structures in the area with one structure possibly located in the current site boundary (Figure 17). At the time of local evacuation for base



**THIS IMAGE REMOVED TO PROTECT SENSITIVE INFORMATION.**

Figure 17. 1921 Onslow County Soils Map with project area outlined in red (Jurney et al. 1921)



**Figure 18. 1938 USDA Aerial Photograph with project area outlined in red.  
Photo courtesy of MCBCL.**

development, site 31ON667 was located on a 41.5-acre parcel owned by Lina Taylor. The 1938 USDA aerial photograph of the area shows that most of the site area was cultivated prior to construction (Figure 18). There also appears to be a structure in the south-central portion of the field; however, it is not known if the structure is a barn, outbuilding, or home site. The identification of these structures on the 1921 soils map and 1938 aerial photograph is consistent with the late nineteenth/early twentieth century remains recovered from the site.

#### *NRHP Evaluation*

Problems concerning site context for site 31ON667 have been demonstrated with the identification of various factors (i.e. historic disturbance, previous construction projects, erosion) affecting spatial integrity and thereby affecting NRHP eligibility at the site level even though the site demonstrates intact deposits within certain contexts. However, the eligibility of an archaeological site for inclusion in the NRHP goes beyond an evaluation of

site integrity, but also incorporates local and regional data from other sites that are eligible or potentially eligible for listing in the NRHP.

At the local level, there are four NRHP eligible sites (31ON308, 31ON379, 31ON1236/1236\*\*, and 31ON1241/1241\*\*) in the vicinity of site 31ON667 (Figure 19). Site 31ON308 is located on Jarretts Point, southwest of 31ON667. The site has been the subject of several surveys going back to the site's identification by Loftfield in 1978. The site, which may represent a Late Woodland seasonal village, was also associated with an ossuary to the north (31ON309) (Abbott 2003b:12). Previous surveys (Espenshade 1988; Abbott 2003) have demonstrated a mixed historic and prehistoric context; however, human remains were recovered from an eroding embankment at 31ON308 as early as 1999. New South Associates identified a semi-intact bundle burial during block excavation in 2000 to address the NAGPRA concerns associated with the eroding remains (Abbott 2003:4).

Site 31ON379 is an extensive historic and prehistoric site located along Harveys Point southeast of 31ON667 (see Figure 19). The site was monitored in 2000 by TRC Garrow as part of a project to stabilize part of the shoreline along Courthouse Bay (Greene and Millis 2003). During the monitoring, TRC identified numerous features including postholes, shell pits, and shell midden in addition to recovering botanical remains, faunal remains, numerous lithic artifacts, and over 600 prehistoric ceramic sherds from Early Woodland to Late Woodland contexts. The site provides an excellent example of local prehistoric manifestations and contributes greatly to an understanding of past lifeways and spatial patterning (Greene and Millis 2003:i).

Down river from 31ON667 are two impressive sites found in the Mile Hammock Bay area (see Figure 19). Site 31ON1236/1236\*\* is an extremely large site, measuring 125.2 acres. During site evaluation, TRC identified numerous surface and subsurface shell clusters, shell scatters, shell middens, and one long, linear shell berm in addition to recovering a large prehistoric ceramic and lithic assemblage and numerous faunal remains (Millis 2007). The site includes a variety of cultural periods from Late Archaic to Late Woodland. One burial was also recovered from the site. Site 31ON1241/1241\*\*, also identified by TRC Garrow, is very similar to 31ON1236/1236\*\*. The site measures 45.9 acres and includes a sizeable prehistoric assemblage composed of Early to Late Woodland ceramics, lithics, and numerous shell features.

These four sites demonstrate qualities not seen at 31ON667. First, the sites possess intact components with little evidence of substantial disturbance. Second, they possess data classes significant to evaluating synchronic and diachronic culture change (i.e. settlement patterns, subsistence, etc.). Third, large sites like 31ON1236/1236\*\* and 31ON1241/1241\*\* provide an avenue of exploration for examining potential intra-site spatial variability, such as differential activity areas, and multiple site interaction. For example, are these large sites single entities with different activity areas or are they multiple sites occupied on a recurring seasonal basis? As a result, these sites offer research questions that epitomize the concept of NRHP eligibility.

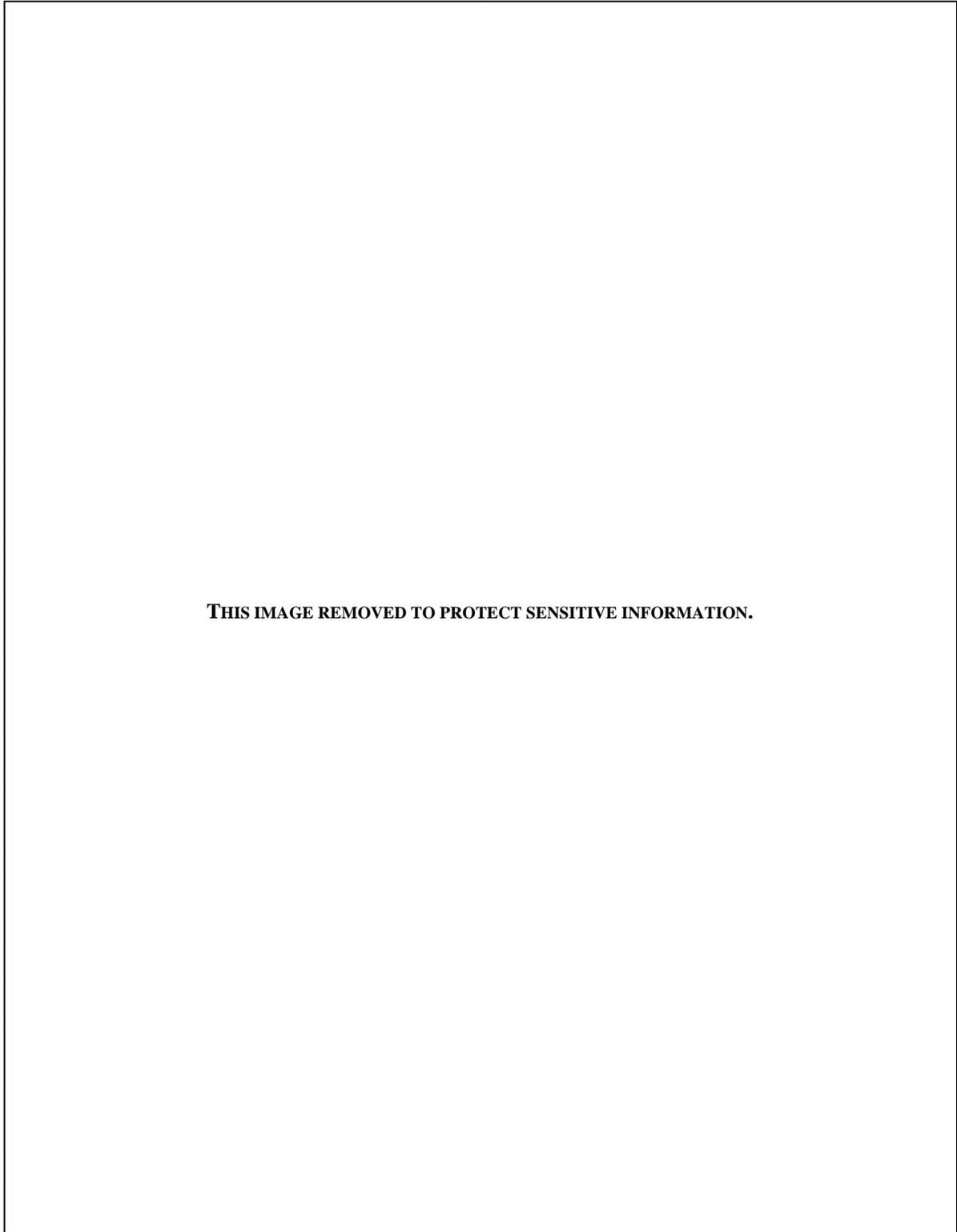


Figure 19. NRHP Eligible Sites in the vicinity of site 31ON667.

Although site 31ON667 maintains several intact features, the site's overall integrity has been greatly compromised by previous disturbance, both historic and modern. As a result, it is unlikely that preservation or further testing of site 31ON667 will recover data that will add new or important information to information provided in this and previous surveys or to data provided by similar, local sites currently determined eligible for listing in the NRHP. Based on the current survey and evaluation, it is the opinion of the Principal Investigator that site 31ON667 is not eligible for listing in the NRHP.

## CONCLUSIONS AND RECOMMENDATIONS

In April 2007, Southeastern Archaeological Research, Inc. (SEARCH) conducted an archaeological evaluation of site 31ON667 at Marine Corps Base Camp Lejeune (MCBCL) in Onslow County, North Carolina as per the contract between the Naval Facilities Engineering Command Atlantic (NAVFACANTLANT) and SEARCH.

Site 31ON667, situated on the east side of New River, is located along the northern edge of Courthouse Bay approximately 1,100 m north of Jarretts Point and 500 m northwest of Harveys Point. Originally identified by former MCBCL Archaeologist Robert Abbott, site 31ON667 was systematically surveyed in 1998 by Louis Berger & Associates (LBA) for the proposed Riverine Center of Excellence (RCE) (Voigt and Simpson 2000). During the survey, LBA revised the boundaries of 31ON667 and identified previously unrecorded sites 31ON690 and 31ON715 located in close proximity to 31ON667. Voigt and Simpson determined that sites 31ON667 and 31ON715 were not eligible for listing in the National Register of Historic Places (NRHP), while 31ON690 contained culturally significant deposits and was potentially eligible for listing in the NRHP. The North Carolina State Historic Preservation Office (NC SHPO) concurred with LBA's recommendations.

Following the LBA survey, but prior to construction associated with the RCE, TRC Garrow, as part of a contract dedicated to revisiting sites identified by Abbott, surveyed the local area and combined the three sites under the original 31ON667 number, expanding the site to approximately 17 acres and recommending on the site form that 31ON667 was potentially eligible for listing in the NRHP. No report was produced for the survey and no official determination of eligibility was conducted for the site. As part of an agreement between former Assistant State Archaeologist Mark Mathis and MCBCL, RCE construction was allowed to proceed based on LBA's original recommendations and NC SHPO concurrence as long as the project was monitored by an archaeologist. Furthermore, subsequent proposed construction affecting 31ON667 would warrant a Phase II investigation to evaluate the NRHP eligibility of the remaining 9.6 acres of the site (e-mail correspondence, Rick Richardson to Thomas Barbee, October 31, 2001).

The current site evaluation was conducted in anticipation of a proposed construction project that would include four clamshell structures to accommodate operational space and individual equipment storage for four Marine Special Operations Battalion (MSOB) Companies. In addition, the project would require construction of an asphalt parking lot, restroom facilities, electric and telephone utilities, a stormwater management pond, security fence and security lighting. Construction of these proposed facilities would require clearing, grubbing, stumping and grading within an area of approximately three acres.

In order to evaluate 31ON667, SEARCH conducted a systematic Phase I survey and Phase II evaluation of the remaining portion of the site. The Phase I survey consisted of 112 shovel tests with 72 shovel tests containing cultural material. The survey resulted in the identification of six concentrated artifact loci and the reorganization of the site boundary.

Subsequent Phase II testing focused on five of the six loci to evaluate the NRHP eligibility of the site.

Site evaluation demonstrated problems (i.e. historic disturbance, previous construction projects and shoreline erosion) concerning the context of site 31ON667. Although site 31ON667 maintains several intact features, the site's overall integrity has been greatly compromised by previous disturbance, both historic and modern. Furthermore, there are several NRHP eligible sites in the local area that exhibit definable research questions, epitomizing the concept of NRHP eligibility. As a result, it is unlikely that preservation or further testing of site 31ON667 will recover data that will add new or important information to information provided in this evaluation and previous surveys of site 31ON667 or to data provided by similar, local sites currently determined eligible for listing in the NRHP. Based on the current survey and evaluation, it is the opinion of the Principal Investigator that site 31ON667 is not eligible for listing in the NRHP.

## REFERENCES CITED

Abbott, Lawrence E.

2003a *Emergency Data Recovery of Site 31ON898: Courthouse Road Ossuary, Marine Corps Base Camp Lejeune, Onslow County, NC.* Report submitted to the U.S. Army Corps of Engineers, Wilmington District.

2003b *Archaeological Data Recovery at Site 31ON308, Jarretts Point Ossuary, Marine Corp Base Camp Lejeune, Onslow County, North Carolina.* Report submitted to the U.S. Army Corps of Engineers, Wilmington District.

Anderson, David G., and Glen T. Hanson

1988 Early Archaic Settlement in the Southeastern United States: A Case Study from the Savannah River Valley. *American Antiquity* 53(2):262-286.

1995 Paleoindian Interaction Networks in the Eastern Woodlands. In *Native American Interaction: Multiscalar Analyses and Interpretations in the Eastern Woodlands*, edited by Michael S. Nassaney and Kenneth E. Sassaman, pp. 3-26. University of Tennessee Press, Knoxville.

Austin, Robert J.

1997 *The Economics of Lithic-Resource Use in South-Central Florida.* Unpublished Ph.D. dissertation, Department of Anthropology, University of Florida, Gainesville.

1999 Technological Characterization of Lithic Waste-Flake Assemblages: Multivariate Analysis of Experimental Archaeological Data. *Lithic Technology* 24:53-68.

Barber, Edwin A.

2001 *Marks of American Potters.* Blackburn Press, Caldwell, NJ.

Barnhill, William L.

1992 *Soil Survey of Onslow County, North Carolina.* United States Department of Agriculture, Washington D.C.

Bense, Judith A.

1994 *Archaeology of the Southeastern United States: Paleoindian to World War I.* Academic Press, San Diego.

Binford, Lewis R.

1980 Willow Smoke and Dogs' Tails: Hunter-Gatherer Settlement Systems and Archaeological Site Formation. *American Antiquity* 45(1):4-20.

Brown, Joseph Parsons

1960 *The Commonwealth of Onslow: A History.* Owen G. Dunn, New Bern, NC.

Bureau of Land Management's Historical Glass Bottle Identification and Information Website, (2006): <http://www.sha.org/bottle/index.htm>

Carraway, Gertrude S.

1946 *Camp Lejeune Leathernecks*. Owen G. Dunn Company, New Bern, NC.

Cheney, John L., editor

1975 *North Carolina Government, 1858-1974: A Narrative and Statistical History*. North Carolina Department of the Secretary of State, Raleigh.

Coe, Joffre L.

1964 The Formative Cultures of the Carolina Piedmont. *Transactions of the American Philosophical Society* 54(5):1-130.

Daniel, I. Randolph

1998 *Early Archaic Settlement in the Southeast: Hardaway Revisited*. The University of Alabama Press, Tuscaloosa.

Davis, Thomas W., and Kathleen M. Child

2000 Late Woodland Ceramics on the Coastal Plain: A Possible New Type from Carteret County, North Carolina. *North Carolina Archaeology* 49:78-92.

Delcourt, Hazel R., and Paul A. Delcourt

1981 Vegetation Maps for Eastern North America: 40,000 BP to the Present. In *Geobotany II*, edited by Robert C. Romans, pp. 123-165. Plenum Publishing Corp., New York.

Dent, Richard, J., Jr.

1995 *Chesapeake Prehistory: Old Traditions, New Directions*. Plenum Press, New York.

Department of Anthropology, American University

n.d. *Shawnee Minisink: New Dates on the Paleoindian Component*. Electronic document, accessed June 13, 2006, [www.american.edu/cas/anthro/shawnee\\_minisink\\_2.html](http://www.american.edu/cas/anthro/shawnee_minisink_2.html). The expanded text is from a poster presentation by Richard J. Dent in the North American Paleoindian and Archaic Session at the 1999 Annual Meeting of the Society for American Archaeology, Chicago.

Finley, Anthony

1824 North Carolina [Map]. A. Finley, Philadelphia, PA.

Haag, William G.

1958 *The Archaeology of Coastal North Carolina*. Coastal Study Series 2. Louisiana State University, Baton Rouge.

Gardner, William M.

1977 Flint Run Paleoindian Complex and Its Implications for Eastern North American Prehistory. *Annals of the New York Academy of Sciences* 288:255-263.

1982 Early and Middle Woodland in the Middle Atlantic: An Overview. In *Practicing Environmental Archaeology: Methods and Interpretations*, edited by Roger W. Moeller. Occasional Paper Number 3. American Indian Archaeological Institute, Washington.

Greene, Lance, and Tracy Millis

2003 *Archaeological Monitoring of the Courthouse Bay Site (31ON379/379\*\*)*, Marine Corps Base Camp Lejeune, Onslow County, North Carolina. Report submitted to the U.S. Army Corps of Engineers, Wilmington District.

Gwynn, Zae Hargett

1961 *Abstracts of the Records of Onslow County, North Carolina*. NPP.

Hargrove, Thomas, and Jane M. Eastman

1997 Limestone- or Marl-Tempered Ceramics from the Lower Cape Fear Region, New Hanover County, North Carolina. *North Carolina Archaeology* 46:91-108.

Herbert, Joseph M.

1999 Prehistoric Pottery Taxonomy and Sequence on the Southern Coast of North Carolina. *North Carolina Archaeology* 48:37-58.

2002 A Woodland Period Prehistory of Coastal North Carolina. In *The Woodland Southeast*, edited by David G. Anderson and Robert C. Mainfort, Jr., pp. 292-317. The University of Alabama Press, Tuscaloosa.

Jones, Olive and Catherine Sullivan

1989 *The Parks Canada Glass Glossary for the Description of Containers, Tableware, Flat Glass, and Closures*. National Historic Parks and Sites, Canadian Park Service, Environment Canada; Studies in Archaeology Architecture and History.

Jurney, R.C., R.E. Devereaux, E.H. Stevens, S.F. Davidson, and W.D. Lee

1921 *Soil Map, Onslow County, North Carolina*. Bureau of Soils, United States Department of Agriculture, Washington, D.C.

Kowalsky, Arnold A, and Dorothy E. Kowalsky

1999 *Encyclopedia of Marks on American, English, and European Earthenware, Ironstone, and Stoneware*. Shiffer Publishing, Ltd., Atglen, PA.

Loftfield, Thomas C.

1976 "A Briefe and True Report..." *An Archaeological Interpretation of the Southern North Carolina Coast*. Unpublished Ph.D. dissertation, Department of Anthropology, The University of North Carolina, Chapel Hill.

1981 *An Archaeological and Historical Reconnaissance of U.S. Marine Corps Base, Camp Lejeune*. Submitted to the Department of the Navy, Washington D.C. Ms. on file at the Office of State Archaeology, Raleigh.

1988 Prehistoric Oysterman of the Central North Carolina Coast. In *Sea and Land: Cultural Biological Adaptations in the Southern Coastal Plain*, edited by James L. Peacock and James C. Sabella, pp. 107-121. Southern Anthropological Society Proceedings No. 21. The University of Georgia Press, Athens.

1990 Ossuary Internments and Algonkian Expansion on the North Carolina Coast. *Southeastern Archaeology* 9(2):116-123.

Loftfield, Thomas C., and David C. Jones

1995 Late Woodland Architecture on the Coast of North Carolina: Structural Meaning and Environmental Adaptation. *Southeastern Archaeology* 14(2):120-135.

Loftfield, Thomas C., and Tucker R. Littleton (compiler)

1981 *An Archaeological and Historical Reconnaissance of U.S. Marine Corps Base, Camp Lejeune Part 2: The Historic Record*. Submitted to the Department of the Navy, Washington D.C. Ms. on file at the Office of State Archaeology, Raleigh.

Mathis, Mark A.

1999 Oak Island: A Retiring Series. *North Carolina Archaeology* 48:18-36.

Miller, George L.

1980 Classification and Economic Scaling of 19<sup>th</sup> Century Ceramics. *Historical Archaeology* 14: 1-40.

Millis, Tracy L., C. Damon Jones, Heather Millis, and Lance Greene

2005 *Archaeological Survey of the FY01 Silvicultural Prescription and Company Battle Course, and Phase II Testing of Site 31ON1019/1019\*\* on Marine Corps Base, Camp Lejeune, Onslow County, North Carolina*. Ms. on file Marine Corps Base, Camp Lejeune.

2007 *Draft – Archaeological Evaluation of Sites in the Miles Hammock Bay Area*. Draft submitted to MCBCL.

Mobley, Joe A.

2003 *The Way We Lived in North Carolina*. University of North Carolina Press, Chapel Hill.

Murrell, Billie Jean and Stratton C.

2001 *Jacksonville and Camp Lejeune*. Arcadia Publishing, Charleston, SC.

North Carolina Department of Environment and Natural Resources

2002 *White Oak River Basin*. Office of Environmental Education.

North Carolina Geological Survey

1985 *Geologic Map of North Carolina*. Department of Environment and Natural Resources, Raleigh.

Perkinson, Phil H.

1971 North Carolina Fluted Projectile Points—Survey Report Number One. *Southern Indian Studies* 23:3-40.

1973 North Carolina Fluted Projectile Points—Survey Report Number Two. *Southern Indian Studies* 25:3-60.

Phelps, David S.

1983 Archaeology of the North Carolina Coast and Coastal Plain: Problems and Hypotheses. In *The Prehistory of North Carolina: An Archaeological Symposium*, edited by Mark A. Mathis and Jeffrey J. Crow, pp. 1-52. North Carolina Division of Archives and History, Raleigh.

Poplin, Eric C., David C. Jones, Joel D. Gunn, and Christopher T. Espenshade

1992 *Intensive Sample Survey and Data Recovery at Marine Corps Base, Camp Lejeune, Onslow County, North Carolina*. Ms. on file U.S. Engineer District, Wilmington, North Carolina.

Onslow County Historical Society

1983 *Heritage of Onslow County*. Hunter Publishing Company, Winston-Salem, NC.

*Onslow County News and Views*

1941a Thousands Flock Here As Marine Base Begins. [1941]. Jacksonville, NC. On file at the Onslow County Museum, Richlands, NC.

1941b Marine Base Occupants Must Move; No Extension. Jacksonville, NC. On file at the Onslow County Museum, Richlands, NC.

1941c Oct. 1<sup>st</sup> New Deadline to Evacuate Marine Base. 22 August 1941. Jacksonville, NC. On file at the Onslow County Museum, Richlands, NC.

1941d More Checks Received for Marine Base Property. 17 June 1941. Jacksonville, NC. On file at the Onslow County Museum, Richlands, NC.

1941e Barden to be Present at Mass Meet Monday. [1941] Jacksonville, NC. On file at the Onslow County Museum, Richlands, NC.

1941f Funds Allocated Aid Marine Base Evacuees. [1941]. Jacksonville, NC. On file at the Onslow County Museum, Richlands, NC.

Onslow County Old Cemetery Society

1997 *Makers of Time: Cemeteries of Onslow County, Volume I*. Onslow County Old Cemetery Society, Jacksonville.

Reid, William H., and Kay Simpson

1998 *Cultural Resources Study, Mainside, Marine Corps Base Camp Lejeune, Onslow County, North Carolina, Volume I: Archaeological Resources Study*. Submitted to the U.S. Army Corps of Engineers, Wilmington District. Ms. on file at the Office of State Archaeology, Raleigh.

Richardson, Rick

2001 Personal email communication to Thomas Barbee.

Rohling, E. J., M. Fenton, F. J. Jorissen, P. Bertrand, G. Ganssen, and J. P. Caulet

1998 Magnitudes of sea-level lowstands of the past 500,000 years. *Nature* 394:162-165.

Sanborn, Erica E., and Lawrence E. Abbott, Jr.

1999 Early Ceramic Traditions on the Southern Coastal Plain of North Carolina: Radiocarbon Data from 31CB114. *North Carolina Archaeology* 48:3-17.

Sassaman, Kenneth E.

1993 *Early Pottery in the Southeast: Tradition and Innovation in Cooking Technology*. The University of Alabama Press, Tuscaloosa.

South, Stanley

1976 An Archaeological Survey of Southeastern Coastal North Carolina. *The Institute of Archaeology and Anthropology Notebook (The University of South Carolina)* 8:1-56.

1977 *Method and Theory in Historical Archaeology*. Academic Press, Inc, San Diego.

Steponaitis, Vincas P.

1986 Prehistoric Archaeology in the Southeastern United States, 1970-1985. *Annual Review of Anthropology* 15:363-404.

Stout, G.P.

1978 Onslow County, N.C. 1978 Roads [map]. On file at the Onslow County Library, Jacksonville.

Sullivan, A. P., III, and K. C. Rozen

1985 Debitage Analysis and Archaeological Interpretation. *American Antiquity* 50:755-779.

US Navy

1941a Property Map, Area C. Bureau of Yards and Docks, Wilmington. On file at Camp Lejeune Public Works, Jacksonville.

1941b Tract C-401, 142.8 Acres, E.L. Cox Heirs. On file at Camp Lejeune Public Works Department, Jacksonville.

1941c Tract C-402, 1123 Acres, John L. Roper Lumber Company. On file at Camp Lejeune Public Works Department, Jacksonville.

1941d Graveyards within Camp Land Acquisition Areas at Start of Construction. Bureau of Yards and Docks, Wilmington. On file at Camp Lejeune Public Works, Jacksonville.

Voigt, Eric, and Kay Simpson

2000 *Archaeological Survey of the Mechanized Assault Course, Range F-245, and Riverine Center of Excellence Project Areas*. Report submitted to the U.S. Army Corps of Engineers, Wilmington District.

Wagner, Daniel P.

1995 *Pedology and Geomorphology of U.S. Marine Corps Base Camp Lejeune, Jacksonville, North Carolina*. Prepared by Geo-Sci Consultants, Inc., College Park, MD, for Louis Berger & Associates, Inc., Richmond, VA.

Ward, H. Trawick, and R. P. Stephen Davis, Jr.

1999 *Time Before History: The Archaeology of North Carolina*. The University of North Carolina Press, Chapel Hill.

Watson, Alan D.

1995 *Onslow County: A Brief History*. North Carolina Division of Archives and History, Raleigh, NC.

Watts, W. R.

1980 The Late Quaternary Vegetation History of the Southeastern United States. *Annual Review of Ecology and Systematics* 11:387-409.

Wayne, Lucy B., and Martin F. Dickinson

1986 *Historic Preservation Plan, Camp Lejeune, North Carolina*. Submitted to the National Park Service, Southeast Region, Atlanta. Ms. on file at Marine Corps Base Camp Lejeune, NC.

Whitehead, D. R.

1972 Developmental and Environmental History of the Dismal Swamp. *Ecological Monographs* 42:301-315

Appendix A  
Artifact Data

31ON667 Shovel Test Data

Site #	FS #	Catalog #	ST #	Depth (cmbs)	Description	Secondary/Attribute	Comment	Count	Weight (g)
31ON667	92	92.02	N930 E1090	30	Uid aboriginal ceramic, residual			2	2.8
31ON667	92	92.01	N930 E1090	30	Hanover Fabric Impressed	grog/clay temper		1	2.9
31ON667	15	15.01	N940 E1000	0-40	Shell, Oyster			23	28.3
31ON667	15	15.02	N940 E1000	0-40	Brick, Red			1	0.8
31ON667	15	15.03	N940 E1000	0-40	Uid aboriginal ceramic, residual			1	0.9
31ON667	25	25.01	N940 E1030	0-100	Shell, Oyster				41.9
31ON667	25	25.02	N940 E1030	0-100	Brick, Red			3	13.4
31ON667	51	51.05	N940 E1045	40-50	Animal bone			1	0.2
31ON667	51	51.04	N940 E1045	0-100	Shell, Oyster			3	9.9
31ON667	51	51.01	N940 E1045	10-20	Brick, Red			2	7.4
31ON667	51	51.02	N940 E1045	40-50	Cape Fear Plain	sand temper		1	1.1
31ON667	51	51.03	N940 E1045	40-50	Shatter, Angular	sandstone		1	0.6
31ON667	91	91.04	N940 E1090	0-30	Hanover Fabric Impressed, rim	grog/clay temper	straight, flat rim	1	6.8
31ON667	91	91.03	N940 E1090	30-40	Charcoal			2	0.5
31ON667	91	91.01	N940 E1090	0-30	Uid aboriginal ceramic, residual			2	3.2
31ON667	91	91.02	N940 E1090	0-30	Hanover Fabric Impressed	grog/clay temper	mend	2	3.7
31ON667	55	55.01	N955 E1065	20	Architectural aggregate		concrete, quartz with cement, green	1	341.8
31ON667	54	54.04	N955 E1030	0-15	Bottle glass	soda green		1	0.5
31ON667	54	54.03	N955 E1030	0-70	Shell, clam, Quahog			2	5.0
31ON667	54	54.02	N955 E1030	0-70	Shell, Oyster			6	8.8
31ON667	54	54.05	N955 E1030	15-70	Onslow Plain	coarse sand		1	2.1
31ON667	54	54.01	N955 E1030	15-70	Brick, Red		2 have sandy mortar	11	121.5
31ON667	62	62.01	N955 E1045	0-60	Shell, Oyster		7 whole	200+	discarded in field
31ON667	62	62.02	N955 E1045	0-60	Shell, clam, Quahog			3	42.1
31ON667	62	62.03	N955 E1045	0-30	Brick, Red			7	29.0
31ON667	62	62.04	N955 E1045	0-60	Nail, cut			1	0.7
31ON667	62	62.05	N955 E1045	0-60	Uid iron/steel			1	0.2
31ON667	62	62.06	N955 E1045	0-60	Charcoal			12	1.2
31ON667	42	42.01	N955 E1060	0-100	Shell, Oyster			3	4.4
31ON667	16	16.01	N940 E1060	0-100	Shell, Oyster			63	41.7
31ON667	16	16.02	N940 E1060	0-100	Shell, clam, Quahog			1	2.4
31ON667	63	63.01	N955 E1075	0-60	Shell, Oyster		16 whole	500+	760.0
31ON667	63	63.04	N955 E1075	0-60	Charcoal			23	2.6
31ON667	63	63.03	N955 E1075	0-60	Animal bone			3	1.0
31ON667	63	63.02	N955 E1075	0-60	Shell, clam, Quahog			5	18.5
31ON667	69	69.03	N970 E910	0-60	Uid aboriginal ceramic, residual			2	3.0
31ON667	69	69.01	N970 E910	0-60	Shell, Oyster			6	94.5
31ON667	69	69.02	N970 E910	0-60	Shell, clam, Quahog			2	12.0
31ON667	48	48.03	N970 E925	20-50	Hanover Fabric Impressed	grog/clay temper		1	4.0

31ON667 Shovel Test Data

Site #	FS #	Catalog #	ST #	Depth (cmbs)	Description	SecondaryAttribute	Comment	Count	Weight (g)
31ON667	48	48.04	N970 E925	20-50	Hanover Plain	grog/clay temper		1	1.9
31ON667	48	48.01	N970 E925	0-20	Shatter, Angular	quartz		1	0.7
31ON667	48	48.02	N970 E925	20-50	Hamps Landing Fabric Impressed	limestone temper		2	12.4
31ON667	27	27.02	N970 E940	30-60	Uid aboriginal ceramic, residual			2	3.2
31ON667	27	27.01	N970 E940	30-60	Fabric marked sherd			1	12.3
31ON667	57	57.03	N970 E955	30-100	Fabric marked sherd		uid tempering agent	1	15.0
31ON667	57	57.02	N970 E955	30-100	Uid aboriginal ceramic, residual			1	0.6
31ON667	57	57.04	N970 E955	30-100	Hanover Fabric Impressed	grog/clay temper		1	12.0
31ON667	57	57.01	N970 E955	30-100	Cape Fear Fabric Impressed	sand temper	mend	2	3.5
31ON667	53	53.04	N970 E1015	20-60	Military hardware		ammo belt clip	1	4.1
31ON667	53	53.01	N970 E1015	20-60	Whiteware	flatware, base		1	3.6
31ON667	53	53.02	N970 E1015	0-100	Shell, Oyster			1	3.6
31ON667	53	53.03	N970 E1015	20-60	Nail, cut			4	4.4
31ON667	10	10.03	N970 E1000	20-100	Shell, Oyster			1	5.4
31ON667	10	10.01	N970 E1000	20-60	Brick, Unidentified			7	15.6
31ON667	10	10.02	N970 E1000	20-60	Window glass			2	55.9
31ON667	56	56.03	N970 E1045	0-30	New River Plain	coarse sand		1	2.6
31ON667	56	56.02	N970 E1045	0-30	Shatter, Angular	quartz		1	0.8
31ON667	56	56.01	N970 E1045	0-30	Shell, Oyster			20	28.1
31ON667	56	56.04	N970 E1045	0-30	Pearlware, scalloped, unimpressed edgeware	unknown, rim		1	0.5
31ON667	9	9.07	N970 E1060	50-70	Charcoal			1	0.2
31ON667	9	9.06	N970 E1060	0-100	Shell, Oyster			1	101.2
31ON667	9	9.02	N970 E1060	50-70	Whiteware	unknown, body		1	4.2
31ON667	9	9.05	N970 E1060	50-70	Animal bone		Mammalia	1	0.1
31ON667	9	9.03	N970 E1060	50-70	Uid iron/steel			2	0.9
31ON667	9	9.08	N970 E1060	50-70	Uid aboriginal ceramic, residual	sand temper		1	0.2
31ON667	9	9.04	N970 E1060	50-70	Brick, Unidentified			3	0.7
31ON667	9	9.09	N970 E1060	50-70	UID concrete			1	2.3
31ON667	9	9.01	N970 E1060	50-70	Porcelainous stoneware	unknown, body		1	3.9
31ON667	39	39.02	N970 E1075	40-50	Shatter, Angular	quartz		1	0.7
31ON667	39	39.03	N970 E1075	40-50	Flake, Thinning	quartzite		1	0.3
31ON667	39	39.01	N970 E1075	0-100	Shell, Oyster			25	25.6
31ON667	26	26.02	N970 E1090	30-100	Brick, Red			1	9.8
31ON667	26	26.01	N970 E1090	30-100	Shell, Oyster			9	26.8
31ON667	26	26.03	N970 E1090	30-100	Possible cultural material/lithic	quartzite		1	1.7
31ON667	70	70.01	N985 E835	30-40	Hanover Fabric Impressed	grog/clay temper		3	10.5
31ON667	70	70.01	N985 E835	30-40	Shell, Oyster			5	25.1
31ON667	66	66.05	N985 E865	10-50	Fire cracked rock	quartz		2	6.1
31ON667	66	66.04	N985 E865	10-50	Possible cultural material/lithic	quartz	cobble	1	17.3

31ON667 Shovel Test Data

Site #	FS #	Catalog #	ST #	Depth (cmbs)	Description	Secondary/Attribute	Comment	Count	Weight (g)
31ON667	66	66.03	N985 E865	20-50	Hanover Fabric Impressed	grog/clay temper		1	1.6
31ON667	66	66.02	N985 E865	0-10	Nail, wire			1	7.3
31ON667	66	66.01	N985 E865	0-100	Shell, Oyster			5	21.1
31ON667	68	68.02	N985 E895	20-75	Cape Fear Fabric Impressed	sand temper		1	8.7
31ON667	68	68.01	N985 E895	0-20	Shell, Oyster			3	48.2
31ON667	49	49.01	N985 E925	0-60	Shell, Oyster			6	13.5
31ON667	58	58.01	N985 E955	20-30	Hanover Fabric Impressed	grog/clay temper		1	3.9
31ON667	50	50.01	N985 E1000	40	Whiteware	unknown, body		1	1.8
31ON667	59	59.02	N985 E1015	10-20	Bottle glass	amber		1	4.3
31ON667	59	59.03	N985 E1015	30-40	Shotgun shell		'Red Head No 20 Reliance' stamp; Montgomery Wards	1	1.2
31ON667	59	59.01	N985 E1015	10-20	Brick, Red			1	5.8
31ON667	60	60.04	N985 E1030	40	Ironstone	unknown, body		2	1.7
31ON667	60	60.06	N985 E1030	0-100	Bottle glass	clear		1	1.4
31ON667	60	60.01	N985 E1030	0-100	Shell, Oyster				131.4
31ON667	60	60.02	N985 E1030	0-80	Brick, Red			10	94.5
31ON667	60	60.03	N985 E1030	0-100	Mortar			1	4.3
31ON667	60	60.07	N985 E1030	0-100	Nail, wire			1	1.2
31ON667	60	60.08	N985 E1030	0-100	Charcoal			3	0.2
31ON667	60	60.05	N985 E1030	0-100	Bottle glass	soda green		1	0.1
31ON667	44	44.06	N985 E1045	50-60	Urid aboriginal ceramic, residual			1	0.9
31ON667	44	44.03	N985 E1045	0-80	Brick, Red			1	2.4
31ON667	44	44.02	N985 E1045	0-80	Bottle glass	amber		1	4.6
31ON667	44	44.01	N985 E1045	40-50	Shell, Oyster			2	1.4
31ON667	44	44.04	N985 E1045	50-60	Hanover Cordmarked	grog/clay temper		1	2.8
31ON667	44	44.05	N985 E1045	50-60	Cape Fear Plain	sand temper		1	2.1
31ON667	34	34.01	N985 E1060	70-80	Hanover Fabric Impressed, rim	grog/clay temper	stamping on interior surface	1	15.5
31ON667	45	45.01	N985 E1075	0-100	Shell, Oyster			12	97.5
31ON667	45	45.02	N985 E1075	0-100	Shell, clam, Quahog			1	14.4
31ON667	35	35.01	N985 E1090	10	Nail, cut			1	3.6
31ON667	40	40.05	N985 E1105	0-100	Animal bone		calcined	1	0.6
31ON667	40	40.01	N985 E1105	0-100	Shell, Oyster			21	21.4
31ON667	40	40.04	N985 E1105	0-100	Cape Fear Plain	sand temper		1	1.2
31ON667	40	40.03	N985 E1105	0-100	Urid iron/steel			1	2.0
31ON667	40	40.02	N985 E1105	0-100	Nail, uid			2	6.5
31ON667	2	2.01	N1000 E850	30-40	Cape Fear Fabric Impressed	sand temper		1	6.6
31ON667	7	7.01	N1000 E910	15-30	Shell, Oyster				4.9
31ON667	5	5.01	N1000 E940	30-50	Urid aboriginal ceramic, residual	shell temper	White Oak series	1	1.6
31ON667	5	5.02	N1000 E940	30-50	Shell, Oyster				6.0
31ON667	8	8.01	N1000 E970	15-40	Cape Fear Fabric Impressed	sand temper		2	4.8

31ON667 Shovel Test Data

Site #	FS #	Catalog #	ST #	Depth (cmbs)	Description	Secondary/Attribute	Comment	Count	Weight (g)
31ON667	8	8.02	N1000 E970	15-40	Shell, Oyster				16.1
31ON667	20	20.02	N1000 E985	0-20	Bottle glass	clear		2	0.7
31ON667	20	20.04	N1000 E985	20-50	Urid aboriginal ceramic, residual			1	1.4
31ON667	20	20.03	N1000 E985	20-50	Possible cultural material-lithic	quartz		1	1.6
31ON667	20	20.01	N1000 E985	0-20	Window glass			1	1.4
31ON667	3	3.02	N1000 E1000	0-70	Urid iron/steel			2	3.0
31ON667	3	3.01	N1000 E1000	0-70	Nail, uid			3	15.4
31ON667	3	3.05	N1000 E1000	0-70	Cape Fear Fabric Impressed	sand temper		1	1.2
31ON667	3	3.07	N1000 E1000	0-70	Shell, clam, Quahog				5.8
31ON667	3	3.03	N1000 E1000	0-70	Window glass			6	2.0
31ON667	3	3.06	N1000 E1000	0-70	Shell, Oyster				33.3
31ON667	3	3.04	N1000 E1000	0-70	Plain aboriginal ceramic	sand temper		1	1.3
31ON667	19	19.03	N1000 E1015	80	Whiteware	unknown, body		1	0.9
31ON667	19	19.02	N1000 E1015	10-50	Brick, Red			7	94.1
31ON667	19	19.01	N1000 E1015	0-100	Shell, Oyster			8	23.2
31ON667	19	19.05	N1000 E1015	0-100	Doll part, porcelain		eye socket frag, cheek or forehead, post 1890	1	1.0
31ON667	19	19.06	N1000 E1015	0-100	Nail, wire			1	5.5
31ON667	19	19.04	N1000 E1015	0-100	Shell, clam, Quahog			1	2.1
31ON667	6	6.02	N1000 E1030	0-50	Bottle glass	clear		2	2.7
31ON667	6	6.01	N1000 E1030	0-50	Brick, Red				148.9
31ON667	6	6.03	N1000 E1030	0-100	Shell, Oyster				77.3
31ON667	18	18.01	N1000 E1045	0-100	Shell, Oyster			18	36.7
31ON667	18	18.05	N1000 E1045	30-50	Window glass			1	0.1
31ON667	18	18.02	N1000 E1045	0-100	Shell, clam, Quahog			3	7.6
31ON667	18	18.03	N1000 E1045	30-80	Brick, Red			1	4.6
31ON667	18	18.04	N1000 E1045	0-30	Animal bone			1	0.8
31ON667	1	1.03	N1000 E1060	0-15	Bottle glass	clear		1	0.2
31ON667	1	1.02	N1000 E1060	0-15	Urid iron/steel			1	2.4
31ON667	1	1.04	N1000 E1060	0-70	Shell, Oyster				25.0
31ON667	1	1.05	N1000 E1060	0-70	Shell, clam, Quahog				10.0
31ON667	1	1.01	N1000 E1060	0-15	Brick, Red			1	3.8
31ON667	4	4.01	N1000 E1090	0-70	Urid aboriginal ceramic, residual	grog/clay temper	Hanover series	1	1.0
31ON667	17	17.01	N1000 E1103	0-20	Urid aboriginal ceramic, residual			1	0.6
31ON667	17	17.02	N1000 E1103	20-30	Possible cultural material-lithic	quartz		1	0.8
31ON667	37	37.02	N1015 E970	0-30	Hanover Fabric Impressed	grog/clay temper		5	12.2
31ON667	37	37.03	N1015 E970	0-30	Cape Fear Fabric Impressed	sand temper		1	4.8
31ON667	37	37.01	N1015 E970	0-50	Shell, Oyster			6	15.8
31ON667	64	64.04	N1015 E985	0-60	Charcoal			50	4.1
31ON667	64	64.05	N1015 E985	20-30	Animal bone			20	9.8

31ON667 Shovel Test Data

Site #	FS #	Catalog #	ST #	Depth (cmbs)	Description	Secondary/Attribute	Comment	Count	Weight (g)
31ON667	64	64.03	N1015 E985	0-60	Shell, clam, Quahog			2	9.9
31ON667	64	64.01	N1015 E985	0-60	Shell, Oyster		whole	41	820.0
31ON667	64	64.02	N1015 E985	0-60	Shell, Oyster		hash	1500+	3340.0
31ON667	38	38.01	N1015 E1000	0-30	Shell, Oyster			1	2.5
31ON667	38	38.03	N1015 E1000	0-30	Brick, Red			1	4.9
31ON667	38	38.02	N1015 E1000	0-30	Shell, clam, Quahog			2	5.0
31ON667	46	46.02	N1015 E1030	0-50	Bottle glass, Machine made	amber		5	18.5
31ON667	46	46.01	N1015 E1030	0-40	Brick, Red			3	108.6
31ON667	46	46.03	N1015 E1030	0-100	Shell, Oyster			5	7.5
31ON667	61	61.1	N1015 E1045	0-50	Hanover Fabric Impressed	grog/clay temper		1	3.4
31ON667	61	61.09	N1015 E1045	0-50	Whiteware, handpainted	unknown, body		1	0.6
31ON667	61	61.08	N1015 E1045	0-50	Urid iron/steel			1	0.1
31ON667	61	61.06	N1015 E1045	0-50	Wood		charred	2	3.6
31ON667	61	61.04	N1015 E1045	0-50	Bottle glass	aqta		1	0.7
31ON667	61	61.03	N1015 E1045	0-50	Bottle glass	clear		1	0.5
31ON667	61	61.11	N1015 E1045	0-50	Hanover Plain	grog/clay temper		1	4.4
31ON667	61	61.01	N1015 E1045	0-100	Shell, Oyster			49	135.6
31ON667	61	61.07	N1015 E1045	0-50	Nail, uid			3	10.2
31ON667	61	61.02	N1015 E1045	0-100	Shell, clam, Quahog			1	1.1
31ON667	61	61.13	N1015 E1045	0-50	Animal bone			1	0.0
31ON667	61	61.14	N1015 E1045	0-50	Possible cultural material/lithic	Rhyolite		1	740.0
31ON667	61	61.15	N1015 E1045	0-50	Possible tool/lithic	Rhyolite		1	14.3
31ON667	61	61.05	N1015 E1045	0-50	Brick, Red			1	2.1
31ON667	61	61.12	N1015 E1045	0-50	Urid aboriginal ceramic, residual			2	1.8
31ON667	33	33.01	N1015 E1060	0-10	Shell, Oyster			1	2.1
31ON667	33	33.03	N1015 E1060	60-70	Non-electrical wire			1	8.6
31ON667	33	33.02	N1015 E1060	30-50	Brick, Red			1	2.2
31ON667	43	43.04	N1015 E1075	0-100	Shell, clam, Quahog			1	1.6
31ON667	43	43.03	N1015 E1075	30-40	Urid aboriginal ceramic, residual			1	1.2
31ON667	43	43.02	N1015 E1075	0-100	Urid plastic		possible pipe fragment, grid stamp on interior	1	0.0
31ON667	43	43.01	N1015 E1075	0-100	Shell, Oyster			31	25.4
31ON667	67	67.01	N1030 E865	30-50	Shell, Oyster			5	52.6
31ON667	67	67.02	N1030 E865	30-50	Cape Fear Cordmarked	sand temper		1	5.3
31ON667	23	23.01	N1030 E880	20-50	Hanover Cordmarked	grog/clay temper	2 mend	3	21.2
31ON667	24	24.01	N1030 E910	10-30	Hanover Fabric Impressed	grog/clay temper		2	3.3
31ON667	30	30.01	N1030 E970	0-20	Flake, Thinning	quartz		1	0.6
31ON667	32	32.03	N1030 E985	0-30	Hanover Plain	grog/clay temper		1	2.5
31ON667	32	32.02	N1030 E985	0-30	Charcoal			3	0.3
31ON667	32	32.01	N1030 E985	0-30	Shell, Oyster			1	1.0

31ON667 Shovel Test Data

Site #	FS #	Catalog #	ST #	Depth (cmbs)	Description	Secondary/Attribute	Comment	Count	Weight (g)
31ON667	12	12.05	N1030 E1000	0-100	Shell, Oyster				17.7
31ON667	12	12.04	N1030 E1000	0-40	Cape Fear Fabric Impressed	sand temper		1	0.8
31ON667	12	12.03	N1030 E1000	0-40	Unmodified stone	other		1	0.6
31ON667	12	12.01	N1030 E1000	0-40	Bottle glass	clear		1	0.3
31ON667	12	12.02	N1030 E1000	0-40	Bottle glass	light green		1	0.4
31ON667	52	52.01	N1050 E1045	0-60	Shell, Oyster			5	5.2
31ON667	52	52.02	N1050 E1045	0-60	Shell, clam, Quahog			4	7.8
31ON667	22	22.02	N1030 E1060	0-40	Utd aboriginal ceramic, residual			1	1.4
31ON667	22	22.01	N1030 E1060	0-90	Shell, Oyster			33	61.5
31ON667	41	41.01	N1030 E1075	0-30	Shell, Oyster			3	3.0
31ON667	41	41.02	N1030 E1075	0-30	Nail, utd			2	2.3
31ON667	41	41.03	N1030 E1075	0-30	Utd aboriginal ceramic, residual			1	1.0
31ON667	65	65.02	N1045 E895	20-40	Fabric marked sherd			2	7.9
31ON667	65	65.01	N1045 E895	20-40	Hanover Cordmarked	grog/clay temper		2	46.2
31ON667	36	36.01	N1045 E1000	0-30	Hanover Fabric Impressed	grog/clay temper		1	1.7
31ON667	47	47.02	N1045 E1045	40-50	Utd decorated aboriginal ceramic	sand temper	possible curvilinear stamp	1	2.9
31ON667	47	47.01	N1045 E1045	20-30	Shell, Oyster			1	2.8
31ON667	14	14.01	N1060 E1000	10-40	Shell, Oyster			6	7.7
31ON667	14	14.02	N1060 E1000	10-40	Nail, utd			1	2.5
31ON667	14	14.03	N1060 E1000	10-40	Hanover Cordmarked	grog/clay temper		2	8.4
31ON667	31	31.03	N1060 E1045	0-60	Utd aboriginal ceramic, residual			1	1.6
31ON667	31	31.04	N1060 E1045	0-60	UID concretion			1	4.7
31ON667	31	31.02	N1060 E1045	0-60	Bottle glass	aqua		1	0.9
31ON667	31	31.01	N1060 E1045	0-60	Shell, Oyster			5	2.8
31ON667	29	29.01	N1060 E1060	0-100	Shell, Oyster			10	34.6
31ON667	29	29.03	N1060 E1060	20-50	Possible cultural material/lithic	quartz		1	0.3
31ON667	29	29.02	N1060 E1060	0-20	Nail, cut			1	9.0
31ON667	21	21.01	N1090 E970	0-30	Shell, Oyster			6	45.8
31ON667	11	11.01	N1090 E1000	20-40	Shell, Oyster				0.7
31ON667	28	28.02	N1090 E1030	70	Utd iron/steel			1	2.3
31ON667	28	28.01	N1090 E1030	10-30	Ironstone	flatware, rim		1	14.4
31ON667	13	13.01	N1120 E1000	20-40	Shell, Oyster			1	0.5

31ON667 Test Unit Data

Site #	FS #	Catalog #	TU	Strata	Level	Depth (cmbd)	Description	SecondaryAttribute	Comment	Count	Weight (g)
31ON667	71	71.06	1	1	1	10-20	Window glass			1	0.7
31ON667	71	71.1	1	1	1	10-20	Shell, Oyster				50.0
31ON667	71	71.02	1	1	1	10-20	Staple			1	5.4
31ON667	71	71.11	1	1	1	10-20	Shell, Oyster; left valve				12.0
31ON667	71	71.09	1	1	1	10-20	Possible cultural material	lithic	other	1	1.0
31ON667	71	71.07	1	1	1	10-20	Uid plastic			2	0.1
31ON667	71	71.05	1	1	1	10-20	Brick, Red			4	2.1
31ON667	71	71.03	1	1	1	10-20	Beer/soda pull tab			3	2.1
31ON667	71	71.01	1	1	1	10-20	Nail, wire			2	16.0
31ON667	71	71.04	1	1	1	10-20	Uid iron/steel			2	7.0
31ON667	71	71.08	1	1	1	10-20	Crayon			1	0.1
31ON667	72	72.03	1	1	2	20-30	Rimfire cartridge			1	14.9
31ON667	72	72.05	1	1	2	20-30	White Oak Fabric Impressed		shell temper	1	5.6
31ON667	72	72.04	1	1	2	20-30	Brick, Red			4	5.0
31ON667	72	72.06	1	1	2	20-30	Hanover Fabric Impressed		grog/clay temper	1	3.5
31ON667	72	72.02	1	1	2	20-30	Non-electrical wire			13	76.9
31ON667	72	72.07	1	1	2	20-30	Shell, Oyster		Possible barbwire		29.3
31ON667	72	72.01	1	1	2	20-30	Uid iron/steel			7	23.6
31ON667	72	72.08	1	1	2	20-30	Shell, clam, Quahog				4.6
31ON667	73	73.05	1	II	1	30-38	Nail, uid			2	10.8
31ON667	73	73.07	1	II	1	30-38	Shell, clam, Quahog				2.3
31ON667	73	73.01	1	II	1	30-38	Window glass			5	4.4
31ON667	73	73.07	1	II	1	30-38	Flake, Thinning		coastal plain chert	3	4.3
31ON667	73	73.07	1	II	1	30-38	White Oak Fabric Impressed		shell temper	1	5.4
31ON667	73	73.07	1	II	1	30-38	Brick, Red			12	68.3
31ON667	73	73.04	1	II	1	30-38	Uid iron/steel			1	8.1
31ON667	73	73.06	1	II	1	30-38	Eyelet/riever/grommet, iron/steel			1	0.1
31ON667	73	73.03	1	II	1	30-38	Whiteware		unknown, body	1	0.8
31ON667	73	73.02	1	II	1	30-38	Bottle glass		dear	1	0.5
31ON667	73	73.07	1	II	1	30-38	Shell, Oyster				138.7
31ON667	76	76.2	1	III	1	38-47	Possible cultural material	lithic	Rhyolite	2	1.0
31ON667	76	76.03	1	III	1	38-47	Window glass			5	5.8
31ON667	76	76.04	1	III	1	38-47	Bottle glass		aqua	3	8.0
31ON667	76	76.01	1	III	1	38-47	Nail, uid			8	53.7

31ON667 Test Unit Data

Sire #	FS #	Catalog #	TU	Strata	Level	Depth (cmbd)	Description	SecondaryAttribute	Comment	Count	Weight (g)
31ON667	76	76.22	1	III	1	38-47	Shell, Oyster; right valve				122.5
31ON667	76	76.05	1	III	1	38-47	Bottle glass	milk glass		1	2.1
31ON667	76	76.14	1	III	1	38-47	Mortar			1	3.6
31ON667	76	76.13	1	III	1	38-47	Brick, Red			285	840.0
31ON667	76	76.12	1	III	1	38-47	Charcoal				4.1
31ON667	76	76.11	1	III	1	38-47	Whiteware	unknown, body		1	3.5
31ON667	76	76.1	1	III	1	38-47	Whiteware	unknown, rim		1	0.9
31ON667	76	76.09	1	III	1	38-47	Urid rubber			1	0.6
31ON667	76	76.08	1	III	1	38-47	Urid plastic			1	0.2
31ON667	76	76.06	1	III	1	38-47	Bottle glass	clear		10	9.1
31ON667	76	76.21	1	III	1	38-47	Shell, clam, Quahog				25.6
31ON667	76	76.15	1	III	1	38-47	Hanover Fabric Impressed			5	20.0
31ON667	76	76.16	1	III	1	38-47	Urid aboriginal ceramic, residual	grog/clay temper		11	51.0
31ON667	76	76.17	1	III	1	38-47	Urid aboriginal ceramic, residual	grog/clay temper		14	8.0
31ON667	76	76.18	1	III	1	38-47	Animal bone		Vertebrata	7	1.4
31ON667	76	76.19	1	III	1	38-47	Possible cultural material/lithic	quartzite		5	3.0
31ON667	76	76.02	1	III	1	38-47	Urid iron/steel			44	19.4
31ON667	76	76.23	1	III	1	38-47	Shell, Oyster				760.0
31ON667	76	76.07	1	III	1	38-47	Pressed glass	clear		1	0.9
31ON667	77	77.05	1	III	2	47-57	Bottle glass, Solarized amethyst color		...CAL 0(?)...	1	0.4
31ON667	77	77.08	1	III	2	47-57	Shotgun shell		...REFEREE... (possible Peters)	1	0.4
31ON667	77	77.06	1	III	2	47-57	Bottle glass, Melted	clear		1	0.5
31ON667	77	77.1	1	III	2	47-57	Urid iron/steel			95	30.0
31ON667	77	77.11	1	III	2	47-57	Brick, Red			160	54.6
31ON667	77	77.12	1	III	2	47-57	Mortar			51	25.6
31ON667	77	77.02	1	III	2	47-57	Bottle glass, Solarized amethyst color			1	0.2
31ON667	77	77.49	1	III	2	47-57	Animal bone		Mammalia (medium)	1	1.7
31ON667	77	77.4	1	III	2	47-57	Bottle glass	light green		1	0.1
31ON667	77	77.14	1	III	2	47-57	Charcoal				4.6
31ON667	77	77.39	1	III	2	47-57	Bottle glass	milk glass		1	0.4
31ON667	77	77.13	1	III	2	47-57	Urid rubber			1	24.9
31ON667	77	77.26	1	III	2	47-57	Animal bone		Testudines	2	0.4
31ON667	77	77.16	1	III	2	47-57	Urid plastic			1	0.3
31ON667	77	77.17	1	III	2	47-57	White Oak Fabric Impressed	shell temper		2	2.3

31ON667 Test Unit Data

Sire #	FS #	Catalog #	TU	Strata	Level	Depth (cmbd)	Description	SecondaryAttribute	Comment	Count	Weight (g)
31ON667	77	77.18	1	III	2	47-57	Cape Fear Fabric Impressed	sand temper		2	2.6
31ON667	77	77.19	1	III	2	47-57	Utd aboriginal ceramic, residual, Cape Fear Series	sand temper		52	15.8
31ON667	77	77.09	1	III	2	47-57	Utd lead			1	1.9
31ON667	77	77.2	1	III	2	47-57	Hanover Fabric Impressed	grog/clay temper		2	1.7
31ON667	77	77.41	1	III	2	47-57	Bottle glass	cobalt blue		1	0.3
31ON667	77	77.22	1	III	2	47-57	Utd aboriginal ceramic, residual, Onslow Series	sand/grit temper		1	0.6
31ON667	77	77.21	1	III	2	47-57	Utd aboriginal ceramic, residual, Hanover Series	grog/clay temper		10	7.0
31ON667	77	77.25	1	III	2	47-57	Animal bone		Mammalia	3	1.0
31ON667	77	77.03	1	III	2	47-57	Bottle glass	clear		4	1.3
31ON667	77	77.27	1	III	2	47-57	Animal bone		Osteichthyes	2	0.3
31ON667	77	77.28	1	III	2	47-57	Shell, gastropod				1.2
31ON667	77	77.29	1	III	2	47-57	Shell, clam, Quahog				7.9
31ON667	77	77.3	1	III	2	47-57	Utd shell				0.6
31ON667	77	77.31	1	III	2	47-57	Shell, Oyster				1376.5
31ON667	77	77.24	1	III	2	47-57	Animal bone		vertebrata (burned)	2	0.2
31ON667	77	77.04	1	III	2	47-57	Bottle glass	amber		1	0.3
31ON667	77	77.01	1	III	2	47-57	Window glass			1	0.1
31ON667	77	77.15	1	III	2	47-57	Wood				3.2
31ON667	77	77.23	1	III	2	47-57	Animal bone		vertebrata	3	0.3
31ON667	77	77.36	1	III	2	47-57	Window glass			8	9.8
31ON667	77	77.53	1	III	2	47-57	Shell, Oyster				447.7
31ON667	77	77.54	1	III	2	47-57	Shell, Oyster; right valve				198.3
31ON667	77	77.55	1	III	2	47-57	Shell, Oyster; left valve				75.9
31ON667	77	77.56	1	III	2	47-57	Shell, clam, Quahog				21.5
31ON667	77	77.47	1	III	2	47-57	Refined earthenware, uid	unknown, body		1	0.4
31ON667	77	77.52	1	III	2	47-57	Cape Fear Plain	sand temper		3	4.6
31ON667	77	77.5	1	III	2	47-57	Hanover Plain	grog/clay temper		2	5.8
31ON667	77	77.48	1	III	2	47-57	Animal bone		Mammalia (large)	1	13.4
31ON667	77	77.35	1	III	2	47-57	Mortar			8	22.7
31ON667	77	77.42	1	III	2	47-57	Very thin clear curved glass, globe or bottle	clear		2	0.7
31ON667	77	77.07	1	III	2	47-57	Very thin clear curved glass, globe or bottle	clear		1	0.1
31ON667	77	77.34	1	III	2	47-57	Nail, wire			13	34.9
31ON667	77	77.46	1	III	2	47-57	Slipware, Utd patterned	unknown, body		1	0.7
31ON667	77	77.45	1	III	2	47-57	Whiteware, brown underglaze stippled trans. Pr.	unknown, body		1	0.6

31ON667 Test Unit Data

Sire #	FS #	Catalog #	TU	Strata	Level	Depth (cmbd)	Description	SecondaryAttribute	Comment	Count	Weight (g)
31ON667	77	77.33	1	III	2	47.57	Nail, uid			13	80.6
31ON667	77	77.38	1	III	2	47.57	Bottle glass	aqua		2	2.1
31ON667	77	77.51	1	III	2	47.57	Cape Fear Fabric Impressed	sand temper		1	4.5
31ON667	77	77.37	1	III	2	47.57	Bottle glass	dear		5	2.2
31ON667	77	77.44	1	III	2	47.57	Ironstone	unknown, body		2	2.9
31ON667	77	77.43	1	III	2	47.57	Globe or chimney, glass	dear		1	0.7
31ON667	77	77.32	1	III	2	47.57	Brick, Red			68	248.0
31ON667	79	79.19	1	III	3	57.67	Canning jar lids/rings		zinc	2	0.5
31ON667	79	79.09	1	III	3	57.67	Window glass			2	16.6
31ON667	79	79.09	1	III	3	57.67	Animal bone		testudines	2	0.1
31ON667	79	79.1	1	III	3	57.67	Uid aboriginal ceramic, residual, Onslow Series	grit temper		2	2.1
31ON667	79	79.15	1	III	3	57.67	Cape Fear Plain	sand temper		1	1.8
31ON667	79	79.03	1	III	3	57.67	Nail, wire			4	38.0
31ON667	79	79.05	1	III	3	57.67	Brick, Red			36	315.4
31ON667	79	79.06	1	III	3	57.67	Whiteware, brown underglaze strippled trans. Pr.	flatware, base		1	3.9
31ON667	79	79.1	1	III	3	57.67	Bottle glass, Embossed letters on panel bottle	amber	Hicks' Capudine	1	8.2
31ON667	79	79.08	1	III	3	57.67	Mortar			2	9.5
31ON667	79	79.14	1	III	3	57.67	Cape Fear Fabric Impressed	sand temper		2	11.3
31ON667	79	79.01	1	III	3	57.67	Uid metal, non iron/steel			1	27.8
31ON667	79	79.11	1	III	3	57.67	Bottle glass	amber		1	3.3
31ON667	79	79.13	1	III	3	57.67	Hanover Fabric Impressed	grog/clay temper		1	2.6
31ON667	79	79.11	1	III	3	57.67	Uid aboriginal ceramic, residual, Hanover Series	grog/clay temper		3	5.0
31ON667	79	79.02	1	III	3	57.67	Nail, uid			17	36.6
31ON667	79	79.16	1	III	3	57.67	Shell, clam, Quahog		2 hinges		51.2
31ON667	79	79.12	1	III	3	57.67	Bottle glass	dear		5	9.7
31ON667	79	79.17	1	III	3	57.67	Shell, Oyster				160.1
31ON667	79	79.18	1	III	3	57.67	Shell, Oyster; left valve				152.3
31ON667	79	79.19	1	III	3	57.67	Shell, Oyster; right valve				181.1
31ON667	79	79.07	1	III	3	57.67	Whiteware, miscellaneous colors u/g strippled tr. Pr.	unknown, body		1	3.4
31ON667	79	79.28	1	III	3	57.67	Uid aboriginal ceramic, residual			6	3.7
31ON667	79	79.05	1	III	3	57.67	Seed, other		charred	2	0.1
31ON667	79	79.04	1	III	3	57.67	Charcoal				5.5
31ON667	79	79.03	1	III	3	57.67	Shell, clam, Quahog				12.0
31ON667	79	79.02	1	III	3	57.67	Wood				2.0

31ON667 Test Unit Data

Sire #	FS #	Catalog #	TU	Strata	Level	Depth (cmbd)	Description	SecondaryAttribute	Comment	Count	Weight (g)
31ON667	79	79.01	1	III	3	57-67	Shell, Oyster				1820.0
31ON667	79	79.08	1	III	3	57-67	Animal bone		large mammal	2	1.6
31ON667	79	79.04	1	III	3	57-67	Uid iron/steel			11	39.0
31ON667	79	79.17	1	III	3	57-67	Bottle glass, Solarized amethyst color			3	2.1
31ON667	79	79.12	1	III	3	57-67	Uid aboriginal ceramic, residual, Cape Fear Series	sand temper		1	1.7
31ON667	79	79.27	1	III	3	57-67	Flake, Unspecified	Rhyolite		1	1.0
31ON667	79	79.26	1	III	3	57-67	Brick, Red			129	49.2
31ON667	79	79.25	1	III	3	57-67	Debitage	quartz		1	3.1
31ON667	79	79.24	1	III	3	57-67	Mortar			46	27.3
31ON667	79	79.07	1	III	3	57-67	Animal bone		mammal	2	0.5
31ON667	79	79.23	1	III	3	57-67	White ware	unknown, base		1	1.3
31ON667	79	79.2	1	III	3	57-67	Lead roofing shields			2	8.2
31ON667	79	79.06	1	III	3	57-67	Nail, uid			10	5.2
31ON667	79	79.18	1	III	3	57-67	Uid lead		looks like lead hardware cloth/grate	1	1.5
31ON667	79	79.16	1	III	3	57-67	Bottle glass	aqua		4	2.3
31ON667	79	79.15	1	III	3	57-67	Graphite, uid		block with raised line around edge and groove	1	3.3
31ON667	79	79.21	1	III	3	57-67	Bottle glass	clear		3	0.9
31ON667	79	79.14	1	III	3	57-67	Uid iron/steel			44	10.1
31ON667	79	79.22	1	III	3	57-67	Window glass			1	0.3
31ON667	79	79.13	1	III	3	57-67	Uid leather		two perforations near edge, possible shoe part	1	0.2
31ON667	85	85.01	1	III	3	62, North Wall	Uid iron/steel			1	82.5
31ON667	81	81.03	1	IV	1	67-77	Bottle glass, Solarized amethyst color			1	0.8
31ON667	81	81.22	1	IV	1	67-77	Peach pit		charred	5	1.4
31ON667	81	81.16	1	IV	1	67-77	White ware, Decal	unknown, body	polychrome floral pattern	1	1.7
31ON667	81	81.25	1	IV	1	67-77	Uid aboriginal ceramic, residual	grog/clay temper	Hanover series	16	9.8
31ON667	81	81.04	1	IV	1	67-77	Bottle glass	amber		3	4.5
31ON667	81	81.23	1	IV	1	67-77	Wood				0.6
31ON667	81	81.21	1	IV	1	67-77	Charcoal				8.4
31ON667	81	81.2	1	IV	1	67-77	Mortar			2	1.2
31ON667	81	81.19	1	IV	1	67-77	Uid metal, non iron/steel			1	10.3
31ON667	81	81.17	1	IV	1	67-77	White ware, scalloped rim impressed curved edgeware	flatware, rim		1	2.6
31ON667	81	81.24	1	IV	1	67-77	Hanover Fabric Impressed	grog/clay temper		5	16.0
31ON667	81	81.15	1	IV	1	67-77	Uid iron/steel			46	65.0
31ON667	81	81.28	1	IV	1	67-77	Cape Fear Plain	sand temper		4	9.1

31ON667 Test Unit Data

Sire #	FS #	Catalog #	TU	Strata	Level	Depth (cmbd)	Description	SecondaryAttribute	Comment	Count	Weight (g)
31ON667	81	81.18	1	IV	1	67-77	Whiteware, blue underglaze transfer print	flatware, rim		1	5.0
31ON667	81	81.3	1	IV	1	67-77	Shell, clam, Quahog				34.8
31ON667	81	81.29	1	IV	1	67-77	Utd aboriginal ceramic, residual	sand temper	Cape Fear series	7	6.1
31ON667	81	81.01	1	IV	1	67-77	Window glass			5	10.8
31ON667	81	81.35	1	IV	1	67-77	Animal bone		Vertebrate (burned)	1	0.1
31ON667	81	81.34	1	IV	1	67-77	Animal bone		Mammalia (small, burned)	1	0.2
31ON667	81	81.33	1	IV	1	67-77	Shell, Oyster				320.5
31ON667	81	81.32	1	IV	1	67-77	Shell, Oyster; right valve				24.2
31ON667	81	81.31	1	IV	1	67-77	Shell, Oyster; left valve				26.6
31ON667	81	81.14	1	IV	1	67-77	Nail, wire			4	25.9
31ON667	81	81.13	1	IV	1	67-77	Nail, utd			12	34.4
31ON667	81	81.12	1	IV	1	67-77	Utd plastic		poss. Toy gear	1	0.8
31ON667	81	81.11	1	IV	1	67-77	Button, glass			1	0.4
31ON667	81	81.02	1	IV	1	67-77	Bottle glass	clear		7	7.2
31ON667	81	81.09	1	IV	1	67-77	Bead, glass; tubular	clear		1	3.5
31ON667	81	81.08	1	IV	1	67-77	Bottle glass, Melted	clear		3	22.2
31ON667	81	81.07	1	IV	1	67-77	Very thin clear curved glass, globe or bottle	clear		4	0.8
31ON667	81	81.06	1	IV	1	67-77	Bottle glass, Machine made	clear		1	3.1
31ON667	81	81.05	1	IV	1	67-77	Bottle glass	aqua		1	1.3
31ON667	81	81.26	1	IV	1	67-77	Utd aboriginal ceramic, residual	shell temper	White Oak series	1	1.6
31ON667	81	81.1	1	IV	1	67-77	Brick, Red			17	79.1
31ON667	81	81.27	1	IV	1	67-77	Cape Fear Fabric Impressed	sand temper		4	5.8
31ON667	83	83.06	1	IV	2	77-87	Very thin clear curved glass, globe or bottle	clear		1	0.1
31ON667	83	83.04	1	IV	2	77-87	Tableware, Goblet rim	amethyst		1	0.6
31ON667	83	83.02	1	IV	2	77-87	Brick, Red			3	4.2
31ON667	83	83.03	1	IV	2	77-87	Bottle glass	amethyst		1	0.1
31ON667	83	83.09	1	IV	2	77-87	Hanover Fabric Impressed	grog/clay temper		2	19.5
31ON667	83	83.08	1	IV	2	77-87	White Oak Fabric Impressed	shell temper		3	17.6
31ON667	83	83.07	1	IV	2	77-87	Shell, Oyster				23.5
31ON667	83	83.05	1	IV	2	77-87	Bottle base	clear		1	0.9
31ON667	83	83.01	1	IV	2	77-87	Nail, utd			2	16.2
31ON667	83	83.1	1	IV	2	77-87	Utd aboriginal ceramic, residual			8	7.8
31ON667	84	84.02	1	V	1	87-97	White Oak Fabric Impressed	shell temper		4	28.9
31ON667	84	84.01	1	V	1	87-97	Very thin clear curved glass, globe or bottle	clear		1	0.1

31ON667 Test Unit Data

Site #	FS #	Catalog #	TU	Strata	Level	Depth (cmbd)	Description	SecondaryAttribute	Comment	Count	Weight (g)
31ON667	84	84.03	1	V	1	1 87-97	Cape Fear Fabric Impressed	sand temper		1	58.3
31ON667	84	84.04	1	V	1	1 87-97	Uid aboriginal ceramic, residual	sand temper	Cape Fear series	1	2.9
31ON667	74	74.08	2	I	1	1 10-20	Animal bone		Mammalia (small to medium)	1	0.7
31ON667	74	74.07	2	I	1	1 10-20	Uid aboriginal ceramic, residual, Cape Fear Series	sand temper		17	12.3
31ON667	74	74.05	2	I	1	1 10-20	Cape Fear Fabric Impressed	sand temper		2	5.5
31ON667	74	74.04	2	I	1	1 10-20	Bottle glass	dear		2	0.6
31ON667	74	74.03	2	I	1	1 10-20	Mortar			1	4.1
31ON667	74	74.09	2	I	1	1 10-20	Shell, clam, Quahog				7.2
31ON667	74	74.1	2	I	1	1 10-20	Shell, Oyster; right valve				16.3
31ON667	74	74.11	2	I	1	1 10-20	Shell, Oyster				136.3
31ON667	74	74.02	2	I	1	1 10-20	Brick, Red			4	2.9
31ON667	74	74.01	2	I	1	1 10-20	Uid iron/steel			1	2.6
31ON667	74	74.06	2	I	1	1 10-20	Hanover Fabric Impressed	grog/clay temper		2	2.8
31ON667	75	75.06	2	I	2	2 20-29	Shell, Oyster; left valve				26.8
31ON667	75	75.02	2	I	2	2 20-29	Hanover Fabric Impressed	grog/clay temper		1	5.3
31ON667	75	75.03	2	I	2	2 20-29	Cape Fear Fabric Impressed, rim	sand temper	Impression is exterior, interior, and along rim	1	4.7
31ON667	75	75.01	2	I	2	2 20-29	Uid iron/steel			1	6.0
31ON667	75	75.04	2	I	2	2 20-29	Uid aboriginal ceramic, residual, Cape Fear Series	sand temper		2	6.3
31ON667	75	75.07	2	I	2	2 20-29	Shell, Oyster				40.7
31ON667	75	75.05	2	I	2	2 20-29	Shell, clam, Quahog				22.8
31ON667	102		2	II	1		Shell, uid		discarded		69000.0
31ON667	78	78.01	2	II	1	1 29-39	Uid iron/steel			9	5.9
31ON667	78	78.09	2	II	1	1 29-39	Animal bone		Mammalia (small)	8	2.7
31ON667	78	78.07	2	II	1	1 29-39	Animal bone		Vertebrata	9	0.3
31ON667	78	78.03	2	II	1	1 29-39	Hanover Fabric Impressed	grog/clay temper		9	50.3
31ON667	78	78.04	2	II	1	1 29-39	Uid aboriginal ceramic, residual, Hanover Series	grog/clay temper		1	0.7
31ON667	78	78.05	2	II	1	1 29-39	Cape Fear Fabric Impressed	sand temper		1	2.9
31ON667	78	78.06	2	II	1	1 29-39	Cape Fear Plain	sand temper		2	3.8
31ON667	78	78.08	2	II	1	1 29-39	Animal bone		Mammalia (medium)	5	5.0
31ON667	78	78.1	2	II	1	1 29-39	Animal bone		Testudines	7	5.5
31ON667	78	78.11	2	II	1	1 29-39	Uid shell				1.2
31ON667	78	78.02	2	II	1	1 29-39	Charcoal				0.6
31ON667	102		2	II	2		Shell, uid		discarded		48300.0
31ON667	80	80.03	2	II	2	2 39-49	Animal bone		Mammalia (medium)	1	2.5

31ON667 Test Unit Data

Sire #	FS #	Catalog #	TU	Strata	Level	Depth (cmbd)	Description	SecondaryAttribute	Comment	Count	Weight (g)
31ON667	80	80.02	2	II	2	39-49	Cape Fear Fabric Impressed	sand temper		1	3.5
31ON667	80	80.04	2	II	2	39-49	Animal bone			1	0.3
31ON667	80	80.01	2	II	2	39-49	Hanover Fabric Impressed	grog/clay temper		1	10.3
31ON667	102		2	II	3		Shell, uid		discarded		12100.0
31ON667	82	82.01	2	II	3	49-59	Hanover Fabric Impressed	grog/clay temper		7	28.1
31ON667	82	82.02	2	II	3	49-59	Hanover Fabric Impressed, rim	grog/clay temper		1	8.9
31ON667	82	82.03	2	II	3	49-59	Animal bone		Vertebrata	11	4.0
31ON667	82	82.04	2	II	3	49-59	Animal bone		Mammalia (medium)	15	14.0
31ON667	82	82.05	2	II	3	49-59	Animal bone		Odocoileus virginianus	1	2.4
31ON667	82	82.06	2	II	3	49-59	Animal bone		Testudines	2	2.3
31ON667	82	82.07	2	II	3	49-59	Uid shell				1.2
31ON667	86	86.02	3	I	1	10-20	Cape Fear Fabric Impressed	sand temper		1	5.3
31ON667	86	86.03	3	I	1	10-20	Uid aboriginal ceramic, residual, Cape Fear Series	sand temper		1	0.9
31ON667	86	86.01	3	I	1	10-20	Uid tobacco pipe fragment	sand temper	Aboriginal pipe fragment	1	1.5
31ON667	87	87.02	3	II	1	20-30	Uid aboriginal ceramic, residual, Cape Fear Series	sand temper		10	17.3
31ON667	87	87.03	3	II	1	20-30	Possible cultural material/lithic	other		2	1.1
31ON667	87	87.01	3	II	1	20-30	Cape Fear Fabric Impressed	sand temper		6	16.7
31ON667	88	88.01	3	II	2	30-40	Cape Fear Fabric Impressed	sand temper		8	81.8
31ON667	88	88.02	3	II	2	30-40	Possible cultural material/lithic	quartzite		2	0.2
31ON667	89	89.01	4	I	1	10-20	Bottle glass	clear		10	8.7
31ON667	89	89.04	4	I	1	10-20	Uid aboriginal ceramic, residual, Hanover Series	grog/clay temper		2	2.8
31ON667	89	89.08	4	I	1	10-20	Shell, Oyster				169.2
31ON667	89	89.02	4	I	1	10-20	Mortar			1	20.3
31ON667	89	89.05	4	I	1	10-20	Shell, clam, Quahog				15.2
31ON667	89	89.06	4	I	1	10-20	Shell, Oyster; left valve				63.0
31ON667	89	89.07	4	I	1	10-20	Shell, Oyster; right valve				31.4
31ON667	89	89.03	4	I	1	10-20	Brick, Red			88	560.0
31ON667	90	90.08	4	I	2	20-29	Shell, Oyster				148.7
31ON667	90	90.07	4	I	2	20-29	Turtle shell		Testudines	2	0.3
31ON667	90	90.06	4	I	2	20-29	White Oak Fabric Impressed	shell temper		1	3.4
31ON667	90	90.04	4	I	2	20-29	Window glass			2	1.2
31ON667	90	90.03	4	I	2	20-29	Brick, Red			113	269.8
31ON667	90	90.09	4	I	2	20-29	Shell, clam, Quahog				2.7
31ON667	90	90.02	4	I	2	20-29	Bottle glass	clear		2	1.2

31ON667 Test Unit Data

Sire #	FS #	Catalog #	TU	Strata	Level	Depth (cmbd)	Description	SecondaryAttribute	Comment	Count	Weight (g)
31ON667	90	90.01	4	I	2	20:29	Uid iron/steel			4	4.6
31ON667	90	90.05	4	I	2	20:29	Mortar			2	11.2
31ON667	93	93.03	5	I	1	11:21	Uid aboriginal ceramic, residual, Onslow Series	sand/grit temper		1	2.6
31ON667	93	93.01	5	I	1	11:21	Cape Fear Plain	sand temper		1	8.0
31ON667	93	93.02	5	I	1	11:21	Hanover Plain	grog/clay temper	UID surface treatment	1	6.9
31ON667	94	94.04	5	I	2	21:31	Shell, Oyster				9.6
31ON667	94	94.03	5	I	2	21:31	Uid aboriginal ceramic, residual	grog/clay temper		19	15.4
31ON667	94	94.02	5	I	2	21:31	Hanover Plain	grog/clay temper		1	2.4
31ON667	94	94.01	5	I	2	21:31	Hanover Fabric Impressed	grog/clay temper		7	14.2
31ON667	94	94.05	5	I	2	21:31	Possible cultural material	Rhyolite		2	1.6
31ON667	95	95.05	5	I	3	31:41	Possible cultural material	Rhyolite		1	0.4
31ON667	95	95.01	5	I	3	31:41	White Oak Fabric Impressed	shell temper		1	5.9
31ON667	95	95.02	5	I	3	31:41	Uid aboriginal ceramic, residual, Cape Fear Series	sand temper		7	9.7
31ON667	95	95.04	5	I	3	31:41	Possible cultural material	other		3	4.0
31ON667	95	95.03	5	I	3	31:41	Shell, Oyster				3.5
31ON667	96	96.02	5	I	4	41:51	Uid aboriginal ceramic, residual, Onslow Series	sand/grit temper		1	1.3
31ON667	96	96.03	5	I	4	41:51	Uid aboriginal ceramic, residual, Cape Fear Series	sand temper		2	3.9
31ON667	96	96.04	5	I	4	41:51	Possible cultural material	Rhyolite		1	0.2
31ON667	96	96.05	5	I	4	41:51	Shell, Oyster				85.0
31ON667	96	96.01	5	I	4	41:51	Hanover Fabric Impressed	grog/clay temper		2	8.7
31ON667	97	97.02	5	II	1	51:61	Shell, Oyster				66.7
31ON667	97	97.01	5	II	1	51:61	Hanover Fabric Impressed	grog/clay temper		1	17.6
31ON667	98	98.03	6	I	1	10:20	Window glass			1	5.5
31ON667	98	98.09	6	I	1	10:20	Cape Fear Plain	sand temper		1	2.6
31ON667	98	98.08	6	I	1	10:20	Hanover Fabric Impressed	grog/clay temper		10	17.3
31ON667	98	98.07	6	I	1	10:20	Brick, Red			5	32.5
31ON667	98	98.06	6	I	1	10:20	Cinder/dinker			1	1.8
31ON667	98	98.05	6	I	1	10:20	Mortar			3	10.6
31ON667	98		6	I	1	10:20	Shell, uid		discarded		3100.0
31ON667	98	98.02	6	I	1	10:20	Uid iron/steel			2	9.2
31ON667	98	98.01	6	I	1	10:20	US Nickel, coin		1989	1	4.9
31ON667	98	98.04	6	I	1	10:20	Animal bone			1	0.2
31ON667	99	99.04	6	II	1	20:30	White Oak Fabric Impressed	shell temper		3	8.8
31ON667	99	99.03	6	II	1	20:30	Animal bone			4	2.5

31ON667 Test Unit Data

Sire #	FS #	Catalog #	TU	Strata	Level	Depth (cmbd)	Description	SecondaryAttribute	Comment	Count	Weight (g)
31ON667	99	99.02	6	II	1	20-30	Flake, Thinning	quartzite		1	1.6
31ON667	99	99.06	6	II	1	20-30	Hanover Fabric Impressed	grog/clay temper		9	32.6
31ON667	99	99.01	6	II	1	20-30	Flake, Thinning	quartz		1	0.6
31ON667	99	99.07	6	II	1	20-30	Hanover Cordmarked	grog/clay temper		2	4.9
31ON667	99	99.08	6	II	1	20-30	Hanover uid decorated	grog/clay temper		4	10.2
31ON667	99	99.05	6	II	1	20-30	Uid aboriginal ceramic, residual			12	14.6
31ON667	99		6	II	1	20-30	Shell, uid		discarded		10100.0
31ON667	100	100.03	6	II	2	30-32	Hanover Fabric Impressed	grog/clay temper		12	45.9
31ON667	100	100.06	6	II	2	30-32	Cape Fear Fabric Impressed	sand temper		1	1.5
31ON667	100	100.04	6	II	2	30-32	Hanover uid decorated	grog/clay temper		2	2.4
31ON667	100		6	II	2	30-32	Shell, uid		discarded		3600.0
31ON667	100	100.02	6	II	2	30-32	Flake, Thinning	Rhyolite		3	1.3
31ON667	100	100.01	6	II	2	30-32	Animal bone			7	2.1
31ON667	100	100.05	6	II	2	30-32	Uid aboriginal ceramic, residual			2	1.5
31ON667	101	101.05	6	III	1	32-40	Cape Fear Fabric Impressed	sand temper		1	2.3
31ON667	101	101.03	6	III	1	32-40	Uid aboriginal ceramic, residual			1	1.2
31ON667	101	101.02	6	III	1	32-40	Hanover Fabric Impressed, rim	grog/clay temper	flat rim, marked on top	1	12.7
31ON667	101	101.04	6	III	1	32-40	Hanover Plain	grog/clay temper	possible podal support or lug	1	2.1
31ON667	101		6	III	1	32-40	Shell, uid		discarded		2600.0
31ON667	101	101.01	6	III	1	32-40	Hanover Fabric Impressed	grog/clay temper		11	117.8
31ON667	102	102.04	6	III	2	40-50	Cape Fear Fabric Impressed	sand temper		1	1.9
31ON667	102	102.03	6	III	2	40-50	Hanover Plain, rim	grog/clay temper	possible rim with handle	1	2.3
31ON667	102	102.02	6	III	2	40-50	Hanover Plain	grog/clay temper	possible incised line/punctate	1	2.4
31ON667	102	102.01	6	III	2	40-50	Hanover Fabric Impressed	grog/clay temper		5	83.0
31ON667	102	102.05	6	III	2	40-50	Uid aboriginal ceramic, residual			5	2.7
31ON667	103	103.01	6	III	3	50-60	Hanover Fabric Impressed	grog/clay temper		5	18.0
31ON667	103	103.02	6	III	3	50-60	Hanover Fabric Impressed, rim	grog/clay temper	excavate rim, flat top, marked on rim	1	1.1