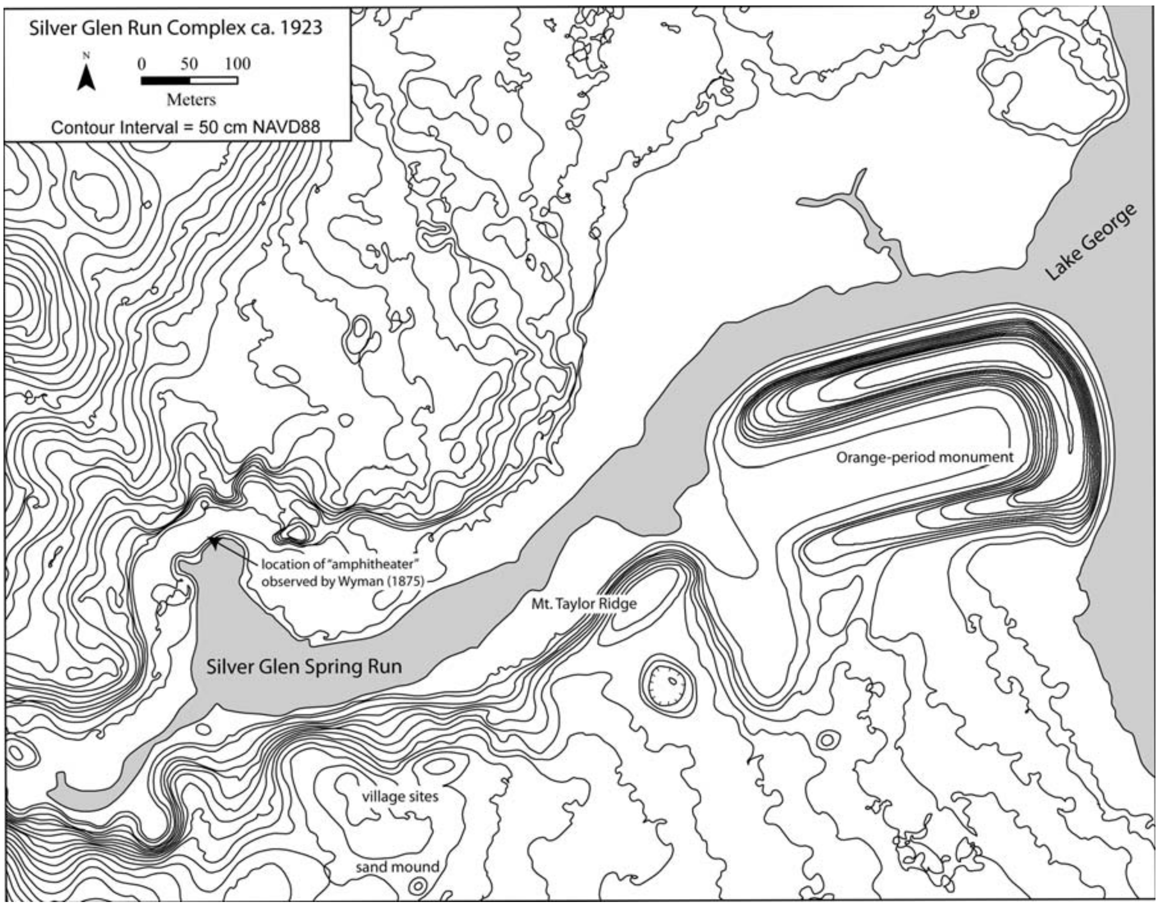
ST. JOHNS ARCHAEOLOGICAL FIELD SCHOOL 2007-2010

SILVER GLEN RUN (8LA1)



Kenneth E. Sassaman, Zackary I. Gilmore, and Asa R. Randall

Technical Report 12
Laboratory of Southeastern Archaeology
Department of Anthropology
University of Florida

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Cover map of the reconstructed landscape of Silver Glen Run produced by Asa R. Randall

Management Summary

Since 2007, faculty and students of the St. Johns Archaeological Field School, Department of Anthropology, University of Florida have been conducting field investigations at pre-Columbian sites along Silver Glen Run in Lake and Marion counties, Florida. The sites are located on property of the Juniper Club of Louisville, Kentucky, hosts of the field school and stewards of an archaeological record spanning thousands of years of intensive occupation. Among the sites on the property are several shell mounds, at least one sand mound, and innumerable subsurface remains dating from the early Holocene.

Field school investigations to date have involved reconnaissance survey of Juniper Club land fronting Silver Glen Run and test excavations at several areas within the site on record for this location (8LA1/8MR3601). The eastern aspect of the site (8LA1-East) once housed a massive U-shaped mound of shell and associated archaeological remains at the confluence of Silver Glen Run and Lake George. Although the mound was mined for shell in 1923, subsurface remnants preserve the footprint and basal strata of the deposit. A program of coring, ground-penetrating radar (GPR), and stratigraphic excavation has helped to document the footprint of the mound's south ridge, but its counterpart on the north side of the mound has been difficult to characterize due to advanced subsurface disturbances associated with mining. Observed through GPR survey along the south ridge are arcuate arrays of subsurface shell deposits, possible evidence for circular settlements akin to coastal shell rings. The lack of definitive evidence for domestic architecture and associated deposits (i.e., vertebrate fauna, food-processing technology) among these arrays may be merely sample error, but perhaps the area was utilized for purposes other than daily living. Elaborately decorated pottery of the Orange tradition (ca. 4600-3600 years ago) attests to specialized (most likely large social) activities along the north ridge of the mound. Pottery from the south ridge is generally plain and infrequent, and appears to date a century or two later than the pottery from the north ridge. Irrespective of the practices responsible for the basal deposits of the south ridge, whole shell was deposited over the ground surface in large quantities, suggesting that the ridge was constructed deliberately over a short timeframe.

The western aspect of 8LA1 (8LA1-West) includes the post-mining remnants of a 200-m-long shell ridge dating to the middle part of the Mount Taylor period (ca. 6300-5750 years ago). Surviving today are subsurface deposits up to one meter deep, as well as mining escarpments averaging about two meters high. At three locations along the ridge, field school students profiled escarpments to document the above-ground layers and then excavated below the mining pit to expose basal deposits. Revealed in all exposures were complex sequences of basal midden capped by brown sand and then successive, relatively thin strata of crushed shell with artifacts, shallow pits, vertebrate fauna, charcoal and ash, paleofeces, and other indications of domestic living. A 6-m-long trench in one location enabled us to observe stratigraphic relationships between primary and secondary deposits, between presumed house platforms and associated refuse, and between emplaced sand and shell. Observations to date suggest that the Mount Taylor ridge formed primarily through repeated occupation, although the emplacement of sand

and clean shell, and occasional interment of subadult humans, points to activities other than domestic living.

A relatively small ridge nose to the west of Locus A contains evidence for intensive activity over the Mount Taylor and Orange periods. Reconnaissance survey in what is known as Locus B showed this portion of the site to be fully intact, with shell-bearing deposits extending well below the surface. Extensive testing, including block excavation, shows that Locus B contains the stratified remains of three successive but fundamentally different episodes of site use. At the base is a Mount Taylor component indicative of repeated occupations dating from ca. 5750 to 4600 cal B.P., followed by a period of intensive pit digging ca. 4500-4000 cal B.P., and finally a capping event ca. 4000-3800 cal B.P. involving the emplacement of clean shell over the pit-pocked surface. The first use of pottery (Orange Plain) coincides with pit digging. The shell capping event, however, was accompanied by the deposition of incised Orange pottery of the Tick Island variety—a rare curvilinear and zoned incised punctate type. Evidence for domestic activities dating to either Orange component has proved elusive. Results of GPR survey conducted in 2011 will be detailed in a later report, but of note is an arcuate pattern of subsurface features not unlike that observed at 8LA1-East.

Field school investigations are ongoing. The results of work conducted over the first four years of the project (2007-2010) are reported here in full with exception of work in Locus C, at the western end of 8LA1-West. Testing in this location did not begin in earnest until 2011. Sufficient data are available to hypothesize that Locus C was a St. Johns II period village (ca. 800-600 years ago) with an arcuate array of houses and associated features (hearths, pits) surrounding a small central plaza devoid of shell. Fronting this village along the spring run is a thick deposit of secondary refuse including ample pottery, vertebrate and invertebrate faunal remains, charcoal and ash, and other evidence of intensive habitation overlooking the spring pool. Along with undocumented shell mounds and other deposits elsewhere on Juniper Club property, Locus C provides ample opportunity for continued investigations well into the future. Recommendations for additional work are provided in the back of this report.

Acknowledgments

Since 2007, the St. Johns Archaeological Field School has been enabled through the support and generosity of the Juniper Club of Louisville, Kentucky. I was introduced to the club by member Dr. James Gay, who reached out to the University of Florida in the Fall of 2005 for a speaker for the annual Main Camp, held every January at the club's property along Silver Glen Run in Lake and Marion counties, Florida. By stroke of good fortune, the request landed on my desk, and I invited Dr. Gay and his wife for a visit to Gainesville. At that meeting Dr. Gay related his interest in providing club members with a lecture on the archaeology of the region, and he shared with me what he knew about sites on the club property. With an active program of archaeological research in the region, I agreed without hesitancy to visit Main Camp that January. Arriving early the day of the lecture, I was treated to a tour of some of the archaeological sites on the property, including remnants of a shell ridge, surface shell deposits spanning several acres, and an intact sand mound. I also met then-President Dr. Thomas Reichard, who agreed to take a proposal for a field school to the club's Board of Directors for consideration. The combination of archaeological sites in need of testing and onsite facilities for housing 15 students for five weeks was a godsend for a field school program that had run its course at Hontoon Island after five good years. It was not until I got back to Gainesville and delved into the literature of Silver Glen that I fully understood the significance of the sites on Juniper Club property and their potential for research. Four years of field schools at the Juniper Club have substantiated this potential manifold.

Visits to Main Camp to report on the results of the previous summer have become an annual tradition, as have visits to the summer field school by club members. In these and other opportunities to share what we have learned, my students and I have appreciated the sincere and enduring interest club members have in its land and its history, and we respect that enormously. A great debt of thanks is owed to all Juniper Club members for their generosity, support, and enthusiasm for what we do. The trust they bestow upon us in using their clubhouse and other resources, and in digging into their land is truly humbling. Special thanks go to Gene Nelson, Resident Manager, for not only tolerating the annual invasion of a hoard of students, but also teaching us about the land and its history, not to mention backfilling our excavation units with heavy equipment. Gene's assistants over the years, most recently Tony, have helped in more ways that we can count.

Our thanks to Richard Estabrook of the Florida Public Archaeology Network (FPAN) for helping field school go high-tech. On three occasions Rich brought FPAN's Ground Penetrating Radar (GPR) equipment to the site to survey for subsurface anomalies and to show the students how we can learn about the anatomy of sites without digging them up.

Back in Gainesville the field school benefited from the administrative assistance of Karen Jones and her staff of the Department of Anthropology, and former chair Allan Burns. The department's blue van was indispensable. Additional material support for the field school has been provided by the Hyatt and Cici Brown Endowment for Florida Archaeology.

My deepest thanks go to Graduate Teaching Assistants for the field school: Asa Randall, Zack Gilmore, Neill Wallis, Paulette McFadden, Jason O'Donoughue, Meggan Blessing, and Elyse Anderson. Of course, the dozens of field school students who did nearly all the physical work deserve special recognition, so we include here photos and the names of all students in the three years of full-blown field schools (pp. vii-ix). In addition, the 2009 field season that invloved focused excavation at Locus B with a veteran squad benefited from the capable help of Julie Byrd of Florida State University, Erik Johanson of the University of Tennessee, and Alisa French of the University of Florida.

2007 Crew. Top row (left to right): David Echeverry, Kira Beam, Neill Wallis, Ann Carvalho, Scott Major. Middle row (left to right): Stacie Sachs, Sheila Rojas, Elizabeth Olson, Josh Robinson, Raymond Wright. Bottom row (left to right): Asa Randall, Riefler Lee, Jeff Brzezinski, Jennifer Pietarila (not pictured: Randi Wilson).

2008 Crew. Top two rows (left to right): Alex Taylor, Matt McCarthy, Aleksei Moskvin, Natan Bastoky, Daniel Tobin, Patrick Donery, Asa Randall, Fernando Luque, Meggan Blessing, Zack Gilmore. Middle row (left to right): Brandon Deegan, Amanda Fisher, Christian Davis, Moriah Goldfarb. Bottom row (left to right): Maranda Kles, Breann DeChellis, Heather Handegard, Catherine Aust, Jason Whitney (not pictured: Neill Wallis).

2010 Crew. Back row (left to right): Asa Randall, Paulette McFadden, John Moran, Kevin Gaduski, Clayon Melhado, Zack Gilmore, Jason O'Donoughue, Cody Davis, Matt Newton. Middle row (left to right): Rudy McIntyre, Lisa Wright, Summer Jupin, Erin Harris-Parks, Lori O'Neal. Bottom row (left to right): Ed Zegarra, Jessica Bartnick, Andrea Bartnick, Katie Cook, Allison Nick.

Contents

CHAPTER 1
INTRODUCTION AND RESEARCH ORIENTATION

Kenneth E. Sassaman

After a five-season stint on Hontoon Island in Volusia County, the St. Johns Archaeological Field School moved to a locale on the western shore of Lake George known to contain some of the largest prehistoric shell deposits in northeast Florida (Figure 1-1). Owned by the Juniper Club of Louisville, Kentucky, the ca. 1250-hectare property contains the remnants of three or four ancient shell monuments of mid-Holocene age, at least nine hectares of shell-bearing deposits, two late-period sand mounds, and buried, shell-free strata dating to the early Holocene. Its major shellworks were noted repeatedly by naturalists since the mid-nineteenth century (Bartram 1942:44; LeBaron 1884:774; Wyman 1875:38-39), and the antiquarian C. B. Moore (1894:176-177) dug into one of the sand mounds in 1894. Despite this early interest, modern investigations have been lacking, perhaps because most of the large shellworks were eliminated in the early twentieth century by shell-mining operations.

Reported here are the results of the first four seasons of field school investigations at Silver Glen Run (8LA1/8MR3601; hereafter 8LA1). As recorded in the Florida Master Site File (FMSF), 8LA1 is the 7-hectare point of land formed by the confluence of Silver Glen Run with Lake George. This is the extreme northeast corner of the Juniper Club property in Lake and Marion counties, known to club members as "Shell Point." The massive U-shaped shellworks that caught the attention of early observers was mined in 1923 and sold for the sum of $17,000 (Johnson 1994:43). Notwithstanding this destruction, subsurface and subaqueous remnants of shell deposits remain undisturbed. As at Hontoon Island and scores of other shellworks across the region, mining operations at 8LA1 exposed the basal strata of mounded shell, as well as the underlying evidence of earlier human activities. The St. Johns Archaeological Field School continues its longstanding interest in exploring the origins of monumentality by targeting mined shellworks such as 8LA1.

The remnants of shellworks at Shell Point are but a small portion of diverse, expansive archaeological deposits along the south margin of Silver Glen Run. Field school investigations have included subsurface testing across this locale, resulting in the tentative conclusion that archaeological deposits are continuous from Shell Point west along the run into Marion County. Lacking any clear break in archaeological deposits along this expanse, all areas tested since 2007 are described in this report under the rubric of 8LA1. To simplify discussion of this massive site, the Shell Point portion of 8LA1 is hereafter referred to as 8LA1-East, and its counterpart along the spring run is designated 8LA1-West. We anticipate the need to divide 8LA1 into its Lake and Marion county components following additional subsurface testing.

This report is divided into seven chapters. The balance of this chapter outlines the overarching research goals of the field school, the rationale for establishing long-term investigations at the Juniper Club, and a summary of findings from this first four years of

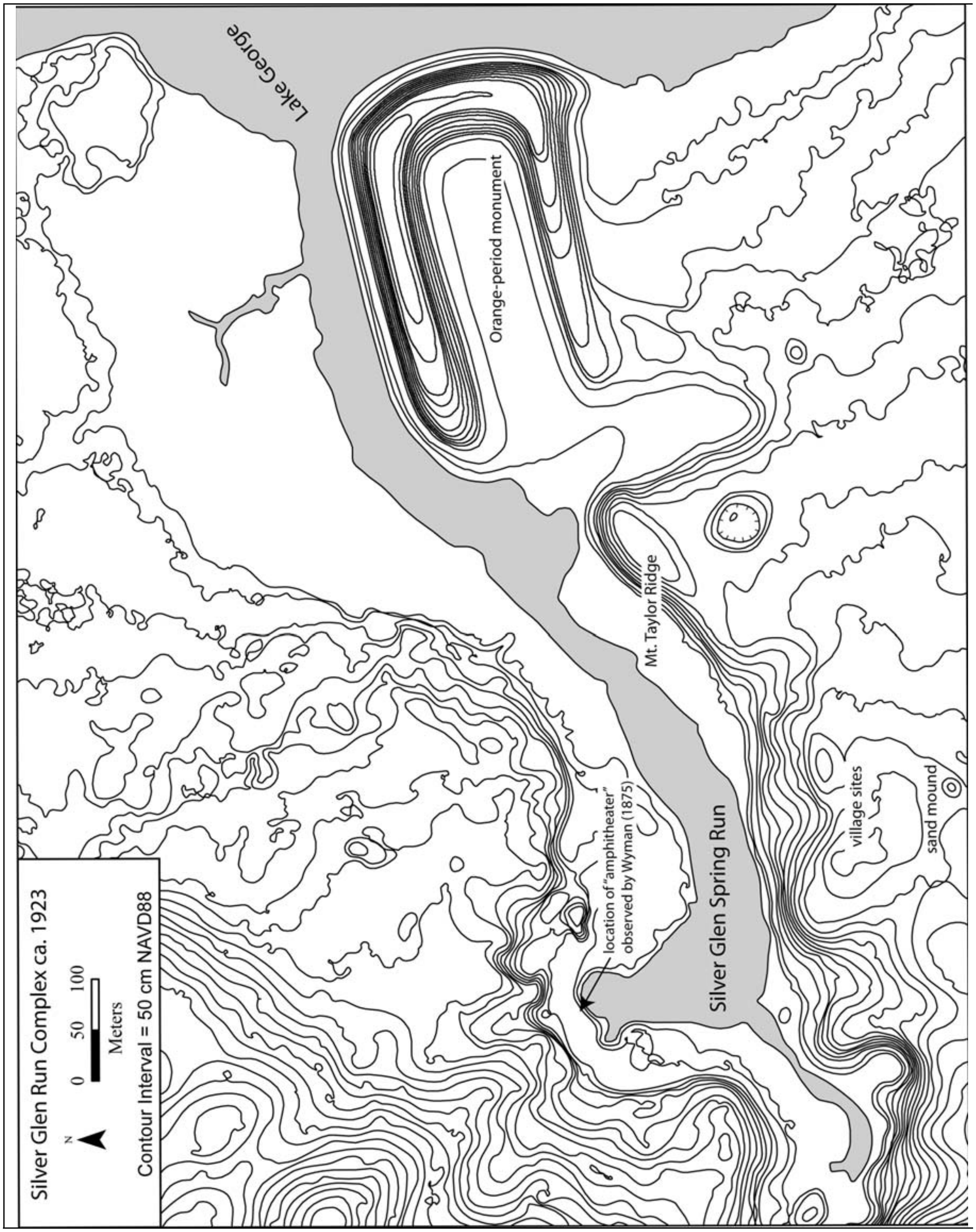

Figure 1-1. Reconstruction of pre-mining landscape of 8LA1, showing U-shaped Orange-period monument (8LA1-East), the Mount Taylor ridge (8LA1-West, Locus A), and village sites to the west (Loci B and C) (courtesy of Asa Randall).

work. Chapter 2 summarizes the natural and cultural histories of the St. Johns region in general and the Silver Glen Run locale in particular. Results of 2007 and 2010 investigations at 8LA1-East are reported in Chapter 3. The methods and results of reconnaissance survey at 8LA1-West are the subject of Chapter 4, followed by the details of excavations at two loci in this portion of the site in Chapters 5-6. In the closing chapter we summarize the major findings of field schools from 2007-2010 and outline priorities for further investigations.

PROBLEM ORIENTATION OF FIELD SCHOOL PROGRAM

Good ethical practice in American archaeology dictates that archaeological field school training be underwritten by bona fide research programs. That is, field schools cannot be conducted for the sole purpose of student field training. Accordingly, the St. Johns Archaeological Field School continues to be structured by a series of research questions with broad anthropological relevance.

Field school interest in shellworks of the St. Johns River valley is guided by research on ancient monument construction in the greater Southeastern U.S. In recent years, archaeologists working in Louisiana (Saunders et al. 1997), Florida (Russo 1991), and South Carolina (Saunders and Russo 2002) have documented cases of monument construction dating as early as 5500 years ago. These cases predate the more widely known mound-building traditions of the Woodland period by over 3000 years, and the onset of pottery making by at least 1000 years. Our own work at Hontoon Island and vicinity adds to this inventory of early monuments with linear shell ridges that were constructed over habitation sites of the Mount Taylor period (ca. 7300-4600 calibrated radiocarbon years before present [hereafter cal B.P.]) (Randall 2007; Randall and Sassaman 2005; Sassaman and Randall 2012). Because many of these ancient shellworks in the St. Johns drainage continued to be utilized well into the last millennium, when pottery-making cultures of the St. Johns tradition flourished, they have often been misidentified as late-period constructions. All of the four shell ridges we tested on or near Hontoon Island had basal components dating to the Mount Taylor period, most with definitive evidence for shell mounding.

The anthropological significance of these recent findings lies in the contradictions they pose to longstanding perceptions about ancient hunter-gatherer societies. Whereas anthropologists acknowledge an "advanced" level of cultural complexity among certain ethnographic and late-prehistoric hunter-gatherer societies (e.g., Chumash, Calusa, Northwest Coast groups), those of the ancient past are widely regarded as fundamentally "simple" people. In the 1960s and 1970s, the empirical benchmark for "primitive" society was constructed from modern observations of small-scale, mobile hunter-gatherers, notably those of the Kalahari Desert of southern Africa. Wrongfully conscripted as a baseline for cultural evolution, these icons of hunter-gatherer living became standard analogs for ancient hunter-gatherers. Presumed to be egalitarian in principle, flexible in practice, and never large or stable in numbers, these populations are envisioned as lacking the wherewithal to erect large monuments, or, for that matter, any reason for doing so.

The earthen mounds of Louisiana pose the clearest threat to this line of reasoning. They are, without question, intentional constructions that were sited and erected in stage-like fashion with great precision (Clark 2004; Sassaman and Heckenberger 2004). Little is known about the people who erected Louisiana mounds over 5000 years ago, but they appear to have had a lineal, if somewhat indirect, historical relationship to Poverty Point culture, the region's most celebrated mound-building people of the preagricultural era (Gibson 2000). Archaeologists will forever debate the significance of these earthen mounds, but no one can deny that these were monumental events that required engineering skill, orchestrated labor, and material provisioning.

In contrast, shellworks of the Atlantic and Gulf coasts, as well as those along the St. Johns River, are not so obviously monumental. There exists enormous variation in the size, internal structure, and content of shellworks. Because many contain the refuse of everyday living, there is a tendency to regard them as merely "trash heaps" or "shell middens" (e.g., Marquardt 2010). In contrast, the enormous size and formality of certain shellworks bear witness to nondomestic, "ritual" practices that arguably were monumental in purpose. These latter works commonly contain layers of shell, and sometimes sand or muck, that were deposited in massive loads. In some cases, episodes of mounding shell or sand coincide with burial of the dead (e.g., Aten 1999), but in most cases purposes other than human interment were at play because they contain no skeletal remains. Above all, large shellworks almost always encapsulate a variety of deposits, making it difficult to generalize about the process and purpose of their accumulation. And, because shell itself was derived from aquatic species consumed by humans, its use in monument construction is a persistent source of ambiguity.

The advanced level of variation among shellworks poses a great challenge to modern archaeology: How do we recognize monumental acts in archaeological deposits that are, in many respects, similar to those left from routine living? And, if we can make this distinction, what do these acts of monumentality tell us about the social, cultural, and political life of these ancient hunter-gatherers?

What we have learned thus far from investigations into St. Johns River shellworks is that they are best understood as historical (as opposed to evolutionary) phenomena. In regarding shellworks as historical phenomena we invoke two related themes: (1) acts of mound building were precipitated by specific events, and (2) acts of mound building were routinized in ritual practice with reference to such events, either literally or figuratively. It follows that we regard monuments as both "products" of historically situated persons, and as "texts" for interpreting their understanding of the past.

We have observed in several contexts that the "triggering" events for mounding shell (and/or sand/muck) was apparently the abandonment of settlements (Randall 2010; Sassaman and Randall 2012). Insofar as this transformation from "mundane" to "ritual" space occurred at different times across locations in the region, the ultimate cause, if there is one, may have been local ecological change, particularly a change in the spatial relationship between habitation spaces and the wetland habitat from which shellfish and other aquatic resources were obtained. Shellfish apparently were collected for subsistence purposes long before the first shell mound was erected, so its ecological limitations must have affected the sustainability of any given settlement. Confounding this logic is the fact that abandoned sites were often capped by shell in quantities of unprecedented scale.

In other locations across the globe, abandoned settlements were covered with earth or rock in acts of apparent commemoration. One of the better documented cases is the Neolithic frontier of northwest Europe, where long houses became long barrows upon abandonment (Bradley 1998). Importantly, this particular tradition appears to have arisen in the context of cultural encounters between indigenous and "foreign" people. Abandonment, then, may have had little to do with the ecological or economic sustainability of a settlement, and more with the transformations in culture and demographic alignments that encounters precipitate. Indeed, the covering of an abandoned settlement may in some cases mark efforts of certain persons to "erase" or "hide" the material evidence of former settlement (i.e., someone else's history).

Evidence for intercultural encounters in Florida coincident with the onset of monument construction has not been forthcoming. However, no one since the time of James Ford (1969) has been seeking such evidence. The widely held but seldom questioned assumption is that cultural developments in northeast Florida were strictly "homegrown." In order to substantiate this assumption, archaeologists must fine sound evidence for the cultural identities of societies in question. How people express themselves through material practices is the chief means of archaeological inference about culture. This involves mostly the artifacts whose forms and uses take on the qualities of "tradition," as in the traditional way to make a spear point or construct a house. Foodways are also relevant in this respect; however, like subsistence technology, they are constrained by ecological parameters. In this respect, the orthodox perspective on culture history in northeast Florida is that the local Mount Taylor populations initiated a riverine lifestyle involving shellfish harvesting that continued unabated through the late prehistoric era (Miller 1998). The Orange period that followed Mount Taylor at ca. 4600 cal B.P., and the St. Johns period that came after that are widely regarded as local, in situ (evolutionary) developments (Milanich 1994). The addition of pottery at the onset of the Orange period, once thought to signal the intrusion of a foreign people (Ford 1969), has for the last 30+ years been treated as nothing more than the technological intensification one expects of a lifestyle that enabled populations to grow larger and more stationary through time.

The chronology of fiber-tempered Orange pottery developed by Ripley Bullen (1972) exemplifies this in situ, evolutionary development. In his scheme, Orange pottery appears on the scene at about 4600 years ago. In the earliest centuries of its use, Orange pottery was plain and unassuming. By about 4100 years ago, incised Orange pottery became the dominate type, followed a few centuries later by the appearance of spiculate-paste wares of the St. John series. The pottery sequence of preceramic Mount Taylor→Orange Plain→Orange Incised→St. Johns is tacitly accepted by most Florida archaeologists as evidence of historical continuity in northeast Florida.

Recent investigations have brought Bullen's sequence into question. New radiometric dates on soot from Orange Incised pottery shows it to be as old as the oldest plainwares, roughly 4600 cal B.P. (Sassaman 2003a). Additional assays on soot from spiculate-paste wares (St. Johns Plain and Incised) include one as old as the oldest Orange wares (Jenks 2006). Moreover, petrographic analyses of Orange Incised sherds dating to at least 4400 cal B.P. contain sponge spicules (Cordell 2004). Taken together, these observations support the inference that pottery types long-assumed to exist in serial fashion over a 1200-year period were actually coeval over the first few centuries of the fourth millennium B.P.

Now that we know that pottery types once thought to be sequential were actually coeval, we have to think about pottery in something other than chronological terms. Relevant in this regard is the spatial segregation of the earliest forms. Plain fiber-tempered pottery (Orange Plain) is often found in stratified shell midden deposits overlying (prepottery) Mount Taylor deposits (e.g., Sassaman 2003b). The apparent continuity in subsistence, use of space, and overall lifestyle suggests that pottery was simply an addition to a longstanding and persistent cultural tradition (i.e., Mount Taylor with pottery). But other locations with fiber-tempered pottery are dominated by Orange Incised pottery, occasionally in great abundance. Compared to locations dominated by Orange Plain, sites with abundant Orange Incised sherds tend to be larger: the biggest, most complex shellworks along the river, as well as on the coast (Saunders 2004a). The Mouth of Silver Glen Run (8LA1-East) is one such location.

The onset of pottery use in the middle St. Johns River valley was far more than the addition of a durable vessel technology to an existing Mount Taylor inventory. Rather, it marked a major transformation in the cultural landscape. The segregation between locations of plainware and locations of decorated ware is a pattern that would persist for at least two millennia. The segregation has been glossed over the years as the distinction between sacred and secular (e.g., Sears 1973). Whereas this simplistic notion outlived its analytical usefulness long ago, the pattern of spatial segregation is real. When Orange Incised was believed to be a late addition to an existing sequence, the appearance of massive shellworks with abundant Orange Incised pottery was simply the consequence of culture evolution (i.e., societies gradually grow bigger and more complex with time). Now that we know it is as old as the oldest Orange Plain, the onset of pottery in the context of massive monument construction was highly eventful.

The term "event" is used deliberately in this context to suggest that the onset of pottery and the transformation in monumentality that took place about 4600 cal B.P. was the result of population realignments that included the relocation of coastal groups to the middle St. Johns area. Given the pre-existing importation of marine shell by Mount Taylor groups in the middle St. Johns, the immigration of coastal groups was likely predicated on longstanding exchange alliances. No matter the degree of affinity, the influx of new personnel to the middle St. Johns required negotiations with local communities that involved, among other things, rituals at locations of massive shell monuments. Communities had to be "reinvented" out of two or more two distinct "cultures," and ritual at shellworks was apparently integral to this process.

Large Orange-period monuments are typically underlain by shell deposits of Mount Taylor age. Because water levels have risen substantially since Mount Taylor times, much of these submound deposits are now submerged. More commonly, Mount Taylor locations of shell accumulation, including the large, linear ridges noted earlier, were not utilized by groups making and using Orange pottery, plain or incised. Indeed, it appears as if pottery-using communities avoided many, maybe most of the Mount Taylor monuments (Randall and Sassaman 2010). It seems likely that many such locations were stranded from the wetland habitats that supplied all its shell, and thus incapable of supporting either long-term inhabitation or additional construction stages of shell after 4600 cal B.P.

Irrespective of their reoccupation during the Orange period, Mount Taylor shell ridges register an earlier transformation in use, well before the era of pottery. As noted earlier, many locations of Mount Taylor occupation were abandoned and then capped, usually with shell, but sometimes with layers of sand or muck, and occasionally human interments (Aten 1999; Endonino 2010). As we will see in Chapters 5 and 6, shell deposits along Silver Glen Run (8LA1-West) encapsulate these sorts of transformations, dating to as early as ca. 5500 cal B.P.

Potential causes for this transformation in Mount Taylor site use are many. It would appear that in some instances, changing water levels and fluctuations in food availability triggered settlement abandonment (Randall 2007, 2010). Still, as noted earlier, the enormous amount of shell that is often deposited over abandoned settlements causes us to question whether diminished shellfish productivity was a sufficient cause of change, and to consider instead historical factors similar to those hypothesized for the Orange period. Although evidence for population movements during the prepottery period eludes us, Mount Taylor communities of the middle St. Johns were involved in regional exchange networks that reached as far as northern Georgia and Mississippi (Endonino 2010). Such extralocal affiliations and interactions implicate a political economy that had the potential to influence local decision-making. That is, abandonment of Mount Taylor sites may have been precipitated not by local conditions, but by processes operating at a regional scale.

The deposits fronting the south bank of Silver Glen Run (8LA1-West) not only contain evidence for the Mount Taylor transformation, they hold some of the best analytical potential for identifying casual factors in the transformation. Like other first-magnitude springs in Florida, Silver Glen Run may be less vulnerable to local changes in precipitation and temperature compared to other water bodies of the St. Johns Basin (O'Donoughue 2011). It follows that locations along first-magnitude springs, while not necessarily the greatest habitat for shellfish, were among the most predictable locations for collecting aquatic resources and potable water.

Identifying the environmental parameters that enabled the massive harvest of shellfish for monument construction is a core objective of field school research. The abundance of snail shell that exists in such varied stratigraphic contexts, spanning many centuries, even millennia, is a woefully understudied record of paleoenvironment. The shells of snails and mussels, vertebrate fauna, plant remains, wood charcoal, and other organic remains have been collected in controlled sampling columns of shellworks at nearly all of the St. Johns field school sites. Ultimately, these numerous samples—recovered from contexts of varying age, location, and form—provide a robust database for comparing the relationship between climate (as it affects aquatic habitat) and events of archaeological deposition. In pursuit of this objective, two additional datasets need to be collected: (1) modern control samples of species in question with accompanying data on temperature, water levels, and other relevant microenvironmental data; and (2) proxy data on paleoclimate for the archaeological samples in question. As the most abundant species in shellworks, *Viviparous georgianus* (banded mystery snail) is a good candidate species for intensive study (Blessing 2009, 2010). Another aquatic snail species, *Pomacea* spp. (apple snail), is likewise an excellent candidate because it occurs in discrete depositional lenses throughout shellworks. Analysis of the stable isotopes of these shellfish remains has the potential to provide proxy data on climatic factors that influenced their abundance at any point in time and space.

In sum, two distinct "events" punctuated the long history of inhabitation and monument construction along the St. Johns during the Mount Taylor and Orange periods. The first, termed herein the "Mount Taylor transformation," is the regionwide initiation of monument construction over abandoned settlements. The second, Orange-period transformation is marked by the construction of especially large, complex monuments and the spatial segregation between locations at which plain pottery was deposited and those at which incised pottery was deposited. For both "events," we must determine the extent to which these transformations were coeval across the region and thus precipitated by the same triggers, be they climatic or cultural. This a matter of fine-grained chronology, which requires a great deal of stratigraphic observation and sampling, coupled with independent radiometric age estimates. Of course, timing alone is only a piece of the puzzle, because explaining these events requires robust, multiscalar data on the environmental and cultural contexts in which these events transpired.

The Juniper Club is among the best locations to investigate the onset and transformations of monument construction in northeast Florida. As noted earlier, 8LA1-East was the location of one of the largest Orange Period monuments in the region. Although it was largely destroyed in 1923, its basal components remain largely intact. The antiquity of its Orange Incised pottery was established several years ago when 8LA1 sherds curated at the Florida Museum of Natural History were sampled for soot that was assayed by AMS technique (Sassaman 2003a). Complementing the Orange deposits are remnants of a Mount Taylor ridge (reported in Chapter 5 as Locus A) along Silver Glen Run with a stratigraphic sequence reflecting episodes of dwelling, abandonment, capping, and repeated reoccupation. Additional Mount Taylor, Orange, and late-period St. Johns II deposits extend across 9 ha of "shell fields," to use Wyman's term. On such location, reported in Chapter 6 as Locus B, has provided one of the best records of change in the study area: a basal Mount Taylor component overlain by an assemblage of large shellfish-steaming pits of Orange age, followed by a "capping" event that effectively buried the evidence of earlier activity and created a well-preserved stratified sequence of change. We have some preliminary data on a third locus of investigation along the run

(Locus C) that encapsulates the record of aboriginal dwelling long after the Archaic era of shell mounding.

In four seasons of work at the Juniper Club, research objectives have revolved around fundamental archaeological documentation about the extent, internal configuration, and age of the shell deposits that survived mining operations 85 years ago. As the foregoing discussion anticipates, we are especially interested in documenting the archaeological evidence for transformative events in ancient history. The larger environmental and cultural contexts for these events will, of course, provide the inferential basis for knowing how and why they transpired. It follows that our research design is broad reaching, and involves data gathering at multiple scales of resolution.

SUMMARY OF FINDINGS

Chapters 3-6 of this report provide the full details of archaeological investigations at the Juniper Club from 2007-2010. The paragraphs that follow below provide brief summaries of these respective chapters, which are organized by the spatial units noted earlier, started with 8LA1-East, and followed in turn by Loci A-C of 8LA1-West, along the south margin of the spring run. In addition, reconnaissance survey across most of the area shown in Figure 1-1 was conducted in 2007 and 2008 to provide baseline data on the distribution of subsurface deposits

8LA1-East

Field investigations in 2007 at 8LA1-East were divided among three tasks: (1) systematic coring to determine the extent of subsurface shell deposits; (2) limited subsurface testing on the largest of the three islands off of Shell Point; and (3) limited subsurface testing in the presumed location of the south ridge of the U-shaped shellworks Wyman reported in 1875. The results of coring corroborated the general size, shape, and orientation of the shellworks Wyman described in print, as well as sketched in an unpublished drawing located by Asa Randall in the Medical Library archives of Harvard University. Subsurface testing the area of the south ridge was likewise successful in locating basal shell deposits and associated Orange period pottery, but too little was exposed to infer much about the activities or circumstances attending shell deposition. Testing on the largest island at the mouth of the spring run did not locate intact shell deposits but instead suggested that this entire island was redeposited fill from the 1923 shell-mining operation.

Lacking evidence for intact shell strata along the north ridge of the U-shaped shellworks, investigations in 2008 were expanded at Shell Point and at another of the islands at the mouth of the spring run. Neither location proved to contain intact shell deposits, although excavation at Shell Point was halted at the top of the water table, below which intact strata appear to lie. Despite an abundance of large Orange Incised sherds in the test units of island, coring and a radiometric age estimate far too young substantiated the inference that this landform, like the island tested the year before, consisted of fill redeposited during mining operations.

Field school efforts in 2010 refocused attention on intact subsurface remains of the south ridge, first observed in 2007 and estimated to date to the latter half of the Orange period, ca. 4000-3800 cal B.P. The application of Ground Penetrating Radar (GPR) by Richard Estabrook of the Florida Public Archaeology Network provided our first remote view of subsurface deposits over a relatively large area of the ridge. Coring and subsurface testing showed that high resistance in the GPR signals was due largely to shell density, but we were unable to find definitive evidence for the purpose of shell deposition or the circumstances under which shell was emplaced. An overall arcuate pattern to dense subsurface shell suggested the presence of a circular or semi-circular village beneath the shell ridge, but direct evidence for architecture and associated features was not observed in 16 m^2 of controlled excavation. For now the U-shaped shellworks at the mouth of Silver Glen Run evade better definition and explanation, although the results of GPR survey provide hope for improved results in the future.

8LA1-West, Locus A

Originally consisting of a ~200-m-long shell ridge, Locus A of 8LA1-West was severely reduced by mining operations in the 1920s. Like others we have tested in the region, the Locus A ridge was not entirely destroyed. Surviving today are subsurface deposits dating to the Mount Taylor period, as well as mining escarpments along the northern margin of the ridge and in select locations elsewhere. Our strategy in such cases has been to profile escarpments to expose the above-ground layers and then continue the profiles below the present surface in controlled excavation units. In 2007 this process began at two locations in Locus A: at the eastern end of the ridge escarpment and some 90 m to the southwest, along the north edge of the ridge. Revealed in both exposures was complex sequence of basal midden capped by brown sand and then successive, relatively thin strata of crushed shell with artifacts, shallow pits, vertebrate fauna, charcoal and ash, paleofeces, and other indications of domestic living. A radiocarbon assay near the base of the 3-m-deep deposit returned a Mount Taylor age estimate of ca. 6200-5950 cal B.P.

The following summer we opened a larger exposure in one of the only mining escarpments to run perpendicular to the length of the ridge and the spring run. This 6-m-long trench verified the general sequence observed in 2007 and provided two additional radiometric assays: ca. 6300-6100 cal B.P. near the base of the deposit, and ca. 6000-5750 cal B.P. on charcoal approximately 60 cm higher up the profile. The larger exposure enabled us to observe stratigraphic facies not seen in the earlier profiles. Apparent were relationships between primary and secondary deposits, between presumed house platforms and associated refuse, and between emplaced sand and shell. Expansion of the escarpment test at the east end of the ridge was halted after encountering the remains of subadult humans, which were returned to their original location, backfilled and thereafter avoided. Observations to date suggest that the Mount Taylor ridge formed primarily through repeated occupation, although the emplacement of sand and clean shell, and interment of at least subadults points to activities other than domestic living.

8LA1-West, Locus B

A relatively small ridge nose overlooking Silver Glen Run was the locus of intensive activity over the Mount Taylor and Orange periods. Reconnaissance survey in 2007 showed this area, dubbed Locus B, to be fully intact, with stratified shell-bearing deposits extending down at least one meter below the surface. A single test unit excavated that same year revealed a sequence of stacked surfaces with abundant shell, vertebrate fauna, and plain fiber-tempered pottery of the Orange tradition. The following summer Zackary Gilmore commenced with intensive testing of Locus B, a project that carried forward through 2010 to form the basis for dissertation research at the University of Florida. As reported by Gilmore in Chapter 6 of this report, Locus B houses deposits during three successive but fundamentally different episodes of site use (see also Gilmore 2010). Revealed in a total of 45 m^2 of excavation to date is a basal Mount Taylor component indicative of repeated occupations dating from ca. 5750 to 4600 cal B.P., followed by a period of intensive pit digging activity ca. 4500-4000 cal B.P., and finally a capping event ca. 4000-3800 cal B.P. involving the emplacement of clean shell over the pit-pocked surface. Coincident with the pit activity is the first use of pottery at Locus B, largely Orange Plain wares. The shell capping event, however, was accompanied by the deposition of incised Orange pottery of the Tick Island variety—a rare curvilinear and zoned-punctated type that deviates both technologically and stylistically from the usual linear incised Orange pottery, such as that found in great abundance along the north ridge of the U-shaped shellworks to the east. Gilmore is investigating the circumstances surrounding the seemingly abrupt transformation of site use at Locus B and will attempt to related these changes with coeval developments at the U-shaped shellworks beyond. Excavations in Locus shave proved to be highly productive and its results original.

8LA1-West, Locus C

A second, larger ridge nose to the immediately west of Locus B and overlooking the spring pool of Silver Glen is home to a late-period component with abundant secondary refuse and promise for an intact village site. Limited testing in 2008 revealed a thick and dense secondary midden on the northern slope of the landform, extending to the spring pool. Pottery of the St. Johns II period (post-A.D. 750 or post-1200 cal B.P.) dominated an assemblage rich in vertebrate fauna and other evidence of intensive activities. Limited testing atop the ridge nose, on the nearest flat ground, revealed subsurface features and other indications of a possible village. About 150 m southeast of this location is an intact sand mound, one of two in the vicinity that was not impacted by antiquarian digging or modern land use. Although we have very little additional information about Locus C, results of testing to date show great promise for an intact St. Johns II period village. Field investigations at Locus C were intensified in 2011. The results of this and the 2008 work are reserved for a follow-up report in the near future.

CONCLUSION

The first four years of archaeological investigations at the Juniper Club substantiate the claim that despite early 20th-century mining operations that removed large quantities of shell, both intact subsurface and above-ground deposits across a large tract of land hold enormous potential for improving our understanding of pre-Columbian life in the region since at least 6000 years ago. Even greater time depth awaits investigations of subsurface deposits beneath those of Mount Taylor and Orange age. Field schools have provided excellent opportunities for fledging archaeologists to learn the technical aspects of the trade, but they have likewise afforded professionals the opportunity to delve into research questions that are precluded by the strictures of most contract archaeology. Our field school host—the Juniper Club of Louisville, Kentucky—is owed a debt of thanks for its enduring support of this effort.

CHAPTER 2
ENVIRONMENTAL AND ARCHAEOLOGICAL CONTEXTS

Asa R. Randall

This chapter situates field school investigations at the Juniper Club within regional environmental and archaeological contexts. Environment is considered first, focusing in particular on physiography and hydrology. The archaeological contexts are then reviewed, with particular attention paid to the Middle and Late Archaic periods. In both cases a regional overview is provided, followed by locality-specific discussions.

ENVIRONMENTAL CONTEXT

The Silver Glen Springs watershed is situated at the intersection of Marion, Lake, and Volusia counties, approximately 15 km north of Astor, Florida. The watershed is defined by the first magnitude Silver Glen Springs that issues forth along a 1-km-long run into Lake George (Figure 2-1). This lake is the second largest body of water in Florida. In addition to Silver Glen Springs, Lake George directly receives water input from the St. Johns river, Juniper Springs, and Sweetwater Springs to the south, and Salt Springs to the north. The current configuration of these hydrological features and the greater St. Johns basin resulted from a long history of fluctuating sea level and attendant progradations and regressions of surface waters, localized faulting and solution of carbonate sediments, as well as more recent factors such as channel dredging for navigation. A number of syntheses and cogent discussions of the geology and geomorphology of Florida have been published (Randazzo and Jones 1997; White 1970). Those aspects relevant to the Silver Glen Springs watershed are discussed here.

Regional Physiography

Like all of peninsular Florida, the regional physiography of the St. Johns River Valley ultimately owes its current configuration to marine processes (Schmidt 1997). Currently, the dry land of peninsular Florida occupies approximately one-half of the Florida Platform. Extending out into the Gulf of Mexico and Atlantic, the Platform is characterized by low relief, and is composed of Cenozoic carbonate sedimentary lithologies that lie unconformably upon a Paleozoic and metamorphic basement.

The Florida Platform has been alternatively inundated by shallow seas and exposed as dry land during much of the Cenozoic era. The low elevation of the Platform (a maximum of 104 meters in the Panhandle) has made it particularly susceptible to relatively small changes in sea level. Sea level fluctuation has resulted in frequent progression and regression of marine, estuarine, and near-shore environments. This process has left the Florida coastal zone dominated by positive features including elevated relict upland ridges, barrier beaches, and sand dunes, and negative features representative of shallow seafloors (Schmidt 1997). Terraces that reflect long-term sea level stands have been identified. In the study area these include the Silver Bluff and

Figure 2-1. Location of springs contributing to Lake George (USGS Daytona Beach Beach 100k quadrangle).

Palmlico Terraces (0-8 m amsl) and Penholoway and Talbot Terraces (8-21 m amsl). Additionally, the carbonate composition of many of Florida's sedimentary deposits has been equally influential. Carbonate lithologies are particularly susceptible to dissolution, which results in karst topography and hydrogeology. Typical features of karst topography are sinkholes, sinking rivers, disappearing lakes, and springs.

Geomorphologists have recognized a number of physiographic regions defined by topography, surficial geology, and hydrology (Cooke 1939; Schmidt 1997; White 1970). The St. Johns River is located in the Atlantic Coastal Lowlands, a zone typified by coast-parallel features. Most positive features in this region are relict beaches and marine terraces formed during the late Pleistocene and Holocene, and are composed of siliclastic marine sediments. The headwaters and mouth of the river are situated within the Eastern Valley, while the middle St. Johns occupies a position west of the Crescent City-Deland Ridge. The Crescent City-Deland Ridge is the only karst-dominated topography in the region, and is a major source of groundwater via the Floridan Aquifer.

Groundwater and channeled water hydrology of the St. Johns is linked to precipitation and geology. Ultimately, all of Florida's freshwater is derived from precipitation (Miller 1997). Although much precipitation is lost due to evapotranspiration and runoff, a significant portion is returned for the recharge of aquifers. Water levels for most of Florida's streams and lakes are directly related to the aquifer levels. Florida has five principle aquifers, only two of which have output in the middle St. Johns. In general, the study area is typified by an undifferentiated surficial aquifer. Water is typically unconfined in Pleistocene and Holocene sediments averaging 50 feet in thickness, and is present at or just below the ground surface. The Floridan Aquifer is the most extensive and productive of all of Florida's aquifers. It extends throughout the state, in addition to Georgia, Alabama, and South Carolina. Generally, the Floridan Aquifer is restricted to carbonate rocks of Tertiary Age, and remains confined well below the ground surface. The aquifer is unconfined or outcrops in regions where these carbonate rocks are thin or have been penetrated by sinkholes. In the study region, the Floridan Aquifer discharges via several first-order magnitude (greater than 100 cubic feet per second or more) springs, including Silver Spring, Silver Glen Springs, and Blue Spring.

As Miller (1998:28) notes, the dominant factor in the region's landscape is water, which is concentrated along the St. Johns River drainage. The St. Johns Rsiver, which has its headwaters in southern Brevard County and discharges into the Atlantic at Jacksonville, is the largest river in Florida, measuring 500 km long. It is also unique as it is one of few rivers in the northern hemisphere to flow from south to north. Although it is extensive and broad, the St. Johns discharges on average only 8,300 cubic feet per second. The discharge is related primarily to volume and less to velocity. This is due to a wide floodplain and a low gradient (0.02 m per kilometer) (Miller 1998:28). For most of its length, the St. Johns is within five feet of mean sea level. The low gradient makes the river responsive to small changes in sea level, and even today the river is tidally influenced as far south as the Wekiva River.

The St. Johns River is composed of three distinct segments whose different characteristics relate to a complex geomorphic history (Adamus et al. 1997; Schmidt 1997; White 1970). Like many of the large river systems in Florida, the St. Johns River is situated in a swale between elevated, upland ridges. Although this configuration was once thought to have formed during late Pleistocene times as a drowned lagoon, it is now believed to have been formed in part within a beach-ridge plain (White 1970) during the early Pleistocene. With the exception of the lower St. Johns, the river is characterized by lakes arrayed in a linear fashion, oriented with the flow of the river. White (1970) suggests that these lakes are sinkholes which have been differentially filled with sediment and linked by channeled surface water.

The upper segment of the river flows between southern Brevard County and Sanford, Florida. This segment is the headwaters, and is characterized by poorly integrated braided streams and extensive wetlands. The middle St. Johns, between Sanford and Lake George, is often referred to as the St. Johns Offset. In a headward-consequent course, the river would be expected to flow from the headwaters to Jacksonville in a relatively straight line following the late Pleistocene beach ridges of the Eastern Valley. However, at Sanford the St. Johns jogs to the west, flowing west of the Crescent City-Deland Ridge. North of Lake George, the river jogs back to the east. It is believed that this portion of the river formed during the early Pleistocene, during a period of low sea level, when the offset portion of the river captured the headwaters south of Sanford. The river was eventually integrated when the basin was first inundated, creating an estuary. The drainage pattern of the middle St. Johns is dominated by an anastomosing pattern, characterized by numerous parallel channel segments. The floodplain is composed of freshwater marshes and swamps. The lower St. Johns is situated between the eastward jog north of Lake George to the mouth at Jacksonville. This course is parallel with Crescent Lake, a relict channel of the St. Johns abandoned when the middle St. Johns switched to its current location. This section of the river is essentially a drowned estuary, and is characterized by a broad channel, averaging over 1 km in width, and by inshore marine habitats.

Late Pleistocene and Holocene Environmental Trends

The same processes that have affected the physiography and hydrology of Florida—namely fluctuating sea level and attendant shifts in climate and environmental regimes—have structured human settlement and their archaeological recognition in the study region. At the end of the Pleistocene sea levels were significantly lower than today (upwards of 40 m), resulting in the extension of inhabitable land over 200 km into the Gulf of Mexico and to a lesser extent into the Atlantic (Faught 2004). Between roughly 12,000 and 10,000 years ago sea levels initially rose quickly, inundating large expanses of the Florida Platform and interior drainages. Although near-modern levels were gradually achieved by 6000 years ago (Faught 2004), sea level fluctuated throughout the middle and late Holocene. The increase in sea level and surface water resulted in the inundation of many early sites. Although inundated sites are routinely discovered in low-energy environments such as the Gulf of Mexico and interior sinks and drainages, many sites along the Atlantic Coast were likely destroyed or deeply buried by transgressing shorelines (Ste. Claire 1990).

The reduction of river gradients in response to sea level change resulted in the initial alluviation and subsequent surface stabilization of interior and coastal fluvial regimes, which in turn affected the flow and biotic characteristics of river channels and floodplains (Schulderein 1996). Peninsular Florida's arid late Pleistocene conditions, characterized by low surface water levels, gradually gave way to a wetter, modern regime ca. 7000 years ago (Watts et al. 1996). At 11,000 years ago oak scrub and prairies characterized peninsular Florida. Around 9500 years ago pine and swamp vegetation expanded from South Carolina throughout much of the Coastal Plain, becoming fully established by 5500 years ago in southern Florida (Watts et al. 1996: 37).

Although the broad characteristics of the middle St. Johns were in place well before humans entered the region, the late Pleistocene and Holocene history of the valley has important consequences for settlement and archaeological recognition. Today, the floodplain is dominated by multiple channels, oxbow cutoffs, lakes, and lagoons. These features reflect a complicated history of channel switching, avulsion, and infilling. In part, this variation is related to the shallow gradient of the river and sea level. Based on the distribution of archaeological sites, this hydrologic regime dates to at least 7000 years ago when the elevation of the river rose to within a meter of present-day levels. However, there were likely significant shifts in the course of the river that would have had effects on the distribution of swamps and wetlands. The presence of archaeological sites hundreds of meters from the main channel, or outside of the range of productive shellfish beds, indicates changes have occurred (Wheeler et al. 2000). The picture is further complicated in shallow bodies of water, such as Lake George. Presumably, much of the lake bed was once exposed as land. Where the pre-inundation channel of the St. Johns was situated with respect to the SGS watershed is unknown. More data are necessary to understand the complexity of channel changes through time. Finally, while it is has long been assumed that springs along the St. Johns did not have established flow until well into the Holocene (Miller 1998), this hypothesis has yet to be tested across a wide range of locations. Indeed, recent investigations of Salt Springs indicate that water was flowing there as early as 9000 years ago (O'Donoughue et al. 2011). More recent changes in the flow characteristics of the river have been wrought during the last 200 years. In addition to the urbanization of the headwaters, the majority of the main channel of the St. Johns has been dredged. Historic documents indicate that the river was first dredged in portions as early as the 1880s, including Volusia Bar at the south end of Lake George (207th House of Representatives, Document no. 1111). During the last century, the river has been fully channelized.

Silver Glen Springs Watershed

The Silver Glen Springs watershed is hydrologically defined by the first-magnitude Silver Glen Springs. Water issues out from a main vent in the center of the spring pool, as well as a secondary vent to the west (Figure 2-2). From here it travels ca. 1 km along a channel of variable width, where it debouches into Lake George. Today the

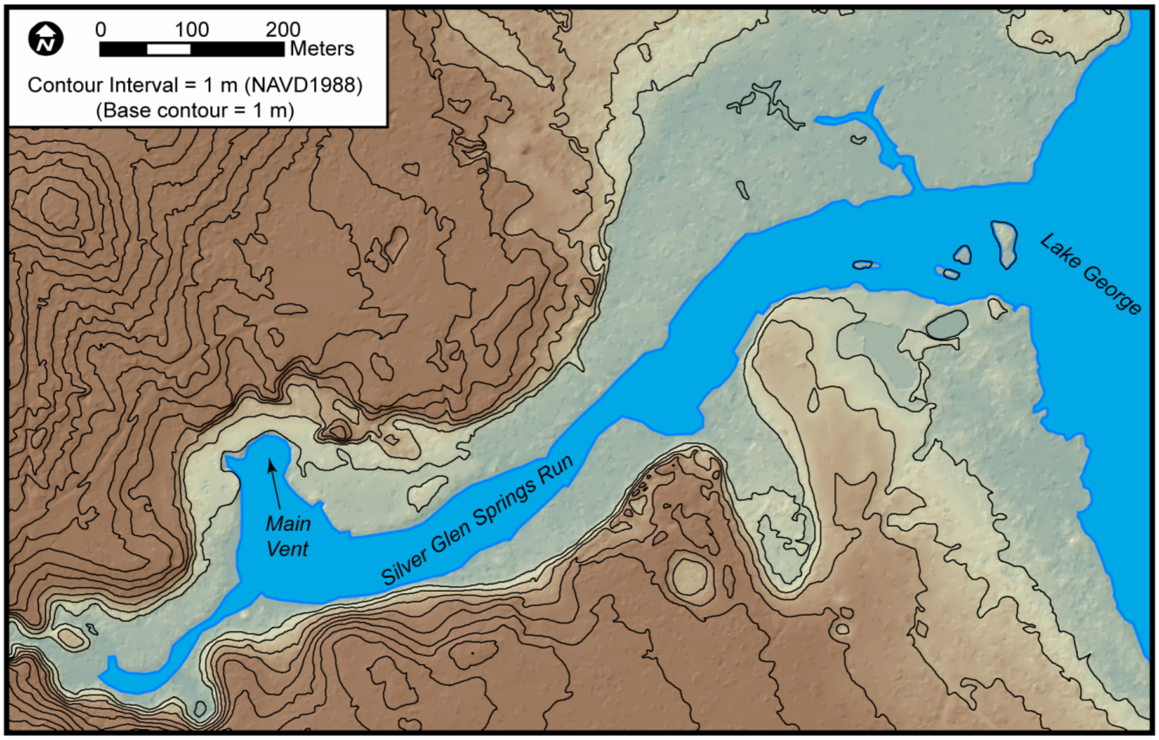

Figure 2-2. Topography of the Silver Glen Springs watershed (elevations derived from the Volusia County Department of Public Works LiDAR dataset).

spring pool is surrounded by low-lying topography associated with a recreational area of the Ocala National Forest. This surface configuration is no doubt a product of ancient shell deposition and recent shell removal. The spring run flows between elevated landforms on either side, with wetlands of varying width separating the channel from the shoreline. The upland slope is generally quite steep, and rises rapidly in absolute elevation from 1.0 to 4.0 m. Although this slope no doubt reflects the natural geomorphology of the basin, particularly to the west, it should be kept in mind that anthropogenic deposits are present on both the north and south banks of the run. Like the spring pool, much of the topography here is a consequence of ancient human deposition.

A variety of soils are present within the Silver Glen Springs watershed (Figure 2-3). The following descriptions are derived from USDA-NRCS (2011) definitions and soil surveys of Lake (USDA 1975) and Marion (USDA 1979) counties. *Paola fine sand* (0 to 8 percent slopes and 8 to 17 percent slopes) is present in the western aspect of the recreational area at the spring pool. Subtypes of this soil vary by slope, and range from level sand hills to strongly sloping surfaces associated with sinks, ridges, and stream banks. This soil is excessively drained, and is associated with pine-scrub oak forest. The area also contains *Pomello sand*, which is moderately well to somewhat poorly drained soil. Unmanaged vegetation is typified by scrub oak, dwarf live oak, saw palmetto, and various pines. Outside of the recreational area to the northeast is poorly drained *Immokalee sand*, which is host to longleaf and slash pines and undergrowth of saw palmetto, gallberry, wax myrtle, and pineland threeawn. Much of the spring run is

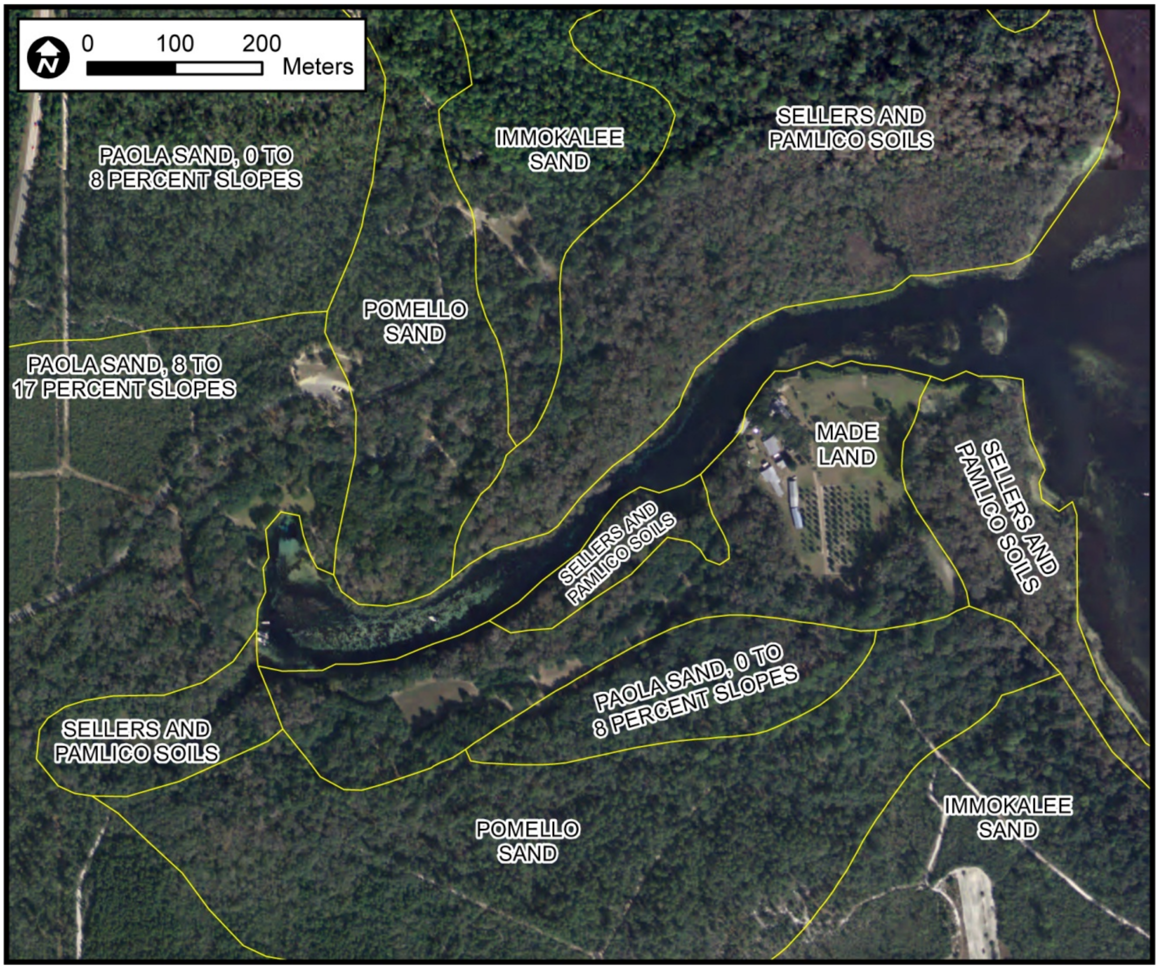

Figure 2-3. Soils present within the Silver Glen Springs watershed.

bordered by soils of the *Sellers* and *Pamlico* series. These poorly drained soils are typical of depressional areas, poorly defined drainage ways, and level floodplains. Native vegetation consists of pond pine, tupelo gum, sweetbay, bald cypress, gum trees, cypress, greenbrier, wax myrtle bushes, with undergrowth of gallberry or pickerelweed and perennial grasses. The one exception on the southern margin of the run is *Made Land*, a description that the USDA employs for locations which have been heavily impacted by cutting or filling. Indeed, much of this area was mined for shell in 1923, which no doubt resulted in the reworking of deposits across much of the terrace edge.

The forests comprising the margins and uplands of the Silver Glen Springs watershed are host to a wide array of fauna. Those of economic importance to humans include white-tailed deer, black bear, raccoon, opossum, gopher tortoise, and turkey. Numerous species of birds, mammals, reptiles, amphibians, and gastropods also inhabit these zones. The wetlands associated with Silver Glen Run and Lake George provide habitat for a diverse array of aquatic fauna. Vertebrates such as alligator, turtle, otter, and upwards of 40 species of fish are present. In addition, the wetlands away from the main pool and within Lake George are potential habitat for numerous mollusks. Species of importance to the inhabitants of the region include the gastropods *Viviparus georgianus* (banded mystery snail) and *Pomacea paludosa* (Florida apple snail), as well as the freshwater bivalve (Unionidae). Smaller gastropods such as *Elimia sp.* (rasp Elimia), and the rams horn and mesa-rams horn (*Planorbella sp.*) can be found with these other species. Unfortunately, little detailed information on the habitat preferences, habit, and seasonal life histories of these species is currently available. It is unknown in what frequencies these invertebrate species normally co-occur. Moreover, few data exist on whether there is predictable variation in their seasonal or spatial availability. In general, all species prefer shallow near-shore environments, such as grassy marshes and shallow lagoons (Quitmyer 2001). *Viviparus* prefer soft, muddy substrates with slack water, such as lagoons, creek edges, lakes, and springs (Clench and Turner 1956). *Pomacea* is known to prefer marshes with emergent vegetation, typically with at least 50 cm of water (Darby et al. 2002).

Recent Landscape/Land Use Change (1923–Present)

Like the much of the St. Johns basin, the Silver Glen Springs watershed was radically transformed by mining and dredging operations. Much of what we know about the pre-modification arrangement of the watershed is derived from early explorers and archaeologists whose observations will be related in subsequent sections. Now is a good time, however, to outline changes that have occurred in the last century. Lake County probate documents record agreements regarding the sale of shell and permission to mine and dredge on both sides of the run. C. W. Perkins, later the Lake George Shell Corporation, was granted the right to mine shell on the south side of the run, including the mouth and portions to the southwest of there. He was also granted permission to mine shell on the north side, approximately half-way down the run. Furthermore, he was permitted to dredge the channel in order to facilitate loading shell onto barges. In 1932, the agreement for the south side of the run was amended. Perkins apparently had excavated shell bearing deposits well below the water level in numerous places along the run, in violation of the agreement. Similarly, the Juniper Club was faulted for removing shell for their own roads, and allowing Marion County workers to do the same. The Lake George Shell Corporation was given the right to mine remaining shell above the water level up to 500 feet from the spring run. We also know that beginning sometime in the early 1930s, Henry Henderson (then owner of the land surrounding the spring pool) began removing shell from around the spring, although it is unknown whether it was carted away or dredged (see below). He even constructed a house that overlooked the spring pool. Over the years, the northern side of the run has passed through several owners, who further developed the property. Many of these structures were recorded on the Juniper Springs USGS topographic quadrangle. When the recreational area was acquired by the U.S. Forest Service in 1990, the majority of this infrastructure was removed.

Figure 2-4. A comparison of aerial photographs of the Silver Glen Springs watershed, taken between 1941 and 2004.

There are no known photographs of Silver Glen Run prior to or during shell mining. However, aerial (Figure 2-4) and terrestrial photographs record the effects of mining shell and developing the land for recreational use. Aerial photographs captured by the USDA are available from 1941, 1958, and 1974, as is a recent image from 2004. There are several patterns of note. In 1941, there are a number of areas that were cleared of vegetation, as evidenced by light colored patches. Importantly, this includes the tract around the spring pool and extending into the uplands, as well as the majority of southern border of the spring run, property of the Juniper Club. The southwest portion of the run is cleared back approximately 400 feet, consistent with the probate court documents. At the mouth of the run is the other southerly clearing. This is associated with the Juniper Club's lodge and other infrastructure. Across the watershed in successive years, vegetation filled in these cleared areas, leaving a patchy network of open spaces and immature forests.

ARCHAEOLOGICAL CONTEXTS

A number of syntheses of Florida prehistoric archaeological contexts have been issued for the St. Johns Basin (Goggin 1952; Miller 1998; Russo 1990a) and for the state of Florida (Borremans 1990; Milanich 1994; Milanich and Fairbanks 1980; Russo 1990b). These and other locality-specific studies are drawn upon to review the culture history of the middle St. Johns River.

Paleoindian (ca. 13,000–11,000 cal BP[1]) and Early Archaic (ca. 11,000–7500 cal BP)

The late Pleistocene Paleoindian traditions include Clovis, Suwannee-Simpson, and Dalton, which are identified on the basis of diagnostic hafted bifaces. In addition to lanceolate hafted bifaces, the toolkits are characterized by a suite of formal unifaces (Daniel et al. 1986), bola stones (Neill 1964), the "Aucilla adze," and a variety of bone and ivory tools (Dunbar and Webb 1996). Early Holocene traditions dating between ca. 12,000 and 10,000 years ago are identified by Side-Notched and Corner-Notched Bolen points (Bullen 1975). Aside from changes in hafted biface morphology and the addition of new tools, the toolkits of these horizons are consistent with Paleoindian forebears, particularly Dalton.

Today the oldest sites are typically restricted to inundated contexts such as drowned river segments (Dunbar et al. 1988; Faught 2004), sinkholes (Clausen et al. 1979), or perched basins and depressions (Daniel and Wisenbaker 1987; Neill 1964; Sassaman 2003c). A trend towards increased surface water ca. 11,000 years ago and subsequent settlement expansion is attested by Early Archaic diagnostics at Late Paleoindian sites, as well as small numbers of Early Archaic diagnostics in previously uninhabited localities. In general, they are redundant and may represent frequent residential mobility (Milanich 1994). Noting the co-occurrence of Paleoindian artifacts and karst topography in northwest Florida, Dunbar and Waller (1983) posited the "Oasis" hypothesis, that in effect Paleoindian populations were tethered to karst regions, abundant in toolstone and reliable surface water. Although this model matches the general

[1] Calibrated years before present.

distribution of early components, Paleoindian and Early Archaic diagnostics have been recovered from the St. Johns Basin (see below).

Between 10,000 and 7300 cal BP, Florida's Archaic traditions remain poorly defined (Austin 2004; Milanich 1994). Stemmed points, consistent with the Kirk Stemmed type and locally referred to as Kirk, Wacissa, Hamilton, and Arredondo (Bullen 1975) are distributed throughout the North, Central, and Gulf Central portions of the state, often in similar localities as early forms (Milanich 1994). Stratigraphic excavations at Harney Flats (Daniel and Wisenbaker 1987), West Williams (Austin 2004), and Trilisa Pond (Neill 1964) indicate an increase in the diversity of unifacial technology.

This period also witnesses the establishment of a long-standing mortuary tradition involving the interment of individuals in shallow bodies of water such as ponds or sinkhole margins. Windover Pond (ca. 9500–7500 cal BP) in Brevard County represents the earliest and is the most thoroughly investigated pond mortuary in the region (Doran 2002b). These sites are typified by large numbers of individuals, and appear to have been repeatedly used over extended periods. For example, at least 168 individuals were interred at Windover Pond over the course 1300 years. Outside of the middle St. Johns pond burials continue into the Middle Archaic (Beriault et al. 1981; Doran 2002a).

In general, Paleoindian and Early Archaic sites are underrepresented within the study area (Sassaman et al. 2000). Several factors may account for this, including a lack of adequate toolstone as well as fewer surveys of submerged contexts. In the St. Johns Basin, early sites are expected to occur adjacent to first- or second-magnitude springs fed by the Floridan Aquifer, including Silver Glen Springs, Salt Springs, Juniper Springs, Fern Hammock Springs, Green Cove Springs, Beecher Springs and Blue Spring (Miller 1998:84). The few known sites and isolated finds that have been documented seem to fit this overall pattern (Sassaman et al. 2000). A survey of Crescent Lake demonstrated that there is great potential for recovering early assemblages in the region (Sassaman 2003c). Crescent Lake is a perched water source that was well-watered throughout the late Pleistocene and early Holocene. Collector surveys and near-shore survey of submerged contexts revealed the presence of numerous early diagnostics. Paleoindian and Early Archaic diagnostics have been recovered from Silver Glen Springs, and have also been reported from the bottom of Lake George (Thulman 2009).

Middle and Late Archaic (ca. 7500–2800 cal BP)

Several environmental and social trends define the Middle and Late Archaic periods. In broad terms the Middle and Late Archaic periods are coeval with increasingly wetter conditions of the middle Holocene, with essentially modern conditions occurring by the end of the Late Archaic. Sites of this period are found throughout much of Florida, and for the first time are located in interior forests, along the St. Johns River and the Atlantic Coastal Lagoon (Milanich 1994:77). Lifeways predicated on intensive shellfishing are present in the St. Johns by 7300 cal BP and no later than 6000 cal BP on the northeast coast of Florida (Russo 1996). The distribution of sites reflects an overall increase in available surface waters and the exploitation of new habitats, as well as a probable increase in population. By 5500 years ago regionalization is evident across Florida. These new traditions, focused particularly on wetlands, presumably resulted in increasingly larger populations and more permanent settlements (Milanich 1994:87).

Throughout Florida, changes in material culture, including projectile point styles and the appearance of pottery, are used to delineate subperiods and local traditions. In the middle St. Johns several subperiods have been defined, including the Newnan Horizon, the Mount Taylor culture, and the Orange period. Additionally, the "preceramic Archaic" is a generic term denoting Middle to Late Archaic traditions dated between 7000 and 4600 cal BP, which were without pottery technology. Archaeologists typically assign sites to the preceramic Archaic when Archaic-age assemblages lacking diagnostic artifacts are recovered.

Newnan Horizon (7500–4600 cal BP). Across much of Peninsular Florida researchers have recognized the Newnan Horizon, characterized by short, narrow stemmed, broad bladed chipped stone hafted bifaces (Milanich 1994:76). A number of types have been defined, including Newnan, Marion, and Putnam (Bullen 1975). There is significant variation in the form of stemmed hafted bifaces from this period, leading to a less formal designation of the "Florida Archaic Stemmed" type, which includes any broad-bladed stemmed hafted biface. Lithic artifacts during this period were typically manufactured from thermally altered chert or silicified coral (Ste. Claire 1987). Dates place Newnan sites between 7500 and 4600 years ago (Milanich 1994:77), although similar forms were likely produced into the Late Archaic period.

Settlement in interior Florida, which contains much of the available chert and silicified coral for the production of stone tools, is characterized by a dichotomy between large, diverse assemblages and small lithic scatters. The large sites have been interpreted by Milanich (1994:79) as indicative of reduced seasonal mobility. Austin (2001) suggests, however, that the larger sites likely represent more intensive short-term reduction episodes near raw material outcrops. Several quarries have been identified, including the Senator Edwards site in central Florida (Purdy 1975). Newnan horizon hafted bifaces are routinely recovered in shell midden contexts along the middle St. Johns. The lack of toolstone in the middle St. Johns precludes their local production. Lithic provenance studies indicate that chipped stone tools were being imported into the region from West and Central Florida (Endonino 2007).

Mount Taylor (ca. 7300–4600 cal BP). The Mount Taylor culture (ca. 7300–4600 cal BP) has been defined to describe the intensive late Middle Archaic and early Late Archaic occupation centered on the extensive wetlands of the middle St. Johns River, the adjacent Ocklawaha and Wekiva rivers, and associated Atlantic Coastal Lagoon (Goggin 1952; Wheeler et al. 2000). This is an archaeological construct, and it refers to a suite of site types and diagnostic artifacts. Recently, the period has been split into an early Mount Taylor phase (ca. 7300–5600 cal BP) and a late Thornhill Lake phase (5600–4600 cal BP), on the basis of changes in the frequency and style of exotic objects and mortuary traditions (Beasley 2008; Endonino 2010). Although the broad details of lifeways are known for this period, the Mount Taylor culture remains poorly understood for several reasons. Mount Taylor period components are typically buried deeply under later components or submerged under alluvium or peat deposits. Moreover, many sites of this period have been destroyed or impacted by modern land-use practices. The majority of shell mounds were mined in part or whole for road fill during the middle of the 20th century (Milanich 1994).

Settlement patterns during this period are not well known (Wheeler et al. 2000). Seasonality studies of late Middle Archaic sites in the coastal Timucuan Preserve (Russo et al. 1993) suggest that Mount Taylor communities likely had well-established patterns of movement within each region. Although this does not preclude movement either within the middle St. Johns, or to the Atlantic coast or interior, it does suggest that populations were relatively circumscribed. Based on botanical remains and hydrology, Grove's Orange Midden has been interpreted as a multiseasonal occupation (Russo et al. 1992). Based largely on the assumption that shell mounds are villages, it is typically presumed that the large shell deposits throughout the middle St. Johns represent multiseasonal to permanent year-round base camps that articulate with smaller task and season-specific localities (Wheeler et al. 2000). This remains to be tested.

Sites with Mount Taylor components are present throughout the middle St. Johns basin (Sassaman et al. 2000). Although many sites are located adjacent to the main channel of the St. Johns, many others are situated within low-lying swamps or marshes. Wheeler et al. (2000) suggest that there are several general configurations, including ovoid midden-mounds, ridges of shell, complexes of shell fields, ridges, and mounds in addition to small, diffuse middens. The configuration of Mount Taylor occupations is made less clear in multicomponent sites, where Mount Taylor assemblages are partially or completely obscured by later deposits, but are generally characterized by linear footprints (Randall 2010).

It is unclear how these sites are internally organized, and whether there are specific areas for habitation, refuse disposal, or other tasks. Based primarily on stratigraphic inference and non-mounded shell bearing sites, some Mount Taylor occupations appear to be composed of households arranged in a linear fashion (Randall 2010). Few features are known from this time period. Aside from the occasional post-mold, features that have been recorded at large sites such as the Lake Monroe Outlet Midden (8VO53) (Archaeological Consultants and Janus Research 2001) and Fort Florida (8VO48) (Johnson 2005) tend to be large shell-filled basins. Further evidence comes from the Lake Monroe Outlet midden, where lithic reduction tasks were apparently segregated from domestic refuse or processing tasks (Scudder 2001). Similarly, at the Hontoon Island North site (8VO202) primary and secondary midden were separated in space suggesting the presence of discrete habitation and refuse areas (Sassaman et al. 2005). Stratigraphically, Mount Taylor shell mounds are characterized by shell lenses, typically composed of whole and crushed *Viviparus*, *Pomacea*, and bivalve. Strata can be composed of a mixture of these taxa, or as concentrations of single taxa. The addition of sand within shell deposits appears to be a later practice. In many cases individual strata are composed of a single taxon, which may be burned, whole, or crushed. Another feature of Mount Taylor sites is the presence of concreted shell, which can occur either as thick, extensive lenses or as localized conglomerates (Wheeler et al. 2000:145). It has been suggested that concreted shell deposits form by the interaction of ash, shell, and percolating water.

In addition to basal deposits of concreted shell, Mount Taylor sites typically contain saturated or submerged components that appear to have been inundated during or soon after deposition. Due to the cost and time involved in dewatering and excavating saturated deposits, these have only rarely been investigated, but include Salt Springs (O'Donoughue et al. 2011) and Groves' Orange Midden (8VO2601), a Mount Taylor and Orange period site on the eastern shore of Lake Monroe (McGee and Wheeler 1994). Groves' Orange midden, for example, is a segment of the much larger multicomponent Old Enterprise mound and shell field complex (8VO55). Stratigraphic excavations yielded five discrete strata. The earliest primary deposition (Stratum IV) dates roughly between 7000 and 6000 cal BP and is characterized by dense *Viviparus* shell deposits. These early dates are supported by dates clustering around 7300 cal BP from the base of Live Oak Mound and Hontoon Dead Creek Mound (Sassaman 2003b, 2005), indicating that the establishment of wetland habitat and its exploitation by residents of the middle St. Johns occurred by at least 7300 years ago, if not before. At Grove's Orange Midden, this basal stratum underlies a thick peat deposit (Stratum III) which dates from 6000 to 4400 cal BP (McGee and Wheeler 1994). This peat is thought to represent a seasonal marsh, which suggests a high water stand or an increase in the hydroperiod (Randall 2010). Rare artifacts within this stratum attest to shifts in refuse disposal that likely relate to micro-environmental changes. Above this peat deposit is another dense *Viviparus* deposit dating to the end of the preceramic Archaic. These data not only demonstrate the variability in surface waters through time, but also demonstrate that much of the early record of the Preceramic Archaic lifeways is likely submerged and covered along Florida's lakes and rivers.

Ceremonialism was a widespread and prominent component of Mount Taylor lifeways, as evidenced by the construction of monumental shell mounds and mortuary-related sand mounds. Although traditionally viewed as relatively late-period constructions or the result of mundane activities, some Mount Taylor mounds were deliberately constructed as ritual and/or mortuary mounds as demonstrated by early observations by Jeffries Wyman (1875) and C.B. Moore (1999), and more recent excavations at Bluffton Burial Mound (8VO23) (Sears 1960), Mount Taylor (8VO19) mound (Wheeler et al. 2000), the Harris Creek site (8VO24) on Tick Island (Aten 1999), Live Oak Mound (8VO41) (Sassaman 2003b), Hontoon Dead Creek Mound (8VO214) (Sassaman 2005), and the Tomoka Mound complex (8VO81) (Piatek 1994) on the Tomoka River. Although Mount Taylor burials have been recorded in only a few cases, similarities in the form and internal structure of these mounds indicates that many if not all were mortuaries at one point in time (Endonino 2003).

Although only a handful of mounds have been archaeological tested in modern times (Bluffton, Mount Taylor, Harris Creek, Live Oak, Tomoka, Hontoon Island North and Hontoon Dead Creek Mound, Thornhill Lake, Silver Glen Run Locus A), many more no doubt existed prior to their destruction during the 20th century. That many of the mounds contained preceramic deposits was well documented by Jeffries Wyman (1875). Wyman, then curator of Harvard's Peabody Museum, made extensive collections and observations of shell-bearing sites throughout the middle St. Johns River between 1860 and 1873. Through pedestrian surveys and collections, observations of cut-banks, and small excavations, Wyman recorded over 40 ridges, ridge complexes, and conical mounds throughout the basin. Later in the 19th century, C.B. Moore (1999) revisited many of these sites. His more intensive excavations provide both a confirmation of the preceramic origins of many mounds, as well as documentation of the stratigraphic sequences and mortuary nature of these sites.

Most ceremonial mounds share design elements and internal sequences (Endonino 2003; Randall and Sassaman 2005; Wheeler et al. 2000). Many mounds are crescent-shaped ridges, with steeply sloping sides and asymmetrical summits 5 to 11 m tall. Excavations at Hontoon Dead Creek Mound and Live Oak Mound determined that at least these two were erected rapidly, on the order of several hundred years at most, and composed primarily of shellfish remains (Randall 2010). The extent to which these mounds encase earlier mortuaries is unknown. Moreover, it is unlikely that all mounds were constructed this rapidly, or for the same ceremonial purposes.

The construction of mortuary mounds may be a practice as old as the Mount Taylor period. Early (Mount Taylor phase) mortuary mounds are best known from the Harris Creek site (8VO24). At Harris Creek, mortuary deposits have been dated between 7000 and 5900 cal BP. As related by Aten (1999), the Harris Creek mortuary was constructed by emplaced shell and white sand upon a preexisting shell deposit in small scale mortuary events. At least 140 individuals were interred here. Later Thornhill Phase mortuaries such as Bluffton and the Thornhill Lake mounds (8VO58) are round, truncated cones. Like the earlier mortuaries, these mounds tend to be erected on top of existing shell deposits. At Bluffton this layer was intentionally burned (Sears 1960). Earthen mounds of sand (typically brown) or muck were then constructed on this midden. Burials were then placed into these deposits. Although grave goods are rare in early contexts (Aten 1999), Thornhill Lake phase burials (such as the type site) were interred with exotic artifacts. Subsequent to interment, these earthen mounds were frequently capped with shell, which in some cases was clearly excavated from preexisting midden deposits (Aten 1999; Piatek 1994).

The importance of wetlands is evident not only in the placement of sites, but in the subsistence remains. Mount Taylor lifeways were characterized by a fishing and hunting subsistence economy. Faunal analysis at Grove's Orange Midden (Russo et al. 1992; Wheeler and McGee 1994), Lake Monroe Outlet Midden (Quitmyer 2001), Blue Spring Midden B (8VO43) (Sassaman 2003b), and Salt Springs (Blessing 2011) demonstrate the dominance of aquatic species, which could have been acquired from marshes, slackwater lagoons, and sloughs. Although it was once thought that shellfish contributed a small percentage of the diet, recent studies indicate that between 33 and 98 percent of the dietary meat weight was derived from freshwater shellfish. Studies have shown that shellfish diversity varies with site contexts, and may reflect local ecological variations (Quitmyer 2001). A diverse array of fish were collected, including catfishes, sunfish (*Lepomis sp.*), gar (*Lepisosteous sp.*), largemouth bass (*Micropterus salmoides*), and eel. Turtle was also collected, including such species as the soft shelled turtle (*Apalone ferox*), sliders, and mud/musk turtles.

Where waterlogged conditions have enabled the preservation of plant matter, such as at Groves Orange Midden (Newsom 1994; Russo et al. 1992), Salt Springs (Talcott 2011), and Windover Pond (Newsom 2002) a stable pattern characterized by high diversity is established by no later than 9500 years ago. Pulpy fruits such as black gum, prickly pear, saw palmetto, maypop, wild plum, blackberry, persimmon, red mulberry, elderberry and grape appear to have been the most important (Newsom 2002). These fruits were supplemented with starchy seeds such as amaranth, pigweed, and knotweed, as well as the greens from these and other species. Numerous tubers were potentially eaten. Cabbage palm hearts and shelf fungi have also been identified (Newsom 2002).

Mount Taylor period assemblages are typified by mundane and decorative material culture manufactured from locally available bone, fired clay, and wood, in addition to exotic materials (Wheeler et al. 2000). Bones from deer and other terrestrial animals were used to make a variety of tools including gouges, awls, needles, fids, projectile points, and decorative pins. Wooden tools have been recovered from saturated deposits such as Groves' Orange Midden (Wheeler and McGee 1994) and include tool handles and net floats. Fired clay objects of various shapes and sizes have also been recovered from numerous contexts.

Nonlocal materials used to manufacture tools and items of adornment speak to the extensive trade networks in which Mount Taylor culture groups were engaged. Marine shell appears early in the Mount Taylor phase, and demonstrates contact or movement to coastal regions. By the Thornhill Lake phase, marine shell was abundant, and in the case of *Strombus gigas*, was apparently imported from southern Florida. Shell tool assemblages are dominated by woodworking tools, including *Busycon sp.* axes and adzes, as well as celts made from *Strombus gigas* shell. Marine shell was also used to make containers, which are often recovered with residue adhering to the interior surfaces. These are preferentially made from left-opening whelks, and may have been used for medicinal or ritual beverages (Sassaman et al. 2011b). Decorative shell artifacts are also typical, and include marine shell beads and plummets made from large whelk columella, as well as decorative shells such as *Oliva sp.* Shark teeth are often recovered. Many have been drilled to facilitate hafting for use as a tool or as personal adornment. Contact with the interior and west coast is demonstrated by the presence of lithic materials of nonlocal origin (Endonino 2007). There is no source for raw material for chipped stone tools in the St. Johns basin, and many artifacts appear to have been traded into the region as performs and finished forms. Hafted bifaces are consistent with those of the Newnan horizon. Aside from hafted bifaces, some Mount Taylor lithic assemblages contain microlithic tools that appear to have been used for the production of objects, potentially marine shell beads (Randall 2010). These appear to date to the Thornhill Lake phase based on excavations at Lake Monroe Outlet Midden (ACI and Janus Research 2001).

The presence of ground stone beads and bannerstones provides evidence for contacts far afield during the Thornhill Lake phase. Groundstone beads have been recovered from several mortuary and cache contexts, (Thornhill Lake mounds 1 and 2 and Coontie Island respectively) (Clausen 1964; Moore 1999). Although their origins are unknown, they are quite similar to tubular beads produced in Mississippi and the Mid-south during the Middle Archaic. Bannerstones have been recovered from several mound contexts, including Thornhill Lake, Tomoka Stone, and Coontie Island. The forms are consistent in form and raw material with those manufactured in the middle Savannah River in Georgia and South Carolina (Sassaman and Randall 2007).

Orange (4600–3600 cal BP) and Early St. Johns (3600–2800 cal BP). The appearance of pottery in shell middens of the St. Johns River and the Atlantic coast signals the end of the preceramic traditions and the beginning of the pottery-making traditions. Orange fiber-tempered pottery has been dated as early as 4800 years ago in the lower St. Johns, although pottery does not appear in the middle St. Johns until 200 years later (Sassaman 2003a). By 3600 years ago, fiber-tempered pottery ceases to be manufactured, signaling the end of the Orange period, and is wholly replaced by spiculate-pasted wares. Once thought to be diagnostic of the St. Johns period, radiocarbon dates (Sassaman 2003a) and paste characterization studies (Cordell 2004) demonstrate that spiculate pottery was produced during the Orange period and continued through the end of the Late Archaic and into the St. Johns Period.

Orange period lifeways have been portrayed as continuing the basic trends set in motion during the preceding Mount Taylor period (Milanich 1994:86). Excluding the production of pottery, and new hafted biface types such as the Culbreath, Lafayette, Clay and Levy varieties, continuity is suggested by the continued use of marine shell and stone tools, although marine shell does appear in reduced frequency at some sites. As evidenced by subsistence data from Blue Spring Midden B (Sassaman 2003b) and Grove's Orange Midden (Russo et al. 1992), communities continued to exploit aquatic habitats, routinely collecting from local shellfish beds and capturing fish and turtles.

The economic importance of wetlands is demonstrated by the continued focus of settlement adjacent to the river. Orange sites are most likely to be found along productive wetlands and marshes, often in the same locales as earlier preceramic components, while there is a decrease in sites in the interior forests of northern Florida. The more numerous and larger Orange components may very well reflect an overall increase in population. This observation, however, must be tempered by the fact that preceramic components may not be adequately recorded due to inundation, stratigraphic ambiguity, or a lack of diagnostic artifacts.

Although there certainly is significant continuity, divergence in traditions within the St. Johns is evident during Orange times (Sassaman 2004). The upper St. Johns is characterized by smaller sites that may, when taken as a whole system, constitute year-long settlement (Sigler-Eisenberg et al. 1985). In the lower St. Johns, large and presumably multi-seasonal settlements are surrounded by smaller, probable fish-processing stations (Russo et al. 1993). In addition to these habitation areas, large shell rings have been identified both at the mouth of the St. Johns and along the coast (Russo and Heide 2001). These sites were likely accretionally but intentionally constructed, and were the loci of communal feasting and ritual activities (Russo 2004; Saunders 2004).

Settlement in the middle St. Johns has been less well documented, but it appears to replicate Mount Taylor site types, characterized by a dichotomy between extensive middens, mound complexes with abundant pottery, and small task sites. Because these sites have not been routinely investigated, data on their internal organization and function are scarce. Sassaman (2003c) has identified a possible Orange period semi-circular compound at Blue Spring Midden B. The compound was situated above a Mount Taylor midden and adjacent to a Mount Taylor mound. At least three households and their associated refuse piles were inferred. Although seasonality data have not been forthcoming, the site was repeatedly occupied.

Emerging new data, primarily from the Silver Glen locality, indicates that Orange communities in the middle St. Johns actively mounded shell as their coastal neighbors did. In general, Orange pottery at mound sites is rare. At Bluffton the pottery was deposited adjacent to and not on top of the mound (Wheeler et al 2000). In excavations at Live Oak Mound, Sassaman (2003c) recovered only a small number of sherds, all from near the surface. However, large quantities of decorated Orange pottery are present at several mounds, including the Mouth of Silver Glen Springs Run (8LA1), Harris Creek, Enterprise, and Orange Mound. In most cases it is unclear if the mounds were in the shape of a linear ridge or a U. Based on the observations of Wyman, however, the mound at the mouth of the SGS run was U-shaped, although it remains to be determined when it attained that configuration (see Chapter 3).

Orange fiber-tempered pottery has been treated primarily as a chronological marker. Bullen (1972) constructed five subperiods, based on changes in vessel construction and surface decoration. The unilineal sequence consisted of a transition from Orange Plain to Incised (Orange Incised and Tick Island) wares, which were eventually replaced by spiculate-tempered St. Johns Incised vessels. However, radiocarbon dates have shown that variation in tempering agents, vessel form, and surface treatment likely reflect spatial variation in the production and use of pottery (Cordell 2004; Sassaman 2004), and not necessarily temporal trends, as once thought. Sassaman (2004) suggests that village sites such as Blue Spring Midden B are dominated by plain pottery that was rarely used over fires, while large and complex sites such as Harris Creek and Silver Glen Run are dominated by incised vessels that were routinely used over fire. He suggests, as Saunders (2004) does for the coastal Orange shell rings, that the different distribution likely represents different social contexts, where plain pottery was used in mundane contexts, and incised pottery was used primarily during ceremony and communal feasts. Recent dates from 8LA1 on Tick Island Incised components indicate this variant post-dates classic Orange Incised vessels, and may be associated with domestic and ritual contexts (see Chapter 6).

The recent upheaval in the chronology and typology of fiber- and spiculate-tempered wares has left an approximately 1000-year gap between the Orange and St.

Johns I periods. A "Transitional" period was defined by Bullen as a bridge between primarily fiber-tempered assemblages and incised spiculate-tempered wares (Milanich 1994:88). Isolating sites of this period has remained problematic (Miller 1998:76), likely because many of the wares thought to occur after the Orange period are actually coeval. Although the term "Transitional" should be discarded, there is a need to document sites of this period. An early date on a spiculate-tempered assemblage at the Joseph Reed Shell Ring (8MT13) in southern Florida indicates that this interval will likely be populated with components as more dates are acquired (Russo and Heide 2002).

St. Johns (ca. 2800–500 cal BP)

Although St. Johns pottery dates as early as 4400 cal BP, fully developed St. Johns lifeways began around 2800 cal BP, and continued into European contact. The archaeological culture was defined by Goggin (1952), who used changes in pottery styles to identify subperiods. The St. Johns I (ca. 2800–1300 cal BP), is typified by plain "chalky" spiculate-tempered wares, and the St. Johns II (ca. 1300–500 cal BP), typified by plain and check-stamped varieties. These ceramic types are formally referred to as St. Johns Plain and St. Johns Check Stamped, respectively. Additional subperiods have been identified by the presence of foreign wares or local copies of them, as well as changes mortuary ritual (Milanich 1994:247). As Miller (1998:79) notes, however, these divisions are not easily traced because the diagnostic artifacts or sites are rare.

Although there are numerous changes in social organization, material culture, and ceremonialism that were incorporated from external contacts, the St. Johns period may be marked by conservatism (Miller 1998:78). In general it is assumed that along the St. Johns River, St. Johns I and to a certain extent St. Johns II lifeways continued seemingly unchanged "from that of their late Archaic, Orange-period predecessors" (Milanich 1994:254). This assumption is based primarily on the fact that St. Johns I components are likely to be found on sites with Orange components, and this trend continues with a similar frequency of reoccupation for St. Johns II components (Miller 1998; Sassaman et al. 2000). However, there have been very few archaeological investigations of these post-Archaic components. The continuity made apparent by the reuse of locations may be superficial at best. In general, however, villages, short-term task sites, and large ceremonial mounds are likely present along much of the St. Johns River and its tributaries, and along the coastal lagoons from Jacksonville into Brevard County. Although equally distributed on the coast and along the St. Johns, St. Johns period sites are also located in interriverine localities. Increases in population from Orange to St. Johns II times are suggested by increases in sites per century. Unfortunately, village contexts have rarely been excavated, so it is unknown how large the residential populations of each these places may have been, nor how they may have been structured.

Continuity with Orange period subsistence practices is a likely possibility. Coastal assemblages are dominated by oyster and coquina, in addition to estuarine fishes (Milanich 1994: 257). Subsistence data from the St. Johns period wet-site deposits at 8VO202 on Hontoon Island indicate that populations continued to focus on the collection of aquatic resources, such as gar, catfish, largemouth bass, alligator, and turtle, in addition to *Viviparus* and bivalve (Wing and McKean 1987). A wide array of plants were also exploited, including many that were collected during the preceding Archaic (Newsom 1987). Cultigens that supported large populations and complex forms of social organization elsewhere in the Southeast occur in relatively limited frequencies. Bottle gourd (*Langeria siceria*) seeds and rind fragments and *Cucurbita pepo* gourd fragments were recovered in St. Johns II contexts, but these were likely used for containers or net floaters. Maize, a staple throughout much of the Southeast by St. Johns IIb times, was present in only historic contexts. Cultivation or encouraged gardening of cornmay have been practiced, but it does not appear to have been widespread or intensive in the middle St. Johns.

Changes in material culture throughout St. Johns I and II times were primarily restricted to pottery decoration and hafted biface types (Milanich 1994:247, 263). Hafted bifaces were typically small and crude, and include the Jackson, Florida Copena, Bradford, Columbia, Broward, Taylor, Westo, Florida Adena, Gadsen, Sarasota, and Ocala types (Bullen 1975). Plain St. Johns wares dominate St. Johns I components. Locally produced Dunns Creek Red vessels were produced during Ia and Ib times, while during Ia copies of Deptford and Swift Creek and during Ib Weeden Island vessels were produced. These often were deposited in mortuary contexts. At ca. A.D. 750, potters began to apply check-stamped designs with wooden paddles. During IIa times, late Weeden Island pottery and copies were made, while elements of the Southeastern Ceremonial Complex are evident in IIb assemblages. During St. Johns IIa or IIb times, there is a shift to the use of small hafted bifaces such as Pinellas, Ichetucknee, and Tampa Points. Other tools found throughout St. Johns period assemblages were shell adzes, celts, picks and hammers. Bone tools include a variety of awls, pins, pendants, beads, and fishhooks.

Ceremonial and political life appears to have been transformed in relation to external contacts (Goggin 1952, Milanich 1994:260-262). Mounds of the St. Johns I period were low, truncated cones constructed of sand. Bundle burials, extended interments, and cremations were placed into these mound. Many mounds were reused for multiple interments, which may indicate that interred individuals were members of the same lineage, as in Weeden Island mounds. During the St. Johns Ia period, larger mounds were constructed, and exotic items such as galena and copper were interred, along with locally made St. Johns Plain and Dunns Creek Red pottery. Towards the end of Ia, Hopewell influences are evident in the construction of log tombs. Mounds of Ib age show evidence for Weeden Island influences. St. Johns IIa mortuary practices appear similar to earlier practices in that they continue to be used for multiple, likely kin-based burials (Milanich 1994:268).

Beginning with the St. Johns IIb subperiod, the construction of mounds takes on a different character, and is clearly influenced by Mississippian cultures to the north and west. Although it is unknown precisely what level of social organization was present at this time period, the symbolism and quantity of material culture is similar to chiefly societies elsewhere in the Southeast at this time. At least three large pyramidal mounds were present in the middle St. Johns basin, including Shields, Mt Royal, and the Thursby

Mound, located across the St. Johns channel from Hontoon Island. These sites were large earthen works, likely constructed in stages. C. B. Moore (1999) excavated all of these sites, and recovered caches of copper, galena, silver and gold, *Busycon* shells, greenstone celts, and clay vessels and effigies in addition to scattered or poorly preserved human remains.

CONCLUSION

The configuration of the Silver Glen Springs watershed today reflects a complex and interwoven history of natural and cultural processes reaching back nearly 12,000 years. The most visible components of this landscape are the four known shell and sand mounds that were constructed there. Yet the preponderance of data indicates that most portions of the watershed were incorporated into the daily and ritual lives of its inhabitants. Although fragmented by recent land use practices, the area encompassed by the Juniper Club was among the more intensively utilized areas since about 6000 years ago. It is to the archaeological investigation of these resources that we now turn.

CHAPTER 3
MOUTH OF SILVER GLEN RUN (8LA1-EAST)

Kenneth E. Sassaman

The large shell deposit that was located at the mouth of Silver Glen Run is listed in the Florida Master Site File as 8LA1. It was first noted by William Bartram in his 1766 travels through northeast Florida (Bartram 1942:44), and more than a century later by Jeffries Wyman (1875:38-39) and J. Francis LeBaron (1884:774). Wyman's account is the most detailed. The shellworks he described at the mouth of what was then called Silver Spring Creek were among "the most gigantic deposits of shells met with on the waters of the St. Johns" (Wyman 1875:38). He goes on to describe a massive U-shaped construction on the south side of the run:

> The one last mentioned is much the larger and consists of three portions forming as many sides of a hollow square. The first extending along the shore of the creek, near the mouth of which it has a height of from twenty to twenty-five feet by measurement; the second is on the shore of the lake, and measures from a hundred and fifty to two hundred feet in width, and the third extends inland at nearly right angles to this. Between these ridges is a deep valley, in which the shells are entirely wanting or are only sparingly found (Wyman 1875:39).

In addition to this description, Wyman made a simple sketch plan of the shellworks during his visit (Figure 3-1), although it was never published. Asa Randall located the sketch in his review of Wyman's field notes, curated at the Countway Library of Medicine at Harvard University. Even though it does not provide much detail, and cannot be taken as a literal rendering, the sketch at least corroborates the general shape of the deposit given in Wyman's description and thus provides a starting point for archaeological investigation.

Having been mined for shell in 1923, the U-shaped shellworks at the mouth of Silver Glen are no longer visible on the surface. Still, subsurface contexts and adjacent waters hold clues to the pre-mining configuration of the deposit. In fact, the east end of the deposit, fronting the lake, consists of exposed shell both on shore and along a submerged ridge a few tens of meters into the lake. Wyman (1875:39) described this submerged feature as a "beach wall," and rightfully attributed it to wave action that eroded the shell mound. Shoreline erosion has no doubt altered much of the site since Wyman's time, although most of its alteration can be attributed to mining activities. Despite massive alteration to the shoreline, we held out hope that three small islands at the mouth of the run were remnants of the original north ridge. Before the shell deposit was mined, the run was narrow at the mouth, as it remains today at its midpoint just northwest of the club house. Thus, the mining operation not only removed virtually all of the above ground shell, it also reconfigured the shoreline of the run and caused much of the basal portion of the north ridge to become submerged. Our testing on two of the three islands failed to locate intact deposits and suggested instead that shell miners emplaced shell in these locations, perhaps as part of a reclamation effort to maintain fish habitat or to subdue erosion of the mainland shore.

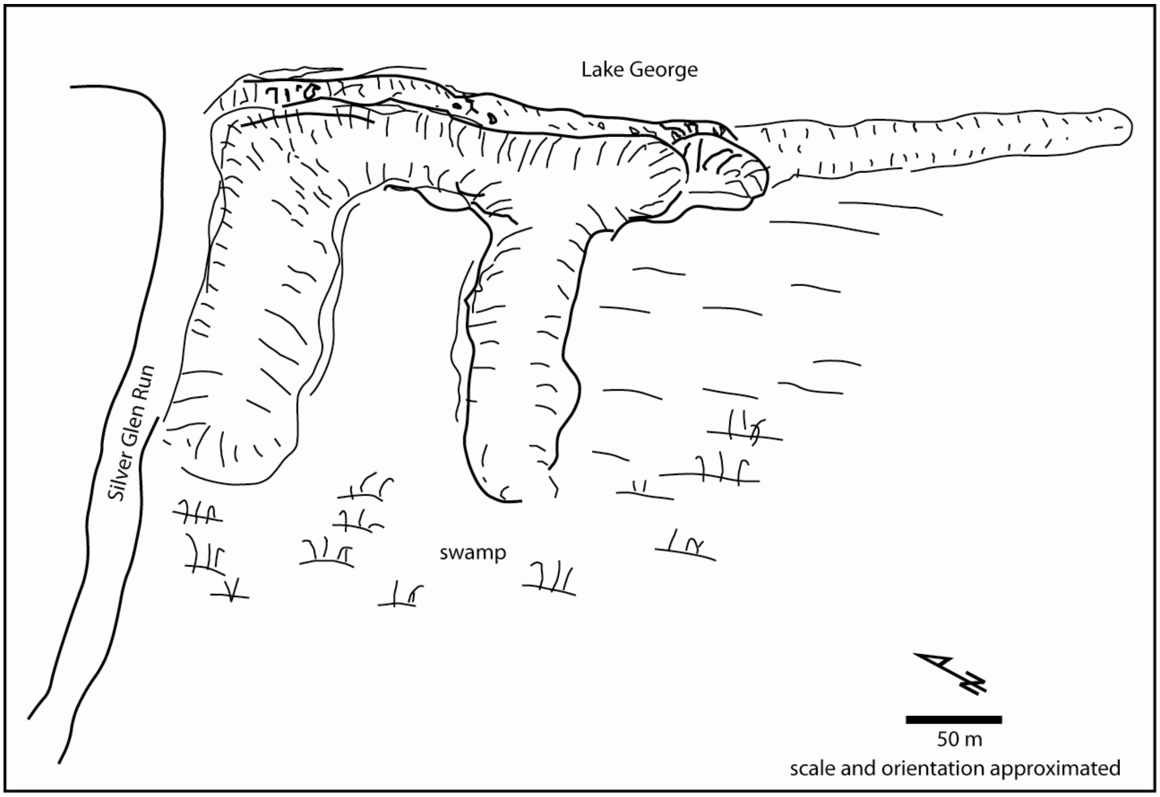

Figure 3-1. Digitized version of sketch map of U-shaped shellworks at 8LA1-East drawn by Jeffries Wyman, ca. 1875 (courtesy of Countway Library of Medicine, Harvard University, and Asa R. Randall).

Little more is known about 8LA1 except that it contained "an abundance of pottery," according to Wyman (1875:40). A large sample of sherds from this location is curated at the Florida Museum of Natural History in Gainesville. Among the sherds are many examples of Orange Incised, a pottery type that is among the oldest in Florida. Soot samples scraped from the surface of three Orange Incised sherds were submitted for radiocarbon dating in 2002 and returned conventional age estimates of 3680 ± 60, 4020 ± 60, and 4070 ± 60 radiocarbon years before present (rcybp) (Sassaman 2003a). The latter two age estimates are especially noteworthy because they are among the oldest ever recorded for the type. These estimates also provide a minimum age for the shell ridges, although given recent work elsewhere in the middle St. Johns region (e.g., Randall 2010; Sassaman 2003b; Randall and Sassaman 2005; Sassaman and Randall 2012), shell may have begun to accumulate as early as 7000 years ago. Nonetheless, 8LA1 is highly significant because it is one of only a few large shell deposits in the region with a sizeable Orange-period component.

Wyman and other early visitors to Silver Glen Run did not make mention of the shell ridge to the immediate west of the U-shaped shellworks and only passing mention of additional shell deposits in what we now refer to as 8LA1-West. As discussed in Chapter 4, there is no discernable break in the distribution of subsurface archaeological remains between the east and west portions of 8LA1. To facilitate communication about different components of the site, we refer to the area of the U-shaped shellworks as 8LA1-East and treat it as a subunit of a larger site for the purposes of this report.

The initial goal of archaeological investigations at 8LA1-East was to establish the distribution of subsurface remains across the entire landform through a program of augering. We were hopeful that enough of the base of the U-shaped deposit had survived mining to be detected simply by the presence of subsurface shell, and thus provide a means for inferring the original placement and orientation of the shellworks. In conjunction with augering, we began in 2007 a program of test unit excavation at the largest island in the run, as well as two locations in the presumed area of the south ridge. We doubled our efforts to locate remnants of the north ridge in 2008, but were largely unsuccessful. In 2010 we returned to 8LA1-East to continue testing in the area of the south ridge, this time in conjunction with Ground Penetrating Radar (GPR) and a program of close-interval coring. Although the results of GPR and coring showed promise for locating portions of a possible circular village, controlled excavations yielded ambiguous results. Nonetheless, the combined investigations of 2007-2010 at 8LA1-East confirm the presence of a large, U-shaped shellworks as described by Wyman, and provided enough evidence to suggest that the south ridge was emplaced on a natural surface by users of Orange pottery. Efforts to locate intact portions of the north ridge at 8LA1-East generally failed, although we hasten to add that so much of this deposit now lies below the watertable and is thus inaccessible without dewatering.

This chapter reports the methods and results of all archaeological investigations at 8LA1-East conducted by the St. Johns Archaeological Field Schools of 2007-2010, beginning with the establishment of a site-wide grid.

SITE-WIDE GRID

In 2007, the first year of investigation, a site-wide grid was established to provide horizontal and vertical spatial controls for all aspects of fieldwork. An arbitrary datum was set about 20 m east of the southeast corner of the deck of the clubhouse. Designated Datum A, this point of reference was assigned an arbitrary northing of 1000.00 m and an easting of 1000.00 m, with an arbitrary elevation of 10.00 m. A 4-ft long section of ¾-inch galvanized electrical conduit was driven into the ground at this location, eventually pushed in flush with the ground surface to prevent being dislodged. From this datum a cloth tape was pulled eastward across the lawn to a location near the bank of the easternmost pond and at 135.5 m a second section of conduit was driven into the ground to establish Datum B (N1000.00 E1135.50). A Nikon DTM-310 Total Station was used at Datum A to verify the taped distance to Datum B and to establish its elevation as 9.40 m.

With this baseline established, the Total Station was used to collect data for topographic mapping and, over the course of multiyear investigations, to determine the coordinates of all subsurface tests, surface finds, and various points of reference. In due course, the grid system at 8LA1-East was extended via Total Station to 8LA1-West, where pairs of permanent data were established at Loci A and B. The acquisition of

LiDAR data in 2008 obviated the need to collect Total Station data for surface topography, and the use of high-resolution GPS data alleviated the need to locate all shovel tests, auger holes, and surface finds with the Total Station. However, all excavation units across all areas of 8LA1 were sited with the Total Station, which was likewise used to maintain three-dimensional controls for many of the point-plotted artifacts uncovered in the 2009 block excavation at Locus B.

AUGER SURVEY

For the purpose of acquiring extensive subsurface data from the full extent of 8LA1-East, a series of augers were initiated in 2007 across the open terrain east and south of the clubhouse. Several augers were also sunk in the wooded area along the lakeshore, and on the largest of three islands (Island A) at the mouth the run. Two types of augers were used: a 6-cm diameter Dutch gouge auger with a maximum reach of 1.2 m, and a 10-cm diameter bucket auger with extensions capable of reaching ~4 m. Subsurface shell deposits and related strata across the expansive lawn could be adequately characterized with the gouge auger, but the bucket auger was required along the lakeshore, at the confluence of the run and the lake, and on Island A. The depth of shell deposits in these near-shore locations often exceeded 1.5 m in depth below the surface.

Transects for auger sampling were oriented parallel to the N1000 base line, spaced 20 m apart. Sampling along transects was conducted uniformly across all open terrain of 8LA1-East at an interval of 20 m (Figure 3-2). Sample points were determined by triangulating from baseline data with two cloth tapes. After a sample point was augered, its location was established within the site grid with the Total Station. All fill

Figure 3-2. Field school students sinking a Dutch gouge auger into subsoil of area east of the clubhouse, July 2007.

from augers was passed through ¼-inch hardware cloth and any recovered artifacts or vertebrate fauna were bagged and labeled by transect and auger numbers. Recorded for each auger were observations on the presence/absence of shell, the depth and condition of shell (crushed, whole, burned), and the presence/absence of nonshell midden.

The locations of 84 augers sunk in 2007 are displayed in Figure 3-3. As can be seen, sample coverage of 8LA1-East is biased toward the open, grassy portions of the site, and biased against its wooded and flooded portions to the east. The latter area is very difficult to traverse due to an abundance of downed trees, mostly the victims of tornadic winds associated with one of three hurricanes in 2004. To minimize this bias in coverage, we surveyed the wooded area for tree throws in 2010 using a GPS unit to record locations. These data do not include estimates of the depth of shell or other midden below the surface, merely observations on the presence/absence of shell. We will review these observations following discussion of the auger results.

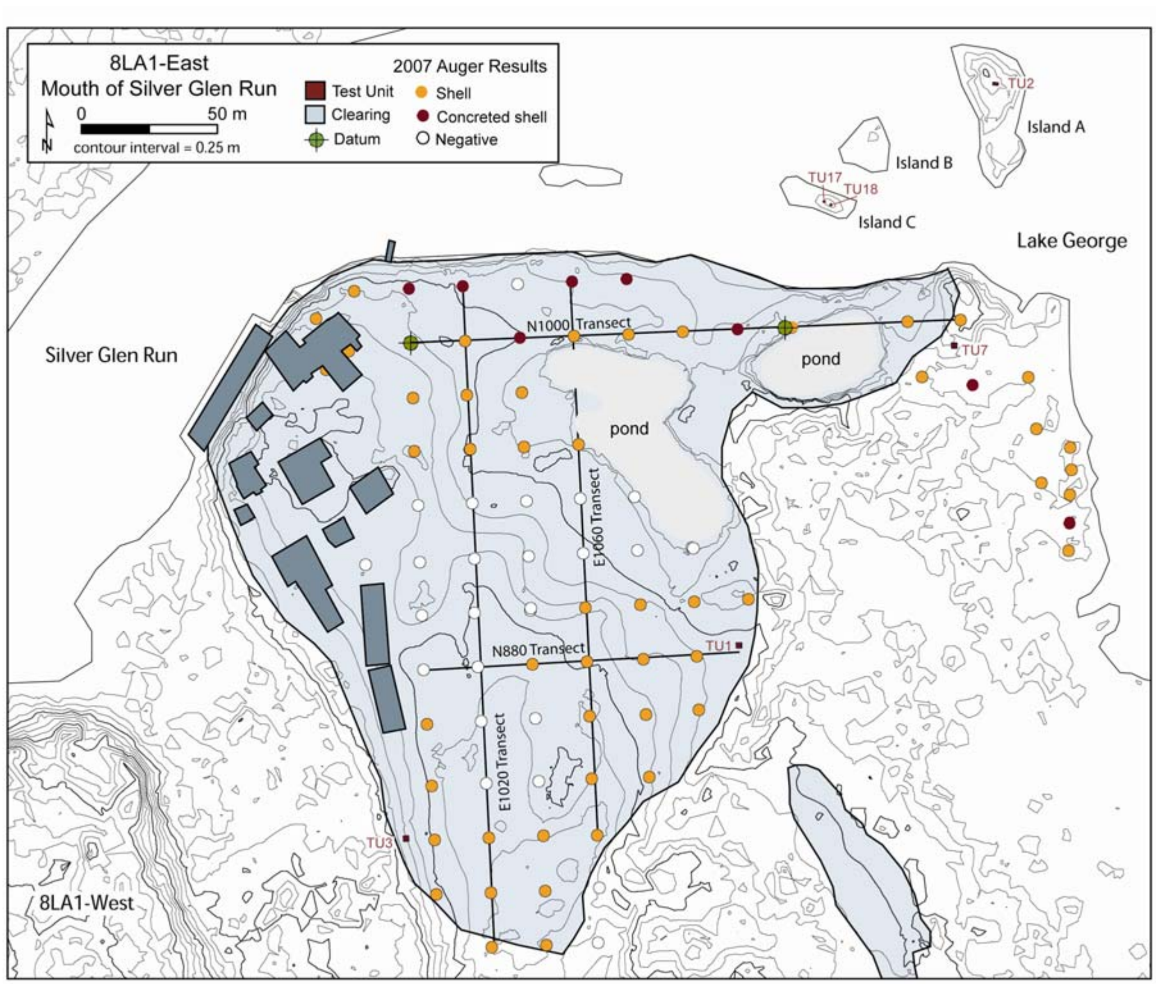

Figure 3-3. Topographic map of the 8LA1-East area showing locations of augers and test units excavated in 2007 and 2008 (refer to Figure 3-4 for cross-sectional views of auger transects).

Cross-sectional views of four transects of augers are provided in Figure 3-4. Starting with the northernmost cross-section (N1000 transect), we find a surface that slopes downward gently to the east before turning back upward at the end of the landform, essentially the point of land that marks the confluence of Silver Glen Run and Lake George. This high point of land at the east end, as we discuss further below, appears to be a product of mining operations, most likely a loading platform for barges used to haul away shell. Irrespective of this surface modification, shell depth increases from west to east, reaching roughly 2 m below surface and about 1 m below the water table on July 11, 2007. Two of the augers of this transect encountered concreted shell ~25 cm below the surface. Patches of concreted shell are evident at the surface just north of this transect, as well as in most of the augers that were placed along the shoreline of the spring run (Transect N1020).

Augers of the N1000 transect, as well as all augers north of this transect, penetrated shell matrix that ostensibly comprises the basal strata of the north ridge observed by Wyman. Because shell along the spring run is often concreted and well below the water table to the east, we suspect that most of this basal shell was actually deposited during the Mount Taylor era, long before the U-shaped configuration took shape after ca. 4200 years ago. If so, Orange-period shell deposition along the north ridge would have been grafted onto a ridge similar perhaps to Locus A of 8LA1-West (see Chapter 5).

A second west-east transect (N880) shown in Figure 3-4 likewise dips to the east gently, but here the subsurface shell is relatively thin (~50 cm BS) and its contact with underlying sand parallels the modern surface. We hasten to note that mining operations have altered all the surfaces shown in cross-section, making it impossible to estimate the contours of emplaced shell before 1923. The N880 transect is located in the presumed area of the south ridge observed by Wyman. As we will see below, shell along this transect was emplaced directly on an old ground surface by people who also deposited Orange fiber-tempered pottery, mostly plain, and dating from ca. 4050-3850 cal B.P. The lack of shell in augers at the west end of this transect may signify the terminus of the south ridge, although additional shell is found in augers to the south, well beyond the expected width of the south ridge.

Two north-south cross-sections in Figure 3-4 provide the best views of subsurface remains running perpendicular to the U-shape shellworks, showing clearly the area lacking shell in what should be the center of the deposit. Recall in the Wyman quote above that the center was “a deep valley, in which the shells are entirely wanting or are only sparingly found.” This area is hardly a “deep valley” today, given that shell was removed on either side to form relatively flat terrain. Because subsurface strata were so variable in composition and structure in many of the shell-free augers in this central location, much of the “valley” may consist of redeposited fill. Despite possible infilling, the cross-sectional views show clearly that shell to the south (on what is presumably the south ridge) was emplaced on higher terrain than shell to the north, along the spring run. As alluded to earlier, we suspect that the south ridge was added during the Orange period to an existing landscape of shellworks that included a Mount Taylor ridge along the

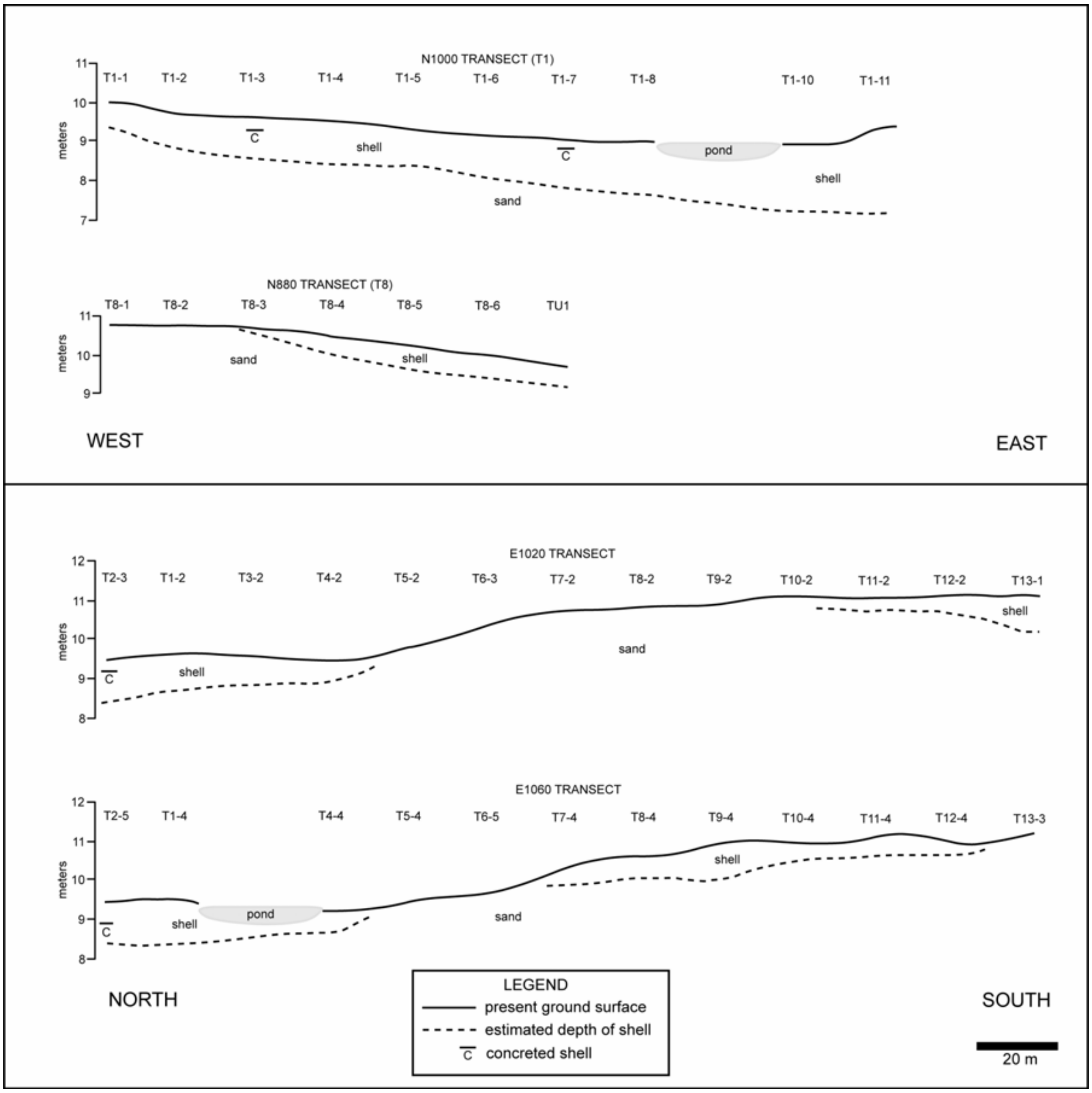

Figure 3-4. Cross-sectional views of two west-east auger transects (top) and two north-south transects showing surface topography, depth of shell, and presence of concreted shell. Vertical exaggeration x8.

spring run. Incidentally, both north-south transects in Figure 3-4 show concreted shell in augers directly adjacent to the spring run, again an indirect measure of the greater antiquity of shell in this location.

In sum, the results of augering enable the following conclusions: (1) shell deposits fronting Lake George are as much as 2.5 m in depth below the modern (mined) surface; (2) shell deposits fronting Silver Glen Run and Lake George contain numerous patches of concreted shell; (3) twenty-three augers lacking shell are concentrated in the south-central portion of open terrain; (4) additional shell deposits exist along the western margin of 8LA1-East, fronting a spring-fed swamp; (5) shell deposits in the purported location of the south ridge were placed on a low slope trending gently upward away from the run and lake; (6) significant archaeological deposits exist below the shell in several locations; (7) augers bearing shell in the presumptive center of the shellworks are among the most variable of the sample, and likely reflect considerable disturbance. On balance, the results of augering suggest that intact shell strata are deeply buried in the area of the north ridge and perhaps along the lakeshore, although most, if not all intact shell strata may be below the modern water table. To the extent this is the case, the challenge will be to determine what shell, if any, was deposited on formerly dry land (and thus of Mount Taylor age) and what shell was deposited in nearshore waters (and presumably of Orange age). A second challenge is to determine the configuration and disposition of shell deposits in the location of the south ridge. Augering shows that shell was emplaced on a slightly elevated landform, apparently directly on a ground surface lacking older midden deposits. Test unit excavations in 2007 and 2008 were designed expressly to address these two challenges.

TEST UNIT EXCAVATION: 2007-2008

Test unit excavations in 2007 and 2008 were designed to locate and sample intact subsurface shell deposits in the presumed locations of the north and south ridges of the U-shaped shellworks Wyman described in 1875. Test units in the area of the north ridge were largely unsuccessful in this effort, whereas those in the area of the south ridge were generally productive, albeit occasionally ambiguous. Our report of this testing begins with units placed on islands at the mouth of the spring run.

Islands at Mouth of Spring Run

The effort to locate intact shell deposits on the islands at the mouth of Silver Glen Run began in 2007 with a single 1 x 2-m test unit on the largest of the three, Island A. The lack of success in this effort redirected our interest back towards the mainland, although a fallen tree at the west end of Island C offered hope that the smallest of the three islands and most proximate to the mainland, retained a bit of intact shell mound. In 2008 we conducted limited testing on Island C to find that it too consisted of redeposited fill left by mining operations.

Test Unit 2. A single 1 x 2-m excavation unit was placed in the center of Island A in an attempt to locate an intact portion of the north ridge. Island A, like its counterparts upstream in Silver Glen Run, was formed by the mining of shell in 1923. Presumably, before 1923, Island A was part of the northeast corner of the U-shaped shellworks. The island today consists entirely of shell, with surface exposures of whole, unconsolidated *Viviparus* interspersed with patches of crushed shell. Little soil development has taken place on the island due to the limited time since the island was formed 85 years ago.

Test Unit 2 (hereafter TU2) was sited in the center of the island, at the topographic high of ca. 9.75 m, where a bucket auger placed one-half meter to the south revealed continuous shell deposits from immediately below the surface to at least 150 cm below surface. The water table was encountered in this auger at ca. 85-90 cm below the surface (8.79-8.74 m). Shoreline water level at the time the island was mapped measured approximately 8.75 m, consistent with the observed water table in the auger.

TU2 was excavated in 10-cm arbitrary levels using the ground surface at the southwest corner for a local datum (Figure 3-5). The upper three levels were dominated by modern refuse, notably construction materials such as wall plaster, wire nails, and window glass. Island A today, and apparently since its formation, is the recipient of all sorts of modern refuse. Bottles and cans, fishing tackle, and miscellaneous trash are routinely deposited on the island today by water and passers-by, but earlier last century the island also received sizable dumps of debris from mainland activities.

Augering before test excavations commenced suggested that shell deposits below about 30 cm were undisturbed and varied from whole, unconsolidated shell, mostly *Viviparus*, to lenses of finely crushed shell. Shell matrix was removed in zones defined with successive levels, although after Level C, it became apparent that shell was laid down in cross-bedded strata, suggesting fluvial reworking of the deposits. Two other observations supported this conclusion. First, alternating whole and crushed shell strata were both thoroughly winnowed of sediment and sorted into discrete depositional units. Second, recovered sherds and vertebrate faunal remains showed an advanced degree of water erosion. Photographs and line drawings of all four profiles of TU are given in Figures 3-6 through 3-8, and Table 3-1 provides descriptions of each stratum.

Figure 3-5. Excavation of Test Unit 2 in the center of Island A, 8LA1-East.

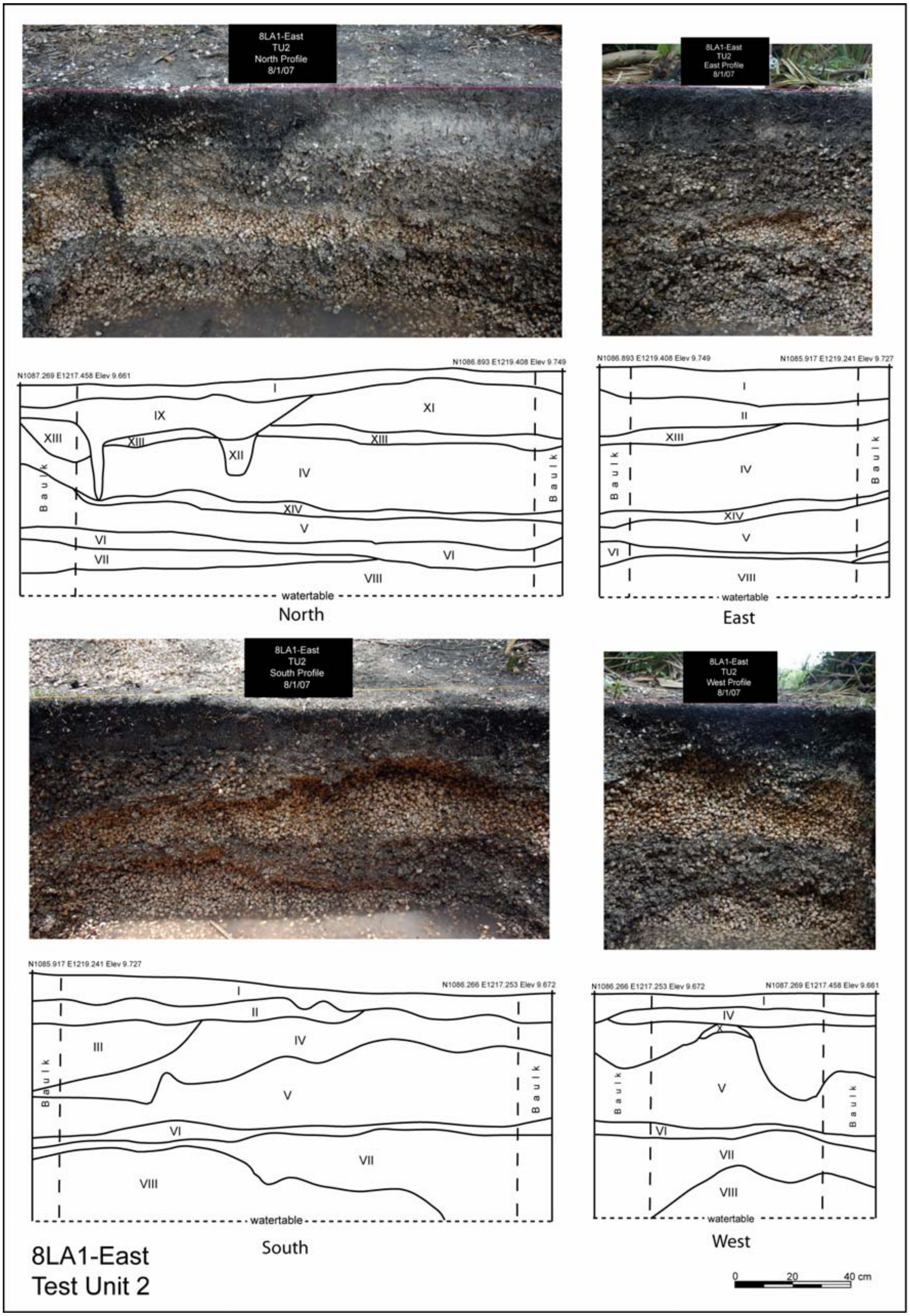

Figure 3-6. Photograph and line drawing of south profile of Test Unit 2, 8LA1-East.

Table 3-1. Stratigraphic Units of Test Unit 2, 8LA1-East

Stratum	Max. Depth (cm BS)	Munsell Color	Description
I	15	10YR2/1	black, very fine sand surface humus with rootlets
II	24	10YR4/2	dark grayish brown fine-medium sand with light grey (10YR7/1) fine sand mottles and traces of *Viviparus* shell
III	41	10YR3/1	whole *Viviparus* shell in very dark gray fine sand with clayey texture (possibly degraded shell)
IV	49	n/a	whole and crushed *Viviparus* shell lacking clastic matrix (grades horizontally into Stratum III in east corner of south profile)
V	63	n/a	whole, unconsolidated *Viviparus* shell with trace of Unionid shell and occasional iron staining, lacking clastic matrix
VI	71	n/a	crushed *Viviparus* and Unionid shell lacking clastic matrix
VII	79+	n/a	whole and crushed *Viviparus* shell lacking clastic matrix
VIII	86+	10YR3/2	whole, unconsolidated *Viviparus* shell with trace of Unionid shell, lacking clastic matrix
IX	49	10YR3/1	very dark gray medium-coarse sand with historic-era refuse
X	20	10YR2/0	black coarse sand
XI	23	10YR6/2	light brownish gray fine sand with historic-era refuse (grades horizontally into Stratum II in west corner of north profile)
XII	33	10YR2/2	very dark brown fine sand with whole Viviparus
XIII	28	n/a	crushed *Viviparus* and Unionid shell lacking clastic matrix
XIV	53	n/a	crushed *Viviparus* and Unionid shell lacking clastic matrix

Table 3-2. Inventory of Artifacts, Vertebrate Fauna, and Miscellaneous Items Recovered from Level Excavation of Test Unit 2, 8LA1-East.

Level	Lithic Flake (n)	Lithic Flake (g)	Orange Sherd (n)	Orange Crumb Sherd (n)	St. Johns Sherd (n)	St. Johns Crumb Sherd (n)	St. Johns Ck. Stmp. Sherd (n)	Vert. Fauna (n)	Vert. Fauna (g)	Botani-cals (g)	Historic Artifacts (g)
A*								21	4.9		78.2
B	1	1.3	1					28	27.6		2026.7
C (Zone A)	1	0.6		2	1	4		57	17.4	0.1	15.1
C (Zone B)	1	0.2			1	1		48	9.5		10.7
D (Zone A)				16		9		77	17.5	0.6	1.3
D (Zone B)	1	0.3		5	1	3		36	11.1		
E	1	1.1	1	11		14		118	25.5	2.2	
F**			3	7	1	10		110	26.5		
G			1	3	2	33	1	58	22.2	0.2	
H								7	2		
I				1				1	0.6		
Profile Clean-up	1	1.1	3	3				9	7.21	0.2	
Total	6	4.6	9	48	6	74	1	570	172.0	3.3	2132.0

* plus one marine shell disk bead 0.4 g
** plus one piece of modified bone 0.3 g

As the profiles show, TU2 penetrated what appears to be redeposited shell matrix, presumably the result of shell mining. The integrity of profiles was compromised by the collapse of unconsolidated, whole shell strata, especially after encountering the watertable at ca. 85 cm below surface. Excavation ceased at this point but deeper strata were sampled by two 2-inch percussion cores driven well past the basal shell deposits and into underlying peat (see below). There is no indication in these profiles and the strata observed in cores below the watertable that Island A contains intact, undisturbed archaeological deposits.

The distribution of artifacts recovered from TU2 corroborate the inference that shell matrix in this location is redeposited (Table 3-2). Historic refuse so prevalent across the surface of the island extended well into shell strata of TU2. Artifacts deeper than ~35 cm below the surface were exclusively pre-Columbian in age, but the relative order of artifacts was inconsistent with chronologies established for the region. Notably, St. Johns sherds were more numerous than the (presumably) older Orange-period sherds in levels greater than 50 cm below surface. Whereas the relative age of these two wares is generally well known, they apparently overlapped for several centuries. However, a single sherd of St. Johns Check Stamped pottery in Level G (58-68 cmbd) attests to the reverse nature of stratigraphy in TU2. Check stamped St. Johns pottery is believed to post-date A.D. 750 (Milanich 1994:247). Another indication of disturbance to the strata in TU2 is that many of the sherds were waterworn, irrespective of type.

Test Units 17 and 18. During the 2007 field school, the author and various members of the staff occasionally inspected exposures along the shoreline of the mainland and island by jonboat to collect artifacts eroding from shell matrix. On one trip we inspected the root mass of a tree that had fallen at the west end of Island C. Contained in the root mass and the water immediately below were sherds of Orange Incised pottery, most of which are shown below in Figure 3-9. Other exposures on the islands and along the south shoreline of Silver Glen Run also produced Orange pottery, as well as sherds of the St. Johns tradition, but none compared to the density of Orange pottery in this fortuitous exposure. Hopeful that this reflected the existence of an intact portion on shell mound on Island C, we opened in 2008 two small test units (50 x 50-cm) in the narrow spine of land that constitutes this island (Figure 3-10). Located but a few meters apart, TUs 17 and 18 both produced good examples of both Orange Plain and Incised sherds (Figure 3-11) in a charcoal-rich dark sandy loam with shells of *Viviparus*, other aquatic snails, and occasional Unionids. Water was encountered in both units at about 60 cm below the surface. Percussion cores sunk in the base of both units provided good profiles of subaqueous matrix. Unfortunately, a radiocarbon assay on charcoal from the TU 18 core indicates that the entirety of Island C, like Island A, consists of redeposited fill (see section on cores below).

Shell Point

A third attempt to locate intact portions of the north ridge was made in 2008 with the excavation of a 2 x 2-m test unit on the high ground of Shell Point, just to the east of the clearing shown in Figure 3-3. Test Unit 7 (TU7) was sited just to the south of the

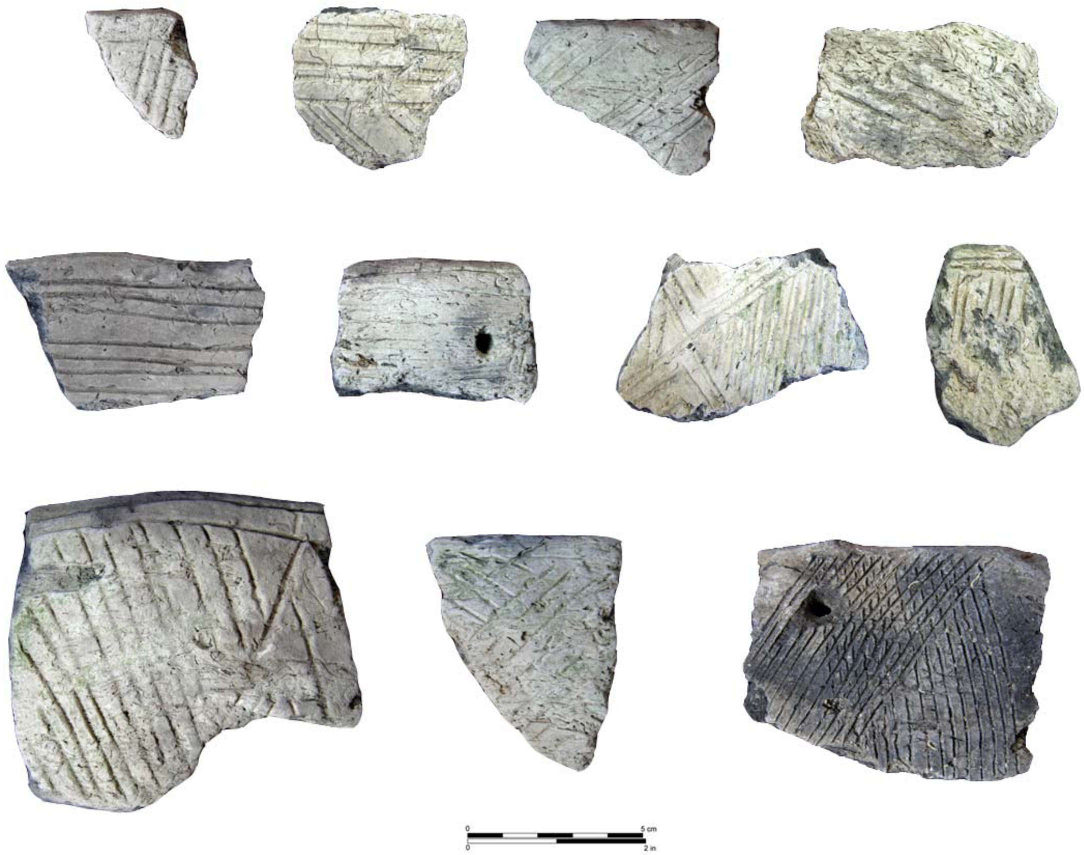

Figure 3-9. Examples of Orange Incised sherds recovered from a tree tip-up at the west end of Island C (Bag# 609).

easternmost auger hole along the N1000 transect, where subsurface shell extended well past the watertable, measured at ca. 110 cm below surface in July 2007. Before excavating TU7, a second sounding with a percussion core was inserted in the high ground of Shell Point, 0.5 m north of the aforementioned auger hole. Shell-rich matrix extended down nearly a meter below the watertable and rested on what appeared to be intact terrace sands.

Located about 10 m south of the core location at Shell Point, TU7 was excavated in the usual fashion of 10-cm arbitrary levels. After removing an upper level containing modern refuse, seemingly intact shell matrix was encountered in the south end of the unit. However, the next four levels produced a confusing array of matrices, some containing modern refuse (mostly metal fragments), as well as Orange plain pottery, chert flakes, and a limited amount of vertebrate fauna. Line drawings (Figure 3-12) and photographs (Figure 3-13) of the profiles show how discombobulated the matrices were. Groundwater was relatively high when TU7 was excavated in July 2008, preventing excavation deeper than ca. 80 cm below surface. Incidentally, seemingly intact shell matrix was observed near the bottom of the unit, labeled “Stratum XXXIX” in Figure 3-12 (note that

Figure 3-10. Extracting percussion core from bottom of Test Unit 17, Island C, 8LA1-East.

stratigraphic descriptions of strata in TU7 are not included in the usual table format given the lack of integrity; all such descriptions are available at the Laboratory of Southeastern Archaeology).

In an effort to extract materials from below the watertable, a 1 x 1-m plywood form was constructed to insert in the center of TU7. After repeated attempts to push the form into subaqueous matrix with heavy equipment, the plan was abandoned. In lieu of this strategy and some means of dewatering, only two levels could be removed from a 1 x 1-m subunit (TU7A) before matrix collapsed. Although stratigraphic controls were severely compromised at this depth, the subunit appears to have penetrated intact shell midden. Further consideration of intact matrix at Shell Point is reserved for discussion of percussion cores below.

Figure 3-11. Examples of Orange Plain (top row) and Orange Incised sherds recovered from two small test units (TU 17 and 18) on Island C.

Found throughout the redeposited fill of TU7 and into what appears to be intact matrix in TU7A, were sherds of Orange pottery (Table 3-3). Unlike those from the islands and along the spring run, however, sherds from TU were plain with one exception (Figure 3-14). Although many such sherds did not come from intact shell strata, the dominance of Orange Plain pottery in this general area corroborates the pattern seen in surface collections of the lake shore and testing along the south ridge. All three of these locations, in contrast to the spring run, have produced assemblages of almost exclusively Orange Plain pottery. Given what we know of the age of Orange Incised and Plain

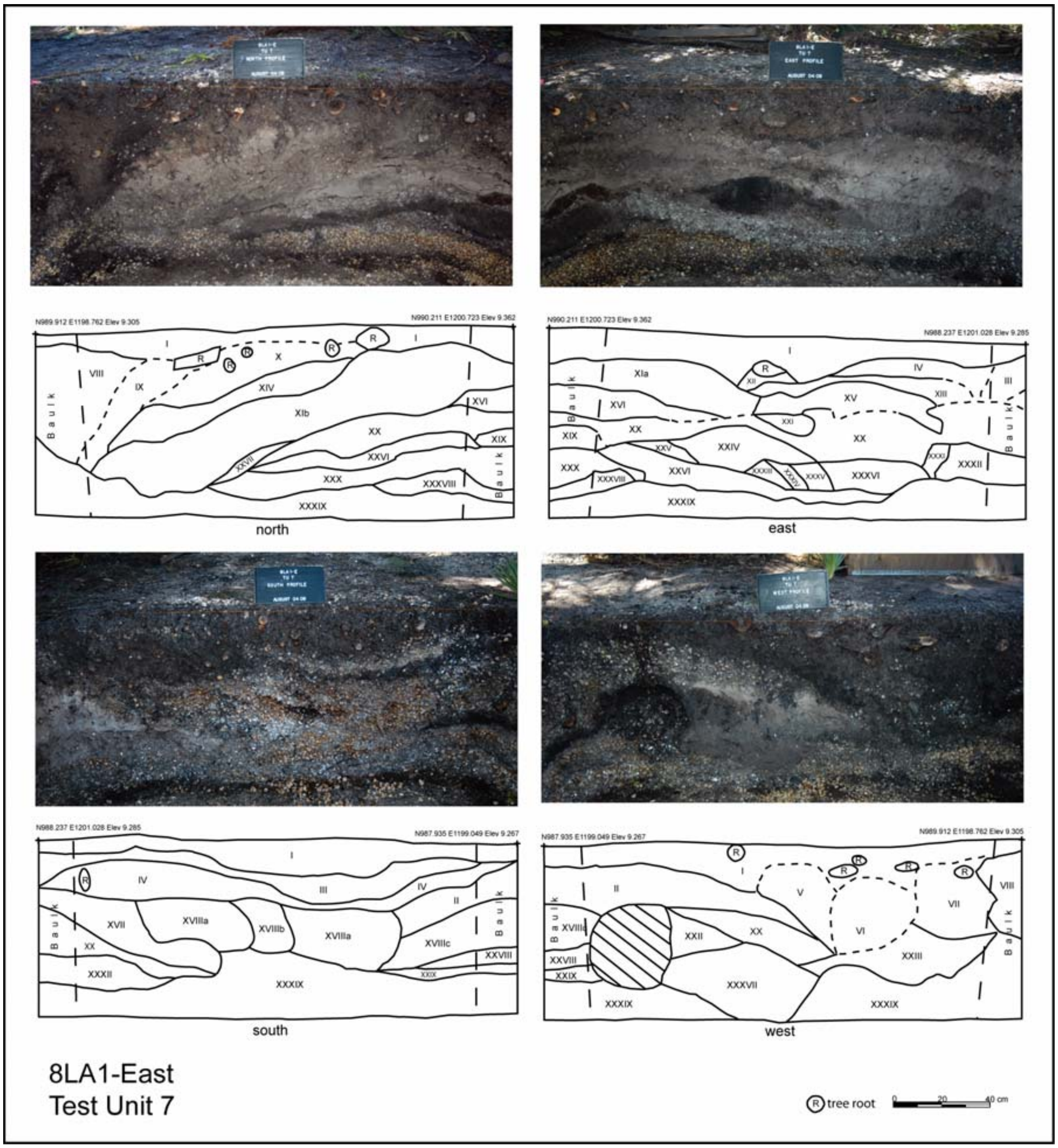

Figure 3-12. Photographs and line drawings of all profiles of Test Unit 7, 8LA1-East.

Table 3-3. Inventory of Artifacts, Vertebrate Fauna, and Miscellaneous Items Recovered from Level Excavation of Test Unit 7 and 7A, 8LA1-East.

Level	Lithic Flake (n)	Lithic Flake (g)	Modified Lithic (n)	Orange Plain Sherd (n)	Tick Island Incised Sherd (n)	Crumb Sherd (n)	Modified bone (n)	Vert. Fauna (n)	Vert. Fauna (g)	Historic Artifacts (g)
A								25	7.9	12.0
B	10	6.5		4		1		418	192.3	113.2
C*	11	8.4	1	2		4		805	271.2	26.1
D**	6	10.7	2	2		5	2	606	258.2	41.2
E***	3	1.6	1	7		6	1	373	141.1	
F	5	5.3		6		2		286	175.9	12.6
G	6	7.1	2	20	1			247	147.8	30.3
Profile Clean-up						4		55	27.1	0.4
7A-H				4		4		9	6.1	0.5
7A-I+				5		16		13	4.8	
Total	41	39.6	6	50	1	42	3	2837	1232.4	236.3

* plus one piece of groundstone
** plus 12 paleofeces, 12.8 g; 1 piece of miscellaneous rock, 12.7 g
*** plus 5 paleofeces, 12.8 g; 2 pieces of miscellaneous rock, 16.4 g
\+ plus 0.2 g charcoal

Figure 3-14. Orange pottery sherds from Test Unit 7, 8LA1-East. All sherds in this sample are Orange Plain with exception of a single Tick Island Incised sherd (upper left).

pottery from the greater Silver Glen area, the emplacement of shell along the lake shore and the south ridge appears to be relatively late in the Orange sequence (i.e., post 3800 rcybp).

Percussion Cores at Shell Point and the Islands

Sampling of subaqueous deposits at Shell Point and on islands at the mouth of Silver Glen Run was enabled by the placement of several percussion cores. Coring was done by simply driving a 2-inch PVC pipe with a beveled edge into substrate with a sledge hammer. After reaching maximum depth, the PVC pipe was filled with water, capped with a rubber stopper, then extracted with a winch attached to a tripod. Cores were then split with a circular saw, photographed, mapped, and extracted for water processing through a #35 geological sieve. Annotated profiles of four cores are provided in Figure 3-15 through 3-18.

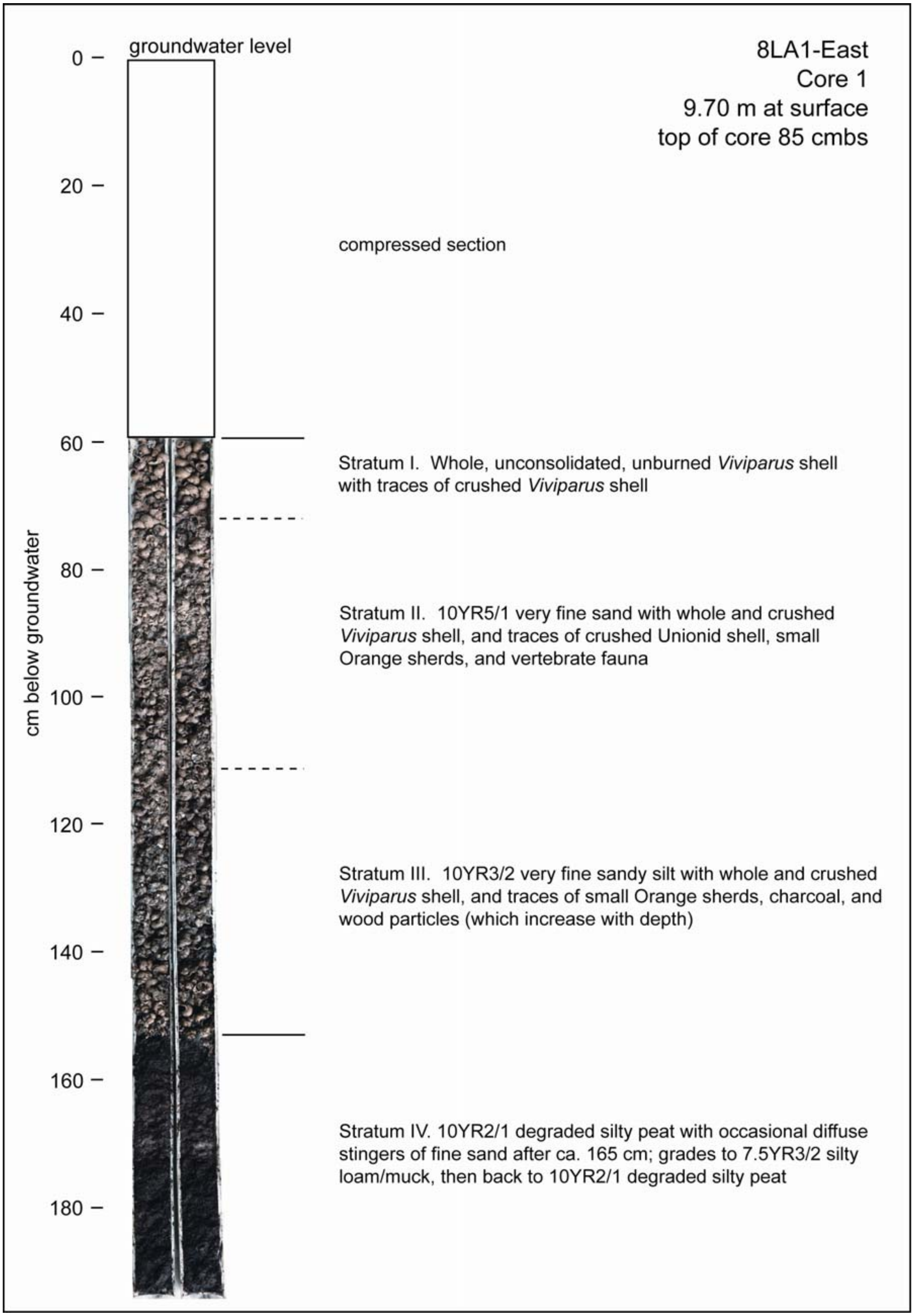

Figure 3-15. Split percussion core from Test Unit 2 on Island A, 8LA1-East.

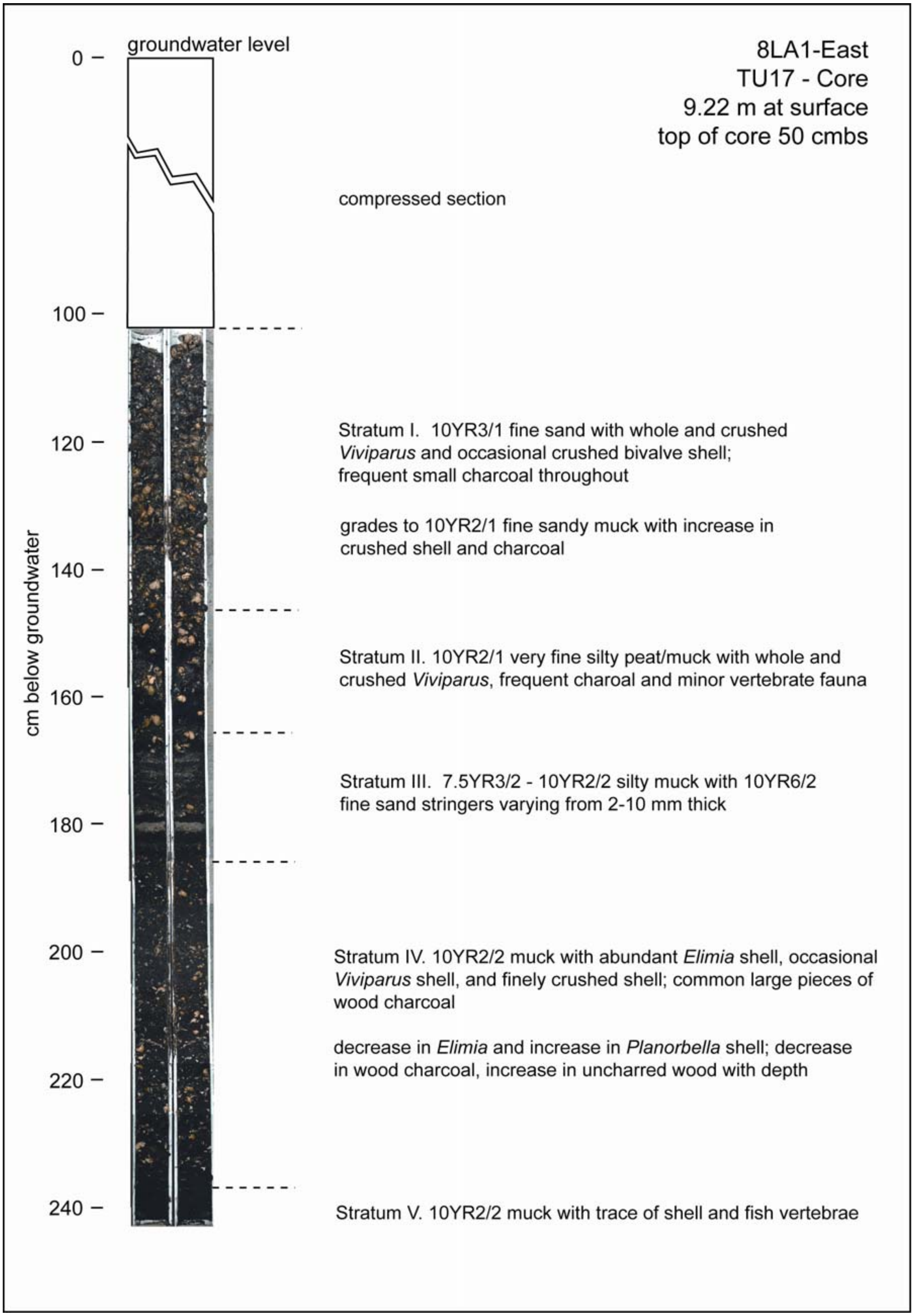

Figure 3-16. Split percussion core from Test Unit 17 on Island C, 8LA1-East.

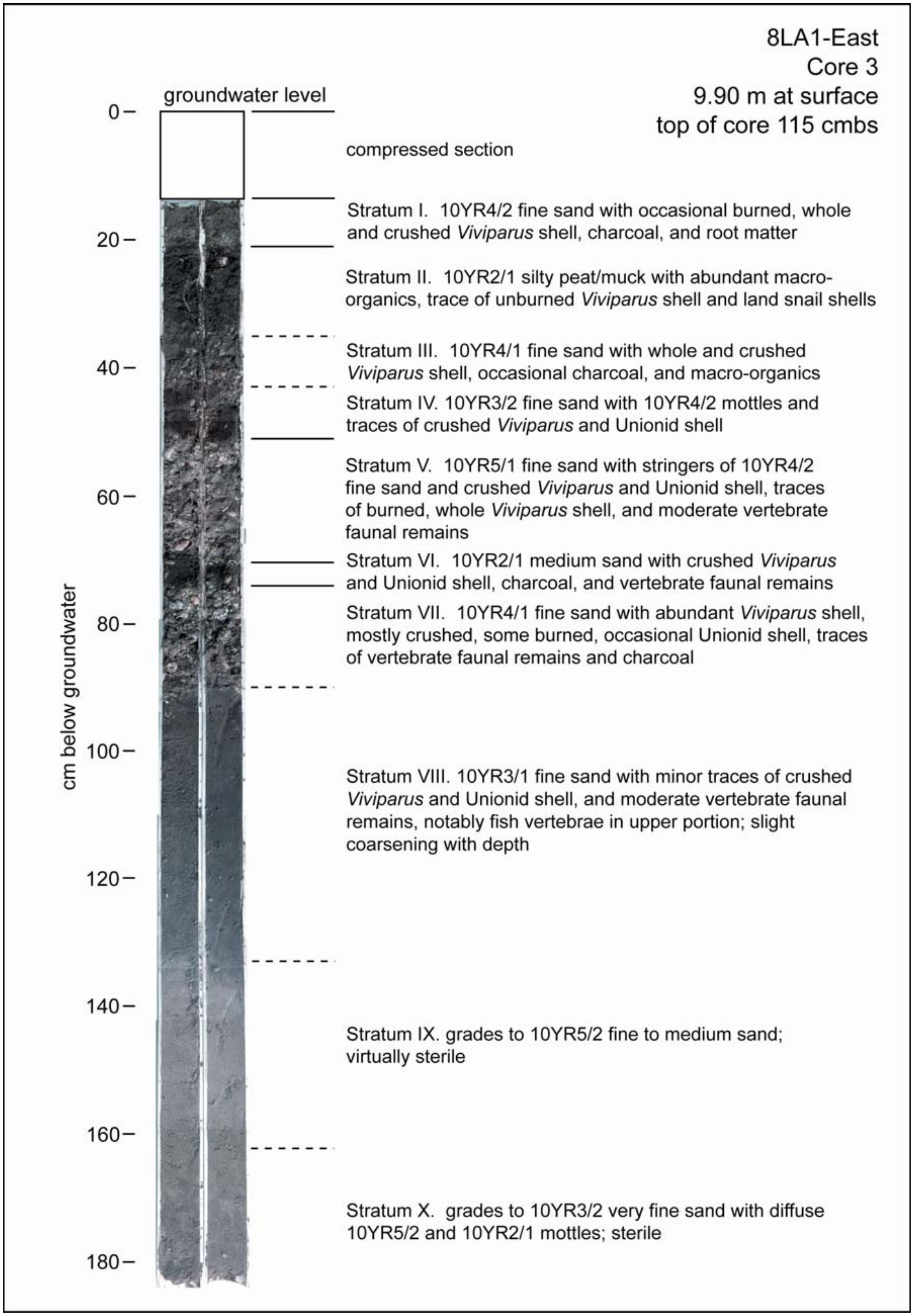

Figure 3-17. Split percussion core from shovel test near Auger 11-1, Shell Point, 8LA1-East.

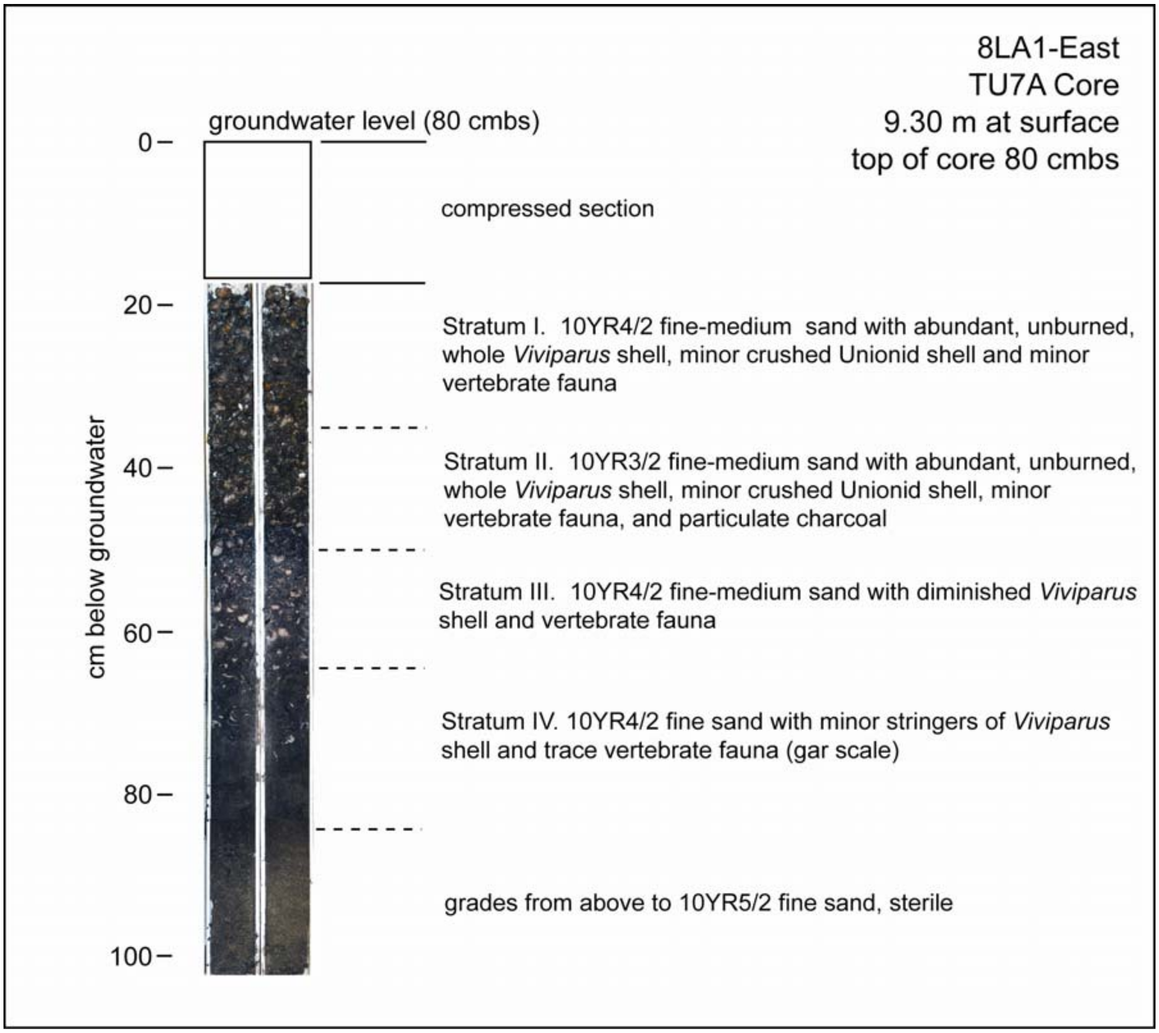

Figure 3-18. Split percussion core from Test Unit 7, Shell Point, 8LA1-East.

Cores sunk on islands at the mouth of Silver Glen Run extended at least 2 m below the watertable. One core (Core 1) in the base of TU2 on Island A (Figure 3-15) penetrated about 1.5 m of shell matrix overlying a degraded silty peat with diffuse stringers of fine sand. One AMS assay on the peat returned an age estimate of 1360 ± 40 B.P. (calibrated at two-sigma range to 1330-1260 B.P. or A.D. 620-690). It goes without saying that the Orange pottery recovered from shell-bearing levels overlying this peat must have been redeposited, presumably in the course of shell-mining operations, but certainly sometime after the thirteenth century B.P. We have no reason to doubt that the peat is autochthonous, but it is hard to reconcile its depth with a near-shore environment given such a late age. With so much landscape modification attending shell mining, as well as subsequent channel dredging, it is certainly possible that peat in this profile, like the overlying shell, was displaced and redeposited.

Two percussion cores were driven into the base of test units 17 and 18 on Island C. The one core profile shown in Figure 3-16 is representative of both cores. Unlike Core 1 on Island A, the Island C cores contained shell-bearing matrix to nearly the base, where shell-free black muck was encountered ca. 230 cm below the water level. Shell strata varied in composition and density but tended to be contained within a silty or very fine sandy muck or degraded peat with abundant charcoal. A 12- to 21-cm-thick stratum of sand stringers interrupted nearly continuous shell-bearing strata in both cores at ca. 170 cm below the water level. Orange Incised sherds were observed in the core of TU18 in shell strata at depths of 138 and 157 cm below the water level. Charcoal taken from the TU18 core at 200-228 cm below the water returned an AMS assay of 2440 ± 40 B.P. (calibrated at two-sigma range to 2710-2350 B.P. or B.C. 760-400). Given that this age estimate postdates the Orange pottery found above, the shell strata of this core evidently were redeposited much like the shell of Island A. However, it seems likely that below the sand stringers at ca. 170 cm shell strata are intact and undisturbed. If so, the age of this charcoal some 30-40 cm deeper suggest that the on-shore shell mound continued to accrete outward, into the spring run, well past the Orange period. The abundance of St. Johns pottery in the spring run to the west attests to intensive activity in the general area through at least 1200 B.P.

Cores driven into the onshore surface of Shell Point likewise penetrated thick shell strata well below the watertable. Core 3 at the east terminus of the N1000 auger transect also penetrated deeply into terrace sands beneath the shell (Figure 3-17). The contact between shell strata and sands is roughly 90 cm below the top of groundwater and some 205 cm below the present surface. Subaqueous shell in this core exists in alternating layers of sand and peat/muck with varying amounts of charcoal and vertebrate fauna. Like the subaerial shell strata of TU7, this varied sequence is likely the result of displacement and redeposition during shell mining. In fact, it would appear that the elevated landform of Shell Point was constructed during the mining operations, perhaps as a loading dock for barges to cart off shell via water. Given the redeposited shell is found today nearly one meter below the water level, miners must have dug deeply into the shell mound, perhaps even flooding the landform before backfilling and then building up a platform.

One final core placed in the bottom of TU7 likewise reached terrace sands at about 90 cm below the water, but here the shell strata above appear to be undisturbed (Figure 3-18). Lacking in ca. 90 cm of shell deposits overlying sand are any of the alternating strata observed in Core 3. Coupled with evidence for intact shell strata at the base of TU7, the subaqueous shell of this core provides some hope that basal anthropogenic deposits remain intact in at least a portion of the ridge connecting the north and south ridges of the U-shaped shellworks. It remains to be determined at a later date if these basal deposits were emplaced by people of the Orange period, or by their Mount Taylor predecessors. If the latter, shell was likely laid down on dry ground, when water levels were at least one meter lower than today. If, however, the basal shell was emplaced during the Orange period—as they seem to be along the south ridge (see below)—then they would have likely been deposited into the water's edge, meaning that the shell works would have prograded out towards the lake some 20-30 m since Orange times.

In sum, test excavations and coring at Shell Point and at two of the islands at the mouth of Silver Glen Run did not produce much evidence for intact archaeological deposits. Subaqueous deposits beneath TU7 appear to be intact, but elsewhere all shell appears to be displaced and redeposited, most likely during the 1923 mining operation. Figure 3-19 provides a schematic cross-section of the landform extending from Shell Point to Island A. The ancient land surface beneath shell is reasonably well documented at Shell Point some 2 m below the present surface and nearly 1 m below the watertable. We repeat that the elevated surface in this location is likely the result of shell-mining activity, specifically the creation of a loading platform for barges. All shell in the water and on the islands today appears to be redeposited. Given the age of peat on Island A and subaqueous shell beneath Island C, the original shellworks of 8LA1-east must have prograded outward into the run, and perhaps the lake, well past the Orange period. Unfortunatey, evidence of later activity has been thoroughly erased by mining. Small portions of basal shell of either Mount Taylor or Orange age await dewatering. In the meantime, remnants of the south ridge of 8LA1-East, residing on higher, drier ground, provide opportunity for documenting basal shell deposits.

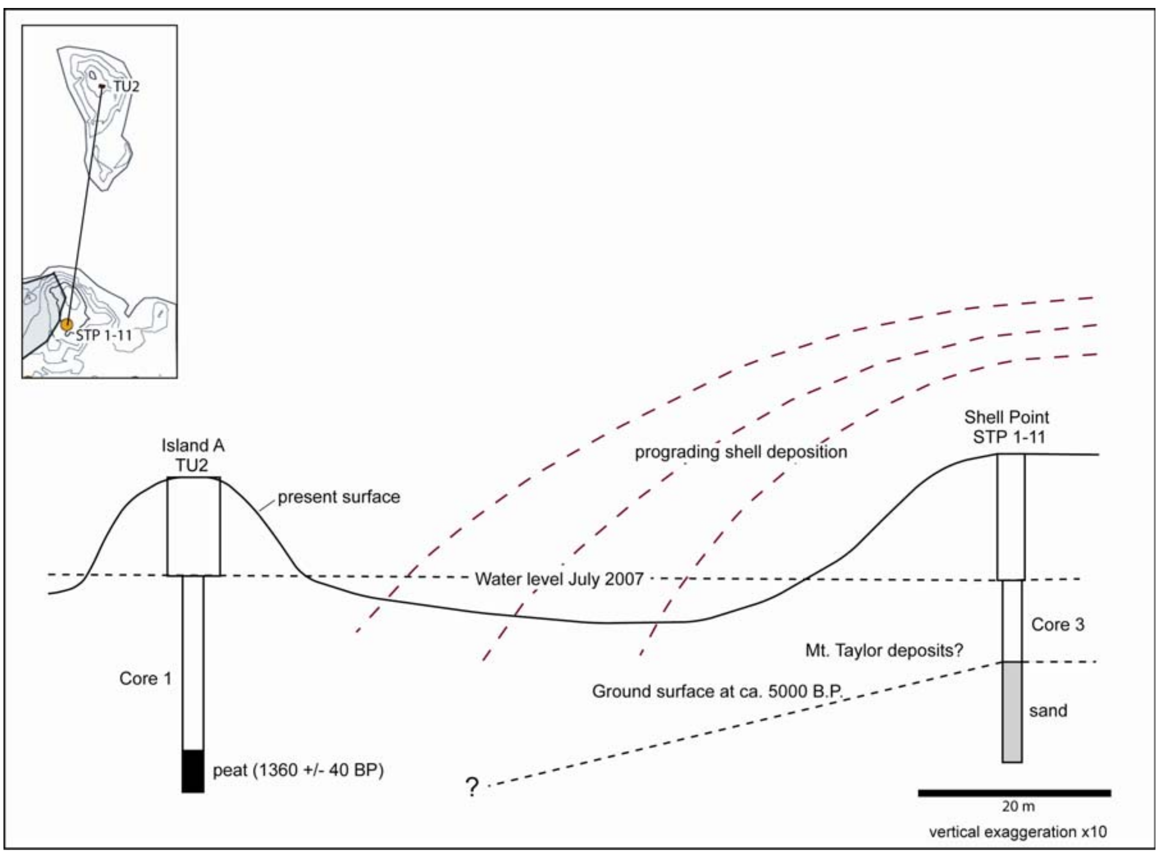

Figure 3-19. Schematic cross-section facing east of landform extending from Island A to Shell Point, 8LA1-East.

South Ridge

The results of augering reported earlier enabled an informed assessment of the likely location and orientation of the south ridge at 8LA1-East. Test Unit 1 was a 2 x 2-m unit placed in what was deemed to be the center of the south ridge, close to the present woods line east of the orange grove (Figure 3-3). A second 2 x 2-m unit, Test Unit 3, was sited on the far western edge of the clearing, where augering revealed subsurface shell in an area that was ostensibly to the west of the terminus of the south ridge (Figure 3-3). Both units were excavated in 10-cm arbitrary levels and all fill passed through ¼-inch hardware cloth.

Test Unit 1. Excavated in 2007, Test Unit 1 (TU1) revealed an intact profile of emplaced shell on a buried A horizon (i.e., old ground surface) overlying sterile, subsurface sands. As expected, the profile was truncated at the top by shell-mining, but other than some minor intrusive features dating to the modern era, the profile was in good shape and appears to represent a basal remnant of the south ridge. Figure 3-20 provides photographs and line drawings of all four walls, and Table 3-4 gives the descriptions of all strata recognized therein.

Generally whole, unconsolidated shell is concentrated in a single stratum (Stratum X) extending from beneath the surface stratum (Stratum I; plowzone?) to as much as 66 cm below surface. The upper portion of this shell was truncated by mining, so we have no basis for inferring its original thickness. We do, however, feel confident in the inference that this shell was placed directly on an ancient ground surface, one with a well-developed A horizon (Stratum III). Recall from earlier discussion of the results of augering that the south ridge appears to have been emplaced over a raised part of the landform, perhaps something akin to a river terrace. This apparent A horizon rests conformably on a mantle of white fine sand, the sterile substrate in this portion of the landform. In July 2007, then TU1 was excavated, the water table was encountered just beneath the maximum depth show in Figure 3-20, roughly 80 cm below surface.

Interrupting what is otherwise a simple profile are a few intrusive features, only one of which may be an intact aboriginal feature. Feature 1, in the northeast corner of the unit, is a large pit whose point of original was apparently truncated by mining (Figure 3-20). Recognized as a zone of alternating shell and organically-enriched sand, this ca. meter-wide pit was formally designated a feature at the base of Level F, ca. 60 cm below surface. The bottom of the pit appeared to be relatively flat, where dark gray sand with minor shell produced charcoal that returned an AMS assay of 3600 ± 40 B.P. (4060-4050 and 3990-3830 cal B.P.). Also recovered from the basal stratum of the pit were several sherds of Orange Plain pottery, examples of which are given in Figure 3-21. Otherwise, only trace amounts of vertebrate fauna were recovered from zones attributed to this feature. On balance, the evidence points to a bone fide Orange period pit feature similar to those found in abundance at 8LA1-West Locus B (see Chapter 6). However, the stratified fill of Feature 1 and apparent disturbance along its northern margins makes it difficult to judge the original form and function of this feature. At a minimum, we can

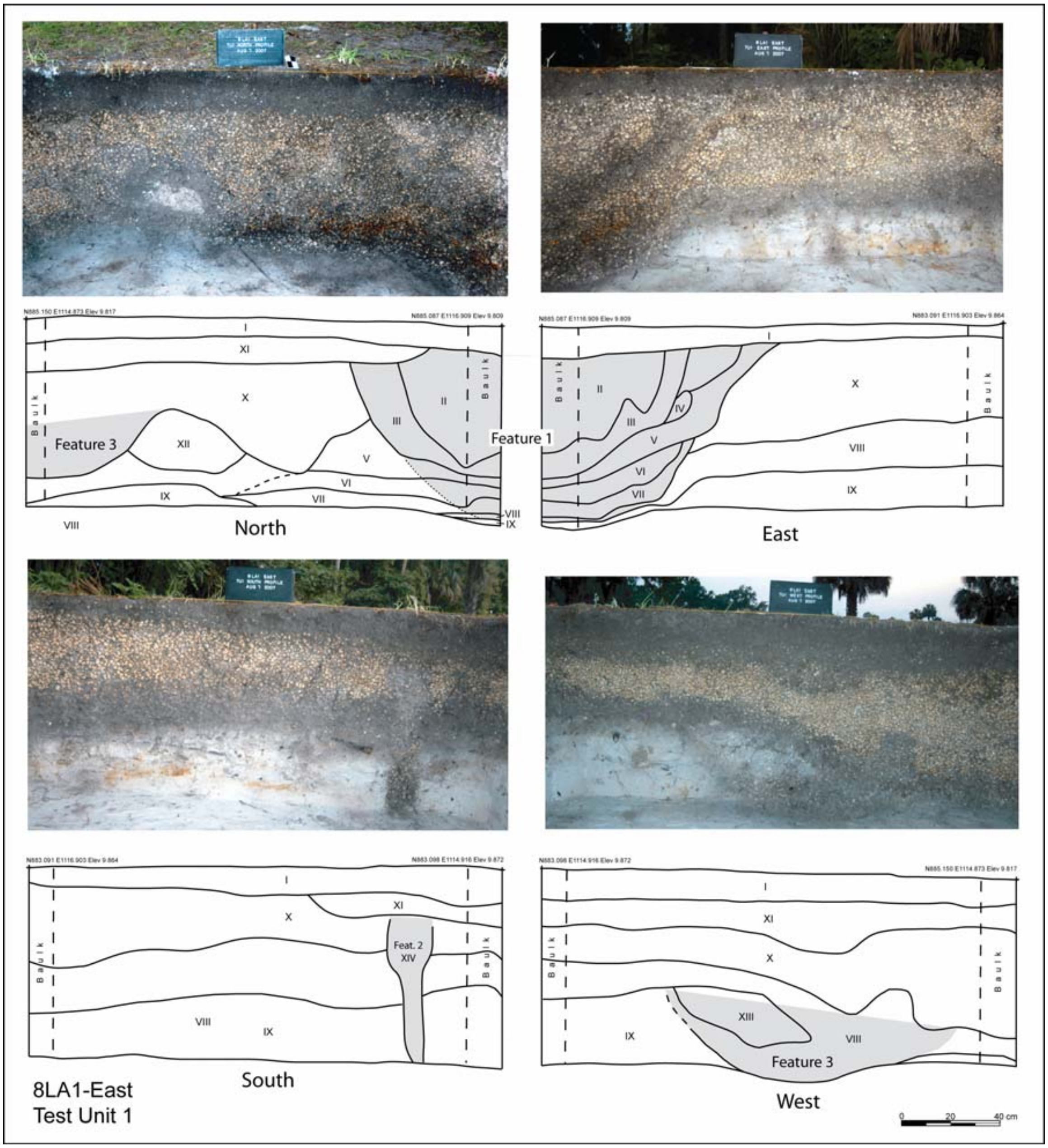

Figure 3-20. Photographs and line drawings of all profiles of Test Unit 1, 8LA1-East.

suggest that it was a relatively large pit that emanated from a surface well above the buried A horizon, and thus postdates the emplacement of shell on this old surface.

Feature 2, seen in the south profile of TU1, is an infilled posthole of the modern era, most likely a fence post (Figure 3-20). Its point of origin is clearly at or very near the modern ground surface.

Table 3-4. Stratigraphic Units of Test Unit 1, 8LA1-East

Stratum	Max. Depth (cm BS)	Munsell Color	Description
I	16	10YR3/1	very dark gray fine sand with root mat
II	58	10YR4/1	whole and crushed *Viviparus* shell in dark gray sand (Feature 1)
III	62	10YR2/1	whole *Viviparus* shell in black fine ashy sand (Feature 1)
IV	40	n/a	dense crushed shell (Feature 1)
V	67	n/a	whole *Viviparus* shell (Feature 1)
VI	76	n/a	organic and iron-stained *Viviparus* shell (Feature 1)
VII	79	7.5YR3/0	whole *Viviparus* shell in very dark gray medium-coarse sand (Feature 1; 3600 ± 40 B.P.)
VIII	88	10YR4/1	dark gray fine-medium sand with sparse whole *Viviparus* shell (buried A horizon)
IX	90+	7.5YR8/0	white fine sand with mottles throughout
X	66	10YR5/2	whole *Viviparus* shell in grayish brown sand
XI	32	10YR3/1	very dark gray fine sand with sparse whole and crushed *Viviparus* shell
XII	65	10YR7/2	light gray mineralized root
XIII	84	10YR4/1	dark gray clayey sand with whole *Viviparus* shell
XIV	82+	10YR6/1	gray fine sand with whole *Viviparus* shell (Feature 2; historic fence post)
XV	30	10YR5/2	whole *Viviparus* shell in grayish brown sand (Feature 1)

A third feature, Feature 3, was at first considered to a second large pit, but after completing the excavation, it seems more likely that this is the outcome of an intrusive disturbance involving either a burrowing animal or tree roots. The mineralized or concreted zone seen in the east profile of Figure 3-20 (Stratum XIII) recurs in other units of the south ridge area, specifically in places beneath thick shell strata. The plan area in the northwest corner of TU1 showed root or burrow casts, as well as numerous palm roots. However, the basal portions of this feature also produced more bivalve than in the overlying shell stratum, which was dominated by *Viviparus* shell. Incidentally, the large pit features of 8LA1-West Locus B contained a disproportionate frequency of bivalve

Figure 3-21. Examples of Orange Plain sherds from Test Unit 1, 8LA1-East.

shell compared to surface middens and other accumulations. It thus remains possible that Feature 3 is akin to Feature 1 and the Locus B pits, only badly disturbed.

The artifact inventory and associated vertebrate fauna from TU1 is rather meager (Table 3-5). A tapered stemmed hafted biface was recovered from the base of Level C in a zone in the northeast corner that is arguably in the upper portion of Feature 1. Virtually all of the fiber-tempered sherds that could identified to type (all Orange Plain) were also from various levels of the northeast corner, which, together with definitive Orange Plain sherds at the base of the Feature 1, puts them well within the fill of the pit. The same can be said for much of the vertebrate fauna, although the total assemblage is admittedly small. The only other notable class of recovered materials is lithic flakes, the vast majority of which (37 of 42) came from the light-colored sands beneath the shell. All of the historic era materials and three of four St. Johns period sherds came from the upper strata, near the surface.

In sum, TU1 revealed a relatively simple profile of emplaced whole *Viviparus* shell on a buried A horizon that was intercepted by at least one large pit feature dug during the late Orange period, ca. 3600 B.P. Aside from the fill of Feature 1, TU1 produced little in the way of material culture or food remains to suggest that shell accumulated on the old surface in the course of routine, domestic activities.

Table 3-5. Inventory of Artifacts, Vertebrate Fauna, and Miscellaneous Items Recovered from Level Excavation of Test Unit 1, 8LA1.

Level	Hafted Biface (n)	Lithic Flake (n)	Lithic Flake (g)	Orange Sherd (n)	Orange Crumb Sherd (n)	St. Johns Crumb Sherd (n)	Vert. Fauna (n)	Vert. Fauna (g)	Botani-cals (g)	Historic Artifacts (g)
A*		4	4.4		2	4	2	0.8	2.9	4.5
B (Zone A)							1	0.9	1.4	16.3
B (Zone B)					1		2	0.7		
C (Zone A)		1	0.2				5	2.4		
C (Zone B plot)	1									
C (Zone B)				4	12	1	31	10.3		
D (Zone B)					9		44	14.3	0.1	
E (Zone B)					16		38	8.6		
E (Zone C)							1	0.1		
F (Zone B)					4		34	8		
F (Zone C)							4	8.2		
F (Zone D)				1			9	1.2		
G (Zone A?)							3	0.4		
G (Zone B)				1	2					
G (Zone D)		1	0.7				2	0.3		
H (Zone D)		36	3.6							
Feature 1				4	2					
Total	1	42	8.9	10	48	5	176	56.2	4.4	20.8

* plus two *Euglandina* shells

Test Unit 3. Located about 50 m west of the projected location of the south ridge, Test Unit 3 (TU3) produced profiles resembling those of TU1 in some respects, but with notable differences. Like TU1, TU3 contained a near-surface stratum of *Viviparus* shell that appears to have been truncated by mining. Missing in TU3, however, was any clear indication that the shell was emplaced on an old surface (A horizon). The subshell strata of TU3 were instead dominated by concreted sand and shell matrix, perhaps a product of the lower elevation of this location and its fluctuating, near-surface watertable. Also, TU3 did noit produce much evidence of an Orange period component, and instead has more evidence than TU1 for a prepottery (Mount Taylor) assemblage. Photographs and line drawings of all four profiles of TU3 can be found in Figure 3-22; descriptions of the strata observed in these profiles are provided in Table 3-6, and all artifacts and vertebrate fauna recovered are summarized in Table 3-7.

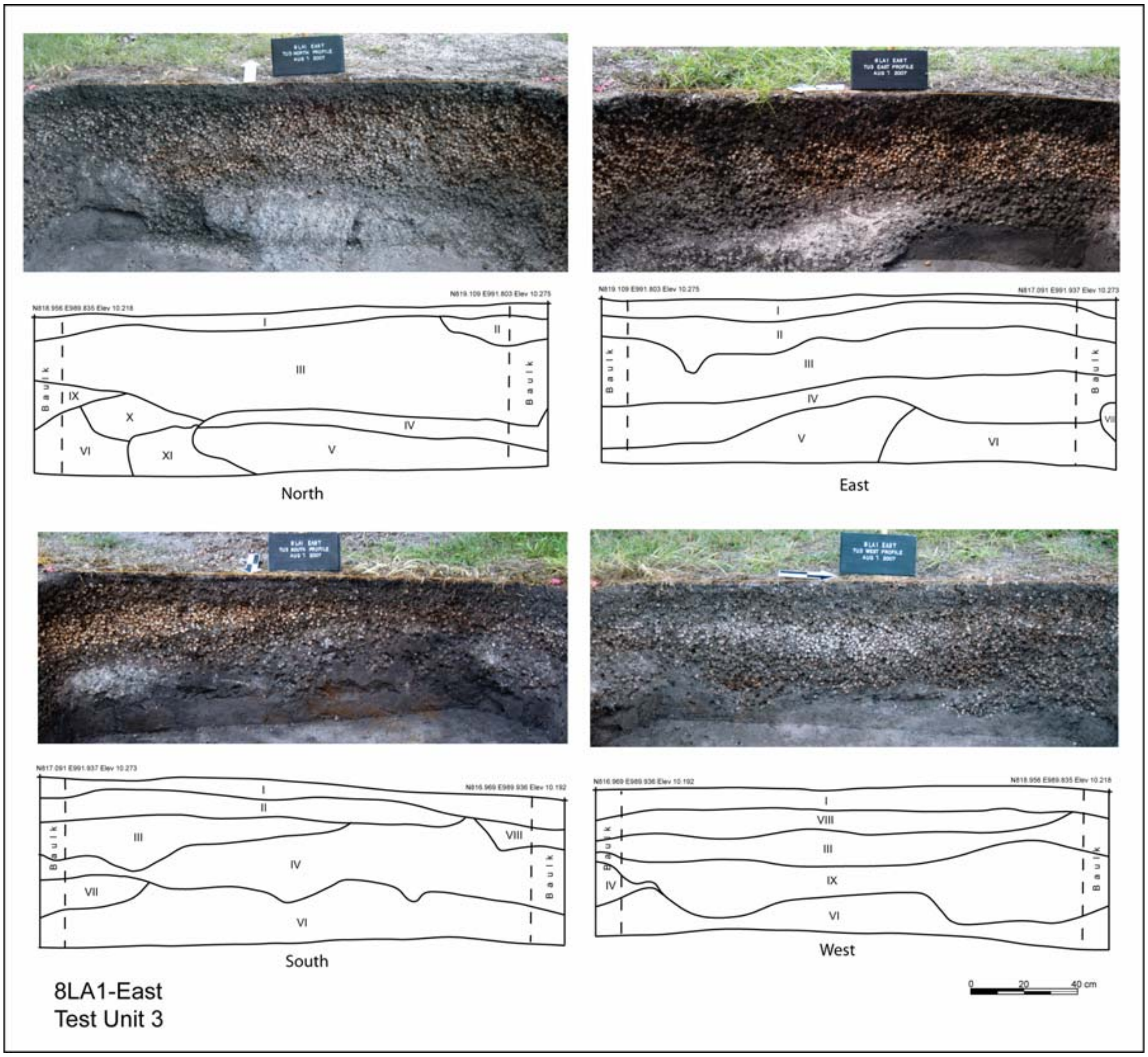

Figure 3-22. Photographs and line drawings of all profiles of Test Unit 3, 8LA1-East.

Table 3-6. Stratigraphic Units of Test Unit 3, 8LA1-East

Stratum	Max. Depth (cm BS)	Munsell Color	Description
I	12	10YR3/1	very dark gray medium sand with root mat
II	28	10YR2/2	sparse *Viviparus* shell in very dark brown fine-medium sand
III	45	10YR3/3	whole *Viviparus* shell in minimal matrix (dark brown fine-medium sand)
IV	56	7.5YR5/2	brown clayey sand with whole *Viviparus* shell
V	62+	7.5YR7/0	concreted light gray clayey sand with whole *Viviparus* shell and crushed Unionid shell
VI	64+	7.5YR4/0	dark gray fine sand (saturated)
VII	53	7.5YR3/0	concreted light gray clayey sand with whole *Viviparus* shell and crushed Unionid shell
VIII	21	7.5YR3/2	dark brown medium-coarse sand with whole and crushed *Viviparus* shell
IX	50	10YR3/1	very dark gray medium sand with whole, iron-stained *Viviparus*
X	47	10YR7/3	concreted brown sand with whole *Viviparus* shell and occasional Unionid shell
XI	62+	10YR3/1	very dark grayish brown clayey sand with whole and crushed *Viviparus* shell

No definitive features were identified in the excavation of TU3, although some of the concreted strata arguably are thermal features. Whether these are anthropogenic or simply natural is unclear. Unlike the mineralized roots seen in TU1 and throughout many of the units excavated in 2010 (see below), the concreted strata of TU3 are massive and generally larger in both horizontal and vertical dimensions, plus they contain substantial amounts of shell, including minor lenses of crushed Unionid shell. The best example is seen in Stratum V in the north and east profiles. Well over a meter wide and at least 30 cm thick, this stratum has a basin-shaped cross-section. Vertebrate faunal remains may have been recovered at greater frequency in this stratum than elsewhere in the unit, but that cannot be substantiated with the relatively limited assemblage available. Also, the only substantial Orange Plain sherds from TU3 came from the northeast quadrant of Level E, in the general vicinity of this stratum, but a direct association cannot be substantiated. The single hafted biface from TU3 was recovered just to the south of the concreted stratum, in light-colored, fine sand, where most of the lithic artifacts in TU1

Table 3-7. Inventory of Artifacts, Vertebrate Fauna, and Miscellaneous Items Recovered from Level Excavation of Test Unit 3, 8LA1-East.

Level	Hafted Biface (n)	Lithic Flake (n)	Lithic Flake (g)	Modifed Marine Shell (n)	Marine Shell Frag. (n)	Misc. Rock (g)	Orange Sherd (n)	Orange Crumb Sherd (n)	St. Johns Crumb Sherd (n)	Vert. Fauna (n)	Vert. Fauna (g)
A*		1	0.3		1					17	4.0
B									1	6	2.2
C				1		0.1		3		21	7.6
D						6.6		1		34	11.2
E										2	0.7
E (Zone A)						0.7				10	1.5
E (Zone B)										12	1.4
E (Zone C)							3			44	14.1
E (Zone D)				1						32	4.7
F (Zone C)										22	3.9
F (Zones C/D)										25	3.8
F (Zone D)	1	3	2.8							38	6.9
G (Zone C)										11	2.2
G (Zone D)										5	0.4
Total	1	4	3.1	1	2	7.4	3	4	1	279	64.6

* plus 3.7 g of historic era artifacts

were recovered. The tapered stem form of this biface signifies a probable Mount Taylor affiliation, as does the marine shell fragments scattered throughout the unit. Basin-shaped pits have been documented at Mount Taylor contexts at 8LA1-West Locus B, and concreted shell matrix in general tends to date to the Mount Taylor period (presumably because such components are often close to or below the watertable).

In sum, TU3 would appear to reflect the accumulation of shell and related materials earlier than and independent of the emplacement of shell along the south ridge during the late Orange period. Presumably Mount Taylor in age, the anthropogenic deposits of TU3 probably represent the use of wetland habitat to the immediately west, namely the slough separating the east and west portions of 8LA1. Additional testing in this area will be needed to verify the age of the deposit and develop better information on the types of activities taking place here.

2010 INVESTIGATIONS OF THE SOUTH RIDGE

Efforts to locate remnants of the South Ridge at 8LA1-East were intensified in 2010 with additional subsurface testing and the application of Ground Penetrating Radar (GPR). The results of our GPR survey are reported first.

Ground Penetrating Radar Survey

A program of Ground Penetrating Radar (GPR) was undertaken in 2010 courtesy of Richard Estabrook of the Florida Public Archaeological Network. Efforts to locate and characterize the south ridge of 8LA1-East to this point produced mixed results and the scope of these initial efforts was simply too small to enable strong inference about the location and orientation of the ridge. The advantage of using GPR was twofold: (1) large tracts of open terrain in the projected vicinity of the south ridge could be surveyed relatively quickly, and (2) data on subsurface strata could be collected with no additional impact to the site. Of course, ground truthing the results of GPR would require additional subsurface tests, but these could be targeted at specific anomalies of the GPR readings, rather than placed randomly or based on limited data, such as augers.

GPR was deployed in two different ways. We first simply ran a series of 30-m-long transects spaced 10 m apart across the area of the site believed to contain subsurface evidence of the northern edge of the south ridge. Second, we ran the GPR unit across a series of five contiguous blocks ranging in plan from 20 x 30 m to 7 x 10 m, using a method of orthogonal transects in order to produce “Z slices” or “time slices’ of data for display. Figure 3-23 shows the locations of the GPR transects and grids, as well as the locations of test units added in 2010 and the results of a tree throw survey that is discussed later below.

Richard Estabrook provided the following description of the GPR equipment, how it was deployed, and how the resulting data were processed:

> A Geophysical Survey Systems, Inc. (GSSI) SIR-3000 GPR system was used to collect the data. The configuration included a 400 MHz antenna mounted in a

> three-wheel cart with distance calibration provided by an on-board survey wheel. The radargrams were collected along transect spaced 50 cm apart within predefined grids of varying sizes. The perimeter of the grids were staked at 1-m intervals and fiberglass surveys ropes used to establish and maintain the transect rows. Initially, information from a single 20 x 30-m grid and nine separate linear transects was acquired. Later, we returned to collect data from an additional four grids. Because of an expansive evergreen tree in one portion of the area of interest, these data were collected as a series of contiguous blocks around the tree. Within each grid, the radar data was collected in a zigzag pattern with transects oriented in one direction. Once the data were collected, the grid was "flipped" 90 degrees and a second dataset perpendicular to the first then collected.
>
> The port-processing employed GPR-Slice® software (Version 7). The GPR data were converted from their GSSI file format, regained, and processed through a low-pass filter. These data are presented as individual time slices or as an animated sequence of time slices showing how the anomalies vary by depth. In the color ramp scheme selected, red indicates areas of greater reflectivity and blue shows areas of lower reflectivity. Yellow and green represent intermediate reflectivity grades. Red regions on the time slices represent locations that reflected more wave energy, and they are thought to be areas of higher density shell concentrations.

The results of preliminary transect survey are shown in Figure 3-24. This area was selected for survey given the likelihood that it encompassed the northern edge of the south ridge of shell. A slight crease in the surface topography of this vicinity lent some support to this inference, although this feature was neither completely linear nor continuous. Nonetheless, we were hopeful that the GPR unit would detect the boundary between subsurface shell and the natural, sandy substrate. The two easternmost transects (top two in Figure 3-24) were shorter than the other seven due to the saturated ground of a wetland depression extending southward from the shoreline of one of the ponds. Survey began with these eastern transects after calibrating the GPR unit to the results of Test Unit 1, reported earlier.

The results of this preliminary survey did not produce unambiguous evidence for the northern edge of the south ridge. The most prominent feature in the output of these transects is the high reflectivity of the wetland area. Another prominent feature is the waterline running east-west across the area surveyed, evident in Figure 3-24 as a series of parabolas. The only suggestive evidence for an edge to the south ridge is seen in the high reflectivity of the south end of the easternmost transects. In the first two transects, high reflectivity is seen in relatively thin bands of red tilted gently toward the north. A break in this pattern in the second transect is most likely the backfilled TU1. The next three transects (to the west, shown in Figure 3-24 as the third to fifth transects from the top) show variable levels of reflectivity but each shows a break or sorts at about 10 m from the southern line of origin. This is perhaps the best evidence we have for a break in subsurface shell, although as we progress farther west, this pattern dissipates and we know from the prior augering that subsurface shell extends north of this projected line by at least 15 m. On balance, the preliminary transect survey offers little evidence for a

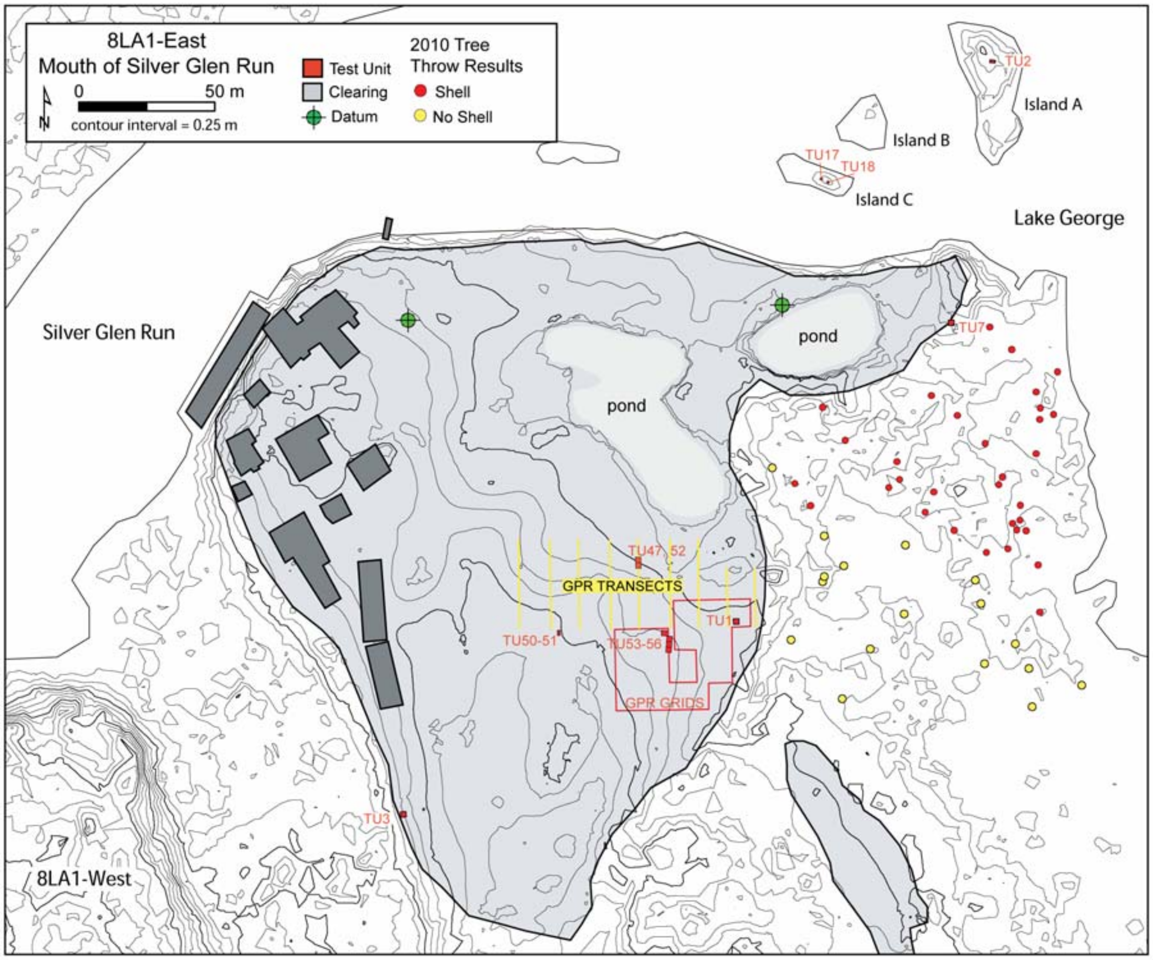

Figure 3-23. Topographic map of 8LA1-East, showing locations of GPR transects and grids, as well as test units excavated in 2010.

subsurface edge to the south ridge, although with better sampling and time-slice processing, this feature may indeed be detectable.

Grid survey with GPR began in an open area directly south of the transects with a 20 x 30-m block (Grid 1). Following procedures described above by Estabrook, field school students dragged the GPR unit at 50-cm intervals both east-west and north-south across the grid. Four subsequent grids were surveyed on a second visit to the site late in the 2010 field season. Although final post-processing of data from the grid surveys took place after completion of fieldwork, Estabrook provided preliminary results from Grid 1 to guide out efforts in subsurface testing. All ground truthing of GPR results in 2010 was confined to the Grid 1 area.

Figure 3-25 provides time slice output for all five grids in the range of 47-55 cm below surface. Thirty time slices from the surface to 177 cm below surface. The depths values are not literal, but rather a relative measure of reflectivity by depth, with some values attenuated vertically due to variations in matrix composition, density and

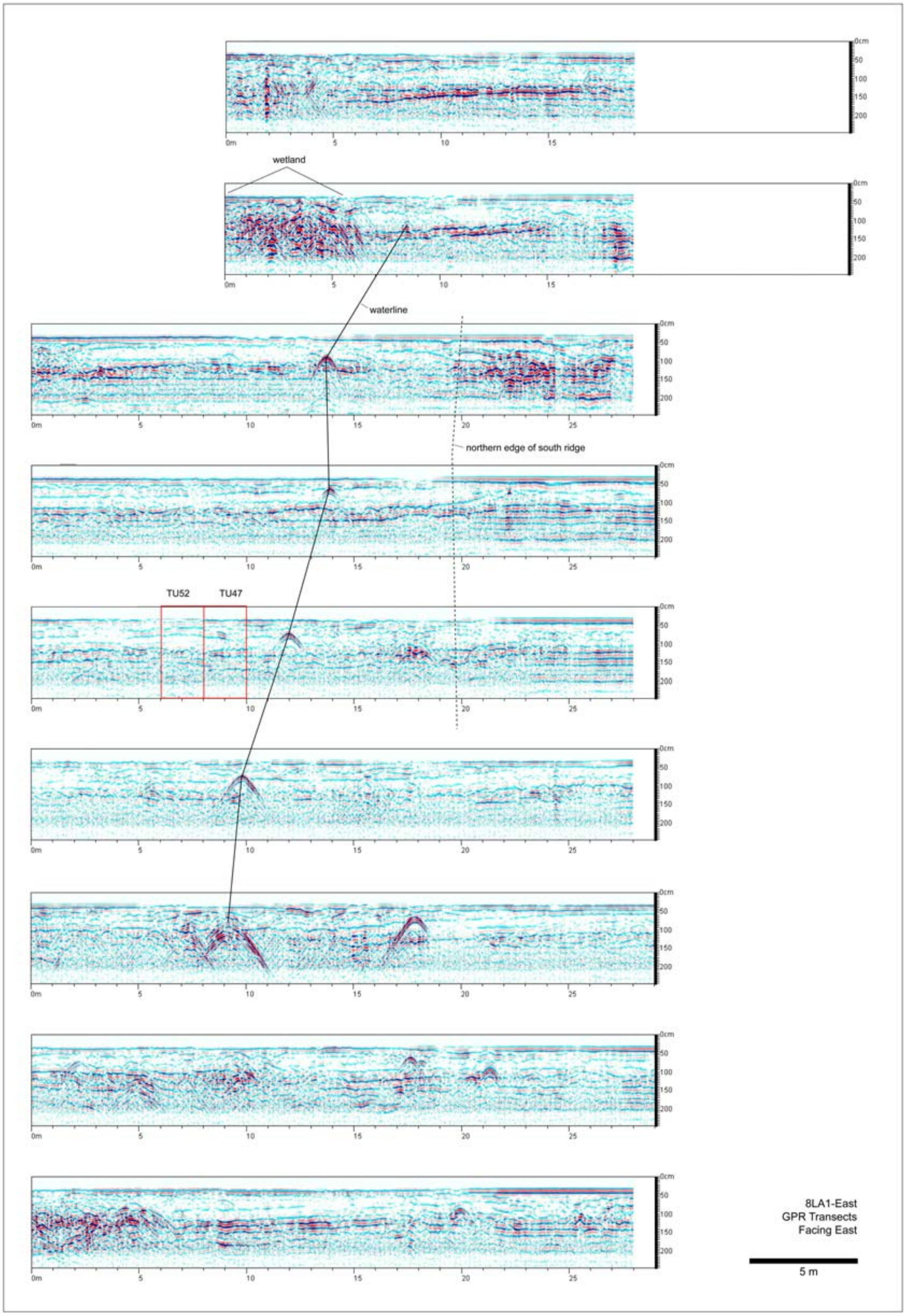

Figure 3-24. GPR results from nine north-south transects placed to detect north edge of south ridge, 8La1-East.

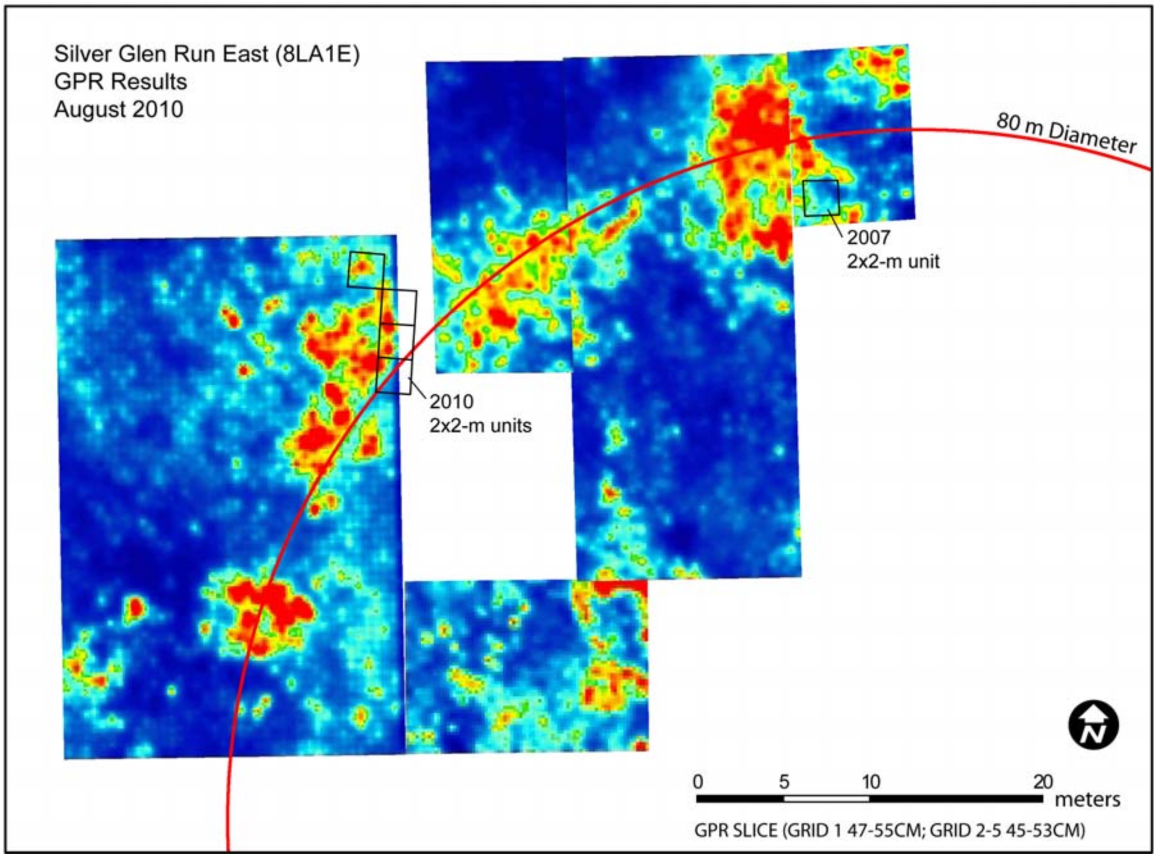

Figure 3-25. GPR results in five contiguous grids for time slice 47-55 cm below surface, with projected arc of anomalies consisting of dense shell.

moisture. In displaying slices in the 47-55 cm range, we are emphasizing those with the greatest clarity of anomalies; slices ranging from 35-78 cm below surface show the same general pattern as the output provided in Figure 3-25.

The output of GPR survey in all five grids offers some tantalizing patterning. As seen in Figure 3-25, major anomalies cluster in four areas some 5-10 m in diameter each, which together form an arc with a projected diameter of 80 m. The northern-most cluster shows a void in reflectivity that corresponds with the 2 x 2-m unit excavated in 2007, TU1. This alone provides strong indication that anomalies correlate with dense shell, although the occurrence of mineralized roots and pit features in this test unit may lend a bit more complexity to the output. In any event, if the arcuate array of anomalies comprises a complete, unbroken circle, some 80 m in diameter, we would expect a total of 16-17 clusters, each spaced about 15 m apart on center. We hasten to add, however, that the clusters are of variable size and shape, and the middle two in Figure 3-25 may actually converge in the strip of unsurveyed land between two of the blocks. Also noteworthy is the lesser anomaly in the southeast corner of the composite grid, where edge-matching of output form adjacent grids is problematic. Still, the area both outside and inside the projected arc of anomalous clusters is dominated by low reflectivity.

Ground truthing the GPR results was accomplished by a combination of coring and select controlled excavations, both in the area of Grid 1. Coring was accomplished with the use of an Oakfield soil tube, which is a foot-long, ¾-inch diameter, chrome-plated steel tube with an open face with a threaded fitting for extensions and a T-top handle. The entire 20 x 30-m area of Grid 1 was cored at 1-meter intervals along east-west transects spaced 1 meter apart. Recorded for each of the 651 tubes inserted along these transects were observations on depth of shell, shell density, substrate beneath shell (if present), and maximum depth of core. Shell density was recorded as low, low-medium, medium, medium-high, and high, if present, and converted to a numerical scale of 1-5, with 1 for low and 5 for high density.

Figure 3-26 provides interpolated output of shell density and maximum depth of shell from the soil tube data using Surfer mapping software (v. 6.01). Comparing these results to the time slice of Grid 1 used in Figure 3-25, we find relatively good conformity between GPR results and shell density, as we expected. The patterns are not a precise match, but there is general agreement between the arcuate shape of the GPR anomalies and shell density, event to the extent that shell density is low in areas to the inside and outside the projected arc. In contrast, depth of shell is more variable, with numerous occurrences in excess of 50 cm in the southern portion of the grid. If such occurrences reflect the presence shell-filled pits, such as the one described in TU1 (see above), then pit features fall well outside the projected arc of GPR anomalies.

In sum, the results of GPR show patterning in the distribution of anomalies that suggests the presence of a circular or arcuate arrangement of shell features. Although the pattern is far from clear, the results point to the possibility of a circular village akin to the Late Archaic shell rings of the Gulf and Atlantic coasts (Russo and Heide 2001). Those known for Florida, such as Horrs Island near Fort Myers (Russo 1991), are nearly as large as the U-shaped configuration Wyman observed at 8LA1-East. Others from Georgia and South Carolina tend to be smaller and generally fully enclosed, perhaps a better model for the pattern suggested by the GPR data. Whereas we did not expect to find a circular village under the shell of the south ridge, the practice of capping old settlements with shell is not all that unusual for the region (Randall 2010). It will take a considerable subsurface testing to substantiate the existence of houses or households, let alone a complete village. That process got underway in 2010 with the excavation of several test units in various locations of the south ridge.

Test Unit Excavation

The locations of test units in and around the area of GPR survey are shown in Figure 3-23. Two contiguous units (TUs 47 and 52) were placed to examine what was perceived to be the northern edge of the south ridge; four contiguous units (TUs 53-56) were excavated to investigate GPR anomalies in Grid 1; and two contiguous units (TUs 50-51) were placed to examine an area west of the GPR survey grids where incised Orange fiber-tempered pottery was found in an auger test. An account of the method and results of these tests follows below in the order just given.

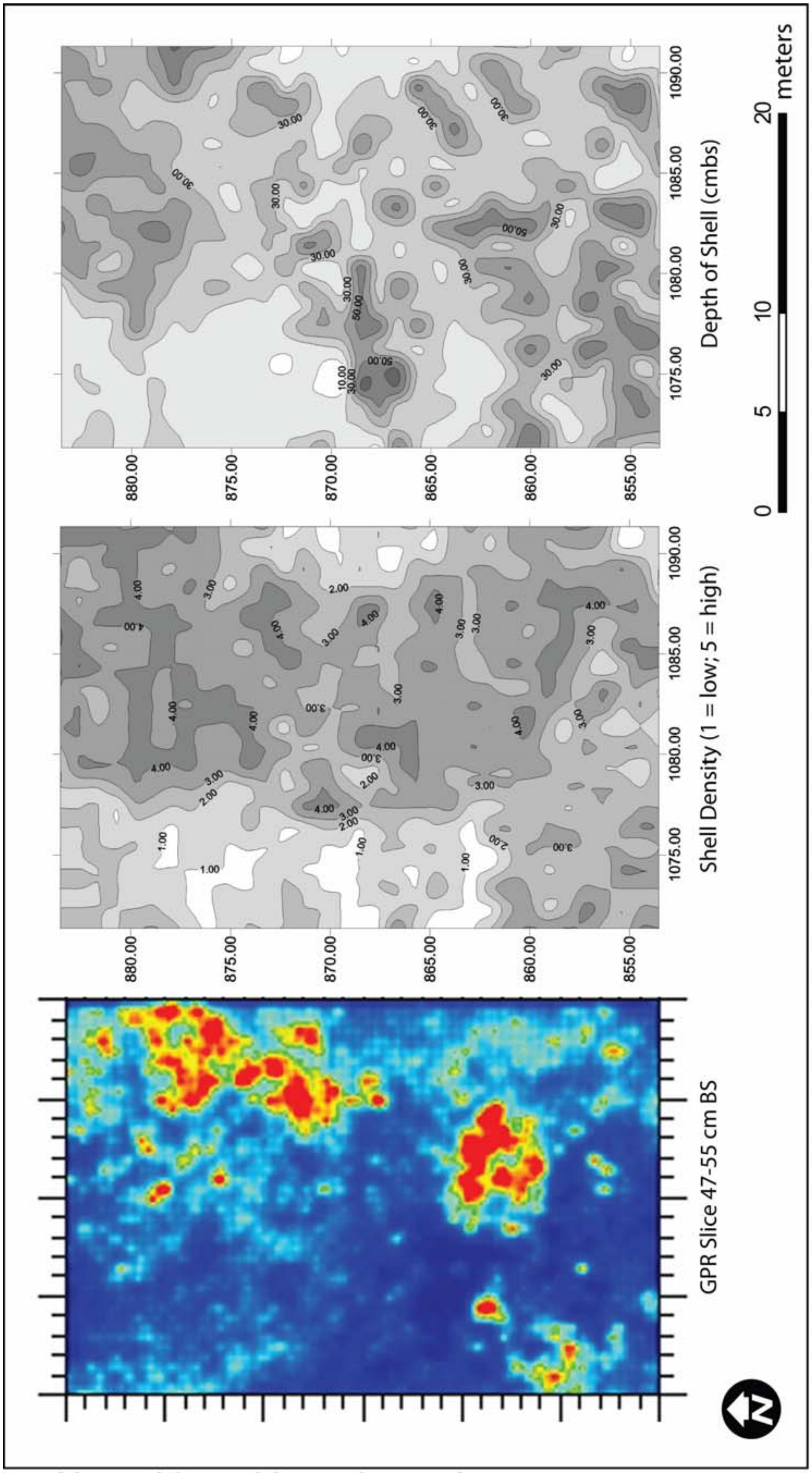

Figure 3-26. Comparison of GPR slice 47-55 cm BS (left) with soil tube data on shell density (center) and shell depth (right).

Test Units 47 and 52. As GPR survey got underway early in the 2010 field season, three contiguous 2 x 2-m units were laid out in the projected area of the south ridge where a slight crease in the surface topography hinted at the position and orientation of the north edge of the ridge. Ultimately, only two of the three units were excavated: Test Units 47 and 52 (TU47 and TU52). Revealed in both units was a discontinuous stratum of shell beneath a well-defined plowzone, and underlain by light-colored fine sands with a sparse but diverse assemblage of flaked stone artifacts. Definitive evidence for the north edge of the south ridge was not observed, although one of the long profiles of the contiguous units provided a hint of this feature. Photographs and line drawings of all profiles of TU47 and TU52 are provided in Figure 3-27. Description of the strata mapped in these profiles are given in Table 3-8, and Table 3-9 gives an inventory of the artifacts and vertebrate fauna recovered.

The upper stratum in both units was removed as a single level (Level A) to reveal well defined plow scars at the base of each unit, ranging up to 28 cm below the surface. Excavation thereafter proceeded in 10-cm arbitrary levels through the shell stratum (Stratum II) and into the underlying light-colored sands (Stratum III). All fill was passed through ¼-inch hardware cloth. Planviews of levels in TU47 revealed matrix of varying composition, which was generally divided into zones as excavation proceeded. Subplowzone matrix in TU52 was comparatively simpler than in TU47, with the exception of the west profile, which revealed an attenuation of Stratum II from TU 47. It was along this eastern profile in TU52 that we observed the only good indication of a terminus to emplaced shell. This can be seen in Figure 3-27 as a basin-shaped, shell-filled depression[1] coterminus with dark gray fine sand (Stratum IV) intrusive to the surrounding gray sand substrate (Stratum III). A second zone of dark gray sand (Stratum IV) was observed a bit farther north of this contact in the west profile of TU52, and a third in the north profile of TU52. The latter zone was designated Feature 66, but it, like the two along the west profile, appear to be recent intrusive disturbances.

One other notable aspect of the TU47 profile is the large, oval-shaped zone in the south profile designated Stratum V. Throughout excavation this zone was described as a clay or clayey sand, and was believed to be emplaced by either natural or human agents. After seeing several similar features in other test units of the south ridge, we came to understand this as the diagentic outcome of tree roots that were covered in shell. Put another way, Stratum V is a mineralized root mass whose source of mineral was the calcium carbonate that leached from overlying shell. In support of this supposition it is noteworthy that such features are not found outside of areas of overlying shell deposition. Given the size and shape of the mass mapped as Stratum V, we suspect this particular example is the mineralized root ball of a palm tree. Additional examples are seen in the profiles of Test Units 55 and 56, discussed further below.

The artifact inventory from level excavation of TUs 47 and 52 is relatively sparse (Table 3-9). Materials recovered from the plowzone and shell stratum were limited to a few lithic flakes, some retouched, two crumb sherds, and a small assemblage of

[1] recorded in the field as Feature 47, this shallow basin appears to be simply a low area of shell accumulation, as opposed to a purposefully dug and filled pit.

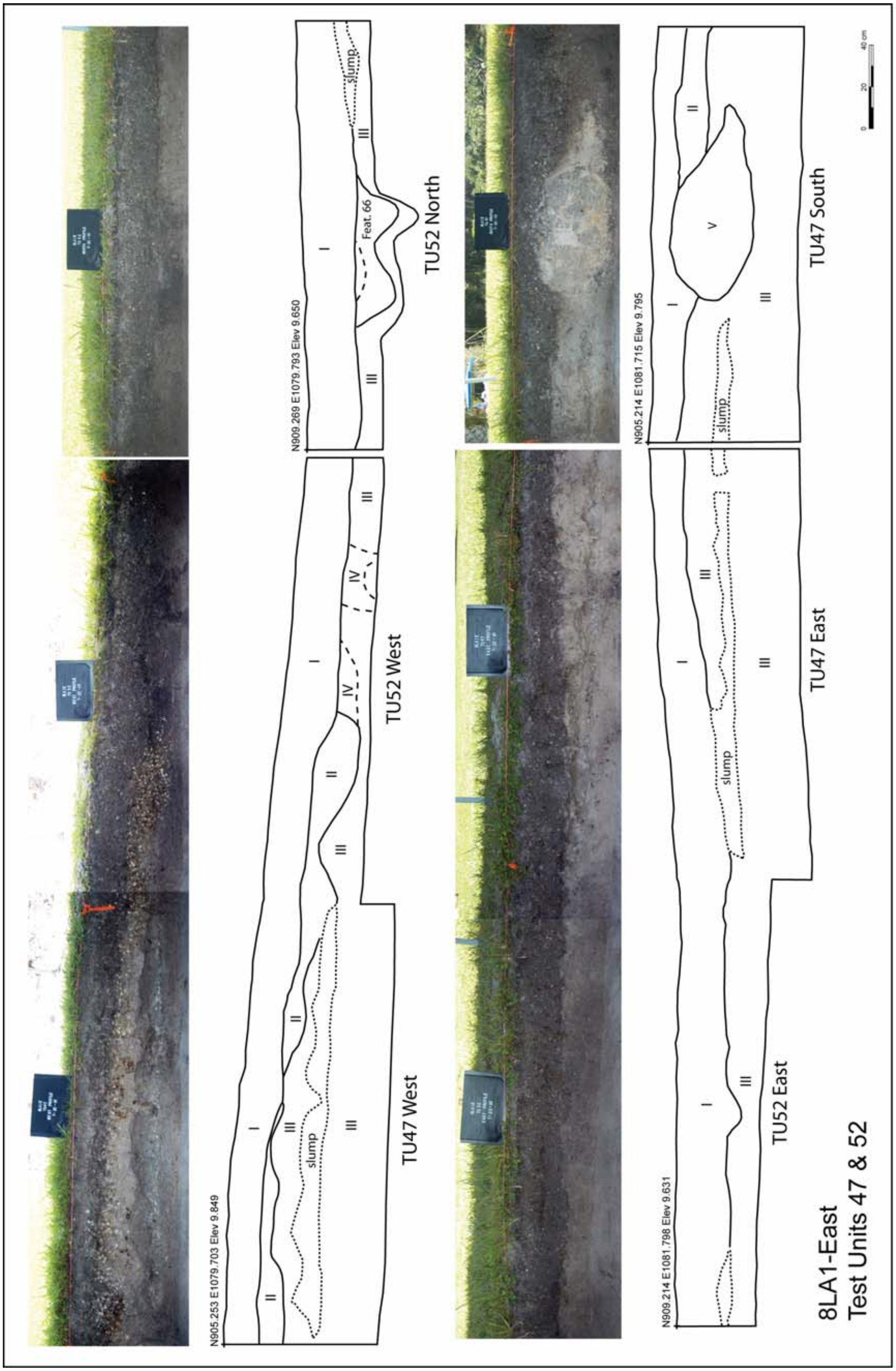

Figure 3-27. Photographs and line drawings of all profiles of Test Units 47 and 52, 8LA1-East

Table 3-8. Stratigraphic Units of Test Units 47 and 52, 8LA1-East

Stratum	Max. Depth (cm BS)	Munsell Color	Description
I	28	10YR4/2	dark grayish brown fine sand with minor *Viviparus* shell (plowzone)
II	37	10YR5/3	whole and crushed *Viviparus* in brown fine sand
III	71+	10YR6/1	gray fine sand with no shell grading to 10YR5/3 brown fine sand with mottling due to fluctuating watertable
IV	38+	10YR4/1	dark gray fine sand with no shell
V	46	10YR8/2	very pale brown fine clayey sand with 10YR5/2 grayish brown fine sand mottles and 10YR6/6 brownish yellow moist clay (mineralized root ball)
Feat. 66	46	10YR4/2	dark grayish brown fine sand with no shell

vertebrate fauna. Notably, most of the lithic artifacts came from the light-colored sands beneath the shell. After heavy rains flooded the units and caused the profile damage seen in Figure 3-27, TU47 was excavated a bit deeper to see how far lithic artifacts extending into the sandy substrate. Three additional 10-cm levels were removed before the receding water table was reached at 70 cm below surface. Recovered in these additional levels were 54 chert flakes greater than ¼-inch in size (students screening the sand from these levels noted an abundance of microflakes falling through the screen), and six chert tools, five of which are illustrated in Figure 3-28, along with tools from other units in the south ridge area. Many of the tools in this figure are unifacially modified flakes, some in forms archaeologists generally refer to as "scrapers" (e.g., Figure 3-28k-m). Another recurrent form is seen in the top row of Figure 3-28 (a-f). These small, pointed objects resemble the microliths of Mount Taylor affinity (e.g., Randall et al. 2011; cf. Jaketown perforators ACI 2001:2-8), and were likely used as drills. The larger pieces in Figure 3-28 (o, p, r, s) are unifacially modified flakes, two from TU47; two examples of biface fragment (Figure 3-28n, q) are also illustrated, including the haft element of a tapered stemmed point from TU52.

The lithic assemblage recovered mostly from subshell sands reflects the broader distribution of Early and Middle Archaic artifacts across much of the 8LA1 site area. A similar pattern was detected on the north side of Silver Glen Run, where field school students assisted in a U.S. Forest Service project to assess the impacts of infrastructure repair to the recreational facilities of Silver Glen Run (Randall et al. 2011). These artifacts reflect relatively intensive use of the greater Silver Glen area well before shell was deposited anywhere at the site, possible as early as the early Holocene, 9000 or more years ago. The Mount Taylor assemblage of microliths, as well as the tapered stemmed biface fragment is not unexpected of an archaeological complex that includes a massive

Table 3-9. Inventory of Artifacts, Vertebrate Fauna, and Miscellaneous Items Recovered from Level Excavation of Test Units 47 and 52, 8LA1-East.

TU47 Level	Lithic Flake (n)	Lithic Flake (g)	Modified Lithic (n)	Crumb Sherd (n)	Vert. Fauna (n)	Vert. Fauna (g)	Historic Artifacts (g)
A	3	1.4					17.2
B, Zone A	1	0.2					
B, Zone D	1	0.8					28.2
C, Zone B					1	1.3	
C, Zone D	4	1.0	1		19	4.7	
C, Zone E					1	0.2	
D	19	4.6	3		4	1.1	
E	12	2.6	2		1	<0.1	
F	23	11.4	1		6	1.0	
Subtotal	63	22.0	7		32	8.3	45.4
TU52 Level							
A	4	9.9	2	1	3	2.8	331.1
B	2	0.4	1		6	1.1	
C	12	2.4	2	1	19	5.2	
Wall Clean-up	1	0.8					
Subtotal	19	13.5	5	2	28	9.1	331.1
Total	82	35.5	12	2	60	17.4	376.5

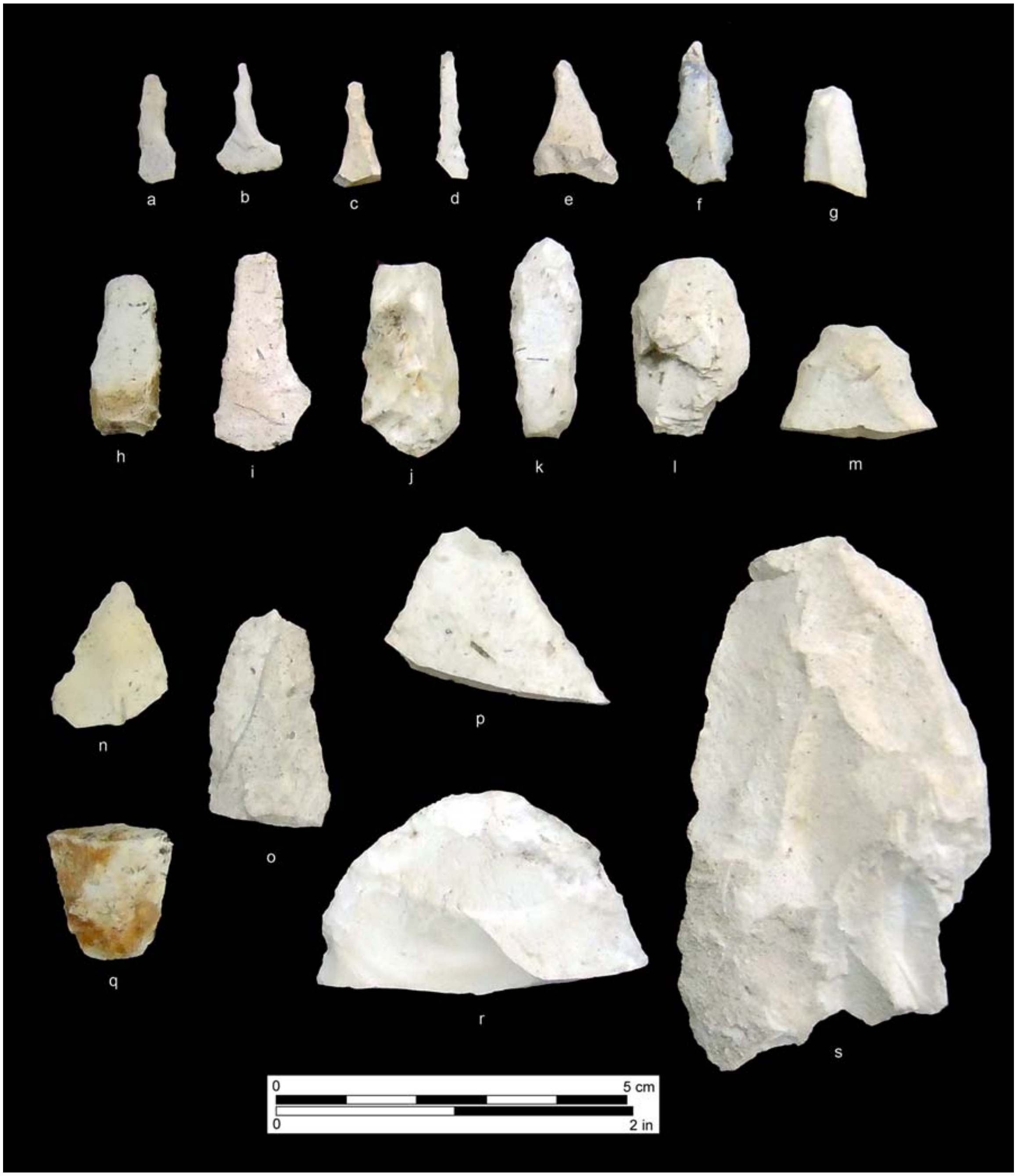

Figure 3-28. Flaked stone artifacts from various test units in the South Ridge area of 8LA1-East (a. 47D-3; b-c. 54I-2; d. 54H-3; e. 54 North G-2; f. 47C Zone D-3; g. 52C-2; h. 52A-4; i. 53F-2; j. 53D-3; k. 47D-3; l. 53G Zone D-2; m. 47F-3; n. 53G Zone B-2; o. 54J Zone A-3; p. 54K Zone A-3; q. 52A-3; r. 47E-1; s. 47E-2).

Mount Taylor shell ridge in Locus A, and possibly along the spring run in the eastern aspect of 8LA1.

In sum, TUs 47 and 52 provided a glimpse, in its west profiles, of the terminus of shell at the possible north edge of the south ridge. Because this observation was not duplicated in the east profiles, we are reluctant to put too fine a point on this inference. Irrespective of this ambiguity, TU47 provided two other useful observations: (1) mineralized roots in the sandy substrate are a good proxy for overlying shell, which is especially useful in contexts where shell have been removed recently; and (2) the sandy substrate of 8LA1-East, like other locations in the greater Silver Glen area, encases a robust record of earlier site use in the form of diverse chert tools and the by-products of their manufacture and use. So much of this record now lies beneath the water table and will thus require dewatering to be adequately sampled.

Test Units 53-56. A series of four contiguous 2 x 2-m units were excavated in the northeast corner of GPR Grid 1 to explore anomalies believed to be indicative of dense subsurface shell (Figure 3-25). The first unit, Test Unit 53 (TU53) was sited directly over a small anomaly, while three other units (TUs 54-56) were aligned offset to the south of TU53 to examine the edge of a larger anomaly. Together the four units provide a eight-meter-long profile of the area, the largest vertical exposure to date. With one exception, each of the units was excavated in 10-cm arbitrary levels and all fill passed through ¼-inch hardware cloth. The exception was excavation of TU55, which was conducted within observed archaeostratigraphy enabled by the “leapfrog” excavation of adjacent units (Figure 3-29).

All four profiles of TU53 are illustrated in Figure 3-30. Profiles that guided the excavation of TU55 are given in Figure 3-31, and the east profiles of TUs 54-56 are given in Figure 3-32. Description of the strata mapped in all four test units can be found in Table 3-10. An inventory of all artifacts and vertebrate fauna recovered for these test units is provided in Table 3-11.

The profiles of TU53 are relatively simple save for a few intrusive features (Figure 3-30). The south and west profiles of this unit provide good perspective with minimal disturbance. Beneath the plowzone (Stratum I) is a stratum of grayish-brown sand with varying amounts of mostly whole *Viviparus* shell with limited vertebrate fauna. This shell-bearing stratum (Stratum II) is underlain by the light-colored sands (Stratum III) seen elsewhere across the south ridge area. Unlike TU1, to the east, this shell stratum does not rest on a buried A horizon, but is instead directly atop the subsurface sands.

Aboriginal artifacts recovered from TU53 consist of 47 chert flakes, 6 chert tools, 60 sherds, and a modest assemblage of vertebrate fauna. All but 6 of the 62 sherds came from the upper strata, 50 from the shell itself, most notably a cluster of Orange Incised sherds from the base of Level C (30 cm below surface) (Figure 3-33). These sherds were conjoined in the lab to form a relatively large upper rim portion of an open bowl with an estimated orifice diameter of 36 cm (Figure 3-34). The exterior surface of this vessel is badly eroded, although traces of its rectilinear incisions are visible in preserved patches. The admittedly cryptic incisions would appear to consist of nested triangles or diamonds, motifs not uncommon to Orange Incised pottery in the region. However, unlike the many Orange Incised sherds found at the mouth of Silver Glen Run (see above), this particular

Figure 3-29. Excavation of Test Units 53-56 in location of GPR Grid 1, 8LA1-East.

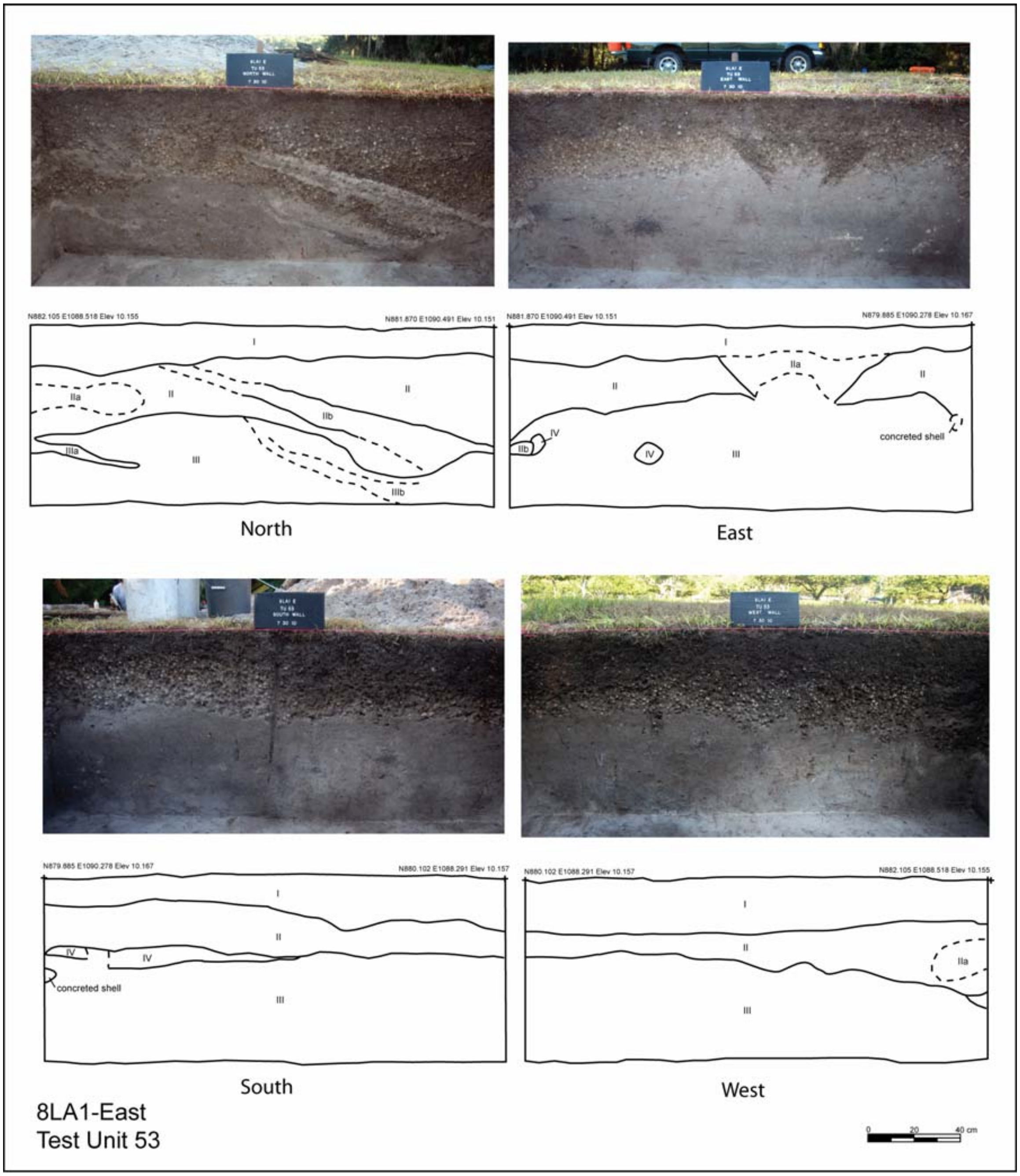

Figure 3-30. Photographs and line drawings of all profiles of Test Unit 53, 8LA1-East.

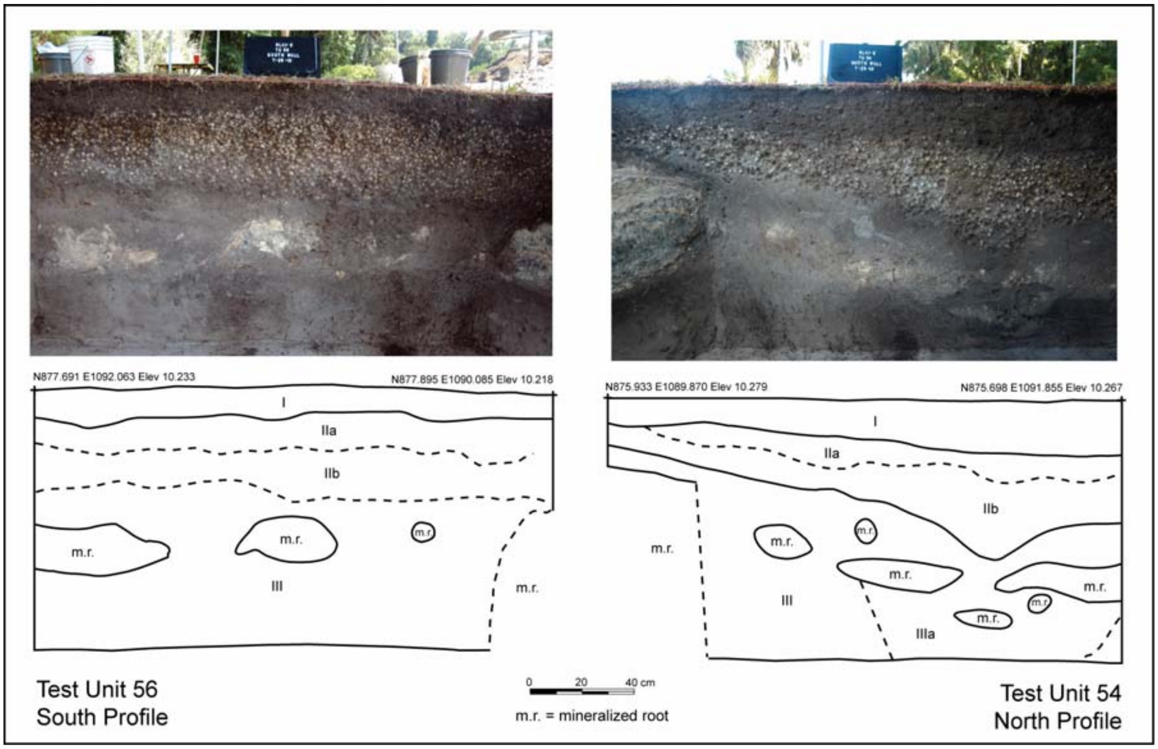

Figure 3-31. Photographs and line drawings of the south profile of Test Unit 56 (left), and the north profile of Test Unit 54 (right), 8LA1-East.

vessel does not contain obvious traces of sponge spicules, making it more similar, technologically, to the Orange Plain pottery found elsewhere in the south ridge area (e.g., TU1), as well as Locus B (see Chapter 6).

The intrusions evident in profiles of TU53 are instructive. The north profile (Figure 3-30) shows a large in-filled tunnel intruding through the shell stratum and into subshell sands at an angle of about 20 degrees. A gopher tortoise is the most likely agent of intrusion in this case. Over the years we have witnessed many excavations by gopher tortoises and they consistently enter the earth at about this angle. The depth and configuration of burrows varies depending on substrate and depth of water table, but they are generally straight, as in this example. A second intrusive feature is seen in the east profile of TU53. Consisting of two converging in-filled "wedges" this intrusion most likely comes from historic-era activity. Like the gopher tortoise intrusion, the contact between in-filled sediment and the surrounding matrix is sharp, indicating they were relatively recent. To the extent both were truncated by the plowzone, these intrusions must predate the last time the site was plowed, but certainly postdate the mining of shell in 1923.

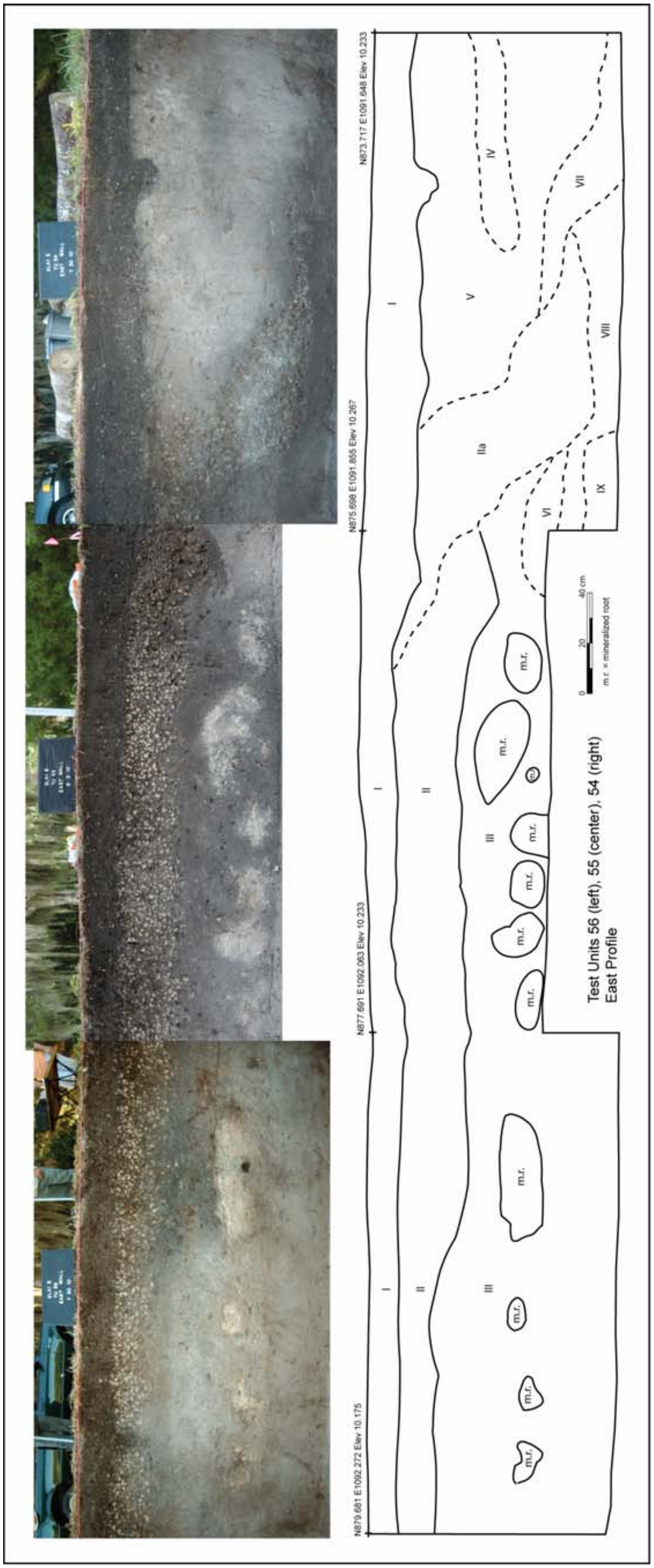

Figure 3-32. Photographs and line drawings of the east profiles of Test Units 54-56, 8LA1-East.

Table 3-10. Stratigraphic Units of Test Units 53-56, 8LA1-East

Stratum	Max. Depth (cm BS)	Munsell Color	Description
I	25	10YR3/1	very dark gray fine sand with minor *Viviparus* shell (plowzone)
II	55	10YR4/2	whole and crushed *Viviparus* in dark grayish brown medium sand grading to 10YR5/1 gray medium sand towards bottom of stratum
IIa	33	10YR5/3	mostly crushed *Viviparus* shell in brown medium sand (TU56 South and TU54 North only)
IIa	90	-	whole and crushed *Viviparus* in matrix on varying color and texture; intrusive feature (TU54 and 55 East only)
IIb	62	10YR5/1	fine-medium gray sand laminated with 10YR4/1 dark gray sand; gopher tortoise burrow (TU54 only)
IIb	62	10YR4/2	whole and crushed *Viviparus* in dark grayish brown medium sand (TU56 South and TU54 North only)
III	102+	10YR5/1	gray fine-medium sand with no shell but abundant mineralized roots when shell dense in overlying stratum
IIIa	62	10YR6/2	light brownish gray medium sand with no shell (TU53 only)
IIIa	99+	10YR4/2	dark grayish brown medium sand with no shell (TU54 North only)
IIIb	75+	10YR4/1	dark gray sand mottled with 10YR6/2 light brownish gray medium sand; gopher tortoise burrow (TU54 only)
IV	40	10YR6/1	gray medium sand with no shell (TU53 only)
IV	57	10YR4/1	dark gray mediums and no shell (TU54 East only)
V	90	10YR7/1	light gray medium sand mottled in upper half with 10YR5/2 grayish brown sand; no shell
VI	79	10YR4/2	dark grayish brown medium sand with no shell
VII	100+	10YR5/1	gray medium sand with no shell
VIII	100+	10YR5/1-2	gray to grayish brown fine-medium sand with no shell
IX	100+	10YR7/2	light gray medium sand with no shell

Table 3-11. Inventory of Artifacts, Vertebrate Fauna, and Miscellaneous Items Recovered from Level Excavation of Test Units 53-56, 8LA1-East.

TU53 Level	Lithic Flake (n)	Lithic Flake (g)	Modified Lithic (n)	Orange Plain Sherd (n)	Orange Incised Sherd (n)	Orange Eroded Sherd (n)	Crumb Sherd (n)	Vert. Fauna (n)	Vert. Fauna (g)	Historic Artifacts (g)
A*								3	0.8	7.3
B							4	16	4.6	
C	1	0.2			16	1	11	53	27.3	
D	2	0.6	1	1			20	90	40.0	0.2
E	3	0.7	1				6	19	4.7	
E, Zone A								13	4.3	
E, Zone B								6	1.3	
F	4	1.4	1							
F, Zone B								7	1.7	
G, Zone A	11	1.8						4	2.0	
G. Zone B			1					7	2.0	
G. Zone C	4	1.4								
G, Zone D	2	0.3	1				1			
G, Clean-up								1	0.2	
H, Zone A	15	4.7								
H, Zone C	2	<0.1	1					6	<0.1	
H, Zone D	2	<0.1						3	<0.1	
H, Clean-up	1	0.7						5	2.0	
Subtotal	47	11.9	6	1	16	1	42	233	91.0	7.5
TU54 Level										
B	1	0.3						2	1.3	
C							2	7	3.3	0.9
C, Zone A**					1		4	39	8.5	4.7
C, Zone B				1			1	3	0.5	
C, Zone B NW							1	51	14.2	
D							1	15	2.3	
D, Zone A							2	30	10.1	
D, Zone B							5	155	33.6	
D, Zone C							4	7	2.0	

Table 3-11. Continued.

TU54 (cont'd) Level	Lithic Flake (n)	Lithic Flake (g)	Modified Lithic (n)	Orange Plain Sherd (n)	Orange Incised Sherd (n)	Orange Eroded Sherd (n)	Crumb Sherd (n)	Vert. Fauna (n)	Vert. Fauna (g)	Historic Artifacts (g)
D, SW								2	1.4	
D (North)								10	2.5	
E, Zone B	1	0.3		1			10	23	3.6	
E (North), Zone B							1	29	13.0	
E (North), Zone D							7	53	8.2	
E (South), Zone A								1	0.9	
F (North), Zone D	8	2.2					2	9	2.1	
F (South)							3	1	0.1	
F (South), Zone B								9	2.3	
F (South), Zone C	1	0.1	1				1	3	0.5	
G (North)			1					4	0.6	
H	4	0.8	1					5	1.5	
I, Zone A	16	4.0	2							
I, Zone B	1	<0.1						1	1.0	
J, Zone A	6	2.0	1					1	0.7	
K, Zone A	5	1.3	1					2	0.3	
Subtotal	43	11.0	7	2	1		44	462	114.5	5.6
TU55 Level										
Stratum I						1	2			
Stratum II				1	1	3	20	323	233.4	
Stratum III	7	1.8		2		1	23	32	15.8	
Subtotal	7	1.8		3	1	5	45	355	249.2	
TU56 Level										
A***	1	<0.1		1				34	12.2	1.9
B	1	0.6					7	153	28.2	
C+	3	11.5				1	8	242	91.9	
D, Zone A	4	0.9					1	7	1.5	
D, Zone B								11	1.7	

Table 3-11. Continued.

TU56 (cont'd) Level	Lithic Flake (n)	Lithic Flake (g)	Modified Lithic (n)	Orange Plain Sherd (n)	Orange Incised Sherd (n)	Orange Eroded Sherd (n)	Crumb Sherd (n)	Vert. Fauna (n)	Vert. Fauna (g)	Historic Artifacts (g)
E	2	2.6		4		2	5	5	2.4	
E, Zone A							1			
F	2	0.8		1						
F, Zone B						1				
G, Zone A	9	1.9								
G, Zone B	2	0.4								
H	8	9.0								
I	13	2.9								
Subtotal	45	30.6		6		4	22	452	137.9	1.9
Total	142	55.3	13	12	18	10	153	1502	592.6	15.0

* plus two sherds of St. Johns Plain, 3.1g
**plus one sherd of St. Johns Plain, 1.8g
***plus one sherd of St. Johns Check Stamped, 2.6g
+plus one piece of unmodified marine shell, 0.2g

Figure 3-33. Plan view of Test Unit 53 at the base of Level f, showing cluster of Orange Incised pottery, 8LA1-East.

The profiles of TUs 54-56 are a bit more complicated than those of TU53, owing to an abundance of mineralized roots and at least one massive intrusive feature (Figure 3-32). The general sequence of plowzone-shell-sand seen in TU53 characterizes the profiles of TUs 54-56, but in the northern two units (TUs 55 and 56) the shell stratum is generally thicker and denser than in TU53, and the sand stratum is dominated by an array of mineralized roots well below the shell. The southern unit in this trio, TU54, generally lacks the shell stratum and is instead dominated by an apparent pit filled with light gray sand. Each of these two deviations from the "typical" profile is discussed in turn below.

Mineralized roots are especially abundant throughout the sand stratum at depths of roughly 55-80 cm below surface. Figure 3-35 provides an example of what these look like in plan at the base of Level E (60 cm below surface) in TU56. As noted for the

Figure 3-34. Reconstructed rim portion of Orange Incised vessel from Level C of Test Unit 53, 8LA1-East.

mineralized root mass in the south profile of TU47 (Figure 3-27), the round masses in TU56 are most likely the root balls of palm trees. The linear masses see in this plan are instead the likely the mineralized consequence of hardwood tree roots. In either case, the degree of mineralization appears to be directly correlated with the density and thickness of overlying shell. Insofar as shell in these profiles was truncated by mining operations, the underlying roots or root balls must have been from trees that either died naturally before the shell was emplaced or were felled by those who emplaced the shell. When we consider the lack of an A horizon beneath the shell, the possibility of deliberate felling of trees grows stronger. That is, the evidence for mineralized roots and lack of A horizon suggest strongly that the ground surface of the south ridge area was prepared for the emplacement of shell.

Figure 3-35. Mineralized root masses at the base of Level E, Test Unit 56, 8LA1-East.

Turning now to the light gray sand seen in the east profile of TU54 (Figure 3-32), it would appear that a large pit was excavated into the shell and underlying sands and then in-filled with sand lacking shell. Running under the north end of this in-filled pit is a stratum of displaced shell (Stratum IIa) that appears to have originated from the shell stratum (II) beneath the plowzone. On first inspection this deeper shell appeared intrusive; in fact, it had the hallmarks of an ancient tortoise burrow that was backfilled with shell. However, in other exposures afforded by the excavation of TU54, the relationship between displaced shell and the light gray sand goes well beyond what would be expected in a tortoise burrow. This is evident in the sectioned plan of the unit at the base of Level F (Figure 3-36). The upper view in Figure 3-36 shows the plan at 40 cm below surface (base of Level D), where the dark grayish brown matrix with shell (Startum II) stands in contrast to the light grey sand lacking shell. The bottom shows a sectioned TU54, with the southern half taken down an additional 20 cm (60 cm BS) to the base of Level F. Observed in both the plan and profile of this cut is displaced shell following the basin-shaped outline of the light grey sand. It would thus appear that a large pit was excavated into the shell and underlying sand and before the pit was backfilled with light gray sand a good bit of the unconsolidated shall matrix dropped into the pit, forming an inverse talus slope of sorts. Based on these exposures, the pit measured at least 2 m in diameter at the top and at least 1 m in diameter at the base.

Figure 3-36. Plan view of Test Unit 54 at the base of Level D (top) and sectioned southern half at the base of Level F (bottom), 8LA1-East.

Figure 3-37. Cross-section view of Feature 63, Test Unit 54, 8LA1-East.

The cultural affiliation of this pit feature is difficult to infer based on stratigraphic principle alone. However, a small feature intrusive to the sand provides a good terminus ante quem for the backfilling of the pit. Seen in the TU54 plan as a circular dark stain in the north-central part of the light gray sand, this feature has the hallmarks of a burned post. Dubbed Feature 63, this apparent burned post has a well defined basal cross-section and diffuse margins (Figure 3-37). A sample of wood charcoal from this feature was submitted for an AMS assay and returned an age estimate of 670 ± 40 B.P. (cal AD 1270-1330/ AD 1340-1400. This placed the burned post in the St. Johns IIb subperiod, coeval with a pit feature from 8LA1-West Locus C containing the diagnostic check-stamped pottery of St. Johns II times (see Chapter 7). We can infer from this age that the pit was dug and backfilled sometime prior to the placement and burning of this post. More than likely, the pit was dug, backfilled, and post emplaced at about the same time. If so, this portion of 8LA1-east was the locus of substantial landscape modification long after the emplacement of shell along the south ridge. St. Johns Check-Stamped sherds are common in the water of the spring run, so a component of this age is not unexpected. One such sherd was recovered from the plowzone of TU56, four meters north of the in-filled pit. Bearing in mind that some portion of the south ridge was truncated by mining, a late date for the burned post suggests that the premining surface of the south ridge in the vicinity of TUs 53-56 was not all that high, perhaps well under a meter.

The overall inventory of artifacts from TUs 54-56 is unremarkable (Table 3-11). Once again we see a tendency for vertebrate fauna, sparse as it is, to be concentrated in the shell stratum, and for chert flakes and tools to be concentrated in the subshell sands. Few diagnostic Orange period sherds were recovered in these units, although crumb sherds were pervasive, if not numerous, and tended to be fiber tempered. On balance, the assemblage is consistent with others from the south ridge area, with the addition of a St. Johns II component represented more so by the sand-filled feature, rather than numerous artifacts. Of course, even a minor amount of shell mining in this area would have removed the latest components of this site, so the lack of more St. Johns II material in the immediate vicinity is not surprising.

One final note on the excavation of TUs 53-56 speaks to the vulnerability of the profiles to slumping and collapse after heavy rains. Late in the field season we experienced a deluge that flooded all units in the south ridge area. Considerable damage was inflicted on TU54, whose profiles collapsed soon after water receded (Figure 3-38). We were fortunate to have recorded much of the stratigraphic information before the collapse, but did lose the opportunity to photograph and map the south and west walls of this unit.

Figure 3-38. Collapsed profiles in Test Unit 54, 8LA1-East.

Test Units 50-51. A third location of subsurface testing in 2010 was opportunistic. Augering in the orange grove to the west of the GPR grids produced an Orange Incised sherd in shell matrix. To investigate this occurrence a 1 x 1-m unit (TU50) was placed adjacent to the auger hole, and it was soon expanded to a 1 x 2-m unit with the addition of a second unit (TU51). All four profiles of TUs 50-51 are illustrated in Figure 3-39. Description of the strata mapped in these profiles can be found in Table 3-12, and an inventory of all artifacts and vertebrate fauna recovered for these test units is provided in Table 3-13.

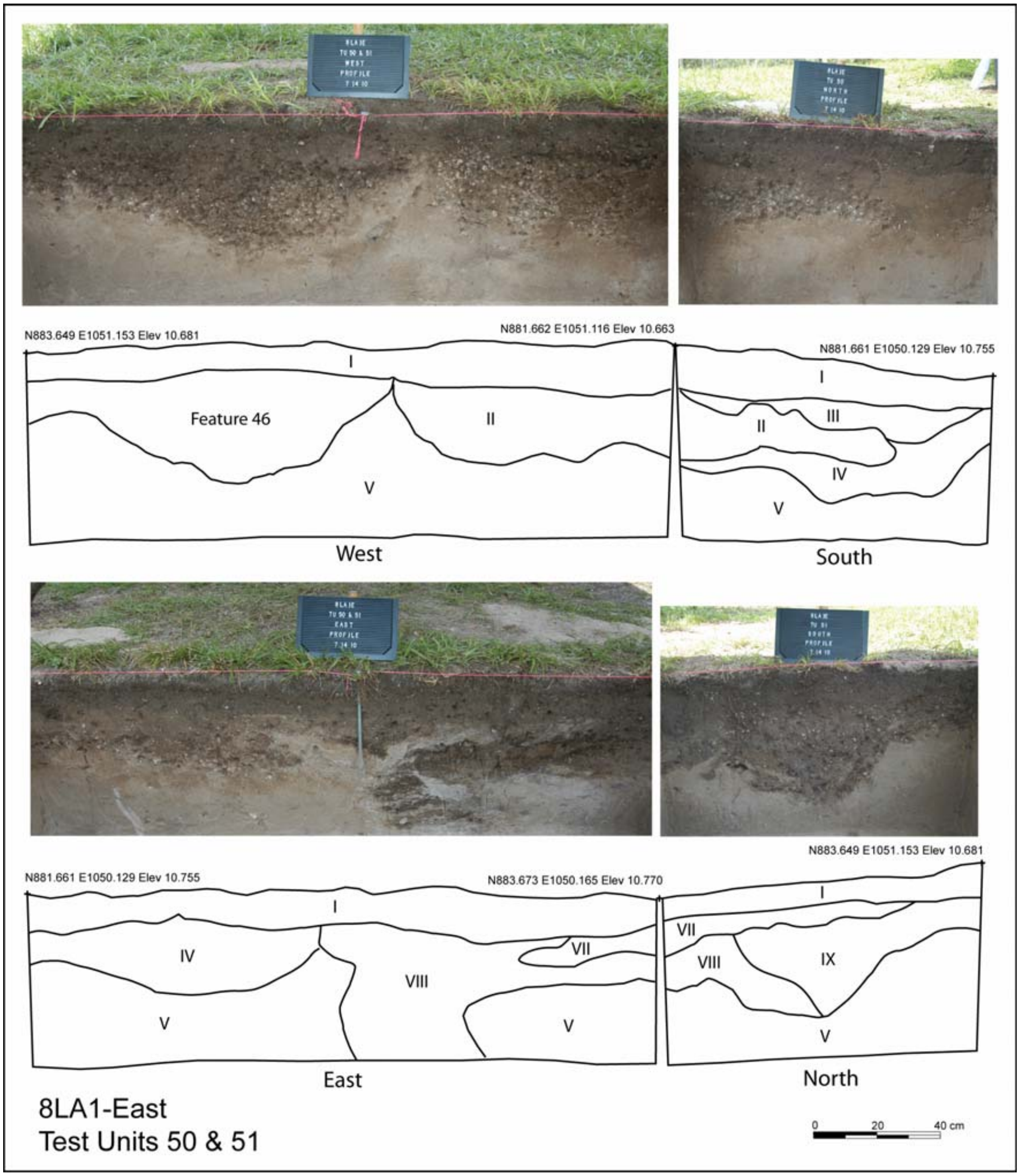

Figure 3-39. Photographs and line drawings of all profiles of Test Units 50 and 51, 8LA1-East.

The profiles of TUs 50-51 deviate a bit from those found elsewhere in the south ridge area. Beneath a thin plowzone (Stratum I) are shell deposits, but they appear to be restricted to shallow basin-shaped features, the best example being Feature 46 in the west profile. Others are not so well defined, and in the east and south profiles of these units, several recent intrusions are apparent. It does not appear that shell was emplaced on a buried A horizon, as seen in TU1, but instead in pits close to the present-day surface. It follows that shell may not have been mined from this area of the site, but that is not altogether clear.

Despite the recovery of Orange Incised pottery in the nearby auger test, TUs 50-51 did not produce much pottery. The recovered assemblage consists of only a small number of Orange Plain sherds, as well as crumb sherds, mostly from the shell matrix. What little vertebrate fauna recovered was concentrated in the shell as well. Feature 46 contained little other than shell and a small amount of vertebrate fauna. As we have seen throughout the area to the south ridge, chert flakes and tools are found primarily in the subshell sands.

Table 3-12. Stratigraphic Units of Test Units 50 and 51, 8LA1-East

Stratum	Max. Depth (cm BS)	Munsell Color	Description
I	17	10YR3/2	very dark grayish brown fine to medium sand with moderate *Viviparus* shell (plowzone)
Feat. 46	43	10YR3/2	whole *Viviparus* shell in very dark grayish brown fine to medium sand
II	38	10YR4/3	whole *Viviparus* shell in brown fine to medium sand
III	21	10YR3/3	dark yellowish brown fine to medium sand with trace of *Viviparus* shell
IV	32	10YR5/4	yellowish brown fine to mediums and grading eastward to 10YR3/2 very dark grayish brown fine to medium sand with moderate whole and crushed *Viviparus* shell
V	60	10YR6/3	pale brown fine to medium sand with no shell
VII	21	10YR3/3	dark brown fine to medium sand with minor *Viviparus* shell (recent intrusion)
VIII	52+	variable	10YR3/2 very dark grayish brown fine to medium sand, with 10YR5/3 brown and 10YR7/1 light gray sand stringers with trace of *Viviparus* shell (recent intrusion)
IX	41	10YR3/3	whole and crushed *Viviparus* shell in dark brown fine to medium sand (recent intrusion)

Table 3-13. Inventory of Artifacts, Vertebrate Fauna, and Miscellaneous Items Recovered from Level Excavation of Test Units 50 and 51, 8LA1-East.

TU50 Level	Lithic Flake (n)	Lithic Flake (g)	Modified Lithic (g)	Orange Plain Sherd (n)	Crumb Sherd (n)	Vert. Fauna (n)	Vert. Fauna (g)	Historic Artifacts (g)
A						1	1.3	10.9
B					2	6	2.9	
C				3	15	6	1.0	
D, Zone A					2	9	1.6	
D, Zone C				1	1	1	0.5	
E	4	0.6	1			1	0.3	
F	1	0.2						
Subtotal	5	0.8	1	4	20	24	7.6	10.9
TU51 Level								
A					4	1	1.4	
B					3	5	1.5	1.5
C					7	5	7.8	
D, Zone A*					1	3	0.4	
D, Zone B	1	2.0						
E					1			
F	2	0.9						
Subtotal	3	2.9			16	14	11.1	1.5
Total	8	3.7	1	4	36	38	18.7	12.4

*plus one piece modified marine shell, 29.3 g; one *Euglandina* shell, 0.8g

In sum, the results of testing in TUs 50-51 reinforce the observation made in 2007 that the distribution of shell and shell-filled pits is not restricted to the projected location of the south ridge, but instead extends westward to the edge of the landform fronting wetlands. This does not mean that the south ridge, before mining, was ill-defined or simply graded into the "natural" contours of the landform, only that there is no abrupt termination to subsurface shell in this portion of the site.

CONCLUSION

Field school investigations at 8LA1-East in 2007, 2008, and 2010 produced mixed results. One the one hand, subsurface testing across much of the area believed to be occupied by a massive U-shaped shellworks revealed a great deal of disturbance owing to shell-mining operations in the 1920s, particularly along the shoreline of Silver Glen Run, the presumed location of the north ridge. Coupled with recent review of Lake County probate records pertaining to the mining (Randall et al. 2011), subsurface tests on two of the islands at the mouth of the run and at Shell Point suggest that more than shell was removed in the operation. Apparently, mining involved severe dredging of the spring run, as well as large-scale sculpting of the shoreline to accommodate barges and other equipment needed to remove the shell. Some of the county documents relate to a settlement among all parties involved over the unauthorized excavation of the landform below the water table. The construction of a ramp at Shell Point appears to have enabled use of this portion of the landform for loading of shell onto barges that apparently were brought into a slip cut well into the shoreline. The deposition of shell as islands at the mouth of the run may have been an attempt on the part of the mining company to ameliorate damage inflicted by the construction of this slip and ramp. A similar ramp-like feature has been identified by Randall up the north side on the north shore, land now under jurisdiction of the U.S. Forest Service (Randall et al. 2011).

Whereas the shoreline of the spring run and adjoining lake shore to the east appears to have been obliterated by mining, subsurface remnants of the north ridge appear to remain intact beneath the water table of the mainland. Much of this resides below concreted shell and will thus require not only dewatering to excavate, but also considerably energy to break up concreted shell. From experience elsewhere in the region, we suspect that the concreted shell and what lies beneath it will date to the Mount Taylor period. The subsequent Orange period component and St. Johns components that followed may be completely removed from the north ridge. Abundant pottery of these periods has been recovered from beneath the water of the run, but little has been observed on the adjacent land.

The south ridge of 8LA1-East presents an altogether different challenge. Augering and limited controlled excavation in 2007 provided good evidence for the position and orientation of the south ridge, but it also showed that subsurface shell extended well beyond the projected western edge of the ridge. Subsurface shell observed in the profiles of TU1 suggested that shell along the south ridge was emplaced directly over an existing surface, with a well developed A horizon. However, subsurface shell elsewhere appears to have been placed over inorganic sands, the natural substrate of the landform. Throughout the area of the south ridge, shell-filled pits extended below the old surface, into the sands below, but it is never obvious if these originated from the original ground surface, or from above, in the emplaced shell that was removed through mining.

The application of Ground Penetrating Radar (GPR) in 2010 complicated the picture by offering evidence for a circular or arcuate arrangement of shell features in the area of the south ridge. Circular villages of Orange age are not unexpected, as this is the configuration of shell rings on the coast, and we have circumstantial evidence for circular village sof this era at Blue Springs in Volusia County (Sassaman et al. 2003), and in the immediate upland area of Silver Glen Run north of 8LA1-West (Randall et al. 2011). That being said, we continue to be disappointed in subsurface testing by the lack of obvious domestic features expected of a village occupation (e.g., heaths, house floors, post holes, etc.). To complicate matters, the sand-field pit found in TU54 contains a St. Johns II period burned post. To the extent this relates to domestic activity, the circular arrangements of anomalies found by GPR may have more to do with late period dwellings than it does the Orange period. However, it is equally possible that the entirety of 8LA1-East since Orange times was devoted to ritual activities that simply did not involve the sorts of domestic features and refuse we expect from relatively permanent dwelling.

On a positive note, the combined efforts of subsurface testing at 8LA1-East confirms the inference made since 2007 that the south ridge was added well after the formation of the north ridge and that this activity resulted in a concentration of Orange Plain pottery in the former area and Orange Incised pottery in the latter area. Investigations of 8LA1-West Locus B by Zack Gilmore (see Chapter 6) addresses this pattern directly, lending credence to the hypothesis that the construction of the U-shaped shellworks was a multistage process involving several cultural constituencies, some perhaps nonlocal.

We also learned through subsurface testing of GPR anomalies that mineralized roots in the sandy substrate of the south ridge area offer a good proxy for overlying shell. This of course may be critical in the ongoing reconstruction of the pre-mined landscape because subsurface sands with mineralized roots likely escaped mining even in locations where mining was thorough in removing overlying shell. One such area in particular is seen in the wooded wetlands to the west of the orange grove. The survey of tree throws in 2010 showed that shell is absent across an area that is fully within the projected location of the south ridge, but which apparently was mined aggressively, leaving no trace of shell.

Finally, because mineralized roots occur in locations that ostensibly received large quantities of shell, we must consider further the possibility that the landscape was denuded of vegetation (and in some areas the A horizon) before shell as emplaced. This implies that the construction of the south ridge was not only purposeful but involved a greater amount of labor and effort than ever imagined. No matter how badly damaged the U-shaped shellworks Wyman observed over 135 years ago may be, it remains a testament to the complexity and scale of Orange communities in the region.

CHAPTER 4
RECONNAISSANCE SURVEY OF 8LA1-WEST

Asa R. Randall

During the 2007 and 2008 seasons, field school students conducted a shovel test reconnaissance survey of the western aspect of the Juniper Club's spring-run fronting property. This area is designated 8LA1-West, and is entered into the FMSF as site 8LA1/8MR3601 (it spans both Lake and Marion counties). The western aspect of the site was once classified as site 8MR123. We have reassigned these portions to 8MR3601 to reflect the site's position on the south side of the run. This chapter describes the methods and results of this work.

SURVEY SCOPE AND METHODS

The primary goal of the field school's reconnaissance efforts was to document the extent, character, and culture-historical affiliation of cultural resources west of 8LA1-East (Figure 4-1). This tract is positioned along a ca. 600-m long segment of Silver Glen Springs Run. It is bordered to the east by a linear wetland that appears to be a seep spring. This feature effectively separates 8LA1-East from the western landform (see Chapter 3). The western margin of the survey tract approaches the property boundary between the Juniper Club and the U.S. Forest Service (USFS). There is no natural border to the south. Interest in this tract was initially piqued during a site visit in January 2007, when we observed extensive surficial shell deposits up to 70 m from the run, in addition to pottery sherds scattered on the surface. Although it was hard to judge how deep most of the shell deposits extended, we observed 2-m-tall vertical exposures of shell—consistent with shell mining operations seen elsewhere along the St. Johns River—near the intersection of the run and the linear wetland.

The current configuration of this tract reflects a complex history of long-term geomorphic processes, ancient depositional practices, historic forest clearing, shell mining operations, and contemporary landscape maintenance (Figure 4-1). In general, the landform rises from the spring run (ca. 0 m) up to 9.5 m in absolute elevation[1]. The lower margin fronts open water (to the west) and wetlands characterized by cypress and other bottomland species (to the east). The slope is relatively steep along the spring run margin, where the landform rises sharply 4 m in absolute elevation before attenuating into a gradual slope.

There are several negative and positive surface features of note in the tract. Two depressions are present on this portion of the Juniper Club property. One is located to the far east, and is approximately 20-m in diameter and 1-m deep. Another larger depression, ca. 60-m wide and 2-m deep, is situated to the northwest of this feature. These depressions presumably represent ancient sink holes that have undergone extensive infilling. This hypothesis needs to be thoroughly tested, however, as the depressions may

[1] All absolute elevations in this chapter are derived from the 2006 Volusia County LiDAR survey, and are referenced to the North American Vertical Datum of 1988 (NAVD88).

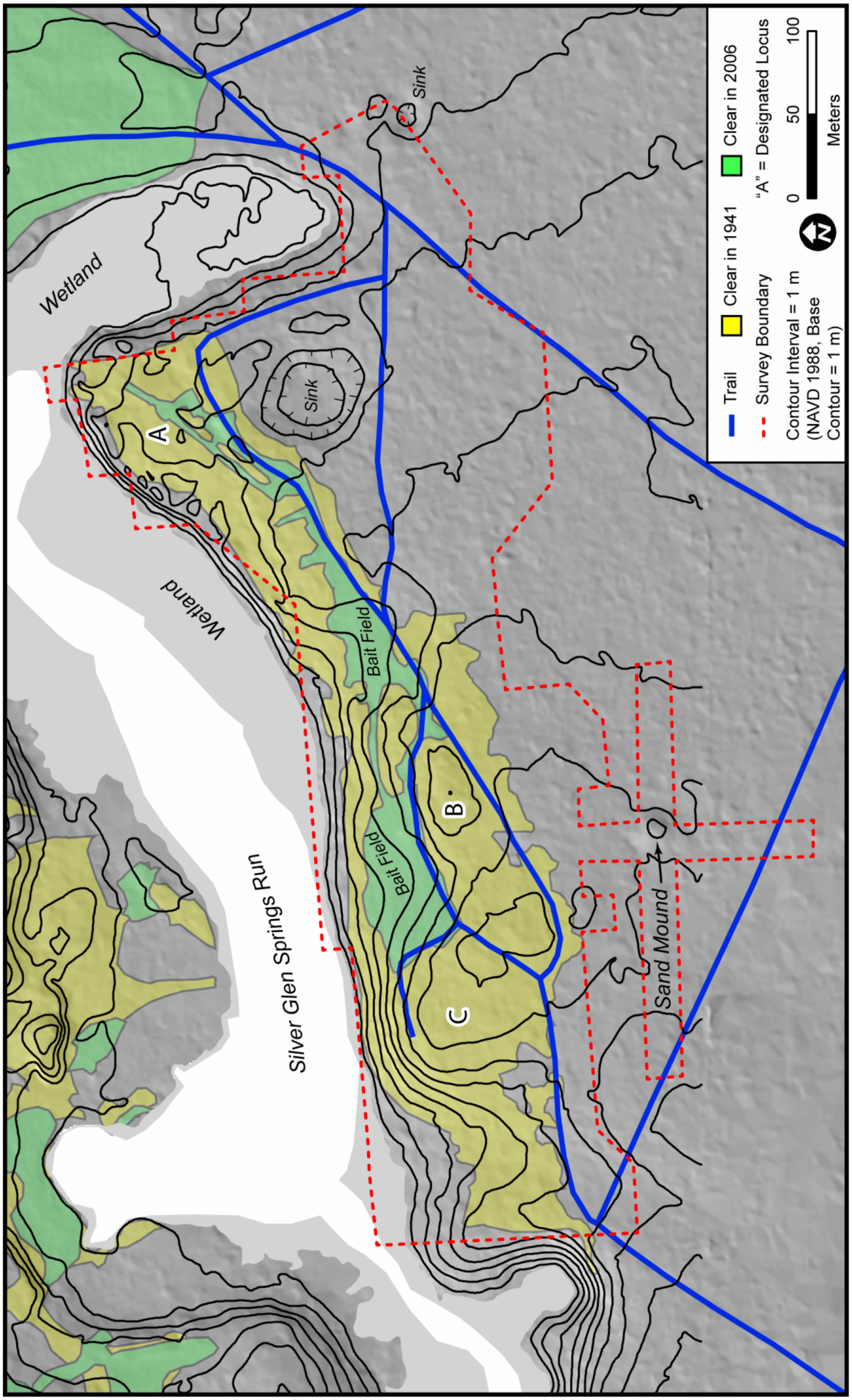

Figure 4-1. Geography of the shovel test reconnaissance project area, highlighting the relationship of surface topography, current trails, and forest clearings identified from aerial photographs in 1941 (yellow) and 2006 (green).

alternatively be related to Mount Taylor-era sediment removal (see Chapter 5). Positive surface features likely represent both geomorphic and anthropogenic processes. Several of the more distinctive subareas were given "locus" designations for ease of communication and description. Along the western aspect of the tract are two ridge noses, between 6 and 8 m in absolute elevation, that overlook the spring run. This ridge complex is designated Locus C. To the east of these ridges, and some 75 m from the water, is an elongated dome that rises ca. 1 to 2 m above the surrounding terrain. This dome and surrounding terrain is designated Locus B. As is detailed in Chapter 6, this dome formed or was accentuated by the deposition of shell and other materials in antiquity. Approximately 120 m southwest of the Locus B dome is a small conical sand mound, roughly 20 m in diameter and 1.5 m high. In shape and scale this mound is consistent with other post-Archaic burial mounds along the St. Johns. However, this temporal attribution has yet to be independently documented. This mound may also be the one opened by C. B. Moore in 1894, although there is limited evidence on the surface for such an excavation. There is a slight depression around this mound that has the appearance of a borrow pit, and it may have resulted from the mound's construction. Finally, the northeast corner of the tract is characterized by variegated topography in an area roughly 200-m long (east-west) and 100-m wide (north-south). It was in this area that we first observed deep shell escarpments and concreted surficial shell, both hallmarks of a mined shell mound. This area is designated Locus A (see Chapter 5).

As discussed in Chapter 2, the north and south sides of the spring run were targeted for shell mining in the 1920s and 1930s. Aerial photographs from 1941 show how this process involved clear-cutting much of the terrace. As highlighted in Figure 4-1, evidence for a bare ground surface (light color) is present up to 120 m south of the run. Between 1941 and 2006, forest (mostly composed of juniper trees) was allowed to grow across much of the terrace. There are, however, two clearings that are maintained as "bait" fields. A tractor is used to disc-harrow the clearings at least once a year, after which the fields are planted with grasses to encourage deer to forage. There is also a linear power line corridor that courses through the survey tract from east (Locus A) to west (Locus C). Finally, distributed across the tract is a system of dirt and shell trails. These trails are approximately 3 to 5-m wide, and are maintained primarily by chain dragging.

A shovel test pit (STP) survey strategy was devised to provide coverage across the once-cleared terrace, from the eastern wetland to near the western property boundary (Figure 4-2). We first established an east-west baseline oriented relative to magnetic north. Starting at the small eastern depression, we tested 34 transects that were oriented north and south of this baseline. These transects were spaced at 20-m intervals. The majority of STPs within transects were also tested at 20-m intervals. The exception to this spacing is in portions of transects predominantly in the east (#2, 4, 6, 8, 9, 10, 11, 12, 13, 14, and 32), where the north-south spacing varied between 20 and 40 m. In addition, we tested around the sand mound in a cruciform pattern. Transects were stopped to the north when either water or saturated deposits were encountered. To the south, transects were generally stopped when we ceased intercepting shell-bearing deposits, or if artifact densities decreased substantially. Because our goal was to characterize near-water

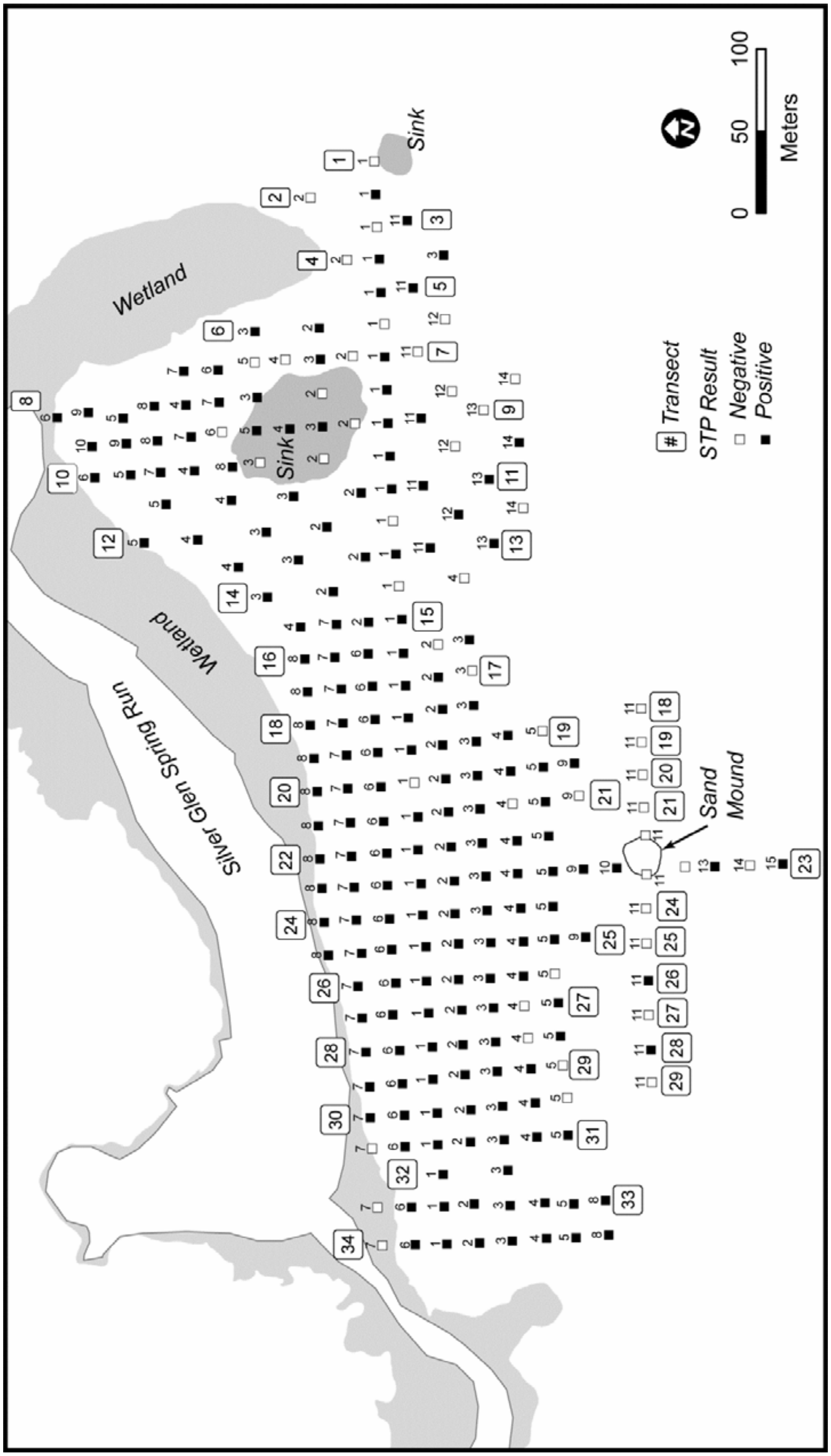

Figure 4-2. Shovel test results.

deposits, we did not attempt to bound the southern border of the site. Although generally characterized by infrequent finds, this component will require further work to determine its full spatial extent and character. Shovel testing on the northern side of the run indicates that extensive shell-free deposits are present within the watershed (Randall et al. 2011). Shovel test pit nomenclature followed a standard system. North-south transects were each given a numeric designation. Within each transect, STPs were given a unique numeric designation. These two designations are combined in the final STP identifier (e.g., Transect 13, STP 1 = STP 13-1).

STP excavation and data recording followed a standard protocol. Each STP measured 30 x 30-cm wide in plan. In general, they were excavated to a maximum depth of 1 m. In several cases STPs intercepted impenetrable concreted shell deposits, in others saturated deposits precluded further excavation. During excavation, all sediment was passed through 1/4-inch screen. All pre-Columbian cultural materials retained in the screen were bagged for subsequent analysis. A select sample of historic and modern materials (i.e. brick fragments, glass, plastic, and the like) was also kept. The stratigraphy in each STP was recorded, including the depth below surface for the top and bottom of each stratum and a description of the matrix. When encountered, shell deposits were categorized using a subjective ordinal scale of low density (more non-shell matrix than shell), high density (more shell than non-shell matrix), and concreted (shell and other matrix cemented together). After excavation and recording were completed, STPs were backfilled. During the survey, STPs were sited with a compass and distances between STPs were measured out by pacing. Precise STP spatial location was acquired in a variety of ways. The location of each STP was recorded on field maps. A subset of STPs also had their position located with a Magellan Meridian Platinum handheld GPS unit. The position of others was captured with a Nikon DTM-310 total station. All of these data were merged together in GIS. The resultant locations have an estimated +/- 5 m horizontal accuracy.

SURVEY RESULTS

During the reconnaissance survey the field crew tested an irregularly shaped area measuring 680-m along an east-west axis and 450-m on a north-south axis, and covering roughly 11.6 hectares. Within this survey tract we excavated a total of 238 STPs (Figure 4-2). Of this total, 189 encountered pre-Columbian artifact-bearing strata and 36 yielded historic or modern materials. Summaries of objects recovered are presented in Table 4-1, while an enumeration of objects recovered from each STP is presented in Table 4-2. Several object classes were routinely recovered. The lithic assemblage is dominated by debitage (n = 394). A significantly smaller number of stage bifaces, hafted bifaces, modified flakes, and unifaces were also encountered. The pottery assemblage included all varieties typically found within the St. Johns basin. The Archaic pottery assemblage included both Orange Plain (n = 65) and Incised (n = 17) varieties. The Post-Archaic assemblage is dominated by St. Johns Plain (n = 530), but also includes St. Johns Check Stamped (n = 71), and other minority types such as sand tempered plain (n = 31). The majority of pottery sherds were classified as “crumb” sherds, those that are less than 1/2-inch in minimum dimension (n = 1197). The zooarchaeological assemblage is composed predominantly of unmodified vertebrate faunal bone. In addition, we recovered three

Table 4-1. Summary of Artifacts Recovered from Shovel Tests.

Category	Count	Weight (g)
Lithics		
Biface	2	5.9
Hafted Biface	4	24.5
Modified Flake	4	10.2
Uniface	4	63.0
Debitage	394	421.0
Pottery		
Orange Incised	17	50.6
Orange Plain	65	191.6
St. Johns Plain	530	2006.1
St. Johns Check Stamped	71	396.1
Misc. Pottery	31	83.9
Crumb Sherd	1197	624.1
Marine Shell	21	98.8
Vertebrate Fauna	3650	2153.9
Modified Bone	3	8.3
Historic	89	618.1

pieces of modified bone and 21 marine shell fragments. Finally, 89 modern or historic objects were also retrieved during testing.

Shell Deposit Distribution

The coverage provided by the STP survey allows us to consider the distribution and variety of cultural deposits across the landform. As the most visible evidence of ancient depositional practices, the presence and character of shell deposits provides an entry point into discussing the spatial distribution of anthropogenic deposition. Shell-bearing deposits were recorded in a total of 113 STPs. The density of shell recorded during testing was used to generate the distribution of shell deposits presented in Figure 4-3. It is important to note that density is a relative measure of the frequency of shell within a particular stratum. As such, it does not equate with shell depth below surface. Using these data, several large-scale patterns are evident. Shell is principally restricted to the northern half of the survey tract, and is typically found within 140 m of the terrace/wetland interface. The trail system associated with the bait fields serves as an approximate boundary between shell-free and shell-bearing deposits. Moreover, dense shell tends to be found closest to the water. As shown in Figure 4-4, the distribution of vertebrate fauna is principally correlated with the appearance, if not density, of shell within an STP. This is an expected result, as shell tends to neutralize Florida's naturally acidic soils that would normally destroy animal bone.

Given the complex history of the landscape, it is no surprise that there is considerable variation in the stratigraphic profiles encountered during the survey. A few examples serve to show the range between deposits. The composition of shell deposits

Table 4-2. Inventory of Artifacts, Vertebrate Fauna, and Miscellaneous Items Recovered from Shovel Tests of 8LA1-West.

STP	Biface (n)	Hafted Biface (n)	Mod. Lithic Flake (n)	Uniface (n)	Lithic Flake (n)	Lithic Flake (g)	Marine Shell Frag. (n)	Misc. Rock (g)	Sherd (n)	Crumb Sherd (n)	Vert. Fauna (n)	Vert. Fauna (g)	Historic Arts. (g)
2-1					1	0.1							
2-2													39.4
3-11					4	0.3							
4-1					5	3.0							
4-3					1	0.3							
5-1					4	1.4							
5-11					4	0.5					1	0.1	52.9
6-2					1	0.1			4	4	1	0.1	
6-3					1	1.1							
7-1													11.1
7-3					3	0.2							
7-6					1	9.4			2	3			
7-7					2	13.5			2	3	6	2.4	
7-11													4.4
8-1					1	0.1							
8-2													0.4
8-3					5	1.5							
8-4							2	0.1	1		39	44.8	2.6
8-5					1	0.2					16	3.1	
8-6									3		22	17	
8-7					3	0.5				2			
8-8					2	1.0			1	1	8	2.4	
8-9											40	18.9	2.3
8-12													13.7
9-1					3	1.7							
9-3					1	1.0							
9-4					3	0.4							
9-5					1	0.2							
9-7					9	2.6					67	25.5	
9-8					2	0.2					28	8.3	0.3

Table 4-2. Continued.

STP	Biface (n)	Hafted Biface (n)	Mod. Lithic Flake (n)	Uniface (n)	Lithic Flake (n)	Lithic Flake (g)	Marine Shell Frag. (n)	Misc. Rock (g)	Sherd (n)	Crumb Sherd (n)	Vert. Fauna (n)	Vert. Fauna (g)	Historic Arts. (g)
9-9								0.4			142	56.4	
9-10											113	62.7	
9-11													
10-1					1	0.4							
10-4				1							11	3.7	
10-5											49	22.9	
10-6					5	19.0	1			1	123	111.7	
10-7					1	0.0		32.8			202	53.6	
10-8					1	2.3					38	12.6	
10-14					1	0.1		0.4					
11-1					17	6.4					1	0.5	0.3
11-2											8	2.1	4.7
11-3					6	0.7				1			
11-4											71	44.5	
11-5					1	0.8	1				78	38	
11-11					1	0.1					2	0.1	
11-13					2	0.3							
12-1													24.5
12-2									9	14			57.3
12-3								1.6	2		148	67.7	
12-4											4	32.9	
12-5									1		83	64	
12-12					1	1.4							
13-1					1	1.1			1				
13-11					4	1.0							
13-13	1				1	7.4							
13-2					1	3.0		7.2					
13-3					3	0.3							
13-4					1	0.0		51.4	1	1	236	79.3	
14-1								1.0					

Table 4-2. Continued.

STP	Biface (n)	Hafted Biface (n)	Mod. Lithic Flake (n)	Uniface (n)	Lithic Flake (n)	Lithic Flake (g)	Marine Shell Frag. (n)	Misc. Rock (g)	Sherd (n)	Crumb Sherd (n)	Vert. Fauna (n)	Vert. Fauna (g)	Historic Arts. (g)
14-2				1	3	3.9				1	33	43.7	
14-3					1	2.1					14	8.1	
15-1					1	0.1							
15-2					5	0.6			10	6	3	2.6	2.8
15-3					32	17.4		3.2	1	1	70	17.2	1.0
15-4					3	1.9		2.5	7	12	92	58.6	
16-1					1	4.6			8	26	11	5.6	8.8
16-3					2	2.4							
16-6									2	3	2	0.3	
16-7								3.2	1	2	8	6.3	0.2
16-8										2	68	24.1	
17-1					2	0.4					1	0.3	10.0
17-2					4	0.6		5.6	2	4			
17-6					2	1.0					7	5.7	3.8
17-7					1	0.5		0.6		5	51	33	
17-8					3	7.5			3	4	12	6	4.7
18-1									1		11	16	
18-2										1	2	2.7	
18-3					1	0.5			1				
18-6					1	1.6					8	3.1	
18-7										1	3	1.8	
18-8									1		6	6.6	
19-1											16	6.8	
19-2					1	0.4					2	1.6	7.4
19-3									1	3	14	3.8	
19-4					1	1.2							
19-6				1						1	30	28.7	
19-7							2		3	5	67	39.9	
19-8					1	2.0			7	20	16	5.8	
20-2					2	0.3			2	1			

Table 4-2. Continued.

STP	Biface (n)	Hafted Biface (n)	Mod. Lithic Flake (n)	Uniface (n)	Lithic Flake (n)	Lithic Flake (g)	Marine Shell Frag. (n)	Misc. Rock (g)	Sherd (n)	Crumb Sherd (n)	Vert. Fauna (n)	Vert. Fauna (g)	Historic Arts. (g)
20-3					5	0.6				26			
20-4					2	0.1							
20-5					1	0.7			2	2			
20-6					12	4.2					10	16.9	
20-7											7	4.9	
20-8			1		6	6.6			2	1	17	9.8	
20-9					1	0.1							
21-1											40	19.6	
21-2									3		2	3.7	
21-3								0.5	1				
21-5					10	2.7							
21-6				1	2	4.2							
21-7									1		15	8.5	
21-8					1	2.9		8.3	9	4	18	15.5	
22-1									23	80	15	3.4	
22-2					4	20.1				5	53	24.2	
22-3										10			
22-4					1	0.5							
22-5					1	0.9							
22-6								161.9			117	106.3	
22-7									1	1	36	35.9	
22-8					2	4.9	3		17	18	43	19.2	
23-1									5	9	15	7.9	
23-2									9	5	5	4.9	
23-3					1	2.3			4	1			
23-4		1			2	0.3							
23-5					2	0.6							
23-6*					1	1.0			13	5	11	2.6	
23-7					2	29.5	1		2	4	21	18.7	
23-8		1			6	15.4	1	47.3	51	60	98	133	11.8

Table 4-2. Continued.

STP	Biface (n)	Hafted Biface (n)	Mod. Lithic Flake (n)	Uniface (n)	Lithic Flake (n)	Lithic Flake (g)	Marine Shell Frag. (n)	Misc. Rock (g)	Sherd (n)	Crumb Sherd (n)	Vert. Fauna (n)	Vert. Fauna (g)	Historic Arts. (g)
24-1								1.1		5	5	1.1	
24-2									1	4	6	4.8	
24-3					3	0.0			2	5	1	0.6	
24-4					2	0.5			3	12			115.7
24-5					6	1.8			3	3			
24-6			1		2	0.5			2	11	50	25.5	
24-7	1				8	6.5			18	51	92	33	
24-8					5	4.2			28	30	93	50.7	1.1
25-1					1	6.8		0.4	3	23	36	12.9	
25-2					1	7.0			6	22	34	13.7	
25-3									3	12	24	4.6	1.6
25-4								0.3	4	16	8	3	
25-5									2	6			215.4
25-6					4	4.4			3	3	5	61.2	
25-7					5	49.6	2		8	42	47	46.3	
25-8					1	0.8		1.9	51	35	38	48	4.2
25-9									1	7			1.2
26-1					4	0.5			6	12	8	1.2	0.8
26-2					4	1.1			1				1.6
26-3			1		7	10.3			3	17	1	0.7	
26-4					2	0.4			1				1.5
26-6					2	0.7			12	23	64	24.9	2.4
26-7					6	7.3			31	37	65	24.3	
27-1			1		1	0.3			10	11	2	0.4	6.7
27-2					4	0.8			3	13			
27-2 Surf									2				
27-3					7	5.2				6			
27-5										1			
27-6					2	1.0	2		12	37	32	9	
27-7					1	0.5			11	8	16	21.4	1.4

Table 4-2. Continued.

STP	Biface (n)	Hafted Biface (n)	Mod. Lithic Flake (n)	Uniface (n)	Lithic Flake (n)	Lithic Flake (g)	Marine Shell Frag. (n)	Misc. Rock (g)	Sherd (n)	Crumb Sherd (n)	Vert. Fauna (n)	Vert. Fauna (g)	Historic Arts. (g)
28-1		1			3	2.7			10	38	69	39	
28-2					13	1.7			2				
28-3									4	7			
28-5									11	10			
28-6							1		2	9	33	16.1	
28-7					2	5.2			7	36	44	21.6	
29-1									7	50	42	14.8	
29-2					5	4.0		2.7	4	6			
29-3					2	0.2							
29-4					4	0.8			3	1			
29-6									12	26	12	6.9	
29-7									4	5	10	2.8	
30-1					4	2.7	5		9	19	54	21.9	
30-2					1	0.1		7.0	12	2			
30-3					5	0.6			4		1	0.1	
30-4					8	2.0			3	1			0.1
30-6					3	3.4			29	37	22	32.1	
30-7					2	7.3			27	1	21	26.6	
31-1		1			18	19.6		5.8	57	66	88	36.3	
31-2					3	0.4			5	17	5	5.1	
31-3					1	20.4		2.2	12	17			
31-4									8	1			
31-5					2	8.1			3	3			
31-6									7	5			
32-1					5	1.4			22	29	15	4.7	

* plus three pieces of modified bone 8.3 g

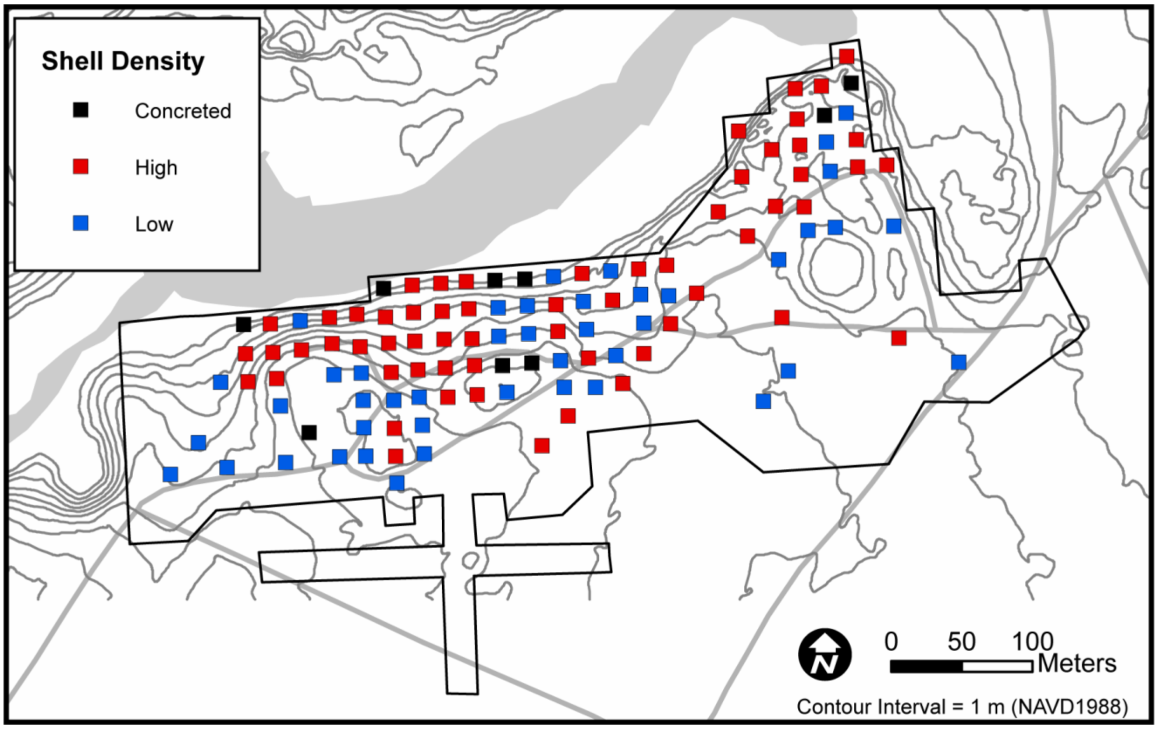

Figure 4-3. Distribution of shell identified during shovel testing, 8LA1-West.

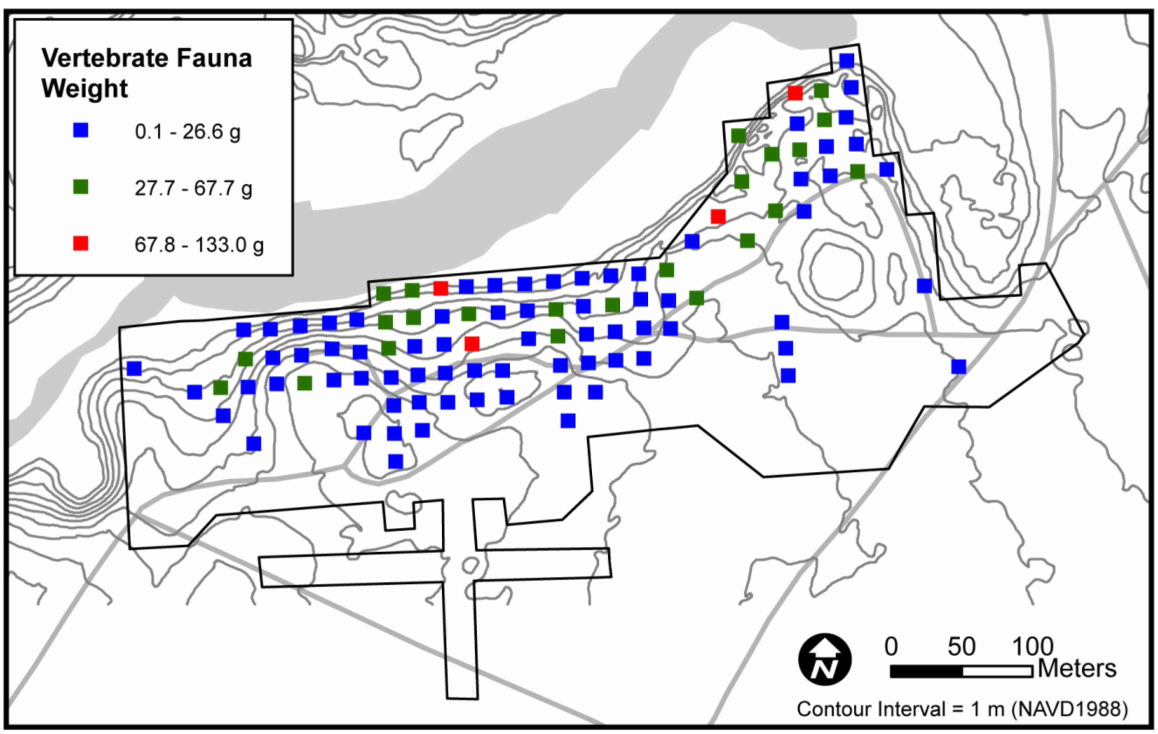

Figure 4-4. Distribution of vertebrate fauna recovered during shovel testing, classified by weight, 8LA1-West.

differs by density and species composition, but tends to include mystery snail, bivalve, and apple snail. A typical STP with dense shell, such as 28-6, yielded the following profile: 0–18 cm below surface (cmbs) dark brown sand with low density whole and crushed shell; 18–32 cmbs, high density whole and crushed shell with some brown sand; 32–100 cmbs, brown fine sand with low density shell. Excavation at high elevations to the south, excluding shell-bearing deposits, encountered profiles similar to STP 24-11: 0–8 cmbs, dark gray/brown sand; 0–85 cmbs, very light gray sand; 85–100 cmbs, dark yellow/brown sand. Slightly different profiles were encountered in the large depression, no doubt due to the different pedogenic processes at work during soil formation, as indicated by the profile within STP 9-4: 0–65 cm cmbs white sand; 65–75 cmbs light brown sand; 75–100 dark gray/brown sand.

At a smaller scale, there are deviations from the larger pattern of shell and non-shell distributions. Concreted shell was noted only in nine STPs. These tend to cluster in several locations. Four STPs encountered concreted shell at low elevations near the terrace/wetland interface. Concreted shell in this location is expected, given that it is thought to form through percolating water. Similarly, two STPs in Locus A intercepted concreted shell, which is frequently encountered in basal deposits of shell mounds (Wheeler et al. 2000). Concreted shell was noted in two STPs within Locus B, both on the northern edge of the dome. Surface cuts there indicate that some shell was removed in this locality, but the presence of concretion may have made extraction too difficult for extensive operations. Finally, one STP within Locus C (19-3) intercepted concreted shell between 85 and 100 cmbs. This deposit is unusual in the area, and may represent the base of a pit. In this same vein, several STPs with shell were found farther south than expected given the broader landscape patterns. For example, STP 20-4 is situated south of the elevated portion of Locus B. The STP intercepted deposits with the following profile: 0–17 cmbs, light gray brown sand; 17–79 cmbs, dark yellow brown sand; 80–99 cmbs, dark gray/brown sand with dense mystery snail, apple snail, and bivalve; 99–100+ cmbs, brown fine sand. Field notes suggest that the basal shell deposit had the appearance of a feature. Although no pottery was recovered, this STP may have intercepted another example of a deep Orange period pit that has been documented in Locus B (Chapter 6) and across the run at 8MR123 (Randall et al. 2011). Other southerly occurrences of shell may have resulted from road construction and maintenance, particularly STPs 5-11, 7-1, and 11-2 in the east and 29-4 and 33-4 in the west.

Within the principal zone of shell, there are several shell-free voids. To the west of Locus A are three shell-free STPs (12-2, 13-3, 14-3). Whether the lack of shell reflects ancient depositional practices or recent shell mining is hard to discern from the STP results alone. Some evidence for disturbance in STP 12-2 was noted, including mottled sediment down to 45 cmbs, a coin (penny), and a metal pipe fragment. However, no such disturbances were noted in the other cases: STP 13-3 yielded a homogenous profile of light brown sand (0–100 cmbs), and STP 14-3 yielded a profile consisting of dark brown/gray sand 0–60 cmbs) and yellow/brown sand (60–100 cmbs). Based on topography alone, these STPs would have been on the backside of the mined shell mound. Elsewhere along the St. Johns River, off-mound testing frequently finds that shell deposits are circumscribed, and so the pattern within Locus A may reflect ancient practices. Another shell-free void, measuring approximately 20 x 40 m in plan, is located on the apex of the ridge nose segment of Locus C (STP 27-2, 27-3, 28-1, 28-2). Although this area was once cleared of trees, presumably as part of the mining operations, there is no other surficial evidence that would suggest the area was mined. As such, this feature may represent a purposefully maintained shell-free zone. Finally, shell is found along most, but interestingly, not all of the terrace/wetland interface. Indeed, shell was rarely encountered west of the Locus C ridge nose, particularly in Transects 31 through 34.

Artifact Distribution

The distribution of artifacts across the landform provides further evidence for differences in land-use practices across the survey area. In general, lithic flakes and tools were the most widely distributed artifact class (Figure 4-5). Flakes were found in quantities ranging between 1 and 32 per STP, while no more than one lithic tool was found in any STP. The presence of lithic objects is independent of shell deposits, and lithics are just as likely to occur in near-water deposits as in the uplands. Indeed, a lithic flake and a biface fragment were found ~290 m south of the spring run, and several lithics flakes were even recovered from the large depression. There are no apparent clusters of lithics across the landform. STPs that yielded large numbers of flakes (greater than 13) were widely distributed, and there is no clear gradation of flake or tool density. The patterning on this side of the run is significantly different than that recently documented north of the Silver Glen Springs main vent (Randall et al. 2011). Lithics were preferentially clustered away from the shell deposits and were found in much higher densities. Moreover, the lithic assemblage was characterized by a wide array of chipped stone tools, including numerous stage bifaces, hafted bifaces, microliths, modified flakes, and sandstone abraders.

In contrast to the lithic assemblage, the pottery assemblage shows spatial patterning that likely reflects changing land-use practices through time (Figure 4-6). At the largest scale, pottery of the Orange and St. Johns series is clustered in the western aspect of the survey tract, and was infrequently recovered in the vicinity of Locus A. As detailed in Chapter 5, stratigraphic excavations within the remnant Locus A shell mound revealed intact preceramic deposits up to 3-m thick. Thus, the lack of pottery in this locus is not necessarily unexpected. However, it is notable that St. Johns pottery is found on the northern, swamp-facing edge of the remnant shell mound, albeit in small quantities. The presence of sherds on the southern edge of the escarpment could be dismissed as resulting from mining and the subsequent movement of material. That could be the case on the north side, as well, but it is much less likely. The implication is that pottery was emplaced upon portions of the mound after the Mount Taylor (preceramic) period, but those deposits were subsequently removed during the mining process.

A closer inspection of the distribution of pottery by type elucidates further chronological and spatial trends. Sherds of the Orange series were recovered in only 29 STPs, in frequencies ranging between 1 and 12 sherds per STP (Figure 4-7). Of this

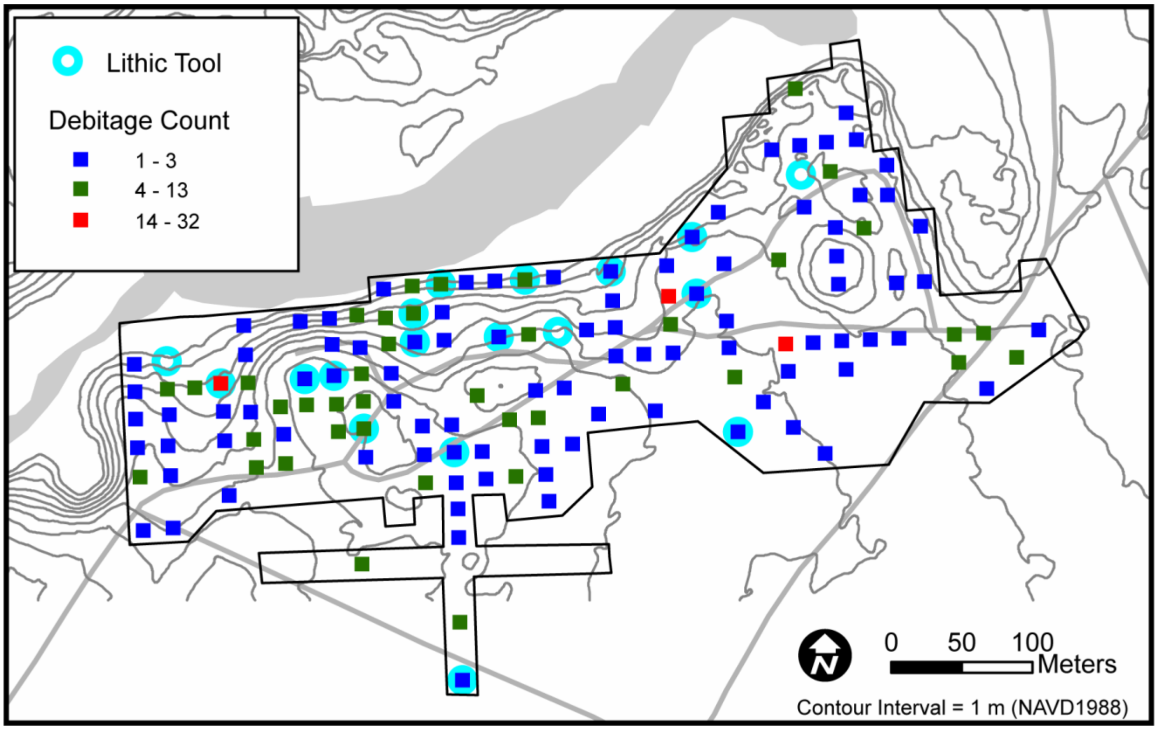

Figure 4-5. Distribution of lithic tools and waste flakes recovered during the shovel test survey.

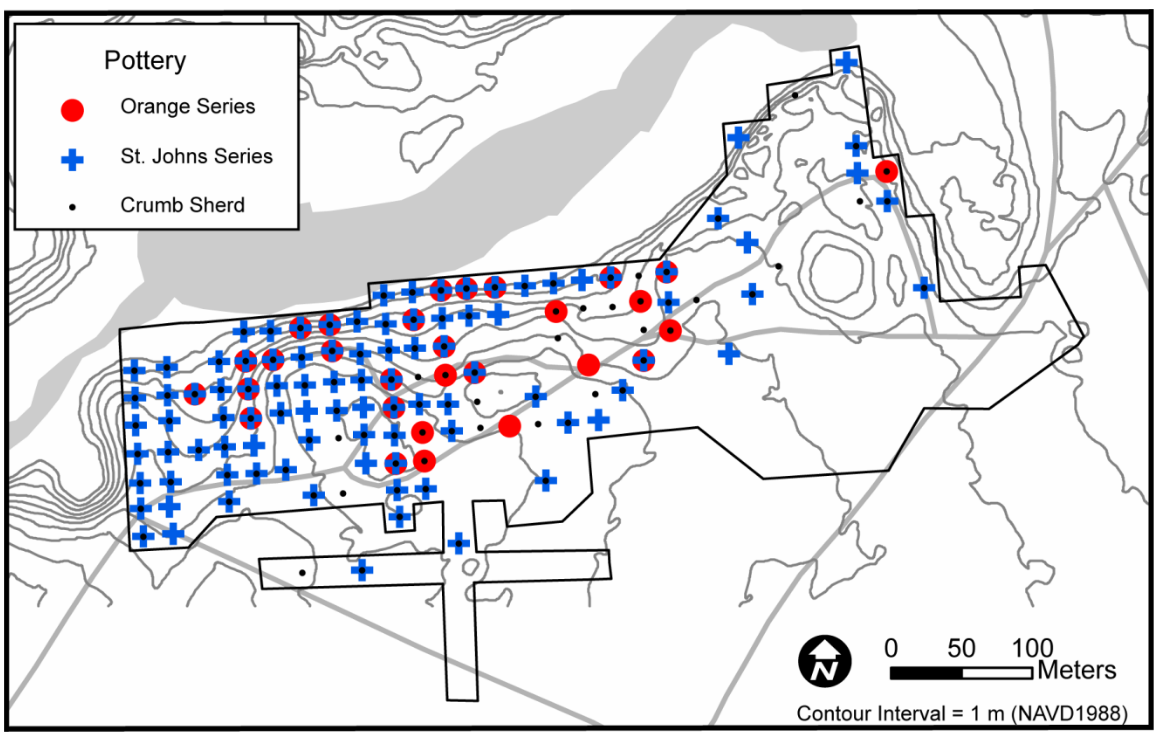

Figure 4-6. Distribution of pottery recovered during the shovel test survey, classified by series.

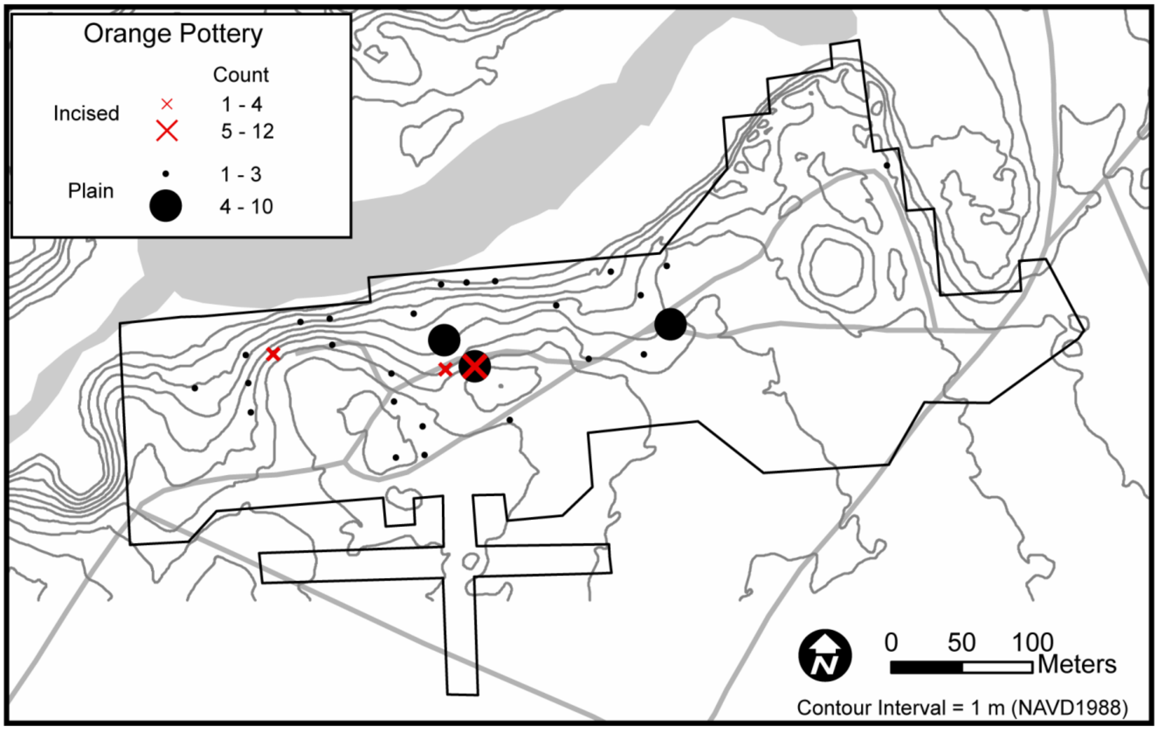

Figure 4-7. Distribution of Orange Plain and Incised sherds recovered during the shovel test survey.

total, three STPs yielded Orange Incised sherds (n = 17), while the remaining 26 yielded only Orange Plain sherds (n = 65). The distribution of Orange Incised and Plain sherds overlaps. Excluding two plain fiber-tempered sherds in STP 7-7, Orange sherds are restricted to the west in the survey tract. Although typically found in small numbers, plain and incised sherds were relatively abundant in STP 22-1, while the nearby STP 23-6 also contained a large number of plain sherds. Aside from the tendency for Orange sherds to be found away from Locus A, this assemblage tends to be restricted to either terrace-edge deposits or the upland dome in Locus B. This pattern is most evident in the vicinity of the Locus C ridge nose, where Orange pottery is not found above 6 m in absolute elevation. This is not to say that fiber-tempered pottery is restricted to low elevations, as the highest density (by STP) of sherds occurs in the vicinity of Locus B. However, the presence of pottery at low elevations around, but not on top of, Locus C would suggest that pottery was preferentially being deposited downslope.

The dominant pottery type recovered during the survey was St. Johns Plain (n = 530) which was encountered in 94 STPs widely distributed across the survey tract (Figure 4-8). St. Johns Plain was not only found in a large number of STPs, but the density of sherds per STP was quite high in some cases (a maximum of 50 sherds was recovered from STP 31-1). Like the Orange series, St. Johns Plain sherds were mostly clustered in the west, although several STPs around Locus A did produce sherds as noted above. More interestingly, however, is that high-density STPs were clustered along the terrace

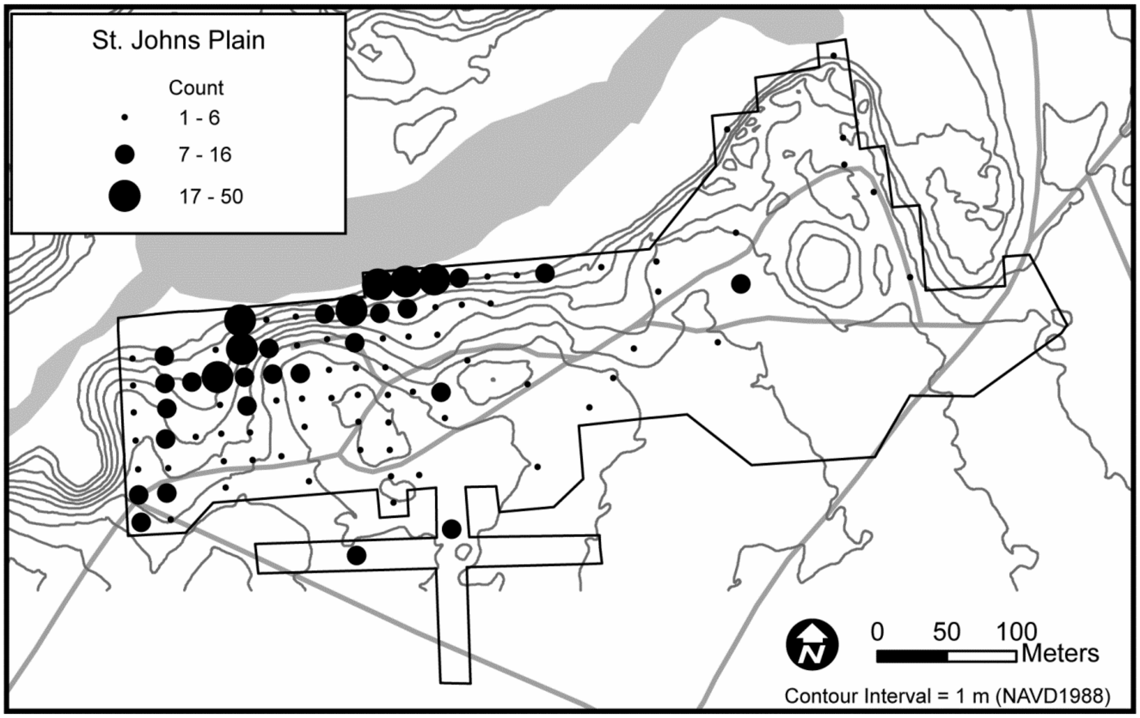

Figure 4-8. Distribution of St. Johns Plain sherds recovered during the shovel test survey.

edge. It would seem that during the St. Johns period there was a preference for depositing sherds downslope, although small numbers of St. Johns Plain sherds were found at high elevations within Locus C. One last notable trend is the presence of moderately dense St. Johns Plain assemblages within STP 23-10 and 26-11 near the sand mound. As the only pottery found near the mound, these lend credence to the hypothesis that the mound was constructed during the St. Johns period, perhaps during St. Johns I times. In contrast to the widespread distribution of St. Johns Plain, only 71 St. Johns Check Stamped sherds were found in a total of 44 STPs (Figure 4-9). Excluding one STP in Locus A (13-4) and Locus B (19-3), St. Johns Check Stamped sherds were restricted to the terrace edge and Locus C. Although the check stamped sherds were recovered at elevations above 6 m, on top of the ridge, the vast majority were actually recovered farther to the west at the survey tract border. This is an interesting trend, as little to no shell was encountered in this location.

CONCLUSIONS

Systematic shovel testing along Juniper Club property fronting the south side of Silver Glen Run shows that subsurface archaeological deposits are distributed widely across the 11.6-ha survey tract. Roughly 80 percent of the 238 shovel test pits (STPs) excavated in the tract yielded pre-Columbian artifacts and/or anthropogenic shell deposits. The latter was observed in 133 STPs, the vast majority within 140 m of the spring run, but also sporadically at distances over 200 m from the run. Shell density

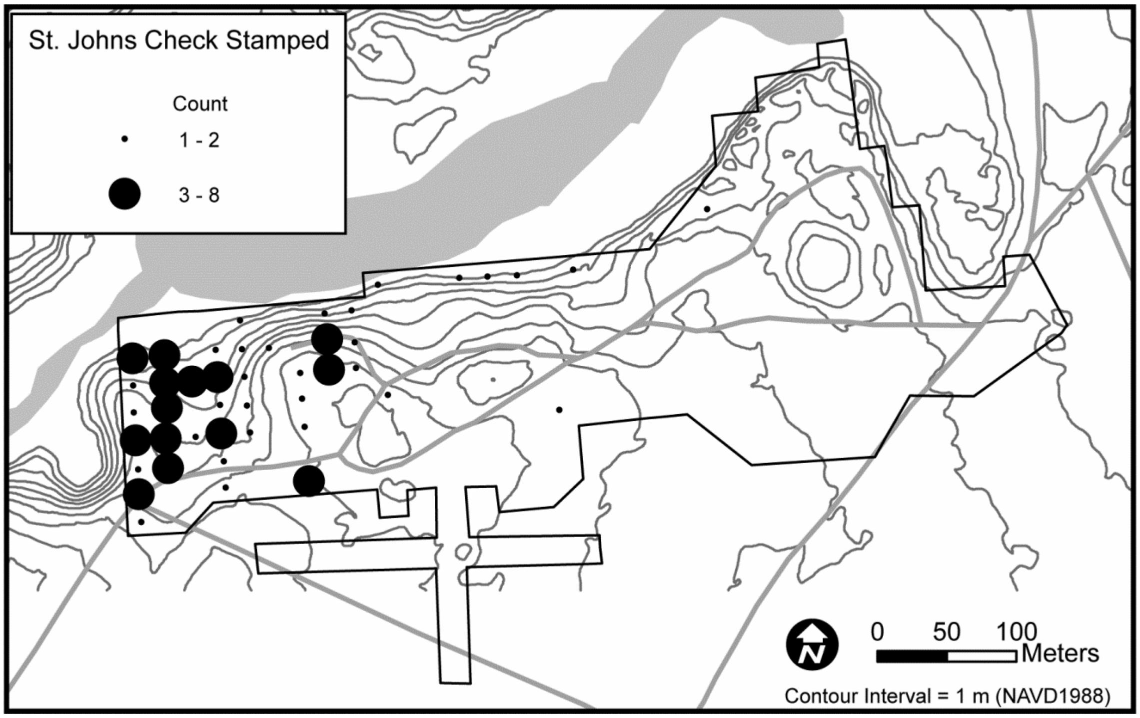

Figure 4-9. Distribution of St. Johns Check Stamped sherds recovered during the shovel test survey.

varied markedly in STPs across the survey tract. Dense subsurface shell coincides with the footprint of the mined Mount Taylor shell ridge designated Locus A, but it also occurs across the terrace slopes of Loci B and C and in their respective shell domes to the south, forming the apex of adjacent ridge noses. Vertebrate fauna coincide with shell due largely to the enhanced preservation of organic matter afforded by the acid-neutralizing affects of degraded shell. Several areas devoid of shell are noteworthy. West of Locus A, the Mount Taylor shell ridge, STPs lacking shell may signal the actual termination of this oldest shell deposit, but we hasten to add that shell-mining operations in this locus may have created an artificial void. More meaningful perhaps is the small shell void at the apex of Locus C. Ongoing work in this location is providing evidence for a St. Johns II-period village with a presumptive central plaza. Shell was largely absent as well to the west of Locus C, on the western margin of the club property. We have not yet to conduct secondary testing in this location, but based on the density of check-stamped St. Johns pottery (see below), a nonshell component coeval with the Locus C village appears to be present.

Like shell, subsurface pre-Columbian artifacts are distributed widely across the survey tract, and reveal spatial patterning indicative of distinct archaeological components. This is most evident in the distribution of pottery. Sherds are generally absent in Locus A, the location of a preceramic shell ridge. Occasional St. Johns period sherds in this locus may signal a reuse of the shell ridge after an extended period of abandonment, but this remains speculative because the upper portion of the ridge was compromised by shell mining. The oldest pottery, that of the Orange series, is concentrated in Loci B and C, largely in the shell nodes of each locus, but also in the downslope portion of Locus C. St. Johns pottery is likewise distributed across Loci B and C, with especially dense occurrences in the downslope aspects of both loci. Check-stamped St. Johns pottery is concentrated in Locus C and especially in the shell-free ridge nose to the west of Locus C, most notably in STPs of transects 31-34.

In sum, reconnaissance survey of 8LA1-West shows that the entire landform fronting the spring run contains intact subsurface deposits with few lacunae. Variation in the composition and density of subsurface shell and artifacts enables us to subdivide 8LA1-West into three loci (Loci A, B, and C) and to implement for each a program of secondary testing and data recovery. Provided in the balance of this report are the results of testing at Loci A and B; testing at Locus C began in earnest only this past summer (2011) and will continue in 2012 and possibly beyond. The results of this work will be provided in a later report.

CHAPTER 5
SILVER GLEN RUN, LOCUS A (8LA1-WEST)

Kenneth E. Sassaman and Asa R. Randall

Locus A at Silver Glen Run is the remnant of a ~200-m-long shell ridge dating to the middle part of the Mount Taylor period (ca. 6300-5750 cal BP). Much of the deposit was mined for shell in the 1923, when 8LA1-East was also mined, but substantial portions of the margins of this ridge remain intact. As shown in Figure 5-1, the outline of the ridge is marked today by a series of discontinuous escarpments and isolated remnants of mounded deposits. The core of this deposit has been largely denuded through mining, although scattered shell on the surface attests to intact subsurface strata (Figure 5-2 top). Shell continued to be removed from this portion of the site until recently, usually in small loads taken with a bucket fitted to a tractor. The margin of this ridge fronting Silver Glen Run expresses the greatest level of continuity, with linear escarpments as much as 2 m tall (Figure 5-2 bottom). It is difficult to judge the original height of the ridge, but it no doubt rose higher than the tops of the extant escarpments. Irrespective of actual height, testing at Locus A revealed substantial subsurface deposits below the grade of the mining pit. We estimate that Locus A originally had at least three to four meters of stratified deposits. Our goal in testing portions of the ridge in 2007 and 2008 was to expose and sample as much stratigraphy as possible from locations where mining operations resulted in the steepest escarpments. Three locations were examined in this fashion (Figure 5-1), totaling 24 m^2 of plan excavation and 12 meters of profile. This chapter reports the results of these efforts.

TEST UNIT EXCAVATION

Six 2 x 2-m test units were excavated in the mining escarpments of Locus A in three different locations: two at the east end (Test Units 5 and 8), one near the west end (Test Unit 6), and three arranged as a trench in an intermediate location (Test Units 9, 10, and 15) (Figure 5-1). In all cases test units were oriented square with the orientation of the escarpment and placed far enough into the escarpment to afford a clean, vertical cut of above-ground deposits. Test units were also excavated below the grade of the mining pit to examine subsurface deposits that were spared the damage of mining. The initial exposure of each escarpment was accomplished by the removal of a wedge-shaped level (referred to as "Profile Cut" in the text and tables that follow below), which was passed through ¼-inch hardware cloth. All artifacts and vertebrate fauna were retrieved, bagged, and returned to the lab for analysis; freshwater shell was not collected. Once intact deposits were encountered, excavation proceeded in 10-cm arbitrary levels, usually within only a 1 x 2-m subunit to the shallow side of the escarpment, to prevent wall collapse (Figure 5-3). Throughout excavation, zones of distinct deposition were removed and processed as subsamples of levels. Pit features and other discrete deposits were mapped, sectioned, and sampled individually. At the close of excavation, all profiles were photographed and drawn to scale. Because the goal of testing at Locus A was to examine stratigraphy, profiles were given more than the usual attention.

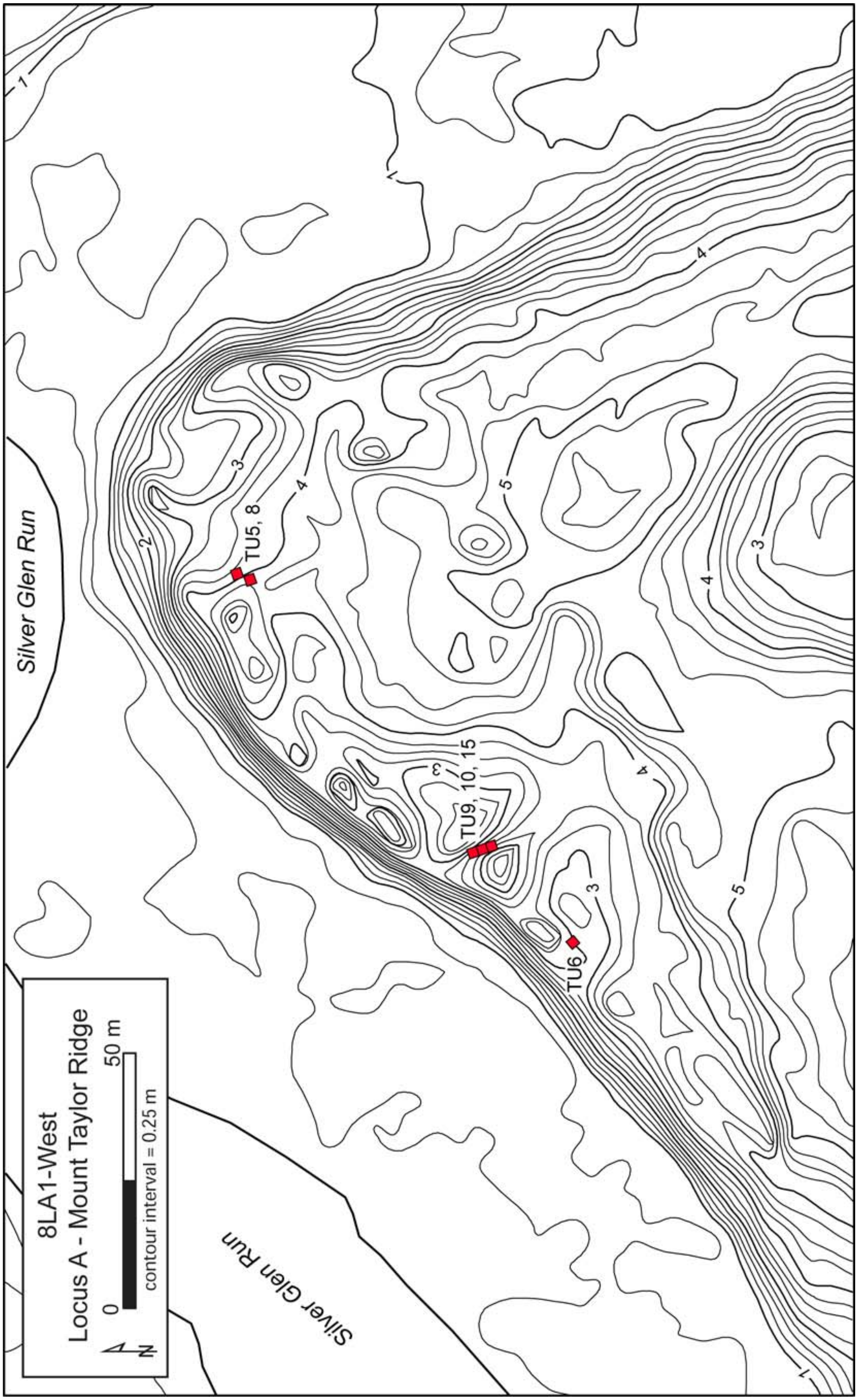

Figure 5-1. Map of 8LA1-West, Locus A, showing locations of test units excavated in escarpments of mining operations.

Figure 5-2. View facing west of the mining pit in the core of Locus A (top), and view facing northeast of the mining escarpment fronting the spring run, into which Test Units 5 and 8 were dug (bottom).

Test Units 5 and 8

Placed at the east end of the shell ridge, Test Units (TU) 5 and 8 were excavated in sequence over two summer sessions (2007 and 2008, respectively) to provide a three-dimensional view of ridge stratigraphy. The units shared a corner but were offset to create two 4-m-long profiles set orthogonally. Test Unit 5 was excavated completely to basal sands, exposing a 3+ m-deep sequence of well stratified, anthropogenic deposition. Test Unit 8 was suspended before reaching sterile substrate due to encounters with human remains, but ~1.6 m of the upper portion of the profile was exposed. The details of this latter unit are provided following a description of stratigraphy in TU5.

Test Unit 5 was placed on an east-facing vertical escarpment. The unit was set back into the escarpment approximately 30 cm to ensure that intact stratigraphy would be exposed throughout. Initially, the unit was excavated to a depth of ~170 cm below the surface (cmbs), which approximates the elevation of the surrounding terrain to the south of the unit. The unit was then subsectioned into two 1 x 2-m units, the eastern (downslope) half of which (TU5-E) was continued to a depth of ~307 cmbs (Figure 5-3). After excavation we recorded the stratigraphy. Photographs and drawings of the west, south, and north profiles are presented in Figures 5-4, 5-5, and 5-6 respectively. Strata color and matrix composition descriptions are presented in Table 5-1. An inventory of objects recovered during excavation is presented in Table 5-2.

Several strategies were employed during excavation. The upper 170 cm was removed as a single "Profile Cut," and all materials were kept together as one provenience. No attempt was made to discriminate between intact and disturbed deposits. Profile cutting operations were ceased at approximately 170 cmbs when a stratigraphic change, characterized by an increase in sand and charcoal, was encountered. At this point, we excavated TU5-E in arbitrary 10-cm levels (beginning with level A). We also recognized several distinct zones that were excavated and bagged separated. Surficial and potentially disturbed fill was designated Zone A. It was recognized during excavation as relatively homogeneous and composed of organically enriched sand,

Figure 5-3. Example of "stepped" excavation in Test Unit 5 to prevent wall collapse and allow for mapping of upper strata.

Figure 5-4. Photograph and line drawing of west profile of Test Unit 5, 8LA1-West.

fragmented shell, and living Juniper tree roots. In profile, Zone A corresponds with Strata (hereafter Str.) I and Ia. Beginning with Level A, we recognized several other zones. Zone B was described as a gray/brown sand with crushed shell. Zone C was described as whole and crushed shell. Zone D was described as tan sand. After Level A we simplified the zonation, such that Zone A was the disturbed matrix and Zone C was all shell-bearing matrices. Beginning with Level H we also recognized Zone E, which was characterized as a gray/brown sand with varying shell density. All sediment in Level H through Level M was associated with this zone designation. Excavations were ceased at the bottom of Level M. Although occasional shell and bone fragments were still encountered, the soil had become both very light in color and wet, and vertebrate bone frequency had significantly decreased.

Excavation of TU5 produced a wide array of cultural materials, including bifaces, lithic flakes, marine shell, rock fragments, modified bone, over 3 kg of vertebrate faunal

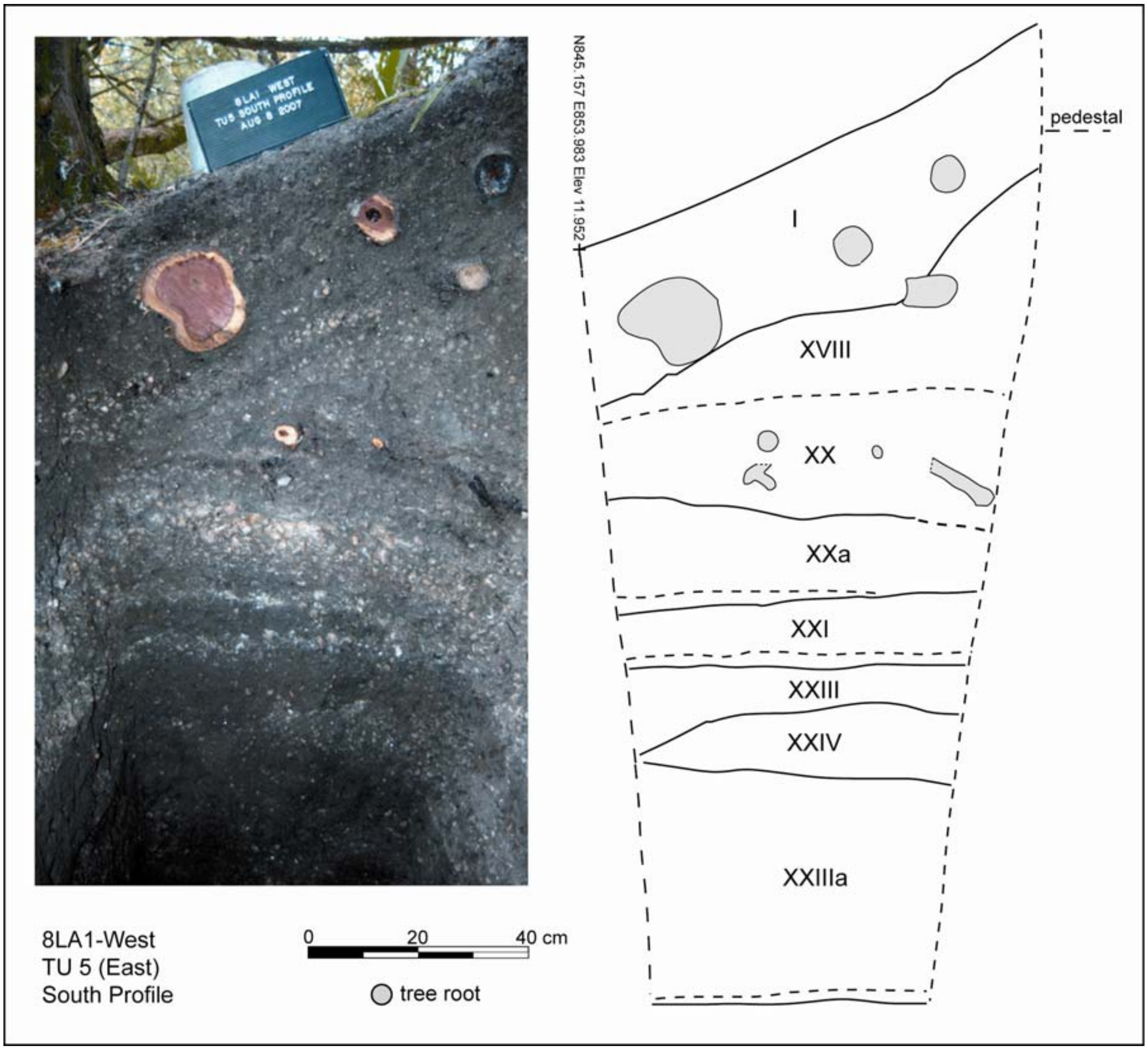

Figure 5-5. Photograph and line drawing of south profile of Test Unit 5 (East), 8LA1-West.

bone, a few sherds, and some historic and modern materials such as nails and plastic (Table 5-2). Vertebrate fauna was found in the greatest density in the profile cut, based on relative volume. We also recovered bone concretions in appreciable quantities. In many cases, these concretions were simply several bones with ash or other sediment that tightly bonding them together. In at least one case (Level G), bone concretions may have represented whole fish that were cemented in place. Finally, excluding the recent objects and sherds of the Orange and St. Johns series, this inventory fits comfortably in the known range of Mount Taylor period assemblages (see examples in photographs in the closing section of this chapter). The majority of non-Mount Taylor objects were recovered from surficial or scree-slope deposits excavated either in the Profile Cut or in Zone A. The one exception is Level G, which yielded two Orange Plain sherds. Level G was the first level in which Zone A was not visually recognized or excavated. It is likely, however, that these sherds were recovered from disturbed contexts. As seen in the north

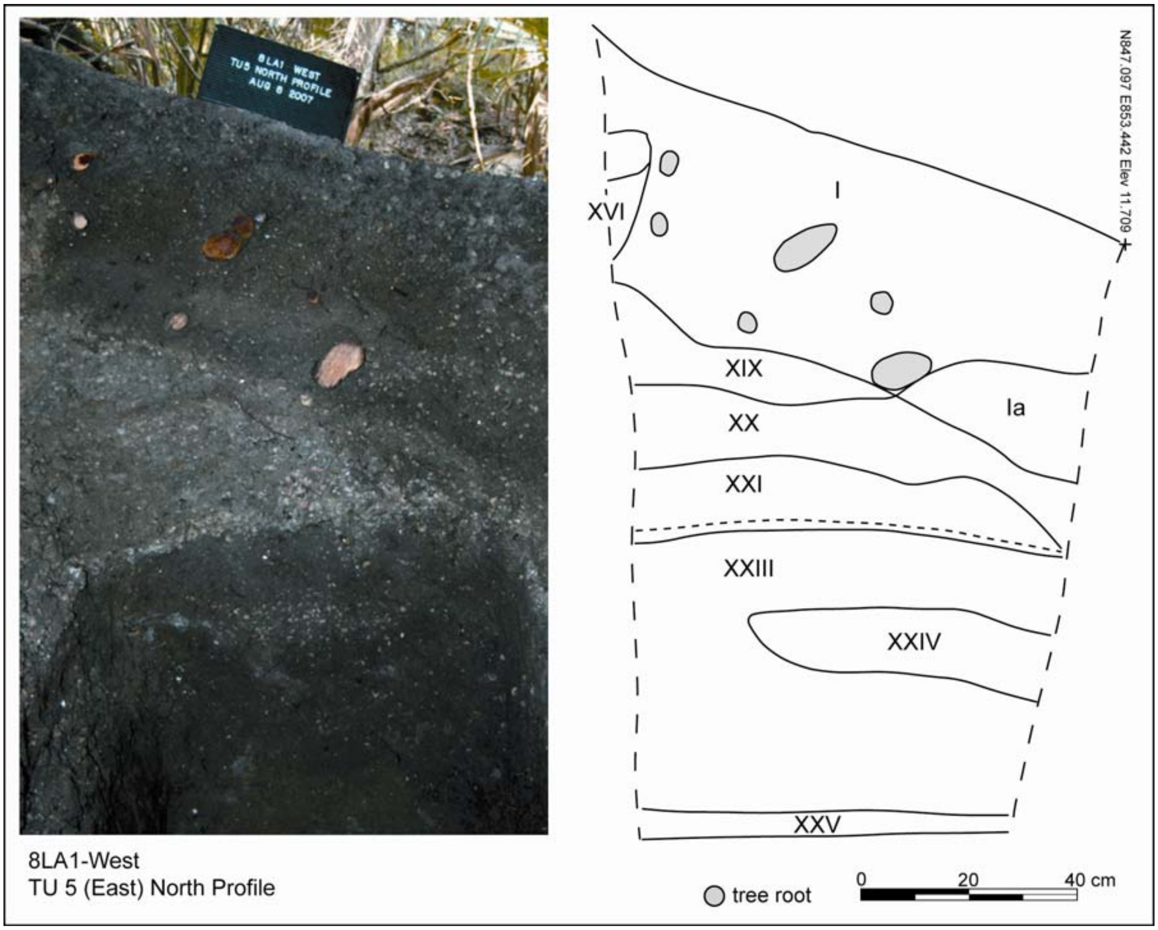

Figure 5-6. Photograph and line drawing of north profile of Test Unit 5 (East), 8LA1-West.

and south profiles, Str. I and Ia have an irregular and dipping contact with intact stratigraphy, and there may have been some deposits of Str. I remaining in Level H which was not easily visible in plan view.

A total of 28 strata were discernible in profile (Table 5-1). For the purposes of discussion, these can be grouped into four macrostratigraphic units that share similar structure. From top to bottom these include: surface deposits, upper shell and sand, lower shell, and basal shell and sand. Overlying all intact strata in TU5 was Stratum I, an organically enriched very dark grayish brown loamy fine sand with abundant roots, in addition to fragments of shell in varying quantities. Related to this matrix is Str. Ia, which was identified in the TU5-E profiles. The extent to which Str. I represents the original mound surface or is a product of mining operations that homogenized and organically enriched sediments is unclear. Based on stratigraphic data and assemblage content, two post-depositional processes are likely represented here. In the west profile, Stratum I varies in thickness between 30 and 50 cm, and its lower margin generally mimics the surface dip. Moreover, the contact between Str. I and Str. II is not sharp, and there is no clear evidence that Str. II or III were truncated. In this location, Str. I may thus represent surficial deposits that were exposed for millennia and subject to bioturbation.

Table 5-1. Stratigraphic Units of Test Unit 5, 8LA1-West, Locus A.

Stratum	Max. Depth (cm BS)	Munsell Color	Description
I	68	10YR3/2	very dark grayish brown loamy fine sand with abundant roots, occasional crushed *Viviparus*, *Pomacea*, and Unionid shell
Ia	--	10YR3/2	redeposited Stratum I with additional shell
II	41	10YR4/3	brown ashy fine sand, partially concreted, no shell
III	81	10YR5/4	abundant whole and crushed *Pomacea* and Unionid with occasional *Viviparus* shell in yellowish brown fine sand
IV	60	10YR2/2	very dark brown fine sand with *Viviparus* and occasional *Pomacea* shell, charcoal; partially concreted
V	85	10YR3/1	very dark gray fine sand with occasional crushed shell and charcoal
VI	74	10YR5/3	brown fine ashy sand with abundant crushed *Viviparus* shell and charcoal (5320 ± 30 BP)
VII	99	10YR3/2-3	very dark grayish brown to dark brown fine ashy sand with abundant whole *Viviparus* shell and charcoal
VIII	109	10YR3/2	very dark grayish brown fine ashy sand with abundant whole *Viviparus* shell and charcoal
IX	107	10YR6/4	light yellowish brown fine sand with 10YR4/3 brown mottles, small flecks of charcoal and crushed shell
X	146	10YR4/4	dark yellowish brown fine ashy sand with whole and crushed *Viviparus* shell and occasional charcoal
XI	184	10YR5/2	grayish brown fine sand with *Viviparus* and occasional *Pomacea* and Unionid shell and flecks of charcoal
XII	155	10YR8/3	abundant whole and crushed *Pomacea* and Unionid with occasional *Viviparus* shell in very pale brown fine ashy sand
XIII	168	10YR5/4	yellowish brown fine sand with occasional flecks of charcoal and crushed *Viviparus* shell
XIV	164	10YR2/1	charcoal in fine sand with occasional crushed shell
XV	177	10YR7/6	yellow fine sand with 10YR4/3 brown mottles and rare flecks of charcoal

Table 5-1. Continued.

XVa	166	10YR6/8	brownish yellow sand with 10YR6/1 gray mottles and abundant crushed shell, flecks of charcoal, and ash
XVI	199	10YR7/6	yellow fine sand with 10YR4/3 brown mottles and rare flecks of charcoal
XVIII	204	10YR6/4	whole *Pomacea* and Unionid in minimal light yellowish brown sand with occasional charcoal
XIX	218	10YR4/2	dark grayish brown fine ashy sand with whole *Viviparus* and occasional crushed *Pomacea* and Unionid shell and flecks of charcoal
XX	226	10YR4/1	dark gray fine ashy sand with whole *Viviparus* and occasional crushed *Pomacea* and Unionid shell and flecks of charcoal
XXa	237	10YR5/4	abundant whole *Pomacea* and *Viviparus* shell in yellowish brown fine sand
XXI	246	10YR3/2	abundant crushed shell in very dark grayish brown fine ashy sand with charcoal throughout
XXII	250	10YR4/3	crushed Unionid, *Pomacea*, and *Viviparus* shell in brown fine sand with flecks of charcoal throughout (5290 ± 40 BP)
XXIII	265	10YR3/2	very dark grayish brown fine sand with occasional crushed shell and charcoal
XXIIIa	302	10YR3/2	very dark grayish brown fine sand with occasional crushed shell and charcoal
XXIV	278	10YR3/1	whole and crushed *Viviparus* and occasional *Pomacea* and Unionid shell in very dark gray fine ashy sand
XXV	307+	10YR5/4	yellowish brown fine sand

The relationship between Str. I/Ia and intact stratigraphy is different for the TU5-E profiles. In both the north and south walls, Str. I and Ia lie unconformably, at roughly a 30-degree angle, upon relatively flat-lying strata that have been truncated. Also significant is that recent Juniper roots were distributed throughout Str. I at this elevation, indicating that it was less compact and easier to grow through (see Figure 5-6). Because we did not excavate the western 1 x 2-m unit, the relationship between the upper and lower Str. I/Ia remains indeterminate. Finally, it is notable that almost all pottery recovered from TU5-E was associated with Str. I deposits (Zone A), further indicating

Table 5-2. Inventory of Artifacts, Vertebrate Fauna, and Miscellaneous Items Recovered from Level Excavation of Test Unit 5, 8LA1-West, Locus A.

Level	Biface (n)	Hafted Biface (n)	Lithic Flake (n)	Lithic Flake (g)	Marine Shell Frag. (n)	Misc. Rock (g)	Vert. Fauna (n)	Vert. Fauna (g)	Modified Bone (n)	Modified Bone (g)	Bone/Shell Concre-tion (g)	Historic Arts. (g)
A (Zone A)*					1		157	43.4			6.9	12.5
A (Zone B)							58	30.9			0.6	
B (Zone A)**			1	0.5			406	167.5			14.8	31.6
B (Zone C)							91	33.9				
C (Zone A)							419	157.5			15.8	
C (Zone C)							282	171.4			7.9	
D (Zone A)					1		272	116.2	2	4.8	5.4	
D (Zone C)					1	3.7	240	85.2			29.4	
E (Zone A)***							27	6.9			1.2	
E (Zone C)						0.3	213	120.9			7.3	
F (Zone A)							47	13.4				
F (Zone C)	1		1	2.7		0.3	370	159.4	1	0.3	22.4	
G (Zone C)+			1	1.8			383	160			35.7	
H (Zone C)++		1			1		189	107.2	1	3	9.4	
H (Zone E)							90	16.4				
I (Zone E)							185	45.8			1.1	
J (Zone E)		1	1	0.3	1	8.7	91	32.6	3	10.2		
K (Zone E)+++			1	1.5			165	61			0.8	
L (Zone E)					2		171	39.6			0.7	
M (Zone E)							68	16.2				
Profile Clean-Up†			1	1.7	1							
Profile Cut††	1	1	16	34.3	8	14.5	3126	1532.2	11	197.1	403.4	21.9
Total	2	3	22	42.8	16	27.5	7050	3117.6	18	215.4	562.8	66.0

* plus one plain St. Johns sherd
** plus one plain St. Johns, and one St. Johns crumb sherd
*** plus one check-stamped St. Johns sherd
\+ plus two plain Orange sherds
++ plus one *Euglandina* shell
+++ plus one lithic core 106.6 g
† plus one piece of modified marine shell 2.2 g
†† plus three paleofeces 19.8 g

that this matrix was redeposited from elsewhere. No sherds were recovered during the profile cut excavations.

Strata II through XVIII comprise the upper shell unit, a stratigraphic assemblage internally marked by variable thickness and composition. For example, strata are as diverse as the predominantly whole and unbroken *Pomacea* and *Viviparus* in Str. XVIII to a mostly shell-free yellow sand in Str. XV, and range from ~5 cm thick to more than 50 cm. Although a complex arrangement, these strata share several structural and sequential characteristics that suggest a repeated pattern. In particular, it appears that a certain arrangement of surface features was being maintained. Most of the strata in this sequence have a distinctive topographic expression: they dip from north to south (Figure 5-4). Whether this dip has a corresponding strike to the east is unknown due to mining, but there is similar patterning evident in TU8 to the south and west (see below).

Within the upper shell unit are two repeated depositional subunits: thin burned layers and extensive shell and sand layers. The base of the sequence is composed of sand-only layers in association with whole shell. These different depositional subunits are discussed below. One component of this sequence includes thin strata (ca. 3–10 cm overall), that show evidence for extensive burning, and have variable amounts of shell. Str. II, for example, is characterized by a brown ashy fine sand with no shell. In contrast, Str. XIV is composed almost exclusively of charcoal, with limited sand or shell. Most others, however, have crushed shell of variable quantity, including Str. IV, V, VI, and IX. A sample of Str. VI was collected from the profile. In the laboratory a sample of wood charcoal was removed and submitted for an AMS assay to Beta Analytic. It returned a conventional age estimate of 5320 ± 30 BP. These lenses are frequently concreted, providing further evidence of both burning and the presence of ash. In general, these lenses mimic the contour of the underlying stratum. In the eastern profile, they are typically discontinuous across these surfaces, but are most strongly expressed in the southern half of the west profile. In this sense, these lenses appear to be strongly associated with areas of highest topography, as if they were emplaced directly upon a mounded surface.

A second subunit to the upper shell sequence consists of relatively thick (ca. 10–50 cm) and laterally extensive layers of shell with variable amounts of non-shell inclusions. The vast majority of these are characterized by whole and crushed *Viviparus*, *Pomacea*, and bivalve shell in a yellow-brown to brown fine sand. Often the non-shell matrix is ashy, and contains flecks of charcoal. Layers matching this description include Str. III, VII, VIII, X, and XI. Some layers, however, are composed primarily of whole shell with limited non-shell matrix. Str. XII, for example, was expressed as several small pockets of whole and crushed *Pomacea* and Unionid shell with the occasional *Viviparus* shell. A more thick and extensive whole shell lens is Str. XVIIII, which is composed almost exclusively of whole *Pomacea* and Unionid shell. Crushed shell was present in this stratum, but was concentrated directly beneath Str. XIV and XV.

The whole shell in Str. XVIII is closely associated with the third type of deposit that is composed almost exclusively of yellow-brown sand. In some cases, such as Str.

XIII, the sand is discontinuous. Most striking, however, is the 15-cm thick Str. XV that is composed of yellow fine sand with rare charcoal. It is a lenticular-shaped stratum that lies above whole shell in Str. XVIII and below the burned charcoal of Str. XIV. The presence of ashy sand (Str. XVa) at the contact between Str. XIV and XV suggests that a fire was constructed directly upon the Str. XV surface. A related sand layer is Str. XVI, a ca. 15-cm thick yellow fine sand with brown mottles and rare charcoal. The lateral extent of Str. XVI is unknown because it was truncated by mining, but it is visible in the north profile. Taking these strata together, it would seem that a large layer of whole shell (Str. XVIII) was deposited on a mostly flat surface (Str. XIX). A fire may have been constructed on top of Str. XIX prior to the deposition of shellfish, as there was ash at the contact. Subsequent to the shell deposition, loads of yellow sand were deposited on top of this shell. This layer was then covered with hot coals. This sequence of (1) shell deposition, (2) sand deposition, and (3) burning may provide a model for subsequent deposition. That is, the overlying thick shell/sand layers appear to be linked with thin lenses of charcoal and crushed shell. Following the model considered above, it would seem that loads of sand and shell were emplaced as small heaps, and then the surface of each heap was burned. Whether the burning occurred just after the surface was created, or was conducted in advance of a subsequent deposit remains unknown at this time.

Beneath Str. XVIII, the character of strata shifts drastically from elevated and discrete deposits to laterally extensive, flat-lying, and heterogeneous strata between 10 and 20-cm thick. The composition and disposition of these strata are suggestive of a depositional pattern that did not include the differentiation of shellfish species, but did involve significant mechanical crushing of shellfish remains. For example, Str. XIX is composed of ashy sand with whole *Viviparus*, and crushed *Pomacea* and Unionid shell. Str. XX is similarly composed of whole *Viviparus* with minor shell, and it grades into Str. XXa, a layer of whole *Pomacea* and *Viviparus* shell in a yellowish brown fine sand. These units are underlain by the relatively thin (ca. 8-cm thick) Str. XXI and XXII, which are characterized by abundant crushed shell and charcoal. In some instances, crushed Unionid shell was present in patches. A sample of charcoal was collected from a crushed shell lens in Str. XXII, and submitted for an AMS assay. It returned a conventional age estimate of 5290 ± 40 BP. Although the age intercept for this date is later than the overlying Str. VI, both estimates overlap at 2-sigma, and are thus statistically coeval. What this suggests is that the deposits in this portion of Locus A were rapidly emplaced.

The final macrounit revealed in TU5 excavations provides evidence for intermittent occupation of this landform prior to the extensive deposition described above. During excavation of Level H (ca. 240–250 cmbs) the crushed shell of Str. XXII gave way to Str. XXIII, a ca. 10-cm thick a dark grayish brown, organically enriched fine sand with occasional crushed shell and charcoal. This sediment was found to overlie another extensive deposit (Str. XXIV) of whole and crushed *Viviparus*, *Pomacea*, and Unionid shell. This shell lens was consistently observed in the west, south, and east profiles, but was discontinuous in the northern profile. Beneath the shell we encountered another organic soil with limited shell (Str. XXIIIa). This graded into a yellowish brown fine sand towards the base of the unit. Although it is possible that the shell-free organic sediment was anthropogenic in origin, and purposefully emplaced like Str. XV and XVII, there are several lines of evidence that indicate both represent A-horizons. First, Str. XXIII and XXIIIa were indistinguishable in the field. They were both organically enriched and characterized by a notable lack of, or comparable reduction in vertebrate fauna. Secondly, a *Euglandina* shell was recovered from shell in Level H. This terrestrial gastropod preys upon other terrestrial univalves. We have argued elsewhere (Sassaman et al. 2005) that *Euglandina* are most likely to be found in association with stable, exposed surfaces that foster colonization of prey species. There is a drop off in the density of vertebrate fauna beginning with Level H, although objects continue to be found in appreciable quantities. We recovered two Florida Archaic Stemmed hafted bifaces, 2 lithic flakes, and 3 marine shell fragments, and four modified bone pieces in this macro-unit.

TU8 was oriented to the west of TU5 (Figure 5-7). As before, one goal of excavation was to expose stratigraphy in this portion of the shell ridge. Drawings and photographs of the north and east profiles are presented in Figure 5-8, and a description of each stratum is presented in Table 5-3. An inventory of objects recovered during excavation is presented in Table 5-4. Because of the surface topography in this location, excavation of TU8 followed slightly different protocols. Unlike TU5, which was emplaced on a sharp escarpment, the surface beneath the TU8 footprint sloped gradually. As a result, we did not remove a profile cut, but instead excavated in arbitrary levels from the start. Levels A and B were removed as 20-cm levels. Thereafter, all levels were removed in 10-cm increments. Each level was a “wedge” cut, which increased in volume

Figure 5-7. View facing northwest of the excavation of Test Unit 8, 8LA1-West.

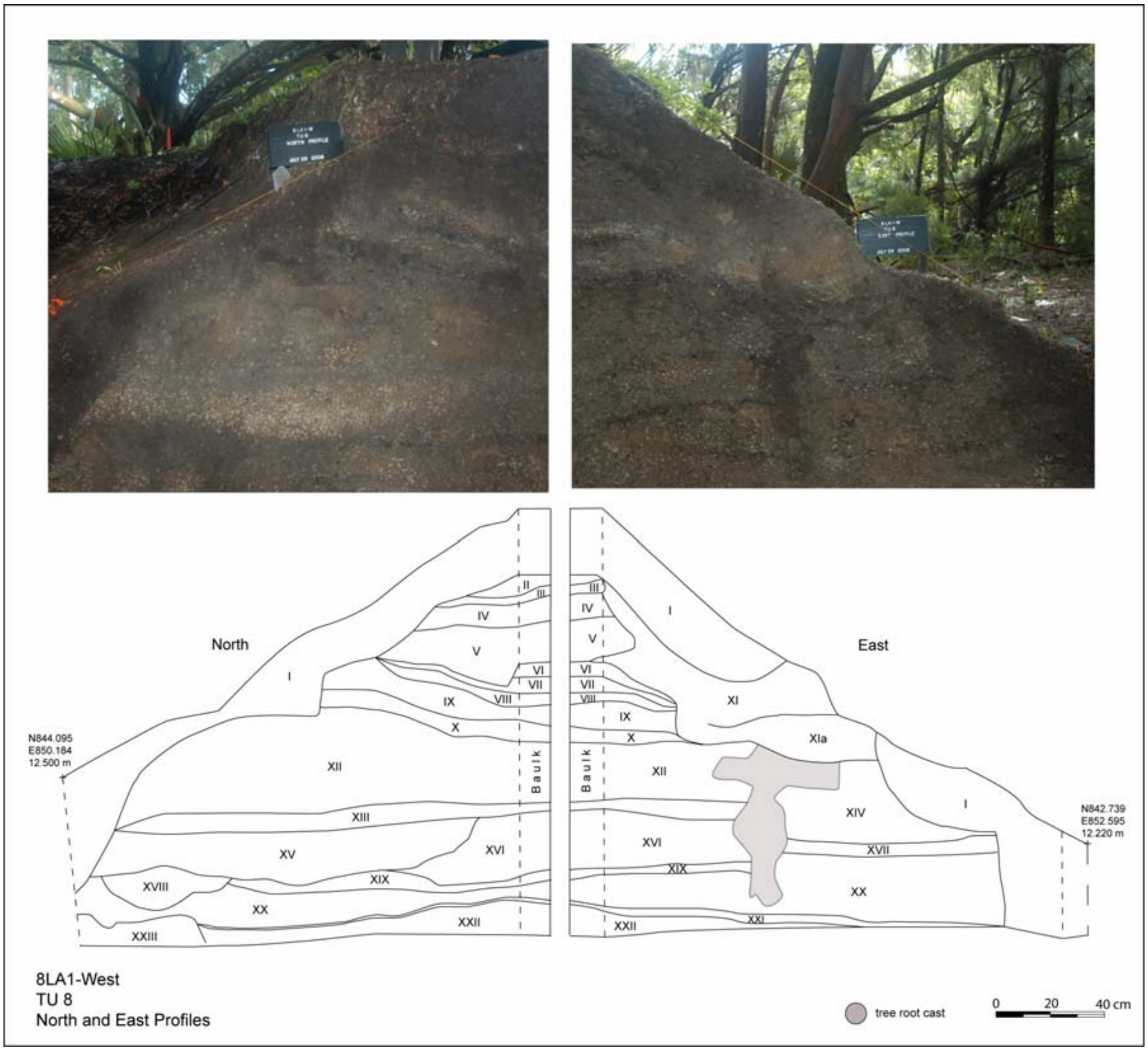

Figure 5-8. Photographs and line drawings of the north and east profiles of Test Unit 8, 8LA1-West.

as excavation proceeded. Beginning with Level F (70 cmbs) we recognized two zones that were excavated, screened, and bagged separately. Zone A corresponds to the organically enriched mining spoil recognized in TU5. It was removed first as each level was removed. All intact stratigraphy not included in Zone A was excavated as Zone B. We ceased excavation in TU8 upon the discovery of two subadult burials (see below).

The material culture assemblage recovered from TU8 is complementary to that recovered in TU5. As enumerated in the artifact inventory from TU8 (Table 5-4), all post-Mount Taylor pottery sherds of the Orange and St. Johns series, as well as historic artifacts, were recovered from Zone A. Vertebrate faunal bone was the most frequently recovered object (n = 8898, 3437.1 g). This density is consistent with the profile cut from TU5 which yielded a similarly large quantity of faunal bone. Otherwise, the

Table 5-3. Stratigraphic Units of Test Unit 8, 8LA1-West, Locus A.

Stratum	Max. Depth (cm BS)	Munsell Color	Description
I	53+	10YR3/2	very dark grayish brown ashy sand with moderate whole and crushed *Viviparus* and occasional Unionid shell
II	32	10YR4/2	dark grayish brown ashy sand with occasional crushed shell
III	36	10YR6/6	abundant crushed Unionid with occasional whole and crushed *Viviparus* shell in brownish yellow ashy fine sand
IV	44	10YR3/1	very dark gray fine sand with occasional whole and crushed *Viviparus* and Unionid shell with flecks of charcoal throughout
V	63	10YR4/2	abundant whole and crushed *Viviparus* and occasional *Pomacea* and Unionid shell in dark grayish brown ashy sand with occasional flecks of charcoal
VI	64	10YR7/6	concreted crushed and burned *Viviparus* and occasional Unionid shell in yellow ashy, gritty sand
VII	70	10YR5/4	yellowish brown ashy, gritty sand with lenses of whole and crushed *Viviparus* and Unionid shell
VIII	75	10YR3/2	very dark grayish brown fine ashy sand with abundant whole *Viviparus* shell and charcoal
IX	84	10YR4/2	light yellowish brown fine sand with 10YR4/3 brown mottles, small flecks of charcoal and crushed shell
X	89	10YR3/1	dark yellowish brown fine ashy sand with whole and crushed *Viviparus* shell and occasional charcoal
XI	58	10YR4/2	grayish brown fine sand with *Viviparus* and occasional *Pomacea* and Unionid shell and flecks of charcoal
XIa	35	10YR5/4	yellowish brown gritty sand with occasional crushed shell intercalated with 10YR3/2 very dark grayish brown sand with occasional crushed shell
XII	112	10YR5/2	grayish brown medium ashy sand with moderate whole and crushed *Viviparus*, occasional whole and crushed Unioinid and *Pomacea* shell, and flecks of charcoal
XIII	115	10YR5/1	gray ashy, gritty sand with abundant whole and crushed *Viviparus* shell

Table 5-3. Continued.

XIV	64	10YR4/1	dark gray sand with moderate crushed and whole *Pomacea* and *Viviparus* shell and occasional charcoal
XV	115	10YR5/3	mostly whole *Viviparus* and occasional *Pomacea* and Unionid shell in a trace of brown sand
XVI	136	10YR4/3	brown ashy sand with abundant whole and crushed *Viviparus* and occasional whole and crushed *Pomacea* and Unionid shell
XVII	66	10YR4/1	abundant crushed Unionid shell and charcoal in trace of dark gray sand
XVIII	69	10YR3/2	very dark grayish brown ashy sand with trace of crushed shell and occasional flecks of charcoal (subadult interment?)
XIX	140	10YR4/1	abundant crushed Unionid shell and charcoal in trace of dark gray sand (probably coterminus with Stratum XVII)
XX	149	10YR6/6	brownish yellow fine sand with occasional whole and crushed *Viviparus*
XXI	150	10YR5/3	crushed shell in brown ashy sand (5280±40 BP)
XXII	161+	10YR5/2	abundant whole *Viviparus* and *Pomacea* shell, with minor crushed shell and abundant charcoal in trace of grayish brown sand
XXIII	87+	10YR5/2	abundant whole *Pomacea* shell, with minor crushed shell and abundant charcoal in trace of grayish brown sand

material culture assemblage included lithic waste flakes, two hafted bifaces, marine shell fragments, and a few modified bone fragments.

Excavation of TU8 revealed 24 stratigraphic units that were mostly complementary to the disturbed and intact upper shell macrounits documented in TU5. Three upper and disturbed strata were recognized. Str. I is an organically enriched and homogeneous ashy sand with moderate amounts of crushed shell. As with TU5, this stratum likely represents both a pre-mining intact surface, particularly above Str. II, in addition to post-mining scree deposits. In both the north and west profiles, Str. I lies unconformably above truncated intact strata. Sherds of the St. Johns and Orange series were restricted to Zone A, which corresponds to Str. I. Another kind of disturbed deposit was recognized in Str. XI and XIa, visible in the eastern profile. These deposits are composed predominantly of gray to yellow brown sand with occasional shell and

Table 5-4. Inventory of Artifacts, Vertebrate Fauna, and Miscellaneous Items Recovered from Level Excavation of Test Unit 8, 8LA1-West, Locus A.

Level	Hafted Biface (n)	Lithic Flake (n)	Lithic Flake (g)	Marine Shell Frag. (n)	Paleo-feces (g)	Vert. Fauna (n)	Vert. Fauna (g)	Modified Bone (n)	Modified Bone (g)	Bone/Shell Concre-tion (g)	Historic Arts. (g)
A*						12	4.0				
B						238	63.4				
C				2		420	134.4			10.2	
D		1	0.2			949	455.1	1	4.7	58.2	
E				1		325	146.8			6.3	
F (Zone A)						209	80.5			10.8	1.9
F (Zone B)						278	75.0			6.0	
G (Zone A)**						210	58.1			16.8	
G (Zone B)						330	83.7			30.1	
G Cleanup	1										
H (Zone A)***		1	0.2			198	66.2			36.3	
H (Zone B)						307	101.5			1.4	
I (Zone A)+				1	1.0	525	66.1			23.3	
I (Zone B)		1	2.2			504	147.4			12.5	
J (Zone A)				1		434	185.2	2	7.1	32.1	
J (Zone B)						933	304.0			159.8	
K (Zone A)++	1	1	1.2		9.4	446	212.1			33.0	
K (Zone B)				1		301	111.5			10.2	
L (Zone A)+++		1	0.3			552	240.8			50.5	
L (Zone B)						176	60.3			6.2	
M (Zone A) †		3	3.3	2		364	255.6				
M (Zone B)		1	0.4			226	78.2			6.2	
N (Zone A) ††		3	2.3			256	186.6			1.6	
N (Zone B)						143	63.4			3.7	
O (Zone A) †††				1		471	219.9			12.9	
O (Zone B)						91	36.9				
Total	2	12	10.1	9	10.4	8898	3437.1	3	11.8	528.1	1.9

* plus one plain St. Johns sherd, 4.0 G
** plus two Orange crumb sherds, 1.3 g; one St. Johns crumb sherd, 0.4 g
*** plus two St. Johns crumb sherds, 1.9 g
+ plus one St. Johns Check Stamped crumb sherd,, 2.8g
++ plus two St. Johns Check Stamped sherds, 18.3 g; one plain St. Johns body sherd, 4.3 g; three St. Johns crumb sherds, 3.0 g
+++ plus one St. Johns Check Stamped sherds, 10.1 g; three plain St. Johns body sherds, 6.0 g; two St. Johns crumb sherds, 1.0 g
† plus one Orange crumb sherd, 0.4 g; one St. Johns Check Stamped body sherd, 4.1 g; two plain St. Johns body sherds, 3.0 g; one St. Johns crumb sherd, 0.2 g
†† plus one St. Johns Check Stamped body sherd, 2.7 g; one plain St. Johns body sherd, 1.7 g; seven St. Johns crumb sherd, 3.5 g
††† plus two Orange crumb sherds, 1.8 g; one plain St. Johns body sherd, 2.0 g; one plain St. Johns rim sherd, 3.9 g; three St. Johns crumb sherds, 1.1 g

charcoal. They too rest unconformably upon intact strata lying more or less horizontally in the eastern portion of the unit. The origin of this sand mass is unknown. Presumably, the sand was emplaced incidentally during the mining process, and perhaps escaped from the steam shovel bucket. On close inspection, there are disaggregated, but intact, clods of whole strata embedded within Str. XI.

Just like TU5, the upper intact shell unit consisted of thin and thick strata of varying composition. In TU8, the relationship between the massive layers and thin strata is made more evident based on surface topography and content. If the thin and thick strata are parts of the same depositional sequence (as argued above), then somewhere between five and six depositional events are represented in the TU8 profiles. Based on excavations at the Hontoon Dead Creek Village (8VO215) and the Hontoon Island North site (8VO202), these elevated surfaces may represent discrete house mounds and floors. Although no architectural features such as post-holes have been identified, similar deposits of shell, roughly 20-50 cm thick and frequently covered with crushed shell, were identified at these other sites. In TU8, the uppermost depositional sequence is represented in Str. II-V. Although varying in composition, they all share the same slope and angle of repose, which can be seen trending upwards to the east and south. The thin strata (II, III) are composed of ashy fine sand with varying amounts of crushed shell. These are likely expressed in TU5 as Str. II. The more massive strata (IV and V) are composed of whole and crushed *Viviparus*, *Pomacea*, and Unionid shell with gray and yellow sand. A secondary sequence is represented by Str. VI-XII, wherein there are many thin complicated strata (VI-X) emplaced upon one massive deposit of ashy fine sand with whole and crushed *Viviparus*, *Pomacea*, and Unionid shell (Str. XII). As seen in the northern profile, the charcoal and crushed shell layers trend upwards to the west, and appear to follow the elevated surface contour of Str. XII. Finally, Str. XII has a large root cast that appears to originate at or near the stratum's surface, although it has been partially truncated by Str. XIa. This is likely the same surface from which root casts originate in TU5 (Str. X), giving further support for a temporary occupational hiatus.

Str. XII is situated upon the Str. XIII surface, which is composed of ashy sand with abundant whole and crushed *Viviparus* shell. This laterally extensive and thin deposit begins a new series of depositional couplets. Str. XVII, XIX and XXI are composed predominantly of crushed bivalve with abundant charcoal. They are present across both the north and east profile. A charcoal sample was extracted from Str. XXI and submitted for an AMS assay to Beta Analytic. It returned a conventional age estimate of 5280 ± 40 BP. The intervening stratigraphic units (Str. XVI, XX) are more massive and composed of both sand and whole and crushed shellfish remains. In the profiles that we exposed, the lower stratigraphy identified in TU8 are mostly flat lying (except for Str. XV and XVIII, see below). Based on the presence of the sand/shell nodes in TU5 at this elevation, it is likely that the strata observed in TU8 represent lateral elements of similar shell domes, and away from the zone of elevated deposition. The base of the test unit just barely exposed an extensive layer of mostly whole *Pomacea* and *Viviparus* shell, with limited non-shell matrix (Str. XXII, XXIII). This layer of shell corresponds with Str. XVIII in TU5 in terms of depth and composition.

As noted previously, excavation of TU8 was terminated prior to reaching basal sands due to the presence of two subadult interments. The first was not recognized in the field. Back in the laboratory as samples were being cleaned, several bones from Level M (140-150 cmbs) were identified as human subadult skeletal elements. At the time of this discovery, we were midway through excavating Level O (160-170 cmbs). As we were cleaning down the base of Level O we encountered yet another subadult interment, this time *in situ*. After consultation with the State Archaeologist, all skeletal elements were reinterred, and we stopped excavations here altogether. After recording the stratigraphy, the unit was backfilled. The stratigraphic relationship of the second interment remains unknown because it was encountered at the base of the unit, although presumably it was associated with the whole shell deposits of Str. XXII. Based on field notes, there is little doubt that the first subadult interment was associated with Str. XVIII, described as very dark grayish brown sand with only a trace amount of crushed shell and some charcoal. In profile, this stratum has the appearance of a small basin, and is likely a pit into which both the subadult and gray sand were emplaced. Importantly, the burial pit lies directly beneath Str. XV, which is composed of mostly whole shell with limited non-shell matrix. In profile, Str. XV also has a basin shape, and appears to lie unconformably upon Str. XVI, which appears to be laterally truncated by Str. XV. Based on these stratigraphic relationships, it would appear that a pit was dug through an existing shell node, and then a subadult was buried in sand at the base of the pit. The burial pit was then filled with whole, and apparently clean shell. These burial practices are the microcosm of interment procedures afforded adults at coeval cemeteries such as the Harris Creek mortuary mound on Tick Island (Aten 1999). Interestingly, subadults were greatly underrepresented at Harris Creek. Based on the discoveries in TU8, it may be the case that Mount Taylor communities buried juveniles in residential spaces, perhaps under house floors.

In sum, excavation of TU5 and TU8 exposed a complicated, 3+ m deep stratigraphic sequence composed of sand, shellfish remains, and other objects. In this portion of the Locus A ridge, at least four macro-stratigraphic units are evident from bottom to top: shell midden above a buried A horizon, a lens of emplaced sand, stacked sequence of house floors and living surfaces, and a post-abandonment stratum. Radiocarbon assays from throughout the sequence suggest that Locus A emerged rapidly (see below), although there may have been intermittent abandonment. The mined disposition and manner in which we excavated the units limits what we can say about material culture frequency, but a few points are worthy of note. With one exception, all post-Mount Taylor material culture was restricted to near-surface of mining scree deposits. Where sherds of the Orange and St. Johns series came from initially remains unknown. One possibility is that they were relocated from somewhere else on the landform, such as Locus B or C, during mining operations. Alternatively, they could have come from surficial deposits within Locus A. Indeed, many large Mount Taylor shell ridges have pottery in the upper 50 cm (Wyman 1875). Secondly, the material culture was diverse and consistent with the earlier Mount Taylor phase. Tools characteristic of the later Thornhill Lake phase, such as microliths and *Strombus* celts were not present. Finally, there was comparably more vertebrate fauna recovered from the upper macrostratigraphic units than in the basal midden.

Test Unit 6

A single 2 x 2-m test unit was excavated in 2007 toward the west end of the Locus A shell ridge in an escarpment running parallel with the long axis of the ridge and the spring run. Test Unit 6 (TU6) generally recapitulated the stratigraphic sequence observed in TU5 and TU8, but with less complexity in the upper unit and an overall shallower profile. Nonetheless, a sequence of basal midden followed by emplaced sand and shallow pit features is fully coeval with the lower sequence at the east end of the ridge. The artifact assemblage from TU6 is likewise consistent with the Mount Taylor assemblage recovered from the east end of the ridge. Similarities in the stratigraphy between the two locations far outweigh the differences, supporting the inference that similar processes of deposition account for the sequences and that they occurred at roughly the same time. It follows that the spatial extent of Mount Taylor activities leading to mounded deposits encompasses upwards of 200 m of the spring run terrace.

Excavation of TU6 generally followed the same protocols as the TU5. A Profile Cut was made from the top of the escarpment to a depth of 107 cmbs, roughly at the point where the southeast corner of the extant mined surface was encountered (Figure 5-9). This wedge-shaped unit crosscut multiple shell-bearing strata and brown sand, and scree deposits. Shell was generally looser than in TU5 and with less associated sand matrix. No pottery was recovered in the Profile Cut, but several lithic artifacts were found, along with marine shell fragments, some worked bone, and relatively abundant vertebrate fauna, although somewhat less per unit volume than in TU5.

The floor plan at the base of the profile cut (ca. 107 cmbs) consisted almost entirely of brown medium sand with only minor shell. Evident at this level were several pit features, including possible postholes. Ultimately, seven circular stains or areas of concreted shell were designated features (Features 6-12; Figure 5-10), but not all were investigated because only the south half of TU6 was excavated below the level of the Profile Cut. As with TU5, TU6 was divided into two 1 x 2-m subunits, with the downslope portion (TU6-South) excavated through the removal of 11 10-cm levels to a depth of 220 cmbs. Figure 5-11 provides a photograph and drawing of the stepped profile. Strata identified in this profile are described in Table 5-5, and an inventory of artifacts, vertebrate fauna, and miscellaneous item is provided in Table 5-6. In the paragraphs that follow we describe the stratigraphy of TU6 and follow with a description of the features.

Fifteen distinct strata were recognized in the profile of TU6. As with TUs 5 and 8, the strata of TU6 can be grouped into four different macrounits, or depositional types: surface deposits, upper shell and sand, lower shell layers, and basal midden. The upper 25 cm (Str. I) consists of very dark grayish brown fine sandy loam with moderate amounts of whole *Viviparus* shell, followed by another 25 cm of similar matrix with a greater density of shell (Str. II). During excavation these strata were assumed to be a post-mining deposit, either fill that was redeposited by heavy equipment during the mining operation, or simply the development of topsoil through natural pedogenic processes. However, as discussed earlier, neither of these scenarios seems very likely in retrospect.

Figure 5-9. View facing northwest of Profile Cut of Test Unit 6, 8LA1-West, Locus A.

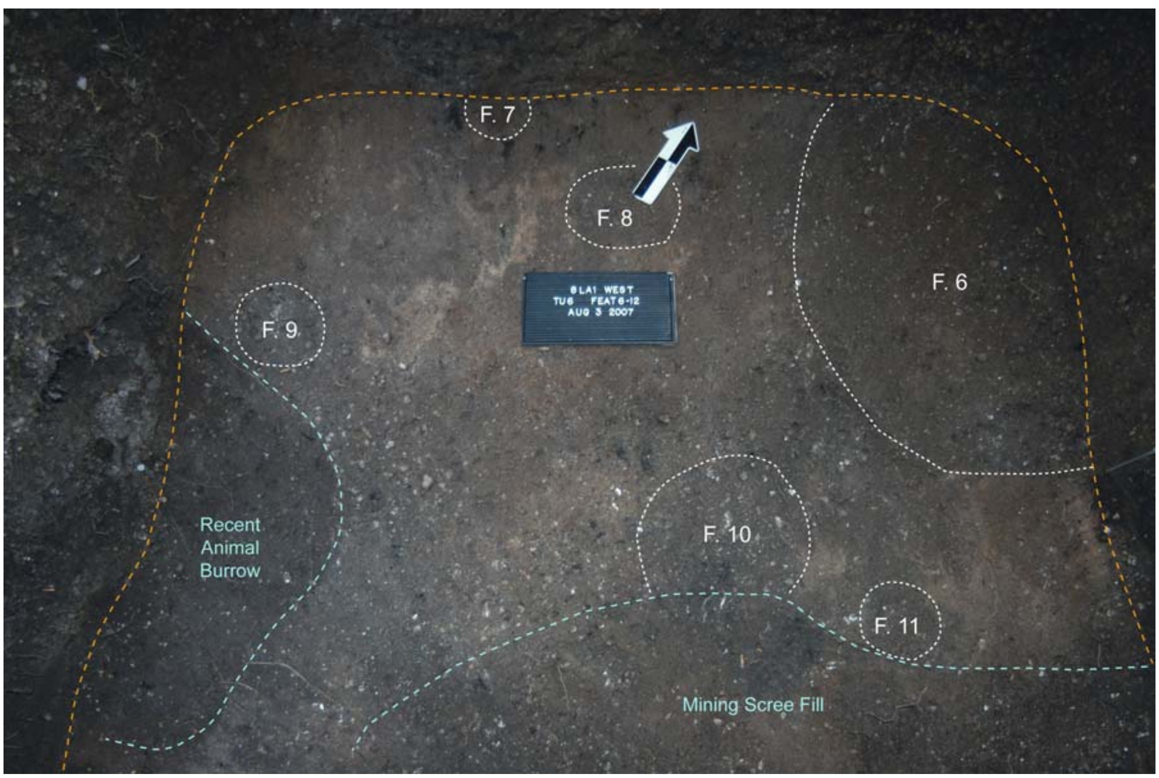

Figure 5-10. View facing northwest of plan at base of Profile Cut, Test Unit 6, 8LA1-West, Locus A, showing Features 6-11 and related zones of disturbance; not shown is Feature 12, to the south of this view.

Figure 5-11. Photograph and line drawing of north profile, Test Unit 6, 8LA1-West-Locus A.

Table 5-5. Stratigraphic Units of Test Unit 6, 8LA1-West, Locus A.

Stratum	Max. Depth (cm BS)	Munsell Color	Description
I	25	10YR3/2	very dark grayish brown fine sandy loam with surface root mat and moderate whole *Viviparus* shell
II	50	10YR4/2	very dark brown fine sandy loam with abundant whole *Viviparus* shell
III	61	10YR4/3	abundant whole *Viviparus* with occasional *Pomacea* shell and charcoal in trace of brown fine sand
IV	88	10YR4/3	brown fine sandy loam with abundant whole *Viviparus* and occasional *Pomacea* shell and charcoal
V	66	10YR5/3	brown medium ashy sand with abundant whole *Viviparus* and occasional charcoal
VI	78	--	abundant whole *Viviparus* shell with trace of charcoal and no matrix
VII	105	10YR3/3	dark brown fine sand with abundant whole *Viviparus* and occasional *Pomacea* shell and abundant charcoal
VIII	105	10YR2/2	very dark brown fine sandy loam (possibly leaching from above)
IX	129	7.5YR4/4	brown medium sand with trace of shell
X	102	10YR4/2	dark grayish brown medium sandy loam with abundant charcoal, trace of shell, and clasts of concreted sand; probable lens of fire-reddened sand along western margin
XI	144	10YR3/2	very dark grayish brown medium sandy loam with crushed shell, including Unionid, and moderate charcoal
XII	145	10YR4/3	brown medium sandy loam with moderate whole and crushed *Viviparus* shell and moderate charcoal
XIII	200	10YR4/2	heterogenous mix of whole and crushed *Viviparus* shell with discontinuous stringers of crushed Unionid shell and occasional charcoal in dark grayish brown medium sandy loam
XIV	211	10YR3/2	very dark grayish brown fine sandy loam with only trace of shell; grades into Stratum XV
XV	219	10YR3/3	dark brown fine sandy loam lacking shell

Table 5-6. Inventory of Artifacts, Vertebrate Fauna, and Miscellaneous Items Recovered from Level Excavation of Test Unit 6, 8LA1-West, Locus A.

Level	Biface (n)	Hafted Biface (n)	Lithic Flake (n)	Lithic Flake (g)	Marine Shell Frag. (n)	Misc. Rock (g)	St. Johns Crumb Sherd (n)	Vert. Fauna (n)	Vert. Fauna (g)	Modified Bone (n)	Modified Bone (g)	Bone/Shell Concre-tion (g)
A							1	429	121.9	1	0.3	187.4
B		1	4	0.8	2	23.9		453	252.1	1	1.5	34.8
C					2			599	321.4	3	3.1	18.6
D			2	0.4				95	75.4	1	1.4	1.5
E			1	0.1				98	52.3	1	1.4	4
F			1	0.9				123	73			
G*			2	0.2				174	50.4			
H			1					332	86.3			
I			1	20.8				358	80.3			1.5
J	1		6	2.9	1		1	342	86.9			
K			3	1.1		0.2		110	23.7			
Profile Clean-Up			1	3	1			2	4.9			
Profile Cut	1		8	15.2	4			2028	876.4	6	15.7	106.9
Feature 6-South								136	97			1.5
Feature 10-South								30	13.1			
Feature 12-South								10	5.6			7.3
Total	2	1	30	45.4	10	24.1	2	5319	2220.7	13	23.4	363.5

* plus one "other" sherd

The contact between Str. I/II and the underlying layers does not express the unconformity of a cut-and-fill event that happened less than a century ago. Likewise, we cannot imagine that enough time has elapsed since the mining to allow for the accumulation of as much as 50 cm of clastic material, especially considering the elevated position of the locations we tested in Locus A. Add to this the limited amount of clastic material available for upward translocation (through bioturbation) from strata immediately below Str. I/II and we are compelled to infer that the upper unit was deposited by humans, much in the same fashion as the deeper sand strata. No pottery was found in Str. I/II of TU6 to corroborate the St. Johns association inferred for this stratum in TUs 5 and 8. Only two small St. Johns crumb sherds were recovered from the entirety of TU6, one from the upper level of TU6 South (in scree deposits), and a second inexplicably from Level J of TU6 South. On balance, the surface stratum of the remnants of ridge in Locus A appears to be anthropogenic, apparently emplaced either during the St. Johns I period or well before, but was thereafter neither truncated nor buried.

The second macrounit in the TU6 profile consists of Str. III through X, a complex array of shell and sand of variable composition, density, and thickness. Unlike its counterparts in TUs 5 and 8, the strata of TU6 do not clearly express a dip-and-strike character, but they are not clearly horizontal either. Rather, this second macrounit includes several pit features that intruded upon shell and sand layers, resulting in profiles that do not clearly express the structure of original deposition. The major shell-rich stratum is the ca. 40-cm-thick Str. IV, consisting of abundant whole *Viviparus* and occasional *Pomacea* shell in a brown fine sandy loam. Below this across most of the unit is ca. 40-cm-thick stratum (Str. IX) of brown medium sand with only a trace of shell. Intercepting both of these strata is a large pit feature in the northeast corner that appears to emanate from the top of Str. IV. It is not clear if this feature is truly cultural (in fact, it was thus not assigned a feature number in the field). Recorded in the profile as Str. V-VII, this intrusion may have been caused by a tree-throw or similar disturbance, but if so it must have occurred before Str. I/II was emplaced. We are more inclined to interpret this as cultural given the apparent thermal activity represented in Str. V, at the top of the feature, similar in many respects to thermal features observed in TU5. A less ambiguous example of a large pit feature in TU6 is Feature 6, which is not seen in the north profile of Figure 5-11, but was sectioned, sampled, and dated, as discussed further below. Another possible intrusive feature in the north profile is recorded as Str. X, a dark grayish brown medium sand with charcoal, a trace of shell, and clasts of concreted sand. Unlike the intrusion recorded as Str. V-VII, Str. X appears to emanate from the top of the sand layer (Str. IX), rather than the overlying shell. Because stratigraphic excavation in the south half of TU6 did not commence until we reached the sand layer (Str. IX), we cannot comment in detail on the distribution of bone and artifacts in the overlying shell except to note that vertebrate fauna were relatively numerous (n = 2028; 876.4 g in Profile Cut sample; Table 5-6), and pottery was entirely absent. One biface fragment, 8 flakes, 6 pieces of modified bone, and 4 fragments of marine shell were also recovered from the Profile Cut.

The third macrounit of TU6 consists of Str. XI-XII, roughly 50 cm of well stratified shell and sand deposits consisting of laterally extensive, flat-lying, and heterogeneous strata of variable thickness (5-25 cm), much like those of TU5. The uppermost stratum (Str. XI) consists of very dark grayish brown medium sandy loam with crushed shell, including Unionid, and charcoal. This gives way to a 5-10-cm thick stratum (Str. XII) of brown medium sandy loam with moderate amounts of whole and crushed shell followed by a 25-cm-thick stratum (Str. XIII) of dark grayish brown medium sandy loam with whole and crushed *Viviparus* and discontinuous stringers of crushed Unionid shell and charcoal. Throughout these strata were observed in plan small (10-20 cm) pockets of charcoal rich matrix and concreted shell that mimic the structure and disposition of post holes. Although these anomalies were recorded as possible cultural features in the plan drawings of level forms, experience has since led us to infer that these are actually mineralized and/or burned root casts common to shell-bearing deposits across the site. Examples are illustrated in the north profile of TU6 (Figure 5-11) at the base of Str. XIII. The irregular outline of these anomalies in profile attests to their status as tree roots. Despite disturbances such as these, the strata of this third macrounit of TU6, like that of TU5, is indicative of repeated and generally consistent deposition of shell, vertebrate fauna, ash, charcoal, and occasional preceramic-aged artifacts on relatively flat, accretional surfaces. The density of vertebrate fauna and artifact is not terribly great throughout this macrounit, and, in fact, diminishes with depth (Levels B-E; Table 5-6). Still, repeated microlayers of crushed shell, charcoal, and ashy sand attest to relatively intensive, repeated activity throughout the time this macrounit accumulated.

The basal macrounit in TU6 consists of Str. XIV and XV, very dark grayish brown fine sandy loam with a trace of shell that lightens with depth as shell disappears altogether. This is essentially the buried ground surface on which the upper strata accumulated. Although this fourth macrounit is generally devoid of shell, vertebrate fauna register an increase with depth over the macrounit above (Levels F-K; Table 5-6), accompanied by several lithic artifacts and pieces of modified bone. A crumb sherd with spiculate (St. Johns) paste from Level J is clearly intrusive. Despite the lack of shell in this basal unit, we are confident that the vertebrate fauna and artifacts contained therein are not merely translocated down from above, but are instead indicative of occupations that slightly predate the accumulation of shell and associated materials.

Because TU6, like all other test units in Locus A to date, was excavated for stratigraphic purposes, observations on matrices in planview were minimal, precluding the detection and sampling of all possible features. However, TU6 revealed a relatively high frequency of pit features, some of which were recorded, sectioned, and sampled as such. The largest of these was Feature 6, a 18+ cm deep basin some 60 by 75 cm in plan. Feature 6 appears to have been dug from the top of Str. IX, the brown sand layer, although it may very well have emanated from higher up, like the one noted above in the north profile. After recording it in plan, Feature 6 was sectioned and the south half removed for processing through ¼-inch screen. The fill consisted of brown to dark brown fine-medium sand with moderate amounts of *Viviparus* and traces of other shell and a moderate density of vertebrate fauna. No artifacts were recovered from the south section. The north section was left unexcavated in the north pedestal of the unit. In profile, the basin expresses a flat bottom and slightly flaring walls (a photograph of which can be seen in the north profile of Figure 5-11). Some concreted shell was observed along the southeast edge of the base, although it was not clear if this was truly a basal deposit or part of the matrix of the underlying stratum (Str. XI). A sample of wood charcoal from the fill of the south half of Feature 6 was submitted for AMS dating and returned a conventional age estimate of 5290 ± 40 BP.

Three other features were sampled in the south section of TU6; none of the features besides Feature 6 recorded in the north section of TU6 was excavated and thus remain intact beneath backfill. Feature 10 is a 20 x 35-cm circular pit whose upper portion was truncated by mining operations (Figure 5-10). The remnant observed at ca. 107 cmbs was sectioned and the south half removed for ¼-inch screening, and the north half recovered for flotation. The very dark grayish brown fine sandy loam of the fill contained equal amounts of bivalve and *Viviparus* shell, along with a moderate density of vertebrate fauna (including several catfish spines), and some charcoal, but no artifacts. Feature 11 is a 15 x 15-cm circular patch of concreted shell in a brown sandy matrix. Only about 5 cm deep, the concreted mass was removed in its entirety to reveal an amorphous outline. It is likely that this mass, like the concreted masses at the base of Str. XIII, is merely a portion of a root cast. Finally, Feature 12 is a 21 x 22-cm circular pit with abundant charcoal and a small amount of vertebrate fauna and *Viviparus* shell in a black sandy matrix. Upon sectioning the feature and removing the south half we determined it was likely to be a burned tree root.

In sum, TU6 generally recapitulated the results of stratigraphic testing in TUs 5 and 8, but with less complexity to the upper shell and sand strata and a greater frequency of pit features. The artifact content and radiometric age estimate of strata in TU6 also matches those of TUs 5 and 8. Deviations between the two units in terms of stratigraphic sequence became interpretable following the excavation of Test Units 9, 10, and 15, to which we now turn.

Test Units 9, 10, and 15

The largest exposure of stratigraphy in the Locus A shell ridge came in 2008 with the excavation of three contiguous 2 x 2-m units (TUs 8, 10, and 15) in a mining escarpment in the west-central portion of the ridge (Figure 5-1). The escarpment in this location is one of the few that deviates from the tendency for escarpments to run parallel with the length of the ridge and the spring run. Not quite perpendicular to the long axis of the ridge, the rectangle formed by these three units provided a good opportunity to view stratigraphy in the core of the deposit. Moreover, the six-meter-long profiles of these contiguous units enabled observations to be made about the horizontal relationships among depositional units lying at the same stratigraphic level. What came to be known to field school students as “the trench” proved to be insightful about stratigraphic variations observed in the earlier, smaller exposures, particularly the relationship between emplaced sand and shell.

The strategy for excavating the trench was similar to that used for the other test units but with some modifications. Having staked out three contiguous 2 x 2-m units in

Figure 5-12. View facing south of the excavation of Test Unit 9 (foreground) and Test Unit 10 (background), 8LA1-West, Locus A.

the slope of the escarpment, the end units were opened first, TU 9 at the north end, TU10 at the south end (Figure 5-12). The intervening unit (TU15) was left intact until units of either side of it were completed in order to preserve the respective north and south profiles. Otherwise, excavation procedures followed those outlined above for the earlier test units. Each of the three test units was subdivided into west and east subunits, with the western (upslope) ones unexcavated below the depth of the Profile Cuts (~50 cmbs), and the eastern (downslope) subunits excavated completely to base. Excavation of the subunits proceeded without surprise as the lower deposits mimicked those of earlier test units, with exception of a greater level of concretion near the base, requiring field school students and supervisors to wield rock hammers and pick axes to penetrated to the base.

Considerable effort was expended on recording stratigraphy of the trench upon completion of excavation. Profile drawing followed the usual protocols, but was tedious given the length and complexity of the exposure (Figure 5-13). Photographing the trench profiles, however, required more than the usual method. To capture the detail of the 6-m-long profile, we collected a series of close-up digital shots at ~ 40-cm intervals along stacked horizontal transects. Individual photographs were stitched together in Adobe Photoshop to create the photo mosaic of the entire profile shown in Figure 5-14. The corresponding profile drawing is presented in Figure 5-15, with descriptions of all recorded strata provided in Table 5-7 and an inventory of all artifacts, vertebrate fauna, and miscellaneous items given in Tables 5-8 and 5-9.

Figure 5-13. Recording stratigraphic profiles of the trench (TUs 9, 10, 15), 8LA1-West, Locus A.

The same four macrounits observed in profiles at the other two test locations are evident in the west profile of the trench. However, intervening in the center of the profile of the trench is a massive disturbance, labeled in Figure 5-15 as Feature 21. This anomaly was initially interpreted as a large pit feature, but once the lower portion was exposed, the tap root to a mature tree became apparent. Unfortunately, the disturbance is positioned directly between two distinct deposits in what we refer to as the second macrounit in the other test units. Although the facies of these depositional units is compromised by the disturbance, enough of the profile is preserved to make sound inferences about the sources of lateral variation, its relationship to the macrostrata or other units, and, ultimately, its relevance to interpreting site use.

The upper macrounit of the trench is similar to those of the other units and therefore warrants no further discussion except to note that the massive disturbance of the tree extends to nearly the surface. This does not imply that the tree was recent if we are to accept that this upper macrounit was emplaced long ago, and not simply the byproduct of mining operations in 1923. Comprised of ca. 20 cm of very dark grayish brown fine sandy loam with only occasional whole *Viviparus* shell, Str. I at the very top is consistent with upper strata observed elsewhere, but the remaining portion of this macrounit (Str. II) varies wildly in color, content, and structure. The seeming disarray of these underlying strata, particularly at the north end of the profile, is probably related to the adjacent tree disturbance, but that remains uncertain. Clearly the disturbance had its greatest impact on the upper macrounit, arguably affecting more than three-fourths of the profile.

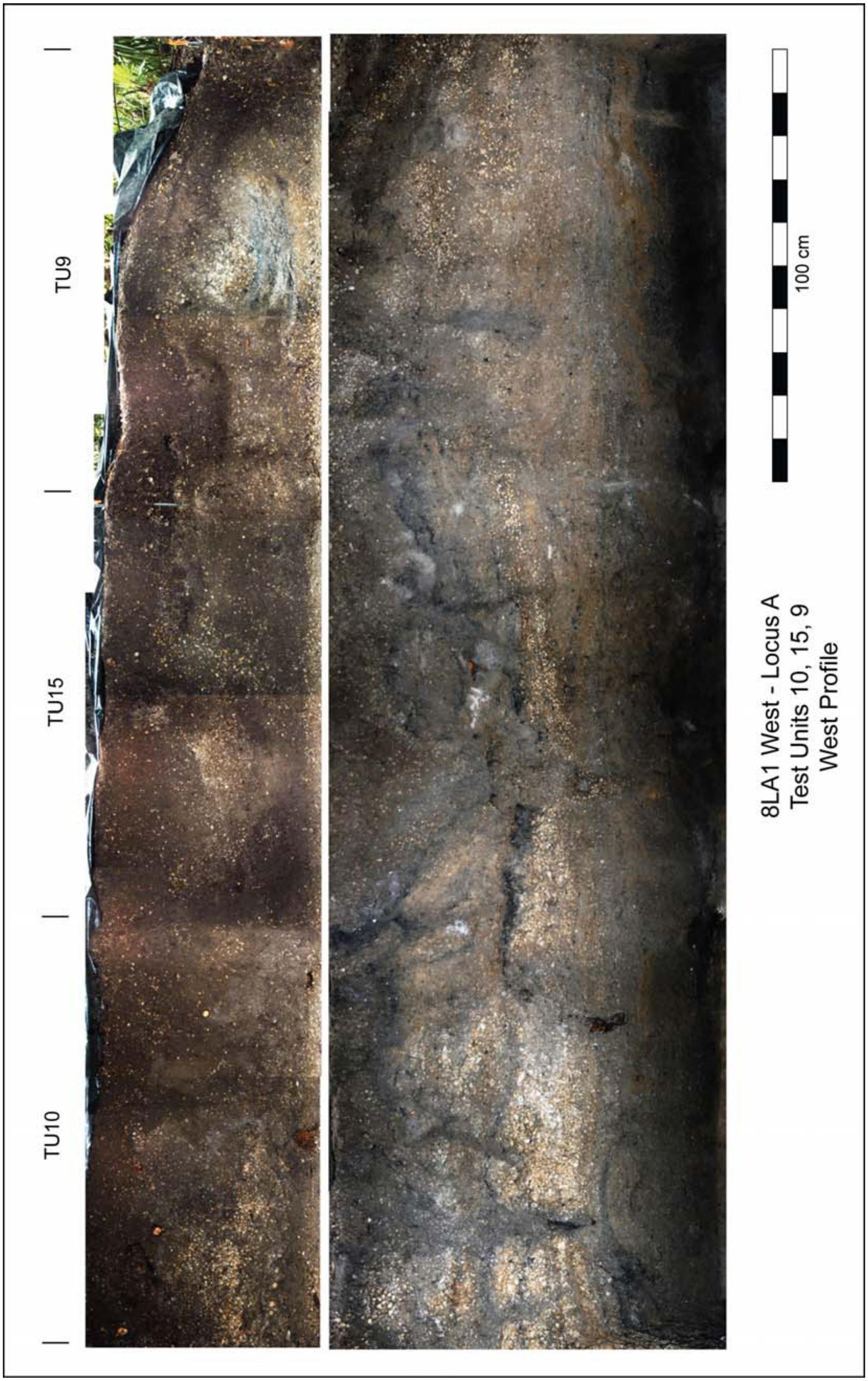

Figure 5-14. Composite photograph of the west profiles of Test Units 9, 10, and 15, 8LA1West-Locus A.

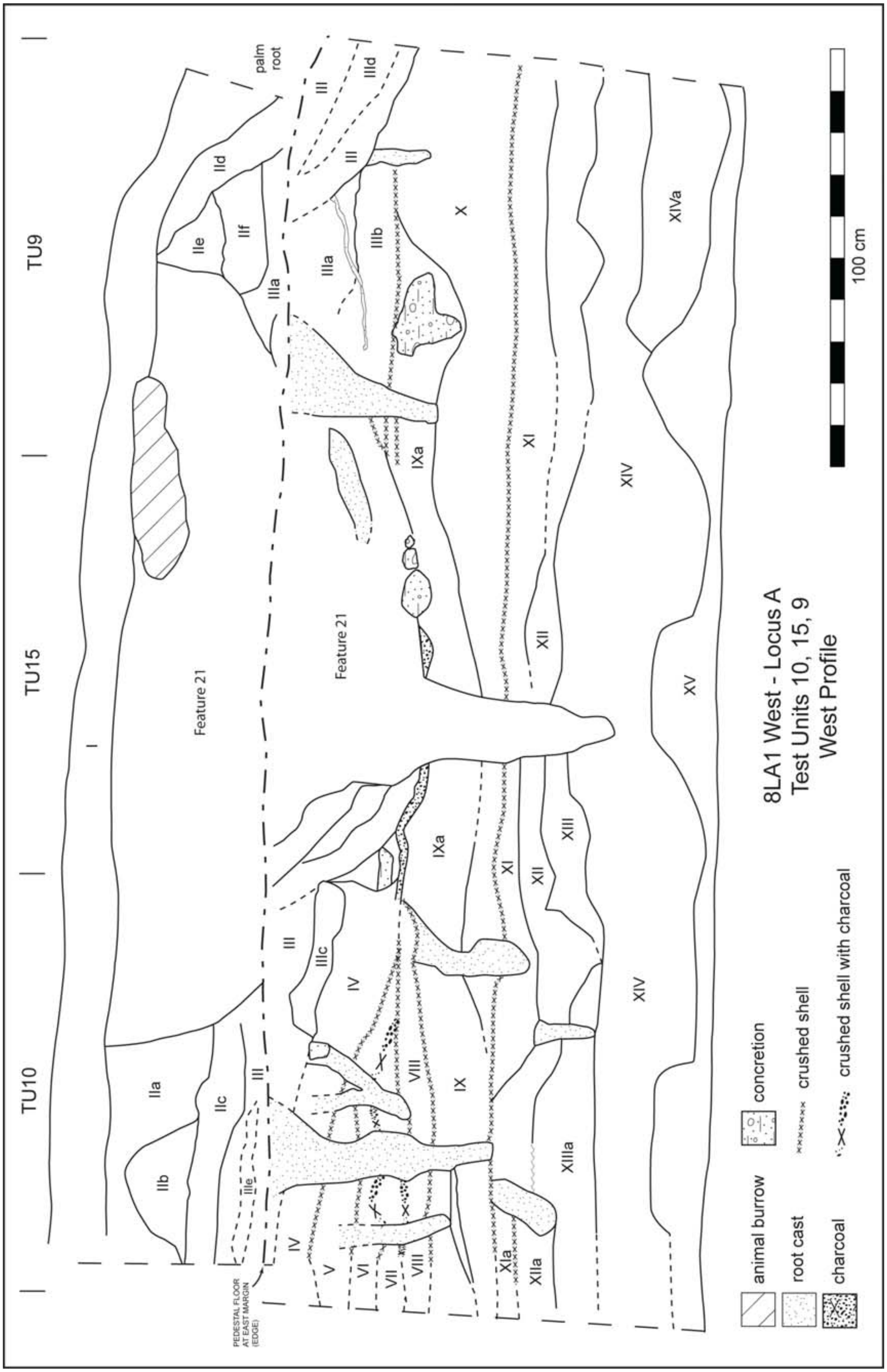

Figure 5-15. Line Drawing of west profile of Test Units 10, 15, and 9, 8LA1-West, Locus A.

Table 5-7. Stratigraphic Units of West Profile of Test Units, 9, 10, and 15, 8LA1-West, Locus A.

Stratum	Max. Depth (cm BS)	Munsell Color	Description
I	47	10YR3/2	very dark grayish brown fine sandy loam with surface root mat and occasional whole *Viviparus* shell
IIa	75	10YR3/1	heterogeneous matrix of very dark gray sandy loam with *Viviparus* shell, charcoal, sand stringers, and roots
IIb	70	10YR4/2	dark grayish brown sand with whole *Viviparus* shell
IIc	92	10YR4/2	whole and crushed *Viviparus* and *Pomacea* shell in dark grayish brown sand
IId	76	10YR3/2	hetereogeneous shell in very dark grayish brown loam
IIe	54	10YR5/3	whole *Viviparus* and *Pomacea* shell with charcoal in trace of brown sand
IIf	74	--	crushed and burned Unionid shell with ash and no sand
III	110	10YR3/2	very dark grayish brown sandy loam
IIIa	118	10YR5/3-4	brown to yellowish brown ashy sand with crushed *Viviparus* shell
IIIb	139	--	whole *Viviparus* with little matrix
IIIc	133	10YR4/3	brown sandy loam
IIId	98	10YR3/2	hetereogeneous shell in very dark grayish brown loam
IIIe	98	--	whole and crushed *Pomacea* shell, no matrix
IV	157	10YR4/2	heterogeneous whole and crushed shell including abundant crushed Unionid in dark grayish brown sand
V	160	--	whole and crushed *Viviparus* and Unionid shell with minimal matrix and occasional charcoal (5130±40 BP)
VI	158	--	whole and crushed *Viviparus* and Unionid shell with minimal matrix
VII	167	10YR4/2	heterogeneous, abundant crushed shell in dark grayish brown sand (5150±50 BP)
VIII	180	--	whole and crushed *Viviparus* and *Pomacea* with minimal matrix

Table 5-7. Continued.

IX	208	--	whole and crushed *Pomacea* with occasional *Viviparus* shell in minimal matrix
IXa	196	10YR6/6	whole *Viviparus* shell in trace of brownish yellow sand
X	195	10YR5/4	yellowish brown fine ashy sand with abundant whole *Viviparus* and occasional crushed Unionid shell and charcoal throughout
XI	228	10YR4/2	dark grayish brown ashy sand with moderate whole and crushed *Viviparus*, *Pomacea*, and Unionid shell and charcoal throughout; crushed Unionid shell lens at top of stratum
XII	255	10YR5/6	yellowish brown sand mottled with 10YR4/2 dark grayish brown sand with occasional crushed shell and charcoal
XIII	256	10YR5/2	whole and crushed *Viviparus*, *Pomacea*, and Unionid shell in grayish brown ashy sand with charcoal throughout
XIIIa	259	10YR4/2	whole and crushed *Viviparus*, *Pomacea*, and Unionid shell in dark grayish brown sand with occasional charcoal (5400±40 BP)
XIV	305	10YR4/3	concreted ashy brown sand with occasional whole and crushed *Viviparus* and Unionid shell and flecks of charcoal throughout
XIVa	270	10YR3/2	very dark grayish brown sand with occasional whole and crushed *Viviparus* shell
XV	310	10YR6/2	light brownish gray medium sand lacking shell

The second macrounit observed elsewhere consists of complex layers of shell and sand, often in tilted or dipping depositional structures. Portions of the trench profile not affected by the tree disturbance reflect the full range of variation seen in the second macrounits of the other profiles. At the south end of the profile, Str. IV-VIII represent alternating thin layers of shell in varied condition and with varying amounts of clastic material, similar to those seen in the west profile of TU5. In the trench profile, the strata of these microunits dip to the north. At the top of this sequence (Str. IV) is a relatively thick layer of dark grayish brown sand with whole and crushed shell, including abundant crushed Unionid shell. This stratum lies conformably on a thin lens of crushed shell, followed immediately by whole and crushed *Viviparus* and Unionid shell with minimal matrix and occasional charcoal (Str. V). Charcoal pulled from a bulk sample of Str. V

Table 5-8. Inventory of Lithic, Ceramic, and Historic Artifacts Recovered from Level Excavation of Test Units 9, 10, and 15, 8LA1-West, Locus A.

Level	Lithic Flake (n)	Lithic Flake (g)	Utilized Flake (n)	Hafted Biface/ Biface (n)	Orange Plain Sherd (n)	St. Johns Plain Sherd (n)	Crumb Sherd (n)	Sand-. stone (n)	Sand-. stone (g)	Historic Artifacts (g)
TU9										
Profile Cut*	10	10.7		2	2	1	8			
A (Zone B)	1	1.0	1							
TU9A										
A (Zone A)	5	10.4	2		4		4			
C (Zone A)							2			
D	2	6.4		2						
F				1						
G	1	0.5	2							
H	2	0.4	2							
I	1	0.5						1	38.0	
J	7	12.3								
L	2	2.8								
M	4	2.6	1							
N	2	1.8						1	71.2	
TU9B										
A	1	2.1								
Subtotal	38	51.5	8	5	6	1	14	2	109.2	
TU10										
Profile Cut**	12	12.7				7				1.5
TU10A										
A (Zone A)	1	0.6					3			
B (Zone A)						1				
C (Zone B)	1	0.4								
F	3	3.7								
G			1							
I	1	0.2		1						

Table 5-8. continued.

Level	Lithic Flake (n)	Lithic Flake (g)	Utilized Flake (n)	Hafted Biface/ Biface (n)	Orange Plain Sherd (n)	St. Johns Plain Sherd (n)	Crumb Sherd (n)	Sand-. stone (n)	Sand-. stone (g)	Historic Artifacts (g)
TU10A										
J	4	1.3								
K	3	0.9								
L	4	1.3								
M	3	0.4								
N	2	0.3								
O	1	0.3								
TU10B										
A	4	7.0			1	2	10			
Subtotal	39	29.1	1	1	1	10	13			1.5
TU15										
Profile Cut	6	9.6	1	1		8	16			4.3
TU15A										
Profile Cut	9	18.4		1		4	5			3.0
A (Zone C)	1	0.2								
B (Zone D)								2	5.5	
C	1	0.3								
D	2	0.5								
E (Zone B)	1	0.3								
F	2	0.7		1				1	3.5	
G	1	0.3								
H	2	0.4								
H (Zone A)	4	1.7								
I	6	3.3						1	19.2	
J	1	0.1								
K	1	0.1								
L	1	1.2					1			

Table 5-8. continued.

Level	Lithic Flake (n)	Lithic Flake (g)	Utilized Flake (n)	Hafted Biface/ Biface (n)	Orange Plain Sherd (n)	St. Johns Plain Sherd (n)	Crumb Sherd (n)	Sand-. stone (n)	Sand-. stone (g)	Historic Artifacts (g)
TU15B										
Profile Cut						1				
Baulk S. Wall	3	1.9			5	6	8			
A	4	1.7		1		1	20			
B				1		4	6			
C	5	1.4								
Subtotal	50	42.1	1	5	5	24	56	4	28.2	7.3
Total	127	122.7	10	11	12	35	83	6	137.4	8.8

* plus one St. Johns Check Stamped sherd, 2.3 g; one polished stone bead fragment, 62. g
** plus one St. Johns Check Stamped sherd, 1.9 g

Table 5-9. Inventory of Marine Shell and Vertebrate Fauna Recovered from Level Excavation of Test Units 9, 10, and 15, 8LA1-West, Locus A.

Level	Marine Shell Fragment (n)	Modified Marine Shell Frag. (g)	Vertebrate Fauna (n)	Vertebrate Fauna (n)	Modified Vert. Fauna (n)	Modified Vert. Fauna (g)	Bone/Shell Concretion (g)
TU9							
Profile Cut	2		670	488.3			1.4
A (Zone A)			33	12.9			
A (Zone B)	1		18	13.3			
TU9A							
A (Zone A)	1		563	187.3			
B (Zone A)			48	23.5	1	1.2	
B (Zone B)			27	12.6			
C (Zone A)			38	37.6			
C (Zone B)			32	70.0			
D			79	56.9			
E	1		201	132.7			4.9
F			84	78.4			74.3
G	3		85	67.1	1	1.0	
H			86	52.0			2.7
I			82	65.5			0.8
J*			300	99.3	4	3.3	14.8
K			168	31.9			
L			254	79.4			18.8
M		1	117	25.9			18.3
N			30	10.5			4.8
Clean-up	1		12	8.6			
TU9B							
A	3		71	35.3			0.3
Subtotal	12	1	2998	1589.0	6	5.5	141.1
TU10							
Profile Cut	2		1585	725.7	7	14.9	3.3
TU10A							
A (Zone A)			149	64.0			

Table 5-9. continued.

Level	Marine Shell Fragment (n)	Modified Marine Shell Frag. (g)	Vertebrate Fauna (n)	Vertebrate Fauna (n)	Modified Vert. Fauna (n)	Modified Vert. Fauna (g)	Bone/Shell Concretion (g)
TU10A							
A (Zone B)			123	103.3			
B (Zone A)			54	25.8			
B (Zone B)			27	29.5			2.0
C (Zone A)			40	26.6			
C (Zone B)		1	1159	465.6			65.3
D		1	1207	409.7			34.5
E			792	180.3			7.6
F	1		1240	384.2			27.4
G			367	147.1			
H			217	110.4			14.5
I			503	254.2			5.4
J			147	113.0			9.3
K			308	142.7	1	0.7	11.0
L			194	130.1			7.1
M		1	182	212.2			9.9
N		1	95	28.9			7.6
O			42	27.8			0.8
P			6	7.4			
TU10B							
A			1057	364.7	3	8.0	3.8
B	1		493	154.6			9.8
C			601	193.9	2	7.6	24.2
Subtotal	4	4	10,588	4278.9	13	31.2	243.5
TU15							
Profile Cut	2		1415	888.3	4	5.7	10.2
TU15A							
Profile Cut	5		1805	1002.3	6	21.4	471.4
A (Zone A)			48	24.4			2.6
A (Zone B)			250	68.4			9.9

Table 5-9. continued.

Level	Marine Shell Fragment (n)	Modified Marine Shell Frag. (g)	Vertebrate Fauna (n)	Vertebrate Fauna (n)	Modified Vert. Fauna (n)	Modified Vert. Fauna (g)	Bone/Shell Concretion (g)
TU15A							
A (Zone C)			22	7.3			3.8
A (Zone D)		1	108	31.0			52.1
A (Zone E)			53	14.8			6.5
A (Feature 21)			62	18.3			11.1
B (Zone A)			7	1.6			1.8
B (Zone B)			186	53.7			9.8
B (Zone D)			375	133.1			122.4
B (Zone E)			19	4.2			3.0
B (Feature 21)			39	10.2			2.5
C			765	292.1			35.2
D			482	170.2			12.7
E (Zone A)			73	41.5			
E (Zone B)	8		227	147.5			
F	1		344	133.7	1	0.2	33.6
G	2		264	171.5			10.1
H	2		355	217.3			7.7
I			284	170.2			23.2
J			260	119.6			20.2
K			123	62.1			31.0
L			113	50.8			
TU15B							
Profile Cut			84	33.8			
A	3	1	914	410.4			
B	1		727	278.0	2	7.1	0.8
C	1		665	368.5	4	7.5	
Baulk South Wall			577	200.6	1	4.3	
Subtotal	25	2	10,646	5125.4	18	46.2	881.6
Total	41	7	24,232	10,993.3	37	82.9	1266.2

* plus 0.5 g paleofeces

returned an AMS age estimate of 5130 ± 40 BP. The three successive strata beneath Str. V are each separated buy a thin lens of crushed shell, the next (Str. VI) consisting of whole and crushed *Viviparus* and Unionid shell with minimal matrix, followed by (Str. VII) abundant crushed shell in a dark grayish brown sand, and then (Str. VIII) whole and crushed *Viviparus* and *Pomacea* shell with minimal matrix. A piece of charcoal pulled from a bulk sample of Str. VII returned an AMS age estimate of 5150 ± 50 BP, statistically identical to the age estimate of the charcoal two layers above.

The last four strata just described at the south end of the profile, ca. 157-180 cmbs, appear to represent rapidly successive deposition acts, each followed by activity that led to the crushing of shell at the surface (e.g., trampling). Charcoal is prevalent in two of these crushed shell lenses. A series of root casts interrupt the sequence in three places, but the larger subunit was not truncated by the central tree disturbance (Feature 21), as was apparently the overlying Str. IV.

The base of this mounded sequence of shell takes a dip upward to the north, against the dip of its upper strata. The base of Str. XIII is likewise underlain with a thin lense of finely crushed shell, which was truncated by the central tree disturbance, but continues on the north end of the profile, where its upward dip flattens. Below this crushed shell across the southern three-fourths of the profile is a thick stratum of shell. The southern subunit of this larger, deeper stratum (Str. IX) consists of crushed and whole *Pomacea* shell and occasional *Viviparus* shell with virtually no clastic matrix. Continuing northward the stratum becomes dominated by whole *Viviparus* shell in a trace of brownish yellow sand (Str. IXa). This stratum overlaps the south-dipping Str. X, consisting of yellowish brown fine ashy sand with abundant, whole *Viviparus* shell, occasional crushed Unionid shell and particulate charcoal throughout. Strata IX and X complement one another to form a 20-30 cm thick layer, with Str. X clearly emplaced first. Beneath this layer is yet another thin lens of crushed shell, this one extending across the entire profile at a flat grade. This deepest crushed shell lense, ~200 cmbs, marks the base of the second macrounit and the top of the third.

As described earlier for the other test units, the third macrounit of the ridge consists of laterally extensive and heterogeneous shell and sand layers with abundant charcoal, ash, and occasional concreted shell/sand, and with a vertebrate faunal assemblage that decreases with depth. All this applies to the third macrounit in the trench (Str. XI-XIII). However the trench deposits were far more concreted in places compared to those of TUs 5 and 6. Because of the concretion, it was not easy to distinguish between this macrounit and the basal unit, interpreted elsewhere as a sub-ridge midden, conformant with the ground surface on which sand and shell was emplaced in large quantities. Moreover, a series of pit-like features appears to extend beyond the base of the third macrounit, evident in the west profile as an undulating contact between Str. XIV (concreted ashy brown to grayish brown sand with shell) and Str. XV (light briowning gray sand lacking shell). A sample of charcoal pulled from the bulk sample of Str. XIIIa of the third macrounit returned an AMS age estimate of 5400 ± 40 BP, the oldest age estimate for the ridge, and indeed the entirety of 8LA1. Minimally, about two centuries separate the deposition of the second and third macrounits in the trench, while the age estimates for the third macrounits in TU5 and the trench overlap statistically by a large margin.

The distribution of artifacts and vertebrate fauna in the trench provide insight on the processes resulting in differential deposition. Gross comparisons across the test units from north to south are instructive. The northernmost unit, TU9, had the lowest density of vertebrate fauna (n = 2998; 1589.0 g), while the units to the south (TUs 10 and 15) each had over three times the bone (TU10: n = 10,588; 4278.9 g. TU15: n = 10,646; 5125.4 g). Test Unit 9, however, had its share of arifacts including five bifaces/biface fragments, eight uiltized flakes, and 13 pieces of marine shell. The adjoining TU15 had a comparable artifact assemblage, but TU10, to the south, yielded only a few tools and less marine shell. Of course, these figures are not terribly indicative of variations within each test unit, and indeed there are measurable differences in the density of vertebrate fauna and artifacts from top to bottom within units. We noted already the diminished density of vertebrate fauna with depth in the third macrounit. The method of excavation did not permit nuanced comparisons of strata crosscut by excavation levels, that is, those with dipping profiles. Still, we can refine the comparison across at least one macrounit for levels within intact subunits. For instance, the combined faunal assemblage of Levels A-E in TU9 (the north half of the second macrounit, dominated by the thick sand-and-shell stratum, Str. X) amounts to 988 pieces weighing 520.6 g. In its counterpart at the south end of the profile, where thinly stacked shell layers are separated by crushed shell (Str. V-VIII), the frequency of bone is more than three times greater by count (n = 3551) and nearly three times by weight (1304.8 g). The contrast in tool frequency noted above holds as well, albeit among a small subset of the total assemblage from the trench. In all aspects, the stone, bone, and shell assemblage is consistent with the Mount Taylor estimates from AMS assays, as well as the material culture of the tradition found throughout 8LA1 and elsewhere in the region. Finally, we note that the trench actually yielded a relatively large assemblage of pottery (n = 130), although just under two-thirds (n = 83) are crumb sherds. The remaining inventory consists of 12 small Orange Plain sherds, and 35 small St. Johns Plain sherds. As with the other test units, sherds in the trench were concentrated in the scree deposits of the mining escarpment. In addition, the central tree disturbance accounted for a large fraction of the assemblage. On balance, the artifact inventory and AMS assays from the trench substantiate the inference that the entire shell ridge of Locus A, with the possible exception of its upper macrounit of "topsoil," formed during the Mount Taylor Period, ca. 5400-5150 BP, or 6300-5750 cal BP.

INTERPRETATION OF STRATIGRAPHY

Thus far we have available for observation three stratigraphic profiles of the shell ridge at Locus A that reached the pre-ridge surface: A 2 m-wide section at the eastern end of the ridge (TU5); a 2-m section near the western end of the ridge (TU6); and a 6-m-wide section in between (TUs 9, 10, 15). The shallowest profile (TU6) is a bit over 2 m tall; the other two are just over 3 m tall. The previous sections provided details on each of the stratigraphic sequences, artifact and vertebrate fauna distributions, and radiocarbon assays. In this section we provide an interpretive sketch of the stratigraphic sequences observed to date. Although our sample is relatively small considering the large size of the total deposit, our test units were distributed widely across available escarpments, stretching nearly 100 m from east to west. Despite obvious variation in the composition of each profile, the similarities far outweigh the differences, and radiocarbon assays show that all accumulations are coeval.

Figure 5-16 is a schematic illustration of all profiles arranged in geographic order from west to east, and scaled for relative elevation using our arbitrary values from the site-wide grid (with Datum A at 10.00 m). At the base of each profile lies a pre-ridge surface stratum (i.e., buried A horizon) that has been organically enriched through the addition of vertebrate fauna, ash, charcoal, paleofeces, occasional shell, and related by-products of human activity. The density of artifacts and food remains is not especially great in this basal midden, and in many places it is partially concreted. Accumulated over this original ground surface/midden are a series of thin, lateral extensive and flat strata of shell and sand, again with abundant ash, some charcoal, and a tendency to be concreted in some places. A two-sigma calibrated age range of 6190-5940 cal BP from a charcoal sample in TU5 overlaps 70 years with the calibrated age range of a charcoal sample from a counterpart provenience in the trench (6290-6120 cal BP). More samples are needed to substantiate the inference that occupation of the landform at this time extended the full length of the shell ridge, but nothing in the stratigraphy and its dating thus far undermines that inference.

The tops of these accretional macrounits in all test units began to receive deposits of brown sand without delay and on the tops of sand strata some 20-40 cm thick shallow pits (basins?) were often dug and presumably used for functions involving heat (e.g., fire hearths). Only one such pit feature has been dated: Feature 6 in TU6, with a calibrated age range of 6190-5940 cal BP, again a 70-year overlap with the lower age estimates and thus all possibly coeval and not likely separated by more than a few decades.

What are the possible sources for the sand emplaced on accretional midden? Sand is hardly at a premium in the immediate vicinity, but if the three profiles we have observed truly reflect the emplacement of 20-40 cm of sand over midden across the entire extent of the shell ridge, then about 2000 cubic meters of sand are implicated. Remarkably, that is about the volume of the "sinkhole" that lies only 50 m south of the very center of the ridge (Figure 5-16 inset). Assumed to be a natural collapse feature, this ~2500 m^3 depression may actually be the borrow pit from which sand was excavated long ago. An effort to investigate this possibility is clearly warranted.

The presence of a ridge-wide stratum of emplaced sand implicates the excavation and transport of a large volume of fill 6000 years ago. Elsewhere in the region, Mount Taylor communities mounded sand, apparently as part of mortuary practice (e.g., Aten 1999). Sand may have been incidental to a larger program of shell mounding early on, but by the Thornhill Lake phase of the Mount Taylor period (ca. 5500 cal BP, a century or two after Locus A at 8LA1-West reached its full form), sand mounds were at least occasionally built expressly for mortuary purposes (Endonino 2010). The shell ridge at 8LA1-West was never expressly mortuary, and despite the presence of two subadults in

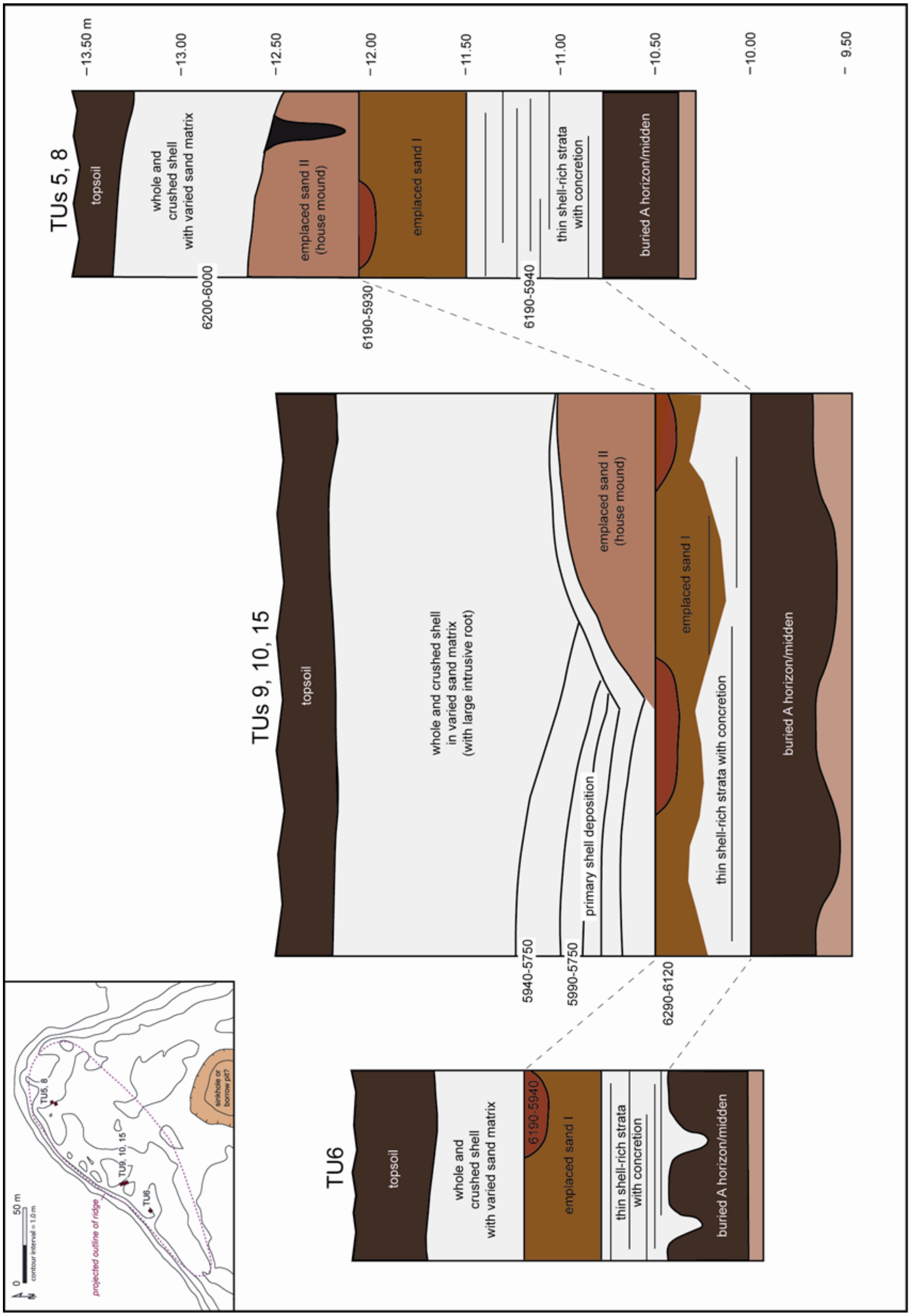

Figure 5-16. Schematic model of the stratigraphic sequences observed in test unit profiles of 8LA1-West, Locus A.

TU8 at the east end of the ridge, we have no indication that other burials exist in the ridge, let alone interred in dedicated cemeteries. Rather, the emplacement of sand may be more generally tied to traditions of renewal or rejuvenation, as in the "cleansing" of an extant living surface on which food remains and other debris had accumulated. Certainly such actions can be considered practical, but worthy of consideration is the possibility that the emplacement of sand was more a symbolic act that a practical affair.

The pattern of deposition changed markedly shortly after the accretional deposits were laid and after the first sand layers were put in place. Deposits of shell and sand thereafter accumulated in nodal fashion, presumably in low mounds no more than a few meters in diameter and about one-half meter high. We have not exposed enough of a profile to see one of these units in full cross-section, but we have a good sense of their form and internal structure from investigations at Hontoon Dead Creek Village (8VO215) to the south (Randall 2010). At this former field school site sand may not have been mobilized to build "house" mounds because of the prevalence of shell, but no matter the material used, the outcome is the same: a slightly elevated platform on which some sort of structures may have been built. We remain frustrated by the lack of direct evidence for architecture (e.g., postholes), or bona fide "house floors." We do, however, have ample evidence for activity surfaces in the form of crushed shell lenses. The stacked sequence of crushed shell lenses in the south half of the trench profile is perhaps a good example of the accretion of shell midden adjacent to houses sited on low sand mounds. If so, there would appear to have been a more spatially differentiated use of the ridge after the sand was emplaced that involved separations of different materials, perhaps under different material circumstances or new cultural preferences.

The emphasis of investigation at Locus A has been on the stratigraphic sequence of the mining escarpments. Little attention has been given thus far to the artifact and vertebrate fauna assemblages other than to note they are consistent with a Mount Taylor cultural affiliation. There is one other very important point to be made about the artifact assemblage recovered from our test units of the ridge. Figures 17-19 present respective samples of the lithic, modified bone/antler, and marine shell artifacts recovered from all test units. This may seem like a small assemblage for the amount of testing undertaken, it is far greater in density and diversity than the assemblage from Hontoon Dead Creek Mound (8VO214), whose excavated volume was more than twice that of Locus A. We have argued that mounding at this earlier Mount Taylor mound was ritualized, and that communities responsible for its accumulation did not live directly on the mound (Sassaman and Randall 2012). That would not seem to be the case at Locus A, the apparent dwelling of communities that built houses atop accretional ridge, and processed foods, burned fires, discarded inedible waste and broken tools, and all other tasks associated with domestic living. The contrast between Hontoon Dead Creek Mound and the ridge at Locus A reminds us that internal differences in what appear to be similar deposits (i.e., linear shell ridges) are to be expected, reflecting both the mudane and ritual aspects of Mount Taylor living. Moreover, the emplacement of sand at Locus A does to show that the line between ritual and mundane practice cannot be drawn too sharply for people who were not subject to the sensibilities of the modern distinction.

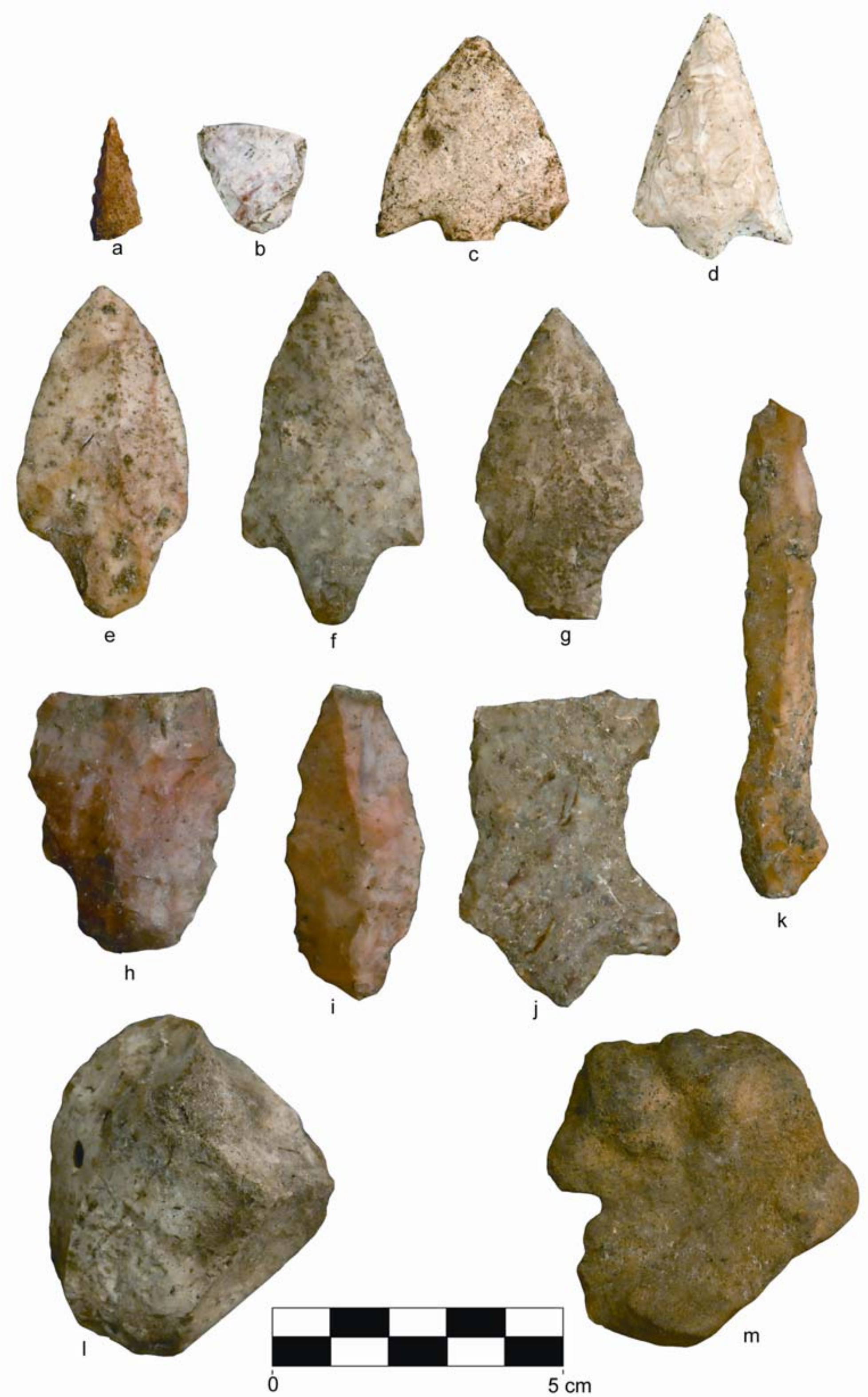

Figure 5-17. Select lithic artifacts from test units of Locus A. a. TU8-L-Zone A; b. TU15B-A-5; c. TU15A-profile cut; d. TU5-profile cut; e, f. TU9A-D; g. TU5 East-H-Zone C; h. TU5 East-J-Zone E; i. TU9A-H; j. TU6 South-B; k. TU9A-H; l. TU5 East-K-Zone E; m. TU9A-N.

Figure 5-18. Modified bone and antler from test units of Locus A. TU6-South: a. C-3; b. D-1; c. E-1. TU9A: d. J-1; e. G-1; f, g. B-Zone A-2. TU10B: h. C-1; i. A-7. TU10A: j-l. I-2. TU15A: m, t. profile cut, Zone B-1; r. profile cut-1. TU10: n-q. profile cut-1; TU15B: s. baulk Zone B-2; u. C-1; 10B: v. A-7; TU5: w, x, ff, gg. profile cut; TU5 East: y, z. D-Zone A-2; aa, bb. J-ZoneE-2; TU8: cc. D-2; dd, ee. D-1.

Figure 5-19. Marine shell artifacts from test units of Locus A. a. TU8-M-Zone A; b. TU9A-M; c. TU10A-D-1; d. TU8-K-Zone B; e. TU6 Surface.

Finally, the cap of earth on top of all the profiles begs explanation for the accumulation of upwards of 50 cm of clastic material on the landform apparently removed from significant sources of alluvial, colluvial, and aeolian deposition. We at first attributed the upper stratum ("topsoil" in Figure 5-16) to pedogenesis following mining, that is, soil development since 1928. Given the lack of a obvious source of natural deposition, this scenario seems unlikely, nor is it likely that this surface stratum was the "spoil" of mining, because it is too pervasive and uniform to have been merely happenstance. We suspect it was emplaced by humans, in a "capping" event not unlike the earlier caps of sands, and not unlike the shell capping of Locus B (see Chapter 6). There is certainly sufficient development of this stratum (organic enrichment and bioturbation with shell strata below) to suggest it has been in place for a long time. The occasional Orange and St. Johns period sherds in this stratum may signal a post-Mount Taylor activity, but it seems equally likely that Mount Taylor communities capped the ridge after abandoning it as a place of dwelling, and that later Orange and St. Johns period dwellers in the vicinity occasionally used the ridge for activities involving pottery.

CONCLUSION

Despite extensive damage from shell mining in 1923, the ridge at Locus A contains remnants of upwards of 3 m of stratified deposits with excellent archaeological potential. Six 2 x 2-m test units excavated in three locations of the ridge reveal a consistent sequence of basal midden, accretional shell and sand, house mounds and associated midden accumulation, and capping with sand, all elapsing over a three-to-five century period of the Mount Taylor phase, ca. 6300-5750 cal BP. All indications are that Mount Taylor communities actually resided on this ridge as it accumulated, eventually with but at first apparently without constructing house mounds and imposing a formal spatial order on the emplacement of sand, shell, and the outputs of daily living. This pattern of dwelling stands in contrast to Mount Taylor shell ridges that lack evidence for domestic activities, but compares favorably to the one known linear village (8VO215), which involved the use of small shell mounds, presumably for domestic dwelling.

Much remains of the shell ridge at Locus A, and further work is warranted. Before delving into additional mining escarpments, however, two other areas of inquiry demand attention. First, stratigraphic excavations at Locus A have emphasized the vertical record of Mount Taylor site use (i.e., change over time), and lacking have been data on the spatial structure of dwelling at any given moment of time. The trench profile shows good promise for locating evidence for spatial patterning in the siting of houses, middens of secondary deposition, and related domestic activities. Although most such evidence was carted away long ago by shell miners, mining stopped well short of the basal deposits, so good potential does exist for examining laterally extensive areas within a single stratum. A large block excavation in the mining pit will be needed, perhaps preceded by some remote sensing to detect subsurface features such as hearths and pits. The second pressing issue is the possible borrow pit to the south of the ridge. Some strategic coring and remote sensing may help to detect evidence that sand was removed from this depression 6000 years ago, but we can start by simply comparing the sand from the mound to a profile adjacent to the depression to see if it matches the texture and color of the emplaced sand. Of course, pedogenic processes since the time of excavation and emplacement of sand may have obscured relevant evidence, so it may take broader sampling in the vicinity to know how much pedogenic variation can be expected under a range of edaphic and topographic conditions. Additional conclusions and recommendations for more work at Locus A are included in the concluding chapter of this report.

CHAPTER 6
SILVER GLEN RUN, LOCUS B (8LA1-WEST)

Zackary I. Gilmore

Locus B occupies a relatively flat, well drained ridge nose less than 200 m to the southwest of Locus A and approximately 80 m south of Silver Glen Spring run. It consists of a small, roughly crescent-shaped shell node and the extensive archaeological deposits that surround it. A previously unknown archaeological resource, Locus B was initially recorded as a result of reconnaissance survey conducted by participants in the St. Johns Archaeological Field School in 2007 (Chapter 4). Despite being relatively modest in size and depth compared to the shell ridges at 8LA1-East and Locus A, Locus B contains well-stratified and largely intact deposits dating primarily to the Late Archaic Orange (4600-3600 cal BP) and preceramic Mt. Taylor (7300-4600 cal BP) periods, although subsequent St. Johns period artifacts are also present. Given the especially well preserved deposits encompassing multiple culture-historical components, this portion of the site presents a virtually unparalleled opportunity for investigation of Late Archaic ritual and domestic practices conducted outside of the more extensively studied "shell mound" contexts. Moreover, its close proximity to the concurrently utilized shell mound at Locus A renders Locus B a uniquely appropriate setting for studying the relationship between these two contrasting types of Archaic places.

Following shovel testing in 2007 (see Chapter 4), Locus B was recognized as an area that warranted more intensive investigation due to the identification of an arcuate or circular concentration of Orange ceramic sherds, presumed to be indicative of an Orange period habitation or "village" site. Consequently, between 2007 and 2011, Locus B was the target of rigorous field investigations that included three primary strategies: (1) topographic mapping and close-interval coring for the purpose of establishing the horizontal and vertical extent of cultural deposits; (2) extensive test unit excavations to determine the vertical structure of these deposits and their variability across Locus B; and (3) intensive block excavations intended to expose relatively fine-scale horizontal and vertical patterning of cultural materials, as well as evidence of architectural remains and features. Although unequivocal evidence for an Orange period "village" has proven elusive, the results of these investigations have revealed three successive, and fundamentally distinctive patterns of site use. Together, these patterns encompass virtually the entire Late Archaic, a dynamic period of region-wide material and social transformation in the middle St. Johns Valley. This chapter details the methods and initial results associated with each of the three testing strategies through 2010, as well as descriptions of feature contents and artifact assemblages for samples analyzed to date. In addition, preliminary interpretations are offered regarding the historical circumstances surrounding the shifting uses of Locus B as well as their relationship to coeval developments at other areas of the Silver Glen Run complex and the broader region. Excluded from this chapter are the results of excavations in 2011, analyses of which are ongoing and will detailed in a subsequent report.

SITE MAPPING AND SUBSURFACE AUGERING

The mapping of Locus B was conducted in accordance with a permanent east-west baseline established at 8LA1E in 2007 (see Chapter 3). Two permanent reference points (Datum A and Datum B) were created to form this line and the western point (Datum A) was assigned the coordinates of N1000.00 E1000.00, with an arbitrary elevation of 10.00 meters. Surface mapping of Locus B was conducted in the spring of 2009 using a Nikon DTM-310 Total Station. Two additional permanent data (Datum C and Datum D) were established in the bait field at the north end of Locus B, and several temporary stations were established to allow for relatively comprehensive mapping of Locus B while minimizing the extent of vegetation removal required in order to establish clear lines of site. Pin flags were used to mark and keep track of recorded points in order to ensure complete coverage. In total, 335 transit points were recorded across Locus B.

The resulting map largely recapitulates the topography discernable from LiDAR data collected by the Volusia County Public Works Department (2006). As illustrated in Figure 6-1, Locus B forms a slightly arcuate and relatively subtle topographic prominence that opens northward, toward Silver Glen Run. It stretches for approximately 60 m along its longest axis (east-west), roughly paralleling the natural terrace on which it sits. At its highest point Locus B rises approximately 1 m above the surrounding terrain. It slopes downward relatively steeply to the north toward the spring run (at least partially due to the presence of a modern gravel road) and more gently in all other directions.

Extensive subsurface testing was performed in 2008 by field school students using an Oakfield soil tube with a 3/4-inch diameter and a maximum depth of 85 cm. Although originally planned to cover all of Locus B and the surrounding area, the difficulty and time involved in punching the soil tube through dense and often concreted shell midden hampered this goal. Tests were conducted at 2-meter intervals within larger 10 x 10-m blocks. Each of these blocks was oriented along approximate cardinal directions using a sighting compass and measured out using 30-m cloth measuring tapes. Pin flags were used to mark the corners of each block as well as the intervening locations of each planned auger test. Ultimately, six contiguous 10 x 10-m blocks were completed that together cover the hypothesized core area of Locus B from the western edge of the topographically visible shell node to its central apex (Figure 6-2).

All auger tests were conducted to the maximum depth allowed by the soil tube (approximately 85 cm) except for the instances in which impenetrable concreted shell midden was encountered. For each test, information was recorded on a log sheet regarding the constituents of each strata encountered (i.e., the type of soil matrix, the density and condition of shell, and the occurrence of artifacts and other cultural materials) along with the depths of stratigraphic transitions. Unfortunately, as tests and logs were completed by a number of different field school participants and the detail with which observations were made and recorded varied significantly from person to person, the quality of data conferred by the auger survey was not entirely consistent across the tested area. Nevertheless, a great deal of useful information was gathered regarding the vertical extent of recent near-surface disturbance, the thickness and density of shell midden

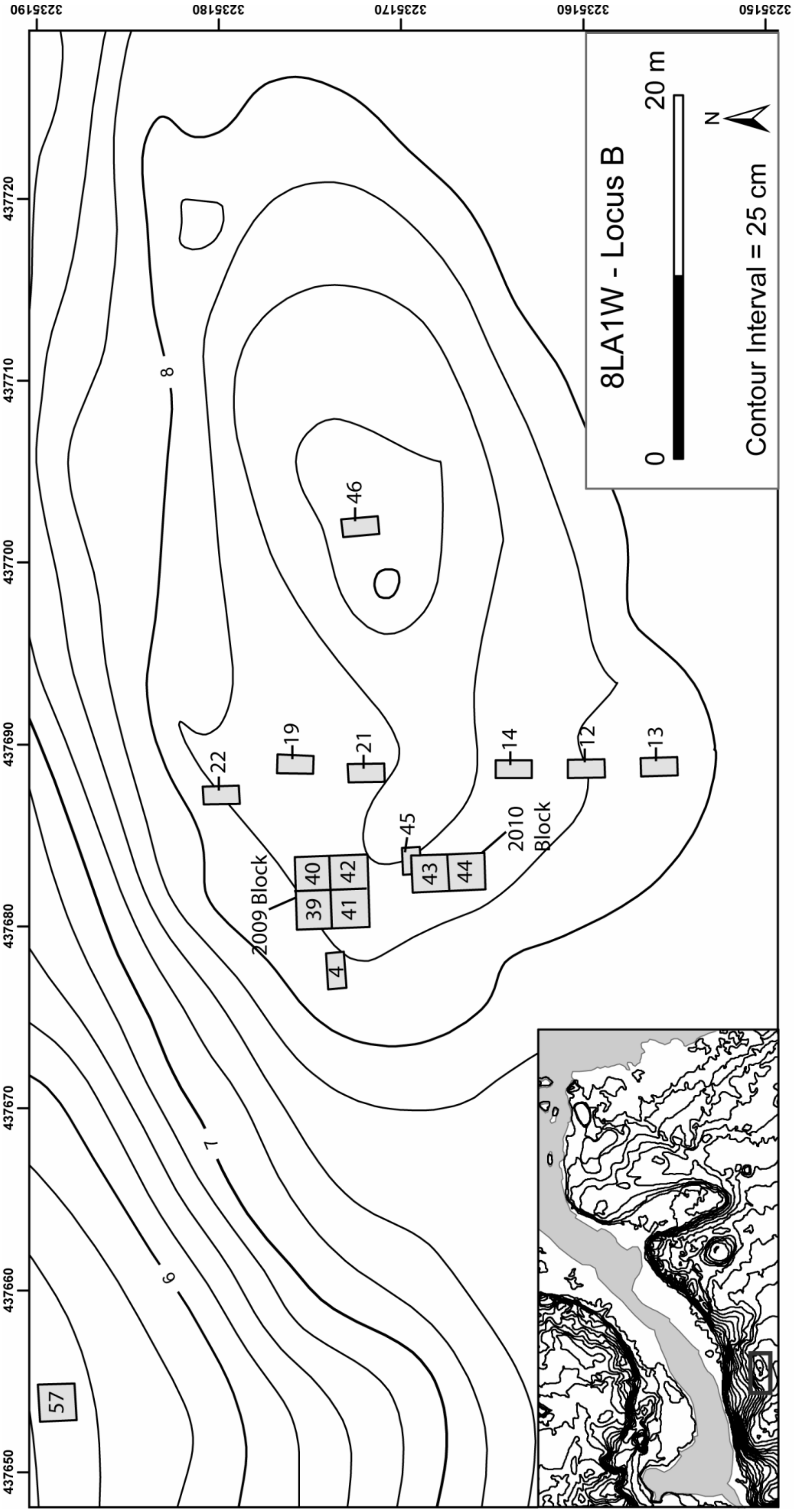

Figure 6-1. Topographic map of Locus B, 8LA1W.

deposits, and the basic morphology of the Locus B surface prior to the initiation of shell deposition.

While virtually every auger test indicated the presence of shell, a tremendous amount of variation was demonstrated in terms of the depth and thickness of shell deposits. Much of this variation can be seen in Figure 6-3, which shows fence diagrams of subsurface deposits along two perpendicular transects at Locus B based on auger tests and subsequent test unit excavations. Each of the vertical black bars represents the position of an auger test or test unit corner along the transect, although some are offset by up to 2.5 m perpendicular to the actual transect line. The diagrams show a consistent zone of disturbance related to historic plowing and recent bioturbation ranging from approximately 5-30 cm thick across this entire portion of the site. The intact shell midden underlying this disturbed stratum varies significantly in thickness along both transects. Shell deposits are most substantial along the western portion of the west-east line, exhibiting a maximum thickness of around 1.5 m in an area subsequently found to contain large numbers of Late Archaic shell-filled pit features. Along the eastern margin of this transect, which coincides approximately with the apex of Locus B's shell node, shell extends for just over 1 m below the surface. Along the north-south transect, shell deposits are most substantial in the north and then taper gradually toward the south, eventually reaching a thickness of only about 20 cm. Aside from the areas dramatically altered by Archaic period pit-digging activities and those where the midden could not be completely penetrated by the auger, these diagrams indicate that shell was deposited on a roughly level sand surface with an absolute elevation of approximately 7.5-7.7 m (NAVD1988; based on local site datum). If this is accepted as the natural pre-depositional surface, then virtually all of Locus B's modest topographic relief at present can be attributed to the depositional activities of the site's Late Archaic inhabitants. Additional stratigraphic evidence supporting this conclusion is discussed below.

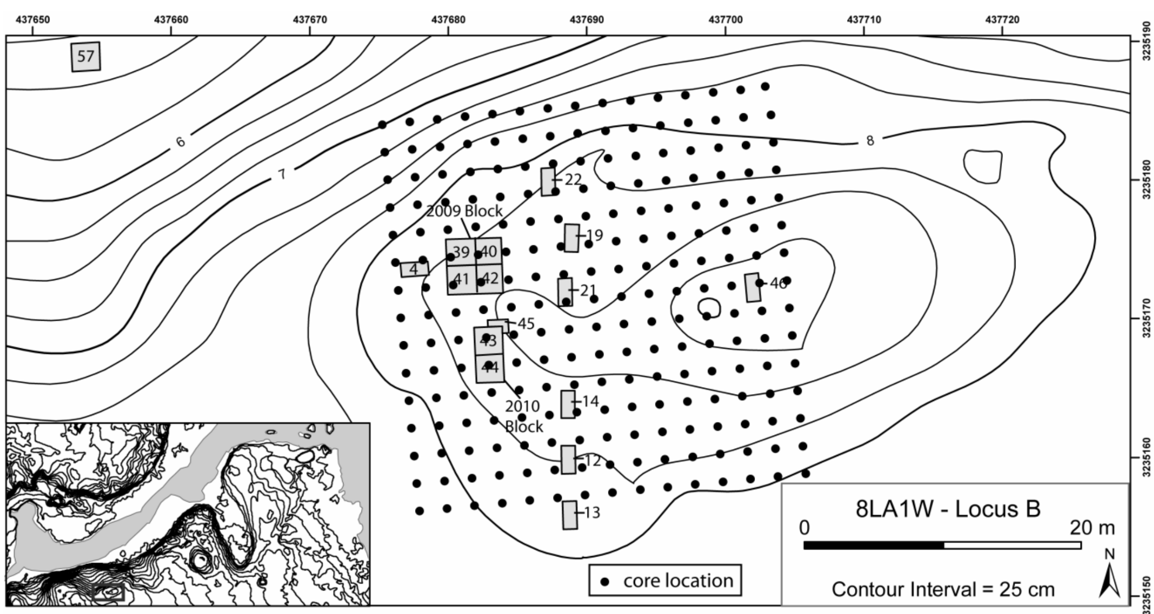

Figure 6-2. Topographic map of Locus B showing locations of 2008 auger tests.

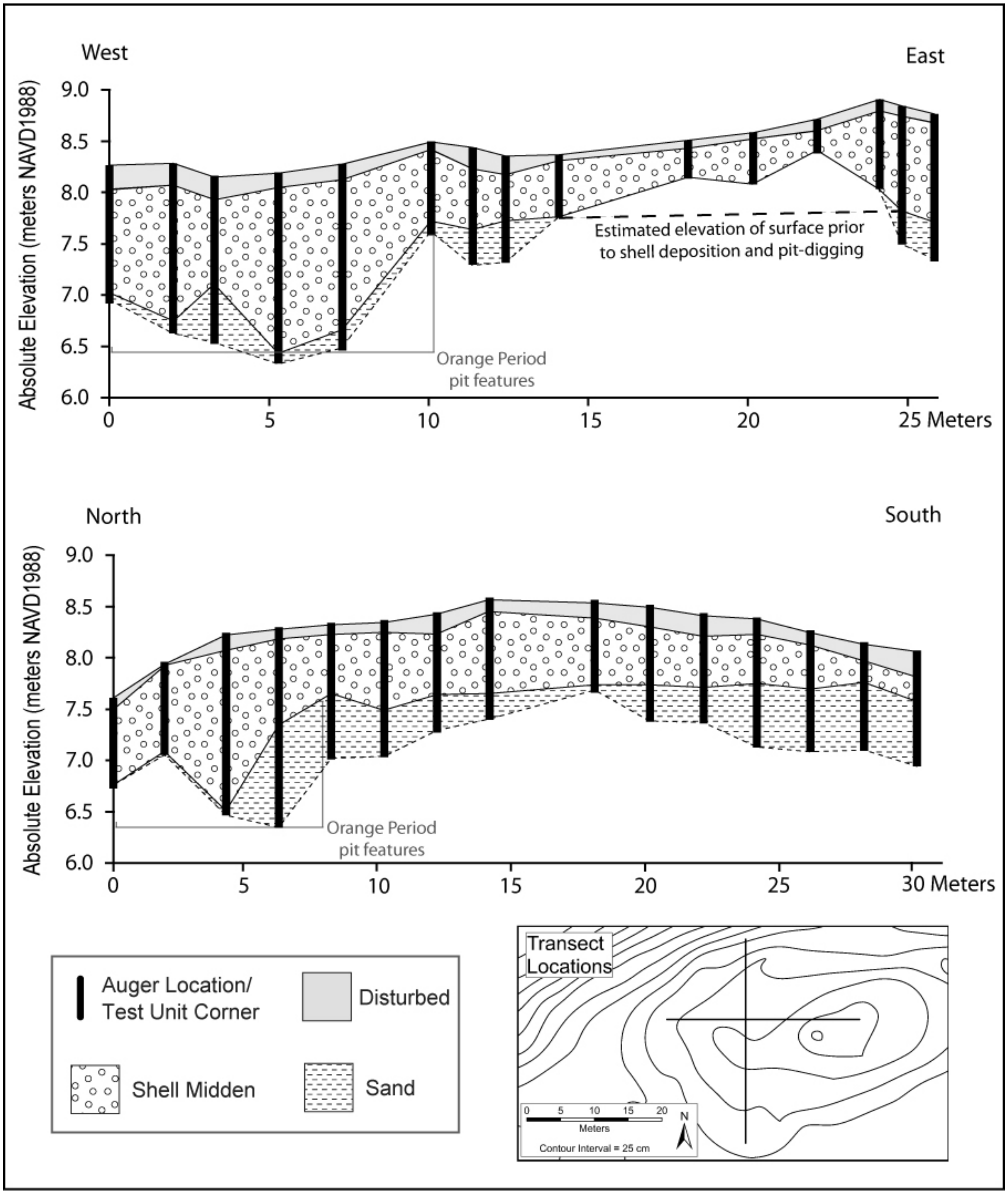

Figure 6-3. Fence diagrams showing cross-sectional profiles of archaeological deposits at Locus B based on auger and test unit excavations.

EXPLORATORY TEST UNIT EXCAVATIONS

During the 2007 St. Johns Archaeological Field School, one 1 x 2-m test unit (Test Unit 4) was excavated at Locus B in an area that shovel testing had indicated contained a concentration of Orange fiber-tempered pottery. This excavation revealed significant, stratigraphically intact cultural deposits dating to the Late Archaic Orange period. To further assess the nature and spatial extent of these deposits, in 2009 and 2010 six more 1 x 2-m test units (Test Units 12-14, 19, 21 and 22) were excavated perpendicular to Test Unit 4, along a north-south transect bisecting Locus B (Figure 6-4). These units were not contiguous but were instead placed two meters apart in order to preserve intervening stratigraphic data. In addition, a six-meter gap was left between Test Units 14 and 21 and the location of the northernmost unit (Test Unit 22) was offset one meter to the west of the original north-south transect in order to avoid two large trees. Finally, in 2010 field school students excavated two additional exploratory test units intended to broaden our understanding of other areas of the site. These included one 1 x 2-m unit (Test Unit 46) to the east near the apex of Locus B's shell node and one 2 x 2-m unit (Test Unit 57) to the northwest in a currently cleared and plowed bait field.

All test units were hand excavated by trowel in arbitrary 10-cm levels with the exception of the uppermost level, which, being heavily disturbed by thick roots and modern farming activities, was shoveled-scraped. A datum was set at the highest corner of each test unit from which level depths were measured. Fill was processed through 1/4-inch screens and all artifacts, vertebrate fauna, and other cultural materials (excluding freshwater shells) were collected and bagged according to provenience. Where clear archaeostratigraphic zones were identified within levels, these were mapped and the respective fills and artifacts kept separate. The floors of each level were inspected for these zones as well as the presence of cultural or natural features. When recognized as such during excavation, features were mapped in plan view, bisected vertically, and then drawn in profile. Where possible, one half of the feature fill was then collected for 1/8-inch water screening while the remaining half was removed as a bulk sample for flotation processing. In instances where large feature size prevented complete sampling, bulk samples were systematically collected from different areas of the feature (usually upper, middle, and lower sections), while the remainder of feature fill was processed through 1/8-inch and 1/4-inch screens. Excavation in all test units proceeded until reaching sterile or virtually sterile subsoil. In addition, 50 x 50-cm column samples were taken from the west profile of Test Unit 22, the west profile of Test Unit 43, and the north profile of Test Unit 46. Unlike the general test unit excavations, columns were excavated stratigraphically. Column strata that exceeded 10-cm in thickness were excavated in 10-cm levels. Within each level, a one gallon sample was collected for flotation while the rest was removed for 1/8-inch water screening. Processing and analysis of bulk column samples has not yet been completed.

The following discussion of individual test units begins with Test Unit 13, the southernmost unit in the north-south transect, and then proceeds northward, as this follows the general south-north progression of the Locus B shell midden from relatively thin and stratigraphically simple to thicker and more complex. Test Units 47, 4, and 57 are then discussed individually because of their relatively detached spatial positions as well as the unique interpretive challenges that each presents.

Figure 6-4. 2008 field school crew excavating a north-south transect of test units at Locus B, 8LA1W.

Test Unit 13

Test Unit 13 (TU13) is a 1 x 2-m test unit placed approximately 10 m to the southeast of shovel test pit 22-2, in an attempt to catch the southern margin of the shell midden at Locus B as indicated by shovel testing and auger data. Oriented north-south, this unit was excavated to a depth of 100 cm below datum (cmbd).

Composite drawings and photographs of the stratigraphic profiles from all four of TU13's walls are shown in Figure 6-5, and descriptions of the major stratigraphic units are provided in Table 6-1. Artifact counts for each level and zone are shown in Table 6-2.

Corresponding with excavation Levels A and B, Stratum I is a 15 to 20-cm-thick A-horizon consisting of dark brown sand with occasional whole and fragmentary *Viviparus* (banded mystery snail) and bivalve (freshwater mussel) shell. Dense root mat permeates the entire stratum with larger roots appearing near the bottom. The few cultural materials that were recovered from this stratum include sparse vertebrate fauna and highly fragmented plain and check-stamped St. Johns ceramic sherds. It was discovered subsequently, during the 2009 block excavation (discussed below), that Locus

B and its surrounding area had been subjected to historic plowing and that the upper 20-30 cm of this part of the site has been significantly disturbed. Consequently, the sporadic occurrence of shell and artifacts throughout Stratum I may be at least partially a result of the repeated scraping and churning of the very top of the underlying midden.

Stratum II appears to represent the top of the undisturbed shell midden at Locus B. It corresponds primarily with excavation levels C, D, and E and consists of an approximately 20 to 30-cm-thick layer of gray sand with abundant whole and crushed *Viviparus* shell mixed with a smaller amount of crushed bivalve. In terms of cultural materials, this stratum contained only sparse vertebrate fauna and a small number of plain St. Johns and Orange ceramic sherds. Within Stratum II, discrete areas containing abundant charcoal and burned shell were encountered along the northern and eastern margins of the unit that were collectively designated Zone A in the field. The clean, fresh appearance of the charcoal from Zone A, the irregular shape of the deposits, and the overall similarity of the zone to the rest of Stratum II (if evidence for burning is excluded) all suggest that Zone A is a relatively recent intrusive disturbance, probably a tree that burned in place. A roughly circular pocket of whole and crushed *Viviparus* along the southern wall of the test unit was designated Zone B. Although initially thought to be of cultural significance, its horizontal orientation perpendicular to the test unit profile suggests instead that it is a natural disturbance. The soil and shell matrix constituting Zone B is identical to the general fill of Stratum II and was probably dragged down by a burrowing animal, most likely a gopher tortoise (*Gopherus polyphemus)*.

Zone B is surrounded by a conspicuous area of virtually shell-free, dark grayish-brown sand, visible in the south profile drawing (Figure 6-5) as Stratum III. Occupying the same basic vertical position as Stratum II, this organically enriched pocket of soil is likely a byproduct of the activities of the burrower noted above. The majorities of both Stratum II and Stratum III correspond to excavation Levels C and D, although they do extend into lower levels in multiple places.

A sharp stratigraphic break is visible between Stratum II and Stratum IV, the latter composed of lighter brown medium sand with only sporadic and isolated pockets of whole *Viviparus* shell. Shell is most common near the top of this stratum and decreases with depth, disappearing entirely near the base of the test unit. Stratum IV largely corresponds with excavation Levels F through J. In locations where Stratum II deposits drop down and penetrate into Level F or below, these were designated Zone D, while the remainder of the test unit deposits, composed of Stratum IV sediments, were labeled Zone C. Overall, Stratum IV contains sparse vertebrate fauna and several lithic flakes but no pottery, making it likely that its constituent deposits are preceramic in age. This Stratum underlies the entire test unit, which was terminated at approximately 100 cmbd, although three lithic flakes were recovered from the bottom excavation level.

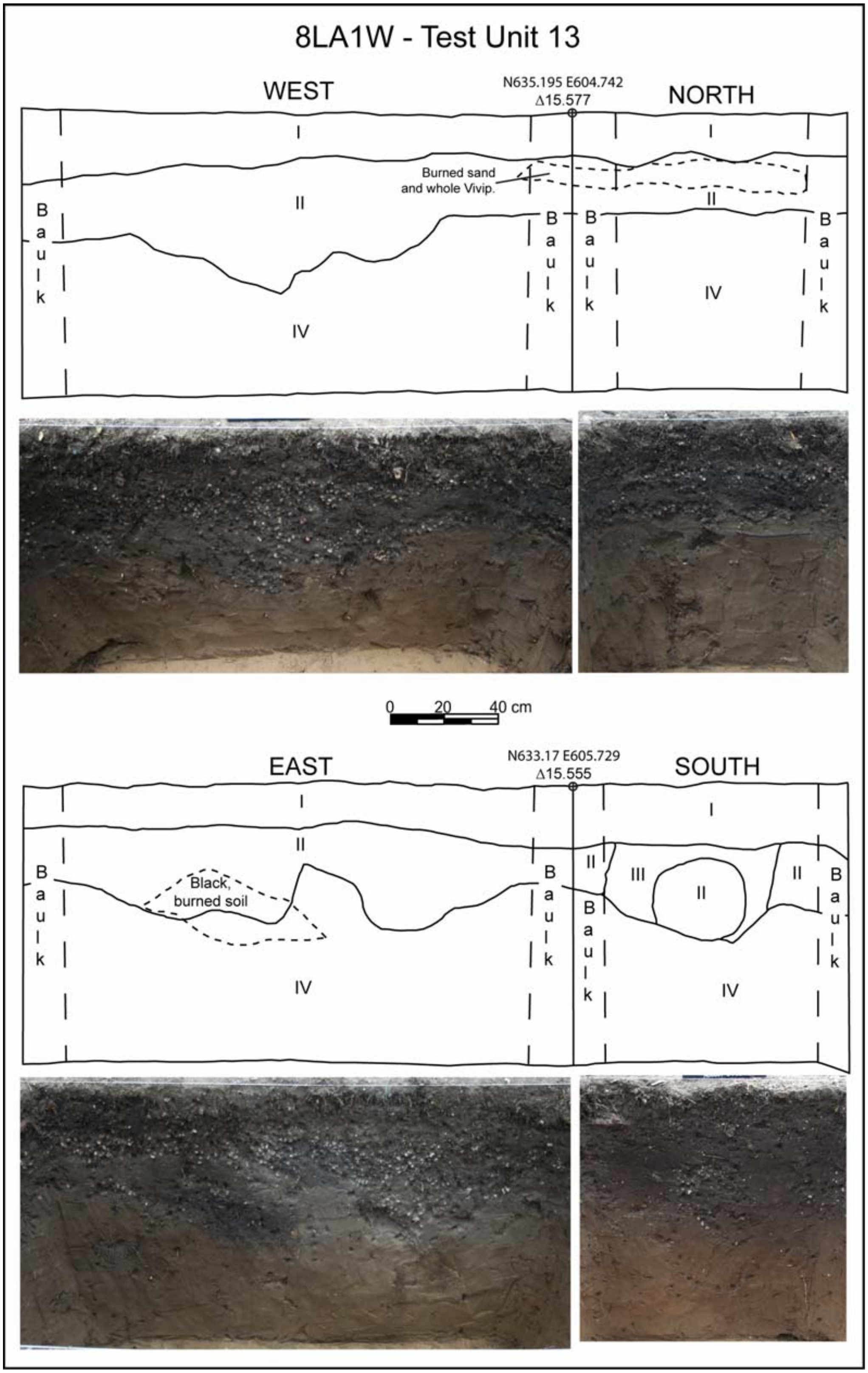

Figure 6-5. Stratigraphic drawings and photographs from profiles of TU13, 8LA1W. (Note: photographs are not to scale)

Table 6-1. Stratigraphic Units of Test Unit 13, 8LA1W.

Stratigraphic Unit	Max. Depth cm BD[1]	Max. Depth cm BS[2]	Munsell Color	Description
I	28	28	7.5YR2.5/2	Very dark brown historically plowed A horizon; abundant roots; occasional whole *Viviparus*.
II	68	67	7.5YR3/2	Dense whole and crushed *Viviparus* in a medium dark brown sandy matrix.
III	58	57	7.5YR3/2	Dark brown organically enriched sandy matrix with no shell or visible cultural materials.
IV	107	107	7.5YR4/6	Strong brown fine sand with isolated pockets of dense concreted shell.

Table 6-2. Cultural Materials Recovered from Test Unit 13, 8LA1W.

Level	St. Johns Plain	Orange/ T. I. Incised	Orange Plain	Crumb	Lithic Flake	Lithic Biface	Marine Shell (g)	Vert. Fauna (g)	Historic Artifact
A	3			15				38.0	
B	3			25	2			33.0	1
C	7			45	2	1		117.9	
D	2		2	49			2.4	103.9	
E – Zone A								5.1	
E – Zone B								0.3	
E – Zone C	2	2		31	2		0.3	66.1	
F – Zone B	1							2.9	
F – Zone C				11	1			44.7	
G – Zone C					6		1.1	18.2	
G – Zone D								0.4	
H – Zone C					4			19.7	
I – Zone C					2			2.9	
J – Zone C					3				
Total	18	2	2	176	22	1	3.8	453.1	1

Test Unit 12

Situated two meters to the north of TU13, Test Unit 12 (TU12) exhibits similar macro-stratigraphic units but with some added complexities. Composite drawings and photographs of the stratigraphic profiles from all four walls of TU12 are shown in Figure 6-6, and descriptions of the major stratigraphic units are provided in Table 6-3. Artifact counts for each level and zone are shown in Table 6-4.

Seven distinct strata were identified in this test unit. Like TU13, Stratum I of TU12 consists of a dark brown organic A horizon lying completely within the historic plow zone. It contains abundant small to medium juniper and palmetto roots along with occasional whole and fragmentary *Viviparus* and bivalve shell. Stratum I corresponds with excavation Levels A, B, and the upper portion of Level C from which were recovered a variety of cultural materials including highly fragmented St. Johns Plain and Check-Stamped ceramic sherds, lithic debitage, and a small amount of vertebrate faunal remains.

The top of Stratum II marks the upper boundary of the intact shell midden in TU12. It consists of dense predominantly whole *Viviparus* shell in grayish brown medium sand. Cultural materials in this stratum are limited to St. Johns ceramics and vertebrate fauna. Stratum III is distinguished from Stratum II by the addition of occasional whole *Pomacea* (apple snail) and bivalve to the shell matrix as well as the appearance of plain and incised Orange fiber-tempered ceramics. During excavation, a small area of dense concreted shell was noted in the northeastern corner of the test unit that penetrated into underlying strata but was never discrete enough to receive a feature designation. This area was labeled Zone B while the rest of the test unit was considered Zone A. Zone B produced no non-shell cultural materials and was terminated at the bottom of excavation Level G. Together, Strata II and III correspond roughly with excavation Levels C through F.

Across most of the test unit, Stratum III sits atop a thin layer of dense burned and crushed bivalve mixed with a small amount of brown fine sand and occasional whole unopened bivalve shells most clearly visible in the northern half of the unit (Stratum IV). Stratum IV slopes gently downward from north to south, paralleling the modern topography. It also thins out and becomes wispier in that direction, eventually tapering out completely as evidenced by its complete absence from Test Unit 13. The point of contact between Strata III and IV was the most artifact rich level within TU12, yielding a variety of materials including Orange ceramics, a bone tool, a marine shell bead, lithic debitage, and relatively abundant vertebrate fauna. Paleofeces were also recovered. The diversity of materials associated with everyday activities, along with the finely crushed roughly horizontal layer of shell suggest that Stratum IV probably represents a Late Archaic living surface.

At approximately the same elevation as Stratum IV, Stratum V consists of a discrete pocket of very dense whole *Viviparus* and abundant vertebrate fauna with only a small amount of interspersed fine sand. This deposit’s discreteness and its apparent

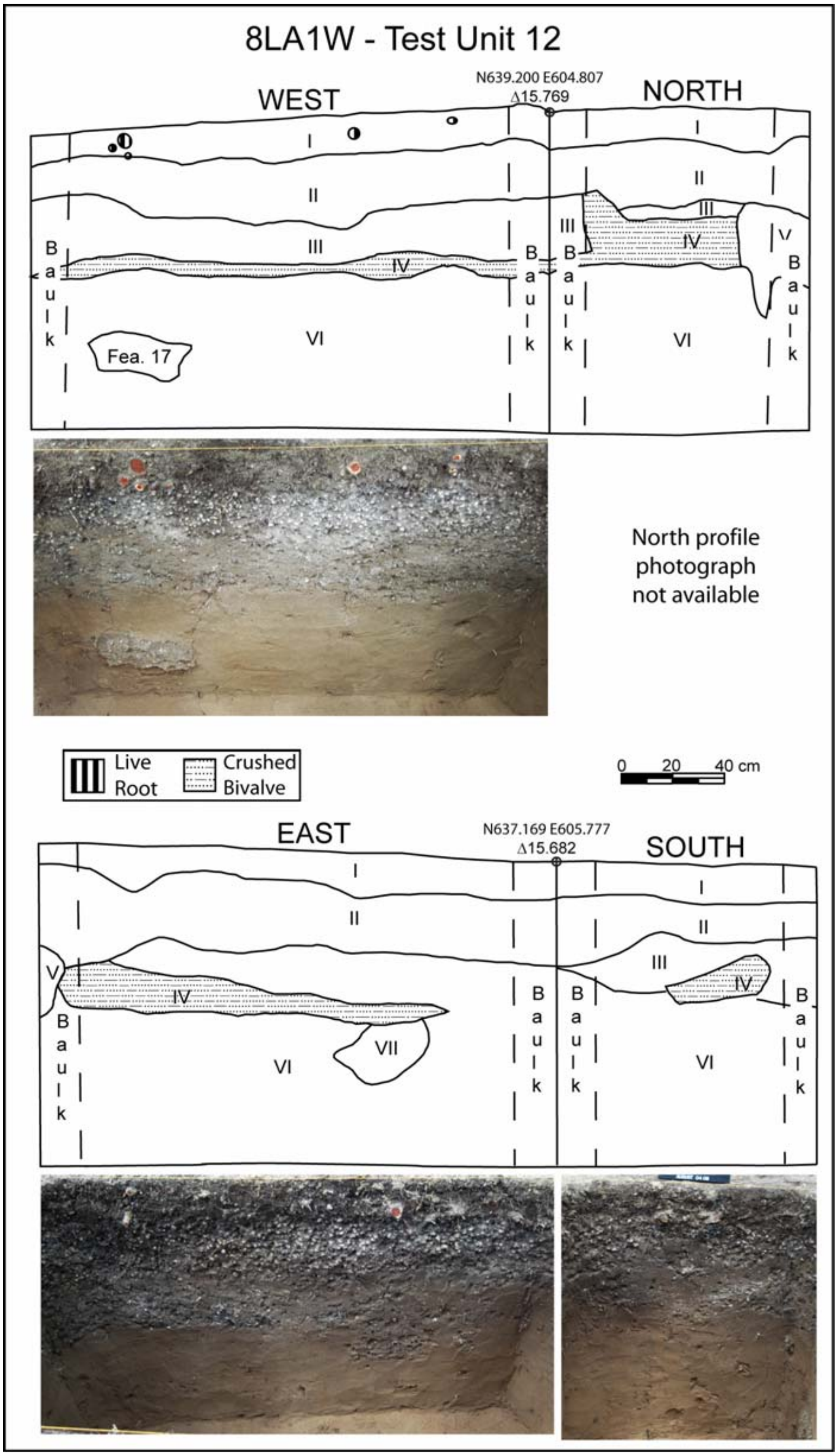

Figure 6-6. Stratigraphic drawings and photographs from profiles of TU12, 8LA1W. (Note: Photographs are not to scale.)

Table 6-3. Stratigraphic Units of Test Unit 12, 8LA1W.

Stratigraphic Unit	Max. Depth cm BD[1]	cm BS[2]	Munsell Color	Description
I	25	18	7.5YR3/2	Dark brown historically plowed A horizon; abundant roots; occasional whole and fragmentary *Viviparus* and bivalve shell.
II	50	49	7.5YR2.5/1	Abundant whole *Viviparus* shell in a black medium sandy matrix.
III	65	60	7.5YR4/3	Abundant whole and crushed *Viviparus* shell in a brown fine sandy matrix; infrequent *Pomacea* and bivalve shell.
IV	72	67	7.5YR4/2	Dense burned crushed bivalve with a few whole unopened shells in a brown fine sandy matrix; abundant vertebrate fauna.
V	80	81	7.5YR4/3	Dense whole *Viviparus* with very sparse brown fine sandy matrix; abundant vertebrate fauna.
VI	127	127	7.5YR4/4	Brown fine sand with discrete pockets of dense shell and vertebrate fauna.
VII	96	91	7.5YR4/3	Dense whole *Viviparus* with very sparse brown fine sandy matrix; infrequent vertebrate fauna.

vertical correspondence with a hypothesized Late Archaic surface, suggest that Stratum V is probably actually a feature of some kind (perhaps a pit or an infilled post hole), although its position in the corner of the unit made this difficult to recognize in the field.

The basal stratum throughout all of TU12 (Stratum VI) is a thick layer of brown medium sand with occasional whole *Viviparus*, *Pomacea*, and bivalve shell. Within TU12, Stratum VI corresponds roughly with excavation Levels G through L. Although appearing in profile as relatively undifferentiated, Stratum VI contains abundant vertebrate fauna that decreases in density from top to bottom and exhibits scattered, apparently isolated deposits of shell and bone throughout. Beginning in excavation Level G, two seemingly discrete concentrations of concreted whole *Viviparus* shell were encountered. The first, Zone C, was located near the center of the test unit while the second, Zone D, was positioned approximately 25 cm to the southeast and intersected the east wall of the unit. By the bottom of Level I, (90 cmbd) these deposits had converged and were grouped together into Zone D. Neither of these zones contained significant non-shell cultural materials outside of trace amounts of vertebrate fauna. In the east wall profile drawing (Figure 6-6), Zone D is labeled Stratum VII and appears as an amorphous feature descending down from Stratum IV. Its irregular shape and intersection with Zone C suggest that Zone D is in all likelihood an old infilled animal burrow rather than a cultural feature.

Table 6-4. Cultural Materials Recovered from Test Unit 12, 8LA1W.

Level	St. Johns Plain	Orange/ T. I. Incised	Crumb	Lithic Flake	Mod. Marine Shell	Marine Shell (g)	Mod-ified Bone	Vert. Fauna (g)	Paleo-Feces (g)
A			12	1				14.1	
B	7		17	3		5.0		46.0	
C	2		6	1				56.5	
D	3		47					38.5	
E		2	16	5				230.5	6.1
F – Zone A	1		5	2	1[1]	5.5	2	364.9	4.5
G – Zone A				1		3.7	1	780.9	34.7
G – Zone C								8.4	
H			2					69.8	
I – Zone A				1				42.6	
I – Zone C								29.7	
I – Zone D			1					3.1	
J – Zone A				1		0.6		129.9	
J – Zone D								2.1	
J – Zone E								2.0	
K								22.6	
K – Zone F								98.5	
L				3				2.1	
Total	13	2	106	18	1	14.8	3	1942.2	45.3

[1]Marine shell disk bead

intersection with Zone C suggest that Zone D is in all likelihood an old infilled animal burrow rather than a cultural feature.

Zone E is another well-defined deposit of concreted shell (*Viviparus*, *Pomacea*, and bivalve) and sand extending out of the west wall of TU12 near the southwest corner. Eventually designated Feature 17, this roughly 15-cm deep deposit may represent a preceramic pit feature, although no pit margins could be defined in the test unit profile either above or below the shell itself. And finally, within excavation Level K (100-110 cmbd), an isolated pocket of shell (Zone F) was identified in the northeastern corner of the test unit that contained a relative abundance of vertebrate fauna that included fish, bird, and mammal. Interestingly, much of the bone from Zone F consists of rabbit (*Sylvilagus* spp.) appendages that remain articulated, having apparently been cemented by the calcium carbonate leached down from overlying shell deposits. The concentration of bone and shell constituting Zone F was not accompanied by any detectable change in soil color or texture. It is possible that it is simply a collapsed rabbit den.

Test Unit 14

Test Unit 14 (TU14) is located two meters to the north of TU12. Following the general south-north trend, TU14 shares a number of stratigraphic similarities with TU12 but also exhibits a certain amount of added complexity. Composite drawings and photographs of the stratigraphic profiles from all four of TU14's walls are shown in Figure 6-7 while descriptions of the major stratigraphic units are provided in Table 6-5. Summations of artifact counts for each level and zone are shown in Table 6-6.

Seven distinct strata were identified in the TU14 excavation. Stratum I once again consists of a dark brown, organically enriched A-horizon that has been disturbed by modern plowing. It is permeated with small to medium tree roots and contains occasional whole and crushed *Viviparus*, as well as moderate amounts of highly fragmented St. Johns Plain and Check-Stamped ceramics, lithic debitage, and vertebrate fauna. Shell density is highest in the north and decreases gradually toward the south. Stratum I ranges between 20 and 25 cm thick and corresponds roughly with excavation Levels A and B.

Stratum II consists of a dense homogeneous layer of mostly whole *Viviparus* shell in dark brown loamy sand. It slopes gently upward from south to north and contains relatively small numbers of St. Johns Check-Stamped, St. Johns Plain, and plain Orange fiber-tempered ceramics in addition to sparse vertebrate fauna. Two discrete areas of charred black soil and shell encountered in Stratum II (one along the west profile and one along the east) were determined to have resulted from relatively recent burning subsequent to the stratum's original deposition. The charred area along the east wall penetrated deep into underlying strata and likely resulted from a tree root that smoldered in place.

At the bottom of Stratum II, near its contact with Stratum III, the *Viviparus* shell, while retaining its high density, transitions from primarily whole to primarily crushed. At approximately the same elevation, the vertebrate fauna density increases significantly and the first *Pomacea* and bivalve specimens appear within TU14. A hafted biface and a few fiber-tempered crumb sherds were also recovered. All of this suggests the possibility that at the time of initial Stratum II deposition, this location may have experienced a relatively intense level of depositional activity and trampling after which additional, perhaps more rapid, shell deposition took place that was not trampled and did not undergo the same level of diminution.

Beginning in excavation Level E, two discrete zones of whole *Viviparus* shell were identified within the otherwise crushed shell floor of TU14 (Zone A). The first of these (designated Zone B) extended approximately 30 cm out of the west profile in the southwestern quadrant of TU14. It proved to be only about 15 cm thick in profile and to represent a location where Stratum II dipped slightly, penetrating underlying strata (see the west profile drawing in Figure 6-7). The second area of whole *Viviparus* shell (Zone C) was located along the south profile of TU14. Unlike Zone B, Zone C descended more than 50-cm beneath the rest of Stratum II. Although not recognized as such in the field, in the south profile of the test unit (Figure 6-7), Zone C is revealed as a roughly straight-sided vertical deposit of shell, almost certainly a result of the infilling of a pre-existing open pit feature. The apparent homogeneity of the Zone C deposit, along with its dearth of non-shell cultural materials including food remains, indicate that it, along with most of

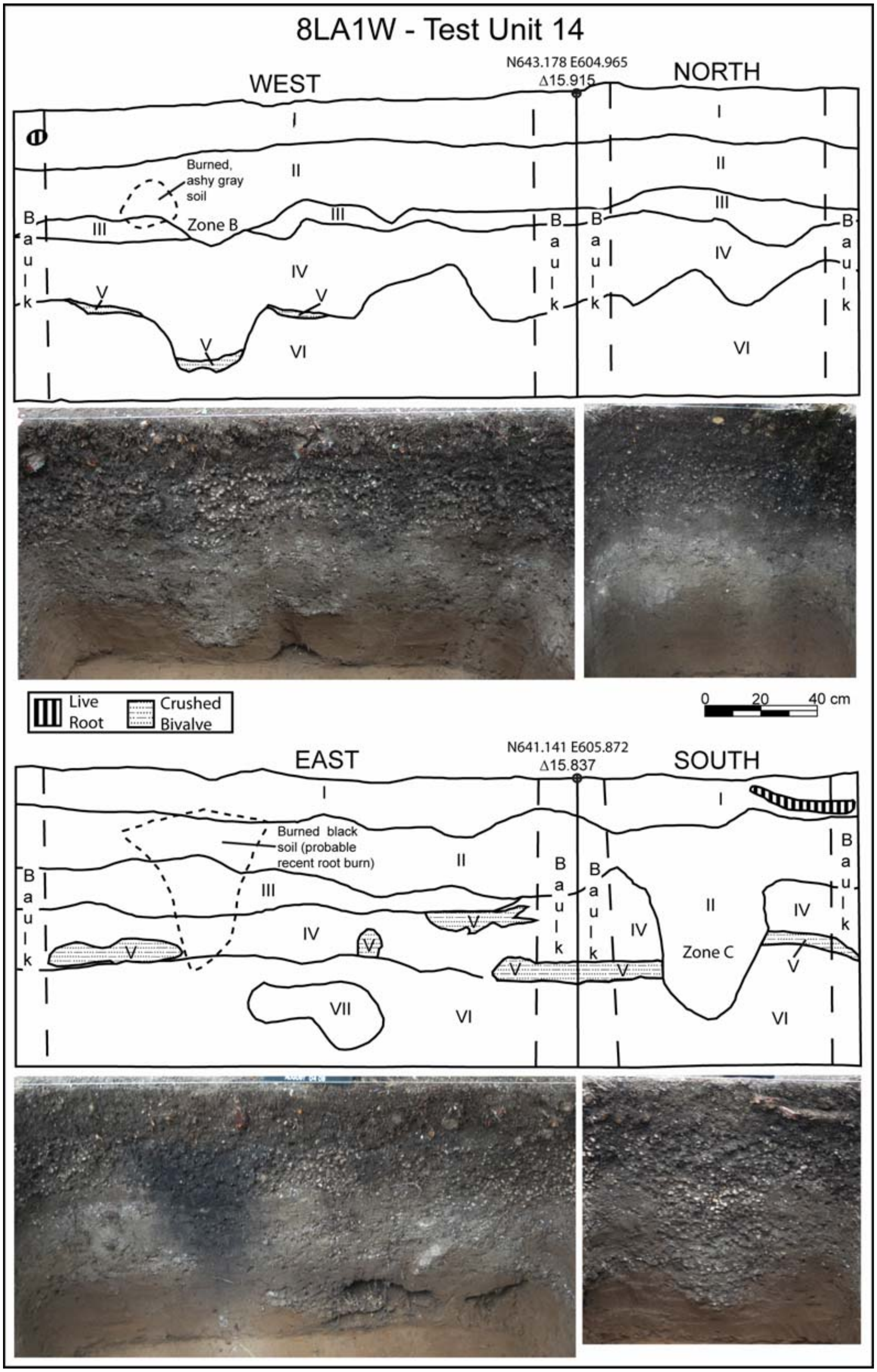

Figure 6-7. Stratigraphic drawings and photographs from profiles of TU14, 8LA1W. (Note: Photographs are not to scale.)

Table 6-5. Stratigraphic Units of Test Unit 14, 8LA1W.

Stratigraphic Unit	Max. Depth cm BD[1]	cm BS[2]	Munsell Color	Description
I	28	22	7.5YR2.5/2	Very dark brown historically plowed A horizon; abundant roots; occasional whole and fragmentary *Viviparus* shell.
II	91	86	7.5YR3/2	Very high density whole *Viviparus* shell in dark brown loamy sand.
III	56	56	7.5YR4/3	Brown fine sand with small amount of finely crushed *Viviparus* shell.
IV	97	92	7.5YR4/2	Moderate density crushed bivalve and *Pomacea* shell in brown sandy matrix; abundant vertebrate fauna.
V	101	97	7.5YR4/2	Burned, crushed and concreted bivalve shell interspersed with very sparse brown fine sandy soil matrix.
VI	110	110	7.5YR4/4	Virtually shell-free brown fine sand.
VII	102	98	7.5YR4/4	Discrete deposit of mostly whole *Viviparus* shell with small amount of brown fine sand.

Stratum II, are a result of rapid, large-scale deposition rather than the gradual accumulation of debris from everyday living. In other Archaic places in the St. Johns Valley, similar deposits of "clean shell" have been interpreted as instances of ritualized "mounding" at ceremonially significant locations (Aten 1999; Randall and Sassaman 2005; Russo 1994, 2004). The possibility of ritual deposition at Locus B is further discussed later in this chapter.

Across much of TU14, Stratum II sits atop Stratum III, a thin horizontal layer of medium brown sand with a trace amount of finely crushed *Viviparus* shell. This stratum may constitute a buried A-horizon, indicating a substantial period of abandonment during which natural soil development was allowed to take place in the absence of human disturbance. Stratum III is thicker and better developed in the north and grows more faint toward the south. Although not easily discernable in the south profile, Stratum III may be the surface from which the Zone C pit feature descends.

Directly beneath Stratum III, Stratum IV is a 15 to 30-cm-thick layer of grayish-brown medium sand with a moderate density of fragmented *Pomacea* and bivalve shell. This stratum contains abundant vertebrate fauna, occasional lithic debitage, and one bone tool but no ceramics. Lining the base of Stratum IV in several spots are thin lenses of concreted, burned and crushed bivalve shell collectively labeled Stratum V. Stratum V in

Table 6-6. Cultural Materials Recovered from Test Unit 14, 8LA1W.

Level	St. Johns Plain	Orange Plain	Crumb	Lithic Biface	Lithic Flake	Marine Shell (g)	Mod-ified bone	Vert. Fauna (g)
A	2		6		1			11.1
B[1]	5		47		5	0.7		55.5
C[2]	3		32		4			30.1
D	1	2	10					41.0
E				1				22.7
E – Zone A			4		2	0.3		90.6
F – Zone A			1		2	0.9	1[3]	92.0
F – Zone B								17.2
F – Zone C						0.9		2.7
G					3		1[4]	152.4
G – Zone C								6.0
H				1	2			56.3
H – Zone C					1			4.3
I								69.0
I – Zone C								2.3
J								29.7
J – Zone D								1.7
J – Zone E								7.0
K								3.3
Total	11	2	100	2	20	2.8	2	694.9

[1]also two sand-tempered sherds
[2]also one St. Johns Check-Stamped sherd
[3]bone bead.
[4]bone pin

TU14 is similar in elevation and stratigraphic position to Stratum IV in TU12 and is most likely a continuation of the same preceramic living surface. In one location along the west profile, Stratum IV drops down approximately 20-25 cm below the rest of the stratum, revealing the presence of a small basin-shaped pit. The base of the pit is lined with the same burned and concreted bivalve comprising Stratum V, indicating that the pit was contemporaneous with the inferred crushed shell surface. In the field, the concreted bivalve lens lining the pit was designated Zone D.

The basal stratum of TU14, Stratum VI, is comprised of medium brown sand with only a trace amount of shell. The upper portion of the stratum contains moderate amounts of vertebrate fauna and lithic debitage. Both shell and bone densities decrease with depth and eventually disappear completely below 100 cmbd. A discrete deposit of dense whole *Viviparus* encountered along the east profile at approximately 80 cmbd (Stratum VII in Figure 6-7) was designated Zone F. Zone F is similar in stratigraphic position and composition to the isolated shell deposits discovered near the base of TU12.

Whether it represents a cultural feature or a natural disturbance of some sort could not be determined. TU14 excavations were halted at 110 cmbd.

Test Unit 21

Test Unit 21 (TU21) is located six meters to the north of TU14 in a slight depression of unknown origin just north of the westernmost extension of Locus B's shell node. The northern edge of the test unit falls on the downward slope of this depression so there is an overall uphill trend from north to south. The possibility exists that this depression is a result of modern earth-moving activities and that the cultural deposits intersected by TU21 have been truncated to some extent.

Excavated to a depth of 110 cmbd, TU21 contained seven distinct stratigraphic units. Composite drawings and photographs of the stratigraphic profiles from all four of the unit's walls are shown in Figure 6-8, and descriptions of the major stratigraphic units are provided in Table 6-7. Summations of artifact counts for each level and zone are shown in Table 6-8.

Stratum I-A consists of the dark brown loamy A-horizon permeated by dense root mat. It varies significantly in thickness between 10 and 28 cm, perhaps contributing supporting evidence of modern surface modification in this location. Stratum I contains occasional whole *Viviparus* shell, a few small St. Johns ceramic sherds, and a trace amount of vertebrate fauna. In the southeastern quadrant of TU21, a small palm stump penetrated this and underlying strata and was not removed until excavation Level D. The criteria distinguishing Stratum I-B from I-A include a reduction in the density of the root mat and an increase in the density of shell. The shell constituents of Stratum I-B consist primarily of whole and crushed *Viviparus* and rare crushed bivalve. Non-shell cultural materials are similar to those recovered from Stratum I-A and include sparse St. Johns ceramics and trace vertebrate fauna. Together, Strata I-A and I-B correspond to excavation Levels A through C and parts of Level D.

Beginning in Level B and continuing through Level D, excavations uncovered an area in the southwestern corner of the unit consisting of gray, ashy sediment with moderate amounts of charcoal, shell and sand concretions, and whole and crushed *Viviparus* (some of which shows signs of burning). Within Level C, this anomaly spread amorphously to the east with depth and was determined to be a relatively recent root burn. Beginning in Level C, this disturbance was designated Zone B while deposits in the rest of the test unit were labeled Zone A. Zone B was no longer visible by the bottom of Level D.

Throughout much of TU21, Stratum I-B is underlain by Stratum II, a thin layer of dark brown medium sand with sparse whole and crushed *Viviparus* and abundant roots. Stratum II is roughly horizontal, although in the north profile, it can be seen sloping downward from west to east. It likely constitutes a buried A-horizon corresponding to the one identified within TU14. The sharply defined contact between Strata I-B and II falls within excavation Levels D and E, two of the most artifact-rich levels encountered in

TU21 excavations. Recovered artifacts include mostly incised Orange ceramics, lithic debitage, modified bone, and relatively abundant vertebrate fauna. As hypothesized for TU14, the relatively high artifact content may be indicative of an Orange period living surface directly atop the buried A-horizon.

Beneath Stratum II, Stratum III is a highly heterogeneous layer consisting of dark grayish-brown sand and containing numerous discontinuous pockets of shell, concretion, and mineralized roots. The shell from Stratum III is mostly whole *Viviparus*, although crushed *Viviparus* and bivalve are also present in small amounts. The few cultural materials recovered from this stratum include a lithic biface, a small fragment of marine shell, and a moderate amount of vertebrate fauna. No ceramics were found below Stratum II.

At approximately the same elevation as Stratum III, a discrete pocket of very dense shell was encountered along the north profile of TU21. Eventually designated Feature 25, this pocket was first noted near the base of excavation Level E and continues down into Level H. It consists exclusively of whole *Viviparus* shell in brown medium sand except at its base, which contains a highly concreted mixture of whole *Viviparus* and *Pomacea*. In the southern half of TU21, Stratum III is interrupted again by a thick mottled grayish brown and dark grayish brown layer containing a relatively low density of whole and crushed *Viviparus*. Labeled Stratum IV in Figure 6-8, this deposit is permeated by a number of light gray mineralized roots and amorphous sand concretions. Rather than a completely separate stratigraphic unit, it is likely that Stratum IV represents a largely disturbed portion of Stratum III where the large number of mineralized roots led to a distinct mottled appearance.

Stratum V consists of a 15-30 cm thick discontinuous layer of fine to medium sand with a high density of mostly crushed *Viviparus* shell. It is interrupted in the north by Feature 25 and Stratum IV and pinches out abruptly in the south. Stratum V is penetrated by a few small live and mineralized roots and contains few artifacts, although a Marion or Newnan-type point that had been reworked into a drill, few lithic flakes, and sparse vertebrate faunal remains were recovered.

Underlying Stratum V, the basal stratum within TU21 (Stratum VI) is composed of dark yellowish-brown fine sand that is largely shell-free but contains some isolated deposits of whole concreted bivalve and/or *Viviparus* shell. Artifacts in this stratum are limited to small amounts of lithic debitage and vertebrate fauna. One of the shell concentrations, occurring near the base of excavation Level K (100-110 cmbd), was surrounded by an faint amorphous "halo" of slightly darker sand, possibly reflecting elevated organic content.

Two additional shell concentrations within Stratum VI were given their own unique stratigraphic designations. Stratum VII-A is a small discrete deposit of very dark grayish-brown sand and dense shell lying at the contact between Strata III and VI in the northeastern corner of TU21. It contains primarily whole *Viviparus* but exhibits abundant crushed bivalve along its upper and lower margins. It appears to extend out of

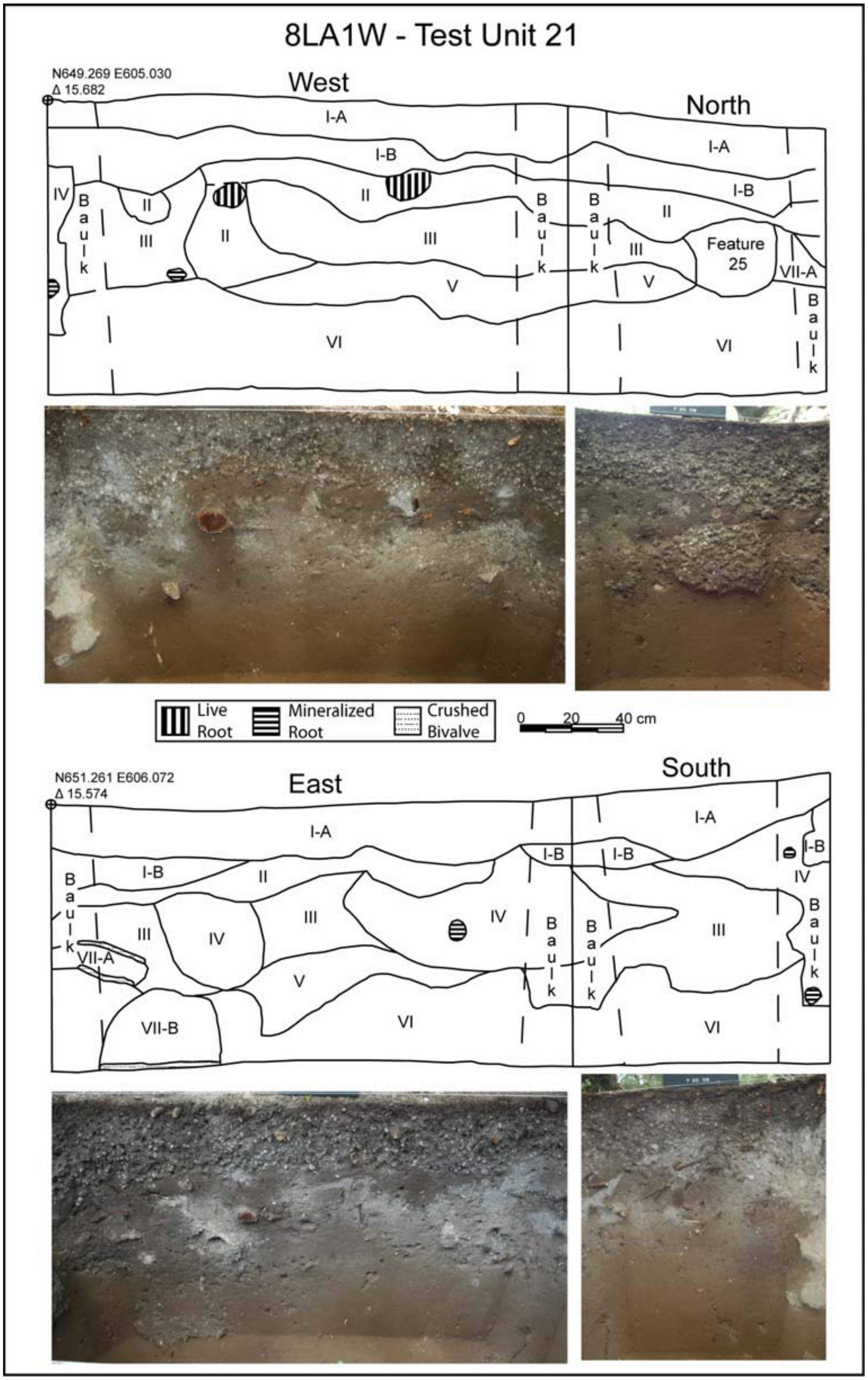

Figure 6-8. Stratigraphic drawings and photographs from profiles of TU21, 8LA1W. (Note: Photographs are not to scale.)

Table 6-7. Stratigraphic Units of Test Unit 21, 8LA1W.

Stratigraphic Unit	Max. Depth cm BD[1]	cm BS[2]	Munsell Color	Description
I-A	33	28	7.5YR3/1	Very dark gray medium loamy sand with abundant whole and crushed *Viviparus* shell; abundant roots.
I-B	46	38	10YR3/2	Very dark grayish brown medium loamy sand with abundant whole and few crushed *Viviparus* shell.
II	56	49	10YR3/3	Dark brown medium sandy loam with low density whole and crushed *Viviparus* shell; abundant roots.
III	91	84	10YR4/2	Dark grayish brown medium sandy loam with discrete pockets of whole *Viviparus* and crushed bivalve shell; occasional ashy deposits; abundant roots and mineralized root casts.
IV	90	90	10YR5/2 10YR4/2	Mottled grayish brown and dark grayish brown sandy loam with low density whole and crushed *Viviparus* shell; frequent mineralized root casts and concreted sand; occasional ashy deposits.
V	100	89	10YR4/3	Brown fine to medium loamy sand with high density mostly crushed *Viviparus* shell; few live and mineralized roots.
VI	114	114	10YR4/4	Dark yellowish brown fine loamy sand with discrete deposits of whole bivalve and *Viviparus* shell.
VII-A	81	70	10YR3/2	Very dark grayish brown medium sandy loam with high density whole *Viviparus* shell throughout and abundant crushed bivalve along lower margin; common fine charcoal particles. Probable animal burrow.
VII-B	113	102	10YR4/4	Dark yellowish brown medium loamy sand with common whole *Viviparus* shell throughout and concreted whole and crushed *Viviparus*, *Pomacea*, and bivalve shell along lower margin.

Feature 25 and is most likely the result of an animal burrowing through the feature deposit and dragging shell into the underlying sand. Stratum VII-B is another pocket of shell near the northeast corner of the TU21. It consists mostly of whole loose *Viviparus* shell but also contains frequent pockets of concreted whole and crushed *Viviparus*, *Pomacea*, and bivalve along its lower margin. Several of the preceramic pit features discussed below also exhibit a lining of concreted shell along their bases, and Stratum VII-B is likely an additional example of these pits that was not recognized during excavation.

Table 6-8. Cultural Materials Recovered from Test Unit 21, 8LA1W.

Level	St. Johns Plain	Orange / T. I. Incised	Orange Eroded	Crumb	Lithic Biface	Lithic Flake	Marine Shell (g)	Mod-ified Bone	Vert. Fauna (g)
A	4								0.9
B	3			4					4.3
C[1]	1		1	3					2.5
C – Zone A		1	1	3				1	14.5
D – Zone B		4	7	27		1			28.9
E[2]				4		1		2	63.4
F					1	1	0.1		66.7
G						4			29.2
H					1	2			10.7
I								1	5.8
J						1			4.0
K						2			4.0
Total	8	5	9	41	2	12	0.1	4	234.9

[1]plus one St. Johns Check-Stamped
[2]plus one Orange Plain

Test Unit 19

Test Unit 19 (TU19) in another 1 x 2-m unit placed two meters to the north of TU21 in a relatively flat area just north of Locus B's shell node. Excavations of TU19 proceeded to a depth of 130 cmbd and revealed eight distinct stratigraphic units. Composite drawings and photographs of the stratigraphic profiles from all four of TU19's walls are shown in Figure 6-9, and descriptions of the major stratigraphic units are provided in Table 6-9. Summations of artifact counts for each level and zone are shown in Table 6-10.

In line with the previously discussed units in this transect, Stratum I of TU19 consists of a 10 to 20-cm-thick A-horizon that has been churned by historic plowing. It consists of dark brown loamy sand with abundant small to medium roots and occasional whole and fragmented *Viviparus*. Artifact content is relatively low in Stratum I and includes small St. Johns Plain ceramic sherds, a few lithic flakes, and sparse vertebrate fauna, all of which are likely to have been displaced by the plowing.

Stratum I sits atop four distinct strata in different parts of TU19, each of which is distinguished from the others based primarily on the density and condition of their shell constituents. Most clearly visible in the south and west profiles, Stratum II consists of a roughly horizontal layer of dark brown loamy sand with dense whole *Viviparus* shell. Stratum IV contains similar soil matrix but is distinguished from Stratum II by a higher proportion of crushed to whole *Viviparus* shell. It shares the same basic elevation as Stratum II and is visible primarily in the north and east profiles. Separating Strata II and IV in the northwestern corner of TU19 is a discrete pocket of very dense whole *Viviparus* and bivalve that contains little to no soil matrix. The portion of this deposit visible in the west profile contains virtually no non-shell sediment and was designated IIIA, while the portion in the corner that contains some burned shell mixed with a small amount of very dark gray ashy sediment was labeled IIIB. Strata IIIA/IIIB extend approximately 25 cm out of the northwest corner of the test unit. Within excavation Levels D and E, this deposit was separated as Zone B while the remaining general level fill was referred to as Zone A. These distinctions are reflected in the artifact counts in Table 6-10.

All occurring at approximately the same elevations, Strata II, IIIA, IIIB, and IV correspond primarily to excavation Levels C through E and a portion of Level F. The density and condition of shell in these strata suggest rapid massive deposition rather than gradual accumulation. The frequency of Orange fiber-tempered ceramics in these levels exceeds that found in the more southerly units while the density of other artifact types remains relatively low. Vertebrate faunal remains, in fact, are significantly less abundant in TU19 than in comparable deposits from the test units already discussed. Also in contrast to previous units, several of the fiber-tempered ceramics recovered from TU19 exhibit Tick Island style surface decorations featuring bold curvilinear incisions and punctations.

Underlying these strata, Stratum V is a probable buried A-horizon visible in TU19's west, south, and east profiles. Stratum V at least roughly follows the general surface topography, sloping downward from south to north. It consists of a layer of dark brown loamy sand of variable thickness and contains only sparse whole *Viviparus* and virtually no other cultural materials. This stratum shares a similar stratigraphic position to presumed buried A-horizons in Test Units 12 and 14 and probably represents a period of site abandonment or very low-intensity use between the Late Preceramic and Early Ceramic occupations of the site.

Stratum VI is a small isolated lens of dense whole *Viviparus* located within the otherwise virtually shell-free matrix of Stratum V, along the southwestern margins of TU19. Located within an apparently natural pedogenic deposit, Stratum VI is best explained as resulting from an animal burrowing through the overlying shell midden and intruding into the soil below.

Throughout much of TU19 Stratum V sits atop Stratum VII, a thin horizontal layer of dense burned and, in some places, concreted bivalve stretching across the southeastern half of the test unit. Designated Zone C during excavation, Stratum VII was first encountered at the base of excavation Level D as a discrete pocket of dense bivalve located in the southeastern corner of the unit. As excavation proceeded, it expanded laterally across almost half of the test unit before eventually terminating near the top of Level G. The only non-shell cultural materials recovered include a small amount of vertebrate fauna and paleofeces. In terms of composition, morphology, and elevation, Stratum VII seems to correspond well with the preceramic crushed shell surfaces noted in TUs 12 and 14. In all three cases, the crushed shell layers are positioned directly underneath a buried A-horizon and exhibit a complete absence of ceramics, suggesting that they may all be extensions of the same preceramic surface.

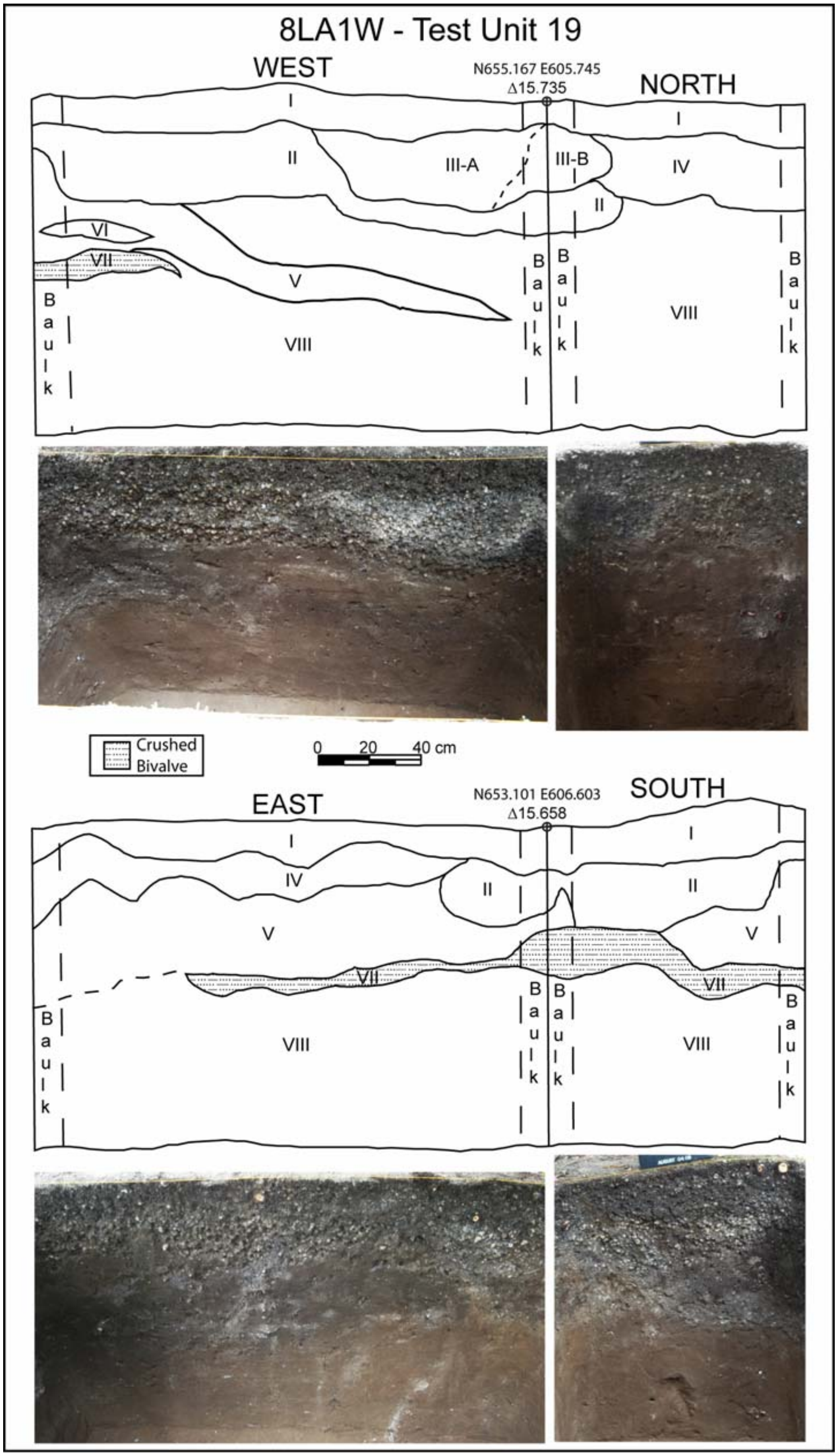

Figure 6-9. Stratigraphic drawings and photographs from profiles of TU19, 8LA1W. (Note: Photographs are not to scale.)

Table 6-9. Stratigraphic Units of Test Unit 19, 8LA1W.

Stratigraphic Unit	Max. Depth cm BD[1]	cm BS[2]	Munsell Color	Description
I	26	23	7.5YR2.5/2	Very dark brown historically plowed A horizon with abundant roots and occasional whole and fragmentary *Viviparus* shell.
II	56	53	7.5YR3/2	Dense whole *Viviparus* shell in a dark brown loamy sand.
III-A	46	43		Extremely dense whole *Viviparus* shell and occasional bivalve with virtually no soil matrix.
III-B	46	43	7.5YR3/1	Extremely dense whole *Viviparus* and bivalve in very dark gray ashy, burned soil matrix.
IV	46	41	7.5YR3/2	Dense whole and crushed *Viviparus* shell in a dark brown loamy sand.
V	88	85	7.5YR3/2	Possible buried A horizon; dark brown organically enriched sand with sparse whole *Viviparus* shell.
VI	57	52	7.5YR3/1	Dense whole *Viviparus* shell in very dark gray sandy matrix.
VII	75	77	7.5YR3/3	Dense crushed and burned bivalve concreted in some places; sparse fauna; paleofeces.
VIII	127	136	7.5YR3/3	Dark brown, virtually shell-free fine sand; occasional fauna and chert flakes, decreasing with depth; large *Busycon* cooking vessel.

The basal stratum of TU19 (Stratum VIII) is composed largely of the same fine to medium brown sand that characterizes the basal deposits of the test units already discussed. Overall, this stratum contains very sparse whole and crushed *Viviparus* and bivalve along with occasional chunks of concreted shell near the center of the test unit. Artifact density is slightly higher than in other units and includes lithic debitage, marine shell, and infrequent vertebrate fauna. In addition to these items, a Newnan point and a burned out *Busycon* shell vessel were recovered from excavation Levels I and J respectively. Both of these are characteristic of the preceramic Mt. Taylor period. Shell and artifact density decrease with depth, eventually dwindling to almost nothing at the bottom of the unit (130 cmbd).

Test Unit 22

Test Unit 22 (TU22), the northernmost unit in the north-south transect bisecting Locus B, is another north-south oriented 1 x 2-m unit located 2 m to the north of TU19 at the northern edge of the ridge nose just before the land begins to slope downward toward the spring run. It is offset one meter to the west of the rest of the transect units in order to

Table 6-10. Cultural Materials Recovered from Test Unit 19, 8LA1W.

Level	St. Johns Plain	Orange/ T. I. Incised	Orange Plain	Crumb	Lithic Biface	Lithic Flake	Marine Shell (g)	Vert. Fauna (g)	Paleo-feces (g)
A	1			4		1		5.7	
B	2		1	3		1		12.8	
C		4	3	9			101.5	4.0	
D – Zone A		6		10		2		24.0	0.1
D – Zone B								2.2	
E – Zone A			2					15.8	
E – Zone B								1.5	
E – Zone C								0.4	
F – Zone A			2	3		3		28.7	
F – Zone C								2.7	
G – Zone A					1	1	14.4	35.1	
G – Zone C							0.9	48.5	10.9
H								28.1	
I				1	1	2	1.4	14.3	
J							726.2	18.4	
K				1				13.4	
L					1	1		9.2	
M								10.7	
Total	3	10	8	31	3	11	844.4	275.5	11.0

avoid a large tree. Excavated to approximately 175 cmbd, TU22 was found to contain seven distinct stratigraphic units, four of which exhibit their own internal divisions. Composite drawings of the stratigraphic profiles from all four of TU22's walls are shown in Figure 6-10, while descriptions of the major stratigraphic units are provided in Table 6-11. Summations of artifact counts for each level are shown in Table 6-12.

Stratum I in TU21 is the 10-20 cm thick active A-horizon covering virtually all of Locus B. It slopes gently downward from south to north, following the general trend of the surface topography on which it is located. Like previously discussed test units, this stratum lies entirely within the modern plow zone and has thus been disturbed to some extent. Located near the base of a large Juniper tree, the plow zone in this area is permeated by a dense mat of small to large roots. It corresponds to excavation Levels A and B and yielded very few artifacts. These are limited to a few small St. Johns Plain and Orange Plain ceramics and a trace of vertebrate fauna.

Consistent with the rest of the transect, the plow zone here sits atop a thick, dense layer of shell that extends across much of Locus B. In TU22, this layer (Stratum II) consists of mostly whole unconsolidated *Viviparus*, and occasional whole *Pomacea* within a dark gray fine sand. In some locations (Stratum IIA), shell density is so high that minimal soil matrix can be discerned. Along the east and south profiles, Stratum II is

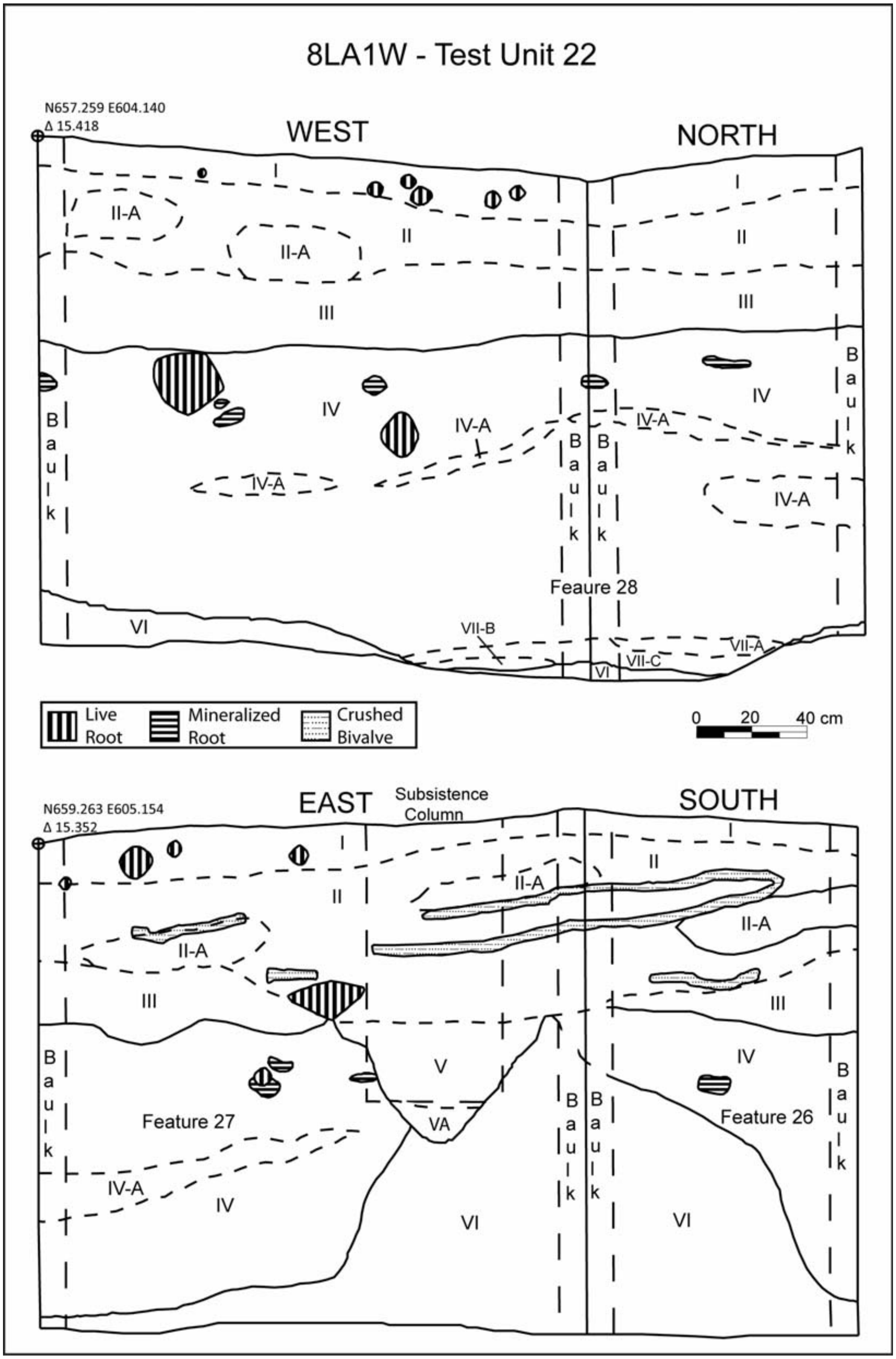

Figure 6-10. Stratigraphic drawings of profiles from TU22, 8LA1W.

Table 6-11. Stratigraphic Units of Test Unit 22, 8LA1W.

Stratigraphic Unit	Max. Depth cm BD[1]	cm BS[2]	Munsell Color	Description
I	34	20	10YR3/2	Very dark grayish brown medium to fine sand with moderate whole *Viviparus* shell and dense root mat.
II	71	74	10YR4/1	Dark gray fine sand with dense whole *Viviparus* and low to moderate density crushed *Viviparus* shell; occasional *Pomacea.*
II-A	54	52		Whole *Viviparus* shell with minimal soil matrix.
III	80	78	10YR2/2 10YR3/2	Fine sand with moderate density whole *Viviparus* shell; grades from very dark brown to very dark grayish brown toward north.
IV	191	179	10YR3/3	Dark brown fine sand with low density whole *Viviparus* and occasional bivalve and *Pomacea.*
IV-A	144	138	10YR3/2	Very dark grayish brown fine sand with moderate density *Viviparus* shell.
V	104	106	10YR4/3	Brown fine sand with abundant whole and broken *Viviparus* shell. Undesignated pit feature.
V-A	115	117	7.5YR4/6	Dark yellowish brown fine shell-free sand with probable heat oxidation.
VI	200	192	10YR4/6 10YR6/6	Fine sand (sterile substrate) that grades from brownish yellow at the top to dark yellowish brown near the bottom.
VII-A	191	182	10YR3/3	Dark brown fine sand with small shell concretions; sparse charcoal.
VII-B	196	182	7.5YR5/6	Yellowish brown heat-oxidized sand.
VII-C	198	186	10YR4/4	Dark yellowish brown fine sand; zone of leaching.

interrupted in spots by thin horizontal lenses of burned and mostly crushed bivalve. These lenses provide virtually the only evidence of a depositional discontinuity within an otherwise massive deposit of gastropod shell. Stratum II deposits contain occasional St. Johns Plain and abundant Orange Plain and Incised ceramics but little else in terms of material culture. Although dominated by highly fragmented crumb sherds with indeterminate surface modifications, Orange ceramics from this stratum include both straight-line and curvilinear Tick Island style motifs. Other recovered materials include a single lithic tool and sparse vertebrate fauna.

Across most of the test unit, Stratum II transitions gradually to Stratum III, a stratigraphic distinction marked by the latter's contrasting color and slightly lower density of shell. Stratum III consists of dark grayish brown fine sand that grades to an even darker brown in the northern half of the test unit. It contains a moderate density of whole *Viviparus* shell along with a small amount of fiber-tempered ceramics, a few small fragments of marine shell and modified bone, and a noticeable, albeit modest, increase in vertebrate fauna density.

Along the east wall of TU22, Stratum III is intersected by Stratum V, a roughly cone-shaped deposit of sand and shell that penetrates approximately 45 cm into the underlying sand. Stratum V is composed of medium brown fine sand with abundant whole and broken *Viviparus.* It appears to originate from the basal margin of Stratum III and probably represents an undesignated pit feature emanating from a Late Archaic occupational surface at that elevation. Additional evidence for a once stable surface at the base of Stratum III occurs in the form of numerous mineralized roots visible in the TU22 profile drawings in the upper portion of Stratum IV. As discussed in Chapter 3, these mineral deposits are thought to form as large amounts of shell are dumped on a surface concealing live roots. As minerals leach down from the overlying shell, mineralized casts of the original roots are preserved. The size and position of these root casts in Stratum IV of TU22 resembles that of the live roots located just below the contemporary surface in Stratum I. In all likelihood, this is the same surface as that is most clearly identified at the base of Stratum II in TU14 and inferable from the profiles of the other test units already discussed. In all of these cases, massive deposits of snail shell containing fiber-tempered pottery were dumped upon a previously existing horizontal sand substrate at a depth of between 50 and 75 cm below the modern surface.

Underlying the Strata II and III shell deposits in TU22 is a massive ca. 120-cm thick layer of brown sand that at first glance appears to simply represent the sterile sand substrate observed at the bottoms of all the aforementioned test units. In contrast to this massive undifferentiated layer, however, excavation of the first few levels of the sand in TU22 revealed at least two large overlapping soil stains that were determined to be infilled pits. Although overlapping and only subtly distinct near their tops, these pits eventually diverged, exposing two discrete dark brown features (Features 26 and 27) penetrating more than one meter into the yellowish-brown substrate (see Figure 6-11). An additional pit (Feature 28), which was indiscernible at its top, was identified near the bottom of TU22 based on a discrete area of oxidized, charcoal impregnated sand and concreted shell. Although impossible to determine accurate dimensions because of the restricted view offered by the 1 x 2-m test unit boundaries, Feature 26 has a diameter of at least 60-cm while Feature 27 exceeds one meter in diameter. These pits contain little material culture aside from a small amount of Orange Plain pottery in Feature 27 and occasional vertebrate fauna. A thin lens of *Viviparus* shell (Stratum IV-A) runs through the center of both of these features, suggesting that their infilling may have occurred slowly in stages rather than in a single depositional episode. Subsequent excavations of similar pits in different areas of Locus B suggest that they functioned as large-scale

Table 6-12: Cultural Materials Recovered from Test Unit 22, 8LA1W

Level	St. Johns Plain	Orange/ T. I. Incised	Orange Plain	Orange Eroded	Crumb	Lithic Tool	Lithic Flake	Marine Shell (g)	Modified Bone	Vert. Fauna (g)
A	2									
B				1	1					1.1
C		6	3		15					7.4
D	3	6	5	3	30					14.8
E		1	1	3	19	1				36.4
F				1	1					38.8
G				1						20.8
H		3	3	6	33			1.5		73.7
I	2	1	7	2	25	1		15.3		12.9
J			5		5			0.3		6.6
K			1		2	1				12.4
L				1			2			11.9
M			1				1			23.5
N			1					25.6		5.8
O			1		9				1	20.5
P										3.5
Q			1							8.0
R										11.4
Total	7	17	29	18	140	3	3	42.7	1	309.5

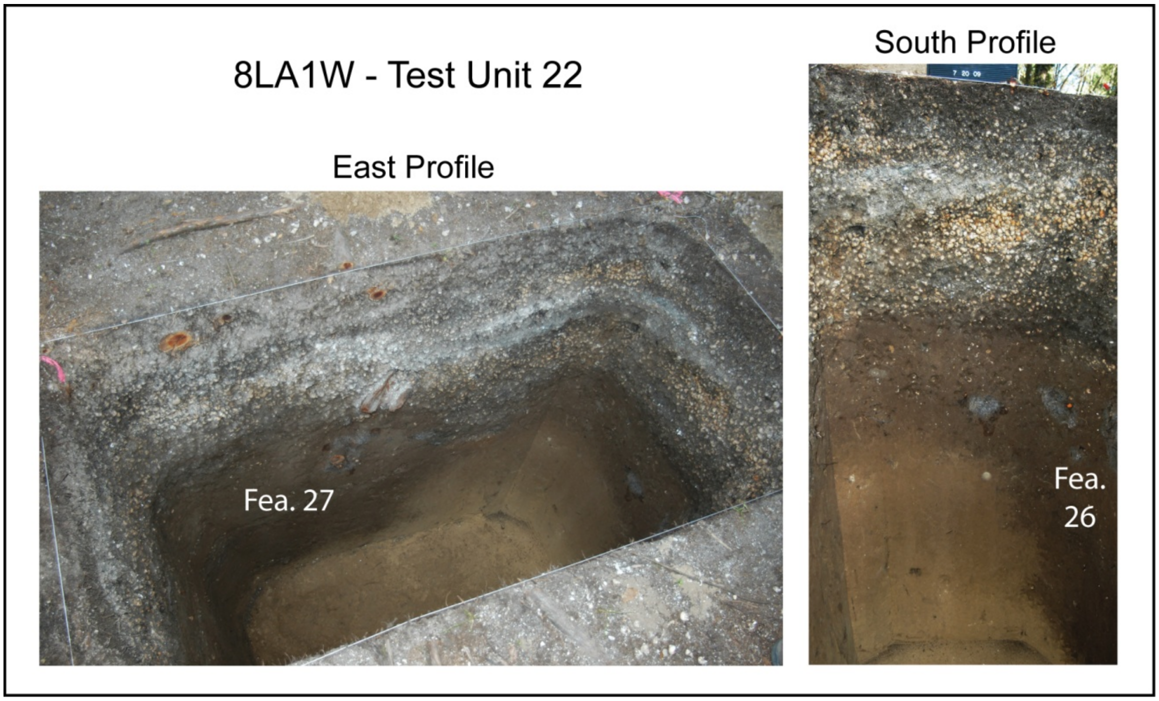

Figure 6-11. Photographs of the east and south profiles of Test Unit 22 showing Features 26 and 27.

roasting or steaming facilities used in the processing of bivalve. This interpretation helps to explain their general lack of artifact content as well as the burning evidence often exhibited at their bases. An AMS assay (see all radiocarbon data in Appendix B) from charcoal obtained near the bottom of Feature 26 yielded an age estimate of 3970 ± 40 rcybp (4520-4300 cal BP). This estimate indicates that unlike the other test units in the same transect, TU22 contains no significant Mount Taylor component. Rather, its entire stratigraphic sequence resulted from Orange period depositional practices.

Following the general level excavations of TU22, a 50 x 50-cm column sample was removed from the east wall of the test unit (precise location of column shown in Figure 6-10) in order to collect fine-grained subsistence data. The column was located so as to capture the stratigraphic data present in the upper strata of the test unit as well as to intersect with the undesignated pit feature (Strata V and VA) descending down from Stratum III in the east profile. The column was terminated at ca. 125 cmbd, as bulk samples had already been removed from the underlying pit features.

Discussion of North-South Transect (TUs 12, 13, 14, 19, 21, and 22)

The six test units making up the north-south transect at Locus B offer a 26-m cross section of this portion of 8LA1W and provide a solid basis for inferring this area's depositional history. The overall stratigraphy of the transect consists of three major ethnostratigraphic units. Beginning at the bottom of the sequence, a substantial preceramic Mount Taylor occupation is visible primarily in the form of a thin crushed shell surface laid down upon a locus-wide sterile substrate of yellowish-brown sand. This crushed shell stratum is visible in all of the test units excluding TU13, where the shell midden thins out considerably along Locus B's southern margin and TU22, where Mount Taylor deposits may have been obliterated by subsequent Orange period pit digging activities. Mount Taylor deposits in this area include a wide variety of cultural materials generally associated with everyday life including lithic, bone, and shell tools, abundant vertebrate fauna, paleofeces, and a number of small pit features suggesting that Locus B served as a place of domestic habitation during this period.

This Mount Taylor occupation was followed by a substantial, albeit indeterminate, period of abandonment or low-intensity use at Locus B as evidenced by the development of the organically enriched A-horizon visible in TUs 14 and 19. The interval represented by this stratum must necessarily have entailed relative surface stability and a lack of large-scale depositional activities. Further evidence for extended surface stability during this time is provided by the numerous mineralized root casts present just below Orange Period shell deposits, which indicate that substantial vegetation was in place shortly before these deposits were made.

Following this "abandonment" period, intensive utilization of Locus B was resumed by people utilizing Orange fiber-tempered ceramics. Along the northern margin of the excavated transect, this utilization involved the digging of extremely large pits, presumably for the processing of freshwater bivalve. After these pits were filled in, massive amounts of *Viviparus* shell were deposited over the entire area, resulting in a thick mantle of whole, often unconsolidated, shell that shows no signs of having been trampled or intensively lived upon. In contrast to earlier Mount Taylor period activities, those carried out by Orange people apparently involved a narrower range of material culture items and resulted in the deposition of less vertebrate fauna and non-*Viviparus* shellfish. All of these factors suggest the possibility of a more specialized use for Locus B during its Orange period occupation.

Finally, a relatively thin and poorly understood St. Johns component exists at the top of the stratigraphic sequence revealed by this series of test units. Unfortunately, Locus B's extensive near-surface disturbances have largely obscured the nature of this occupation as well as its relationship to the underlying Archaic components. There are some indications, such as the depression noted at the location of TU21, of modern surface modifications that may have truncated St. Johns deposits, although the extent of such activities is unclear. At the very least, the entire area appears to have been plowed and its upper 20-30 cm of sediment churned and displaced.

In summary, the 1 x 2-m test units comprising the north-south transect at Locus B revealed three distinct ethnostratigraphic units that respectively correspond to the archaeologically defined Mount Taylor, Orange, and St. Johns periods. The Mount Taylor and Orange components in this area appear substantial and well-preserved while the St. Johns stratum is relatively wispy and has been disturbed. A more nuanced understanding of these different components and their historical relationships has been achieved through the excavation of two exploratory test units in other parts of Locus B, as well as larger-scale and more intense block excavations.

Test Unit 46

Test Unit 46 (TU46) is a 1 x 2-m test unit located approximately 13 m to the east of TU21. Excavated in 2010, TU46 was placed near Locus B's topographic high point at the apex of the shell node in order to assess the node's age and cultural affiliation. It was also intended to help determine what the natural morphology of the Locus B landscape was prior to the deposition of shell during the Archaic.

Composite drawings and photographs of the stratigraphic profiles from all four of TU46's walls are shown in Figure 6-12, and descriptions of the major stratigraphic units are provided in Table 6-13. Summations of artifact counts for each level and zone are shown in Table 6-14.

Based on a 1941 aerial photograph and the nearby presence of a very large and presumably old hardwood tree, the location of TU46 is likely to have escaped the historic plowing that affected the rest of Locus B. The uppermost stratum in TU46 (Stratum I) consists of a 10 to 25-cm-thick A-Horizon and contains the highest density of St. Johns ceramics thus far encountered at Locus B. Beneath this stratum, pottery is largely absent, with only one sherd recovered that is larger than crumb-size (>2 cm in diameter). Fiber-tempered pottery is scarce throughout TU46, suggesting that the Orange component may be less substantial in this part of the site.

Directly beneath the active A-horizon lies a thick deposit of mostly whole *Viviparus* that is divided into multiple distinct strata based primarily on soil color differences and the presence of additional shellfish species. Much of this differentiation may be a result of several disturbances intruding into the deposit from above including live tree roots, trees that burned in place, and animal burrows. In some instances, these disturbances penetrate more than a meter into the TU46 deposits, obscuring the upper portion of the stratigraphic profile. Burned ashy deposits in the south half of the test unit and orange oxidized sand and shell along the west profile are perhaps the most severe examples. A shell-filled pit feature (Feature 52) also interrupts this *Viviparus*-dominated stratum in the southwest corner of TU46. Originally designated Zone A during excavation, the pit itself is highly stratified, indicating that it was filled in multiple episodes involving alternately the deposition of whole and broken bivalve and whole *Viviparus*. Although containing no ceramics, this feature appears to originate high in the stratigraphic sequence, perhaps emanating from the St. Johns deposits near the modern surface. A few mineralized roots are present at the base of and directly underneath this *Viviparus* layer.

A series of thin, horizontal layers of crushed and burned bivalve and *Pomacea* are observable underneath the thick stratum of *Viviparus* shell. These bivalve lenses are most clearly visible in the west and north profiles as Strata V, VIII, and X but exist in all four profiles to some extent. When first encountered as a seemingly discrete pocket of

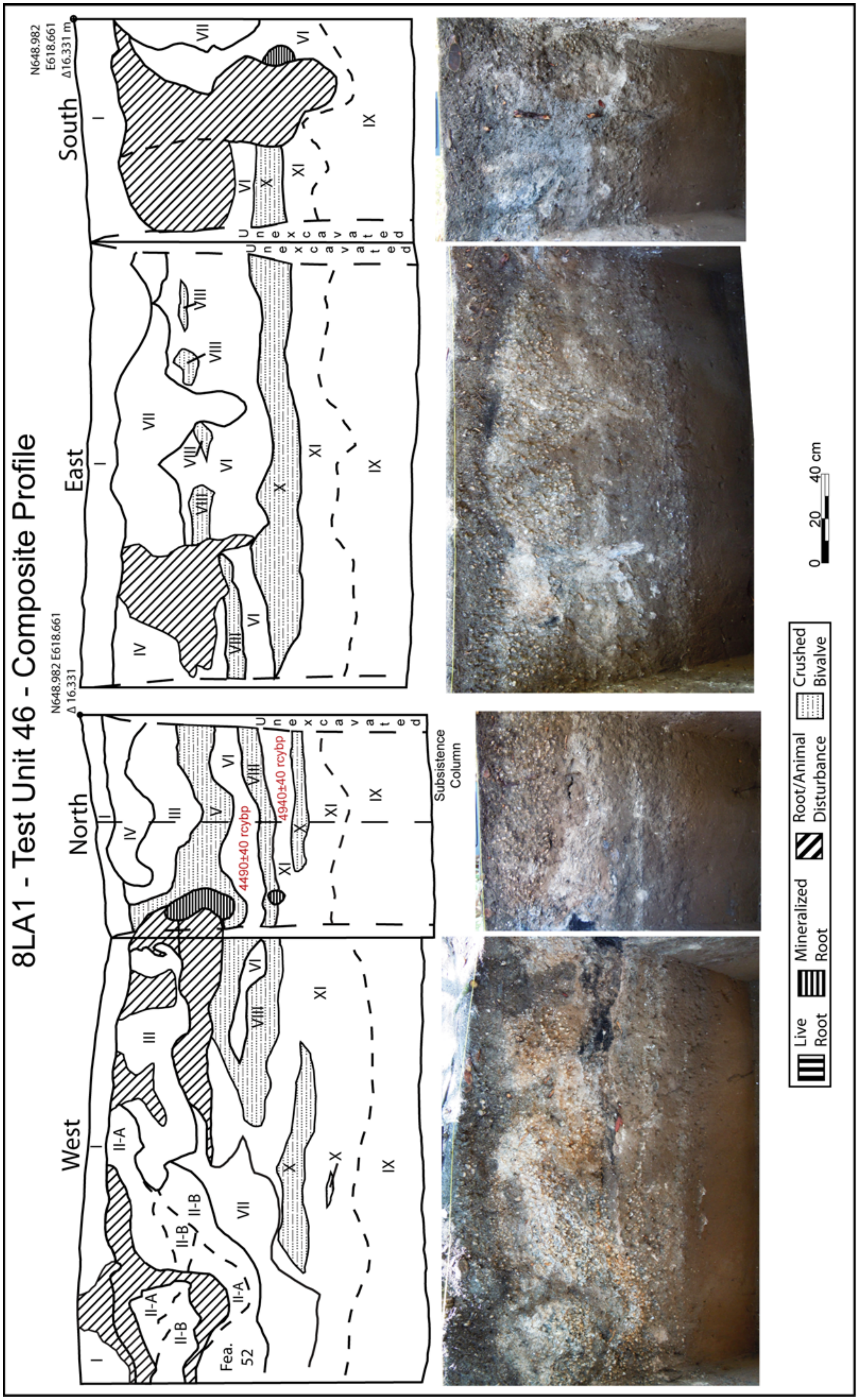

Figure 6-12. Stratigraphic drawings and photographs from profiles of TU46, 8LA1W. (Note: Photographs are not to scale.)

Table 6-13. Stratigraphic Units of Test Unit 46, 8LA1W.

Stratigraphic Unit	Max. Depth cm BD[1]	cm BS[2]	Munsell Color	Description
I	36	30	10YR2/2	Very dark brown fine sand with low density whole *Viviparus*.
II-A	73	72		Dense crushed bivalve with virtually no soil matrix.
II-B	81	80		Dense whole *Viviparus* with virtually no soil matrix.
III	54	46	10YR3/6	Dark yellowish brown medium sand with moderate density whole and broken *Viviparus*.
IV	52	50	10YR6/2	Light brownish gray ashy fine sand with moderate to high density whole *Viviparus* and crushed bivalve.
V	72	59	10YR5/3	Brown fine sand with moderate to high density crushed bivalve.
VI	133	121	10YR3/3	Dark brown fine sand with very low density broken shell.
VII	103	101	10YR4/3	Brown fine sand with medium whole *Viviparus* and broken shell.
VIII	109	104	10YR4/3	Brown fine sand with moderate to high density whole and crushed bivalve and *Pomacea*.
IX	153	148	10YR3/3	Dark brown, shell-free fine sand.
X	101	96	10YR4/3	Brown fine sand with moderate to high density whole and crushed bivalve and *Pomacea*.
XI	127	126	10YR3/3	Dark brown fine sand with very low density broken shell.

bivalve and *Pomacea* in an otherwise sand test unit floor at the base of Level G, the uppermost lens was labeled Zone B. These thin layers of shell contain a variety of cultural materials, albeit all in modest amounts, including lithic debitage and tools, marine shell, modified bone, increased vertebrate fauna relative to overlying strata (including a shark's tooth), and paleofeces. Stratigraphically, the crushed shell lenses alternate with thin layers of dark brown sand containing very low densities of shell or other cultural materials. This entire sequence of shell-filled and shell-free strata most likely reflects a series of domestic occupations with intervening periods of abandonment during which natural soil development was allowed to take place. Two charcoal samples from the intervening sand strata were submitted for AMS radiocarbon assays, one from Stratum VI and one from the top of Stratum XI and returned dates of 4490 ± 40 rcybp (5300-4970 cal BP) and 4940 ± 40 rcybp (5740-5600 cal BP) respectively. If confirmed

Table 6-14. Cultural Materials Recovered from Level Excavation of Test Unit 46, 8LA1W.

Level	St. Johns Plain	Crumb	Lithic Tool	Unmod. Lithic Flake	Misc. Rock	Marine Shell (g)	Modified Bone	Vert. Fauna (g)
A[1]	4	12	1	1	1			22.4
B[2]	1	10	1	1	1			13.8
C[3]	9	10				48.8		10.6
D		22				0.3		23.9
E	1	3				3.4	1	36.0
F		1	1	1		16.3		44.6
F – Zone A								36.2
G[4]			1	2			2	103.8
G – Zone A								3.0
G – Zone B[5]								10.4
H[6]				3		6.8		56.4[7]
I			2	1				80.3
J				1		2.0		152.6
K								7.8
L			1	5				1.4
M				5	1			4.2
N				7				0.9
Profile Cleanup								14.9
Total	15	58	7	27	3	77.6	3	623.2

[1] plus one St. Johns Incised sherd
[2] plus one Orange/Tick Island Incised sherd
[3] plus one sand-tempered eroded sherd
[4] plus 26.1 g paleofeces
[5] plus 1.7 g paleofeces
[6] plus one historic artifact; 9.6 g paleofeces
[7] includes one shark tooth

by additional analysis, these dates indicate a surprisingly long, roughly 450-year interval between successive occupations at the base of TU46.

A brown sand substrate underlies these serial occupations at the base of TU46. The color of the substrate is slightly darker in this area than that revealed by other Locus B test units. Also, a higher density of heavily patinated lithic debitage was observed, possibly indicating the presence of an early Holocene component akin to those noted at 8LA1-East (Chapter 3) and also directly across the spring run at 8MR123 (Randall et al. 2011).

To summarize the current understanding of the stratigraphic sequence at TU46, beginning at ca. 5000 B.P. this location was the site of apparent domestic activities involving the deposition of relatively large meaty shellfish species (primarily bivalve and *Pomacea*), various tools and manufacturing debris, vertebrate fauna, and paleofeces. Eventually, however, the area was abandoned and natural pedogenic processes gradually covered it with a thin layer of dark organic sediment. Over the next four-plus centuries, this process of settlement and abandonment repeated itself at least two additional times leading to the stacked sequence of shell and sand visible near the base of TU46. At some point, still prior to the introduction of ceramic technology, the use of this location changed dramatically as everyday domestic activities were discontinued and a massive mantle of *Viviparus* shell was placed over the former settlement, resulting in the shell node observable at Locus B today. Similar episodes involving the "capping" domestic locales at the end of their use-lives have been noted for other Mount Taylor period sites in the region and may mark a ritual transition in the use-lives of places (Randall 2010; Sassaman 2010). The only subsequent cultural deposition evident from TU46 was carried out by people using St. Johns Plain ceramics, indicating a probable hiatus in the use of the shell node throughout the Late Archaic Orange period.

Test Unit 57

Test Unit 57 (TU57) is a 2 x 2-m test unit located approximately 34 m to the northwest of TU22, the north end of the north-south transect discussed above. This puts it within what is now a cleared field that slopes down toward the spring run to the north. TU57 was excavated in 2010 in an area in between shovel tests 23-1 and 23-6, both of which yielded substantial quantities of Orange fiber-tempered ceramics. These shovel tests, along with judgmentally placed bucket auger tests, also indicated this as an area where shell deposits extended at least a meter beneath the modern surface. TU57 was intended to help determine the lateral extent of the Orange component at Locus B and perhaps to locate the habitation structures and/or domestic debris associated with this component that were conspicuously absent in the test units farther to the east.

Composite drawings and photographs of the stratigraphic profiles from three of TU46's walls are shown in Figure 6-13. Missing from this figure is the north profile, which unfortunately collapsed after a severe rain storm late in the field season before it was photographed or drawn (see Figure 6-14). Descriptions of the major stratigraphic units are provided in Table 6-15, and artifact counts for each level and zone are shown in Table 6-16.

The clearing in which TU57 is situated is maintained by the current land manager through periodic disking. Consequently, the upper 20-25 cm of sediment has been repeatedly churned leading to a well-defined plow-zone throughout the unit with visible plow scars near the bottom of this stratum. This plow zone (Stratum I) was excavated largely as a single unit (Level A). Directly underneath the plow zone, a clear division became visible in the floor of the unit between a dark grayish brown zone with a very high density of mostly whole *Viviparus* shell (Zone A) and a dark brown loamy sand with a much lower density of primarily crushed *Viviparus* (Zone B). Initially, at the base of Level B (30 cmbd), Zone A was restricted to the southern quarter of the unit. It expanded with depth, however, reaching its maximum extent in Level E (50-60 cmbd) before again receding toward the south. Artifact distribution was fairly comparable between Zone A and Zone B with both containing Orange ceramic sherds, of which incised varieties

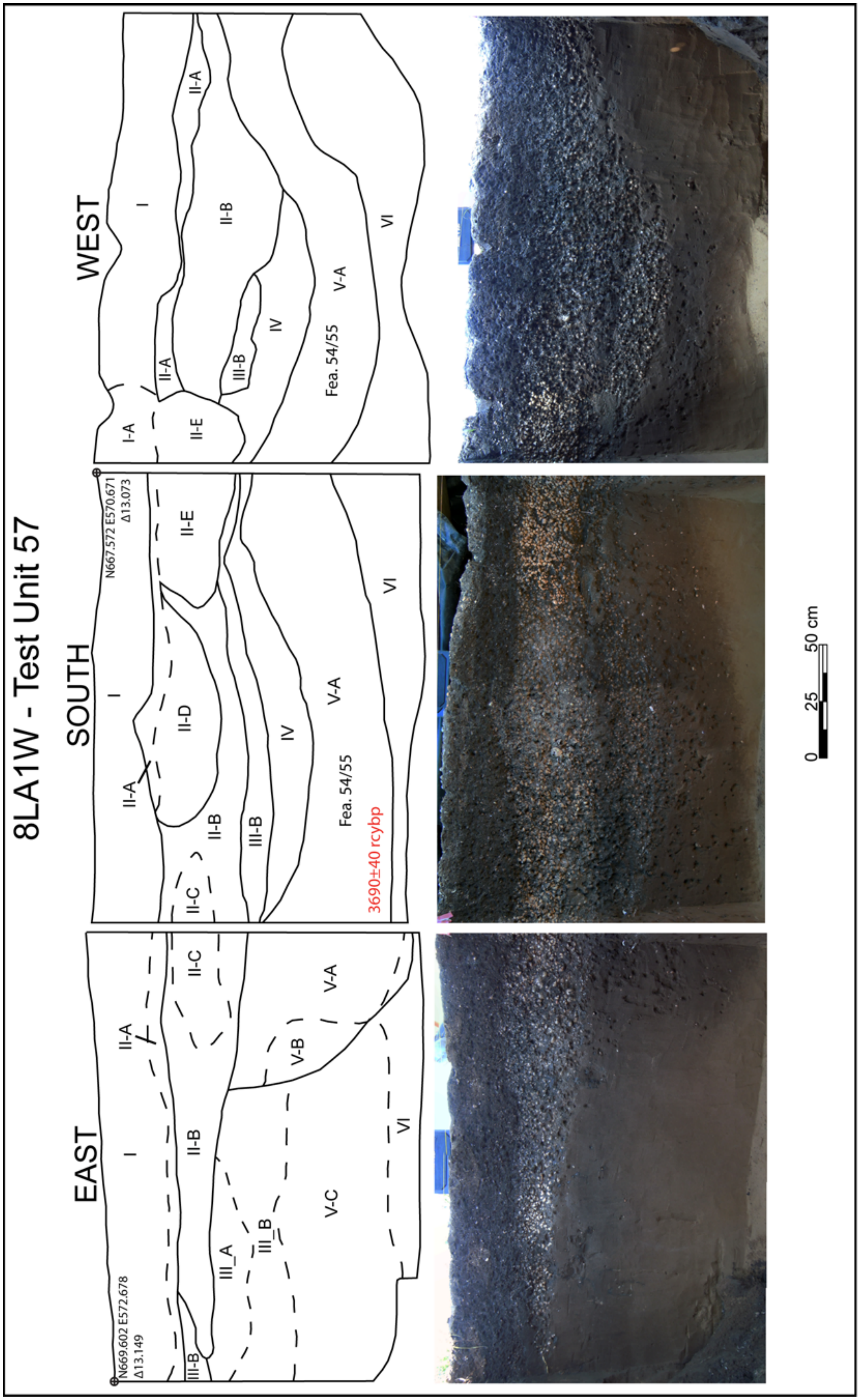

Figure 6-13. Stratigraphic drawings and photographs of profiles from Test Unit 57, 8LA1W. (Note Photographs are not to scale.)

Table 6-15. Stratigraphic Units of Test Unit 57, 8LA1W.

Stratigraphic Unit	Max. Depth cm BD[1]	cm BS[2]	Munsell Color	Description
I	47	31	10YR3/2	Plow zone. Very dark grayish brown medium sand with low density *Viviparus*.
II-A	55	39	10YR3/2	Very dark grayish brown medium sand with dense crushed *Viviparus*.
II-B	88	72	10YR3/2	Very dark grayish brown medium sand with dense whole *Viviparus*.
II-C	94	60	10YR3/2	Very dark grayish brown medium sand with high density whole *Viviparus* and moderate density whole *Pomacea*.
II-D	60	58	10YR4/2	Dark grayish brown medium sand with dense whole *Viviparus* and crushed bivalve.
II-E	71	66	10YR3/2	Very dense whole *Viviparus* in small amount of very dark grayish brown medium sand.
III-A	75	63	10YR3/3	Dark brown medium sand.
III-B	94	80	10YR3/2	Dark grayish brown medium sand.
IV	103	101	10YR3/3	Dark brown medium sand with high density whole *Viviparus*.
V-A	140	138	10YR4/3	Brown medium sand with low to moderate density whole *Viviparus*.
V-B	124	120	10YR4/3	Brown medium to fine sand with no shell surrounding pit feature.
V-C	140	128	10YR4/3	Brown medium to fine shell-free sand.
VI	155	154	10YR6/6	Yellowish-brown fine sand.

outnumber the plain ones, and occasional vertebrate fauna. In profile, Zone A is visible as a thick dense mantle of shell (Strata IIA-IIE) that, like the upper shell strata in the 1 x 2-m units to the southwest, shows little differentiation from bottom to top, perhaps indicating its complete deposition in one or a few episodes over a short period of time.

The thick stratum of dense *Viviparus* constituting Zone A sits atop a buried A-horizon that can be observed as Stratum IIIB in the profile illustrations. This 5 to 15-cm-thick layer runs throughout much of the test unit at approximately 70-80 cm below the modern surface. Interestingly, as this ancient surface was approached during excavation, the fiber-tempered ceramic assemblage shifted from predominantly incised to

Figure 6-14. North profile of Test Unit 57 following the collapse of its rain-saturated basal sands.

predominantly plain, indicating two distinct depositional patterns within the Orange component in TU57.

As excavations proceeded beneath the buried surface, the densest shell deposits remained confined to the southern half of the test unit. Initially, this shell appeared to constitute a broad continuous stratum cutting across the entire test unit, but at ca. 100 cmbd, it became more discrete, revealing a large shell-filled pit. Originally considered two separate pits (Features 54 and 55) due to the angle at which the shell intersected the corner of the test unit, it was later determined to be one large pit. This pit is similar in scale to those observed in TU22, although it is somewhat shallower and more basin-shaped. It also lacks clear evidence for thermal alteration at its base, perhaps indicating an alternative function from its counterparts to the southwest. Detailed compositional data from the pit fill is not yet available but the fill includes dense whole and crushed *Viviparus*, moderate density of vertebrate fauna, and occasional lithic flakes. A complete bone awl was also recovered from Feature 54/55. A zone of dark brown organic sediment with a lower density of shell (Strata VA and VB) surrounds the shell-dense portion of the feature. It is unclear whether this reflects the stratigraphically distinct basal portions of the pit or simply a zone of organic leaching into the underlying substrate. An AMS radiocarbon assay obtained from charcoal recovered from the base of Feature 54/55 returned an age estimate of 3690 ± 40 rcybp (4140-3900 cal BP), situating it at least two hundred years later than Feature 26 from TU22.

Table 6-16: Cultural Materials Recovered from Level Excavation of Test Unit 57, 8LA1W

Level	Historic Objects	St. Johns C.-S.	St. Johns Plain	St. Johns Eroded	Orange / T. I. Incised	Orange Plain	Orange Eroded	Crumb Sherds	Lithic Tool	Unmod Lithic Flake	Misc. Rock	Marine Shell (g)	Mod-ified Bone	Vert. Fauna (g)
A[1]	4	4	9	1				57		2	1			14.9
B	3	4	16	3			1	75	2	3				20.1
C	1	10	19		8			53				1.0		54.9
D		1	4	3	1	1	3	18		1				18.4
D – Zone A					2		1	20				0.1	3	113.1
D – Zone B			8				1	46						52.3
E – Zone A						1		29		1				51.2
E – Zone B					2		3	23						110.5
F – Zone A						2		13				1.0		35.2
F – Zone B								7				4.3		19.1
G – Zone A					1	1		4						44.6
G – Zone B						2	2	13		2				26.1
H								14						25.9
H – Zone B						3		1	1	3				9.3
I – Zone B									1	3	1			4.2
J								1	1	1				5.0
K – Zone B														0.8
L										1				
L – Zone B									1	5				0.4
M – Zone B										2				2.6
Profie Clean			1			1		1		1				3.9
Total	8	19	56	7	14	11	11	375	6	25	2	6.4	3	612.5

[1] plus one sand tempered plain sherd

Before its collapse, the north profile of TU57 contrasted significantly with the rest of the test unit in its overall dearth of shell. The buried A-horizon (Stratum IIIB) was clearly visible at the same elevation as the rest of the unit but instead of supporting an overlying mantle of dense shell, it was topped by a thick undifferentiated layer of dark brown sand. In the surviving profiles, this sand layer is visible as only a small lens (Stratum IIIA) in the east wall that underlies the shell stratum as it pinches out in the northeast corner of the unit. This sand was emplaced directly onto the ancient surface and must have existed as subtle topographic rise at the time that the mantle of shell (Strata IIA-IIE) was deposited. That shell thus appears to have leveled out what previously would have been a rough and uneven surface.

Test Unit 4

Test Unit 4 (TU4) is an east-west oriented 1 x 2-m test unit located approximately five meters south (upslope) of shovel test pit 22-1 and ca. ten meters to the west of the north-south transect described above. It was sited in an effort to investigate an Orange period occupation, possibly of circular orientation judging from the distribution of shell and fiber-tempered pottery in shovel tests. Although the first test unit excavated at Locus B in 2007, TU4 is discussed last among the exploratory units because its stratigraphic complexity made explanation difficult until additional units were dug to provide some interpretive context. Excavation of TU4 was supervised by Neill Wallis and this discussion is adapted largely from his field notes.

Composite drawings and photographs of the stratigraphic profiles from three of TU46's walls are shown in Figures 6-15 and 6-16. Descriptions of the major stratigraphic units are provided in Table 6-17, and artifact counts for each level and zone are shown in Table 6-18.

Excavation methods in TU4 differed slightly from those described at the beginning of this chapter. Like the other test units, TU4 was excavated primarily in arbitrary 10-cm levels. As excavation proceeded, however, dense unconsolidated shell in the walls of the unit began to dislodge and in order to avoid a complete collapse, the walls were allowed to slope further and further in toward the center of the unit until it took on a bathtub shape. Subsequently, this "bathtub balk" was removed in natural stratigraphic layers. Consequently, artifact counts (Table 6-18) are provided for both arbitrary excavation levels and natural stratigraphic units.

TU4 exhibits a 20 to 30-cm-thick dark brown, organic plow zone containing a few displaced artifacts and occasional *Viviparus* shell, the density of which increases with depth. By the middle of excavation Level C (ca. 25 cmbs) this plow zone (Stratum I) begins to give way to the same thick stratum of dense whole *Viviparus* (Strata IIA-B, IV, and IVA-B in the profile drawings; Zones A and B during excavation) that has been observed within all Locus B test units so far discussed. The shell density in TU4, however, exceeds that encountered in most of the other units, leading to the instability issues noted above. In multiple locations along the profiles (especially in the east and

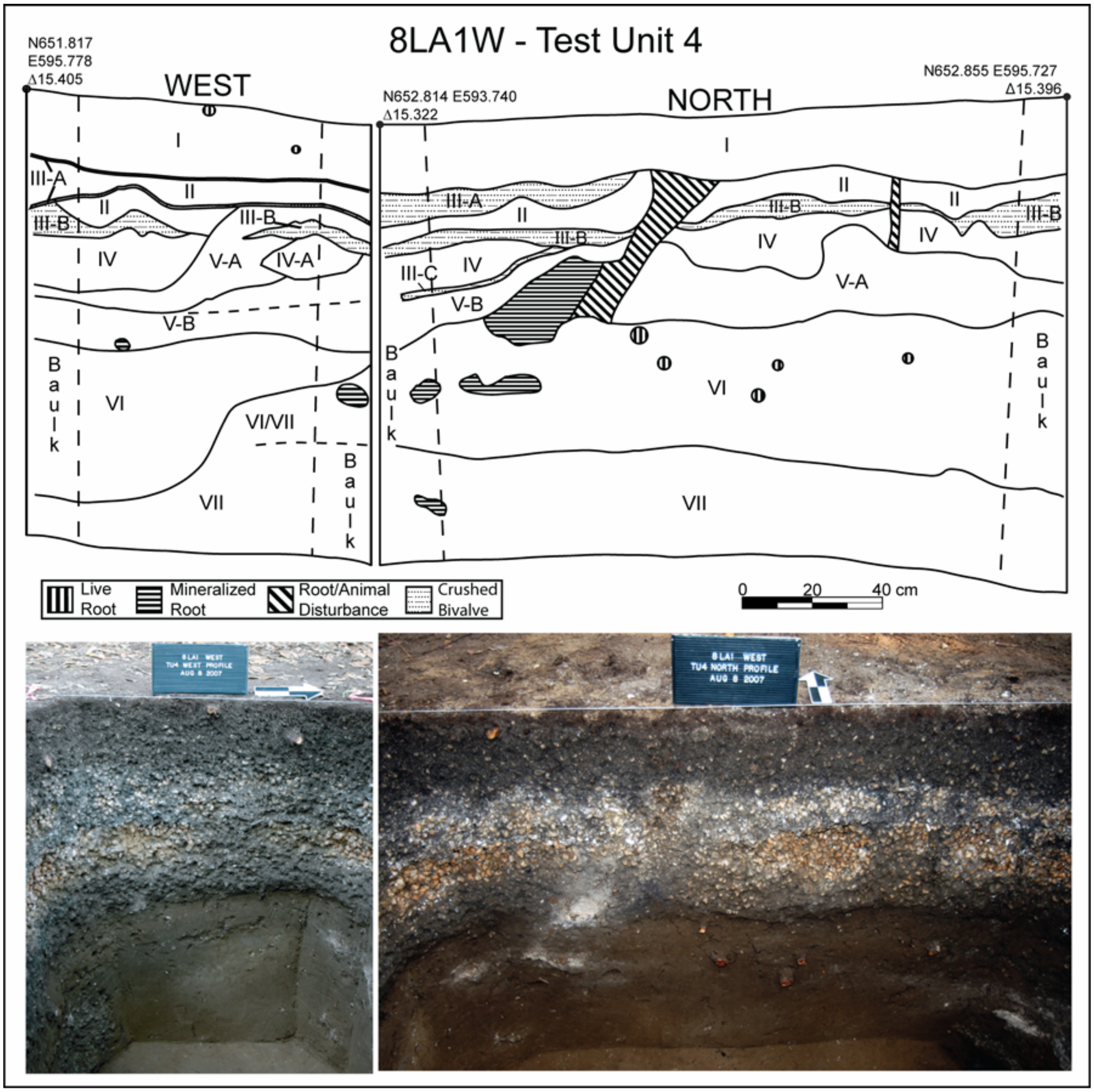

Figure 6-15. Stratigraphic drawings and photographs from west and north profiles of TU19, 8LA1W. (Note: Photographs are not to scale.)

south) there are large shell pockets that contain virtually no soil matrix. Thin horizontal lenses of crushed and sometimes burned bivalve (Strata IIIA-C; Zone C) cut through this thick *Viviparus* stratum in at least three distinct elevations. One of these lenses extended across the entire floor of the test unit at the base of excavation Level E (50 cmbd) and contained some of the densest concentrations of Orange ceramic sherds (including both plain and incised varieties) and vertebrate fauna within TU4. Together, these upper shell strata at TU4 may show evidence of a sequence of prepared and lived upon surfaces consisting of layers of whole *Viviparus* laid down to form a level and regular foundation upon which burned and crushed bivalve shell was then placed. At least three of these surfaces are discernible in the TU4 profiles, while another may have sat atop Stratum II,

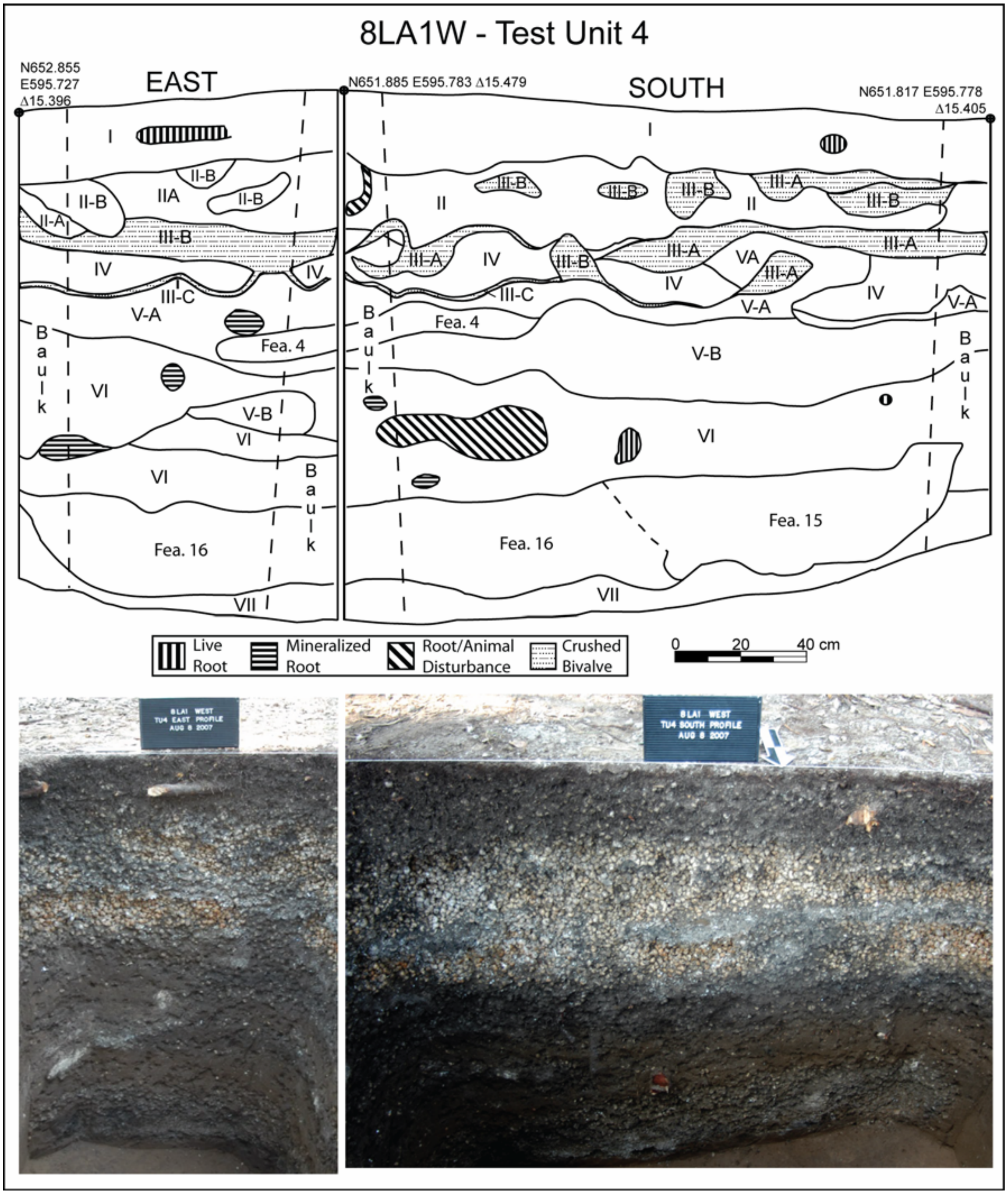

Figure 6-16. Stratigraphic drawings and photographs from east and south profiles of TU19, 8LA1W. (Note: Photographs are not to scale.)

but was perhaps obliterated by plowing. Underneath the lowermost crushed bivalve lens the shell density decreases substantially. Strata VA and VB constitute a thick massive layer of moderately dense whole *Viviparus* and sand distinguished only by the darker color of the latter. This layer (designated Zone D during excavation) contains abundant Orange Plain ceramics, occasional flakes and vertebrate fauna, and frequent charcoal. It

Table 6-17. Stratigraphic Units of Test Unit 4, 8LA1W.

Stratigraphic Unit	Max. Depth cm BD[1]	cm BS[2]	Munsell Color	Description
I	30	25	10YR3/3	Historically plowed A horizon with abundant roots and moderately dense whole *Viviparus* shell.
II-A	52	48		Whole unconsolidated *Viviparus* shell with no soil matrix. Trace amounts of vertebrate fauna and charcoal.
II-B	45	40	10YR3/1	High density *Viviparus* in very dark gray loamy fine sand.
III-A	62	57	10YR5/2	Crushed and burned bivalve shell (with trace amounts of *Viviparus* and *Pomacea*) interspersed with grayish brown fine ashy sand.
III-B	60	55	10YR3/2	Identical to Stratum IIIB but with very dark grayish brown sand and slightly less dense shell.
III-C	67	60		Identical to Strata IIIA and IIIB but with absolutely no soil matrix.
IV	70	64		Whole unconsolidated *Viviparus* shell with small amounts of *Pomacea* and bivalve and no soil matrix. Trace amounts of vertebrate fauna and abundant charcoal.
V-A	85	83	10YR4/3	Moderately dense whole *Viviparus* shell in brown fine sandy matrix. Abundant vertebrate fauna.
V-B	106	106	10YR3/2	Moderately dense whole *Viviparus* shell in very dark grayish brown sandy loam; abundant vertebrate fauna.
VI	131	126	10YR3/4	Dark yellowish brown fine sand with scant whole *Viviparus* shell; sparse vertebrate fauna.
VII	165	165	10YR4/4	Dark yellowish brown fine sand with no shell; trace vertebrate fauna.

sits atop a dark yellowish brown sandy substrate (Zone E) that lightens slightly in color near the base of the test unit. In the southeastern half of the test unit, the basal sands are interrupted by Features 15 and 16, visible as a 20-30 cm thick deposit of concreted shell, ash, and charcoal in the south and east profiles. Originally designated Zone F, these features covered over half of the test unit at the base of excavation Level L (120 cmbd). They consist primarily of burned whole and crushed *Viviparus* but also contain pockets of burned whole bivalve, *Pomacea*, and charcoal. Portions of the features are highly concreted and had to be excavated with a pick. Both contain Orange Plain ceramics but no other artifacts were recovered. No obvious division exists between Features 15 and

Table 6-18. Cultural Materials Recovered from Test Unit 4, 8LA1W.

Level	St. Johns Plain	Orange/ T. I. Incised	Orange Plain	Crumb	Lithic Flake	Marine Shell (g)	Vert. Fauna (g)	Botani-cals (g)	Other
80CM			3						
A				1			0.1		
B	1		2	7	1	0.9	2.6		2[1]
C (Zone A)				1			0.7		
C (Zone B)	2			12	2		5.9		
D (Zone A)				8			0.7	0.5	
D (Zone B)				1			1.7	0.4	
D (Zone C)				15			1.8		
E (Zone A)				10			3.8		
E (Zone C)		1		16	1	9.6	14.4	3.3	0.6[2]
F (Zone C)		1		4			4.7		
G (Zone C)				4			4.3		
G (Zone D)		1	11	11			28.5		
H (Zone D)			14	35	2		15.2		
H			3						
I (Zone D)			12	10			3.9	1.2	
I (Zone E)			6	7			7.1		
J (Str. VI)			1	17			8.3	11.7	
J (Zone F)			2						
K (Str. VI)			2	7			14.9	2.4	
K (Str. VII)			2	24	3		33.1	1.5	
L (Str. VII)			5	18	3		19.3	1.4	1[3]
L (Zone F)			5						
M (Str VIII)							3.1		
M (Zone F)			8	21			7.0	1.0	
N			2				0.2		
Profile Clean			4	14			8.1		
Str. I							1.6		
Str. IIA							5.1		
Str. IIB							0.5		
Str. III			3	24			1.6	1.4	
Str. IV+				1			6.0	2.9	1[3]
Str. V			10	15	1		8.9		
Str. VI			14	12	2		24.5		
Total	3	3	109	295	15	10.5	237.6	27.7	

[1] one historic lead bullet; one St. Johns Check Stamped sherd
[2] paleofeces (g)
[3] one modified bone

16, although the shell in Feature 16 in the southeastern corner of the test unit does drop down further into the underlying sand than that from Feature 15. Nevertheless, it is possible that these are actually distinct portions of the same massive feature. No vertical margins could be discerned within the overlying sand but it is likely that the shell and ash deposits represent the basal fill of one or more large roasting pits, similar to those Features 26 and 27 at the bottom of TU22. An AMS radiocarbon assay from charcoal recovered from Feature 15 returned an age estimate of 3820 ± 40 rcybp (4410-4100 cal BP), which overlaps temporally with the 2-sigma calibrated range of the assay from Feature 26.

Summary of Exploratory Test Units

The excavation of nine individual discontinuous test units at 8LA1W's Locus B between 2007 and 2010 yielded a tremendous amount of information regarding the extent, condition, and structure of the site's archaeological deposits. These test units first expand upon the auger survey in demonstrating the presence of extensive shell deposits at Locus B that extend at least 35 m from north to south and 50-m from east to west. Within this 1750-m^2 area, deposits vary greatly with regard to both thickness and depth, with the thickest, most complex stratigraphy occurring along the northern margin and then thinning gradually to the south. Aside from a consistent 20-30-cm plow zone and various discrete plant and animal disturbances, these deposits were shown to have escaped the mining activities that impacted other areas of the Silver Glen Run site and remain relatively intact.

Test units revealed three distinct ethnostratigraphic units within Locus B that together span thousands of years of the site's history. Beginning as early as 5700 cal BP, Mount Taylor people began using Locus B in a manner that involved the deposition of freshwater shellfish (primarily bivalve and *Pomacea*), a variety of stone, bone, and marine shell tools and debitage, and moderate amounts of vertebrate fauna. Formal floors or living surfaces were constructed during this period through the deposition of bivalve that was either processed beforehand through burning and crushing or was altered in this way through use. Small cylindrical and basin-shaped pits were dug down from these surfaces presumably for either storage or cooking, although there is little evidence for thermal alteration. All of these material culture objects and features are what would be expected to result from routine everyday living at this time, suggesting that the Mount Taylor component at Locus B reflects a settlement or "village" occupation. At least one area of Locus B, as revealed by TU46, was occupied repeatedly in a similar manner following periods of abandonment as indicated by a series of thin horizontal bivalve strata with intervening layers of sand. This eventually resulted in the construction of Locus B's raised shell node, which was subsequently capped with a layer of *Viviparus* by Mt. Taylor or later people. The test units tentatively suggest that this Mt. Taylor component is restricted to the southeastern portion of Locus B as it was not observed in TU22 at the north end of the north-south transect or in TUs 4 and 57 to the west.

Eventually Locus B was abandoned or utilized sparingly over an extended enough period that a well-developed A-horizon was allowed to form with associated large tree roots. Subsequently, perhaps as early as 4500 cal BP, this location was utilized in a wholly different manner by Orange period people using the region's earliest pottery type. Enormous pits were dug deep into the underlying sand and shellfish was processed at an unprecedented scale. At the same time, fewer and less diverse cultural materials were deposited with the shell, possibly suggesting a more specialized, non-domestic function. Later in the Orange period, use of the site changed again, as the entire area was capped with a massive layer of whole *Viviparus* shell. In most places this capping appears to have occurred quickly as a single act while in TU4 it was added in stages as indicated by the presence of horizontal bivalve lenses interrupting the *Vivivparus* stratum at multiple points. The architects of the shell cap utilized a new type of fiber-tempered pottery (Tick-Island Incised) featuring bold curvilinear incisions and punctations. It is unknown at present whether they were the same or a different people than those responsible for the massive underlying pits. Although spatially overlapping somewhat with earlier Mount Taylor materials, Orange deposits at Locus B appear to be centered to the west of the shell node on the down-slope portion of the landform.

And finally, following the Orange occupation, Locus B was utilized to some extent by St. Johns people as evidenced by the smattering of St. Johns ceramics found throughout the site's near-surface deposits. Unfortunately, the St. Johns component lies completely within this area's plow zone and has been heavily disturbed, making any inferences regarding the nature of the St. Johns occupation or its relationship to earlier Orange materials difficult at best.

The individual test units also revealed some significant stratigraphic patterns that proved useful for interpreting the results of subsequent excavations. First, they provide additional support for the notion that the presence and distribution of the mineralized root casts that form underneath shell deposits (see also Chapter 3) can be used to infer periods of relative inactivity and approximate the elevations of paleosurfaces. At Locus B, root casts are generally concentrated within or just below buried A-horizons, thus replicating the pattern exhibited by live roots in relation to the modern surface. In addition, these test units demonstrate that living surfaces during both the Mount Taylor and Orange periods are frequently lined with thin layers of burned and crushed bivalve that sometimes contain concentrations artifacts and vertebrate fauna.

BLOCK EXCAVATIONS

Each of the individual test units described above provides an important window into the basic structure of Locus B deposits at a particular location and together, they begin to offer some clues as to the distribution of particular stratigraphic units and the historical relationships among them. These small-scale units are clearly limited, however, in the insight they convey into the contemporary processes operating *within* any one temporal-stratigraphic unit because of the relatively restricted horizontal perspective that they entail. To address topics such as community organization, architectural features, and the horizontal patterning of cultural materials, it was necessary to broaden the perspective by opening up larger continuous areas for excavation. Consequently, between 2009 and 2010 two block excavations were conducted near the presumed center of Locus B's archaeological deposits.

2009 Block Excavation

In 2009, a 4 x 4-m block was excavated in the area between the north-south transect of test units and TU4 (see Figure 6-17). It was originally laid out as a 3 x 4-m unit with its southeast corner positioned 4 m to the west of the southwest corner of TU21 but was expanded to 4 x 4 m before excavation began. The block was intended to locate Orange period domestic features and architectural remains and to document spatial patterning in features and artifacts at a finer scale than is possible utilizing smaller excavation units. This location was chosen because of the particularly dense Orange shell deposits and pit features indicated by the surrounding 1 x 2-m test units.

Excavation Methods. With these goals in mind, excavation methods employed in the block deviated somewhat from those described above and were tailored toward detailed documentation of spatial data. Initially, the block was divided into sixteen 1 x 1-m units (Test Units 23-38) which were excavated and documented separately, although at the same rate. It was quickly realized, though, that digging in these small units, while providing a fine level of spatial control, actually obscured the broad horizontal perspective that constituted the ultimate goal of the block excavation. Ultimately, near the base of the plow zone, the block was divided into four 2-x-2 m units (Test Units 39-42) in order to maintain adequate spatial control while still allowing for the recognition of horizontal patterning. Test unit numbers both before and after the switch from 1 x 1-m to 2 x 2-m test units are shown in Figure 6-18.

The four individual units were generally excavated separately in arbitrary 10 cm levels; however, an effort was made to take them all down at approximately the same rate so that when stratigraphic zones or large features were uncovered, they could be followed and documented across test unit boundaries. To this end, level elevations for all four units were measured from the same datum located at the southeastern corner of the block with an absolute elevation of 15.81 m based on the site datum. Because the upper 30 cm of the block was lumped together as the "plow zone," Level A refers to the absolute elevations 15.51-15.41 m, Level B to 15.41-15.31 m, and so on. As a result of the sloping surface on which the block was situated, Levels A through E were excavated as partial levels until a level plane was reached across all four test units.

All artifacts larger than two centimeters in diameter (excluding unmodified vertebrate fauna) that were discovered *in situ* were plotted with a Nikon DTM-310 Total Station, assigned a unique piece-plot number, and bagged individually. As with the exploratory units discussed in the previous section, all non-feature fill was dry sieved through 1/4-inch screen and all cultural materials excluding freshwater shells were collected and bagged according to provenience. Features were mapped in plan view, bisected vertically, and then drawn in profile. When possible, one half of the feature fill was removed for 1/8-inch water screening while the remaining half was removed as a bulk flotation sample. For some extremely large features, it was not practical to collect

Figure 6-17. 2009 field crew excavating a 4-x-4-m block at Locus B, 8LA1W.

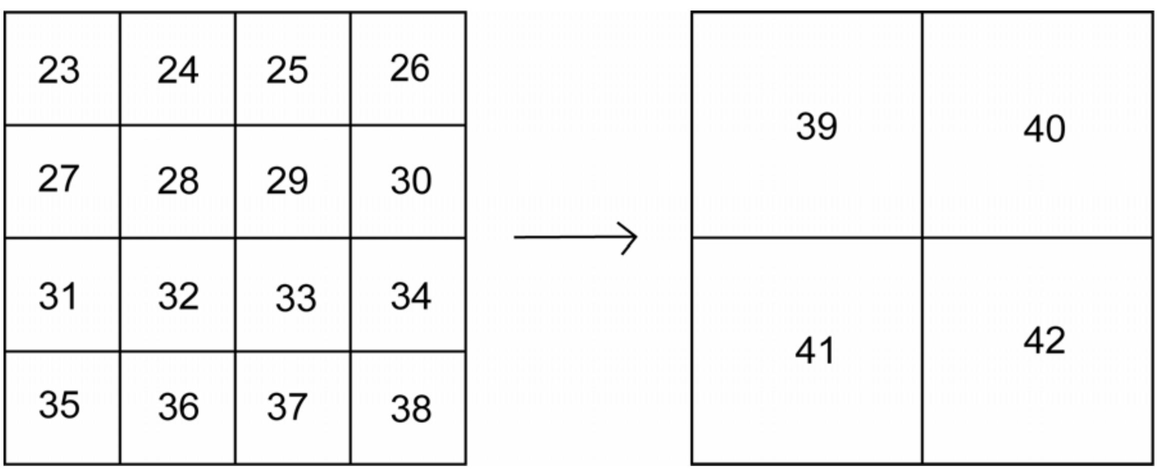

Figure 6-18. Test unit numbers of 1-x-1-m units and 2-x-2-m units from 2009 block at Locus B, 8LA1W.

them in their entirety. In these cases fine screen and bulk flotation samples were collected from multiple locations within the feature while the rest of the fill was 1/4-inch screened.

2009 Block Stratigraphy. Nineteen distinct stratigraphic units were identified in the 2009 block excavation. Composite drawings and photographs of the stratigraphic profiles from the block's walls are shown in Figures 6-19 through 6-25. Descriptions of the major stratigraphic units are provided in Table 6-19, and artifact counts for each level and zone are shown in Table 6-20.

For the most part, the uppermost stratum encountered within the 2009 block (Stratum I) is consistent with that observed in the individual exploratory units. It consists of a 20 to 30-cm thick layer very dark grayish brown organically enriched sand with a moderate density of whole *Viviparus* and is permeated by dense tree roots. Small, highly fragmented St. Johns ceramic sherds are the most common artifact type, although Orange ceramics, lithic tools and debitage, and vertebrate faunal remains were also observed. Near the base of Stratum I, linear stringers of whole and crushed shell oriented in a northeast-southwest fashion (shown in Figure 6-26) were identified as plow scars, confirming suspicions based on earlier excavations that Locus B was cleared and plowed in the relatively recent past.

The contact between Stratum I and the intact shell deposits below is irregular in some locations, probably owing to the scraping of the top of the midden by the metal plow. It is unclear how much shell may have been removed or displaced by these activities. Regardless, Stratum I now sits atop a variably thick (ranging primarily between ca. 30 and 50 cm) deposit of extremely dense mostly whole *Viviparus* with occasional bivalve and *Pomacea* labeled Stratum II (also IIA and IIB). This shell layer is thickest in the north half of the block and thins considerably near the southeast corner. In one discrete location visible in the west profile, Stratum II abruptly drops down into underlying strata, apparently infilling a pit that was open at the time of its deposition. Shell density in Stratum II varies slightly, ranging from high (Zone A) to extremely high (Zone C), often with little to no intervening soil matrix. As in TU4, this dense, unconsolidated shell resulted in instability issues in some locations as whole *Viviparus* shell would occasionally pour out of the profile if even lightly contacted. Again, shell of this density and condition suggests rapid large-scale deposition rather than the gradual accumulation of domestic food remains that would have allowed for more substantial soil development and resulted in crushed tightly packed shell deposits. The highly variable basal margin of Stratum II indicates that these shell deposits filled in what had been a rough irregular surface at the time of deposition.

Stratum II, however, was probably not deposited in a single episode as evidenced by the fact that this thick layer of *Viviparus*, as seen in TU4, is interrupted at different levels by thin horizontal lenses of burned and crushed bivalve (Zone B) that may represent a series of prepared shell surfaces. These bivalve lenses are clearly visible in the north and east profiles of the block but were not observed in the west and south.

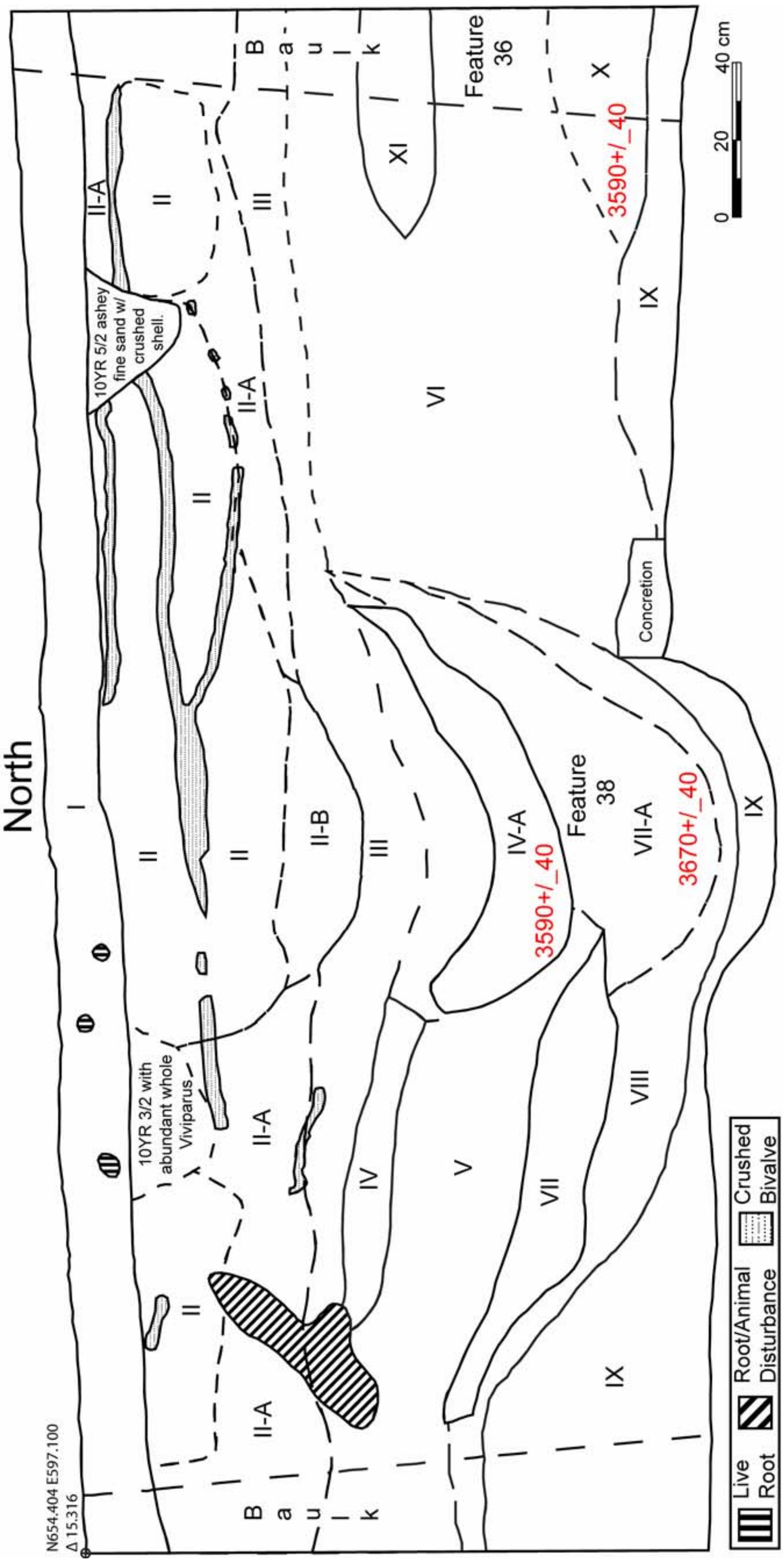

Figure 6-19. Stratigraphic drawing of north profile from 2009 block (TUs 39-42), 8LA1W.

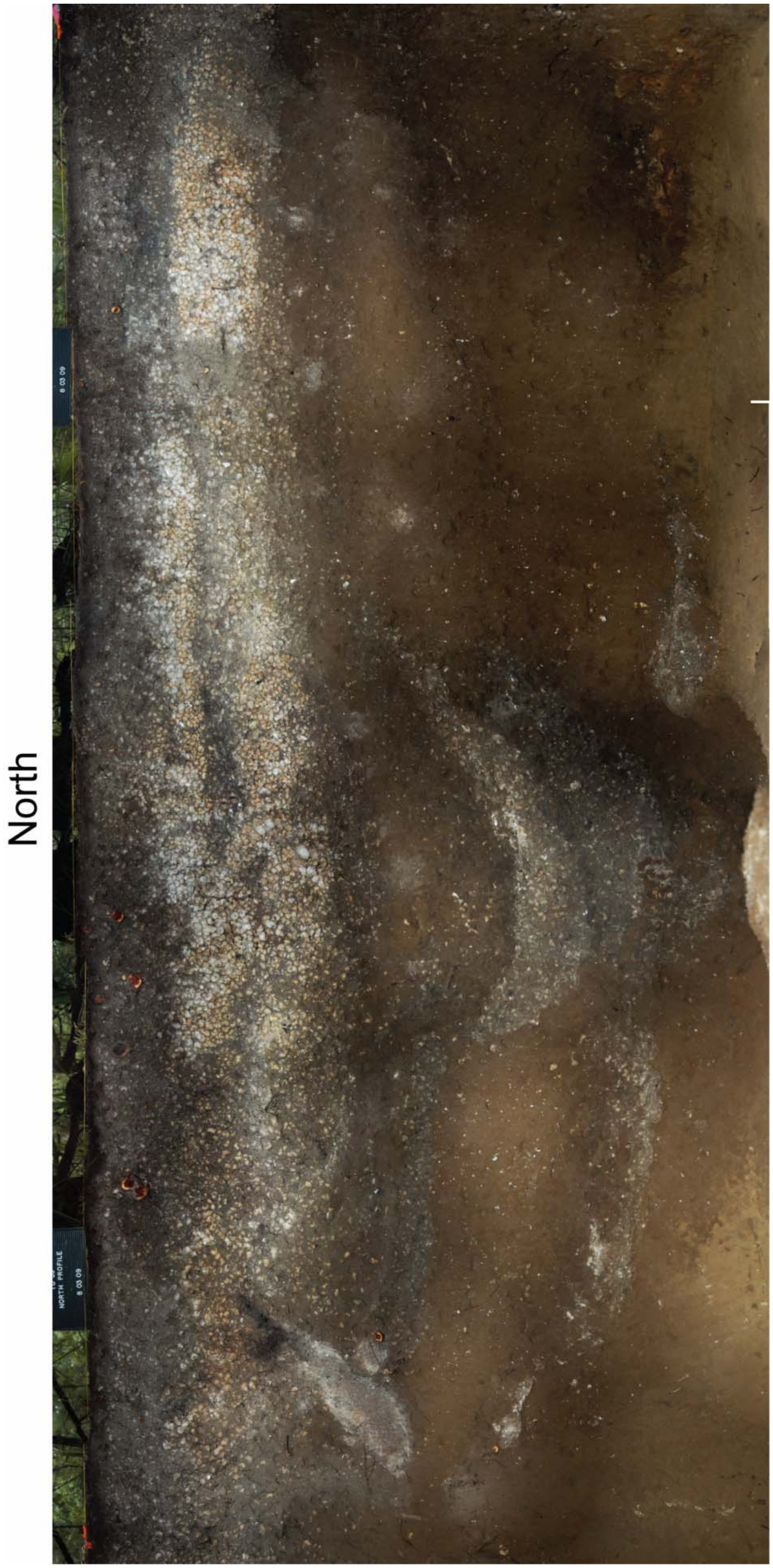

Figure 6-20. Composite photograph of north profile from 2009 block (TUs 39-42), 8LA1W.

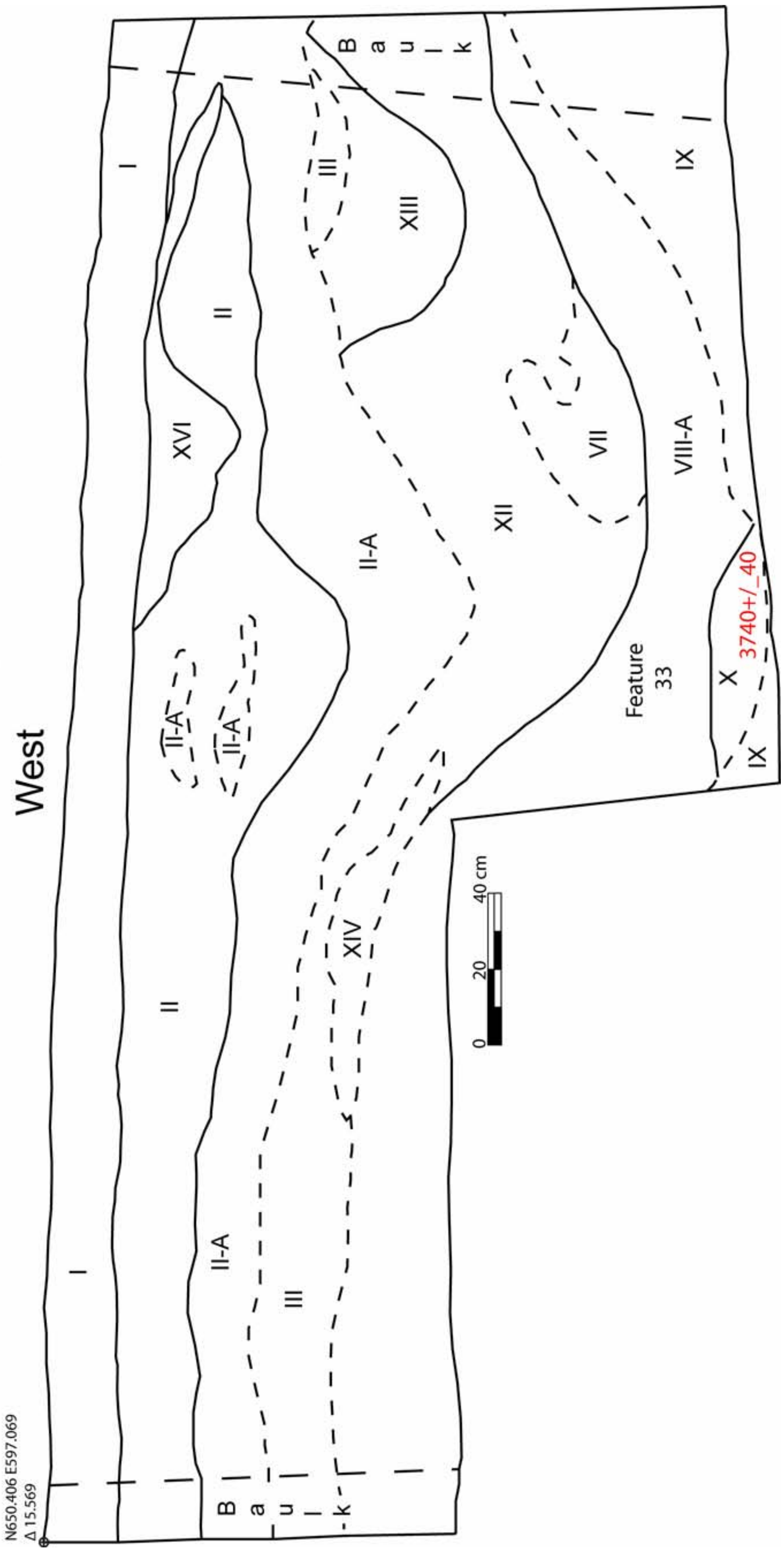

Figure 6-21. Stratigraphic drawing of west profile from 2009 block (TUs 39-42), 8LA1W.

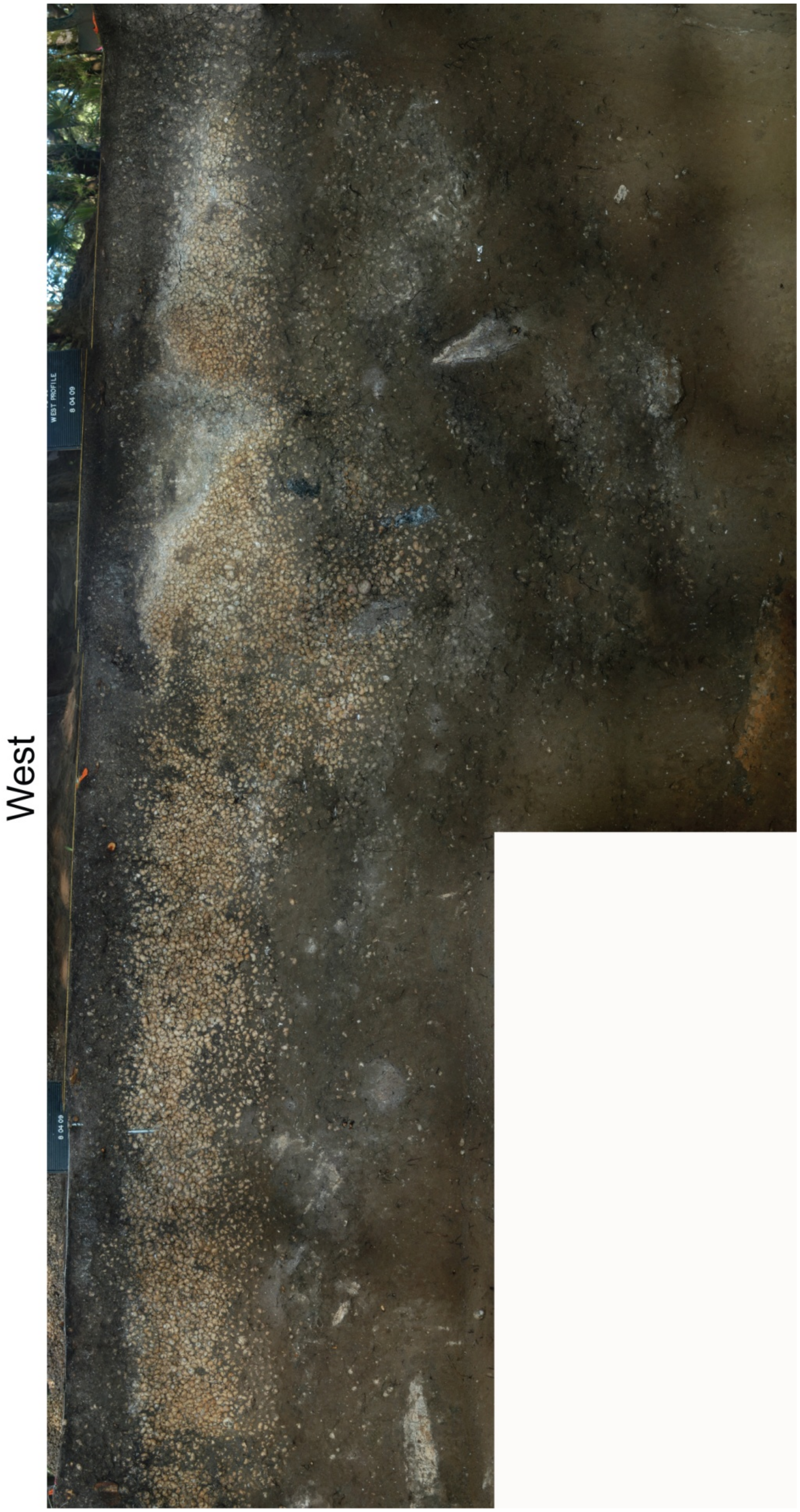

Figure 6-22. Composite photograph of west profile from 2009 block (TUs 39-42), 8LA1W.

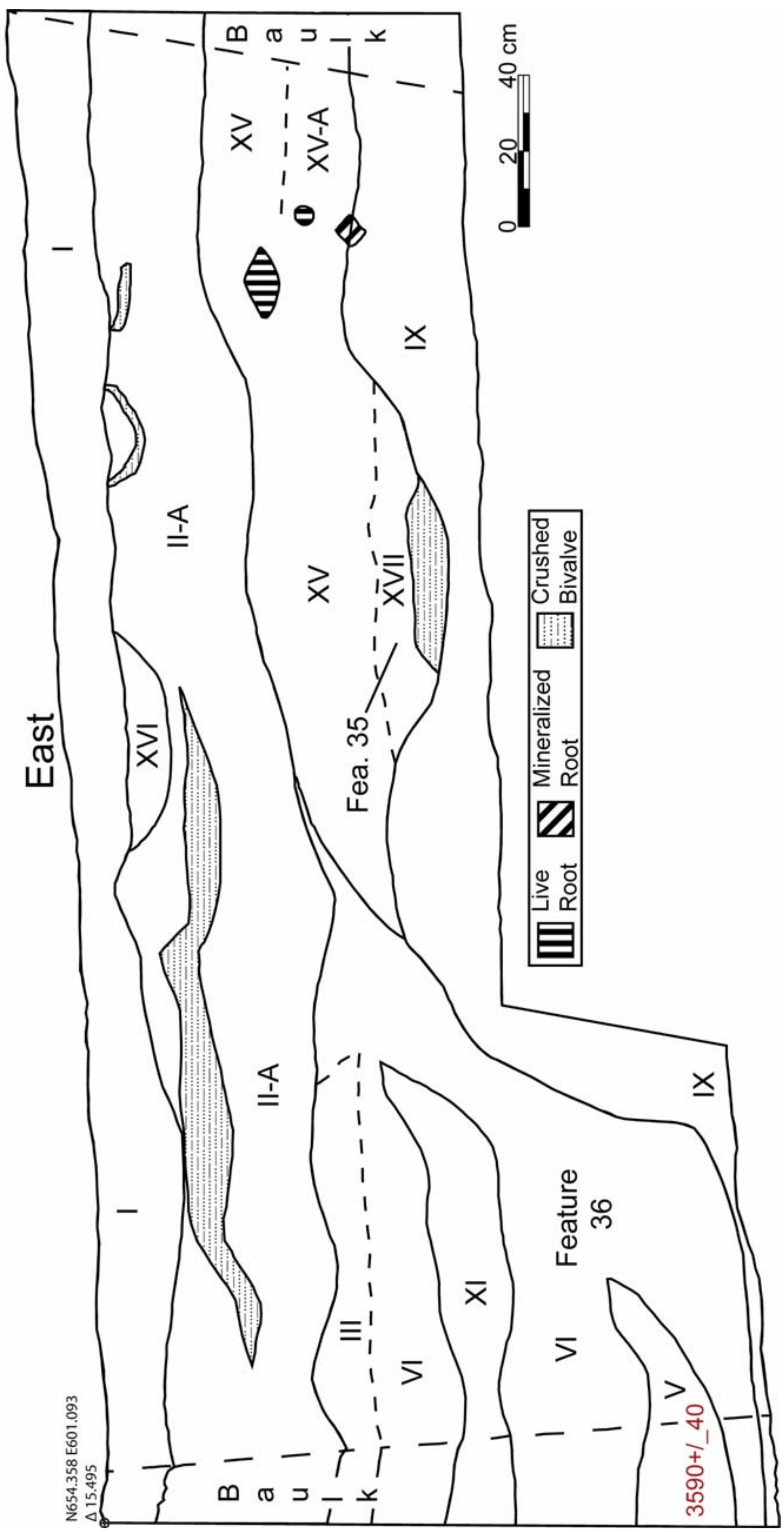

Figure 6-23. Stratigraphic drawing of east profile from 2009 block (TUs 39-42), 8LA1W.

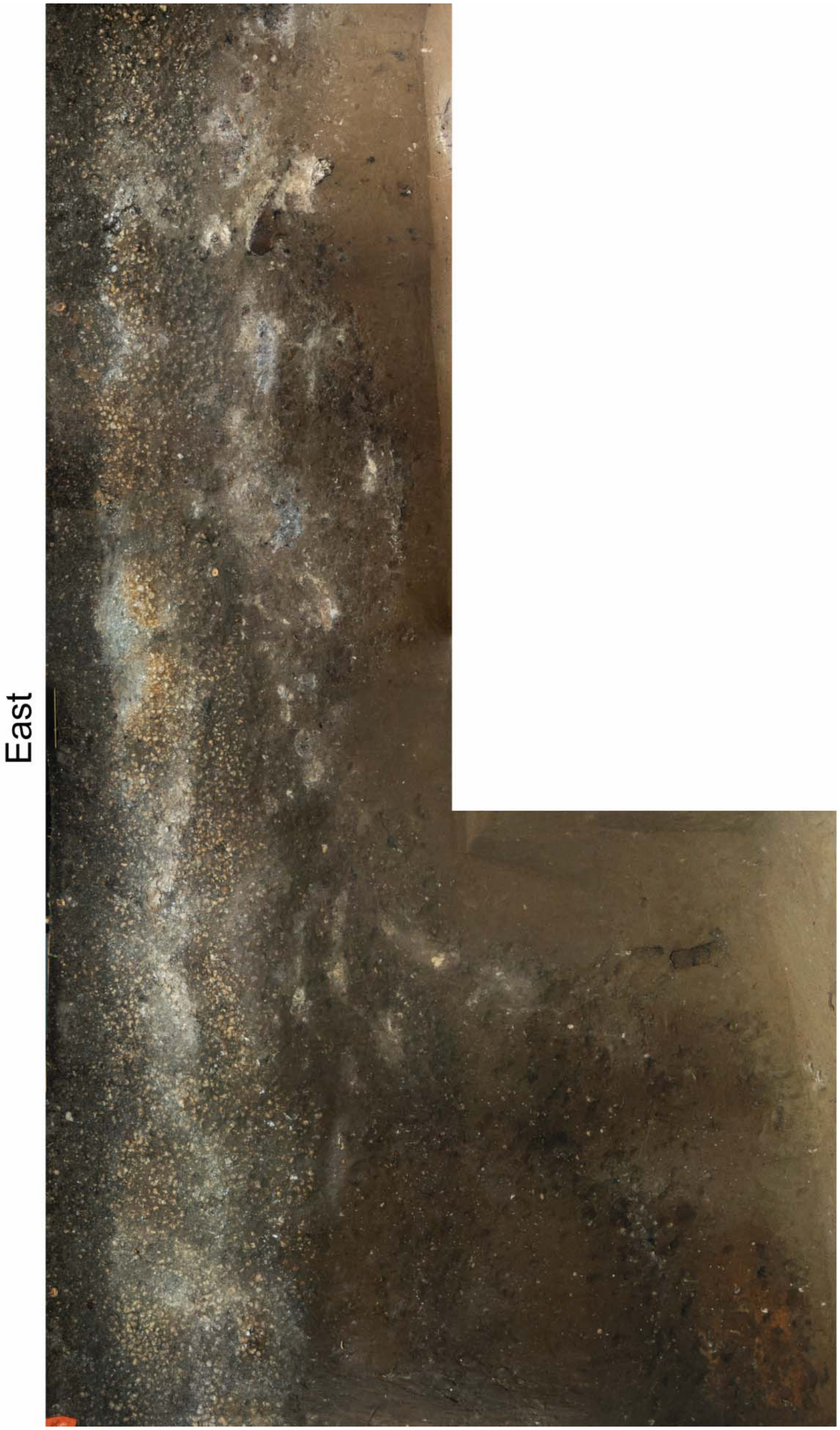

Figure 6-24. Composite photograph of east profile from 2009 block (TUs 39-42), 8LA1W.

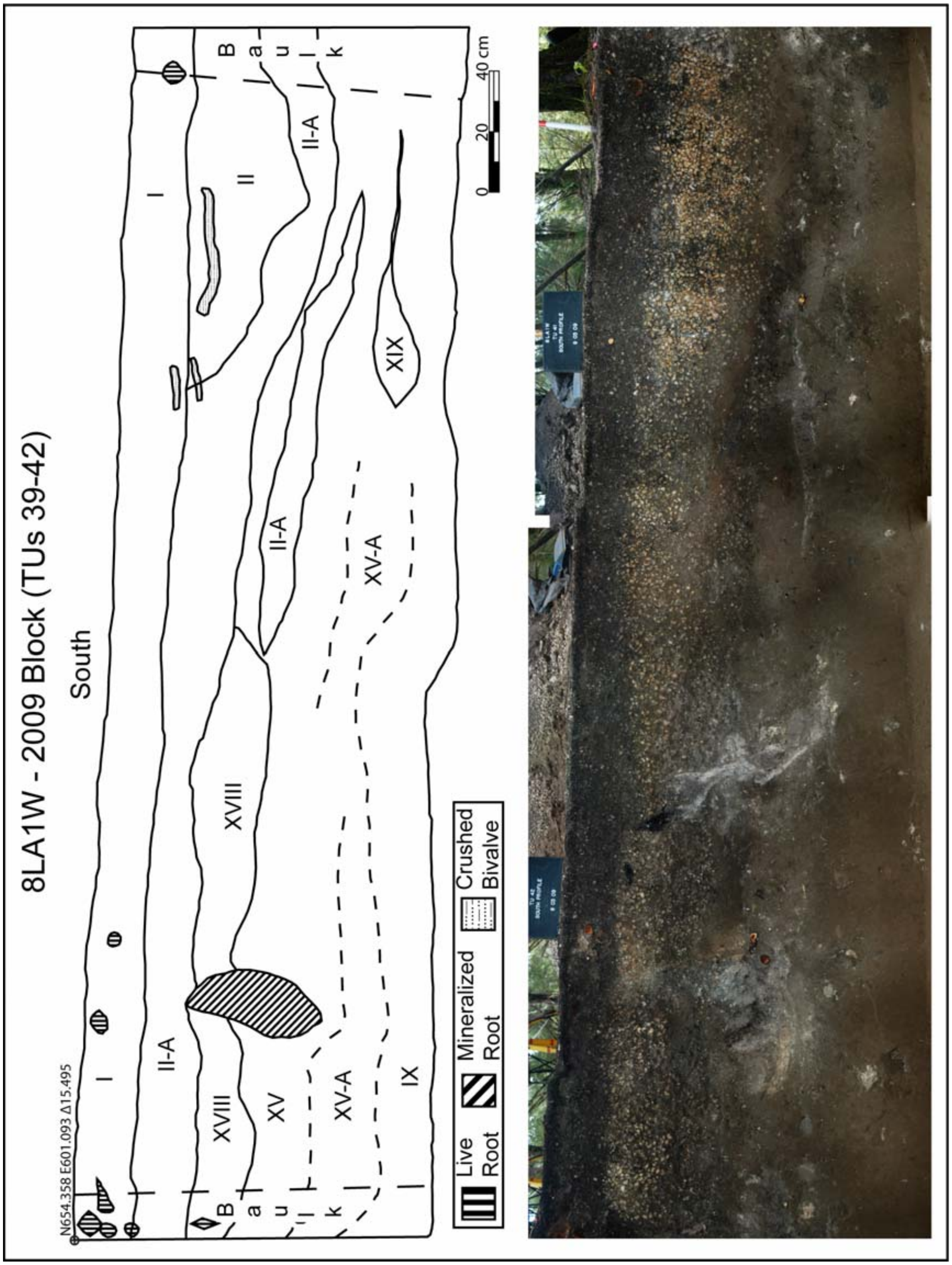

Figure 6-25. Stratigraphic drawing and composite photograph of south profile from 2009 block (TUs 39-42), 8LA1W.

Table 6-19. Stratigraphic Units of 2009 Block (TUs 39-42), 8LA1W.

Stratigraphic Unit	Max. Depth cm BD[1]	cm BS[2]	Munsell Color	Description
I	74	23	10YR3/2	Plow zone; very dark grayish brown loamy fine sand with moderate to abundant whole *Viviparus* shell; abundant live roots
II	111	71		Whole *Viviparus* shell with minimal soil matrix; traces of crushed shell throughout; thin lenses of crushed bivalve
II-A	144	104	10YR4/2	Dark grayish brown loamy fine sand with abundant whole *Viviparus* shell and occasional *Pomacea* shell
II-B	125	81	10YR3/2	Very dark grayish brown loamy fine sand with whole *Viviparus* shell; infrequent fauna.
III	141	96	10YR3/3	Buried A-horizon; dark brown fine to medium sand with only trace amount of shell; grades to lighter brown color with depth.
IV	141	94	10YR4/2	Dark grayish brown medium sand with abundant whole *Viviparus* shell and moderate density crushed *Viviparus* and bivalve.
IV-A	179	132	10YR4/2	Dark grayish brown concreted medium sand with abundant whole *Viviparus* and bivalve shell and moderate density crushed *Viviparus*.
V	187	141	10YR4/3	Brown fine sand with moderate to low frequency of whole *Viviparus* and bivalve.
VI	201	158	10YR4/3	Brown fine sand with low frequency of whole *Viviparus* and bivalve.
VII	190	148		Concreted *Viviparus* (whole) and bivalve (whole and crushed) shell.
VII-A	217	172		Concreted *Viviparus* (whole) bivalve (whole and crushed) shell; higher density bivalve than stratum VII.
VIII	222	176	10YR4/4	Dark yellowish brown fine to medium sand with no shell.
VIII-A	218	176	10YR4/2	Dark grayish brown medium sand with no shell.
IX	231	187	10YR6/4	Light yellowish brown fine to medium sand with no shell.
X	221	181	7.5YR5/8	Strong brown heat oxidized sand with high frequency of charcoal.

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Table 6-19. *(continued)*

Stratigraphic Unit	Max. Depth cm BD[1]	cm BS[2]	Munsell Color	Description
XI	144	109	10YR2/2	Very dark brown medium sand with moderate density whole and crushed *Viviparus* and small amount of charcoal.
XII	190	148	10YR3/2	Very dark grayish brown fine sand with abundant whole *Viviparus* and moderate density whole bivalves. Heterogeneous in color and content.
XIII	144	96	10YR4/2	Dark grayish brown fine sand with abundant compacted whole *Viviparus* and rare crushed bivalve, *Pomacea*. Occasional charcoal.
XIV	135	99	10YR4/2	Dark grayish brown fine to medium sand with abundant whole and moderate density crushed *Viviparus*.
XV	108	85	10YR5/3-10YR3/3	Brown to dark brown medium sand with moderate frequency whole *Viviparus* and abundant mineralized root casts throughout.
XV-A	116	92	10YR4/3	Brown fine to medium sand with abundant mineralized root casts throughout.
XVI	83	40	10YR5/3	Brown mottled crushed shell with oxidized sand and burned shell. Virtually no soil matrix.
XVII	118	103	10YR3/3	Dark brown medium sand with whole and crushed *Viviparus* and bivalve near base.
XVIII	70	54	10YR4/1	Dark gray medium sand with moderate amount finely crushed shell and whole *Viviparus*.
XIX	119	98	10YR3/3	Dark brown medium sand with moderate amount crushed shell and whole *Viviparus* and *Pomacea*.

Whatever their origin, there is little indication, in terms of either habitation debris or shell diminution, that they reflect lengthy domestic occupations.

In addition, at least three discrete thermal features were encountered in the excavation of Stratum II. All were ovoid in shape and consisted of a central pocket of gray ash and burned shell surrounded first by burned and crushed *Viviparus* and bivalve and then by orange oxidized shell and sand. Initially these were designated as features (Features 29 and 30) and were interpreted as possible domestic cooking hearths. As excavations progressed, however, the burned deposits began to taper and turn in unpredictable ways suggesting that they were in fact tree roots that penetrated into shell deposits and eventually burned in place.

Table 6 20. Cultural Materials Recovered from Level Excavation of 2009 Block (Test Units 39, 40, 41, and 42), 8LA1W

Level	Absolute Elevation (m)[1]	St. Johns Plain	Orange/ T. I. Incised	Orange Plain	Orange Eroded	Crumb	Lithic Tool	Unmod. Lithic Flake	Marine Shell (g)	Mod-ified Bone	Vert. Fauna (g)	Paleo-feces (g)
Plow Zone[2]		69	2	3	4	107	4	8		1	92.5	
A	**15.51-15.41**										0.3	
A – Zone B						1			0.5		4.4	
A – Zone C											1.9	
B	**15.41-15.31**											
B – Zone A						5					0.4	
B – Zone B		1				2					2.6	
B – Zone C		1				8					17.3	
C	**15.31-15.21**											
C – Zone A			1									
C – Zone B			4	1	1	30					17.0	
C – Zone C						16					28.8	
C – Zone E							1	1			38.8	
D	**15.21-15.11**											
D – Zone A			1	1		1	1				4.6	
D – Zone B			2	4	1	39					39.5	
D – Zone C			4	3	3	27			7.0	1	48.5	
D – Zone E											8.9	
E	**15.11-15.01**											
E – Zone A											0.6	
E – Zone B			3	3	5	29			67.7		10.2	
E – Zone C			8	11	9	69			1.6		114.5	6.0
E – Zone E				1	1	4			17.1		16.4	
F	**15.01-14.91**											

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Table 6-20. *(continued)*

Level	Absolute Elevation (m)[1]	St. Johns Plain	Orange/ T. I. Incised	Orange Plain	Orange Eroded	Crumb	Lithic Tool	Unmod. Lithic Flake	Marine Shell (g)	Mod-ified Bone	Vert. Fauna (g)	Paleo-feces (g)
F – Zone B			4	1	7	8					10.0	
F – Zone C			5	7	7	54	1	1	0.1		32.6	
F – Zone D									28.1			
F – Zone E				1	2	9				1	51.8	
G[3]	**14.91-14.81**											
G – Zone B/C				2		2					8.1	
G – Zone C			1	4	2	18	2				59.3	
G – Zone D			2	1	1	1		1			44.6	
G – Zone E			1	9	7	35		2			57.1	7.4
G – Zone F											0.6	
G – NE Quad				1							8.3	
G – SE Quad											10.8	
H[4]	**14.81-14.71**											
H – Zone C				7	3	87					9.6	
H – Zone D				5	2	29	1	2	143.0		56.3	
H – Zone D/E				1	2	7	1				54.8	
H – Zone E						5					0.3	
H – Zone F				1	3	9	1				4.7	
H – NE quad			1	1	2	14			12.4		5.0	
H – NW quad				5	2	11					1.9	
I[5]	**14.71-14.61**										23.8	
I – Zone D				2	2	13				2	47.3	
I – Zone F			2	23	6	85	2	1	1.1		29.7	
I – NE quad						2					11.8	

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t

Table 6-20. (*continued*)

Level	Absolute Elevation (m)[1]	St. Johns Plain	Orange/ T. I. Incised	Orange Plain	Orange Eroded	Crumb	Lithic Tool	Unmod. Lithic Flake	Marine Shell (g)	Mod-ified Bone	Vert. Fauna (g)	Paleo-feces (g)
I – NW Quad				8	1	14					7.7	
J[6]	**14.61-14.51**											
J – Zone D						8		1		1	6.9	
J – Zone F				23	3	72		3	1.9		8.5	0.5
J – NW quad				7	4	30					7.3	
K	**14.61-1451**											
K – Zone D						2					1.6	
K – Zone F				14	1	20	1		0.6		24.6	
K – NW quad				4	2	13					3.0	
Total		65	39	173	85	942	15	20	281.1	6	1035.2	13.9

[1] maximum upper and lower elevations based on Datum A from 8LA1E with arbitrary elevation of 10.00 m
[2] plus two St. Johns check-stamped sherds
[3] Level G/H in Test Unit 40
[4] Level I in Test Unit 40
[5] Level J in Test Unit 40
[6] Level K in Test Unit 40

Figure 6-26. Plow scars in south half of 2009 block at approximately 20 cmbd.

Artifacts are generally sparse within Stratum II and include Orange fiber-tempered ceramics, occasional lithic flakes, and a very low frequency of vertebrate fauna. The Orange ceramic assemblage includes both plain and incised varieties, including relatively rare Tick Island Incised examples. The latter were found primarily within the densest shell in the northern half of the block.

The thick mantle of shell constituting Stratum II sits atop a probable buried A-horizon (Stratum III) suggesting some period of disuse at Locus B before the shell was deposited. This natural soil horizon consists of a ca. 10-15 cm thick layer of dark brown sand with only a trace amount of shell and is most clearly visible in the block's north profile. It is roughly horizontal but trends gently upward toward the northeast, following the slope of the modern surface in this area.

Beneath the thick *Viviparus* layer and buried A-horizon, it becomes more difficult to discuss the block as a whole, as at this point its north and south halves begin to diverge stratigraphically. In the north, just below Stratum III the basal sand (Stratum IX) is intersected by a number of massive pit features similar to those found in TUs 4 and 22 (see Figure 6-27). As in TU22, these pits are broadest and often overlap at their tops so that virtually the entire bottom 1.5 m of cultural deposits in the northern half of the excavation block consist completely of pit fill. Although only five of these large-scale pits could be defined well enough to receive feature distinctions, several additional examples were undoubtedly excavated. Probable pit fill that could not be confidently attributed to any specific feature was excavated as either Zone D if it consisted of shell-

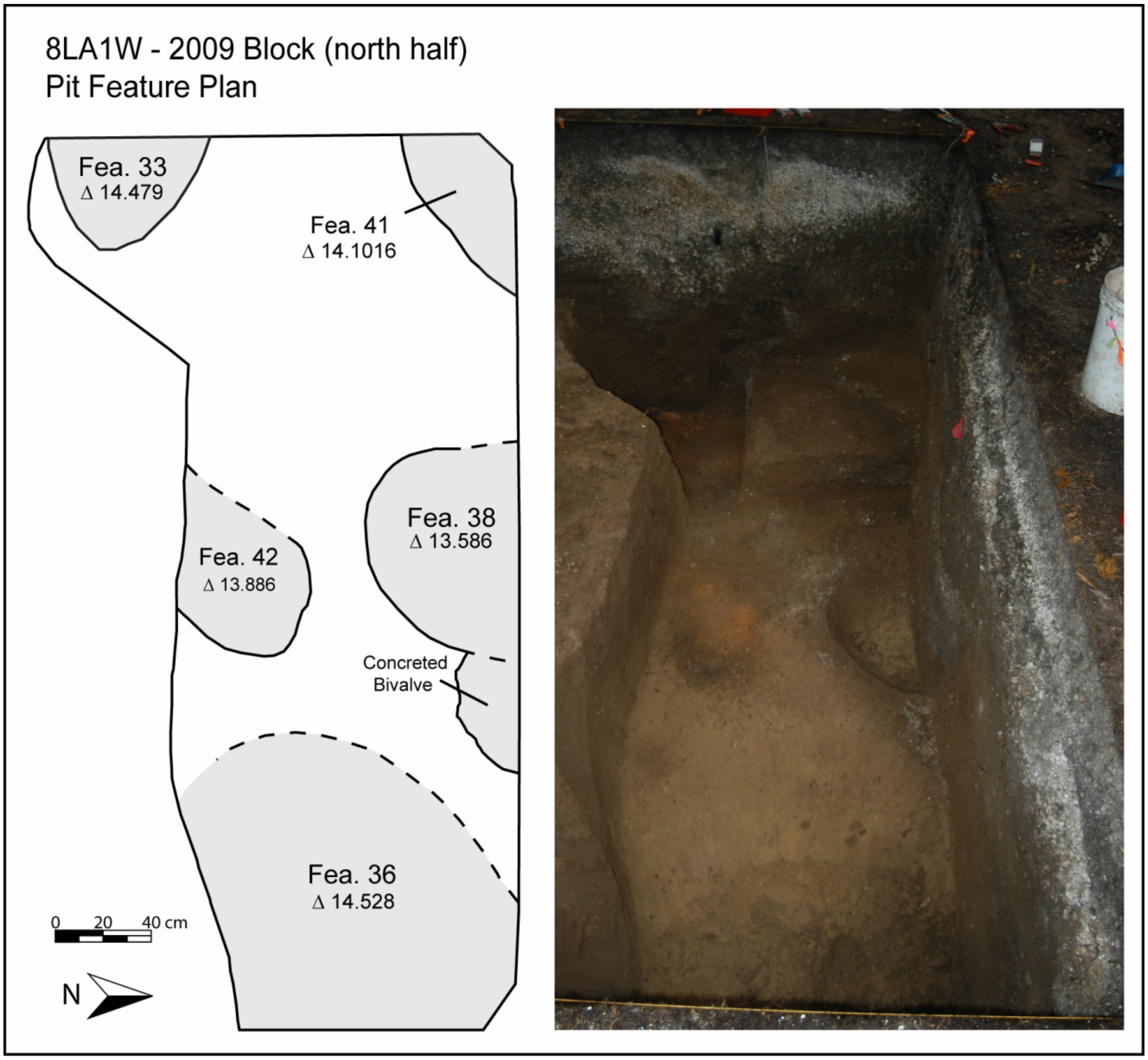


Figure 6-27. Plan drawing and photograph of the bases of pit features in the north half of the 2009 block, 8LA1W (Note: photograph not to scale).

free sand or Zone F if it contained both sand and shell. With one notable exception, the features that could be delineated contain mostly dark gray-brown sand with varying densities of *Viviparus* shell and small to moderate amounts of plain fiber-tempered pottery. They all exhibit evidence of thermal activities, with most displaying the bright red oxidized sand and charcoal deposits at their bases noted above for TU22. In addition, at least three of the pits contain substantial amounts of burned and concreted bivalve shell, providing strong support for their interpretation as mussel steaming facilities. Charcoal samples recovered from two of the pits containing Orange Plain pottery (Features 33 and 36) returned respective AMS radiocarbon assays of 3730 ± 40 rcybp (4230-3980 cal BP) and 3590 ± 40 rcybp (3980-3830 cal BP).

One of the pit features, Feature 38 is different from the others in that it appears to have been filled in at least three distinct stages. The base of this feature is composed of fine brown sand with no shell. Above this is a dense, highly concreted layer of whole and crushed bivalve and *Viviparous* shell, followed by a less concreted layer with more sand relative to shell. Feature 38 is also the only pit in the 2009 block to contain decorated ceramic sherds, all of which exhibit Tick Island style designs. This pit appears to be slightly younger in age than the others because it originates from a higher surface and actually cuts into two preexisting pits. Two AMS assays of 3590 ± 40 rcybp (3980-3830 cal BP) and 3670 ± 40 rcybp (4140-3890 cal BP) situate Feature 38, along with the Tick Island style pottery that it contains, late in the Orange period, near the end of Locus B's Late Archaic occupation. Individual pits are discussed in more detail in the section below on features.

In the south half of the block, instead of a covering a series of large pits, Stratum II, the thick *Viviparus* layer, obscures a low-lying, flat-topped mound of emplaced sand labeled Strata XV and XV-A (Figure 6-28). This sand feature is approximately 40 cm tall at its highest exposed point in the southeast corner of the block and can be seen to slope gradually down in both the south and east profiles until it reaches the underlying basal sand (Stratum IX). Although its precise dimensions are unknown, prior to excavation the sand extended almost 1.5 m out from the southeast corner. In all likelihood, the sand was piled up as the pits evident in the north half of the block were dug, although what, if any, function this feature may have served is unclear at this time.

Virtually no cultural materials were found either on or within the emplaced sand and no features were discovered that would suggest it served as an architectural foundation. There were, however, two small, shallow basin shaped pits discovered along the margins of the emplaced sand. One of these, Feature 35, extended out of the east wall of the block near the northern edge of the sand and contained mostly whole unopened bivalve and whole *Pomacea* while the other, Feature 37, was located approximately 2 m to the west and contained exclusively whole unopened bivalve. These pits emanated from the same surface as the larger steaming pits in the northern half of the block and appear to have been placed in relation to the emplaced sand feature. Their relatively small size, lack of thermal alteration, and the whole paired bivalves they contained, suggest that these features may reflect either short-term storage pits that were abandoned or forgotten or perhaps even intentional votive deposits or "offerings" associated with the shellfish production process. An AMS radiocarbon assay of 3640 ± 40 rcybp (4080-3850 cal BP) from Feature 37 indicates general contemporaneity with the large steaming pits and possibly a coordinating function.

The emplaced sand sits atop the yellowish brown layer of shell-free sand (Stratum IX) that constitutes the sterile basal stratum throughout the excavation block. In the south half of the block this stratum was consistently encountered at approximately 70 to 90 cmbd. In the north half, the upper portion of the basal sand was largely obliterated when the large steaming pits were dug. Consequently, at some spots along the northern profiles it is present only below these pits at depths of 150 to 200 cmbd.

Figure 6-28. South profile of 2009 block showing location of emplaced sand.

2010 Block Excavation

In 2010, an additional 2 x 4-m block was excavated at Locus B by members of the St. Johns Archaeological Field School (Figure 6-29). Oriented north-south, the 2010 block was aligned with the eastern edge of the 2009 block and offset two meters to the south, placing it at the western edge of Locus B's shell node. It was positioned in an attempt to intersect the southern edge of the emplaced sand "platform" encountered in 2009 and thereby determine what, if any, function the sand may have served. As in 2009, the ultimate goal was to locate any architectural features or patterns in the distribution of artifacts and/or features from which houses or other domestic structures could be inferred.

Excavation Methods. The excavation block was divided into two 2 x 2-m test units, Test Unit 43 (TU43) in the north and Test Unit 44 (TU44) in the south. The basic excavation methods employed were identical to those utilized in 2009 and were once again geared toward the collection of fine-grained spatial data. As with the previous year, all artifacts larger than two centimeters in diameter were point-plotted, although in this case plot locations were measured manually using folding rules and line-levels rather than a total station. Depths for both units were measured from a local datum set at 10-cm above the northeast corner of TU43.

At approximately 50 cmbd, a pit feature (Feature 45) was encountered along the eastern portion of TU43's north wall. Within the feature, a large portion of a fiber-tempered ceramic vessel protruded out of the wall and into TU43. In order to expose the feature in its entirety and recover the pot without destroying it, a small L-shaped test unit covering 1 m^2 (Test Unit 45) was tacked onto the northeast corner of the block. Following the same excavation methods employed for the rest of the block, it was initially excavated down to the level of the exposed pot. Once this level was reached and the sherds recovered, Test Unit (TU45) was left untouched until excavation of TU43 and TU44 was completed, so that their original profiles could be recorded. Subsequently, TU45 was excavated down to the same level as the other two test units.

2010 Block Stratigraphy. Eleven distinct stratigraphic units were identified in TU43 and TU44 from the 2010 block excavation. Composite drawings and photographs of the stratigraphic profiles from the block's walls are shown in Figures 6-30 through 6-33. Descriptions of the major stratigraphic units are provided in Table 6-21. Because TU45 was excavated and profiled independently from the rest of the block, its stratigraphic data are reported separately in Figure 6-34 and Table 6-22. Nonetheless, unless otherwise indicated, the following in-text discussion of the block's stratigraphy utilizes strata designations from TUs 43 and 44. Artifact counts for each level and zone of all three test units comprising the 2010 block are shown in Table 6-20.

Figure 6-29: Field school students excavating the 2010 block at Locus B, 8LA1W.

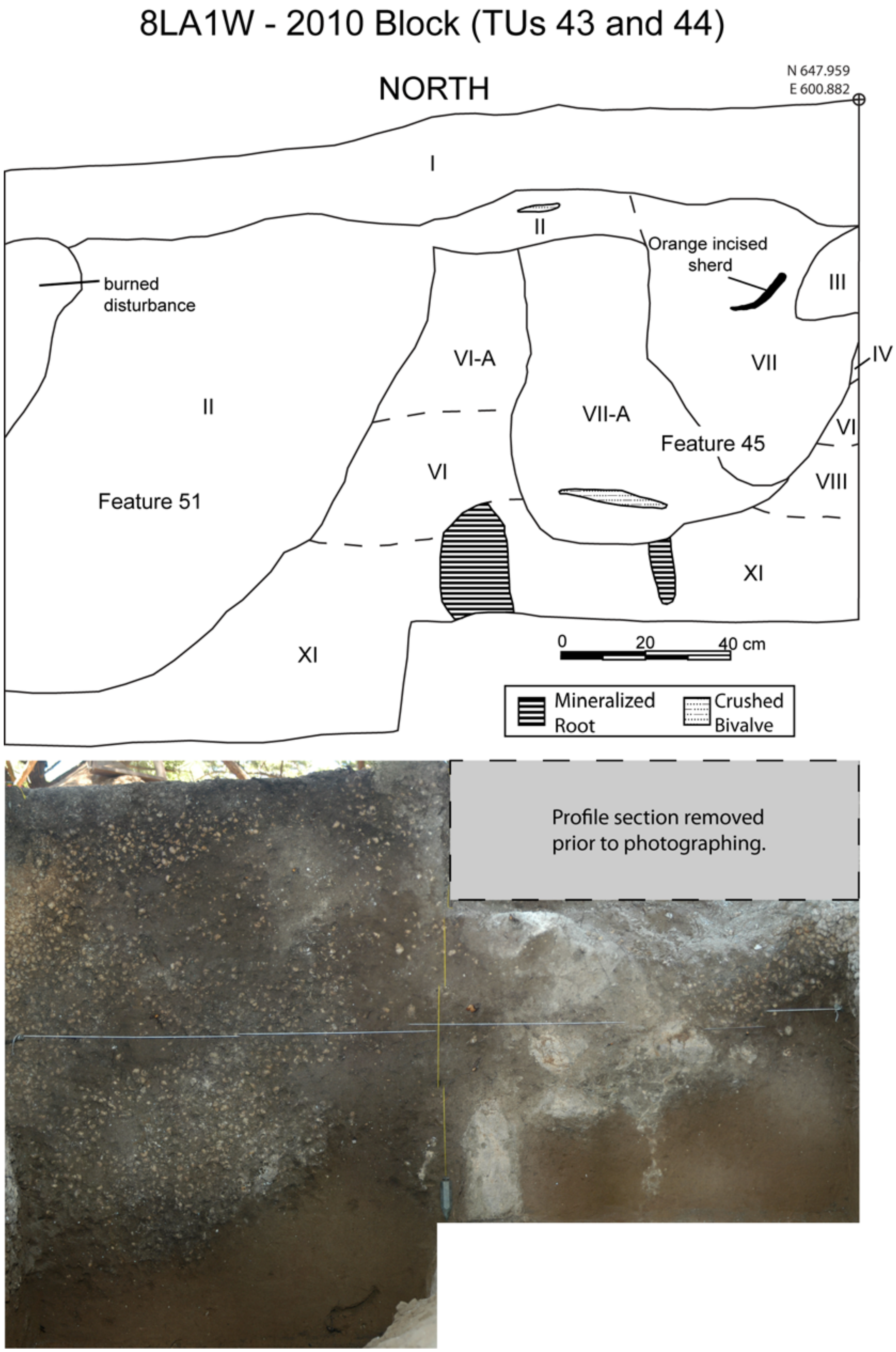


Figure 6-30. Stratigraphic drawing and composite photograph of north profile from 2010 block (TUs 43 and 44), 8LA1W. (Note: photograph not to scale.)

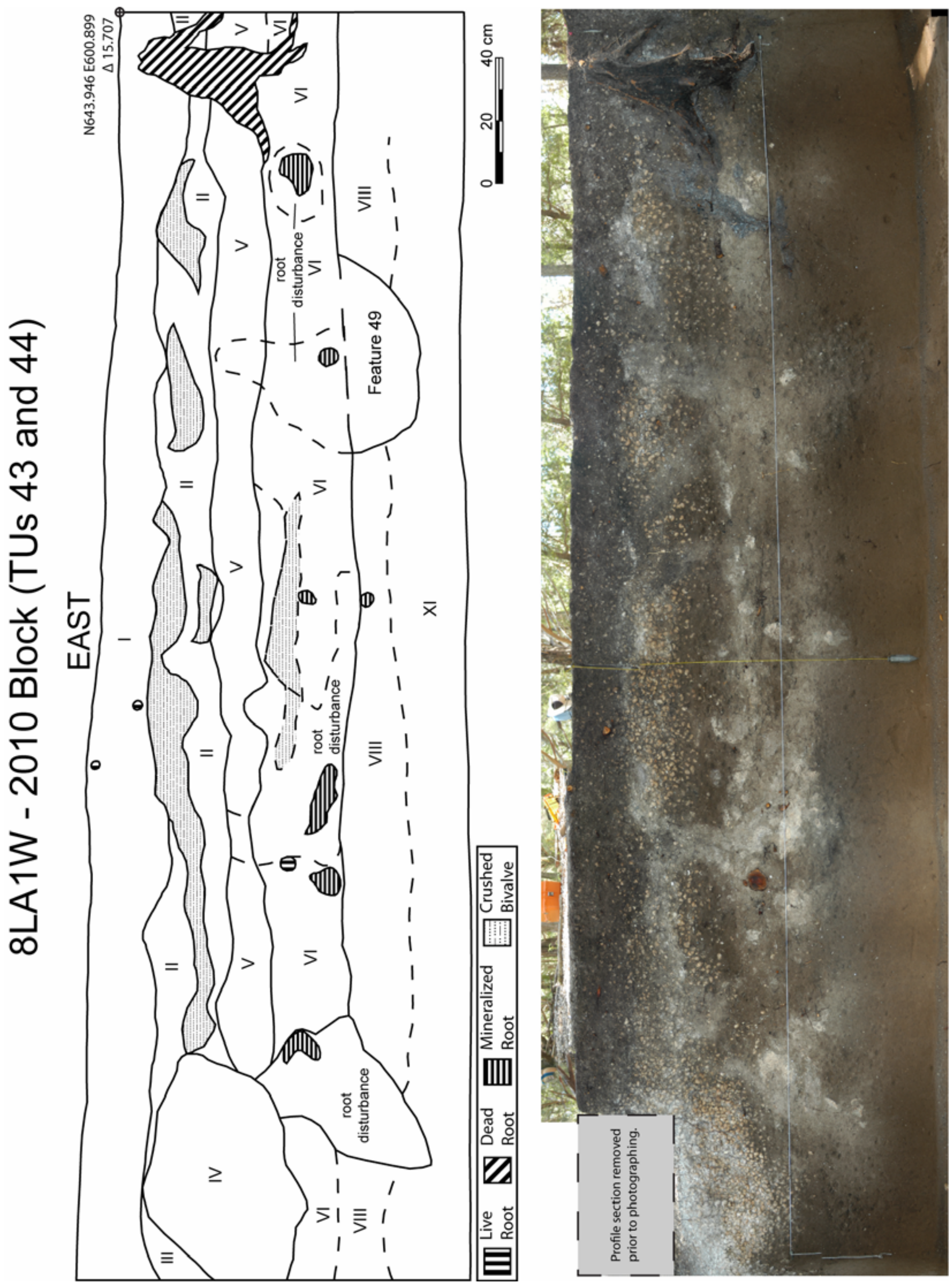


Figure 6-31. Stratigraphic drawing and composite photograph of east profile from 2010 block (TUs 43 and 44), 8LA1W.

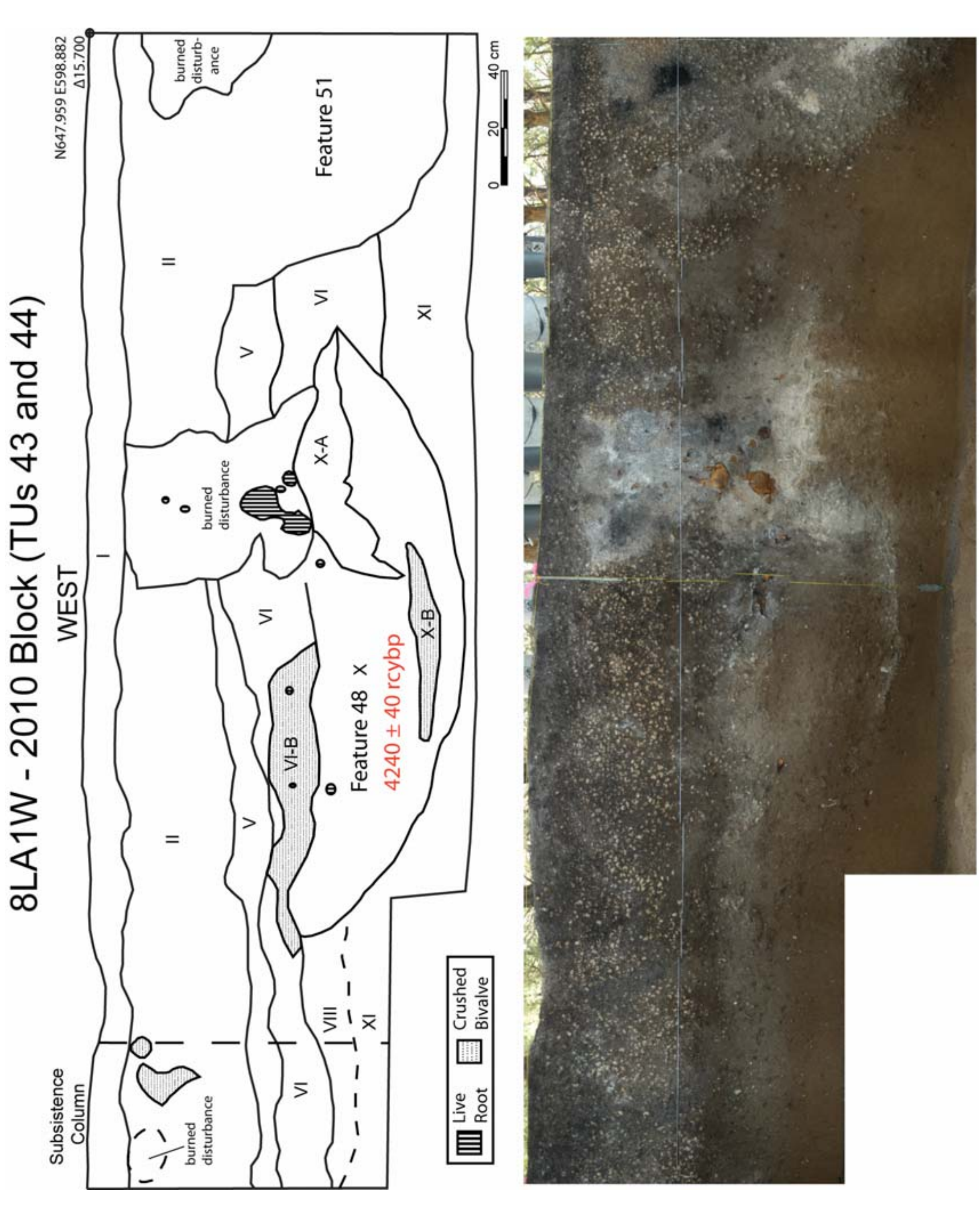


Figure 6-32. Stratigraphic drawing and composite photograph of west profile from 2010 block (TUs 43 and 44), 8LA1W.

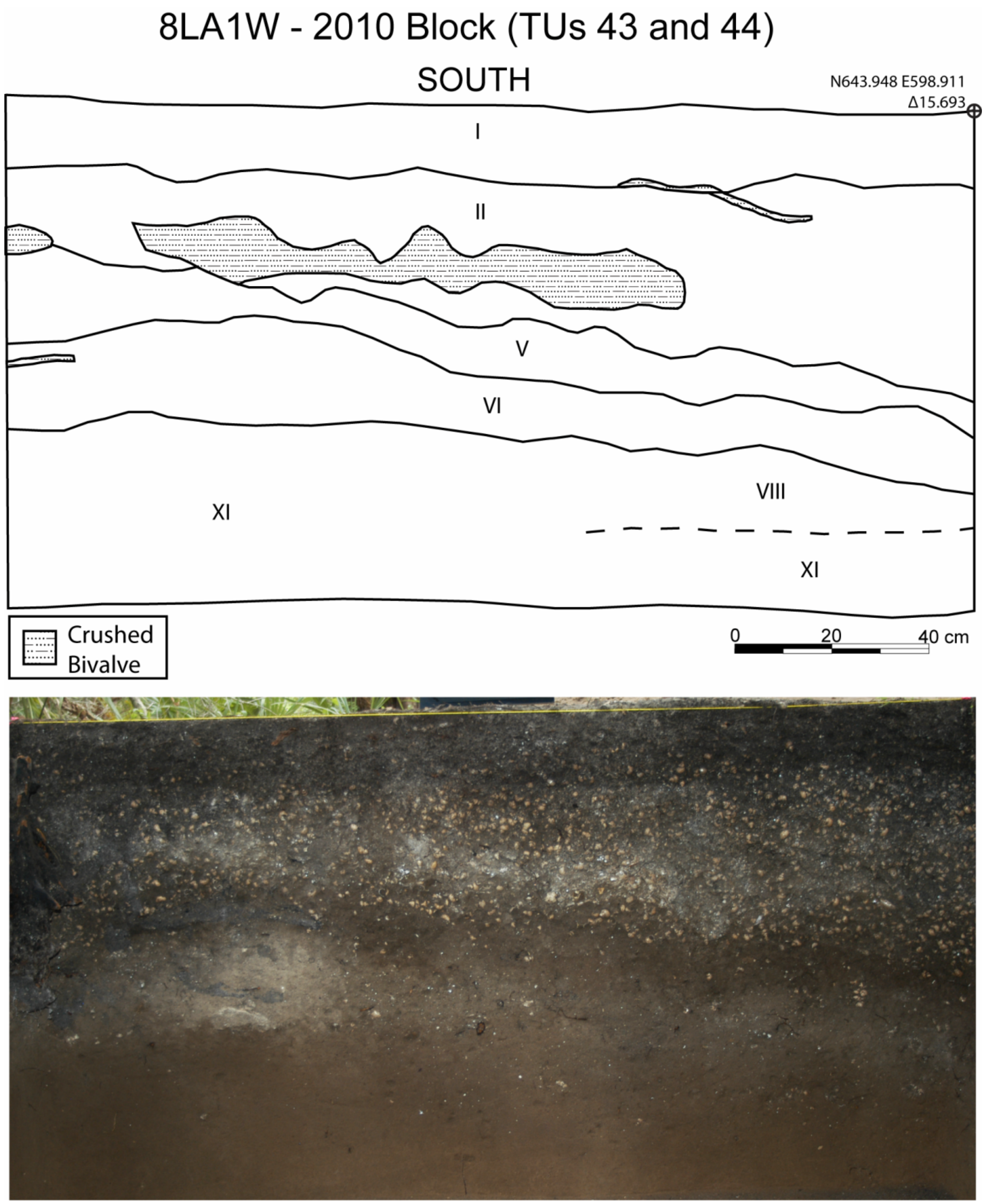


Figure 6-33. Stratigraphic drawing and composite photograph of east profile from 2010 block (TUs 43 and 44), 8LA1W. (Note: photograph not to scale.)

Table 6-21. Stratigraphic Units of 2010 block (Test Units 43 and 44), 8LA1W.

Stratigraphic Unit	Max. Depth cm BD[1]	cm BS[2]	Munsell Color	Description
I	35	30	10YR3/2	Very dark grayish brown, organically enriched sand with moderate density whole and crushed *Viviparus* and abundant live roots. Plow zone.
II	76	59	10YR4/2	Dark grayish brown sand with high density of mostly whole *Viviparus*, frequent lenses of burned crushed bivalve and occasional *Pomacea.*
III	55	50	10YR5/1	Very dense burned and crushed bivalve shell in a small amount of gray sand.
IV	71	67		Very high density of whole *Viviparus* and crushed bivalve with virtually no soil matrix.
V	83	68	10YR3/2	Buried A-horizon. Very dark grayish brown medium sand with low density whole *Viviparus.*
VI	118	84	10YR5/3	Medium grayish sand with low density crushed bivalve, occasional whole *Viviparus* and *Pomacea*.
VI-A	87	80	10YR5/3	Medium grayish brown sand with low density crushed bivalve. Abundant mineralized roots, and patches of very pale brown sand (10YR8/3).
VI-B	95	81		Very dense and compacted whole and crushed *Pomacea* and bivalve with virtually no soil matrix.
VII	102	96	10YR5/3	Medium grayish brown sand with very high density whole *Viviparus*. Smaller amounts of crushed *Pomacea* and bivalve. Feature 45.
VII-A	103	97	10YR6/2	Light brownish-gray, ashy sand with moderate density whole *Viviparus*, occasional crushed bivalve and frequent mineralized roots.
VIII	108	92	10YR3/1	Medium very dark gray shand with very low density crushed shell. Second buried A-horizon.
IX	105	97	10YR3/1	Very dark gray sand with high density whole *Viviparus*. Feature 49.
X	145	131	10YR4/3	Medium brown sand with occasional whole *Pomacea* and bivalve. Feature 48.
X-A	125	109	10YR8/3	Mneralized roots and sand with frequent whole and crushed bivalve. Highly concreted.
X-B	137	122		Very dense concreted *Pomacea* and bivalve with virtually no soil matrix.
XI	150	137	10YR4/3	Medium brown sand with no shell. Sterile.

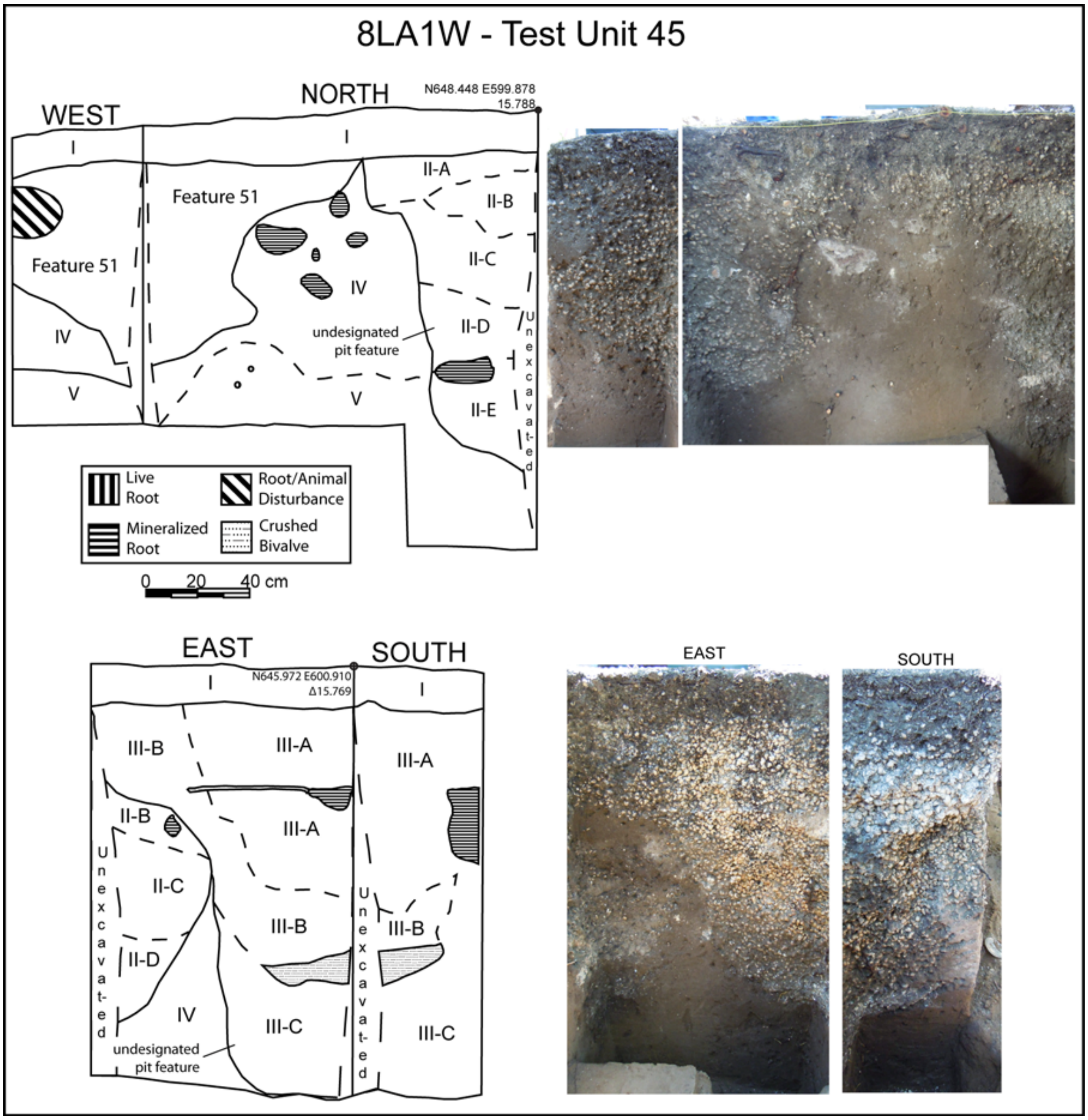


Figure 6-34. Stratigraphic drawings and composite photographs of profiles from Test Unit 45, 8LA1W. (Note: photographs not to scale.)

The plow zone exposed by the 2010 block ranges from 10-25 cm thick and largely corresponds to excavation Level A/B, although it extends down into Level C in some places. Like other excavated areas of Locus B, it consists of very dark, organically enriched sand with low to moderate density whole and crushed *Viviparus* shell and abundant small to large roots. It contains a relatively high density of mostly plain St. Johns ceramics, several lithic tools and flakes, and a small amount of vertebrate fauna. Again, the St. Johns component is largely confined to this upper, disturbed stratigraphic unit.

Table 6-22. Stratigraphic Units of Test Unit 45 (2010 block), 8LA1W.

Stratigraphic Unit	Max. Depth cm BD[1]	cm BS[2]	Munsell Color	Description
I	25	18	10YR3/2	Dark grayish-brown fine sand with low to medium density whole and crushed *Viviparus*.
IIA	41	39	10YR4/2	Dark grayish brown fine sand with medium density whole *Viviparus.*
IIB	79	74	10YR4/2	Dark grayish brown fine sand with high density crushed bivalve and occasional whole *Viviparus.*
IIC	110	104	10YR2/2	Very dark brown fine sand with low density whole *Viviparus*.
IID	141	138	10YR3/2	Very dark grayish brown fine sand with medium to high density crushed bivalve and occasional whole *Viviparus*.
IIE	142	135	10YR2/2	Very dark brown fine sand with occasional crushed bivalve and whole *Viviparus*.
IIIA	52	45		Very high density whole *Viviparus* and crushed bivalve with virtually no soil matrix.
IIIB	120	113	10YR4/2	Dark grayish brown fine sand with high density whole *Viviparus*.
IIIC	171	165	10YR2/2	Very dark brown fine sand with sporadic whole *Viviparus*.
IV	170	163	10YR3/3	Dark brown fine sand.
V	162	168	10YR4/4	Dark yellowish brown fine sand.

In this area, as in the 2009 block just to the north, the plow zone sits atop a massive stratum of mostly whole shell with varying amounts of dark grayish brown sand (Stratum II). At one location in the northeast corner of TU43 (Stratum IV), shell density is so high that virtually no soil matrix can be discerned. This shell layer consists primarily of large whole *Viviparus* but also contains occasional *Pomacea* and is crosscut in several locations by thin horizontal lenses of burned and crushed bivalve. While the top of this stratum contains a significant amount of St. Johns Plain ceramics, this is most likely a result of plow disturbance. Orange fiber-tempered ceramics are present throughout, although their density is highest around the crushed bivalve lenses near the stratum’s center. They include roughly equal proportions of plain and incised varieties. Other artifacts from Strata II/IV are sparse and include a few chert flakes, small bits of marine shell, and a low frequency of vertebrate fauna.

Table 6-23. Cultural Materials Recovered from Level Excavation of 2010 block (Test Units 43, 44, and 45), 8LA1W.

Level	St. Johns Plain	Orange/ T. I. Incised	Orange Plain	Orange Eroded	Crumb	Lithic Tool	Unmod. Lithic Flake	Misc. Rock	Marine Shell (g)	Modified Bone	Vert. Fauna (g)
A/B[1]	11		2		36	4	10	2	1.8		32.9
C[2]	22	1	4	1	86	3	5	4	13.0	1	105.5
D[3]	3	21	13	1	46	1	1		13.8		47.0
E[4]		2	8	2	35		1	3			111.6
F		6	5	4	35	1	5	1	27.1		177.6
G		2	1	1	24	5	5	1	194.8	4	405.4
H			1		2	2	1		7.6	1	195.3
I							6		10.3	1	180.2
J						1	4		94.1		134.9
K[5]											53.6
K – Zone A						1	1				1.1
K – Zone B									2.9		6.8
K – Zone C							1				15.6
L											28.2
L – Zone C							2		1.4		9.6
M					1		6				25.8
Profile Cleanup[6]			1				1		0.1		56.7
Total	36	32	35	9	265	18	49	11	366.9	7	1587.8

[1] plus one historic metal object; one St. Johns Check Stamped sherd; two St. Johns incised sherds
[2] plus two St. Johns Check Stamped sherds
[3] plus one St. Johns eroded sherd
[4] plus 0.6 g of paleofeces; one sand-tempered plain sherd
[5] plus 0.1 g of paleofeces
[6] plus 3.5 g of paleofeces

Stratum II is interrupted in multiple spots along the west profile by patches of charcoal and burned black sand that probably resulted from tree roots burning in place. In the east profile near the southeast corner, a large branching tree root penetrated down into Stratum II from the base of the plow zone. It was initially thought that this root may have been a small Archaic-age tree preserved as a result of being encased in the Stratum II shell. A sample of the root, however, returned conventional radiocarbon assay of 120 ± 40 rcybp (280-0 cal BP), indicating that it is actually the lower root portion of a modern tree, perhaps removed when the land was cleared for plowing in the early 20th-century.

The shell cap in the 2010 block (Strata II/IV) thickens substantially from east to west, increasing from around 20 cm in the east profile to upwards of 45 cm in the west. This trend appears to result from the sloping buried A-horizon (Stratum V) upon which the shell was deposited. This buried soil horizon consists of very dark grayish brown soil with low shell density and slopes upward from west to east (see south profile in Figure 6-33). As observed within other Locus B test units, this buried surface resembles the modern active A-horizon in exhibiting an underlying concentration of mineralized root casts. It is possible that the shell constituting Strata II/IV was used to level this preexisting sloped surface. Alternatively, if the shell deposits at Locus B have been truncated by plowing or other recent earth-moving activities, then the Strata II/IV may represent deposits of mounded shell that actually accentuated the sloping surface before they were scraped flat. It appears unlikely, however, that significant Late Archaic deposits have been removed, given the abundance of St. Johns materials that remain within the modern plow zone.

In the northwest corner of the block the Stratum II shell drops down approximately 110 cm, filling in a huge Orange period pit (Feature 51). The shell demarcating the exposed portion of this pit extends approximately 50 cm out from the northwest corner into TU43 and is identical to that observed in the overlying shell stratum. At least two additional shell-filled pits were exposed during the excavation of TU45, although they were not designated as such during excavation. One of these undesignated features can be seen in Figure 6-34 cutting down through the eastern edge of TU45's north profile and coming back up in the east, while the second partially overlaps the southern margin of the first and is visible in both the east and south profiles. This southernmost feature is similar to Feature 51 in that there is no distinction between the pit fill and the overlying shell cap, suggesting that some pits may have been open at the time that the shell layer was deposited and were infilled in one or a few large scale depositional events. This is perhaps a further indication that the shell cap was used consciously as means for obscuring existing topographical irregularities or "renewing" the existing Locus B surface. These massive pits are similar in scale and morphology to those previously excavated at Locus B and indicate widespread intensive use of this area during the Orange Period. Once again, however, little was found within them in terms of typical domestic debris that would suggest they resulted from everyday habitation activities. Instead, their extraordinary size and overlapping distribution suggest intermittent pulses of extremely intensive activity, perhaps geared toward the rapid processing of large quantities of shellfish.

This cap is visible across all 2010 block profiles with the exception of the north profile of TU45. There, an undifferentiated sand deposit exists between the two pit features that probably represents an intact portion of the emplaced sand “platform” observed in the southern half of the 2009 block. Unfortunately, this appears to be the only section of the emplaced sand that was not obliterated by subsequent pit-digging and is not particularly informative regarding the feature’s function or meaning.

Underneath the buried A-horizon, excavations uncovered a layer of grayish brown sand with low (Stratum VI) to very high (Stratum VI-B) densities of whole and crushed *Pomacea* and bivalve shell. This provides a noticeable contrast with the subsequent *Viviparus*-dominated Orange deposits and implies a distinct suite of shell deposition activities during this time. Stratum VI ranges in thickness from 10 cm to upwards of 50 cm. In spots (designated Stratum VI-A), it is permeated by abundant mineralized root casts associated with the overlying buried surface. No ceramic sherds were recovered from this stratum, indicating its probable preceramic Mount Taylor age. It does, however, contain frequent lithic and marine shell artifacts and relatively abundant vertebrate fauna compared to overlying deposits.

Stratum VI was deposited on top of a second buried A-horizon (Stratum VIII) that is most clearly visible in the block’s east profile as a 10 to 20-cm-thick layer of very dark, organic sand. The densest shell within Stratum VI was observed at its base along the contact with this organic layer, suggesting that the top of Stratum VIII is most likely the original Mount Taylor period surface. An increase in the density of cultural materials was noted as this surface was approached during excavation. Recovered artifacts include the base of a Newnan point, lithic flakes, marine shell fragments, and vertebrate fauna. Three pit features were also found to originate from this surface, including a broad shallow basin (Feature 49), a small straight-sided cylindrical pit filled with *Viviparus* (Feature 50), and a massive roughly 2-m-wide basin that is lined with dense concreted *Pomacea* and bivalve (Feature 48). All three are devoid of ceramics and Feature 48 contains a moderate density of vertebrate fauna remains. Charcoal samples from Features 50 and 48 returned radiocarbon assays of 4180 ± 40 rcybp (4810-4430 cal BP) and 4240 ± 40 (4860-4650 cal BP), situating them late in the Mount Taylor Period within the recently defined Thornhill Lake Phase (5600-4500 cal BP) (Endonino 2008). The diversity of features and artifacts, along with the higher frequencies of vertebrate fauna, suggest that the Mount Taylor component revealed by the 2010 block resulted from sustained activities associated with everyday living. These Mount Taylor deposits are underlain by medium brown, virtually sterile subsoil (Stratum XI).

Locus B Depositional Patterns

Excavation of a 4 x 4-m block in 2009 and a 2 x 4-m block in 2010 exposed evidence for the same basic culture-historical components previously identified in Locus B’s initial exploratory test units, albeit at a much broader and more revealing scale. When combined with the data from the exploratory test units, the added insight gained from these relatively expansive excavations has exposed evidence for three distinct patterns of shell deposition at Locus B (see Figure 6-35). These patterns each exhibit

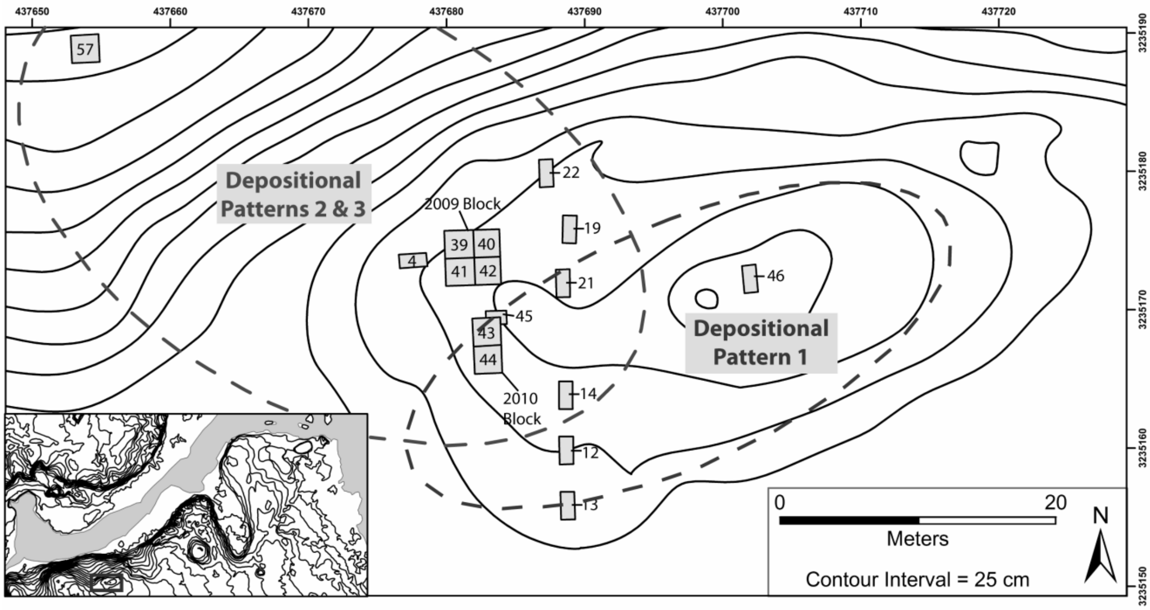


Figure 6-35. Map showing distribution of Late Archaic depositional patterns at Locus B, 8LA1W.

distinct material culture assemblages and correspond to three fundamentally different uses of this place during the Late Archaic. Together, they divulge a great deal regarding the Locus B's dynamic depositional history and its shifting role in larger-scale social processes.

Depositional Pattern 1 (DP1). As noted above, the earliest shell deposition at Locus B is centered on the high point of this area's shell node and in fact, these cultural deposits, and not natural fluvial processes are responsible for most of Locus B's modern topographic relief. The preceramic occupation responsible for this pattern involved a small domestic settlement where everyday activities were carried out off and on over a period of hundreds of years. TU46, excavated near the center of the shell node, revealed a series of thin horizontal deposits of shell with intervening thin layers of dark, organically enriched sand that is virtually shell-free. In terms of composition, the thin shell layers are made up primarily of crushed freshwater bivalve and apple snail, but also include lithic tools and debitage, marine shell, modified and unmodified vertebrate fauna, and paleofeces. It is likely that these alternating layers represent a sequence of at least 4 repeated habitations and abandonments.

Approximately 20 m to the southwest, we see a continuation of this same basic pattern in deposits uncovered in the 2010 block excavation. Again, there is a horizontal layer of crushed bivalve and *Pomacea* shell but in this location there are also a series of pit features descending from this apparent habitation surface. Varying in size, morphology, and content, these appear to constitute three functionally distinct features within a preceramic domestic context. The artifacts recovered from this stratum and the associated pits include a diverse array of bone, lithic, and shell tools and a relatively large quantity of vertebrate fauna, all of which support a domestic interpretation of these deposits. These materials were deposited on top of a well-developed intact A-horizon, the original preceramic surface at Locus B. Calibrated 2 sigma ranges from a series of four radiocarbon assays indicate that DP1 dates to the late preceramic Thornhill Lake Phase between 5740 and 4580 cal BP.

Depositional Pattern 2 (DP2). Radiocarbon and stratigraphic data indicate that this area of Locus B was abandoned near the end of the Thornhill Lake phase for perhaps a few hundred years, but at least long enough that substantial natural soil development was allowed to take place. Further evidence of this abandonment exists in the large mineralized tree roots that permeate the soil just below this second buried A-horizon. The next people to occupy Locus B did so during the subsequent Orange Period and initiated a depositional pattern wholly inconsistent with their preceramic predecessors. Where before the site's inhabitants had deposited materials and prepared features indicative of residential domestic activities, DP2 entailed a mode of inhabitation centered on the excavation and use of extraordinarily large pits. Many of these pits overlap, dug one on top of another across a broad area stretching at least 50 m from the western edge of Locus B's shell node over to TU57.

Burned and concreted bivalve shell in the bottoms of multiple pits hints at their use in shellfish processing, although with dimensions sometimes exceeding a meter in both diameter and depth, these pits seem out of proportion with domestic food processing. This period also saw the introduction of the region's first ceramic technology to Locus B. Aside from a modest number of undecorated fiber-tempered pot sherds, however, relatively few cultural materials were deposited during this time, especially considering the apparently high-intensity activities taking place. Consequently, little evidence exists suggesting that Locus B was a place of residence during this time. Instead, the size and overlapping nature of the pits point to successive short-term, high intensity events involving the processing of shellfish at a communal or even extra-communal scale. Calibrated 2 sigma ranges from a series of seven radiocarbon assays situate DP2 within the Orange period between 4520 and 3830 cal BP.

Depositional Pattern 3 (DP3). Shortly following the end of large-scale pit digging, a large quantity of mostly whole *Viviparus* shell was deposited across the surface of Locus B, an event marking another major transition in the site's history. DP3 forms a 30-50 cm thick, mostly homogeneous stratum of dense unconsolidated shell that at many places contains little if any soil matrix. Like the pits below it, this stratum contains only very sparse vertebrate fauna and artifacts, save for a small amount of fiber-tempered pottery. In contrast to the undecorated pottery from the pits, however, many of the sherds recovered from this deposit exhibit the curvilinear incisions and punctuations typical of the Tick Island style of decoration.

In many locations this layer of shell is completely undifferentiated from top to bottom. In others, it is crosscut by thin, roughly horizontal layers of crushed bivalve similar in many respects to the preceramic surfaces noted in DP1. These may be an indication that DP3 did not entail a single massive depositional act but rather a repeated sequence of formal surface preparations using crushed bivalve followed by deposition of clean *Viviparus*. Nevertheless, the "clean" and unfragmented nature of the shell suggests a series of large-scale intentional capping events and not the gradual accumulation of domestic debris. The layer of shell constituting DP3 is virtually coextensive with the pits underlying it and in some places appears to have infilled open pits, in effect turning what must have been a rough and uneven surface into a relatively flat and smooth one. This massive mantle of shell is not unlike the ones noted earlier that cap discontinued Mt. Taylor habitation spaces (Randall 2010; Sassaman 2010) and perhaps constitutes the renewal of a long lived tradition of laying down whole shell over places at the end of their use lives. Two radiocarbon assays on samples recovered from Feature 38 (the only pit feature containing Tick Island style pottery similar to that recovered from DP3 deposits) tentatively date this stratum to 4140-3830 cal BP.

FEATURE ASSEMBLAGE

In total, 34 features were recorded during the 2007-2010 excavations at Locus B, of which 25 were determined to be of pre-modern cultural origin (see Table 6-24). Following examination of excavation profiles, an additional four features were identified that had gone unrecognized in the field and as a result, were not assigned feature numbers. All Locus B features have been interpreted as infilled pits. These pits were classified according to shape and size as follows:

Type 1: includes shallow basin-shaped pits with outward sloping margins; maximum diameters range from 25- 87 cm and depths from 8-20 cm;

Type 2: includes broad, deep basin-shaped pits with outward sloping margins; maximum diameters range from 67-230 cm and depths from 42-73+ cm;

Type 3: includes small cylindrical pits with vertical margins; maximum diameters range from 40-45 cm and depths from 31-51 cm;

Type 4: includes large cylindrical pits with vertical margins; maximum diameters range from 60-140+ cm and depths range from 50-102 cm;

Type 5: includes conical pits with inward sloping margins; maximum diameter of 120 cm and depth of 94 cm;

Type 6: includes isolated shell pockets of presumed cultural origin: maximum diameters range from 38-47 cm and depths from 20-28 cm.

Typical examples of the various feature types and their relative stratigraphic distributions can be seen in Figure 6-36. The Thornhill Lake Phase deposits constituting DP1 include the widest variety of feature types, even though this component has undergone the smallest amount of excavation in terms of total surface area. DP1 features include small basins (Type 1), one large shallow basin (Type 2), small cylindrical pits (Type 3), and isolated shell pockets (Type 6). Most of these DP1 pits are found within the relatively restricted space encompassed by the southern two thirds of the 2010 block (see Figure 6-37). In this location, various pit types were dug down from a buried surface occurring at approximately 90-100 cmbd.

Table 6-24. Cultural features recorded at Locus B, 8LA1W.

Feature No.	Type	Shape	Dimension (cm)	Depth (cm)	Cult.-Hist. Affiliation	Depo. Pattern
1	1	basin	25	14	Orange	2
2	downgraded					
3	downgraded					
4	1	basin	45 x 27	10	Orange	2
5	downgraded					
13	downgraded					
14	1	basin	17 x 12	8	Orange	2
15	2	basin	131+ x 52+	75?	Orange	2
16	2	basin	100+	80?	Orange	2
17	6	amorph.	45 x 22	20	Thornhill?	1
25	6	amorph.	38 x 30	28+	Thornhill?	1
26	4	cylinder	60	65+	Orange	2
27	4	cylinder	100+	50+	Orange	2
29	downgraded					
30	downgraded					
31	downgraded					
33	4	cylinder	100 x 66	84	Orange	2
34	1	basin	87 x 83	12	Orange	2
35	1	basin	82 x 74	16	Orange	2
36	2	basin	120+ x 80+	~90	Orange	2
37	1	basin	55 x 34	19	Orange	2
38	5	cone	120 x 72+	94	Orange/T.I.	3?
39	downgraded					
41	2	basin	indeterminate	indeterminate		
42	4	cylinder	100+	indeterminate		
45	4	cylinder	71 x 58	70	Orange	2/3?
48	2	basin	230 x 135+	42	Thornhill	1
49	1	basin	54 x 23	20	Thornhill	1
50	3	cylinder	45 x 43	31	Thornhill	1
51	4	cylinder	140+ x 100+	102	Orange	2
52	2	basin	67 x 27	65	St. Johns?	
53	downgraded					
54/55	2	basin	227+ x 134+	50+	Orange	2

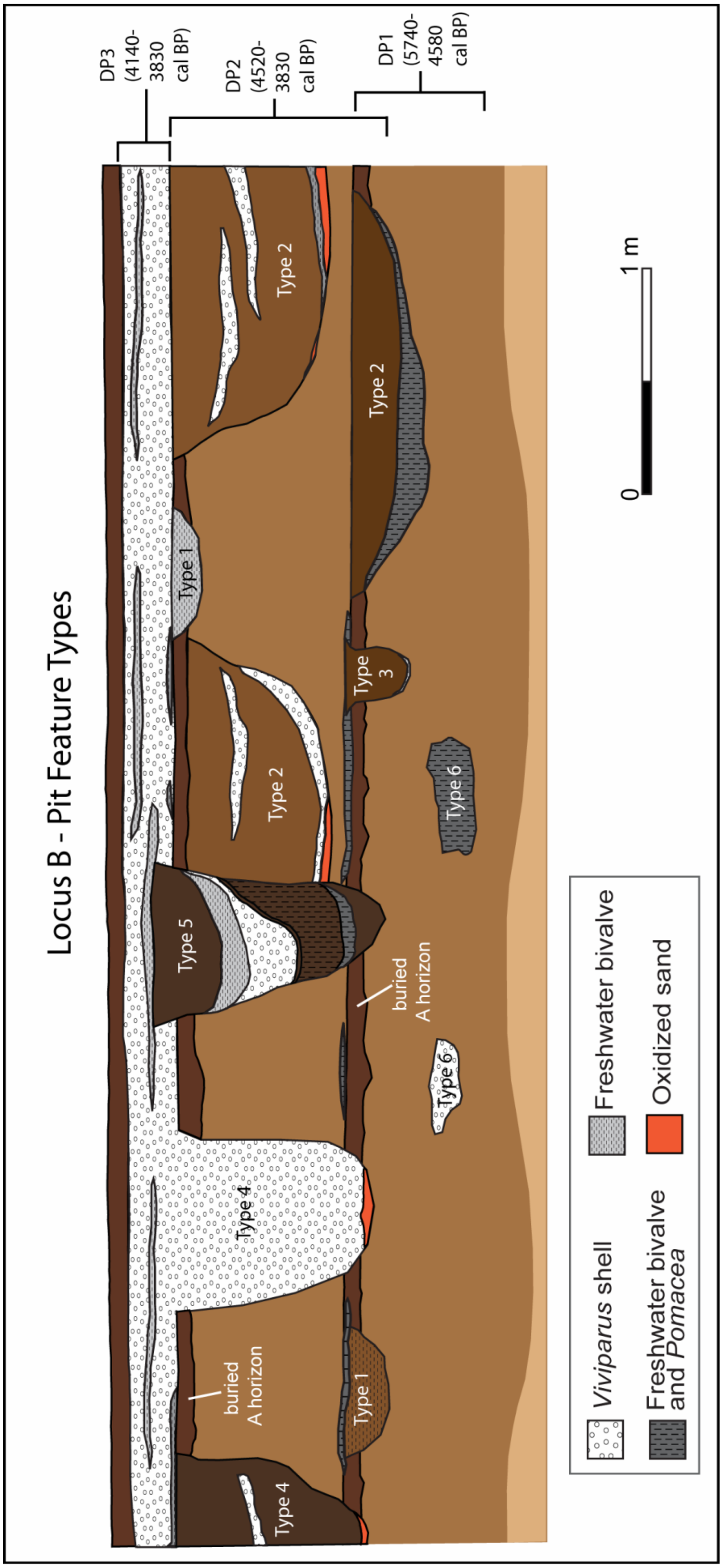
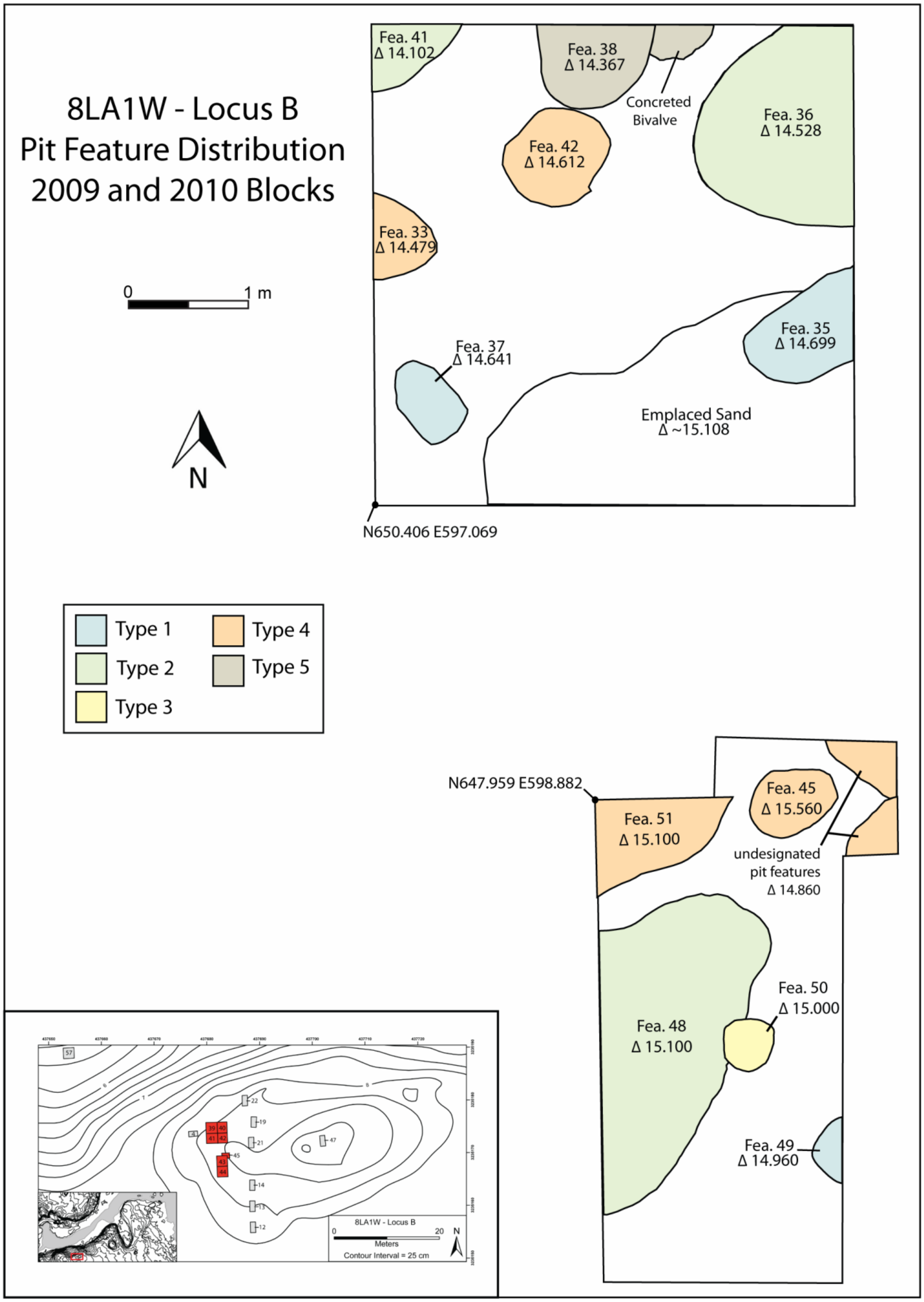


Figure 6-36. Schematic showing typical examples of feature types and their stratigraphic distributions within Locus B deposits.



Feature 6-37. Map showing horizontal distribution of pit feature types in the 2009 and 2010 blocks, 8LA1W.

DP2 features are far less varied and reflect a major transition in the mode and temporality with which Locus B was utilized during the Orange period. The most striking aspect of DP2 features is their scale, as almost all of Locus B's truly massive Type 2 and Type 4 features are associated with this pattern. These unusually large pits are found in all excavated contexts in the northern half of Locus B from TU22 in the east to TU57 in the west. They are tightly bunched across much of this area and frequently overlap making the delineation of some pit boundaries impossible. This has undoubtedly led to an underestimation of their total number. Smaller Type 1 features are also found within DP1 deposits, although at a lower frequency than Types 2 and 4.

The only Type 5 feature has tentatively been associated with DP3. This is a large conical pit, similar in size to many of the DP2 pits but with a tapered base and complex stratified fill. It straddles the boundary between TU39 and TU40 along the northern edge of the 2009 block. All feature types and individual features are discussed in more detail in the section that follows.

Type 1 Features

A total of seven Type 1 features were recorded at Locus B. While these features all share a shallow basin shape in profile, in plan view, they vary widely in size and shape, ranging from small and roughly circular to long and ovoid. They also hold a variety of different fills with some enclosing only dark organic sands and others containing dense deposits of shell, bone, and other artifacts. The precise function(s) of Type 1 features is unknown, although they may have served variously as roasting pits, small-scale storage containers, or even as receptacles for votive offerings. As noted above, they are found within both the 2009 and 2010 blocks and are distributed throughout DP1 and DP2, thus bridging the gap between the preceramic Thornhill Lake and early ceramic Orange Period occupations of Locus B.

Feature 1. Feature 1 (Figure 6-38) is a small circular Type 1 pit located in the southern half of TU4. Measuring approximately 25 cm in diameter, it was initially recognized at 86 cmbd as a very dark gray (10YR3/1) pocket of loamy soil containing denser shell than that in the surrounding matrix. In cross-section, Feature 1 is a shallow basin with a maximum depth of 14 cm. It contains dense whole and crushed *Viviparus* and bivalve shell, some of which shows signs of burning. Bits of charcoal and small fiber-tempered ceramic sherds were also recovered from the pit, dating it to the Late Archaic Orange period. It is possible that this feature functioned as a small, temporary cooking hearth or roasting pit, although none of the matrix surrounding the pit shows any signs of having been exposed to fire. Feature 1 was bisected along a north-south axis. The eastern half was removed as a bulk sample for flotation, while the western half was ¼-inch screened.

Feature 4. Feature 4 (Figure 6-39) is a Type 1 pit located in the southeastern corner of TU4. Although only a quarter-section of this feature was uncovered, it appears amorphous in shape, with exposed dimensions of 70 x 63 cm. A large mineralized root that was originally designated Feature 5 was observed along the northern edge of the pit

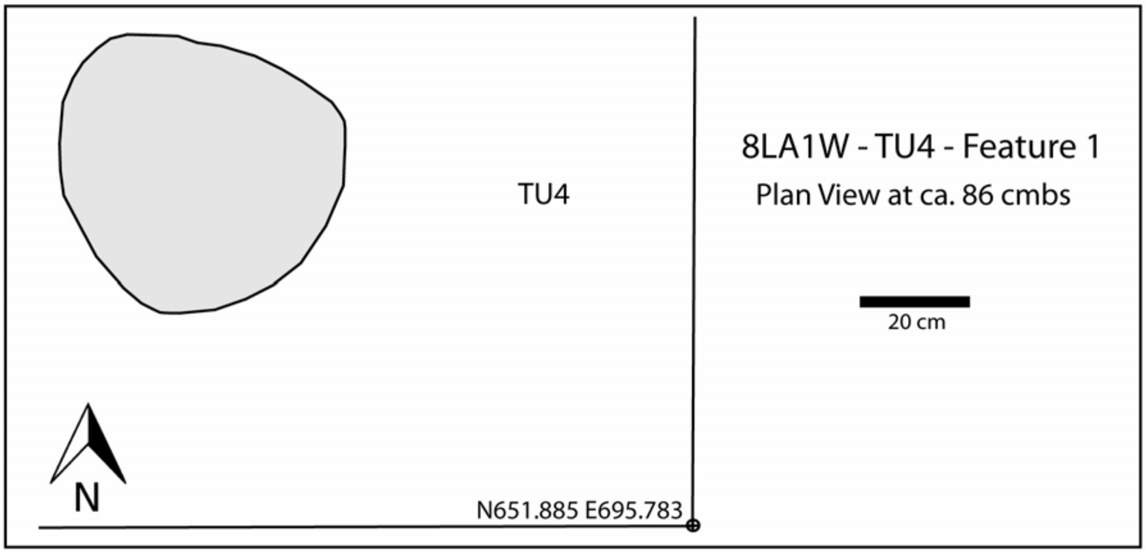


Figure 6-38. Drawing of the plan view of Feature 1, TU4, 8LA1W.

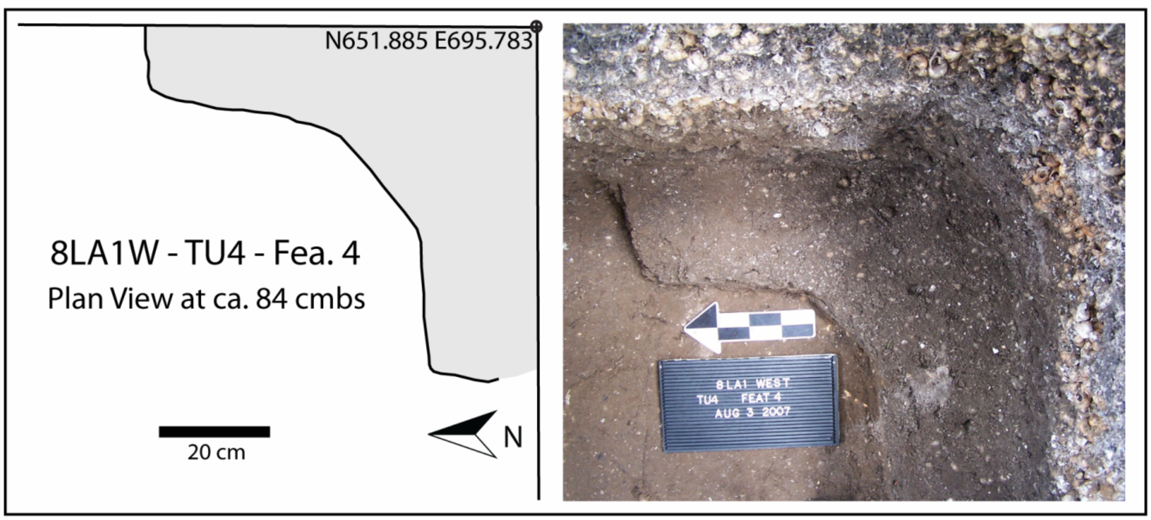


Figure 6-39. Drawing and photograph of the plan view of Feature 4, TU4, 8LA1W. (Note: photograph not to scale.)

and may be at least partially responsible for its unusual morphology. Feature 4 was not recognized until near its base but the portion visible in the south and east profiles of TU4 exhibits a maximum depth of approximately 10 cm. The pit is characterized by very dark grayish brown (10YR3/2) loamy soil matrix containing moderately dense whole *Viviparus* shell. After documenting the feature, the entire intact portion was removed as a bulk sample for flotation. Although no artifacts were observed during excavation, some may still exist within this unanalyzed sample. Stratigraphically, Feature 4 is situated near the top of DP2 deposits, likely situating it within the Orange period.

Feature 14. Feature 14 is visible in cross-section in the northern half of TU4's east profile. It has been tentatively interpreted as a very small and shallow basin-shaped pit but could alternatively be the base of an infilled posthole. Feature 14 was recognized during excavation as a discrete pocket of dense whole *Pomacea* in slightly darker brown sand than the surrounding matrix. The shell is most concentrated near the base of the pit and is mixed with frequent lumps of charcoal. Due to its small size, Feature 14 was excavated in its entirety as a bulk sample for flotation.

Feature 34. Feature 34 (Figure 6-40) is a broad shallow basin-shaped pit located in the eastern half of TU39. It is roughly circular in plan view, measuring 87 x 83 cm at the top. It is characterized by abundant whole *Viviparus* shell in very dark grayish brown (10YR3/2) medium sand. Much of the shell excavated from Feature 34 is semi-concreted, especially that found near the center of the pit. One fiber-tempered plain sherd was recovered from this area and two other large sherds were found near the feature's southwestern periphery, near the base of Feature 29. The close proximity of Feature 29 may have impacted this portion of the pit, while a mineralized root runs through its eastern half.

Feature 34 was bisected along an axis running northwest to southeast. The northeastern half of the feature was removed as a bulk for flotation analysis while the southwestern half was 1/8-inch water screened. Excavation of the water screen sample was carried out to a point below the actual lower margin of the feature in order to ensure that the bottom had been reached and to expose a complete cross-section of the pit. It revealed a shallow basin with gently sloping sides that bottoms out in the northwest with a maximum depth of approximately 12 cm.

Feature 35. Feature 35 (Figures 6-41 and 6-42) is a shallow pit extending out of the east wall of TU42. It exhibits an unusual elongated ovoid shape that distinguishes it among Type 1 features and results in a linear "trough"-like appearance. It was first recognized at an absolute depth of 14.699 m (based on the local site datum) as a discrete concentration of whole bivalve and *Pomacea.* Excavation of the pit also revealed occasional whole *Viviparus*, crushed shell fragments of various types, and small flakes of charcoal. No artifacts were recovered that can confidently be attributed to the feature but a marine shell fragment found near its edge may be associated. Feature 35 lies within DP2 deposits, right at the edge of the emplaced sand anomaly discovered in the southern half of the 2009 block and appears to originate from approximately the same surface as the one on which the sand was deposited. It is likely that Feature 35 was intentionally placed in relation to the emplaced sand and the two may have had interrelated functions, although it remains unclear what those may have entailed.

In the field, this pit was bisected along an east-west axis, revealing the cross-section of a shallow basin with a maximum depth of 16 cm and regular, gently sloping margins. The cross-section grades in color from medium brown (10YR4/3) at the top to

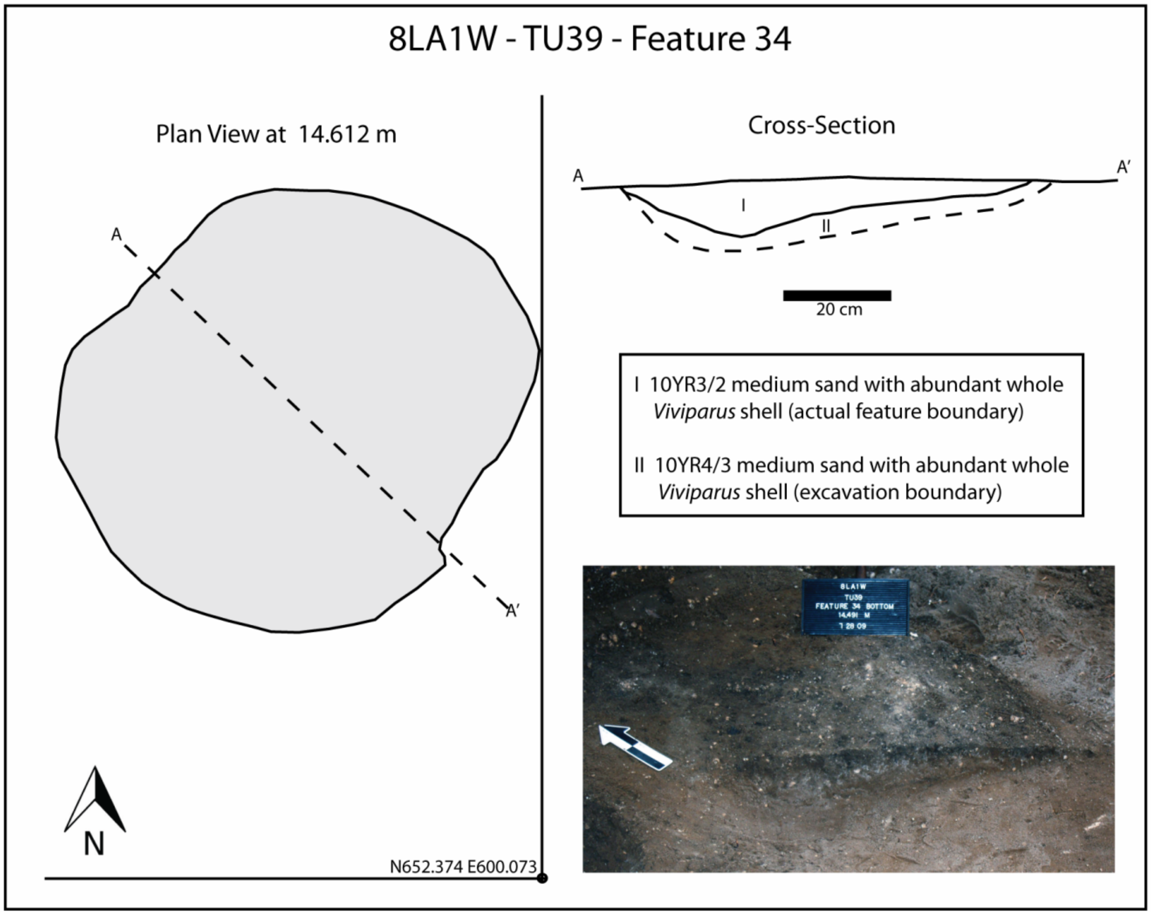


Figure 6-40. Drawings and photograph of the plan view and excavated cross-section of Feature 34 from TU39, 8LA1W. (Note: photograph not to scale.)

dark yellowish brown (10YR4/4) at the bottom. A thin 2-4-cm layer of dense bivalve and *Pomacea* cuts through the center. A potential disturbance exists in the form of a large mineralized root that runs along, or perhaps truncates, the northern edge of the pit and may have affected the feature's current shape.

Feature 37. Feature 37 (Figure 6-43) is a Type 1 pit feature located in the southwest quadrant of TU41. It stood out during excavation as a dense concentration of bivalve shell and very dark grayish brown (10YR3/2) sand in an otherwise mostly shell-free stratum. This feature is unusual in that it is filled primarily with whole bivalve shells that were paired and unopened prior to excavation. On the west side of the pit, a layer of extremely dense whole and concreted bivalve line the bottom of the pit. Underneath this concreted layer is a lens of bright red oxidized sand. This type of thermally altered sand is common at the bases of larger Type 2 and Type 4 pits at Locus B but is unique to Feature 37 among Type 1 features. The oxidized sand, along with a small amount of charcoal, and the whole unopened bivalve, may indicate that Feature 37 was a small

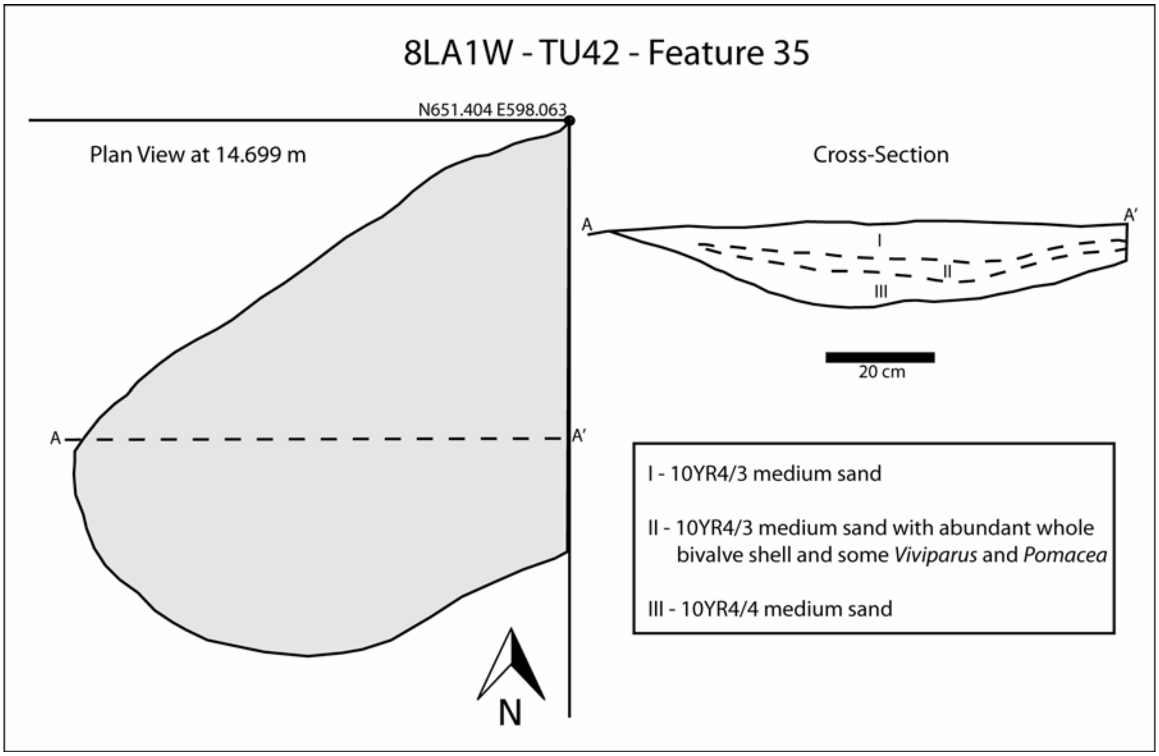


Figure 6-40. Drawings of the plan view and excavated cross-section of Feature 35 from TU39, 8LA1W.

Figure 6-41. Photograph of the excavated cross-section of Feature 35 from TU39, 8LA1W.

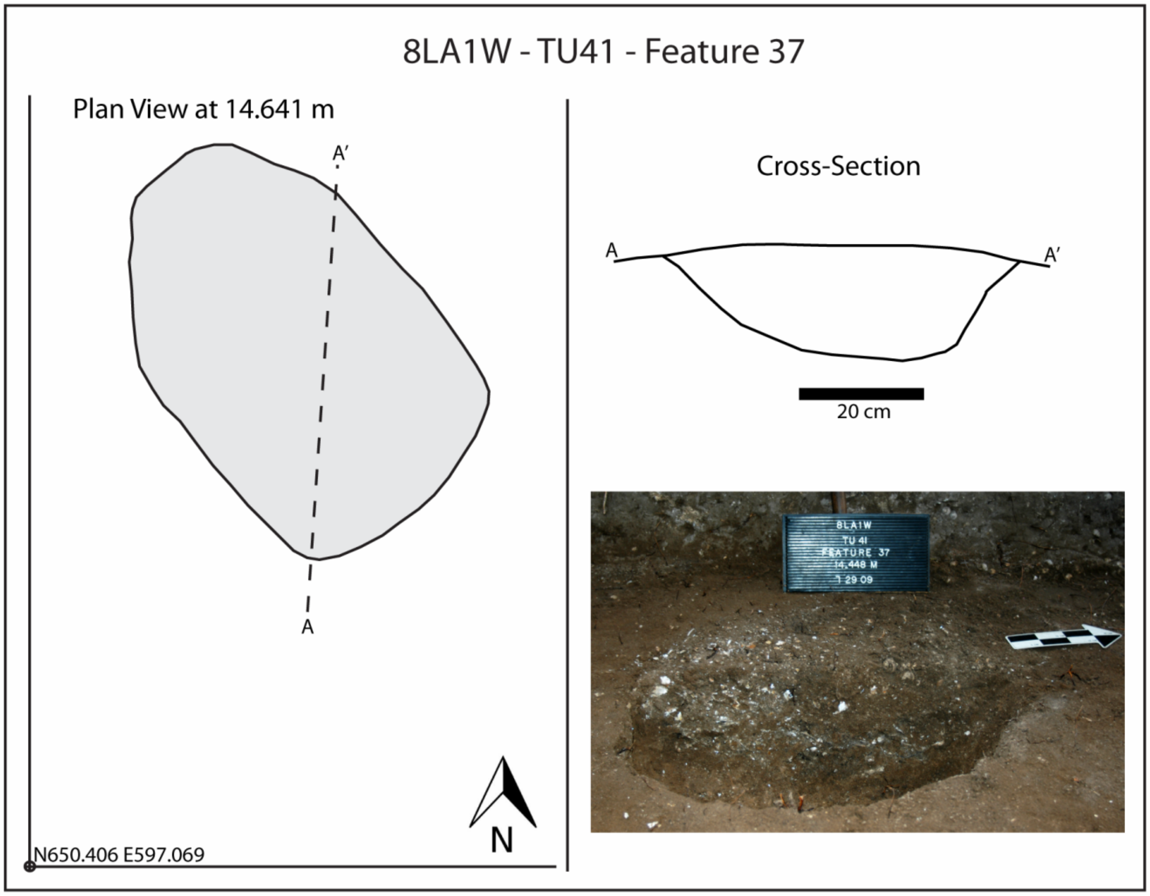


Figure 6-43. Drawings and photograph of the plan view and excavated cross-sections of Feature 37 from TU39, 8LA1W. (Note: photograph not to scale.)

roasting pit that was filled with freshwater clams, covered, and then forgotten about. A moderate density of *Viviparus* and small number of fiber-tempered plain ceramic sherds are the only other materials documented during excavation. A small concreted root runs through the base of the feature.

Feature 37 was bisected along a north-south axis, revealing a shallow basin with a maximum depth of approximately 19 cm. The west half was removed for flotation analysis and the east half was 1/8-inch water screened. A charcoal sample recovered from the bulk returned a radiocarbon assay of 3630 ± 40 rcybp (4080-3850 cal BP), which is within the temporal range of other DP2 features.

Feature 49. Feature 49 (Figure 6-44) is a Type 1 feature overlapping the eastern edge of TU44 in the 2010 block. Although its actual top sits at 88 cmbd, this feature was not recognized as such until near its base when a concentration of *Viviparus* and bivalve in dark grayish brown (10YR3/2) sand became apparent in both the floor and east profile of the test unit. The exposed half of the feature measures 54 cm in diameter and extends approximately 23 cm into TU44. It appears to be the western half of a roughly circular

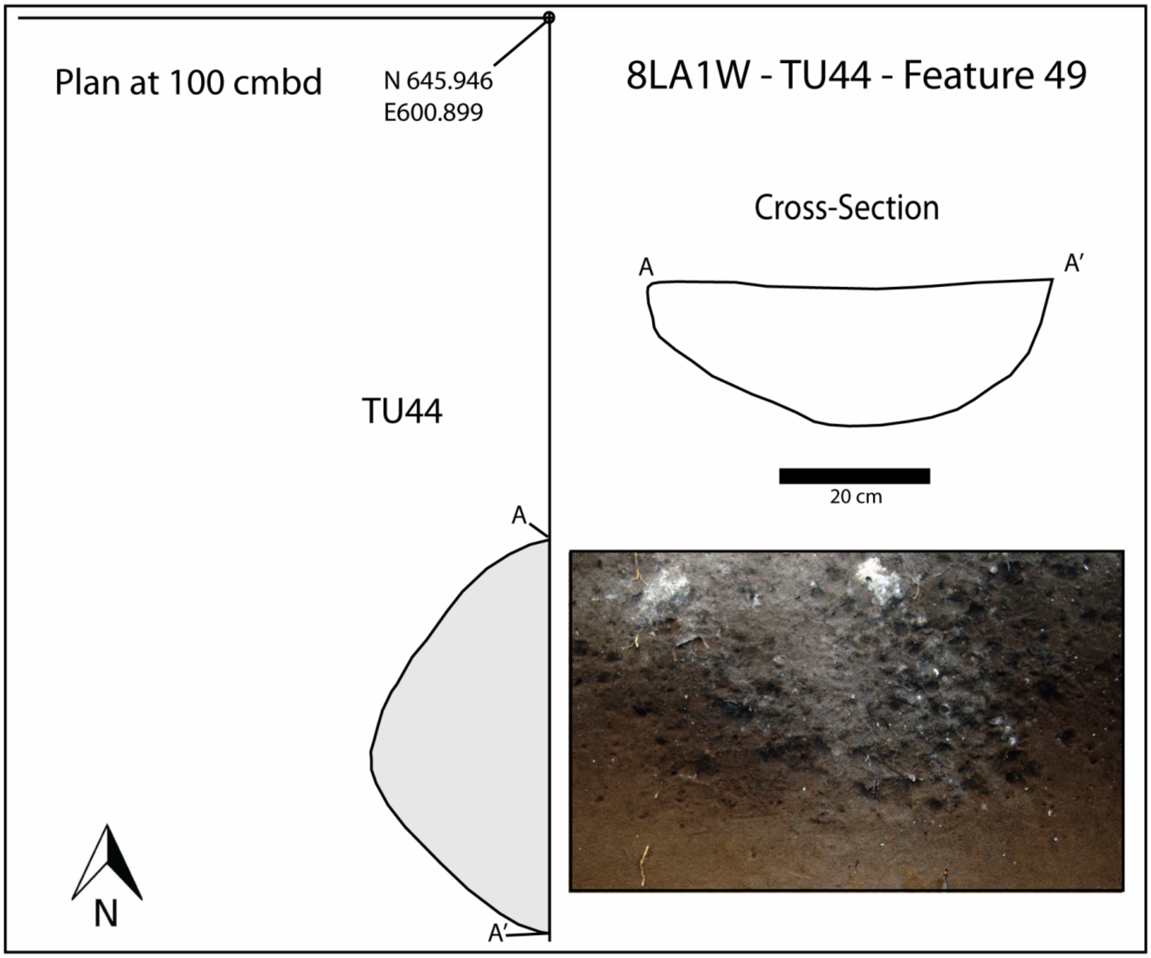


Figure 6-44. Drawings and photograph of the plan view and excavated cross-section of Feature 49 from TU44, 8LA1W. (Note: photograph not to scale.)

pit containing a moderate density of shell but no other observable artifacts. Bisected by the test unit wall, the feature originates from the lower buried A-horizon observed within the 2010 block, making it a part of DP1. It may consequently be related to two other pits (Features 48 and 50) discovered at this same level. Feature 49 is basin shaped and relatively shallow with a maximum depth of around 20 cm. Upon its recognition at approximately 100 cmbd, the entire remaining portion of the feature was removed and bagged as a bulk sample for flotation analysis.

Type 2 Features

A total of eight Type 2 features have been documented at Locus B. Like Type 1 features, these exhibit a basic basin shape in cross-section with sloping sides and rounded or flat bottoms. They are clearly distinguished, however, by their scale, with maximum diameters ranging from 67-230 cm and depths from 42-73+ cm, resulting in volumes many times greater than those displayed by Type 1 pits. Pit fill varies considerably among features, with some containing only a trace of shell while others enclose large, dense shell deposits. At least four Type 2 features contain highly structured deposits of shell and earth, resulting in complex stratified profiles. As noted above, most of these massive pits (at least six of the eight) are associated with DP2. At least five of these have evidence for burning near their bases, a fact that, when combined with the ambient shell and general lack of vertebrate fauna throughout DP2 deposits, suggests a primary function related to the steaming or roasting of shellfish. Type 2 features have a horizontal distribution that stretches across the entire area encompassed by the Locus B excavations. Within this area, individual pits frequently overlap each other, often making their recognition difficult and their precise delineation nearly impossible.

Features15/16. Features 15 and 16 (Figure 6-45) are two large basin-shaped pits stretching across the entire southwestern half of TU4. These pits were first recognized as a single continuous concentration of shell in the floor of the test unit at approximately 110 cmbd. This concentration was later determined, however, to include two distinct pits. The features appear in stark contrast to the virtually shell-free sand surrounding them. Examination of the south and east profiles of TU4 reveals that the pits probably originate from a surface just below the base of the DP3 shell, perhaps at around 70-80 cmbd. This results in estimated maximum depths of 75 cm for Feature 15 and 80 cm for Feature 16. Horizontally, the visible portions of both pits extend for over one meter in diameter, although their actual dimensions are obscured by their overlapping margins and the limited perspective provided by the 1 x 2-m test unit.

If the upper boundary of the features proposed above is correct, then the fill from both pits can be said to exhibit some level of stratification. At least three distinct filling episodes are evident in both features. These can be seen in the cross-sections of the features shown in the south and east profiles of TU4 (see Figure 6-16 above). The lowermost, and presumably earliest, fill in Feature 15 consists of brown (10YR4/3) fine sand containing very dense, mostly burned shell, ash, and charcoal. Shell constituents include mostly whole and crushed *Viviparus* with pockets of whole burned bivalve. Portions of this stratum are solidly concreted and had to be broken up with a pick hammer during excavation of the feature. The bottom stratum of fill in Feature 16 is very similar to that in Feature 15 but with the addition of whole and broken *Pomacea*. Plain fiber-tempered pottery was found within the shell of both features. During excavation of the lower portion of these pits, a smell similar to burned rubber was noted. Above this basal stratum, the stratigraphic sequence of the two pits is virtually identical. In each case, a 25 to 45-cm thick layer of dark yellowish brown (10YR3/4) sand with only sparse whole *Viviparus* was deposited directly on top of the dense shell. In Feature 16, this layer is penetrated by a possible animal burrow and multiple mineralized roots. Following this, roughly 25 cm of dense whole *Viviparus* in a very dark grayish brown (10YR3/2) sand was laid down, thus completing the fill sequence. Relatively abundant vertebrate fauna is present within this upper layer. The fact that this sequence of discrete depositional acts was repeated in two distinct pits dug at different times suggests intentional structured deposition rather than the haphazard disposal of everyday refuse.

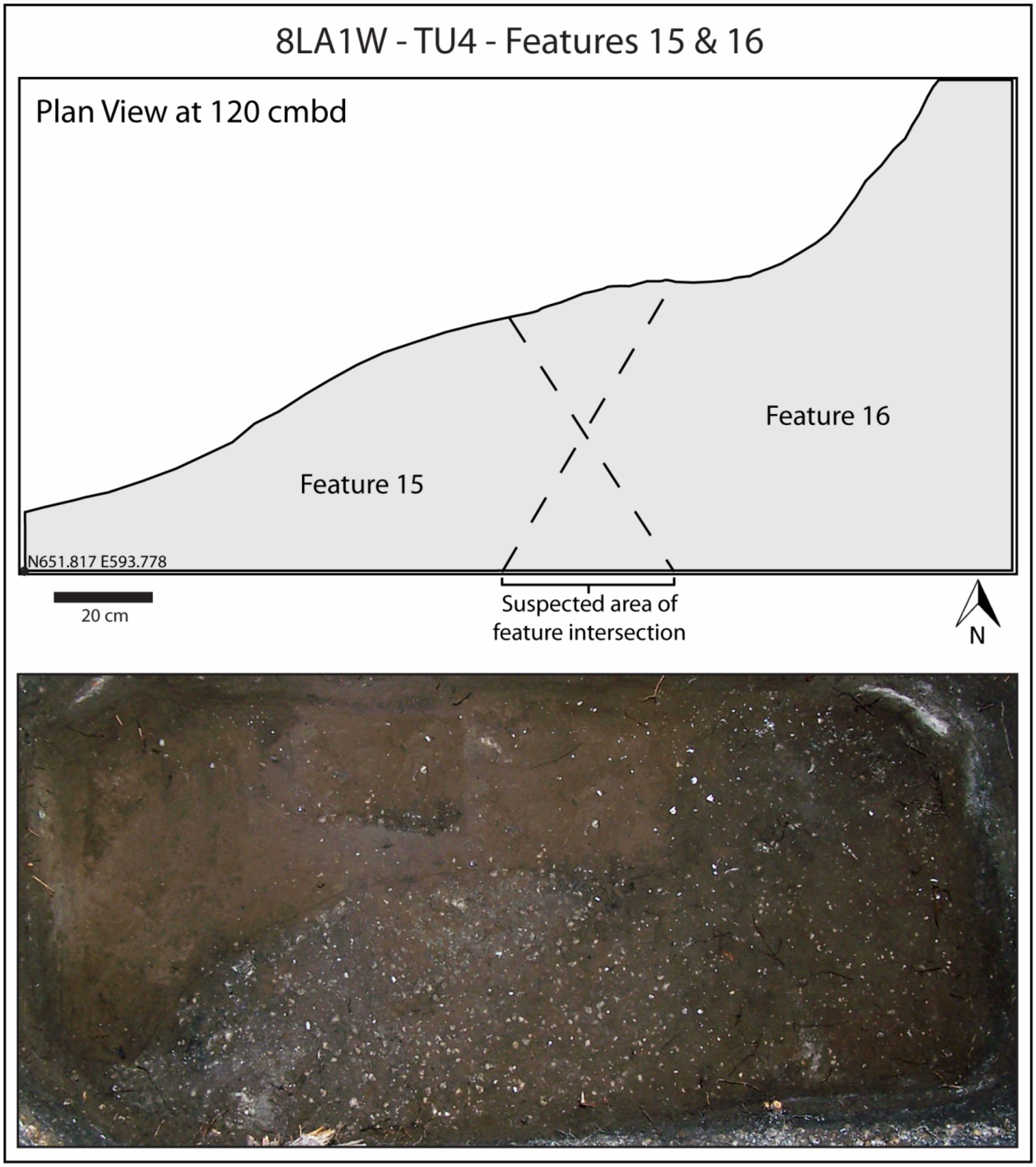


Figure 6-45. Drawing and photograph of plan view of the basal strata of Features 15 and 16, TU4, 8LA1W. (Note: photograph not to scale.)

As noted above, these features were not recognized until their dense basal shell was encountered at approximately 110 cmbd. Consequently, this stratum alone was preserved for fine screening. In each case, standard feature protocol was followed so that half of the fill was 1/8-inch water screened while the remaining half was removed in bulk for flotation analysis. The abundance of shell in the bottom of Features 15 and 16, (including substantial amounts of the larger, meatier *Pomacea* and bivalve), along with the evidence for burning, indicate that these pits were likely utilized as shellfish roasting facilities. Their extraordinary size and elaborate fill sequences, however, suggest a significance that extends beyond small-scale subsistence economics. Charcoal from the base of Feature 15 returned an AMS radiocarbon assay of 3830 ± 40 rcybp (4410-4100 cal BP).

Feature 36. Another probable DP2 roasting pit, Feature 36 (Figures 6-46 and 6-47) is an extremely broad and deep basin located in the northeast corner of TU40, a part of the 2009 block. The pit appears to be roughly oval in shape, measuring more than 120

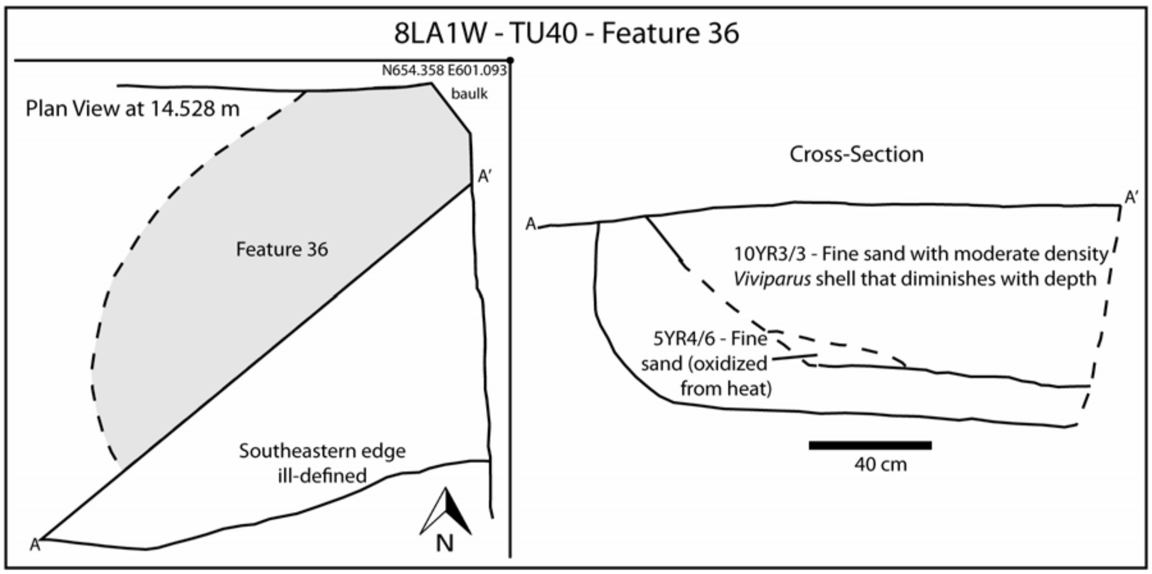


Figure 6-46. Drawing of the plan view and cross-section of Feature 36 from TU40, 8LA1W.

Figure 6-47. Photographs showing a) the excavated plan view, and b) the excavated cross-section of Feature 36 from TU40, 8LA1W.

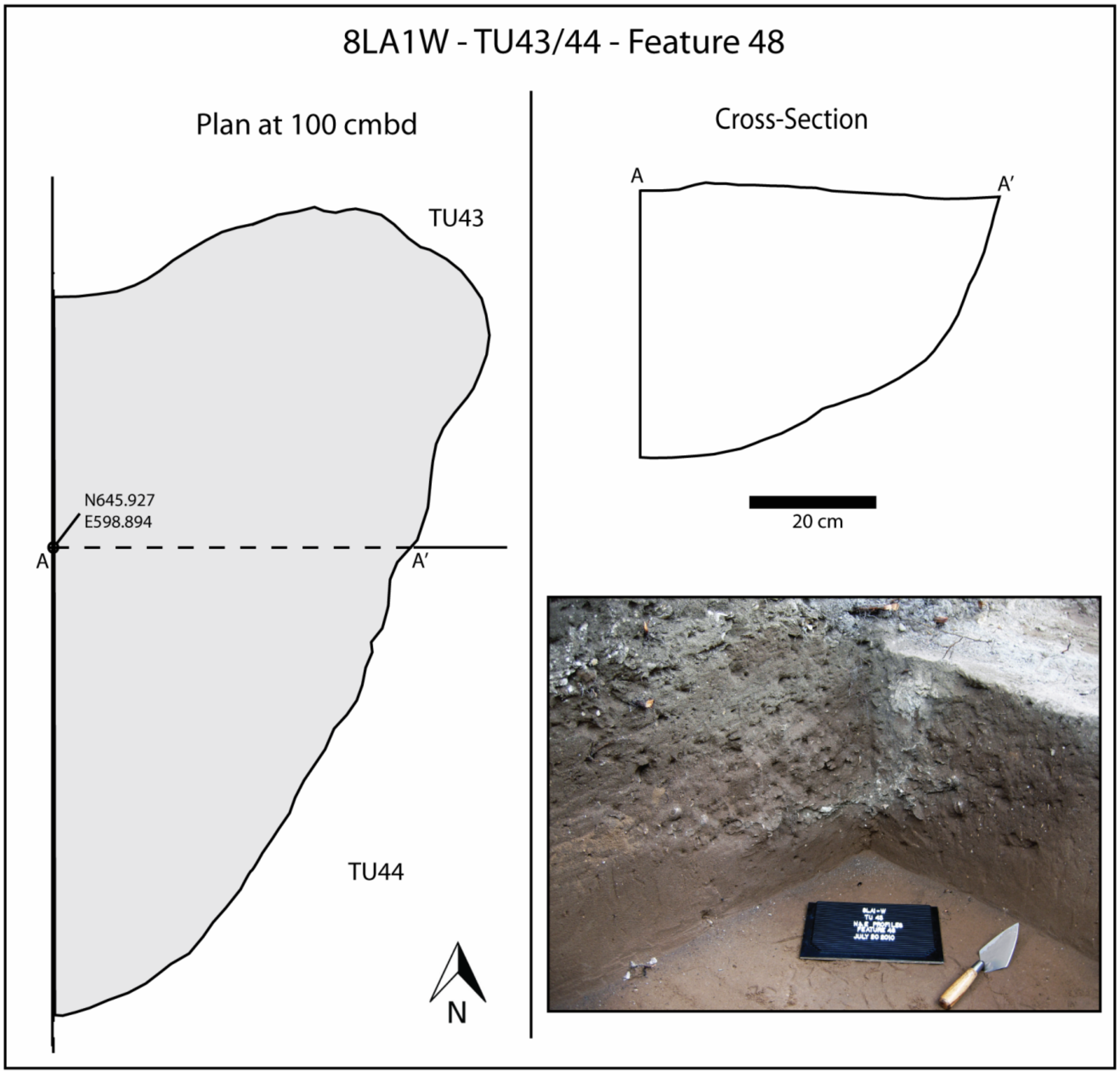
cm long and at least 80 cm wide, although its actual dimensions are obscured by the test unit boundaries. It was initially recognized as a feature at an absolute elevation of 14.528 m, although its actual upper boundary seems to be slightly higher than this. In cross-section Feature 36 appears as a roughly 90-cm deep straight-sided and flat-bottomed basin. In the 2009 block's east profile (see Figures 6-23 and 6-24 above), the top of the pit can be seen to flare outward, significantly expanding its maximum upper diameter.

Feature 36 fill consists primarily of dark brown (10YR3/3) sand with moderate density of *Viviparus* shell that diminishes with depth. Whole and broken bivalve is also present throughout with the highest density occurring near its base. The pit is largely bereft of material culture with no significant vertebrate fauna and only a trace of plain fiber-tempered pottery. The basal portion of the western half of the pit consists of a very distinct stratum of heavily oxidized bright orange (5YR4/6) sand. This thermally altered sand extends for 120+ cm across the entire length of the feature and measures up to 15 cm thick in some places. A heavy concentration of charcoal was found associated with the oxidized sand in the northeast quadrant of the pit.

Upon recognition, Feature 36 was bisected along a southwest-northeast transect. As its southeastern margin was difficult to delineate in plan view, excavation of this half of the feature was extended beyond the known boundary of the pit in order to expose a clear and complete cross-section. Fill from this half was 1/8-inch water screened. The northwest half of the feature was carefully excavated only up to the boundary of the pit. Bulk samples were removed from this section for flotation analysis and the remainder was ¼-inch screened. A charcoal sample from the basal bulk returned an AMS assay of 3590 ± 40 rcybp (3980-3830 cal BP).

Feature 41. Feature 41 is a pit of unknown dimensions located in the northwest corner of TU39, within the 2009 block. Unfortunately, it was not recognized as a feature until bright orange oxidized sand and charcoal was encountered near its base (at approximately 13.54 m in absolute elevation), so little information regarding its size and morphology were documented. The depth and stratigraphic position of the pit's base, nonetheless, suggest a large and extremely deep feature in line with other Locus B Orange Period roasting pits belonging to DP2. Along the western half of the block's north profile, a thin arcuate stratum of shell is visible that may be an upper stratum of Feature 41. The broad, gently sloping basin-like configuration of this shell layer and the similarity of TU41's basal deposits to Feature 36 in terms of depth and composition are the primary criteria on which Feature 41 was tenuously classified as a Type 2 rather than a Type 4 feature. The pit's basal portion was removed in bulk for flotation analysis.

Feature 48. Feature 48 is an extremely broad, but relatively shallow, preceramic Type 2 feature that stretches across the boundary between TU43 and TU44 in the 2010 block. This massive pit originates from a hardened clay-like DP1 surface at approximately 86 cmbd that is lined in spots by thin lenses of dense bivalve, *Pomacea*, and relatively abundant vertebrate fauna. Feature 48 was initially recognized as an anomalous pocket of sand and shell within this surface. Because of its unusual size, it was at first unclear whether the anomaly was a feature or simply an intersecting stratum.



Feature 6-48. Drawings and photograph showing the plan view and excavated cross-section of Feature 48 from TU43 and TU44, 8LA1W. (Note: photograph not to scale.)

It measures 230 cm in length and at least 135 cm in width, although its actual maximum width is unknown as the feature intersects the western margin of the excavation block. In cross-section, however, the edges of the pit can be seen to slope regularly down to a maximum depth of 42 cm, forming an expansive shallow basin. This overall shape contrasts significantly with the deep and often straight-sided Type 2 features associated with DP2.

Excavation revealed that most of Feature 48 is filled with medium brown (10YR4/3) sand with occasional whole shell. The bottom of the pit however, is lined with dense whole and crushed bivalve and *Pomacea* shell similar to that found lying on the surface from which the pit descends. A large concreted mass of this shell and sand was recovered near the center of the pit, at its deepest point. A moderate amount of vertebrate fauna and frequent charcoal were the only other material culture observed during excavation. The northern half of the pit has been penetrated by a number of mineralized and live roots. In addition, the eastern edge of Feature 48 appears to have been intersected by a small cylindrical pit (Feature 50), which emanates from the same surface. The evidence for burning and the large amount of shell in the bottom of the pit suggest that this feature too may have been utilized in cooking or shellfish processing activities.

Already crosscut by the western wall of the block, Feature 48 was bisected again along the east-west transect formed by the boundary between TU43 and TU44, and the south half was removed in order to obtain a perpendicular cross-section. Samples were taken from multiple levels and sections of the feature for flotation analysis and 1/8-inch water screening. The remainder of the feature fill was ¼-inch screened. Charcoal obtained from the base of the pit returned an AMS radiocarbon assay of 4230 ± 40 rcybp (4860-4650 cal BP), which dates it to near the end of the preceramic Thornhill Lake Phase.

Feature 52. Feature 52 is a deep basin-shaped pit located along the western edge of TU46. Although the top of this pit sits near the surface at approximately 10 cmbd, it was largely concealed, by the numerous natural and modern disturbances that have affected the upper strata of TU46. Consequently, Feature 52 was not recognized as an anthropogenic pit until near its base. In cross-section (see west profile of TU46 in Figure 6-12) the feature shows up as a large, relatively deep basin measuring more than 67 cm in length and approximately 65 cm in maximum depth. The pit is filled with a complex, stratified sequence of deposits that are somewhat obscured by the various disturbances cutting through it. Nevertheless, a pattern consisting of layers of whole and crushed bivalve alternating with layers of whole *Viviparus* shell is apparent. Excluding a moderate amount of vertebrate fauna, the feature is devoid of any other material culture that might provide a clue to its function. Despite the lack of ceramics within the Feature 52 fill, its stratigraphic origin near the top of the TU46 profile indicates that it probably dates to the St. Johns period, given the relative abundance of spiculate-tempered ceramic sherds recovered from this level of the test unit. Because the feature was recognized so late, only the basal portion was available for sampling. This entire intact section was removed in bulk for flotation analysis.

Feature 54/55. Features 54 and 55 (Figure 6-49) are located in the southwest half of TU57. Originally these were assigned separate feature numbers because pit cross-sections were visible in both the south and west profiles of the test unit with an apparent gap in the corner. Further inspection of the profiles, however, indicates instead one massive pit (hereafter Feature 54/55) covering more than half the test unit. Its center is likely near the midpoint of TU57 and its southwest margin angles up toward the corner of the unit. The feature appears roughly circular in shape and based on the test unit profiles exhibits a maximum diameter of more than 230 cm. The pit itself descends down to a maximum depth of approximately 30-40 cm from a buried A-Horizon visible across most

Figure 6-49. Photograph showing the plan view of Feature 54/55 at 100 cmbd in TU57, 8LA1W, facing south.

of the unit. An additional 30-40 cm of organic leaching extends below this point. Like all other pits associated with DP2, Feature 54/55 was covered with a thick, dense stratum of mostly whole *Viviparus* and occasional *Pomacea* shell (DP3). The development of organic soil at the top of the feature suggests that a substantial amount of time elapsed before the overlying shell was deposited.

The fill from Feature 54/55 is composed primarily of dense whole *Viviparus* shell, although smaller amounts of *Pomacea* and broken bivalve shell are also present. These shell constituents are mixed with dark brown (10YR3/3) medium sand. This feature is unusual among DP2 pits in that it contains a significant amount of vertebrate fauna, as well as a variety of other cultural materials including a lithic drill, a bone pin, and frequent plain fiber-tempered ceramics. These materials, along with the shallow cross-section of the pit and the lack of obvious burning in the bottom, may reflect an alternative function with regard to other Type 2 features associated with DP2, perhaps one related to day-to-day domestic activities. If so, this pit may be the best evidence so far for the residential occupation of Locus B during the Orange period.

Bulk samples were collected from various locations throughout Feature 54/55 for flotation analysis. The remaining portions were 1/8-inch water screened or ¼-inch screened. An AMS assay from a charcoal sample recovered from near the base of the feature provided an age estimate of 3680 ± 40 rcybp (4140-4120 cal BP).

Type 3 Features

Only one small cylindrical Type 3 feature (Feature 50) has been identified within Locus B deposits, although another probable feature of this type is visible in the south profile of TU14 but was not recognized as such in the field. Despite being the only representative example, Feature 50 was designated as its own "type" because, while it is similar in shape to some Type 4 features, its scale is so vastly different that the two cannot be assumed to have any functional similarity. It is possible that additional small cylindrical pits were utilized within excavated areas of Locus B but were obliterated by the large-scale DP2 pit digging that occurred during the Orange period.

Feature 50. Feature 50 (Figure 6-50) is a small cylindrical pit that straddles the boundary between TU43 and TU44 within the preceramic deposits of the 2010 block. First encountered at an elevation of 96 cmbd, the pit is almost perfectly circular, measuring 45 cm long and 43 cm wide. It has straight sides and a rounded bottom, exhibiting a maximum depth of 19 cm. Feature 50 originates from the same organically enriched buried surface from which Features 48 and 49 descend. It is positioned at the westernmost edge of Feature 48 and likely intersects the larger pit to some extent.

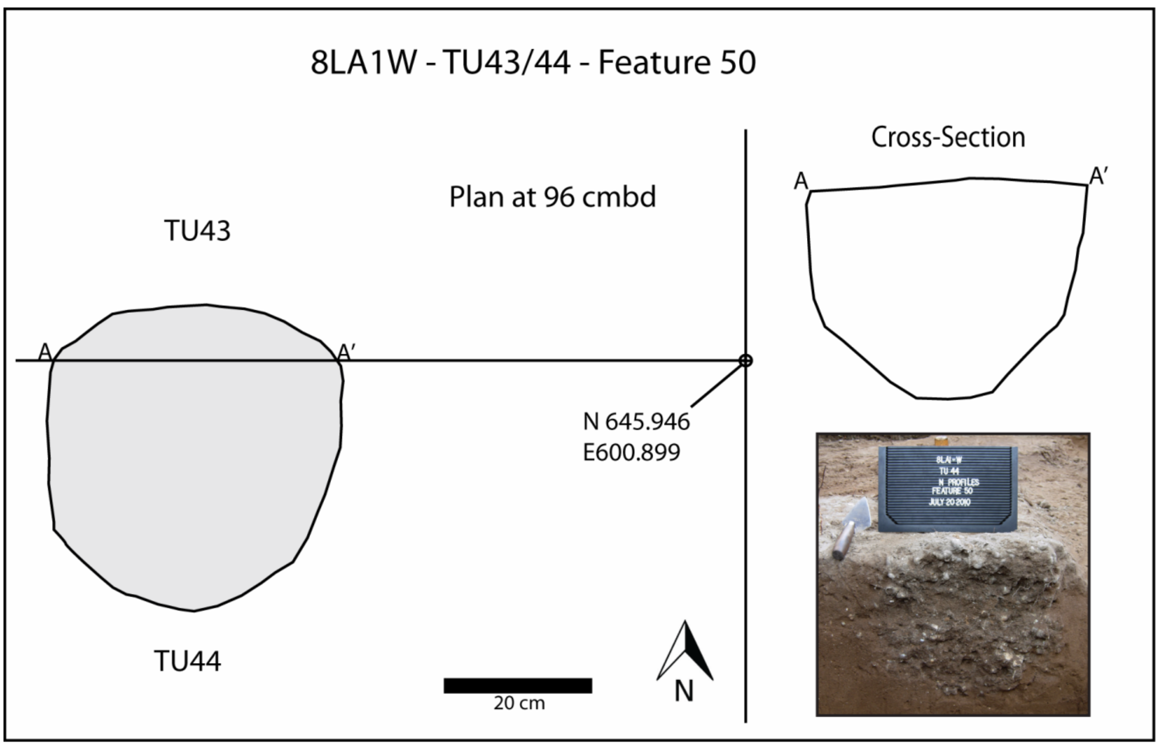


Figure 6-50. Drawings and photograph showing the plan view and excavated cross-section of Feature 50 from TU43 and TU44, 8LA1W. (Note: photograph not to scale.)

In the field, Feature 50 was bisected by the east-west line formed by the test unit boundary. The southern half of the feature was excavated first in order to expose the pit's cross-section. Bulk samples were taken from both sides of the feature and the remaining fill was processed through ¼-inch screen. Pit fill is composed virtually exclusively of dense whole *Viviparus* shell in very dark grayish brown (10YR3/2) sand. The shell was concreted in some places, especially near the center of the feature's base. Although no artifacts were observed during excavation, the pit's stratigraphic position and its placement relative to other features securely implicate it as a part of DP1. Few clues were discovered regarding the feature's function, but it could easily have served as a small storage pit. A small charcoal sample from the feature returned an AMS radiocarbon assay of 4180 ± 40 rcybp (4840-4580 cal BP), positioning it right on the eve of ceramic use in the region.

Type 4 Features

A total of 6 pits at Locus B were designated Type 4 features and another two probable features of this type were subsequently identified in test unit profiles. These features exhibit a cylindrical shape similar to the Type 3 pit but are many times larger, with maximum depths and diameters often exceeding one meter. They do share a number of characteristics with Type 2 pits, the other variety of extremely large DP2 features. First, all six Type 4 pits are associated with DP2 and most contain some quantity of Orange plain fiber-tempered pottery but a conspicuous absence of other material culture. Their contents also vary widely in terms of the quantity and pattern of their shell deposits with some being filled completely with shell from a single species while others contain only trace amounts of various types. Like Type 2 features, Type 4 pits are distributed broadly across Locus B with examples occurring in both the 2009 and 2010 excavation blocks, as well as in the north-south transect of test units to the east. They are also arranged tightly together and frequently overlap with other pit features. Finally, at least three of the six Type 4 features exhibit evidence for burning at their bottoms in the form of orange oxidized sand and charcoal. Together, these parallels suggest similar, or at least interrelated, functions between Type 4 and Type 2 features.

Feature 26. Feature 26 (Figures 6-51 and 6-52), the first Type 4 feature encountered at Locus B, intercepts the southwest corner of TU22. It was first recognized as a subtle dark brown (10YR3/3) soil stain with low density shell at approximately 126 cmbd, but its actual top is likely higher than this. Although its outline was difficult to make out in plan, it appears to be roughly circular with a diameter of ca. 60 cm. In cross-section, the feature exhibits very slightly inward sloping sides and a flat bottom, forming a large cylinder more than 65 cm in depth. The color of the pit's fill grades to a dark yellowish brown (10YR3/4) near its base. The feature runs into the walls of the test unit along its western and southern margins and intersects a similar cylindrical pit (Feature 27) on the east.

Feature 26 was bisected along an east-west transect. Two bulk samples were taken from the south half of the pit (one from the top and one from the bottom), while the remaining feature fill was 1/8-inch water screened. The fill includes a low to moderate

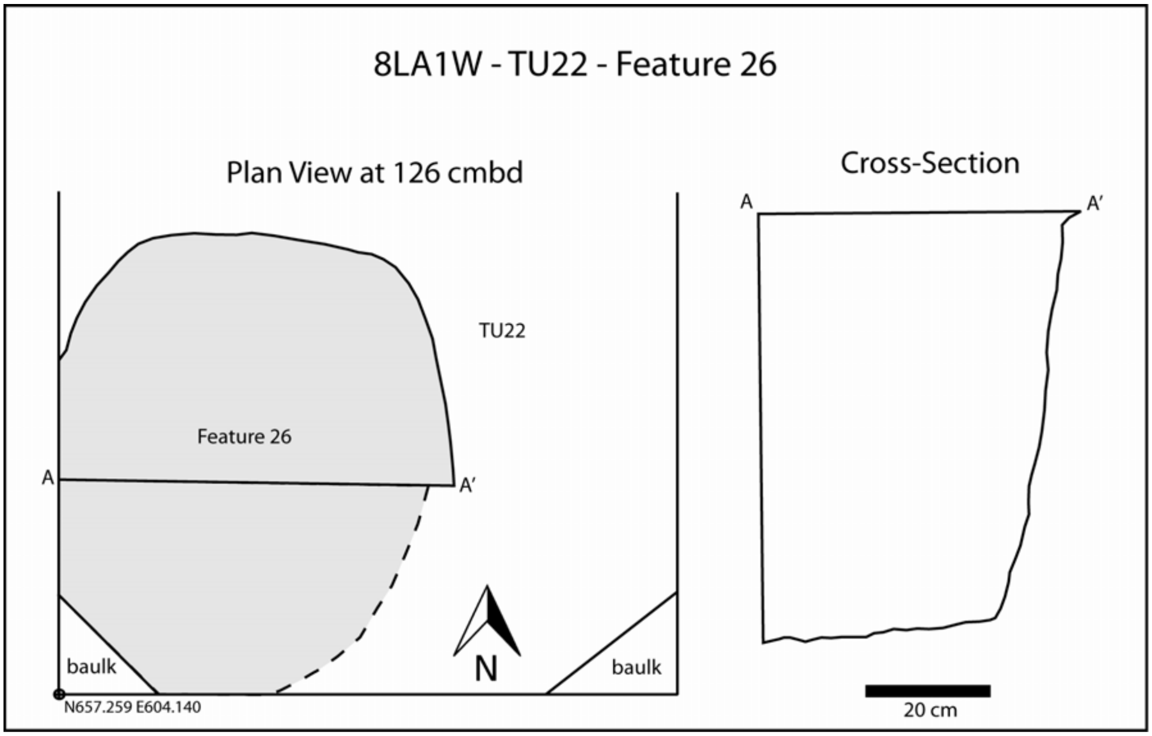


Figure 6-51. Drawings of the plan view and excavated cross-section of Feature 26 from TU22, 8LA1W.

Figure 6-52. Photograph of the excavated cross-section of Feature 26 from TU22, 8LA1W.

density of *Viviparus* shell and occasional bivalve and *Pomacea* fragments. Beyond this, sparse vertebrate fauna and a small amount of charcoal are the only other cultural materials that were recovered. A charcoal sample from near the bottom of Feature 26 yielded an AMS radiocarbon assay of 3970 ± 40 rcybp (4520-4300 cal BP), making this the earliest of the large DP2 pit features yet dated.

Feature 27. Feature 27 (Figure 6-53) is a large cylindrical pit feature similar to and actually intersecting Feature 26 within TU22. The outline of most of the pit and its

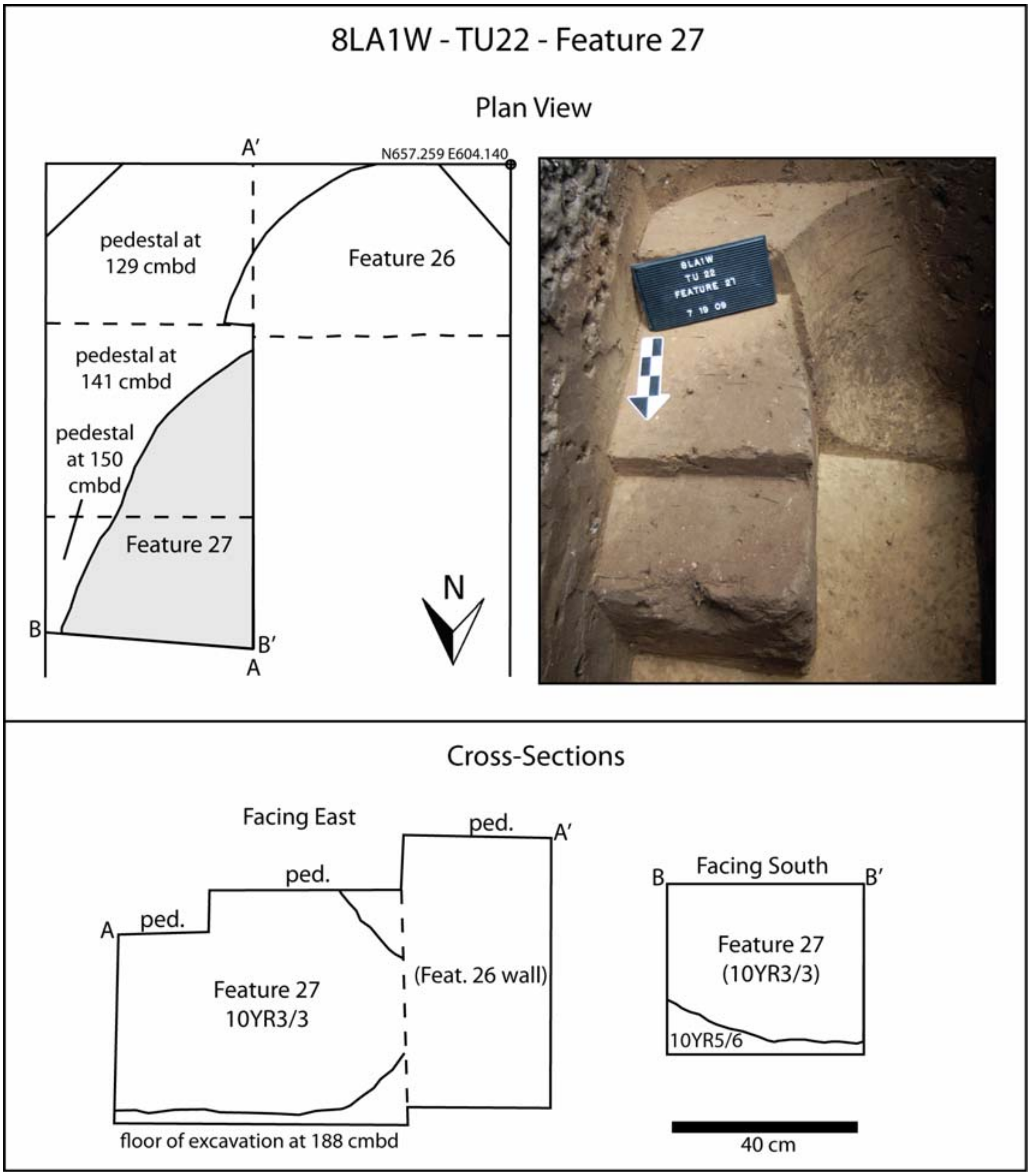


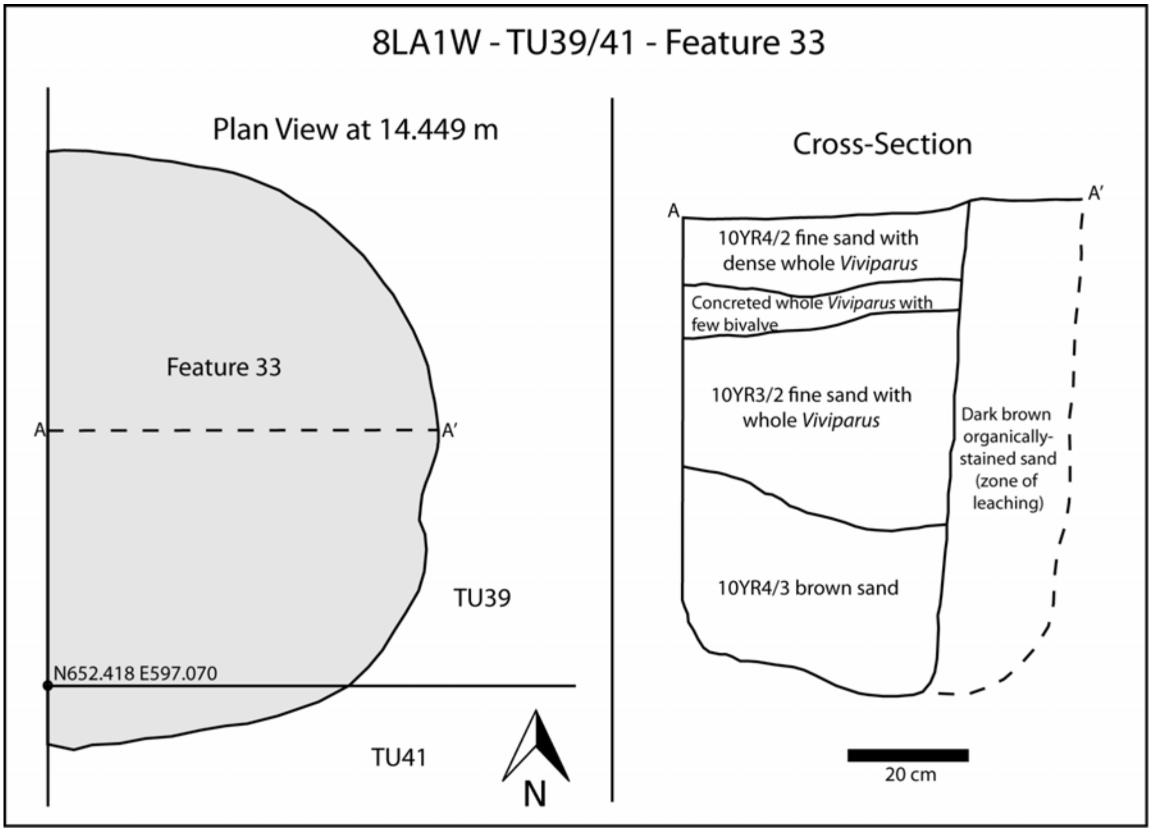
Figure 6-53. Drawings and photograph showing the plan view and excavated cross-sections of Feature 27 from TU22, 8LA1W. (Note: photograph not to scale.)

stratigraphic origin could not be defined due to the pervasive pit-digging that has occurred within the area encompassed by the test unit. Only the east half could be isolated and this was possible only after sectioning the pit along both north-south and east-west axes and carving the intact portion of the feature into multiple pedestaled sections, each at a different level. In this way, the eastern edge of the feature was recognizable as a dark brown (10YR3/3) soil stain with diffuse margins surrounded by yellowish brown (10YR5/6) medium sand.

Feature 27 appears to be similar in both size and shape to Feature 26. Based on the visible portion of the feature, it is roughly circular to ovoid in outline and exhibits a diameter of greater than one meter. The pit bottoms out at approximately 50 cm below the point at which it was recognized but its actual depth may have been as much as twice this. It is flat-bottomed and appears to have steeply sloping sides similar to those noted for Feature 26. Shell was found scattered throughout the pit and included a low to moderate density of whole *Viviparus* shell along with occasional bivalve and *Pomacea*. A small amount of fiber-tempered pottery was also recovered but no vertebrate fauna was observed. Bulk samples were taken from the top and bottom of the feature for flotation.

Feature 33. Feature 33 (Figure 6-54) is a Type 4 feature that straddles the boundary between TU39 and TU41, along the western edge of the 2009 block. The visible eastern half of the feature forms a semicircle with a maximum diameter of approximately one meter and extends 66 cm into the block. It was initially recognized as a discrete concentration of shell at an absolute elevation of 14.755 m but appears in profile to originate from a buried surface, perhaps 30 cm above this point. This is the same Orange period surface from which several additional large DP2 pits were dug. The very top of Feature 33 may have been impacted somewhat by the lower extension of a burned root disturbance (originally designated Feature 29).

The feature was bisected along an east-west axis running perpendicular to the wall of the block, and the southern half was excavated first. The resulting cross-section reveals a deep, straight-sided, cylindrical pit with four distinct fill strata. The uppermost stratum consists of dense whole *Viviparus* shell in dark grayish brown sand. It is virtually identical to the overlying DP3 shell and may reflect the portion of the pit that was open at the time that this shell was deposited. Underneath this is a thin layer of dense and highly concreted whole *Viviparus* and bivalve shell with occasional whole *Pomacea* intermixed. This concreted layer sits atop a 25-35-cm stratum of very dark grayish brown sand containing moderate density of whole *Viviparus*. Most of the pit bottom is filled with shell-free medium brown sand. In the south half, this sand is underlain by a thin layer of bright orange oxidized sand and frequent charcoal, indicating yet another massive DP2 pit with evidence for thermal alteration. A modest quantity of fiber-tempered plain pottery and a trace amount of vertebrate fauna were found scattered throughout the feature. As noted above with reference to Type 2 features, the stratification present within Feature 33 indicates multiple pit-filling episodes and provides convincing evidence for intentional, “structured” depositional practices by Late Archaic peoples at Locus B.



Feature 6-54. Drawing showing the plan and cross-section of Feature 33 from TU39 and TU41, 8LA1W.

Feature 42. Feature 42 is a large pit feature located in TU39 and TU40 that went undetected until near its base due to the pervasive overlapping pits that exist in this area of Locus B. It was finally recognized as a discrete feature at an absolute elevation of 13.886 m when a roughly circular pocket of orange oxidized sand and charcoal was encountered. These heat altered deposits are interspersed with dark brown (10YR3/3) sand across an area measuring approximately one meter in diameter. This has been inferred as a minimum diameter for the pit, although its rim may have been significantly broader. Given the close proximity of the features' bases, it is likely that Feature 42 intersected Feature 38 at some point near their tops. Feature 42 may also have been truncated somewhat on its western edge by additional pit digging. One small fiber-tempered plain sherd was found among the burned deposits at the bottom of the pit, dating this feature to the Orange period and likely confirming its association with DP2 activities.

Feature 45. Feature 45 (Figure 6-55) is a large, roughly cylindrical pit located within TU43 and TU45 at the northern edge of the 2010 block. The feature was first recognized in TU43 at approximately 30 cmbd as a definable concentration of particularly dense whole *Viviparus* shell. Soon after excavation of the feature began, a relatively large portion of a fiber-tempered incised vessel was encountered protruding out

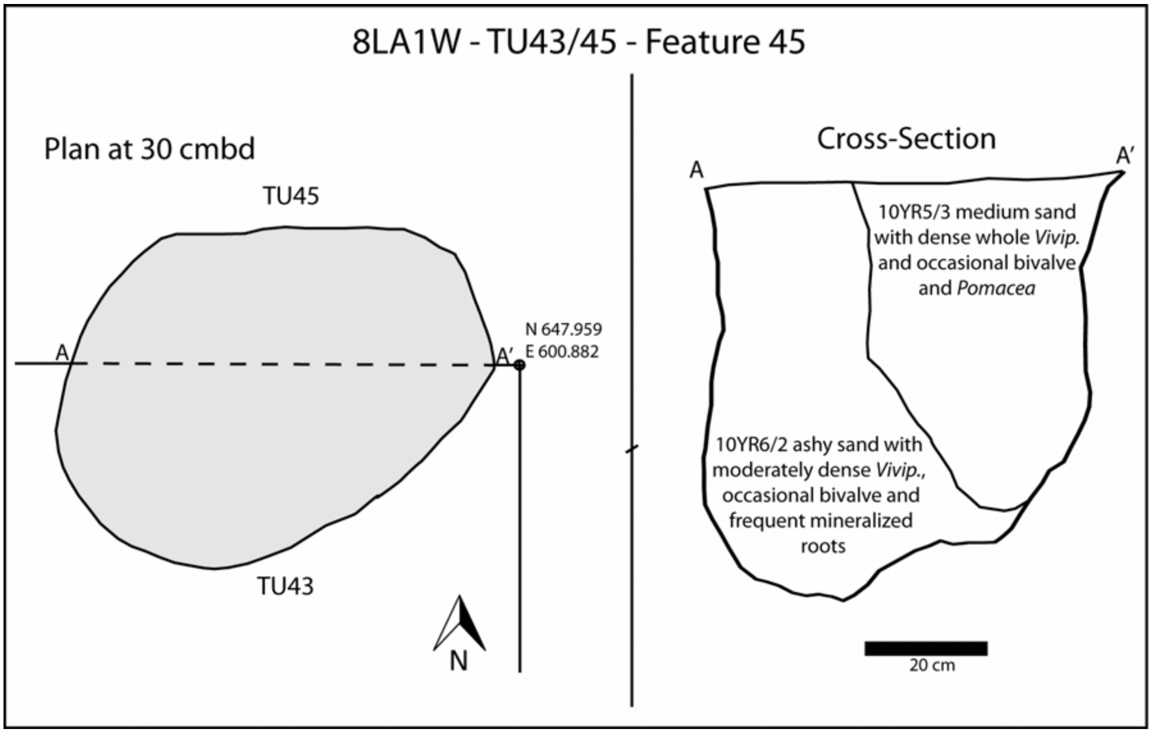


Figure 6-55. Drawings of the plan view and excavated cross-section of Feature 45 from TU43 and TU45, 8LA1W.

of the north wall of the test unit within the upper portion of the pit. As explained earlier in this chapter, TU45, a small L-shaped unit, was then tacked onto the northeast corner of the block to expose the northern half of the feature and make retrieval of the ceramic sherd possible. When the complete top of the feature was exposed, a roughly ovoid-shaped pit was revealed measuring 71 cm x 58 cm.

Using the line of bisection formed by the test unit boundary, the southern half of the feature was first excavated in its entirety. This exposed an unusual profile with clear compositional differences between the eastern and western sides of the feature. The western half contains light brownish gray (10YR6/2) sand and ash with a moderate density of *Viviparus* and crushed bivalve shell. Near its bottom, this side of the feature is highly concreted and may contain a concentration of mineralized roots. The eastern half of the feature profile shows a discrete deposit of dense shell (whole *Viviparus* with occasional bivalve and *Pomacea*) and brown (10YR5/3) sand apparently intruding into this ashy fill. It thus appears that Feature 45 may actually include two cylindrical pits, with one having been dug into the other. The larger and earlier pit exhibits roughly straight vertical walls and measures 70 cm deep at its lowest point. The intrusive pit, on the other hand, displays a similar morphology but tapers slightly at the bottom and is approximately 50 cm deep. The primary functions are not known for either pit, although the evidence for burning in the earlier one and the corresponding lack of it in the later may indicate two different uses. The intrusive pit is unusual among Locus B features in containing incised fiber-tempered ceramic sherds, perhaps indicating its association with DP3. Bulk samples were taken from both the northern and southern halves of the feature for flotation analysis. The remaining feature fill was processed through a combination of ¼-inch dry screening and 1/8-inch water screening.

Feature 51. Feature 51 (Figure 6-56) is an extremely large cylindrical pit located in the northwest corner of TU43 in the 2010 block. Although it appears that only about a quarter-section of the feature was exposed, this portion extends more than a meter out from the corner of the test unit. The pit originates from the paleosurface upon which the DP3 shell was initially deposited. The fill within Feature 51 is virtually indistinguishable from the overlying shell, consisting of very high density whole *Viviparus,* burned crushed bivalve, and infrequent *Pomacea* in dark grayish brown (10YR4/2) sand. In fact, the feature was first recognized as an apparent dip in this shell mixture into the underlying, relatively sand-rich stratum. This is perhaps evidence that Feature 51 was still an open pit at the time that the DP3 shell was deposited and was infilled during the course of that event.

In the cross-sections provided by the north and west walls of the test unit (see test unit profiles in Figures 6-30 and 6-32) Feature 51 can be seen to drop down vertically

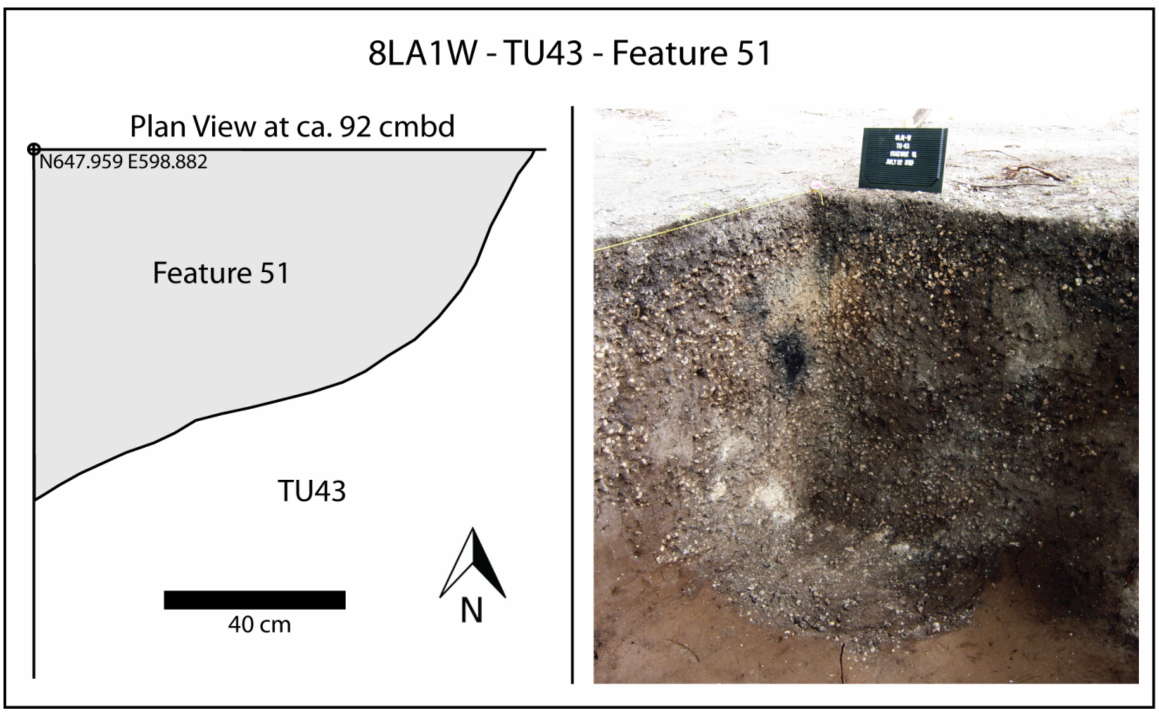


Figure 6-56. Drawing of the plan view and photograph of the excavated cross-sections of Feature 51 from TU43, 8LA1W.

before rounding off at its base, achieving a maximum depth of 92 cm. The exposed portion of the feature appears unimpacted by any of the other features within the excavation block. There is, however, a sizable pocket of charcoal and burned shell observable in the west profile near the top of the feature, probably a result of a tree root that smoldered in place. Bulk flotation and 1/8-inch water screen samples were taken strategically from different sections of the feature while the remaining fill was ¼-inch screened.

Type 5 Features

Type 5 features from Locus B are defined above as cone shaped pits with broad openings and tapered profiles. Only one Type 5 feature (Feature 38) has thus far been identified at Locus B; however, like Feature 50, the size and morphology displayed by this pit is distinct enough to warrant its own type designation.

Feature 38. Feature 38 (Figure 6-57; see also north profile of block in Figures 6-19 and 6-20) straddles the boundary between TU39 and TU40 along the northern edge of the 2009 excavation block. Although only partially exposed, the top of the pit appears roughly circular in shape with an approximate diameter of 120 cm, making it comparable to the large DP2 pits in size. While Feature 38 clearly cuts through the surface on which the DP3 shell was deposited, it is unclear whether this surface is the origin point from which the pit was dug or whether it originates from some higher point. This ambiguity makes it difficult to determine stratigraphically whether the pit is associated with DP2 or DP3 activities. From this level, the pit penetrates at least 94 cm into underlying deposits, bottoming out at an absolute elevation of 13.764 m. It narrows with depth, coming almost to a point at its base. As can be seen in the block's north profile, this feature was dug through at least one and perhaps two large preexisting basin shaped pits. These were not recognized during excavation but were revealed through subsequent profile examination.

In addition to its unusual morphology, Feature 38's fill also exhibits some unique characteristics among Locus B pits. Like a few of the large DP2 pits, Feature 38 is stratified, containing at least three distinct layered deposits. The uppermost layer consists of very dark grayish brown (10YR3/2) sand with moderately dense whole and crushed *Viviparus*. This sits atop a 15-20 cm thick layer of very dense crushed bivalve and whole *Viviparus* mixed with somewhat lighter (10YR4/2) sand. The base of the pit is filled with dense and highly concreted whole *Viviparus* and sand. These different strata are clear and distinct in cross-section and the contacts between them are sharp suggesting that they resulted from three planned and discrete filling episodes rather than a hodgepodge of accumulated domestic trash. Small flakes of charcoal recovered from the pit's bottom and middle strata yielded respective AMS radiocarbon assays of 3670 ± 40 rcybp (4140-3890 cal BP) and 3590 ± 40 rcybp (3980-3830 cal BP). Because these estimates overlap within the 2-sigma range, the strata must be considered contemporaneous at the level of precision offered by radiocarbon dating methods. The actual temporality of their deposition, however, be it on the order of hours, days, or even years, is unknown.

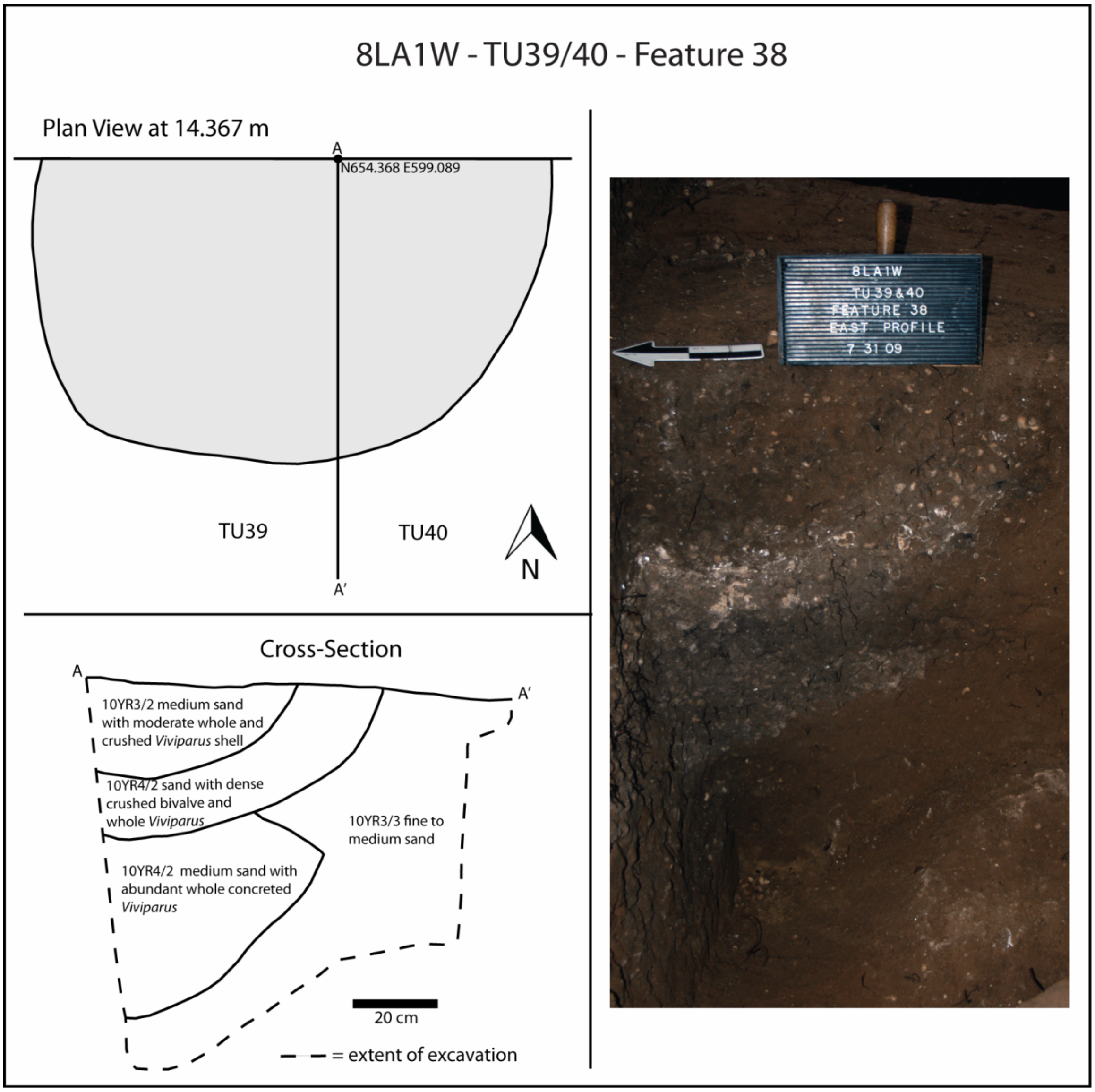


Figure 6-57. Drawings and photograph showing the plan view and excavated cross-section of Feature 38 from TU39 and TU40, 8LA1W. (Note: photograph not to scale.)

Regardless, Feature 38 provides yet further evidence that the infilling of at least some of Locus B's abnormally large pits was an intentional, structured affair.

Feature 38 is also one of only two Locus B pit features to contain incised fiber-tempered pottery and the only one with Tick Island style incisions and punctations. While this ceramic variety is rare in feature contexts, it occurs relatively frequently within the expansive shell cap constituting DP3. Given Feature 38's somewhat uncertain stratigraphic origin in relation to the large DP2 roasting pits and relatively late radiocarbon dates, it is possible that this feature is either one of the last DP2 pits to be dug and utilized at Locus B or that it reflects one of the earliest events associated with

DP3 activities. The primary function of the pit remains unclear, as it displays an unusual morphology and does not exhibit the obvious evidence of burning observable in other large Orange period pits at Locus B.

Type 6 Features

Two Type 6 features have been recorded at Locus B. These are defined as discrete, isolated pockets of shell located in the otherwise shell-free sand underlying Locus B's large, expansive cultural deposits. These features are assumed to mark pits or perhaps the basal portions of pits, but this interpretation is tenuous due to the fact that neither of the examples appears to be connected to an apparent paleosurface or other cultural deposits. It is also possible that these shell concentrations are simply animal burrows that were filled in with overlying shell, although no burrow passages or collapses have been identified connecting them to upper shell deposits. Both Type 6 features are located near the center of Locus B and were encountered in 1 x 2-m test units making up the north-south transect bisecting this part of the site. If cultural, they are almost certainly associated with DP1 and may constitute yet another type of domestic feature associated with the late preceramic Thornhill Lake Phase habitation of Locus B.

Feature 17. Feature 17 (Figure 6-58) is an isolated concentration of concreted shell and sand extending out of the western wall of TU12. The exposed portion of the feature is amorphous in shape and measures 47 cm in length, although its complete dimensions and configuration are unknown. It is composed of whole and crushed *Viviparus*, *Pomacea*, and bivalve mixed with brown (7.5YR5/4) medium sand. In profile, the feature shows up as a 15-cm thick pocket of shell surrounded by virtually shell-free sand. It is positioned approximately 25-30 cm beneath a shell-rich stratum but there is no indication in the profile that the feature originates from or is connected in any way to this shell. No artifacts were recovered from the feature and its function remains unclear, although it may be a small pit originating from a deeply buried surface imperceptible in the profile of the test unit.

Feature 25. Similar in many ways to Feature 17, Feature 25 is an isolated pocket of concreted shell jutting out of the north wall of TU21. The feature appears roughly circular or ovoid in shape and exhibits a maximum exposed diameter of 38 cm and a maximum thickness of 28 cm. It is composed primarily of concreted whole *Viviparus* shell but *Pomacea* is also frequent, especially along its base. Like Feature 17, this shell concentration is surrounded on all sides by shell-free sand; however, in this case, a dense shell stratum is located only 5-10 cm above it. There is, nonetheless, nothing connecting the feature to the overlying shell and its function is unknown.

Non-cultural and Modern Features

Nine anomalies were encountered during Locus B excavations that were initially designated cultural features and assigned feature numbers but were subsequently downgraded. Seven of these were eventually recognized as natural disturbances, while two were determined to have resulted from recent modern activities. Features 2, 3, 5, and

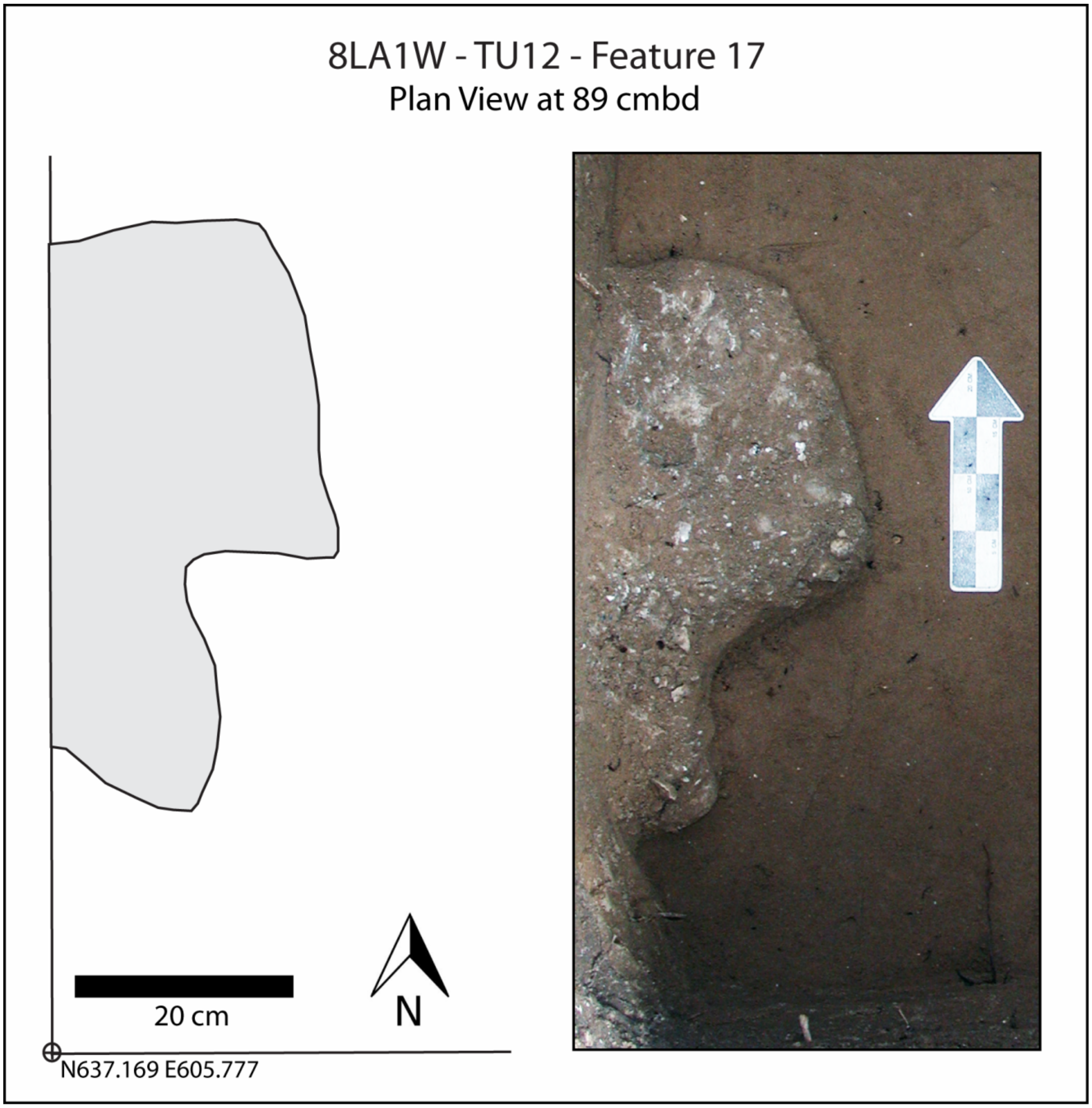
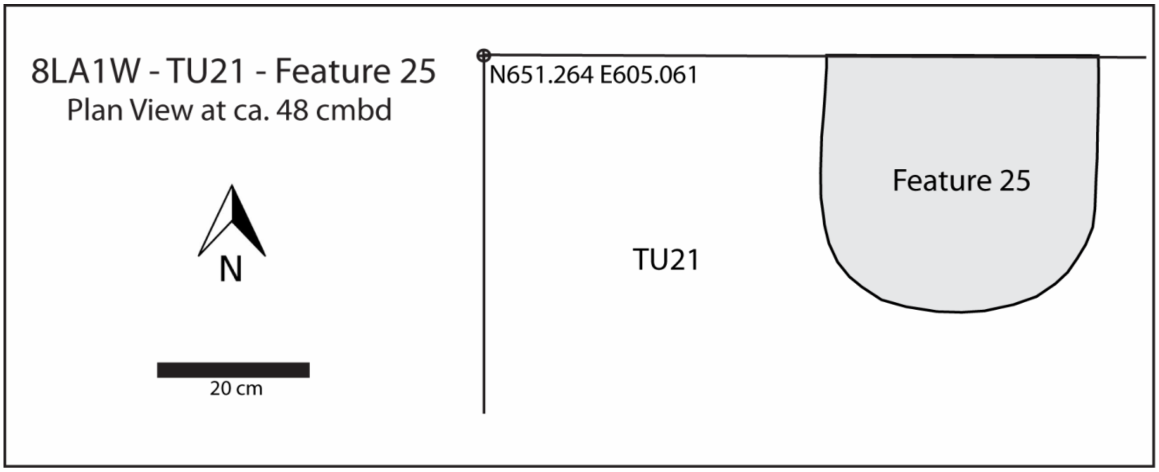


Figure 6-58. Drawing and photograph of the plan view of Feature 17 from TU39, 8LA1W. (Note: photograph not to scale.)

13 were all documented during the first year of Locus B excavation within TU4. They were originally recorded as possible post molds but, as experience with these phenomena accumulated, were ultimately determined to be mineralized root casts whose size and vertical orientation mimic those usually displayed by architectural supports. Similarly, Features 29, 30, and 31, were initially recorded as potential cooking hearths. These features all display a similar morphology and structure consisting of a gray ovoid deposit of burned shell, ash, and charcoal ringed by orange heat-oxidized shell (see Figure 6-60).



Feature 6-59. Drawing of the plan view of Feature 25 in TU21, 8LA1W.

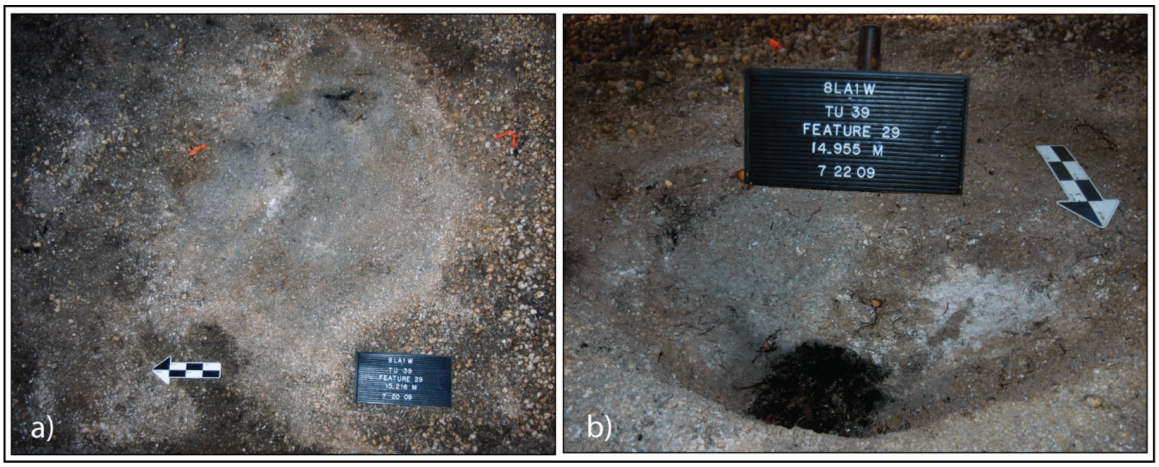


Figure 6-60. Photographs showing the a) plan view, and b) excavated cross section of Feature 29 (downgraded) in TU39, 8LA1W.

In profile, however, these burned anomalies tended to taper to a point and turn unpredictably, suggesting that they are actually a result of tree roots that penetrated shell deposits and burned in place. In fact, Feature 29 actually had a large charred root running through its bottom, further solidifying this secondary interpretation. In 2009, an unusual subrectangular feature (Feature 39) with sharp margins that connect at right angles was encountered in TU39 but was quickly recognized as a shovel test pit dug by field school students in 2007. And finally, excavation of TU57's upper deposits revealed an almost perfectly circular dark soil stain that persisted for approximately 30 cm before rounding off at its base. The feature's sharp margins, along with the large amount of apparently recent charcoal that it contains, led to its tentative interpretation as a modern disturbance of some kind, although its precise source is unknown.

Summary and Discussion of Locus B Feature Assemblage

Excavations at Locus B have uncovered a diverse assemblage of pit features that can be categorized into six basic types based on size and overall morphology. The horizontal and vertical distribution of these pit types has in part led to the identification of three distinct patterns of shell deposition at Locus B (discussed in the previous section), each of which corresponds to a fundamentally different use of this space during a particular time in the site's occupational history. The specific characteristics of individual pits and pit types offer clues as to the nature of these contrasting depositional patterns and their relationship to coterminous places throughout the region.

DP1 includes a wide variety of features including Type 1 small basins, Type 2 large basins, Type 3 small cylinders, and Type 6 isolated shell pockets. In all likelihood, this diversity of feature shapes and sizes reflects the diverse functions of pits involved in the many activities associated with sustained everyday living during the late preceramic period at Locus B. This interpretation is supported by the relative abundance of diverse tool types and vertebrate faunal remains within and surrounding DP1 pits. All of the DP1 pits with discernable origin points descend from a crushed shell surface near the base of Locus B's shell deposits. Given the stacked sequence of such surfaces found at the base of TU46, a series of successive preceramic occupations are most likely responsible for these features. Although precise functions are difficult to assign, the shapes, sizes, and contents of the features suggest their use in cooking and storage activities related to relatively small-scale domestic food production. The often heat-altered and concreted shell within most DP1 pits points to their probable role in the processing of shellfish. DP1 pits from Locus B are consistent in these respects with features associated with the slightly earlier Mount Taylor habitation component at 8LA1W's Locus A (Chapter 5 of this report), as well as those from roughly coterminous deposits at the nearby sites of Hontoon Island North (8VO202) (Sassaman et al. 2005), Blue Spring Midden B (8VO43) (Sassaman 2003b), and Thornhill Lake (8VO60) (Endonino 2010). These preceramic features are restricted to the southeastern quadrant of Locus B.

The most striking contrast between DP1 and DP2 involves the scale and frequency of pit digging across Locus B. This transition entailed a shift from the everyday use of a relatively small number of highly diverse pits to the repeated digging and infilling of countless remarkably large features across an expansive area of 8LA1W. The DP2 feature assemblage, while including a handful of Type 1 shallow basins, is dominated by massive Type 2 basins and Type 4 cylinders, several of which exceed 1 m in diameter and/or depth. Calculating precise diameters for most of these features is complicated because their size virtually ensures that they will intersect test unit walls unless large blocks are excavated. Nevertheless, for two of the pits that appear to most closely approach true cylinders, Features 51 and 36, respective volumes can be estimated using the formula $V = \frac{\pi d^2 h}{4}$ to be 1500+ L and 800+ L, far beyond what would be expected if these were intended simply to address the short-term subsistence requirements of small kin-based groups.

Excavations at Locus B have currently extended to a sufficiently large area that some projections can be made as to the overall scale of pit digging and shellfish processing that took place there. Across the area highlighted in gray in Figure 6-61, 31 m^2 have been excavated within which 14 large DP2 pits were documented. Assuming that pits are present in the intervening areas between excavation units, projecting this pit density across the entire area encompassed by their known distribution results in an estimate of more than 310 massive pits at Locus B. Due to the fact that some pits could not be discretely defined because of their overlapping distribution and that these features are likely to extend beyond current excavation boundaries, this estimate should be considered conservative.

The contents of the pits may offer some clues as to the nature of the activities in which they were involved. As noted above, the bases of many, although not all, DP2 pits are marked by heat oxidized sand, charcoal, and lenses of burned, concreted bivalve. This, along with the conspicuous absence of vertebrate fauna and artifacts aside from a small amount of fiber-tempered pottery, suggest a specialized function for these massive features related to shellfish processing. Again, the scale of the pits, and correspondingly the quantity of shellfish they could have produced, is out of proportion with the everyday domestic needs of a small group. If looked at in the broader context of the Silver Glen Run complex, the Locus B pits may instead be speculated to have been a means for quickly producing large amounts of food needed for consumption at the large scale social gatherings hypothesized to have taken place at 8LA1E's U-shaped monument, less than half a kilometer to the east. The fact that new pits were frequently dug through preexisting ones does suggest intermittent pulses of intense pit-centered activities rather than long-term sustained occupation during this time.

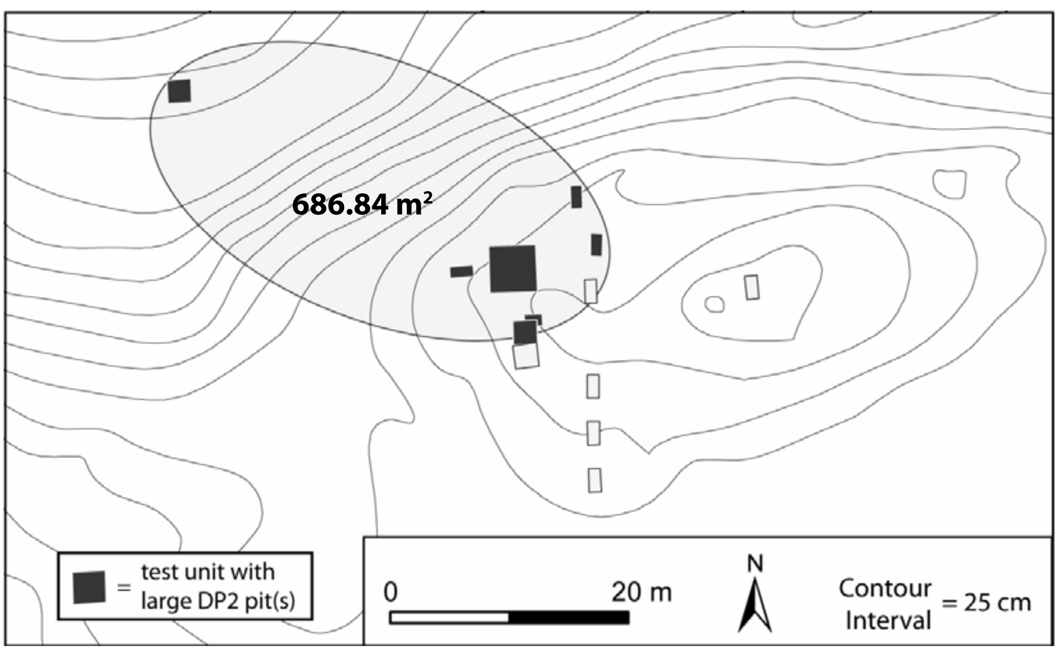


Figure 6-61. Map showing test units containing Type 2 and Type 4 pits associated with DP2 and the bounded area used to project the total number of these pits at Locus B.

Subsequently, the pits were infilled with various combinations of sand and shell, a process that at least occasionally involved multiple structured and intentional depositional acts. The resulting elaborately stratified feature cross-sections provide strong evidence that although many of these features may have begun as roasting pits, their significance extended beyond mere practical functionality. In fact, as time went by and pit excavation persisted, the encountering of old infilled pits must have become the expected outcome of, and perhaps even added motivation for, continued digging. Under these circumstances, sequences of pit fill may have come to be viewed by the Orange period inhabitants of Locus B similarly to the layering of shell above ground to form mounds, as a historical practice through which the past was accessed and the future could be anticipated (*sensu* Sassaman 2010, 2012). DP2 thus signals a major intensification of shellfish production at Locus B and perhaps a fundamental reworking of the way in which people accessed and related to their past.

DP3, for the most part at least, signals the end of large-scale pit digging at Locus B. Its historical connection to DP2, however, is unquestionable given that the distribution of DP3 shell seems to have been mapped onto the area containing DP2 pits. In some instances, it even appears to have filled in large open pits and evened out the Locus B surface. As noted above, shell “capping events” have been observed covering Mount Taylor domestic occupations and have been interpreted as signaling the “death” of these localities as places of inhabitation (Sassaman 2010:72). In this case, the capping of the DP2 pits may have similarly marked the death of these features or of the entire area as a place of ritualized shell processing and deposition.

ARTIFACT ASSEMBLAGE

A total of 3704 artifacts were recovered from level excavations of Locus B test units during the 2007-2010 field seasons. This number does not take account material culture from features whose samples were not completely analyzed as of the writing of this report, nor does it include unmodified vertebrate fauna or marine shell. A large majority of all artifact types were recovered from Late Archaic Thornhill Lake Phase and Orange period contexts, although later prehistoric and historic objects are also represented. Results of the preliminary analysis of the Locus B ceramic assemblage and descriptions of all other artifact classes are provided below. A summary of all artifacts recovered by test unit is shown in Table 6-25.

Pottery

Locus B excavations produced a total assemblage of 889 ceramic sherds, excluding crumb sherds. Of these, 603 have been classified as Orange, 281 as St. Johns, and five as generic sand-tempered pottery. While Orange sherds are found throughout the strata comprising DP2 and DP3 and in all Locus B test units, the other two types are largely restricted to the plow zone in this area 8LA1W. Consequently, their assemblages are highly fragmented and are assumed to have been displaced from their original depositional contexts in most cases. As a result, the pottery analysis that follows is

Table 6-25. Summary of Artifacts Recovered by Test Unit from Locus B, 8LA1W.

	TU4	TU12	TU13	TU14	TU19	TU21	TU22	TU39	TU40	TU41	TU42	TU43	TU44	TU45	TU46	TU57	Total
Pottery Sherds																	
St. Johns	4	13	18	12	3	9	7	18	23	10	23	23	17	2	16	83	281
Orange	109	2	4	2	18	15	64	134	46	68	28	30	38	8	1	36	603
sand-tempered				2									1		1	1	5
crumb	295	106	176	100	31	41	140	408	146	210	125	149	96	20	58	375	2476
Flaked Stone	15	18	23	22	14	14	6	16	5	4	10	47	17	3	36	34	284
Bone Tool/Ornament	1	3		2		4	1	1	3	2		2	5		3	3	30
Marine Shell Tool/Ornament	1	1			2				2	1	1		1		1		10
Historic Artifacts	1	1	1						2			1			1	8	15
Total	426	144	222	140	68	83	218	577	227	295	187	252	175	33	117	540	3704

focused largely on the Orange pottery with brief descriptions offered for the St. Johns and sand-tempered varieties.

Orange Fiber-Tempered Pottery. Orange pottery, a low-fired earthenware defined by its distinctive temper consisting of Spanish moss and possibly palmetto fibers (Brain and Peterson 1971; Simpkins and Allard 1986), is the earliest pottery technology in Florida. First appearing along the state's northern Atlantic coast by at least 4200 rcybp (Russo 1993), it rapidly spread inland to the nearby St. Johns River Valley most likely via preexisting exchange networks (Sassaman 2003a, 2004). Orange pottery is frequently divided into three basic varieties based primarily on surface treatment (Griffin 1945; Bullen 1972; Milanich 1994): 1) Orange Incised, exhibiting primarily straight rectilinear incisions and occasional tick marks; 2) Tick Island Incised – displaying curvilinear spiral shaped incisions and round punctations; and 3) Orange Plain. Research over the past decade suggests that Orange Incised pottery occurs in the highest proportions at shell rings along the Atlantic Coast and at large shell mounds within the St. Johns River Valley, while Orange Plain vessels are most frequent at smaller non-mounded sites in both areas (Sassaman 2004; Saunders 2004a, 2004b). Little is known about the spatial distribution of Tick Island Incised pottery other than it appears to be largely restricted to a relatively small area within the Middle St. Johns River Valley (Griffin 1945).

In the middle part of the last century, Bullen (1955, 1972) argued that formal and stylistic differences in Orange pottery was primarily chronological and devised a ceramic chronology with five distinct periods based on this variation. The general trends noted by Bullen were a progression from plain pottery in early Orange times to decorated sherds in later periods, greater diversity in lip form through time, increased vessel size and wall thickness through time, and a movement from exclusively fiber-tempered pots to ones also containing sand and sponge spicules. Recent research, however (Cordell 2004; Sassaman 2003a; Saunders 2004a), effectively demonstrates that this entire range of variation actually overlaps temporally and should instead be evaluated with an eye toward concurrent functional and/or ethnic diversity.

Vessel Lots. A vessel unit analysis was conducted for Locus B's fiber-tempered pottery. Sherds were separated into vessel lots using a variety of criteria including surface treatment, temper, rim form and thickness, orifice diameter, and basic sherd shape (e.g., straight or curved). Provenience was not taken into account in assigning sherds to vessel lots, as all excavated proveniences at Locus B are within 50 m of each other and could conceivably contain sherds from a single vessel. Based on these considerations, a minimum of 98 fiber-tempered vessels are represented in the Locus B assemblage. These vessels were evaluated with regard to a number of stylistic and technological variables. Basic morphological and metric data associated with each of these variables are listed in Table 6-26.

Surface Treatment. Of the 98 vessels, 50 (51.0 percent) are plain, 33 (33.7 percent) have rectilinear incisions associated with the Orange Incised variety, 14 (14.3 percent) exhibit Tick Island style curvilinear incisions and/or punctations, and one vessel (1.0 percent) has a surface too eroded to determine surface treatment. Examples showing

Table 6-26. Data on Orange Fiber-Tempered Vessel Lots from Locus B, 8LA1W.

V #	# Sherds	Temper[1]	Surface Treatment[2]	Lip Form[3]	Lip Thk. (mm)	Rim Form[4]	Rim Thk. (mm)	Orifice Diam. (cm)
1	5	FAS	INP	RD	5.1	ST	9.3	28
2	17	FAS	INR	XF	3.9			22
3	2	FAN	INC					
4	7	FAS	INP	RD	7.6			
5	2	FMS	PL	RD	4.3			
6	2	FAS	INC					
7	1	FAS	INR					
8	1	FAS/S	INR					
9	1	FAS/S	INR					
10	4	FAS	INR	RE	3.0	ST		
11	1	FAS	PUN					
12	1	FAS/S	INR					
13	1	FAS	INR					
14	1	FAS/S	INR	RD	4.8	IN	6.6	
15	2	FAN	INR	RE	8.6			26
16	14	FAS	INP	RE	8.7	IN	8.9	30
17	1	FAN/S	INR	RE	6.4			14
18	2	FAS	INR	RE	6.4			
19	1	FAS	INR	RI	6.7	ST	7.5	
20	1	FAS/S	INR	RE				
21	3	FAS	INR	RD	4.5	ST		24
22	1	FAS	INP	RD	6.0	ST	8.9	
23	1	FAS	INP	XF/D	17.0	ST	8.8	30
24	1	FAS	INC					
25	3	FAS/S	PL	RE/T	6.6	ST	5.3	
26	17	FAS/S	PL	RE	5.2	ST	8.3	
27	1	FAS	PL	FI	6.4	ST	8.0	
28	2	FAS	PL	RD	4.6			
29	1	FAS	PL	XF	4.6			
30	2	FAS	PL	FI	3.8	ST	7.0	
31	2	FAS	PL	BE	4.0	IN	9.0	
32	1	FAS	PL	PR	2.2			
33	5	FAS	PL	XF	5.2	ST	6.2	34
34	1	FAS	PL	RE	2.9			8
35	1	FAS	PL	PR	2.1	ST		
36	1	FAS	PL	RE	5.2	ST		
37	1	FAS	PL	RI	4.6	EX		6
38	1	FAS	PL	BE	3.9			
39	1	FAS	PL	BE	5.5			
40	2	FAS	PL	BI	4.9	ST		
41	1	FAS	PL	RE	3.8			
42	1	FAS/S	PL	RE	3.6			6
43	2	FAS/S	PL	RE	5.0			
44	1	FAS	PL	RD	5.7			16
45	2	FAS/S	PL	FI	4.7	IN	9.7	
46	1	FAS/S	PL	RE	4.2	IN		
47	1	FAS	PL	RE	4.2			
48	1	FAS	PL	BE/T	7.8			
49	1	FAS	PL	XF/T	7.5	ST	5.9	
50	1	FAS/S	PL	FD/T				
51	1	FAS	PL	XF	4.5			
52	1	FAS	PL	RE	3.3	IN		
53	2	FAS	PL	FI	4.7	ST	7.4	20
54	2	FAS	PL	FI	5.7	IN	9.8	36
55	1	FAS	PL	BV	4.6	IN		
56	1	FAS	PL	FI/T	6.0			

(continued on next page)

Table 6-26. *(continued)*

V #	# Sherds	Temper	Surface Treatment	Lip Form	Lip Thk. (mm)	Rim Form	Rim Thk. (mm)	Orifice Diam. (cm)
57	3	FAS/S	PL	RD	5.6	ST	7.3	16
58	1	FAS/S	PL	RE	8.0			
59	2	FAS	PL	FI	2.5	ST	3.9	10
60	1	FAS	PL	RD	5.3	ST	7.3	
61	1	FAS	PL	FI/T	9.1	IN	6.1	
62	1	FAS	PL	BE	6.4			
63	4	FAS	PL	PR	3.9	IN	7.2	
64	4	FAS/S	PL	RE	4.9			
65	3	FAS/S	PL	XF	6.0			20
66	2	FAS	PL	XF	5.3			12
67	1	FAS	PL	RD	4.8			
68	2	FAS/S	PL	RD	4.3			
69	2	FAS/S	PL	RE	5.7			
70	1	FAS	INR	RD	6.0	IN		18
71	1	FAS	INR					
72	1	FAN/S	INC					
73	3	FAS	INC					
74	1	FMS/S	PUN					
75	1	FAS/S	INR					
76	1	FAS	INR	XF	6.2	ST		
77	3	FAS	PL	BE	6.0	ST	6.7	
78	1	FAS/S	PL	FE/T	17.9			
79	2	FAS/S	INR	XF	4.4	ST		
80	1	FAS/S	INR	BE	4.9	ST	8.7	
81	2	FAS	INR					
82	7	FAS	INR	XF	7.5	ST	7.8	16
83	1	FAS	INR	PR		IN	8.1	
84	1	FAS	INR	RE		ST		
85	1	FAS/S	INR					
86	1	FAS/S	INR					
87	1	FAS	INR	XF	5.4			
88	3	FAS/S	INC	RD	7.5	IN		24
89	1	FAS	INR					
90	1	FAS/S	INR	RD	5.3	ST		10
91	3	FAS	INC					
92	4	FAS/S	INR	FI/D	10.2	IN	7.6	
93	2	FAS/S	ER	RD	6.5	ST		
94	2	FAS	INR					
95	1	FAS	PL	RE	3.3	ST		
96	2	FAS	PL	RE	3.4			
97	4	FAS	INR	RD	7.6	IN	7.1	
98	17	FAS/S	INR	BE	9.1	ST	11.4	30

[1]Temper categories: FAN – fiber abundant, no visible aplastics; FAS – fiber abundant, visible aplastics; FMS – fiber trace, visible aplastics; /S – suffix indicating presence of sponge spicules

[2]Surface Treatment categories: INR – incised rectilinear; INC – incised curvilinear; INP – incised and punctuated; PUN – punctuated; PL – plain; ER – eroded

[3]Lip Form categories: XF – flat; RD – rounded; RI – rounded interior; RE – rounded exterior; PR – tapered; BV – beveled; BI – beveled interior; BE – beveled exterior; FI – flanged interior; FE – flanged exterior; /T – suffix added if thickened; /D – suffix added if decorated

[4]Rim Form categories: ST – straight; IN – incurvate; EX – excurvate

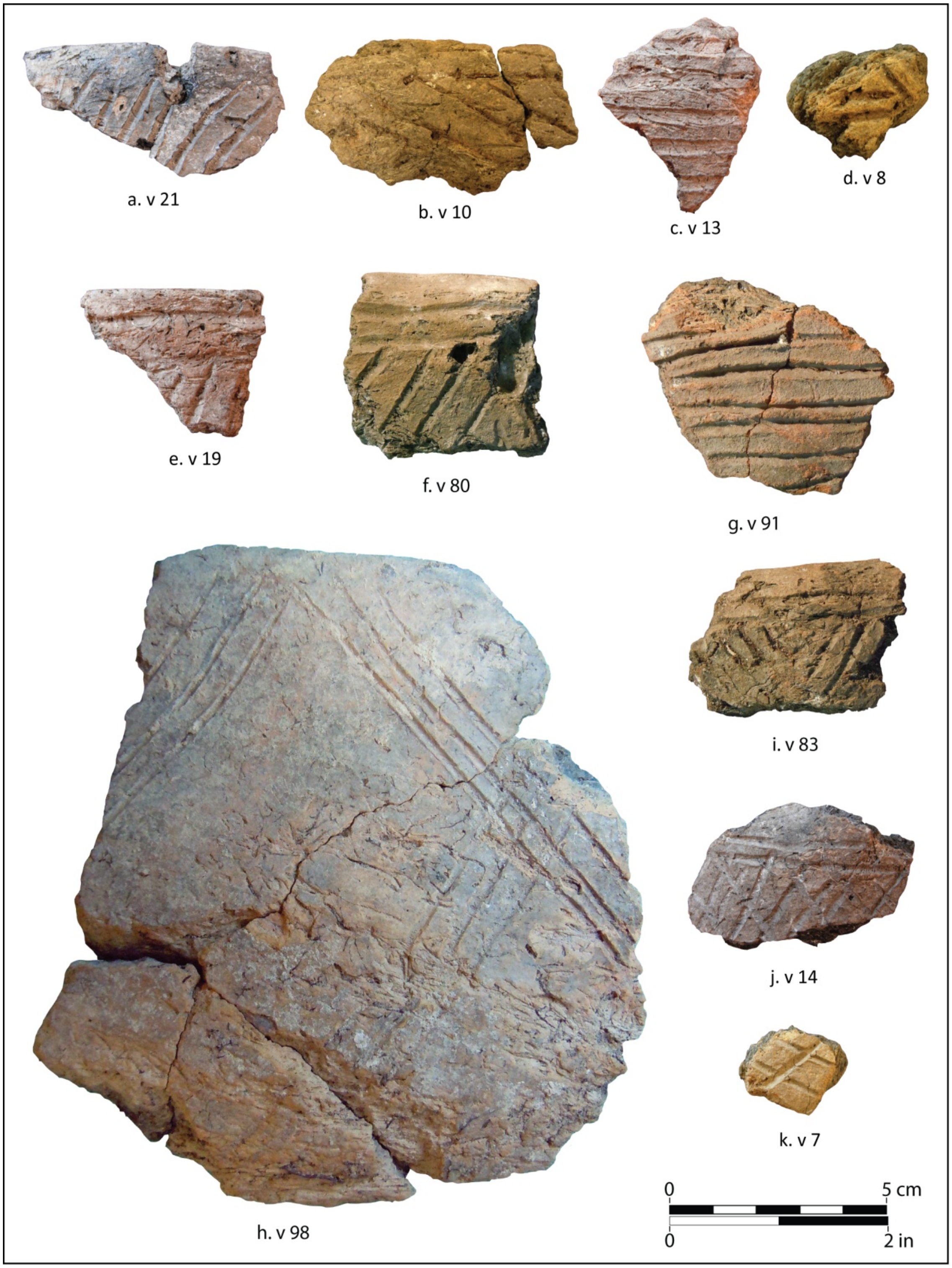


Figure 6-62. Examples of Orange Incised fiber-tempered vessels from Locus B, 8LA1W.

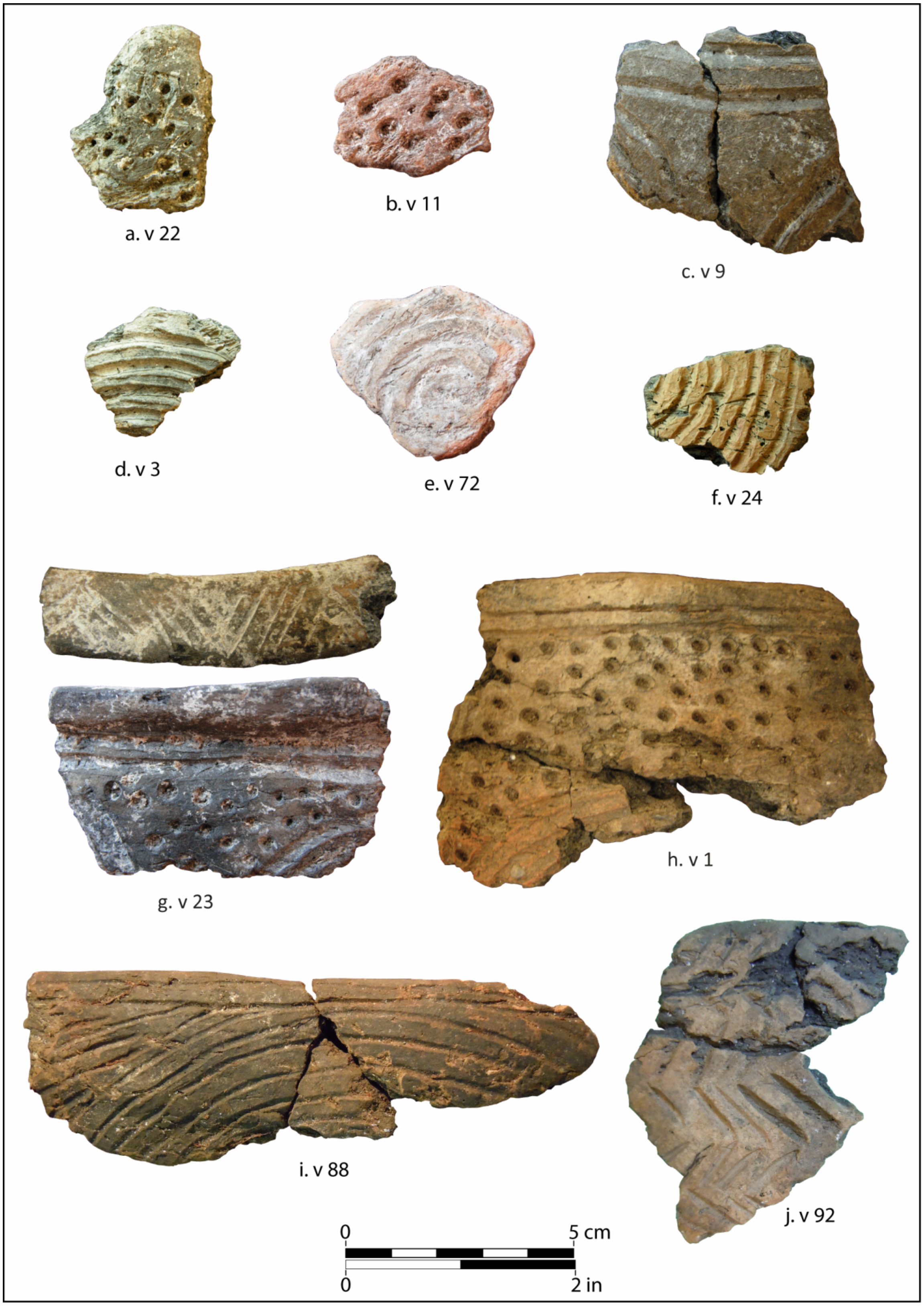


Figure 6-63. Examples of: a-i) Tick Island Incised vessels; and j) a fiber-tempered vessel with an unusual motif featuring elongated ticks.

the range of variation within the incised types are provided in Figures 6-62 and 6-63. Locus B's Orange Incised vessels display a diversity of motifs, a majority of which incorporate some combination of oblique and/or horizontal lines. Zoning is apparent in only a few examples, although the small vessel portions available in most cases may obscure larger zoned patterns. Two vessels have cross-hatched designs and seven have nested chevrons, with one of these, vessel 98 (Figure 6-62h), displaying a pattern of upward and downward pointing chevrons that cross each other on their margins. Tick Island motifs from Locus B are less variable and consist primarily of large spiral-shaped incisions surrounded by punctations. On all four of the Tick Island vessels for which a substantial portion of the rim is present, two straight horizontal incisions line the rim. Two of the Tick Island vessels also have paired vertical lines that divide their surfaces into distinct zones. Vessel 9 (Figure 6-63, c) is the only Locus B vessel that shows curvilinear incisions in the absence of punctations. In all but two cases, surface decorations are restricted to the exterior surfaces of vessels, the exceptions being Vessels 23 and 92, which both have incised lips.

Execution of the incisions is also variable with some exhibiting perfectly straight, evenly spaced lines while others are highly irregular. With only a few exceptions, both the rectilinear and curvilinear designs on Locus B pots consist of broad deep lines, apparently incised with a flat-tipped or rounded stylus. Many incisions exceed 2.5 cm in width. Punctation diameters vary from 2-4.3 mm. The narrow ridges of clay built up on the edges of most incisions and punctations suggest that they were applied while the clay was still wet.

<u>Temper</u>. A small fresh break was made on sherds from each vessel lot in order to evaluate the constituents of their added temper(s). Sherds were examined under a stereoscopic microscope at 40X magnification. All but 2 of the 98 vessel lots were determined to contain abundant fiber as well as visible aplastic inclusions, primarily quartz sand. Of these, 32 (32.7 percent) also contain freshwater sponge spicules, the defining characteristic of St. Johns type pottery but also a common constituent of some Orange assemblages in the Middle St. Johns River Valley (Cordell 2004; Sassaman 2003a). At this point, it is still unclear the extent to which spicules were intentionally added to clay as a temper or were simply natural constituents of local clays (Borremans and Shaak 1986; Cordell 2004; Cordell and Koski 2003; Rolland and Bond 2003). Interestingly, unlike other sites in the region, spiculate pastes within the Locus B assemblage do not appear correlate with surface treatment (see Cordell 2004; Sassaman 2003b), as at least 14 (43.8 percent) of the vessels with spicules are plain. Of the remaining vessels with spiculate pastes, 14 (43.8 percent) have rectilinear incisions, three (9.4 percent) have curvilinear incisions and/or punctations, and one (3.1 percent) is eroded.

<u>Morphology and Size</u>. Morphological and metric data were gathered for each vessel with regard to a number of variables including lip form, lip thickness, rim form, rim thickness, orifice diameter, and basic vessel shape (round or rectangular). Lip and rim form were coded using the system developed by Sassaman (1993) for fiber-tempered pottery from Georgia and more recently utilized in the analysis of Orange pottery from

Blue Spring Midden B (Sassaman 2003b). Rim thickness was measured at a distance of 3 cm from the lip. Orifice diameter was estimated using a standardized rim chart for all vessels with five percent or more of the rim present. In addition, rim profiles were drawn for all vessels with at least 3 cm of the rim present (see Figures 6-64 and 6-65).

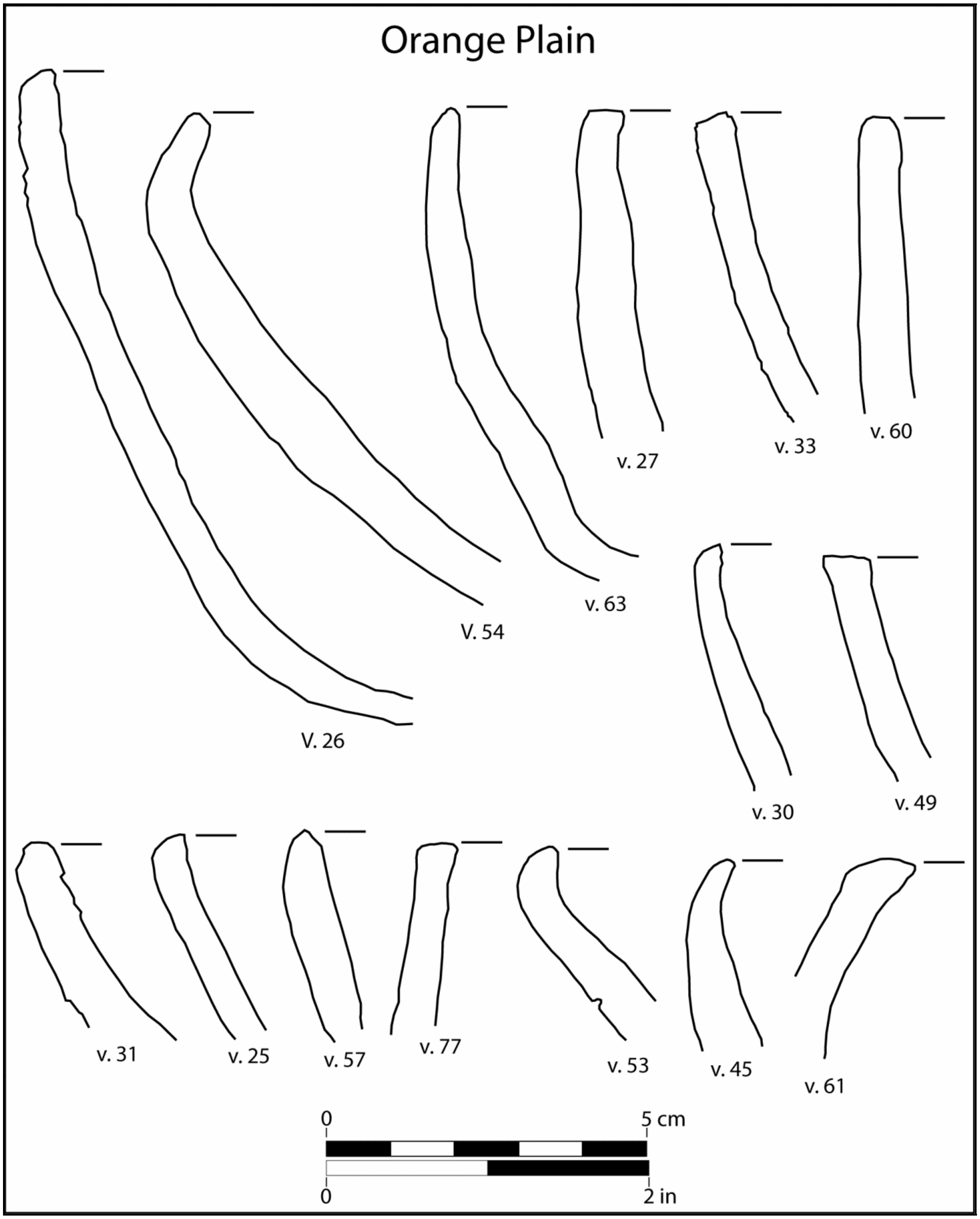


Figure 6-64. Profiles of rim portions of select Orange Plain vessels from Locus B, 8LA1W.

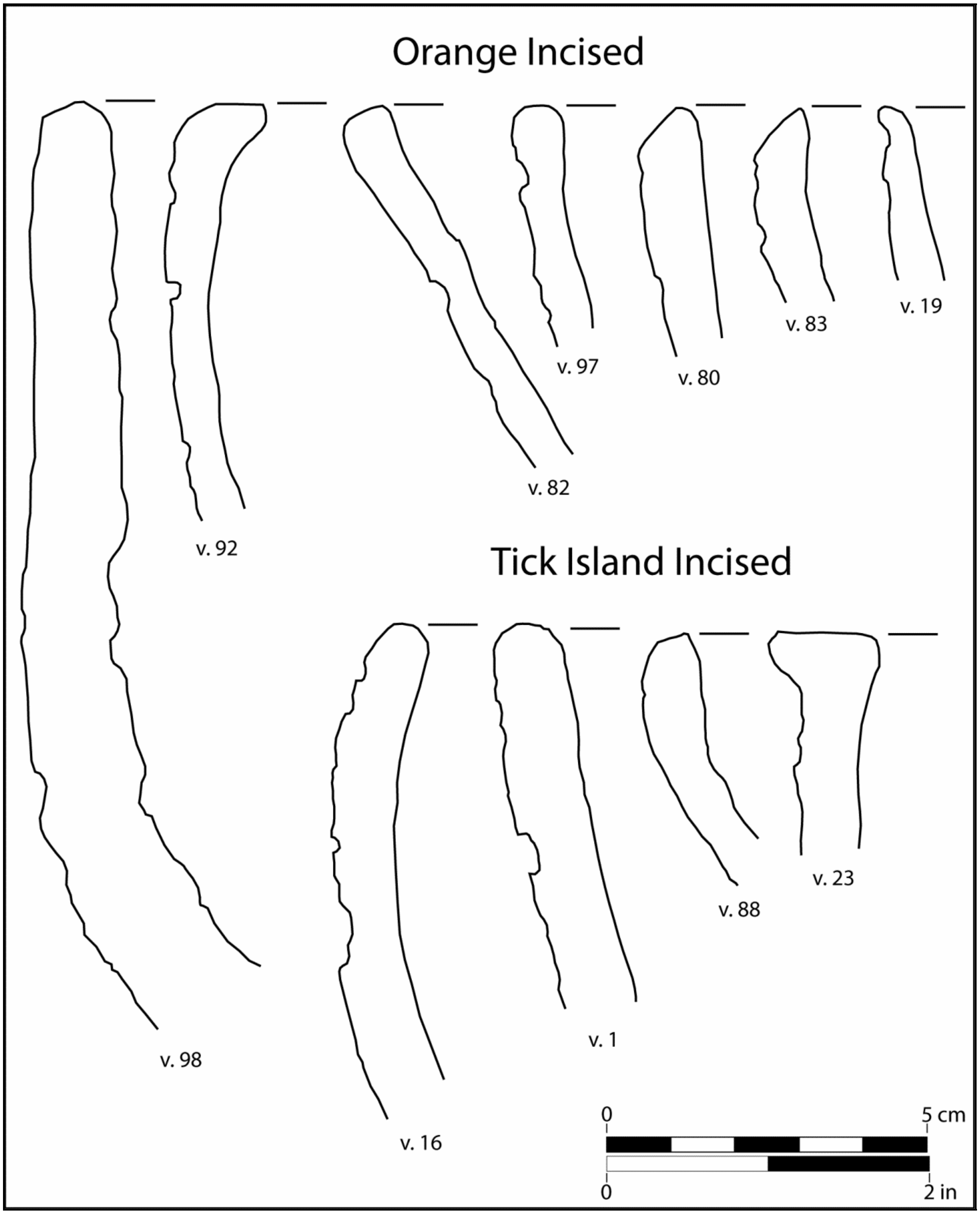


Figure 6-65. Profiles of rim portions of select Orange Incised and Tick Island Incised vessels from Locus B, 8LA1W.

A broad diversity of lip forms are represented among Locus B Orange vessel lots, likely bespeaking the lack of standardization present during this period that was also noted by Sassaman (2003b:115) at Blue Spring Midden B. A majority of rims are straight and outward sloping, resulting in broad open vessel profiles, although a handful of rims are incurvate near the lip and must have had somewhat restricted openings. Rim thickness is also highly variable, ranging from 3.9-11.4 mm, as is estimated orifice diameter with a range of 6-36 cm. There is a strong positive correlation between rim thickness and vessel size as estimated by orifice diameter (Pearson correlation coefficient = 0.642), suggesting that thicker walls may have been necessary to prevent larger vessels from collapsing in on themselves during the manufacturing process (Espenshade 1983). There also appears to be some connection between vessel size and surface treatment, as the mean diameters are 16.73 cm for plain vessel lots and 22.67 cm for incised vessels, although this difference is not statistically significant (t value = -1.644; probability = 0.115).

Only a few different vessel types can be inferred from the Locus B assemblage. A large majority of vessel lots for which vessel shape can be surmised appear to be round or oval bowls with straight or slightly incurving rims and flat bottoms. Two of the largest reconstructible vessel portions from Locus B both conform to this description. Vessel 26 (Figure 6-66) is an Orange Plain roughly circular bowl with thin walls that round into a flat base. It measures 11.3 cm in height and has an 8.3-mm thick rim gauged at 3 cm below its flattened lip. Its exterior surface is extremely friable and it shows significant thermal attrition on its base. Vessel 16 (Figure 6-67) is a large, elaborately decorated Tick Island Incised bowl with thick, incurving walls and a lug handle projecting out of its rim. The vessel's rim measures 8.9 cm in thickness and it has an estimated orifice diameter of 30 cm. Rim sherds from six vessel lots show no apparent horizontal or vertical curvature and probably come from rectangular vessels. Of these, four are plain, one has rectilinear incisions, and one is eroded.

Chronology. The stratigraphic distribution of the different types of fiber-tempered pottery at Locus B provides important clues as the chronological relationships between them. These relationships, while repeated within virtually all excavated Locus B contexts, are perhaps most clearly visible in the pottery data from the 2009 excavation block. Figure 6-68 is a backplot showing the vertical locations of all piece-plotted fiber-tempered sherds in front of the north profile of the 2009 block. What this figure demonstrates is that the lowermost and hence earliest pot sherds at Locus B are primarily plain, while decorated sherds (including both Orange Incised and Tick Island incised) arrive on the scene relatively late and are associated with the DP3 shell layer capping the area's massive pits. The only exceptions to this pattern are a few fiber-tempered incised sherds visible near the center of the profile in Figure 6-68 that were all recovered from Feature 38. This feature is exceptional in that it is the only large Locus B pit to contain incised pottery, including Tick Island Incised sherds. This pattern is corroborated by extensive radiocarbon data that date pits containing plain pottery to between 3970 ± 40 and 3590 ± 40 rcybp and the one pit containing incised pottery to the very end of this range at 3590 ± 40 rcybp (see complete radiocarbon data in Appendix B of this report).

This sequence of plain fiber-tempered pottery followed by incised vessels with Tick Island designs is the same one observed by Bullen (1955, 1976; Bullen and

Figure 6-66. Partially reconstructed Orange Plain vessel from Locus B, 8LA1W.

Figure 6-67. Partially reconstructed Tick Island Incised vessel from Locus B, 8LA1W.

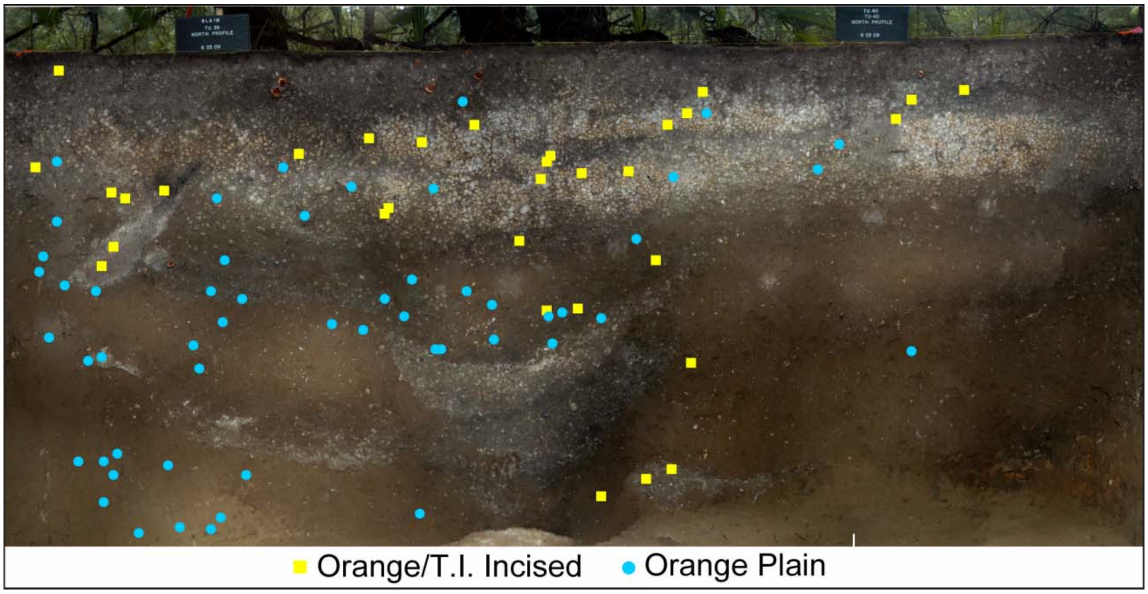


Figure 6-68. Backplot showing vertical stratigraphic distribution of Orange/Tick Island Incised vessels and Orange Plain vessels in the 2009 excavation block at Locus B, 8LA1W.

Stoltman 1972) at the Bluffton (8VO22) and Palmer (8SO2A) sites that largely provided the basis for his Orange 1 and Orange 2 subperiods. In Bullen's chronology, these pottery types were thought to be characteristic of the Orange Period's earliest manifestations. He argued that these were subsequently replaced by pots with more elaborate straight-line motifs in the Orange 3 subperiod, which were in turn succeeded by vessels with simpler designs and chalky pastes by Orange 4. As noted above, this chronology has been largely invalidated by subsequent research that has demonstrated contemporaneity between these different styles of Orange pottery (Cordell 2004; Sassaman 2003a; Saunders 2004a). Data from Locus B further corroborates this research by demonstrating the use of Orange 1 and Orange 2 vessels during a period hundreds of years later than dates obtained by Sassaman (2003a) for Orange 3 and Orange 4 vessels at the Mouth of Silver Glen Run (8LA1E) and other sites in the region. Importantly, Locus B research has also resulted in the first securely dated context containing Tick Island Incised pottery. The date of 3590 ± 40 rcybp (3980-3830 cal BP) for Feature 38 contrasts with Bullen's chronology by firmly placing this relatively rare variety of fiber-tempered pottery late in the Orange Period, centuries after the initial appearance of the classic Orange Incised variety.

Comparisons to Orange Incised Pottery from 8LA1E. In 2009, a technofunctional analysis was conducted of 146 vessel lots collected from the north ridge of the 8LA1E mound as a part of a class project (Gilmore 2009). Radiocarbon assays obtained from soot on sherds from this massive U-shaped monument range from 4070 ± 40 to 3680 ± 60 rcybp (Sassaman 2003a) and thus overlap with Orange Period dates from Locus B, indicating that use of the respective fiber-tempered pottery assemblages from the two areas was coeval. With this in mind, there are a number of interesting stylistic and technological differences apparent between the two contexts.

As at Locus B, a majority of the 8LA1E pots for which vessel type can be inferred are shallow open bowls, perhaps best suited as serving containers. However, whereas just under half (49 percent) of the vessel lots from Locus B have some kind of surface decoration, more than 75 percent of those analyzed from 8LA1E are decorated. This pattern parallels the one noted by Saunders (2004a) between shell rings and contemporary non-mounded sites along the Florida's Atlantic coast but occurs instead as an intrasite arrangement at Silver Glen Run.

Comparing Locus B's Orange Plain vessels to the incised pots from the mound also reveals a number of additional differences, beyond those related to surface treatment. First, a large majority of north ridge vessel lots have chalky, spiculate-rich pastes, while spicules were observed in less than one third of Locus B's plain vessel lots. These plain vessels are also smaller and thinner-walled than their incised counterparts from the mound with an average orifice diameter of 16.7 cm and rim thickness of 7.2 mm compared to 25.8 cm and 10.0 mm for the 8LA1E pots. Other differences relate to the manner in which the pots were actually utilized. While heat attrition is observable on the exteriors of vessels from both assemblages, only vessels from 8LA1E have soot preserved on their surfaces, perhaps indicating that they were suspended over open flames while Locus B pots were placed directly onto smoldering coals. In addition, while six 8LA1E vessels have holes drilled into them for mending, no Locus B vessels show evidence for the repair of broken vessels.

Interestingly, the decorated vessels from Locus B bear more technological and stylistic resemblance to the plain pots from the same location than they do the Orange Incised vessels from the 8LA1E mound. First, while the rectilinear motifs between the two areas are similar, a much higher proportion (29.8 percent as compared to 7.1 percent) of Locus B vessels exhibit the curvilinear incisions and/or punctations characteristic of Tick Island style pottery. Importantly, the rectilinear incisions on Locus B pots, which form similar overall motifs to the Orange Incised vessels from 8LA1E, more closely resemble the thick and sometimes irregular Tick Island incisions than they do the mostly thin, precise lines on their counterparts from the 8LA1E shell mound. The 8LA1E designs also lack the thin ridges of clay lining the margins of incisions, perhaps indicating that their lines were applied at a later stage in the drying process. In terms of size and thickness, the decorated Locus B vessels are actually intermediate between that area's plain pottery and the incised pots from the mound with an average rim thickness of 8.4 mm and orifice diameter of 22.1 cm.

Given that these intrasite differences in fiber-tempered pottery can no longer be attributed to simple chronological succession, other factors including functional specialization and/or ethnic diversity must be considered (Sassaman 2003a). Differences between Locus B pottery and that from the mound at 8LA1E may be explained in terms of the social scale of the respective events orchestrated at these two areas. The relative size of vessels is commonly used to deduce the size of the groups being served (e.g., Blitz 1993; Mills 1989) and can also inform on the physical distance between the pots and the people intended to view them (Mills 2007). Moreover, stylistic elements of pots, including surface decorations, often encode messages regarding group affiliation

(Pikirayi 2007; Weissner 1983; Wobst 1977) or status (Hayden 1995; Russo 2004; Russo et al. 2002). These messages are recognized by both sender and receiver and become increasingly important as interaction occurs between groups that are more socially distant (Wobst 2007). Although the relationship between style and identity are likely more complex than generally portrayed (Gosselain 1998; Hegmon 1992; Stark et al. 2000), high frequencies or exaggerated forms of pottery surface decorations may be indicative of their use in socially diverse contexts. With this in mind, the large, elaborately decorated vessels from 8LA1E suggest relatively large-scale and possibly multi-ethnic social events in line with the regional-scale feasts suggested by some to have occurred at Orange period shell rings (Russo 2004; Russo et al. 2002; Saunders 2004a, 2004b). The smaller and predominantly plain vessels associated with the huge roasting pits at Locus B, on the other hand, are probably indicative of more socially restricted, although not necessarily less ritually charged, activities. Given their close spatial proximity and contemporaneous use, these two places, in all likelihood, functioned in concert as coordinating parts of the same ritual landscape. The seemingly sudden appearance of Tick Island Incised vessels late in the site's Orange period history must signal a significant transformation in the social conditions surrounding Locus B's use, although the circumstances surrounding that shift and its larger scale significance are not currently well understood.

Post-Archaic Pottery. The remaining pottery is composed entirely of post-Archaic varieties with most belonging to the St. Johns sponge-spiculate tradition (Figure 6-69). Not including crumb sherds, a total of 281 St. Johns pottery sherds were recovered, including three St. Johns Incised, 240 St. Johns Plain, 30 St. Johns Check Stamped, and eight eroded. St. Johns Incised pottery is diagnostic of the St. Johns I subperiod (ca. 2800-1300 cal BP) while St. Johns Check Stamped is characteristic of St. Johns II (ca. 1300-500 cal BP) (Milanich 1994:247). By far the most numerous variety at Locus B, St. Johns Plain, is found throughout both subperiods. Unfortunately, as noted above, the St. Johns component at Locus B is contained almost entirely within the plow

Figure 6-69. Examples of: a) St. Johns Check Stamped; and b) St. Johns Incised sherds from Locus B, 8LA1W.

zone, resulting in small fragmentary sherds that largely prohibit any meaningful, context-dependent interpretations. The only other pottery type identified is sand-tempered plain, of which 6 undecorated sherds were recovered. These were found in the same stratigraphic contexts as the St. Johns pottery and could date to any post-Archaic period.

Flaked Stone

A total of 284 flaked stone objects were recovered from level excavations at Locus B between 2007 and 2010, including 17 formal tools and preforms (Table 6-27). A large majority of both tools and debitage were found within the preceramic Thornhill Lake Phase component. Flaked stone is especially sparse within the site's Orange period deposits and is in fact virtually absent from the many large roasting pits constituting DP2, perhaps adding supporting evidence to the hypothesis that Locus B was a special-use site rather than a place of residence during this time.

Hafted Bifaces. Among the formal lithic tools recovered from Locus B, all but two exhibit bifacial flaking. Three of these have basal stems presumably related to hafting and can be classified within the broad Florida Archaic Stemmed (FAS) category. One of these hafted bifaces is a classic Newnan type with a broad excurvate blade and long contracting stem (Figure 6-70, k). It is mostly complete except for the tip that was removed by a transverse break and the corners of the shoulders, which were slightly damaged during excavation. Like most FAS points, this example is asymmetrical and has relatively steep edge angles, probably indicating its use as a sharpened cutting implement rather than a projectile point. Two other Locus B bifaces have similar contracting stems and probably started out as FAS points. One of these (Figure 6-70, i) exhibits the contracting stem and right-angled shoulders that are characteristic of Newnan points. Its blade, however, has undergone repeated lateral sharpening, resulting in a cruciform drill shape probably representing the tool's final stage of reduction. The other contracting-stem biface appears to be a FAS point that experienced a perverse fracture along its long axis and was subsequently recycled into a smaller hafted cutting tool. Its stem remains largely intact, while the curved broken edge of the blade has been sharpened via the removal of several flakes at a steep angle. The tool has a thick irregular cross-section, perhaps indicating it was not yet complete at the time of the original break. All three FAS tools were found within the preceramic component at Locus B.

The only hafted biface that cannot be classified as a FAS implement is a Kirk Stemmed/Serrated point found near the bottom of TU19 (Figure 6-70, m). It has a square stem, straight shoulders, and slightly incurvate blade margins. The blade exhibits broad flake scars across most of its width and was serrated through the removal of a series of short, deep flakes along both edges. A transverse break removed the tip of the point, but the specimen is otherwise intact. It is composed of chert that is heavily patenated, indicating an advanced age. Serrated Kirk Stemmed tools have been interpreted as knives and are thought to date to the Early-Middle Archaic between 8500 and 7000 cal BP (Shroder 2002:76). The fact that this specimen was recovered from a Late Archaic stratigraphic context at Locus B suggests that it was picked up and perhaps utilized long after its initial manufacture and deposition.

Table 6-27. Attributes and Metric Characteristics of Flaked Stone Artifacts Recovered from Test Units at Locus B, 8LA1W.

Prov.	Fig. 6-70 letter	Description	Condition	Max. Length (mm)	Max. Width (mm)	Max. Thickness (mm)	Wt. (g)
TU13C	d	biface	tip	18.9	13.1	5.3	0.8
TU14E	k	hafted biface	missing tip	62.1	40.2	7.9	16.0
TU14H	c	biface preform	tip	24.1	17.8	6.6	2.1
TU19G	f	biface	fragment	21.9	20.8	9.1	3.4
TU19I	m	hafted biface	missing tip	60.7	34.4	8.9	17.7
TU19L		biface	complete	34.9	30.9	10.7	11.5
TU21F	j	hafted biface	recycled/ complete	41.7	20.0	10.6	5.7
TU21H	i	hafted biface-drill	complete	41.8	31.1	7.9	5.4
TU39-F.38	a	uniface-expanding base microlith	complete	16.7	10.0	2.8	0.2
TU40G	g	biface	recycled/ distal	43.2	29.2	13.9	17.5
TU41H		biface	fragment	32.2	20.8	11.7	6.9
TU43G		biface preform	tip	20.2	17.2	7.2	1.2
TU46B		biface preform	medial	24.1	18.4	9.2	4.2
TU46G	b	uniface-expanding base microlith	complete	26.7	13.6	4.3	1.0
TU46I	h	wedge	complete	31.6	29.1	8.6	8.8
TU57B	e	biface preform	distal	30.1	26.2	9.25	6.2
TU57B		biface preform	medial	22.5	17.1	5.8	3.2
TU57H	l	biface – drill	complete	66.9	42.9	8.3	12.5

Preforms. Five flaked stone objects from Locus B were classified as preforms because they appear to be at a late stage of reduction but do not exhibit the extent of edge retouching and shaping expected of finished tools. Three of these consist of tips or distal portions that appear to have been detached via transverse breaks (Figure 6-70, c-e). The other two examples are medial fragments, one with roughly straight parallel margins and the other with contracting edges that may reflect its original location near the base of the

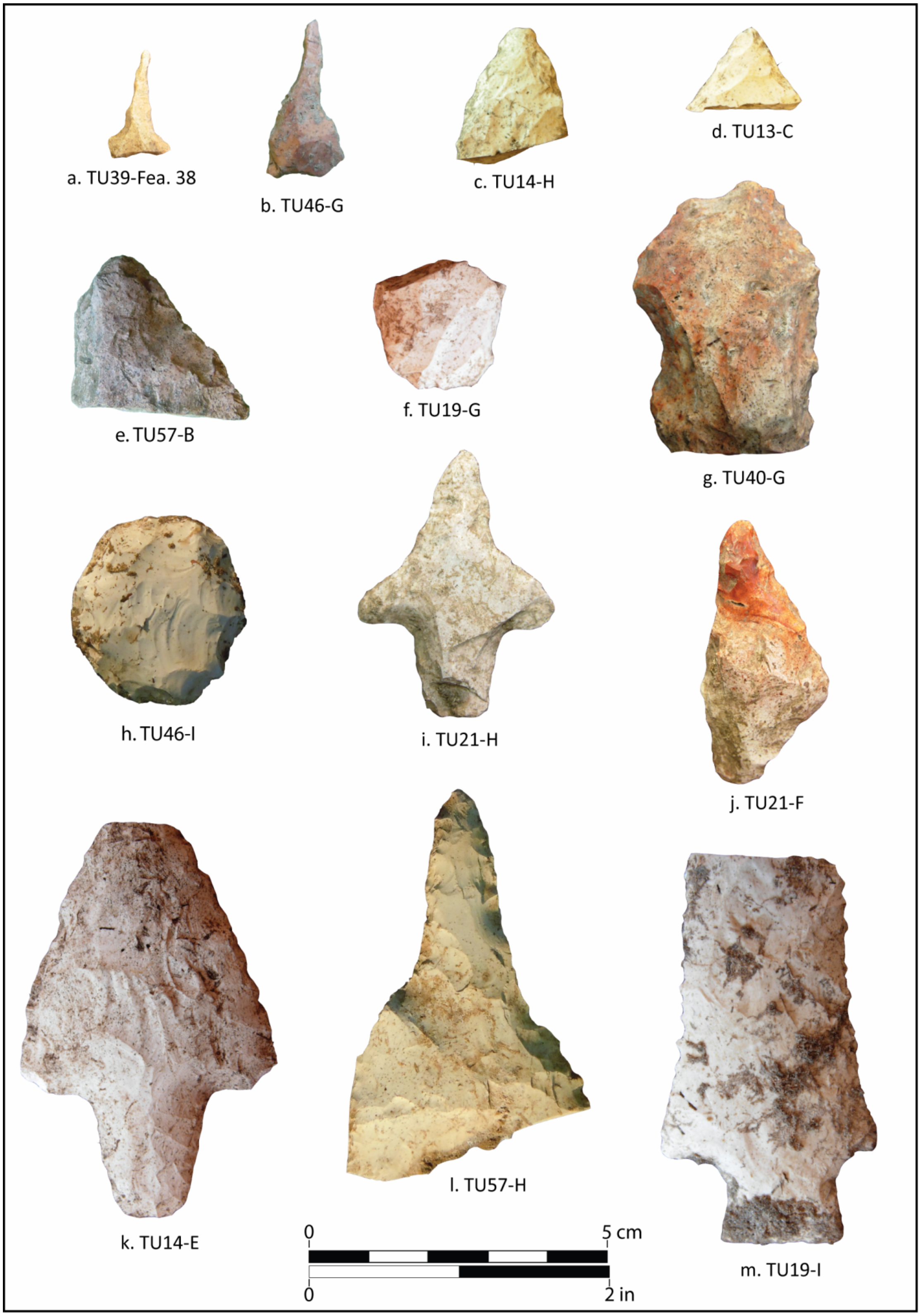


Figure 6-70. Select flaked stone artifacts from test units at Locus B, 8LA1W.

tool. Both of these have thick biconvex cross-sections and little evidence of fine edge retouch. Because of their fragmentary condition, inferences regarding the intended final form or planned use of Locus B preforms are not possible.

Other Bifacial Tools. One of the bifaces from Locus B has been classified as a “wedge” (Figure 6-70, h). It is roughly circular in shape and has steeply retouched edges running along its entire perimeter. The presumed distal end of the tool has a number of small step fractures, apparently a result of repeated battering. The tool was found within a preceramic stratum within TU46 and likely belongs to the Mount Taylor Thornhill Lake Phase component. An almost identical tool was found across the spring run at the Silver Glen Springs site (8MR123) that was interpreted as a possible woodworking implement (Randall et al. 2011:144).

Another flaked stone object from Locus B has been classified as a “drill” (Figure 6-70, l). This bifacial tool has undergone a great amount of lateral edge retouch so that its margins curve inward forming a thin elongated blade. The tool terminates proximally in a straight transverse break, although it is unclear whether this is its original base or whether it has been truncated. In its present condition, there is no evidence of a hafting element. The drill is made of chert and is heavily patinated, again suggesting an advanced age. Assigning it a cultural affiliation is difficult, as it was found within preceramic deposits but near the edge of a large Orange period pit (Feature 54/55).

Various other bifacially flaked fragments were also recovered whose irregularity and/or condition prevent classification into a formal category. One of these (Figure 6-70, g) is a thick, chunky biface that appears to have been recycled from a larger tool. Although small flake scars with feather terminations are visible on both sides of the biface, its edges exhibit evidence of large irregular flake removal. The proximal end of the original tool is missing, although it is impossible to tell whether this break occurred before or after the tool’s secondary modifications. It is one of the few examples of a lithic tool that can be confidently attributed to the Orange period component at Locus B.

Microliths. Microlithic tools have been recovered from a number of prehistoric contexts in Florida, including multiple middle St. Johns River Valley sites such as Lake Monroe Outlet Midden (8VO53) (ACI and JR 2001) and the Thornhill Lake Complex (8VO58-60) (Endonino 2010:292-294). Several examples have also recently been unearthed at other locations within the Silver Glen Run Complex including both the Silver Glen Springs site (8MR123) (Randall et al. 2011) and the Mouth of Silver Glen Run (8LA1E) (Chapter 3, this report). Two flaked stone objects from Locus B have been classified as microlithic tools (Figure 6-70, a-b). Both of these are whole with maximum respective lengths of 16.7 mm and 26.7 mm. In shape, they conform closely to the category of “expanded base microliths,” as described by Randall et al. (2011:155) based on specimens from 8MR123. They have broad flat bases that contract rapidly into elongated distal shafts and terminate in relatively dull points. Both Locus B examples appear to have been manufactured from bifacial thinning flakes and were formed via unifacial flaking at an extremely high angle (ca. 90 degree) along the length of the shaft. While Randall et al. (2011:151) suggest a possible connection between this tool type and the production of marine shell beads, their true function(s) remains poorly understood and could include drilling, perforating, and/or incising.

Bone Tools and Ornaments

Thirty modified bone objects were recovered from test unit excavations at Locus B (Table 6-28). An additional bone tool was recovered from Feature 54/55 in TU57 and is included in Table 6-28 but was not counted in the inventory presented in Table 6-25. Unlike the flaked stone tools, which were mostly found within Locus B's preceramic DP1 component, modified bone appears to be less patterned stratigraphically and was found within Thornhill Lake and Orange deposits, as well as within the upper St. Johns Period component. All modified bone was classified according to the categories outlined by Sassaman et al. (2011) based on the assemblage from Salt Springs (8MR2322). Identified artifact classes include bone pins, bone awls, bone splinters, and miscellaneous cut bone and antler. Representative examples of each class are pictured in Figure 6-71. Measurements of each specimen were included in Table 6-28 regardless of condition.

Bone pins are defined as highly polished items retaining little of the bone's cortical surface or medullary cavity and generally exhibiting roughly circular cross-sections (Sassaman et al. 2011:57). Two bone pin fragments were recovered from Locus B, one from the preceramic component of TU22 and the other from near the base of ceramic-bearing deposits of TU44. The example from TU22 (Figure 6-71, a) is a proximal fragment of a pin that is well-polished and has a round cross-section. Its proximal end tapers almost to a point and features five thin parallel lines incised around its circumference, resulting in a rattlesnake-like appearance. It is the only decorated bone object from Locus B. The other specimen in this category (Figure 6-71, b) is a small medial fragment from a thinner, undecorated pin.

Bone awls are by far the most common modified bone objects recovered from Locus B test units, comprising 76.7 percent of the assemblage. Awls are here defined as pointed tools retaining some element(s) of original bone morphology, usually a portion of the medullary cavity (Sassaman et al. 2011:60). A majority of the Locus B awls have relatively thick, almost triangular cross-sections and comparatively blunt working ends (see examples in Figure 6-71, c-k). At least six awls, however, have somewhat thinner flattened cross-sections, are more highly polished, and exhibit exceedingly sharp and symmetrical pointed ends (Figure 6-71, l-q). Other modified bone types include one bone splinter that has been sharpened to a point on one end (Figure 6-71, r) along with a deer metapodial fragment and antler tine, both of which were cut straight across perpendicular to their long axis (Figure 6-71, s and t). Apparent damage to the point of the tine suggests that the antler may have been used as a flaking tool.

Two tubular bone beads were also recovered from Locus B. One of these (Figure 6-71, u) measures 20.1 mm long, has a diameter of 5.4 mm, and appears to have been made by scoring and snapping off the ends of a small mammal or bird long bone. It is similar in both size and morphology to beads recovered from Groves Orange Midden (8VO2601) in nearby Volusia County (Wheeler and McGee 1994). The other bead is

Table 6-28. Attributes and Metric Characteristics of Bone Artifacts from Test Units at Locus B, 8LA1W.

Prov.	Fig. 6-71 letter	Description	Condition	Max. Length (mm)	Max. Width (mm)	Wt. (g)
TU4-IV		awl	distal fragment	29.8	4.5	0.8
TU4-VII		awl	distal fragment	33.5	9.8	1.1
TU12F	l	awl	distal fragment	45.0	8.2	1.4
TU12F	t	cut antler		34.3	8.7	1.2
TU12G	g	awl	distal fragment	56.0	11.7	4.5
TU14F	u	bead	complete	20.1	5.4	0.4
TU14G	k	awl	distal fragment	29.3	7.6	1.1
TU21C	c	awl	medial fragment	64.8	11.0	5.3
TU21D		awl	medial fragment	35.4	10.6	1.8
TU21D		awl	medial fragment	37.0	9.5	1.6
TU21I	v	bead	complete	15.8	17.0	1.8
TU22O	a	incised pin	proximal end	44.5	4.7	1.0
TU40-PZ		awl	medial fragment	31.2	7.5	1.6
TU40I		awl	medial fragment	28.5	7.1	1.2
TU40I	e	awl	missing proximal end	134.5	9.3	8.1
TU40J	o	awl	distal fragment	33.0	6.8	0.7
TU41F	d	awl	missing proximal end	142.2	11.2	10.9
TU41J	m	awl	distal fragment	44.8	8.2	1.4
TU44G		awl	medial fragment	71.9	9.9	3.9
TU44G		awl	distal fragment	73.5	10.17	4.5
TU44G	b	pin	medial fragment	25.19	3.6	0.3
TU44H	n	awl	distal fragment	42.3	11.0	2.2
TU44H		awl	medial fragment	23.4	8.0	0.6
TH44H		awl	medial fragment	27.33	7.6	0.9
TU44I	h	awl	distal fragment	50.2	9.8	3.5
TU46E	s	cut bone	fragment	46.9	17.3	3.5
TU46G	q	awl	distal fragment	45.7	8.0	1.4
TU46G	i	awl	distal fragment	48.5	12.6	4.1
TU57D	r	splinter		44.9	8.7	1.4
TU57D	p	awl	distal fragment	63.4	8.3	2.0
TU57-Fea 54/55*	q	awl	complete	83.7	16.9	4.6

*not included in Table 6-25 artifact inventory

Figure 6-71. Select bone tools and ornaments from Locus B, 8LA1W including: a-b) bone pins; c-q) bone awls; r) bone splinter; s) cut bone; t) cut antler; u-v) bone beads.

shorter (15.8 mm in length) and much broader (17.0 mm in diameter). It is also made of bird bone and has an almost perfectly circular cross-section. Both beads have polished exterior surfaces.

Modified Marine Shell

A total of 10 modified marine shell objects were recovered from test unit excavations at Locus B, not including items recovered from features. Six of these came from secure preceramic contexts while at least one of the others is likely preceramic in age but was recovered from near the interface between Thornhill Lake and Orange Period components. Overall, the stratigraphic distribution of marine shell (both modified and unmodified) within Locus B largely mirrors that observed with regard to flaked stone. It is by far most common in preceramic contexts, becoming much sparser in the deposits of subsequent periods. Marine shell tool type determinations were made using the classification scheme provided by Wheeler and McGee (1994) based on the Groves Orange Midden assemblage. Representative examples of the different types identified at Locus B are shown in Figures 6-72 and 6-73.

Most of the modified marine shell objects from Locus B are made from large marine gastropods (*Busycon sp.*). Two of these are lightning whelk (*Busycon contrarium*) shells that have been modified for use as containers that have been variously referred to as shell "receptacles" (Wheeler and McGee 1994:365) or "vessels" (Sassaman et al. 2011:61). These vessels, which are common in Mt. Taylor contexts throughout the St. Johns River Valley (e.g., ACI 2001; Sassaman 2003; Sassaman et al. 2011; Wheeler and McGee 1994), are hollowed out via removal of their columnella. One of the examples from Locus B (Figure 6-73) is complete aside from a large whole that has been burned through the bottom of the vessel, presumably a result of heating its contents. It measures 256 mm in length, 152 mm in width, and is approximately 90 mm tall. The other Locus B shell vessel (Figure 6-72, c) is a broken fragment of the whelk's outer whorl with clear evidence for removal of the columnella. Sassaman et al. (2011:61) point to the relatively small capacities offered by even the largest of these shell vessels in suggesting that they were probably special use containers rather than everyday cooking utensils, perhaps employed in the preparation of medicines or poisons.

The other *Busycon sp.* tools from Locus B are all cutting implements. Two tools (including the one pictured in Figure 6-72, e), also fashioned from *Busycon contrarium*, fall into the adze/gouge category. These are triangular sections of the lower outer whorl that have been sharpened on their broad end. Generally these tools are beveled on the interior in order to produce a unifacial cutting edge, although the working edges are missing on both of the Locus B examples. Another Locus B marine shell implement is a knobbed whelk (*Busocyon* carica) cutting edge tool (Figure 6-72, d). It is similar to the Type X tools described by both Goggin (1952:115) and Wheeler and McGee (1994:365) in having a beveled bit formed by grinding the siphonal canal but this specimen lacks the shoulder perforation thought to be necessary for hafting. The only other Locus B cutting tools include two *Strombus gigas* celt fragments (including Figure 6-72, f). Wheeler and McGee (1994:361) group all of these various cutting tools within the Mt. Taylor

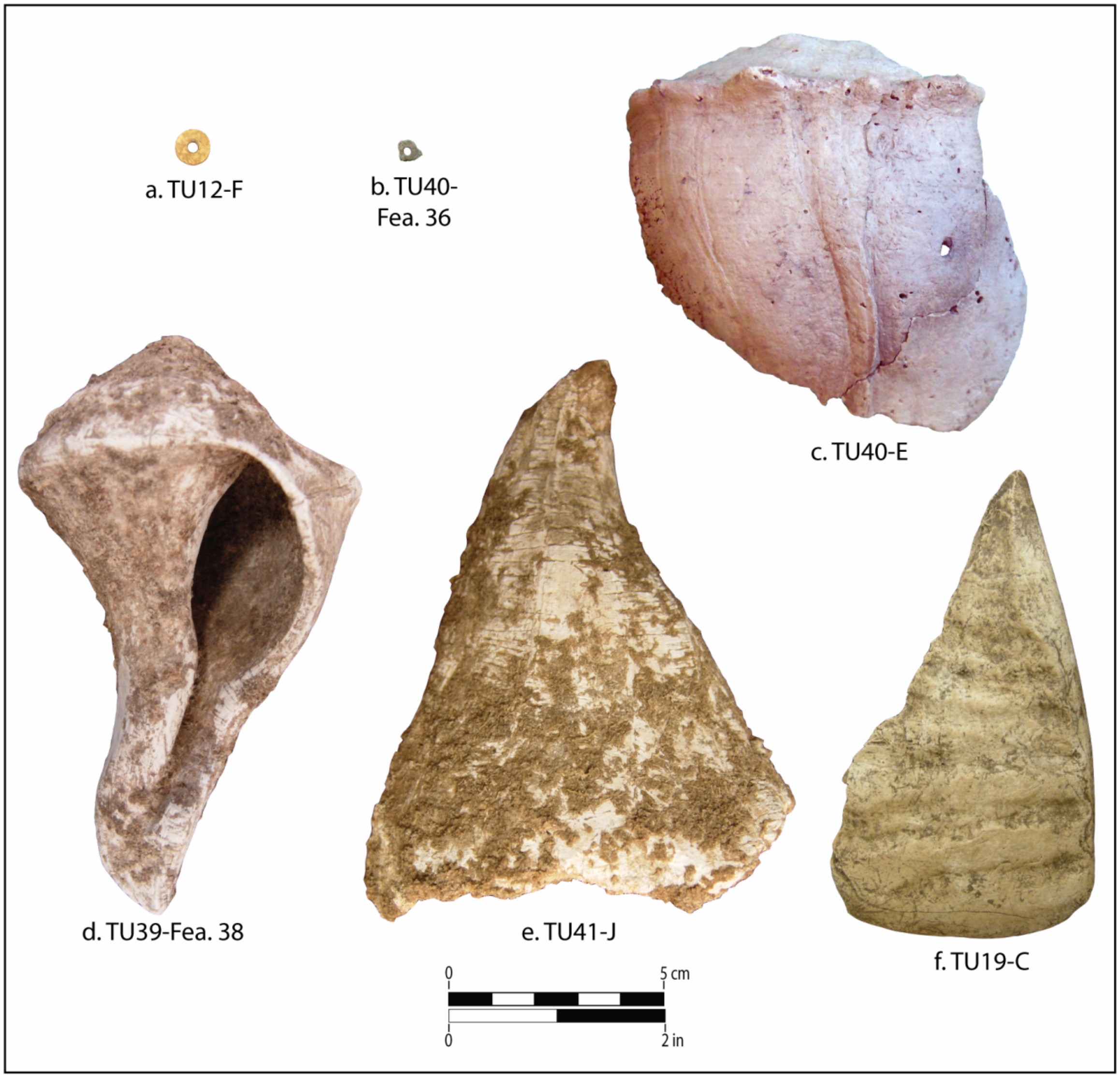


Figure 6-72. Select marine shell tools and ornaments from Locus B, 8LA1W including: a-b) disk beads; c) *Busycon contarium* vessel fragment; d) *Busycon carica* cutting edge tool; e) *Busycon contrarium* adze/gouge; f) *Strombus gigas* celt. Working edges are oriented downward for all cutting tools.

woodworking complex, hypothesized to have been geared toward the reduction and carving of wood.

Three marine shell objects from Locus B fall into Wheeler and McGee's (1994:365) "personal adornment complex" and have been classified as disk variety beads (Figure 6-72, a-b). All three consist of small flat fragments of marine shell with holes drilled through the middle from one side. The largest was recovered from Level F of TU12, near the interface between late preceramic and early Orange period deposits. It

Figure 6-73. Burned-out vessel made of lightning whelk (*Busycon contrarium)* recovered from TU19 at Locus B, 8LA1W.

measures approximately 7.0 mm in diameter and is 2.1 mm thick and has smoothed sides and rounded edges. The others were both found in fill from Feature 36, a large DP2 pit dating to the Orange period. They are both smaller and more irregular, with snapped edges that have not been rounded off. Determination of the shellfish taxa utilized for these beads was not possible.

DISCUSSION AND CONCLUSIONS

Four seasons of stratigraphic testing at Locus B have yielded a tremendous amount of information regarding the extent, structure, and archaeological significance of the area's cultural deposits. A combination of topographic mapping, auger testing, and a total of 45 m^2 of test unit excavations were conducted between 2007 and 2010. Initially, these investigations were geared toward the elucidation of Late Archaic domestic practices and broad-scale community patterning. As work has progressed and new data have accumulated, however, a picture has gradually emerged of Locus B not as a fixed and stable "village," but rather as a historically volatile place whose functions and meanings frequently shifted with changing local and regional conditions. As a result, more recent research has focused on investigating the *various* manners in which Locus B was inhabited prehistorically, along with the events and processes through which the place was transformed.

Information gleaned from auger tests and test unit excavations indicates that Locus B's modern surface topography is largely a result of anthropogenic processes involving the deposition of shell and sand. Radiocarbon data suggest that most of this landscape modification occurred during the Late Archaic (ca. 5740-3830 cal BP) when the site underwent at least three successive and fundamentally distinct "patterns" of deposition. The earliest of these, Depositional Pattern 1 (DP1), was undertaken during the late preceramic Thornhill Lake Phase. Centered on an area in the southeastern part of Locus B, DP1 resulted from a series of small-scale domestic settlements and abandonments. These settlements are evidenced first by the stacked sequence of thin, horizontal lenses of crushed shell and intervening layers of dark organic sand most clearly visible near the bottom of TU46. In this test unit, as well as the 2010 block, DP1 deposits are composed primarily of bivalve and *Pomacea* shell containing a broad range of artifact types and debitage generally associated with the activities of everyday living. A number of pit features exhibiting various sizes, morphologies, and fills also support the interpretation of DP1 as resulting primarily from routine domestic practices.

The composition and structure of the DP1 deposits at Locus B are comparable in most ways to other late preceramic Archaic sites in the Middle St. Johns Valley. The lithic, shell, and bone artifact assemblages associated with DP1 are all entirely consistent with existing outlines of Mount Taylor period technology (e.g., Randall 2010; Wheeler and McGee 1994; Wheeler et al. 2000). Similarly, the range of pit features and sequence of stacked shell-lined surfaces from Locus B are also largely duplicated at other coterminous sites in the region (e.g., Endonino 2010; Sassaman 2003b, Chapter 3 of this report; Sassaman et al. 2005). Like Locus B, these other sites have been interpreted as places of residence during the Mount Taylor and/or Thornhill Lake Phases.

By ca. 4600 cal BP, Locus B appears to have been abandoned or perhaps utilized only sparingly for a time, as evidenced by a gap in the radiocarbon data and the presence of a persistent and extensive buried A-horizon positioned directly above the most recent DP1 deposits. Following this period of disuse, Locus B was transformed from a place of sustained residence to a place of periodic, intensive activity. Depositional Pattern 2 (DP2) began during the Orange period by ca. 4500 cal BP and involved the excavation and infilling of hundreds of massive pits across an expansive swath of Locus B. In terms of scale, these DP2 pits far exceed any that either preceded or followed them within the Silver Glen Run complex. Many of them overlap each other, apparently having been dug one on top of another as a part of intermittent pulses of intense activity. The charcoal, oxidized sand, and concreted bivalve shell found lining the bases of several pits suggest that they may have served as large-scale mussel processing facilities, geared toward the rapid production of large amounts of food. While the pits' size and number seem to preclude a domestic subsistence-focused explanation, Locus B's proximity to the contemporaneously utilized U-shaped shell mound at 8LA1E suggests the interesting possibility that the processed shellfish may have been consumed at the large-scale ritualized gatherings hypothesized to have taken place there.

Regardless of where the shellfish ended up, however, the significance of Locus B's DP2 pits undoubtedly extended beyond their practical functionality as processing tools. This is made abundantly clear by the complex, highly structured deposits though which the pits were infilled. Virtually none of the DP2 pits contain a substantial quantity of artifacts or vertebrate fauna that would indicate their use as refuse containers. In fact, DP2 deposits are largely devoid of most classes of material culture save for small amounts of plain fiber-tempered pottery. Instead, pits are filled with various combinations of shell and/or earth that, in several cases, form elaborate stratified sequences of deposition reminiscent of those composing the countless shell mounds found throughout the region. It is possible that Locus B's infilled DP2 pits were essentially inverted, subterranean versions of these above-ground monuments. If so, their layered deposits were likely a means of inscribing particular histories into the landscape. While unlike traditional mounds these deposits were at least initially hidden from view, their frequently overlapping distribution means that earlier DP2 pits are likely to have been cut into and exposed by later ones, a fact of which the Locus B pit diggers themselves must have been aware.

Whereas DP1 at Locus B is replicated at a number of coeval sites throughout the region, DP2 is virtually unique among known Orange period sites, although the data available for comparison is relatively limited. The best information regarding Orange period domestic practices comes from Blue Spring Midden B (8VO43) (Sassaman 2003b) in the St. Johns valley and from Summer Haven (8SJ46) (Janus Research 1995) on the adjacent Atlantic coast. In both cases, excavations revealed relatively artifact-rich deposits, abundant vertebrate fauna, and diverse assemblages of small domestic features, all of which contrasts with the dearth of material culture and the specialized, hypertrophic pits found at Locus B. A more comparable depositional history may actually have occurred at the Bluffton site (8VO22/23) approximately 25 km to the south of Silver Glen Run. There, Bullen (1955:3) describes a large cooking hearth, "some 16 feet across" that was characterized by mussel shells that were "cemented together by heat" and a base that displayed a "pink area, eight inches across, which contained nineteen lumps of red ochre-cemented sand." This hearth was overlain by a thick layer of "relatively clean, loose shells." It is likely that what Bullen actually observed was the burned base(s) of one or more large Orange period pits and that the "red ochre" was in reality heat-oxidized sand. His recognition of individual pits may have been hampered by the relatively restricted view offered by the narrow trench excavation that he was overseeing. The data from Bluffton suggest, not surprisingly, that the depositional practices at Locus B were not unique or isolated but were instead implicated in broader, regional scale processes of shell-centered "history-making" during the Late Archaic.

While the precise events triggering the transition from DP1 to DP2 remain poorly understood, it is clear that this shift took place in a context of regional-scale spatial and social transformation. Although traditional archaeological consensus has long been that, beyond the introduction of pottery technology, the onset of the Orange Period came with few, if any, significant changes in the lifeways of Florida's Archaic hunter-gatherers (e.g., Milanich 1994:86), that position is no longer tenable given current archaeological data. In terms of material culture, the beginning of the Orange period in the St. Johns is characterized by a marked reduction in the number nonlocal objects, including bannerstones, marine shell, and chipped stone artifacts, when compared to the preceding Thornhill Lake Phase (Randall 2010). It is possible that pottery replaced some of these other materials in maintaining extralocal relationships but even if this were the case, the size of the exchange network appears to have been constricted to a large degree. The scant evidence we have for Orange period settlement layout indicates a transition to circular, or perhaps semicircular (e.g., Randall et al. 2011; Sassaman 2003b) arrangements of houses, a pattern that stands in stark contrast to the mostly linear settlements of the prior period. It has been suggested that this shift may be related to an influx of people and ring-centered ideologies from the Atlantic coast into the interior St. Johns region (Sassaman 2012).

Perhaps the most drastic transformation, however, involved an apparent shift in historical consciousness from Mount Taylor times when past and present existed side-by-side, to the Orange period when the past was kept at a distance from everyday life. One area in which this is most clearly manifested is that of mortuary practices. There is currently no indication that the long-lived Mt. Taylor tradition of burying the dead in shell or sand mounds near settlements continued into the Orange Period. In fact, virtually no Orange burials have been encountered in the Middle St. Johns region (in either domestic or ceremonial contexts), suggesting that whatever Orange people did with their dead, it involved separating their remains from contexts of everyday living. In addition, whereas Mt. Taylor communities repeatedly settled in the same locations, constructing conspicuous material histories in the form of tell-like mounds of debris, the few known Orange settlements in this area appear scattered and relatively ephemeral. And while Orange components are sometimes found within a few tens of meters of Mt. Taylor mounds, the mounds themselves appear to have been actively avoided in all but four known cases, one of these being the Silver Glen Run complex (Randall 2010).

Based on their huge quantities of large elaborately decorated ceramics and massive deposits of shell, these four Orange period mound centers are thought by many to have served as regional gathering places during the Orange Period where ritual feasts and other ceremonies were conducted. At Silver Glen Run, and at least two of the other sites, Orange mounds were constructed directly atop preexisting Mt. Taylor mortuaries (Aten 1999; Randall 2010). Thus, in direct contrast to Orange settlements, where the past was intentionally avoided, practices in these specialized ceremonial locations seem to have been geared explicitly toward drawing on the power of the past, probably as a source of ritual legitimacy. In this context, by exposing older deposits, the excavation of Locus B's DP2 pits would have provided yet another means by which the past could be accessed and exploited at Silver Glen Run. By infilling pits in structured, meaningful ways, particular histories were literally constructed by actors cognizant of the fact that they would eventually be uncovered by future digging.

Shortly following the cessation of large-scale pit digging at Locus B, a massive amount of largely undifferentiated, whole *Viviparus* shell was deposited across the entire area encompassed by the DP2 pits. This mantle of shell (constituting Depositional Pattern 3 [DP3]) contains Tick Island Incised pottery, a style that contrasts dramatically with those that preceded it, and little else. It appears to have been laid down in a single depositional event in some areas, while in others it is broken up by thin lenses of crushed bivalve shell, perhaps indicating a multi-staged depositional process. In either case, the paucity of artifacts, vertebrate fauna, and crushed shell point to the intentional, rapid emplacement of shell. DP3 completely obscured any evidence of the underlying DP2 features, transforming the Locus B landscape from what must have been an unusually rough and pocked surface into a smooth and unremarkable one.

As noted above, the practice of "capping" places in clean shell at the end of their use lives as a symbol of renewal or transition was a common practice during the preceramic Mount Taylor period. DP3 may simply be an Orange period manifestation of this long-lived regional tradition. Alternatively, multiple lines of evidence, including Locus B's position back away from the spring run and its elaborate, yet buried "mounds" of shell, suggest that the ritualized practices associated with DP2 may have intentionally been kept hidden from view. It is possible then that during the Orange Period Locus B served as a secluded "back-region" (*sensu* Giddens 1984) where relatively socially restricted rites were conducted in conjunction with the larger-scale, more inclusive activities carried out at the nearby mound. This would help to explain the contrasts in pottery style observed between Locus B and the north ridge of the mound at 8LA1E. In this scenario, DP3 may actually have been a final step in efforts to conceal all material traces of DP2 pit digging. Regardless of its specific meaning, though, DP3 clearly marks yet another major transformation in the Late Archaic use of Locus B.

At some point subsequent to DP3, Locus B was once again occupied in a materially conspicuous manner—this time by people utilizing spiculate-tempered St. Johns pottery. This component has unfortunately been heavily disturbed by modern activities including historic plowing and gopher tortoise burrowing. Consequently, aside from confirming its existence at Locus B, excavations have revealed little about the nature of this area's St. Johns occupation or its historical relationship to underlying deposits.

Four seasons of excavations at Locus B have thus shown it to be a significant, and possibly unique, archaeological resource. The data gathered during these investigations are vital not only for illuminating the Late Archaic occupation of the Silver Glen Run complex but also for achieving a better understanding of the larger regional-scale historical processes and events that shaped this dynamic period of Florida's past. Ultimately, however, research at Locus B is an ongoing process and important questions remain unanswered. It is still not clear what the range of actual practices was that contributed to each of the depositional patterns discussed above. In addition, what were the events that triggered the seemingly rapid and sweeping transitions between these patterns of use? And finally, what was Locus B's actual role in the creation and perpetuation of larger scale social networks and historical transformations that characterize the Late Archaic in the surrounding region? The investigations outlined in this chapter provide a sound basis for delving deeper into these and other issues. Future research, which has already begun with additional test unit excavations in 2011 and my own dissertation-focused analyses, will be geared toward addressing these questions in an even more complete and meaningful manner.

CHAPTER 7
CONCLUSIONS AND RECOMMENDATIONS

Kenneth E. Sassaman, Asa R. Randall, and Zackary I. Gilmore

Four summers of fieldwork at Silver Glen Run has resulted in a fairly detailed account of archaeological sites spanning some 6000 years. Property of the Juniper Club fronting Silver Glen Run once contained some of the largest, most complex shell deposits in northeast Florida. Although mining operations in 1923 compromised much of this archaeological record, intact deposits exist beneath the extant ground surface, as well as in escarpments left after mining shell. Moreover, the landforms fronting Silver Glen Run include several landforms that contain stratified archaeological deposits unaffected by mining. One such location, known to us as 8LA1-West Locus B, contains a remarkable record of intensive activity dating from ca. 5700 to 3800 years ago. Another ridge nose, Locus C, houses the remains of a village site dating to the 14th century. Additional archaeological deposits are pervasive in this part of the Juniper Club property; indeed, the land fronting Silver Glen Run is essentially one continuous archaeological site, with components distributed differentially but linked together in a more-or-less continuous occupational history. The land today continues to have great significance for individuals who appreciate its deep record of human occupation. The St. Johns Archaeological Field School has benefited immensely from the stewardship of the land by the Juniper Club and the opportunity it has provided to bring the ancient history of this land to light.

In this concluding chapter we summarized briefly the results of four field sessions at 8LA1 and follow with some general observations and recommendations for further work at this site, as well as other portions of the Juniper Club property. This report has been restricted to field school efforts dating from 2007 to 2010. Field school was also conducted in 2011 and is planned for the upcoming summer of 2012. Thus, this report is but the first installment in a series of reports. Likewise, graduate students who have been drawing on field school investigations in their doctoral research will issue additional information in their respective dissertations. The first of these is expected to be completed in 2013 (Zackary Gilmore, on Locus B), followed by another in 2014 or slightly later (Elyse Anderson, on Locus C).

SUMMARY OF INVESTIGATIONS

Since the first field school along Silver Glen Run in 2007, a major focus has been on detecting the remnants of a massive U-shaped shell deposit reported at the mouth of the run in 1875 by Jeffries Wyman of Harvard's Peabody Museum. All above-ground shell from this once ~8-m-tall deposit was removed in 1923, leaving a relatively flat surface to the east of the club house. Field school investigations at what is known as 8LA1-East in 2007, 2008, and 2010 were only partially successful in documenting the below-ground footprint of the U-shaped deposit. Coring and test-unit excavation across much of the area revealed a great deal of subsurface disturbance, particularly along the shoreline of Silver Glen Run, the presumed location of the north ridge of the U-shaped deposit. Small islands at the mouth of the run believed to be intact remnants of the shell deposit proved to be redeposited fill, apparently emplaced to create fish habitat. Other major disturbances at the mouth of the run relate to the construction of a slip and loading ramp for the mining operation.

The south ridge of 8LA1-East was likewise severely reduced by mining, although augering and limited excavation in 2007 provided good evidence for its position and orientation. Subsurface deposits observed in the profiles of several test units suggested that shell along the south ridge was emplaced directly over the existing (natural) ground surface. Subsurface shell in some locations of the south ridge appears to have been placed over inorganic sands, the natural substrate of the landform. Throughout the area of the south ridge, shell-filled pits extended below the old surface, into the sands below. Ground Penetrating Radar (GPR) deployed in 2010 offered evidence for a circular or arcuate arrangement of such features. Circular villages of Orange age are not unexpected for the region, but we were frustrated that subsurface testing failed to reveal domestic features expected of a village occupation (e.g., heaths, house floors, post holes, etc.). It remains possible that the entirety of 8LA1-East was devoted to ritual activities that simply did not involve the sorts of domestic features and refuse we expect from intensive dwelling. Irrespective of the actual function of the south ridge, the combined efforts of subsurface testing confirms that it was added after the formation of the north ridge and that this activity resulted in a concentration of Orange Plain pottery in the former area and Orange Incised pottery in the latter area. We suspect that people of multiple cultural traditions were involved in the construction and use of the U-shaped deposit, some perhaps with roots on the coast, where circular or arcuate settlements were common during the Orange period.

Investigations to the west of 8LA1 began in 2007 with reconnaissance survey. This area contains the remnants of a 200-m-long shell ridge that was mined, along with several sites with well-stratified midden deposits of varying age and composition, all in reasonably good shape. Systematic shovel testing along property fronting Silver Glen Run shows that subsurface archaeological deposits are distributed widely across the 11.6-ha survey tract. Some 80 percent of the 238 shovel test pits (STPs) excavated in the tract yielded pre-Columbian artifacts and/or anthropogenic shell deposits, the latter observed in 133 STPs. Shell density varied markedly, with dense subsurface shell coinciding with the footprint of the mined Mount Taylor shell ridge designated Locus A, but occurring also across the terrace slopes of Loci B and C and in their respective shell domes to the south, forming the apex of adjacent ridge noses. Several areas devoid of shell were also encountered. Most noteworthy is a small shell void at the apex of Locus C, to the far west of the survey tract. Ongoing work in this location is providing evidence for a St. Johns II-period village with a presumed central plaza, apparently kept clean of shell.

Subsurface pre-Columbian artifacts, like shell, are distributed widely across the survey tract, revealing spatial patterning indicative of distinct archaeological components. Pottery sherds are generally absent in Locus A, the location of the Mount Taylor shell ridge. The oldest pottery, that of the Orange series, is concentrated in Loci B and C, largely in the shell nodes of each locus, but also in the downslope portion of Locus C. St. Johns pottery is likewise distributed across Loci B and C, with especially dense occurrences in the downslope aspects of both loci. Check-stamped St. Johns pottery is concentrated in Locus C and especially in the shell-free ridge nose to the west of Locus C. In sum, reconnaissance survey of 8LA1-West shows that the entire expanse of land fronting the spring run contains intact subsurface deposits. Variation in the composition and density of subsurface shell and artifacts enables us to subdivide 8LA1-West into three loci (A, B, and C), each the subject of secondary testing, and Locus B the target of block excavation.

Shell-mining escarpments of the ridge at Locus A encase up to 3 m of stratified deposits. Six 2 x 2-m test units excavated in 2007 and 2008 were distributed across three widely-spaced locations of the ridge to reveal a consistent sequence of basal midden, accretional shell and sand, house mounds and associated midden accumulation, and possibly a final cap of sand. Seven AMS assays on charcoal from various layers of the ridge indicate that all deposition took place over a three-to-five-century period of the Mount Taylor phase, ca. 6300-5750 cal BP. Communities appear to have resided on this ridge as it accumulated, eventually constructing house mounds and imposing a formal spatial order to the placement of sand, shell, and the outputs of daily living. A major finding at Locus A is the use of sand as a medium of mounding. During this time frame, sand was used in conjunction with shell for purposes that were clearly mortuary (Aten 1999). Evidently, the emplacement of sand at Locus A did not involve human interments (the two subadult humans uncovered and then reburied at the east end of the ridge are an exception, and are not typical of Mount Taylor mound burials involving the emplacement of sand [Aten 1999; Endonino 2010]). The use of sand at Locus A may have been simply practical, for instance, in the construction of small houses mounds, but if so, it was pervasive, because sand strata up to 40 cm thick were observed in all profiles exposed to date. The volume of sand emplaced on the ridge is estimated to be a minimum of 2000 m^3. One potential source for the sand is the depression 50 m to the south of the ridge, a presumed sinkhole. At ca. 2500 m^3, the displaced volume of the depression is comparable to the minimal amount of sand deposited on the ridge. That the depression is indeed a sinkhole is speculative and awaits investigation.

The most intensive excavations of the field school have been conducted at Locus B, a relatively small, but complex shell-bearing site to the west of Locus A. Topographic mapping, auger testing, and a total of 45 m^2 of test unit excavations were conducted between 2007 and 2010, the last three years under the direction of Zackary Gilmore. After the first year of testing, we assumed the site to be an Orange-period habitation, but as the project continued in successive years, we came to understand it as a place whose function and meaning changed repeatedly over nearly a millennium spanning the late precermaic (Mount Taylor) and early ceramic (Orange) periods (ca. 5700-3800 cal BP). The earliest occupation resulted in stratified midden deposits similar to those at Locus A. With the introduction of pottery at ca. 4600 cal BP came a flurry of food processing activity involving massive pits, lots of them. While the pits in some cases were evidently shellfish steaming facilities, others have fill and other attributes that evoke a sense of ritual practice. After about five to six centuries, pit digging and infilling ceased and the site was capped with a thick mantle of shell. Contained in the shell cap are Orange-period sherds of the Tick Island variety, a unique regional variant appearing at about

4000 years ago. Coincident with these developments is the construction and use of the large U-shaped shell deposit at 8LA1-East.

In the concluding section of the chapter on Locus B (Chapter 6), Gilmore puts the results of Locus B into regional perspective. Much of the archaeological record of Locus B has no parallel in the documented literature, but some of its elements gain significance in the context of happenings elsewhere, notably on the coast. The argument need not be repeated here, but we note that Gilmore's ongoing study of pottery from Locus A and 8LA1-East involves sourcing analyses that have good potential to identify the provenance of clays used to make pots, and with that, the geographic origins of communities participating in large-scale gatherings, such as those imagined for 8LA1-East.

Finally, limited testing at Locus C in 2008 documented the presence of a St. Johns II period (ca. 600 years ago) midden at the top of the ridge nose, a presume village site. It is bounded to the north, toward the spring boil, by a 2-m thick, organic-rich midden spanning the past 300 years. Because testing of Locus C did not begin in earnest until the summer of 2011, the results are not included in this report, but will be included in a later installment. More intensive testing at Locus C is scheduled for 2012 and perhaps beyond, and will figure prominently in the dissertation project underway by Elyse Anderson.

DISCUSSION

The major goals of field school investigations in the first two years were to locate all archaeological resources in the Juniper Club property fronting Silver Glen Run and to begin to assess the age and composition of each component through controlled stratigraphic testing. In 2009 a limited crew of experienced excavators, including field school supervisors, focused efforts on more detailed testing of Locus B in support of dissertation research of Zackary Gilmore. As this work continued in 2010 we ramped up efforts to document the subsurface remains of the south ridge at 8LA1-East, deploying for the first time Ground Penetrating Radar (GPR). The combined efforts through 2010 amount to 238 shovel tests across 8LA1-West, 119 m^2 of excavation in four areas of 8LA1, about 1200 m^2 of GPR survey in a portion of the south ridge at 8LA1-East, and scores of cores and augers in a variety of contexts. As field work progressed, research questions evolved to encompass more than simply finding, characterizing, and dating archaeological remains. However, the basic goal of characterizing subsurface deposits at 8LA1 remains an ongoing project. The site is a large, complex amalgam of many distinct components, some stratified in vertical sequences, others distributed differentially across varied landforms paralleling the spring run. Above all, 8LA1 is an anthropogenic landscape, whose surface contours and subsurface layers are the product of human activity, much of it involving the deliberate emplacement of shell, sand, and other materials.

To date, 28 age estimates have been obtained on charcoal or soot samples from a wide variety of contexts at 8LA1. Figure 7-1 shows all age estimates as two-sigma calibrated date ranges, ordered by time from oldest (left) to youngest (right) and divided

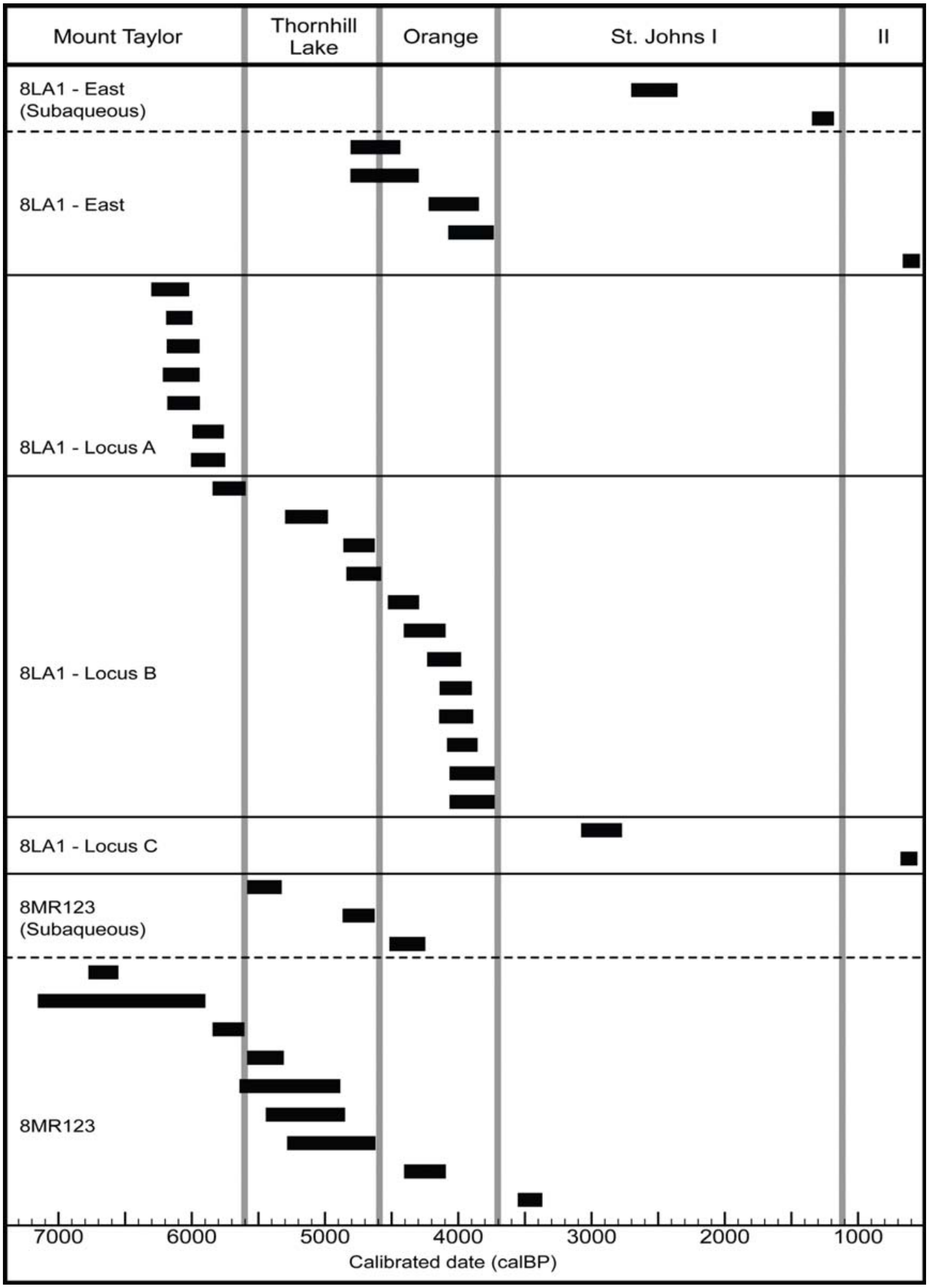


Figure 7-1. Two-sigma age estimate ranges on AMS assays from carbon samples from sites 8LA1 and 8MR123, subdivided into components and showing culture-historical divisions of regional chronology.

vertically from west (bottom) to east (top) along the run. Included at the bottom are age estimates obtained for 8MR123, the site surrounding the spring pool of Silver Glen on property of the U.S. Forest Service. Investigations at 8MR123 led by Asa Randall in 2010 incorporated field school students in the reconnaissance stage of fieldwork. Figure 7-1 is taken from Randall's report to the Forest Service (Randall et al. 2011).

As seen in Figure 7-1, human activity in the greater Silver Glen Run locality was more-or-less continuous from about 7000 to 3700 years ago. We know from shovel tests results and surface collections that occupation of the locality stretches back well before this time, evidently as much as 10,000 years based on the occasional occurrence of Early Archaic bifaces and unifaces, as well as heavily patinated flakes. However, archaeological deposits predating 7000 years ago have not presented themselves in any of our excavations to date. Apparently, shellfish were not collected and deposited in any significant fashion until this time and without the addition of shell to archaeological matrix, the residues of human activity are far less conspicuous and less well preserved.

The intensive and widespread practice of collecting shellfish and depositing their shells in mounds, middens, and pits after 7000 BP resulted a dramatic and highly visible archaeological record. As we have seen, much of this remains encased deep under the ground, particularly the output of infilling large pits at Locus B and Locus C. After about 3700 BP intensive shellfish collecting and shell depositing appears to have waned. This is more-or-less the end of the Orange period and the beginning of the St. Johns period. Sherds of this later period are common at many locations along the spring run, as they are throughout northeast Florida. That we have yet to encounter intact deposits of the St. Johns I period (ca. 3700-1100 cal B.P.) is perhaps not too surprising considering the tops of shell deposits have been truncated by mining, and any occupation of surfaces that have been plowed or otherwise altered in the modern era would have displaced St. Johns materials from near-surface contexts. The one deeply buried context for a St. Johns I component came from the downslope midden of Locus C. Two other AMS assays for deposits of this time period came from subaqeuous contexts at 8MR123, as well as an additional terrestrial context at that site, in this case from an "upland" landform away from the spring pool. As work progresses at 8LA1 we are likely to encounter better contexts for St. Johns I deposits, closing the apparent gap in the radiocarbon record between Orange and St. Johns II.

Well preserved archaeological deposits dating to the St. Johns II period are encased in the portion of 8LA1-East known as Locus C (technically, this portion of the site extends into Marion County and is recorded in the Florida Master Site Files as 8MR3601). As mentioned repeatedly in this report, concentrated work on this location began in only 2011, and we have plans continue that project in 2012 and perhaps beyond. What information we have to this point suggests that Locus C was a circular or semi-circular village with a small central plaza and a massive downslope midden that capped earlier deposits. We suspect that the sand mound to the southeast of Locus C dates to this village occupation (~13th century). One other AMS assay of this timeframe came from the apparent burned post in the south ridge of 8LA1-East. Placed in what appears to be a basin-shaped deposit of white sand, the post does not appear to be associated with a structure and its function remains uncertain. Given the frequency of St. Johns II check-stamped pottery in the water fronting 8LA1-East, as well as the spring pool of 8MR123, we are assured that occupation of the area during this interval was substantial, even beyond the village site at Locus C.

A few other observations of occupational chronology are noteworthy. Enough dates are currently available to suggest that the Mount Taylor occupation of Locus B was initiated at the same time Locus A was abandoned. As with the transformations in site use Gilmore outlines for Locus B, patterns of site use across the area seem to suggest that abandonments and relocations involved more than simply finding a better place to make a living. Indeed, the proximity of Loci A and B make sit hard to imagine that access to food and water resources was ever significantly different between the two, nor is there any reason to suspect that Locus A became uninhabitable due to flooding or any other catastrophic events. The changes appear instead to be cultural choices and may have had little to do with the material conditions or inhabitability of either location. We hasten to add, however, that the post-Mount Taylor use of Locus A remains elusive. We suggested in Chapter 5 that the cap on top of the shell ridge at Locus A was emplaced as the site was abandoned, but we simply do not have the data to substantiate this assertion.

Another coincidence may be seen in the transformation of the shell ridge at 8LA1-East into a U-shaped monument and the shell cap emplaced over the Orange-period pit assemblage at Locus B. This occurred at about 4000 years ago, when the south ridge was apparently constructed. This activity appears to have been conducted by people using Orange Plain pottery like that documented in pit features at Locus B. How the deposition of Tick Island Incised pottery in the shell cap at Locus B relates to construction of the south ridge is unknown, for we have yet to locate pottery of this type in the south ridge. Ongoing research on the provenance of these various wares by Gilmore has the potential to solve this puzzle.

A lingering frustration in field school research has been the lack of solid evidence for Orange-period habitation sites. Our assumption that Locus B was a village of this age has not been realized. We remain optimistic that good evidence for Orange-period habitation will one day be located at 8LA1-East, the locus of an enormous assemblage of Orange Incised pottery, as well as the Orange Plain noted earlier at the south ridge. To date, however, nearly all incidences of Orange Incised pottery have come from underwater and the redeposited islands at the mouth of Silver Glen Run. The upland landform of 8MR123 holds potential too for an Orange-period village, and the recent GPR survey of the bait field of Locus B at 8LA1-West offers suggestive evidence for a circular arrangement of subsurface features, another possible village. Solid evidence for places of dwelling during the Orange period are likely to be forthcoming, although we have seen enough of Orange-period at 8LA1 to know that what appears to be habitation is often specialized activity that may have had little to do with day-to-day living.

RECOMMENDATIONS

The first four years of investigations at Juniper Club property along Silver Glen Run have been enormously productive, as we have learned a great deal about an area that was not much more that a footnote in the accounts of 19th-century naturalists and antiquarians. And yet, as is the case in archaeology generally, our work has led to new questions as basic issues of chronology and site function are resolved. There is indeed much more that can be done. We are often asked by club members how long we plan on working on the property, and the answer has always been: "As long as you'll have us."

Short- and long-range goals for future fieldwork can be itemized. First, we have yet to open a large enough area of Locus A to reveal spatial relationships among different types of deposits (e.g., house mounds, primary deposition, secondary deposition, features, etc). Because most of the upper portion of the shell ridge at Locus A was removed by mining, the only option for block excavation is the floor of the mining pit. Upwards of one meter of stratified deposits are known to exist in certain locations of the mining pit, offering opportunities for examining more than simply the "basement" of the ridge. In some locations, GPR may prove useful, although the density of tree roots and near-surface concreted midden will no doubt obscure any patterning of subsurface cultural features. Nonetheless, the aim in opening a large horizontal area, or multiple areas of Locus A is to collect direct evidence for the spatial arrangement of dwelling during the Mount Taylor phase, and with it paleoenvironmental data from secure feature contexts.

Second, large-scale testing at Locus C initiated in 2011 ought to continue until we have sufficient data to reconstruct the size and configuration of the presumed St. Johns II village overlooking the spring pool, including data on architecture, duration of occupation, and seasonal variations in activities. UF graduate student and field school teaching assistant Elyse Anderson is leading efforts to locate good contexts at Locus C for the differential use and deposition of animal remains. Going beyond the usual zooarchaeological questions about seasonality and ecology, Anderson is developing a strong case for religious beliefs (i.e., animism) that involved, among other things, ritualized treatment of animal bones. Locus C contains abundant pit features with good bone preservation, as well as a 1.5-m thick downslope midden chock full of animal bone, plant remains, pottery, and other materials. Ultimately, data on the differential treatment of animal bones in pits and middens will help to inform broader aspects of St. Johns ritual, such as the use of sand burial mounds and effigy vessels.

Third, it is time to break way from 8LA1 and begin to explore the greater archaeological record of the Juniper Club. At least two other shell mounds are known from the property, one at the mouth of Little Juniper Creek, and another to the west on a terrace overlooking wetlands paralleling Lake George. Neither of these mounds has been tested, and both appear to be fully intact. We are compelled for ethical reasons to leave these mounds alone, but basic information on chronology and function are needed to establish their significance in the broader context of regional archaeology. Again, remote sensing is recommended, in conjunction with limited subsurface testing. To start, however, we need to conduct reconnaissance using either augers or shovel tests to establish the depth and extent of each deposit.

The same terrace edge on which one of these mounds lies is in need of full-scale reconnaissance survey. We have traveled the dirt road paralleling the terrace edge with Resident Manager Gene Nelson, who pointed out several surficial shell deposits. It would appear that most, if not all such occurrences of shell are recent emplacements, usually to enhance the traction of steep grades along the road. However, not all such occurrences may be recent, and irrespective of that, we expect to find evidence for subsurface remains lacking shell, including one dating to the early Holocene, before shellfish were collected and deposited in mounds. We are compelled to survey this terrace edge whether or not it proves to contain intact subsurface deposits because sound knowledge of where sites are not to be found is just as important as its counterpart, and, equally important, field school students need experience in basic reconnaissance survey, which is what most will spend the majority of their time doing if they find employment in cultural resource management.

Long-range goals run the gamut from more reconnaissance survey to more intensive excavation. Regarding reconnaissance, there remains a need to expand survey of 8LA1-West beyond the southern boundary and into the adjoining "uplands." The dense lithic assemblages found in the uplands of 8MR123 (Randall et al. 2010) may have parallels south of 8LA1-West. There is also a need to test the wetlands in the interior of club property, as well as the southern boundary of the property along Juniper Run. As for additional excavation, we have unresolved questions about the subsurface composition of the south ridge at 8LA1-East and the bait field of Locus B. Likewise, the nature of saturated deposits along the south margin of the spring run, the shoreline of Lake George, and below the water table of Shell Point remains unknown. On the north side of the run, saturated deposits date predominantly to the Thornhill Lake and Orange periods (Randall et al. 2011). A likely parallel may be found in Lake George proper, as well as the basal aspects of the north ridge at 8LA1-East. We suspect, but have never investigated the likelihood that the massive north ridge recorded by Wyman in 1875 was constructed over an existing Mount Taylor shell ridge. Delving into these deeper deposits will likely require a draw down of the water table, something that is both economically and politically challenging, and thus not to be undertaken without good cause and without the full endorsement by those charged with stewardship of the land and its water.

The archaeological record bounded by property of the Juniper Club is truly spectacular. Much of it was compromised by land-use practices that today seem irresponsible but in their time were necessary and commonplace. Field school investigations show that much can be learned from sustained efforts to locate and characterize the remnants of deposits long ago mined for shell. Field school efforts have also succeeded in locating subsurface deposits along the spring run that were unaffected by mining operations and prove to be unprecedented in the extant literature of northeast Florida archaeology. The partnership between the Juniper Club and the University of Florida to bring this record to light in the hopes of better understanding the ancient past has been exceptionally fruitful and hopefully will continue for years to come.

REFERENCES CITED

Blitz, John
1993 Big Pots for Big Shots: Feasting and Storage in a Mississippian Community. *American Antiquity* 58:80-96.

Borremans, Nina T.
1990 *The Paleoindian Period*. Florida Historical Contexts.

Borremans, Nina T and Graig D. Shaak
1986 Preliminary Report on Investigations of Sponge Spicules in Florida "Chalky" Paste Pottery. In *Papers in Ceramic Analysis, Ceramic Notes No. 3*, edited by P. M. Rice, pp. 125-132. Occasional Publications of the Ceramic Technology Laboratory, Florida State Museum, Gainesville.

Bradley, Richard
1998 *The Significance of Monuments*. Routledge, London.

Brain, Jeffrey P. and Drexel A. Peterson
1971 Palmetto Tempered Pottery. *Southeastern Archaeological Conference Bulletin* 13:70-76.

Bullen, Ripley P.
1955 Stratigraphic Tests at Bluffton, Volusia County Florida. *The Florida Anthropologist* 8(1):1-16.

1972 The Orange Period of Peninsular Florida. In *Fiber-Tempered Pottery in Southeastern United States and Northern Colombia: Its Origins, Context, and Significance,* edited by Ripley P. Bullen and James B. Stoltman. Florida Anthropological Society Publications 6, Gainesville.

1975 *A Guide to the Identification of Florida Projectile Points*. Revised ed. Kendall Books, Gainesville.

Clark, John E.
2004 Surrounding the Sacred: Geometry and Design of Early Mound Groups as Meaning and Function. In *Signs of Power: The Rise of Cultural Complexity in the Southeast*, edited by J. L. Gibson and P. J. Carr, pp. 162-213. University of Alabama Press, Tuscaloosa.

Clausen, C. J.
1964 *The a-356 Site and the Florida Archaic.* Masters Thesis, University of Florida, Gainesville.

Clausen, C. J., A. D. Cohen, Cesare Emiliani, J. A. Holman and J. J. Stipp
1979 Little Salt Springs, Florida: A Unique Underwater Site. *Science* 203:609-614.

Clench, William J. and Ruth D. Turner
1956 Freshwater Mollusks of Alabama, Georgia and Florida. *Bulletin of the Florida State Museum, Biological Sciences* 1:108-111.

Cooke, C. Wythe
1939 *Scenery of Florida Interpreted by a Geologist*. Florida Geological Survey Bulletin no. 17, Tallahassee.

Cordell, Ann S.
2004 Paste Variability and Possible Manufacturing Origins of Late Archaic Fiber-Tempered Pottery from Selected Sites in Peninsular Florida. In *Early Pottery: Technology, Function, Style and Interaction in the Lower Southeast*, edited by Rebecca Saunders and Christopher T. Hays, pp. 63-104. University of Alabama Press, Tuscaloosa.

Cordell, Ann S. and Steven H. Koski
2003 Analysis of a Spiculate Clay from Lake Monroe, Volusia County, Florida. *The Florida Anthropologist* 56(2):113-124.

Daniel, I. Randolph and Michael Wisenbaker
1987 *Harney Flats: A Florida Paleo-Indian Site*. Baywood Publishing Company, Inc., Farmingdale, New York.

Daniel, I. Randolph, Michael Wisenbaker and George Ballo
1986 The Organization of a Suwannee Technology: The View from Harney Flats. *The Florida Anthropologist* 39:24-56.

Darby, Philip C., Robert E. Bennetts, Steven J. Miller and H. Franklin Percival
2002 Movements of Florida Apple Snails in Relation to Water Levels and Drying Events. *Wetlands* 22:489-498.

Doran, Glen H.
2002a Introduction to Wet Sites and Windover (8BR246) Investigations. In *Windover: Multidisciplinary Investigations of an Early Archaic Florida Cemetery*, edited by Glen H. Doran, pp. 1-38. University Press of Florida, Gainesville.

2002b *Windover: Multidisciplinary Investigations of an Early Archaic Florida Cemetery*. University of Florida Press, Gainesville.

Dunbar, James S., Michael K. Faught and David S. Webb
1988 Page/Ladson (8je591): An Underwater Paleo-Indian Site in Northwestern Florida. *The Florida Anthropologist* 41:442-452.

Dunbar, James S. and Ben Waller
1983 A Distribution Analysis of the Clovis/Suwannee Paleo-Indian Sites of Florida: A Geographic Approach. *The Florida Anthropologist* 36:18-30.

Dunbar, James S. and S. David Webb
1996 Bone and Ivory Tools from Submerged Paleoindian Sites in Florida. In *The Paleoindian and Early Archaic Southeast*, edited by David G. Anderson and Kenneth E. Sassaman, pp. 331-. University of Alabama Press, Tuscaloosa.

Endonino, Jon C.
2003 Pre-Ceramic Archaic Burial Mounds Along the St. Johns River, Florida. Paper presented at the 59th Annual Southeastern Archaeological Conference, Charlotte, NC.

2007 A Reevaluation of the Gainesville, Ocala, and Lake Panasoffkee Quarry Clusters. *The Florida Anthropologist* 60:77-96.

2008 The Thornhill Lake Archaeological Research Project: 2005-2008. *The Florida Anthropologist* 61:149-165.

2010 *Thornhill Lake: Hunter-Gatherers, Monuments, and Memory.* Ph.D. Dissertation, Department of Anthropology, University of Florida, Gainesville.

Faught, Michael K.
2004 The Underwater Archaeology of Paleolandscapes, Apalachee Bay, Florida. *American Antiquity* 69:275-289.

Ford, James A.
1969 *A Comparison of Formative Cultures in the Americas*. Smithsonian Contributions to Anthropology 11. Smithsonian Institution, Washington, D.C.

Gibson, Jon L.
2000 *The Ancient Mounds of Poverty Point: Place of Rings*. University Press of Florida, Gainesville.

Giddens, Anthony
1984 *The Constitution of Society: Outline of the Theory of Structuration*. University of California Press, Berkeley.

Gilmore, Zackary I.
2009 Orange Pottery Variability and Intrasite Spatial Organization at Silver Glen Run, Lake and Marion Counties, Florida. Manuscript on file at the Laboratory of Southeastern Archaeology, University of Florida, Gainesville.

2010 Shell-ving the Midden-Mound Dichotomy: A Diverse History of Archaic Period Shell Deposition Practices at Locus B, Silver Glen Run (8LA1), Florida. Paper presented at the 67th Annual Meeting of the Southeastern Archaeological Conference, Lexington, KY.

Goggin, John M.
1952 *Space and Time Perspectives in Northern St. Johns Archaeology, Florida*. University Press of Florida, Gainesville.

Gosselain, Olivier P.
1998 Social and Technical Identity in a Clay Crystal Ball. In *The Archaeology of Social Boundaries*, edited by M. T. Stark, pp. 79-106. Smithsonian Institution Press, Washington.

Griffin, James B.
1945 The Significance of Fiber-Tempered Pottery of the St. Johns Area in Florida. *Journal of the Washington Academy of Sciences* 35(7):218-223.

Hayden, Brian
1995 The Emergence of Prestige Technologies and Pottery. In *The Emergence of Pottery: Technology and Innovation in Ancient Societies*, edited by W. K. Barnett and J. W. Hoopes, pp. 257-265. Smithsonian Institution Press, Washington.

Hegmon, Michelle
1992 Archaeological Research on Style. *Annual Review of Anthropology* 21:517-536..

Janus Research
1995 *Archaeological Investigations at the Summer Haven Site (8SJ46), an Orange Period and St. Johns Period Midden Site in Southeastern St. Johns County, Florida*. Janus Research, St. Petersburg, Florida.

Jenks, Clifford Joseph
2006 Rethinking Culture History in Florida: An Analysis of Ceramics from the Harris Creek Site (8VO24) on Tick Island in Volusia County, Florida, Unpublished M.A. thesis, Department of Anthropology, University of Florida, Gainesville.

Johnson, Katherine Burger
1994 Juniper, That's Me! The History of the Juniper Club: 1090-1993. Privately published, The Juniper Club, Louisville, KY.

Johnson, Robert E.
2005 *Phase III Archaeological Data Recovery at the Fort Florida Midden Site (8VO48), at Traderscove's Riverside at Debary Development, Volusia County, Florida*. Report Submitted to Traderscove Corp. by Florida Archeological Services, Inc. Jacksonville, Florida, Jacksonville, Florida.

Le Baron, J. Francis
1884 Prehistoric Remains in Florida. In *Annual Report of the Smithsonian Institution*, pp. 771-790. Government Printing Office, Washington, D. C.

Marquardt, William H.
2010 Shell Mounds in the Southeast: Middens, Monuments, Temple Mounds, Rings, or Works? *American Antiquity* 75(3):551-570.

Marrinan, Rochelle A., H. Stephen Hale and William M. Stanton
1990 *Test Excavations at Silver Glen Springs, Florida (8MR123)*. Miscellaneous Report Series Number 2. Department of Anthropology, Florida State University, Tallahassee.

McGee, Ray M. and Ryan J. Wheeler
1994 Stratigraphic Excavations at Groves' Orange Midden, Lake Monroe, Volusia County, Florida: Methodology and Results. *The Florida Anthropologist* 47:333-349.

Milanich, Jerald T.
1994 *Archaeology of Precolumbian Florida*. University Press of Florida, Gainesville.

Milanich, Jerald T. and Charles H. Fairbanks
1980 *Florida Archaeology*. Academic Press, New York.

Miller, James A.
1997 Hydrogeology of Florida. In *The Geology of Florida*, edited by Anthony F. Randazzo and Douglas S. Jones, pp. 69-88. University of Florida Press, Gainesville.

Miller, James J.
1998 *An Environmental History of Northeast Florida*. University Press of Florida, Gainesville.

Mills, Barbara J.
1989 Ceramics and the Social Contexts of Food Consumption in the Northern Southwest. In *Pottery and Technology: Ideas and Approaches*, edited by G. Bronitsky, pp. 99-114. Westview Press.

2007 Performing the Feast: Visual Display and Suprahousehold Commensalism in the Puebloan Southwest. *American Antiquity* 72:210-239.

Moore, Clarence B.
1894 Certain Sand Mounds of the St. John's River, Florida. Part II. *Journal of the Academy of Natural Sciences of Philadelphia* 10:129-246.

1999 *The East Florida Expeditions of Clarence Bloomfield Moore*. Classics in Southeastern Archaeology. University of Alabama Press, Tuscaloosa.

Neill, Wilfred T.
1964 Trilisa Pond, an Early Site in Marion County, Florida. *The Florida Anthropologist* 17.

Neill, Wilfred T., H. James Gut and Pierce Brodkorb
1956 Animal Remains from Four Preceramic Sites in Florida. *American Antiquity* 21:383-395.

Newsom, Lee A.
1987 Analysis of Botanical Remains from Hontoon Island (8VO202), Florida: 1980-1985 Excavations. *The Florida Anthropologist* 40:47-84.

1994 Archaeobotanical Data from Groves' Orange Midden (8VO2601), Volusia County, Florida. *The Florida Anthropologist* 47:404-417.

2002 The Paleoethnobotany of the Archaic Mortuary Pond. In *Windover: Multidisciplinary Investigations of an Early Archaic Florida Cemetery*, edited by Glen H. Doran, pp. 191-210. University Press of Florida, Gainesville.

Norman, Robert
2010 *Images of America: Ocala National Forest*. Arcadia Publishing, Charleston.

O'Donoughue, Jason M.
2011 Environmental and Archaeological Contexts. In *Archaeological Investigations at Salt Springs (8MR2322), Marion County, Florida*, edited by J. M. O'Donoughue, K. E. Sassaman, M. E. Blessing, J. B. Talcott and J. C. Byrd. Technical Report 11. Laboratory of Southeastern Archaeology, Department of Anthropology, University of Florida, Gainesville.

O'Donoughue, Jason M., Kenneth E. Sassaman, Meggan E. Blessing, Johanna B. Talcott and Julie Byrd
2011 *Archaeological Investigations at Salt Springs (8MR2322), Marion County, Florida*. Technical Report 11. Laboratory of Southeastern Archaeology, Department of Anthropology, the University of Florida, Gainesville.

Piatek, Bruce John
1994 The Tomoka Mound Complex in Northeast Florida. *Southeastern Archaeology* 13:109-118.

Pikirayi, Innocent
2007 Ceramics and Group Identities: Towards a Social Archaeology in Southern African Iron Age Ceramic Studies. *Journal of Social Archaeology* 7(3):286-301.

Potter, Alden L.
1935 The Remains at Silver Glenn Springs. In *Some Further Papers on Aboriginal Man in the Neighborhood of the Ocala National Forest*, edited by A. E. Abshire, Alden L. Potter, Allen R. Taylor, Clyde H. Neil, Walter H. Anderson, John I. Rutledge and Stevenson B. Johnson, pp. 13-14. Civilian Conservation Corps, Company 1420, Ocala Camp, Florida - F5.

Purdy, Barbara A.
1975 The Senator Edwards Chipped Stone Workshop Site (8-Mr-122), Marion County, Florida: A Preliminary Report of Investigations. *The Florida Anthropologist* 28:178-189.

Quitmyer, Irvy R.
2001 Zooarchaeological Analyses. In *Phase III Mitigative Excavations at Lake Monroe Outlet Midden (8VO53), Volusia County, Florida*, pp. 1-25. Report Submitted to U.S. Department of Transportation Federal Highway Administration and Florida Department of Transportation District Five by Archaeological Consultants, Inc. and Janus Research.

Randall, Asa R.
2007 *St. Johns Archaeological Field School 2005: Hontoon Island State Park*. Technical Report 8. Laboratory of Southeastern Archaeology, Department of Anthropology, University of Florida, Gainesville.

2010 *Remapping Histories: Archaic Period Community Construction Along the St. Johns River, Florida.* Ph.D. Dissertation, Department of Anthropology, University of Florida, Gainesville.

Randall, Asa R., Meggan E. Blessing and Jon C. Endonino
2011 *Cultural Resource Assessment Surey of Silver Glen Springs Recreational Area in the Ocala National Forest, Florida*. Technical Report 13. Laboratory of Southeastern Archaeology, Department of Anthropology, University of Florida, Gainesville.

Randall, Asa R. and Kenneth E. Sassaman
2005 *St. Johns Archaeological Field School 2003-2004: Hontoon Island State Park*. Technical Report 6. Laboratory of Southeastern Archaeology, Department of Anthropology, University of Florida, Gainesville.

Randazzo, Anthony F. and Douglas S. Jones (editors)
1997 *The Geology of Florida*. University Press of Florida, Gainesville.

Rolland, Vicki L. and Paulette Bond
2003 The Search for Spiculate Clays near Aboriginal Sites in the Lower St. Johns River Region, Florida. *The Florida Anthropologist* 56(2):91-111.

Russo, Michael

1990a *The Archaic Period*. Florida Historical Contexts.

1990b *East and Central Florida, 3200 B.P.-A.D. 1565*. Florida Historical Contexts.

1991 Archaic Sedentism on the Florida Coast: A Case Study from Horr's Island. Unpublished Ph.D. dissertation, Department of Anthropology, University of Florida, Gainesville.

1994 Why We Don't Believe in Archaic Ceremonial Mounds and Why We Should: The Case from Florida. *Southeastern Archaeology* 13:93-109.

1996 Southeastern Mid-Holocene Coastal Settlements. In *The Archaeology of the Mid-Holocene Southeast*, edited by Kenneth E. Sassaman and David G. Anderson, pp. 177-199. University Press of Florida, Gainesville.

2004 Measuring Shell Rings for Social Inequality. In *Signs of Power: The Rise of Cultural Complexity in the Southeast*, edited by Jon L. Gibson and Philip J Carr, pp. 26-70. The University of Alabama Press, Tuscaloosa.

Russo, Michael, Ann S. Cordell and Donna Ruhl

1993 *The Timucuan Ecological and Historic Preserve, Phase III Final Report*. SEAC Acccession Number: 899. Florida Museum of Natural History, Gainesville.

Russo, Michael and Gregory Heide

2001 Shell Rings of the Southeast US. *Antiquity* 75:491-492.

2002 The Joseph Reed Shell Ring. *The Florida Anthropologist* 55:67-87.

Russo, Michael, Gregory Heide and Vicki L. Rolland

2002 The Guana Shell Ring. Report Submitted to The Florida Department of State, Division of Historical Resources, Historic Preservation Grant No. F0126.

Russo, Michael, Barbara Purdy, Lee A. Newsom and Ray M. McGee

1992 A Reinterpretation of Late Archaic Adaptations in Central-East Florida: Grove's Orange Midden (8VO2601). *Southeastern Archaeology* 11:95-108.

Sassaman, Kenneth E.

2003a New AMS Dates on Orange Fiber-Tempered Pottery from the Middle St. Johns Valley and Their Implications for Culture History in Northeast Florida. *The Florida Anthropologist* 56:5-14.

2003b *St. Johns Archaeological Field School 2000-2001: Blue Spring and Hontoon Island State Parks*. Technical Report 4. Laboratory of Southeastern

Archaeology, Department of Anthropology, University of Florida, Gainesville.

2003c *Crescent Lake Archaeological Survey 2002: Putnam and Flagler Counties, Florida*. Technical Report 5. Laboratory of Southeastern Archaeology, Department of Anthropology, the University of Florida, Gainesville.

2004 Common Origins and Divergent Histories in the Early Pottery Traditions of the American Southeast. In *Early Pottery: Technology, Function, Style and Interaction in the Lower Southeast*, edited by Rebecca Saunders and Christopher T. Hays, pp. 23-39. The University of Alabama Press, Tuscaloosa.

2005 Hontoon Dead Creek Mound (8VO214). In *St. Johns Archaeological Field School 2003-2004: Hontoon Island State Park*, edited by Asa R. Randall and Kenneth E. Sassaman, pp. 83-106. Technical Report 6. Laboratory of Southeastern Archaeology, Department of Anthropology, University of Florida, Gainesville.

2010 *The Eastern Archaic, Historicized*. AltaMira Press, Lanham, MD.

2012 Drowning out the Past: How Humans Historicize Water as Water Historicizes Them. In *Big Histories, Human Lives: Tackling Problems of Scale in Archaeology*, edited by J. E. Robb and T. R. Pauketat. SAR Press, Santa Fe (in press).

Sassaman, Kenneth E. and Michael J. Heckenberger
2004 Crossing the Symbolic Rubicon in the Southeast. In *Archaeology of the Mid-Holocene Southeast*, edited by K. E. Sassaman and D. G. Anderson, pp. 214-233. University Press of Florida, Gainesville.

Sassaman, Kenneth E., Jason M. O'Donoughue and Julie Byrd
2011 Material Culture. In *Archaeological Investigations at Salt Springs (8MR2322), Marion County, Florida*, edited by Jason M. O'Donoughue, Kenneth E. Sassaman, Meggan E. Blessing, Johanna B. Talcott and Julie Byrd, pp. 49-64. Technical Report 11, Laboratory of Southeastern Archaeology, Department of Anthropology, the University of Florida, Gainesville.

Sassaman, Kenneth E. and Asa R. Randall
2012 Shell Mounds of the Middle St. Johns Basin, Northeast Florida. In *Early New World Monumentality*, edited by R. L. Burger and R. M. Rosenwig, pp. 53-77. University Press of Florida, Gainesville.

Sassaman, Kenneth E., Asa R. Randall, Meggan E. Blessing and Peter R. Hallman
2005 Hontoon Island North (8VO202). In *St. Johns Archaeological Field School 2003-2004: Hontoon Island State Park*, edited by Asa R. Randall and Kenneth

E. Sassaman, pp. 27-82. Technical Report 6. Laboratory of Southeastern Archaeology, Department of Anthropology, University of Florida, Gainesville.

Sassaman, Kenneth E., J. Christian Russell and John Endonino
2000 *St. Johns Archaeological Project Phase I: A GIS Approach to Regional Preservation Planning in Northeast Florida*. Technical Report 3, Laboratory of Southeastern Archeology, Department of Anthropology, University of Florida, Gainesville.

Saunders, Joe W., Rolfe D. Mandel, Roger T. Saucier, E. Thurman Allen, C. T. Hallmark, Jay K. Johnson, Edwin H. Jackson, Charles M. Allen, Gary L. Stringer, Douglas S. Frink, James K. Feathers, Stephen Williams, Kristen J. Gremillion, Malcolm F. Vidrine and Reca Jones
1997 A Mound Complex in Louisiana at 5400-5000 Years Before the Present. *Science* 277(5333):1796-1799.

Saunders, Rebecca
2004a Spatial Variation in Orange Culture Pottery: Interaction and Function. In *Early Pottery: Technology, Function, Style and Interaction in the Lower Southeast*, edited by Rebecca Saunders and Christopher T. Hays, pp. 40-62. University of Alabama Press, Tuscaloosa.

2004b The Stratigraphic Sequence at Rollins Shell Ring: Implications for Ring Function. *The Florida Anthropologist* 57(4):249-268.

Saunders, Rebecca and Michael Russo
2002 *The Fig Island Ring Complex (38CH42): Coastal Adaptation and the Question of Ring Function in the Late Archaic*. Grant 45-01-16441, South Carolina Department of Archives and History, Columbia.

Schmidt, Walter
1997 Geomorphology and Physiography of Florida. In *The Geology of Florida*, edited by Anthony F. Randazzo and Douglas S. Jones, pp. 1-12. University of Florida Press, Gainesville.

Schulderein, Joseph
1996 Geoarchaeology and the Mid-Holocene Landscape History of the Greater Southeast. In *Archaeology of the Mid-Holocene Southeast*, edited by Kenneth E. Sassaman and David G. Anderson, pp. 3-27. University of Florida Press, Gainesville.

Scudder, Sylvia
2001 *Archaeopedological Analyses*. Phase Iii Mitigative Excavations at Lake Monroe Outlet Midden (8VO53), Volusia County, Florida. Report Submitted to U.S. Department of Transportation Federal Highway Administration and

Florida Department of Transportation District Five by Archaeological Consultants, Inc. and Janus Research.

Sears, William H.

1960 The Bluffton Burial Mound. *The Florida Anthropologist* 13:55-60.

1973 The Sacred and the Secular in Prehistoric Ceramics. In *Variation in Anthropology: Essays in Honor of John C. McGregor*, edited by D. Lathrap and J. Douglas, pp. 31-42. Illinois Archaeological Survey, Urbana, IL.

Shroder, Loyd E.

2002 *The Anthropology of Florida Points and Blades*. American Systems of the Southeast, Inc., West Columbia, SC.

Sigler-Eisenberg, Brenda, Ann S. Cordell, Richard Estabrook, Elizabeth Horvath, Lee A. Newsom and Michael Russo

1985 *Archaeological Site Types, Distribution, and Preservation within the Upper St. Johns River Basin, Florida*. Florida State Museum Miscellaneous Project and Report Series, Number 27. Department of Anthropology, Florida State Museum, University of Florida, Gainesville, Florida.

Simpkins, Daniel L. and Dorothy J. Allard

1986 Isolation and Identification of Spanish Moss Fiber from a Sample of Stallings and Orange Series Ceramics. *American Antiquity* 51:102-117.

Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture

2011 Official Soil Series Descriptions. Electronic document, http://soils.usda.gov/technical/classification/osd/index.html, accessed 01/15/2011.

Stanton, William M.

1995 *Archaic Subsistence in the Middle St. Johns River Valley: Silver Glen Springs and the Mt. Taylor Period.* Unpublished Masters Thesis, The Florida State University, Tallahassee.

Stark, Miriam T., Ronald L. Bishop and Elizabeth Miksa

2000 Ceramic Technology and Social Boundaries: Cultural Practices in Kalinga Clay Selection and Use. *Journal of Archaeological Method and Theory* 7:295-331.

Ste. Claire, Dana

1987 The Development of Thermal Alteration Technologies in Florida: Implications for the Study of Prehistoric Adaptations. *The Florida Anthropologist* 40:203-208.

1990 The Archaic in East Florida: Archaeological Evidence from Early Coastal Adaptations. *The Florida Anthropologist* 43:189-197.

Talcott, Johanna B.

2011 Paleoethnobotanical Assemblage. In *Archaeological Investigations at Salt Springs (8MR2322), Marion County, Florida*, edited by Jason M. O'Donoughue, Kenneth E. Sassaman, Meggan E. Blessing, Johanna B. Talcott and Julie Byrd, pp. 87-104. Technical Report 11, Laboratory of Southeastern Archaeology, Department of Anthropology, the University of Florida, Gainesville.

Taylor, Allen R.

1935 Shell Tumuli at Silver Glenn Springs. In *Some Further Papers on Aboriginal Man in the Neighborhood of the Ocala National Forest*, edited by A. E. Abshire, Alden L. Potter, Allen R. Taylor, Clyde H. Neil, Walter H. Anderson, John I. Rutledge and Stevenson B. Johnson, pp. 14. Civilian Conservation Corps, Company 1420, Ocala Camp, Florida - F5.

Thulman, David K.

2009 Freshwater Availability as the Constraining Factor in the Middle Paleoindian Occupation of North-Central Florida. *Geoarchaeology: An International Journal* 24:243-276.

United States Department of Agriculture

1975 *Soil Survey Report Maps and Interpretations: Lake County Area, Florida*. Deptartment of Agriculture Soil Conservation Service, Washington.

1979 *Soil Survey of Marion County Area, Florida*. Deptartment of Agriculture Soil Conservation Service, Washington.

1980 *Soil Survey of Volusia County, Florida*. Deptartment of Agriculture Soil Conservation Service, Washington.

Watts, William A., Eric C. Grimm and T. C. Hussey

1996 Mid-Holocene Forest History of Florida and the Coastal Plain of Georgia and South Carolina. In *Archaeology of the Mid-Holocene Southeast*, edited by Kenneth E. Sassaman and David G. Anderson, pp. 28-38. University of Florida Press, Gainesville.

Wheeler, Ryan J. and Ray M. McGee

1994 Technology of Mount Taylor Period Occupation, Groves' Orange Midden (8VO2601), Volusia County, Florida. *The Florida Anthropologist* 47:350-379.

Wheeler, Ryan J., Christine L. Newman and Ray M. McGee

2000 A New Look at the Mount Taylor and Bluffton Sites, Volusia County, with an Outline of the Mount Taylor Culture. *The Florida Anthropologist* 53:133-157.

White, William Arthur
1970 *The Geomorphology of the Florida Peninsula*. Bureau of Geology Division of Interior Resources Florida, no. 51, Tallahassee.

Wiessner, Polly
1983 Style and Social Information in Kalahari San Projectile Points. *American Antiquity* 48(2):253-276.

Wing, Elizabeth S. and L. McKean
1987 Preliminary Study of the Animal Remains Excavated from the Hontoon Island Site. *The Florida Anthropologist* 40:40-46.

Wobst, H. Martin
1977 Stylistic Behavior and Information Exchange. In *For the Director: Research Essays in Honor of James B. Griffin*, edited by C. E. Cleland, pp. 317-342. Anthropological Papers, no. 61. Museum of Anthropology, University of Michigan, Ann Arbor.

Wyman, Jeffries
1872 Journal and Field Notes. Manuscript on file, Harvard Countway Medical Library. (HMS B54.1). Cambridge, MA.

1875 Fresh-Water Shell Mounds of the St. John's River, Florida. *Memoirs of the Peabody Academy of Science* 1 (4).

APPENDIX A:
CATALOG

CATALOG CODES

MATERIAL	MATTYPE	FORM	DESCRIPTION
BOTANICAL	CHARCOAL	C14	MATERIAL FOR C14 ANALYSIS
BOTANICAL	CHARCOAL	FRAG	UID CARBONIZED PLANT REMAINS
CONCRETION	UID	UID	UID CONCRETION
HISTORIC	METAL	**	(**) FORM OF METAL FRAGMENT
HISTORIC	METAL	FRAG	METAL FRAGMENT
HISTORIC	MOD	UID	MISC UNIDENTIFED HISTORIC/MODERN
LITHIC	MOD	BIFACE	BIFACIALLY WORKED STONE
LITHIC	MOD	FLAKE	FLAKE WITH MODIFIED MARGINS
LITHIC	MOD	HAFTEDBIFACE	BIFACE WITH MODIFICATION FOR HAFTING
LITHIC	MOD	HAMMERSTONE	
LITHIC	MOD	UNIFACE	
LITHIC	UNMOD	FLAKE	
LITHIC	MOD	SANDSTONE	MODIFIED SANDSTONE
MARINESHELL	MOD	FRAG	
MARINESHELL	MOD	WHOLE	
MARINESHELL	UNMOD	FRAG	
MISCROCK	UNMOD	LIMESTONE	
MISCROCK	UNMOD	PEBBLE	
POTTERY	OFTI	BODY	ORANGE INCISED
POTTERY	OFTI	CRUMB	ORANGE INCISED
POTTERY	OFTI	RIM	ORANGE INCISED
POTTERY	OFTP	BODY	ORANGE PLAIN
POTTERY	OFTP	CRUMB	ORANGE PLAIN
POTTERY	OFTP	RIM	ORANGE PLAIN
POTTERY	SJCS	BODY	ST. JOHNS CHECK STAMPED
POTTERY	SJCS	CRUMB	ST. JOHNS CHECK STAMPED
POTTERY	SJCS	RIM	ST. JOHNS CHECK STAMPED
POTTERY	SJP	BODY	ST. JOHNS PLAIN
POTTERY	SJP	CRUMB	ST. JOHNS PLAIN
POTTERY	SJP	RIM	ST. JOHNS PLAIN
POTTERY	SJIN	BODY	ST. JOHNS INCISED
POTTERY	SJIN	CRUMB	ST. JOHNS INCISED
POTTERY	SJIN	RIM	ST. JOHNS INCISED
POTTERY	STP	BODY	SAND TEMPERED PLAIN
POTTERY	STP	CRUMB	SAND TEMPERED PLAIN
POTTERY	STP	RIM	SAND TEMPERED PLAIN
POTTERY	STCS	BODY	SAND TEMPERED CHECK STAMPED
POTTERY	STCS	CRUMB	SAND TEMPERED CHECK STAMPED
POTTERY	STCS	RIM	SAND TEMPERED CHECK STAMPED
POTTERY	GTP	BODY	GRIT TEMPERED PLAIN
POTTERY	DCS	BODY	DEPTFORD CHECK STAMPED
BIVALVE	BIVALVE	WHOLE	FRESHWATER BIVALVE (>50%)
BIVALVE	BIVALVE	FRAG	FRESHWATER BIVALVE (<50%)
TERRESTRIALSNAIL	EUGLANDINA	UID	
VERTFAUNA	ANTLER	ANTLER	
VERTFAUNA	MOD	BONE	
VERTFAUNA	UNMOD	ANTLER	
VERTFAUNA	UNMOD	FRAG	
VERTFAUNA	UNMOD	SHARKTOOTH	
VERTFAUNA	UNMOD	CONCRETION	
FIRECLAY	UID	UID	
POTTERY	SJPNT	BODY	ST. JOHNS "PAINTED", PROBABLY DUNN'S CREEK RED
POTTERY	SJPNT	RIM	
POTTERY	SJPNT	CRUMB	
MISCROCK	MOD	STONEBEAD	
PALEOFECES	UNMOD	FRAG	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2007	1.01	TU	1	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.8	
2007	1.02	TU	1	A		LEVEL	0.25	POTTERY	SJP	CRUMB	4	1.1	
2007	1.03	TU	1	A		LEVEL	0.25	POTTERY	OFTP	CRUMB	2	1.5	
2007	1.04	TU	1	A		LEVEL	0.25	LITHIC	MOD	FLAKE	4	4.4	
2007	1.05	TU	1	A		LEVEL	0.25	MISCROCK	UNMOD	LIMESTONE	3	7.6	
2007	1.06	TU	1	A		LEVEL	0.25	TERR. SNAIL	EUGLANDINA	UID	2	0.5	
2007	1.07	TU	1	A		LEVEL	0.25	HISTORIC	PLASTIC	FRAG	3	0.4	
2007	1.08	TU	1	A		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	8	2.9	
2007	1.09	TU	1	A		LEVEL	0.25	HISTORIC	METAL	WIRE	1	0.5	
2007	2.01	TU	1	B	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.9	
2007	2.02	TU	1	B	A	LEVEL	0.25	MISCROCK	UNMOD	LIMESTONE	1	8.3	
2007	2.03	TU	1	B	A	LEVEL	0.25	HISTORIC	METAL	NAIL	3	15.4	
2007	2.04	TU	1	B	A	LEVEL	0.25	HISTORIC	LEAD	BULLET	2	0.9	.22 CAL
2007	2.05	TU	1	B	A	LEVEL	0.25	HISTORIC	PLASTIC	FRAG	1	0.0	
2007	2.06	TU	1	B	A	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	4	1.4	
2007	3.01	TU	1	B	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.7	
2007	3.02	TU	1	B	B	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.2	
2007	4.01	TU	1	C	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	5	2.4	
2007	4.02	TU	1	C	A	LEVEL	0.25	LITHIC	MOD	FLAKE	1	0.2	
2007	5.01	TU	1	C	B	LEVEL	0.25	POTTERY	OFTP	BODY	2	2.7	
2007	5.02	TU	1	C	B	LEVEL	0.25	POTTERY	OFTP	RIM	2	8.2	
2007	5.03	TU	1	C	B	LEVEL	0.25	POTTERY	OFTP	CRUMB	5	1.3	
2007	5.04	TU	1	C	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	10	5.9	
2007	5.05	TU	1	C	B	LEVEL	0.25	MISCROCK	UNMOD	PEBBLE	1	0.4	
2007	8.01	TU	1	C	B	LEVEL	0.25	POTTERY	OFTP	CRUMB	7	2.8	
2007	8.02	TU	1	C	B	LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.2	
2007	8.03	TU	1	C	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	21	4.4	
2007	8.04	TU	1	C	B	LEVEL	0.25	CONCRETION	UID	UID	4	15.7	ROOT CAST
2007	8.05	TU	1	C	B	LEVEL	0.25	MISCROCK	UNMOD	FRAG	2	0.9	
2007	9.01	TU	1	D	B	LEVEL	0.25	POTTERY	OFTP	CRUMB	9	2.9	
2007	9.02	TU	1	D	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	44	14.3	
2007	9.03	TU	1	D	B	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	1	0.1	
2007	10.01	TU	1	C-D	B	LEVEL	0.25	LITHIC	MOD	HAFTEDBIFACE	1	5.0	NEWNAN?
2007	12.01	TU	1	E	B	LEVEL	0.25	POTTERY	OFTP	CRUMB	7	2.7	
2007	12.02	TU	1	E	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	13	2.1	
2007	13.01	TU	1	E	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.1	
2007	14.01	TU	1	F	B	LEVEL	0.25	POTTERY	OFTP	CRUMB	4	0.6	
2007	14.02	TU	1	F	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	32	7.9	
2007	15.01	TU	1	F	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.5	
2007	16.01	TU	1	F	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	0.8	
2007	18.01	TU	1	F	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	5	0.4	
2007	19.01	TU	1	F	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.1	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2007	20.01	TU	1	F	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	7.7	
2007	21.01	TU	1	E	B	LEVEL	0.25	POTTERY	OFTP	CRUMB	9	4.4	
2007	21.02	TU	1	E	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	25	6.5	
2007	31.01	TU	1	G	A?	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	3	0.4	
2007	32.01	TU	1	G	B	LEVEL	0.25	POTTERY	OFTP	BODY	1	2.4	
2007	32.02	TU	1	G	B	LEVEL	0.25	POTTERY	OFTP	CRUMB	2	0.2	
2007	36.01	TU	3	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	13	3.7	
2007	36.02	TU	3	A		LEVEL	0.25	MISCROCK	UNMOD	LIMESTONE	1	0.3	
2007	36.03	TU	3	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	0.3	MODERN FISH BONE
2007	36.04	TU	3	A		LEVEL	0.25	HISTORIC	METAL	NAIL	1	3.7	
2007	38.01	TU	3	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	2.0	
2007	38.02	TU	3	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.2	MODERN FISH BONE
2007	38.03	TU	3	B		LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.1	
2007	39.01	TU	3	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	10	5.0	
2007	39.02	TU	3	C		LEVEL	0.25	POTTERY	OFTP	CRUMB	2	0.3	
2007	39.03	TU	3	C		LEVEL	0.25	MARINESHELL	MOD	FRAG	1	18.5	
2007	40.01	TU	3	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	11	2.6	
2007	40.02	TU	3	C		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.1	
2007	40.03	TU	3	C		LEVEL	0.25	MISCROCK	UNMOD	PEBBLE	1	0.1	
2007	41.01	TU	3	D		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	34	11.2	
2007	41.02	TU	3	D		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.8	
2007	43.01	TU	3	E	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.7	
2007	43.02	TU	3	E	A	LEVEL	0.25	MISCROCK	UNMOD	PEBBLE	1	0.7	
2007	44.01	TU	3	E	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	3	0.5	
2007	45.01	TU	3	E	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	7	2.2	
2007	45.02	TU	3	E	C	LEVEL	0.25	BOTANICAL	CHARCOAL	C14			
2007	46.01	TU	3	E	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	36	11.3	
2007	46.02	TU	3	E	C	LEVEL	0.25	VERTFAUNA	UNMOD	ANTLER	1	0.6	
2007	46.03	TU	3	E	C	LEVEL	0.25	POTTERY	OFTP	BODY	2	38.7	EMBEDDED IN CONCRETION
2007	46.04	TU	3	E	C	LEVEL	0.25	POTTERY	OFTP	BODY	1	2.2	CONCRTETION ON OUTSIDE
2007	46.05	TU	3	E	C	LEVEL	0.25	CONCRETION	UID	UID	3	0.6	ASH CONCRETIONS
2007	47.01	TU	3	E	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	32	4.7	
2007	47.02	TU	3	E	D	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	1.2	
2007	48.01	TU	3	E	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	9	0.9	
2007	49.01	TU	3	E	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	10	1.5	
2007	50.01	TU	3	F	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	3	1.3	
2007	51.01	TU	3	F	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	12	2.0	
2007	52.01	TU	3	F	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	26	4.9	
2007	52.02	TU	3	F	D	LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.3	
2007	52.03	TU	3	F	D	LEVEL	0.25	LITHIC	MOD	FLAKE	1	2.5	
2007	53.01	TU	3	F	C/D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	25	3.8	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2007	54.01	TU	3	F	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	19	2.6	
2007	56.01	TU	3	G	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	5	0.4	
2007	58.01	TU	3	G	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	11	2.2	
2007	59.01	TU	1	G	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.3	
2007	59.02	TU	1	G	D	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.7	
2007	61.01	TU	1	H	D	LEVEL	0.25	LITHIC	UNMOD	FLAKE	15	3.5	
2007	61.02	TU	1	H	D	LEVEL	0.25	MISCROCK	UNMOD	PEBBLE	1	0.2	
2007	62.01	TU	1	H	D	LEVEL	0.25	LITHIC	UNMOD	FLAKE	21	0.1	
2007	108.01	TU	5E	A	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	157	43.4	
2007	108.02	TU	5E	A	A	LEVEL	0.25	CONCRETION	BONE	UID	7	6.9	
2007	108.03	TU	5E	A	A	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	0.6	
2007	108.04	TU	5E	A	A	LEVEL	0.25	POTTERY	SJP	BODY	1	1.0	
2007	108.05	TU	5E	A	A	LEVEL	0.25	HISTORIC	METAL	FRAG	2	12.5	SCREW
2007	109.01	TU	5E	A	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	58	30.9	
2007	109.02	TU	5E	A	B	LEVEL	0.25	CONCRETION	BONE	UID	1	0.6	
2007	111.01	TU	5E	B	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	406	167.5	
2007	111.02	TU	5E	B	A	LEVEL	0.25	CONCRETION	BONE	UID	32	14.8	
2007	111.03	TU	5E	B	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.5	
2007	111.04	TU	5E	B	A	LEVEL	0.25	HISTORIC	METAL	NAIL	2	31.6	
2007	111.05	TU	5E	B	A	LEVEL	0.25	POTTERY	SJP	BODY	1	1.6	
2007	111.06	TU	5E	B	A	LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.4	
2007	112.01	TU	5E	B	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	91	33.9	
2007	113.01	TU	5E	C	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	419	157.5	
2007	113.02	TU	5E	C	A	LEVEL	0.25	CONCRETION	BONE	UID	16	14.0	
2007	113.03	TU	5E	C	A	LEVEL	0.25	CONCRETION	UID	UID	2	1.8	POSSIBLY ROOT
2007	114.01	TU	5E	C	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	280	103.0	
2007	114.02	TU	5E	C	C	LEVEL	0.25	CONCRETION	BONE	UID	20	7.9	
2007	116.01	TU	5E	D	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	272	116.2	
2007	116.02	TU	5E	D	A	LEVEL	0.25	VERTFAUNA	MOD	BONE	2	4.8	
2007	116.03	TU	5E	D	A	LEVEL	0.25	CONCRETION	BONE	UID	14	5.4	
2007	116.04	TU	5E	D	A	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	0.2	
2007	117.01	TU	5E	D	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	240	85.2	
2007	117.02	TU	5E	D	C	LEVEL	0.25	CONCRETION	BONE	UID	16	29.4	
2007	117.03	TU	5E	D	C	LEVEL	0.25	MISCROCK	UNMOD	PEBBLE	1	3.7	
2007	120.01	TU	5E	E	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	27	6.9	
2007	120.02	TU	5E	E	A	LEVEL	0.25	CONCRETION	BONE	UID	2	1.2	
2007	120.03	TU	5E	E	A	LEVEL	0.25	POTTERY	SJCS	BODY	1	3.9	
2007	121.01	TU	5E	E	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	213	120.9	TWO PIECES REFIT
2007	121.02	TU	5E	E	C	LEVEL	0.25	CONCRETION	BONE	UID	15	7.3	
2007	121.03	TU	5E	E	C	LEVEL	0.25	MISCROCK	UNMOD	PEBBLE	1	0.3	
2007	122.01	TU	5E	F	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	47	13.4	
2007	123.01	TU	5E	F	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	370	159.4	

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2007	123.02	TU	5E	F	C	LEVEL	0.25	CONCRETION	BONE	UID	31	22.4	
2007	123.03	TU	5E	F	C	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	2.7	
2007	123.04	TU	5E	F	C	LEVEL	0.25	VERTFAUNA	MOD	BONE	1	0.3	POLISHED
2007	123.05	TU	5E	F	C	LEVEL	0.25	MISCROCK	UNMOD	PEBBLE	1	0.3	
2007	123.06	TU	5E	F	C	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	1	0.1	
2007	124.01	TU	5E	F	C	LEVEL	0.25	BOTANICAL	CHARCOAL	C14			
2007	125.01	TU	5E	G	C	LEVEL	0.25	POTTERY	OFTP	BODY	2	4.6	
2007	125.01	TU	5E	H	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	189	107.2	
2007	125.02	TU	5E	G	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	383	160.0	
2007	125.02	TU	5E	H	C	LEVEL	0.25	CONCRETION	BONE	UID	13	9.4	
2007	125.03	TU	5E	G	C	LEVEL	0.25	CONCRETION	BONE	UID	21	35.7	
2007	125.03	TU	5E	H	C	LEVEL	0.25	MARINESHELL	MOD	FRAG	1	1.1	
2007	125.04	TU	5E	G	C	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	1.8	
2007	125.04	TU	5E	H	C	LEVEL	0.25	TERR. SNAIL	EUGLANDINA	UID	1	5.8	
2007	125.05	TU	5E	H	C	LEVEL	0.25	VERTFAUNA	MOD	BONE	1	3.0	
2007	128.01	TU	5E	H	E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	90	16.4	
2007	129.01	TU	5E	I	E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	185	45.8	
2007	129.02	TU	5E	I	E	LEVEL	0.25	CONCRETION	BONE	UID	3	1.1	
2007	130.01	TU	5E	J	E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	91	32.6	
2007	130.02	TU	5E	J	E	LEVEL	0.25	VERTFAUNA	MOD	BONE	3	10.2	TWO PIECES REFIT
2007	130.03	TU	5E	J	E	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	0.2	
2007	130.04	TU	5E	J	E	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.3	
2007	130.05	TU	5E	J	E	LEVEL	0.25	MISCROCK	UNMOD	FRAG	2	8.7	
2007	132.01	TU	5E	K	E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	163	34.8	
2007	132.02	TU	5E	K	E	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	1.5	
2007	132.03	TU	5E	K	E	LEVEL	0.25	CONCRETION	BONE	UID	1	0.2	
2007	132.04	TU	5E	K	E	LEVEL	0.25	HUMANBONE	UNMOD	TOOTH	1	1.1	HUMAN TOOTH
2007	132.05	TU	5E	K	E	LEVEL	0.25	CONCRETION	UID	UID	1	0.3	POSSIBLY OCHER
2007	135.01	TU	5E	L	E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	171	39.6	
2007	135.02	TU	5E	L	E	LEVEL	0.25	CONCRETION	UID	UID	1	0.7	POSSIBLY OCHER
2007	135.03	TU	5E	L	E	LEVEL	0.25	MARINESHELL	UNMOD	UID	2	36.9	MARINE GASTROPOD
2007	136.01	TU	5E	M	E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	68	16.2	
2007	211.01	TU	6S	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	429	121.9	
2007	211.02	TU	6S	A		LEVEL	0.25	VERTFAUNA	MOD	BONE	1	0.3	POSSIBLY MODIFIED
2007	211.03	TU	6S	A		LEVEL	0.25	CONCRETION	BONE	UID	39	187.4	
2007	211.04	TU	6S	A		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	3	0.2	
2007	213.01	TU	6S	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	453	252.1	
2007	213.02	TU	6S	B		LEVEL	0.25	CONCRETION	BONE	UID	19	34.8	
2007	213.03	TU	6S	B		LEVEL	0.25	VERTFAUNA	MOD	BONE	1	1.5	
2007	213.04	TU	6S	B		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	2	4.4	
2007	213.05	TU	6S	B		LEVEL	0.25	LITHIC	UNMOD	FLAKE	4	0.8	
2007	213.06	TU	6S	B		LEVEL	0.25	MISCROCK	UNMOD	LIMESTONE	2	23.9	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2007	215.01	TU	6S	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	599	321.4	
2007	215.02	TU	6S	C		LEVEL	0.25	CONCRETION	BONE	UID	30	18.6	
2007	215.03	TU	6S	C		LEVEL	0.25	VERTFAUNA	MOD	BONE	3	3.1	
2007	215.04	TU	6S	C		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	2	3.2	
2007	216.01	TU	6S	D		LEVEL	0.25	VERTFAUNA	MOD	BONE	1	1.4	
2007	216.02	TU	6S	D		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.4	
2007	216.03	TU	6S	D		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	95	75.4	
2007	216.04	TU	6S	D		LEVEL	0.25	CONCRETION	BONE	UID	3	1.5	
2007	217.01	TU	6S	E		LEVEL	0.25	VERTFAUNA	MOD	BONE	1	1.4	
2007	217.02	TU	6S	E		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.1	
2007	217.03	TU	6S	E		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	98	52.3	
2007	217.04	TU	6S	E		LEVEL	0.25	CONCRETION	BONE	UID	6	4.0	
2007	218.01	TU	6S	F		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	123	73.0	
2007	218.02	TU	6S	F		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.9	
2007	219.01	TU	6S	G		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	174	50.4	
2007	219.02	TU	6S	G		LEVEL	0.25	FIRECLAY	UID	UID	1	0.2	
2007	219.03	TU	6S	G		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.2	
2007	220.01	TU	6S	H		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	332	86.3	
2007	220.02	TU	6S	H		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.0	
2007	221.01	TU	6S	I		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	358	80.3	
2007	221.02	TU	6S	I		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	20.8	
2007	221.03	TU	6S	I		LEVEL	0.25	CONCRETION	BONE	UID	4	1.5	
2007	222.01	TU	6S	J		LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.0	
2007	222.02	TU	6S	J		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	342	86.9	
2007	222.03	TU	6S	J		LEVEL	0.25	LITHIC	MOD	BIFACE	1	2.1	FRAGMENT
2007	222.04	TU	6S	J		LEVEL	0.25	LITHIC	MOD	FLAKE	1	1.7	
2007	222.05	TU	6S	J		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	2.4	
2007	222.06	TU	6S	J		LEVEL	0.25	LITHIC	UNMOD	FLAKE	5	1.2	
2007	223.01	TU	6S	K		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	110	23.7	
2007	223.02	TU	6S	K		LEVEL	0.25	LITHIC	UNMOD	FLAKE	3	1.1	
2007	223.03	TU	6S	K		LEVEL	0.25	MISCROCK	UNMOD	PEBBLE	1	0.2	
2007	604.01	TU	2	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	21	4.9	
2007	604.02	TU	2	A		LEVEL	0.25	HISTORIC	METAL	FRAG	20	26.6	
2007	604.03	TU	2	A		LEVEL	0.25	HISTORIC	PLASTIC	FRAG	23	3.8	
2007	604.04	TU	2	A		LEVEL	0.25	HISTORIC	GLASS	FRAG	20	22.9	
2007	604.05	TU	2	A		LEVEL	0.25	HISTORIC	PLASTER	FRAG	7	24.9	
2007	604.06	TU	2	A		LEVEL	0.25	MARINESHELL	MOD	BEAD	1	0.4	SHELL BEAD
2007	606.01	TU	2	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	28	27.6	
2007	606.02	TU	2	B		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	1.3	
2007	606.03	TU	2	B		LEVEL	0.25	HISTORIC	UID	UID	0	2023.6	
2007	606.04	TU	2	B		LEVEL	0.25	HISTORIC	COIN	PENNY	1	3.1	DATED 1964
2007	615.01	TU	2	C	A	LEVEL	0.25	POTTERY	SJP	BODY	1	6.1	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2007	615.02	TU	2	C	A	LEVEL	0.25	POTTERY	SJP	CRUMB	4	4.4	
2007	615.03	TU	2	C	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.6	
2007	615.04	TU	2	C	A	LEVEL	0.25	POTTERY	OFTP	CRUMB	2	0.9	
2007	615.05	TU	2	C	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	57	17.4	
2007	615.06	TU	2	C	A	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	1	0.1	
2007	615.07	TU	2	C	A	LEVEL	0.25	BOTANICAL	WOOD	UID	1	0.1	
2007	615.08	TU	2	C	A	LEVEL	0.25	HISTORIC	UID	UID	17	15.1	
2007	616.01	TU	2	C	B	LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.4	
2007	616.02	TU	2	C	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	48	9.5	
2007	616.03	TU	2	C	B	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.2	
2007	616.04	TU	2	C	B	LEVEL	0.25	HISTORIC	UID	UID	7	10.7	
2007	618.01	TU	2	D	A	LEVEL	0.25	POTTERY	OFTP	CRUMB	16	7.5	
2007	618.02	TU	2	D	A	LEVEL	0.25	POTTERY	SJP	CRUMB	9	3.1	
2007	618.03	TU	2	D	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	77	17.5	
2007	618.04	TU	2	D	A	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	12	0.6	
2007	618.05	TU	2	D	A	LEVEL	0.25	HISTORIC	UID	UID	3	1.3	
2007	619.01	TU	2	D	B	LEVEL	0.25	POTTERY	SJP	BODY	1	2.3	
2007	619.02	TU	2	D	B	LEVEL	0.25	POTTERY	OFTP	CRUMB	5	1.1	
2007	619.03	TU	2	D	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	36	11.1	
2007	619.04	TU	2	D	B	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.3	
2007	619.05	TU	2	D	B	LEVEL	0.25	POTTERY	SJP	CRUMB	3	1.8	
2007	620.01	TU	2	E		LEVEL	0.25	POTTERY	SJP	CRUMB	14	10.1	
2007	620.02	TU	2	E		LEVEL	0.25	POTTERY	OFTP	BODY	1	2.8	
2007	620.03	TU	2	E		LEVEL	0.25	POTTERY	OFTP	CRUMB	11	3.8	
2007	620.04	TU	2	E		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	118	25.5	
2007	620.05	TU	2	E		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	1.1	
2007	620.06	TU	2	E		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	3	2.2	
2007	621.01	TU	2	F		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	110	26.5	WATER WORN
2007	621.02	TU	2	F		LEVEL	0.25	POTTERY	SJP	CRUMB	10	3.9	WATER WORN
2007	621.03	TU	2	F		LEVEL	0.25	POTTERY	OFTP	BODY	3	4.2	
2007	621.04	TU	2	F		LEVEL	0.25	POTTERY	OFTP	CRUMB	7	2.4	
2007	621.05	TU	2	F		LEVEL	0.25	VERTFAUNA	MOD	BONE	1	0.3	
2007	623.01	TU	2	G		LEVEL	0.25	POTTERY	SJP	BODY	1	2.8	
2007	623.02	TU	2	G		LEVEL	0.25	POTTERY	SJP	CRUMB	3	1.7	
2007	623.03	TU	2	G		LEVEL	0.25	POTTERY	OFTP	BODY	1	2.0	
2007	623.04	TU	2	G		LEVEL	0.25	POTTERY	OFTP	CRUMB	3	1.8	
2007	623.05	TU	2	G		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	58	22.2	
2007	623.06	TU	2	G		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	1	0.2	
2007	626.01	TU	2	H		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	7	2.0	
2007	627.01	TU	2	I		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	1.8	
2007	627.02	TU	2	I		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.6	
2007	1162.01	TU	4	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.1	

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2007	1162.02	TU	4	A		LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.6	
2007	1163.01	TU	4	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	8	2.6	
2007	1163.02	TU	4	B		LEVEL	0.25	POTTERY	SJCS	BODY	1	2.3	
2007	1163.03	TU	4	B		LEVEL	0.25	POTTERY	SJP	CRUMB	6	4.0	
2007	1163.04	TU	4	B		LEVEL	0.25	POTTERY	SJP	RIM	1	1.2	
2007	1163.05	TU	4	B		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.5	
2007	1163.06	TU	4	B		LEVEL	0.25	POTTERY	OFTP	BODY	2	5.0	
2007	1163.07	TU	4	B		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.2	
2007	1163.08	TU	4	B		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	0.9	
2007	1163.09	TU	4	B		LEVEL	0.25	CONCRETION	UID	UID	1	0.5	
2007	1163.10	TU	4	B		LEVEL	0.25	HISTORIC	LEAD	BULLET	1	1.8	
2007	1163.11	TU	4	B		LEVEL	0.25	POTTERY	SJP	BODY	1	1.8	
2007	1164.01	TU	4	C	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	10	5.9	
2007	1164.02	TU	4	C	B	LEVEL	0.25	POTTERY	SJP	CRUMB	10	4.5	
2007	1164.03	TU	4	C	B	LEVEL	0.25	POTTERY	SJP	BODY	2	5.7	
2007	1164.04	TU	4	C	B	LEVEL	0.25	POTTERY	OFTP	CRUMB	2	0.9	
2007	1164.05	TU	4	C	B	LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.3	
2007	1165.01	TU	4	C	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	3	0.7	
2007	1165.02	TU	4	C	A	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.3	
2007	1165.03	TU	4	C	A	LEVEL	0.25	MISCROCK	UNMOD	PEBBLE	1	0.2	
2007	1166.01	TU	4	C	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	0.7	
2007	1166.02	TU	4	C	A	LEVEL	0.25	POTTERY	OFTP	CRUMB	8	3.6	
2007	1166.03	TU	4	D	A	LEVEL	0.25	BOTANICAL	CHARCOAL	C14		0.5	
2007	1167.01	TU	4	D	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	6	1.7	
2007	1167.02	TU	4	D	B	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.1	
2007	1167.03	TU	4	D	B	LEVEL	0.25	BOTANICAL	CHARCOAL	C14		0.4	
2007	1188.01	TU	4	D	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	9	1.8	
2007	1188.02	TU	4	D	C	LEVEL	0.25	POTTERY	OFTP	CRUMB	15	5.7	
2007	1189.01	TU	4	E	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	49	12.2	
2007	1189.02	TU	4	E	C	LEVEL	0.25	VERTFAUNA	UNMOD	ANTLER	1	2.2	
2007	1189.03	TU	4	E	C	LEVEL	0.25	POTTERY	OFTP	CRUMB	16	3.4	
2007	1189.04	TU	4	E	C	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	9.6	
2007	1189.05	TU	4	E	C	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	1.5	
2007	1189.06	TU	4	E	C	LEVEL	0.25	PALEOFECES	UID	UID	1	0.6	
2007	1189.07	TU	4	E	C	LEVEL	0.25	BOTANICAL	CHARCOAL	C14		3.3	
2007	1193.01	TU	4	F	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	9	4.7	
2007	1193.02	TU	4	F	C	LEVEL	0.25	POTTERY	OFTP	CRUMB	4	1.9	
2007	1194.01	TU	4	E	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	14	3.8	
2007	1194.02	TU	4	E	A	LEVEL	0.25	POTTERY	OFTP	CRUMB	10	2.3	
2007	1195.01	TU	4	F	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	12	4.3	
2007	1195.02	TU	4	F	C	LEVEL	0.25	POTTERY	OFTP	CRUMB	4	0.7	
2007	1196.01	TU	4	G	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	61	28.5	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2007	1196.02	TU	4	G	D	LEVEL	0.25	POTTERY	OFTI	BODY	1	3.7	
2007	1196.03	TU	4	G	D	LEVEL	0.25	POTTERY	OFTP	RIM	5	6.5	
2007	1196.04	TU	4	G	D	LEVEL	0.25	POTTERY	OFTP	BODY	6	16.5	
2007	1196.05	TU	4	G	D	LEVEL	0.25	POTTERY	OFTP	CRUMB	11	2.5	
2007	1197.01	TU	4	H	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	56	15.2	
2007	1197.02	TU	4	H	D	LEVEL	0.25	CONCRETION	BONE	UID	1	0.7	
2007	1197.03	TU	4	H	D	LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.5	
2007	1197.04	TU	4	H	D	LEVEL	0.25	POTTERY	OFTP	BODY	11	17.9	
2007	1197.05	TU	4	H	D	LEVEL	0.25	POTTERY	OFTP	RIM	3	1.6	
2007	1197.06	TU	4	H	D	LEVEL	0.25	POTTERY	OFTP	CRUMB	35	8.4	
2007	1200.01	TU	4	I	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	12	3.9	
2007	1200.02	TU	4	I	D	LEVEL	0.25	POTTERY	OFTP	BODY	10	16.5	
2007	1200.03	TU	4	I	D	LEVEL	0.25	POTTERY	OFTP	CRUMB	10	3.0	
2007	1200.04	TU	4	I	D	LEVEL	0.25	POTTERY	OFTP	RIM	2	3.2	
2007	1200.05	TU	4	I	D	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG		1.2	
2007	1201.01	TU	4	I	E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	24	7.1	
2007	1201.02	TU	4	I	E	LEVEL	0.25	POTTERY	OFTP	CRUMB	7	1.9	
2007	1201.03	TU	4	I	E	LEVEL	0.25	POTTERY	OFTP	BODY	5	8.3	
2007	1202.01	TU	4	I		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.4	
2007	1206.01	TU	4	STR II-a		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	7	5.1	
2007	1210.01	TU	4	STR III		LEVEL	0.25	BOTANICAL	CHARCOAL	C14		0.6	
2007	1211.01	TU	4	STR IV		LEVEL	0.25	BOTANICAL	CHARCOAL	C14		0.3	
2007	1212.01	TU	4	STR IV		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG		2.9	
2007	1216.01	TU	4	STR V		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	27	8.9	
2007	1216.02	TU	4	STR V		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.1	
2007	1216.03	TU	4	STR V		LEVEL	0.25	POTTERY	OFTP	RIM	1	0.1	
2007	1216.04	TU	4	STR V		LEVEL	0.25	POTTERY	OFTP	BODY	9	14.7	
2007	1216.05	TU	4	STR V		LEVEL	0.25	POTTERY	OFTP	CRUMB	15	4.6	
2007	1218.01	TU	4	STR VI		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	54	23.4	
2007	1218.02	TU	4	STR VI		LEVEL	0.25	CONCRETION	UID	UID	2	2.0	
2007	1218.03	TU	4	STR VI		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.5	
2007	1218.04	TU	4	STR VI		LEVEL	0.25	POTTERY	OFTP	CRUMB	12	3.5	
2007	1218.05	TU	4	STR VI		LEVEL	0.25	POTTERY	OFTP	BODY	13	27.4	
2007	1218.06	TU	4	STR VI		LEVEL	0.25	POTTERY	OFTP	RIM	1	1.2	
2007	1218.07	TU	4	STR VI		LEVEL	0.25	HUMANBONE	UNMOD	TOOTH	1	1.1	HUMAN TOOTH
2007	1218.08	TU	4	STR VI		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG			
2007	1224.01	TU	4	J STR VI		LEVEL	0.25	POTTERY	OFTP	BODY	1	2.4	
2007	1224.02	TU	4	J STR VI		LEVEL	0.25	POTTERY	OFTP	CRUMB	17	5.9	
2007	1224.03	TU	4	J STR VI		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	27	8.3	
2007	1224.04	TU	4	J STR VI		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG		11.7	EMBEDDED IN CONCRETION
2007	1226.01	TU	4	K STR VI		LEVEL	0.25	POTTERY	OFTP	RIM	2	2.6	
2007	1226.02	TU	4	K STR VI		LEVEL	0.25	POTTERY	OFTP	CRUMB	7	2.3	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB- STRAT	SAMPLE	RECOV- ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2007	1226.03	TU	4	K STR VI		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	33	14.9	
2007	1226.04	TU	4	K STR VI		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG		2.4	
2007	1227.01	TU	4	K STR VII		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	82	33.1	
2007	1227.02	TU	4	K STR VII		LEVEL	0.25	LITHIC	UNMOD	FLAKE	3	6.3	
2007	1227.03	TU	4	K STR VII		LEVEL	0.25	POTTERY	OFTP	BODY	1	2.9	
2007	1227.04	TU	4	K STR VII		LEVEL	0.25	POTTERY	OFTP	RIM	1	0.7	
2007	1227.05	TU	4	K STR VII		LEVEL	0.25	POTTERY	OFTP	CRUMB	24	6.8	
2007	1227.06	TU	4	K STR VII		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG		1.5	
2007	1228.01	TU	4	L STR VII		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	45	12.7	
2007	1228.02	TU	4	L STR VII		LEVEL	0.25	VERTFAUNA	MOD	BONE	1	1.2	
2007	1228.03	TU	4	L STR VII		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG		0.3	
2007	1228.04	TU	4	L STR VII		LEVEL	0.25	LITHIC	UNMOD	FLAKE	3	1.0	
2007	1228.05	TU	4	L STR VII		LEVEL	0.25	POTTERY	OFTP	BODY	3	5.6	
2007	1228.06	TU	4	L STR VII		LEVEL	0.25	POTTERY	OFTP	RIM	1	2.0	
2007	1228.07	TU	4	L STR VII		LEVEL	0.25	POTTERY	OFTP	CRUMB	14	4.4	
2007	1228.08	TU	4	L STR VII		LEVEL	0.25	MISCROCK	UNMOD	PEBBLE	1	0.9	
2007	1229.01	TU	4	L STR VII	F	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	16	6.6	
2007	1229.02	TU	4	L STR VII	F	LEVEL	0.25	POTTERY	OFTP	BODY	1	1.2	
2007	1229.03	TU	4	L STR VII	F	LEVEL	0.25	POTTERY	OFTP	CRUMB	4	0.7	
2007	1229.04	TU	4	L STR VII	F	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG		1.1	
2007	1233.01	TU	4	M	F	LEVEL	0.25	POTTERY	OFTP	RIM	5	2.2	ALL REFIT
2007	1233.02	TU	4	M	F	LEVEL	0.25	POTTERY	OFTP	RIM	1	0.8	
2007	1233.03	TU	4	M	F	LEVEL	0.25	POTTERY	OFTP	BODY	2	2.6	
2007	1233.04	TU	4	M	F	LEVEL	0.25	POTTERY	OFTP	CRUMB	21	10.8	
2007	1233.05	TU	4	M	F	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	26	7.0	
2007	1233.06	TU	4	M	F	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG		1.0	
2007	1236.01	TU	4	N		LEVEL	0.25	POTTERY	OFTP	BODY	2	4.8	
2007	1236.02	TU	4	N		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.2	
2007	1236.03	TU	4	N		LEVEL	0.25	CONCRETION	BONE	UID	1	1.0	
2007	1245.01	TU	4	M STR VIII		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	11	3.1	
2007	17.01	TU	1	F	D	PP	-1	POTTERY	OFTP	BODY	1	10.8	
2007	27.01	TU	1			PP	-1	POTTERY	OFTP	RIM	1	4.4	
2007	28.01	TU	1			PP	-1	POTTERY	OFTP	BODY	1	2.2	
2007	29.01	TU	1			PP	-1	POTTERY	OFTP	RIM	2	11.4	2 SHERDS REFIT
2007	29.02	TU	1			PP	-1	POTTERY	OFTP	CRUMB	2	1.2	
2007	37.01	TU	3	A		PP	-1	MARINESHELL	UNMOD	FRAG	1	62.5	
2007	42.01	TU	3	D		PP	-1	BOTANICAL	WOOD	UID	1	25.6	
2007	42.02	TU	3	D		PP	-1	MISCROCK	UNMOD	PEBBLE	1	6.6	
2007	55.01	TU	3	F	D	PP	-1	LITHIC	MOD	HAFTEDBIFACE	1	10.3	
2007	57.01	TU	3	G	D	PP	-1	BOTANICAL	CHARCOAL	C14			
2007	101.01	TU	5	PROFILE CUT		PP	-1	LITHIC	MOD	HAFTEDBIFACE	1	9.1	
2007	103.01	TU	5	PROFILE CUT		PP	-1	VERTFAUNA	MOD	ANTLER	5	180.6	ALL REFIT

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2007	105.01	TU	5	PROFILE CUT		PP	-1	VERTFAUNA	UNMOD	ANTLER	2	173.7	PIECES REFIT
2007	105.02	TU	5	PROFILE CUT		PP	-1	PALEOFECES	UNMOD	FRAG	1	5.9	
2007	106.01	TU	5	PROFILE CUT		PP	-1	BOTANICAL	CHARCOAL	C14			
2007	107.01	TU	5	PROFILE CUT		PP	-1	BOTANICAL	CHARCOAL	C14			
2007	115.01	TU	5E	C	C	PP	-1	VERTFAUNA	UNMOD	FRAG	2	68.4	PIECES REFIT, LARGE BONE
2007	118.01	TU	5E	D	C	PP	-1	MARINESHELL	UNMOD	FRAG	1	9.7	
2007	126.01	TU	5E	F	C	PP	-1	LITHIC	MOD	BIFACE	1	5.7	FRAGMENT
2007	127.01	TU	5E	H	C	PP	-1	LITHIC	MOD	BIFACE	1	19.4	
2007	131.01	TU	5E	J	E	PP	-1	LITHIC	MOD	HAFTEDBIFACE	1	26.6	
2007	133.01	TU	5E	K	E	PP	-1	LITHIC	MOD	UID	1	106.6	POSSIBLE CORE
2007	134.01	TU	5E	K	E	PP	-1	MARINESHELL	UNMOD	FRAG	1	25.1	
2007	201.01	TU	6	PROFILE CUT		PP	-1	LITHIC	MOD	BIFACE	1	20.3	FRAGMENT
2007	214.01	TU	6S	B		PP	-1	LITHIC	MOD	HAFTEDBIFACE	1	28.5	
2007	608.01	TU	2	B		PP	-1	POTTERY	OFTP	BODY	1	32.2	
2007	617.01	TU	2	C	B	PP	-1	POTTERY	SJP	BODY	1	6.7	
2007	622.01	TU	2	F		PP	-1	POTTERY	SJP	BODY	1	5.4	
2007	624.01	TU	2	G		PP	-1	POTTERY	SJCS	BODY	1	6.1	
2007	625.01	TU	2	G		PP	-1	POTTERY	SJP	BODY	1	4.4	
2007	1190.01	TU	4	E	C	PP	-1	POTTERY	OFTI	BODY	1	7.2	
2007	1191.01	TU	4	E	C	PP	-1	CONCRETION	UID	UID		381.9	
2007	1192.01	TU	4	F	C	PP	-1	POTTERY	OFTI	BODY	1	27.8	
2007	1198.01	TU	4	H		PP	-1	POTTERY	OFTP	RIM	1	8.2	
2007	1199.01	TU	4	H		PP	-1	POTTERY	OFTP	BODY	2	26.2	SHERDS REFIT
2007	1203.01	TU	4	I	E	PP	-1	POTTERY	OFTP	BODY	1	12.3	
2007	1230.01	TU	4	L	F	PP	-1	POTTERY	OFTP	BODY	4	8.3	
2007	1230.02	TU	4	L	F	PP	-1	POTTERY	OFTP	RIM	1	25.2	
2007	1231.01	TU	4	J	F	PP	-1	POTTERY	OFTP	BODY	2	53.1	
2007	100.01	TU	5	PROFILE CUT		PROFILE	0.25	VERTFAUNA	UNMOD	FRAG	212	95.5	
2007	100.02	TU	5	PROFILE CUT		PROFILE	0.25	VERTFAUNA	MOD	BONE	1	2.0	
2007	100.03	TU	5	PROFILE CUT		PROFILE	0.25	CONCRETION	BONE	UID	23	21.0	
2007	100.04	TU	5	PROFILE CUT		PROFILE	0.25	LITHIC	UNMOD	FLAKE	1	6.9	
2007	100.05	TU	5	PROFILE CUT		PROFILE	0.25	LITHIC	MOD	BIFACE	1	0.3	FRAG OF BASE
2007	100.06	TU	5	PROFILE CUT		PROFILE	0.25	MISCROCK	UNMOD	LIMESTONE	1	12.0	
2007	102.01	TU	5	PROFILE CUT		PROFILE	0.25	VERTFAUNA	UNMOD	FRAG	1745	628.5	
2007	102.02	TU	5	PROFILE CUT		PROFILE	0.25	CONCRETION	BONE	UID	509	343.3	
2007	102.03	TU	5	PROFILE CUT		PROFILE	0.25	MARINESHELL	UNMOD	FRAG	5	4.1	
2007	102.04	TU	5	PROFILE CUT		PROFILE	0.25	LITHIC	UNMOD	FLAKE	8	9.7	
2007	102.05	TU	5	PROFILE CUT		PROFILE	0.25	MISCROCK	UNMOD	PEBBLE	2	0.5	
2007	102.06	TU	5	PROFILE CUT		PROFILE	0.25	VERTFAUNA	UNMOD	SHARKTOOTH	1	0.4	
2007	102.07	TU	5	PROFILE CUT		PROFILE	0.25	MARINESHELL	MOD	FRAG	1	2.2	
2007	102.08	TU	5	PROFILE CUT		PROFILE	0.25	VERTFAUNA	MOD	BONE	2	5.4	
2007	104.01	TU	5	PROFILE CUT		PROFILE	0.25	VERTFAUNA	UNMOD	FRAG	1164	627.5	

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2007	104.02	TU	5	PROFILE CUT		PROFILE	0.25	VERTFAUNA	MOD	BONE	3	9.1	
2007	104.03	TU	5	PROFILE CUT		PROFILE	0.25	CONCRETION	BONE	UID	90	39.1	
2007	104.04	TU	5	PROFILE CUT		PROFILE	0.25	VERTFAUNA	UNMOD	ANTLER	1	6.3	
2007	104.05	TU	5	PROFILE CUT		PROFILE	0.25	PALEOFECES	UNMOD	FRAG	2	13.9	
2007	104.06	TU	5	PROFILE CUT		PROFILE	0.25	MARINESHELL	UNMOD	FRAG	3	13.9	
2007	104.07	TU	5	PROFILE CUT		PROFILE	0.25	HUMANBONE	UNMOD	TOOTH	1	0.3	HUMAN TOOTH
2007	104.08	TU	5	PROFILE CUT		PROFILE	0.25	HISTORIC	UID	UID	7	21.9	
2007	104.09	TU	5	PROFILE CUT		PROFILE	0.25	MISCROCK	UNMOD	PEBBLE	2	2.0	
2007	104.10	TU	5	PROFILE CUT		PROFILE	0.25	LITHIC	UNMOD	FLAKE	7	17.7	
2007	200.01	TU	6	PROFILE CUT		PROFILE	0.25	VERTFAUNA	UNMOD	FRAG	2027	865.1	
2007	200.02	TU	6	PROFILE CUT		PROFILE	0.25	VERTFAUNA	MOD	BONE	6	15.7	
2007	200.03	TU	6	PROFILE CUT		PROFILE	0.25	CONCRETION	BONE	UID	5	105.6	
2007	200.04	TU	6	PROFILE CUT		PROFILE	0.25	MARINESHELL	UNMOD	FRAG	4	31.3	
2007	200.05	TU	6	PROFILE CUT		PROFILE	0.25	LITHIC	UNMOD	FLAKE	8	15.2	
2007	200.06	TU	6	PROFILE CUT		PROFILE	0.25	CONCRETION	UID	UID	1	1.3	
2007	200.07	TU	6	PROFILE CUT		PROFILE	0.25	VERTFAUNA	UNMOD	ANTLER	1	11.3	
2007	212.01	TU	6S	A		SLUMP FILL		POTTERY	SJP	CRUMB	1	2.9	
2007	119.01	TU	5E	WALL CLEAN		WALL	0.25	LITHIC	UNMOD	FLAKE	1	1.7	
2007	119.02	TU	5E	WALL CLEAN		WALL	0.25	MARINESHELL	UNMOD	FRAG	1	6.0	
2007	224.01	TU	6	WALL CLEAN		WALL	0.25	VERTFAUNA	UNMOD	FRAG	1	1.9	
2007	224.02	TU	6	WALL CLEAN		WALL CLEAN	0.25	MARINESHELL	UNMOD	FRAG	1	19.1	WHOLE COCALE SHELL
2007	224.03	TU	6	WALL CLEAN		WALL	0.25	LITHIC	UNMOD	FLAKE	1	0.3	
2007	224.04	TU	6	WALL CLEAN		WALL	0.25	HUMANBONE	UNMOD	TOOTH	1	0.3	HUMAN TOOTH
2007	540.01	TU	2	WALL CLEAN		WALL		POTTERY	OFTP	BODY	3	5.3	
2007	540.02	TU	2	WALL CLEAN		WALL		POTTERY	OFTP	CRUMB	3	2.7	
2007	540.03	TU	2	WALL CLEAN		WALL		VERTFAUNA	UNMOD	FRAG	9	7.2	
2007	540.04	TU	2	WALL CLEAN		WALL		LITHIC	UNMOD	FLAKE	1	1.1	
2007	540.05	TU	2	WALL CLEAN		WALL		BOTANICAL	CHARCOAL	FRAG	1	0.2	
2007	1205.01	TU	4	STR I		WALL	0.25	VERTFAUNA	UNMOD	FRAG	4	1.6	
2007	1207.01	TU	4	STR II-b		WALL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.5	
2007	1209.01	TU	4	STR III		WALL	0.25	VERTFAUNA	UNMOD	FRAG	3	1.6	
2007	1209.02	TU	4	STR III		WALL	0.25	POTTERY	OFTP	BODY	3	9.2	
2007	1209.03	TU	4	STR III		WALL	0.25	POTTERY	OFTP	CRUMB	24	10.2	
2007	1209.04	TU	4	STR III		WALL	0.25	BOTANICAL	CHARCOAL	FRAG		0.5	
2007	1213.01	TU	4	STR IV		WALL	0.25	VERTFAUNA	UNMOD	FRAG	24	6.0	
2007	1213.02	TU	4	STR IV		WALL	0.25	VERTFAUNA	MOD	BONE	1	0.8	
2007	1213.03	TU	4	STR IV		WALL	0.25	POTTERY	OFTP	CRUMB	1	0.6	
2007	1213.04	TU	4	STR IV		WALL	0.25	BOTANICAL	CHARCOAL	FRAG			
2007	1214.01	TU	4	WALL CLEAN		WALL	0.25	VERTFAUNA	UNMOD	FRAG	19	6.1	
2007	1214.02	TU	4	WALL CLEAN		WALL	0.25	POTTERY	OFTP	CRUMB	6	2.2	
2007	1239.01	TU	4	WALL CLEAN		WALL	0.25	VERTFAUNA	UNMOD	FRAG	11	2.0	
2007	1239.02	TU	4	WALL CLEAN		WALL	0.25	CONCRETION	BONE	UID	2	0.7	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2007	1239.03	TU	4	WALL CLEAN		WALL	0.25	POTTERY	OFTP	BODY	2	7.5	
2007	1239.04	TU	4	WALL CLEAN		WALL	0.25	POTTERY	OFTP	CRUMB	7	1.8	
2007	1239.05	TU	4	WALL CLEAN		WALL	0.25	POTTERY	OFTP	RIM	2	0.7	
2008	1513.01	TU	8	G		CLEAN UP	0.25	LITHIC	MOD	BIFACE	1	0.9	LIKELY HALFTED BIFACE STEM
2008	1551.01	TU		TRENCH		CLEAN UP	0.25	LITHIC	UNMOD	FLAKE	1	0.4	
2008	1498.01	TU	20	EAST WALL		FELL OUT OF WALL	-1	POTTERY	SJP	BODY	1	8.4	
2008	1484.01	TU	16			FLOOR	0.25	VERTFAUNA	UNMOD	FRAG	25	8.6	
2008	1484.02	TU	16			FLOOR	0.25	POTTERY	SJP	CRUMB	8	2.6	
2008	1485.01	TU	20	D		FLOOR	0.25	VERTFAUNA	UNMOD	FRAG	29	9.2	
2008	1485.02	TU	20	D		FLOOR	0.25	BOTANICAL	CHARCOAL	FRAG	2	0.1	
2008	1485.03	TU	20	D		FLOOR	0.25	POTTERY	OFTP	BODY	1	1.8	
2008	1489.01	TU	16			FLOOR	0.25	POTTERY	SJP	BODY	1	1.6	
2008	1489.02	TU	16			FLOOR	0.25	POTTERY	SJP	CRUMB	40	12.3	
2008	1489.03	TU	16			FLOOR	0.25	LITHIC	UNMOD	FLAKE	1	1.0	
2008	1489.04	TU	16			FLOOR	0.25	BOTANICAL	CHARCOAL	FRAG	5	0.3	
2008	1489.05	TU	16			FLOOR	0.25	VERTFAUNA	UNMOD	FRAG	62	12.6	
2008	1300.01	TU	7	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	23	7.8	
2008	1300.02	TU	7	A		LEVEL	0.25	TERR. SNAIL	EUGLANDINA	UID	1	0.1	
2008	1300.03	TU	7	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.0	FISH SCALES
2008	1300.04	TU	7	A		LEVEL	0.25	HISTORIC	METAL	FRAG	9	11.9	
2008	1300.05	TU	7	A		LEVEL	0.25	HISTORIC	STYROFOAM	FRAG	1	0.1	STYROFOAM
2008	1301.01	TU	7	B		LEVEL	0.25	POTTERY	OFTP	RIM	1	23.8	
2008	1301.02	TU	7	B		LEVEL	0.25	POTTERY	OFTP	BODY	3	6.7	
2008	1301.03	TU	7	B		LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.4	
2008	1301.04	TU	7	B		LEVEL	0.25	LITHIC	UNMOD	FLAKE	10	6.5	
2008	1301.05	TU	7	B		LEVEL	0.25	HISTORIC	METAL	FRAG	153	113.2	
2008	1301.06	TU	7	B		LEVEL	0.25	TERR. SNAIL	EUGLANDINA	UID	2	2.6	
2008	1301.07	TU	7	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	418	192.3	
2008	1302.01	TU	7	C		LEVEL	0.25	POTTERY	OFTP	BODY	2	14.7	
2008	1302.02	TU	7	C		LEVEL	0.25	POTTERY	OFTP	CRUMB	4	3.4	
2008	1302.03	TU	7	C		LEVEL	0.25	MISCROCK	MOD	SANDSTONE	1	14.3	MODIFIED SANDSTONE
2008	1302.04	TU	7	C		LEVEL	0.25	LITHIC	MOD	BIFACE	1	14.3	
2008	1302.05	TU	7	C		LEVEL	0.25	LITHIC	UNMOD	FLAKE	11	8.4	
2008	1302.06	TU	7	C		LEVEL	0.25	HISTORIC	METAL	FRAG	26	26.1	
2008	1302.07	TU	7	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	805	271.2	
2008	1304.01	TU	7	D		LEVEL	0.25	LITHIC	MOD	FLAKE	2	10.4	
2008	1304.02	TU	7	D		LEVEL	0.25	LITHIC	UNMOD	FLAKE	6	10.7	
2008	1304.03	TU	7	D		LEVEL	0.25	POTTERY	OFTP	RIM	1	1.1	
2008	1304.04	TU	7	D		LEVEL	0.25	POTTERY	OFTP	BODY	1	26.6	
2008	1304.05	TU	7	D		LEVEL	0.25	POTTERY	OFTP	CRUMB	5	3.8	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1304.06	TU	7	D		LEVEL	0.25	VERTFAUNA	UNMOD	ANTLER	1	97.2	
2008	1304.07	TU	7	D		LEVEL	0.25	PALEOFECES	UID	UID	12	12.8	
2008	1304.08	TU	7	D		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	606	258.2	
2008	1304.09	TU	7	D		LEVEL	0.25	HISTORIC	METAL	FRAG	23	41.2	
2008	1304.10	TU	7	D		LEVEL	0.25	MISCROCK	UNMOD	SANDSTONE	1	12.7	
2008	1304.11	TU	7	D		LEVEL	0.25	VERTFAUNA	MOD	BONE	1	0.5	
2008	1305.01	TU	7	E		LEVEL	0.25	VERTFAUNA	MOD	BONE	1	0.6	
2008	1305.02	TU	7	E		LEVEL	0.25	LITHIC	MOD	FLAKE	1	4.5	
2008	1305.03	TU	7	E		LEVEL	0.25	LITHIC	UNMOD	FLAKE	3	1.6	
2008	1305.04	TU	7	E		LEVEL	0.25	POTTERY	OFTP	RIM	1	2.9	
2008	1305.05	TU	7	E		LEVEL	0.25	POTTERY	OFTP	BODY	6	18.2	
2008	1305.06	TU	7	E		LEVEL	0.25	POTTERY	OFTP	CRUMB	6	3.6	
2008	1305.07	TU	7	E		LEVEL	0.25	PALEOFECES	UID	UID	5	6.7	
2008	1305.08	TU	7	E		LEVEL	0.25	MISCROCK	UNMOD	SANDSTONE	2	16.4	
2008	1305.09	TU	7	E		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	373	141.1	
2008	1306.01	TU	7	F		LEVEL	0.25	HISTORIC	METAL	FRAG	1	12.6	
2008	1306.02	TU	7	F		LEVEL	0.25	POTTERY	OFTP	CRUMB	2	1.2	
2008	1306.03	TU	7	F		LEVEL	0.25	POTTERY	OFTP	BODY	5	21.7	
2008	1306.04	TU	7	F		LEVEL	0.25	POTTERY	OFTP	RIM	1	3.5	
2008	1306.05	TU	7	F		LEVEL	0.25	LITHIC	UNMOD	FLAKE	5	5.3	
2008	1306.06	TU	7	F		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	286	175.9	
2008	1308.01	TU	7	G		LEVEL	0.25	HISTORIC	METAL	FRAG	6	30.3	
2008	1308.02	TU	7	G		LEVEL	0.25	LITHIC	UNMOD	FLAKE	6	7.1	
2008	1308.03	TU	7	G		LEVEL	0.25	LITHIC	MOD	FLAKE	2	6.0	
2008	1308.04	TU	7	G		LEVEL	0.25	POTTERY	OFTP	RIM	1	3.3	
2008	1308.05	TU	7	G		LEVEL	0.25	POTTERY	OFTP	BODY	19	124.4	
2008	1308.06	TU	7	G		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	247	147.8	
2008	1308.07	TU	7	G		LEVEL	0.25	POTTERY	OFTI	BODY	1	7.3	TICK ISLAND
2008	1309.01	TU	7A	H		LEVEL	0.25	POTTERY	OFTP	BODY	4	17.7	
2008	1309.02	TU	7A	H		LEVEL	0.25	POTTERY	OFTP	CRUMB	4	1.2	
2008	1309.03	TU	7A	H		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	9	6.1	
2008	1309.04	TU	7A	H		LEVEL	0.25	HISTORIC	METAL	FRAG	1	0.5	
2008	1310.01	TU	7A	I		LEVEL	0.25	POTTERY	OFTP	BODY	5	9.9	
2008	1310.02	TU	7A	I		LEVEL	0.25	POTTERY	OFTP	CRUMB	16	8.8	
2008	1310.03	TU	7A	I		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	13	4.8	
2008	1310.04	TU	7A	I		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	2	0.2	
2008	1311.01	TU	17	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	12	4.1	
2008	1312.01	TU	17	B		LEVEL	0.25	POTTERY	OFTP	BODY	2	43.1	
2008	1312.02	TU	17	B		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	1.2	
2008	1312.03	TU	17	B		LEVEL	0.25	POTTERY	SJP	CRUMB	2	0.5	
2008	1312.04	TU	17	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	26	10.9	
2008	1312.05	TU	17	B		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	1	0.1	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1312.06	TU	17	B		LEVEL	0.25	F.W. SNAIL	VIVIPARUS	WHOLE	1	0.1	
2008	1313.01	TU	17	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	9	5.4	
2008	1313.02	TU	17	B		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	7	0.5	
2008	1314.01	TU	17	C		LEVEL	0.25	POTTERY	OFTP	BODY	2	6.0	
2008	1314.02	TU	17	C		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.1	
2008	1314.03	TU	17	C		LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.3	
2008	1314.04	TU	17	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	84	25.4	
2008	1314.05	TU	17	C		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	92	18.1	
2008	1314.06	TU	17	C		LEVEL	0.25	TERR. SNAIL	ELIMIA	FRAG	1	0.2	
2008	1318.01	TU	17	C		LEVEL	0.25	BOTANICAL	CHARCOAL	C14		2.1	
2008	1319.01	TU	17	D		LEVEL	0.25	POTTERY	OFTI	BODY	2	28.6	
2008	1319.02	TU	17	D		LEVEL	0.25	POTTERY	OFTP	BODY	2	8.0	
2008	1319.03	TU	17	D		LEVEL	0.25	POTTERY	OFTP	CRUMB	3	2.8	
2008	1319.04	TU	17	D		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	55	26.2	
2008	1319.05	TU	17	D		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	5	0.5	
2008	1320.01	TU	17	D		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG		25.6	
2008	1322.01	TU	17	E		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG		27.9	
2008	1323.01	TU	17	E		LEVEL	0.25	POTTERY	OFTI	BODY	1	3.0	
2008	1323.02	TU	17	E		LEVEL	0.25	POTTERY	OFTP	BODY	3	13.2	
2008	1323.03	TU	17	E		LEVEL	0.25	POTTERY	OFTP	CRUMB	2	1.1	
2008	1323.04	TU	17	E		LEVEL	0.25	POTTERY	SJP	CRUMB	7	1.7	
2008	1323.05	TU	17	E		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	2	0.7	
2008	1323.06	TU	17	E		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	62	26.5	
2008	1324.01	TU	17	E		LEVEL	0.25	POTTERY	OFTI	RIM	1	48.2	
2008	1328.01	TU	17	F		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	4	0.8	
2008	1328.02	TU	17	F		LEVEL	0.25	POTTERY	OFTP	BODY	1	3.3	
2008	1328.03	TU	17	F		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.1	
2008	1328.04	TU	17	F		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	39	11.1	
2008	1329.01	TU	17	F		LEVEL	0.25	BOTANICAL	CHARCOAL	C14		17.6	
2008	1330.01	TU	18	A		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	5	0.8	
2008	1330.02	TU	18	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	2.1	
2008	1331.01	TU	18	B		LEVEL	0.25	POTTERY	OFTP	BODY	3	7.6	
2008	1331.02	TU	18	B		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.6	
2008	1331.03	TU	18	B		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	6	17.0	
2008	1331.04	TU	18	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	57	63.8	
2008	1334.01	TU	18	B		LEVEL	0.25	BOTANICAL	CHARCOAL	C14		3.5	
2008	1335.01	TU	18	C		LEVEL	0.25	POTTERY	OFTP	CRUMB	2	2.1	
2008	1335.02	TU	18	C		LEVEL	0.25	POTTERY	OFTP	BODY	3	4.7	
2008	1335.03	TU	18	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	71	20.3	
2008	1336.01	TU	18	C		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG		52.5	
2008	1339.01	TU	18	D		LEVEL	0.25	POTTERY	OFTI	BODY	1	2.2	
2008	1339.02	TU	18	D		LEVEL	0.25	POTTERY	OFTP	BODY	1	3.9	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1339.03	TU	18	D		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.6	
2008	1339.04	TU	18	D		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	4	0.4	
2008	1339.05	TU	18	D		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	57	21.1	
2008	1339.06	TU	18	D		LEVEL	0.25	POTTERY	OFTI	CRUMB	1	0.4	
2008	1340.01	TU	18	D		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG		38.5	
2008	1343.01	TU	18	E		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	54	34.0	
2008	1343.02	TU	18	E		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	3	0.3	
2008	1343.03	TU	18	E		LEVEL	0.25	POTTERY	SJP	CRUMB	3	0.6	
2008	1343.04	TU	18	E		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.7	
2008	1343.05	TU	18	E		LEVEL	0.25	POTTERY	OFTI	BODY		49.1	
2008	1344.01	TU	18	E		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG		35.6	
2008	1345.01	TU	18	F		LEVEL	0.25	POTTERY	OFTP	BODY	2	3.0	
2008	1345.02	TU	18	F		LEVEL	0.25	POTTERY	OFTP	CRUMB	2	0.7	
2008	1345.03	TU	18	F		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	1	0.3	
2008	1345.04	TU	18	F		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	18	4.7	
2008	1346.01	TU	18	F		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG		5.3	
2008	1348.01	TU	17A	UPPER 30 CM OF MIDDEN		LEVEL	0.25	POTTERY	OFTP	RIM	4	35.3	BELOW WATER TABLE
2008	1348.02	TU	17A	UPPER 30 CM OF MIDDEN		LEVEL	0.25	POTTERY	OFTP	BODY	4	12.7	BELOW WATER TABLE
2008	1360.01	TU	20	D	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	6	1.0	
2008	1404.01	TU	11	A		LEVEL	0.25	POTTERY	SJCS	BODY	1	2.8	
2008	1404.02	TU	11	A		LEVEL	0.25	POTTERY	SJP	BODY	5	8.8	
2008	1404.03	TU	11	A		LEVEL	0.25	POTTERY	SJP	CRUMB	9	6.6	
2008	1404.04	TU	11	A		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	0.1	
2008	1404.05	TU	11	A		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	1.4	
2008	1404.06	TU	11	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	6	1.3	
2008	1405.01	TU	11	B		LEVEL	0.25	POTTERY	OFTP	CRUMB	3	2.2	
2008	1405.02	TU	11	B		LEVEL	0.25	POTTERY	SJP	BODY	20	64.5	
2008	1405.03	TU	11	B		LEVEL	0.25	POTTERY	SJP	CRUMB	82	62.5	
2008	1405.04	TU	11	B		LEVEL	0.25	POTTERY	SJCS	BODY	6	18.6	
2008	1405.05	TU	11	B		LEVEL	0.25	POTTERY	SJCS	CRUMB	1	0.9	
2008	1405.06	TU	11	B		LEVEL	0.25	LITHIC	MOD	FLAKE	1	8.1	
2008	1405.07	TU	11	B		LEVEL	0.25	LITHIC	UNMOD	FLAKE	5	6.6	
2008	1405.08	TU	11	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	108	33.2	
2008	1405.09	TU	11	B		LEVEL	0.25	VERTFAUNA	UNMOD	SHARKTOOTH	1	0.2	
2008	1405.10	TU	11	B		LEVEL	0.25	HISTORIC	PLASTIC	FRAG	1	0.7	
2008	1406.01	TU	11	C		LEVEL	0.25	POTTERY	STP	BODY	1	3.3	
2008	1406.02	TU	11	C		LEVEL	0.25	POTTERY	OFTP	CRUMB	2	2.2	
2008	1406.03	TU	11	C		LEVEL	0.25	POTTERY	SJP	BODY	46	155.8	
2008	1406.04	TU	11	C		LEVEL	0.25	POTTERY	SJP	CRUMB	98	64.8	
2008	1406.05	TU	11	C		LEVEL	0.25	POTTERY	SJCS	BODY	5	14.0	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1406.06	TU	11	C		LEVEL	0.25	POTTERY	SJCS	CRUMB	4	3.4	
2008	1406.07	TU	11	C		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	2	2.0	
2008	1406.08	TU	11	C		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	6.3	
2008	1406.09	TU	11	C		LEVEL	0.25	HISTORIC	GLASS	FRAG	1	6.4	
2008	1406.10	TU	11	C		LEVEL	0.25	HISTORIC	METAL	FRAG	2	4.0	NAIL
2008	1406.11	TU	11	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	138	56.8	
2008	1407.01	TU	11	D	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	32	12.2	
2008	1407.02	TU	11	D	B	LEVEL	0.25	LITHIC	UNMOD	FLAKE	3	2.9	
2008	1407.03	TU	11	D	B	LEVEL	0.25	POTTERY	OFTP	CRUMB	2	2.3	
2008	1407.04	TU	11	D	B	LEVEL	0.25	POTTERY	SJCS	BODY	2	5.5	
2008	1407.05	TU	11	D	B	LEVEL	0.25	POTTERY	SJP	BODY	8	21.4	
2008	1407.06	TU	11	D	B	LEVEL	0.25	POTTERY	SJP	CRUMB	40	24.1	
2008	1407.07	TU	11	D	B	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	2	0.1	
2008	1408.01	TU	11	D	A	LEVEL	0.25	POTTERY	SJP	RIM	3	6.1	
2008	1408.02	TU	11	D	A	LEVEL	0.25	POTTERY	SJP	BODY	60	349.9	
2008	1408.03	TU	11	D	A	LEVEL	0.25	POTTERY	SJP	CRUMB	120	72.5	
2008	1408.04	TU	11	D	A	LEVEL	0.25	POTTERY	SJCS	BODY	22	254.5	
2008	1408.05	TU	11	D	A	LEVEL	0.25	POTTERY	SJCS	CRUMB	3	2.6	
2008	1408.06	TU	11	D	A	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	2	2.7	
2008	1408.07	TU	11	D	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	2.2	
2008	1408.08	TU	11	D	A	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	16	2.4	
2008	1408.09	TU	11	D	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	190	93.0	
2008	1409.01	TU	11	E	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	170	75.0	
2008	1409.02	TU	11	E	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.5	
2008	1409.03	TU	11	E	A	LEVEL	0.25	POTTERY	SJP	BODY	59	448.2	
2008	1409.04	TU	11	E	A	LEVEL	0.25	POTTERY	SJP	CRUMB	69	51.4	
2008	1409.05	TU	11	E	A	LEVEL	0.25	POTTERY	SJCS	BODY	5	43.5	
2008	1409.06	TU	11	E	A	LEVEL	0.25	POTTERY	SJCS	CRUMB	3	2.3	
2008	1409.07	TU	11	E	A	LEVEL	0.25	POTTERY	SJCS	RIM	1	11.6	
2008	1409.08	TU	11	E	A	LEVEL	0.25	POTTERY	SJP	RIM	1	2.3	
2008	1409.09	TU	11	E	A	LEVEL	0.25	MARINESHELL	MOD	FRAG	1	14.7	
2008	1409.10	TU	11	E	A	LEVEL	0.25	TERR. SNAIL	EUGLANDINA	UID	3	1.7	
2008	1409.11	TU	11	E	A	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	30	2.9	
2008	1410.01	TU	11	E	B	LEVEL	0.25	POTTERY	SJCS	RIM	2	3.8	
2008	1410.02	TU	11	E	B	LEVEL	0.25	POTTERY	SJP	RIM	5	13.1	
2008	1410.03	TU	11	E	B	LEVEL	0.25	POTTERY	SJCS	BODY	9	29.9	
2008	1410.04	TU	11	E	B	LEVEL	0.25	POTTERY	SJP	BODY	27	17.0	
2008	1410.05	TU	11	E	B	LEVEL	0.25	POTTERY	SJCS	CRUMB	2	0.7	
2008	1410.06	TU	11	E	B	LEVEL	0.25	POTTERY	SJP	CRUMB	34	16.2	
2008	1410.07	TU	11	E	B	LEVEL	0.25	LITHIC	UNMOD	FLAKE	3	2.8	
2008	1410.08	TU	11	E	B	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	1	0.1	
2008	1410.09	TU	11	E	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	31	12.6	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1411.01	TU	11	F	A	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.9	
2008	1411.02	TU	11	F	A	LEVEL	0.25	POTTERY	SJP	RIM	7	55.1	
2008	1411.03	TU	11	F	A	LEVEL	0.25	POTTERY	SJP	BODY	73	574.4	
2008	1411.04	TU	11	F	A	LEVEL	0.25	POTTERY	SJP	CRUMB	31	23.4	
2008	1411.05	TU	11	F	A	LEVEL	0.25	POTTERY	SJCS	BODY	3	28.3	
2008	1411.06	TU	11	F	A	LEVEL	0.25	POTTERY	SJCS	CRUMB	1	0.4	
2008	1411.07	TU	11	F	A	LEVEL	0.25	LITHIC	MOD	FLAKE	1	0.9	
2008	1411.08	TU	11	F	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	5	9.7	
2008	1411.09	TU	11	F	A	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	8	1.1	
2008	1411.10	TU	11	F	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	244	123.7	
2008	1412.01	TU	11	F	C	LEVEL	0.25	POTTERY	SJP	BODY	1	6.8	
2008	1412.02	TU	11	F	C	LEVEL	0.25	POTTERY	SJP	CRUMB	4	2.5	
2008	1412.03	TU	11	F	C	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	2	2.2	
2008	1412.04	TU	11	F	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	5	2.9	
2008	1413.01	TU	11	F	A	LEVEL	0.25	MISCROCK	UNMOD	SANDSTONE	3	470.8	
2008	1414.01	TU	11	G		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	587	321.7	
2008	1414.02	TU	11	G		LEVEL	0.25	LITHIC	UNMOD	FLAKE	4	6.0	
2008	1414.03	TU	11	G		LEVEL	0.25	POTTERY	SJCS	BODY	1	1.1	
2008	1414.04	TU	11	G		LEVEL	0.25	POTTERY	SJP	RIM	2	16.5	
2008	1414.05	TU	11	G		LEVEL	0.25	POTTERY	SJP	BODY	41	310.7	
2008	1414.06	TU	11	G		LEVEL	0.25	POTTERY	SJP	CRUMB	99	45.4	
2008	1414.07	TU	11	G		LEVEL	0.25	POTTERY	OFTP	CRUMB	5	1.9	
2008	1414.08	TU	11	G		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	29	3.3	
2008	1423.01	TU	11	H		LEVEL	0.25	POTTERY	SJP	RIM	2	3.2	
2008	1423.02	TU	11	H		LEVEL	0.25	POTTERY	SJIN	RIM	1	26.7	
2008	1423.03	TU	11	H		LEVEL	0.25	POTTERY	SJCS	BODY	1	7.2	
2008	1423.04	TU	11	H		LEVEL	0.25	POTTERY	SJP	BODY	59	334.8	
2008	1423.05	TU	11	H		LEVEL	0.25	POTTERY	SJP	CRUMB	74	45.5	
2008	1423.06	TU	11	H		LEVEL	0.25	VERTFAUNA	MOD	BONE	2	2.7	
2008	1423.07	TU	11	H		LEVEL	0.25	LITHIC	UNMOD	FLAKE	7	11.0	
2008	1423.08	TU	11	H		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	1	0.3	
2008	1423.09	TU	11	H		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	660	258.3	
2008	1424.01	TU	11	I		LEVEL	0.25	LITHIC	UNMOD	FLAKE	7	8.5	
2008	1424.02	TU	11	I		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	3	0.1	
2008	1424.03	TU	11	I		LEVEL	0.25	LITHIC	MOD	FLAKE	1	2.1	
2008	1424.04	TU	11	I		LEVEL	0.25	POTTERY	OFTI	BODY	1	4.6	
2008	1424.05	TU	11	I		LEVEL	0.25	POTTERY	SJIN	BODY	1	1.3	
2008	1424.06	TU	11	I		LEVEL	0.25	POTTERY	OFTP	RIM	1	2.6	
2008	1424.07	TU	11	I		LEVEL	0.25	POTTERY	SJP	RIM	4	74.9	
2008	1424.08	TU	11	I		LEVEL	0.25	POTTERY	SJP	BODY	51	128.4	
2008	1424.09	TU	11	I		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	368	143.9	
2008	1424.10	TU	11	I		LEVEL	0.25	POTTERY	OFTP	BODY	11	11.0	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1425.01	TU	11	I	D	LEVEL	0.25	POTTERY	SJP	BODY	1	2.6	
2008	1425.02	TU	11	I	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	8	2.0	
2008	1427.01	TU	11	J		LEVEL	0.25	VERTFAUNA	MOD	BONE	2	6.5	
2008	1427.02	TU	11	J		LEVEL	0.25	POTTERY	OFTP	BODY	1	7.6	
2008	1427.03	TU	11	J		LEVEL	0.25	POTTERY	SJP	BODY	18	80.5	
2008	1427.04	TU	11	J		LEVEL	0.25	POTTERY	SJP	CRUMB	12	6.8	
2008	1427.05	TU	11	J		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	12	1.0	
2008	1427.06	TU	11	J		LEVEL	0.25	LITHIC	UNMOD	FLAKE	6	6.4	
2008	1427.07	TU	11	J		LEVEL	0.25	VERTFAUNA	UNMOD	SHARKTOOTH	1	0.1	
2008	1427.08	TU	11	J		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	241	76.9	
2008	1428.01	TU	11	J	A	LEVEL	0.25	LITHIC	MOD	FLAKE	1	5.5	
2008	1428.02	TU	11	J	A	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	4	0.7	
2008	1428.03	TU	11	J	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	4	2.9	
2008	1428.04	TU	11	J	A	LEVEL	0.25	MISCROCK	UNMOD	SANDSTONE	1	0.7	
2008	1428.05	TU	11	J	A	LEVEL	0.25	POTTERY	OFTP	BODY	6	6.7	
2008	1428.06	TU	11	J	A	LEVEL	0.25	PALEOFECES	UID	UID	3	0.7	
2008	1428.07	TU	11	J	A	LEVEL	0.25	POTTERY	SJP	BODY	14	46.3	
2008	1428.08	TU	11	J	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	193	64.0	
2008	1429.01	TU	11	J	D	LEVEL	0.25	POTTERY	SJP	BODY	1	2.0	
2008	1429.02	TU	11	J	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	6	0.9	
2008	1430.01	TU	11	K	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	198	78.3	
2008	1430.02	TU	11	K	A	LEVEL	0.25	VERTFAUNA	MOD	BONE	1	0.6	
2008	1430.03	TU	11	K	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	6	2.8	
2008	1430.04	TU	11	K	A	LEVEL	0.25	POTTERY	SJP	BODY	1	5.0	
2008	1430.05	TU	11	K	A	LEVEL	0.25	POTTERY	SJP	RIM	1	3.4	
2008	1430.06	TU	11	K	A	LEVEL	0.25	POTTERY	SJP	CRUMB	11	6.1	
2008	1430.07	TU	11	K	A	LEVEL	0.25	POTTERY	OFTP	CRUMB	4	1.3	
2008	1430.08	TU	11	K	A	LEVEL	0.25	MISCROCK	UNMOD	SANDSTONE	2	58.5	
2008	1430.09	TU	11	K	A	LEVEL	0.25	MISCROCK	UNMOD	PEBBLE	1	0.2	
2008	1431.01	TU	11	K	G	LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.9	
2008	1431.02	TU	11	K	G	LEVEL	0.25	POTTERY	SJP	CRUMB	3	1.5	
2008	1431.03	TU	11	K	G	LEVEL	0.25	LITHIC	MOD	BIFACE	1	9.1	
2008	1431.04	TU	11	K	G	LEVEL	0.25	POTTERY	SJIN	BODY	1	3.3	
2008	1431.05	TU	11	K	G	LEVEL	0.25	POTTERY	OFTP	BODY	1	2.0	
2008	1431.06	TU	11	K	G	LEVEL	0.25	POTTERY	OFTP	CRUMB	9	2.5	
2008	1431.07	TU	11	K	G	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	63	23.6	
2008	1432.01	TU	11	K	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.1	
2008	1432.02	TU	11	K	D	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.3	
2008	1433.01	TU	11	L	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	375	137.1	
2008	1433.02	TU	11	L	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	3	7.3	
2008	1433.03	TU	11	L	A	LEVEL	0.25	POTTERY	SJP	BODY	5	17.9	
2008	1433.04	TU	11	L	A	LEVEL	0.25	POTTERY	SJP	CRUMB	9	2.4	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB- STRAT	SAMPLE	RECOV- ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1433.05	TU	11	L	A	LEVEL	0.25	POTTERY	OFTP	BODY	3	8.0	
2008	1433.06	TU	11	L	A	LEVEL	0.25	POTTERY	OFTI	BODY	1	3.3	
2008	1433.07	TU	11	L	A	LEVEL	0.25	POTTERY	OFTP	CRUMB	5	2.2	
2008	1434.01	TU	11	L	G	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	50	14.9	
2008	1434.02	TU	11	L	G	LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.7	
2008	1434.03	TU	11	L	G	LEVEL	0.25	POTTERY	SJP	BODY	1	4.1	
2008	1434.04	TU	11	L	G	LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.6	
2008	1434.05	TU	11	L	G	LEVEL	0.25	POTTERY	OFTP	BODY	1	1.9	
2008	1434.06	TU	11	L	G	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.4	
2008	1435.01	TU	11	L	G	LEVEL	0.25	MARINESHELL	MOD	FRAG	1	119.5	
2008	1436.01	TU	11	M	G	LEVEL	0.25	POTTERY	SJP	CRUMB	1	1.5	
2008	1436.02	TU	11	M	G	LEVEL	0.25	POTTERY	OFTP	CRUMB	3	1.7	
2008	1436.03	TU	11	M	G	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	23	5.4	
2008	1437.01	TU	11	M	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	105	28.2	
2008	1437.02	TU	11	M	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.9	
2008	1437.03	TU	11	M	A	LEVEL	0.25	POTTERY	SJP	BODY	3	7.4	
2008	1437.04	TU	11	M	A	LEVEL	0.25	POTTERY	SJP	CRUMB	4	1.9	
2008	1437.05	TU	11	M	A	LEVEL	0.25	POTTERY	OFTP	RIM	2	6.3	
2008	1437.06	TU	11	M	A	LEVEL	0.25	POTTERY	OFTP	BODY	4	14.3	
2008	1437.07	TU	11	M	A	LEVEL	0.25	POTTERY	OFTP	CRUMB	10	6.9	
2008	1438.01	TU	11	N	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	119	31.3	
2008	1438.02	TU	11	N	A	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	1	0.1	
2008	1438.03	TU	11	N	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	5	2.4	
2008	1438.04	TU	11	N	A	LEVEL	0.25	CONCRETION	BONE	UID	1	2.1	
2008	1438.05	TU	11	N	A	LEVEL	0.25	POTTERY	SJP	CRUMB	5	2.3	
2008	1438.06	TU	11	N	A	LEVEL	0.25	POTTERY	SJP	BODY	4	20.7	
2008	1438.07	TU	11	N	A	LEVEL	0.25	POTTERY	OFTP	CRUMB	8	3.7	
2008	1438.08	TU	11	N	A	LEVEL	0.25	POTTERY	OFTP	RIM	1	0.3	
2008	1439.01	TU	11	N	G	LEVEL	0.25	MISCROCK	UNMOD	SANDSTONE	3	0.9	
2008	1439.02	TU	11	N	G	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.1	
2008	1439.03	TU	11	N	G	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	21	5.3	
2008	1449.01	TU	11	O	G	LEVEL	0.25	LITHIC	UNMOD	FLAKE	3	28.4	
2008	1449.02	TU	11	O	G	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	1.4	
2008	1450.01	TU	11	O	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	28	5.6	
2008	1450.02	TU	11	O	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	1.7	
2008	1451.01	TU	11	P	G	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	7	2.8	
2008	1451.02	TU	11	P	G	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.2	
2008	1451.03	TU	11	P	G	LEVEL	0.25	MISCROCK	UNMOD	PEBBLE	2	0.8	
2008	1452.01	TU	11	P	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	28	4.7	
2008	1452.02	TU	11	P	A	LEVEL	0.25	POTTERY	SJP	BODY	1	6.1	
2008	1452.03	TU	11	P	A	LEVEL	0.25	POTTERY	OFTP	CRUMB	2	1.6	
2008	1453.01	TU	16	A		LEVEL	0.25	HISTORIC	METAL	FRAG	14	14.1	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1453.02	TU	16	A		LEVEL	0.25	HISTORIC	GLASS	FRAG	2	3.2	
2008	1453.03	TU	16	A		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	2.0	
2008	1453.04	TU	16	A		LEVEL	0.25	BOTANICAL	SEED	UID	1	0.3	
2008	1453.05	TU	16	A		LEVEL	0.25	HISTORIC	BRICK	FRAG	2	9.2	
2008	1453.06	TU	16	A		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	2	0.2	
2008	1453.07	TU	16	A		LEVEL	0.25	LITHIC	UNMOD	FLAKE	5	24.6	
2008	1453.08	TU	16	A		LEVEL	0.25	POTTERY	SJCS	RIM	1	7.0	
2008	1453.09	TU	16	A		LEVEL	0.25	POTTERY	SJCS	BODY	3	11.0	
2008	1453.10	TU	16	A		LEVEL	0.25	POTTERY	SJP	RIM	2	9.4	
2008	1453.11	TU	16	A		LEVEL	0.25	POTTERY	SJP	BODY	32	68.5	
2008	1453.12	TU	16	A		LEVEL	0.25	POTTERY	SJP	CRUMB	86	37.6	
2008	1453.13	TU	16	A		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.3	
2008	1453.14	TU	16	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	208	71.4	
2008	1454.01	TU	11	Q	A	LEVEL	0.25	POTTERY	OFTP	CRUMB	2	1.1	
2008	1454.02	TU	11	Q	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	31	11.2	
2008	1455.01	TU	11	Q	G	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	6.3	
2008	1455.02	TU	11	Q	G	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.1	
2008	1457.01	TU	16	B		LEVEL	0.25	LITHIC	UNMOD	FLAKE	15	15.6	
2008	1457.01	TU	16	B		LEVEL	0.25	POTTERY	SJP	RIM	2	11.5	
2008	1457.02	TU	16	B		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	2	0.1	
2008	1457.02	TU	16	B		LEVEL	0.25	POTTERY	SJCS	CRUMB	1	0.7	
2008	1457.03	TU	16	B		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.9	
2008	1457.03	TU	16	B		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	0.4	BURNED
2008	1457.04	TU	16	B		LEVEL	0.25	POTTERY	SJCS	RIM	1	6.4	
2008	1457.04	TU	16	B		LEVEL	0.25	HISTORIC	METAL	FRAG	2	0.8	
2008	1457.05	TU	16	B		LEVEL	0.25	POTTERY	SJP	RIM	1	2.1	
2008	1457.05	TU	16	B		LEVEL	0.25	HISTORIC	PLASTIC	FRAG	1	0.2	
2008	1457.06	TU	16	B		LEVEL	0.25	HISTORIC	METAL	NAIL	1	3.7	
2008	1457.06	TU	16	B		LEVEL	0.25	POTTERY	SJP	BODY	23	79.8	
2008	1457.07	TU	16	B		LEVEL	0.25	POTTERY	SJCS	BODY	9	43.5	
2008	1457.07	TU	16	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	24	6.0	
2008	1457.08	TU	16	B		LEVEL	0.25	POTTERY	SJP	CRUMB	11	3.9	
2008	1457.08	TU	16	B		LEVEL	0.25	POTTERY	SJP	CRUMB	80	32.8	
2008	1457.09	TU	16	B		LEVEL	0.25	POTTERY	SJCS	CRUMB	5	2.0	
2008	1457.09	TU	16	B		LEVEL	0.25	POTTERY	SJP	BODY	7	13.3	
2008	1457.10	TU	16	B		LEVEL	0.25	MISCROCK	UNMOD	SANDSTONE	1	13.8	
2008	1457.11	TU	16	B		LEVEL	0.25	PALEOFECES	UID	UID	1	0.5	
2008	1457.12	TU	16	B		LEVEL	0.25	HISTORIC	METAL	FRAG	11	11.5	
2008	1457.13	TU	16	B		LEVEL	0.25	HISTORIC	GLASS	FRAG	1	0.2	
2008	1457.14	TU	16	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	374	107.3	
2008	1458.01	TU	16	C		LEVEL	0.25	POTTERY	SJIN	RIM	1	11.4	
2008	1458.02	TU	16	C		LEVEL	0.25	POTTERY	SJP	RIM	2	2.3	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1458.03	TU	16	C		LEVEL	0.25	POTTERY	SJIN	BODY	2	13.9	
2008	1458.04	TU	16	C		LEVEL	0.25	POTTERY	SJCS	BODY	1	12.6	
2008	1458.05	TU	16	C		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.8	
2008	1458.06	TU	16	C		LEVEL	0.25	POTTERY	SJCS	CRUMB	4	3.0	
2008	1458.07	TU	16	C		LEVEL	0.25	POTTERY	SJP	BODY	58	277.8	
2008	1458.08	TU	16	C		LEVEL	0.25	POTTERY	SJP	CRUMB	135	58.9	
2008	1458.09	TU	16	C		LEVEL	0.25	LITHIC	UNMOD	FLAKE	69	41.3	
2008	1458.10	TU	16	C		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	25	1.6	
2008	1458.11	TU	16	C		LEVEL	0.25	MISCROCK	UNMOD	PEBBLE	2	1.3	
2008	1458.12	TU	16	C		LEVEL	0.25	HISTORIC	BRICK	FRAG	1	0.2	
2008	1458.13	TU	16	C		LEVEL	0.25	HISTORIC	METAL	FRAG	2	0.5	
2008	1458.14	TU	16	C		LEVEL	0.25	HISTORIC	GLASS	FRAG	1	0.2	
2008	1458.15	TU	16	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1002	351.6	
2008	1459.01	TU	16	D	A	LEVEL	0.25	POTTERY	SJP	RIM	2	129.9	
2008	1459.02	TU	16	D	A	LEVEL	0.25	POTTERY	SJP	BODY	30	114.0	
2008	1459.03	TU	16	D	A	LEVEL	0.25	POTTERY	SJP	CRUMB	96	25.6	
2008	1459.04	TU	16	D	A	LEVEL	0.25	POTTERY	SJCS	BODY	4	47.7	
2008	1459.05	TU	16	D	A	LEVEL	0.25	POTTERY	SJCS	CRUMB	1	0.5	
2008	1459.06	TU	16	D	A	LEVEL	0.25	POTTERY	OFTP	BODY	1	2.2	
2008	1459.07	TU	16	D	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	79	38.6	
2008	1459.08	TU	16	D	A	LEVEL	0.25	VERTFAUNA	UNMOD	SHARKTOOTH	2	1.9	
2008	1459.09	TU	16	D	A	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	29	3.7	
2008	1459.10	TU	16	D	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	792	247.8	
2008	1460.01	TU	16	D	B	LEVEL	0.25	POTTERY	SJCS	BODY	5	71.0	
2008	1460.02	TU	16	D	B	LEVEL	0.25	POTTERY	SJP	BODY	6	44.0	
2008	1460.03	TU	16	D	B	LEVEL	0.25	POTTERY	SJP	CRUMB	7	5.7	
2008	1460.04	TU	16	D	B	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.6	
2008	1460.05	TU	16	D	B	LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.9	
2008	1460.06	TU	16	D	B	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	21	2.1	
2008	1460.07	TU	16	D	B	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	1.7	
2008	1460.08	TU	16	D	B	LEVEL	0.25	HISTORIC	PLASTIC	FRAG	1	0.1	
2008	1460.09	TU	16	D	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	118	31.2	
2008	1461.01	TU	16	E	A	LEVEL	0.25	POTTERY	SJP	RIM	1	1.7	
2008	1461.02	TU	16	E	A	LEVEL	0.25	POTTERY	SJP	BODY	14	33.3	
2008	1461.03	TU	16	E	A	LEVEL	0.25	POTTERY	SJP	CRUMB	67	24.6	
2008	1461.04	TU	16	E	A	LEVEL	0.25	POTTERY	OFTP	CRUMB	3	1.8	
2008	1461.05	TU	16	E	A	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	4	0.2	
2008	1461.06	TU	16	E	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	18	15.5	
2008	1461.07	TU	16	E	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	289	102.8	
2008	1468.01	TU	20	A		LEVEL	0.25	POTTERY	SJCS	RIM	1	21.0	
2008	1468.02	TU	20	A		LEVEL	0.25	POTTERY	SJCS	BODY	4	11.0	
2008	1468.03	TU	20	A		LEVEL	0.25	POTTERY	SJP	BODY	11	27.8	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1468.04	TU	20	A		LEVEL	0.25	POTTERY	SJP	CRUMB	27	21.0	
2008	1468.05	TU	20	A		LEVEL	0.25	MISCROCK	UNMOD	SANDSTONE	2	8.2	
2008	1468.06	TU	20	A		LEVEL	0.25	LITHIC	UNMOD	FLAKE	5	3.3	
2008	1468.07	TU	20	A		LEVEL	0.25	HISTORIC	METAL	FRAG	2	1.5	
2008	1468.08	TU	20	A		LEVEL	0.25	HISTORIC	GLASS	FRAG	1	5.3	
2008	1468.09	TU	20	A		LEVEL	0.25	HISTORIC	METAL	NAIL	1	4.4	
2008	1468.10	TU	20	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	89	26.6	
2008	1469.01	TU	20	A		LEVEL	0.25	POTTERY	SJCS	RIM	1	2.5	
2008	1469.02	TU	20	A		LEVEL	0.25	POTTERY	SJP	CRUMB	11	5.1	
2008	1469.03	TU	20	A		LEVEL	0.25	POTTERY	SJCS	CRUMB	1	1.4	
2008	1469.04	TU	20	A		LEVEL	0.25	LITHIC	UNMOD	FLAKE	3	4.6	
2008	1469.05	TU	20	A		LEVEL	0.25	HISTORIC	METAL	FRAG	2	8.8	
2008	1469.06	TU	20	A		LEVEL	0.25	HISTORIC	METAL	NAIL	1	2.6	
2008	1469.07	TU	20	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	34	12.5	
2008	1470.01	TU	20	B		LEVEL	0.25	HISTORIC	GLASS	FRAG	5	6.3	
2008	1470.02	TU	20	B		LEVEL	0.25	HISTORIC	METAL	NAIL	3	13.4	
2008	1470.03	TU	20	B		LEVEL	0.25	HISTORIC	METAL	FRAG	13	12.1	
2008	1470.04	TU	20	B		LEVEL	0.25	LITHIC	MOD	BIFACE	1	18.0	
2008	1470.05	TU	20	B		LEVEL	0.25	LITHIC	UNMOD	FLAKE	10	7.2	
2008	1470.06	TU	20	B		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	26	2.1	
2008	1470.07	TU	20	B		LEVEL	0.25	POTTERY	SJCS	RIM	1	2.4	
2008	1470.08	TU	20	B		LEVEL	0.25	POTTERY	SJP	RIM	2	5.0	
2008	1470.09	TU	20	B		LEVEL	0.25	POTTERY	SJCS	BODY	16	64.1	
2008	1470.10	TU	20	B		LEVEL	0.25	POTTERY	SJP	BODY	34	102.4	
2008	1470.11	TU	20	B		LEVEL	0.25	POTTERY	OFTP	BODY	1	1.7	
2008	1470.12	TU	20	B		LEVEL	0.25	POTTERY	SJPNT	BODY	2	8.4	
2008	1470.13	TU	20	B		LEVEL	0.25	POTTERY	STP	BODY	1	2.2	
2008	1470.14	TU	20	B		LEVEL	0.25	POTTERY	STP	CRUMB	5	4.8	
2008	1470.15	TU	20	B		LEVEL	0.25	POTTERY	SJCS	CRUMB	9	6.3	
2008	1470.16	TU	20	B		LEVEL	0.25	POTTERY	SJP	CRUMB	116	54.6	
2008	1470.17	TU	20	B		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	1.1	
2008	1470.18	TU	20	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	689	209.5	
2008	1471.01	TU	20	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	755	227.6	
2008	1471.02	TU	20	C		LEVEL	0.25	LITHIC	UNMOD	FLAKE	11	6.4	
2008	1471.03	TU	20	C		LEVEL	0.25	POTTERY	SJP	BODY	20	72.0	
2008	1471.04	TU	20	C		LEVEL	0.25	POTTERY	SJP	CRUMB	31	11.6	
2008	1471.05	TU	20	C		LEVEL	0.25	POTTERY	SJCS	BODY	2	3.0	
2008	1471.06	TU	20	C		LEVEL	0.25	POTTERY	STP	BODY	1	1.5	
2008	1471.07	TU	20	C		LEVEL	0.25	MISCROCK	UNMOD	PEBBLE	1	1.7	
2008	1471.08	TU	20	C		LEVEL	0.25	CONCRETION	UID	UID	6	10.6	
2008	1471.09	TU	20	C		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	25	2.4	
2008	1476.01	TU	20	D	A	LEVEL	0.25	POTTERY	SJP	BODY	4	6.4	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1476.02	TU	20	D	A	LEVEL	0.25	POTTERY	SJP	BODY	1	1.1	
2008	1476.03	TU	20	D	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	5	4.0	
2008	1476.04	TU	20	D	A	LEVEL	0.25	POTTERY	SJP	CRUMB	10	2.0	
2008	1476.05	TU	20	D	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	194	46.9	
2008	1477.01	TU	20	D	A	LEVEL	0.25	POTTERY	SJCS	BODY	2	5.5	
2008	1477.02	TU	20	D	A	LEVEL	0.25	POTTERY	SJCS	CRUMB	2	0.4	
2008	1477.03	TU	20	D	A	LEVEL	0.25	POTTERY	SJP	BODY	2	22.2	
2008	1477.04	TU	20	D	A	LEVEL	0.25	POTTERY	SJP	CRUMB	8	2.9	
2008	1477.05	TU	20	D	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	7	25.3	
2008	1477.06	TU	20	D	A	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	9	0.7	
2008	1477.07	TU	20	D	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	279	80.1	
2008	1478.01	TU	20	D	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	49	26.8	
2008	1478.02	TU	20	D	B	LEVEL	0.25	LITHIC	UNMOD	FLAKE	4	2.2	
2008	1478.03	TU	20	D	B	LEVEL	0.25	POTTERY	SJP	BODY	3	13.9	
2008	1478.04	TU	20	D	B	LEVEL	0.25	POTTERY	SJP	CRUMB	7	3.4	
2008	1478.05	TU	20	D	B	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.7	
2008	1478.06	TU	20	D	B	LEVEL	0.25	POTTERY	SJCS	BODY	1	17.2	
2008	1479.01	TU	20	D	E	LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.2	
2008	1479.02	TU	20	D	E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	16	5.6	
2008	1481.01	TU	20	D	F	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.1	
2008	1481.02	TU	20	D	F	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	23	5.0	
2008	1482.01	TU	20	D	D	LEVEL	0.25	LITHIC	MOD	FLAKE	1	16.3	
2008	1483.01	TU	20	D	D	LEVEL	0.25	POTTERY	SJP	BODY	3	10.1	
2008	1483.02	TU	20	D	D	LEVEL	0.25	POTTERY	SJP	CRUMB	5	0.5	
2008	1488.01	TU	20	D	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	223	82.0	
2008	1488.02	TU	20	D	A	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	2	0.3	
2008	1488.03	TU	20	D	A	LEVEL	0.25	POTTERY	SJP	CRUMB	21	6.2	
2008	1488.04	TU	20	D	A	LEVEL	0.25	POTTERY	SJP	BODY	7	3.7	
2008	1488.05	TU	20	D	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	14	8.7	
2008	1490.01	TU	16	E	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	6	1.3	
2008	1490.02	TU	16	E	C	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.2	
2008	1491.01	TU	20	E	C	LEVEL	0.25	POTTERY	SJP	CRUMB	2	1.0	
2008	1491.02	TU	20	E	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG		1.6	
2008	1492.01	TU	20	E	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	259	87.9	
2008	1492.02	TU	20	E	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	10	3.8	
2008	1492.03	TU	20	E	A	LEVEL	0.25	LITHIC	MOD	HAFTEDBIFACE	1	38.5	
2008	1492.04	TU	20	E	A	LEVEL	0.25	POTTERY	SJP	BODY	5	15.5	
2008	1492.05	TU	20	E	A	LEVEL	0.25	POTTERY	SJP	CRUMB	18	5.8	
2008	1494.01	TU	20	F	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	9	12.5	
2008	1494.02	TU	20	F	A	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.7	
2008	1494.03	TU	20	F	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	145	40.4	
2008	1495.01	TU	16	F	A	LEVEL	0.25	POTTERY	SJP	BODY	1	2.9	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1495.02	TU	16	F	A	LEVEL	0.25	POTTERY	SJP	CRUMB	5	1.0	
2008	1495.03	TU	16	F	A	LEVEL	0.25	POTTERY	SJCS	CRUMB	1	0.7	
2008	1495.04	TU	16	F	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	8	3.4	
2008	1495.05	TU	16	F	A	LEVEL	0.25	MISCROCK	UNMOD	PEBBLE	1	0.3	
2008	1495.06	TU	16	F	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	95	60.4	
2008	1496.01	TU	20	F	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.5	
2008	1497.01	TU	16	F	H	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	19	15.0	
2008	1497.02	TU	16	F	H	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.6	
2008	1499.01	TU	16	F	G/A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	8	3.4	
2008	1499.02	TU	16	F	G/A	LEVEL	0.25	POTTERY	SJP	CRUMB	1	1.0	
2008	1500.01	TU	8	A		LEVEL	0.25	POTTERY	SJP	RIM	1	4.0	
2008	1500.02	TU	8	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	12	4.0	
2008	1502.01	TU	8	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	238	63.4	
2008	1503.01	TU	8	C		LEVEL	0.25	BIVALVE	BIVALVE	FRAG	2	3.0	
2008	1503.02	TU	8	C		LEVEL	0.25	CONCRETION	BONE	UID	5	10.2	
2008	1503.03	TU	8	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	420	134.4	
2008	1504.01	TU	8	D		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.2	
2008	1504.02	TU	8	D		LEVEL	0.25	VERTFAUNA	MOD	BONE	1	4.7	
2008	1504.03	TU	8	D		LEVEL	0.25	VERTFAUNA	UNMOD	ANTLER	10	54.4	
2008	1504.04	TU	8	D		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	935	369.1	
2008	1504.05	TU	8	D		LEVEL	0.25	CONCRETION	BONE	UID	10	58.2	
2008	1506.01	TU	8	E		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	84.1	
2008	1506.02	TU	8	E		LEVEL	0.25	CONCRETION	BONE	UID	2	6.3	
2008	1506.03	TU	8	E		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	325	146.8	
2008	1507.01	TU	8	F	A	LEVEL	0.25	HISTORIC	LEAD	BULLET	1	1.9	22 CALIBER
2008	1507.02	TU	8	F	A	LEVEL	0.25	CONCRETION	BONE	UID	4	10.8	
2008	1507.03	TU	8	F	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	209	80.5	
2008	1508.01	TU	8	F	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	150	38.8	
2008	1508.02	TU	8	F	B	LEVEL	0.25	CONCRETION	BONE	UID	3	0.8	
2008	1509.01	TU	8	F	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	64	18.1	
2008	1509.02	TU	8	F	B	LEVEL	0.25	CONCRETION	BONE	UID	4	5.2	
2008	1510.01	TU	8	G	A	LEVEL	0.25	POTTERY	OFTP	CRUMB	2	1.3	
2008	1510.02	TU	8	G	A	LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.4	
2008	1510.03	TU	8	G	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	210	58.1	
2008	1510.04	TU	8	G	A	LEVEL	0.25	CONCRETION	BONE	UID	46	16.8	
2008	1511.01	TU	8	G	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	85	16.6	
2008	1511.02	TU	8	G	B	LEVEL	0.25	CONCRETION	BONE	UID	9	1.9	
2008	1512.01	TU	8	G	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	245	67.1	
2008	1512.02	TU	8	G	B	LEVEL	0.25	CONCRETION	BONE	UID	33	28.2	
2008	1514.01	TU	8	H	A	LEVEL	0.25	POTTERY	SJP	CRUMB	2	1.9	
2008	1514.02	TU	8	H	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.2	
2008	1514.03	TU	8	H	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	170	58.4	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1514.04	TU	8	H	A	LEVEL	0.25	CONCRETION	BONE	UID	19	15.9	
2008	1516.01	TU	8	H	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	28	7.8	
2008	1516.02	TU	8	H	A	LEVEL	0.25	CONCRETION	BONE	UID	1	20.4	
2008	1518.01	TU	8	H	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	307	101.5	
2008	1518.02	TU	8	H	B	LEVEL	0.25	CONCRETION	BONE	UID	6	1.4	
2008	1519.01	TU	8	I	A	LEVEL	0.25	TERR. SNAIL	EUGLANDINA	UID	2	1.1	
2008	1519.02	TU	8	I	A	LEVEL	0.25	POTTERY	SJCS	CRUMB	1	2.8	
2008	1519.03	TU	8	I	A	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	0.9	
2008	1519.04	TU	8	I	A	LEVEL	0.25	PALEOFECES	UID	UID	1	1.0	
2008	1519.05	TU	8	I	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	525	66.1	
2008	1519.06	TU	8	I	A	LEVEL	0.25	CONCRETION	BONE	UID	68	23.3	
2008	1520.01	TU	8	I	B	LEVEL	0.25	LITHIC	MOD	FLAKE	1	2.2	
2008	1520.02	TU	8	I	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	150	58.8	
2008	1520.03	TU	8	I	B	LEVEL	0.25	CONCRETION	BONE	UID	13	3.4	
2008	1521.01	TU	8	I	B	LEVEL	0.25	TERR. SNAIL	EUGLANDINA	UID	1	7.1	
2008	1521.02	TU	8	I	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	354	88.6	
2008	1521.03	TU	8	I	B	LEVEL	0.25	CONCRETION	BONE	UID	33	9.1	
2008	1522.01	TU	8	J	A	LEVEL	0.25	VERTFAUNA	MOD	BONE	2	7.1	
2008	1522.02	TU	8	J	A	LEVEL	0.25	BIVALVE	BIVALVE	FRAG	1	1.0	
2008	1522.03	TU	8	J	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	434	185.2	
2008	1522.04	TU	8	J	A	LEVEL	0.25	CONCRETION	BONE	UID	47	32.1	
2008	1523.01	TU	8	J	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	651	219.9	
2008	1523.02	TU	8	J	B	LEVEL	0.25	CONCRETION	BONE	UID	215	102.0	
2008	1524.01	TU	8	J	B	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	3.6	
2008	1524.02	TU	8	J	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	282	84.1	
2008	1524.03	TU	8	J	B	LEVEL	0.25	CONCRETION	BONE	UID	70	57.8	
2008	1525.01	TU	8	K	A	LEVEL	0.25	POTTERY	SJCS	RIM	1	6.4	
2008	1525.02	TU	8	K	A	LEVEL	0.25	POTTERY	SJCS	BODY	1	11.9	
2008	1525.03	TU	8	K	A	LEVEL	0.25	POTTERY	SJP	BODY	1	4.3	
2008	1525.04	TU	8	K	A	LEVEL	0.25	POTTERY	SJP	CRUMB	3	3.0	
2008	1525.05	TU	8	K	A	LEVEL	0.25	LITHIC	MOD	BIFACE	1	0.9	DRILL?
2008	1525.06	TU	8	K	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	1.2	
2008	1525.07	TU	8	K	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	446	212.1	
2008	1525.08	TU	8	K	A	LEVEL	0.25	CONCRETION	BONE	UID	48	33.0	
2008	1525.09	TU	8	K	A	LEVEL	0.25	PALEOFECES	UID	UID	1	9.4	
2008	1526.01	TU	8	K	B	LEVEL	0.25	MARINESHELL	MOD	FRAG	1	149.5	GASTROPOD
2008	1526.02	TU	8	K	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	301	111.5	
2008	1526.03	TU	8	K	B	LEVEL	0.25	CONCRETION	BONE	UID	24	10.2	
2008	1527.01	TU	8	L	A	LEVEL	0.25	POTTERY	SJCS	BODY	1	10.1	
2008	1527.02	TU	8	L	A	LEVEL	0.25	POTTERY	SJP	BODY	3	6.0	
2008	1527.03	TU	8	L	A	LEVEL	0.25	POTTERY	SJP	CRUMB	2	1.0	
2008	1527.04	TU	8	L	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.3	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1527.05	TU	8	L	A	LEVEL	0.25	TERR. SNAIL	EUGLANDINA	UID	1	0.8	
2008	1527.06	TU	8	L	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	552	240.8	
2008	1527.07	TU	8	L	A	LEVEL	0.25	CONCRETION	BONE	UID	90	50.5	
2008	1528.01	TU	8	L	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	156	55.7	
2008	1528.02	TU	8	L	B	LEVEL	0.25	CONCRETION	BONE	UID	19	6.2	
2008	1529.01	TU	8	L	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	20	4.6	
2008	1530.01	TU	8	M	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	364	255.6	
2008	1530.02	TU	8	M	A	LEVEL	0.25	POTTERY	SJCS	BODY	1	4.1	
2008	1530.03	TU	8	M	A	LEVEL	0.25	POTTERY	SJP	BODY	2	3.0	
2008	1530.04	TU	8	M	A	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.4	
2008	1530.05	TU	8	M	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	3	3.3	
2008	1530.06	TU	8	M	A	LEVEL	0.25	MISCROCK	UNMOD	PEBBLE	1	0.7	
2008	1530.07	TU	8	M	A	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	8.9	
2008	1530.08	TU	8	M	A	LEVEL	0.25	CONCRETION	UID	UID	8	26.4	
2008	1530.09	TU	8	M	A	LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.2	
2008	1531.01	TU	8	M	A	LEVEL	0.25	MARINESHELL	MOD	FRAG	1	73.6	
2008	1532.01	TU	8	M	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	71	28.6	
2008	1532.02	TU	8	M	B	LEVEL	0.25	CONCRETION	BONE	UID	6	3.9	
2008	1533.01	TU	8	M	B	LEVEL	0.25	LITHIC	MOD	FLAKE	1	0.4	
2008	1533.02	TU	8	M	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	155	49.6	
2008	1533.03	TU	8	M	B	LEVEL	0.25	CONCRETION	BONE	UID	6	2.3	
2008	1534.01	TU	8	N	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	256	186.6	
2008	1534.02	TU	8	N	A	LEVEL	0.25	CONCRETION	BONE	UID	3	1.6	
2008	1534.03	TU	8	N	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	3	2.3	
2008	1534.04	TU	8	N	A	LEVEL	0.25	POTTERY	SJCS	BODY	1	2.7	
2008	1534.05	TU	8	N	A	LEVEL	0.25	POTTERY	SJP	BODY	1	1.7	
2008	1534.06	TU	8	N	A	LEVEL	0.25	POTTERY	SJP	CRUMB	7	5.3	
2008	1535.01	TU	8	N	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	143	63.4	
2008	1535.02	TU	8	N	B	LEVEL	0.25	CONCRETION	BONE	UID	7	3.7	
2008	1536.01	TU	8	O	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	471	219.9	
2008	1536.02	TU	8	O	A	LEVEL	0.25	CONCRETION	BONE	UID	12	12.9	
2008	1536.03	TU	8	O	A	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	0.8	
2008	1536.04	TU	8	O	A	LEVEL	0.25	POTTERY	SJP	RIM	1	3.9	
2008	1536.05	TU	8	O	A	LEVEL	0.25	POTTERY	SJP	BODY	1	2.0	
2008	1536.06	TU	8	O	A	LEVEL	0.25	POTTERY	SJP	CRUMB	3	1.1	
2008	1536.07	TU	8	O	A	LEVEL	0.25	POTTERY	OFTP	CRUMB	2	1.8	
2008	1537.01	TU	8	O	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	91	36.9	
2008	1538.01	TU	8A	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	37	8.2	
2008	1538.02	TU	8A	A		LEVEL	0.25	CONCRETION	BONE	UID	8	2.9	
2008	1539.01	TU	8A	A/C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	7	1.1	
2008	1539.02	TU	8A	A/C		LEVEL	0.25	CONCRETION	UID	UID	1	0.3	
2008	1540.01	TU	15A	E	A	LEVEL	0.25	CONCRETION	UID	UID	1	14.7	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1540.02	TU	15A	E	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	73	41.5	
2008	1541.01	TU	15A	E	B	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.3	
2008	1541.02	TU	15A	E	B	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	8	9.0	
2008	1541.03	TU	15A	E	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	227	147.5	
2008	1541.04	TU	15A	E	B	LEVEL	0.25	CONCRETION	UID	UID	28	18.0	
2008	1542.01	TU	15A	F		LEVEL	0.25	VERTFAUNA	MOD	BONE	1	0.2	
2008	1542.02	TU	15A	F		LEVEL	0.25	LITHIC	MOD	BIFACE	1	1.3	
2008	1542.03	TU	15A	F		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.7	
2008	1542.04	TU	15A	F		LEVEL	0.25	MISCROCK	UNMOD	SANDSTONE	1	3.5	
2008	1542.05	TU	15A	F		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	0.7	
2008	1542.06	TU	15A	F		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	344	133.7	
2008	1542.07	TU	15A	F		LEVEL	0.25	CONCRETION	BONE	UID	61	33.6	
2008	1543.01	TU	15A	G		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.3	
2008	1543.02	TU	15A	G		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	2	6.4	
2008	1543.03	TU	15A	G		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	264	17.2	
2008	1543.04	TU	15A	G		LEVEL	0.25	CONCRETION	BONE	UID	11	10.1	
2008	1545.01	TU	15A	H		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	47	19.3	
2008	1546.01	TU	15A	H		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	299	195.4	
2008	1546.02	TU	15A	H		LEVEL	0.25	CONCRETION	BONE	UID	21	7.7	
2008	1546.03	TU	15A	H		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.4	
2008	1546.04	TU	15A	H		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	2	0.6	
2008	1546.05	TU	15A	H		LEVEL	0.25	MISCROCK	UNMOD	PEBBLE	1	0.6	
2008	1547.01	TU	15A	I		LEVEL	0.25	MISCROCK	UNMOD	SANDSTONE	1	19.2	ABRAIDER
2008	1547.02	TU	15A	I		LEVEL	0.25	LITHIC	UNMOD	FLAKE	6	3.3	
2008	1547.03	TU	15A	I		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	284	170.2	
2008	1547.04	TU	15A	I		LEVEL	0.25	CONCRETION	BONE	UID	1	23.2	
2008	1547.05	TU	15A	I		LEVEL	0.25	CONCRETION	UID	UID	23	5.9	
2008	1547.06	TU	15A	I		LEVEL	0.25	TERR. SNAIL	EUGLANDINA	UID	1	2.6	
2008	1548.01	TU	15A	J		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.1	
2008	1548.02	TU	15A	J		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	260	119.6	
2008	1548.03	TU	15A	J		LEVEL	0.25	CONCRETION	BONE	UID	7	20.2	
2008	1549.01	TU	15A	K		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	123	62.1	
2008	1549.02	TU	15A	K		LEVEL	0.25	CONCRETION	BONE	UID	23	31.0	
2008	1549.03	TU	15A	K		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.1	
2008	1550.01	TU	15A	L		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	1.2	
2008	1550.02	TU	15A	L		LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.5	
2008	1550.03	TU	15A	L		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	113	50.8	
2008	1550.04	TU	15A	L		LEVEL	0.25	CONCRETION	UID	UID	10	2.2	
2008	1552.01	TU	16	F	G	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	3	0.6	
2008	1554.01	TU	16	G	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	37	13.1	
2008	1554.02	TU	16	G	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	8	1.8	
2008	1555.01	TU	20	G		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.6	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1555.02	TU	20	G		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	18	3.8	
2008	1557.01	TU	16	G	H	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	5	1.4	
2008	1558.01	TU	20	H		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.2	
2008	1558.02	TU	20	H		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	1.2	
2008	1559.01	TU	15	H	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	4	1.7	
2008	1559.02	TU	15	H	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	9	1.6	
2008	1560.01	TU	16	H	H	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	3	0.4	
2008	1601.01	TU	9A	A	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	160	64.7	
2008	1601.02	TU	9A	A	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	8.7	REFIT
2008	1601.03	TU	9A	A	A	LEVEL	0.25	POTTERY	SJP	BODY	1	1.9	
2008	1601.04	TU	9A	A	A	LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.3	
2008	1601.05	TU	9A	A	A	LEVEL	0.25	HISTORIC	UID	FRAG	1	0.9	DAUB?
2008	1601.06	TU	9A	A	A	LEVEL	0.25	CONCRETION	UID	UID	3	1.2	
2008	1602.01	TU	9A	A	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	403	122.6	
2008	1602.02	TU	9A	A	A	LEVEL	0.25	LITHIC	MOD	FLAKE	2	2.3	
2008	1602.03	TU	9A	A	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	3	1.7	
2008	1602.04	TU	9A	A	A	LEVEL	0.25	POTTERY	SJP	BODY	3	5.3	
2008	1602.05	TU	9A	A	A	LEVEL	0.25	POTTERY	SJP	CRUMB	3	2.3	
2008	1602.06	TU	9A	A	A	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	0.5	
2008	1602.07	TU	9A	A	A	LEVEL	0.25	CONCRETION	UID	UID	37	28.1	
2008	1603.01	TU	9	A	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	33	12.9	
2008	1604.01	TU	9	A	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	18	13.3	
2008	1604.02	TU	9	A	B	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	2.9	
2008	1604.03	TU	9	A	B	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	1.0	
2008	1604.04	TU	9	A	B	LEVEL	0.25	LITHIC	MOD	FLAKE	1	1.5	
2008	1604.05	TU	9	A	B	LEVEL	0.25	CONCRETION	UID	UID	1	2.3	
2008	1605.01	TU	10A	A	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	145	61.7	
2008	1605.02	TU	10A	A	A	LEVEL	0.25	POTTERY	SJP	CRUMB	3	0.7	
2008	1605.03	TU	10A	A	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.6	
2008	1605.04	TU	10A	A	A	LEVEL	0.25	CONCRETION	UID	UID	7	3.3	
2008	1606.01	TU	9A	B	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	48	23.5	
2008	1606.02	TU	9A	B	A	LEVEL	0.25	VERTFAUNA	MOD	BONE	1	1.2	
2008	1607.01	TU	9A	B	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	27	12.6	
2008	1608.01	TU	9A	C	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	38	37.6	
2008	1608.02	TU	9A	C	A	LEVEL	0.25	POTTERY	SJP	CRUMB	2	0.6	
2008	1609.01	TU	10A	A	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	42	52.7	
2008	1609.02	TU	10A	A	B	LEVEL	0.25	CONCRETION	UID	UID	6	10.0	
2008	1610.01	TU	9A	C	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	32	70.0	
2008	1611.01	TU	10A	A	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	81	50.6	
2008	1612.01	TU	10A	A	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	2.3	
2008	1613.01	TU	9A	D		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	79	56.9	
2008	1613.02	TU	9A	D		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	6.4	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1613.03	TU	9A	D		LEVEL	0.25	CONCRETION	UID	UID	4	6.3	
2008	1614.01	TU	10A	B	A	LEVEL	0.25	POTTERY	SJP	BODY	1	5.5	
2008	1614.02	TU	10A	B	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	54	25.8	
2008	1615.01	TU	9A	D		LEVEL	0.25	LITHIC	MOD	HAFTEDBIFACE	1	21.2	
2008	1617.01	TU	9A	D		LEVEL	0.25	LITHIC	MOD	HAFTEDBIFACE	1	18.4	
2008	1618.01	TU	10A	B	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	27	29.5	
2008	1618.02	TU	10A	B	B	LEVEL	0.25	CONCRETION	BONE	UID	1	2.0	
2008	1619.01	TU	9A	E		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	159	102.4	
2008	1619.02	TU	9A	E		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	1.4	
2008	1619.03	TU	9A	E		LEVEL	0.25	CONCRETION	UID	UID	3	2.6	
2008	1620.01	TU	10A	C	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	32	24.5	
2008	1621.01	TU	10A	C	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	8	2.1	
2008	1622.01	TU	9A	E		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	42	30.3	
2008	1622.02	TU	9A	E		LEVEL	0.25	CONCRETION	BONE	FRAG	3	4.9	
2008	1623.01	TU	10A	C	B	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.4	
2008	1623.02	TU	10A	C	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	782	307.4	
2008	1623.03	TU	10A	C	B	LEVEL	0.25	CONCRETION	BONE	UID	45	45.9	
2008	1624.01	TU	9A	F		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	84	78.4	
2008	1624.02	TU	9A	F		LEVEL	0.25	LITHIC	MOD	HAFTEDBIFACE	1	1.2	FRAGMENT
2008	1624.03	TU	9A	F		LEVEL	0.25	CONCRETION	BONE	UID	19	74.3	
2008	1625.01	TU	10A	C	B	LEVEL	0.25	MARINESHELL	MOD	FRAG	1	27.3	PERFORATED GASTROPOD
2008	1625.02	TU	10A	C	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	377	158.2	
2008	1625.03	TU	10A	C	B	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	1	0.2	
2008	1625.04	TU	10A	C	B	LEVEL	0.25	CONCRETION	BONE	UID	38	19.4	
2008	1626.01	TU	9A	G		LEVEL	0.25	VERTFAUNA	MOD	BONE	1	1.0	
2008	1626.02	TU	9A	G		LEVEL	0.25	LITHIC	MOD	FLAKE	2	23.0	
2008	1626.03	TU	9A	G		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.5	
2008	1626.04	TU	9A	G		LEVEL	0.25	BIVALVE	BIVALVE	FRAG	3	16.8	
2008	1626.05	TU	9A	G		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	85	67.1	
2008	1626.06	TU	9A	G		LEVEL	0.25	CONCRETION	UID	UID	17	14.5	
2008	1627.01	TU	10A	D		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1207	409.7	
2008	1627.02	TU	10A	D		LEVEL	0.25	CONCRETION	BONE	UID	57	34.5	
2008	1628.01	TU	9A	H		LEVEL	0.25	LITHIC	MOD	UNIFACE	1	12.0	BLADE
2008	1628.02	TU	9A	H		LEVEL	0.25	LITHIC	MOD	FLAKE	1	9.6	
2008	1628.03	TU	9A	H		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.4	
2008	1628.04	TU	9A	H		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	86	52.0	
2008	1628.05	TU	9A	H		LEVEL	0.25	CONCRETION	UID	UID	4	2.7	
2008	1629.01	TU	10A	D		LEVEL	0.25	MARINESHELL	MOD	FRAG	1	181.6	GASTROPOD
2008	1630.01	TU	9A	I		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.5	
2008	1630.02	TU	9A	I		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	82	65.5	
2008	1630.03	TU	9A	I		LEVEL	0.25	MISCROCK	UNMOD	SANDSTONE	1	38.0	
2008	1630.04	TU	9A	I		LEVEL	0.25	CONCRETION	BONE	UID	2	0.8	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1631.01	TU	10A	E		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	142	46.3	
2008	1631.02	TU	10A	E		LEVEL	0.25	CONCRETION	BONE	UID	5	5.0	
2008	1632.01	TU	9A	J		LEVEL	0.25	VERTFAUNA	MOD	BONE	4	3.3	
2008	1632.02	TU	9A	J		LEVEL	0.25	PALEOFECES	UID	UID	5	0.5	
2008	1632.03	TU	9A	J		LEVEL	0.25	LITHIC	UNMOD	FLAKE	7	12.3	
2008	1632.04	TU	9A	J		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	300	99.3	
2008	1632.05	TU	9A	J		LEVEL	0.25	CONCRETION	BONE	UID	22	14.8	
2008	1633.01	TU	10A	E		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	650	134.0	
2008	1633.02	TU	10A	E		LEVEL	0.25	CONCRETION	BONE	UID	11	2.6	
2008	1634.01	TU	10A	F		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1240	384.2	
2008	1634.02	TU	10A	F		LEVEL	0.25	CONCRETION	BONE	UID	65	27.4	
2008	1634.03	TU	10A	F		LEVEL	0.25	LITHIC	UNMOD	FLAKE	3	3.7	
2008	1634.04	TU	10A	F		LEVEL	0.25	BIVALVE	BIVALVE	FRAG	1	0.6	
2008	1634.05	TU	10A	F		LEVEL	0.25	CONCRETION	UID	UID	38	8.5	
2008	1635.01	TU	9A	K		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	168	31.9	
2008	1637.01	TU	9A	L		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	234	70.2	
2008	1637.02	TU	9A	L		LEVEL	0.25	CONCRETION	BONE	UID	18	18.8	
2008	1637.03	TU	9A	L		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	2.8	
2008	1638.01	TU	10A	G		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	91	22.2	
2008	1638.02	TU	10A	G		LEVEL	0.25	CONCRETION	UID	UID	1	0.2	
2008	1639.01	TU	10A	G		LEVEL	0.25	LITHIC	MOD	FLAKE	1	1.5	
2008	1639.02	TU	10A	G		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	276	124.9	
2008	1640.01	TU	9A	L		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	20	9.2	
2008	1640.02	TU	9A	L		LEVEL	0.25	UID	UID	UID	1	0.8	
2008	1641.01	TU	9A	M		LEVEL	0.25	LITHIC	MOD	FLAKE	1	2.5	
2008	1641.02	TU	9A	M		LEVEL	0.25	LITHIC	UNMOD	FLAKE	4	2.6	
2008	1641.03	TU	9A	M		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	117	25.9	
2008	1641.04	TU	9A	M		LEVEL	0.25	CONCRETION	BONE	UID	13	18.3	
2008	1643.01	TU	10A	H		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	217	110.4	
2008	1643.02	TU	10A	H		LEVEL	0.25	CONCRETION	BONE	UID	12	14.5	
2008	1643.03	TU	10A	H		LEVEL	0.25	CONCRETION	UID	UID	19	14.4	
2008	1644.01	TU	9A	N		LEVEL	0.25	MISCROCK	MOD	SANDSTONE	2	71.2	ABRAIDER
2008	1644.02	TU	9A	N		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	1.8	
2008	1644.03	TU	9A	N		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	30	10.5	
2008	1644.04	TU	9A	N		LEVEL	0.25	CONCRETION	BONE	UID	2	4.8	
2008	1645.01	TU	10A	I		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	139	46.7	
2008	1645.02	TU	10A	I		LEVEL	0.25	CONCRETION	BONE	UID	7	5.4	
2008	1645.03	TU	10A	I		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.2	
2008	1646.01	TU	10A	I		LEVEL	0.25	LITHIC	MOD	BIFACE	1	0.5	
2008	1646.02	TU	10A	I		LEVEL	0.25	VERTFAUNA	MOD	BONE	3	3.2	
2008	1646.03	TU	10A	I		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	364	207.5	
2008	1648.01	TU	10A	J		LEVEL	0.25	LITHIC	UNMOD	FLAKE	4	1.3	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB- STRAT	SAMPLE	RECOV- ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1648.02	TU	10A	J		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	147	113.0	
2008	1648.03	TU	10A	J		LEVEL	0.25	CONCRETION	BONE	UID	6	9.3	
2008	1649.01	TU	10A	J		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	3	0.3	
2008	1649.02	TU	10A	J		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG		19.8	
2008	1651.01	TU	10A	K		LEVEL	0.25	LITHIC	UNMOD	FLAKE	3	0.9	
2008	1651.02	TU	10A	K		LEVEL	0.25	VERTFAUNA	MOD	BONE	1	0.7	
2008	1651.03	TU	10A	K		LEVEL	0.25	CONCRETION	BONE	UID	17	11.0	
2008	1651.04	TU	10A	K		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	308	142.7	
2008	1652.01	TU	10A	L		LEVEL	0.25	LITHIC	UNMOD	FLAKE	4	1.3	
2008	1652.02	TU	10A	L		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	2	0.1	
2008	1652.03	TU	10A	L		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	194	130.1	
2008	1652.04	TU	10A	L		LEVEL	0.25	CONCRETION	BONE	UID	21	7.1	
2008	1654.01	TU	10A	M		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	182	212.2	
2008	1654.02	TU	10A	M		LEVEL	0.25	LITHIC	UNMOD	FLAKE	3	0.4	
2008	1654.03	TU	10A	M		LEVEL	0.25	CONCRETION	BONE	UID	25	9.9	
2008	1656.01	TU	10A	N		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	12	6.0	
2008	1656.02	TU	10A	N		LEVEL	0.25	CONCRETION	BONE	UID	7	2.7	
2008	1656.03	TU	10A	N		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.2	
2008	1657.01	TU	10A	N		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	83	22.9	
2008	1657.02	TU	10A	N		LEVEL	0.25	CONCRETION	BONE	UID	2	4.9	
2008	1657.03	TU	10A	N		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.1	
2008	1657.04	TU	10A	N		LEVEL	0.25	MARINESHELL	MOD	FRAG	1	15.6	
2008	1660.01	TU	10A	O		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	42	27.8	
2008	1660.02	TU	10A	O		LEVEL	0.25	CONCRETION	BONE	UID	2	0.8	
2008	1660.03	TU	10A	O		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.3	
2008	1662.01	TU	10A	P		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	6	7.4	
2008	1671.01	TU	15A	A	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	48	24.4	
2008	1671.02	TU	15A	A	A	LEVEL	0.25	CONCRETION	BONE	UID	5	2.6	
2008	1672.01	TU	15A	A	B	LEVEL	0.25	CONCRETION	BONE	UID	15	9.9	
2008	1672.02	TU	15A	A	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	250	68.4	
2008	1673.01	TU	15A	A	C	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.2	
2008	1673.02	TU	15A	A	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	22	7.3	
2008	1673.03	TU	15A	A	C	LEVEL	0.25	CONCRETION	BONE	UID	7	3.8	
2008	1674.01	TU	15A	A	D	LEVEL	0.25	MARINESHELL	MOD	FRAG	1	3.6	
2008	1674.02	TU	15A	A	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	108	31.0	
2008	1674.03	TU	15A	A	D	LEVEL	0.25	CONCRETION	BONE	UID	52	52.1	
2008	1675.01	TU	15A	A	E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	53	14.8	
2008	1675.02	TU	15A	A	E	LEVEL	0.25	CONCRETION	BONE	UID	10	6.5	
2008	1676.01	TU	15A	B	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	7	1.6	
2008	1676.02	TU	15A	B	A	LEVEL	0.25	CONCRETION	BONE	UID	5	1.8	
2008	1677.01	TU	15A	B	E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	19	4.2	
2008	1677.02	TU	15A	B	E	LEVEL	0.25	CONCRETION	BONE	UID	8	3.0	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1681.01	TU	15A	B	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	375	133.1	
2008	1681.02	TU	15A	B	D	LEVEL	0.25	CONCRETION	BONE	UID	245	122.4	
2008	1681.03	TU	15A	B	D	LEVEL	0.25	MISCROCK	UNMOD	SANDSTONE	2	5.5	
2008	1682.01	TU	15A	B	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	186	53.7	
2008	1682.02	TU	15A	B	B	LEVEL	0.25	CONCRETION	BONE	UID	25	9.8	
2008	1686.01	TU	15A	C		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.3	
2008	1686.02	TU	15A	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	400	159.5	
2008	1686.03	TU	15A	C		LEVEL	0.25	CONCRETION	BONE	UID	70	30.4	
2008	1687.01	TU	15A	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	365	132.6	
2008	1687.02	TU	15A	C		LEVEL	0.25	CONCRETION	BONE	UID	16	4.8	
2008	1689.01	TU	9B	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	71	35.3	
2008	1689.02	TU	9B	A		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	3	7.4	2 BIVALVE - 1 GASTROPOD
2008	1689.03	TU	9B	A		LEVEL	0.25	TERR. SNAIL	EUGLANDINA	UID	1	0.2	
2008	1689.04	TU	9B	A		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	2.1	
2008	1689.05	TU	9B	A		LEVEL	0.25	CONCRETION	BONE	UID	1	0.3	
2008	1689.06	TU	9B	A		LEVEL	0.25	MISCROCK	UNMOD	LIMESTONE	2	4.1	
2008	1689.07	TU	9B	A		LEVEL	0.25	MISCROCK	UNMOD	PEBBLE	1	0.3	
2008	1691.01	TU	10B	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1057	364.7	
2008	1691.02	TU	10B	A		LEVEL	0.25	CONCRETION	BONE	UID	3	3.8	
2008	1691.03	TU	10B	A		LEVEL	0.25	POTTERY	OFTP	BODY	1	1.3	
2008	1691.04	TU	10B	A		LEVEL	0.25	POTTERY	OFTP	CRUMB	7	2.8	
2008	1691.05	TU	10B	A		LEVEL	0.25	POTTERY	SJP	BODY	2	3.2	
2008	1691.06	TU	10B	A		LEVEL	0.25	POTTERY	SJP	CRUMB	3	1.1	
2008	1691.07	TU	10B	A		LEVEL	0.25	VERTFAUNA	MOD	BONE	3	8.0	
2008	1691.08	TU	10B	A		LEVEL	0.25	LITHIC	UNMOD	FLAKE	4	7.0	
2008	1691.09	TU	10B	A		LEVEL	0.25	MISCROCK	UNMOD	PEBBLE	1	5.9	
2008	1692.01	TU	15A	D		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.5	
2008	1692.02	TU	15A	D		LEVEL	0.25	CONCRETION	BONE	UID	14	12.7	
2008	1692.03	TU	15A	D		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	482	170.2	
2008	1693.01	TU	15B	A		LEVEL	0.25	POTTERY	SJP	CRUMB	12	6.9	
2008	1693.02	TU	15B	A		LEVEL	0.25	POTTERY	SJP	BODY	1	9.2	
2008	1693.03	TU	15B	A		LEVEL	0.25	POTTERY	SJP	CRUMB	8	1.0	CONTAINS FIBER
2008	1693.04	TU	15B	A		LEVEL	0.25	MISCROCK	UNMOD	LIMESTONE	1	14.7	
2008	1693.05	TU	15B	A		LEVEL	0.25	LITHIC	MOD	BIFACE	1	2.9	
2008	1693.06	TU	15B	A		LEVEL	0.25	LITHIC	UNMOD	FLAKE	4	1.7	
2008	1693.07	TU	15B	A		LEVEL	0.25	MARINESHELL	MOD	FRAG	1	25.3	GASTROPOD
2008	1693.08	TU	15B	A		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	3	26.2	GASTROPOD
2008	1693.09	TU	15B	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	914	410.4	
2008	1694.01	TU	15B	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	309	120.9	
2008	1694.02	TU	15B	B		LEVEL	0.25	LITHIC	MOD	BIFACE	1	0.7	
2008	1694.03	TU	15B	B		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	0.8	
2008	1694.04	TU	15B	B		LEVEL	0.25	TERR. SNAIL	EUGLANDINA	UID	1	0.2	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB- STRAT	SAMPLE	RECOV- ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1694.05	TU	15B	B		LEVEL	0.25	POTTERY	SJP	BODY	4	49.2	
2008	1694.06	TU	15B	B		LEVEL	0.25	POTTERY	OFTP	CRUMB	3	0.3	
2008	1695.01	TU	10B	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	29	7.5	
2008	1696.01	TU	15B	B		LEVEL	0.25	VERTFAUNA	MOD	BONE	2	7.1	
2008	1696.02	TU	15B	B		LEVEL	0.25	TERR. SNAIL	EUGLANDINA	UID	1	0.4	
2008	1696.03	TU	15B	B		LEVEL	0.25	POTTERY	SJP	CRUMB	3	2.2	CONTAINS FIBER
2008	1696.04	TU	15B	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	418	157.1	
2008	1697.01	TU	10B	B		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	0.6	
2008	1697.02	TU	10B	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	464	147.1	
2008	1697.03	TU	10B	B		LEVEL	0.25	CONCRETION	BONE	UID	20	9.8	
2008	1698.01	TU	15B	C		LEVEL	0.25	VERTFAUNA	MOD	BONE	4	7.5	
2008	1698.02	TU	15B	C		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	0.3	
2008	1698.03	TU	15B	C		LEVEL	0.25	LITHIC	UNMOD	FLAKE	5	1.4	
2008	1698.04	TU	15B	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	665	368.5	
2008	1699.01	TU	10B	C		LEVEL	0.25	VERTFAUNA	MOD	BONE	2	7.6	
2008	1699.02	TU	10B	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	601	193.9	
2008	1699.03	TU	10B	C		LEVEL	0.25	CONCRETION	BONE	UID	45	24.2	
2008	1700.01	TU	12	A		LEVEL	0.25	POTTERY	SJP	CRUMB	10	4.5	
2008	1700.02	TU	12	A		LEVEL	0.25	POTTERY	SJCS	CRUMB	2	2.4	
2008	1700.03	TU	12	A		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.1	
2008	1700.04	TU	12	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	35	14.1	
2008	1700.05	TU	12	A		LEVEL	0.25	UID	UID	UID	2	2.1	
2008	1701.01	TU	12	B		LEVEL	0.25	POTTERY	SJP	BODY	7	15.4	
2008	1701.02	TU	12	B		LEVEL	0.25	POTTERY	SJP	CRUMB	17	8.3	
2008	1701.03	TU	12	B		LEVEL	0.25	LITHIC	UNMOD	FLAKE	3	6.4	
2008	1701.04	TU	12	B		LEVEL	0.25	MISCROCK	UNMOD	LIMESTONE	1	39.4	
2008	1701.05	TU	12	B		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	5.0	GASTROPOD
2008	1701.06	TU	12	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	108	46.0	
2008	1701.07	TU	12	B		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	8	1.0	
2008	1702.01	TU	12	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	63	56.5	
2008	1702.02	TU	12	C		LEVEL	0.25	POTTERY	SJP	BODY	2	5.5	
2008	1702.03	TU	12	C		LEVEL	0.25	POTTERY	SJP	CRUMB	6	1.0	
2008	1702.04	TU	12	C		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.1	
2008	1702.05	TU	12	C		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	1	0.1	
2008	1703.01	TU	12	D		LEVEL	0.25	POTTERY	OFTP	CRUMB	8	1.6	
2008	1703.02	TU	12	D		LEVEL	0.25	POTTERY	SJP	BODY	3	4.6	
2008	1703.03	TU	12	D		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	126	38.5	
2008	1703.04	TU	12	D		LEVEL	0.25	POTTERY	SJP	CRUMB	39	7.1	
2008	1704.01	TU	13	A		LEVEL	0.25	POTTERY	STP	BODY	1	1.1	
2008	1704.02	TU	13	A		LEVEL	0.25	POTTERY	SJP	BODY	2	9.4	
2008	1704.03	TU	13	A		LEVEL	0.25	POTTERY	SJP	CRUMB	15	6.0	
2008	1704.04	TU	13	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	93	38.0	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1705.01	TU	13	B		LEVEL	0.25	POTTERY	SJP	BODY	2	6.6	
2008	1705.02	TU	13	B		LEVEL	0.25	POTTERY	SJCS	CRUMB	1	1.7	
2008	1705.03	TU	13	B		LEVEL	0.25	POTTERY	SJP	CRUMB	16	6.1	
2008	1705.04	TU	13	B		LEVEL	0.25	POTTERY	OFTP	CRUMB	2	2.5	
2008	1705.05	TU	13	B		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	1.5	
2008	1705.06	TU	13	B		LEVEL	0.25	HISTORIC	LEAD	BALL	1	2.5	
2008	1705.07	TU	13	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	64	21.2	
2008	1706.01	TU	12	E		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	81	24.4	
2008	1706.02	TU	12	E		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	2.9	
2008	1706.03	TU	12	E		LEVEL	0.25	POTTERY	SJP	CRUMB	10	3.0	
2008	1706.04	TU	12	E		LEVEL	0.25	POTTERY	OFTP	CRUMB	2	0.7	
2008	1707.01	TU	12	E		LEVEL	0.25	POTTERY	OFTI	BODY	2	4.8	
2008	1707.02	TU	12	E		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	1.4	
2008	1707.03	TU	12	E		LEVEL	0.25	PALEOFECES	UID	UID	1	6.1	
2008	1707.04	TU	12	E		LEVEL	0.25	POTTERY	SJP	CRUMB	4	0.6	
2008	1707.05	TU	12	E		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	1	0.1	
2008	1707.06	TU	12	E		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	366	206.3	
2008	1708.01	TU	13	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	35	10.8	
2008	1708.02	TU	13	B		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	7.7	
2008	1708.03	TU	13	B		LEVEL	0.25	POTTERY	SJP	BODY	1	3.1	
2008	1708.04	TU	13	B		LEVEL	0.25	POTTERY	SJP	CRUMB	6	1.4	
2008	1708.05	TU	13	B		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	3	0.2	
2008	1709.01	TU	12	F		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	86	356.8	
2008	1709.02	TU	12	F		LEVEL	0.25	VERTFAUNA	MOD	BONE	3	2.6	
2008	1709.03	TU	12	F		LEVEL	0.25	MARINESHELL	MOD	FRAG	1	0.2	BEAD
2008	1709.04	TU	12	F		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	2.5	
2008	1709.05	TU	12	F		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	2	5.5	
2008	1709.06	TU	12	F		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	1.5	
2008	1709.07	TU	12	F		LEVEL	0.25	POTTERY	SJP	BODY	1	1.7	
2008	1709.08	TU	12	F		LEVEL	0.25	POTTERY	SJP	CRUMB	4	0.4	
2008	1709.09	TU	12	F		LEVEL	0.25	PALEOFECES	UID	UID	2		
2008	1710.01	TU	12	G	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	1.7	
2008	1710.02	TU	12	G	A	LEVEL	0.25	PALEOFECES	UID	UID	8	11.1	
2008	1710.03	TU	12	G	A	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	2	3.7	
2008	1710.04	TU	12	G	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	722	448.7	
2008	1710.05	TU	12	G	A	LEVEL	0.25	VERTFAUNA	MOD	FRAG	1	4.6	BONE AWL
2008	1711.01	TU	12	G	B	LEVEL	0.25	CONCRETION	BONE	UID	2	7.9	
2008	1712.01	TU	12	G	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	525	321.1	
2008	1712.02	TU	12	G	A	LEVEL	0.25	PALEOFECES	UID	UID	10	27.4	
2008	1712.03	TU	12	G	A	LEVEL	0.25	CONCRETION	BONE	UID	3	0.3	
2008	1713.01	TU	13	C		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.6	
2008	1713.02	TU	13	C		LEVEL	0.25	POTTERY	SJP	BODY	7	30.4	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB- STRAT	SAMPLE	RECOV- ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1713.03	TU	13	C		LEVEL	0.25	POTTERY	SJP	CRUMB	44	17.4	
2008	1713.04	TU	13	C		LEVEL	0.25	LITHIC	MOD	BIFACE	1	0.8	
2008	1713.05	TU	13	C		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.4	
2008	1713.06	TU	13	C		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	1	0.1	
2008	1713.07	TU	13	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	263	117.9	
2008	1714.01	TU	12	G	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	17	8.4	
2008	1715.01	TU	12	H		LEVEL	0.25	POTTERY	OFTP	CRUMB	2	0.8	
2008	1715.02	TU	12	H		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	238	69.8	
2008	1716.01	TU	12	I	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	66	29.7	
2008	1716.02	TU	12	I	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	1.9	
2008	1717.01	TU	12	I	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	21	12.9	
2008	1718.01	TU	13	D		LEVEL	0.25	POTTERY	OFTP	CRUMB	14	4.0	
2008	1718.02	TU	13	D		LEVEL	0.25	POTTERY	SJP	CRUMB	3	0.2	
2008	1718.03	TU	13	D		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	2	2.4	
2008	1718.04	TU	13	D		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	101	47.6	
2008	1719.01	TU	12	I	C	LEVEL	0.25	HISTORIC	GLASS	FRAG	1	0.1	
2008	1719.02	TU	12	I	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	69	29.7	
2008	1720.01	TU	12	I	D	LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.1	
2008	1720.02	TU	12	I	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	15	3.1	
2008	1721.01	TU	12	J	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.5	
2008	1721.02	TU	12	J	A	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	0.6	
2008	1721.03	TU	12	J	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	109	129.9	
2008	1722.01	TU	12	J	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	13	2.1	
2008	1723.01	TU	12	J	E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	5	2.0	
2008	1724.01	TU	13	E	C	LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.2	
2008	1724.02	TU	13	E	C	LEVEL	0.25	POTTERY	OFTI	RIM	1	5.6	
2008	1724.03	TU	13	E	C	LEVEL	0.25	POTTERY	OFTI	BODY	1	3.9	
2008	1724.04	TU	13	E	C	LEVEL	0.25	POTTERY	SJP	BODY	2	4.5	
2008	1724.05	TU	13	E	C	LEVEL	0.25	POTTERY	SJP	CRUMB	10	2.6	
2008	1724.06	TU	13	E	C	LEVEL	0.25	POTTERY	OFTP	CRUMB	21	5.3	
2008	1724.07	TU	13	E	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	301	66.1	
2008	1724.08	TU	13	E	C	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	1	0.1	
2008	1724.09	TU	13	E	C	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	0.3	
2008	1725.01	TU	13	E	A	LEVEL	0.25	TERR. SNAIL	EUGLANDINA	UID	2	0.6	
2008	1725.02	TU	13	E	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	30	5.1	
2008	1728.01	TU	12	K		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	46	22.6	
2008	1729.01	TU	13	E	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.3	
2008	1730.01	TU	13	F	C	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.2	
2008	1730.02	TU	13	F	C	LEVEL	0.25	POTTERY	OFTP	CRUMB	11	3.3	
2008	1730.03	TU	13	F	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	104	44.7	
2008	1731.01	TU	12	K	F	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	170	98.5	
2008	1731.02	TU	12	K	F	LEVEL	0.25	CONCRETION	UID	UID	4	2.0	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1732.01	TU	12	L		LEVEL	0.25	LITHIC	UNMOD	FLAKE	3	1.1	
2008	1732.02	TU	12	L		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	11	2.1	
2008	1733.01	TU	13	F	B	LEVEL	0.25	POTTERY	SJP	BODY	1	2.8	
2008	1733.02	TU	13	F	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	12	2.9	
2008	1734.01	TU	13	G	C	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	1.1	
2008	1734.02	TU	13	G	C	LEVEL	0.25	LITHIC	UNMOD	FLAKE	6	9.5	
2008	1734.03	TU	13	G	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	45	18.2	
2008	1735.01	TU	14	A		LEVEL	0.25	POTTERY	SJP	BODY	2	0.6	
2008	1735.02	TU	14	A		LEVEL	0.25	POTTERY	SJP	CRUMB	6	2.3	
2008	1735.03	TU	14	A		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.3	
2008	1735.04	TU	14	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	31	11.1	
2008	1737.01	TU	13	G	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.4	
2008	1738.01	TU	13	H	C	LEVEL	0.25	LITHIC	UNMOD	FLAKE	4	3.9	
2008	1738.02	TU	13	H	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	35	19.7	
2008	1738.03	TU	13	H	C	LEVEL	0.25	MISCROCK	UNMOD	PEBBLE	1	1.8	
2008	1739.01	TU	14	B		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	0.7	
2008	1739.02	TU	14	B		LEVEL	0.25	LITHIC	MOD	FLAKE	3	3.5	CHERT
2008	1739.03	TU	14	B		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	7.3	
2008	1739.04	TU	14	B		LEVEL	0.25	POTTERY	SJP	BODY	5	11.3	
2008	1739.05	TU	14	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	143	55.5	
2008	1739.06	TU	14	B		LEVEL	0.25	POTTERY	SJP	CRUMB	44	16.8	
2008	1739.07	TU	14	B		LEVEL	0.25	POTTERY	SJCS	BODY	3	9.8	
2008	1739.08	TU	14	B		LEVEL	0.25	POTTERY	STP	CRUMB	2	1.8	
2008	1739.09	TU	14	B		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.2	
2008	1740.01	TU	13	I	C	LEVEL	0.25	LITHIC	MOD	FLAKE	2	0.9	CHERT
2008	1740.02	TU	13	I	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	7	2.9	
2008	1741.01	TU	13	J	C	LEVEL	0.25	LITHIC	UNMOD	FLAKE	3	0.7	
2008	1742.01	TU	14	C		LEVEL	0.25	POTTERY	SJCS	BODY	1	5.5	
2008	1742.02	TU	14	C		LEVEL	0.25	POTTERY	SJP	BODY	3	8.7	
2008	1742.03	TU	14	C		LEVEL	0.25	POTTERY	SJP	CRUMB	24	8.7	
2008	1742.04	TU	14	C		LEVEL	0.25	POTTERY	OFTP	CRUMB	8	5.7	
2008	1742.05	TU	14	C		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	1.7	
2008	1742.06	TU	14	C		LEVEL	0.25	LITHIC	UNMOD	FLAKE	3	1.1	
2008	1742.07	TU	14	C		LEVEL	0.25	CONCRETION	UID	UID	1	0.9	
2008	1742.08	TU	14	C		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	4	0.3	
2008	1742.09	TU	14	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	101	30.1	
2008	1743.01	TU	14	D		LEVEL	0.25	POTTERY	OFTP	BODY	1	1.7	
2008	1743.02	TU	14	D		LEVEL	0.25	POTTERY	OFTP	CRUMB	4	2.2	
2008	1743.03	TU	14	D		LEVEL	0.25	POTTERY	SJP	BODY	2	4.6	
2008	1743.04	TU	14	D		LEVEL	0.25	POTTERY	SJP	CRUMB	6	1.1	
2008	1743.05	TU	14	D		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	112	41.0	
2008	1743.06	TU	14	D		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	6	0.5	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB- STRAT	SAMPLE	RECOV- ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1744.01	TU	14	E	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	3.1	
2008	1744.02	TU	14	E	A	LEVEL	0.25	POTTERY	SJP	CRUMB	4	0.1	
2008	1744.03	TU	14	E	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	348	90.6	
2008	1744.04	TU	14	E	A	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	0.3	
2008	1744.05	TU	14	E	A	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	2	7.1	
2008	1746.01	TU	14	E		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	36	22.7	
2008	1747.01	TU	14	F	A	LEVEL	0.25	VERTFAUNA	MOD	BONE	1	0.4	BONE BEAD
2008	1747.02	TU	14	F	A	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	2	0.9	
2008	1747.03	TU	14	F	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	41.9	
2008	1747.04	TU	14	F	A	LEVEL	0.25	POTTERY	SJP	CRUMB	1	7.1	
2008	1747.05	TU	14	F	A	LEVEL	0.25	TERR. SNAIL	EUGLANDINA	UID	1	0.8	
2008	1747.06	TU	14	F	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	216	92.0	
2008	1747.07	TU	14	F	A	LEVEL	0.25	CONCRETION	BONE	UID	5	1.7	
2008	1748.01	TU	14	F	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	45	17.2	
2008	1749.01	TU	14	F	C	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	0.9	
2008	1749.02	TU	14	F	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	6	2.7	
2008	1750.01	TU	14	G	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	3	11.7	
2008	1750.02	TU	14	G	A	LEVEL	0.25	CONCRETION	BONE	UID	9	41.1	
2008	1750.03	TU	14	G	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	391	152.4	
2008	1750.04	TU	14	G	A	LEVEL	0.25	VERTFAUNA	MOD	BONE	1	1.2	
2008	1751.01	TU	14	G	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	15	6.0	
2008	1752.01	TU	14	H	A	LEVEL	0.25	LITHIC	MOD	BIFACE	1	2.2	
2008	1752.02	TU	14	H	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	2.4	
2008	1752.03	TU	14	H	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	147	55.5	
2008	1752.04	TU	14	H	A	LEVEL	0.25	CONCRETION	BONE	UID	12	23.0	
2008	1752.05	TU	14	H	A	LEVEL	0.25	UID	UID	UID	1	3.6	
2008	1753.01	TU	14	H	C	LEVEL	0.25	LITHIC	MOD	FLAKE	1	5.0	
2008	1753.02	TU	14	H	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	13	4.3	
2008	1754.01	TU	14	I	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	89	69.0	
2008	1755.01	TU	14	H	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	0.8	
2008	1757.01	TU	14	I	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	2.3	
2008	1758.01	TU	14	J	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	68	29.7	
2008	1758.02	TU	14	J	A	LEVEL	0.25	CONCRETION	BONE	UID	14	13.2	
2008	1759.01	TU	14	J	E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	23	7.0	
2008	1760.01	TU	14	J	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	7	1.7	
2008	1760.02	TU	14	J	D	LEVEL	0.25	CONCRETION	BONE	UID	3	2.1	
2008	1761.01	TU	14	K		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	20	3.3	
2008	1761.02	TU	14	K		LEVEL	0.25	CONCRETION	BONE	UID	5	1.1	
2008	1762.01	TU	19	A		LEVEL	0.25	POTTERY	SJP	CRUMB	4	1.3	
2008	1762.02	TU	19	A		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	3.1	
2008	1762.03	TU	19	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	15	4.3	
2008	1763.01	TU	19	A		LEVEL	0.25	POTTERY	SJP	RIM	1	2.6	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1763.02	TU	19	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	6	1.4	
2008	1764.01	TU	19	B		LEVEL	0.25	POTTERY	OFTP	BODY	1	4.3	
2008	1764.02	TU	19	B		LEVEL	0.25	POTTERY	SJP	BODY	2	5.4	
2008	1764.03	TU	19	B		LEVEL	0.25	POTTERY	SJP	CRUMB	3	1.2	
2008	1764.04	TU	19	B		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.4	
2008	1764.05	TU	19	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	21	12.8	
2008	1765.01	TU	19	C		LEVEL	0.25	POTTERY	OFTI	BODY	4	17.1	
2008	1765.02	TU	19	C		LEVEL	0.25	POTTERY	OFTP	RIM	1	8.7	
2008	1765.03	TU	19	C		LEVEL	0.25	POTTERY	OFTP	BODY	2	5.2	
2008	1765.04	TU	19	C		LEVEL	0.25	POTTERY	OFTP	CRUMB	9	2.6	
2008	1765.05	TU	19	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	17	4.0	
2008	1767.01	TU	19	D	A	LEVEL	0.25	POTTERY	OFTI	RIM	1	43.1	
2008	1767.02	TU	19	D	A	LEVEL	0.25	POTTERY	OFTI	BODY	5	20.1	
2008	1767.03	TU	19	D	A	LEVEL	0.25	POTTERY	OFTP	CRUMB	10	6.2	
2008	1767.04	TU	19	D	A	LEVEL	0.25	PALEOFECES	UID	UID	1	0.1	
2008	1767.05	TU	19	D	A	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	8	0.3	
2008	1767.06	TU	19	D	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	2.2	
2008	1767.07	TU	19	D	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	101	24.0	
2008	1768.01	TU	19	D	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	10	2.2	
2008	1769.01	TU	19	E	A	LEVEL	0.25	POTTERY	OFTP	BODY	2	3.6	
2008	1769.02	TU	19	E	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	44	15.8	
2008	1770.01	TU	19	E	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	8	1.5	
2008	1771.01	TU	19	E	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.4	
2008	1772.01	TU	19	F	A	LEVEL	0.25	POTTERY	OFTP	BODY	2	2.7	
2008	1772.02	TU	19	F	A	LEVEL	0.25	POTTERY	OFTP	CRUMB	3	1.9	
2008	1772.03	TU	19	F	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	3	4.0	
2008	1772.04	TU	19	F	A	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	1	7.1	
2008	1772.05	TU	19	F	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	58	28.7	
2008	1773.01	TU	19	F	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	6	2.7	
2008	1773.02	TU	19	F	C	LEVEL	0.25	CONCRETION	BONE	UID	2	1.4	
2008	1774.01	TU	19	G	A	LEVEL	0.25	LITHIC	MOD	BIFACE	1	3.6	
2008	1774.02	TU	19	G	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	13.8	
2008	1774.03	TU	19	G	A	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	14.4	
2008	1774.04	TU	19	G	A	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	2	0.2	
2008	1774.05	TU	19	G	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	98	35.1	
2008	1774.06	TU	19	G	A	LEVEL	0.25	CONCRETION	BONE	UID	4	2.6	
2008	1775.01	TU	19	G	C	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	0.9	
2008	1775.02	TU	19	G	C	LEVEL	0.25	PALEOFECES	UID	UID	1	10.9	
2008	1775.03	TU	19	G	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	109	48.5	
2008	1775.04	TU	19	G	C	LEVEL	0.25	CONCRETION	BONE	UID	2	1.4	
2008	1776.01	TU	19	H	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	127	28.1	
2008	1776.02	TU	19	H	A	LEVEL	0.25	CONCRETION	BONE	UID	4	6.8	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1776.03	TU	19	H	A	LEVEL	0.25	UID	UID	UID	4	0.9	
2008	1777.01	TU	19	I	A	LEVEL	0.25	LITHIC	MOD	BIFACE	1	18.0	KIRK STEMMED POINT
2008	1777.02	TU	19	I	A	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	1.4	
2008	1777.03	TU	19	I	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	13	7.3	
2008	1778.01	TU	19	I	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	3.7	
2008	1778.02	TU	19	I	A	LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.8	
2008	1778.03	TU	19	I	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	29	7.0	
2008	1779.01	TU	19	J	A	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	0.8	
2008	1779.02	TU	19	J	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	44	18.4	
2008	1779.03	TU	19	J	A	LEVEL	0.25	CONCRETION	BONE	UID	3	0.5	
2008	1781.01	TU	19	K	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	42	13.4	
2008	1781.02	TU	19	K	A	LEVEL	0.25	POTTERY	STP	CRUMB	1	0.3	
2008	1782.01	TU	19	L		LEVEL	0.25	LITHIC	MOD	BIFACE	1	11.9	
2008	1782.02	TU	19	L		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	1.2	
2008	1782.03	TU	19	L		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	22	9.2	
2008	1783.01	TU	19	M		LEVEL	0.25	MISCROCK	UNMOD	PEBBLE	1	0.5	
2008	1783.02	TU	19	M		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	21	10.7	
2008	1784.01	TU	13	D		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	154	56.3	
2008	1784.02	TU	13	D		LEVEL	0.25	POTTERY	SJP	BODY	2	12.4	
2008	1784.03	TU	13	D		LEVEL	0.25	POTTERY	SJP	CRUMB	30	3.0	
2008	1784.04	TU	13	D		LEVEL	0.25	POTTERY	OFTP	BODY	2	5.8	
2008	1784.05	TU	13	D		LEVEL	0.25	POTTERY	OFTP	CRUMB	2	1.1	
2008	1784.06	TU	13	D		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	12	1.0	
2008	1315.01	TU	17	C		PP	-1	BOTANICAL	CHARCOAL	C14	1		IN ASSOCIATION W/ PP 2 AND 3
2008	1316.01	TU	17	C		PP	-1	POTTERY	OFTP	BODY	1	5.7	
2008	1317.01	TU	17	C		PP	-1	BOTANICAL	CHARCOAL	C14	1		
2008	1321.01	TU	17	D		PP	-1	POTTERY	OFTP	RIM	1	11.8	
2008	1325.01	TU	17	E		PP	-1	BOTANICAL	CHARCOAL	C14	1		
2008	1326.01	TU	17	E		PP	-1	BOTANICAL	CHARCOAL	C14	1		
2008	1327.01	TU	17	E		PP	-1	BOTANICAL	CHARCOAL	C14	1		
2008	1332.01	TU	18	B		PP	-1	POTTERY	OFTI	RIM	1	52.9	
2008	1333.01	TU	18	B		PP	-1	BOTANICAL	CHARCOAL	C14	1		
2008	1337.01	TU	18	C		PP	-1	POTTERY	OFTI	BODY	1	9.6	
2008	1338.01	TU	18	C		PP	-1	BOTANICAL	CHARCOAL	C14		2.0	WEIGHED IN FOIL
2008	1341.01	TU	18	D		PP	-1	POTTERY	OFTP	BODY	1		SOOTED ?
2008	1342.01	TU	18	D		PP	-1	BOTANICAL	CHARCOAL	C14	1		
2008	1358.01	TU	17	C		PP	-1	POTTERY	OFTI	RIM	1	22.5	
2008	1415.01	TU	11	G		PP	-1	POTTERY	SJP	BODY	7	286.3	
2008	1472.01	TU	20	C		PP	-1	POTTERY	SJP	RIM	1	52.5	
2008	1473.01	TU	20	C		PP	-1	POTTERY	SJP	BODY	1	19.9	ARTICULATED WITH PP1

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1474.01	TU	20	C		PP	-1	POTTERY	SJIN	RIM	1	10.3	
2008	1475.01	TU	20	C		PP	-1	POTTERY	SJIN	RIM	1	6.5	
2008	1493.01	TU	16	E	A	PP	-1	POTTERY	SJP	BODY	19	205.7	
2008	1493.02	TU	16	E	A	PP	-1	POTTERY	SJP	CRUMB	12	4.5	
2008	1505.01	TU	8	D		PP	-1	VERTFAUNA	UNMOD	ANTLER	4	31.6	
2008	1616.01	TU	9A	D		PP	-1	BOTANICAL	CHARCOAL	C14	1	48.5	MOSTLY SOIL
2008	1642.01	TU	9A	M		PP	-1	MARINESHELL	MOD	WHOLE	1	73.4	GASTROPOD
2008	1655.01	TU	10A	M		PP	-1	MARINESHELL	MOD	WHOLE	1	64.8	
2008	1745.01	TU	14	E		PP	-1	LITHIC	MOD	BIFACE	1	16.0	
2008	1766.01	TU	19	C		PP	-1	MARINESHELL	MOD	WHOLE	1	101.5	STROMBUS GIGAS ADZE
2008	1780.01	TU	19	J	A	PP	-1	MARINESHELL	MOD	WHOLE	1	725.4	BUSYCON CUP
2008	1647.01	TU	9A	PROFILE CLEAN	S WALL	PROFILE CLEAN	0.25	VERTFAUNA	UNMOD	FRAG	12	8.6	
2008	1647.02	TU	9A	PROFILE CLEAN	S WALL	PROFILE CLEAN	0.25	CONCRETION	UID	UID	3	2.0	
2008	1665.01	TU	9A	PROFILE CLEAN		PROFILE CLEAN	0.25	MARINESHELL	UNMOD	FRAG	1	1.7	
2008	1501.01	TU	9	PROFILE CUT		PROFILE	0.25	VERTFAUNA	UNMOD	FRAG	670	488.3	
2008	1501.02	TU	9	PROFILE CUT		PROFILE	0.25	LITHIC	UNMOD	FLAKE	10	10.7	
2008	1501.03	TU	9	PROFILE CUT		PROFILE CUT	0.25	LITHIC	MOD	HAFTEDBIFACE	2	1.7	DRILL? PART OF LARGER BIFACE
2008	1501.04	TU	9	PROFILE CUT		PROFILE	0.25	POTTERY	SJCS	RIM	1	2.3	
2008	1501.05	TU	9	PROFILE CUT		PROFILE	0.25	POTTERY	SJP	BODY	1	6.6	
2008	1501.06	TU	9	PROFILE CUT		PROFILE	0.25	POTTERY	SJP	CRUMB	6	3.0	
2008	1501.07	TU	9	PROFILE CUT		PROFILE	0.25	POTTERY	OFTP	BODY	2	5.6	
2008	1501.08	TU	9	PROFILE CUT		PROFILE	0.25	POTTERY	OFTP	CRUMB	2	0.5	
2008	1501.09	TU	9	PROFILE CUT		PROFILE	0.25	MISCROCK	MOD	BEAD	1	6.2	STONE BEAD
2008	1501.10	TU	9	PROFILE CUT		PROFILE	0.25	BIVALVE	BIVALVE	FRAG	1	2.0	
2008	1501.11	TU	9	PROFILE CUT		PROFILE	0.25	MISCSNAIL	UID	UID	1	0.5	
2008	1501.12	TU	9	PROFILE CUT		PROFILE	0.25	CONCRETION	BONE	UID	3	1.4	
2008	1501.13	TU	9	PROFILE CUT		PROFILE	0.25	MISCROCK	UNMOD	PEBBLE	3	4.6	
2008	1501.14	TU	9	PROFILE CUT		PROFILE	0.25	CONCRETION	UID	UID	2	10.2	
2008	1600.01	TU	10	PROFILE CUT		PROFILE	0.25	LITHIC	MOD	FLAKE	1	0.3	
2008	1600.02	TU	10	PROFILE CUT		PROFILE	0.25	POTTERY	SJCS	RIM	1	1.9	
2008	1600.03	TU	10	PROFILE CUT		PROFILE	0.25	VERTFAUNA	MOD	BONE	7	14.9	
2008	1600.04	TU	10	PROFILE CUT		PROFILE	0.25	POTTERY	SJP	BODY	7	13.4	
2008	1600.05	TU	10	PROFILE CUT		PROFILE	0.25	LITHIC	UNMOD	FLAKE	12	12.7	
2008	1600.06	TU	10	PROFILE CUT		PROFILE	0.25	HISTORIC	METAL	NAIL	1	1.5	
2008	1600.07	TU	10	PROFILE CUT		PROFILE	0.25	MARINESHELL	UNMOD	FRAG	2	10.0	
2008	1600.08	TU	10	PROFILE CUT		PROFILE	0.25	TERR. SNAIL	EUGLANDINA	UID	1	0.1	
2008	1600.09	TU	10	PROFILE CUT		PROFILE	0.25	VERTFAUNA	UNMOD	FRAG	1	26.7	FOSSILIZED BONE
2008	1600.10	TU	10	PROFILE CUT		PROFILE	0.25	VERTFAUNA	UNMOD	FRAG	1585	725.7	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1600.11	TU	10	PROFILE CUT		PROFILE	0.25	CONCRETION	BONE	UID	2	3.3	
2008	1650.01	TU	15	PROFILE CUT		PROFILE	0.25	MARINESHELL	UNMOD	FRAG	1	0.4	
2008	1650.02	TU	15	PROFILE CUT		PROFILE	0.25	LITHIC	UNMOD	FLAKE	1	0.7	
2008	1650.03	TU	15	PROFILE CUT		PROFILE	0.25	VERTFAUNA	MOD	BONE	2	4.0	
2008	1650.04	TU	15	PROFILE CUT		PROFILE	0.25	POTTERY	SJP	BODY	6	8.8	
2008	1650.05	TU	15	PROFILE CUT		PROFILE	0.25	VERTFAUNA	UNMOD	FRAG	565	303.4	
2008	1650.06	TU	15	PROFILE CUT		PROFILE	0.25	MISCROCK	UNMOD	PEBBLE	1	0.6	
2008	1650.07	TU	15	PROFILE CUT		PROFILE	0.25	HISTORIC	METAL	NAIL	1	1.7	
2008	1650.08	TU	15	PROFILE CUT		PROFILE	0.25	LITHIC	UNMOD	FLAKE	1	1.0	
2008	1653.01	TU	15A	PROFILE CUT		PROFILE	0.25	VERTFAUNA	UNMOD	FRAG	301	186.6	
2008	1653.02	TU	15A	PROFILE CUT		PROFILE	0.25	VERTFAUNA	MOD	BONE	2	0.9	
2008	1653.03	TU	15A	PROFILE CUT		PROFILE	0.25	LITHIC	UNMOD	FLAKE	4	12.9	
2008	1653.04	TU	15A	PROFILE CUT		PROFILE	0.25	LITHIC	MOD	HAFTEDBIFACE	1	7.1	
2008	1653.05	TU	15A	PROFILE CUT		PROFILE	0.25	MARINESHELL	MOD	FRAG	1	3.4	
2008	1653.06	TU	15A	PROFILE CUT		PROFILE	0.25	POTTERY	SJP	RIM	1	11.9	
2008	1653.07	TU	15A	PROFILE CUT		PROFILE	0.25	POTTERY	SJP	BODY	3	8.1	
2008	1653.08	TU	15A	PROFILE CUT		PROFILE	0.25	POTTERY	SJP	CRUMB	3	2.0	
2008	1653.09	TU	15A	PROFILE CUT		PROFILE	0.25	MISCROCK	UNMOD	LIMESTONE	1	4.6	
2008	1653.10	TU	15A	PROFILE CUT		PROFILE	0.25	MISCROCK	UNMOD	PEBBLE	2	1.3	
2008	1653.11	TU	15A	PROFILE CUT		PROFILE	0.25	HISTORIC	PLASTIC	CAP	1	3.0	
2008	1658.01	TU	15	PROFILE CUT	A	PROFILE	0.25	POTTERY	SJP	RIM	1	5.1	
2008	1658.02	TU	15	PROFILE CUT	A	PROFILE	0.25	POTTERY	SJP	BODY	1	2.2	
2008	1658.03	TU	15	PROFILE CUT	A	PROFILE	0.25	POTTERY	SJCS	BODY	1	7.7	
2008	1658.04	TU	15	PROFILE CUT	A	PROFILE	0.25	POTTERY	SJP	CRUMB	1	0.1	
2008	1658.05	TU	15	PROFILE CUT	A	PROFILE	0.25	POTTERY	SJP	BODY	14	9.7	
2008	1658.06	TU	15	PROFILE CUT	A	PROFILE	0.25	VERTFAUNA	MOD	BONE	2	1.7	
2008	1658.07	TU	15	PROFILE CUT	A	PROFILE	0.25	LITHIC	MOD	BIFACE	1	0.6	
2008	1658.08	TU	15	PROFILE CUT	A	PROFILE	0.25	LITHIC	MOD	FLAKE	1	1.6	
2008	1658.09	TU	15	PROFILE CUT	A	PROFILE	0.25	LITHIC	UNMOD	FLAKE	4	7.9	
2008	1658.10	TU	15	PROFILE CUT	A	PROFILE	0.25	MARINESHELL	UNMOD	FRAG	1	7.1	GASTROPOD
2008	1658.11	TU	15	PROFILE CUT	A	PROFILE	0.25	HISTORIC	METAL	UID	1	4.3	SHOTGUN SHELL
2008	1658.12	TU	15	PROFILE CUT	A	PROFILE	0.25	VERTFAUNA	UNMOD	FRAG	850	584.9	
2008	1658.13	TU	15	PROFILE CUT	A	PROFILE	0.25	CONCRETION	UID	UID	9	10.2	CONTAINS BONE
2008	1661.01	TU	15B	PROFILE CUT	B	PROFILE	0.25	POTTERY	SJP	BODY	1	1.3	
2008	1661.02	TU	15B	PROFILE CUT	B	PROFILE	0.25	VERTFAUNA	UNMOD	FRAG	84	33.8	
2008	1663.01	TU	15A	PROFILE CUT	B	PROFILE	0.25	POTTERY	SJP	CRUMB	1	0.4	
2008	1663.02	TU	15A	PROFILE CUT	B	PROFILE	0.25	POTTERY	SJP	CRUMB	1	0.4	CONTAINS FIBER
2008	1663.03	TU	15A	PROFILE CUT	B	PROFILE	0.25	BIVALVE	BIVALVE	FRAG	1	1.2	
2008	1663.04	TU	15A	PROFILE CUT	B	PROFILE	0.25	LITHIC	UNMOD	FLAKE	3	0.8	
2008	1663.05	TU	15A	PROFILE CUT	B	PROFILE	0.25	VERTFAUNA	UNMOD	FRAG	167	89.3	
2008	1663.06	TU	15A	PROFILE CUT	B	PROFILE	0.25	CONCRETION	BONE	UID	1	9.1	
2008	1664.01	TU	15A	PROFILE CUT	B	PROFILE	0.25	VERTFAUNA	MOD	BONE	2	7.1	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1664.02	TU	15A	PROFILE CUT	B	PROFILE	0.25	LITHIC	UNMOD	FLAKE	2	4.7	
2008	1664.03	TU	15A	PROFILE CUT	B	PROFILE	0.25	VERTFAUNA	UNMOD	FRAG	213	201.5	
2008	1664.04	TU	15A	PROFILE CUT	B	PROFILE	0.25	CONCRETION	BONE	UID	36	32.5	
2008	1666.01	TU	15A	PROFILE CUT	A	PROFILE	0.25	VERTFAUNA	MOD	BONE	1	4.6	
2008	1666.02	TU	15A	PROFILE CUT	A	PROFILE	0.25	VERTFAUNA	MOD	ANTLER	1	8.8	
2008	1666.03	TU	15A	PROFILE CUT	A	PROFILE	0.25	VERTFAUNA	UNMOD	FRAG	95	62.0	
2008	1666.04	TU	15A	PROFILE CUT	A	PROFILE	0.25	CONCRETION	BONE	UID	1	28.3	
2008	1667.01	TU	15A	PROFILE CUT	B	PROFILE	0.25	MARINESHELL	UNMOD	FRAG	3	1.7	
2008	1667.02	TU	15A	PROFILE CUT	B	PROFILE	0.25	VERTFAUNA	UNMOD	FRAG	862	373.6	
2008	1667.03	TU	15A	PROFILE CUT	B	PROFILE	0.25	CONCRETION	BONE	UID	273	401.5	
2008	1736.01	TU	12	PROFILE CUT		PROFILE	0.25	VERTFAUNA	UNMOD	FRAG	3	0.5	
2008	1362.01	SURFACE		EAST		SURFACE	-99	LITHIC	MOD	BIFACE	1	1.8	
2008	1362.02	SURFACE		EAST		SURFACE	-99	POTTERY	OFTI	RIM	2	36.5	
2008	1362.03	SURFACE		EAST		SURFACE	-99	POTTERY	OFTI	BODY	6	88.7	
2008	1362.04	SURFACE		EAST		SURFACE	-99	POTTERY	OFTP	BODY	11	198.2	
2008	1362.05	SURFACE		EAST		SURFACE	-99	POTTERY	OFTP	RIM	1	20.1	
2008	1362.06	SURFACE		EAST		SURFACE	-99	MISCROCK	UNMOD	LIMESTONE	1	34.9	
2008	1362.07	SURFACE		EAST		SURFACE	-99	POTTERY	SJP	BODY	3	12.1	
2008	1363.01	SURFACE		NORTH		SURFACE	-99	POTTERY	SJP	BODY	16	163.7	
2008	1363.02	SURFACE		NORTH		SURFACE	-99	POTTERY	SJCS	BODY	2	20.3	
2008	1365.01	SURFACE		SAWMILL		SURFACE	-99	LITHIC	MOD	HAFTEDBIFACE	1	7.2	
2008	1366.01	SURFACE		ISLAND B		SURFACE	-99	POTTERY	SJIN	RIM	1	35.4	
2008	1366.02	SURFACE		ISLAND B		SURFACE	-99	POTTERY	SJP	BODY	1	3.9	
2008	1366.03	SURFACE		ISLAND B		SURFACE	-99	POTTERY	SJIN	BODY	1	15.3	
2008	1515.01	SURFACE		ISLAND C		SURFACE	-99	LITHIC	MOD	FLAKE	1	9.2	
2008	1515.02	SURFACE		ISLAND C		SURFACE	-99	MARINESHELL	UNMOD	FRAG	1	20.1	GASTROPOD
2008	1515.03	SURFACE		ISLAND C		SURFACE	-99	POTTERY	SJCS	RIM	1	28.4	
2008	1515.04	SURFACE		ISLAND C		SURFACE	-99	POTTERY	OFTP	BODY	3	18.2	
2008	1515.05	SURFACE		ISLAND C		SURFACE	-99	POTTERY	OFTI	RIM	7	188.9	
2008	1515.06	SURFACE		ISLAND C		SURFACE	-99	POTTERY	OFTI	BODY	9	228.9	
2008	1517.01	SURFACE		MINING PIT		SURFACE	-99	LITHIC	MOD	FLAKE	1	93.9	
2008	1517.02	SURFACE		MINING PIT		SURFACE	-99	MARINESHELL	MOD	FRAG	1	55.0	
2008	1544.01	SURFACE		MINING PIT		SURFACE	-99	LITHIC	UNMOD	FLAKE	2	28.9	
2008	1303.01	TU	7	WALL CLEAN		WALL	0.25	POTTERY	OFTP	CRUMB	4	0.7	
2008	1303.02	TU	7	WALL CLEAN		WALL	0.25	HISTORIC	METAL	FRAG	1	0.4	
2008	1303.03	TU	7	WALL CLEAN		WALL	0.25	VERTFAUNA	UNMOD	FRAG	12	5.5	
2008	1307.01	TU	7	WALL CLEAN		WALL	0.25	VERTFAUNA	UNMOD	FRAG	43	21.6	
2008	1347.01	TU	18	WALL CLEAN		WALL	0.25	POTTERY	OFTI	RIM	1	14.6	
2008	1347.02	TU	18	WALL CLEAN		WALL	0.25	POTTERY	OFTP	BODY	1	14.5	
2008	1367.01	TU	20	WALL CLEAN		WALL	0.25	LITHIC	UNMOD	FLAKE	1	1.9	
2008	1368.01	TU	16	WALL CLEAN		WALL	0.25	POTTERY	SJP	CRUMB	4	2.2	
2008	1426.01	TU	11	WALL CLEAN		WALL	0.25	POTTERY	SJP	BODY	10	37.8	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2008	1426.02	TU	11	WALL CLEAN		WALL	0.25	POTTERY	OFTP	BODY	2	7.6	
2008	1426.03	TU	11	WALL CLEAN		WALL	0.25	POTTERY	SJP	CRUMB	11	6.4	
2008	1426.04	TU	11	WALL CLEAN		WALL	0.25	MARINESHELL	UNMOD	FRAG	2	2.7	
2008	1426.05	TU	11	WALL CLEAN		WALL	0.25	LITHIC	UNMOD	FLAKE	1	0.1	
2008	1426.06	TU	11	WALL CLEAN		WALL	0.25	VERTFAUNA	UNMOD	FRAG	141	72.3	
2008	1456.01	TU	11	WALL CLEAN		WALL	0.25	HISTORIC	GLASS	FRAG	1	0.9	
2008	1456.02	TU	11	WALL CLEAN		WALL	0.25	MARINESHELL	UNMOD	FRAG	1	0.2	
2008	1456.03	TU	11	WALL CLEAN		WALL	0.25	LITHIC	UNMOD	FLAKE	4	6.9	
2008	1456.04	TU	11	WALL CLEAN		WALL	0.25	POTTERY	OFTP	CRUMB	1	0.6	
2008	1456.05	TU	11	WALL CLEAN		WALL	0.25	POTTERY	SJP	RIM	2	7.9	
2008	1456.06	TU	11	WALL CLEAN		WALL	0.25	POTTERY	SJP	BODY	18	70.0	
2008	1456.07	TU	11	WALL CLEAN		WALL	0.25	POTTERY	SJP	CRUMB	28	15.2	
2008	1456.08	TU	11	WALL CLEAN		WALL	0.25	VERTFAUNA	UNMOD	FRAG	274	88.0	
2008	1561.01	TU	20	WALL CLEAN		WALL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.4	
2008	1561.02	TU	20	WALL CLEAN		WALL	0.25	LITHIC	UNMOD	FLAKE	2	0.3	
2008	1562.01	TU	16	WALL CLEAN		WALL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.2	
2008	1562.02	TU	16	WALL CLEAN		WALL	0.25	POTTERY	SJP	CRUMB	1	0.4	
2008	1364.01	TU	10A					POTTERY	SJP	BODY	1	11.8	
2008	1364.02	TU	10A					VERTFAUNA	UNMOD	FRAG	26	10.1	
2009	2272.01	TU	39	FLOOR CLEAN	W 1/2	FLOOR CLEAN	0.25	POTTERY	OFTE	BODY	3	4.6	
2009	2001.01	TU	21	A		LEVEL	0.25	POTTERY	SJP	RIM	1	1.3	
2009	2001.02	TU	21	A		LEVEL	0.25	POTTERY	SJP	BODY	2	2.8	
2009	2001.03	TU	21	A		LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.4	
2009	2001.04	TU	21	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	5	0.9	
2009	2002.01	TU	21	B		LEVEL	0.25	POTTERY	OFTP	CRUMB	2	1.4	
2009	2002.02	TU	21	B		LEVEL	0.25	POTTERY	OFTI	CRUMB	1	0.7	
2009	2002.03	TU	21	B		LEVEL	0.25	POTTERY	SJP	BODY	3	5.0	
2009	2002.04	TU	21	B		LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.4	
2009	2002.05	TU	21	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	7	4.3	
2009	2002.06	TU	21	B		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	1	0.1	
2009	2003.01	TU	22	A		LEVEL	0.25	POTTERY	SJP	BODY	2	1.2	
2009	2004.01	TU	22	B		LEVEL	0.25	POTTERY	OFTE	BODY	1	1.6	
2009	2004.02	TU	22	B		LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.2	
2009	2004.03	TU	22	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	1.1	
2009	2005.01	TU	21	C		LEVEL	0.25	POTTERY	OFTE	BODY	1	1.2	
2009	2005.02	TU	21	C		LEVEL	0.25	POTTERY	SJP	BODY	1	2.0	
2009	2005.03	TU	21	C		LEVEL	0.25	POTTERY	SJP	CRUMB	3	1.7	
2009	2005.04	TU	21	C		LEVEL	0.25	POTTERY	SJCS	BODY	1	1.7	
2009	2005.05	TU	21	C		LEVEL	0.25	VERTFAUNA	MOD	BONE	1	5.3	BONE PIN
2009	2005.06	TU	21	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	7	2.5	
2009	2005.07	TU	21	C		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	7	0.9	
2009	2006.01	TU	22	C		LEVEL	0.25	POTTERY	OFTP	CRUMB	8	2.1	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2009	2006.02	TU	22	C		LEVEL	0.25	POTTERY	SJP	CRUMB	2	1.3	
2009	2006.03	TU	22	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	15	6.2	
2009	2007.01	TU	34	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.9	
2009	2008.01	TU	32	A		LEVEL	0.25	POTTERY	SJP	BODY	1	0.8	
2009	2008.02	TU	32	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.4	
2009	2009.01	TU	34	B		LEVEL	0.25	POTTERY	OFTI	CRUMB	1	0.3	
2009	2009.02	TU	34	B		LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.6	
2009	2010.01	TU	29	A		LEVEL	0.25	POTTERY	SJP	BODY	1	2.8	
2009	2011.01	TU	21	C	A	LEVEL	0.25	POTTERY	OFTP	CRUMB	2	1.7	
2009	2011.02	TU	21	C	A	LEVEL	0.25	POTTERY	OFTI	BODY	1	1.9	
2009	2011.03	TU	21	C	A	LEVEL	0.25	POTTERY	OFTE	BODY	1	1.7	
2009	2011.04	TU	21	C	A	LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.2	
2009	2011.05	TU	21	C	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	9	14.5	
2009	2011.06	TU	21	C	A	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	9	0.6	
2009	2012.01	TU	22	C		LEVEL	0.25	POTTERY	OFTP	CRUMB	2	2.0	
2009	2012.02	TU	22	C		LEVEL	0.25	POTTERY	OFTI	BODY	4	9.6	
2009	2012.03	TU	22	C		LEVEL	0.25	POTTERY	OFTI	RIM	2	11.2	REFIT
2009	2012.04	TU	22	C		LEVEL	0.25	POTTERY	OFTP	BODY	3	8.7	
2009	2012.05	TU	22	C		LEVEL	0.25	POTTERY	OFTP	CRUMB	3	1.4	
2009	2012.06	TU	22	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	3	1.2	
2009	2014.02	TU	34	B		LEVEL	0.25	POTTERY	OFTI	CRUMB	1	1.2	
2009	2014.03	TU	34	B		LEVEL	0.25	POTTERY	SJP	BODY	4	3.2	
2009	2014.04	TU	34	B		LEVEL	0.25	POTTERY	SJP	CRUMB	2	0.6	
2009	2014.05	TU	34	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	9	5.4	
2009	2015.01	TU	27	B		LEVEL	0.25	POTTERY	SJP	BODY	2	2.3	
2009	2015.02	TU	27	B		LEVEL	0.25	POTTERY	SJP	CRUMB	3	0.5	
2009	2015.03	TU	27	B		LEVEL	0.25	LITHIC	MOD	FLAKE	1	3.9	
2009	2015.04	TU	27	B		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	1.3	
2009	2015.05	TU	27	B		LEVEL	0.25	LITHIC	MOD	BIFACE	1	4.0	
2009	2015.06	TU	27	B		LEVEL	0.25	MISCROCK	UNMOD	SANDSTONE	1	1.8	
2009	2015.07	TU	27	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	7	1.6	
2009	2015.08	TU	27	B		LEVEL	0.25	TERR. SNAIL	EUGLANDINA	UID	1	0.1	
2009	2016.02	TU	21	D		LEVEL	0.25	POTTERY	OFTP	CRUMB	12	5.5	
2009	2016.03	TU	21	D		LEVEL	0.25	POTTERY	OFTI	BODY	3	5.4	
2009	2016.04	TU	21	D		LEVEL	0.25	POTTERY	OFTI	RIM	1	8.8	
2009	2016.05	TU	21	D		LEVEL	0.25	POTTERY	OFTI	CRUMB	3	1.1	
2009	2016.06	TU	21	D		LEVEL	0.25	POTTERY	OFTE	BODY	7	9.5	
2009	2016.07	TU	21	D		LEVEL	0.25	POTTERY	OFTE	CRUMB	12	1.9	
2009	2016.08	TU	21	D		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	53	28.9	
2009	2016.09	TU	21	D		LEVEL	0.25	VERTFAUNA	MOD	BONE	2	3.5	BONE AWL
2009	2016.10	TU	21	D		LEVEL	0.25	LITHIC	MOD	FLAKE	1	7.3	
2009	2016.11	TU	21	D		LEVEL	0.25	MISCROCK	UNMOD	SANDSTONE	2	2.2	BURNT

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2009	2016.12	TU	21	D		LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	4	0.3	
2009	2017.01	TU	29	B		LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.3	
2009	2017.02	TU	29	B		LEVEL	0.25	POTTERY	SJP	BODY	7	6.7	
2009	2017.03	TU	29	B		LEVEL	0.25	POTTERY	SJP	RIM	1	2.6	
2009	2017.04	TU	29	B		LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.2	
2009	2017.05	TU	29	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	5	3.0	
2009	2017.06	TU	29	B		LEVEL	0.25	TERR. SNAIL	EUGLANDINA	UID	1	9.7	
2009	2018.01	TU	22	D		LEVEL	0.25	POTTERY	OFTP	BODY	3	5.5	
2009	2018.02	TU	22	D		LEVEL	0.25	POTTERY	OFTP	RIM	2	2.1	
2009	2018.03	TU	22	D		LEVEL	0.25	POTTERY	OFTP	CRUMB	9	4.7	
2009	2018.04	TU	22	D		LEVEL	0.25	POTTERY	OFTI	BODY	6	14.2	
2009	2018.05	TU	22	D		LEVEL	0.25	POTTERY	OFTI	CRUMB	7	2.8	
2009	2018.06	TU	22	D		LEVEL	0.25	POTTERY	OFTE	BODY	3	4.5	
2009	2018.07	TU	22	D		LEVEL	0.25	POTTERY	OFTE	CRUMB	13	5.4	
2009	2018.08	TU	22	D		LEVEL	0.25	POTTERY	SJP	BODY	3	2.7	
2009	2018.09	TU	22	D		LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.1	
2009	2018.10	TU	22	D		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	36	14.8	
2009	2019.02	TU	32	B		LEVEL	0.25	POTTERY	SJP	BODY	1	0.9	
2009	2019.03	TU	32	B		LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.3	
2009	2019.04	TU	32	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	5	2.8	
2009	2020.02	TU	27	C		LEVEL	0.25	POTTERY	OFTE	CRUMB	5	3.2	
2009	2020.04	TU	27	C		LEVEL	0.25	POTTERY	SJP	BODY	2	1.8	
2009	2020.05	TU	27	C		LEVEL	0.25	POTTERY	SJCS	CRUMB	1	0.2	
2009	2020.06	TU	27	C		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.3	
2009	2020.07	TU	27	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	7	4.3	
2009	2021.02	TU	34	C		LEVEL	0.25	POTTERY	SJP	BODY	1	1.6	
2009	2021.04	TU	34	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.6	
2009	2022.02	TU	32	C		LEVEL	0.25	POTTERY	OFTP	CRUMB	3	1.5	
2009	2022.03	TU	32	C		LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.1	
2009	2022.04	TU	32	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.5	
2009	2023.01	TU	22	F		LEVEL	0.25	POTTERY	OFTP	RIM	1	1.4	
2009	2023.02	TU	22	F		LEVEL	0.25	POTTERY	OFTP	CRUMB	3	0.6	
2009	2023.03	TU	22	F		LEVEL	0.25	POTTERY	OFTI	BODY	1	1.8	
2009	2023.04	TU	22	F		LEVEL	0.25	POTTERY	OFTI	CRUMB	1	0.2	
2009	2023.05	TU	22	F		LEVEL	0.25	POTTERY	OFTE	BODY	3	16.3	
2009	2023.07	TU	22	F		LEVEL	0.25	POTTERY	OFTE	CRUMB	15	4.0	
2009	2023.08	TU	22	F		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	41	36.4	
2009	2023.10	TU	22	F		LEVEL	0.25	MISCROCK	UNMOD	SANDSTONE	1	9.3	
2009	2024.01	TU	21	E		LEVEL	0.25	POTTERY	OFTP	BODY	1	1.2	
2009	2024.02	TU	21	E		LEVEL	0.25	POTTERY	OFTP	CRUMB	4	1.5	
2009	2024.03	TU	21	E		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	90	63.4	
2009	2024.04	TU	21	E		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.6	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2009	2025.01	TU	29	C		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.8	
2009	2025.02	TU	29	C		LEVEL	0.25	LITHIC	MOD	FLAKE	1	17.3	
2009	2026.01	TU	22	F		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.5	
2009	2026.02	TU	22	F		LEVEL	0.25	POTTERY	OFTE	RIM	1	1.8	
2009	2026.03	TU	22	F		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	33	38.8	
2009	2027.01	TU	21	F		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	19	12.0	
2009	2027.02	TU	21	F		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	4	0.1	
2009	2029.01	TU	22	G		LEVEL	0.25	POTTERY	OFTE	BODY	1	3.9	
2009	2029.02	TU	22	G		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	24	20.8	
2009	2030.01	TU	24	A		LEVEL	0.25	POTTERY	SJP	BODY	3	6.7	
2009	2030.02	TU	24	A		LEVEL	0.25	POTTERY	SJP	RIM	1	2.4	
2009	2030.03	TU	24	A		LEVEL	0.25	TERR. SNAIL	EUGLANDINA	UID	1	0.5	
2009	2030.04	TU	24	A		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	1.0	
2009	2031.01	TU	26	A		LEVEL	0.25	POTTERY	SJP	BODY	1	1.5	
2009	2032.01	TU	35	A		LEVEL	0.25	POTTERY	SJP	RIM	1	1.8	
2009	2033.01	TU	37	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.6	
2009	2034.01	TU	22	H		LEVEL	0.25	POTTERY	OFTP	BODY	2	3.0	
2009	2034.02	TU	22	H		LEVEL	0.25	POTTERY	OFTP	RIM	1	1.4	
2009	2034.03	TU	22	H		LEVEL	0.25	POTTERY	OFTP	CRUMB	11	3.5	
2009	2034.04	TU	22	H		LEVEL	0.25	POTTERY	OFTI	BODY	3	8.6	
2009	2034.05	TU	22	H		LEVEL	0.25	POTTERY	OFTI	CRUMB	1	0.3	
2009	2034.06	TU	22	H		LEVEL	0.25	POTTERY	OFTE	BODY	6	14.4	
2009	2034.07	TU	22	H		LEVEL	0.25	POTTERY	OFTE	CRUMB	21	7.5	
2009	2034.09	TU	22	H		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	108	73.7	
2009	2034.10	TU	22	H		LEVEL	0.25	VERTFAUNA	MOD	BONE	2	0.8	
2009	2034.11	TU	22	H		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	2	1.5	
2009	2035.01	TU	24	A		LEVEL	0.25	POTTERY	SJP	BODY	2	2.3	
2009	2036.01	TU	26	B		LEVEL	0.25	POTTERY	OFTP	BODY	1	1.5	
2009	2036.02	TU	26	B		LEVEL	0.25	POTTERY	SJP	BODY	4	4.8	
2009	2036.03	TU	26	B		LEVEL	0.25	POTTERY	SJP	CRUMB	2	0.4	
2009	2036.04	TU	26	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	1.0	
2009	2036.05	TU	26	B		LEVEL	0.25	VERTFAUNA	MOD	BONE	1	1.6	
2009	2037.01	TU	37	B		LEVEL	0.25	POTTERY	SJP	BODY	1	1.2	
2009	2037.03	TU	37	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	14	14.5	
2009	2037.04	TU	37	B		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.9	
2009	2038.01	TU	35	B		LEVEL	0.25	POTTERY	SJP	BODY	2	4.5	
2009	2038.02	TU	35	B		LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.4	
2009	2038.03	TU	35	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	3.9	
2009	2039.02	TU	24	B		LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.2	
2009	2039.03	TU	24	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	10	3.1	
2009	2040.01	TU	22	I		LEVEL	0.25	POTTERY	OFTP	BODY	5	14.9	
2009	2040.02	TU	22	I		LEVEL	0.25	POTTERY	OFTP	RIM	2	3.5	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2009	2040.03	TU	22	I		LEVEL	0.25	POTTERY	OFTP	CRUMB	12	4.0	
2009	2040.04	TU	22	I		LEVEL	0.25	POTTERY	OFTI	BODY	1	5.4	
2009	2040.05	TU	22	I		LEVEL	0.25	POTTERY	OFTE	BODY	1	4.6	
2009	2040.06	TU	22	I		LEVEL	0.25	POTTERY	OFTE	RIM	1	2.3	
2009	2040.07	TU	22	I		LEVEL	0.25	POTTERY	OFTE	CRUMB	13	4.1	
2009	2040.08	TU	22	I		LEVEL	0.25	POTTERY	SJP	BODY	2	0.8	
2009	2040.09	TU	22	I		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	48	12.9	
2009	2040.10	TU	22	I		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	2	15.3	
2009	2040.11	TU	22	I		LEVEL	0.25	LITHIC	MOD	FLAKE	1	3.5	
2009	2041.01	TU	21	F		LEVEL	0.25	LITHIC	MOD	BIFACE	1	5.6	
2009	2041.02	TU	21	F		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	89	54.7	
2009	2041.03	TU	21	F		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	1.2	
2009	2042.01	TU	22	J		LEVEL	0.25	POTTERY	OFTP	BODY	5	20.2	
2009	2042.02	TU	22	J		LEVEL	0.25	POTTERY	OFTP	CRUMB	5	3.0	
2009	2042.03	TU	22	J		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	18	6.6	
2009	2042.04	TU	22	J		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	2	0.3	
2009	2043.01	TU	26	C		LEVEL	0.25	POTTERY	OFTE	BODY	1	1.3	
2009	2043.02	TU	26	C		LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.2	
2009	2043.03	TU	26	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	1.8	
2009	2044.01	TU	35	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.3	
2009	2045.01	TU	37	C		LEVEL	0.25	POTTERY	SJP	CRUMB	2	1.1	
2009	2045.02	TU	37	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.9	
2009	2046.01	TU	22	K		LEVEL	0.25	POTTERY	OFTP	BODY	1	10.5	
2009	2046.02	TU	22	K		LEVEL	0.25	POTTERY	OFTP	CRUMB	2	0.5	
2009	2046.03	TU	22	K		LEVEL	0.25	LITHIC	MOD	FLAKE	1	5.3	
2009	2046.04	TU	22	K		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	9	12.4	
2009	2047.01	TU	24	C		LEVEL	0.25	POTTERY	SJP	BODY	1	3.9	
2009	2047.02	TU	24	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	3.8	
2009	2048.01	TU	21	G		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	4.5	
2009	2048.02	TU	21	G		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	35	11.3	
2009	2049.01	TU	33	A		LEVEL	0.25	POTTERY	SJP	BODY	1	1.8	
2009	2049.02	TU	33	A		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.5	
2009	2050.01	TU	22	L		LEVEL	0.25	POTTERY	OFTE	BODY	1	16.6	
2009	2050.02	TU	22	L		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.5	
2009	2050.03	TU	22	L		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	5	1.4	
2009	2051.01	TU	21	G		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.6	
2009	2051.02	TU	21	G		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	50	17.9	
2009	2052.01	TU	22	L		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	28	10.5	
2009	2053.02	TU	28	A		LEVEL	0.25	POTTERY	SJP	CRUMB	2	0.3	
2009	2053.03	TU	28	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	3.5	
2009	2054.01	TU	31	B		LEVEL	0.25	POTTERY	SJP	CRUMB	3	3.1	
2009	2055.01	TU	38	A		LEVEL	0.25	POTTERY	SJCS	RIM	1	8.7	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2009	2056.02	TU	33	B		LEVEL	0.25	POTTERY	SJP	BODY	1	1.9	
2009	2056.03	TU	33	B		LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.2	
2009	2056.04	TU	33	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.5	
2009	2056.05	TU	33	B		LEVEL	0.25	LITHIC	MOD	FLAKE	1	0.7	
2009	2057.02	TU	38	B		LEVEL	0.25	POTTERY	SJP	CRUMB	6	4.5	
2009	2057.03	TU	38	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	9	5.8	
2009	2057.04	TU	38	B		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	2.1	
2009	2057.05	TU	38	B		LEVEL	0.25	TERR. SNAIL	EUGLANDINA	UID	1	0.7	
2009	2058.01	TU	30	A		LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.2	
2009	2058.02	TU	30	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.4	
2009	2059.01	TU	28	B		LEVEL	0.25	POTTERY	SJP	CRUMB	5	1.9	
2009	2059.02	TU	28	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	11	6.2	
2009	2060.01	TU	21	H		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	1.2	
2009	2060.03	TU	21	H		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	19	10.7	
2009	2061.01	TU	31	C		LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.8	
2009	2061.02	TU	31	C		LEVEL	0.25	POTTERY	SJP	BODY	2	4.2	
2009	2061.03	TU	31	C		LEVEL	0.25	POTTERY	SJP	CRUMB	2	1.0	
2009	2061.04	TU	31	C		LEVEL	0.25	POTTERY	STP	BODY	1	4.6	
2009	2061.05	TU	31	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	1.0	
2009	2062.01	TU	22	M		LEVEL	0.25	POTTERY	OFTP	RIM	1	5.7	
2009	2062.02	TU	22	M		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	1.1	
2009	2062.03	TU	22	M		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	13	23.5	
2009	2063.01	TU	33	C		LEVEL	0.25	POTTERY	OFTE	CRUMB	1	1.2	
2009	2063.02	TU	33	C		LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.2	
2009	2063.03	TU	33	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	0.7	
2009	2065.01	TU	30	B		LEVEL	0.25	POTTERY	SJP	BODY	2	3.8	
2009	2065.02	TU	30	B		LEVEL	0.25	POTTERY	SJP	CRUMB	9	4.8	
2009	2066.02	TU	38	C		LEVEL	0.25	POTTERY	SJP	CRUMB	5	5.6	
2009	2066.03	TU	38	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	6	4.3	
2009	2067.01	TU	36	A		LEVEL	0.25	POTTERY	SJP	CRUMB	5	5.5	
2009	2067.02	TU	36	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	1.2	
2009	2068.01	TU	23	A		LEVEL	0.25	POTTERY	OFTE	CRUMB	1	1.6	
2009	2069.02	TU	22	N		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	11	4.5	
2009	2070.01	TU	23	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	1.0	
2009	2071.01	TU	21	I		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	1.0	
2009	2071.02	TU	21	I		LEVEL	0.25	VERTFAUNA	MOD	BONE	1	1.9	BONE BEAD NORTH
2009	2072.02	TU	28	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.5	
2009	2073.02	TU	22	N		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	1.3	
2009	2074.01	TU	21	I		LEVEL	0.25	CONCRETION	BONE	FRAG	2	18.4	
2009	2074.02	TU	21	I		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	23	4.8	
2009	2075.01	TU	30	B		LEVEL	0.25	POTTERY	OFTI	BODY	1	2.6	
2009	2075.02	TU	30	B		LEVEL	0.25	POTTERY	SJP	BODY	1	3.1	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2009	2075.03	TU	30	B		LEVEL	0.25	POTTERY	SJP	RIM	1	1.5	
2009	2075.04	TU	30	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.4	
2009	2076.02	TU	36	B		LEVEL	0.25	POTTERY	SJP	CRUMB	10	9.8	
2009	2076.03	TU	36	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	16	9.9	
2009	2077.01	TU	22	O		LEVEL	0.25	POTTERY	OFTP	CRUMB	2	1.5	
2009	2077.02	TU	22	O		LEVEL	0.25	POTTERY	OFTP	RIM	1	0.4	
2009	2077.03	TU	22	O		LEVEL	0.25	POTTERY	OFTE	CRUMB	7	1.8	
2009	2077.04	TU	22	O		LEVEL	0.25	VERTFAUNA	MOD	BONE	1	1.1	INCISED BONE PIN
2009	2077.05	TU	22	O		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	67	20.5	
2009	2078.01	TU	25	A		LEVEL	0.25	POTTERY	SJP	BODY	1	3.2	
2009	2078.02	TU	25	A		LEVEL	0.25	POTTERY	SJP	CRUMB	2	0.2	
2009	2078.03	TU	25	A		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.5	
2009	2078.04	TU	25	A		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.8	
2009	2078.05	TU	25	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.1	
2009	2079.01	TU	23	B		LEVEL	0.25	POTTERY	OFTE	BODY	1	1.2	
2009	2079.02	TU	23	B		LEVEL	0.25	POTTERY	OFTE	CRUMB	2	0.8	
2009	2079.03	TU	23	B		LEVEL	0.25	POTTERY	SJP	CRUMB	5	2.0	
2009	2079.04	TU	23	B		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	1.7	
2009	2079.05	TU	23	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	8	5.0	
2009	2080.01	TU	30	C		LEVEL	0.25	POTTERY	SJP	BODY	1	6.7	
2009	2080.02	TU	30	C		LEVEL	0.25	POTTERY	SJCS	CRUMB	1	0.9	
2009	2080.03	TU	30	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	1.1	
2009	2080.04	TU	30	C		LEVEL	0.25	MISCROCK	UNMOD	FRAG	1	25.3	
2009	2081.01	TU	21	J		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	1.0	
2009	2081.02	TU	21	J		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	8	4.0	
2009	2082.01	TU	22	P		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	16	3.5	
2009	2083.01	TU	25	B		LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.2	
2009	2083.02	TU	25	B		LEVEL	0.25	POTTERY	SJP	CRUMB	5	1.3	
2009	2083.03	TU	25	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	1.7	
2009	2083.04	TU	25	B		LEVEL	0.25	HISTORIC	METAL	BOLT	1	20.6	BOLT
2009	2084.01	TU	22	Q		LEVEL	0.25	POTTERY	OFTP	BODY	1	1.3	
2009	2084.02	TU	22	Q		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	32	8.0	
2009	2085.01	TU	23	C		LEVEL	0.25	POTTERY	OFTE	CRUMB	2	1.5	
2009	2085.02	TU	23	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	3.5	
2009	2086.01	TU	21	K		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.6	
2009	2086.01	TU	21	K		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	11	4.0	
2009	2087.01	TU	25	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.3	
2009	2089.01	TU	22	R		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	8	11.4	
2009	2094.01	TU	38	D	A	LEVEL	0.25	POTTERY	OFTE	BODY	1	2.6	
2009	2094.02	TU	38	D	A	LEVEL	0.25	POTTERY	SJP	BODY	2	2.6	
2009	2094.03	TU	38	D	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	1.2	
2009	2095.00	TU	37	D	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.6	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2009	2097.01	TU	33	D	A	LEVEL	0.25	POTTERY	OFTE	CRUMB	1	1.1	
2009	2097.02	TU	33	D	A	LEVEL	0.25	POTTERY	SJP	CRUMB	2	1.3	
2009	2097.03	TU	33	D	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	3	1.7	
2009	2101.01	TU	37	D	A	LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.4	
2009	2101.02	TU	37	D	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.1	
2009	2102.01	TU	28	D	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.7	
2009	2104.01	TU	42	A	B	LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.7	
2009	2104.02	TU	42	A	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	4.4	
2009	2104.03	TU	42	A	B	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	0.5	
2009	2105.01	TU	41	A	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.3	
2009	2106.01	TU	41	B	C	LEVEL	0.25	POTTERY	OFTE	CRUMB	7	1.3	
2009	2106.02	TU	41	B	C	LEVEL	0.25	POTTERY	SJP	BODY	1	1.6	
2009	2106.03	TU	41	B	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	5	2.1	
2009	2107.02	TU	41	B	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.4	
2009	2108.01	TU	42	A	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	1.9	
2009	2109.01	TU	40	B	B	LEVEL	0.25	POTTERY	SJP	BODY	1	1.7	
2009	2110.01	TU	42	B	C	LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.1	
2009	2110.02	TU	42	B	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	26	15.2	
2009	2111.01	TU	41	C	C	LEVEL	0.25	POTTERY	OFTI	CRUMB	1	0.7	
2009	2111.02	TU	41	C	C	LEVEL	0.25	POTTERY	OFTP	CRUMB	6	1.3	
2009	2111.03	TU	41	C	C	LEVEL	0.25	POTTERY	OFTE	CRUMB	7	1.2	
2009	2111.04	TU	41	C	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	26	9.5	
2009	2112.01	TU	39	C	B	LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.7	
2009	2112.02	TU	39	C	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.2	
2009	2113.01	TU	42	B	B	LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.4	
2009	2113.02	TU	42	B	B	LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.2	
2009	2113.03	TU	42	B	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	5	2.6	
2009	2114.01	TU	39	C	B	LEVEL	0.25	POTTERY	SJP	CRUMB	2	1.1	
2009	2115.02	TU	40	C	B	LEVEL	0.25	POTTERY	OFTE	CRUMB	2	0.5	
2009	2115.03	TU	40	C	B	LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.4	
2009	2115.04	TU	40	C	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	9	3.4	
2009	2116.02	TU	40	C	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.7	
2009	2117.01	TU	42	C	B	LEVEL	0.25	POTTERY	OFTE	BODY	1	3.0	
2009	2117.02	TU	42	C	B	LEVEL	0.25	POTTERY	OFTE	CRUMB	3	3.6	
2009	2117.03	TU	42	C	B	LEVEL	0.25	POTTERY	OFTP	CRUMB	3	0.9	
2009	2117.04	TU	42	C	B	LEVEL	0.25	POTTERY	SJP	CRUMB	2	0.2	
2009	2117.06	TU	42	C	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	15	5.0	
2009	2118.01	TU	42	C	C	LEVEL	0.25	POTTERY	OFTP	CRUMB	2	0.4	
2009	2118.02	TU	42	C	C	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	5.1	
2009	2118.03	TU	42	C	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	18	9.3	
2009	2119.01	TU	41	D	C	LEVEL	0.25	POTTERY	OFTE	CRUMB	2	0.5	
2009	2119.02	TU	41	D	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	3	0.6	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2009	2122.01	TU	42	C	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	25	8.3	
2009	2123.01	TU	42	C	B	LEVEL	0.25	POTTERY	OFTP	BODY	1	10.2	
2009	2123.02	TU	42	C	B	LEVEL	0.25	POTTERY	OFTP	CRUMB	2	1.8	
2009	2123.03	TU	42	C	B	LEVEL	0.25	POTTERY	OFTI	BODY	1	3.4	
2009	2123.04	TU	42	C	B	LEVEL	0.25	POTTERY	OFTI	CRUMB	5	4.8	
2009	2123.05	TU	42	C	B	LEVEL	0.25	POTTERY	OFTE	CRUMB	3	1.0	
2009	2123.06	TU	42	C	B	LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.1	
2009	2123.07	TU	42	C	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	18	6.4	
2009	2123.08	TU	42	C	B	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	32.3	
2009	2124.01	TU	40	C	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.2	
2009	2126.01	TU	42	C	E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	27	38.8	
2009	2127.01	TU	40	C	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	3	1.4	
2009	2128.01	TU	41	D	C	LEVEL	0.25	POTTERY	OFTP	CRUMB	3	0.7	
2009	2128.03	TU	41	D	C	LEVEL	0.25	POTTERY	OFTE	CRUMB	7	1.5	
2009	2128.04	TU	41	D	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	19	11.6	
2009	2128.06	TU	41	D	C	LEVEL	0.25	POTTERY	OFTI	BODY	1	2.2	
2009	2132.01	TU	41	D	E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	8	5.0	
2009	2134.01	TU	40	D	A	LEVEL	0.25	POTTERY	OFTI	BODY	1	3.8	
2009	2134.02	TU	40	D	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	3	0.2	
2009	2135.03	TU	40	D	B	LEVEL	0.25	POTTERY	OFTE	CRUMB	5	1.5	
2009	2135.04	TU	40	D	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	14	36.1	
2009	2136.01	TU	42	D	C	LEVEL	0.25	POTTERY	OFTE	BODY	1	3.2	
2009	2136.02	TU	42	D	C	LEVEL	0.25	POTTERY	OFTE	CRUMB	8	7.2	
2009	2136.03	TU	42	D	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	47	25.6	
2009	2137.01	TU	42	D	E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	14	3.9	
2009	2138.01	TU	39	D	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	11	6.0	
2009	2139.01	TU	40	D	C	LEVEL	0.25	POTTERY	OFTP	BODY	3	11.9	
2009	2139.02	TU	40	D	C	LEVEL	0.25	POTTERY	OFTP	CRUMB	3	1.8	
2009	2139.03	TU	40	D	C	LEVEL	0.25	POTTERY	OFTI	BODY	1	1.3	
2009	2139.04	TU	40	D	C	LEVEL	0.25	POTTERY	OFTE	CRUMB	4	0.4	
2009	2139.05	TU	40	D	C	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	7.0	
2009	2139.06	TU	40	D	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	5	1.5	
2009	2140.01	TU	39	D	A	LEVEL	0.25	POTTERY	OFTP	RIM	1	0.3	
2009	2140.02	TU	39	D	A	LEVEL	0.25	POTTERY	SJP	CRUMB	1	1.3	
2009	2140.04	TU	39	D	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.8	
2009	2141.01	TU	39	D	B	LEVEL	0.25	POTTERY	OFTP	BODY	3	5.2	
2009	2141.02	TU	39	D	B	LEVEL	0.25	POTTERY	OFTP	CRUMB	12	3.6	
2009	2141.03	TU	39	D	B	LEVEL	0.25	POTTERY	OFTI	CRUMB	2	1.3	
2009	2141.04	TU	39	D	B	LEVEL	0.25	POTTERY	OFTE	BODY	1	0.7	
2009	2141.05	TU	39	D	B	LEVEL	0.25	POTTERY	OFTE	CRUMB	20	4.0	
2009	2141.06	TU	39	D	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	7	3.4	
2009	2142.01	TU	41	E	C	LEVEL	0.25	POTTERY	OFTP	BODY	4	10.1	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2009	2142.02	TU	41	E	C	LEVEL	0.25	POTTERY	OFTP	CRUMB	2	1.1	
2009	2142.04	TU	41	E	C	LEVEL	0.25	POTTERY	OFTI	BODY	1	1.5	
2009	2142.07	TU	41	E	C	LEVEL	0.25	POTTERY	OFTE	CRUMB	5	2.1	
2009	2142.08	TU	41	E	C	LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.2	
2009	2142.09	TU	41	E	C	LEVEL	0.25	PALEOFECES	UNMOD	FRAG	1	6.0	
2009	2142.10	TU	41	E	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	55	92.3	
2009	2143.01	TU	40	E	C	LEVEL	0.25	POTTERY	OFTP	RIM	1	4.4	
2009	2143.02	TU	40	E	C	LEVEL	0.25	POTTERY	OFTP	CRUMB	4	1.5	
2009	2143.03	TU	40	E	C	LEVEL	0.25	POTTERY	OFTE	BODY	1	2.8	
2009	2143.04	TU	40	E	C	LEVEL	0.25	POTTERY	OFTE	CRUMB	3	2.1	
2009	2143.05	TU	40	E	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	6	2.0	
2009	2144.01	TU	40	E	B	LEVEL	0.25	POTTERY	OFTE	CRUMB	2	0.3	
2009	2144.03	TU	40	E	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	1.1	
2009	2145.01	TU	39	E	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	0.6	
2009	2146.01	TU	39	E	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	7	3.6	
2009	2147.02	TU	39	E	B	LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.2	
2009	2147.03	TU	39	E	B	LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.4	
2009	2147.04	TU	39	E	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	6	2.9	
2009	2149.01	TU	40	E	B	LEVEL	0.25	POTTERY	OFTP	BODY	3	7.4	
2009	2149.02	TU	40	E	B	LEVEL	0.25	POTTERY	OFTP	CRUMB	3	1.1	
2009	2149.03	TU	40	E	B	LEVEL	0.25	POTTERY	OFTE	BODY	4	4.2	
2009	2149.04	TU	40	E	B	LEVEL	0.25	POTTERY	OFTE	RIM	1	0.7	
2009	2149.05	TU	40	E	B	LEVEL	0.25	POTTERY	OFTE	CRUMB	19	4.3	
2009	2149.06	TU	40	E	B	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	0.4	
2009	2149.07	TU	40	E	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	0.7	
2009	2150.01	TU	40	E	C	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	1.5	
2009	2150.02	TU	40	E	C	LEVEL	0.25	POTTERY	OFTP	RIM	1	0.4	
2009	2150.03	TU	40	E	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	9	7.0	
2009	2151.01	TU	42	E	C	LEVEL	0.25	POTTERY	OFTP	BODY	4	9.9	
2009	2151.02	TU	42	E	C	LEVEL	0.25	POTTERY	OFTP	CRUMB	17	21.5	
2009	2151.03	TU	42	E	C	LEVEL	0.25	POTTERY	OFTI	BODY	4	10.6	
2009	2151.05	TU	42	E	C	LEVEL	0.25	POTTERY	OFTE	BODY	4	6.9	
2009	2151.06	TU	42	E	C	LEVEL	0.25	POTTERY	OFTE	CRUMB	24	19.8	
2009	2151.07	TU	42	E	C	LEVEL	0.25	POTTERY	SJP	CRUMB	2	0.4	
2009	2151.08	TU	42	E	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	9	1.9	
2009	2152.01	TU	41	E	C	LEVEL	0.25	POTTERY	OFTP	CRUMB	3	0.9	
2009	2152.04	TU	41	E	C	LEVEL	0.25	POTTERY	OFTE	BODY	2	4.9	
2009	2152.05	TU	41	E	C	LEVEL	0.25	POTTERY	OFTE	CRUMB	7	3.4	
2009	2152.07	TU	41	E	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	6	1.3	
2009	2153.03	TU	39	E	B	LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.1	
2009	2153.04	TU	39	E	B	LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.1	
2009	2153.05	TU	39	E	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	9	2.6	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB- STRAT	SAMPLE	RECOV- ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2009	2154.01	TU	39	E	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	13	5.5	
2009	2156.01	TU	42	C	B	LEVEL	0.25	POTTERY	OFTP	CRUMB	5	3.1	
2009	2156.02	TU	42	C	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	1.8	
2009	2157.01	TU	42	C	C	LEVEL	0.25	LITHIC	MOD	BIFACE	1	0.9	
2009	2157.02	TU	42	C	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	3	0.3	
2009	2158.01	TU	40	F	B	LEVEL	0.25	POTTERY	OFTI	BODY	1	1.0	
2009	2158.02	TU	40	F	B	LEVEL	0.25	POTTERY	OFTE	BODY	1	2.7	
2009	2158.03	TU	40	F	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	10	3.6	
2009	2159.01	TU	40	F	C	LEVEL	0.25	POTTERY	OFTP	BODY	1	1.8	
2009	2159.02	TU	40	F	C	LEVEL	0.25	POTTERY	OFTP	CRUMB	2	1.0	
2009	2159.03	TU	40	F	C	LEVEL	0.25	POTTERY	OFTI	BODY	1	1.4	
2009	2159.04	TU	40	F	C	LEVEL	0.25	POTTERY	OFTI	CRUMB	1	0.3	
2009	2159.05	TU	40	F	C	LEVEL	0.25	POTTERY	OFTE	BODY	3	4.5	
2009	2159.06	TU	40	F	C	LEVEL	0.25	POTTERY	OFTE	CRUMB	2	1.1	
2009	2159.07	TU	40	F	C	LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.4	
2009	2159.08	TU	40	F	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	8.5	
2009	2160.08	TU	41	F	C	LEVEL	0.25	POTTERY	OFTP	BODY	4	8.4	
2009	2160.09	TU	41	F	C	LEVEL	0.25	POTTERY	OFTP	CRUMB	16	9.2	
2009	2160.10	TU	41	F	C	LEVEL	0.25	POTTERY	OFTI	BODY	1	4.5	
2009	2160.11	TU	41	F	C	LEVEL	0.25	POTTERY	OFTI	CRUMB	2	1.4	
2009	2160.12	TU	41	F	C	LEVEL	0.25	POTTERY	OFTE	BODY	3	3.9	
2009	2160.13	TU	41	F	C	LEVEL	0.25	POTTERY	OFTE	CRUMB	20	8.1	
2009	2160.14	TU	41	F	C	LEVEL	0.25	POTTERY	SJP	CRUMB	8	1.8	
2009	2160.15	TU	41	F	C	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.6	
2009	2160.16	TU	41	F	C	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	0.1	
2009	2160.17	TU	41	F	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	63	20.5	
2009	2161.01	TU	42	D	C	LEVEL	0.25	VERTFAUNA	MOD	BONE	1	0.6	
2009	2161.02	TU	42	D	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	12	3.2	
2009	2162.01	TU	39	F	C	LEVEL	0.25	POTTERY	OFTE	CRUMB	2	0.3	
2009	2162.02	TU	39	F	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	13	3.6	
2009	2163.03	TU	39	F	B	LEVEL	0.25	POTTERY	OFTI	BODY	1	2.2	
2009	2163.04	TU	39	F	B	LEVEL	0.25	POTTERY	OFTE	CRUMB	2	0.5	
2009	2164.01	TU	42	E	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	0.8	
2009	2167.01	TU	40	G	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	3	2.3	
2009	2168.02	TU	40	G	C	LEVEL	0.25	POTTERY	OFTP	CRUMB	2	1.3	
2009	2168.03	TU	40	G	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	18	18.6	
2009	2169.01	TU	38	F	C	LEVEL	0.25	POTTERY	OFTP	BODY	1	2.1	
2009	2169.02	TU	38	F	C	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.3	
2009	2169.03	TU	38	F	C	LEVEL	0.25	POTTERY	OFTE	CRUMB	1	1.3	
2009	2169.04	TU	38	F	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	9	1.5	
2009	2171.01	TU	40	G	B/C	LEVEL	0.25	POTTERY	OFTP	BODY	2	7.0	
2009	2171.02	TU	40	G	B/C	LEVEL	0.25	POTTERY	OFTP	CRUMB	2	0.7	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2009	2171.03	TU	40	G	B/C	LEVEL	0.25	VERTFAUNA	UNMOD	SHARKTOOTH	1	0.5	
2009	2171.04	TU	40	G	B/C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	8	5.3	
2009	2172.02	TU	39	G	C	LEVEL	0.25	POTTERY	OFTP	RIM	1	0.5	
2009	2172.03	TU	39	G	C	LEVEL	0.25	POTTERY	OFTP	CRUMB	6	1.9	
2009	2172.04	TU	39	G	C	LEVEL	0.25	POTTERY	OFTE	CRUMB	9	4.3	
2009	2172.05	TU	39	G	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	24	10.7	
2009	2173.01	TU	39	G	B/C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	3	1.3	
2009	2174.01	TU	41	F	B	LEVEL	0.25	POTTERY	OFTE	BODY	2	13.4	
2009	2174.02	TU	41	F	B	LEVEL	0.25	POTTERY	OFTE	CRUMB	3	1.0	
2009	2174.03	TU	41	F	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	6	5.1	
2009	2175.02	TU	41	G	C	LEVEL	0.25	POTTERY	OFTP	BODY	2	3.2	
2009	2175.03	TU	41	G	C	LEVEL	0.25	POTTERY	OFTE	BODY	2	2.2	
2009	2175.04	TU	41	G	C	LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.4	
2009	2175.05	TU	41	G	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	16	3.8	
2009	2176.03	TU	42	F	B	LEVEL	0.25	POTTERY	OFTP	RIM	1	1.3	
2009	2176.04	TU	42	F	B	LEVEL	0.25	POTTERY	OFTI	CRUMB	1	1.0	
2009	2176.05	TU	42	F	B	LEVEL	0.25	POTTERY	OFTE	BODY	1	1.5	
2009	2176.06	TU	42	F	B	LEVEL	0.25	POTTERY	OFTE	CRUMB	3	1.1	
2009	2176.07	TU	42	F	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	5	0.5	
2009	2177.01	TU	40	F	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	5	0.8	
2009	2179.02	TU	39	H	C	LEVEL	0.25	POTTERY	OFTP	BODY	1	1.5	
2009	2179.03	TU	39	H	C	LEVEL	0.25	POTTERY	OFTP	CRUMB	21	9.6	
2009	2179.04	TU	39	H	C	LEVEL	0.25	POTTERY	OFTI	CRUMB	1	0.3	
2009	2179.05	TU	39	H	C	LEVEL	0.25	POTTERY	OFTE	BODY	1	2.0	
2009	2179.06	TU	39	H	C	LEVEL	0.25	POTTERY	OFTE	CRUMB	41	16.2	
2009	2179.07	TU	39	H	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	25	7.6	
2009	2180.01	TU	42	E	E	LEVEL	0.25	POTTERY	OFTE	BODY	1	2.7	
2009	2180.02	TU	42	E	E	LEVEL	0.25	POTTERY	OFTE	CRUMB	3	0.8	
2009	2180.03	TU	42	E	E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	8	3.2	
2009	2181.01	TU	41	E	E	LEVEL	0.25	POTTERY	OFTP	BODY	1	2.1	
2009	2181.02	TU	41	E	E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	12	2.8	
2009	2181.03	TU	41	E	E	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	1	0.1	
2009	2182.01	TU	42	E	B	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.5	
2009	2182.02	TU	42	E	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	7	2.1	
2009	2183.01	TU	42	F	E	LEVEL	0.25	POTTERY	OFTE	BODY	1	2.6	
2009	2183.02	TU	42	F	E	LEVEL	0.25	POTTERY	OFTE	CRUMB	4	0.8	
2009	2183.03	TU	42	F	E	LEVEL	0.25	POTTERY	SJP	CRUMB	3	0.3	
2009	2183.04	TU	42	F	E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	9	4.1	
2009	2185.02	TU	40	H	NE QUAD	LEVEL	0.25	POTTERY	OFTP	RIM	1	5.5	
2009	2185.03	TU	40	H	NE QUAD	LEVEL	0.25	POTTERY	OFTP	CRUMB	11	7.7	
2009	2185.04	TU	40	H	NE QUAD	LEVEL	0.25	POTTERY	OFTI	BODY	1	1.8	
2009	2185.05	TU	40	H	NE QUAD	LEVEL	0.25	POTTERY	OFTE	BODY	1	1.7	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2009	2185.06	TU	40	H	NE QUAD	LEVEL	0.25	POTTERY	OFTE	RIM	1	0.4	
2009	2185.07	TU	40	H	NE QUAD	LEVEL	0.25	POTTERY	OFTE	CRUMB	3	0.9	
2009	2185.08	TU	40	H	NE QUAD	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	7	8.3	
2009	2185.09	TU	40	H	NE QUAD	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	5	0.3	
2009	2186.01	TU	41	F	E	LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.2	
2009	2186.01	TU	41	F	E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	22	12.0	
2009	2188.03	TU	39	H	NW QUAD	LEVEL	0.25	POTTERY	OFTP	BODY	2	3.4	
2009	2188.04	TU	39	H	NW QUAD	LEVEL	0.25	POTTERY	OFTP	RIM	2	2.6	
2009	2188.05	TU	39	H	NW QUAD	LEVEL	0.25	POTTERY	OFTP	CRUMB	4	1.6	
2009	2188.06	TU	39	H	NW QUAD	LEVEL	0.25	POTTERY	OFTI	CRUMB	1	0.3	
2009	2188.07	TU	39	H	NW QUAD	LEVEL	0.25	POTTERY	OFTE	BODY	1	1.6	
2009	2188.08	TU	39	H	NW QUAD	LEVEL	0.25	POTTERY	OFTE	CRUMB	6	1.5	
2009	2188.09	TU	39	H	NW QUAD	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	10	1.9	
2009	2188.10	TU	39	H	NW QUAD	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	4	0.1	
2009	2190.02	TU	40	I	NE QUAD	LEVEL	0.25	POTTERY	OFTE	CRUMB	2	1.3	
2009	2190.03	TU	40	I	NE QUAD	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	18	5.0	
2009	2191.01	TU	39	I	NW QUAD	LEVEL	0.25	POTTERY	OFTE	BODY	1	0.8	
2009	2191.02	TU	39	I	NW QUAD	LEVEL	0.25	POTTERY	OFTP	RIM	1	2.1	
2009	2191.03	TU	39	I	NW QUAD	LEVEL	0.25	POTTERY	OFTP	CRUMB	2	0.7	
2009	2191.04	TU	39	I	NW QUAD	LEVEL	0.25	POTTERY	OFTP	BODY	7	14.0	
2009	2191.05	TU	39	I	NW QUAD	LEVEL	0.25	POTTERY	OFTE	CRUMB	12	4.9	
2009	2191.06	TU	39	I	NW QUAD	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	12	7.7	
2009	2192.01	TU	41	G	SE QUAD	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	17	4.7	
2009	2193.02	TU	42	G	E	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.4	
2009	2193.03	TU	42	G	E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	34	14.4	
2009	2193.04	TU	42	G	E	LEVEL	0.25	PALEOFECES	UNMOD	FRAG	1	7.4	
2009	2194.01	TU	40	J	NE QUAD	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	22	11.8	
2009	2194.02	TU	40	J	NE QUAD	LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.2	
2009	2195.01	TU	41	G	SE QUAD	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	27	6.1	
2009	2196.01	TU	39	J	NW QUAD	LEVEL	0.25	POTTERY	OFTP	BODY	5	7.0	
2009	2196.02	TU	39	J	NW QUAD	LEVEL	0.25	POTTERY	OFTP	RIM	1	7.2	
2009	2196.03	TU	39	J	NW QUAD	LEVEL	0.25	POTTERY	OFTP	LUG	1	3.2	
2009	2196.04	TU	39	J	NW QUAD	LEVEL	0.25	POTTERY	OFTP	CRUMB	9	3.0	
2009	2196.05	TU	39	J	NW QUAD	LEVEL	0.25	POTTERY	OFTE	BODY	4	7.7	
2009	2196.06	TU	39	J	NW QUAD	LEVEL	0.25	POTTERY	OFTE	CRUMB	21	5.4	
2009	2196.07	TU	39	J	NW QUAD	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	16	7.3	
2009	2196.08	TU	39	J	NW QUAD	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	1	0.1	
2009	2197.01	TU	42	H	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	31	10.3	
2009	2200.03	TU	39	G	D	LEVEL	0.25	POTTERY	OFTI	BODY	1	2.1	
2009	2201.01	TU	41	F	E	LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.3	
2009	2201.02	TU	42	F	E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.1	
2009	2202.01	TU	40	G	E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.6	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2009	2203.02	TU	42	E	E	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.4	
2009	2203.03	TU	42	E	E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	13	9.9	
2009	2204.03	TU	40	H	D	LEVEL	0.25	POTTERY	OFTP	CRUMB	4	3.0	
2009	2204.04	TU	40	H	D	LEVEL	0.25	POTTERY	OFTE	BODY	1	1.6	
2009	2204.05	TU	40	H	D	LEVEL	0.25	POTTERY	OFTE	CRUMB	2	1.1	
2009	2204.06	TU	40	H	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	44	20.9	
2009	2205.02	TU	41	G	E	LEVEL	0.25	POTTERY	OFTP	BODY	2	4.2	
2009	2205.03	TU	41	G	E	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.3	
2009	2205.04	TU	41	G	E	LEVEL	0.25	POTTERY	OFTE	BODY	1	0.6	
2009	2205.05	TU	41	G	E	LEVEL	0.25	POTTERY	OFTE	CRUMB	8	2.0	
2009	2205.06	TU	41	G	E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	9	3.3	
2009	2206.01	TU	39	H	D	LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.1	
2009	2206.02	TU	39	H	D	LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	1.0	
2009	2206.03	TU	39	H	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	0.9	
2009	2207.01	TU	39	H	C	LEVEL	0.25	POTTERY	OFTP	BODY	1	1.9	
2009	2207.02	TU	39	H	C	LEVEL	0.25	POTTERY	OFTP	CRUMB	3	1.4	
2009	2207.03	TU	39	H	C	LEVEL	0.25	POTTERY	OFTE	BODY	1	1.4	
2009	2207.04	TU	39	H	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	7	2.0	
2009	2207.05	TU	39	H	C	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	1	0.1	
2009	2208.01	TU	42	E	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.9	
2009	2210.01	TU	42	E	E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	3	0.5	
2009	2211.02	TU	41	G	E	LEVEL	0.25	POTTERY	OFTP	BODY	4	12.5	
2009	2211.03	TU	41	G	E	LEVEL	0.25	POTTERY	OFTP	RIM	2	3.0	
2009	2211.04	TU	41	G	E	LEVEL	0.25	POTTERY	OFTP	CRUMB	7	2.7	
2009	2211.05	TU	41	G	E	LEVEL	0.25	POTTERY	OFTE	BODY	5	4.3	
2009	2211.06	TU	41	G	E	LEVEL	0.25	POTTERY	OFTE	RIM	1	1.5	
2009	2211.07	TU	41	G	E	LEVEL	0.25	POTTERY	OFTE	CRUMB	17	3.3	
2009	2211.08	TU	41	G	E	LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.5	
2009	2211.09	TU	41	G	E	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	4.8	
2009	2211.10	TU	41	G	E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	64	39.4	
2009	2211.11	TU	41	G	E	LEVEL	0.25	BOTANICAL	WOOD	FRAG	1	0.5	
2009	2212.02	TU	39	H	D	LEVEL	0.25	POTTERY	OFTP	BODY	4	7.3	
2009	2212.03	TU	39	H	D	LEVEL	0.25	POTTERY	OFTP	CRUMB	2	0.8	
2009	2212.04	TU	39	H	D	LEVEL	0.25	POTTERY	OFTE	BODY	1	3.9	
2009	2212.05	TU	39	H	D	LEVEL	0.25	POTTERY	OFTE	CRUMB	19	7.4	
2009	2212.06	TU	39	H	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	10	5.6	
2009	2213.02	TU	39	H	C	LEVEL	0.25	POTTERY	OFTP	BODY	1	1.8	
2009	2213.03	TU	39	H	C	LEVEL	0.25	POTTERY	OFTP	RIM	2	0.6	
2009	2213.04	TU	39	H	C	LEVEL	0.25	POTTERY	OFTP	CRUMB	7	4.5	
2009	2213.05	TU	39	H	C	LEVEL	0.25	POTTERY	OFTE	BODY	1	1.3	
2009	2213.06	TU	39	H	C	LEVEL	0.25	POTTERY	OFTE	CRUMB	14	4.9	
2009	2213.07	TU	39	H	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	27	24.9	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB- STRAT	SAMPLE	RECOV- ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2009	2213.08	TU	39	H	C	LEVEL	0.25	LITHIC	MOD	FLAKE	1	4.7	
2009	2213.09	TU	39	H	C	LEVEL	0.25	BOTANICAL	CHARCOAL	FRAG	1	30.1	
2009	2214.01	TU	40	H	D	LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.9	
2009	2214.02	TU	40	H	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.4	
2009	2215.02	TU	40	I	D	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.8	
2009	2215.03	TU	40	I	D	LEVEL	0.25	POTTERY	OFTE	CRUMB	3	0.8	
2009	2215.04	TU	40	I	D	LEVEL	0.25	VERTFAUNA	MOD	BONE	1	1.2	
2009	2215.05	TU	40	I	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	39	13.4	
2009	2216.01	TU	42	F	E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	31	33.9	
2009	2217.01	TU	42	F	E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	1.7	
2009	2220.02	TU	41	H	D/E	LEVEL	0.25	POTTERY	OFTP	BODY	1	2.2	
2009	2220.03	TU	41	H	D/E	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.3	
2009	2220.04	TU	41	H	D/E	LEVEL	0.25	POTTERY	OFTE	BODY	2	2.3	
2009	2220.05	TU	41	H	D/E	LEVEL	0.25	POTTERY	OFTE	CRUMB	6	1.7	
2009	2220.06	TU	41	H	D/E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	107	54.8	
2009	2221.01	TU	39	I	D	LEVEL	0.25	POTTERY	OFTP	BODY	1	1.3	
2009	2221.02	TU	39	I	D	LEVEL	0.25	POTTERY	OFTP	RIM	1	4.7	
2009	2221.03	TU	39	I	D	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.6	
2009	2221.04	TU	39	I	D	LEVEL	0.25	POTTERY	OFTE	BODY	2	3.7	
2009	2221.05	TU	39	I	D	LEVEL	0.25	POTTERY	OFTE	CRUMB	7	1.4	
2009	2221.06	TU	39	I	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	6	2.0	
2009	2222.01	TU	40	J	F	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	1.1	
2009	2222.02	TU	40	J	F	LEVEL	0.25	POTTERY	OFTE	BODY	1	0.9	
2009	2222.03	TU	40	J	F	LEVEL	0.25	POTTERY	OFTE	CRUMB	3	0.6	
2009	2222.04	TU	40	J	F	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	14	18.2	
2009	2223.01	TU	40	J	D	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.2	
2009	2223.02	TU	40	J	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	23	8.3	
2009	2223.03	TU	40	J	D	LEVEL	0.25	VERTFAUNA	MOD	BONE	1	0.6	
2009	2224.01	TU	42	G	D	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.4	
2009	2224.02	TU	42	G	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	46	23.3	
2009	2224.03	TU	42	G	D	LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.1	
2009	2225.01	TU	41	H	F	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	1.0	
2009	2225.02	TU	41	H	F	LEVEL	0.25	POTTERY	OFTE	CRUMB	4	1.3	
2009	2225.03	TU	41	H	F	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	3	0.3	
2009	2226.11	TU	39	I	F	LEVEL	0.25	POTTERY	OFTP	BODY	18	33.4	
2009	2226.12	TU	39	I	F	LEVEL	0.25	POTTERY	OFTP	CRUMB	30	15.5	
2009	2226.13	TU	39	I	F	LEVEL	0.25	POTTERY	OFTE	BODY	3	4.9	
2009	2226.14	TU	39	I	F	LEVEL	0.25	POTTERY	OFTI	CRUMB	41	10.0	
2009	2226.15	TU	39	I	F	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	51	24.7	
2009	2226.16	TU	39	I	F	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	1.1	
2009	2226.17	TU	39	I	F	LEVEL	0.25	LITHIC	UNMOD	FRAG	1	0.3	
2009	2226.18	TU	39	I	F	LEVEL	0.25	MISCROCK	UNMOD	FRAG	1	0.7	POSSIBLE GASTROLITH

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2009	2228.03	TU	41	H	F	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.5	
2009	2228.04	TU	41	H	F	LEVEL	0.25	POTTERY	OFTE	BODY	3	4.8	
2009	2228.05	TU	41	H	F	LEVEL	0.25	POTTERY	OFTE	CRUMB	8	1.5	
2009	2228.06	TU	41	H	F	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	14	4.7	
2009	2229.01	TU	40	K	F	LEVEL	0.25	POTTERY	OFTP	CRUMB	3	1.3	
2009	2229.02	TU	40	K	F	LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.9	
2009	2229.03	TU	40	K	F	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	6	2.2	
2009	2232.02	TU	42	H	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	32	14.9	HIGHLY CONCRETED
2009	2233.01	TU	40	K	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	0.8	
2009	2234.03	TU	39	J	F	LEVEL	0.25	POTTERY	OFTP	BODY	2	2.9	
2009	2234.04	TU	39	J	F	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	1.1	
2009	2235.01	TU	41	I	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	13	5.3	
2009	2237.01	TU	42	H	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	34	11.2	
2009	2238.01	TU	40	K	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	11	2.1	
2009	2239.01	TU	41	I	D	LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.2	
2009	2239.02	TU	41	I	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	60	31.7	
2009	2240.01	TU	41	I	F	LEVEL	0.25	POTTERY	OFTP	BODY	2	4.0	
2009	2240.02	TU	41	I	F	LEVEL	0.25	POTTERY	OFTE	CRUMB	11	4.2	
2009	2240.03	TU	41	I	F	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	36	11.5	
2009	2243.06	TU	39	J	F	LEVEL	0.25	POTTERY	OFTP	BODY	9	31.3	
2009	2243.07	TU	39	J	F	LEVEL	0.25	POTTERY	OFTP	RIM	5	10.3	
2009	2243.08	TU	39	J	F	LEVEL	0.25	POTTERY	OFTP	CRUMB	32	19.7	
2009	2243.09	TU	39	J	F	LEVEL	0.25	POTTERY	OFTE	CRUMB	31	9.3	
2009	2243.10	TU	39	J	F	LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.6	
2009	2243.11	TU	39	J	F	LEVEL	0.25	PALEOFECES	UNMOD	FRAG	1	0.5	
2009	2244.01	TU	40	K	F	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	1.9	
2009	2244.02	TU	40	K	F	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.5	
2009	2244.03	TU	40	K	F	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	7	5.2	
2009	2246.01	TU	39	J	D	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	4.0	
2009	2246.02	TU	39	J	D	LEVEL	0.25	POTTERY	OFTE	CRUMB	5	1.8	
2009	2246.03	TU	39	J	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	9	3.3	
2009	2249.01	TU	42	I	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	36	23.8	
2009	2252.03	TU	39	K	F	LEVEL	0.25	POTTERY	OFTP	BODY	4	5.2	
2009	2252.04	TU	39	K	F	LEVEL	0.25	POTTERY	OFTP	RIM	2	0.9	
2009	2252.05	TU	39	K	F	LEVEL	0.25	POTTERY	OFTP	CRUMB	4	1.2	
2009	2252.07	TU	39	K	F	LEVEL	0.25	POTTERY	OFTE	CRUMB	2	0.5	
2009	2252.08	TU	39	K	F	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	21	6.3	
2009	2253.02	TU	39	K	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	1.6	
2009	2253.03	TU	39	K	D	LEVEL	0.25	POTTERY	OFTE	CRUMB	2	1.1	
2009	2256.01	TU	39	K	F	LEVEL	0.25	POTTERY	OFTP	BODY	4	5.3	
2009	2256.02	TU	39	K	F	LEVEL	0.25	POTTERY	OFTP	RIM	3	2.5	
2009	2256.03	TU	39	K	F	LEVEL	0.25	POTTERY	OFTP	CRUMB	7	3.5	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2009	2256.04	TU	39	K	F	LEVEL	0.25	POTTERY	OFTE	BODY	1	7.0	
2009	2256.05	TU	39	K	F	LEVEL	0.25	POTTERY	OFTE	CRUMB	7	2.6	
2009	2256.06	TU	39	K	F	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	2	0.6	
2009	2256.07	TU	39	K	F	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	45	18.3	
2009	2257.02	TU	41	J	D	LEVEL	0.25	POTTERY	OFTP	CRUMB	2	1.2	
2009	2257.03	TU	41	J	D	LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.2	
2009	2257.04	TU	41	J	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	40	16.7	
2009	2257.05	TU	41	J	D	LEVEL	0.25	VERTFAUNA	MOD	BONE	1	1.5	FIT TOGETHER
2009	2260.03	TU	41	J	F	LEVEL	0.25	POTTERY	OFTE	CRUMB	5	0.9	
2009	2260.04	TU	41	J	F	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	1.2	
2009	2277.01	TU	45	M	A	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.7	
2009	2289.01	TU	39	K	NW QUAD	LEVEL	0.25	POTTERY	OFTP	BODY	4	15.9	
2009	2289.02	TU	39	K	NW QUAD	LEVEL	0.25	POTTERY	OFTP	CRUMB	6	2.1	
2009	2289.03	TU	39	K	NW QUAD	LEVEL	0.25	POTTERY	OFTE	BODY	2	2.2	
2009	2289.04	TU	39	K	NW QUAD	LEVEL	0.25	POTTERY	OFTE	CRUMB	7	0.9	
2009	2289.05	TU	39	K	NW QUAD	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	9	3.0	
2009	2014.01	TU	34	B		PP	-1	POTTERY	SJP	BODY	1	17.5	PP1
2009	2019.01	TU	32	B		PP	-1	POTTERY	OFTI	RIM	1	2.1	PP2
2009	2020.03	TU	27	C		PP	-1	POTTERY	SJP	RIM	1	13.5	PP3
2009	2021.01	TU	34	C		PP	-1	POTTERY	OFTP	BODY	1	5.4	PP5
2009	2021.03	TU	34	C		PP	-1	POTTERY	SJCS	BODY	1	2.7	PP4
2009	2031.02	TU	26	A		PP	-1	MARINESHELL	UNMOD	FRAG	1	13.8	PP6; STROMBUS GIGAS ADZE
2009	2036.07	TU	26	B		PP	-1	POTTERY	SJP	BODY	1	4.2	PP8
2009	2036.08	TU	26	B		PP	-1	POTTERY	SJP	BODY	1	4.3	PP9
2009	2037.02	TU	37	B		PP	-1	POTTERY	SJP	RIM	1	4.8	PP11
2009	2037.05	TU	37	B		PP	-1	POTTERY	SJP	BODY	1	5.4	PP10
2009	2037.06	TU	37	B		PP	-1	POTTERY	SJP	BODY	1	4.6	PP12
2009	2039.01	TU	24	B		PP	-1	POTTERY	SJP	BODY	5	7.9	PP13
2009	2053.01	TU	28	A		PP	-1	POTTERY	OFTE	BODY	1	3.5	PP14
2009	2056.01	TU	33	B		PP	-1	POTTERY	SJP	RIM	1	6.7	PP17
2009	2056.06	TU	33	B		PP	-1	LITHIC	MOD	BIFACE	1	6.1	PP15
2009	2056.07	TU	33	B		PP	-1	POTTERY	SJP	BODY	1	6.5	PP16
2009	2057.01	TU	38	B		PP	-1	POTTERY	SJP	BODY	1	2.8	PP18
2009	2060.02	TU	21	H		PP	-1	LITHIC	MOD	HAFTEDBIFACE	1	5.4	PP19
2009	2066.01	TU	38	C		PP	-1	POTTERY	SJP	BODY	1	13.4	PP20 FIT TOGETHER
2009	2069.01	TU	22	N		PP	-1	MARINESHELL	UNMOD	FRAG	1	25.6	PP21
2009	2072.01	TU	28	C		PP	-1	POTTERY	SJP	BODY	1	5.9	PP22
2009	2073.01	TU	22	N		PP	-1	POTTERY	OFTP	BODY	1	16.6	PP23; BASE?
2009	2076.01	TU	36	B		PP	-1	POTTERY	SJP	BODY	1	2.2	PP24
2009	2094.04	TU	38	D	A	PP	-1	POTTERY	SJP	BODY	1	5.9	PP25
2009	2094.05	TU	38	D	A	PP	-1	POTTERY	SJP	BODY	1	2.3	PP26
2009	2094.06	TU	38	D	A	PP	-1	POTTERY	SJP	BODY	1	3.1	PP27

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2009	2107.01	TU	41	B	A	PP	-1	POTTERY	OFTI	CRUMB	5	2.1	PP28
2009	2115.01	TU	40	C	B	PP	-1	POTTERY	OFTI	RIM	1	41.0	PP29 - 2 PIECES FIT TOGETHER
2009	2115.05	TU	40	C	B	PP	-1	POTTERY	OFTI	BODY	1	7.1	PP31
2009	2115.06	TU	40	C	B	PP	-1	POTTERY	OFTI	BODY	1	12.1	PP35
2009	2116.01	TU	40	C	A	PP	-1	POTTERY	OFTI	RIM	1	32.6	PP30
2009	2117.05	TU	42	C	B	PP	-1	LITHIC	UNMOD	FLAKE	1	20.7	PP32
2009	2120.01	TU	39	D	C	PP	-1	POTTERY	OFTI	BODY	1	4.8	PP33
2009	2120.02	TU	39	D	C	PP	-1	POTTERY	OFTE	RIM	1	3.9	PP34
2009	2128.02	TU	41	D	C	PP	-1	POTTERY	OFTI	BODY	1	2.5	PP36
2009	2131.01	TU	39		S 1/2	PP	-1	POTTERY	OFTE	BODY	1	1.1	PP37
2009	2135.01	TU	40	D	B	PP	-1	POTTERY	OFTP	BODY	1	3.5	PP42
2009	2135.02	TU	40	D	B	PP	-1	POTTERY	OFTI	RIM	1	16.3	PP38
2009	2135.05	TU	40	D	B	PP	-1	POTTERY	OFTI	BODY	1	50.3	PP39 - 2 PIECES FIT TOGETHER
2009	2136.04	TU	42	D	C	PP	-1	POTTERY	OFTE	BODY	1	4.9	PP40
2009	2140.03	TU	39	D	A	PP	-1	LITHIC	MOD	BIFACE	1	5.1	PP41
2009	2142.03	TU	41	E	C	PP	-1	POTTERY	OFTI	BODY	1	1.5	PP45
2009	2142.05	TU	41	E	C	PP	-1	POTTERY	OFTP	BODY	1	67.5	PP43
2009	2142.06	TU	41	E	C	PP	-1	POTTERY	OFTE	BODY	1	6.3	PP44
2009	2144.02	TU	40	E	B	PP	-1	MARINESHELL	MOD	FRAG	1	67.3	PP47; PROBABLE BUSYCON CUP/DIPPER
2009	2147.01	TU	39	E	B	PP	-1	POTTERY	OFTI	BODY	1	3.6	PP46
2009	2148.01	TU		B/W LOCUS B AND BAITFIELD		PP	-1	LITHIC	MOD	HAFTEDBIFACE	1	6.1	PP56 - SURFACE FIND
2009	2151.04	TU	42	E	C	PP	-1	POTTERY	OFTE	BODY	1	3.4	PP55
2009	2152.02	TU	41	E	C	PP	-1	POTTERY	OFTI	BODY	1	2.6	PP50
2009	2152.03	TU	41	E	C	PP	-1	POTTERY	OFTI	BODY	1	8.2	PP51
2009	2152.06	TU	41	E	C	PP	-1	MARINESHELL	UNMOD	FRAG	1	1.6	PP54
2009	2153.01	TU	39	E	B	PP	-1	POTTERY	OFTI	BODY	1	9.6	PP53
2009	2153.02	TU	39	E	B	PP	-1	POTTERY	OFTI	RIM	1	4.0	PP52
2009	2160.01	TU	41	F	C	PP	-1	POTTERY	OFTI	RIM	1	4.7	PP59 - 2 PIECES FIT TOGETHER
2009	2160.02	TU	41	F	C	PP	-1	POTTERY	OFTP	BODY	1	11.1	PP60
2009	2160.03	TU	41	F	C	PP	-1	LITHIC	MOD	FLAKE	1	4.4	PP61
2009	2160.04	TU	41	F	C	PP	-1	POTTERY	OFTI	BODY	1	6.9	PP62
2009	2160.05	TU	41	F	C	PP	-1	POTTERY	OFTP	BODY	1	4.9	PP63
2009	2160.06	TU	41	F	C	PP	-1	POTTERY	OFTE	RIM	1	2.9	PP65
2009	2160.07	TU	41	F	C	PP	-1	POTTERY	OFTI	RIM	1	6.5	PP68
2009	2163.01	TU	39	F	B	PP	-1	POTTERY	OFTE	BODY	1	2.2	PP57
2009	2163.02	TU	39	F	B	PP	-1	POTTERY	OFTE	RIM	1	1.6	PP58
2009	2165.01	TU	40	F	D	PP	-1	MARINESHELL	UNMOD	FRAG	1	28.1	PP64

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2009	2166.01	TU	41	F	E	PP	-1	POTTERY	OFTP	BODY	1	10.3	PP66
2009	2168.01	TU	40	G	C	PP	-1	LITHIC	MOD	BIFACE	1	17.5	PP67
2009	2172.01	TU	39	G	C	PP	-1	POTTERY	OFTI	RIM	1	11.1	PP69 - SEVERAL PIECES FIT TOGETHER
2009	2175.01	TU	41	G	C	PP	-1	POTTERY	OFTP	RIM	1	3.4	PP70
2009	2176.01	TU	42	F	B	PP	-1	POTTERY	OFTI	BODY	1	6.4	PP72
2009	2176.02	TU	42	F	B	PP	-1	POTTERY	OFTE	BODY	1	4.2	PP71
2009	2178.01	TU	40		E 1/2	PP	-1	POTTERY	OFTP	BODY	1	50.8	PP75
2009	2178.02	TU	40		E 1/2	PP	-1	POTTERY	OFTI	BODY	1	9.4	PP73
2009	2179.01	TU	39	H	C	PP	-1	POTTERY	OFTP	BODY	1	4.2	PP74
2009	2186.01	TU	41	F	E	PP	-1	POTTERY	OFTE	BODY	1	5.6	PP76
2009	2186.01	TU	41	F	E	PP	-1	VERTFAUNA	MOD	BONE	1	11.0	PP79; BONE PIN
2009	2188.01	TU	39	H	NW QUAD	PP	-1	POTTERY	OFTE	RIM	1	4.1	PP77
2009	2188.02	TU	39	H	NW QUAD	PP	-1	POTTERY	OFTP	BODY	1	3.9	PP78
2009	2190.01	TU	40	I	NE QUAD	PP	-1	MARINESHELL	UNMOD	FRAG	1	12.4	PP80
2009	2193.01	TU	42	G	E	PP	-1	LITHIC	UNMOD	FLAKE	1	1.8	PP81
2009	2200.01	TU	39	G	D	PP	-1	POTTERY	OFTI	BODY	1	4.5	PP82
2009	2200.02	TU	39	G	D	PP	-1	POTTERY	OFTP	BODY	1	2.2	PP83
2009	2203.01	TU	42	E	E	PP	-1	MARINESHELL	UNMOD	FRAG	1	17.1	PP85
2009	2204.01	TU	40	H	D	PP	-1	POTTERY	OFTP	RIM	1	12.3	PP84
2009	2205.01	TU	41	G	E	PP	-1	POTTERY	OFTI	BODY	1	3.1	PP86
2009	2211.01	TU	41	G	E	PP	-1	POTTERY	OFTP	BODY	1	2.6	PP91
2009	2212.01	TU	39	H	D	PP	-1	LITHIC	MOD	FLAKE	1	3.4	PP90
2009	2213.01	TU	39	H	C	PP	-1	POTTERY	OFTP	BODY	1	5.7	PP89
2009	2215.01	TU	40	I	D	PP	-1	VERTFAUNA	MOD	BONE	1	8.2	PP88; BONE PIN
2009	2220.01	TU	41	H	D/E	PP	-1	LITHIC	MOD	GROUNDSTONE	1	26.7	PP103
2009	2226.01	TU	39	I	F	PP	-1	POTTERY	OFTP	BODY	1	5.6	PP92
2009	2226.02	TU	39	I	F	PP	-1	POTTERY	OFTE	BODY	1	12.5	PP93
2009	2226.03	TU	39	I	F	PP	-1	POTTERY	OFTP	BODY	1	17.7	PP94
2009	2226.04	TU	39	I	F	PP	-1	POTTERY	OFTE	BODY	1	7.2	PP95
2009	2226.05	TU	39	I	F	PP	-1	POTTERY	OFTP	RIM	1	2.4	PP96
2009	2226.06	TU	39	I	F	PP	-1	POTTERY	OFTI	BODY	1	5.8	PP97
2009	2226.07	TU	39	I	F	PP	-1	LITHIC	MOD	FLAKE	1	0.7	PP98
2009	2226.08	TU	39	I	F	PP	-1	POTTERY	OFTE	BODY	1	2.1	PP99
2009	2226.09	TU	39	I	F	PP	-1	LITHIC	MOD	FLAKE	1	10.8	PP100
2009	2226.10	TU	39	I	F	PP	-1	POTTERY	OFTI	BODY	1	3.6	PP104
2009	2228.01	TU	41	H	F	PP	-1	POTTERY	OFTP	BODY	1	3.1	PP101
2009	2228.02	TU	41	H	F	PP	-1	LITHIC	MOD	BIFACE	1	7.0	PP102
2009	2232.01	TU	42	H	D	PP	-1	MARINESHELL	MOD	FRAG	1	143.0	PP105; POSSIBLE BUSYCON ADZE/GOUGE TOOL

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2009	2234.01	TU	39	J	F	PP	-1	POTTERY	OFTE	BODY	1	104.7	PP106
2009	2234.02	TU	39	J	F	PP	-1	POTTERY	OFTE	BODY	1	35.8	PP107 - 16 PIECES
2009	2236.01	TU	39		E 1/2	PP	-1	POTTERY	OFTP	BODY	1	4.2	PP108
2009	2242.01	TU	39		NE 1/2	PP	-1	LITHIC	UNMOD	FLAKE	1	5.0	BAG 1 OF 2; PP109
2009	2242.02	TU	39		NE 1/2	PP	-1	POTTERY	OFTP	BODY	1	10.2	BAG 1 OF 2; PP111
2009	2242.03	TU	39		NE 1/2	PP	-1	POTTERY	OFTP	BODY	1	5.4	BAG 1 OF 2; PP110
2009	2243.01	TU	39	J	F	PP	-1	POTTERY	OFTP	BODY	1	4.3	PP112
2009	2243.02	TU	39	J	F	PP	-1	POTTERY	OFTP	BODY	1	10.3	PP113
2009	2243.03	TU	39	J	F	PP	-1	POTTERY	OFTP	RIM	1	5.2	PP115
2009	2243.04	TU	39	J	F	PP	-1	POTTERY	OFTE	BODY	1	12.8	PP116
2009	2243.05	TU	39	J	F	PP	-1	POTTERY	OFTP	RIM	1	2.2	PP117
2009	2245.12	TU	42		S 1/2	PP	-1	LITHIC	UNMOD	FLAKE	1	5.0	PP109
2009	2250.01	TU	40		SE 1/2	PP	-1	POTTERY	OFTP	BODY	1	14.7	BAG 1 OF 8; PP114
2009	2252.01	TU	39	K	F	PP	-1	LITHIC	MOD	FLAKE	1	1.1	PP118
2009	2252.02	TU	39	K	F	PP	-1	POTTERY	OFTP	RIM	1	9.3	PP119
2009	2257.01	TU	41	J	D	PP	-1	MARINESHELL	MOD	FRAG	1	112.1	PP122; BUSYCON ADZE/GOUGE TOOL
2009	2259.01	TU	39		W1/2	PP	-1	POTTERY	OFTI	RIM	1	29.6	PP126
2009	2259.02	TU	39		W1/2	PP	-1	POTTERY	OFTP	RIM	1	56.4	PP125
2009	2260.01	TU	41	J	F	PP	-1	POTTERY	OFTP	BODY	1	3.2	PP120
2009	2260.02	TU	41	J	F	PP	-1	POTTERY	OFTP	BODY	1	11.8	PP121
2009	2261.01	TU	40		NW 1/2	PP	-1	MARINESHELL	UNMOD	FRAG	1	61.4	PP123
2009	2262.01	TU	39		NW 1/2	PP	-1	POTTERY	OFTP	RIM	1	5.3	BAG 1 OF 5; PP124
2009	2262.02	TU	39		NW 1/2	PP	-1	POTTERY	OFTP	RIM	1	12.3	PP127
2009	2262.03	TU	39		NW 1/2	PP	-1	POTTERY	OFTP	BODY	1	3.6	PP128
2009	2270.01	TU	40		E 1/2	PP	-1	POTTERY	OFTI	BODY	1	3.6	PP136
2009	2270.02	TU	40		E 1/2	PP	-1	POTTERY	OFTI	BODY	1	3.2	PP135
2009	2270.03	TU	40		E 1/2	PP	-1	POTTERY	OFTI	BODY	1	4.7	PP130
2009	2270.04	TU	40		E 1/2	PP	-1	POTTERY	OFTI	RIM	1	7.7	PP137
2009	2273.01	TU	39		NE 1/2	PP	-1	POTTERY	OFTP	BODY	1	11.7	PP134
2009	2273.02	TU	39		NE 1/2	PP	-1	POTTERY	OFTP	BODY	1	11.3	PP133
2009	2273.03	TU	39		NE 1/2	PP	-1	POTTERY	OFTP	BODY	1	18.6	PP132
2009	2274.01	TU	39			PP	-1	POTTERY	OFTP	RIM	1	9.0	PP131
2009	2274.02	TU	39			PP	-1	POTTERY	OFTP	RIM	1	9.6	PP129
2009	2299.01	TU	39			PP	-1	POTTERY	OFTE	BODY	1	1.4	PP138
2009	2299.02	TU	39			PP	-1	POTTERY	OFTP	BODY	1	5.6	PP139
2009	2299.03	TU	39			PP	-1	POTTERY	OFTP	BODY	1	29.3	PP140
2009	2299.04	TU	39			PP	-1	POTTERY	OFTP	BODY	1	6.6	PP141
2009	2255.01	TU	40	PROFILE CUT	SE 1/2	PROFILE	0.25	POTTERY	OFTP	CRUMB	2	0.9	
2009	2255.02	TU	40	PROFILE CUT	SE 1/2	PROFILE	0.25	POTTERY	OFTE	CRUMB	1	0.4	
2009	2255.03	TU	40	PROFILE CUT	SE 1/2	PROFILE	0.25	LITHIC	UNMOD	FLAKE	1	0.2	
2009	2255.04	TU	40	PROFILE CUT	SE 1/2	PROFILE	0.25	VERTFAUNA	UNMOD	FRAG	32	8.8	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2009	2265.01	TU	39	PROFILE CUT	W 1/2	PROFILE CUT	0.25	MARINESHELL	MOD	FRAG	1	154.4	WESTERN PORTION OF NON-FEATURE FILL-140CM; BUSYCON CUTTING EDGE TOOL
2009	2265.02	TU	39	PROFILE CUT	W 1/2	PROFILE CUT	0.25	POTTERY	OFTP	CRUMB	1	0.3	WESTERN PORTION OF NON-FEATURE FILL-140CM
2009	2265.03	TU	39	PROFILE CUT	W 1/2	PROFILE CUT	0.25	POTTERY	OFTP	BODY	4	25.4	WESTERN PORTION OF NON-FEATURE FILL-140CM
2009	2265.04	TU	39	PROFILE CUT	W 1/2	PROFILE CUT	0.25	POTTERY	OFTE	CRUMB	9	3.1	WESTERN PORTION OF NON-FEATURE FILL-140CM
2009	2265.05	TU	39	PROFILE CUT	W 1/2	PROFILE CUT	0.25	LITHIC	MOD	FLAKE	2	7.0	WESTERN PORTION OF NON-FEATURE FILL-140CM
2009	2265.06	TU	39	PROFILE CUT	W 1/2	PROFILE CUT	0.25	VERTFAUNA	UNMOD	FRAG	29	10.6	WESTERN PORTION OF NON-FEATURE FILL-140CM
2009	2265.07	TU	39	PROFILE CUT	W 1/2	PROFILE CUT	0.25	POTTERY	OFTE	BODY	1	2.1	WESTERN PORTION OF NON-FEATURE FILL-140CM
2009	2297.01	TU	39	PROFILE CUT		PROFILE	0.25	POTTERY	OFTP	BODY	6	23.2	
2009	2297.02	TU	39	PROFILE CUT		PROFILE	0.25	POTTERY	OFTP	RIM	2	7.2	
2009	2297.03	TU	39	PROFILE CUT		PROFILE	0.25	POTTERY	OFTP	CRUMB	4	2.2	
2009	2297.04	TU	39	PROFILE CUT		PROFILE	0.25	POTTERY	OFTE	BODY	1	6.0	
2009	2297.05	TU	39	PROFILE CUT		PROFILE	0.25	POTTERY	OFTE	CRUMB	2	1.0	
2009	2297.06	TU	39	PROFILE CUT		PROFILE	0.25	VERTFAUNA	UNMOD	FRAG	14	6.9	
2009	2170.01	SURFACE		BAITFIELD		SURFACE	-99	POTTERY	OFTP	RIM	1	6.2	
2009	2170.02	SURFACE		BAITFIELD		SURFACE	-99	POTTERY	OFTE	CRUMB	1	0.9	
2009	2170.03	SURFACE		BAITFIELD		SURFACE	-99	POTTERY	SJP	BODY	195	756.9	
2009	2170.04	SURFACE		BAITFIELD		SURFACE	-99	POTTERY	SJP	RIM	25	80.5	
2009	2170.05	SURFACE		BAITFIELD		SURFACE	-99	POTTERY	SJP	CRUMB	68	76.0	
2009	2170.06	SURFACE		BAITFIELD		SURFACE	-99	POTTERY	SJCS	BODY	31	158.8	
2009	2170.07	SURFACE		BAITFIELD		SURFACE	-99	POTTERY	SJCS	CRUMB	14	21.4	
2009	2170.08	SURFACE		BAITFIELD		SURFACE	-99	BOTANICAL	WOOD	FRAG	3	0.5	
2009	2170.09	SURFACE		BAITFIELD		SURFACE	-99	HISTORIC	METAL	BUTTON	1	2.9	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2009	2170.10	SURFACE		BAITFIELD		SURFACE	-99	MARINESHELL	UNMOD	FRAG	5	40.8	
2009	2170.11	SURFACE		BAITFIELD		SURFACE	-99	VERTFAUNA	UNMOD	FRAG	11	12.3	
2009	2170.12	SURFACE		BAITFIELD		SURFACE	-99	BOTANICAL	COAL	FRAG	1	1.0	
2009	2170.13	SURFACE		BAITFIELD		SURFACE	-99	HISTORIC	UNMOD	BRICK	2	4.1	
2009	2170.14	SURFACE		BAITFIELD		SURFACE	-99	LITHIC	MOD	FLAKE	1	3.3	
2009	2170.15	SURFACE		BAITFIELD		SURFACE	-99	LITHIC	MOD	BIFACE	5	87.4	
2009	2170.16	SURFACE		BAITFIELD		SURFACE	-99	LITHIC	UNMOD	FLAKE	9	16.1	
2009	2170.17	SURFACE		BAITFIELD WEST		SURFACE	-99	MISCROCK	UNMOD	LIMESTONE	2	35.8	FOSSILIFUEOUS LIMESTONE
2009	2170.18	SURFACE		BAITFIELD		SURFACE	-99	MISCROCK	UNMOD	LIMESTONE	1	19.6	
2009	2170.19	SURFACE		BAITFIELD		SURFACE	-99	LITHIC	MOD	UNIFACE	1	72.0	
2009	2170.20	SURFACE		BAITFIELD WEST		SURFACE	-99	MISCROCK	MOD	LIMESTONE	1	39.7	LIMESTONE COBBLE, MAY BE DRILLED
2009	2312.01	SURFACE		ISLAND B		SURFACE	-99	POTTERY	SJP	BODY	7	100.4	
2009	2312.02	SURFACE		ISLAND B		SURFACE	-99	POTTERY	OFTP	BODY	15	266.6	
2009	2312.03	SURFACE		ISLAND B		SURFACE	-99	POTTERY	OFTI	BODY	11	192.4	
2009	2312.04	SURFACE		ISLAND B		SURFACE	-99	POTTERY	OFTI	RIM	3	48.7	
2009	2312.05	SURFACE		ISLAND B		SURFACE	-99	VERTFAUNA	UNMOD	FRAG	2	120.0	
2009	2155.01	TU	39	WALL CLEAN		WALL	0.25	POTTERY	OFTP	CRUMB	2	2.2	
2009	2155.02	TU	39	WALL CLEAN		WALL	0.25	VERTFAUNA	UNMOD	FRAG	3	1.6	
2009	2198.01	TU	39	WALL COLLAPSE	NW WALL	WALL COLLAPSE	0.25	POTTERY	OFTP	BODY	1	3.3	
2009	2198.02	TU	39	WALL COLLAPSE	NW WALL	WALL COLLAPSE	0.25	POTTERY	OFTP	CRUMB	1	0.6	
2009	2230.01	TU	39	WALL COLLAPSE	NW WALL	WALL COLLAPSE	0.25	POTTERY	OFTP	CRUMB	2	1.1	
2009	2230.02	TU	39	WALL COLLAPSE	NW WALL	WALL COLLAPSE	0.25	POTTERY	OFTE	RIM	1	1.8	
2009	2230.03	TU	39	WALL COLLAPSE	NW WALL	WALL COLLAPSE	0.25	POTTERY	OFTE	CRUMB	3	0.8	
2009	2258.01	TU	39	WALL COLLAPSE	N WALL	WALL COLLAPSE	0.25	POTTERY	OFTP	BODY	1	6.6	
2009	2258.02	TU	39	WALL COLLAPSE	N WALL	WALL COLLAPSE	0.25	POTTERY	OFTP	CRUMB	1	0.5	
2009	2258.04	TU	39	WALL COLLAPSE	N WALL	WALL COLLAPSE	0.25	POTTERY	OFTE	CRUMB	5	2.2	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2009	2258.05	TU	39	WALL COLLAPSE	N WALL	WALL COLLAPSE	0.25	VERTFAUNA	UNMOD	FRAG	1	0.4	
2009	2093.02	TU	22		S 1/2			VERTFAUNA	UNMOD	FRAG		3.7	
2009	2103.01	TU	39-42	CRUSHED SHELL FLOOR			0.25	POTTERY	SJP	CRUMB	3	3.3	
2009	2103.02	TU	39-42	CRUSHED SHELL FLOOR			0.25	VERTFAUNA	UNMOD	FRAG	1	0.3	
2009	2298.01	TU	40				0.25	POTTERY	OFTP	BODY	1	8.6	ISTHMUS B/W FEATURES 39 AND 40
2009	2298.02	TU	40				0.25	POTTERY	OFTP	CRUMB	1	1.2	ISTHMUS B/W FEATURES 39 AND 40
2009	2298.03	TU	40				0.25	POTTERY	OFTE	CRUMB	5	0.9	ISTHMUS B/W FEATURES 39 AND 40
2009	2298.04	TU	40				0.25	MARINESHELL	UNMOD	FRAG	1	1.8	ISTHMUS B/W FEATURES 39 AND 40
2009	2298.05	TU	40				0.25	VERTFAUNA	UNMOD	FRAG	37	10.3	ISTHMUS B/W FEATURES 39 AND 40
2010	2350.01	TU	43	A/B		LEVEL	0.25	HISTORIC	METAL	FRAG	1	18.0	SLUG
2010	2350.02	TU	43	A/B		LEVEL	0.25	MISCROCK	UNMOD	FRAG	1	27.9	
2010	2350.03	TU	43	A/B		LEVEL	0.25	LITHIC	UNMOD	FLAKE	4	13.8	
2010	2350.04	TU	43	A/B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	16	4.0	
2010	2350.05	TU	43	A/B		LEVEL	0.25	POTTERY	SJP	RIM	1	0.8	
2010	2350.06	TU	43	A/B		LEVEL	0.25	POTTERY	SJP	CRUMB	12	8.0	
2010	2350.07	TU	43	A/B		LEVEL	0.25	POTTERY	SJP	BODY	4	6.4	
2010	2351.01	TU	44	A/B		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.8	
2010	2351.02	TU	44	A/B		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	1.8	
2010	2351.03	TU	44	A/B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	10	4.3	
2010	2351.04	TU	44	A/B		LEVEL	0.25	POTTERY	SJP	CRUMB	6	2.8	
2010	2351.05	TU	44	A/B		LEVEL	0.25	POTTERY	SJP	BODY	1	2.1	
2010	2352.01	TU	43	A/B		LEVEL	0.25	POTTERY	OFTP	BODY	2	6.9	
2010	2352.02	TU	43	A/B		LEVEL	0.25	POTTERY	OFTP	CRUMB	4	2.6	
2010	2352.03	TU	43	A/B		LEVEL	0.25	POTTERY	OFTI	CRUMB	1	0.6	
2010	2352.04	TU	43	A/B		LEVEL	0.25	POTTERY	SJP	BODY	2	8.0	
2010	2352.05	TU	43	A/B		LEVEL	0.25	POTTERY	SJP	CRUMB	6	2.1	
2010	2352.06	TU	43	A/B		LEVEL	0.25	POTTERY	SJIN	BODY	2	4.6	
2010	2352.07	TU	43	A/B		LEVEL	0.25	POTTERY	SJIN	CRUMB	1	1.0	
2010	2352.08	TU	43	A/B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	28	11.5	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2010	2352.09	TU	43	A/B		LEVEL	0.25	LITHIC	MOD	FLAKE	2	4.7	
2010	2352.10	TU	43	A/B		LEVEL	0.25	LITHIC	UNMOD	FLAKE	5	2.9	
2010	2353.01	TU	44	A/B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	10	5.3	
2010	2353.02	TU	44	A/B		LEVEL	0.25	POTTERY	SJP	CRUMB	3	0.8	
2010	2353.03	TU	44	A/B		LEVEL	0.25	POTTERY	SJCS	BODY	1	2.6	
2010	2355.01	TU	44	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	90	34.8	
2010	2355.02	TU	44	C		LEVEL	0.25	LITHIC	UNMOD	FLAKE	3	4.8	
2010	2355.03	TU	44	C		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	12.6	
2010	2355.04	TU	44	C		LEVEL	0.25	POTTERY	STP	CRUMB	2	2.5	
2010	2355.05	TU	44	C		LEVEL	0.25	POTTERY	OFTP	CRUMB	2	1.6	
2010	2355.06	TU	44	C		LEVEL	0.25	POTTERY	SJCS	BODY	2	8.9	
2010	2355.07	TU	44	C		LEVEL	0.25	POTTERY	SJP	BODY	7	23.7	
2010	2355.08	TU	44	C		LEVEL	0.25	POTTERY	SJP	CRUMB	18	9.3	
2010	2356.01	TU	43	C		LEVEL	0.25	LITHIC	UNMOD	FLAKE	5	7.0	
2010	2356.02	TU	43	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	105	45.6	
2010	2356.03	TU	43	C		LEVEL	0.25	VERTFAUNA	MOD	FRAG	1	0.2	CUT MARKS
2010	2356.04	TU	43	C		LEVEL	0.25	POTTERY	SJP	RIM	5	12.6	
2010	2356.05	TU	43	C		LEVEL	0.25	POTTERY	SJE	CRUMB	1	1.4	
2010	2356.06	TU	43	C		LEVEL	0.25	POTTERY	SJP	CRUMB	31	10.7	
2010	2356.07	TU	43	C		LEVEL	0.25	POTTERY	SJP	BODY	6	13.7	
2010	2356.08	TU	43	C		LEVEL	0.25	POTTERY	OFTP	CRUMB	22	15.7	
2010	2356.09	TU	43	C		LEVEL	0.25	POTTERY	OFTI	RIM	1	1.9	
2010	2356.10	TU	43	C		LEVEL	0.25	POTTERY	OFTP	RIM	3	1.4	
2010	2357.02	TU	43	D		LEVEL	0.25	POTTERY	OFTE	BODY	5	17.5	
2010	2357.03	TU	43	D		LEVEL	0.25	POTTERY	OFTP	RIM	2	6.9	
2010	2357.04	TU	43	D		LEVEL	0.25	POTTERY	OFTP	CRUMB	14	5.9	
2010	2357.05	TU	43	D		LEVEL	0.25	POTTERY	OFTI	RIM	1	1.4	
2010	2357.06	TU	43	D		LEVEL	0.25	POTTERY	SJP	BODY	3	3.2	
2010	2357.07	TU	43	D		LEVEL	0.25	POTTERY	SJP	CRUMB	7	3.5	
2010	2357.08	TU	43	D		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	61	25.9	
2010	2357.09	TU	43	D		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	2.0	
2010	2357.10	TU	43	D		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	2.1	
2010	2358.01	TU	44	J		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	112	37.3	
2010	2358.02	TU	44	J		LEVEL	0.25	LITHIC	MOD	FLAKE	1	0.1	BROKEN DRILL PIECE
2010	2359.01	TU	44	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	31	12.9	
2010	2359.02	TU	44	C		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	0.4	
2010	2359.03	TU	44	C		LEVEL	0.25	POTTERY	SJP	CRUMB	5	1.3	
2010	2360.01	TU	44	D		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	45	19.7	
2010	2360.02	TU	44	D		LEVEL	0.25	POTTERY	SJE	BODY	1	1.6	
2010	2360.03	TU	44	D		LEVEL	0.25	POTTERY	SJE	CRUMB	1	0.6	
2010	2360.04	TU	44	D		LEVEL	0.25	POTTERY	OFTP	CRUMB	13	6.5	
2010	2360.05	TU	44	D		LEVEL	0.25	POTTERY	OFTE	BODY	2	4.8	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2010	2360.06	TU	44	D		LEVEL	0.25	POTTERY	OFTI	CRUMB	1	0.9	
2010	2360.07	TU	44	D		LEVEL	0.25	POTTERY	OFTI	BODY	2	11.1	
2010	2361.01	TU	43	E		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	128	39.2	
2010	2361.02	TU	43	E		LEVEL	0.25	MISCROCK	UNMOD	FRAG	2	7.3	
2010	2361.03	TU	43	E		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.2	
2010	2361.04	TU	43	E		LEVEL	0.25	PALEOFECES	UID	UID	3	0.5	
2010	2361.05	TU	43	E		LEVEL	0.25	POTTERY	OFTE	CRUMB	2	1.1	
2010	2361.06	TU	43	E		LEVEL	0.25	POTTERY	OFTP	CRUMB	18	5.9	
2010	2361.07	TU	43	E		LEVEL	0.25	POTTERY	OFTI	CRUMB	2	2.8	
2010	2363.01	TU	45	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.4	
2010	2363.02	TU	45	A		LEVEL	0.25	LITHIC	MOD	FLAKE	1	1.0	
2010	2364.01	TU	45	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.5	
2010	2366.01	TU	45	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	1.0	
2010	2366.02	TU	45	C		LEVEL	0.25	POTTERY	SJP	CRUMB	1	1.0	
2010	2367.01	TU	44	E		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	25	6.6	
2010	2367.02	TU	44	E		LEVEL	0.25	MISCROCK	UNMOD	FRAG	1	21.7	
2010	2367.03	TU	44	E		LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.7	
2010	2367.04	TU	44	E		LEVEL	0.25	POTTERY	OFTE	CRUMB	2	2.1	
2010	2367.05	TU	44	E		LEVEL	0.25	POTTERY	OFTE	RIM	1	0.6	
2010	2367.06	TU	44	E		LEVEL	0.25	POTTERY	OFTP	BODY	1	1.6	
2010	2367.07	TU	44	E		LEVEL	0.25	POTTERY	OFTP	CRUMB	8	3.7	
2010	2368.01	TU	43	E		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	49	19.3	
2010	2368.02	TU	43	E		LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.4	
2010	2368.03	TU	43	E		LEVEL	0.25	PALEOFECES	UID	UID	1	0.1	
2010	2368.04	TU	43	E		LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.6	REFITS WITH CAT. 6
2010	2368.05	TU	43	E		LEVEL	0.25	POTTERY	OFTP	BODY	2	7.2	
2010	2368.06	TU	43	E		LEVEL	0.25	POTTERY	OFTP	RIM	1	2.4	
2010	2368.07	TU	43	E		LEVEL	0.25	POTTERY	OFTP	RIM	2	1.5	RIM CRUMBS
2010	2369.01	TU	43	F		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	20	5.4	
2010	2369.02	TU	43	F		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	4.3	
2010	2369.03	TU	43	F		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	2.3	
2010	2369.04	TU	43	F		LEVEL	0.25	MISCROCK	UNMOD	FRAG	1	4.1	
2010	2369.05	TU	43	F		LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.6	
2010	2369.06	TU	43	F		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.3	
2010	2370.01	TU	44	E		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	6	0.8	
2010	2370.02	TU	44	E		LEVEL	0.25	POTTERY	STP	BODY	1	2.3	
2010	2371.01	TU	43	F		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	114	72.4	
2010	2371.02	TU	43	F		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	3	1.6	
2010	2371.03	TU	43	F		LEVEL	0.25	LITHIC	UNMOD	FLAKE	4	7.9	
2010	2371.04	TU	43	F		LEVEL	0.25	POTTERY	OFTP	CRUMB	8	3.5	
2010	2371.05	TU	43	F		LEVEL	0.25	POTTERY	OFTE	BODY	2	3.3	
2010	2371.06	TU	43	F		LEVEL	0.25	POTTERY	OFTP	RIM	1	0.6	RIM CRUMB

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB- STRAT	SAMPLE	RECOV- ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2010	2371.07	TU	43	F		LEVEL	0.25	POTTERY	OFTP	RIM	1	1.5	
2010	2371.08	TU	43	F		LEVEL	0.25	POTTERY	OFTI	RIM	1	4.0	
2010	2372.01	TU	44	F		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	139	78.7	
2010	2372.02	TU	44	F		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	3	6.1	
2010	2372.03	TU	44	F		LEVEL	0.25	POTTERY	OFTE	CRUMB	7	3.6	
2010	2372.04	TU	44	F		LEVEL	0.25	POTTERY	OFTP	CRUMB	7	4.0	
2010	2372.05	TU	44	F		LEVEL	0.25	POTTERY	OFTP	RIM	3	5.3	
2010	2372.06	TU	44	F		LEVEL	0.25	POTTERY	OFTI	CRUMB	6	1.8	
2010	2372.07	TU	44	F		LEVEL	0.25	POTTERY	OFTI	BODY	3	8.5	
2010	2373.01	TU	45	A/B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.2	
2010	2373.02	TU	45	A/B		LEVEL	0.25	LITHIC	MOD	FLAKE	1	8.8	
2010	2374.01	TU	45	A/B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	7	6.7	
2010	2374.02	TU	45	A/B		LEVEL	0.25	MISCROCK	UNMOD	FRAG	1	0.9	
2010	2374.03	TU	45	A/B		LEVEL	0.25	POTTERY	SJP	CRUMB	2	1.6	
2010	2374.04	TU	45	A/B		LEVEL	0.25	POTTERY	SJP	BODY	2	5.5	
2010	2374.05	TU	45	A/B		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	1.3	
2010	2375.01	TU	44	G		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG		229.2	
2010	2375.02	TU	44	G		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	8.7	
2010	2375.03	TU	44	G		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	3	7.5	
2010	2375.04	TU	44	G		LEVEL	0.25	VERTFAUNA	MOD	BONE	3	9.6	
2010	2375.05	TU	44	G		LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.6	
2010	2375.06	TU	44	G		LEVEL	0.25	POTTERY	OFTP	RIM	1	1.5	
2010	2375.07	TU	44	G		LEVEL	0.25	POTTERY	OFTP	CRUMB	11	7.6	
2010	2375.08	TU	44	G		LEVEL	0.25	POTTERY	OFTI	CRUMB	1	0.9	
2010	2375.09	TU	44	G		LEVEL	0.25	POTTERY	OFTI	RIM	1	1.9	
2010	2376.01	TU	45	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	12	9.4	
2010	2376.02	TU	45	C		LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.9	
2010	2376.03	TU	45	C		LEVEL	0.25	POTTERY	OFTP	CRUMB	3	2.2	
2010	2377.01	TU	43	F		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	17	5.3	
2010	2377.02	TU	43	F		LEVEL	0.25	POTTERY	OFTP	CRUMB	3	0.7	
2010	2381.01	TU	43	F		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	2.1	
2010	2381.02	TU	43	F		LEVEL	0.25	POTTERY	OFTE	BODY	2	13.0	
2010	2381.03	TU	43	F		LEVEL	0.25	POTTERY	OFTE	CRUMB	2	0.2	
2010	2382.01	TU	44	H		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	91	48.9	
2010	2383.01	TU	43	G		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	985	165.6	
2010	2383.02	TU	43	G		LEVEL	0.25	MISCROCK	UNMOD	FRAG	1	0.6	
2010	2383.03	TU	43	G		LEVEL	0.25	LITHIC	UNMOD	FLAKE	3	1.7	
2010	2383.04	TU	43	G		LEVEL	0.25	LITHIC	MOD	FLAKE	2	11.0	
2010	2383.05	TU	43	G		LEVEL	0.25	LITHIC	MOD	BIFACE	1	1.2	
2010	2383.06	TU	43	G		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	4	13.1	
2010	2383.07	TU	43	G		LEVEL	0.25	VERTFAUNA	MOD	BONE	1	1.5	BONE PIN (2 PIECES)
2010	2383.08	TU	43	G		LEVEL	0.25	POTTERY	OFTE	BODY	1	3.5	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2010	2383.09	TU	43	G		LEVEL	0.25	POTTERY	OFTE	CRUMB	10	3.1	
2010	2384.01	TU	44	I		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	180	77.4	
2010	2384.02	TU	44	I		LEVEL	0.25	VERTFAUNA	MOD	BONE	1	3.6	BONE PIN
2010	2384.03	TU	44	I		LEVEL	0.25	LITHIC	UNMOD	FLAKE	4	7.8	
2010	2387.01	TU	44	H		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	130	51.5	
2010	2387.02	TU	44	H		LEVEL	0.25	VERTFAUNA	MOD	BONE	1	3.8	BONE PIN (3 PIECES)
2010	2387.03	TU	44	H		LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.8	
2010	2388.01	TU	43	H		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	201	66.4	
2010	2388.02	TU	43	H		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	3.6	
2010	2388.03	TU	43	H		LEVEL	0.25	LITHIC	MOD	FLAKE	1	4.1	
2010	2388.04	TU	43	H		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	1.6	
2010	2389.01	TU	44	J		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	130	43.7	
2010	2389.02	TU	44	J		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.3	
2010	2389.03	TU	44	J		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	2	39.0	
2010	2391.01	TU	44	K		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	40	12.8	
2010	2398.01	TU	44	K		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	9	4.4	
2010	2399.01	TU	43	I		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	17	56.6	
2010	2399.02	TU	43	I		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	1.5	
2010	2401.01	TU	43	J		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	69	26.5	
2010	2401.02	TU	43	J		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	3	6.4	
2010	2401.03	TU	43	J		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	1.6	
2010	2409.01	TU	44	L		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	7	3.0	
2010	2411.01	TU	44	L		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	9	1.6	
2010	2412.01	TU	43	J		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	35	13.7	
2010	2412.02	TU	43	J		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	2	3.8	
2010	2412.03	TU	43	J		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.2	
2010	2413.01	TU	46	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	47	22.4	
2010	2413.02	TU	46	A		LEVEL	0.25	LITHIC	MOD	FLAKE	1	11.2	
2010	2413.03	TU	46	A		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.0	
2010	2413.04	TU	46	A		LEVEL	0.25	MISCROCK	UNMOD	FRAG	1	0.5	
2010	2413.05	TU	46	A		LEVEL	0.25	POTTERY	STP	CRUMB	2	3.2	
2010	2413.06	TU	46	A		LEVEL	0.25	POTTERY	SJP	CRUMB	7	4.4	
2010	2413.07	TU	46	A		LEVEL	0.25	POTTERY	SJP	BODY	4	13.2	
2010	2413.08	TU	46	A		LEVEL	0.25	POTTERY	SJIN	BODY	1	5.5	
2010	2413.09	TU	46	A		LEVEL	0.25	POTTERY	OFTP	CRUMB	3	5.4	
2010	2415.01	TU	46	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	34	13.8	
2010	2415.02	TU	46	B		LEVEL	0.25	MISCROCK	UNMOD	PEBBLE	1	16.6	
2010	2415.03	TU	46	B		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	1.7	
2010	2415.04	TU	46	B		LEVEL	0.25	LITHIC	MOD	BIFACE	1	4.2	
2010	2415.05	TU	46	B		LEVEL	0.25	POTTERY	SJP	CRUMB	7	3.1	
2010	2415.06	TU	46	B		LEVEL	0.25	POTTERY	OFTI	BODY	1	2.2	
2010	2415.07	TU	46	B		LEVEL	0.25	POTTERY	OFTE	CRUMB	2	0.9	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2010	2419.01	TU	46	C		LEVEL	0.25	POTTERY	STE	BODY	1	3.0	
2010	2419.02	TU	46	C		LEVEL	0.25	POTTERY	SJP	CRUMB	7	2.5	
2010	2419.03	TU	46	C		LEVEL	0.25	POTTERY	OFTP	CRUMB	3	0.6	
2010	2419.04	TU	46	C		LEVEL	0.25	POTTERY	SJP	BODY	5	9.2	
2010	2419.05	TU	46	C		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	4	3.8	
2010	2419.06	TU	46	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	28	10.6	
2010	2421.01	TU	44	M		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	17	7.8	
2010	2421.02	TU	44	M		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.4	
2010	2422.01	TU	43	K	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	3	1.1	
2010	2423.01	TU	43	K	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	26	6.8	
2010	2424.01	TU	43	K	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	19	15.6	
2010	2425.01	TU	46	D		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	88	23.9	
2010	2425.02	TU	46	D		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	0.3	
2010	2425.03	TU	46	D		LEVEL	0.25	POTTERY	SJP	CRUMB	2	0.7	
2010	2425.04	TU	46	D		LEVEL	0.25	POTTERY	OFTE	CRUMB	4	2.7	
2010	2427.01	TU	43	K		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	13	4.0	
2010	2427.02	TU	43	K		LEVEL	0.25	PALEOFECES	UNMOD	FRAG	1	0.1	
2010	2427.03	TU	43	K		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	<0.01	
2010	2428.01	TU	46	E		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	69	32.2	
2010	2428.02	TU	46	E		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	3.4	
2010	2428.03	TU	46	E		LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.1	
2010	2428.04	TU	46	E		LEVEL	0.25	POTTERY	SJP	BODY	1	1.8	
2010	2428.07	TU	46	E		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	3.8	
2010	2429.01	TU	43	L	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	28	9.6	
2010	2429.02	TU	43	L	C	LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	<0.01	
2010	2429.03	TU	43	L	C	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	1.4	
2010	2430.01	TU	43	L		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	15	16.3	
2010	2430.02	TU	43	L		LEVEL	0.25	POTTERY	OFTE	CRUMB	1	1.3	
2010	2432.01	TU	46	F	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	82	36.2	
2010	2433.01	TU	46	F		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	118	44.6	
2010	2433.02	TU	46	F		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	1.7	
2010	2433.05	TU	46	F		LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.4	
2010	2435.01	TU	57	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	21	14.9	
2010	2435.02	TU	57	A		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	2.2	
2010	2435.03	TU	57	A		LEVEL	0.25	MISCROCK	UNMOD	FRAG	1	1.8	
2010	2435.04	TU	57	A		LEVEL	0.25	POTTERY	SJP	BODY	8	25.7	
2010	2435.05	TU	57	A		LEVEL	0.25	POTTERY	SJP	CRUMB	36	27.0	
2010	2435.06	TU	57	A		LEVEL	0.25	POTTERY	SJP	RIM	1	1.7	
2010	2435.07	TU	57	A		LEVEL	0.25	POTTERY	SJCS	BODY	4	13.8	
2010	2435.08	TU	57	A		LEVEL	0.25	POTTERY	SJCS	CRUMB	3	2.6	
2010	2435.09	TU	57	A		LEVEL	0.25	POTTERY	SJE	CRUMB	18	8.0	
2010	2435.10	TU	57	A		LEVEL	0.25	POTTERY	SJE	BODY	1	1.3	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2010	2435.11	TU	57	A		LEVEL	0.25	POTTERY	STP	RIM	1	2.3	
2010	2435.12	TU	57	A		LEVEL	0.25	HISTORIC	GLASS	FRAG	2	4.2	BOTTLE GLASS
2010	2435.13	TU	57	A		LEVEL	0.25	HISTORIC	METAL	NAIL	1	1.4	WIRE NAIL
2010	2435.14	TU	57	A		LEVEL	0.25	HISTORIC	METAL	FRAG	1	0.4	ALUMINIUM SODA
2010	2436.01	TU	43	M		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.3	
2010	2436.02	TU	43	M		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	2.3	
2010	2437.01	TU	45	D	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.4	
2010	2438.01	TU	45	D	B	LEVEL	0.25	POTTERY	OFTP	BODY	1	1.7	
2010	2438.02	TU	45	D	B	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.1	
2010	2438.03	TU	45	D	B	LEVEL	0.25	POTTERY	OFTE	CRUMB	1	1.3	
2010	2439.01	TU	46	G		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	20	9.2	
2010	2439.02	TU	46	G		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.4	
2010	2439.03	TU	46	G		LEVEL	0.25	VERTFAUNA	MOD	BONE	1	1.4	BONE PIN PIECE
2010	2440.01	TU	45	D	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	1.0	
2010	2440.02	TU	45	D	A	LEVEL	0.25	LITHIC	MOD	FLAKE	1	3.9	
2010	2440.03	TU	45	D	A	LEVEL	0.25	POTTERY	OFTP	CRUMB	7	0.9	
2010	2440.04	TU	45	D	A	LEVEL	0.25	POTTERY	OFTP	BODY	1	1.6	
2010	2440.05	TU	45	D	A	LEVEL	0.25	POTTERY	OFTI	CRUMB	1	0.1	
2010	2441.01	TU	57	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	47	20.1	
2010	2441.02	TU	57	B		LEVEL	0.25	LITHIC	UNMOD	FLAKE	3	15.4	
2010	2441.03	TU	57	B		LEVEL	0.25	LITHIC	MOD	BIFACE	2	9.7	
2010	2441.04	TU	57	B		LEVEL	0.25	POTTERY	SJP	CRUMB	29	25.8	
2010	2441.05	TU	57	B		LEVEL	0.25	POTTERY	SJP	BODY	15	47.4	
2010	2441.06	TU	57	B		LEVEL	0.25	POTTERY	SJP	RIM	1	6.3	
2010	2441.07	TU	57	B		LEVEL	0.25	POTTERY	SJCS	CRUMB	4	2.8	
2010	2441.08	TU	57	B		LEVEL	0.25	POTTERY	SJCS	BODY	4	18.7	
2010	2441.09	TU	57	B		LEVEL	0.25	POTTERY	SJE	CRUMB	38	22.6	
2010	2441.10	TU	57	B		LEVEL	0.25	POTTERY	SJE	BODY	3	6.8	
2010	2441.11	TU	57	B		LEVEL	0.25	POTTERY	OFTE	CRUMB	4	2.0	
2010	2441.12	TU	57	B		LEVEL	0.25	POTTERY	OFTE	BODY	1	2.6	
2010	2441.13	TU	57	B		LEVEL	0.25	HISTORIC	GLASS	FRAG	1	1.7	
2010	2441.14	TU	57	B		LEVEL	0.25	HISTORIC	METAL	NAIL	2	8.3	BOX NAIL AND WIRE
2010	2442.01	TU	46	G		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	75	45.9	
2010	2442.02	TU	46	G		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.1	
2010	2442.03	TU	46	G		LEVEL	0.25	PALEOFECES	UNMOD	FRAG	2	10.5	
2010	2442.04	TU	46	G		LEVEL	0.25	VERTFAUNA	MOD	BONE	1	4.3	BONE PIN
2010	2443.01	TU	43	M		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	6	1.2	
2010	2443.02	TU	43	M		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.3	
2010	2444.01	TU	45	D	A	LEVEL	0.25	POTTERY	OFTP	BODY	1	1.9	
2010	2445.01	TU	46	G	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	13	3.0	
2010	2446.01	TU	46	G	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	15	2.6	
2010	2447.01	TU	45	E	A	LEVEL	0.25						EMPTY BAG - NO

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2010	2448.01	TU	45	E	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.3	
2010	2448.02	TU	45	E	B	LEVEL	0.25	POTTERY	OFTP	BODY	1	1.3	
2010	2449.01	TU	45	E	C	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	1.4	
2010	2449.02	TU	45	E	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	17	25.3	
2010	2453.01	TU	57	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	23	13.8	
2010	2453.02	TU	57	C		LEVEL	0.25	POTTERY	SJP	BODY	11	49.8	
2010	2453.03	TU	57	C		LEVEL	0.25	POTTERY	SJP	CRUMB	6	5.3	
2010	2453.04	TU	57	C		LEVEL	0.25	POTTERY	SJP	RIM	2	4.2	
2010	2453.05	TU	57	C		LEVEL	0.25	POTTERY	SJCS	BODY	6	20.6	
2010	2453.06	TU	57	C		LEVEL	0.25	POTTERY	SJCS	CRUMB	2	2.9	
2010	2453.07	TU	57	C		LEVEL	0.25	POTTERY	SJE	CRUMB	6	2.5	
2010	2455.01	TU	57	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	82	41.1	
2010	2455.02	TU	57	C		LEVEL	0.25	POTTERY	SJCS	BODY	4	8.0	
2010	2455.03	TU	57	C		LEVEL	0.25	POTTERY	SJP	BODY	3	11.1	
2010	2455.04	TU	57	C		LEVEL	0.25	POTTERY	SJE	CRUMB	31	9.5	
2010	2455.05	TU	57	C		LEVEL	0.25	POTTERY	OFTI	BODY	1	3.5	
2010	2455.06	TU	57	C		LEVEL	0.25	POTTERY	OFTE	CRUMB	8	3.5	
2010	2455.12	TU	57	C		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	1.0	
2010	2456.01	TU	43	M		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	<0.01	
2010	2457.01	TU	46	G		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	38	41.1	
2010	2457.02	TU	46	G		LEVEL	0.25	PALEOFECES	UNMOD	FRAG	1	15.6	
2010	2461.01	TU	46	G	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	14	7.8	
2010	2461.02	TU	46	G	B	LEVEL	0.25	PALEOFECES	UNMOD	FRAG	1	1.7	
2010	2464.01	TU	57	D		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	53	15.0	
2010	2464.02	TU	57	D		LEVEL	0.25	POTTERY	SJE	CRUMB	5	1.4	
2010	2464.03	TU	57	D		LEVEL	0.25	POTTERY	OFTP	CRUMB	5	2.0	
2010	2464.04	TU	57	D		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.6	
2010	2465.01	TU	46	H		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	122	56.2	
2010	2465.02	TU	46	H		LEVEL	0.25	VERTFAUNA	UNMOD	SHARKTOOTH	1	0.2	
2010	2465.03	TU	46	H		LEVEL	0.25	LITHIC	UNMOD	FLAKE	3	1.8	
2010	2465.04	TU	46	H		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	6.8	
2010	2465.05	TU	46	H		LEVEL	0.25	PALEOFECES	UNMOD	FRAG	1	9.6	
2010	2465.06	TU	46	H		LEVEL	0.25	HISTORIC	GLASS	FRAG	1	0.8	BOTTLE GLASS PIECE
2010	2466.01	TU	57	D	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	248	113.1	
2010	2466.02	TU	57	D	A	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	<0.01	
2010	2466.03	TU	57	D	A	LEVEL	0.25	POTTERY	OFTE	RIM	1	0.6	RIM CRUMB
2010	2466.04	TU	57	D	A	LEVEL	0.25	POTTERY	OFTI	RIM	1	0.8	RIM CRUMB
2010	2466.05	TU	57	D	A	LEVEL	0.25	VERTFAUNA	MOD	BONE	1	1.5	BONE PIN
2010	2466.06	TU	57	D	A	LEVEL	0.25	POTTERY	OFTE	BODY	2	2.6	POSSIBLE MEND
2010	2466.07	TU	57	D	A	LEVEL	0.25	POTTERY	OFTI	BODY	1	1.9	
2010	2466.08	TU	57	D	A	LEVEL	0.25	POTTERY	OFTE	CRUMB	15	7.3	
2010	2466.11	TU	57	D	A	LEVEL	0.25	POTTERY	SJP	CRUMB	5	0.9	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2010	2467.01	TU	57	D	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	116	52.3	
2010	2467.02	TU	57	D	B	LEVEL	0.25	POTTERY	SJP	BODY	2	6.2	
2010	2467.03	TU	57	D	B	LEVEL	0.25	POTTERY	SJP	CRUMB	25	7.4	
2010	2467.04	TU	57	D	B	LEVEL	0.25	POTTERY	OFTE	CRUMB	21	8.9	
2010	2468.01	TU	46	I		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	106	80.3	
2010	2468.02	TU	46	I		LEVEL	0.25	LITHIC	MOD	BIFACE	1	8.8	
2010	2468.03	TU	46	I		LEVEL	0.25	LITHIC	MOD	FLAKE	1	1.6	
2010	2468.04	TU	46	I		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	2.6	
2010	2471.01	TU	46	J		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	164	152.6	
2010	2471.02	TU	46	J		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	2	2.0	
2010	2471.03	TU	46	J		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.4	
2010	2472.01	TU	46	K		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	34	7.8	
2010	2473.01	TU	57	D		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	6	3.4	
2010	2473.02	TU	57	D		LEVEL	0.25	POTTERY	SJP	CRUMB	5	0.6	
2010	2474.01	TU	46	L		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	1.4	
2010	2474.02	TU	46	L		LEVEL	0.25	LITHIC	UNMOD	FLAKE	5	2.7	
2010	2474.03	TU	46	L		LEVEL	0.25	LITHIC	MOD	FLAKE	1	1.3	
2010	2475.01	TU	57	E	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	218	98.7	
2010	2475.02	TU	57	E	B	LEVEL	0.25	POTTERY	SJE	CRUMB	1	1.3	
2010	2475.03	TU	57	E	B	LEVEL	0.25	POTTERY	OFTE	CRUMB	11	5.2	
2010	2476.01	TU	57	E	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	70	43.0	
2010	2476.02	TU	57	E	A	LEVEL	0.25	POTTERY	OFTE	CRUMB	19	6.9	
2010	2476.03	TU	57	E	A	LEVEL	0.25	POTTERY	OFTP	BODY	1	9.7	
2010	2478.01	TU	46	M		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.3	
2010	2478.02	TU	46	M		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	1.2	
2010	2479.01	TU	57	E	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	22	8.2	
2010	2479.02	TU	57	E	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	1.1	
2010	2479.03	TU	57	E	A	LEVEL	0.25	POTTERY	OFTE	CRUMB	10	1.9	
2010	2480.01	TU	57	E	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	17	11.8	
2010	2480.02	TU	57	E	B	LEVEL	0.25	POTTERY	OFTE	RIM	1	2.1	
2010	2480.03	TU	57	E	B	LEVEL	0.25	POTTERY	OFTI	BODY	2	4.9	
2010	2480.04	TU	57	E	B	LEVEL	0.25	POTTERY	OFTE	CRUMB	11	5.2	
2010	2481.01	TU	46	M		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	8	3.9	
2010	2481.02	TU	46	M		LEVEL	0.25	LITHIC	UNMOD	FLAKE	3	2.7	
2010	2481.03	TU	46	M		LEVEL	0.25	MISCROCK	UNMOD	FRAG	1	0.7	
2010	2482.01	TU	57	F	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	78	35.2	
2010	2482.02	TU	57	F	A	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	1.0	
2010	2482.03	TU	57	F	A	LEVEL	0.25	POTTERY	OFTE	CRUMB	10	5.8	
2010	2482.04	TU	57	F	A	LEVEL	0.25	POTTERY	OFTP	CRUMB	3	3.2	
2010	2482.05	TU	57	F	A	LEVEL	0.25	POTTERY	OFTP	RIM	2	4.2	
2010	2483.01	TU	57	F	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	53	19.1	
2010	2483.02	TU	57	F	B	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	4.3	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2010	2483.03	TU	57	F	B	LEVEL	0.25	POTTERY	SJP	CRUMB	3	3.2	
2010	2483.04	TU	57	F	B	LEVEL	0.25	POTTERY	OFTE	CRUMB	4	2.8	
2010	2484.01	TU	46	N		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.9	
2010	2484.02	TU	46	N		LEVEL	0.25	LITHIC	UNMOD	FLAKE	7	1.7	
2010	2485.01	TU	43	E	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	44	20.1	
2010	2486.01	TU	57	G	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	51	44.6	
2010	2486.02	TU	57	G	A	LEVEL	0.25	POTTERY	OFTP	BODY	1	10.0	
2010	2486.03	TU	57	G	A	LEVEL	0.25	POTTERY	OFTI	BODY	1	2.1	
2010	2486.04	TU	57	G	A	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	1.9	
2010	2486.05	TU	57	G	A	LEVEL	0.25	POTTERY	OFTE	CRUMB	3	0.7	
2010	2487.01	TU	57	G	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	93	26.1	
2010	2487.02	TU	57	G	B	LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.9	
2010	2487.03	TU	57	G	B	LEVEL	0.25	POTTERY	OFTE	BODY	2	6.7	
2010	2487.04	TU	57	G	B	LEVEL	0.25	POTTERY	OFTP	RIM	2	2.0	
2010	2487.05	TU	57	G	B	LEVEL	0.25	POTTERY	OFTE	CRUMB	8	3.7	
2010	2487.06	TU	57	G	B	LEVEL	0.25	POTTERY	SJP	CRUMB	5	1.1	
2010	2491.01	TU	45	F	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	29	7.3	
2010	2492.01	TU	45	F	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	23	6.4	
2010	2502.01	TU	45	C	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	9	1.8	
2010	2502.02	TU	45	C	A	LEVEL	0.25	MISCROCK	UNMOD	FRAG	1	6.2	
2010	2508.01	TU	57	H	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	25	9.3	
2010	2508.02	TU	57	H	B	LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.1	
2010	2508.03	TU	57	H	B	LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	5.0	
2010	2509.01	TU	57	H		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	21	20.8	
2010	2509.02	TU	57	H		LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.3	
2010	2509.03	TU	57	H		LEVEL	0.25	POTTERY	OFTP	CRUMB	7	4.4	
2010	2509.04	TU	57	H		LEVEL	0.25	POTTERY	OFTP	RIM	2	1.1	RIM CRUMB
2010	2510.01	TU	45	G	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	43	9.5	
2010	2510.02	TU	45	G	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.8	
2010	2510.03	TU	45	G	C	LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.6	
2010	2517.01	TU	45	H	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	7	1.5	
2010	2518.01	TU	45	H	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	45	12.4	
2010	2524.01	TU	57	I	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	3	1.0	
2010	2525.01	TU	57	H		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	7	2.7	
2010	2525.02	TU	57	H		LEVEL	0.25	POTTERY	OFTE	CRUMB	2	0.3	
2010	2530.01	TU	45	I	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	8	9.7	
2010	2531.01	TU	45	I	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	60	16.3	
2010	2534.01	TU	57	I	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	10	3.2	
2010	2534.02	TU	57	I	B	LEVEL	0.25	MISCROCK	UNMOD	SANDSTONE	1	27.4	
2010	2534.03	TU	57	I	B	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.5	
2010	2534.04	TU	57	I	B	LEVEL	0.25	LITHIC	MOD	FLAKE	1	1.6	
2010	2540.01	TU	57	J		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	13	5.0	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2010	2540.02	TU	57	J		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.2	
2010	2540.03	TU	57	J		LEVEL	0.25	LITHIC	MOD	FLAKE	1	0.6	
2010	2540.04	TU	57	J		LEVEL	0.25	POTTERY	SJE	CRUMB	1	0.8	
2010	2542.01	TU	45	J	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	15	6.6	
2010	2543.01	TU	45	J	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	6	4.4	
2010	2543.02	TU	45	J	A	LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	8.1	
2010	2545.01	TU	57	K	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	5	0.8	
2010	2547.01	TU	45	K	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.2	
2010	2548.01	TU	45	K	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	8	1.4	
2010	2554.01	TU	57	L	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.4	
2010	2554.02	TU	57	L	B	LEVEL	0.25	LITHIC	UNMOD	FLAKE	5	2.6	
2010	2563.01	TU	45	L	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	3	1.7	
2010	2564.01	TU	45	L	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	8	5.6	
2010	2566.01	TU	57	M	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	2.6	
2010	2566.02	TU	57	M	B	LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	2.1	
2010	2577.01	TU	46	M	A	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.7	
2010	2577.02	TU	45	M	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	17	12.5	
2010	2578.01	TU	57	L		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.7	
2010	2582.01	TU	45	M	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	7	4.0	
2010	3001.01	TU	47	A		LEVEL	0.25	HISTORIC	GLASS	FRAG	6	17.2	
2010	3001.02	TU	47	A		LEVEL	0.25	LITHIC	UNMOD	FLAKE	3	1.4	
2010	3008.01	TU	47	B	D	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.8	
2010	3008.02	TU	47	B	D	LEVEL	0.25	HISTORIC	METAL	NAIL	1	78.2	
2010	3008.03	TU	47	B	D	LEVEL	0.25	HISTORIC	GLASS	FRAG	19	28.2	
2010	3009.01	TU	47	B	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.2	
2010	3010.01	TU	50	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	1.3	
2010	3010.02	TU	50	A		LEVEL	0.25	HISTORIC	METAL	UID	1	10.9	
2010	3011.01	TU	50	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	6	2.9	
2010	3011.02	TU	50	B		LEVEL	0.25	POTTERY	SJP	CRUMB	2	0.8	
2010	3012.01	TU	47	C	E	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.2	
2010	3013.01	TU	47	C	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	19	4.7	
2010	3013.02	TU	47	C	D	LEVEL	0.25	LITHIC	UNMOD	FLAKE	4	1.0	
2010	3013.03	TU	47	C	D	LEVEL	0.25	LITHIC	MOD	DRILL	1	0.9	UNIFACIAL
2010	3014.01	TU	50	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	6	1.0	
2010	3014.02	TU	50	C		LEVEL	0.25	POTTERY	OFTP	RIM	2	3.4	
2010	3014.03	TU	50	C		LEVEL	0.25	POTTERY	OFTP	BODY	1	1.7	
2010	3014.04	TU	50	C		LEVEL	0.25	POTTERY	OFTP	CRUMB	11	3.4	
2010	3014.05	TU	50	C		LEVEL	0.25	POTTERY	OFTE	CRUMB	4	2.5	
2010	3015.01	TU	50	D	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	9	1.6	
2010	3015.02	TU	50	D	A	LEVEL	0.25	POTTERY	OFTP	CRUMB	16	6.9	
2010	3015.03	TU	50	D	A	LEVEL	0.25	POTTERY	OFTE	CRUMB	22	2.8	
2010	3016.01	TU	50	D	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.5	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2010	3016.02	TU	50	D	C	LEVEL	0.25	POTTERY	OFTP	BODY	3	10.4	
2010	3016.03	TU	50	D	C	LEVEL	0.25	POTTERY	OFTP	CRUMB	3	0.7	
2010	3018.01	TU	47	C	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	1.3	
2010	3019.01	TU	51	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	1.4	
2010	3019.02	TU	51	A		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.3	
2010	3019.03	TU	51	A		LEVEL	0.25	HISTORIC	CERAMIC	FRAG	3	1.9	
2010	3020.01	TU	52	A		LEVEL	0.25	HISTORIC	METAL	NAIL	3	97.0	
2010	3020.02	TU	52	A		LEVEL	0.25	HISTORIC	METAL	UID		2.2	
2010	3021.01	TU	51	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	3	0.6	
2010	3021.02	TU	51	B		LEVEL	0.25	HISTORIC	GLASS	FRAG	1	1.1	
2010	3021.03	TU	51	B		LEVEL	0.25	HISTORIC	METAL	FRAG	1	0.4	
2010	3021.04	TU	51	B		LEVEL	0.25	POTTERY	OFTE	CRUMB	2	0.3	
2010	3023.01	TU	51	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	5	7.8	
2010	3023.02	TU	51	C		LEVEL	0.25	POTTERY	SJP	CRUMB	1	1.2	
2010	3023.03	TU	51	C		LEVEL	0.25	POTTERY	OFTP	CRUMB	6	2.2	
2010	3024.01	TU	51	D	A	LEVEL	0.25	TERR. SNAIL	EUGLANDINA	UID	1	0.8	
2010	3024.02	TU	51	D	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	3	0.4	
2010	3024.03	TU	51	D	A	LEVEL	0.25	MARINESHELL	MOD	FRAG	1	29.3	
2010	3024.04	TU	51	D	A	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	1.1	
2010	3025.01	TU	52	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	3	2.8	
2010	3025.02	TU	52	A		LEVEL	0.25	LITHIC	UNMOD	FLAKE	4	9.9	
2010	3025.03	TU	52	A		LEVEL	0.25	LITHIC	MOD	HAFTEDBIFACE	1	2.3	
2010	3025.04	TU	52	A		LEVEL	0.25	LITHIC	MOD	UNIFACE	1	1.1	
2010	3025.05	TU	52	A		LEVEL	0.25	HISTORIC	METAL	NAIL	2	173.2	
2010	3025.06	TU	52	A		LEVEL	0.25	HISTORIC	METAL	UID	1	17.1	
2010	3025.07	TU	52	A		LEVEL	0.25	HISTORIC	PLASTIC	UID	3	2.4	
2010	3025.08	TU	52	A		LEVEL	0.25	HISTORIC	GLASS	FRAG	14	39.2	
2010	3025.09	TU	52	A		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.5	
2010	3026.01	TU	51	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.9	
2010	3026.02	TU	51	B		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.6	
2010	3027.01	TU	51	D	B	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	2.0	
2010	3034.01	TU	52	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	6	1.1	
2010	3034.02	TU	52	B		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.4	
2010	3034.03	TU	52	B		LEVEL	0.25	LITHIC	MOD	FLAKE	1	4.9	
2010	3035.01	TU	51	E		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.2	
2010	3036.01	TU	50	E		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.3	
2010	3036.02	TU	50	E		LEVEL	0.25	LITHIC	UNMOD	FLAKE	4	0.6	
2010	3036.03	TU	50	E		LEVEL	0.25	LITHIC	MOD	FLAKE	1	6.8	
2010	3037.01	TU	51	F		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.9	
2010	3040.01	TU	53	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	3	0.8	
2010	3040.02	TU	53	A		LEVEL	0.25	POTTERY	SJP	BODY	2	3.1	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2010	3040.03	TU	53	A		LEVEL	0.25	HISTORIC	LEAD	BULLET	2	2.3	.22 CALIBER: BULLET AND SHELL CASING
2010	3040.04	TU	53	A		LEVEL	0.25	HISTORIC	METAL	UID	2	4.8	
2010	3040.05	TU	53	A		LEVEL	0.25	HISTORIC	PLASTIC	UID	1	0.2	
2010	3041.01	TU	50	F		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.2	
2010	3042.01	TU	53	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	16	4.6	
2010	3042.02	TU	53	B		LEVEL	0.25	POTTERY	OFTP	CRUMB	4	1.8	
2010	3043.01	TU	53	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	30	20.3	
2010	3043.02	TU	53	C		LEVEL	0.25	POTTERY	OFTE	CRUMB	6	1.5	
2010	3043.03	TU	53	C		LEVEL	0.25	POTTERY	OFTE	BODY	1	2.5	
2010	3043.04	TU	53	C		LEVEL	0.25	POTTERY	SJE	CRUMB	1	<0.01	
2010	3043.05	TU	53	C		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.2	
2010	3045.01	TU	53	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	23	7.0	
2010	3045.02	TU	53	C		LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.1	
2010	3046.01	TU	53	C		LEVEL	0.25	POTTERY	OFTI	RIM	3	79.6	HIGHLY ERODED, BELONGING TO SAME VESSEL
2010	3046.02	TU	53	C		LEVEL	0.25	POTTERY	OFTI	BODY	13	77.8	HIGHLY ERODED, BELONGING TO SAME VESSEL
2010	3046.03	TU	53	C		LEVEL	0.25	POTTERY	OFTI	CRUMB	3	1.2	HIGHLY ERODED, BELONGING TO SAME VESSEL
2010	3047.01	TU	47	D		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	1.1	
2010	3047.02	TU	47	D		LEVEL	0.25	LITHIC	UNMOD	FLAKE	18	4.6	
2010	3047.03	TU	47	D		LEVEL	0.25	LITHIC	MOD	FLAKE	3	2.8	TWO UNIFACIAL DRILL & ONE
2010	3048.01	TU	53	D		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	86	34.6	
2010	3048.02	TU	53	D		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.6	
2010	3048.03	TU	53	D		LEVEL	0.25	LITHIC	MOD	UNIFACE	1	2.8	
2010	3048.04	TU	53	D		LEVEL	0.25	HISTORIC	METAL	UID	1	0.2	
2010	3048.05	TU	53	D		LEVEL	0.25	POTTERY	OFTP	BODY	1	4.0	
2010	3048.06	TU	53	D		LEVEL	0.25	POTTERY	OFTP	CRUMB	20	8.6	
2010	3050.01	TU	52	C		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.5	
2010	3050.02	TU	52	C		LEVEL	0.25	LITHIC	MOD	UNIFACE	1	0.3	
2010	3051.01	TU	53	D		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	0.4	
2010	3052.01	TU	54	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	1.3	
2010	3052.02	TU	54	B		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.3	
2010	3052.03	TU	54	B		LEVEL	0.25	MISCROCK	UID	UID	1	4.9	
2010	3054.01	TU	53	E		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	8	1.1	
2010	3054.02	TU	53	E		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	<0.01	
2010	3054.03	TU	53	E		LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.4	
2010	3055.01	TU	54	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	3.0	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2010	3055.02	TU	54	C		LEVEL	0.25	POTTERY	OFTE	CRUMB	1	1.6	
2010	3055.03	TU	54	C		LEVEL	0.25	HISTORIC	UID	UID	1	0.9	
2010	3056.01	TU	54	C	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	3	0.5	
2010	3056.02	TU	54	C	B	LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.6	
2010	3056.03	TU	54	C	B	LEVEL	0.25	POTTERY	OFTP	RIM	1	0.5	
2010	3057.01	TU	54	C	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	39	8.5	
2010	3057.02	TU	54	C	A	LEVEL	0.25	POTTERY	SJP	BODY	1	1.8	
2010	3057.03	TU	54	C	A	LEVEL	0.25	POTTERY	OFTI	BODY	1	3.2	
2010	3057.04	TU	54	C	A	LEVEL	0.25	POTTERY	OFTE	CRUMB	4	2.1	
2010	3057.05	TU	54	C	A	LEVEL	0.25	MISCROCK	UNMOD	PEBBLE	1	34.2	
2010	3057.06	TU	54	C	A	LEVEL	0.25	HISTORIC	METAL	FRAG	5	4.7	
2010	3058.01	TU	54	C	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	51	14.2	NW CORNER OF ZONE B
2010	3058.02	TU	54	C	B	LEVEL	0.25	POTTERY	OFTP	CRUMB	2	1.0	NW CORNER OF ZONE B
2010	3059.01	TU	53	E		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	5	2.2	
2010	3059.02	TU	53	E		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.7	
2010	3059.03	TU	53	E		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.4	
2010	3060.01	TU	53	E	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	13	4.3	
2010	3064.01	TU	54	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	3	0.3	BASE OF LEVEL C
2010	3064.02	TU	54	C		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.2	BASE OF LEVEL C
2010	3065.01	TU	53	E		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	6	1.4	
2010	3065.02	TU	53	E		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.9	
2010	3065.03	TU	53	E		LEVEL	0.25	LITHIC	MOD	FLAKE	1	0.9	
2010	3065.04	TU	53	E		LEVEL	0.25	POTTERY	OFTP	CRUMB	4	0.6	
2010	3066.01	TU	54	D	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	74	16.3	
2010	3066.02	TU	54	D	B	LEVEL	0.25	POTTERY	OFTE	CRUMB	3	0.8	
2010	3067.01	TU	54	D	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	30	10.1	
2010	3067.02	TU	54	D	A	LEVEL	0.25	POTTERY	SJCS	CRUMB	1	1.5	
2010	3067.03	TU	54	D	A	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.2	
2010	3068.01	TU	53	E	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	6	1.3	
2010	3069.01	TU	54	D	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	1.2	
2010	3069.02	TU	54	D	C	LEVEL	0.25	POTTERY	OFTE	CRUMB	1	<0.01	
2010	3070.01	TU	54	D		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	1.4	FROM DARK STAIN IN SW CORNER
2010	3071.01	TU	54	D	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	9	1.9	
2010	3071.02	TU	54	D	B	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.8	
2010	3072.01	TU	53	F		LEVEL	0.25	LITHIC	UNMOD	FLAKE	4	1.4	
2010	3072.02	TU	53	F		LEVEL	0.25	LITHIC	MOD	UNIFACE	1	0.7	
2010	3073.01	TU	54	D	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	72	15.4	
2010	3073.02	TU	54	D	B	LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.1	
2010	3074.01	TU	54	D	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	5	0.8	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2010	3074.02	TU	54	D	C	LEVEL	0.25	POTTERY	OFTE	CRUMB	3	0.5	
2010	3075.01	TU	54	D		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	15	2.3	BASE OF LEVEL D
2010	3075.02	TU	54	D		LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.3	BASE OF LEVEL D
2010	3076.01	TU	53	F	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	7	1.7	
2010	3080.01	TU	53	G	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	2.0	
2010	3080.02	TU	53	G	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	11	1.8	
2010	3082.01	TU	53	G	C	LEVEL	0.25	LITHIC	UNMOD	FLAKE	4	1.4	
2010	3083.01	TU	54 S	E	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.9	
2010	3083.02	TU	55 S	E	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.5	
2010	3083.03	TU	56 S	E	A	LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.2	
2010	3084.01	TU	54	E	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	23	3.6	
2010	3084.02	TU	54	E	B	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.3	
2010	3084.03	TU	54	E	B	LEVEL	0.25	POTTERY	OFTE	CRUMB	9	1.7	
2010	3084.04	TU	54	E	B	LEVEL	0.25	POTTERY	OFTI	CRUMB	1	0.2	
2010	3084.05	TU	54	E	B	LEVEL	0.25	POTTERY	OFTP	RIM	1	0.4	
2010	3085.01	TU	53	G	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	7	2.0	
2010	3085.02	TU	53	G	B	LEVEL	0.25	LITHIC	MOD	BIFACE	1	1.3	
2010	3086.01	TU	53	G	D	LEVEL	0.25	LITHIC	UNMOD	FRAG	2	0.3	
2010	3086.02	TU	53	G	D	LEVEL	0.25	LITHIC	MOD	UNIFACE	1	3.3	
2010	3086.03	TU	53	G	D	LEVEL	0.25	POTTERY	OFTE	CRUMB	1	<0.01	
2010	3088.01	TU	54 S	F	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	9	2.3	
2010	3088.02	TU	55 S	F	B	LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.3	
2010	3088.03	TU	56 S	F	B	LEVEL	0.25	POTTERY	OFTE	CRUMB	1	1.2	
2010	3089.01	TU	53	H	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	15	4.7	
2010	3090.01	TU	54 S	F		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.1	
2010	3090.02	TU	54 S	F		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.7	
2010	3091.01	TU	54 S	F	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	3	0.5	
2010	3091.02	TU	54 S	F	C	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.1	
2010	3091.03	TU	54 S	F	C	LEVEL	0.25	LITHIC	MOD	BIFACE	1	5.9	
2010	3091.04	TU	54 S	F	C	LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.2	
2010	3093.01	TU	53	H	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	3	<0.01	
2010	3093.02	TU	53	H	D	LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	<0.01	
2010	3094.01	TU	53	H	C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	6	<0.01	
2010	3094.02	TU	53	H	C	LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	<0.01	
2010	3094.03	TU	53	H	C	LEVEL	0.25	LITHIC	MOD	FLAKE	1	<0.01	
2010	3095.01	TU	54 N	D		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	10	2.5	LEVEL D BASE
2010	3100.01	TU	52	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	19	5.2	
2010	3100.02	TU	52	C		LEVEL	0.25	LITHIC	UNMOD	FLAKE	10	1.9	
2010	3100.03	TU	52	C		LEVEL	0.25	LITHIC	MOD	FLAKE	1	9.6	
2010	3100.04	TU	52	C		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	1.1	
2010	3102.01	TU	56	A		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	34	12.1	
2010	3102.02	TU	56	A		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	<0.01	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2010	3102.03	TU	56	A		LEVEL	0.25	POTTERY	SJCS	BODY	1	2.6	
2010	3102.04	TU	56	A		LEVEL	0.25	POTTERY	OFTP	RIM	1	1.0	
2010	3102.05	TU	56	A		LEVEL	0.25	HISTORIC	METAL	FRAG	2	0.3	
2010	3102.06	TU	56	A		LEVEL	0.25	HISTORIC	METAL	NAIL	1	1.6	
2010	3104.01	TU	54 N	E	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	49	7.6	
2010	3104.02	TU	54 N	E	D	LEVEL	0.25	POTTERY	OFTE	CRUMB	5	0.7	
2010	3104.03	TU	54 N	E	D	LEVEL	0.25	POTTERY	OFTP	CRUMB	2	0.6	
2010	3105.01	TU	47	E		LEVEL	0.25	LITHIC	MOD	BIFACE	1	11.6	
2010	3106.01	TU	47	E		LEVEL	0.25	LITHIC	UNMOD	FLAKE	7	1.2	
2010	3107.01	TU	56	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	19	5.2	
2010	3107.02	TU	56	B		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.6	
2010	3107.03	TU	56	B		LEVEL	0.25	POTTERY	OFTE	CRUMB	2	<0.01	
2010	3108.01	TU	47	E		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.2	
2010	3109.01	TU	54 N	E	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	29	13.0	
2010	3109.02	TU	54 N	E	B	LEVEL	0.25	POTTERY	OFTE	CRUMB	3	0.4	
2010	3109.03	TU	54 N	E	B	LEVEL	0.25	CONCRETION	UID	UID		21.7	
2010	3110.01	TU	54 N		C	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	5	0.6	REMOVE AS FEAT. BUT NO FEAT. FORM
2010	3110.02	TU	54 N		C	LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.6	REMOVE AS FEAT. BUT NO FEAT. FORM
2010	3111.01	TU	54 N	E	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	0.6	
2010	3112.01	TU	56	B		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	134	23.0	
2010	3112.02	TU	56	B		LEVEL	0.25	POTTERY	SJP	CRUMB	1	0.8	
2010	3112.03	TU	56	B		LEVEL	0.25	POTTERY	OFTE	CRUMB	4	0.6	
2010	3113.01	TU	47	E		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	<0.01	
2010	3113.02	TU	47	E		LEVEL	0.25	LITHIC	UNMOD	FLAKE	4	1.2	
2010	3114.01	TU	47	F		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	6	1.0	
2010	3114.02	TU	47	F		LEVEL	0.25	LITHIC	UNMOD	FLAKE	23	11.4	
2010	3114.03	TU	47	F		LEVEL	0.25	LITHIC	MOD	UNIFACE	1	2.2	
2010	3115.01	TU	54 N	59-75cmbd	B FILL	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	18	2.4	
2010	3115.02	TU	55 N	59-75cmbd	B FILL	LEVEL	0.25	POTTERY	OFTE	CRUMB	3	0.1	
2010	3117.01	TU	56	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	210	81.2	
2010	3117.02	TU	56	C		LEVEL	0.25	POTTERY	OFTE	CRUMB	6	1.4	
2010	3117.03	TU	56	C		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.8	
2010	3117.04	TU	56	C		LEVEL	0.25	MARINESHELL	UNMOD	FRAG	1	0.2	
2010	3118.01	TU	54 N	F	D	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	9	2.1	
2010	3118.02	TU	54 N	F	D	LEVEL	0.25	LITHIC	UNMOD	FLAKE	8	2.2	
2010	3118.03	TU	54 N	F	D	LEVEL	0.25	POTTERY	OFTE	CRUMB	1	<0.01	
2010	3118.04	TU	54 N	F	D	LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.3	
2010	3120.01	TU	56	C		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	32	7.1	
2010	3120.02	TU	56	C		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	10.7	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2010	3120.03	TU	56	C		LEVEL	0.25	POTTERY	OFTE	CRUMB	2	0.3	
2010	3120.04	TU	56	C		LEVEL	0.25	POTTERY	OFTE	RIM	1	0.7	
2010	3121.01	TU	54 N	G		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	4	0.6	
2010	3121.02	TU	54 N	G		LEVEL	0.25	LITHIC	MOD	UNIFACE	1	0.4	
2010	3122.01	TU	56	D	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	11	1.7	
2010	3124.01	TU	56	D	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	7	1.5	
2010	3124.02	TU	56	D	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	4	0.9	
2010	3124.03	TU	56	D	A	LEVEL	0.25	POTTERY	OFTE	CRUMB	1	0.2	
2010	3125.01	TU	54	H		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	3	1.1	
2010	3125.02	TU	54	H		LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	0.6	
2010	3127.01	TU	56	E		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	5	2.4	
2010	3127.02	TU	56	E		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	2.6	
2010	3127.03	TU	56	E		LEVEL	0.25	CONCRETION	OFTP	BODY	2	14.8	CONCRETED POTTERY
2010	3127.04	TU	56	E		LEVEL	0.25	POTTERY	OFTP	BODY	2	13.0	
2010	3127.05	TU	56	E		LEVEL	0.25	POTTERY	OFTP	RIM	2	4.8	
2010	3127.06	TU	56	E		LEVEL	0.25	POTTERY	OFTE	CRUMB	4	1.1	
2010	3127.07	TU	56	E		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	0.9	
2010	3128.01	TU	54	H		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.4	
2010	3128.02	TU	54	H		LEVEL	0.25	LITHIC	UNMOD	FLAKE	3	0.2	
2010	3128.03	TU	54	H		LEVEL	0.25	LITHIC	MOD	UNIFACE	1	<0.01	DRILL
2010	3129.01	TU	54	I	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	16	4.0	
2010	3129.02	TU	54	I	A	LEVEL	0.25	LITHIC	MOD	UNIFACE	2	0.3	DRILL
2010	3130.01	TU	54	I	B	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	1.0	
2010	3130.02	TU	54	I	B	LEVEL	0.25	LITHIC	UNMOD	FLAKE	1	<0.01	
2010	3131.01	TU	54	J	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.7	
2010	3131.02	TU	54	J	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	6	2.0	
2010	3131.03	TU	54	J	A	LEVEL	0.25	LITHIC	MOD	UNIFACE	1	2.5	
2010	3132.01	TU	56	F		LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.8	
2010	3132.02	TU	56	F		LEVEL	0.25	CONCRETION	OFTP	RIM	1	9.9	CONCRETED POTTERY
2010	3133.01	TU	56	G	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	9	1.9	
2010	3134.01	TU	54	K	A	LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.3	
2010	3134.02	TU	54	K	A	LEVEL	0.25	LITHIC	UNMOD	FLAKE	5	1.3	
2010	3134.03	TU	54	K	A	LEVEL	0.25	LITHIC	MOD	UNIFACE	1	3.3	
2010	3135.01	TU	56	G	B	LEVEL	0.25	LITHIC	UNMOD	FLAKE	2	0.4	SOUTH WALL
2010	3136.01	TU	56	H		LEVEL	0.25	LITHIC	UNMOD	FLAKE	8	9.0	
2010	3137.01	TU	55	PLOW ZONE		LEVEL	0.25	TERR. SNAIL	EUGLANDINA	UID	1	0.6	
2010	3137.02	TU	55	PLOW ZONE		LEVEL	0.25	POTTERY	STP	CRUMB	1	1.3	
2010	3137.03	TU	55	PLOW ZONE		LEVEL	0.25	POTTERY	OFTI	CRUMB	1	0.7	
2010	3137.04	TU	55	PLOW ZONE		LEVEL	0.25	POTTERY	OFTE	CRUMB	1	<0.01	
2010	3137.05	TU	55	PLOW ZONE		LEVEL	0.25	POTTERY	OFTE	BODY	1	3.0	
2010	3138.01	TU	56	I		LEVEL	0.25	LITHIC	UNMOD	FLAKE	13	2.9	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2010	3140.01	TU	55	B STR II		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	48	32.2	
2010	3140.02	TU	55	B STR II		LEVEL	0.25	POTTERY	OFTI	RIM	1	6.2	
2010	3140.03	TU	55	B STR II		LEVEL	0.25	POTTERY	OFTE	CRUMB	2	1.1	
2010	3140.04	TU	55	B STR II		LEVEL	0.25	POTTERY	OFTP	CRUMB	2	2.0	
2010	3141.01	TU	55	D STR II		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	275	201.2	
2010	3141.02	TU	55	D STR II		LEVEL	0.25	POTTERY	OFTP	BODY	1	3.0	
2010	3141.03	TU	55	D STR II		LEVEL	0.25	POTTERY	OFTE	BODY	3	7.3	
2010	3141.04	TU	55	D STR II		LEVEL	0.25	POTTERY	OFTP	CRUMB	2	3.1	
2010	3141.05	TU	55	D STR II		LEVEL	0.25	POTTERY	OFTE	CRUMB	14	3.8	
2010	3142.01	TU	55	C STR III		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	19	7.9	
2010	3142.02	TU	55	C STR III		LEVEL	0.25	LITHIC	UNMOD	FLAKE	3	1.0	
2010	3142.03	TU	55	C STR III		LEVEL	0.25	POTTERY	OFTE	BODY	1	2.1	
2010	3142.04	TU	55	C STR III		LEVEL	0.25	POTTERY	OFTP	RIM	2	2.6	
2010	3142.05	TU	55	C STR III		LEVEL	0.25	POTTERY	OFTP	CRUMB	1	1.0	
2010	3142.06	TU	55	C STR III		LEVEL	0.25	POTTERY	OFTE	CRUMB	19	5.1	
2010	3143.01	TU	55	C STR III		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	3	1.0	
2010	3144.01	TU	55	D		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.8	
2010	3145.01	TU	55	E		LEVEL	0.25	VERTFAUNA	UNMOD	FRAG	8	6.0	
2010	3145.02	TU	55	E		LEVEL	0.25	MISCROCK	UNMOD	FRAG	1	20.4	
2010	2355.09	TU	44	C		PP	-1	POTTERY	SJP	BODY	1	5.0	PP4
2010	2355.10	TU	44	C		PP	-1	POTTERY	SJP	BODY	1	4.9	PP7
2010	2355.11	TU	44	C		PP	-1	POTTERY	OFTE	BODY	1	8.3	PP2
2010	2355.12	TU	44	C		PP	-1	POTTERY	SJP	BODY	1	2.0	PP6
2010	2355.13	TU	44	C		PP	-1	LITHIC	MOD	FLAKE	1	5.1	PP5
2010	2355.14	TU	44	C		PP	-1	POTTERY	SJP	BODY	1	7.1	PP3
2010	2355.15	TU	44	C		PP	-1	LITHIC	MOD	FLAKE	1	4.2	PP1
2010	2356.11	TU	43	C		PP	-1	LITHIC	MOD	FLAKE	1	4.3	PP1
2010	2356.12	TU	43	C		PP	-1	POTTERY	OFTP	BODY	1	4.0	PP2
2010	2357.01	TU	43	D		PP	-1	POTTERY	OFTP	RIM	1	5.9	PP1
2010	2359.04	TU	44	C		PP	-1	POTTERY	OFTI	RIM	1	20.0	PP8
2010	2360.08	TU	44	D		PP	-1	POTTERY	OFTI	RIM	13	41.7	PP1
2010	2360.09	TU	44	D		PP	-1	POTTERY	OFTI	BODY	2	9.5	PP2
2010	2360.10	TU	44	D		PP	-1	POTTERY	OFTI	BODY	1	6.4	PP3
2010	2360.11	TU	44	D		PP	-1	POTTERY	OFTE	BODY	1	3.1	PP4
2010	2360.12	TU	44	D		PP	-1	POTTERY	OFTI	RIM	1	10.9	PP5
2010	2360.13	TU	44	D		PP	-1	MARINESHELL	UNMOD	FRAG	1	11.8	PP6
2010	2367.08	TU	44	E		PP	-1	POTTERY	OFTE	BODY	1	1.6	PP1
2010	2367.09	TU	44	E		PP	-1	POTTERY	OFTP	BODY	1	3.1	PP2
2010	2371.09	TU	43	F		PP	-1	MARINESHELL	UNMOD	FRAG	1	15.1	PP1
2010	2371.10	TU	43	F		PP	-1	POTTERY	OFTI	RIM	1	3.3	PP2
2010	2372.08	TU	44	F		PP	-1	LITHIC	MOD	FLAKE	1	3.3	PP1
2010	2372.09	TU	44	F		PP	-1	POTTERY	OFTI	BODY	1	5.5	PP2

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2010	2375.10	TU	44	G		PP	-1	LITHIC	MOD	FLAKE	1	4.1	PP2
2010	2375.11	TU	44	G		PP	-1	POTTERY	OFTI	RIM	1	33.3	PP1
2010	2375.12	TU	44	G		PP	-1	MARINESHELL	UNMOD	FRAG	1	173.4	PP3
2010	2384.04	TU	44	I		PP	-1	LITHIC	UNMOD	FLAKE	1	1.6	PP1
2010	2388.05	TU	43	H		PP	-1	LITHIC	MOD	FLAKE	1	5.2	PP2
2010	2388.06	TU	43	H		PP	-1	MARINESHELL	UNMOD	FRAG	1	7.6	PP1
2010	2389.04	TU	44	J		PP	-1	LITHIC	UNMOD	FLAKE	1	1.4	PP2
2010	2389.05	TU	44	J		PP	-1	MARINESHELL	UNMOD	FRAG	1	36.8	PP1
2010	2399.03	TU	43	I		PP	-1	MARINESHELL	UNMOD	FRAG	1	10.3	PP1
2010	2415.08	TU	46	B		PP	-1	POTTERY	SJP	BODY	1	9.8	PP1
2010	2415.09	TU	46	B		PP	-1	POTTERY	SJP	BODY	1	3.1	PP2
2010	2419.07	TU	46	C		PP	-1	MARINESHELL	UNMOD	FRAG	3	39.8	PP3
2010	2419.08	TU	46	C		PP	-1	MARINESHELL	UNMOD	FRAG	2	5.2	PP2
2010	2419.09	TU	46	C		PP	-1	POTTERY	SJP	BODY	4	3.7	PP1
2010	2422.02	TU	43	K	A	PP	-1	LITHIC	MOD	FLAKE	1	5.8	PP1
2010	2422.03	TU	43	K	A	PP	-1	LITHIC	UNMOD	FLAKE	1	0.2	PP3
2010	2423.02	TU	43	K	B	PP	-1	MARINESHELL	UNMOD	FRAG	1	2.9	PP2
2010	2424.02	TU	43	K	C	PP	-1	LITHIC	UNMOD	FLAKE	1	1.9	PP4
2010	2425.05	TU	46	D		PP	-1	POTTERY	OFTP	CRUMB	16	5.7	PP1
2010	2428.05	TU	46	E		PP	-1	POTTERY	OFTE	CRUMB	2	0.4	
2010	2428.06	TU	46	E		PP	-1	VERTFAUNA	MOD	BONE	1	3.7	PP1, BONE PIN PIECE
2010	2433.03	TU	46	F		PP	-1	LITHIC	MOD	FLAKE	1	3.1	PP2
2010	2433.04	TU	46	F		PP	-1	MARINESHELL	UNMOD	FRAG	1	16.3	PP1
2010	2439.04	TU	46	G		PP	-1	LITHIC	MOD	DRILL	1	1.0	PP1
2010	2440.06	TU	45	D	A	PP	-1	POTTERY	OFTI	BODY	1	2.0	PP2
2010	2442.05	TU	46	G		PP	-1	VERTFAUNA	UNMOD	FRAG	6	7.6	PP1
2010	2448.03	TU	45	E	B	PP	-1	POTTERY	OFTI	RIM	1	4.9	PP1
2010	2453.08	TU	57	C		PP	-1	POTTERY	SJP	BODY	1	33.7	PP1
2010	2453.09	TU	57	C		PP	-1	POTTERY	SJP	RIM	1	30.2	PP2
2010	2455.07	TU	57	C		PP	-1	POTTERY	OFTI	BODY	3	20.5	PP3
2010	2455.08	TU	57	C		PP	-1	HISTORIC	METAL	NAIL	1	5.4	PP4, BOX NAIL
2010	2455.09	TU	57	C		PP	-1	POTTERY	OFTI	RIM	2	14.8	PP5
2010	2455.10	TU	57	C		PP	-1	POTTERY	SJP	BODY	1	44.3	PP6
2010	2455.11	TU	57	C		PP	-1	POTTERY	OFTI	BODY	2	17.8	PP7
2010	2464.05	TU	57	D		PP	-1	POTTERY	OFTP	RIM	1	5.8	PP1
2010	2464.06	TU	57	D		PP	-1	POTTERY	SJCS	BODY	1	2.3	PP2
2010	2464.07	TU	57	D		PP	-1	POTTERY	SJP	BODY	1	1.3	PP3
2010	2464.08	TU	57	D		PP	-1	POTTERY	SJE	BODY	3	0.7	PP4, BOX NAIL
2010	2464.09	TU	57	D		PP	-1	POTTERY	SJP	BODY	1	9.7	PP5
2010	2464.10	TU	57	D		PP	-1	POTTERY	SJP	CRUMB	3	1.6	PP6
2010	2464.11	TU	57	D		PP	-1	POTTERY	SJP	BODY	1	3.0	PP7
2010	2464.12	TU	57	D		PP	-1	POTTERY	SJP	BODY	1	1.5	PP8

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB-STRAT	SAMPLE	RECOV-ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2010	2464.13	TU	57	D		PP	-1	POTTERY	OFTI	RIM	1	12.7	PP9
2010	2466.09	TU	57	D	A	PP	-1	VERTFAUNA	MOD	BONE	2	2.0	PP17, BONE PIN
2010	2466.10	TU	57	D	A	PP	-1	POTTERY	OFTE	BODY	1	1.7	PP18
2010	2467.05	TU	57	D	B	PP	-1	POTTERY	OFTE	BODY	1	12.3	PP10
2010	2467.06	TU	57	D	B	PP	-1	POTTERY	SJP	BODY	1	32.1	PP13
2010	2467.07	TU	57	D	B	PP	-1	POTTERY	SJP	BODY	1	4.1	PP14
2010	2467.08	TU	57	D	B	PP	-1	POTTERY	SJP	BODY	1	1.7	PP12
2010	2467.09	TU	57	D	B	PP	-1	POTTERY	SJP	BODY	1	2.1	PP15
2010	2467.10	TU	57	D	B	PP	-1	POTTERY	SJP	BODY	1	17.1	PP11
2010	2467.11	TU	57	D	B	PP	-1	POTTERY	SJP	BODY	1	17.4	PP16
2010	2475.04	TU	57	E	B	PP	-1	POTTERY	OFTE	BODY	1	13.4	PP1
2010	2475.05	TU	57	E	B	PP	-1	POTTERY	OFTE	RIM	1	4.6	PP2
2010	2501.01	TU	45	G		PP	-1	POTTERY	OFTP	BODY	13	50.6	PP1 - PROBABLY FROM INCISED VESSEL
2010	2508.04	TU	57	H	B	PP	-1	LITHIC	UNMOD	FLAKE	1	1.9	PP2
2010	2508.05	TU	57	H	B	PP	-1	LITHIC	MOD	BIFACE	1	12.7	PP6, DRILL
2010	2508.06	TU	57	H	B	PP	-1	POTTERY	OFTP	BODY	1	5.0	PP3
2010	2508.07	TU	57	H	B	PP	-1	POTTERY	OFTP	BODY	1	9.1	PP7
2010	2508.08	TU	57	H	B	PP	-1	POTTERY	OFTP	BODY	1	3.5	PP4
2010	2509.05	TU	57	H		PP	-1	POTTERY	OFTP	CRUMB	2	1.5	PP5
2010	2509.06	TU	57	H		PP	-1	VERTFAUNA	UNMOD	FRAG	1	2.4	PP1
2010	2517.02	TU	45	H	A	PP	-1	POTTERY	OFTP	BODY	1	3.5	PP1
2010	2534.05	TU	57	I	B	PP	-1	LITHIC	UNMOD	FLAKE	1	1.4	PP1
2010	2534.06	TU	57	I	B	PP	-1	LITHIC	UNMOD	FLAKE	1	0.6	PP2
2010	2538.07	TU	57		N 1/2	PP	-1	POTTERY	OFTE	BODY	1	13.5	PP2
2010	2538.08	TU	57		N 1/2	PP	-1	VERTFAUNA	MOD	BONE	1	4.7	PP3 - BONE PIN
2010	2554.03	TU	57	L	B	PP	-1	LITHIC	MOD	FLAKE	1	8.0	PP2
2010	2573.02	TU	57	STR V-b		PP	-1	POTTERY	OFTP	CRUMB	1	1.5	COL 1 - PP1
2010	3108.02	TU	47	E		PP	-1	LITHIC	MOD	UNIFACE	1	33.8	PP1 SIDE SCRAPPER
2010	3038.01	SURFACE		ON ROAD W. OF TU 50/51		SURFACE	-99	MARINESHELL	UNMOD	FRAG	1	38.4	
2010	3096.01	TU	53	WALL & FLOOR CLEAN		WALL & FLOOR CLEAN	0.25	VERTFAUNA	UNMOD	FRAG	5	2.0	LEVEL H
2010	3096.02	TU	53	WALL & FLOOR CLEAN		WALL & FLOOR CLEAN	0.25	LITHIC	UNMOD	FLAKE	1	0.7	LEVEL H
2010	2420.01	TU	43	WALL CLEAN		WALL	0.25	VERTFAUNA	UNMOD	FRAG	11	12.5	
2010	2420.02	TU	43	WALL CLEAN		WALL	0.25	PALEOFECES	UNMOD	FRAG	1	3.5	
2010	2420.03	TU	43	WALL CLEAN		WALL	0.25	MARINESHELL	UNMOD	FRAG	1	<0.01	
2010	2420.04	TU	43	WALL CLEAN		WALL	0.25	LITHIC	UNMOD	FLAKE	1	0.5	
2010	2454.01	TU	43-45	WALL CLEAN		WALL	0.25	VERTFAUNA	UNMOD	FRAG	10	2.5	

YEAR	BAG	PROV. TYPE	TEST UNIT	LEVEL/ STRAT	ZONE/SUB- STRAT	SAMPLE	RECOV- ERY	MATERIAL	MAT. TYPE	FORM	N	Wt. (g)	NOTE
2010	2460.01	TU	43/44	WALL CLEAN		WALL	0.25	VERTFAUNA	UNMOD	FRAG	33	32.3	
2010	2460.02	TU	43/44	WALL CLEAN		WALL	0.25	POTTERY	OFTE	CRUMB	1	0.4	
2010	2477.01	TU	46	WALL CLEAN		WALL	0.25	VERTFAUNA	UNMOD	FRAG	3	0.8	
2010	2490.01	TU	45	WALL CLEAN		WALL	0.25	VERTFAUNA	UNMOD	FRAG	6	0.9	
2010	2493.01	TU	46	WALL CLEAN		WALL	0.25	VERTFAUNA	UNMOD	FRAG	22	14.1	
2010	2520.01	TU	45	WALL CLEAN		WALL	0.25	VERTFAUNA	UNMOD	FRAG	7	0.7	
2010	2523.01	TU	57	WALL CLEAN		WALL	0.25	VERTFAUNA	UNMOD	FRAG	9	3.9	
2010	2523.02	TU	57	WALL CLEAN		WALL	0.25	POTTERY	SJP	RIM	1	8.1	
2010	2523.03	TU	57	WALL CLEAN		WALL	0.25	POTTERY	OFTP	BODY	1	1.7	
2010	2541.01	TU	45	WALL CLEAN		WALL	0.25	VERTFAUNA	UNMOD	FRAG	14	4.6	
2010	2551.01	TU	45	WALL CLEAN		WALL	0.25	VERTFAUNA	UNMOD	FRAG	9	2.8	
2010	2551.02	TU	45	WALL CLEAN		WALL	0.25	POTTERY	OFTP	BODY	1	2.0	
2010	2587.01	TU	45	WALL CLEAN		WALL	0.25	VERTFAUNA	UNMOD	FRAG	2	0.4	
2010	2591.01	TU	57	WALL CLEAN		WALL		LITHIC	UNMOD	FLAKE	1	2.6	
2010	2591.02	TU	57	WALL CLEAN		WALL		POTTERY	SJP	CRUMB	1	0.5	
2010	3044.01	TU	50/51	WALL CLEAN		WALL	0.25	VERTFAUNA	UNMOD	FRAG	1	7.7	
2010	3087.01	TU	53	WALL CLEAN		WALL	0.25	VERTFAUNA	UNMOD	FRAG	1	0.2	LEVEL G
2010	3097.01	TU	47	WALL CLEAN		WALL	0.25	LITHIC	UNMOD	FLAKE	1	<0.01	LEVEL D
2010	3116.01	TU	52	WALL CLEAN		WALL	0.25	LITHIC	UNMOD	FLAKE	1	0.8	
2010	3119.01	TU	54 S	WALL CLEAN		WALL	0.25	POTTERY	OFTE	CRUMB	2	0.1	LEVEL F
2010	3139.01	TU	56	WALL CLEAN	S WALL	WALL	0.25	LITHIC	UNMOD	FLAKE	1	0.3	
2010	3000.01	CORE	A-1	20-60cmbs				VERTFAUNA	UNMOD	FRAG	4	0.8	
2010	3002.00	CORE	A-3	0-80cmbs									BAG EMPTY; POTTERY LISTED ON BAG LIST
2010	3003.01	CORE	F-1	60-100cmbs				POTTERY	OFTE	CRUMB	1	0.4	
2010	3004.01	CORE	F-3	36-94cmbs				LITHIC	UNMOD	FLAKE	2	0.4	
2010	3006.01	AUGER	H-1	0-40cmbs				POTTERY	OFTP	RIM	2	1.6	
2010	3006.02	AUGER	H-2	0-40cmbs				POTTERY	OFTP	CRUMB	2	1.5	
2010	3006.03	AUGER	H-3	0-40cmbs				POTTERY	OFTE	CRUMB	9	1.4	
2010	3007.01	AUGER	H-3	26-50cmbs				VERTFAUNA	UNMOD	FRAG	1	0.3	

APPENDIX B
RADIOCARBON DATA

Prov.	Material	Beta Lab Number	Measured 14C Age BP	13C/12C Ratio	Conventional 14C Age BP	2-sigma Cal AD/BC	2-sigma Cal BP
TU44-Tree	wood	285044	120 ± 40	-24.8	120 ± 40	AD 1670-1780 AD 1790-1960	280-160 160-0
Feature 22	charcoal	298846	610 ± 50	-24.8	610 ± 50	AD 1280-1420	670-530
Feature 63	charcoal	289502	680 ± 40	-25.6	670 ± 40	AD 1270-1330 AD 1340-1400	680-620 610-560
Core 1-IV	peat	236136	1330 ± 40	-23.4	1360 ± 40	AD 620-690	1330-1260
TU18-Core	charcoal	248526	2440 ± 40	-25.1	2440 ± 40	BC 760-400	2710-2350
Feature 18	charcoal	298845	2790 ± 60	-23.9	2810 ± 60	BC 1120-820	3070-2770
Feature 36b	charcoal	264443	3570 ± 40	-23.9	3590 ± 40	BC 2030-1880	3980-3830
Feature 38m	charcoal	264446	3590 ± 40	-25.0	3590 ± 40	BC 2030-1880	3980-3830
Feature 1	charcoal	255903	3610 ± 40	-25.8	3600 ± 40	BC 2110-2100 BC 2040-1880	4060-4050 3990-3830
Feature 37	charcoal	264444	3630 ± 40	-24.1	3640 ± 40	BC 2130-1900	4080-3850
Feature 38b	charcoal	264445	3670 ± 40	-25.1	3670 ± 40	BC 2190-2180 BC 2140-1940	4140-4120 4100-3890
Vessel 12	soot	166671	3690 ± 60	-25.8	3680 ± 60	BC 2210-1900	4160-3850
Feature 54	charcoal	285043	3690 ± 40	-25.9	3680 ± 40	BC 2190-2170 BC 2150-1950	4140-4120 4100-3900
Feature 33	charcoal	264442	3730 ± 40	-24.1	3740 ± 40	BC 2280-2240 BC 2240-2030	4230-4190 4190-3980
Feature 15	charcoal	255904	3820 ± 40	-24.3	3830 ± 40	BC 2460-2190 BC 2180-2140	4410-4140 4120-4100
Feature 26	charcoal	264441	3960 ± 40	-24.5	3970 ± 40	BC 2570-2440 BC 2420-2400 BC 2380-2350	4520-4390 4370-4350 4320-4300
Vessel 6	soot	166672	4020 ± 60	-25.2	4020 ± 60	BC 2850-2820 BC 2680-2430	4800-4770 4630-4380
Vessel 27	soot	166673	4060 ± 40	-24.4	4070 ± 40	BC 2860-2810 BC 2690-2480	4810-4760 4640-4430
Feature 50	charcoal	285042	4180 ± 40	-24.8	4180 ± 40	BC 2890-2630	4840-4580

Prov.	Material	Beta Lab Number	Measured 14C Age BP	13C/12C Ratio	Conventional 14C Age BP	2-sigma Cal AD/BC	2-sigma Cal BP
Feature 48	charcoal	285041	4240 ± 40	-25.4	4230 ± 40	BC 2910-2850	4860-4800
						BC 2810-2750	4760-4700
						BC 2720-2700	4670-4650
TU46-VIa	charcoal	285045	4490 ± 40	-24.9	4490 ± 40	BC 3360-3020	5300-4970
TU46-XIa	charcoal	285046	4940 ± 40	-24.4	4950 ± 40	BC 3880-3650	5740-5600
TU10A-C14-5	charcoal	298849	5130 ± 40	-24.7	5130 ± 40	BC 3990-3910	5940-5860
						BC 3880-3800	5830-5750
TU10A-C14-4	charcoal	248528	5160 ± 50	-25.4	5150 ± 50	BC 4040-3910	5990-5860
						BC 3880-3800	5830-5750
TU8-STR19	charcoal	298848	5280 ± 40	-25.2	5280 ± 40	BC 4240-3980	6190-5930
Feature 6	charcoal	299734	5290 ± 40	-25.0	5290 ± 40	BC 4240-3990	6190-5940
TU5E-XXII	charcoal	236137	5290 ± 40	-24.7	5290 ± 40	BC 4240-3990	6190-5940
TU5-STRVI	charcoal	298847	5320 ± 30	-25.0	5320 ± 30	BC 4250-4040	6200-6000
TU10A-C14-3	charcoal	248527	5390 ± 40	-24.4	5400 ± 40	BC 4340-4230	6290-6180
						BC 4200-4170	6150-6120