# ARCHEOLOGICAL INVESTIGATIONS OF THE SAN PABLO AND SAN PEDRO BASTIONS AT <br> CASTILLO DE SAN MARCOS NATIONAL MONUMENT ST. AUGUSTINE, FLORIDA 

## By

Charles F. Lawson<br>and<br>John E. Cornelison Jr.

## SEAC Accession Number 1325

Park Accession Number 249
Southeast Archeological Center
National Park Scrvice
Tallahassee, Florida
2001

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## MANAGEMENT SUMMARY

Cracking of the bastion walls of Castillo de San Marcos at the Castillo de San Marcos National Monument in St. Augustine had necessitated repair. Archeological excavation under the direction of Project Archeologist John E. Cornelison Jr. was conducted at the fort in order to gather information on both the nature of the wall cracks and the history of the fort.

Five excavation units and eighteen core tests were completed at the Castillo over five field projects. Ten core tests and two large excavation units, one in each of the apexes of the northwest and southwest bastions, were opened on the terreplein of the fort in 1997. Excavations in EU 2 in the northwest bastion reached a depth of 68 inches below the modern surface of the terreplein in 1997 and recovered a significant amount of material culture. Also in 1997, core tests one through eight were driven to depths between 6 and 14.5 feet below the modern surface of the terreplein and recovered archeological material culture as well as evidence of historic floors. However, the main focus of the excavations was EU 1 in the southwest bastion. This excavation unit was dug to a depth of 140 inches below the modern terreplein surface in both 1997 and 1998. Physical evidence of construction zones and living floors was recovered, displaying the history of the fort from its original construction to its modern use. A significant amount of material culture was also recovered; some of which can shed light on the day to day life of the soldiers garrisoned at the fort and some of which gives information on how and when the specific levels of the fort were built.

Three excavation units (units 3, 4 and 5) and core tests eleven through eighteen were placed in the moat in 2000. All of these archeological tests recovered information on the substructure of the fort and the soil it was built upon.

During the excavations, the required data on the nature of the cracks and the erosion problems caused by them were recovered. The excavation units have hence been backfilled and paved over and a waterproof sealant has been planned for the surface of the terreplein. The cracks themselves have been filled with a porous material that will hopefully arrest further erosion of the fill within the bastion walls. It is expected that further archeological excavation will not be necessary upon the terreplein.

## ACKNOWLEDGMENTS

We would like to express thanks and appreciation to Jill Halchin for her help in the editing of this report. We would also like to extend the thanks of the Southeast Archeological Center to the many volunteers who assisted with the excavations at the fort. These people include from the St. Augustine Archaeological Association Betty Riggan, Richard Todd, Paul Geiser, and Margaret Porkins. Also, the St. Augustine City Archeologist, Carl Halburth, his wife Carla and volunteers Judith Brown, Robin Manuzy, Christina Donley and Judy Allen.

Many SEAC staff members worked hard to complete these excavations and the artifact analysis. Personnel involved in field excavations include Regina Meyer, Rolando Garza, Lou Groh, Tom Hodgson, Rhonda Brewer, Lynn Shreve, Christian Russell, Amy Osmon, Marc Tieman, Tanya Peres, Jason McEachern, Tammy Cooper, Sophia Yassin, Jeff Jones and Brinnen Carter. Max Campbell helped with the artifact analysis.

SEAC would like to extend thanks to the staff of the Castillo de San Marcos National Historic Monument, especially Superintendent Gordie Wilson, retired Historian Luis Arana, Site Supervisor Luis Gonzales, Maintenance Chief Dean Garrison, Electrician Bob Billetdeaux, and Mason John Harley, for their assistance in locating historical documentation and during the excavations. Thanks also to Tony Crosby, Project Architect, of the Denver Service Center.

We would also like to thank Southeast Archeological Center Director, John E. Ehrenhard, and the Associate Director of the Investigation and Evaluation Division, George S. Smith for the opportunity to work and report on exciting projects such as this one.



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## CHAPTER 1. INTRODUCTION

The Castillo de San Marcos National Monument (CASA) is located in St. Johns County in St. Augustine, Florida, about 200 feet east of Florida Highway A1A, just northeast of the colonial city of St. Augustine on the shore of the Matanzas River (Figure 1). The city of St. Augustine is the oldest continuously occupied European settlement in North America and represents colonial Spanish occupation of Florida. Besides the Spanish, English and American occupations, numerous indigenous peoples, slaves and immigrants from all over Europe also inhabited St. Augustine. Due to its age, preservation, and extent of its colonial constructions, the Castillo, its grounds, and much of the colonial city itself are listed on the National Register of Historic Places.

Figure 1. The Castillo de San Marcos. The project areas include both the northwest and southwest bastions of the fort and the moat on the west of the monument.

Stabilization of the San Pablo and San Pedro bastions of the Castillo was proposed in order to arrest cracking in the bastion walls of the fort. Monitoring of the crack movement and moisture levels within the bastions had been ongoing since 1993, however, the exact nature of the damage to the walls, in terms of the extent and cause, was not fully understood through surface observation. What was known is that the cracks had been apparent for as long a two hundred years and were worsening with time, particularly in the northwest and southwest bastions, which had active cracks. In order to evaluate the problems with the fort's walls, it was necessary to view the damage from the interior of the bastions. In order to obtain this perspective, the removal of a portion of the terreplein surface was necessary. Once the surface was removed, the fill within each bastion was removed in order to determine the extent of repairs needed in each bastion. At that point, the park was able to make a determination as to what measures would be taken to stabilize the walls and prevent further damage to the monument.

This project had the potential to impact unidentified cultural resources. This being the case, it was recommended that archeological testing be conducted at the project location in order to determine what, if any, intact cultural resources are present. Archeological testing served to record the resources present, assess whether they were significant, and to determine if the proposed construction would affect any resources present.

The Southeast Archeological Center (SEAC), under the direction of John E. Cornelison Jr., conducted archeological testing during the months of October, 1997; February, 1998; July, 1998 and August, 1998 on the terreplein, as well as excavations in the moat in March, 2000. The excavations on the terreplein consisted of two excavation units in the corners of the southwest (San Pedro) and the northwest (San Pablo) bastions of the Castillo de San Marcos. The excavation units were triangular (dictated by the corners of the diamond-shaped bastions) and measured approximately fifteen feet by fifteen feet by fifteen feet. The outside edge of the units, the one not bordered by the bastion walls, was rounded. Eight core samples were taken through holes punched in the concrete floor of the northwest and southwest bastions terreplein surfaces. These cores were taken to determine the components of the fill within the bastions and help locate previous occupation levels. Four cores were taken from each bastion and were driven to various depths. The cores in the southwest bastion were extended to about 12.5 feet below the surface and the ones in the northwest bastion to about 6.5 feet, where they were halted when an underlying surface was encountered (one of the four San Pablo cores was driven to 14.5 feet). Two other cores were taken, one inside of Excavation Unit 2 (northwest bastion) and the other from the
bottom of Excavation Unit 1 (southwest bastion), extending the depth of recovery in that unit to more than 25 feet.

Excavations conducted in the moat in 2000 were designed to gather information on the footing of the bastion and curtain walls. Three excavation units, two on the north side of the southwest bastion and one on the east side of the northwest bastion, as well as eight core tests along the north and west walls of the fort, were dug and recorded. The excavation units were located in the moat, adjacent to the walls of the fort, in order to gather information about the condition and construction of the foundation of the fort and what its relationship might be, if any, to the cracks forming in the bastion walls. The cores focused on stratigraphy and groundwater levels at and below the fort's foundation.

The artifacts collected throughout this project were returned to the Southeast Archeological Center in Tallahassee, Florida, where they were analyzed and curated. Information obtained from the cultural materials recovered, and from the records of the excavations, has contributed to our knowledge of the construction and condition of the foundation and upper levels of the Castillo de San Marcos and of the lifeways of the soldiers who manned it. The data also offered guidance pertaining to the proper course of action for the stabilization of the bastion walls.


## CHAPTER 2. ARCHEOLOGICAL BACKGROUND

## HISTORY

The project area was expected to contain evidence of past human activities ranging from the Orange Period (ca. 2000 BC ) through modern activities. Archeological investigations in the St. Augustine area have provided information on the prehistoric and historic utilization in the region (Bryne 1990; Deagan 1976, 1980; Gluckman 1966; Vernon 1979; Williams 1979).

In general, the prehistoric components in the St. Augustine area can be characterized by a shellfish midden like the one that is present inside and around the Castillo at a level below the original construction of the fort. As such, there was potential for encountering prehistoric cultural resources in the project area. This was suggested by the fact that previous excavations found that much of the fill used in the Castillo's construction appears to have originated at indigenous sites. Archeological investigations conducted at CASA have recovered St. Johns, San Marcos, Lamar Bold Incised, Jefferson Stamped, Leon-Jefferson, Deptford Check-stamped, Wakulla Checkstamped, and Sarasota Incised ceramics. Deagan (1980) indicates that there was a large St. Johns IIb period site located at the Castillo. It contained sheet midden deposits as well as pit features. There did not appear to be any evidence suggesting aboriginal occupation during the historic period in the areas tested. This aboriginal site, however, did have ties with Georgia and west Florida (Deagan 1980:206). Also, the appearance of Deptford Check-stamped pottery suggests that there may have been an earlier aboriginal occupation of the area.

The recorded history of the Castillo de San Marcos begins with the Spain's earliest explorations into the New World. In the century after Columbus's arrival in the West Indies, Spanish adventurers explored, and laid claim, to a vast area in the name of the Crown. The Spanish Empire stretched from northern South America, through the mainland of Central America and many of the islands of the West Indies and into southern North America. Although Spain had only recently escaped a 711 -year Moorish occupation of the Iberian Peninsula, the country quickly grew to a major European power due to the riches the conquered from their New World Empire.

In 1513 the explorer Juan Ponce de Leon discovered Florida and laid Spanish claim to the North American continent. During his explorations of the Florida peninsula he also discovered the ocean current now known as the Gulf Stream, which runs clockwise around the Gulf of Mexico, through the Bahamas Channel, up the west coast of Florida and then across the Atlantic to Europe. It was this current that Spanish galleons, laden with the spoils of Central and South American mines and native tribute, would travel on their journey back to Spain. This discovery made Florida of great strategic significance, for if Spain did not control Florida's west coast, pirates could use its many bays and natural harbors as bases from which they could disrupt Spain's commerce (Chatelain 1941).

Figure 2. The Gulf Stream, Spain's route through its New World Empire. Florida was of great strategic importance for the protection of Spanish galleons returning to Spain with the riches of the New World. Taken from Manucy (1961:3).

Spain made a number of failed attempts to settle Florida after Ponce de Leon's discoveries but it was the French who first established a settlement, Fort Caroline, in 1564 on the St. John's River. Upon hearing of this, King Philip of Spain commissioned Don Pedro Menendez de Aviles to travel to Florida and remove the French threat to the Spanish Crown's North American claims
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(Chatelain 1941). Menendez arrived in Florida in 1565, and in preparation for battle with the French, went about modifying a Timucuan great house into a fort in an area he named San Augustine. The Timucuan village was probably located about a quarter mile north of the present day Castillo, on or near the site of Nombre de Dios (Arana n.d. a). This was to be the first of nine wooden forts built to protect Spain's colony at St. Augustine. The original fort was not to Menendez's liking, and he was concerned about how it would fair in an attack. Fortunately for him it did not see use. Before the French reinforcements could arrive, Menendez had seized Fort Caroline and dispatched the French troops there. When France's ships arrived on the Florida coast they were scattered by severe weather and eventually wrecked. Menendez used this opportunity to slaughter the French troops who had become castaways at the Matanzas Inlet (hence the name Matanzas, Spanish for slaughters) (Manucy 1955). With Menendez's arrival and victory over the French forces, Spain had once again laid claim to Florida. The new settlement of St. Augustine would survive as Spain's capitol in North America for the next two centuries.

The Spanish settlers remained in the Timucuan village for less than a year and left due to increased hostility between the settlers and the natives. This move was the first of a number of small moves around the Matanzas Bay that would eventually end at the location of the present day historic district of St. Augustine and the Castillo de San Marcos. The second wooden fort of St. Augustine was built in 1566, but was replaced before the end of the year due to foundation damage from tidewater (Chatelain 1941).

Life in St. Augustine was difficult. The colonists and soldiers there had to survive entirely on subsidies from Mexico and Cuba. This was because St. Augustine did not produce revenue or goods but was instead a strategic holding used to protect the profitable colonies to the south. However, the Crown was entrenched in war within Europe and could not be bothered with the support of the colonies. As such, the colonists at St. Augustine were often left hungry and poorly dressed when supplies from the south did not arrive or were not sent. This damaged moral at the settlement and the third fort was destroyed in 1570 during a garrison mutiny. The fourth fort was built that same year and was replaced by the fifth in 1579 and the sixth in 1586 (Chatelain 1941).

Before the completion of the sixth wooden fort in 1586 the English pirate Sir Francis Drake led a successful raid on St. Augustine. Drake's forces took the city with relative ease and burned the wooden fort, houses and other buildings to the ground (Manucy 1955). The sacking of St. Augustine was an embarrassing loss for the Spanish who, since the defeat of the French in 1565, had held Florida unopposed. The event was to foreshadow the coming struggle for colonial and naval rights between the English, who were becoming a stronger colonial power, and the Spanish whose hegemony was waning.

St. Augustine was rebuilt, and the seventh wooden fort, one with significant reinforcements, was built in 1586. This was the first of the forts at St. Augustine to bear the name San Marcos (Arana n.d. a). The original San Marcos fort was maintained for about two decades. During this time Spain seriously considered abandoning St. Augustine and its holdings in Florida. The Crown's considerations were based upon the poverty of the settlement, that no one wanted to go there, and the fact that it was supported by expensive subsidies from the rest of New Spain without a financial return to the Crown. The decision to abandon the settlement was, however, put aside. Instead, it was determined that further fortification of the city was in order. This change of plans was in part due to arguments presented to the Crown by then Governor of Florida Gonzalo Mendez de Canzo (Manucy 1955). Governor Canzo suggested that abandonment of St. Augustine would require the removal of the christianized natives in the region as well as the clergy who taught them. At the time the mission system had sufficiently expanded to make this a daunting task. He also suggested that Spain had yet to determine if the interior lands of Florida offered


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anything in the way of natural resources and that Spain's presence at St. Augustine had allowed for the rescue of hundreds of castaway Spanish sailors along the east coast of Florida. Canzo's arguments were considered along with the fact that abandonment would leave the stretch of Gulf Stream along the east coast of Florida dangerously unprotected from pirates. St. Augustine also represented Spain's first line of defense against the encroachment of the English, who were increasingly active along North America's east coast (Chatelain 1941).

Once the decision to remain in St. Augustine was made, the Crown considered and even allotted money for the construction of a masonry fort at the settlement. Plans were drawn for the use of a local limestone called coquina, a rock made of naturally cemented shell fragments, that was readily available on nearby Anastasia Island. However, these plans were never implemented and instead an eighth wooden fort was built, most likely in 1604 . Although it was constantly being repaired throughout its lifetime, this was to be the longest lasting of the wooden forts. It became obsolete and completely dilapidated and was replaced by the ninth and final wooden fort sometime between 1647 and 1654. The ninth fort was located in the exact position of the present day Castillo de San Marcos, and was of approximately the same size and similar design (Chatelain 1941).

By the mid 1600s, New Spain was again negligent in its subsidies to St. Augustine and the seitlement had been reduced to a weak military outpost. The fort was in serious disrepair and the population of the city was at one of its lowest points since Menendez's original founding of the colony. In 1668 the English pirate Robert Searles (alias John Davis) led a successful surprise raid on St. Augustine. Although his forces did not take the fort during their 20 -hour occupation of the city, they did make off with all of the supplies and valuables of the town and left about 60 Spaniards dead (nearly a quarter of the total Spanish population in Florida at the time). The pirates recorded landmarks and took soundings of the bays and inlets before leaving the area and indicated that they planned to return to the settlement and occupy it as a permanent base for commerce raiding along the coast. The fact that they did not burn the city suggested that their threat was indeed genuine (Chatelain 1941).

Although Searles's raid was not directly connected with the English Crown, it was a wake up call for Spain because it showed the weakness of New Spain's northern frontier. Further exacerbating the situation was England's establishment of a permanent settlement in what is now South Carolina at Charleston in 1670. In 1669 the Spanish queen Mariana approved the construction of a new masonry fort at St. Augustine and appointed a new governor, Don Manuel de Cendoya, to oversee the construction of the fort. Cendoya was sent to Mexico to obtain funding in 1671 and then traveled to Havana to enlist skilled workers, stonemasons, and lime-burners to work on the fort. In Havana, Cendoya also employed the military engineer Ignacio Daza and the master of construction Lorenzo Lajones (Manucy 1961).

Cendoya arrived in St. Augustine in 1671 with funding from Mexico and skilled workers from Cuba to prepare for the construction of the masonry fort. Blacksmiths and carpenters made tools for quarrying and shaping the coquina stone as well as for transporting it from Anastasia Island to the fort site. Lime kilns were built and put to use burning oyster shell to produce lime for construction, and Daza and St. Augustine's military council went to work on plans for the new fort (Manucy 1961). It was decided that the position and style of the existing wooden fort would be retained in the new stone one, but it would be slightly enlarged and the bastions lengthened (Arana n.d. a). This position afforded the Spanish a commanding defense of the settlement and waterway. The location was such that an enemy ship could not attack the settlement without entering the harbor where it could be easily engaged from the safety of the fort. This position also offered protection from a land attack from the north (Chatelain 1941).

In October of 1672 construction was officially begun with the ground breaking for the foundation trench of the fort. In addition to the skilled laborers Cendoya had brought from Havana, a number of common laborers were also present during construction. The majority of these were Native Americans from three local Indian Nations: the Guale (Georgia), Timucua (eastern Florida) and Apalache (western Florida). The natives were paid for their labor, but were expected to work for specified lengths of time that were often increased indefinitely. Other common labor at the fort included Spanish peons, a few of the Crown's slaves, and convicts, both foreign and Spanish. All told, there were about 150 workers on the site during the first years of construction, most of whom labored at cutting coquina, burning lime, mixing mortar and moving stone (Manucy 1961:11).

Work on the fort continued at a steady rate in spite of financial troubles and epidemics that nearly wiped out the Indian laborers. Six governors and over 100,000 pesos later, the original portion of the fort was completed in 1696.

The completed fort was an example of seventeenth century military engineering meant to protect occupants and adjacent territories from the onslaught of cannon fire as well as providing protection from siege troops. San Marcos is a square fort with four bastions, one on each corner. The four bastions are diamond shaped, allowing protection in all directions and eliminating blind spots along the walls of the fort. The bastion system evolved out of medieval castle construction modified to protect against cannon fire. Bastioned forts are designed with a central plaza surrounded by the outer wall, called the curtain or scarp, which slopes up to the terreplein, the fighting platform. The curtain extends above the terreplein producing the parapet, which afforded the soldiers protection during fighting. Soldiers fired upon the enemy through openings in the parapet called embrasures. The outer area of the fort was surrounded by a moat located immediately outside of the curtain walls. This moat would slow any advancing forces and add height to the walls to discourage scaling. A ravelin -a diamond shaped defensive structure- was built outside the curtain over the moat directly across from the fort's entrance. The ravelin gave support to the corners of the bastions and the fort's entrance, the areas most vulnerable to attack. Beyond the moat was a flat area protected by a masonry wall, called the covered way, and beyond this was a sloping earthwork called the glacis. The covered way afforded additional protection to soldiers who could use it as a firing platform for engaging unprotected troops attempting to approach over the glacis (Duffy 1985; Arana n.d. a).

Figure 3. The Castillo de San Marcos, an example of $17^{\text {th }}$ century military engineering. Taken from Herman (1992:83)

The defensive structures of the newly completed Castillo were soon tested. During the period spent building the fort, increasing naval and border disputes between the English and Spanish in the New World had escalated the two powers into open warfare. In 1702 Governor James Moore of Carolina amassed an army of about 800 Indians and Englishmen and marched on St. Augustine (Manucy 1961). Upon Moore's arrival in St. Augustine, his troops quickly took the city and occupied the homes. The townspeople had few defenses other than to retreat into the fort. Moore's forces occupied St. Augustine for nearly two months, but he was unable to take the fort. While he was settled in and waiting for additional artillery to arrive from Jamaica, two Spanish men-of-war arrived and blocked the harbor. Moore then burned St. Augustine along with his vessels and stores and retreated overland to Carolina. The fort had proven itself, but the town had been destroyed. The next 25 years were spent building fortifications around the settlement, basically turning St. Augustine into a walled city (Manucy 1961). The Cubo Line, which formed the northern boundary of St. Augustine, was constructed between 1704 and 1705. Its present day



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reconstruction runs from the fort to the city gates. In 1706 the hornwork and Fort Mose lines were constructed to aid in the defense of the settlement (Chatelaine 1941).

The new fortifications were impressive and served to deter at least one would-be attack led by Colonel Palmer of Carolina, but the English continued to gain strength in the north and more and more stress was put on the Castillo to protect Spanish Florida. In 1732 General James Oglethorpe began a settlement at Savannah and in 1736 another at Fort Frederica, placing the English firmly in lands that until that time had been recognized as Spanish holdings (Manucy 1961). These new threats forced the Spanish to reevaluate the condition of the 40 -year-old fort. It was found to be seriously underfitted for the times and a series of improvements were constructed using funding and labor from Havana. The old wooden rooms inside the fort were torn out and 28 great arches were built to make the new rooms bombproof. The terreplein was re-laid, the walls were thickened, and some of the parapets were rebuilt. Outside the fort the covered way and the city walls were strengthened (Arana and Manucy 1977; Manucy 1961).

In 1740 construction was temporarily halted on the fort when General Oglethorpe arrived from Fort Frederica in Georgia and began a siege on the Castillo lasting 38 days. The 2000 inhabitants of St. Augustine took cover in the fort and during the siege only two were killed inside the walls. The Castillo de San Marcos had again proven its capabilities when Oglethorpe, worried about the coming hurricane season and his exhausted troops, raised the siege and returned north (Manucy 1961).

Construction on the vaulted rooms resumed after the fighting and was completed between 1750 and 1756. Also, in 1762 work began on a new ravelin, but it was never completed because word arrived in St. Augustine that Florida had been ceded to England under terms of the treaty that ended the Seven Years War (Manucy 1961). Although the Castillo de San Marcos had held its ground against the advancing English, Cuba had not fared as well. In payment for the return of Havana, Spain was obliged to relinquish Florida to England (Manucy 1961). The Spanish left the fort in July of 1763, thus ending what has come to be known as the First Spanish Period.

The British occupation lasted for 21 years, the first ten of which were relatively eventless. By this time England had eliminated all of the other European powers from North America's eastern coast so the strategic significance of the fort at St. Augustine, referred to as Fort St. Mark, was greatly reduced (Arana and Manucy 1977). This changed with the outbreak of the American Revolution. The city of St. Augustine was used to garrison British troops and to house a number of southern loyalists. The fort and the city defenses were repaired and readied for battle, but when the British took Savannah in 1778 and then moved into the Carolinas it became apparent that the fighting would not reach St. Augustine (Bearss and Paige 1983). Instead, the fort was used for storage and as a prison for southern rebels (Manucy 1955).

In 1779 Spain declared war on England, but never attacked eastern Florida and did not play a significant role in the American Revolutionary War. However, as an ally of France, Spain did participate in the peace negotiations following the war. As a result, Florida once again became a part of the Spanish Empire. The British occupation at St. Augustine ended in July of 1784 with the return of the Spanish military and government (Bearss and Paige 1983) and the initiation of the Second Spanish Period.

The second Spanish occupation at St. Augustine saw many of the same problems that the first did. The city still had to rely upon subsidies from Cuba and Mexico for survival-subsidies that were never guaranteed to arrive or even be sent. Also, Spain was under considerable financial strain due to the struggle against Napoleon and the European conflict stemming from the French


Revolution, so there was little money for the American colonies. St. Augustine was once again faced with an increasingly hostile frontier to the north, not from England this time, but from the new American country eager to expand its borders to encompass more land and resources (Patrick 1954). Although there was little money, the American threat necessitated a new city gate (the gate that can be seen today) to replace the original built around 1740 and other improvements to the city defenses, such as strengthening the Cubo Line. There was also substantial repairs to the Castillo, the terreplein and a number of walls were thoroughly rebuilt (Arana n.d.b).

Spanish Florida had for many years been divided into two sections: the east and the west. East Florida was made up of the peninsula east of Apalachicola River and West Florida stretched west from the same river to the Mississippi River. The first threat from the Americans to Spanish Florida came in 1803 with the Louisiana Purchase. The American government claimed West Florida to be a part of that purchase while Spain felt otherwise. Nevertheless, the majority of the European settlers in West Florida were American citizens and in 1810 they revolted against Spanish rule. Spain had little choice but to give up West Florida to the United States and it was annexed in 1811 (Patrick 1954).

The success of the Americans in West Florida encouraged Georgians to attempt to oust Spain from the rest of Florida. There was high tension between Georgia and Spanish Florida because Spain had been lenient with escaped slaves from the north and had unwittingly encouraged them to attempt to escape from Georgia into Florida. When Georgia slave owners would go south to retrieve and re-enslave them, they would sometimes raid Seminole villages (a Spanish ally). This, along with America's desire for more land, encouraged Georgians, in 1812, to organize the East Florida Patriots, who, with the backing of the Federal Government, attacked Spanish holdings north of St. Augustine. St. Augustine itself was never taken because of the city's fortifications, the aid of the Seminole Indians, and the fact that President Madison withdrew his support of the rebels. However, Spain's breathing room did not last for long. In 1817 President Monroe authorized a campaign against the Seminole who were raiding settlers on the Georgia border. General Andrew Jackson was sent to drive the Seminole back into Florida but he took it upon himself to continue into Florida and attack Spanish posts as well, although he never approached St. Augustine (Patrick 1954).

The American encroachments, as well as numerous revolutions for independence in Central and South America, convinced Spain that it could no longer spread itself so thin in its attempt to hold onto both Florida and its more profitable colonies. In 1821 Spain ceded Florida to the United States in exchange for relieving debts Spain owed to American citizens. On July 10, 1821 Spain turned the Castillo de San Marcos over to the American government and left St. Augustine for the last time (Patrick 1954).

Upon America's acquisition of Florida, United States citizens began to move into the territory and set up farms and plantations. The Federal Army also established a number of outposts throughout the territory and a garrison was stationed at the Castillo de San Marcos, which was renamed Fort Marion in 1825 in honor of Revolutionary War General Francis Marion (Buker 1983:151) (Congress would enact legislation in 1942 restoring the original name of Castillo de San Marcos) (Manucy 1961:33). In the years before the Spanish vacated Florida, limited funding and questions about the future of the colony had resulted in few repairs to the fort. Upon their arrival, American troops found it to be uninhabitable, so instead it was used as a prison by local authorities and as a storage facility for supplies and provisions (Buker 1983:152).

With increased American settlement of the Florida peninsula came increased conflicts with the Native Americans living there. In 1823 the United States Senate ratified the treaty of Moultrie
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Creek, which established a reservation in the center of the peninsula to which the Seminole tribe would be relocated (Mahon 1967:49). This was the first of a series of problems to befall the Seminole Nation. American settlers continued to have problems with raiding Indians who would not remain on the reservation where land was poor and unproductive. In 1830 the Senate passed the Indian Removal Act, which allowed the United States to trade Native American lands in the East for unoccupied lands in the West and do whatever was necessary to remove the Indians to the new lands (Mahon 1967:72). The Seminole agreed to this removal by signing the Treaty of Pane's Landing in 1832 and the Treaty of Fort Gibson in 1833, nevertheless, they soon declared the treaties invalid and refused to submit to the forced relocation. Tensions mounted and resulted in the Second Seminole War from 1835 to 1842 . The result of this action was the near complete removal by either relocation or death of the Native American population in Florida (Mahon 1967).

During the Second Seminole War, Fort Marion continued to serve the U.S. Army as a storage facility for weapons, supplies and provisions. It also briefly served as a prison for Seminole warriors including King Philip, Coacoochee, Blue Snake, Coa Hadjo and Osceola (Mahon 1983:216-218). During the war, the U.S. government reevaluated the usefulness of Fort Marion as a coastal defense, and money was allocated for repair of the fort and seawall in 1832 and for the construction of a water battery in 1842. A hot shot furnace, which could heat cannonballs to red hot for use against flammable targets, was also constructed (Bearss 1983:152-230).

Once the Second Seminole war had ended in 1842, Florida returned to a peacetime economy. The soldiers garrisoned there were moved to other locations and since the Indians were virtually gone, the White population of the territory gradually increased until it was high enough to apply for statehood in 1845 (Brown 1997:27-28). Florida entered the Union as a slave state and became an actor in the growing tensions between the North and the South, leading to its secession from the Union on January 10, 1861 (Trindall and Shi 1992:631,639). Even before the formal secession was signed, Florida's state troops were sent to seize federally owned forts throughout the state. On January $7^{\text {th }}$ these troops took control of Fort Marion from its single caretaker without a fight (Brown 1997:28). Florida played a minimal part in the Civil War and Fort Marion saw little action. Its guns were dismantled and sent to more useful locations to the north so when Federal ships arrived outside the harbor in 1862, the Confederate forces quickly abandoned the fort and the city. The Federal forces then took control of the fort and brought it back to war readiness, but the Confederates made no attempt to retake the fort. After the war had ended Federal troops remained in St. Augustine throughout the years of Reconstruction (Brown 1997:28).

Following the Civil War the attention of the U.S. government was shifted to the Great Plains and manifest destiny. Continuing contact with Plains and Southwestern Indian Nations and the desire for more land, including reservation lands set aside in the 1830s, led to the Western Indian Wars of the 1860 s , 70s and 80 s (Trindall and Shi 1992:756-761). During the wars, Indian prisoners from the western battles were brought to Fort Marion, which served as both a prison and a school for the Native Americans held there. A number of wooden structures as well as tents were used to house the Indians, who numbered as high as 447 in 1887 (Brown 1997:29-30).

St. Augustine enjoyed a reputation as a tourist location as early as the 1830s, and the War department began to give tours of Fort Marion around 1848. In 1884 Congress appropriated $\$ 5000$ for the restoration and preservation of the fort, which was by that time seen as a monument worthy of preservation. More money followed in 1888 and 1890, and restorations continued throughout the twentieth century. In 1924 President Coolidge declared Fort Marion, Fort Matanzas and three other forts to be national monuments. The War Department continued to administer the monument until 1933 when President Roosevelt turned the nation's monuments,
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military parks, cemeteries, and battlefields over to the National Park Service in the Department of the Interior (Brown 1997:31-32).

## PREVIOUS ARCHEOLOGICAL INVESTIGATIONS

Some of the earliest archeological investigations in St. Augustine, and on the grounds surrounding the Castillo de San Marcos, were conducted by Jack Winter. Much of this data has been incorporated into The Defenses of Spanish Florida (Chatelaine 1941). In 1937 Winter excavated three different sites around the city including the remains of the city moat on the fort grounds, the west glacis at the west end of the south covered way, and a portion of the Cubo redoubt located within the colonial city (Winter 1937). Winter's excavations on these various defensive structures uncovered information on their locations, construction techniques, and construction materials and on the chronological sequence of construction activities. These excavations helped to clarify the nature of St. Augustine's colonial defenses. Specifically, Winter's excavations shed light on the construction of the glacis, which he determined was built through two filling episodes, and the position and schematics of the Cubo redoubt.

In 1941, Thor Borrensen carried out a number of archeological investigations that examined the foundations of the fort and the moat and provided structural information about the vestibule and drawbridge landing. These excavations took place in the St. Paul's bastion, in the south moat, in the water battery, and in the file room. Borrensen and Manucy (1940) revealed the depth and construction of the fort's foundation and Borrensen pinpointed areas in which water movement was impacting the fabric of the fort walls. He suggested action to arrest erosion and settling problems that were causing damage to the bastion walls -the same kind of damage that brought about the need for the 1997 and 1998 excavations by SEAC.

Between the years of 1939 and 1960, Albert Manucy prepared several reports on historic construction activities at the Castillo. Of these reports the 1939 report on the terreplein construction (Williams 1982) and the 1960 Colonial Floors, provided insight into construction techniques and materials of Spanish colonial times. In 1939 Manucy excavated portions of the terreplein in order to determine the type, amount, and stages of fill between the 1939 grade and the arched casements. Manucy's 1960 report shed light on the Spanish use of tabby in floor construction and established various levels and grades for the floors in the sally port, west and east guardrooms and the courtyard. Dimensional information concerning doorways and soldiers' living quarters was also recovered (Manucy 1960). The archeology leading to the Colonial Floors report is relevant to the SEAC excavations because the time periods, construction materials and techniques encountered in the lower level of the fort are similar to those on the terreplein, the area of the 1997 and 1998 excavations.

Another area of previous excavation is the courtyard where Harrington, Griffin and Manucy worked in 1955. In that study a number of masonry wall foundations predating the modernization constructions of 1738-1739 were uncovered in the courtyard of the Castillo. Also, the colonial grade at 1738 was determined. There was also considerable evidence of Native American occupation of the site, indicated by indigenous ceramics and the remains of a shell midden at a level below fort construction (Harrington et al. 1955). This study also provided the first stratigraphically controlled collection of material culture remains from the Castillo.

Between 1959 and 1963 John Griffin undertook excavations on the green outside the Castillo in order to understand more about the construction and positioning of the Cubo Line. These excavations were intended to gather information to be incorporated in the reconstruction of the Cubo Line. Griffin's excavations were successful. A great degree of material and construction
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information recovered closely agreed with documents concerning the original construction of the defensive line (Griffin 1963).

Thomas Padgett carried out additional archeological work in the courtyard in 1973. This excavation focused on the Pozo well, one of at least three wells that were located in the courtyard and the only well that was not filled and covered over during the building of the bombproof rooms between 1738 and 1739. The purpose of the excavation was to recover information on the construction of the well and any artifacts within it. Padgett's excavations in the well did not recover additional information, rather it was determined that the well had likely been cleaned out sometime in the early twentieth century (Padgett 1973).

In 1975 Bostwick produced a report on the use of ceramic potsherds as shims and levelers between the courses of coquina used in the Castillo's walls. He noted that the use of ceramics in this manner was limited to the lower courses and suggested that as the unskilled laborers responsible for building the fort became more adept at construction, the necessity of shims for fixing small mistakes was reduced. Bostwick also noted that analysis of the ceramics in question showed that indigenous pottery was not used in this manner. He suggests that this could be the case because although the majority of the labor at the Castillo was Indian, their living requirements were supplied by the Spanish and they may have made little use of their own ceramics (Bostwick 1975). However, indigenous materials are present on site and often recovered, as seen in the 1997 and 1998 excavations, suggesting that ceramic use in construction may have been more a factor of what materials were at hand at the construction site.

In 1975 Kathleen Deagan reorganized, assessed and analyzed the archeological collections housed at the Castillo de San Marcos National Monument. Although information was gathered concerning variation in ceramic form and type, the collection was determined to have little archeological research potential. The majority of the material housed at San Marcos had not been collected or catalogued to modern standards, thereby making the provenience of a majority of the materials indeterminable (Deagan 1975).

In 1979 Joan Koch conducted an underwater survey of the offshore area adjoining and east of the fort. The purpose of the study was to gather information on the fort's construction and the behavioral patterns of the soldiers who were stationed there over the years. Cultural materials were recovered representing the entire range of occupation at the fort, but in numbers so low that few conclusions could be drawn that would add to historical knowledge of San Marcos's occupation (Koch 1979).

Deagan (1980) and Williams (1982) carried out excavations in 1979 for archeological assessment and mitigation prior to fort stabilization work. Deagan spent a total of 18 weeks on site and tested a number of areas in and around the Castillo. Excavations were carried out on the south covered way, on the glacis, in the ravelin, water battery and Seminole room and in the east and west latrines. Deagan's excavations on the covered way and glacis revealed evidence of prehistoric occupation, probably dating to the St. John's Ilb period (AD 1100-1500), as well as evidence for two major construction periods during the historic occupation. One of these historic filling episodes indicated either the initial construction of the fort or the 1738-1756 renovations, and the other represented a filling episode in 1762 (Deagan 1980:58). The ravelin was reconstructed and expanded in 1762, and the excavations uncovered the original ravelin stairway and powder magazine as well as information on the infilling of the original structure and the construction of both the first and second structure (Deagan 1980:70). Excavations in the water battery (which had been a moat prior to the American period at the fort) were intended to recover information on the use of the area in the early part of the American occupation after the moat was filled. Other than


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 ,the condition of the structures in the water battery, no new information as to special use of the area was recovered (Deagan 1980:98). Excavations in the east and west latrines uncovered a sequence of modifications to the privy from the period of the Spanish renovation of the fort through the British and second Spanish occupation and partially into the American period (Deagan 1980:136-138). The excavations in the Seminole room provided information on the prehistoric aboriginal level below the fort construction, as well as historic information spanning from the original construction of the fort through the second Spanish period additions (Deagan 1980:204-205).

In 1988 Bruce Piatek did some limited archeological testing in the southeast bastion. According to John Harley of CASA maintenance (personal communication 1997), a shallow trench was dug through the terreplein as well as a small test pit near the apex of the bastion. Excavations in the test pit ceased when Piatek determined that he had reached an historic firing step. The SEAC excavations that are the subject of this report confirmed these findings.

In 1991, Stanley Bond, of the Historic St. Augustine Preservation Board, reported on archeological monitoring that took place on the Castillo grounds during the construction of electrical lines in 1988. A series of trenches were dug to bury electrical lines that ran on the western edge of the fort green from the administration building, across the Cubo Line, around the parking lot and the southern side of the fort and ended on the western side of the Castillo. A number of features were located during the monitoring project, including one that may have been an earlier placement of the Cubo Line, south of its present reconstruction. Also noted was the presence of indigenous midden that may have been deposited at the time that the fort was originally constructed and various other features in and around the glacis related to the Castillo's construction (Bond 1991). Bond noted that trench monitoring is not a very effective way of gathering archeological data and that in the future the national monument should attempt to rely on more scientific archeological methods that recover data prior to impact.

Also in 1991, Elizabeth Horvath of SEAC conducted archeological investigations for the construction of a new telephone line that was to be installed near the administrative building, northwest of the Castillo. She excavated a series of shovel tests along the proposed route of the phone lines and recovered a number of indigenous and historic artifacts. Her results were in agreement with historical records which reported the existence of a Costa Indian village and church in the same area in 1717 (Hann 1989:198; Horvath 1991). Also in 1991, Ken Wild monitored bore test holes in the terreplein. These test holes were small, four inch borings to a depth no lower than three feet. No cultural materials were recovered but the tests were able to determine that successive layers of modern concrete floor on the terreplein were in need of repair (Wild 1991).

## CHAPTER 3. ARCHEOLOGICAL TESTING

## INTRODUCTION

Under the terms of Section 106 of the National Historic Preservation Act of 1966, before any action by the park to stabilize the bastion walls of the Castillo could take place, archeological testing was required in order to access the impact of the project to this nationally significant resource. It was determined that a system of coring on the northwest and southwest bastions of the fort, as well as two large excavation units, one in the corner of each of the two bastions, would result in the best recovery of both archeological information and information on the nature of the structural problems of the fort. These excavations were undertaken on four separate occasions in 1997 and 1998. A fifth trip was made in March, 2000 during which excavation units and cores were placed in the moat in order to determine the condition of the foundation of the fort and whether or not this condition was affecting the cracking of the bastion walls.

## FIELD METHODOLOGY

In order to adequately evaluate the impact of the proposed construction and to aid in the recovery of information on the condition of the bastion walls, a subsurface testing program was implemented.

Coring conducted by Law Engineering in the late 1980s and early 90s indicated that there is a fine sand layer with a few shell fragments at 7.5 feet and 8.5 feet below the surface of the modern terreplein. There is the possibility that this represents the terreplein surface prior to the 1740 remodeling. For that reason, archeological testing was recommended and a 15 -foot by 15 -foot excavation unit was placed in each of the two bastions. The depth of the fill dictated the size of the units and a corer was used at several locations within each bastion in order to gather more information on the condition and makeup of the bastion fill. Fieldwork and analysis was undertaken by staff from the Southeast Archeological Center (SEAC) under the direction of Project Archeologist John Cornelison. Cornelison and his staff were assisted by a number of volunteers from the St. Augustine Archeological Association and personnel employed by the National Monument.

All artifacts recovered were field identified and returned to SEAC for analysis, cataloging, and for use in the preparation of this report. All soils screened on the site were passed through $1 / 4$ inch hardware mesh in order in insure a high rate of recovery. In addition, some of the soils were returned to SEAC where they were water screened through a $1 / 8$ inch mesh. The tests and construction area were mapped and the data were transferred into a computer in order to provide a precise record of the park's resources. The archeological investigations were thoroughly documented with notes, drawings, maps and photographs. Once the data collection was completed for each archeological test, it was backfilled. The data collected and produced during the project was recorded on task specific forms, such as excavation unit forms, field specimen and photo logs. These standardized forms are produced on acid free paper for archival storage and are used to ensure consistency in data recording.

The artifacts were placed in plastic ziplock bags with the appropriate data recorded on them (project name, SEAC accession number 1325, provenience, crewmembers, date, and field specimen [FS] numbers). An FS log was maintained in the field. This log contains the provenience, types of artifacts recovered, the date of excavation, and crewmembers involved. Small, delicate items were wrapped and placed in vials to assure that they were not inadvertently crushed. The fragile items were stored separately in appropriate containers, which were marked
indicating that fragile items were enclosed. Larger items, whose weight or size could possibly damage smaller ones (for example some of the large brick or coquina samples) were stored separately and properly labeled.

Work on this project ceased once the depth of the unit made shoring of the walls impractical However, sufficient information had been recovered to provide reasonable estimates of the scientific value of the bastion fill and supply the park with guidelines concerning mitigation of the site prior to the stabilization project.

## CORE TESTING

In order to gather stratigraphic, structural and material data on as much of the area of the bastions as possible, it was decided that both excavation units and coring would be utilized. In all, ten core samples were taken from within the northwest and southwest bastions, eight of them from the surface of the terreplein and one from within each of the two units. The eight main core tests were separated into four for each of the two bastions, spaced three in a line across the widest point of the diamond shaped bastion and one opposite the excavation units toward the interior of the fort (Figures 4 and 5). Each core test was numbered ( 1 through 8) for ease of reference and assigned its own field specimen number in order to provenience the cultural material recovered from them. The cores were dug with a four-inch hand driven auger after park personnel cut holes in the modern concrete terreplein. The soils recovered from the core tests were screened through a $1 / 4$ inch hardware mesh in order to ensure complete recovery of cultural information. The core stratigraphy was recorded for comparison with the excavation units.

Figure 4. The southwest, San Pedro, bastion of the Castillo de San Marcos, showing the locations of core tests 1-4 and excavation unit 1 .

Figure 5. The northwest, San Pablo, bastion of the Castillo de San Marcos, showing the locations of core tests 5-8 and excavation unit 2.

## Core 1

Core 1 was driven to a depth of 12 feet 6 inches below the modern surface of the terreplein of the southwest bastion. It was located on the southeastern side of the bastion 49 feet northeast of the apex of the bastion and 4.5 feet northwest of the south wall of the bastion (Figure 4). This core resulted in the identification of two lenses of heavy coquina, very close to each other, at about 6 feet below the modern surface of the terreplein. These lenses may be the remains of an older terreplein floor. Below the coquina level, at about 7.5 feet below the surface, a wet mucky sand with a high concentration of oyster shell was encountered. Artifacts recovered pointed to a wide range of occupation, from Spanish contact to the nineteenth century. Indigenous ceramics recovered suggest either that part of the bastion fill came from near a Native American domestic site or that European forces at the fort were making use of native-made pottery.

## Core 2

Core 2 was driven to a depth of 12 feet below the modern surface of the terreplein of the southwest bastion. It was located in the center of the bastion 45.5 feet northeast of the apex of the bastion and 79 feet southwest of the interior corner of the southwest corner of the terreplein

(Figure 4). Although some coquina was encountered at approximately 6 feet below the modern surface, this core did not encounter the heavy coquina lenses that the other cores in the San Pedro bastion did. The cultural material recovered was similar to that in core 1 and suggested a wide range of occupation, from Spanish Contact to the nineteenth century. Indigenous ceramics were again present suggesting either their use by the Spanish or that at some point the bastion fill came from near a Native American domestic site.

## Core 3

Core 3 was taken to a depth of 12 feet 5 inches below the modern surface of the terreplein in the southwest bastion. It was located on the northwestern side of the bastion 52.6 feet northeast from the apex of the bastion and 4.25 feet southeast from the north wall of the bastion (Figure 4). This core recovered a large amount of coquina throughout the upper six to seven feet of strata, but at approximately 6.5 to 7 feet the heaviest concentration of coquina was encountered, which may represent an old terreplein floor. The cultural material recovered in the screen suggested a wide range of occupation and various building periods. Contact period indigenous ceramics as well as eighteenth century Spanish Majolica potsherds and modern steel wire were all recovered.

## Core 4

Core 4 was driven to a depth of 12 feet 5 inches below the modern surface of the terreplein of the southwest bastion. It was located in the center of the back of the San Pedro bastion 80.7 feet northeast of the apex of the bastion and 44 feet southwest of the interior corner of the southwest corner of the terreplein (Figure 4). This test was similar to Core 3 in that a heavy concentration of coquina was encountered in the upper 6 feet of the core with the largest coquina pieces at approximately 6 feet below the modern surface. These large coquina chunks may represent an historic floor. Below this depth there was drastically less coquina, and deposits consisted of mostly sand and shell. The cultural material recovered in the screen consisted of Contact Period Native American pottery, glass and cut nails -suggesting a wide range of occupation and/or various construction periods spanning from Contact to the nineteenth century.

## Core 5

Core 5 was driven to a depth of 6 feet 5 inches below the modern surface of the northwest bastion. It was located in the central back part of the San Pablo bastion, 78.4 feet southeast of the apex of the bastion and 50 feet northwest from the interior corner of the northwest corner of the terreplein (Figure 5). The core test was halted at 6 feet 5 inches due to contact with a solid structural component, possibly an historic terreplein floor. The strata above 6 feet 5 inches showed a high concentration of coquina, especially at approximately 6 feet below the modern terreplein surface. The cultural material recovered from the test consisted of items dating from Spanish Contact to the nineteenth century.

## Core 6

Core 6 was taken to a depth of 6 feet below the modern surface of the northwest bastion. It was located on the northeastern side of the San Pablo bastion 52 feet southeast of the apex of the bastion and 8 feet southwest from the north wall of the bastion (Figure 5). Like core 5, this test was stopped because it encountered a solid structural component at 6 feet below the modern terreplein surface. The strata above the 6 -foot depth contained small amounts of concrete and brick, and increasing amounts coquina until the last few feet above the structural component,

which was composed of a brown sand. The cultural material recovered in the screen consisted of items dating from pre-Spanish Contact (St. John's ceramics) to the present.

## Core 7

Core 7 was driven to a depth of 14 feet 5 inches below the modern surface of the northwest bastion. It was located in the center of the San Pablo bastion 43.2 feet southeast of the apex of the bastion and 76 feet northwest of the interior corner of the northwest corner of the terreplein (Figure 5). This was the only core on the northwest bastion to be driven further than 6.5 feet below the modern terreplein surface. Three light colored lenses containing high concentrations of coquina were encountered at approximately $3,4.5$ and 6 feet below the terreplein surface. The lens at 6 feet showed the highest concentration of coquina, and likely represents the same structure that caused the other cores on this bastion to be stopped short. Below the 6 -foot level there was much less coquina recovered and an increasing amount of brown sandy fill. The material culture recovered after screening the soil from the core test consisted of indigenous ceramics predating Spanish contact as well as machine cut nails.

## Core 8

Core 8 was driven to a depth of 6 feet 5 inches below the modern surface of the northwest bastion. It was located on the southwestern side of the San Pablo bastion 43.5 feet southeast of the Apex of the bastion and 5.5 feet northeast of the south wall of the bastion (Figure 5). Like cores 5 and 6 this test was stopped short because it encountered a structural component at approximately 6 feet 5 inches below the modern terreplein surface. The strata above the $6^{\prime} 5$ " stopping point consisted of sand, broken and complete shells, some brick, and a good deal of coquina fragments. The material culture collected by screening the soils from this test displayed evidence of contact period Native American activity as well as later construction materials.

## Core Testing Summary

Core testing in both bastions of the project area gathered information on the stratigraphy of the bastion fill and directed the strategy for the archeology in the excavation units. All of the cores appeared to be consistent in that a structural coquina component was encountered at approximately 6 to 6.5 feet below the modern surface of the terreplein. This surface could have been a part of the fort's original construction, perhaps the original surface of the terreplein before the renovations in the mid 1700s. The cultural material recovered from the core testing also tells something of the construction of the bastions. The presence of local Contact and Pre-Contact indigenous ceramics in the bastion fill suggests that much of the fill originated at a nearby Native American domestic site, probably a midden. This corresponds with historic records that place numerous Native American settlements around St. Augustine and the Castillo de San Marcos during colonial times, and also with Deagan's (1980) work showing the presence of a St. John's IIb settlement on the Castillo site.

## EXCAVATION UNITS

Two triangular excavation units were opened and excavated during the 1997 and 1998 excavations at the Castillo de San Marcos. Excavation unit 1 (EU 1) was placed in the apex of the southwest (San Pedro) bastion and excavation unit 2 (EU 2) was situated in the apex of the northwest (San Pablo) bastion. Figures 4 and 5 show the locations of the two units. Both units
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measured approximately 15 feet by 15 feet by 15 feet and were excavated in four-inch arbitrary levels measured from a stationary datum point. Work in these excavation units was intended to recover information about the construction of the terreplein and the interior condition of the bastion walls. For this reason, the units were positioned against the bastion walls, resulting in a triangular shape. Due to the non-standard unit shape, additional care was taken to control provenience within the units and exacting maps were produced of each level.

## Excavation Unit 1

EU 1 was located in the apex of the southwest bastion of the Castillo de San Marcos (Figure 4). It was triangular and measured approximately 15 feet on all three sides. The unit was bordered on two sides by the walls of the bastion, although not perfectly aligned with the true cardinal directions, for ease of reference these walls are referred to as "northwest" and "southeast." The third wall of the unit (the one not bordered by a bastion wall) was referred to as "east." Elevation within the unit was measured from a stationary datum located in the easternmost corner of the unit. Provenience within the unit was controlled through measurements from two points, the unit elevation datum and a second stationary datum located to the southwest of the unit in the guard tower. Park personnel removed the upper, modern concrete surface before the SEAC archeologists arrived, resulting in a unit that began between 7.5 and 11 inches below the datum.

Level 1 of EU 1 took the entire excavation unit down to approximately $10-11$ inches below the datum. At this depth part of a hard packed coquina floor was encountered in the center of the unit, extending to the east wall of the unit. A portion of this coquina was covered with portland cement. The rest of the floor of Level 1 was made up of three different sand areas. A 10 YR $4 / 2$ sand fill was located along the southeast wall. This area probably represented fill from a trench dug by the park service in 1988. The area to the northeast of the coquina and cement floor was represented by a 7.5 YR $4 / 1$ sand and shell fill, and the rest of the level's floor, to the south and southwest of the coquina floor, was a 10 YR $5 / 3$ sand and shell fill. The material culture recovered after screening the soil from Level 1 resulted in mostly modern construction materials, which would be expected considering the amount of work that has been done on the terreplein surface during the twentieth century. However, both wrought and cut nails as well as olive jar fragments were also recovered, suggesting the disturbed context of the upper levels of the gun deck.

Level 2 of EU 1 brought the sand fill areas of the unit down to 15 inches below the unit datum. The hard packed coquina and cement floor in the center and back of the unit was left in place as balk. The sand fill along the southwest wall that represented the 10 -year-old Park Service trench continued in this level, and a darker sand area within this fill was identified as Feature 1. This feature was excavated two inches deeper and was determined to be a rodent burrow. A loose coquina intrusion was uncovered along the northeast wall toward the back of the unit and was surrounded by a 10 YR $5 / 3$ brown sand and rubble fill. In the southwest corner of the unit (the apex) another pit was uncovered that was marked with visqueen. This pit was later designated Feature 4 when it was determined to be a test pit excavated in 1988 by Bruce Piatek. In Level 2 it was made up of a 10 YR 5/4 yellowish brown sand and coquina rubble. The material culture recovered in this level included Contact period Native American ceramics, eighteenth century English delftware, cut nails and modern construction materials. The wide range of materials present suggest either a disturbed context or various filling episodes using a local source for fill.

Level 3 of EU 1 brought the excavated areas of the unit (excluding the coquina balk) to a depth of 19 inches below the unit datum. The modern pit fill (Feature 4) uncovered in the southwest corner
of the unit continued in this level but with a higher concentration of coquina rubble. The brown sand representing the fill from the 1988 Park Service trench continued along the southeast wall in Level 3, and the rodent hole that was identified in Level 2 spread out through it. The coquina intrusion on the northwest side of the unit ended in a brown sand and rubble fill that made up most of the northwest side of the unit. The material culture recovered in the screen for Level 3 ranged from Precolumbian ceramics to modern building materials, again suggesting a disturbed context or various filling episodes.

Level 4 of EU 1 was excavated to a depth of 23 inches below the unit datum. The coquina and cement balk in the center and back of the unit was left in place. Although at this point it remained undesignated, Feature 4 in the southwest corner continued through this level. The rest of the excavated portion of the unit was made up of a fairly uniform mottled dark grayish brown sand. The cultural material recovered from this level represents a time period spanning from Precolumbian times to at least the mid nineteenth century, possibly later. These artifacts again suggest that that the fill used in constructing the fort was either disturbed or came from a nearby, disturbed context.

Level 5 of EU 1 brought the excavated area of the unit to a depth of 27 inches below the unit datum. The coquina and cement balk in the center and back of the unit was again left in place. Feature 3 was designated in the southeastern corner of the unit. It was made up of charcoal with bone and iron fragments and surrounded by an area of coquina rubble. It appeared to be a burn pit of some type. More coquina rubble apparent at the southeastern corner of the unit was cut through by the as-yet-undesignated Feature 4 test pit. The coquina and burn pit in the southeast corner and the coquina in the southwest corner gave a strong impression of an historic floor at this depth. The rest of the excavated portion of the unit was made up of a mottled brown sand. The material culture recovered from Level 5 again displayed Precolumbian and Contact Period local ceramics, suggesting that local fill was used in the construction of the bastion. In this level, however, there was very little evidence of modern materials, suggesting that the excavations were beginning to enter undisturbed construction levels from historic times.

Level 6 of EU 1 brought the lowest point in the unit to a depth of 31 inches below the unit datum (the coquina and cement balk was left in place). The beginnings of the coquina rubble floor that was identified in the southwest and southeast corners of Level 5 were left in place and the coquina floor was followed down from the southeast wall toward the center of the unit. This level made very apparent the remains of the historic floor along the southeastern wall of the unit. Feature 3 (the burn pit) and Feature 4 (the 1988 test pit) were apparent at the base of Level 6, and Feature 3 had become slightly larger and now extended along the entire southeast wall. Feature 4 was excavated to 31 inches below the unit datum, resulting in a better view of its character, as it cut through the coquina floor. The remains of the crushed coquina floor surrounded both features and stepped down toward the center of the unit approximately a foot to a foot and a half out from the southeast wall before 31 inches below the unit datum was reached. The remainder of the bottom of Level 6 was made up of a 10 YR $4 / 2$ grayish brown sand fill. The artifacts recovered from Level 6 again showed evidence of a local source for fill used to construct the bastion and like Level 5 , no specifically modern artifacts were recovered.

Level 7 of EU 1 brought the lowest point in the unit to a depth of 35 inches below the unit datum, following the level of the crushed coquina floor. The coquina floor encountered at the bottom of Level 6 ( 31 inches below the datum) was not removed. The balk was also left in place. In Level 7 the crushed coquina floor, which was first identified in Level 5, continued to step down and extend out further from the southeast wall. At this depth it extended approximately 2 feet from

the southeast wall and encompassed the entire southwest corner, including 4 feet of the northwest wall. Features 3 and 4 were still visible in the crushed coquina floor and the burned feature was larger at 35 inches below the datum. The interior of Feature 4 was excavated to 35 inches to coincide with the floor of the unit. The rest of the Level 7 floor at 35 inches deep was made up of a brown sandy fill. Very little material culture was recovered from Level 7, but there was no evidence of modern materials.

Level 8 of EU 1 was excavated to a depth of 39 inches below the unit datum. The balk was left in place. Once the base of Level 8 was reached, the crushed coquina floor covered the entire floor of the unit. Feature 4 continued to be excavated to a depth coinciding with the lowest depth of the unit and, at the bottom of Level 8 ( 39 inches below the unit datum), its base was reached. It was then positively identified as a 1988 test pit by a labeled tag found at its base. More charcoal was uncovered along the northwest wall of the unit, and a sample of it was taken for flotation testing at the lab. The small amount of material culture recovered from the fill remaining above the coquina floor consisted mainly of aboriginal ceramics that were either used by the Spanish forces garrisoned at the fort or were brought in with the construction fill.

Once the entire coquina floor had been uncovered it was determined that for the remainder of the season excavation would only continue in a 3 by 4 foot rectangle located to the southeast of the balk against the center of the southeast wall, adjacent to a large crack. This area was designated Area A (Figure 6). During the 1997 field season excavations continued in Area A only, and excavation in other sections of the unit were not resumed until February of 1998. Area A continued to be excavated in arbitrary four-inch levels, which were modified to follow cultural floors when they were encountered. Ultimately, Area A reached Level 18 and a maximum depth of 79 inches below the unit datum at its lowest point.

Figure 6. EU 1, Level 8, showing the locations of Features 3 and 4 and Area A.

Because the coquina floor was sloped down from Level 5 in the southwest corner to Level 8 in the northern half of the unit, the first level of excavation in Area A was in Level 7. The majority of Area A, Level 7 incorporated the burned Feature 3 and much more material culture was recovered from it than from the rest of Level 7 . The artifacts recovered included a large number of metal fragments as well as bone and a kaolin pipe stem. These materials suggest that Feature 3 was a burn pit, and its size suggests that it may have been used over a period of some time. Manucy has suggested that the southwest bastion, being the one facing the St. Augustine settlement, was of the least tactical use so it may have been considered a logical place to burn trash.

Excavations in Area A continued to the depth of the lowest point of the remaining unit, Level 8. The majority of the unit continued to be covered by a lens of charcoal and soot, but it appeared to be ending and coquina began to become visible below it. There was also evidence of erosion through the crack in the wall. The artifacts recovered from Area A are consistent with what would be expected from an eighteenth century site, strengthening the assumption that Feature 3 was a burn pit on the terreplein floor sometime after the 1740-50s remodeling. It is possible that a good deal of the burned material could have come from the wooden decking that originally made up the terreplein surface before the installation of the bomb-proof casements.

In Level 9 of Area A most of the burned Feature 3 had been peeled away, exposing a very shallow lens of coquina rubble representing the last of the floor uncovered in Level 8 , and a brown sandy fill beneath it. There continued to be evidence of erosion and soil lost through the

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crack in the bastion wall. The material culture recovered in this level continued to be consistent with what would be expected from an eighteenth century burn pit, and also included some aboriginal ceramics that were either brought in with the bastion fill or used by the Europeans at the fort.

Level 10 of Area A excavated the entire floor of the area to 47 inches below the unit datum. At this point the excavation had completely removed the charcoal feature, and the coquina lens above it, and was continuing through a brown sandy fill containing some coquina rubble and shell. A large number of artifacts were recovered from this level including numerous brick and iron fragments and various other materials indicating a seventeenth to eighteenth century deposition. Aboriginal ceramics were also encountered, again suggesting that the bastion fill came from a nearby indigenous midden or that the Spanish were making use of Native American ceramics.

In Level 11 of Area A the first evidence of another coquina floor was uncovered in the southeast corner of the unit at approximately 51 inches below the unit datum. Other than the coquina rubble in the southeast corner of the unit, the floor of this level was made up of a 10 YR 4/3 brown sand. There was significantly less material culture recovered in this level than in the two above it, but what was encountered was consistent with the artifacts from previous levels.

Level 12 of Area A followed the coquina floor down to a depth of 55 inches below the unit datum. The coquina floor extended out from the southeast wall of the bastion approximately a foot and half and began to take on the appearance of a step. The remainder of the unit floor continued to be made up of a 10 YR $4 / 3$ brown sand fill which contained a wide variety of artifacts, particularly metal fragments and aboriginal ceramics.

Level 13 of Area A continued down through the brown fill four more inches. By the bottom of this level, a coquina step was exposed along the southeast wall of the unit. It extended out from the wall approximately a foot and a half, but base of the floor upon which it was laid was not yet visible in this level. The material culture recovered included aboriginal ceramics as well as historic Spanish Majolica such as San Luis Polychrome, suggesting a seventeenth to eighteenth century occupation on this floor.

Level 14 of Area A uncovered a second coquina step upon which the already uncovered step was laid. This step extended from underneath the first one, approximately 6 inches, and was located at a depth of 62 inches below the unit datum. The northwest half of the unit was excavated to a depth of 63 inches below the unit datum and was still covered by the brown sand fill. Artifacts encountered included a number of aboriginal ceramics from both before and after the Contact Period and Spanish Majolica probably dating to sometime between 1650 and 1750.

Level 15 of Area A uncovered the coquina rubble floor in the entire unit. At this point it was possible to see the coquina floor at 67 inches below the unit datum, the lower at 62 inches below the datum and the upper step at 52 inches below the datum. The steps were probably built to give soldiers additional height above the parapet when shooting. Reconstructions of firing steps similar to this one are present on the modern surface of the terreplein. The artifacts that were recovered from this level were represented mainly by aboriginal ceramics including Deptford Check-stamped, which dates from 800 BC to 500 AD . This points to the conclusion that at least some of the aboriginal ceramics recovered made their way into the bastion with the construction fill.


Once the coquina floor was reached over the entire unit, the two steps were removed and screened according to level. Thus the remainder of Levels 14 and 15 were removed and the entire floor reached a depth of 67 inches below the datum. Very little material culture was recovered from within the coquina rubble that made up the steps, only some iron fragments and a few aboriginal ceramics. Erosion through the crack in the southeast wall was apparent, and caused some varying colors of brown sand to be present. Once the floor of the unit was all at the same depth, Level 16 was excavated. This level took Area A to 71 inches below the unit datum except on the southeast side where what seemed to be another step was reached at 69 inches below the datum. This step was different from the coquina steps directly above it in that it was made up of coquina blocks joined and covered with a lime mortar, rather than coquina rubble. Later, it was determined that it was not a firing step but a wall footer, suggesting that the coquina floor above it represented the terreplein surface during the First Spanish Period. Erosion caused by the crack in the southeast wall of the bastion had seriously impacted the course of coquina block making up the top of the footer and a large portion of it was broken and missing adjacent to the crack. The northwestern part of the unit continued to be made up of coquina rubble. There were no artifacts from this level.

Level 17 continued down through the coquina rubble in the northwestern part of Area A and further uncovered the course of mortar covered coquina block along the southwest wall. For the most part the coquina rubble continued in the northwestern part of the unit, but there was a small lens of 10 YR $4 / 3$ brown sand along the interior edge of the coquina block, separating it from the rest of the coquina rubble floor. There was no material culture recovered from this level.

Level 18 excavated the northwestern part of Area A to a depth of 79 inches below the unit datum and further uncovered the course of coquina block on the southeastern wall of the bastion. At this depth another course of mortar-covered coquina block was uncovered below the first course. This course extended out from underneath the first one about three inches into the northeastern portion of the unit. The remainder of the unit had been excavated below the coquina rubble and was now covered by a brown sandy fill, out of which a few fragments of mammal bone were recovered.

Upon reaching the bottom of Level 18, the depth of the unit was a safety concern and the field season was coming to a close. For this reason a decision was made to put a post hole test into the brown sand fill at the bottom of Level 18 in order to increase the depth of recovery in Area A as far as was safely possible. The post hole test was driven 29 inches below Level 18 to a total depth of 9 feet below the unit datum. The soil recovered was made up of light brown sand with two subtle color changes (one at 3 inches below Level 18 and another at 18 inches below Level 18). Two ceramic vessel fragments were recovered, one Spanish olive jar fragment and one piece of indigenous San Marcos Ware.

At this point the 1997 excavations ceased and profile maps of the walls of EU 1 were drawn. The profiles of the excavations within Area A made the various historic floors very easy to see. Figures 7 and 8 show the north ( $10^{\circ}$ east of north) profile from the modern surface to the base of Level 18, 79 inches below the unit datum. In this profile and photograph, at least three historic floors are clearly visible below the modern floor of the terreplein. The first one, and most recent, is apparent as the light colored crushed coquina level directly above the dark, burned midden layer first identified as Feature 3. This floor slopes down from the southeastern wall toward the middle of the unit such that its surface is located at 27 inches below the unit datum on the southeast wall of the unit and at 39 inches below the datum on the northwest wall of Area A. This sloping may have been the result of the firing step along the southeast wall that brought the floor level higher in that area, but was also probably impacted by the settling of the bastion fill over time. This floor is approximately 2 inches thick was covered by a brown sandy fill. Excavations

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in EU 1 stopped at the surface of this floor except in Area A where they continued down through it.

The next historic floor that was identified was also made of coquina rubble and was located directly below the burned midden. It was upon this occupation level that a prolonged period of trash burning seems to have taken place, long enough to build up nearly a foot of charcoal and soot deposits in some parts of the unit. When the burning period ended the coquina rubble floor was resurfaced above the ash and charcoal, building the floor discussed in the previous paragraph.

The final and oldest floor visible from the 1997 excavations was located at 51 inches below the datum on the southeast wall and at 67 inches on the northwest wall of Area A. A firing step was located on the southeast wall and extended into the northern part of unit approximately a foot and a half and was underlain by a shorter step which extended out another six inches from underneath the large step. Both of these steps were constructed of coquina rubble as was the floor upon which they were laid. This floor was approximately six inches thick and was directly above another, lighter colored, coquina rubble level. This lighter colored level may represent another useable floor, and the coquina rubble above it could have been placed directly on it as a repair or improvement. When the firing steps were removed, two courses of lime-covered coquina block were uncovered. These blocks most likely served as wall footers, suggesting that the coquina rubble floor above them represents the surface of the terreplein during the First Spanish Period (the original terreplein construction). It must also be mentioned that the depth of this floor is approximately the same as the one that was predicted by the coring tests that took place before EU I was opened.

Figure 7. Profile map of EU 1, Area A. Northeast wall, modern surface to Level 18, 79 inches below datum.

Figure 8. Photo of northeast wall of EU 1, Area A. At least three historic floors are visible.

After the profiles were photographed and mapped the unit was covered and closed for the season. The 1997 excavations gathered information on the conditions of the fill within the bastions and the nature of the cracks in the walls. This information led the park to the conclusion that the best remedy for the cracking walls would be to resurface the terreplein with a waterproof sealant and to fill in the cracks with a porous fill. However, because excavation unit 1 had already been opened and the historic information recovered from it was significant, it was decided that further excavation in the unit was warranted for interpretation. SEAC personnel returned to the site in February of 1998 to continue excavations in EU 1.

Upon arrival at St. Augustine in February of 1998, examination of EU 1 showed that it had been severely damaged by rainwater erosion. A majority of the balk that had been left in place and a portion of the Level 8 floor had washed into the Area A excavation, filling it completely. A small amount of bulk remained on the east wall of the unit and another section was present as an island in the center. Besides filling up Area A, a good deal of soil had been lost through the crack in the bastion wall. Based on the condition of the unit, it was determined that the best course of action would be to remove the existing balk in arbitrary four-inch levels until reaching the level 9 depth. The unit would then be cleaned of eroded soil and excavations could continue.

Levels 2 through 9 of the remaining balk were removed in four-inch levels and screened separately. There were few unexpected discoveries uncovered in these 7 levels. All of the levels contained indigenous ceramic fragments and the upper two contained a high concentration of
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modern building materials. The soils below the concrete and coquina rubble that made up the modern resurfaced levels was made up of the same 10 YR $3 / 4$ brown sand that that had been identified during the previous season as fill separating the construction periods. The balk was excavated to a depth of 43 inches below the unit datum, where it completely uncovered the top of a coquina rubble floor. This coquina rubble area was designated Zone A. Zone A made up the majority of the unit excluding the excavated and eroded area associated with Area A from the 1997 excavations and the eastern most corner of the unit where the burned layer was exposed. This burned area was designated Zone B (Figure 9).

Figure 9. Diagram showing the positions of Zone A, a coquina rubble floor; Area A, the area comprising the 1997 excavations and subsequent erosion; and Zone B, a burned level representing a floor used prior to the one identified as Zone A.

Zone A was made up of a pale yellow, 2.5 YR 7/3 crushed coquina matrix about one to two inches thick. It began in Level 6 on the southeast wall and stepped down to Level 9 on the opposite side of the unit. This sloping effect was noted in the 1997 excavations and was due to the construction of a firing step along the southeast wall. In order to understand the nature of each level encountered, excavations continued to take place in arbitrary four-inch levels, but when a new floor was encountered, its surface was followed until it was completely uncovered. In this manner each occupation level could be examined in its entirety before proceeding below it, and Zone A was removed in four levels even though it was less than two inches thick. Datable material culture recovered from the coquina matrix, which made up the remains of the floor, consisted of a kaolin pipe stem, wrought nails, green glass, Native American colonoware and Spanish Majolica. The presence of Native American ceramics within this occupation level is notable, indicating their importance within the fort. Unfortunately, none of the material culture offers a tight terminus post quem for the floor, but it suggests early Spanish colonial period.

Zone B was a burned level located directly below Zone A. It was originally identified as Feature 3 in the southeast corner of Level 5 during the 1997 excavations. After the removal of the crushed coquina floor designated Zone A , the burned floor covered the entire unit. The surface of Zone B stepped down from Level 6 at its highest point along the southeast wall to Level 9 at its lowest on the opposite side of the unit (from approximately one to two feet below the unit datum). Like Zone A, Zone B was removed in four-inch arbitrary levels and was determined to range in thickness from approximately 2 inches in the northeasternmost corner of the unit to nearly a foot in the southwestern corner. The charcoal and soot matrix that was removed was returned to SEAC and water screened in order to gather as much information about the level as possible. The cultural material recovered from Zone B also agrees with the conclusion that the burned zone was the result of repeated use as a trash burning area, as in no other time during the excavations was an area located that had a higher concentration of artifacts. There was a particularly large amount of food remains in the form of bone, as well as a wide variety of Spanish Majolica, aboriginal San Marcos and English delftware ceramics, and military artifacts such as gunflints, gun parts and musketballs. A broken grinding stone was also recovered as well as a number of kaolin pipe bowls and stems. Overall, the artifacts recovered suggest that the burned zone was in use during the early decades of the eighteenth century, however the possibility exists that it was put into use immediately after the fort's reconstruction period during the 1740s and 50s.

Zone C was located directly below the burned Zone B and was made up of a pale yellow 2.5 YR $7 / 3$ crushed coquina matrix. The surface of this floor stepped from Level 6 on the southeastern side of the unit to Level 12 on the northwest. Once the burned level was removed, Zone C covered the entire floor of EU 1. Like Zones A and B, Zone C was removed in four inch levels

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following the firing step and the floor's downward slope toward the northwest. Upon its removal it was determined to be approximately one to two inches thick and it overlaid a brown sand fill that was designated Zone G . Zone C was similar in construction and material culture to Zone A and was most likely the floor that was in use before, and upon which, the burning episodes that created Zone B occurred. When the bastion was no longer used as a location to burn trash, a new crushed coquina floor, Zone A, was laid down on top of the soot. The variation in thickness of Zone B shows that for the most part trash was burned in the far southwest corner of the bastion, as that was where the burned layer was thickest. Based on the material culture recovered in Zone B, Zone C was most likely the terreplein floor of the Second Spanish Period that was built as a part of the fort's massive reconstruction that took place in the 1740s and 50s.

Zone $G$ was located below the crushed coquina floor designated Zone $C$. It consisted of dark brown 10 YR $3 / 2$ sand with abundant shell and was determined to represent fill laid down during the remodeling of the fort in the mid $18^{\text {th }}$ century. The Zone G fill extended from Level 8 ( 35 inches below the unit datum) to Level 11 on the southeastern wall of the unit. On this side of EU 1 Zone G included fill that bulked out the firing step in the Zone A/B/C floor, and extended downward until another crushed coquina firing step appeared by Level 11 ( 47 inches below datum). In the central and northwestern portion of the unit, Zone G extended from Level 12 to Level 17, to a total depth of 75 inches below the unit datum. The material culture that was recovered from this fill zone consisted of bone, brick, metal fragments, and ceramics, an assemblage that would be expected from a filling episode during which loose garbage could be brought in with construction material. The dateable artifacts recovered consisted of Spanish Majolica ceramics such as Abo Polychrome, Caparra Blue, Puebla Polychrome, Guadalajara Polychrome and French faience. Overall the date suggested by these ceramics would continue to imply that Zone G represented the time period during which the Castillo underwent its remodeling, the mid 1700 s. There was also a great deal of indigenous pottery uncovered, including San Marcos, Saint John's, San Pedro, and Fort Walton Wares. Of these Native ceramic types only San Marcos Wares were uncovered on the occupational floor (Zone B). This suggests that the garrisoned soldiers may have made use of San Marcos ceramics, but the other types, particularly the Saint John's Ware, were brought in with the fill (probably from in an indigenous midden) that was used to construct the bastion. This conclusion is also supported by the general consensus of Saint Johns Ware as a Precolumbian ceramic type.

Below the fill designated Zone $G$ another occupational floor of crushed coquina was encountered. This floor correlated to the one first uncovered during the 1997 excavations in Area A at 51 to 67 inches below the unit datum. The same two steps found along the southeast wall in Area A were uncovered below Zone G. The top of the upper step was first reached in Level 10 but not completely uncovered until Level 11 of Zone G was removed. This upper step extended out from the southeast wall approximately one and a half feet and was laid directly on top of a second step that extended out another foot and a half toward the center of the bastion. This second step was completely uncovered upon the removal of Level 14 of Zone $G$ at 59 inches below the unit datum and could be seen to gradually slope down to the coquina floor upon which it was placed (Figure 10 ). Once the two coquina steps had been uncovered, removal of Zone $G$ continued in four inch levels until the occupation floor had been reached. The coquina floor was for the most part uncovered in Level 16, but a small portion continued into Level 17 at a maximum depth below the unit datum of 75 inches. It was made up of crushed coquina, some of which was covered with a hard lime mixture that most likely represented the terreplein floor from the First Spanish Period. This conclusion is supported by the presence of the lime-covered wall footers that were uncovered in Area A directly below this floor.
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Figure 10. Photo showing firing steps and crushed coquina floor below Zone G fill. In this figure it is also possible to see the lime-covered wall footers originally uncovered in the 1997 excavations of Area A.

The total excavation of Zone G took place through a number of stages over two field sessions during 1998. Upon its complete removal, excavation continued through the coquina floor below it, beginning with the firing steps along the southeast wall. The top of the upper step began at 47 inches below the unit datum in Level 10 and was excavated down in four-inch levels to the top of Level 16 at 67 inches below the datum. At this depth a brown sand fill was encountered that was found to be two inches thick and separated the coquina of the firing step from a lime-covered course of coquina block. This block corresponded to the structure that was determined to be a wall footer when it was first encountered in Area A in 1997. The remainder of the coquina floor was removed in four-inch levels beginning at Level 17 (71 inches below the unit datum) and ending when a brown sandy fill was uncovered in Level 20 at a depth of approximately 85 inches below the datum. Evidence of three possible construction periods was uncovered during the excavation of this floor (Figure 11). The first, and most recent was represented by the coquina rubble and lime-plaster that was uncovered directly below the Zone G fill. Two more lime-plastered surfaces were uncovered beneath the first one with shallow levels of brown fill separating each surface. The second surface was at 83 inches below the datum and the third was at 84 . The positioning of these three floors one on top of the other suggests that this was one occupational level in use over a long period of time, long enough to necessitate at least two different periods of major repair to the surface of the terreplein. Material culture recovered from this floor zone include American Slipware and San Luis Polychrome, placing it in the early $18^{\text {th }}$ century and allowing the possibility that it is the First Spanish Period terreplein. At approximately 85 inches below the unit datum the series of coquina rubble and lime-plaster floors gave way to a brown sandy fill that covered the entirety of EU 1.

Figure 11. The east profile of EU 1 after the excavation of the First Spanish Period Floor. In this photo it is possible to see all of the discussed occupational levels as well as the positioning of the firing steps on the southeast wall of the bastion. Note also the lime-covered coquina block wall footer/firing step base in the lower right of the photo.

Three features were associated with the series of floors located below Zone G. One was determined to be a post hole test from a previous excavation, and one appeared to simply be concentration of coquina that was dumped in with the fill. Neither of these features contained cultural material. The third feature consisted of burned midden-like deposits in the extreme southwest of the bastion. This feature could represent trash burning on the terreplein, similar to what occurred on the more recent floor. However, the position of this feature in association with a large crack in the corner of the bastion most likely suggests that it was the result of erosion and soil loss through the crack in the bastion wall. More evidence for this conclusion comes from the existence of another feature, also in the southwest corner and made up of shell and lime mortar, which was excavated below the floor at a depth of 91 to 108 inches below the unit datum. Its positioning below the occupation level and near the crack suggested it was also the result of movement within the bastion fill.

Once the coquina floors representing the First Spanish Period had been removed, excavations continued through the brown sandy fill below them. Arbitrary, and for the first time flat, fourinch levels were removed from Level 21 to 23 ( 87 to 99 inches below the unit datum).


Throughout these levels the fill remained a consistent 10 YR 4/4 dark yellowish brown sand with a high concentration of shell. Cultural material recovery from these three levels was high for a stratum considered to be fill, but it merely suggests the significant and long term occupation of the St. Augustine area. Datable materials include considerable quantities of indigenous and colonoware ceramics suggesting a large local Native American population, probably working as paid laborers.

In the middle of Level 24 ( 100 inches below the datum) a tabby floor began to appear in the southeast and northwest corners of the unit. This floor was completely uncovered at 101 inches below the unit datum and photographed before excavations continued. The tabby floor was level and thin, approximately an inch thick, and separated the brown fill above it from a more complex filling episode below. For excavation, this complex fill was separated into four zones based on visible color and shell concentration differences, and each of the zones were screened separately. Upon examination of the material culture recovered, it was determined that there was no temporal difference between these zones. It is most likely that this entire filling episode was laid down at the same time but that it was brought from several areas near the fort. Based upon the shell and bone concentrations, and the presence of historic and Precolumbian aboriginal ceramics it is likely that the fill came from midden areas that were in use both before and after the arrival of the Spanish.

Below Level 25 (107 inches below the datum) the fill became less complex as a 10 YR 4/3 brown sand covered the majority of the unit. Excavation continued in level, four-inch arbitrary levels through the fill until Level 32 was reached. At that point another possible crushed coquina floor began to appear in the easternmost corner of the unit. This possible floor was followed down to the top of Level 35 at 139 inches below the datum. Material culture recovered from this fill was similar to the items that had been removed from other filling episodes within the bastion: a high concentration of food remains consisting of shell and bone, and large amount of historic and Precolumbian aboriginal ceramics. The conclusion that the bastion fill had originated in local midden areas held true for this zone, as it did for the fill areas above it.

Once the fill making up Levels 25 through 32 and parts of levels 33,34 and 35 had been removed, the coquina gravel floor beginning in Level 32 was arbitrarily removed to a final flat grade at the bottom of Level 35 ( 147 inches below the unit datum). Portions of the floor in the upper levels showed evidence of being covered with a lime-plaster, but much of it was degraded, particularly near the apex and walls of the bastion. Levels 34 and 35 were made up of a tan-colored sand and coquina and appeared to be the underlying support for the limecovered floor seen in Levels 32 and 33. Material culture recovered while excavating this floor was similar to the fill zones except that there were fewer food byproducts such as bone and shell, suggesting that this area was not constructed from midden. Aboriginal ceramics made up the majority of the pottery but there was also a large component of olive jar and one Spanish ceramic, Green Basin, sporting a relatively early date of 1490 to 1600 . The early date of this artifact, as well as its depth within the bastion, suggests that this floor was associated with the early construction efforts on the Castillo.

Due to safety concerns about the depth of the unit and problems with stabilizing equipment, excavation in arbitrary levels ceased at the base of Level 35 in EU 1. In order to increase the depth of recovery, a core test, Core 10, was driven to a depth of approximately 14 feet below
the base of Level 35. This core brought the total depth of investigation in the San Pedro Bastion to approximately 26 feet below the modern surface of the terreplein. The core sample was returned to the Southeast archeological Center for study. When it was opened evidence of another crushed coquina floor was noted approximately one foot below where excavations were halted. Below this floor was local fill in varying shades of brown. The total depth of the core came short of reaching the base of the fort by approximately eight to ten feet. However, excavations in the moat in March of 2000 (see Moat Excavations) dug through sand levels that were quite similar to the soils recovered at the bottom of Core 10 , thus leading to the conclusion that the earliest floor in the bastion is probably the one located at the top of the core test.

## Excavation Unit 2

EU 2 was located in the apex of the northwest bastion of the Castillo de San Marcos (Figure 5). Like EU 1, the traditional square excavation unit shape was rejected in favor of a modified triangular shape that conformed to the walls of the bastion. Four walls bordered the unit, three major ones that made up the triangular shape of the bastion and one short one that squared off the unit in the apex of the bastion. Although not directly oriented with the cardinal directions, the walls were referred to as north, south, east and west. The west wall was the short one in the apex of the bastion and was approximately 2.5 feet in length. The east wall was not bordered by a bastion wall and was approximately 15 feet long. The north and south walls were both 12 feet long and consisted of the existing coquina bastion walls. Elevation within the unit was measured from a stationary datum located in the easternmost corner of the unit. Provenience within the unit was controlled through measurements from two points, the unit elevation datum and a second stationary datum located above the west wall. Park personnel removed the upper, modern concrete level before the SEAC archeologists arrived, resulting in a unit that began at between 3.5 and 9.5 inches below the datum.

Excavations in EU 2 followed the same methodology as those in EU 1. All measurements were taken in feet and inches and the unit was excavated in arbitrary four-inch levels, which were modified upon reaching soil changes and historic floors in order to follow these variations and not mingle proveniences. For the most part the cultural material that was recovered from the excavations in EU 2 represented a more recent time period than that in EU 1. This was the case for two reasons. First, due to stability problems within the unit, safety concerns meant that EU 2 could not be dug to the same depth as EU 1, limiting the opportunity for excavations to reach the older floors that were uncovered in EU 1. Second, apparently there was a significant disturbance on the terreplein surface in the northwest bastion during the Civil War. This disturbance, although also historically significant, mixed the soils in the unit nearly to the bottom of its excavation extents.

The first two levels excavated in EU 2, which took the depth of the unit to approximately 15 inches below the modern surface, consisted mainly of construction materials related to a series of repairs to the terreplein floor undertaken by the Park Service since the 1930s. At the base of Level 2 a number of complete bricks were uncovered throughout the unit. Level 3 uncovered more of these jumbled bricks and an area near the center of the unit which contained four bricks that were in situ and showed the original positioning of a brick floor at approximately 19 inches below the modern surface of the terreplein. According to park personnel (Luis Gonzales personal communication 2001), during the Civil War the guard tower at the tip of the northwest bastion was removed and a large swivel mounted cannon was installed on a brick floor. The existence of the intact brick floor at 19 inches below the surface of the terreplein marks the level of the
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original installation of the cannon. However, bricks from this floor were uncovered as deep as 63 inches below the modern surface suggesting that either the installation and subsequent removal of the cannon comprised a significant disturbance to the soils within the bastion, or there had been a great deal of soil movement within the bastion fill.

Below Level 3 excavations in EU 2 were limited to a four foot swath in the center of the unit. This was done for safety concerns and to avoid damaging the bastion walls, it also allowed the area containing the intact Civil War floor to remain in place. Excavations continued in this manner until the base of Level 7 was reached at 35 inches below the modern surface of the terreplein (Figure 12). Throughout these levels numerous bricks associated with the Civil War cannon emplacement were recovered, as well as a Civil War era friction primer. However, Spanish Majolica ceramic fragments of various ages were also recovered, as were prehistoric and colonoware potsherds. The mixed nature of the assemblage suggests the considerable disturbance in the northwest bastion. Excavation within the southwest bastion also displayed artifacts of similar origins within the fill but differing dates, but for the most part this was due to the nature of the fort construction, i.e. using materials collected from midden areas. The same type of artifact confusion would be expected in the northwest bastion, as its construction took place at the same time from the same materials, but the Civil War material at a depth far below the original level of the brick floor shows that a physical disturbance of these levels also took place.

Figure 12. EU 2 at the base of Level 7. Bricks originally making up the floor constructed for the placement of a Civil War cannon are still visible in Level 7. To the right of the excavated area are four intact bricks displaying the original level at which this floor was constructed.

Level 8 was excavated in the same area in the middle of the originally defined unit. Rubble and brick from the Civil War cannon emplacement was encountered in this level as well. Upon the complete removal of Level 8, a large area of the floor of the unit collapsed and exposed a void running north/south through the unit. The void was a minimum of two feet deep and dropped off much deeper to the north and south of the unit where it was still covered with soil. This cavity was most likely created through erosion and the loss of soil through the cracks in the bastion wall. It also suggested an additional explanation for the heavily disturbed nature of EU 2.

Following the collapse of the unit under Level 8, Core Test 9 was placed in the surviving floor. This test was driven approximately 36 inches below the base of Level 8 and was intended to determine if it was safe to continue excavation in the non-collapsed areas of the unit. The test determined that in this portion of the unit, it was safe to continue excavation.

Excavations in EU 2 continued after the placement of Core Test 9 suggested that the void below Level 8 did not encompass the entire unit. Digging continued in a restricted area that was not impacted by the collapse. This area was designated Area A (Figure 13). Area A was excavated to the base of Level 17, bringing the total depth of recovery in EU 2 to 73 inches below the modern terreplein surface. All of the levels removed from Area A showed evidence of disturbance in the form of bricks from the Civil War construction. However, the base of Level 17 reached a hard packed coquina floor which bore similarity to the levels in EU 1 that were referred to as the original terreplein surface of the Castillo before the remodeling took place. The depth at which this floor was reached is generally the same as EU 1. Unfortunately, safety issues, including another collapse of the floor around Area A and a collapse of the north wall, ended excavations in EU 2 before this floor could be excavated. Upon the close of the unit a profile was drawn of the east wall (Figure 14). This profile attempts to display the undisturbed strata uncovered during the excavation.


Figure 13. Diagram of EU 2 showing the position of Area A. Excavations were limited to Area A following the collapse of the unit floor to the north and east of it.

Figure 14. East wall profile of EU 2 showing the depth of the in situ brick floor and the final depth of the excavation where the fort's original terreplein was reached.

## Excavation Units Summary

Excavations in EU 1 in the San Pedro Bastion contained the most significant archeological resources uncovered during the 1997 and 1998 field project. From the modern surface of the bastion to the base of Core 10 at the bottom of the excavation unit, the remains of at least 12 historic floors were identified and documented. From the surface down, the first two floors are associated with modern activities on the terreplein of the monument. Approximately 10 inches below the modern surface another fragmentary level of coquina rubble was apparent in the profile of the unit. Little was made of this possible floor during excavation because it had been substantially disturbed by modern construction activities, and much of it was also lost to erosion between the two field seasons. However, its location in the profile suggests that it may represent an historic floor in use sometime during the original American occupation of the fort. The next series of floors represents at least two, and possibly three, levels of occupation on the fort's gun deck. These floors include the burned level, and the lime and coquina floors above and below it. This series of floors most likely represent the terreplein following the completion of renovation of the fort in 1756. These floors were in use during the 21 -year English occupation of the Castillo and the Second Spanish Period. Continuing down through the profile of EU 1, the next series of floors was first reached in Level 10, when a coquina firing step was uncovered along the northwest wall of the bastion. This step was part of a coquina rubble floor that was completely uncovered in Level 17 and was found to be lying on top of two other lime and tabby floors uncovered between Levels 17 and 20. Each of these floors was associated with a large firing step, and each was separated from the other with a thin layer of brown fill. This series of floors was determined to be the terreplein surface during the First Spanish Period before the major reconstruction efforts on the fort between 1736 and 1756. Below these three floors, four other tabby, lime and coquina floors were uncovered within the construction fill of the bastion. The first was made of a thin layer of tabby at approximately 100 inches below the unit datum, the next was a lime surface between 135 and 139 inches deep, the third was a coquina rubble level at 147 inches deep. The final and earliest floor uncovered was made of tabby and was found in Core 10 at approximately 159 inches below the unit datum. There was no evidence of firing steps associated with the lower floors, and they are interpreted as temporary working levels built during the original construction of the fort to aid in the construction of the bastion walls.

Excavations in EU 2 in the San Pablo bastion contained archeological evidence of the use of the Castillo de San Marcos during the Civil War. Evidence of a brick floor that was used to support a swivel cannon during the war was uncovered approximately 19 inches below the modern surface of the terreplein. It was also discovered that the layers making up the fill in the northwest bastion were considerably more disturbed than that those in the southwest one. This disturbance was the result of a number of factors including Park Service renovations and repairs to the fort, the installation and removal of the Civil War cannon, and the considerable erosion and loss of soil through the cracks in the bastion walls. This erosion produced voids in the bastion fill that caused two collapses of the excavation unit floor and a collapse of the north wall. The collapses produced a safety threat significant enough to end excavation in the unit. This did not occur, however, until after the First Period Spanish floor was reached at 73 inches below the modern surface of the terreplein, approximately the same depth that it was uncovered in EU 1 .


## MOAT EXCAVATIONS

In March, 2000, SEAC personnel returned to St. Augustine in order to conduct further archeological testing in the moat surrounding the Castillo de San Marcos. These excavations were aimed at determining the condition and construction of the foundation of the fort. They were also meant to identify whether the condition of the fort's foundation could be causing or exacerbating the cracking of the bastion walls.

A series of cores, numbered 11 through 18, were laid out along the northern and western sides of the fort, offset five feet from the walls of the Castillo. Cores 11 through 15 were located along the west wall and 16 through 18 were located along the north wall (Figure 15). Each core was driven to a depth of four feet below the modern surface of the moat. It was expected that the cores would provide information on filling and cleaning episodes in the history of the moat and information on the depth of the present water table below the fort.

Figure 15. The western half of the Castillo de San Marcos, showing the locations of core tests 11-18 and excavation units 3-5 in the fort's moat.

In addition to the core testing three 5 -foot by 5 -foot excavation units (units 3, 4 and 5) were excavated in the Castillo moat. Each of these units was judgmentally placed adjacent to the walls of the fort near areas that were cracking. Two units were excavated outside the southwest bastion (units 3 and 5) and one outside the northwest one (unit 4) (Figure 15).

## Cores

In general, all of the cores revealed that the first foot of soil below the modern surface of the moat was made up of recent fill material. The next foot and a half consisted of a dark clay deposit with a large quantity of oyster shell that had collected since the 1930s when the moat was cleaned out. Below approximately 2.5 feet was sterile sand. Material culture encountered consisted of coquina chunks and plastic fragments in the upper level, none of which was collected. The cores also reached the water table. The highest water level was in core 16 where standing water was noted at only 18 inches below the ground surface. The results of the coring tests indicated that the high water table below the fort could be causing structural damage to the fort's foundation. In terms of archeological history of the site, the cores made it apparent that the cleaning of the moat in the 1930s was thorough and it is likely that very little information of a pre-1930s nature remains.

## Excavation Unit 3

Excavation Unit 3 (EU 3) was located immediately adjacent to the wall of the fort, north of the southwest bastion in the corner produced by the joining of the bastion wall and the fort scarp (Figure 15). Due to knowledge of recent construction and filling episodes, the first foot of EU 3 was removed as one level and not screened. The fill consisted of dark brown sandy soil and shell. This level uncovered a concrete footer that was poured by the park in 1996 to surround the entire fort. The footer extended out from the fort walls approximately one and a half feet on the eastern and southern sides of the unit. The remaining levels were dug only in the northeast section of EU 3 , the area not overlaid by the concrete footer.

Level 2 was a four-inch arbitrary level that resulted in an overall depth of 16 inches below the datum. This level also proved to be a brown sandy fill with no material culture other than plastic fragments, suggesting modern deposition. The third and final level in EU 3 ended in a depth of 20 inches below the datum and was made up of the same brown sandy fill. This level was also

determined to represent a modern filling episode, as there was no material culture other than concrete, plastic, coquina and tar. Flagging tape was recovered from the bottom of the unit. It is likely that this fill is from the trench dug in 1996 when the modern footer was laid. Excavation in EU 3 ceased after Level 3 due to problems with standing water in the unit.

## Excavation Unit 4

Excavation Unit 4 (EU 4) was located immediately adjacent to the wall of the fort, east of the northwest bastion in the corner produced by the joining of the bastion wall and the fort scarp (Figure 15). Like EU 3, the first foot of soil in EU 4 was removed without screening as it was unlikely that any historic material would be located in the modern fill. The same modern concrete footer that was encountered in EU 3 appeared along the western and southern sides of EU 4. It extended out into the unit approximately one and a half feet on both of those sides. All future levels in this unit were to be excavated only in the area not overlain by the concrete footer. No material culture was collected from this level but a circular feature appeared in the northeast corner of the unit. It was made up of two rings of silty sand with high concentrations of shell, the outer ring was a gray color and the inner part was a grayish brown. Both of these areas were excavated and screened separately from dark grayish brown fill that made up the rest of the next level.

Level 2 and the feature were excavated to a depth of 16 inches below the datum. The first area to be removed was the dark grayish brown fill that made up the majority of the unit, excluding the feature in the northeast corner. It continued to be fill and the only material culture to be recovered was a small glass fragment. The gray outer ring of the feature was taken out next. This area had more material culture, including a gunflint and kaolin pipe fragment. However, the presence of plastic fragments suggested a disturbed context. The interior portion of the feature was excavated last. It also contained material remains spanning a long period, including an indigenous ceramic potsherd and modern plastic fragments.

Level 3 of EU 4 was excavated in two areas to a depth of 20 inches below the datum. The two areas included the circular feature in the northeast corner-which had increased in size, and was basically made up of one color and soil type-and the rest of the fill surrounding it. The feature contained a wide range of material culture including kaolin pipe stems and plastic fragments, while the lighter colored fill surrounding it had relatively few artifacts, none of historic age.

Level 4 of EU 3 was also excavated in two zones to a depth of 24 inches below the datum. In this level the disturbed fill surrounding the feature in the northeast corner ended, and the unit was taken over by the feature. At this point it was determined that the disturbed fill was most likely the result of a trench dug in 1996 in order to build the modern footer, and the feature was in fact not a feature at all and probably represented moat fill that had accumulated since the 1930s when the moat was last cleaned out.

There was an attempt to dig Level 5 of EU 4, but it was ended at 27 inches below the datum because of standing water in the unit. However, before work in this level was halted, enough cultural material was recovered to demonstrate that this level was a mix of relatively modern fill, because both plastic fragments and indigenous ceramics were recovered.
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## Excavation Unit 5

Excavation Unit 5 (EU 5) was located immediately adjacent to the wall of the fort with its southwest corner 27 inches east of the northern corner of the southwest bastion (Figure 15). The excavation method for this unit differed from the other two in the moat. It was not excavated in levels and not screened in order to reach the bottom of the fort's foundation quickly. This method was chosen because excavations in the other two moat units had shown that the soils around the fort were disturbed and mixed and because part of the goal of this project was to view the condition and construction of the bottom of the fort's foundation. This goal had proven impossible when excavating slowly because the ground water would fill the unit before the bottom of the foundation could be reached.

The excavation of EU 5 succeeded in producing a profile of the fort foundation. The first foundation component encountered was the modern concrete footer (poured in 1996) that was visible in Units 3 and 4. The top of this surface appeared at about 18 inches and extended out about 22 inches from the fort wall. The modern footer was approximately 9.5 inches thick and was laid on top of an historic coquina step. The coquina step extended beyond the modern concrete one about five and a half inches and varied between eight and six inches in thickness. The coquina step represented the base of the fort foundation: an iron pin was pushed through 22 inches of sand below it without hitting an obstruction. The coquina step had been laid directly on the sand, which presently is well below the water table and has water moving through it. Oyster shells attached to the coquina step showed that the bottom of the fort's foundation was at one time above the ground level in the moat.

## Moat Excavations Summary

Eight core tests and three excavation units were placed along the outside of the northern and western walls of the Castillo de San Marcos by SEAC personnel in March of 2000. These archeological tests gathered information on the condition of the fort's foundation and the history of filling episodes in the moat surrounding it. The core tests determined that the upper foot of soil in the moat is made up of modern fill, most likely fill that was the result of the moat draining that took place in the early 1990s. Below this fill was approximately one and a half feet of dark, sandy clay that represented an accumulation of sediments and materials since the 1930s when the moat was last cleaned out. Below this level was sterile sand. The core testing also determined that the water level below the surface of the ground was quite high, high enough to potentially impact the foundation of the fort.

Three excavation units were placed against the walls of the fort in order to gather information about the condition of the fort's foundation. These units uncovered a modern concrete footer that was laid around the base of the fort in 1996. The excavation units also located the trench in which the footer was poured, and evidence of the modern fill and post-1930s fill that was encountered in the core tests. Excavation units 3 and 4 could not be excavated to a depth that allowed viewing of the historic foundation due to the high water table, but EU 5 was. EU 5 uncovered the original fort footer, immediately below where the 1996 footer had been poured. Excavations in EU 5 determined that the fort was built directly on top of a sand surface without any special stabilization constructions. EU 5 also demonstrated that there was sufficient water moving through and around the lower foundation to potentially threaten the fort walls, but whether or not foundation instability was the actual cause of the bastion cracks could not be determined.

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## CHAPTER 4. MATERIAL CULTURE

## INTRODUCTION

Following each of the five stages of fieldwork the artifacts collected were returned to the Southeastern Archeological Center in Tallahassee, Florida. Prior to removing the excavated materials from the park, SEAC personnel obtained a park accession number and a NPS Specimen Loan Form (Form 10-127) signed by the appropriate personnel. Most of the artifacts were cleaned by hand-brushing with water and then air-dried. Delicate items and small faunal and floral remains were dry-brushed. A number of soil samples were also returned to the lab at SEAC where they were water screened through a series of wire screens to ensure a higher recovery rate than could have been easily obtained in the field. The materials were placed in sturdy containers for transportation. Items that required conservation, particularly degraded metals, were treated appropriately in SEAC's conservation lab.

The classification and subsequent cataloging of the artifacts followed the guidelines set forth in the Cataloging Manual for Archeological Objects Vols. I, II, \& III (National Park Service 1990) and the Museum Handbook, Museum Records, Part II (National Park Service 1984). The cultural materials were sorted into four basic categories: mineral, vegetal, animal, and unidentified. The Southeast Archeological Catalog System (SACS) was used to guide the artifact analysis and computer data entry, and project personnel entered cataloged data into the Automated National Catalog System (ANCS).

The artifacts to be curated were labeled on an undecorated area with the park acronym and its catalog number in indelible ink. Small, delicate materials were not labeled, but the specific information was recorded on the bag or vial containing the artifacts. This information was also recorded on an acid-free paper tag placed in the container with the artifact.

The data collected and generated as a result of this project are curated at the Southeast Archeological Center under SEAC accession number 1325. These data include but are not limited to field notes, maps, excavation and feature forms, photographic logs and negatives, the FS log, ANCS and SEAC artifact analysis forms, the artifacts, correspondences, and all reports generated as a result of this project. All of these materials were turned over to the Collections Management Division of SEAC.

## MATERIAL CULTURE

The database created for the archeological testing at the Castillo de San Marcos in 1997, 1998 and 2000 lists 16,310 artifacts weighing a total of $345,106.9$ grams. This collection reflects the history of the Castillo de San Marcos and of colonial St. Augustine from before Spanish contact to the present. It is representative of the military and domestic aspects of life at the Spanish colonial fort as well as Native American life in Spanish Florida during the time of the Mission System and the Precolumbian era. Eleven preliminary artifact categories were used to separate and analyze the materials recovered from the subsurface testing. All of the materials were divided into one of the following groups: glass, ceramics, stone, synthetic, metal, unfired clay or soil, fiber, wood, shell, bone or a mix of various mineral materials. For example, any artifact manufactured from glass, such as a bottle fragment or a piece of windowpane was assigned to the glass group, and any artifact made out of fired clay, such as pottery or brick, was assigned to ceramics.
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Each artifact in the database was also assigned to a specific category in relation to its function. The categories used are adapted from the revised version of Robert G. Chenhail's system of classifying human-made objects (Chenhail 1923). The categories used include building components, tools and equipment, energy production materials and byproducts, food processing remains, furnishings, personal artifacts and accessories, and armaments.

## Datable Evidence

The combined sample of artifacts recovered during the excavations in 1997, 1998 and 2000 represent a date range spanning from the Middle Archaic Period to the present. The historic artifacts display dates ranging the entire span of written history in the New World. Mean ceramic dates were calculated using South's and Carlson's formulas (Carlson 1983; South 1977). The mean ceramic date is based upon the known periods of manufacture of each ceramic type and the weights or counts of those ceramics within the sample. Beginning manufacturing dates of historic ceramics dating to before the Spanish arrival in the St. Augustine region were adjusted forward to 1565, since it is unlikely that they arrived in Florida before that date. The mean ceramic date for the entire historic assemblage (including EU 2 but excluding the moat) is 1705. Separate dates were calculated for proveniences recorded within EU 1. EU 1 was chosen because it contained the largest assemblage of data of the two excavation units within the fort, represent a wider span of time, and has not been severely affected by disturbance (Appendix 1).

Various occupational levels and construction zones were identified during the excavation of EU 1. The most important of these have been interpreted in this report as the Second Spanish Period floor, the First Spanish Period floor, and the construction zones above and below each of these levels. The floors themselves are actually series of occupation levels that are visible as multiple construction levels not separated by fill. This condition has been interpreted as episodes of floor repair rather than major fort rehabilitation. Large-scale remodeling, however, is visible in the fill between the First Period and Second Period Spanish floors, designated the Zone G construction fill. Mean ceramic dates were calculated for each of the floor series and the filling episodes (see Appendix 1). These calculations returned dates of 1725 for the fill between the modern surface and the Second Period floors, 1707-1712 for the Second Period floor, 1700 for the construction fill separating the two historic floor series, and 1643 for the fill below the First Period floor series. The First Period floor itself did not contain enough datable artifacts to return a reliable date. The mean ceramic dates are similar to, but not the same as those historically recorded for the fort's construction stages. Historic records report the First Period floor as completed by 1696 and the Second Period floor by 1756. This discrepancy does not necessarily indicate that conclusions on the identities of the floors are incorrect, rather it confirms that the fill within the fort is secondary deposit, sufficiently mixed with not only prehistoric remains, but historic ones as well. This is expected, especially considering that the fort was built on the same spot as earlier wooden forts, and that Spanish had occupied the St. Augustine area for more than one hundred years before construction of the Castillo had begun.

## Artifact Range and Variations

The dateable artifact assemblage from the Castillo de San Marcos consists mainly of ceramics, both prehistoric and historic, but also includes kaolin pipe fragments, glass, two coins, various nail types and a matchlock musket fragment. The datable ceramics represent a range from the Middle Woodland period (approximately 300 BC ) all the way up to modern times, with the most modern forms being recovered from the moat. The ceramics from within the moat are represented for the most part by seventeenth and eighteenth century colonial Spanish influence, intermixed with prehistoric types that were most likely the result of secondary deposition. Glass fragments consisting of vessel fragments and windowpane were tentatively dated on the basis of color. This
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is a flawed methodology considering the nature of glass manufacture (see Glass Artifacts, this section), but it is effective for identifying later historic glass types (i.e. colorless, etc.). The existence of late period glass was useful in identifying disturbed contexts. Due to the coastal, wet environment, the majority of the nails recovered were in poor, unidentifiable condition. The majority of those that sufficiently survived the elements were wrought, which would be expected from the early construction efforts at the fort. Both machine made wire nails (c1870 to modern times) and machine cut nails (in common use between 1790-1870) are also present in the assemblage. Like the late historic glass types, these nails served to identify disturbed proveniences or those associated with post-Spanish occupation of the fort. One Spanish half-real coin and the priming pan to a matchlock musket were recovered. Both of these artifacts are of early colonial Spanish origin.

A significant number of kaolin pipe fragments were recovered from the excavations, many of them in association with the Second Spanish Period burned floor. Pipe stems can be loosely dated based on their bore diameters, those pipe fragments which were recovered from undisturbed strata provided an additional resource for recovering dates for the historic floors.

## BUILDING MATERIALS

Building materials recovered during the excavations at the Castillo de San Marcos consisted of brick, coquina, tabby, mortar, concrete, wood, tar, and asphalt. All of these materials, other than the wood fragments, which contain the potential for radiocarbon dating, were analyzed and then discarded.

The fort is constructed of cut coquina stone originating on nearby Anastasia Island. It would thereby be expected that a great deal of coquina would be encountered during the excavations. This was of course, the case, and a total of 57 bags of coquina weighing $49,276.87$ grams were excavated from the two bastions and the moat. Coquina was present in nearly every provenience area, but was not always collected, particularly in areas where crushed coquina made up the matrix that was being excavated.

A total of 113 bags of brick, weighing 19,564.49 grams, were recovered from the excavations in the bastions and the moat. The majority of the brick was of the hand made variety, and most of it was discarded. However, seven lots of brick were cataloged because they were whole (five lots) or because they were glazed (two lots).

Tabby was also used in the construction of the fort. It is made of a shell and lime mixture laid down as a floor finish in the fort. Tabby is similar to the mortar used in construction but has a higher concentration of shell. A total of 19 bags of tabby fragments, weighing $8,058.43$ grams, were recovered during the excavations. All but one of these bags of tabby was discarded; one was cataloged so that it could be retained as a sample. Mortar used in the construction of the fort was also collected, identified and discarded. The database produced for this project lists 70 bags of mortar with a total weight of $2,782.22$ grams.

Some wood fragments were also recovered from 11 proveniences, all within EU 1. The total weight of wood fragments recovered from the southwest bastion was 74.78 grams. The low concentration of wood within the excavations is expected of a masonry fort, and the fragments recovered were likely deposited as trash rather than being a direct component of the fort's structure. However, it is possible that much of the charcoal in the burned level on the Second Period Spanish floor was actually the original planking that made up the terreplein floor before the construction of the bomb-proof casemates. Other modern building materials such as concrete (ten bags, 1160.6 grams), asphalt (seven bags, 50.19 grams) and tar fragments ( 22 bags, 175.24
(an
grams) were also recovered during the excavations. All of these items were identified and discarded.

## GLASS ARTIFACTS

For the most part, glass artifacts from the excavations at the Castillo took the form of vessel fragments, but there was also windowpane, one glass bead, and a fragment of a modern glass tube recovered from the moat.

Glass vessel fragments were sorted by color, as none of them were large enough to be assigned to categories based upon form and function. Glass color is most often related to the presence of impurities in the form of metal oxides, usually iron, in the sand used to produce the glass. Before the last quarter of the nineteenth century there were few means for a glassmaker to control the impurities in a glass batch, and hence the metals present in the sand often dictated the color of the glass produced. Because of this, dating glass based solely upon color is difficult, as many colors could have been produced accidentally or purposefully at various times in the past (Jones and Sullivan 1985). There are some temporal markers for methods used to control the color of glass, and of specific importance to this project are those producing amber glass and colorless glass. Amber glass made its first regular appearance in the beer industry after the Civil War and is produced when a high iron content is present and the glass is melted in an oxidizing environment (Jones and Sullivan 1985). Most amber glass dates to after the Civil War, however, the color was infrequently produced earlier. Colorless glass has been a goal of glassmakers since the early days of the trade but is difficult to achieve because it requires the absence of metal impurities in the sand used in production. For the most part, the manufacture of colorless glass was not perfected until the late nineteenth century. Therefore, the few colorless glass fragments excavated likely date to after this period. The majority of the glass fragments recovered from within the bastions were various shades of green glass that could have been produced at any time. However, the condition and manufacture of the green glass recovered from the fort (heavily patinated and blown) is generally accepted as ranging from the fifteenth to the eighteenth century.

In the moat outside of the fort there was a wider range of glass types. Colors ranged from colorless through various shades of blue and green to light and dark amber. The majority of the glass vessel fragments found in the moat were manufactured by modern machine molding techniques, but there was also some of the old, blown green glass that was prevalent within the walls of the bastion. In total, 597 glass vessel fragments, weighing 1407.48 grams, were recovered during the excavations in 1997, 1998 and 2000. For a detailed breakdown of the glass artifacts recovered (Table 1).

Three different colors of windowpane were recovered from the excavations within the two bastions of the fort: colorless, light green, and light blue-green. However, only one small piece of each was collected. More was recovered during the moat excavations, a total of 52 fragments, all of which were light blue-green in color, and all came from EU 4. In total, 55 windowpane fragments were recovered from the moat weighing a total of 41.85 grams (Table 1).
Table 1. Glass Artifacts Recovered During archeological Testing.

## Ceramics

Ceramic artifacts recovered during the excavations at the Castillo were identified by ware types whenever possible. These types included coarse, tin enameled wares such as Spanish Majolica, French faience and English delftware as well as a number of untyped tin enameled ceramic sherds. Other historic, coarse earthenwares recovered include redware and a few Spanish types,

the majority of which was olive jar. A few fragments of refined earthenware were also recovered, mainly from the excavations in the moat, including creamware, pearlware, whiteware, yellow ware and ironstone. One semivitreous ceramic sherd was recovered from EU 1.

Although an impressive collection of European style ceramics was amassed, the majority of the ceramics recovered were Native American in origin. The Native American pottery types represented in the collection include colonoware and other historic period ceramics such as San Marcos and San Pedro Wares as well as Woodland and Mississippian ceramics such as Saint John's Ware, Fort Walton Incised, and Deptford and Wakulla Check-stamped varieties. These aboriginal ceramic types represent the Native American occupation of the St. Augustine area both before and after the Spanish occupation.

## Majolica

Majolica is a category of Hispanic made wares that are wheel-thrown, soft earthenware, which are distinguished by the presence of a thick vitreous glaze made opaque by the presence of tin oxide. As a ceramic style majolica evolved over several hundred years in Spain after being introduced by the Moors in the thirteenth century. Many of the majolica styles that can be found in the New World were also influenced by the Italian Renaissance during the sixteenth century. Majolica is similar to other tin enameled wares such as French faience and English and Dutch delftware, but is of Spanish production (Deagan 1987:53-54).

During the excavations at the Castillo, nine different types of identifiable majolica were recovered. These types included Caparra Blue, Yayal Blue on White, San Luis Blue on White, Aucilla Polychrome, Puebla Polychrome, San Luis Polychrome, Abo Polychrome, San Augustin Blue on White, and Puebla Blue on White (Figure 16). The majority of these majolica types originated in Mexico at the major centers of Mexico City and Puebla during the seventeenth and eighteenth centuries. However, two of the types, Caparra Blue and Yayal Blue on White were produced in Spain and could potentially be older than the fort they were recovered from. For a complete breakdown of the origins and date ranges of the majolica ceramics recovered during the excavations see Table 2.

Table 2. Majolica Ceramic Types Recovered During Archeological Testing.
Figure 16. Majolica ceramics recovered during the 1997 and 1998 excavations. a) Caparra Blue, b) Yayal Blue on White, c) San Luis Blue on White, d) Abo Polychrome, e) Aucilla Polychrome, f) Puebla Polychrome, g) San Luis Polychrome, h) Puebla Blue on White, i) Puebla Blue on White.

## Non-Hispanic Tin Enameled Wares

English delftware and French faience were also recovered from the excavations at the Castillo de San Marcos. Both of these early colonial period ceramic types are related to Spanish majolica in that they are soft, wheel-thrown earthenwares coated with a lead glaze to which tin oxide is added, thus producing a thick opaque white glaze (Hume 1969:106;140). Neither the faience nor the delftware recovered are identifiable as to a specific type, therefore the date ranges available on them are of little help in adding to the understanding of the history of the Castillo. However, it is likely that the English made use of their own ceramics during their brief but significant occupation of the fort between 1762 and 1784. Also, trade for English wares at St. Augustine in the early 1700s would have been neither illegal (Deagan 1987:184) nor surprising given the proximity of English settlements to the north. It may in fact have been preferable to waiting for
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subsides from the rest of New Spain. The faience and delftware ceramics are summarized in Table 3 and can be examined in Figure 17.

Table 3. Non-Majolica Historic Ceramics.

Figure 17. Non-Hispanic tin enameled wares recovered during the 1997 and 1998 excavations. Letters a-e) English delftware, f) French faience.

## Historic Earthenwares

Of all the historic ceramics collected during the 1997, 1998 and 2000 excavations, Spanish olive jar was the most abundant. Olive jar is a crudely manufactured, coarse, wheel-thrown earthenware most often appearing without any type of surface treatment (Figure 18). It was intended for use primarily as a storage and transport vessel, taking on much of the duties of wooden barrels that were utilized throughout Northern Europe (Deagan 1987:31). Upon reaching their intended destinations, it is likely that olive jar vessels continued to be used for storage, but evidence also exists for their use as a building component (Deagan 1987:32). A number of the olive jar sherds in this collection are mortar covered, suggesting that they too were used as a building material, which may explain their abundance within the bastion floors.

Figure 18. Some Olive Jar sherds from the 1997 and 1998 excavations. a) green glazed, b) white slip, c) without surface treatment (4).

Three additional Spanish ceramic types were recovered from the excavations within the southwest bastion: El Morro Ware, Green Bacin and Guadalajara Polychrome. All of these are coarse, wheel-thrown ceramics to which a lead glaze is applied. Of these three types, Green Bacin is the earliest, and is most likely of European production (Deagan 1987:41). Guadalajara Polychrome is a decorated variety similar to Aztec wares from central Mexico and in fact continues to be made in that region (Deagan 1987:41). El Morro Ware is a simple glazed earthenware of an undetermined New World origin, most likely Puebla or Puerto Rico (Degan 1987:51) (Table 3 and Figure 19).

Figure 19. Spanish lead glazed earthenwares. a and b) Guadalajara Polychrome, cand d) El Morro Ware, e) Green Bacin.

Refined earthenwares were recovered from the moat excavations that took place in 2000. These ceramics represent a significantly later occupation than those recovered from various constructions levels within the fort's bastions. They consisted of at least one sherd each of creamware, pearlware, whiteware and ironstone, all of which are refined, white-bodied, molded earthenwares. Creamware was first produced in the early 1760s by Josiah Wedgwood as English competition to stonewares and Chinese porcelains. The fragment of creamware recovered from the Castillo's moat was a light yellow color, suggesting that it was a late version of the type, most likely from the early nineteenth century (Hume 1969:124-126). Pearlware was produced as a closer approximation to Chinese export porcelain in the late eighteenth and early nineteenth centuries. It is identifiable by a blue tint in its glaze resulting from an increased flint content in its paste and a small amount of cobalt in its lead glaze (Miller 1992). Whiteware was an improvement of pearlware and replaced it by 1830 ; it is a purer white color as a result of a reduction of the cobalt used in the glaze (Hume 1969:130). Ironstone represents a similar time frame to whiteware (both continue to be manufactured today). It is a higher-fired refined
earthenware resulting in a harder product. Although it is possible that some of these ceramics are recent additions to the moat, it is likely that these artifacts are representative of the time period of American occupation and use of the fort after the Second Spanish Period. This period, as well as earlier ones, was sparsely represented in the moat excavations due to the moat clean-out that took place in the 1930s. A summary of the refined earthenwares can be referred to in Table 3.

## Native American Ceramics

The vast majority of the ceramics encountered in the 1997 and 1998 excavations at the Castillo de San Marcos were of Native American manufacture. The sheer volume of these ceramics suggests both that the Spanish soldiers garrisoned at the fort were making use of Native ceramic wares and that much of the fill used in the construction of the bastions was taken from prehistoric midden areas. Six different basic indigenous ceramic types were recovered during the excavations including the prehistoric types (Figure 20) Deptford Check-stamped, Fort Walton Incised, Wakulla Check-stamped and Saint Johns Ware (Figure 21), as well as the historic period San Pedro and San Marcos Wares. Of these six types the Saint Johns, San Marcos, and San Pedro Wares were all broken down further into categories based upon their decoration techniques (Table 4).

Of the prehistoric ceramics recovered, both Deptford Check-stamped and the Saint John's Wares are considered local types in the St. Augustine area. The Fort Walton Incised and Wakulla Checkstamped varieties, on the other hand, are considered to be from the Florida Gulf Coast area (Williams and Thompson 1999). However, previous archeological work around the St. Augustine area has demonstrated a significant occupation in prehistoric times, so trade and other contact could have easily brought ideas and pottery from a region as close as Western Florida. The Saint John's varieties were the predominate prehistoric ceramic types uncovered during the excavations within the fort (Table 4). It was the prominent utilitarian ceramic type in the St. Augustine area before and during the arrival of the Spanish. Therefore, when Native American middens were quarried by fort laborers looking for construction fill, the Saint John's ceramics made their way into the fort's walls.

Figure 20. Prehistoric ceramics recovered during the 1997 and 1998 excavations. a through c) Deptford Check-stamped, d) Wakulla Check-stamped, e and f) Fort Walton Incised.

Figure 21. Examples of Saint John's Ware ceramics recovered during the fort excavations. a through c) Plain (no surface treatment), d through f) Check-stamped, $g$ through i) Incised.

Of all the Native American ceramics recovered during the excavations, the most frequently occurring type was San Marcos Ware (Figure 22). This historic type from the St. Augustine region was originally named by Hale Smith for the Castillo de San Marcos (Williams and Thompson 1999). The numbers and volume of San Marcos ceramics collected, as well as the amounts of them which were collected from occupational levels, suggest a function beyond accidental inclusion in construction fill. Rather, it would appear that the Spanish troops were using Native ceramics, particularly San Marcos types, for cooking and food storage. This conclusion is further supported by the comparatively low quantity of Spanish wares in the fort. The economic situation of St. Augustine as a settlement relying on the infrequent charity of the richer New Spain colonies necessitated the adaptations such as the use of cheap, local commodities.

Figure 22. Examples of San Marcos Ware ceramics recovered during the excavations. a) Plain, b) Red Filmed, c) Check-stamped, d) Simple Stamped, e) Complicated Stamped.

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Table 4. Native American Ceramics.


#### Abstract

ARMAMENTS The Castillo de San Marcos was a military structure and accordingly, a number of artifacts relating to firearms and other armaments were recovered during the excavations. Table 5 gives a summary of the items recovered, some of which are displayed in Figures 23, 24, 25 and 26. Of all of these artifacts, two are loosely datable, the Miquelet cock and the matchlock priming pan. The matchlock was the first firearm that made use of a mechanical ignition system, or lock. The matchlock mechanism consisted of a simple firing system with only two moving parts that would bring a burning matchcord into contact with gunpowder in the priming pan of the weapon. The matchlock was probably invented in Germany ca. 1440-1470 and existed as the firing mechanism of choice, particularly of the Spanish, for nearly three centuries (Brown 1980:25-26). The Miquelet is representative of the next stage in the development of firearms: it is the quintessential Spanish flintlock. It can be identified by the construction of the cock mechanism alone, it was used by the Spanish in the seventeenth and eighteenth centuries (Lavin 1965). The size of the Miquelet cock recovered during the excavations in EU 1 suggests it was from a pistol.


Figure 23. Military artifacts: gun parts and artillery fuse. a) trigger, b) jaw screw, c) matchlock firing pan, d) Miquelet flintlock cock, e) brass bullet puller, fi) brass sight, g) brass barrel band, h) barrel fragment, i) artillery fuse.

Figure 24. Gunflints recovered during the excavations at the Castillo de San Marcos.
Figure 25. Musket balls recovered during excavations at the fort. a and b) . 64 caliber, c) .60 caliber, $d$ and e) fired, indeterminate caliber.

Figure 26. Arrow points: two historic iron points and an Archaic Period Levy point.
Table 5. Military Artifacts.

## Other Metal Artifacts

Additional metal artifacts including building materials such as nails, spikes, various bolts, and hinges as well as unidentifiable metal fragments, slag and concretions are summarized in Table 6.

Table 6. Miscellaneous Metal Artifacts Recovered During Excavations.

## Personal Items

A number of personal artifacts were recovered during the excavations within the fort bastions. These items included one glass bead, a half-real coin (Figure 27), two brass straight pins, one brass and one bone button, a copper rivet, and a bone pin. Also recovered was one ground stone marble, one pipe clay marble and two Native American gaming pieces (Figure 28) that may have been utilized by the soldiers or Indian laborers. In general, personal artifacts were quite infrequent considering that troops were garrisoned at the fort for extended periods and the fort was occupied for a number of centuries. However, the excavations took place on the terreplein of the fort, not in living quarters where these types of artifacts would be expected to be more common.
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Figure 27. Spanish half real coin.

Figure 28. Native American gaming pieces or discoidals.

## Pipes

The most abundant personal artifact recovered from the excavations in the two bastions and the moat were the remains of tobacco pipes (Figures 29 and 30). The majority of these were historic, molded kaolin pipe fragments. A total of 94 were collected. However, six Native American soapstone pipe fragments and one Indigenous clay pipe bowl were also recovered. A number of the kaolin pipe fragments have identifiable decorations and maker's marks on them and at the time of this publication one pipe stem has been traced to its origin of Glasgow, Scotland sometime between 1805 and 1884. However, this pipe was found in the moat excavations and is therefore of questionable provenience. Lewis Binford produced a regression formula for determining the date of a collection of pipe stems based upon a chart created by J.C. Harrington which shows the gradual decrease in pipe stem diameter between 1620 and 1800 (Hume 1969:299). The formula is $\mathrm{Y}=1931.85-38.26(\mathrm{X})$, where $\mathrm{Y}=$ the mean date of the collection, 1931.85 is the theoretical date in which pipe stem diameters would disappear, 38.26 is the number of years required for the decrease of one $64^{\text {th }}$ of an inch in pipe stem diameter, and $X=$ the mean hole diameter of the collection. The variable X is calculated by determining the pipe stem diameters of each stem in the collection and dividing the total number of $64^{\text {ths }}$ of an inch by the total number of stems. Using this formula a mean date of 1745.08 was obtained for the entire collection and 1741.21 for the pipe stems recovered from EU 1 only (Appendix 2).

Figure 29. Kaolin pipe fragments.
Figure 30. Native American soapstone pipe fragments.

## Faunal Remains

The faunal remains excavated from within the bastions of the Castillo comprised a wide variety of food sources, the majority of which were mammals, although fish, shellfish, birds and turtles also made up a portion of the subsistence sources. St. Augustine and the Castillo itself are located in both a coastal and a riverine environment with nearby forested areas. There were diverse habitats available for exploit, and the faunal collection recovered from the fort shows that all of these areas were indeed utilized. Also, there was a considerable dependence on domesticated animals, as a large amount of bovine, pig and to a lesser extent, chicken remains were uncovered. All of the faunal material collected was identified through the use of comparative analysis using whole samples of species. Invertebrate faunal remains are summarized in Table 7, vertebrates in Table 8.

## Shell

A great number of shell fragments were excavated in 1997 and 1998 from within the Castillo, as would be expected due to its proximity to the sea and access to this important food resource. The vast majority of the food shell remains that were recovered were Eastern Oyster (Crassostrea virginica). This species has a large range spanning the entire eastern and gulf coastlines of the United States and into the West Indies (Wernert 1982:255). A total of 42.77 kilograms of fragmented oyster shells were recovered within the fort. These shell remains tell two different archeological stories, they are food remains, but they are for the most part prehistoric food remains that were brought into the historic fort as fill from Indigenous middens, in the same
(
manner that the prehistoric ceramic types arrived. The second most common shell encountered was the Northern Quahog Clam (Mercenaria mercenaria). This species of hard shelled clam has a habitat range similar to the Eastern Oyster (Wernert 1982:258) and most likely made their way into the fort through secondary deposition the same way the oysters did. A variety of local species of whelks made up the third largest category of food shells recovered from the fort. The majority of these remains were probably also brought into the fort with the construction fill. Other unidentified shell fragments were recovered during the excavations as well, and data on all of these remains are summarized in Table 7.

## Table 7. Invertebrate Faunal Remains.

## Vertebrates

## Mammalia

Based upon the number of bones recovered, mammal resources were the most abundant food source found within the fort. Evidence exists for the use of both domesticated species such as pigs, horses and cattle, as well as wild species such as deer, raccoon, bear, and opossum. Unidentifiable mammal remains made up the largest category of food remains aside from oyster shells, which leave behind heavy shells but represent small biomass. The existence of domesticated species in the collection shows that at least a portion of the faunal remains represent use in historic times by residents of the fort, hence, not all of the of the faunal remains recovered are the result of secondary deposition. For a summary of the mammal bones recovered see Table 8.

## Osteichthyes and Chondrichthyes

Fish resources are also well represented in the Castillo collection. Like the shellfish, fish bones are expected in a site so close to a marine environment. The most common identified fish remains belonged to mullet (Mugilidae), an inshore species. Other pelagic fish represented included sea catfish (Ariidae), jacks (Carangidae), drums (Sciaenidae), rays (Rajiformes) and flounder (Bothidae). There was also a large amount of unidentified bony and cartilaginous fish remains recovered. For a summary of the fish bones see Table 8.

## Testudines

Both sea (Cheloniidae) and land turtles (Diamondback Terrapin) were represented in the faunal sample from the Castillo. These species, along with the unidentified Testudines fragments recovered, made turtles the third largest group of vertebrates represented in the faunal collection. See Table 8 for a summary of the turtle bones.

## Aves

A small number of bird remains were recovered during the excavations at the fort, making it the smallest percentage of vertebrates represented. The majority of these faunal remains remain unidentified, but representatives of the duck family (Anatidae) and a number of specimens of chicken (Gallus gallus) were identified. Beyond the duck and chicken remains, 62 fragments of unidentified Aves bones were recovered. See Table 8 for a summary of the bird bones recovered.

Table 8. Vertebrate Faunal Remains.

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## Biomass

The study of faunal remains can provide an archeologist with insight into the types of animals used for subsistence. This kind of information is important in the reconstruction of daily lifeways and economic systems in the past. It is not only important to identify the types of animals used as food resources but also to determine how much a species can contribute to the diet of the people studied. This is done by calculating the biomass, or the amount of useable meat, each type of animal contributed to the diet of the archeological culture. The biomass can be represented as a percentage of the meat consumed for each type of animal studied. It can be calculated with an algorithm that varies based on the class of animal studied. Reitz and Scarry described this method in 1985 and the values used in the calculations were obtained from their work (Reitz and Scarry 1985:67). The calculations for the vertebrate faunal remains from this project at the Castillo de San Marcos revealed the following percentages: mammals $87.89 \%$, bony fish $10.33 \%$, cartilaginous fish $.9 \%$, turtle $.9 \%$, and birds $.88 \%$ (Appendix 3). Mammals represented the majority of vertebrates used as food, with surprising little use of fish considering the proximity to ocean resources. Furthermore, domesticated animals represented only $15.18 \%$ of the sample, possibly suggesting a considerable reliance on wild food sources (although a great deal of the unidentified mammal bones are likely from domesticated species). However, all of these numbers should be regarded with skepticism considering the nature of the deposits within the bastion's construction levels. It has already been determined that much of the fill within the bastion walls originated from old Native American middens, therefore, these percentages are based upon a mix of faunal remains from two contexts, the prehistoric midden remains and the primary deposits laid down during occupation of the fort. Also, there appears to have been a heavy reliance on shellfish, which are not represented in these calculations.

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## CHAPTER 5. SUMMARY AND RECOMMENDATIONS

The Castillo de San Marcos National Historic Monument intends to proceed with a stabilization project to arrest cracking in the walls of the fort. Monitoring of crack movement and moisture levels within the bastions of the fort has been going on since 1993, but in order to fully access the nature of the damage to the fort it was determined necessary to remove some of the soils from the northwest and southwest bastions. As the nature of this project comprised a considerable threat to archeological resources, and the removal of the soils offered the opportunity to document the archeological significance of the bastion fill, it was decided that the soils would be removed by way of controlled archeological testing.

Archeological testing at CASA took place over three field seasons: 1997, 1998 and 2000. The excavations in 1997 and 1998 were concerned with materials and soils removed from within the bastion walls and the excavations in 2000 were designed to examine materials and conditions outside of and beneath the fort, in the Castillo's moat. In total, five excavation units were dug: three 5 by 5 foot square units were dug in the fort's moat, and two large (approximately 15 by 15 by 15 feet) triangular units were placed, one each in the apexes of the northwest and southwest bastions. In addition to these excavation units, eight core tests were placed on the two bastions in an attempt to recover information on the stratigraphy of the bastion fill. These cores were driven to a depth of approximately 12 feet in the southwest bastion and recovered information on changes in the makeup of the bastion fill and locations of historic floors. In the northwest bastion, three of the four core tests were stopped short at approximately 6 feet deep, suggesting contact with an intact historic floor. Eight additional core tests placed in the moat recovered information on the depth of the water table below the ground surface, as well as information on episodes during which the moat was cleaned out. Also, a core test was placed in the bottom of each of the two excavation units in the bastions. The core test in EU 1 in the southwest bastion was used to extend the depth of recovery in that unit to a depth that would not have been safe to dig to in levels. The core test in EU 2 was used to determine if it was safe to proceed with digging after collapses in the floor had exposed voids in the bastion fill.

Excavations in the moat were considerably less productive than those that took place within the fort. This was because the moat was cleaned out in the 1930s and probably at various times before that in the past. The testing did, however, give visual access to the base of the fort's foundation providing information of concern to the proposed stabilization project. Specifically, that the coquina block walls were laid directly on the sand beneath the fort, and there is considerable water movement around the base of the fort's foundation.

Excavations in EU 2 in the northwest bastion of the Castillo provided information on a time period not generally included in the interpretation of the fort, the Civil War. For the most part the soils within the northwest bastion were found to be heavily disturbed, both through construction and stabilization efforts undertaken by the Park Service and through considerable soil movement and loss due to erosion through the cracks in the bastion wall. This erosion resulted in large voids in the bastion fill that eventually posed a safety concern that ended excavation of EU 2 prematurely. The most significant feature uncovered in EU 2 were the remains of a brick floor that was installed before the Civil War to support a large swivel gun. Installation of the gun necessitated the removal of the guard tower at the apex of the bastion. The intact portion of this floor was located approximately 20 inches below the modern surface of the terreplein, but soil movement moved portions of it as deep as 67 inches below the surface.



Due to disturbances in the northwest bastion and the moat, the main focus of this report has been the information recovered from EU 1 in the southwest bastion of the Castillo. Excavations in EU 1 reached a total depth of 26 feet below the modern surface of the terreplein and recovered over 220 kilograms of cataloged artifacts. During the course of the excavations in this unit the remains of 12 historic floors were uncovered and physical evidence of both of the major construction periods at the fort, as well as several minor ones, was identified.

Beginning with the lowest-and earliest—levels of the excavation, four consecutive floors made of thin applications of coquina rubble and tabby were uncovered. The nature of the construction of these floors, their depth within the bastion fill ( $100,135,147$, and 159 inches below the modern surface respectively), their thinness (only one or two inches) and their lack of features, such as firing steps, suggests that these floors were surfaces used during the construction of the fort's walls. These floors would have been temporary working surfaces that were covered with tabby to waterproof and stabilize them. The walls of the bastion would have been built to a certain height and then filled with local soils after which another working platform would be covered with tabby and coquina rubble. These floors represent evidence of four of these occurrences during the original construction of the southwest bastion.

Moving up through the bastion fill, the excavations uncovered the remains of the original terreplein surface of the Castillo. This floor was determined to be the original surface by its general mass, as well as by the existence of a firing step. The excavation of this floor determined that it had been improved, repaired or rebuilt three times because three distinct construction levels were visible in the profile of the unit. They were separated by a thin layer of fill and each of them incorporated the firing step. This series of floors was located between 71 and 85 inches below the modern surface of the terreplein.

Above the three floors that represented the use and repair of the fort after the completion of its original construction, was a thick layer of fairly consistent brown fill. This fill was laid down during the remodeling of the fort that took place between 1736 and 1756. Above it, the excavations uncovered the Spanish floor that represented the terreplein surface after the remodeling. This floor series contained a firing step and was made up of two coquina rubble floors sandwiching a thick layer of charcoal and soot heavily laden with artifacts. The two floors and burn layer were located between 31 and 47 inches below the modern surface. Apparently, at some point after the completion of the mid eighteenth century remodeling, the surface of the southwest bastion was used for burning trash. This burn midden was substantial and made up a foot of deposit in some areas of the excavation unit. Eventually, the burn area was paved over with a new coquina rubble floor.

Above the remodeled terreplein surface incorporating the burn zone, the bastion fill became increasingly disturbed by more recent construction activities and previous archeological investigations. At approximately 10 inches below the modern surface, the remains of a fragmentary level of coquina rubble was encountered. This possible floor did not cover the entire unit, but probably represented a floor that had been mostly obliterated by construction and stabilization activities of the terreplein. Based upon its position in the profile of the unit, this floor probably corresponds with the early occupation of the fort by Americans. Above this floor fragment lie two additional floors associated with recent activities on the terreplein. They are located directly below the modern surface.

The material culture recovered from these excavations represented a wide range of time periods. In fact, for the most part, every level of the excavations contained artifacts ranging from prehistoric times to the eighteenth century. None of the floors uncovered during the excavations

could be conclusively dated through the examination of artifacts, but were rather identified through historical knowledge of the construction periods at the fort. Initially, the jumble of artifacts recovered from the excavation created a confusing situation not clarified until the nature of the construction of the fort, and the site upon which it was built, was considered.

St. Augustine was a long-lived site. Native Americans had been living in the area for centuries before the arrival of the Spanish, and the Spanish had been there for over 100 years before construction on the coquina block fort began. Throughout this time refuse middens accumulated on the site. It was soils taken from these refuse piles that were used in the construction of the bastions. The result of this activity was that the artifacts recovered from each level of bastion fill represented a wide range of dates, the majority of which were much earlier than the actual construction of the fort. When only considering the Spanish ceramics, the sample recovered was sufficient to display a progression through time between the construction periods of the fort. However, these dates were consistently younger than they should be when considering knowledge of the dates of floor construction. It is possible that additional excavations in the bastions would deliver more artifacts, which could tighten the date ranges for each of the construction levels, but there is no reason to believe that any additional locales within the bastions would contain more ideal conditions for obtaining dates.

The difficulty in obtaining dates based upon material culture for the floors within the bastion was exacerbated by two facts. First, only 42 years separated the time when the original fort was completed and remodeling began-not an incredibly long period of time within the archeological record. The second problem is related to St. Augustine's economic situation within the Spanish Empire. The St. Augustine settlement was not a moneymaking colony and relied upon subsidies from the rest of New Spain. These subsidies rarely arrived and St. Augustine was left in a perpetual state of poverty. For this reason it is likely that styles in St. Augustine did not change as rapidly as in the rest of New Spain.

Unreliable subsidies to the colony pushed St. Augustine to solve their supply problems on their own. Like many Europeans at New World sites that were beyond a reliable trade route, St. Augustine turned to native goods to fulfill their needs. Evidence of this was apparent in the one area of excavations that can be considered undisturbed: the burn midden on the Second Period Spanish floor in EU 1. This zone represents the burning of trash produced by the fort after the completion of the remodeling between 1750 and 1756. The artifacts recovered from it are not from a mixture of origins and periods like those from the fill areas. Trash burning on the bastion was a part of actual fort occupation and when burning was ceased the burn midden was paved over with a coquina rubble floor, protecting it from contamination by later filling episodes above it. Artifacts recovered from this zone include objects expected from a military installation such as gunflints, a musket ball and a bullet puller, as well as gun parts including a barrel fragment, a trigger, a jaw screw, a sight, a matchlock priming pan and a Miquelet pistol cock. Both the matchlock and the Miquelet can be considered Spanish and probably dated to the Second Spanish Period. Other artifacts from the burn midden are representative of domestic life within the fort. They include a large amount of food remains in the form of bone and shell, a grinding stone, a button, an iron pot fragment and a large number of ceramic vessel fragments. Of the ceramics recovered, only 46 were of European design, (mostly Majolicas of various dates) while 495 were Native American colonowares ( 493 were San Marcos wares and two remain unidentified). The provenience of these artifacts undeniably represents Spanish use of, and in fact dependence upon, Native ceramics, because Spanish soldiers were garrisoned within the fort, not Indians.

A wealth of information was gathered on the history and construction of the Castillo de San Marcos as a result of the excavations in 1997, 1998 and 2000. Numerous artifact types were
(aneren
collected, many in an excellent state of preservation. The excavation units in the bastions showed great potential for the interpretation of construction periods and the lifeways of both the soldiers garrisoned at the fort and general life in colonial St. Augustine. The condition of the bastion fill, particularly of the southwest bastion, is of adequate preservation to examine detailed information on most of the construction history of the fort. To date, plans exist to repair the bastion cracks by patching them with a porous compound and to remove the modern surface of the terreplein and replace it with a new weatherproof surface. There are no plans to further disturb any of the bastion fill. Hopefully, the proposed stabilization efforts will arrest further damage to the fort, but if at a future date more invasive stabilization techniques or fill disturbance for other reasons are deemed necessary, archeological data collection is recommended as mitigation to preserve information from this significant resource.

## APPENDIX 1

Mean Ceramic Dates
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| Mean Ceramic Dates |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ceramic Type | Median Date | Weight |  | Mean | Count |  | Mean |
| Entire Assemblage |  |  |  |  |  |  |  |
| Untyped Majolica | 1707.5 | 87.55 | 149491.6 |  | 61 | 104157.5 |  |
| Aucilla Polychrome | 1675 | 4.8 | 8040.0 |  | 2 | 3350.0 |  |
| San Luis Polychrome | 1700 | 53.98 | 91766.0 |  | 13 | 22100.0 |  |
| San Luis Blue on White | 1615 | 29.91 | 48304.7 |  | 4 | 6460.0 |  |
| San Augustine Blue on White | 1715 | 128.6 | 220549.0 |  | 2 | 3430.0 |  |
| Puebla Polychrome | 1687.5 | 30.98 | 52278.8 |  | 20 | 33750.0 |  |
| Puebla Blue on White | 1752.5 | 19.88 | 34839.7 |  | 15 | 26287.5 |  |
| Yayalblue on white | 1592.5 | 36.3 | 57807.8 |  | 1 | 1592.5 |  |
| Caparra Blue | 1582.5 | 18.36 | 29054.7 |  | 1 | 1582.5 |  |
| ABO Polychrome | 1700 | 19.6 | 33320.0 |  | 3 | 5100.0 |  |
| El Morro Ware | 1667.5 | 12.2 | 20343.5 |  | 3 | 5002.5 |  |
| Green Bacin | 1582.5 | 16.55 | 26190.4 |  | 1 | 1582.5 |  |
| Semivitreous Ware | 1907 | 3.52 | 6712.6 |  | 1 | 1907.0 |  |
| American Slipware | 1750 | 1 | 1750.0 |  | 2 | 3500.0 |  |
| Delft | 1734.5 | 21.86 | 37916.2 |  | 5 | 8672.5 |  |
| Faience | 1682.5 | 5.66 | 9523.0 | Mean Date | 1 | 1682.5 | Mean Date |
| sums |  | 490.75 | 827887.8 | 1687 | 135 | 230157.0 | 1705 |
|  |  |  |  |  |  |  |  |
| Above the Second Period Floor |  |  |  |  |  |  |  |
| San Augustine Blue on White | 1715 | NA |  |  | 1 | 1715.0 |  |
| Puebla Blue on White | 1752.5 | 2.6 | 4556.5 |  | 1 | 1752.5 |  |
| Untyped Majolica | 1707.5 | 1 | 1707.5 |  | 2 | 3415.0 |  |
| Delft | 1734.5 | 2.1 | 3642.5 | Mean Date | 2 | 3469.0 | Mean Date |
| sums |  | 5.7 | 9906.5 | 1738 | 6 | 10351.5 | 1725 |
|  |  |  |  |  |  |  |  |
| Zone A, Above Burned Floor |  |  |  |  |  |  |  |
| Untyped Majolica | 1707.5 | 1.11 | 1895.3 | Mean Date | 2 | 3415.0 | Mean Date |
| sums |  | 1.11 | 1895.3 | 1708 | 2 | 3415.0 | 1708 |
|  |  |  |  |  |  |  |  |
| Zone B, Burned Floor |  |  |  |  |  |  |  |
| Abo Polychrome | 1700 | 18.24 | 31008.0 |  | 2 | 3400.0 |  |
| Delft | 1734.5 | 2.66 | 4613.8 |  | 1 | 1734.5 |  |
| El Morro Ware | 1667.5 | 12.12 | 20210.1 |  | 3 | 5002.5 |  |
| Majolica | 1707.5 | 0.93 | 1588.0 |  | 3 | 5122.5 |  |
| Puebla Blue On White | 1752.5 | 9 | 15772.5 |  | 8 | 14020.0 |  |
| Puebla Polychrome | 1687.5 | 2.26 | 3813.8 |  | 2 | 3375.0 |  |
| San Augustin Blue On White | 1715 | 2.9 | 4973.5 |  | 1 | 1715.0 |  |
| San Luis Blue on White | 1615 | 2.71 | 4376.7 |  | 1 | 1615.0 |  |
| San Luis Polychrome | 1700 | 8.29 | 14093.0 | Mean Date | 2 | 3400.0 | Mean Date |
| sums |  | 59.11 | 100449.2 | 1699 | 23 | 39384.5 | 1712 |
|  |  |  |  |  |  |  |  |
| Zone C, Below Burned Floor |  |  |  |  |  |  |  |
| San Luis Polychrome | 1700 | 3.7 | 6290.0 | Mean Date | 1 | 1700.0 | Mean Date |
| sums |  | 3.7 | 6290.0 | 1700 | 1 | 1700.0 | 1700 |
|  |  |  |  |  |  |  |  |
| Zone G, Construction Fill |  |  |  |  |  |  |  |
| Abo Polychrome | 1700 | 1.36 | 2312.0 |  | 1 | 1700.0 |  |
| Aucilla Polychrome | 1675 | 3.2 | 5360.0 |  | 1 | 1675.0 |  |
| Delft | 1734.5 | 17.1 | 29660.0 |  | 2 | 3469.0 |  |
| Caparra Blue | 1582.5 | 18.36 | 29054.7 |  | 1 | 1582.5 |  |
| Faience | 1682.5 | 5.66 | 9523.0 |  | 1 | 1682.5 |  |
| Majolica | 1707.5 | 54.42 | 92922.2 |  | 41 | 70007.5 |  |
| Puebla Polychrome | 1687.5 | 22.84 | 38542.5 |  | 13 | 21937.5 |  |


| Ceramic Type | Median Date | Weight |  | Mean | Count |  | Mean |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| San Luis Blue on White | 1615 | 27.2 | 43928.0 |  | 3 | 4845.0 |  |
| San Luis Polychrome | 1700 | 17.06 | 29002.0 |  | 5 | 8500.0 |  |
| Semivitreous | 1907 | 3.52 | 6712.6 | Mean Date | 1 | 1907.0 | Mean Date |
| sums |  | 170.72 | 287016.9 | 1681 | 69 | 117306.0 | 1700 |
|  |  |  |  |  |  |  |  |
| First Spanish Peroid Floor Series |  |  |  |  |  |  |  |
| American Slipware | 1750 | 1 | 1750.0 | Mean Date | 2 | 3500.0 | Mean Date |
| SUMIs |  | 1 | 1750.0 | 1750 | 2 | 3500.0 | 1750 |
|  |  |  |  |  |  |  |  |
| Below the First Period Floor Series |  |  |  |  |  |  |  |
| Yayal Blue On White | 1592.5 | 36.3 | 57807.8 |  | 1 | 1592.5 |  |
| Puebla Polychrome | 1687.5 | 1.58 | 2666.3 |  | 1 | 1687.5 |  |
| Majolica | 1707.5 | 0.3 | 512.3 |  | , | 1707.5 |  |
| Green Bacin | 1582.5 | 16.55 | 26190.4 | Mean Date | 1 | 1582.5 | Mean Date |
| sums |  | 54.73 | 87176.6 | 1593 | 4 | 6570.0 | 1643 |



## APPENDIX 2

Pipe Stem Bore Diameter Dating

|  | Pipe Stem Dating |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Entire Collection | Number of Fragments | Total 64ths | X | Y |  |
| Stem Diameter (inches) | 19 | 76 |  |  |  |
| $4 / 64$ | 49 | 245 |  |  |  |
| $5 / 64$ | 6 | 36 |  | Mean Date |  |
| $6 / 64$ | 2 | 14 |  | $\mathbf{1 7 4 5 . 0 8}$ |  |
| $7 / 64$ | 76 | 371 | 4.88 |  |  |
| Totals |  |  |  |  |  |
|  |  |  |  |  |  |
| EU 1 Only | 9 | 36 |  |  |  |
| $4 / 64$ | 42 | 210 |  | Mean Date |  |
| $5 / 64$ | 6 | 36 |  |  |  |
| $6 / 64$ | 1 | 7 |  |  |  |
| $7 / 64$ | 58 | 289 | 4.98 | $\mathbf{1 7 4 1 . 2 1}$ |  |

## APPENDIX 3

Vertebrate Biomass Table


| Vertebrate Biomass |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Species | Count | Count \% | Weight (g) | Weight \% | Biomass (g) | Biomass \% |
| Procyonidae | 1 | 0.01 | 0.03 | 0.00 | 1.12 | 0.00 |
| Ursidae | 1 | 0.01 | 8.43 | 0.15 | 179.16 | 0.30 |
| Cervidae | 4 | 0.04 | 9.18 | 0.16 | 193.45 | 0.32 |
| Didelphidae | 2 | 0.02 | 0.11 | 0.00 | 3.61 | 0.01 |
| Suidae | 45 | 0.45 | 154.39 | 2.77 | 2,453.34 | 4.06 |
| Bovidae | 37 | 0.37 | 816.50 | 14.64 | 10,984.00 | 18.17 |
| Mammalia | 1,498 | 15.01 | 3367.22 | 60.36 | 39,313.74 | 65.04 |
| Total Mammalia | 1,588 | 15.92 | 4355.86 | 78.08 | 53,128.41 | 87.89 |
| Anatidae | 4 | 0.04 | 2.83 | 0.05 | 52.62 | 0.09 |
| Meleagridinae | 6 | 0.06 | 5.20 | 0.09 | 91.53 | 0.15 |
| Aves | 62 | 0.62 | 25.29 | 0.45 | 386.09 | 0.64 |
| Total Aves | 72 | 0.72 | 33.32 | 0.60 | 530.23 | 0.88 |
| Cheloniidae | 1 | 0.01 | 3.97 | 0.07 | 79.65 | 0.13 |
| Emydidae | 1 | 0.01 | 1.06 | 0.02 | 32.88 | 0.05 |
| Testudines | 57 | 0.57 | 49.73 | 0.89 | 433.25 | 0.72 |
| Total Testudines | 59 | 0.59 | 54.76 | 0.98 | 545.78 | 0.90 |
| Ariidae | 53 | 0.53 | 21.42 | 0.38 | 353.15 | 0.58 |
| Bothidae | 13 | 0.13 | 2.34 | 0.04 | 58.76 | 0.10 |
| Carangidae | 8 | 0.08 | 12.48 | 0.22 | 228.00 | 0.38 |
| Mugilidae | 443 | 4.44 | 50.82 | 0.91 | 711.03 | 1.18 |
| Osteichthyes | 4,859 | 48.70 | 513.10 | 9.20 | 4,626.62 | 7.65 |
| Sciaenidae | 24 | 0.24 | 15.23 | 0.27 | 267.91 | 0.44 |
| Total Osteichthyes | 5,400 | 54.12 | 615.39 | 11.03 | 6,245.47 | 10.33 |
| Chondrichthyes | 5 | 0.05 | 3.77 | 0.07 | 394.14 | 0.65 |
| Lamniformes | 1 | 0.01 | 0.06 | 0.00 | 11.20 | 0.02 |
| Rajiformes | 3 | 0.03 | 1.11 | 0.02 | 137.71 | 0.23 |
| Total Chondrichthyes | 9 | 0.09 | 4.94 | 0.09 | 543.06 | 0.90 |
| Unidentified Vertebrata | 2,859 | 28.65 | 519.33 | 9.31 | N/A | N/A |
| Total UID Vertebrate Fauna | 2,859 | 28.65 | 519.33 | 9.31 | N/A | N/A |
| Vertebrate Fauna Totals | 9,978 | 100.00 | 5578.66 | 100.00 | 60,449.89 | 100.00 |



## APPENDIX 4

## CATALOG OF ARTIFACTS



| Catalog of Artifacts |  |  |
| :---: | :---: | :---: |
| Material | Cat. \# | Provenience |
| Clay. | DISC | EU01, LV01 |
| Wood. | CASA 004844 | EU01, LV01 |
| Asphalt. | DISC | EU01, LV01 |
| Tar. | DISC | EU01, LV01 |
| Cement. | DISC | EU01, LV01 |
| Mortar. | DISC | EU01, LV01 |
| Clay. | CASA 004849 | EU01, LV01 |
| Iron. | CASA 004850 | EU01, LV01 |
| Iron. | CASA 004851 | EU01, LV01 |
| Iron. | CASA 004852 | EU01, LV01 |
| Clay. | DISC | EU02, LV01 |
| Iron. | CASA 004856 | EU02, LV01 |
| Iron. | CASA 004857 | EU02, LV01 |
| Iron. | CASA 004858 | EU02, LV01 |
| Clay. | CASA 004859 | EU02, LV01 |
| Clay. | CASA 004860 | EU02, LV01 |
| Mortar. | DISC | EU02, LV01 |
| Asphalt. | DISC | EU02, LV01 |
| Chert. | CASA 004863 | EU02, LV01 |
| Glass. | CASA 004864 | EU02, LV01 |
| Clay. | CASA 004845 | EU02, LV01 |
| Bone. --Fauna Remains. | CASA 004866 | EU02, LV01 |
| Bone. --Fauna Remains. | CASA 004867 | EU02, LV01 |
| Glass. | CASA 004848 | EU02, LV01 |
| Asphalt. | DISC | EU01, LV02 |
| Mortar. | DISC | EU01, LV02 |
| Flora Remains. | CASA 004870 | EU01, LV02 |
| Iron. | CASA 004871 | EU01, LV02 |
| Brass. | CASA 004872 | EU01, LV02 |
| Glass. | CASA 004873 | EU01, LV02 |
| Chert. | CASA 004874 | EU01, LV02 |
| Kaolinite Clay. | CASA 004875 | EU01, LV02 |
| Clay. | CASA 004876 | EU01, LV02 |

 CASA 004889 CORE01 CASA 004890 CORE01 CASA 004891 CORE01 DISC CORE01 DISC CORE01 I0ヨYOD $668 \vdash 00$ VSVS CASA 004895 CORE01 CASA 004896 CORE01 I0ヨyOD L68ャ00 VSVD I0ヨษOつ $868+00 \mathrm{VSVO}$ I0ヨ\＆Oつ $668+00 \mathrm{VSVO}$ DISC CORE01
 I0ヨYOD 206t00 VSVD CASA 004903 CORE01 CASA 004904 CORE 01 CASA 004905 CORE 01 N
0
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 CASA 004908 CORE02 CASA 004909 CORE02 CASA 004910 CORE02
Material

Remains．－－Shell． Clay．
－－Fauna Remains． Bone． Clay．
Remains. Bone．－－Fauna Remains．
Bone．－－Fauna Remains． Bone．－－Fauna Remains．
 Bone．－－Fauna Remains． Clay． Mortar． Iron．
Iron．
Tar． Clay． Clay． U Coquina Bone．－－Fauna Remains．交 Slag．
Iron． Iron．

Flora Remains． 4．00009 San Marcos Complicated Stamped． 4．00010 Untyped，Native American． 4．00011 San Marcos Ware． 4.00012 Coquina fragment． 4．00013 Mugilidae． 4．00016 Vertebrata．

Provenience
Material
Tar.
Clay.
Clay.
Bone. --Fauna Remains.
Clay.
Clay.
Coquina.
Bone. --Fauna Remains.
Bone. --Fauna Remains.
Flora Remains.
Iron.
Clay.
Mortar.
Steel.
Wood.
Tar.
Tar. --Fiber.
Clay.
Slag.
Clay.
Clay.
Clay.
Bone. --Fauna Remains.
Clay.
Clay.
Coquina.
Bone. --Fauna Remains.
Bone. --Fauna Remains.
Bone. --Fauna Remains.
Bone. --Fauna Remains.
Clay.
Mortar.
Glass.
Glass.

| Lot Control Name | Material | Cat. \# | Provenience | Count | Weight |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 7.00005 Coquina fragment. | Coquina. | DISC | CORE04 |  | 512 |
| 7.00006 Metal fragment. | Iron. | CASA 004948 | CORE04 |  | 38.75 |
| 7.00007 Mammalia. | Bone. --Fauna Remains. | CASA 004965 | CORE04 | 7 | 6.89 |
| 7.00008 Wire. | Steel. | CASA 004950 | CORE04 | 1 | 0.7 |
| 7.00009 Nail. | Iron. | CASA 004951 | CORE04 | 11 | 35.18 |
| 7.00010 Screw. | Iron. | CASA 004952 | CORE04 | 1 | 4.2 |
| 7.00011 Spike. | Iron. | CASA 004953 | CORE04 | 1 | 37.5 |
| 7.00012 Saint Johns Check Stamped. | Clay. | CASA 004964 | CORE04 | 1 | 1.53 |
| 7.00013 Charcoal. | Flora Remains. | CASA 004846 | CORE04 |  | 0.22 |
| 7.00014 Asphalt fragment. | Asphalt. | DISC | CORE04 |  | 1.42 |
| 7.00015 Tar fragment. | Tar. | DISC | CORE04 | 8 | 4.8 |
| 7.00016 Tile, roof. | Clay. | CASA 004958 | CORE04 | 1 | 3.3 |
| 7.00017 Flake. | Chert. | CASA 004959 | CORE04 | 1 | 1.9 |
| 7.00018 Saint Johns Ware. | Clay. | CASA 004960 | CORE04 | 3 | 1.5 |
| 7.00019 San Marcos Complicated Stamped. | Clay. | CASA 004961 | CORE04 | 2 | 6.67 |
| 7.00020 San Marcos Ware. | Clay. | CASA 004962 | CORE04 | 5 | 2.11 |
| 8.00001 Nail. | Iron. | CASA 004967 | CORE05 | 1 | 14.6 |
| 8.00002 Metal fragment. | Iron. | CASA 004968 | CORE05 |  | 2.6 |
| 8.00003 Slag. | Slag. | CASA 004969 | CORE05 |  | 1.1 |
| 8.00004 Mortar. | Mortar. | DISC | CORE05 |  | 0.3 |
| 8.00005 Coquina fragment. | Coquina. | DISC | CORE05 |  | 530.39 |
| 8.00006 Brick. | Clay. | DISC | CORE05 |  | 87.11 |
| 8.00007 San Marcos Complicated Stamped. | Clay. | CASA 004973 | CORE05 | 2 | 19.7 |
| 8.00008 Vertebrata. | Bone. --Fauna Remains. | CASA 004977 | CORE05 | 9 | 0.21 |
| 8.00009 Saint Johns Ware. | Clay. | CASA 004975 | CORE05 | 2 | 3.13 |
| 8.00010 Osteichthyes. | Bone. --Fauna Remains. | CASA 004976 | CORE05 | 1 | 0.8 |
| 9.00001 Nail. | Iron. | CASA 004979 | CORE06 | 1 | 4.6 |
| 9.00002 Wire. | Steel. | CASA 004980 | CORE06 | 1 | 0.4 |
| 9.00003 Brick. | Clay. | DISC | CORE06 |  | 48.4 |
| 9.00004 Charcoal. | Flora Remains. | CASA 004982 | CORE06 |  | 0.7 |
| 9.00005 San Marcos Ware. | Clay. | CASA 004983 | CORE06 | 1 | 2.31 |
| 9.00006 Saint Johns Ware. | Clay. | CASA 004984 | CORE06 | 2 | 0.32 |
| 9.00007 Ariidae. | Bone. --Fauna Remains. | CASA 004985 | CORE06 | 1 | 0.49 |
| 9.00008 Mugilidae. | Bone. --Fauna Remains. | CASA 004986 | CORE06 | 2 | 0.32 |

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| Material | Cat. \# | Provenience |
| :---: | :---: | :---: |
| Bone. --Fauna Remains. | CASA 004987 | CORE06 |
| Bone. --Fauna Remains. | CASA 004988 | CORE06 |
| Bone. --Fauna Remains. | CASA 004989 | CORE06 |
| Coquina. | DISC | CORE06 |
| Clay. | CASA 004853 | CORE06 |
| Lead. | CASA 004991 | CORE07 |
| Iron. | CASA 004992 | CORE07 |
| Coquina. | DISC | CORE07 |
| Brass. | CASA 004994 | CORE07 |
| lron. | CASA 004995 | CORE07 |
| Glass. | CASA 004996 | CORE07 |
| Clay. | DISC | CORE07 |
| Clay. | CASA 004998 | CORE07 |
| Cement. | DISC | CORE07 |
| Mortar. | DISC | CORE07 |
| Tar. | DISC | CORE07 |
| Flora Remains. | CASA 005002 | CORE07 |
| Clay. | CASA 005003 | CORE07 |
| Clay. | CASA 005004 | CORE07 |
| Clay. | CASA 005005 | CORE07 |
| Clay. | CASA 005006 | CORE07 |
| Bone, --Fauna Remains. | CASA 005007 | CORE07 |
| Clay. | DISC | CORE08 |
| Iron. | CASA 005010 | CORE08 |
| Iron. | CASA 005011 | CORE08 |
| Slag. | CASA 005012 | CORE08 |
| Tar. | DISC | CORE08 |
| Asphalt. | DISC | CORE08 |
| Clay. | CASA 005015 | CORE08 |
| Bone. --Fauna Remains. | CASA 005016 | CORE08 |
| Coquina. | DISC | CORE08 |
| Clay. | CASA 004854 | CORE08 |
| Clay. | CASA 005027 | EU01, LV03 |
| Clay. | CASA 005028 | EU01, LV03 |



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| :---: |


| Lot Control Name | Material | Cat. \# | Provenience |
| :---: | :---: | :---: | :---: |
| 12.00003 Olive Jar. | Clay. | CASA 005029 | EU01, LV03 |
| 12.00004 Nail. | Iron. | CASA 005021 | EU01, LV03 |
| 12.00005 Brick. | Clay. | DISC | EU01, LV03 |
| 12.00006 Concrete fragment. | Cement. | DISC | EU01, LV03 |
| 12.00007 Vertebrata. | Bone. --Fauna Remains. | CASA 005030 | EU01, LV03 |
| 12.00008 Olive Jar. | Clay. | CASA 005025 | EU01, LV03 |
| 13.00001 Pipe, tobacco. | Kaolinite Clay. | CASA 005031 | EU01, LV04 |
| 13.00002 Olive Jar. | Clay. | CASA 005032 | EU01, LV04 |
| 13.00003 Metal fragment. | Iron. | CASA 005033 | EU01, LV04 |
| 13.00004 Tar fragment. | Tar. | DISC | EU01, LV04 |
| 13.00005 Slag. | Slag. | CASA 005035 | EU01, LV04 |
| 13.00006 Brick. | Clay. | DISC | EU01, LV04 |
| 13.00007 Mortar. | Mortar. | DISC | EU01, LV04 |
| 13.00008 Gastropoda. | Fauna Remains. --Shell. | DISC | EU01, LV04 |
| 13.00009 Saint Johns Check Stamped. | Clay. | CASA 005039 | EU01, LV04 |
| 13.00010 Saint Johns Simple Stamped. | Clay. | CASA 005040 | EU01, LV04 |
| 13.00011 Saint Johns Ware. | Clay. | CASA 005041 | EU01, LV04 |
| 13.00012 San Marcos Ware. | Clay. | CASA 005042 | EU01, LV04 |
| 13.00013 San Pedro Ware. | Clay. | CASA 005043 | EU01, LV04 |
| 13.00014 Mammalia. | Bone. --Fauna Remains. | CASA 005047 | EU01, LV04 |
| 13.00015 Ariidae. | Bone. --Fauna Remains. | CASA 005045 | EU01, LV04 |
| 13.00016 Testudines. | Bone. --Fauna Remains. | CASA 005046 | EU01, LV04 |
| 14.00001 Spike. | Iron. | CASA 005049 | EU02, LV02 |
| 14.00002 Nail. | Iron. | CASA 005050 | EU02, LV02 |
| 14.00003 Bovidae. | Bone. --Fauna Remains. | CASA 005195 | EU02, LV02 |
| 14.00004 Mammalia. | Bone. --Fauna Remains. | CASA 005095 | EU02, LV02 |
| 14.00005 Nail. | Iron. | CASA 005053 | EU02, LV02 |
| 14.00006 Nonfood, bone. | Bone. --Fauna Remains. | CASA 005094 | EU02, LV02 |
| 14.00007 Shell, worked. | Fauna Remains. --Shell. | CASA 004855 | EU02, LV02 |
| 14.00008 Mollusca. | Fauna Remains. --Shell. | DISC | EU02, LV02 |
| 14.00009 Spike. | Iron. | CASA 005057 | EU02, LV02 |
| 14.00010 Arrowhead. | Iron. | CASA 005058 | EU02, LV02 |
| 14.00011 Aglet. | Iron. | CASA 005059 | EU02, LV02 |
| 14.00012 Aglet. --Blank. | Iron. | CASA 005060 | EU02, LV02 |


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| :---: |
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| Lot Control Name | Material | Cat. \# | Provenience |
| :---: | :---: | :---: | :---: |
| 14.00013 Spall. | Chert. | CASA 005061 | EU02, LV02 |
| 14.00014 Pipe, tobacco. | Kaolinite Clay, | CASA 005062 | EU02, LV02 |
| 14.00015 Vessel fragment. | Glass. | CASA 005063 | EU02, LV02 |
| 14.00016 Windowpane. | Glass. | CASA 005064 | EU02, LV02 |
| 14.00017 Vessel fragment. | Glass. | CASA 005065 | EU02, LV02 |
| 14.00018 Tile, roof. | Clay. | CASA 005066 | EU02, LV02 |
| 14.00019 Concrete fragment. | Cement. | DISC | EU02, LV02 |
| 14.00020 Puebla Polychrome. | Clay. | CASA 005068 | EU02, LV02 |
| 14.00021 Metal fragment. | Iron. | CASA 005069 | EU02, LV02 |
| 14.00022 Mortar. | Mortar. | DISC | EU02, LV02 |
| 14.00023 Untyped, Native American. | Clay. | CASA 005090 | EU02, LV02 |
| 14.00024 San Marcos Checked Stamped. | Clay. | CASA 005072 | EU02, LV02 |
| 14.00025 San Marcos Ware. | Clay. | CASA 005073 | EU02, LV02 |
| 14.00026 San Marcos Complicated Stamped. | Clay. | CASA 005074 | EU02, LV02 |
| 14.00027 San Marcos Simple Stamped. | Clay. | CASA 005075 | EU02, LV02 |
| 14.00028 Untyped, Native American. | Clay. | CASA 005088 | EU02, LV02 |
| 14.00029 Discoidal. | Clay. | CASA 005087 | EU02, LV02 |
| 14.00030 Untyped, Native American. | Clay. | CASA 005085 | EU02, LV02 |
| 14.00031 Saint Johns Check Stamped. | Clay. | CASA 005079 | EU02, LV02 |
| 14.00032 Saint Johns Punctated. | Clay. | CASA 005080 | EU02, LV02 |
| 14.00033 Saint Johns Ware. | Clay. | CASA 005081 | EU02, LV02 |
| 14.00034 Untyped, Native American. | Clay. | CASA 005082 | EU02, LV02 |
| 15.00001 Puebla Polychrome. | Clay. | CASA 005096 | EU02, LV03 |
| 15.00002 San Luis Polychrome. | Clay. | CASA 005097 | EU02, LV03 |
| 15.00003 Pipe, tobacco. | Kaolinite Clay. | CASA 005098 | EU02, LV03 |
| 15.00004 Marble. | Rock. | CASA 005099 | EU02, LV03 |
| 15.00005 Nail. | Iron. | CASA 005100 | EU02, LV03 |
| 15.00006 Untyped, Native American. | Clay. | CASA 004862 | EU02, LV03 |
| 15.00007 Brick. | Clay. | DISC | EU02, LV03 |
| 15.00008 Coquina fragment. | Coquina. | DISC | EU02, LV03 |
| 15.00009 Olive Jar. | Clay. | CASA 005104 | EU02, LV03 |
| 15.00010 Metal fragment. | Iron. | CASA 005105 | EU02, LV03 |
| 15.00011 Vessel fragment. | Glass. | CASA 005106 | EU02, LV03 |
| 15.00012 Vessel fragment. | Glass. | CASA 005107 | EU02, LV03 |



| Lot Control Name | Material | Cat. \# Provenience | Count | Weight |
| :---: | :---: | :---: | :---: | :---: |
| 15.00013 Vessel fragment. | Glass. | CASA 005108 EU02, LV03 | 1 | 1.1 |
| 15.00014 Saint Johns Plain. | Clay. | CASA 005109 EU02, LV03 | 2 | 11.9 |
| 15.00015 Saint Johns Check Stamped. | Clay. | CASA 005110 EU02, LV03 | 2 | 14.4 |
| 15.00016 San Marcos Complicated Stamped. | Clay. | CASA 005111 EU02, LV03 | 1 | 3.5 |
| 15.00017 Tile, drain. | Clay. | CASA 005112 EU02, LV03 | 2 | 253 |
| 15.00018 Bovidae. | Bone. --Fauna Remains. | CASA 005113 EU02, LV03 | 2 | 13.88 |
| 15.00019 Aves. | Bone. --Fauna Remains. | CASA 005114 EU02, LV03 | 2 | 0.36 |
| 15.00020 Mammalia. | Bone. --Fauna Remains. | CASA 005115 EU02, LV03 | 9 | 18.07 |
| 15.00021 Osteichthyes. | Bone. --Fauna Remains. | CASA 005116 EU02, LV03 | 2 | 1.16 |
| 16.00001 Olive Jar. | Clay. | CASA 005117 EU01, LV05 | 1 | 7.8 |
| 16.00002 Metal fragment. | Iron. | CASA 005118 EU01, LV05 |  | 36.9 |
| 16.00003 Nail. | Iron. | CASA 005119 EU01, LV05 | 4 | 9.7 |
| 16.00004 Suidae. | Bone. --Fauna Remains. | CASA 005125 EU01, LV05 | 1 | 0.95 |
| 16.00005 Saint Johns Ware. | Clay. | CASA 005121 EU01, LV05 | 1 | 2.1 |
| 16.00006 Saint Johns Check Stamped. | Clay. | CASA 005122 EU01, LV05 | 1 | 6.6 |
| 16.00007 San Marcos Simple Stamped. | Clay. | CASA 005123 EU01, LV05 | 1 | 5.8 |
| 16.00008 San Pedro Ware. | Clay. | CASA 005124 EU01, LV05 | 4 | 20.5 |
| 17.00001 Metal fragment. | Iron. | CASA 005126 EU01, LV06 |  | 33.03 |
| 17.00002 Brick. | Clay. | DISC EU01, LV06 |  | 243.5 |
| 17.00003 Tar fragment. | Tar. | DISC EU01, LV06 | 27 | 8.3 |
| 17.00004 Spike. | Iron. | CASA 005129 EU01, LV06 | 1 | 42.7 |
| 17.00005 Bivalvia. | Fauna Remains. --Shell. | DISC EU01, LV06 |  | 2 |
| 17.00006 Slag. | Slag. | CASA 005131 EU01, LV06 |  | 15.5 |
| 17.00007 Charcoal. | Flora Remains. | CASA 005132 EU01, LV06 |  | 15.4 |
| 17.00008 San Pedro Ware. | Clay. | CASA 005141 EU01, LV06 | 5 | 10.3 |
| 17.00009 Testudines. | Bone. --Fauna Remains. | CASA 005134 EU01, LV06 | 2 | 0.7 |
| 17.00010 Saint Johns Ware. | Clay. | CASA 005135 EU01, LV06 | 13 | 38.5 |
| 17.00011 Saint Johns Check Stamped. | Clay. | CASA 004865 EU01, LV06 | 1 | 7.9 |
| 17.00012 San Marcos Simple Stamped. | Clay. | CASA 005139 EU01, LV06 | 2 | 9 |
| 18.00001 Pipe, tobacco. | Kaolinite Clay. | CASA 005143 EU02, LV04 | 3 | 2.03 |
| 18.00002 Mammalia. | Bone. --Fauna Remains. | CASA 005163 EU02, LV04 | 11 | 65.03 |
| 18.00003 Spike. | Iron. | CASA 005145 EU02, LV04 | 1 | 112.4 |
| 18.00004 Recorder. | Bone. | CASA 005146 EU02, LV04 | 2 | 4.8 |
| 18.00005 Pipe, tobacco. | Steatite (soapstone) | CASA 005147 EU02, LV04 | 1 | 10.6 |



| unt | Weight |
| ---: | ---: |
| 1 | 4.3 |
| 2 | 26.3 |
| 1 | 3.8 |
| 1 | 3.2 |
|  | 20.64 |
| 1 | 6.5 |
| 1 | 3.9 |
| 1 | 3.9 |
|  | 21.3 |
| 1 | 0.8 |
| 1 | 0.8 |
| 1 | 0.2 |
| 1 | 23 |
| 1 | 0.33 |
| 1 | 42.25 |
| 2 | 31.7 |
| 2 | 48.2 |
| 2 | 6.01 |
| 4 | 0.88 |
| 1 | 2 |
| 1 | 11.7 |
| 4 | 105 |
| 1 | 2.9 |
|  | 14.4 |
| 2 | 6.23 |
| 1 | 0.26 |
| 20 | 34.19 |
|  | 3.6 |
| 1 | 3.1 |
| 2 | 28.9 |
| 1 | 5.7 |
| 1 | 3.4 |
| 1 | 5.6 |
| 1 | 35 |
|  |  |


| Lot Control Name | Material | Cat. \# | Provenience |
| :---: | :---: | :---: | :---: |
| 18.00006 Nail. | lron. | CASA 005148 | EU02, LV04 |
| 18.00007 Saint Johns Ware. | Clay. | CASA 005149 | EU02, LV04 |
| 18.00008 Saint Johns Incised. | Clay. | CASA 005150 | EU02, LV04 |
| 18.00009 Saint Johns Check Stamped. | Clay. | CASA 005151 | EU02, LV04 |
| 18.00010 Mortar. | Mortar. | DISC | EU02, LV04 |
| 18.00011 Gunflint. | Chert. | CASA 005153 | EU02, LV04 |
| 18.00012 Untyped, Native American. | Clay. | CASA 005154 | EU02, LV04 |
| 18.00013 San Marcos Ware. | Clay. | CASA 005155 | EU02, LV04 |
| 18.00014 Slag. | Slag. | CASA 005156 | EU02, LV04 |
| 18.00015 Primer. | Brass. | CASA 005157 | EU02, LV04 |
| 18.00016 Majolica. | Clay. | CASA 005158 | EU02, LV04 |
| 18.00017 Puebla Blue On White. | Clay. | CASA 005159 | EU02, LV04 |
| 18.00018 San Marcos Red. | Clay. | CASA 005160 | EU02, LV04 |
| 18.00019 Osteichthyes. | Bone. --Fauna Remains. | CASA 005161 | EU02, LV04 |
| 18.00020 Bovidae. | Bone. --Fauna Remains. | CASA 005162 | EU02, LV04 |
| 19.00001 Tile. | Clay. | CASA 004869 | EU02, LV05 |
| 19.00002 Olive Jar. | Clay. | CASA 005165 | EU02, LV05 |
| 19.00003 San Marcos Complicated Stamped. | Clay. | CASA 005166 | EU02, LV05 |
| 19.00004 Osteichthyes. | Bone. --Fauna Remains. | CASA 005182 | EU02, LV05 |
| 19.00005 San Marcos Ware. | Clay. | CASA 005168 | EU02, LV05 |
| 19.00006 Saint Johns Incised. | Clay. | CASA 005169 | EU02, LV05 |
| 19.00007 Saint Johns Plain. | Clay. | CASA 005170 | EU02, LV05 |
| 19.00008 Saint Johns Ware. | Clay. | CASA 005171 | EU02, LV05 |
| 19.00009 Metal fragment. | Iron. | CASA 005172 | EU02, LV05 |
| 19.00010 Nail. | Iron. | CASA 005173 | EU02, LV05 |
| 19.00011 Aves. | Bone. --Fauna Remains. | CASA 005181 | EU02, LV05 |
| 19.00012 Mammalia. | Bone. --Fauna Remains. | CASA 005180 | EU02, LV05 |
| 19.00013 Asphalt fragment. | Asphalt. | DISC | EU02, LV05 |
| 19.00014 San Pedro Plain. | Clay. | CASA 005177 | EU02, LV05 |
| 19.00015 Saint Johns Check Stamped. | Clay. | CASA 005178 | EU02, LV05 |
| 19.00016 San Luis Polychrome. | Clay. | CASA 005179 | EU02, LV05 |
| 20.00001 Nail. | Iron. | CASA 005183 | EU02, LV06 |
| 20.00002 Pipe, tobacco. | Kaolinite Clay. | CASA 005184 | EU02, LV06 |
| 20.00003 Tile. | Clay. | CASA 005185 | EU02, LV06 |


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| Cat. \# | Provenience |
| :---: | :---: |
| DISC | EU02, LV06 |
| CASA 005194 | EU02, LV06 |
| CASA 005188 | EU02, LV06 |
| CASA 005189 | EU02, LV06 |
| CASA 005190 | EU02, LV06 |
| CASA 005191 | EU02, LV06 |
| CASA 005192 | EU02, LV06 |
| CASA 005193 | EU02, LV06 |
| CASA 005196 | EU02, LV07 |
| CASA 005197 | EU02, LV07 |
| CASA 005210 | EU02, LV07 |
| DISC | EU02, LV07 |
| CASA 005200 | EU02, LV07 |
| CASA 005201 | EU02, LV07 |
| CASA 005202 | EU02, LV07 |
| CASA 004885 | EU02, LV07 |
| CASA 005204 | EU02, LV07 |
| CASA 005205 | EU02, LV07 |
| CASA 005206 | EU02, LV07 |
| CASA 005207 | EU02, LV07 |
| CASA 005208 | EU02, LV07 |
| CASA 004888 | EU02, LV07 |
| CASA 005211 | EU02, LV08 |
| CASA 005212 | EU02, LV08 |
| CASA 005222 | EU02, LV08 |
| CASA 005214 | EU02, LV08 |
| CASA 005215 | EU02, LV08 |
| CASA 005216 | EU02, LV08 |
| CASA 005217 | EU02, LV08 |
| CASA 005218 | EU02, LV08 |
| CASA 005221 | EU02, LV08 |
| CASA 005220 | EU02, LV08 |
| CASA 004892 | EU01, FEAT04, (modern, 1988 EU) |
| CASA 005224 | EU01, LV07 | CASA 005224 EU01, LV07

Material
Clay.
Bone. --Fauna Remains.
Iron.
Bone. --Fauna Remains.
Clay.
Clay.
Clay.
Bone. --Fauna Remains.
Kaolinite Clay.
Kaolinite Clay.
Bone. --Fauna Remains.
Fauna Remains. --Shell
Clay.
Ferrous Metal.
Iron.
Clay.
Iron.
Clay.
Clay.
Clay.
Clay.
Clay.
lron.
Iron.
Bone. --Fauna Remains.
Kaolinite Clay.
Clay.
Clay.
Clay.
Clay.
Bone. --Fauna Remains.
Bone. --Fauna Remains.
Plastic.
Slag.
Cl
Lot Control Name
20.00004 Brick.
20.00005 Aves.
20.00006 Metal fragment.
20.00007 Testudines.
20.00008 San Marcos Plain.
20.00009 San Marcos Complicated Stamped.
20.00010 Saint Johns Ware.
20.00011 Mammalia.
21.00001 Marble.
21.00002 Pipe, tobacco.
21.00003 Mammalia.
21.00004 Melongenidae.
21.00005 Tile.
21.00006 Concretion.
21.00007 Nail.
21.00008 Brick.
21.00009 Metal fragment.
21.00010 San Marcos Plain.
21.00011 Saint Johns Ware.
21.00012 Saint Johns Plain.
21.00013 San Marcos Complicated Stamped.
21.00014 San Marcos Simple Stamped.
22.00001 Nail.
22.00002 Metal fragment.
22.00003 Mammalia.
22.00004 Pipe, tobacco.
22.00005 Saint Johns Check Stamped.
22.00006 San Marcos Ware.
22.00007 Olive Jar.
22.00008 San Marcos Red.
22.00009 Osteichthyes.
22.00010 Ariidae.
23.00001 Label.
24.00001 Slag.
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| Material | Cat. \# | Provenience |
| :--- | :--- | :--- |
| Clay. | CASA 005225 EU01, LV07 |  |
| Clay. | CASA 005226 EU01, LV07 |  |
| Flora Remains. | CASA 005227 EU01, LV07 |  |
| Iron. | CASA 005228 | EU01, LV07 |
| Iron. | CASA 005229 | EU01, LV08 |
| Clay. | DISC | EU01, LV08 |
| Clay. | CASA 005231 | EU01, LV08 |
| Bone. --Fauna Remains. | CASA 005240 EU01, LV08 |  |
| Clay. | CASA 005233 EU01, LV08 |  |
| Slag. | CASA 005234 EU01, LV08 |  |
| Clay. | CASA 005235 EU01, LV08 |  |
| Clay. | CASA 005236 EU01, LV08 |  |
| Clay. | CASA 005237 EU01, LV08 |  |
| Flora Remains. | CASA 005238 EU01, LV08 |  |
| Bone. --Fauna Remains. | CASA 005239 EU01, LV08 |  |
| Slag. | CASA 005241 EU01, LV07, AREA A |  |
| Iron. | CASA 005242 EU01, LV07, AREA A |  |
| Clay. | DISC | EU01, LV07, AREA A |
| Kaolinite Clay. | CASA 005244 EU01, LV07, AREA A |  |
| Mortar. | DISC | EU01, LV07, AREA A |
| Cement. | DISC | EU01, LV07, AREA A |
| Clay. | CASA 005247 EU01, LV07, AREA A |  |
| Copper. | CASA 005248 EU01, LV07, AREA A |  |
| Iron. | CASA 005263 EU01, LV07, AREA A |  |
| Glass. | CASA 005250 EU01, LV07, AREA A |  |
| Clay. | CASA 005251 EU01, LV07, AREA A |  |
| Flora Remains. | CASA 005252 EU01, LV07, AREA A |  |
| Clay. | CASA 005253 EU01, LV07, AREA A |  |
| Clay. | CASA 005254 EU01, LV07, AREA A |  |
| Bone. --Fauna Remains. | CASA 005268 EU01, LV07, AREA A |  |
| Bone. --Fauna Remains. | CASA 005267 EU01, LV07, AREA A |  |
| Bone. --Fauna Remains. | CASA 005266 EU01, LV07, AREA A |  |
| Iron. | CASA 005265 EU01, LV07, AREA A |  |
| Clay. | CASA 005259 EU01, LV07, AREA A |  |





| Lot Control Name | Material | Cat. \# | Provenience |
| :---: | :---: | :---: | :---: |
| 26.00020 Nail. | Iron. | CASA 005264 | EU01, LV07, AREA A |
| 27.00001 Coquina fragment. | Coquina. | DISC | CORE09 |
| 27.00002 Brick. | Clay. | DISC | CORE09 |
| 27.00003 Charcoal. | Flora Remains. | CASA 005507 | CORE09 |
| 27.00004 Mortar. | Mortar. | DISC | CORE09 |
| 27.00005 Metal fragment. | Iron. | CASA 005509 | CORE09 |
| 27.00006 Untyped, Native American. | Clay. | CASA 005510 | CORE09 |
| 27.00007 Saint Johns Ware. | Clay. | CASA 005511 | CORE09 |
| 27.00008 Osteichthyes. | Bone. --Fauna Remains. | CASA 005512 | CORE09 |
| 28.00001 San Marcos Red. | Clay. | CASA 005269 | EU02, LV09, AREA A |
| 28.00002 San Marcos Complicated Stamped. | Clay. | CASA 005270 | EU02, LV09, AREA A |
| 28.00003 Saint Johns Check Stamped. | Clay. | CASA 005271 | EU02, LV09, AREA A |
| 28.00004 Cinder. | Coal. | CASA 005272 | EU02, LV09, AREA A |
| 28.00005 Nail. | Iron. | CASA 005273 | EU02, LV09, AREA A |
| 28.00006 Vertebrata. | Bone. --Fauna Remains. | CASA 005274 | EU02, LV09, AREA A |
| 28.00007 Mammalia. | Bone. --Fauna Remains. | CASA 005275 | EU02, LV09, AREA A |
| 28.00008 Mollusca. | Fauna Remains. --Shell. | DISC | EU02, LV09, AREA A |
| 29.00001 San Marcos Complicated Stamped. | Clay. | CASA 005277 | EU02, LV10, AREA A |
| 29.00002 San Marcos Plain. | Clay. | CASA 005278 | EU02, LV10, AREA A |
| 29.00003 San Marcos Red. | Clay. | CASA 005279 | EU02, LV10, AREA A |
| 29.00004 Saint Johns Plain. | Clay. | CASA 005280 | EU02, LV10, AREA A |
| 29.00005 Plaster. | Plaster. | CASA 005281 | EU02, LV10, AREA A |
| 29.00006 Osteichthyes. | Bone. --Fauna Remains. | CASA 005287 | EU02, LV10, AREA A |
| 29.00007 Nail. | Iron. | CASA 005283 | EU02, LV10, AREA A |
| 29.00008 Mollusca. | Fauna Remains. --Shell. | DISC | EU02, LV10, AREA A |
| 29.00009 Metal fragment. | Iron. | CASA 005285 | EU02, LV10, AREA A |
| 29.00010 Mammalia. | Bone. --Fauna Remains. | CASA 005286 | EU02, LV10, AREA A |
| 30.00001 Slag. | Slag. | CASA 005289 | EU01, LV08, AREA A |
| 30.00002 Metal fragment. | Iron. | CASA 005290 | EU01, LV08, AREA A |
| 30.00003 Nail. | Iron. | CASA 005291 | EU01, LV08, AREA A |
| 30.00004 Spike. | Iron. | CASA 005292 | EU01, LV08, AREA A |
| 30.00005 Metal fragment. | Brass. | CASA 005293 | EU01, LV08, AREA A |
| 30.00006 Brick. | Clay. | DISC | EU01, LV08, AREA A |
| 30.00007 Mortar. | Mortar. | DISC | EU01, LV08, AREA A |

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$2 y^{2}+1$ act
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| unt | Weight |
| ---: | ---: |
| 1 | 83.7 |
|  | 112.52 |
| 13 | 80.5 |
| 2 | 34.4 |
| 4 | 10 |
| 1 | 0.2 |
| 8 | 1.51 |
| 19 | 41.67 |
| 5 | 18.4 |
|  | 8.1 |
|  | 36.7 |
| 1 | 87.46 |
| 1 | 3.42 |
| 1 | 8.18 |
| 2 | 13.1 |
| 20 | 105.1 |
|  | 3751.7 |
|  | 1425.3 |
|  | 7.4 |
|  | 45.9 |
| 1 | 3.59 |
|  | 25.2 |
| 9 | 6.2 |
|  | 5.6 |
| 1 | 11.86 |
| 1 | 49.3 |
| 1 | 3.7 |
| 1 | 2.97 |
|  | 9.5 |
|  | 3.17 |
|  | 8.7 |
|  | 3.6 |
|  |  |
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| Material | Cat. \# | Provenience |
| :---: | :---: | :---: |
| Granite. | CASA 005296 | EU01, LV08, AREA A |
| Rock. | DISC | EU01, LV08, AREA A |
| Clay. | CASA 005298 | EU01, LV08, AREA A |
| Clay. | CASA 005299 | EU01, LV08, AREA A |
| Clay. | CASA 005300 | EU01, LV08, AREA A |
| Bone. --Fauna Remains. | CASA 005315 | EU01, LV08, AREA A |
| Bone. --Fauna Remains. | CASA 005314 | EU01, LV08, AREA A |
| Bone. --Fauna Remains. | CASA 005313 | EU01, LV08, AREA A |
| Glass. | CASA 005304 | EU01, LV08, AREA A |
| Flora Remains. | CASA 005312 | EU01, LV08, AREA A |
| Wood. | CASA 005311 | EU01, LV08, AREA A |
| Clay. | CASA 005307 | EU01, LV08, AREA A |
| Clay. | CASA 005308 | EU01, LV08, AREA A |
| lron. | CASA 005310 | EU01, LV08, AREA A |
| Clay. | CASA 004893 | EU01, LV08, AREA A |
| Iron. | CASA 004900 | EU01, LV08, AREA A |
| Iron. | CASA 005316 | EU01, LV09, AREA A |
| Slag. | CASA 005317 | EU01, LV09, AREA A |
| Mortar. | DISC | EU01, LV09, AREA A |
| Clay. | DISC | EU01, LV09, AREA A |
| Kaolinite Clay. | CASA 005320 | EU01, LV09, AREA A |
| Copper. | CASA 005321 | EU01, LV09, AREA A |
| Glass. | CASA 005322 | EU01, LV09, AREA A |
| Brass. | CASA 005323 | EU01, LV09, AREA A |
| Clay. | CASA 005324 | EU01, LV09, AREA A |
| Clay. | CASA 005325 | EU01, LV09, AREA A |
| Clay. | CASA 005326 | EU01, LV09, AREA A |
| Bone. --Fauna Remains. | CASA 005344 | EU01, LV09, AREA A |
| Fauna Remains. --Shell. | DISC | EU01, LV09, AREA A |
| Coquina. | DISC | EU01, LV09, AREA A |
| Flora Remains. | CASA 005330 | EU01, LV09, AREA A |
| Bone. --Fauna Remains. | CASA 005343 | EU01, LV09, AREA A |
| Iron. | CASA 005332 | EU01, LV09, AREA A |
| B | C | EU01, LV09, AREA A | CASA 005342 EU01, LV09, AREA A

Lot Control Name
30.00008 Stone, building.
30.00009 Stone, manuport.
30.00010 San Marcos Complicated Stamped.
30.00011 San Marcos Simple Stamped.
30.00012 San Marcos Ware.
30.00013 Bothidae.
30.00014 Osteichthyes.
30.00015 Mammalia.
30.00016 Vessel fragment.
30.00017 Charcoal.
30.00018 Wood fragment.
30.00019 Olive Jar.
30.00020 Untyped, tin enameled.
30.00021 Ring.
30.00022 San Marcos Plain.
30.00023 Nail.
31.00001 Metal fragment.
31.00002 Slag.
31.00003 Mortar.
31.00004 Brick.
31.00005 Pipe, tobacco.
31.00006 Metal fragment.
31.00007 Vessel fragment.
31.00008 Metal fragment.
31.00009 Untyped, tin enameled.
31.00010 San Marcos Plain.
31.0001
31.00012 San Luis Polychrome.
31.00013 Bivalvia.
31.00014 Coquina fragment.
31.00015 Charcoal.
31.00016 Carangidae.
31.00017 Spike.
31.00018 Mugilidae.
31


| Material | Cat. \# | Provenience |
| :---: | :---: | :---: |
| lron. | CASA 005334 | EU01, LV09, AREA A |
| Iron. | CASA 005335 | EU01, LV09, AREA A |
| Bone. --Fauna Remains. | CASA 005341 | EU01, LV09, AREA A |
| Clay. | CASA 005339 | EU01, LV09, AREA A |
| Clay. | CASA 005338 | EU01, LV09, AREA A |
| Bone. --Fauna Remains. | CASA 005340 | EU01, LV09, AREA A |
| Iron. | CASA 004906 | EU01, LV09, AREA A |
| Kaolinite Clay. | CASA 005345 | EU01, LV09, AREA A, FILL (coquina) |
| Iron. | CASA 005346 | EU01, LV09, AREA A, FILL (coquina) |
| Clay | DISC | EU01, LV09, AREA A, FlLL (coquina) |
| Glass. | CASA 005348 | EU01, LV09, AREA A, FILL (coquina) |
| Clay. | CASA 005349 | EU01, LV09, AREA A, FILL (coquina) |
| Clay. | CASA 005350 | EU01, LV09, AREA A, FILL (coquina) |
| Clay. | CASA 005351 | EU01, LV09, AREA A, FILL (coquina) |
| Clay. | CASA 005352 | EU01, LV09, AREA A, FILL (coquina) |
| Bone. --Fauna Remains. | CASA 005353 | EU01, LV09, AREA A, FILL (coquina) |
| Bone. --Fauna Remains. | CASA 005354 | EU01, LV09, AREA A, FILL (coquina) |
| Glass. | CASA 005355 | EU02, LV11, AREA A |
| Clay. | CASA 005356 | EU02, LV11, AREA A |
| Clay. | CASA 005357 | EU02, LV11, AREA A |
| Fauna Remains. --Shell. | DISC | EU02, LV11, AREA A |
| Rock. | CASA 004911 | EU02, LV11, AREA A |
| lron. | CASA 005360 | EU02, LV11, AREA A |
| Chert. | CASA 005361 | EU02, LV11, AREA A |
| Clay. | CASA 005362 | EU02, LV11, AREA A |
| Bone. --Fauna Remains. | CASA 005366 | EU02, LV11, AREA A |
| Bone. --Fauna Remains. | CASA 005364 | EU02, LV11, AREA A |
| Bone. --Fauna Remains. | CASA 005365 | EU02, LV11, AREA A |
| Clay. | CASA 005368 | EU02, LV12, AREA A |
| Clay. | CASA 005369 | EU02, LV12, AREA A |
| Clay. | CASA 005370 | EU02, LV12, AREA A |
| Clay. | CASA 005371 | EU02, LV12, AREA A |
| Clay. | CASA 005372 | EU02, LV12, AREA A |
| Clay. | CASA 005373 | EU02, LV12, AREA A |

Lot Control Name
31.00019 Nail.
31.00020 Tack.
31.00021 Mammalia.
31.00022 Olive Jar.
31.00023 San Marcos Simple Stamped.
31.00024 Nonfood, bone.
31.00025 Spike.
32.00001 Pipe, tobacco.
32.00002 Metal fragment.
32.00003 Brick.
32.00004 Vessel fragment.
32.00005 Olive Jar.
32.00006 San Marcos Simple Stamped.
32.00007 San Marcos Complicated Stamped.
32.00008 San Marcos Ware.
32.00009 Carangidae.
32.00010 Mammalia.
33.00001 Vessel fragment.
33.00002 Olive Jar.
33.00003 Untyped, Native American.
33.00004 Mollusca.
33.00005 Stone, ballast.
33.00006 Metal fragment.
33.00007 Gunflint.
33.00008 Saint Johns Check Stamped.
33.00009 Osteichthyes.
33.00010 Mammalia.
33.00011 Sciaenidae.
34.00001 San Marcos Ware.
34.00002 San Marcos Complicated Stamped.
34.00003 San Marcos Plain.
34.00004 Untyped, Native American.
34.00005 Saint Johns Ware.
34.00006 Olive Jar.
3.
3.


$\begin{array}{ll}\text { Cat．\＃} & \text { Provenience } \\ \text { CASA } 005374 \text { EU02，LV12，AREA A }\end{array}$ CASA 005375 EU02，LV12，AREA A CASA 005376 EU02，LV12，AREA A CASA 005377 EU02，LV12，AREA A
 CASA 005384 EU02，LV12，AREA A CASA 005380 EU02，LV12，AREA A CASA 005381 EU02，LV12，AREA A
 CASA 005383 EU02，LV12，AREA A
 CASA 005386 EU02，LV13，AREA A
 V VヨyV ‘£IヘT ‘z0חヨ 88ะs00 VSVD CASA 005389 EU02，LV13，AREA A CASA 005390 EU02，LV13，AREA A

 CASA 005393 EU02，LV13，AREA A V VヨyV＇£I 1 ＇z0n马 $\operatorname{\nabla 6\varepsilon s00~VSVD~}$ CASA 005395 EU02，LV13，AREA A V VヨyV＇£I 1 ＇z0nヨ



 CASA 005402 EU01，LV10，AREA A CASA 005403 EU01，LV10，AREA A CASA 005404 EU01，LV10，AREA A V Vaty ‘0I 17 ‘I0חs 9てts00 VSVO DISC EU01，LV10，AREA A

 CASA 005409 EU01，LV10，AREA A Bone，－－Fauna Remains．
Clay．
Clay．
Clay．
Fauna Remains．－－Shell．
Bone．－－Fauna Remains． －－Fauna Remains． Bone．

Slag． Brass． Chert． Bone．－－Fauna Remains．
Mortar． Bone．－－Fauna Remains．
Mortar． Kaolinite Clay， Clay． Clay．

34.00007 Spall．

34．00008 Vessel fragment． 34．00009 Metal fragment． 34.00010 Nail．
34.00011 Vertebrata． 34.00012 Bovidae． 34.00013 Nail．

34．00014 Majolica．
34．00015 Nonfood，
34.00015 Nonfood，bone． 34.00016 Osteichthyes．
35.00001 Metal fragment． 35.00002 Olive Jar．

35．00003 Untyped，Native American． 35．00004 San Marcos Ware． 35．00005 Saint Johns Plain．
35．00005 Saint Johns Pain．
35．00006 Saint Johns Check Stamped． 35．00007 Mammalia． 35.00008 Osteichthyes． 35.00009 Tile，drain．
35.00010 San Marcos Complicated Stamped
36.00010 San Marcos Simple Stamped

| Material | Cat. \# | Provenience |
| :---: | :---: | :---: |
| Copper. | CASA 004917 | EU01, LV10, AREA A |
| Clay. | CASA 005411 | EU01, LV10, AREA A |
| Clay. | CASA 005412 | EU01, LV10, AREA A |
| Clay. | CASA 005413 | EU01, LV10, AREA A |
| Fauna Remains. --Shell. | DISC | EU01, LV10, AREA A |
| Clay. | CASA 005415 | EU01, LV10, AREA A |
| Kaolinite Clay. | CASA 005416 | EU01, LV10, AREA A |
| Clay. | CASA 005417 | EU01, LV10, AREA A |
| Flora Remains. | CASA 005418 | EU01, LV10, AREA A |
| Fauna Remains. --Shell. | DISC | EU01, LV10, AREA A |
| Bone. --Fauna Remains. | CASA 005429 | EU01, LV10, AREA A |
| Fauna Remains. --Shell. | DISC | EU01, LV10, AREA A |
| Bone. --Fauna Remains. | CASA 005427 | EU01, LV10, AREA A |
| Bone. --Fauna Remains. | CASA 005428 | EU01, LV10, AREA A |
| Clay. | CASA 005424 | EU01, LV 10, AREA A |
| Bone. --Fauna Remains. | CASA 005425 | EU01, LV10, AREA A |
| Iron. | CASA 005431 | EU01, LV11, AREA A |
| Brass. | CASA 005432 | EU01, LV11, AREA A |
| Mortar. | DISC | EU01, LV11, AREA A |
| Clay. | CASA 005434 | EU01, LV11, AREA A |
| Kaolinite Clay. | CASA 005435 | EU01, LV11, AREA A |
| Ferrous Metal. | CASA 005436 | EU01, LV11, AREA A |
| Clay. | DISC | EU01, LV11, AREA A |
| Clay. | CASA 005438 | EU01, LV11, AREA A |
| Bone. --Fauna Remains. | CASA 005451 | EU01, LV11, AREA A |
| Clay. | CASA 005440 | EU01, LV11, AREA A |
| Clay. | CASA 005441 | EU01, LV11, AREA A |
| Clay. | CASA 005442 | EU01, LV11, AREA A |
| Clay. | CASA 005443 | EU01, LV11, AREA A |
| Clay. | CASA 005444 | EU01, LV11, AREA A |
| Slag. | CASA 005445 | EU01, LV11, AREA A |
| Iron. | CASA 005446 | EU01, LV11, AREA A |
| Bone. --Fauna Remains. | CASA 005452 | EU01, LV11, AREA A |
| lora Remains. | CASA 005448 | EU01, LV11, AREA A |

Lot Control Name
Lot Control Name
36.00011 Metal fragment.
36.00012 Tile, drain.
36.00013 San Marcos Complicated Stamped.
36.00014 San Marcos Plain.
36.00015 Mollusca.
36.00016 Puebla Blue On White.
36.00017 Pipe, tobacco.
36.00018 Olive Jar.
36.00019 Charcoal.
36.00020 Ostreidae.
36.00021 Cervidae.
36.00022 Melongenidae.
36.00023 Osteichthyes.
36.00024 Mammalia.
36.00025 Majolica.
36.00026 Mugilidae.
37.00001 Metal fragment.
37.00002 Metal fragment.
37.00003 Mortar.
37.00004 Tile.
37.00005 Pipe, tobacco.
37.00006 Concretion.
37.00007 Brick.
37.00008 San Marcos Ware.
37.00009 Mugilidae.
37.00010 San Marcos Plain.
37.00011 San Marcos Simple Stamped.
37.00012 San Marcos Complicated Stamped.
37.00013 Saint Johns Ware.
37.00014 Olive Jar.
37.00015 Slag.
37.00016 Nail.
37.00017 Vertebrata.
37.00018 Charcoal.
37




| Material | Cat. \# | Provenience | Count | Weight |
| :---: | :---: | :---: | :---: | :---: |
| Clay. | CASA 005488 | EU02, LV14, AREA A | 1 | 34 |
| Clay. | CASA 005491 | EU02, LV15, AREA A | 5 | 16 |
| Clay. | CASA 005492 | EU02, LV15, AREA A | 1 | 1.4 |
| Bone. --Fauna Remains. | CASA 005504 | EU02, LV15, AREA A | 1 | 0.19 |
| Clay. | CASA 005494 | EU02, LV15, AREA A | 2 | 58.6 |
| Mortar. | DISC | EU02, LV15, AREA A |  | 3.21 |
| Clay. | CASA 005496 | EU02, LV15, AREA A | 2 | 51.1 |
| Iron. | CASA 005497 | EU02, LV15, AREA A |  | 1.52 |
| Glass. | CASA 005498 | EU02, LV15, AREA A | 1 | 1.11 |
| Clay. | CASA 005499 | EU02, LV15, AREA A | 1 | 0.6 |
| Clay. | CASA 005500 | EU02, LV15, AREA A | 1 | 1.4 |
| Clay. | DISC | EU02, LV15, AREA A |  | 4.1 |
| Flora Remains. | CASA 005502 | EU02, LV15, AREA A |  | 0.4 |
| Bone. --Fauna Remains. | CASA 005503 | EU02, LV15, AREA A | 6 | 17.32 |
| Iron. | CASA 005514 | EU02, LV16, AREA A |  | 200.08 |
| Clay. | DISC | EU02, LV16, AREA A |  | 31.9 |
| Glass. | CASA 005516 | EU02, LV16, AREA A | 1 | 1.33 |
| Clay. | CASA 005517 | EU02, LV16, AREA A | 1 | 9.22 |
| Clay. | CASA 005518 | EU02, LV16, AREA A | 1 | 3.97 |
| Clay. | CASA 005519 | EU02, LV16, AREA A | 1 | 3.77 |
| Clay. | CASA 005520 | EU02, LV16, AREA A | 2 | 2.8 |
| Clay. | CASA 005521 | EU02, LV16, AREA A | 1 | 17.5 |
| Clay. | CASA 005522 | EU02, LV16, AREA A | 1 | 3.3 |
| Flora Remains. | CASA 005523 | EU02, LV16, AREA A |  | 0.8 |
| Bone. --Fauna Remains. | CASA 005524 | EU02, LV16, AREA A | 11 | 33.59 |
| Bone. --Fauna Remains. | CASA 005525 | EU02, LV16, AREA A | 1 | 1.06 |
| Bone. --Fauna Remains. | CASA 005526 | EU02, LV16, AREA A | 1 | 0.81 |
| Bone. | CASA 005527 | EU02, LV16, AREA A | 1 | 0.5 |
| Clay. | CASA 004923 | EU02, LV16, AREA A | 1 | 1.4 |
| Tabby. | CASA 004924 | EU02, LV17, AREA A |  | 28.3 |
| Iron. | CASA 005529 | EU01, LV13, AREA A |  | 60.6 |
| Slag. | CASA 005530 | EU01, LV13, AREA A |  | 9.8 |
| Mortar. | DISC | EU01, LV13, AREA A |  | 3.2 |
| Clay. | DISC | EU01, LV13, AREA A |  | 3.56 |

40.00001 Saint Johns Ware.
40.00002 San Marcos Checked Stamped.
40.00003 Aves.
40.00004 San Marcos Complicated Stamped.
40.00005 Mortar.
40.00006 Tile.
40.00007 Metal fragment.
40.00008 Windowpane.
40.00009 Majolica.
40.00010 San Marcos Simple Stamped.
40.00011 Brick.
40.00012 Charcoal.
40.00013 Mammalia.
41.00001 Metal fragment.
41.00002 Brick.
41.00003 Vessel fragment.
41.00004 Olive Jar.
41.00005 San Pedro Plain.
41.00006 Deptford Check Stamped.
41.00007 Saint Johns Ware.
41.00008 Tile.
41.00009 Coarse Redware.
41.00010 Charcoal.
41.00011 Mammalia.
41.00012 Emydidae.
41.00013 Osteichthyes.
41.00014 Pin.
41.00015 Untyped, Native American.
42.00001 Tabby fragment.
43.00001 Metal fragment.
43.00002 Slag.
43.00003 Mortar.
43.00004 Brick.
4.



CASA 005533 EU01，LV13，AREA A CASA 005534 EU01，LV13，AREA A CASA 005535 EU01，LV13，AREA A CASA 005536 EU01，LV13，AREA A CASA 005537 EU01，LV13，AREA A CASA 005538 EU01，LV13，AREA A CASA 005539 EU01，LV 13 ，AREA A CASA 005540 EU01，LV13，AREA A CASA 005541 EU01，LV13，AREA A CASA 005542 EU01，LV13，AREA A CASA 005543 EU01，LV13，AREA A CASA 005544 EU01，LV13，AREA A CASA 005545 EU01，LV13，AREA A
 CASA 005547 EU01，LV13，AREA A CASA 005548 EU01，LV13，AREA A CASA 005549 EU01，LV13，AREA A

 CASA 005553 EU01，LV14，AREA A EU01，LV14，AREA A V VGZV＇เI 1 ＇I0חヨ

 EU01，LV14，AREA A
 CASA 005560 EU01，LV14，AREA A CASA 005561 EU01，LV14，AREA A CASA 005562 EU01，LV14，AREA A CASA 005563 EU01，LV14，AREA A CASA 005564 EU01，LV14，AREA A CASA 005565 EU01，LV14，AREA A CASA 005570 EU01，LV14，AREA A V VGYV ‘ャI $\Lambda 7$＇I0חヨ L9sc00 VSVO Bone．－－Fauna Remains．

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& \text { (1) }
\end{aligned}
$$
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Bone．－－Fauna Remains． Flora Remains．
50．00025 Sample，flotation．
51.00001 Metal fragment．
51．00002 Untyped，Native American． 51．00003 Slag．
52.00001 Nail．
52．00002 San Marcos Ware．
52.00003 Olive Jar．
53.00001 Untyped，Native American．
53.00002 Bovidae． 53．00002 Bovidae．
53.00003 Tar fragment．
53．00004 Metal fragment．
53．00005 Concrete fragment．
53.00006 Wood fragment．
53．00007 Brick．
54．00001 San Marcos Plain． 54.00002 Saint Johns Ware．
54．00003 Saint Johns Check Stamped． 54．00004 Untyped，Native American． 54.00005 San Augustin Blue On White． 54.00006 Brick．
54.00007 Nail．
54．00008 Lamniformes． 54．00009 Metal fragment． 54．00010 Charcoal． 54.00011 Mortar． 54.00012 Mollusca．
54．00013 San Marcos Ware． 54.00014 Mammalia． 54．00015 Ariidae．
55．00001 Brick．
55.00002 Saint Johns Ware． 55.00003 Testudines． 55．00004 Charcoal．
55．00005 San Marcos Ware．






| t Control Name | Material | Cat. \# | Provenience |
| :---: | :---: | :---: | :---: |
| 64.00001 Charcoal. | Flora Remains. | CASA 005692 | EU01, LV08, ZN A |
| 64.00002 Metal fragment. | Iron. | CASA 005693 | EU01, LV08, ZN A |
| 64.00003 Slag. | Slag. | CASA 005694 | EU01, LV08, ZN A |
| 64.00004 Nail. | Iron. | CASA 005695 | EU01, LV08, ZN A |
| 64.00005 Coquina fragment. | Coquina. | DISC | EU01, LV08, ZN A |
| 64.00006 Brick. | Clay. | DISC | EU01, LV08, ZN A |
| 64.00007 Metal fragment. | Copper. | CASA 005698 | EU01, LV08, ZN A |
| 64.00008 Tar fragment. | Tar. | DISC | EU01, LV08, ZN A |
| 64.00009 San Marcos Ware. | Clay. | CASA 005700 | EU01, LV08, ZN A |
| 64.00010 San Marcos Plain. | Clay. | CASA 005701 | EU01, LV08, ZN A |
| 64.00011 Osteichthyes. | Bone. --Fauna Remains. | CASA 005707 | EU01, LV08, ZN A |
| 64.00012 San Marcos Complicated Stamped. | Clay. | CASA 005703 | EU01, LV08, ZN A |
| 64.00013 Majolica. | Clay. | CASA 005706 | EU01, LV08, ZN A |
| 64.00014 Vessel fragment. | Glass. | CASA 005705 | EU01, LV08, ZN A |
| 65.00001 Slag. | Slag. | CASA 005708 | EU01, LV09, ZN A |
| 65.00002 Metal fragment. | Iron. | CASA 005709 | EU01, LV09, ZN A |
| 65.00003 Nail. | Iron. | CASA 005710 | EU01, LV09, ZN A |
| 65.00004 Brick. | Clay. | DISC | EU01, LV09, ZN A |
| 65.00005 Tabby fragment. | Tabby. | DISC | EU01, LV09, ZN A |
| 65.00006 Mammalia. | Bone. --Fauna Remains. | CASA 005725 | EU01, LV09, ZN A |
| 65.00007 Pipe, tobacco. | Kaolinite Clay. | CASA 005714 | EU01, LV09, ZN A |
| 65.00008 Charcoal. | Flora Remains. | CASA 005715 | EU01, LV09, ZN A |
| 65.00009 Stone, manuport. | Rock. | DISC | EU01, LV09, ZN A |
| 65.00010 Vessel fragment. | Glass. | CASA 005717 | EU01, LV09, ZN A |
| 65.00011 Metal fragment. | Lead. | CASA 005718 | EU01, LV09, ZN A |
| 65.00012 Metal fragment. | Copper. | CASA 005719 | EU01, LV09, ZN A |
| 65.00013 Metal fragment. | Brass. | CASA 005720 | EU01, LV09, ZN A |
| 65.00014 San Pedro Ware. | Clay. | CASA 005721 | EU01, LV09, ZN A |
| 65.00015 Saint Johns Ware. | Clay. | CASA 005722 | EU01, LV09, ZN A |
| 65.00016 San Marcos Complicated Stamped. | Clay. | CASA 005723 | EU01, LV09, ZN A |
| 66.00001 Metal fragment. | Iron. | CASA 005726 | EU01, LV06, ZN D |
| 66.00002 Slag. | Slag. | CASA 005727 | EU01, LV06, ZN D |
| 66.00003 Metal fragment. | Brass. | CASA 005728 | EU01, LV06, ZN D |
| 66.00004 Puebla Polychrome. | Clay. | CASA 005729 | EU01, LV06, ZN D |



| ot Control Name | Material | Cat.\# | Provenience | Count | Weight |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 66.00005 San Marcos Plain. | Clay. | CASA 005730 | EU01, LV06, ZN D | 1 | 23.1 |
| 66.00006 San Marcos Simple Stamped. | Clay. | CASA 005731 | EU01, LV06, ZN D | 1 | 2.37 |
| 66.00007 Brick. | Clay. | DISC | EU01, LV06, ZN D |  | 0.24 |
| 66.00008 Untyped, Native American. | Clay. | CASA 005733 | EU01, LV06, ZN D | 1 | 0.61 |
| 66.00009 Charcoal. | Flora Remains. | CASA 005734 | EU01, LV06, ZN D |  | 0.31 |
| 66.00010 Vessel fragment. | Glass. | CASA 005735 | EU01, LV06, ZN D | 4 | 0.09 |
| 66.00011 Untyped, tin enameled. | Clay. | CASA 005736 | EU01, LV06, ZN D | 1 | 1.95 |
| 66.00012 Osteichthyes. | Bone. --Fauna Remains. | CASA 005737 | EU01, LV06, ZN D | 9 | 1.93 |
| 66.00013 Mammalia. | Bone. --Fauna Remains. | CASA 005738 | EU01, LV06, ZN D | 3 | 14.24 |
| 66.00014 Ostreidae. | Fauna Remains. --Shell. | DISC | EU01, LV06, ZN D |  | 23.15 |
| 66.00015 Mollusca. | Fauna Remains. --Shell. | DISC | EU01, LV06, ZN D |  | 12.39 |
| 67.00001 Pipe, tobacco. | Kaolinite Clay. | CASA 005741 | EU01, LV06, ZN B | 1 | 2.47 |
| 67.00002 Vessel fragment. | Glass. | CASA 005742 | EU01, LV06, ZN B | 8 | 240.4 |
| 67.00003 Matchlock priming pan. | Iron. | CASA 005743 | EU01, LV06, ZN B | 1 | 12.6 |
| 67.00004 San Marcos Complicated Stamped. | Clay. | CASA 005744 | EU01, LV06, ZN B | 4 | 20.9 |
| 67.00005 San Marcos Simple Stamped. | Clay. | CASA 005745 | EU01, LV06, ZN B | 2 | 1.4 |
| 67.00006 San Marcos Ware. | Clay. | CASA 005746 | EU01, LV06, ZN B | 11 | 31.6 |
| 67.00007 Sample, flotation. | Composite. | CASA 005051 | EU01, LV06, ZN B |  | 3098.8 |
| 67.00008 Debitage. | Chert. | CASA 005748 | EU01, LV06, ZN B | 2 | 1.21 |
| 67.00009 Vertebrata. | Bone. --Fauna Remains. | CASA 005052 | EU01, LV06, ZN B | 13 | 2.18 |
| 67.00010 Metal fragment. | Copper. | CASA 005750 | EU01, LV06, ZN B |  | 4.4 |
| 67.00011 Charcoal. | Flora Remains. | CASA 005751 | EU01, LV06, ZN B |  | 25.4 |
| 67.00012 Nail. | Iron. | CASA 005752 | EU01, LV06, ZN B | 5 | 28.8 |
| 67.00013 Washer. | Iron. | CASA 005753 | EU01, LV06, ZN B | 1 | 2.5 |
| 67.00014 Spike. | Iron. | CASA 005754 | EU01, LV06, ZN B | 3 | 17.64 |
| 67.00015 Mammalia. | Bone. --Fauna Remains. | CASA 005755 | EU01, LV06, ZN B | 3 | 13.77 |
| 67.00016 Osteichthyes. | Bone. --Fauna Remains. | CASA 005756 | EU01, LV06, ZN B | 30 | 2 |
| 67.00017 Mugilidae. | Bone. --Fauna Remains. | CASA 005757 | EU01, LV06, ZN B | 3 | 0.19 |
| 67.00018 Aves. | Bone. --Fauna Remains. | CASA 005758 | EU01, LV06, ZN B | 1 | 0.15 |
| 67.00019 Sciaenidae. | Bone. --Fauna Remains. | CASA 005759 | EU01, LV06, ZN B | 1 | 0.47 |
| 67.00020 Ostreidae. | Fauna Remains. --Shell. | DISC | EU01, LV06, ZN B |  | 37.28 |
| 67.00021 Metal fragment. | Iron. | CASA 005761 | EU01, LV06, ZN B |  | 2148.2 |
| 67.00022 Slag. | Slag. | CASA 005762 | EU01, LV06, ZN B |  | 479.6 |
| 67.00023 Sample, unprocessed. | Composite. | CASA 005763 | EU01, LV06, ZN B |  | 1515.7 |


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| Cat. \# | Provenience |
| :---: | :---: |
| DISC | EU0 1, LV07, ZN B |
| CASA 005793 | EU01, LV07, ZN B |
| CASA 005076 | EU01, LV07, ZN B |
| CASA 005077 | EU01, LV07, ZN B |
| CASA 004861 | EU01, LV08, ZN B |
| CASA 005830 | EU01, LV08, ZN B |
| CASA 005825 | EU01, LV08, ZN B |
| CASA 005799 | EU01, LV08, ZN B |
| CASA 005804 | EU01, LV08, ZN B |
| CASA 005801 | EU01, LV08, ZN B |
| CASA 005802 | EU01, LV08, ZN B |
| CASA 005803 | EU01, LV08, ZN B |
| CASA 005822 | EU01, LV08, ZN B |
| CASA 005823 | EU01, LV08, ZN B |
| CASA 005806 | EU01, LV08, ZN B |
| CASA 005807 | EU01, LV08, ZN B |
| CASA 005808 | EU01, LV08, ZN B |
| CASA 005809 | EU01, LV08, ZN B |
| CASA 005810 | EU01, LV08, ZN B |
| CASA 005811 | EU01, LV08, ZN B |
| CASA 005812 | EU01, LV08, ZN B |
| CASA 005828 | EU01, LV08, ZN B |
| DISC | EU01, LV08, ZN B |
| CASA 005815 | EU01, LV08, ZN B |
| CASA 005824 | EU01, LV08, ZN B |
| CASA 005817 | EU01, LV08, ZN B |
| CASA 005818 | EU01, LV08, ZN B |
| CASA 005819 | EU01, LV08, ZN B |
| CASA 005820 | EU01, LV08, ZN B |
| CASA 005821 | EU01, LV08, ZN B |
| CASA 004868 | EU01, LV08, ZN B |
| DISC | EU01, LV08, ZN B |
| DISC | EU01, LV08, ZN B |
| CASA 005078 | EU01, LV08, ZN B |

Material
Coquina.
Lead.
Composite.
Composite.
Clay.
Composite.
Iron.
Clay.
Clay.
Clay.
Clay.
Clay.
Bone. --Fauna Remains.
Steatite (soapstone).
Clay.
Clay.
Kaolinite Clay.
Flora Remains.
Chert.
Lead.
Glass.
Composite.
Fauna Remains. --Shell.
Wood.
Iron.
Bone. --Fauna Remains.
Bone. --Fauna Remains.
Bone. --Fauna Remains.
Bone. --Fauna Remains.
Bone. --Fauna Remains.
Kaolinite Clay.
Coquina.
Mortar.
Copper.
Co

Lot Control Name
68.00029 Coquina fragment.
68.00030 Metal fragment.
68.00031 Sample, flotation.
68.00032 Sample, flotation.
69.00001 Brick.
69.00002 Sample, flotation.
69.00003 Metal fragment.
69.00004 San Marcos Complicated Stamped.
69.00005 Untyped, tin enameled.
69.00006 San Marcos Checked Stamped.
69.00007 San Marcos Ware.
69.00008 Olive Jar.
69.00009 Vertebrata.
69.00010 Pipe, tobacco.
69.00011 Abo Polychrome.
69.00012 El Morro Ware.
69.00013 Pipe, tobacco.
69.00014 Charcoal.
69.00015 Debitage.
69.00016 Ball, musket.
69.00017 Vessel fragment.
69.00018 Sample, unprocessed.
69.00019 Ostreidae.
69.00020 Wood fragment.
69.00021 Nail.
69.00022 Aves.
69.00023 Mammalia.
69.00024 Mugilidae.
69.00025 Osteichthyes.
69.00026 Ariidae.
69.00027 Pipe, tobacco.
69.00028 Coquina fragment.
69.00029 Mortar.
69.00030 Metal fragment.
69


$\begin{array}{ll}\text { Cat．\＃} & \text { Provenience } \\ \text { CASA 005083 } & \text { EU01，LV08，ZN B }\end{array}$ CASA 005084 EU01，LV08，ZN B CASA 005831 EU01，LV09，ZN B CASA 005832 EU01，LV09，ZN B CASA 005833 EU01，LV09，ZN B CASA 005834 EU01，LV09，ZN B CASA 005835 EU01，LV09，ZN B CASA 005836 EU01，LV09，ZN B g NZ＇60ヘT ‘เ0 g NZ ‘60 T＇ $10 \cap$ ق $0 \downarrow 8$ s00 VSVO CASA 005839 EU01，LV09，ZN B CASA 005086 EU01，LV09，ZN B CASA 005841 EU01，LV09，ZN B CASA 005842 EU01，LV09，ZN B CASA 005843 EU01，LV09，ZN B CASA 005844 EU01，LV09，ZN B \＆NZ＇60ムT＇10חG st8s00 VSVO
 g NZ＇60ヘT＇I0חヨ Lเ8s00 VSVO CASA 005848 EU01，LV09，ZN B CASA 005849 EU01，LV09，ZN B CASA 005850 EU01，LV09，ZN B CASA 005851 EU01，LV09，ZN B CASA 005852 EU01，LV09，ZN B CASA 005853 EU01，LV09，ZN B \＆NZ ‘60ヘT ‘I0חヨ 680¢00 VSVO
 g NZ ‘60＾T ‘I0חヨ Z60s00 VSVO g NZ ‘60 T＇ $10 \cap \exists$ £ $60 \varsigma 00$ VSVO DISC CASA 005101 EU01，LV09，ZN B



Material
Brass．
Slag．
Clay．
Clay．
Clay．
Clay．
lron．
Clay．
Kaolinite Clay． Bone．－－Fauna Remains． Kaolinite Clay． Kaolinite Clay． Bone． Chert． Chert． Chert． Shale． Lead．

Clay． Clay． Clay． Iron． Clay． Clay．

Bone．－－Fauna Remains． Bone．－－Fauna Remains． Bone．－－Fauna Remains． Bone．－－Fauna Remains． Fauna Remains．－－Shell． Bone．－－Fauna Remains． Bone．－－Fauna Remains． Clay．

Lot Control Name

## 69．00031 Metal fragment．

 69．00032 Slag．69.00032 Slag
70.00001 El Morro Ware． 70.00002 Untyped，earthenware． 70.00003 Puebla Polychrome．
70.00004 Puebla Blue On White． 70.00005 Spike．
70.00006 Untyped，tin enameled． 70.00007 Pipe，tobacco． 70.00008 Pipe，tobacco 70.00009 Pipe，tobacco 70.00010 Testudines． 70.00011 Bone，worked．
70.00012 Spall．
70.00013 Gunflint．
70.00014 Gunflint．
70.00015 Stone，building
70.00016 Weight
70.00017 San Marcos Simple Stamped．
70.00018 San Marcos Complicated Stamped． 70.00019 San Marcos Red．
70.00020 San Marcos Plain
70.00021 Nail．
70.00022 Untyped，earthenware．
70.00023 Untyped，Native American 70.00024 Fossil．
70.00025 Sciaenidae．
70.00026 Nonfood，bone．
70.00027 Ariidae．

70．00028 Crustacea．
70．00029 Mugilidae． 70．00030 Mammalia．

70．00031 San Marcos Ware
70.00032 Olive Jar．


| Material | Cat. \# | Provenience | Count | Weight |
| :---: | :---: | :---: | :---: | :---: |
| Clay. | CASA 005863 | EU01, LV09, ZN B | 1 | 103.13 |
| Iron. | CASA 005103 | EU01, LV09, ZN B | 1 | 16.6 |
| Clay. | CASA 005865 | EU01, LV09, ZN B | 2 | 14.9 |
| Glass. | CASA 005866 | EU01, LV09, ZN B | 206 | 415.4 |
| Wood. | CASA 005120 | EU01, LV09, ZN B |  | 0.6 |
| Fauna Remains, --Shell. | DISC | EU01, LV09, ZN B |  | 305.1 |
| Composite. | CASA 005127 | EU01, LV09, ZN B |  | 23.4 |
| Fauna Remains. --Shell. | DISC | EU01, LV09, ZN B |  | 0.81 |
| Composite. | CASA 005128 | EU01, LV09, ZN B |  | 807.1 |
| Fauna Remains. --Shell. | DISC | EU01, LV09, ZN B |  | 2253 |
| Flora Remains. | CASA 005873 | EU01, LV09, ZN B |  | 568.9 |
| Copper. | CASA 005874 | EU01, LV09, ZN B |  | 467.3 |
| Lead. | CASA 005875 | EU01, LV09, ZN B |  | 11.54 |
| Copper. | CASA 005876 | EU01, LV09, ZN B | 1 | 6.1 |
| Copper. | CASA 005877 | EU01, LV09, ZN B | 1 | 6.6 |
| Iron. | CASA 005878 | EU01, LV09, ZN B | 26 | 920 |
| Iron. | CASA 005879 | EU01, LV09, ZN B | 2 | 87.6 |
| Iron. | CASA 005880 | EU01, LV09, ZN B | 89 | 477.7 |
| Iron. | CASA 005881 | EU01, LV09, ZN B | 1 | 6.1 |
| Iron. | CASA 005882 | EU01, LV09, ZN B | 1 | 19.1 |
| Iron. | CASA 005883 | EU01, LV09, ZN B | 2 | 27.7 |
| Iron. | CASA 005884 | EU01, LV09, ZN B | 1 | 34.8 |
| Iron. | CASA 005885 | EU01, LV09, ZN B | 1 | 39.1 |
| Iron. | CASA 005886 | EU01, LV09, ZN B | 1 | 15.8 |
| Iron. | CASA 005887 | EU01, LV09, ZN B | 1 | 15.5 |
| Iron. | CASA 005888 | EU01, LV09, ZN B | 2 | 82.2 |
| Iron. | CASA 005889 | EU01, LV09, ZN B |  | 31657.9 |
| Slag. | CASA 005890 | EU01, LV09, ZN B |  | 7969.3 |
| Bone. --Fauna Remains. | CASA 005891 | EU01, LV09, ZN B | 6 | 88.3 |
| Bone. --Fauna Remains. | CASA 005892 | EU01, LV09, ZN B | 723 | 44.1 |
| Bone. --Fauna Remains. | CASA 005893 | EU01, LV09, ZN B | 1 | 0.33 |
| Brass. | CASA 005894 | EU01, LV09, ZN B | 1 | 48.9 |
| Brass. | CASA 005895 | EU01, LV09, ZN B | 2 | 3.7 |
| Bone. --Fauna Remains. | CASA 005896 | EU01, LV09, ZN B | 2 | 1.3 |




| Material | Cat. \# | Provenience |
| :---: | :---: | :---: |
| Bone. --Fauna Remains. | CASA 005897 | EU01, LV09, ZN B |
| Clay. | CASA 005130 | EU01, LV09, ZN B |
| Tabby. | DISC | EU01, LV09, ZN B |
| Bone, --Fauna Remains. | CASA 005900 | EU01, LV09, ZN B |
| Bone. --Fauna Remains. | CASA 005901 | EU01, LV09, ZN B |
| Chert. | CASA 005133 | EU01, LV09, ZN B |
| Chert. | CASA 005136 | EU01, LV09, ZN B |
| Clay. | DISC | EU01, LV09, ZN B |
| Composite. | CASA 005905 | EU01, LV09, ZN B |
| Coquina. | DISC | EU01, LV09, ZN B |
| Iron. | CASA 005137 | EU01, LV09, ZN B |
| Brass. | CASA 005138 | EU01, LV09, ZN B |
| Iron. | CASA 005140 | EU01, LV09, ZN B |
| Rock. | DISC | EU01, LV09, ZN B |
| Igneous Rock. | CASA 005142 | EU01, LV09, ZN B |
| Iron. | CASA 005144 | EU01, LV09, ZN B |
| Bone. | CASA 005152 | EU01, LV09, ZN B |
| Iron. | CASA 005164 | EU01, LV09, ZN B |
| Steatite (soapstone). | CASA 005167 | EU01, LV09, ZN B |
| Ferrous Metal. | CASA 005174 | EU01, LV09, ZN B |
| Steatite (soapstone). | CASA 005175 | EU01, LV09, ZN B |
| Brass. | CASA 005176 | EU01, LV09, ZN B |
| Fauna Remains. --Shell. | DISC | EU01, LV09, ZN B |
| Glass. | CASA 005186 | EU01, LV09, ZN B |
| Bone. --Fauna Remains. | CASA 005907 | EU01, LV10, ZN B |
| Composite. | CASA 005908 | EU01, LV10, ZN B |
| Fauna Remains. --Shell. | DISC | EU01, LV10, ZN B |
| Bone. --Fauna Remains | CASA 005187 | EU01, LV10, ZN B |
| Bone. --Fauna Remains | CASA 005198 | EU01, LV10, ZN B |
| Bone. --Fauna Remains. | CASA 005199 | EU01, LV10, ZN B |
| Bone. --Fauna Remains. | CASA 005203 | EU01, LV10, ZN B |
| Bone. --Fauna Remains. | CASA 005209 | EU01, LV10, ZN B |
| Clay. | CASA 005213 | EU01, LV10, ZN B |
| Clay. | CASA 005219 | EU01, LV10, ZN B |


| Lot Control Name |
| :---: |
| 70.00067 Vertebrata. |
| 70.00068 Majolica. |
| 70.00069 Tabby fragment. |
| 70.00070 Suidae. |
| 70.00071 Cervidae. |
| 70.00072 Debitage. |
| 70.00073 Flake. |
| 70.00074 Brick. |
| 70.00075 Sample, unprocessed. |
| 70.00076 Coquina fragment. |
| 70.00077 Ring. |
| 70.00078 Gun sight. |
| 70.00079 Musket barrel. |
| 70.00080 Stone, manuport. |
| 70.00081 Mano. |
| 70.00082 Hardware. |
| 70.00083 Button. |
| 70.00084 Bar. |
| 70.00085 Pipe, tobacco. |
| 70.00086 Concretion. |
| 70.00087 Pipe, tobacco. |
| 70.00088 Tack. |
| 70.00089 Gastropoda. |
| 70.00090 Vessel fragment. |
| 71.00001 Mammalia. |
| 71.00002 Sample, unprocessed. |
| 71.00003 Bivalvia. |
| 71.00004 Aves. |
| 71.00005 Osteichthyes. |
| 71.00006 Vertebrata. |
| 71.00007 Mugilidae. |
| 71.00008 Ariidae. |
| 71.00009 San Marcos Plain. |
| 71.00010 San Marcos Red |



| Material | Cat. \# | Provenience | Count | Weight |
| :---: | :---: | :---: | :---: | :---: |
| Bone. --Fauna Remains. | CASA 005223 | EU01, LV10, ZN B | 1 | 8.5 |
| Clay. | CASA 005230 | EU01, LV10, ZN B | 18 | 12.7 |
| Clay. | CASA 005232 | EU01, LV10, ZN B | 7 | 91.8 |
| Fauna Remains. --Shell. | DISC | EU01, LV10, ZN B |  | 0.7 |
| Fauna Remains. --Shell. | DISC | EU01, LV10, ZN B |  | 859.7 |
| Clay. | CASA 005243 | EU01, LV10, ZN B | 1 | 1.13 |
| Clay. | DISC | EU01, LV10, ZN B |  | 519.9 |
| lron. | CASA 005245 | EU01, LV10, ZN B | 13 | 90.4 |
| lron. | CASA 005246 | EU01, LV10, ZN B | 1 | 28.87 |
| Ferrous Metal. | CASA 005249 | EU01, LV10, ZN B |  | 2.3 |
| Tabby. | DISC | EU01, LV10, ZN B |  | 477.9 |
| Clay. | CASA 005255 | EU01, LV10, ZN B | 1 | 2.66 |
| Flora Remains. | CASA 005256 | EU01, LV10, ZN B |  | 67.6 |
| Copper. | CASA 005257 | EU01, LV10, ZN B |  | 77.8 |
| lron. | CASA 005258 | EU01, LV10, ZN B |  | 4356.8 |
| Slag. | CASA 005260 | EU01, LV10, ZN B |  | 1563.5 |
| Coquina. | DISC | EU01, LV10, ZN B |  | 3957.6 |
| Chert. | CASA 005261 | EU01, LV10, ZN B | 5 | 2.3 |
| Glass. | CASA 005262 | EU01, LV10, ZN B | 28 | 45.75 |
| Glass. | CASA 005276 | EU01, LV10, ZN B | 1 | 0.27 |
| Clay. | CASA 005282 | EU01, LV10, ZN B | 1 | 2.71 |
| Clay. | CASA 005284 | EU01, LV10, ZN B | 1 | 0.39 |
| Copper. | CASA 005288 | EU01, LV10, ZN B | 1 | 27.2 |
| Brass. | CASA 005294 | EU01, LV10, ZN B |  | 20.6 |
| Composite. | CASA 005295 | EU01, LV10, ZN B |  | 3286.3 |
| lron. | CASA 005639 | EU01, LV10, ZN B | 2 | 116.6 |
| Iron. | CASA 005297 | EU01, LV10, ZN B | 1 | 13.8 |
| Coquina | DISC | EU01, LV10, ZN F |  | 2589.1 |
| Composite. | CASA 005911 | EU01, LV10, ZN F |  | 1284.2 |
| Kaolinite Clay. | CASA 005301 | EU01, LV10, ZN F | 2 | 10.5 |
| lron. | CASA 005302 | EU01, LV10, ZN F | 9 | 28.8 |
| Kaolinite Clay. | CASA 005303 | EU01, LV10, ZN F | 1 | 0.9 |
| Clay. | CASA 005305 | EU01, LV10, ZN F |  | 4001.3 |
| Flora Remains. | CASA 005306 | EU01, LV10, ZN F |  | 52.09 |




| Material | Cat. \# | Provenience |
| :---: | :---: | :---: |
| 1ron. | CASA 005309 | EU01, LV10, ZN F |
| Tabby. | DISC | EU01, LV10, ZN F |
| Brass. | CASA 005318 | EU01, LV10, ZN F |
| Chert. | CASA 005319 | EU01, LV10, ZN F |
| Clay. | CASA 005327 | EU01, LV10, ZN F |
| Glass. | CASA 005328 | EU01, LV10, ZN F |
| Glass. | CASA 005329 | EU01, LV10, ZN F |
| Chert. | CASA 005331 | EU01, LV10, ZN F |
| Fauna Remains. --Shell. | DISC | EU01, LV10, ZN F |
| Clay. | CASA 005333 | EU01, LV10, ZN F |
| Clay. | CASA 005336 | EU01, LV10, ZN F |
| Clay. | CASA 005337 | EU01, LV10, ZN F |
| Clay. | CASA 005347 | EU01, LV10, ZN F |
| Clay. | CASA 005358 | EU01, LV10, ZN F |
| Composite. | CASA 005359 | EU01, LV10, ZN F |
| Bone. --Fauna Remains. | CASA 005363 | EU01, LV10, ZN F |
| Bone. --Fauna Remains. | CASA 005367 | EU01, LV10, ZN F |
| Bone. --Fauna Remains. | CASA 005378 | EU01, LV10, ZN F |
| Bone. --Fauna Remains. | CASA 005379 | EU01, LV10, ZN F |
| Bone. --Fauna Remains. | CASA 005391 | EU01, LV10, ZN F |
| Fauna Remains. --Shell. | DISC | EU01, LV10, ZN F |
| Bone. --Fauna Remains. | CASA 005392 | EU01, LV10, ZN F |
| Bone. --Fauna Remains. | CASA 005396 | EU01, LV10, ZN F |
| Flora Remains. | CASA 005913 | EU01, LV11, ZN B |
| Composite. | CASA 005914 | EU01, LV11, ZN B |
| Composite. | CASA 005405 | EU01, LV11, ZN B |
| Mortar. | DISC | EU01, LV11, ZN B |
| Composite. | CASA 005406 | EU01, LV11, ZN B |
| Coquina. | DISC | EU01, LV11, ZN B |
| Kaolinite Clay. | CASA 005410 | EU01, LV11, ZN B |
| Slag. | CASA 005414 | EU01, LV11, ZN B |
| Clay. | DISC | EU01, LV11, ZN B |
| Iron. | CASA 005419 | EU01, LV11, ZN B |
| Copper. | CASA 005420 | EU01, LV11, ZN B |




Pu01, LV11, 7N B
EUd, LVI, ZNB CASA 005422 EU01, LV11, ZNB CASA 005422 EU01, LV11, ZN B CASA 005423 EU01, LVII, ZN B CASA 005430 EU01, LV11, ZN B CASA 005433 EU01, LV11, ZN B CASA 005437 EU01, LV11, ZN B

 CASA 005449 EU01, LV11, ZN B
 DISC EU01, LV11, ZN B CASA 005459 EU01, LV11, ZN B CASA 005460 EU01, LV11, ZN F DISC EU01 LV11, 7N F CASA 005918 EU01, LV11, ZN F CASA 005463 EU01, LV11, ZN F DISC EU01, LV11, ZN F DISC EU01, LV11, ZN F CASA 005471 EU01, LV11, ZN F DISC EU01, LV11, ZN F CASA 005479 EU01, LV11, ZN F CASA 005480 EU01, LV11, ZN F CASA 005483 EU01, LV11, ZN F CASA 005484 EU01, LV11, ZN F CASA 005487 EU01, LV11, ZN F CASA 005493 EU01, LV11, ZN F CASA 005495 EU01, LV11, ZN F CASA 005501 EU01, LV11, ZN F CASA 005505 EU01, LVI1, ZN F
 CASA 005506 EU01, LV1, ZN F
 CASA 005528 EU01, LV11, ZN F

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75.00010 Pipe, tobacco.
75.00011 San Marcos Ware.
75.00012 San Augustin Blue On White. 75.00013 Vessel fragment. 75.00014 Vessel fragment. 75.00015 Coquina fragment. 75.00016 Tabby fragment. 75.00017 Ostreidae.
75.00018 Nail.
75.00019 Metal fragment. 75.00020 Osteichthyes. 75.00021 Gun trigger. 75.00022 Handle. 75.00023 Bridle.
75.00024 Sample, flotation. 75.00025 Sample, flotation. 76.00001 Metal fragment. 76.00002 Charcoal.
76.00003 Metal fragment. 77.00001 Mortar.
78.00001 Wood fragment. 78.00002 Metal fragment.

Count Weight
 $\sim \quad-\quad-$


| Cat. \# | Pr |
| :---: | :---: |
| CASA 005684 | E |
| CASA 005690 | E |
| ASA 005696 | EU01, LV09, ZN G |
| CASA 005697 | E |
| CASA 005699 | EU01, LV09, ZN G |
| SA 005702 | EU01, LV09, ZN G |
| ISC | EU01, LV09, ZN G |
| DISC | EU01, LV09, ZN G |
| A | EU |
| ASA 00571 | EU01, LV09, ZN G |
| ASA 00 | G |
| CASA 005713 | G |
| CASA 005716 | EU01, LV09, ZN G |
| ASA 005724 | EU01, LV09, ZN G |
| ASA 005 | EU01, LV09, ZN G |
| 00 | EU01, LV09, ZN G |
| 40 | EU01, LV09, ZN G |
| ASA 00574 | EU01, LV09, ZN G |
| SA 00574 | EU01, LV09, ZN G |
| CASA 005760 | EU01, LV10, ZN G |
| SA 00576 | EU01, LV10, ZN G |
| 05 | EU01, LV10, |
| SA | EU01, LV10, ZN G |
| A | EU01, LV10, ZN G |
| DISC | EU01, LV10, ZN G |
| DISC | EU01, LV10, ZN G |
| A 0 | EU01, LV10, ZN G |
| SA 005776 | EU01, LV10, ZN G |
| CASA 005778 | EU01, LV10, ZN G |
| ASA 00578 | EU01, LV10, ZN G |
| CASA 005 | EU01, LV10, ZN G |
| SA 005787 | J01, LV10, ZN G |
| A 005795 | 01, LV10, |
| 005 |  |



| Lot Control Name | Material | Cat. \# | Provenience |
| :---: | :---: | :---: | :---: |
| 85.00016 Saint Johns Check Stamped. | Clay. | CASA 005797 | EU01, LV10, ZN G |
| 85.00017 Saint Johns Ware. | Clay. | CASA 005798 | EU01, LV10, ZN G |
| 85.00018 Melongenidae. | Fauna Remains, --Shell. | DISC | EU01, LV10, ZN G |
| 85.00019 Melongenidae. | Fauna Remains. --Shell. | DISC | EU01, LV10, ZN G |
| 85.00020 Osteichthyes. | Bone. --Fauna Remains. | CASA 005800 | EU01, LV10, ZN G |
| 85.00021 Bovidae. | Bone. --Fauna Remains. | CASA 005805 | EU01, LV10, ZN G |
| 85.00022 Testudines. | Bone. --Fauna Remains. | CASA 005813 | EU01, LV10, ZN G |
| 85.00023 Mammalia. | Bone. --Fauna Remains. | CASA 005814 | EU01, LV10, ZN G |
| 86.00001 Slag. | Slag, | CASA 005816 | EU01, LV11, ZN G, SE |
| 86.00002 Metal fragment. | Iron. | CASA 005826 | EU01, LV11, ZN G, SE |
| 86.00003 Nail. | Iron. | CASA 005827 | EU01, LV11, ZN G, SE |
| 86.00004 Spike. | Iron. | CASA 005829 | EU01, LV11, ZN G, SE |
| 86.00005 Brick. | Clay. | DISC | EU01, LV11, ZN G, SE |
| 86.00006 Wood fragment. | Wood. | CASA 005838 | EU01, LV11, ZN G, SE |
| 86.00007 Olive Jar. | Clay. | CASA 005854 | EU01, LV11, ZN G, SE |
| 86.00008 San Marcos Plain. | Clay. | CASA 005855 | EU01, LV11, ZN G, SE |
| 86.00009 San Marcos Checked Stamped. | Clay. | CASA 005856 | EU01, LV11, ZN G, SE |
| 86.00010 Saint Johns Ware. | Clay. | CASA 005857 | EU01, LV11, ZN G, SE |
| 86.00011 Olive Jar. | Clay. | CASA 005858 | EU01, LV11, ZN G, SE |
| 86.00012 Saint Johns Check Stamped. | Clay. | CASA 005859 | EU01, LV11, ZN G, SE |
| 86.00013 San Marcos Complicated Stamped. | Clay. | CASA 005860 | EU01, LV11, ZN G, SE |
| 86.00014 San Marcos Ware. | Clay. | CASA 005864 | EU01, LV11, ZN G, SE |
| 86.00015 Fort Walton Incised. | Clay. | CASA 005867 | EU01, LV11, ZN G, SE |
| 86.00016 San Marcos Simple Stamped. | Clay. | CASA 005868 | EU01, LV11, ZN G, SE |
| 86.00017 Untyped, earthenware. | Clay. | CASA 005869 | EU01, LV11, ZN G, SE |
| 86.00018 Gastropoda. | Fauna Remains. --Shell. | DISC | EU01, LV11, ZN G, SE |
| 86.00019 Mammalia. | Bone. --Fauna Remains. | CASA 005870 | EU01, LV11, ZN G, SE |
| 86.00020 Aves. | Bone. --Fauna Remains. | CASA 005871 | EU01, LV11, ZN G, SE |
| 86.00021 Fossil. | Bone. --Fauna Remains. | CASA 005872 | EU01, LV11, ZN G, SE |
| 86.00022 Untyped, earthenware. | Clay. | CASA 005898 | EU01, LV11, ZN G, SE |
| 86.00023 Charcoal. | Flora Remains. | CASA 005899 | EU01, LV11, ZN G, SE |
| 86.00024 Osteichthyes. | Bone, --Fauna Remains. | CASA 005902 | EU01, LV11, ZN G, SE |
| 86.00025 Meleagridinae. | Bone. --Fauna Remains. | CASA 005903 | EU01, LV11, ZN G, SE |
| 87.00001 Charcoal. | Flora Remains. | CASA 005904 | EU01, LV12, ZN G, SE |



| Weight |  |
| :---: | :---: |
|  | 37.24 |
|  | 22.02 |
|  | 2.07 |
|  | 1.39 |
| 2 | 2.18 |
| 2 | 0.44 |
| 1 | 39.57 |
| 2 | 7.39 |
| 1 | 4.17 |
| 3 | 3.9 |
| 7 | 14.2 |
| 8 | 17.8 |
| 16 | 74 |
|  | 38.44 |
| 1 | 0.9 |
| 10 | 4.6 |
| 28 | 80.6 |
| 1 | 263.2 |
|  | 3.81 |
|  | 32.45 |
|  | 43.56 |
| 2 | 34 |
|  | 4.9 |
| 2 | 48.27 |
| 3 | 4.87 |
| 4 | 8 |
|  | 6.57 |
| 1 | 3.8 |
| 3 | 2.9 |
| 2 | 5.5 |
|  | 3.6 |
| 1 | 0.5 |
| 44 | 7.1 |
| 34 |  |


| Material | Cat. \# | Provenience |
| :---: | :---: | :---: |
| Slag. | CASA 005906 | EU01, LV12, ZN G, SE |
| Iron. | CASA 005909 | EU01, LV12, ZN G, SE |
| Brass. | CASA 005910 | EU01, LV12, ZN G, SE |
| Clay. | DISC | EU01, LV12, ZN G, SE |
| Clay. | CASA 005912 | EU01, LV12, ZN G, SE |
| Clay. | CASA 005915 | EU01, LV12, ZN G, SE |
| Clay | CASA 005916 | EU01, LV12, ZN G, SE |
| Clay. | CASA 005917 | EU01, LV12, ZN G, SE |
| Clay. | CASA 005919 | EU01, LV12, ZN G, SE |
| Clay. | CASA 005920 | EU01, LV12, ZN G, SE |
| Clay. | CASA 005922 | EU01, LV12, ZN G, SE |
| Clay. | CASA 005926 | EU01, LV12, ZN G, SE |
| Clay. | CASA 005934 | EU01, LV12, ZN G, SE |
| Mortar. | DISC | EU01, LV12, ZN G, SE |
| Bone. --Fauna Remains. | CASA 005939 | EU0 1, LV12, ZN G, SE |
| Bone. --Fauna Remains. | CASA 005941 | EU01, LV12, ZN G, SE |
| Bone. --Fauna Remains. | CASA 005943 | EU01, LV12, ZN G, SE |
| Clay. | CASA 005944 | EU01, LV13, ZN G, SE |
| Flora Remains. | CASA 005945 | EU01, LV13, ZN G, SE |
| Slag. | CASA 005946 | EU01, LV13, ZN G, SE |
| Iron. | CASA 005947 | EU01, LV13, ZN G, SE |
| Iron. | CASA 005948 | EU01, LV13, ZN G, SE |
| Fauna Remains. --Shell. | DISC | EU01, LV13, ZN G, SE |
| Clay. | CASA 005949 | EU01, LV13, ZN G, SE |
| Kaolinite Clay. | CASA 005950 | EU01, LV13, ZN G, SE |
| Clay. | CASA 005951 | EU01, LV13, ZN G, SE |
| Fauna Remains. --Shell. | DISC | EU01, LV13, ZN G, SE |
| Clay. | CASA 005952 | EU01, LV13, ZN G, SE |
| Clay. | CASA 005953 | EU01, LV13, ZN G, SE |
| Bone. --Fauna Remains. | CASA 005954 | EU01, LV13, ZN G, SE |
| Clay. | CASA 005955 | EU01, LV13, ZN G, SE |
| Bone. --Fauna Remains. | CASA 005956 | EU01, LV13, ZN G, SE |
| Bone. --Fauna Remains. | CASA 005957 | EU01, LV13, ZN G, SE |
| Bone. --Fauna Remain | CASA 005958 | U01, LV13, ZN G, SE |

Lot Control Name
87.00002 Slag.
87.00003 Metal fragment.
87.00004 Flintlock jaw pad.
87.00005 Brick.
87.00006 San Luis Polychrome.
87.00007 Majolica.
87.00008 Tile.
87.00009 Saint Johns Plain.
87.00010 San Marcos Red.
87.00011 San Marcos Plain.
87.00012 San Marcos Ware.
87.00013 San Marcos Simple Stamped.
87.00014 San Marcos Complicated Stamped.
87.00015 Mortar.
87.00016 Meleagridinae.
87.00017 Osteichthyes.
87.00018 Mammalia.
88.00001 Tile.
88.00002 Charcoal.
88.00003 Slag.
88.00004 Metal fragment.
88.00005 Nail.
88.00006 Mollusca.
88.00007 Olive Jar.
88.00008 Pipe, tobacco.
88.00009 Puebla Polychrome.
88.00010 Naticidae.
88.00011 Untyped, tin enameled.
88.00012 Majolica.
88.00013 Osteichthyes.
88.00014 Majolica.
88.00015 Meleagridinae.
88.00016 Vertebrata.
88.00017 Mammalia.
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| Lot Control Name | Material | Cat. \# | Provenience |
| :---: | :---: | :---: | :---: |
| 88.00018 Coarse Redware. | Clay. | CASA 005959 | EU01, LV13, ZN G, SE |
| 88.00019 Saint Johns Check Stamped. | Clay. | CASA 005960 | EU01, LV13, ZN G, SE |
| 88.00020 Saint Johns Ware. | Clay. | CASA 005961 | EU01, LV13, ZN G, SE |
| 88.00021 San Marcos Ware. | Clay. | CASA 005962 | EU01, LV13, ZN G, SE |
| 88.00022 San Pedro Plain. | Clay. | CASA 005963 | EU01, LV13, ZN G, SE |
| 88.00023 San Marcos Simple Stamped. | Clay. | CASA 005964 | EU01, LV13, ZN G, SE |
| 88.00024 San Marcos Complicated Stamped. | Clay. | CASA 005965 | EU01, LV13, ZN G, SE |
| 88.00025 San Marcos Plain. | Clay. | CASA 005966 | EU01, LV13, ZN G, SE |
| 88.00026 Brick. | Clay. | DISC | EU01, LV13, ZN G, SE |
| 88.00027 Mortar. | Mortar. | DISC | EU01, LV13, ZN G, SE |
| 88.00028 Debitage. | Chert. | CASA 005967 | EU01, LV13, ZN G, SE |
| 88.00029 Bovidae. | Bone. --Fauna Remains. | CASA 005968 | EU01, LV13, ZN G, SE |
| 89.00001 Charcoal. | Flora Remains. | CASA 005969 | EU01, LV14, ZN G, SE |
| 89.00002 Slag. | Slag. | CASA 005970 | EU01, LV14, ZN G, SE |
| 89.00003 Metal fragment. | Iron. | CASA 005971 | EU01, LV14, ZN G, SE |
| 89.00004 Nail. | Iron. | CASA 005972 | EU01, LV14, ZN G, SE |
| 89.00005 Stone, manuport. | Rock. | DISC | EU01, LV14, ZN G, SE |
| 89.00006 Mortar. | Mortar. | DISC | EU01, LV14, ZN G, SE |
| 89.00007 Brick. | Clay. | DISC | EU01, LV14, ZN G, SE |
| 89.00008 Pipe, tobacco. | Kaolinite Clay. | CASA 005973 | EU01, LV14, ZN G, SE |
| 89.00009 Pipe, tobacco. | Kaolinite Clay. | CASA 005974 | EU01, LV14, ZN G, SE |
| 89.00010 Vessel fragment. | Glass. | CASA 005975 | EU01, LV14, ZN G, SE |
| 89.00011 Mammalia. | Bone. --Fauna Remains. | CASA 005976 | EU01, LV14, ZN G, SE |
| 89.00012 Olive Jar. | Clay. | CASA 005977 | EU01, LV14, ZN G, SE |
| 89.00013 Majolica. | Clay. | CASA 005978 | EU01, LV14, ZN G, SE |
| 89.00014 Caparra Blue. | Clay. | CASA 005979 | EU01, LV14, ZN G, SE |
| 89.00015 Saint Johns Ware. | Clay. | CASA 005980 | EU01, LV14, ZN G, SE |
| 89.00016 Saint Johns Incised. | Clay. | CASA 005981 | EU01, LV14, ZN G, SE |
| 89.00017 Saint Johns Check Stamped. | Clay. | CASA 005982 | EU01, LV14, ZN G, SE |
| 89.00018 San Pedro Plain. | Clay. | CASA 005983 | EU01, LV14, ZN G, SE |
| 89.00019 San Marcos Ware. | Clay. | CASA 005984 | EU01, LV14, ZN G, SE |
| 89.00020 San Marcos Plain. | Clay. | CASA 005985 | EU01, LV14, ZN G, SE |
| 89.00021 San Marcos Complicated Stamped. | Clay. | CASA 005986 | EU01, LV14, ZN G, SE |
| 89.00022 San Marcos Simple Stamped. | Clay. | CASA 005987 | EU01, LV14, ZN G, SE |


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| Lot Control Name | Material | Cat. \# | Provenience |
| :---: | :---: | :---: | :---: |
| 89.00023 San Marcos Checked Stamped. | Clay. | CASA 005988 | EU01, LV14, ZN G, SE |
| 89.00024 Food, plant. | Flora Remains. | CASA 005989 | EU01, LV14, ZN G, SE |
| 89.00025 Osteichthyes. | Bone. --Fauna Remains. | CASA 005990 | EU01, LV14, ZN G, SE |
| 90.00001 Charcoal. | Flora Remains. | CASA 005991 | EU01, LV15, ZN G, SE |
| 90.00002 Metal fragment. | Iron. | CASA 005992 | EU01, LV15, ZN G, SE |
| 90.00003 Nail. | Iron. | CASA 005993 | EU01, LV15, ZN G, SE |
| 90.00004 Brick. | Clay. | DISC | EU01, LV15, ZN G, SE |
| 90.00005 San Marcos Ware. | Clay. | CASA 005994 | EU01, LV15, ZN G, SE |
| 90.00006 Saint Johns Ware. | Clay. | CASA 005995 | EU01, LV15, ZN G, SE |
| 90.00007 Saint Johns Check Stamped. | Clay. | CASA 005996 | EU01, LV15, ZN G, SE |
| 90.00008 San Marcos Simple Stamped. | Clay. | CASA 005997 | EU01, LV15, ZN G, SE |
| 90.00009 San Marcos Complicated Stamped | Clay. | CASA 005998 | EU01, LV15, ZN G, SE |
| 90.00010 Ostreidae. | Fauna Remains. --Shell. | DISC | EU01, LV15, ZN G, SE |
| 90.00011 Mammalia. | Bone. --Fauna Remains. | CASA 005999 | EU01, LV15, ZN G, SE |
| 90.00012 San Marcos Red. | Clay. | CASA 006000 | EU01, LV15, ZN G, SE |
| 90.00013 Osteichthyes. | Bone. --Fauna Remains. | CASA 006001 | EU01, LV15, ZN G, SE |
| 90.00014 Majolica. | Clay. | CASA 006002 | EU01, LV15, ZN G, SE |
| 91.00001 Charcoal. | Flora Remains. | CASA 006003 | EU01, LV16, ZN G, SE |
| 91.00002 Slag. | Slag. | CASA 006004 | EU01, LV16, ZN G, SE |
| 91.00003 Nail. | Iron. | CASA 006005 | EU01, LV16, ZN G, SE |
| 91.00004 Brick. | Clay. | DISC | EU01, LV16, ZN G, SE |
| 91.00005 Mortar. | Mortar. | DISC | EU01, LV16, ZN G, SE |
| 91.00006 Olive Jar. | Clay. | CASA 006006 | EU01, LV16, ZN G, SE |
| 91.00007 San Marcos Simple Stamped. | Clay. | CASA 006007 | EU01, LV16, ZN G, SE |
| 91.00008 San Marcos Ware. | Clay. | CASA 006008 | EU01, LV16, ZN G, SE |
| 91.00009 Saint Johns Ware. | Clay. | CASA 006009 | EU01, LV16, ZN G, SE |
| 91.00010 San Marcos Complicated Stamped. | Clay. | CASA 006010 | EU01, LV16, ZN G, SE |
| 91.00011 Osteichthyes. | Bone. --Fauna Remains. | CASA 006011 | EU01, LV16, ZN G, SE |
| 91.00012 Ariidae. | Bone, --Fauna Remains. | CASA 006012 | EU01, LV16, ZN G, SE |
| 91.00013 Vertebrata. | Bone. --Fauna Remains. | CASA 006013 | EU01, LV16, ZN G, SE |
| 91.00014 Untyped, semivitrieous. | Clay. | CASA 006014 | EU01, LV16, ZN G, SE |
| 91.00015 Abo Polychrome. | Clay. | CASA 006015 | EU01, LV16, ZN G, SE |
| 91.00016 Puebla Polychrome. | Clay. | CASA 006016 | EU01, LV16, ZN G, SE |
| 91.00017 Majolica. | Clay. | CASA 006017 | EU01, LV16, ZN G, SE |

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| Material | Cat. \# | Provenience |
| :---: | :---: | :---: |
| Chert. | CASA 006018 | EU01, LV16, ZN G, SE |
| Clay. | CASA 006019 | EU01, LV16, ZN G, SE |
| Flora Remains. | CASA 006020 | EU01, LV11, ZN G, NE |
| Chert. | CASA 006021 | EU01, LV11, ZN G, NE |
| Slag. | CASA 006022 | EU01, LV11, ZN G, NE |
| on. | CASA 006023 | EU01, LV11, ZN G, NE |
| Fauna Remains. --Shell. | DISC | EU01, LV11, ZN G, NE |
| Iron. | CASA 006024 | EU01, LV11, ZN G, NE |
| Clay. | DISC | EU01, LV11, ZN G, NE |
| Mortar. | DISC | EU01, LV11, ZN G, NE |
| Cla | CASA 006025 | EU01, LV11, ZN G, NE |
| Bone. --Fauna Remains, | CASA 006026 | EU01, LV11, ZN G, NE |
| Clay. | CASA 006027 | EU01, LV11, ZN G, NE |
| Clay. | CASA 006028 | EU01, LV11, ZN G, NE |
| Clay. | CASA 006029 | EU01, LV11, ZN G, NE |
| Fauna Remains, --Shell | DISC | EU01, LV11, ZN G, NE |
| Clay. | CASA 006030 | EU01, LV11, ZN G, NE |
| Fauna Remains. --Shell. | DISC | EU01, LV11, ZN G, NE |
| Clay. | CASA 006032 | EU01, LV11, ZN G, NE |
| Bone. --Fauna Remains. | CASA 006033 | EU01, LV11, ZN G, NE |
| Clay. | CASA 006034 | EU01, LV11, ZN G, NE |
| Bone. --Fauna Remains. | CASA 006035 | EU01, LV11, ZN G, NE |
| Bone. --Fauna Remains. | CASA 006036 | EU01, LV11, ZN G, NE |
| Clay. | CASA 006037 | EU01, LV11, ZN G, NE |
| Clay. | CASA 006038 | EU01, LV11, ZN G, NE |
| Bone. --Fauna Remains. | CASA 006039 | EU01, LV11, ZN G, NE |
| Bone. --Fauna Remains. | CASA 006040 | EU01, LV11, ZN G, NE |
| Clay. | CASA 006041 | EU01, LV11, ZN G, NE |
| Bone. --Fauna Remains. | CASA 006042 | EU01, LV11, ZN G, NE |
| Bone. --Fauna Remains. | CASA 006043 | EU01, LV11, ZN G, NE |
| Clay. | CASA 006044 | EU01, LV11, ZN G, NE |
| Clay. | CASA 006045 | EU01, LV11, ZN G, NE |
| Clay. | CASA 006046 | EU01, LV11, ZN G, NE |
| Flora Remains. | CASA 00604 | J01, LV12, ZN G, |

Lot Control Name
91.00018 Flake.
91.00019 Pipe, tobacco.
92.00001 Charcoal.
92.00002 Debitage.
92.00003 Slag.
92.00004 Metal fragment.
92.00005 Fasciolariidae.
92.00006 Nail.
92.00007 Brick.
92.00008 Mortar.
92.00009 Olive Jar.
92.00010 Rajiformes.
92.00011 Faience.
92.00012 Olive Jar.
92.00013 San Marcos Complicated Stamped.
92.00014 Melongenidae.
92.00015 San Marcos Plain.
92.00016 Mollusca.
92.00017 San Marcos Simple Stamped.
92.00018 Mugilidae.
92.00019 San Marcos Ware.
92.00020 Ariidae.
92.00021 Mammalia.
92.00022 San Pedro Plain.
92.00023 San Pedro Ware.
92.00024 Osteichthyes.
92.00025 Testudines.
92.00026 Saint Johns Ware.
92.00027 Vertebrata.
92.00028 Bovidae.
92.00029 Saint Johns Check Stamped.
92.00030 Fort Walton Incised.
92.00031 Majolica.
93.00001 Charcoal.
9.
9.
9.
Wha


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| nt Weight |  |
| :---: | :---: |
| 1 | 5.29 |
| 1 | 36.08 |
| 1 | 4.42 |
|  | 2.4 |
| 3 | 25.3 |
| 3 | 0.28 |
| 6 | 7.83 |
|  | 0.9 |
|  | 11.2 |
|  | 3.7 |
|  | 1.1 |
| 8 | 40.1 |
| 3 | 13.2 |
| 2 | 8.5 |
| 2 | 7.9 |
| 1 | 3.4 |
| 1 | 3.2 |
| 1 | 5.4 |
| 3 | 11.8 |
|  | 24.7 |
|  | 3.6 |
|  | 6.5 |
|  | 2.3 |
|  | 7.8 |
| 2 | 52.4 |
|  | 29.4 |
| 1 | 6.2 |
| 9 | 0.29 |
| 2 | 1.4 |
|  | 1.6 |
| 2 | 4.4 |
| 2 | 0.49 |
| 23 | 52.38 |
| 2 | 11.7 |


| Cat. \# | Provenience |
| :---: | :---: |
| CASA 006078 | EU01, LV12, ZN G, NE |
| CASA 006079 | EU01, LV12, ZN G, NE |
| DISC | EU01, LV12, ZN G, NE |
| CASA 006080 | EU01, LV13, AREA B, ZN G, NE |
| CASA 006081 | EU01, LV13, AREA B, ZN G, NE |
| CASA 006082 | EU01, LV13, AREA B, ZN G, NE |
| CASA 006083 | EU01, LV13, AREA B, ZN G, NE |
| CASA 006084 | EU01, LV13, AREA B, ZN G, NE |
| DISC | EU01, LV13, AREA B, ZN G, NE |
| DISC | EU01, LV13, AREA B, ZN G, NE |
| DISC | EU01, LV13, AREA B, ZN G, NE |
| CASA 006085 | EU01, LV13, AREA B, ZN G, NE |
| CASA 006086 | EU01, LV13, AREA B, ZN G, NE |
| CASA 006087 | EU01, LV13, AREA B, ZN G, NE |
| CASA 006088 | EU01, LV13, AREA B, ZN G, NE |
| CASA 006089 | EU01, LV14, AREA B, ZN G, NE |
| CASA 006090 | EU01, LV14, AREA B, ZN G, NE |
| CASA 006091 | EU01, LV 14, AREA B, ZN G, NE |
| CASA 006092 | EU01, LV14, AREA B, ZN G, NE |
| CASA 006093 | EU01, LV14, AREA B, ZN G, NE |
| CASA 006094 | EU01, LV14, AREA B, ZN G, NE |
| DISC | EU01, LV14, AREA B, ZN G, NE |
| D1SC | EU01, LV14, AREA B, ZN G, NE |
| DISC | EU01, LV14, AREA B, ZN G, NE |
| CASA 006095 | EU01, LV14, AREA B, ZN G, NE |
| CASA 006096 | EU01, LV14, AREA B, ZN G, NE |
| CASA 006097 | EU01, LV14, AREA B, ZN G, NE |
| CASA 006098 | EU01, LV14, AREA B, ZN G, NE |
| CASA 006099 | EU01, LV14, AREA B, ZN G, NE |
| DISC | EU01, LV14, AREA B, ZN G, NE |
| CASA 006100 | EU01, LV14, AREA B, ZN G, NE |
| CASA 006101 | EU01, LV14, AREA B, ZN G, NE |
| CASA 006102 | EU01, LV14, AREA B, ZN G, NE |
| CASA 006103 | U01, LV14, AREA B, ZN G, NE |

Material
Clay.
Clay.
Tar.
lron.
lron.
Bone. --Fauna Remains.
Bone. --Fauna Remains.
Flora Remains
Clay.
Coquina.
Mortar.
Clay.
Clay.
Clay.
Clay.
Kaolinite Clay.
Clay.
Glass.
lron.
lron.
Flora Remains.
Mortar.
Coquina.
Clay.
Clay.
Slag.
Clay.
Bone. --Fauna Remains.
Clay.
Fauna Remains. --Shell.
Clay.
Bone. --Fauna Remains.
Bone. --Fauna Remains.
Clay.
Cl

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| Cat. \# | Provenience | Count | Weight |
| :---: | :---: | :---: | :---: |
| CASA 006104 | EU01, LV14, AREA B, ZN G, NE | 4 | 9.6 |
| CASA 006105 | EU01, LV14, AREA B, ZN G, NE | 28 | 58.5 |
| CASA 006106 | EU01, LV14, AREA B, ZN G, NE | 15 | 80.9 |
| CASA 006107 | EU01, LV14, AREA B, ZN G, NE | 4 | 6.9 |
| CASA 006108 | EU01, LV14, AREA B, ZN G, NE | 18 | 4.4 |
| DISC | EU01, LV15, AREA B, ZN G, NE |  | 26.8 |
| CASA 006109 | EU01, LV15, AREA B, ZN G, NE | 1 | 49.4 |
| DISC | EU01, LV15, AREA B, ZN G, NE |  | 1.8 |
| CASA 006110 | EU01, LV15, AREA B, ZN G, NE | 2 | 13.1 |
| CASA 006111 | EU01, LV15, AREA B, ZN G, NE | 1 | 1.6 |
| CASA 006112 | EU01, LV15, AREA B, ZN G, NE |  | 38.1 |
| CASA 006113 | EU01, LV15, AREA B, ZN G, NE |  | 5.7 |
| CASA 006114 | EU01, LV15, AREA B, ZN G, NE | 1 | 57.8 |
| CASA 006115 | EU01, LV15, AREA B, ZN G, NE |  | 3.7 |
| DISC | EU01, LV15, AREA B, ZN G, NE |  | 1.4 |
| CASA 006116 | EU01, LV15, AREA B, ZN G, NE | 1 | 3.4 |
| CASA 006117 | EU01, LV15, AREA B, ZN G, NE | 1 | . 3 |
| CASA 006118 | EU01, LV15, AREA B, ZN G, NE | 1 | 0.4 |
| CASA 006119 | EU01, LV15, AREA B, ZN G, NE | 1 | 1.9 |
| CASA 006120 | EU01, LV15, AREA B, ZN G, NE | 2 | 25.62 |
| CASA 006121 | EU01, LV15, AREA B, ZN G, NE | 1 | 4.98 |
| CASA 006122 | EU01, LV15, AREA B, ZN G, NE | 8 | 13.6 |
| CASA 006123 | EU01, LV15, AREA B, ZN G, NE | 1 | 1.3 |
| CASA 006124 | EU01, LV15, AREA B, ZN G, NE | 1 | 1.75 |
| CASA 006125 | EU01, LV15, AREA B, ZN G, NE | 19 | 36.9 |
| CASA 006126 | EU01, LV15, AREA B, ZN G, NE | 2 | 0.54 |
| CASA 006127 | EU01, LV15, AREA B, ZN G, NE | 2 | 1.31 |
| CASA 006128 | EU01, LV15, AREA B, ZN G, NE | 17 | 3.06 |
| CASA 006129 | EU01, LV15, AREA B, ZN G, NE | 2 | 2.3 |
| CASA 006130 | EU01, LV15, AREA B, ZN G, NE | 8 | 14.46 |
| CASA 006131 | EU01, LV15, AREA B, ZN G, NE | 28 | 7.32 |
| CASA 006132 | EU01, LV15, AREA B, ZN G, NE | 1 | 1.05 |
| CASA 006133 | EU01, LV 15, AREA B, ZN G, NE | 6 | 31.7 |
| CASA 006 | EU01, LV16, AREA B, ZN G, NE | 7 |  |

Material
Clay.
Clay.
Clay.
Clay.
Bone. --Fauna Remains.
Clay.
Clay.
Coquina.
Clay.
Kaolinite Clay.
lron.
Copper.
Iron.
Flora Remains.
Fauna Remains. --Shell.
Clay.
Clay.
Clay.
Clay.
Clay.
Clay.
Clay.
Clay.
Bone. --Fauna Remains.
Clay.
Bone. --Fauna Remains.
Bone. --Fauna Remains.
Bone. --Fauna Remains.
Clay.
Bone. --Fauna Remains.
Bone. --Fauna Remains.
Clay.
Clay.
Bone. --Fauna Remains.
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| Material | Cat. \# | Provenience |
| :---: | :---: | :---: |
| Iron. | CASA 006135 | EU01, LV16, AREA B, ZN G, NE |
| Clay. | CASA 006136 | EU01, LV16, AREA B, ZN G, NE |
| Flora Remains. | CASA 006137 | EU01, LV16, AREA B, ZN G, NE |
| Clay. | CASA 006138 | EU01, LV16, AREA B, ZN G, NE |
| Iron. | CASA 006139 | EU01, LV20, AREA A, SE |
| Clay. | DISC | EU01, LV20, AREA A, SE |
| Clay. | CASA 006140 | EU01, LV20, AREA A, SE |
| Clay. | CASA 006141 | EU01, LV20, AREA A, SE |
| Clay. | CASA 006142 | EU01, LV20, AREA A, SE |
| Clay. | CASA 006143 | EU01, LV20, AREA A, SE |
| Flora Remains. | CASA 006144 | EU01, LV07, (matrix cleaning) |
| Slag. | CASA 006145 | EU01, LV07, (matrix cleaning) |
| Mortar. | DISC | EU01, LV07, (matrix cleaning) |
| Clay. | DISC | EU01, LV07, (matrix cleaning) |
| Plastic. | D1SC | EU01, LV07, (matrix cleaning) |
| Fauna Remains. --Shell. | DISC | EU01, LV07, (matrix cleaning) |
| Synthetic. | CASA 006146 | EU01, LV07, (matrix cleaning) |
| Clay. | CASA 006147 | EU01, LV07, (matrix cleaning) |
| lron. | CASA 006148 | EU01, top of ZN C, (matrix cleaning) |
| Slag. | CASA 006149 | EU01, top of ZN C, (matrix cleaning) |
| Chert. | CASA 006150 | EU01, top of ZN C, (matrix cleaning) |
| Mortar. | DISC | EU01, top of ZN C , (matrix cleaning) |
| Flora Remains. | CASA 006151 | EU01, top of ZN C, (matrix cleaning) |
| Clay. | DISC | EU01, top of ZN C, (matrix cleaning) |
| Fauna Remains. --Shell. | DISC | EU01, top of ZN C, (matrix cleaning) |
| Coquina. | DISC | EU01, top of ZN C, (matrix cleaning) |
| Clay. | CASA 006152 | EU01, top of ZN C , (matrix cleaning) |
| Clay. | CASA 006153 | EU01, top of ZN C, (matrix cleaning) |
| Clay. | CASA 006154 | EU01, top of ZN C, (matrix cleaning) |
| Bone. --Fauna Remains. | CASA 006155 | EU01, top of ZN C, (matrix cleaning) |
| Bone. --Fauna Remains. | CASA 006156 | EU01, top of ZN C, (matrix cleaning) |
| Flora Remains. | CASA 006157 | EU01, LV12, ZN G |
| Clay. | CASA 006158 | EU01, LV12, ZN G |
| Clay. | DISC | EU01, LV12, ZN G |

Lot Control Name
97.00002 Metal fragment.
97.00003 Tile.
97.00004 Charcoal.
97.00005 San Marcos Complicated Stamped.
98.00001 Metal fragment.
98.00002 Brick.
98.00003 San Pedro Plain.
98.00004 Saint Johns Plain.
98.00005 Saint Johns Incised.
98.00006 Saint Johns Check Stamped.
99.00001 Charcoal.
99.00002 Slag.
99.00003 Mortar.
99.00004 Brick.
99.00005 Plastic fragment.
99.00006 Mollusca.
99.00007 Rope.
99.00008 Saint Johns Check Stamped.
100.00001 Metal fragment.
100.00002 Slag.
100.00003 Debitage.
100.00004 Mortar.
100.00005 Charcoal.
100.00006 Brick.
100.00007 Mollusca.
100.00008 Coquina fragment.
100.00009 San Marcos Simple Stamped.
100.00010 San Marcos Complicated Stamped.
100.00011 San Marcos Ware.
100.00012 Osteichthyes.
100.00013 Mammalia.
101.00001 Charcoal.
101.00002 Olive Jar.
101.00003 Brick.
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--Fauna Remains. Bone.
Clay.
Iron.
Clay.
Flora Bone. --Fauna Remains. Slag. Bone, --Fauna Remains. --Fauna Remains. Bone.
Clay.
Clay.
Clay. Bone. --Fauna Remains. Bone. --Fauna Remains. Clay. Clay. Iron. Flora Remains.
Fauna Remains. --Shell. Clay. Iron.
Mortar.
Bone. --Fauna Remains. Glass. Slag. Fauna Remains. --Shell. Fauna Remains. --Shell. Clay.
Clay.

## Lot Control Name


101.00006 San Marcos Complicated Stamped 101.00006 San Marcos Complicated Stamped 101.00007 Mammalia. 03.00001 San Marcos Ware 103.00002 Charcoal. 103.00003 Vertebrata.
103.00004 Slag.
103.00005 Fossil.
103.00006 Osteichth
103.00006 Osteichthyes.
103.00007 Guadalajara P
103.00007 Guadalajara Polychrome. 104.00001 Puebla Blue On White.
104.00002 San Marcos Complicated Stamped. 104.00003 San Marcos Ware. 104.00004 Osteichthyes.
104.00005 Vertebrata.
104.00006 Untyped, Native American. 104.00007 Untyped, earthenware.
104.00008 Saint Johns Ware.
104.00009 Metal fragment
104.00010 Charcoal. 104.00011 Mollusca.
104.00012 Brick.
104.00013 Nail.
104.00014 Mortar.
104.00015 Mammalia.
104.00016 Vessel fragment.
104.00017 Slag.
105.00001 Ostreidae.
105.00002 Bivalvia.
105.00003 San Marcos Complicated Stamped. 105.00004 San Marcos Simple Stamped.



| Cat. \# | Provenience |
| :---: | :---: |
| CASA 006188 | EU01, LV13 |
| CASA 006189 | EU01, LV13 |
| CASA 006190 | EU01, LV13 |
| CASA 006191 | EU01, LV13 |
| CASA 006192 | EU01, LV13 |
| CASA 006193 | EU01, LV13 |
| CASA 006194 | EU01, LV13 |
| CASA 006195 | EU01, LV13 |
| CASA 006196 | EU01, LV13 |
| CASA 006197 | EU01, LV13 |
| CASA 006198 | EU01, LV13 |
| CASA 006199 | EU01, LV13 |
| CASA 006200 | EU01, LV13 |
| CASA 006201 | EU01, LV13 |
| CASA 006202 | EU01, LV13 |
| DISC | EU01, LV13 |
| DISC | EU01, LV13 |
| CASA 006203 | EU01, LV13 |
| CASA 006204 | EU01, LV13 |
| CASA 006205 | EU01, LV13 |
| DISC | EU01, LV13 |
| CASA 006206 | EU01, LV13 |
| CASA 006207 | EU01, LV13 |
| CASA 006208 | EU01, LV13 |
| CASA 006209 | EU01, LV13 |
| CASA 006210 | EU01, LV13 |
| CASA 006211 | EU01, LV13 |
| CASA 006212 | EU01, LV13 |
| CASA 006213 | EU01, LV13 |
| CASA 006214 | EU01, LV13 |
| CASA 006215 | EU01, LV13 |
| DISC | EU01, LV13 |
| CASA 006216 | EU01, LV13 |
| CASA 006217 | EU01, FEAT |

$\qquad$ Bone. --Fauna Remains. Bone. --Fauna Remains. Bone. --Fauna Remains. Bone. --Fauna Remains. lron. Copper. Mortar. Clay. Clay. Clay. Clay. Chert. Clay. lora Flora Remains.
Clay.
Brass.
Barss.
Clay.
Tabby.
Kaolinite Clay.
Clay. 105.00006 San Marcos Plain. 105.00007 San Marcos Red. 105.00008 San Marcos Ware. 105.00009 Saint Johns Ware.
105.00010 Saint Johns Check Stamped. 105.00011 Mammalia.
105.00012 Mugilidae.
105.00013 Vertebrata. 105.00014 Osteichthyes.
105.00015 Suidae.
105.00016 Ursidae.
105.00017 Nonfood, bone 105.00018 Nail.
105.00019 Nail.
105.00020 Coquina fragment. 105.00021 Mortar.
105.00022 Majolica.
105.00023 San Luis Blue on White. 105.00024 Metal fragment.
105.00025 Brick.
105.0026 105.00027 Untyped, 105.00028 Gunflint. 105.00029 Brick.
105.00030 Slag.
105.00031 Charcoal. 105.00032 Majolica. 105.00033 Pin, straight. 105.00034 Metal fragment.
105.00035 Olive Jar.
105.00036 Tabby fragment.
105.00037 Pipe, tobacco.
106.00001 San Marcos Ware.


Cat. \# Provenience CASA 006218 EU01, FEAT05 CASA 006219 EU01, FEAT05 CASA 006220 EU01, FEAT05 CASA 006221 EU01, FEAT05 DISC EU01, FEAT05 CASA 006222 EU01, FEAT05 CASA 006223 EU01, FEAT05 EU01, FEAT05 EU01, FEAT05 CASA 006224 EU01, FEAT05 CASA 006225 EU01, FEAT05 CASA 006226 EU01, FEAT05 CASA 006227 EU01, FEAT05 CASA 006228 EU01, FEAT05 DISC EU01, FEAT05 CASA 006229 EU01, LV14 CASA 006230 EU01, LV14 CASA 006231 EU01, LV14 CASA 006232 EU01, LV14 CASA 006233 EU01, LV14 DISC EU01, LV14 CASA 006234 EU01, LV14
 DISC EU01, LV14 DISC EU01, LV14 CASA 006236 EU01, LV14 CASA 006237 EU01, LV14
 CASA 006239 EU01, LV14 CASA 006240 EU01, LV14 CASA 006241 EU01, LV14 DISC EU01, LV14 CASA 006242 EU01, LV14 CASA 006243 EU01, LV14 Bone. --Fauna Remains. Bone. --Fauna Remains.突 Chert. ron.

Fauna Remains. --Shell Flora Remains. Clay

Clay. lron. Brass. clay. lay.
ron. Coquina. Mortar. Slag. Clay. Silver. Kaolinite Clay. Fauna Remains. --Shell 07.00007 San Marcos Complicated Stamped. 07.00006 Brick. 107.00008 Nail.
107.00009 Coquina fragment. 107.00010 Mortar.
107.00011 Slag.
107.00012 San Marcos Simple Stamped. 107.00013 Vessel fragment. 107.00014 Debitage.
107.00015 Coin.
107.00016 Pipe, tobacco.
107.00017 Mollusca.
107.00018 Vertebrata.
107.00019 Chondrichthye

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| Material | Cat. \# | Provenience |
| :---: | :---: | :---: |
| Clay. | CASA 006272 | EU01, LV15 |
| Clay. | CASA 006273 | EU01, LV15 |
| Clay. | CASA 006274 | EU01, LV15 |
| Clay. | CASA 006275 | EU01, LV15 |
| Clay. | CASA 006276 | EU01, LV15 |
| Clay. | CASA 006277 | EU01, LV15 |
| Clay. | CASA 006278 | EU01, LV15 |
| Clay. | CASA 006279 | EU01, LV15 |
| Clay. | CASA 006280 | EU01, LV15 |
| Flora Remains. | CASA 006281 | EU01, LV15 |
| Slag. | CASA 006282 | EU01, LV15 |
| Glass. | CASA 006283 | EU01, LV15 |
| Clay. | DISC | EU01, LV15 |
| lron. | CASA 006284 | EU01, LV15 |
| Kaolinite Clay. | CASA 006285 | EU01, LV15 |
| Iron. | CASA 006286 | EU01, LV15 |
| Coquina. | DISC | EU01, LV15 |
| Bone. --Fauna Remains. | CASA 006287 | EU01, LV15 |
| Bone. --Fauna Remains. | CASA 006288 | EU01, LV15 |
| Bone. --Fauna Remains. | CASA 006289 | EU01, LV15 |
| Bone. --Fauna Remains. | CASA 006290 | EU01, LV15 |
| Bone. --Fauna Remains. | CASA 006291 | EU01, LV15 |
| Bone. --Fauna Remains. | CASA 006292 | EU01, LV15 |
| Bone. --Fauna Remains. | CASA 006293 | EU01, LV15 |
| Clay. | CASA 006294 | EU01, LV15 |
| Clay. | CASA 006295 | EU01, LV15 |
| Clay. | CASA 006296 | EU01, LV15 |
| Clay. | CASA 006297 | EU01, LV15 |
| Clay. | CASA 006298 | EU01, LV15 |
| Clay. | CASA 006299 | EU01, LV15 |
| Lead. | CASA 006300 | EU01, LV15 |
| Kaolinite Clay. | CASA 006301 | EU01, FEAT06 |
| Clay. | DISC | EU01, FEAT06 |
| Glass. | CASA 006302 | EU01, FEAT06 |

## Lot Control Name



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| Material | Cat. \# | Provenience |
| :---: | :---: | :---: |
| Brass. | CASA 006303 | EU01, FEAT06 |
| Brass. | CASA 006304 | EU01, FEAT06 |
| Clay. | CASA 006305 | EU01, FEAT06 |
| Clay. | CASA 006306 | EU01, FEAT06 |
| Clay. | CASA 006307 | EU01, FEAT06 |
| Clay. | CASA 006308 | EU01, FEAT06 |
| Clay. | CASA 006309 | EU01, FEAT06 |
| Clay. | CASA 006310 | EU01, FEAT06 |
| Clay. | CASA 006311 | EU01, FEAT06 |
| Clay. | CASA 006312 | EU01, FEAT06 |
| Fauna Remains. --Shell. | DISC | EU01, FEAT06 |
| Iron. | CASA 006313 | EU01, FEAT06 |
| 1ron. | CASA 006314 | EU01, FEAT06 |
| Flora Remains. | CASA 006315 | EU01, FEAT06 |
| Mortar. | DISC | EU01, FEAT06 |
| Kaolinite Clay. | CASA 006316 | EU01, FEAT06 |
| Slag. | CASA 006317 | EU01, FEAT06 |
| Fauna Remains. --Shell. | DISC | EU01, FEAT06 |
| Chert. | CASA 006318 | EU01, FEAT06 |
| Bone. --Fauna Remains. | CASA 006319 | EU01, FEAT06 |
| Wood. | CASA 006320 | EU01, FEAT06 |
| Bone. --Fauna Remains. | CASA 006321 | EU01, FEAT06 |
| Bone. --Fauna Remains. | CASA 006322 | EU01, FEAT06 |
| Chert. | CASA 006323 | EU01, FEAT06 |
| Bone. --Fauna Remains. | CASA 006324 | EU01, FEAT06 |
| Bone. --Fauna Remains. | CASA 006325 | EU01, FEAT06 |
| Tabby. | DISC | EU01, FEAT06 |
| Bone. --Fauna Remains. | CASA 006327 | EU01, FEAT06 |
| Bone. --Fauna Remains. | CASA 006328 | EU01, FEAT06 |
| Bone. --Fauna Remains. | CASA 006329 | EU01, FEAT06 |
| Bone. --Fauna Remains. | CASA 006330 | EU01, FEAT06 |
| Bone. --Fauna Remains. | CASA 006331 | EU01, FEAT06 |
| Clay. | DISC | EU01, LV16, FEAT06 |
| Flora Remains. | CASA 006332 | EU01, LV16, FEAT06 |

Lot Control Name
109.00004 Hinge.
109.00005 Metal fragment.
109.00006 Majolica.
109.00007 San Marcos Complicated Stamped.
109.00008 San Marcos Simple Stamped.
109.00009 San Marcos Ware.
109.00010 San Marcos Plain.
109.00011 Saint Johns Check Stamped.
109.00012 Saint Johns Ware.
109.00013 Olive Jar.
109.00014 Ostreidae.
109.00015 Nail.
109.00016 Metal fragment.
109.00017 Charcoal.
109.00018 Mortar.
109.00019 Pipe, tobacco.
109.00020 Slag.
109.00021 Mollusca.
109.00022 Debitage.
109.00023 Bovidae.
109.00024 Wood fragment.
109.00025 Ariidae.
109.00026 Mammalia.
109.00027 Flake.
109.00028 Testudines.
109.00029 Fossil.
109.00030 Tabby fragment.
109.00031 Aves.
109.00032 Suidae.
109.00033 Osteichthyes.
109.00034 Mugilidae.
109.00035 Vertebrata.
110.00001 Brick.
110.00002 Charcoal.



| Material | Cat. \# | Provenience |
| :---: | :---: | :---: |
| Brass. | CASA 006303 | EU01, FEAT06 |
| Brass. | CASA 006304 | EU01, FEAT06 |
| Clay. | CASA 006305 | EU01, FEAT06 |
| Clay. | CASA 006306 | EU01, FEAT06 |
| Clay. | CASA 006307 | EU01, FEAT06 |
| Clay. | CASA 006308 | EU01, FEAT06 |
| Clay. | CASA 006309 | EU01, FEAT06 |
| Clay. | CASA 006310 | EU01, FEAT06 |
| Clay. | CASA 006311 | EU01, FEAT06 |
| Clay. | CASA 006312 | EU01, FEAT06 |
| Fauna Remains. --Shell. | DISC | EU01, FEAT06 |
| Iron. | CASA 006313 | EU01, FEAT06 |
| lron. | CASA 006314 | EU01, FEAT06 |
| Flora Remains. | CASA 006315 | EU01, FEAT06 |
| Mortar. | DISC | EU01, FEAT06 |
| Kaolinite Clay. | CASA 006316 | EU01, FEAT06 |
| Slag. | CASA 006317 | EU01, FEAT06 |
| Fauna Remains. --Shell | DISC | EU01, FEAT06 |
| Chert. | CASA 006318 | EU01, FEAT06 |
| Bone. --Fauna Remains. | CASA 006319 | EU01, FEAT06 |
| Wood. | CASA 006320 | EU01, FEAT06 |
| Bone. --Fauna Remains. | CASA 006321 | EU01, FEAT06 |
| Bone. --Fauna Remains. | CASA 006322 | EU01, FEAT06 |
| Chert. | CASA 006323 | EU01, FEAT06 |
| Bone. --Fauna Remains. | CASA 006324 | EU01, FEAT06 |
| Bone. --Fauna Remains. | CASA 006325 | EU01, FEAT06 |
| Tabby. | DISC | EU01, FEAT06 |
| Bone. --Fauna Remains. | CASA 006327 | EU01, FEAT06 |
| Bone. --Fauna Remains. | CASA 006328 | EU01, FEAT06 |
| Bone. --Fauna Remains. | CASA 006329 | EU01, FEAT06 |
| Bone. --Fauna Remains. | CASA 006330 | EU01, FEAT06 |
| Bone. --Fauna Remains. | CASA 006331 | EU01, FEAT06 |
| Clay. | DISC | EU01, LV16, FEAT06 |
| Flora Remains. | CASA 006332 | EU01, LV16, FEAT06 |

109.00007 San Marcos Complicated Stamped 109.00008 San Marcos Simple Stamped. 109.00009 San Marcos Ware. 109.00010 San Marcos Plain.
109.00011 Saint Johns Check Stamped. 109.00012 Saint Johns Ware. 109.00013 Olive Jar. 109.00014 Ostreidae.
109.00015 Nail.
109.00016 Metal fragment. 109.00017 Charcoal.
109.00018 Mortar.
109.00019 Pipe, tobacco. 109.00020 Slag.
109.00021 Mollusca. 109.00022 Debitage. 109.00023 Bovidae.
109.00024 Wood fragment.
09.00025 Ariidae.
109.00026 Mammalia.
109.00027 Flake.
109.00028 Testudines.
109.00029 Fossil.
109.00030 Tabby fragment, 109.00031 Aves. 109.00032 Suidae.
109.00033 Osteichthyes.
109.00034 Mugilidae.
109.00035 Vertebrata.
110.00001 Brick.
110.00002 Charcoal.


# 4, 





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| Count | Weight |
| ---: | ---: |
| 1 | 4.06 |
| 2 | 5.4 |
| 1 | 4.2 |
| 6 | 26.1 |
|  | 19.5 |
|  | 14.5 |
|  | 5.6 |
| 17 | 47 |
| 12 | 79 |
| 1 | 1.1 |
| 9 | 17.2 |
| 25 | 88.2 |
| 18 | 1.5 |
| 2 | 0.9 |
| 2 | 0.3 |
| 10 | 8.2 |
| 1 | 3.9 |
|  | 1.1 |
| 1 | 4.16 |
|  | 1.6 |
| 3 | 6.42 |
| 1 | 4.25 |
|  | 7.9 |
|  | 0.6 |
|  | 1.3 |
| 4 | 2.69 |
| 1 | 0.8 |
| 3 | 2.2 |
| 2 | 9.1 |
| 2 | 5 |
| 1 | 3.37 |
|  | 0.7 |
| 2 | 0.5 |
| 1 | 40.83 |
|  |  |



| unt Weight |  |
| :---: | :---: |
|  | 50.2 |
|  | 0.6 |
|  | 26.7 |
|  | 1.4 |
|  | 7.5 |
| 4 | 1.92 |
| 1 | 0.66 |
| 1 | 12.05 |
|  | 0.9 |
|  | 0.1 |
|  | 31.78 |
| 3 | 1.94 |
| 1 | 35.78 |
| 2 | 6.9 |
| 1 | 2.44 |
|  | 6.7 |
| 3 | 114.91 |
| 2 | 9.03 |
|  | 1.48 |
|  | 136.6 |
|  | 162.9 |
| 2 | 20 |
|  | 4.21 |
| 1 | 0.91 |
|  | 7.6 |
| 4 | 2.2 |
| 1 | 0.2 |
| 2 | 0.5 |
| 18 | 39.9 |
| 1 | 1.48 |
| 1 | 5.6 |
| 1 | 1.93 |
| 2 | 14 |
| 1 | 13.31 |

 Clay. Clay. Iron. Fauna Remains. --Shell clay. Clay.
Clay.
Clay.
Mortar. Mortar. Iron. Tar. lora Iron. Bone. --Fauna Remains. Fauna Remains. --Shell. Bone. --Fauna Remains Bone. --Fauna Remains. Bone. --Fauna Remains. Clay. Clay. Clay. Clay.


Lot Control Name
116.00009 Coquina fragment.
116.00010 Metal fragment.
116.00011 Charcoal.
116.00012 Mortar.
116.00013 Vertebrata.
117.00001 Saint Johns Ware.
117.00002 San Marcos Complicated Stamped 117.00003 Metal fragment. 117.00004 Charcoal. 117.00005 Ostreidae.
118.00001 Saint Johns Ware.
118.00002 San Marcos Comp 118.00003 San Marcos Ware. 118.00004 San Marcos Plain. 118.00005 Mortar.
118.00006 Spike.
118.00007 Tar fragment. 118.00008 Charcoal.
118.00009 Metal fragment.
118.00010 Brick.
118.00011 Olive Jar.
118.00012 Slag.
118.00013 Fossil.
118.00014 Mollusca.
118.00015 Mammalia.
118.00016 Osteichthyes.
118.00017 Mugilidae.
119.00001 Saint Johns Ware.

- pas!oul suyor lu!es z0000611
119.00003 Wakulla Check Stamped.
paduels ədu!S soэaew ues t00006II
119.00005 San Marcos Ware.
119.00006 San Marcos Plain.
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| Lot Control Name | Material | Cat. \# | Provenience |
| :---: | :---: | :---: | :---: |
| 116.00008 Brick. | Clay. | DISC | EU01, LV16, (coquina firing step) |
| 116.00009 Coquina fragment. | Coquina. | DISC | EU01, LV16, (coquina firing step) |
| 116.00010 Metal fragment. | Iron. | CASA 006390 | EU01, LV16, (coquina firing step) |
| 116.00011 Charcoal. | Flora Remains. | CASA 006391 | EU01, LV16, (coquina firing step) |
| 116.00012 Mortar. | Mortar. | DISC | EU01, LV16, (coquina firing step) |
| 116.00013 Vertebrata. | Bone. --Fauna Remains. | CASA 006392 | EU01, LV16, (coquina firing step) |
| 117.00001 Saint Johns Ware. | Clay. | CASA 006393 | EU01, LV16, FILL (brown) |
| 117.00002 San Marcos Complicated Stamped. | Clay. | CASA 006394 | EU01, LV16, F1LL (brown) |
| 117.00003 Metal fragment. | Iron. | CASA 006395 | EU01, LV16, FILL (brown) |
| 117.00004 Charcoal. | Flora Remains. | CASA 006396 | EU01, LV16, F1LL (brown) |
| 117.00005 Ostreidae. | Fauna Remains. ---Shell. | DISC | EU01, LV 16, FILL (brown) |
| 118.00001 Saint Johns Ware. | Clay. | CASA 006397 | EU01, LV17 |
| 118.00002 San Marcos Complicated Stamped. | Clay. | CASA 006398 | EU01, LV17 |
| 118.00003 San Marcos Ware. | Clay. | CASA 006399 | EU01, LV17 |
| 118.00004 San Marcos Plain. | Clay. | CASA 006400 | EU01, LV17 |
| 118.00005 Mortar. | Mortar. | DISC | EU01, LV17 |
| 118.00006 Spike. | Iron. | CASA 006401 | EU01, LV17 |
| 118.00007 Tar fragment. | Tar. | DISC | EU01, LV17 |
| 118.00008 Charcoal. | Flora Remains. | CASA 006403 | EU01, LV17 |
| 118.00009 Metal fragment. | 1ron. | CASA 006404 | EU01, LV17 |
| 118.00010 Brick. | Clay. | DISC | EU01, LV17 |
| 118.00011 Olive Jar. | Clay. | CASA 006326 | EU01, LV17 |
| 118.00012 Slag. | Slag. | CASA 006463 | EU01, LV17 |
| 118.00013 Fossil. | Bone. --Fauna Remains. | CASA 006405 | EU01, LV17 |
| 118.00014 Mollusca. | Fauna Remains. --Shell. | DISC | EU01, LV17 |
| 118.00015 Mammalia. | Bone. --Fauna Remains. | CASA 006406 | EU01, LV17 |
| 118.00016 Osteichthyes. | Bone. --Fauna Remains. | CASA 006407 | EU01, LV17 |
| 118.00017 Mugilidae. | Bone. --Fauna Remains. | CASA 006408 | EU01, LV17 |
| 119.00001 Saint Johns Ware. | Clay. | CASA 006409 | EU01, LV18 |
| 119.00002 Saint Johns Incised. | Clay. | CASA 006410 | EU01, LV18 |
| 119.00003 Wakulla Check Stamped. | Clay. | CASA 006411 | EU01, LV18 |
| 119.00004 San Marcos Simple Stamped. | Clay. | CASA 006412 | EU01, LV18 |
| 119.00005 San Marcos Ware. | Clay. | CASA 006413 | EU01, LV18 |
| 119.00006 San Marcos Plain. | Clay. | CASA 006414 | EU01, LV18 |

(1)
(2)


Provenience
EU01, LV18
EU01, LV18
EU01, LV18
EU01, LV18 EU01, LV18 EU01, LV18 EU01, LV18 EU01, LV18 EU01, LV18 CASA 006419 CASA 006420 EU01, LV18 CASA 006421 EU01, LV18 EU01, LV18 EU01, LV18 EU01, LV18 EU01, LV18
FEAT07 FEAT07 FEAT07 FEAT07合
 CASA 006425 EU01, LV17, FEAT07 CASA 006426 EU01, LV17, FEAT07 CASA 006427 EU01, LV17, FEAT07 CASA 006428 EU01, LV17, FEAT07 CASA 006429 EU01, LV17, FEAT07 CASA 006430 EU01, LV17, FEAT07 CASA 006431 EU01, LV17, FEAT07

 CASA 006432 EU01, LV17, FEAT07 CASA 006433 EU01, LV17, FEAT07 CASA 006434 EU01, LV17, FEAT07 CASA 006435 EU01, LV17, FEAT07
 LOLVGA 'LIAT 'I0 O
Material
Clay.
Flora Remains.
Iron.
Iron.
Slag.
Tabby.
Fauna Remains. --Shell.
Fauna Remains. --Shell.
Bone. --Fauna Remains.
Bone. --Fauna Remains.
Bone. --Fauna Remains.
Fauna Remains. --Shell
Fauna Remains. --Shell.
Fauna Remains. --Shell.
Clay.
Clay.
Fauna Remains. --Shell.
Fauna Remains. --Shell.
Bone. --Fauna Remains.
Clay.
Bone. --Fauna Remains.
Bone. --Fauna Remains.
Clay.
Clay.
Clay.
Iron.
Clay.
Mortar.
Slag.
Copper.
Kaolinite Clay.
Coal.
Flora Remains.
Bone. --Fauna Remains.
Be

Lot Control Name
119.00007 Brick.
119.00008 Charcoal.
119.00009 Nail.
119.00010 Metal fragment.
119.00011 Slag.
119.00012 Tabby fragment.
19.00013 Naticidae.
119.00014 Mollusca.
119.00015 Mammalia.
119.00016 Osteichthyes.
119.00017 Mugilidae.
119.00017 Mugilidae.
119.00018 Ostreidae.
119.00019 Veneroida.
119.00020 Melongenidae.
120.00001 San Marcos Simple Stamped. 120.00002 San Marcos Ware. 120.00003 Ostreidae.
120.00004 Melongenidae.
120.00005 Carangidae.
120.00006 San Marcos Plain 120.00007 Mugilidae.
120.00008 Osteichthyes.
120.00009 San Luis Polychrome. 120.00010 Majolica.
120.00011 Untyped, tin enameled
120.00012 Metal fragment.
120.00013 Brick.
120.00014 Mortar
120.00015 Slag.
120.00016 Spike.
120.00017 Pipe, tobacco.
120.00018 Cinder.
120.00019 Charcoal. 120.00020 Mammalia.

Weight
5.42
0.84
4.18
0.98
0.61
2.5
44
3.1
62.9
120
4.2
15.3
31.1
0.7
2.6
0.73
40.7
12.4
35.3
17.8
1
14.8
56.1
0.1
0.2
2.1
3.7
0.2
0.4
2.4
1948.4
51.7
1.69
1089
 CASA 006445 EU01, LV19 CASA 006446 EU01, LV19 CASA 006447 EU01, LV19
 CASA 006448 EU01, LV19 CASA 006449 EU01, LV19 CASA 006450 EU01, LV19 CASA 006451 EU01, LV19
 DISC EU01, LV19 CASA 006453 EU01, LV19 CASA 006454 EU01, LV19 CASA 006455 EU01, LV19 CASA 006456 EU01, LV19 CASA 006457 EU01, LV19
 CASA 006459 EU01, LV19 CASA 006460 EU01, LV19 CASA 006461 EU01, LV19 CASA 006462 EU01, LV19 DISC EU01, LV19 EU01, LV19 EU01, LV19
1د ‘0Zム7 ‘I0กヨ
Material
Bone. --Fauna Remains.
Bone. --Fauna Remains.
Fauna Remains. --Shell.
Bone. --Fauna Remains.
Bone. --Fauna Remains.
Clay.
Clay.
Clay.
Clay.
Clay.
Chert.
Clay.
Fauna Remains. --Shell.
Clay.
Flora Remains.
Glass.
lron.
lron.
Coquina.
Lead.
Slag.
Clay.
Clay.
Bone. --Fauna Remains
Bone. --Fauna Remains.
Bone. --Fauna Remains.
Bone. --Fauna Remains.
Bone. --Fauna Remains.
Bone. --Fauna Remains.
Fauna Remains. --Shell.
Fauna Remains. --Shell.
Fauna Remains. --Shell.
Fauna Remains. --Shell.
Composite.
Col
$\qquad$ Bone. --Fauna Remains Fauna Remains. --Shell. Fauna Remains. --Shell. Fauna Remains. --Shell. Fauna Remains. --Shell.
121.00005 San Marcos Complicated Stamped 121.00006 Flake.
121.00007 San Marcos Ware. 121.00008 Naticidae.
121.00009 American Slipware. 121.00009 American Slipware.
121.00010 Charcoal.
121.00011 Vessel fragment.
121.00011 Vessel fragment. 121.00011 Vessel fragment.
121.00012 Metal fragment.
121.00013 Nail. 121.00011 Vessel fragment.
121.00012 Metal fragment.
121.00013 Nail.
121.00014 Coquina fragment.
121.00015 Ball, musket. 121.00015 Ball, musket.
121.00016 Slag.
121.00017 Olive Jar.
121.00018 Tile.
121.00019 Mugilidae.
121.00020 Sciaenidae.
121.00021 Osteichthyes.
121.00022 Mammalia.
121.00023 Vertebrata.
121.00024 Testudines.
121.00025 Mollusca.
121.00026 Ostreidae.
121.00027 Veneroida. 121.00016 Slag.
121.00017 Olive Jar.
121.00018 Tile.
121.00019 Mugilidae.
121.00020 Sciaenidae.
121.00021 Osteichthyes.
121.00022 Mammalia.
121.00023 Vertebrata.
121.00024 Testudines.
121.00025 Mollusca.
121.00026 Ostreidae.
121.00027 Veneroida. 121.00016 Slag.
121.00017 Olive Jar.
121.00018 Tile.
121.00019 Mugilidae.
121.00020 Sciaenidae.
121.00021 Osteichthyes.
121.00022 Mammalia.
121.00023 Vertebrata.
121.00024 Testudines.
121.00025 Mollusca.
121.00026 Ostreidae.
121.00027 Veneroida. 121.00016 Slag.
121.00017 Olive Jar.
121.00018 Tile.
121.00019 Mugilidae.
121.00020 Sciaenidae.
121.00021 Osteichthyes.
121.00022 Mammalia.
121.00023 Vertebrata.
121.00024 Testudines.
121.00025 Mollusca.
121.00026 Ostreidae.
121.00027 Veneroida. 121.00016 Slag.
121.00017 Olive Jar.
121.00018 Tile.
121.00019 Mugilidae.
121.00020 Sciaenidae.
121.00021 Osteichthyes.
121.00022 Mammalia.
121.00023 Vertebrata.
121.00024 Testudines.
121.00025 Mollusca.
121.00026 Ostreidae.
121.00027 Veneroida. 121.00016 Slag.
121.00017 Olive Jar.
121.00018 Tile.
121.00019 Mugilidae.
121.00020 Sciaenidae.
121.00021 Osteichthyes.
121.00022 Mammalia.
121.00023 Vertebrata.
121.00024 Testudines.
121.00025 Mollusca.
121.00026 Ostreidae.
121.00027 Veneroida. 121.00016 Slag.
121.00017 Olive Jar.
121.00018 Tile.
121.00019 Mugilidae.
121.00020 Sciaenidae.
121.00021 Osteichthyes.
121.00022 Mammalia.
121.00023 Vertebrata.
121.00024 Testudines.
121.00025 Mollusca.
121.00026 Ostreidae.
121.00027 Veneroida. 121.00016 Slag.
121.00017 Olive Jar.
121.00018 Tile.
121.00019 Mugilidae.
121.00020 Sciaenidae.
121.00021 Osteichthyes.
121.00022 Mammalia.
121.00023 Vertebrata.
121.00024 Testudines.
121.00025 Mollusca.
121.00026 Ostreidae.
121.00027 Veneroida. 121.00016 Slag.
121.00017 Olive Jar.
121.00018 Tile.
121.00019 Mugilidae.
121.00020 Sciaenidae.
121.00021 Osteichthyes.
121.00022 Mammalia.
121.00023 Vertebrata.
121.00024 Testudines.
121.00025 Mollusca.
121.00026 Ostreidae.
121.00027 Veneroida. 121.00016 Slag.
121.00017 Olive Jar.
121.00018 Tile.
121.00019 Mugilidae.
121.00020 Sciaenidae.
121.00021 Osteichthyes.
121.00022 Mammalia.
121.00023 Vertebrata.
121.00024 Testudines.
121.00025 Mollusca.
121.00026 Ostreidae.
121.00027 Veneroida. 121.00016 Slag.
121.00017 Olive Jar.
121.00018 Tile.
121.00019 Mugilidae.
121.00020 Sciaenidae.
121.00021 Osteichthyes.
121.00022 Mammalia.
121.00023 Vertebrata.
121.00024 Testudines.
121.00025 Mollusca.
121.00026 Ostreidae.
121.00027 Veneroida. 121.00016 Slag.
121.00017 Olive Jar.
121.00018 Tile.
121.00019 Mugilidae.
121.00020 Sciaenidae.
121.00021 Osteichthyes.
121.00022 Mammalia.
121.00023 Vertebrata.
121.00024 Testudines.
121.00025 Mollusca.
121.00026 Ostreidae.
121.00027 Veneroida. 121.00028 Muricidae.
122.00001 Sample, unprocessed.

Lot Control Name
120.00021 Vertebrata. 120.00022 Testudines. 120.00023 Mollusca.
120.00024 Aves.
120.00025 Ariidae.
121.00001 Saint Johns Check Stamped. 121.00002 Saint Johns Ware. 121.00003 San Marcos Plain.
121.00004 Brick 121.00016 Slag.
121.00017 Olive Jar.
121.00018 Tile.
121.00019 Mugilidae.
121.00020 Sciaenidae.
121.00021 Osteichthyes.
121.00022 Mammalia.
121.00023 Vertebrata.
121.00024 Testudines.
121.00025 Mollusca.
121.00026 Ostreidae.
121.00027 Veneroida.
$\begin{array}{ll}\text { Cat．\＃} & \text { Provenience } \\ \text { CASA } 006464 & \text { EU01，LV20 }\end{array}$ CASA 006465 EU01，LV20 DISC EU01，LV20 CASA 006466 EU01，LV20 CASA 006467 EU01，LV20 CASA 006468 EU01，LV20 CASA 006469 EU01，LV20 CASA 006470 EU01，LV20 CASA 006471 EU01，LV20 DISC EU01，LV20 CASA 006472 EU01，LV20 DISC EU01，LV20 CASA 006473 EU01，LV20 EU01，LV20 CASA 006474 EU01，LV20 CASA 006475 EU01，LV20 CASA 006476 EU01，LV20 CASA 006477 EU01，LV20 CASA 006478 EU01，LV20 CASA 006479 EU01，LV20 CASA 006480 EU01，LV20 CASA 006481 EU01，LV21 CASA 006482 EU01，LV21 CASA 006483 EU01，LV21 CASA 006484 EU01，LV21 IZム7＇I0nヨ 585900 VSVO CASA 006486 EU01，LV21 $\begin{array}{ll}\text { DISC } & \text { EU01，LV21 } \\ \text { DISC } & \text { EU01，LV21 }\end{array}$
 DISC EU01，LV21 CASA 006488 EU01，LV21



MaterialClay．
Clay． $\stackrel{亠}{i}$ ． Fauna
Clay．
Clay．
Clay．
Clay．
Clay．
Iron．
Coquin
Clay．
Clay． Flora Remains Fauna Remains．－－Shell． Slag．
 Bone． Chert． Iron． Bone．－－Fauna Remains． －－Fauna Remains． Bone．－－Fauna
Clay．
Clay．
Clay．
Clay．
Clay．
Clay．
Coquina．
Clay．
Clay．
Mortar．
Iron．
Iron．
Flora Remains． Flora Remains． （lora Remains




Cat．\＃Provenience
IZムT ‘IONA 16 t 900 VSVO IZムT‘IOnG OSIG IスムT‘IONG 26 t 900 VSVO IZAT ‘IOnヨ E6t900 VSVO EU01，LV2I へ CASA 006494 EU01，LV2 DISC EU0I，LV2I CASA 006495 EU0I，LV22
 CASA 006497 EU01，LV22 CASA 006498 EU01，LV22 CASA 006499 EU01，LV22 DISC EU0I，LV22 CASA 006500 EU01，LV22 CASA 006501 EU01，LV22 CASA 006502 EU01，LV22 CASA 006503 EU01，LV22 DISC EU01，LV22 DISC EU01，LV22
 CASA 006505 EU01，LV22 CASA 006506 EU01，LV22 CASA 006507 EU01，LV22 DISC EU01，LV22



 CASA 006508 EU01，LV23 DISC EU01，LV23 CASA 006509 EU0I，LV23 CASA 006510 EU01，LV23
 CASA 006512 EU0I，LV23 Material
Bone．－－Fauna Remains．
Fauna Remains．－－Shell． Bone．－－Fauna Remains Bone．－－Fauna Remains． Fauna Remains．－－Shell． Bone．－－Fauna Remains． Fauna Remains．－－Shell． Clay． Clay．㐫忞 Tar．

Flora Remains． B

## ron．

 Coquina． Clay．Bone．－－Fauna Remains． Bone．－－Fauna Remains． Bone．－－Fauna Remains． Bone．－－Fauna Remains． Fauna Remains．－－Shell． Fauna Remains．－－Shell． Fauna Remains．－－Shell． Fauna Remains．－－Shell． Fauna Remains．－－Shell． Clay．

Fauna Remains．－－Shell． Clay． Clay． Clay． Clay．

Lot Control Name
126．00004 San Marcos Simple Stamped
126．00005 San Marcos Ware．
126．00006 San Pedro Ware．
Lot Control Name
 125．00003 Saint Johns Check Stamped．
I25．00004 San Marcos Ware． 125．00004 San Marcos Ware． 125．00005 Saint Johns Ware． 125．00006 Tar fragment． 125.00006 Tar fragment 125．00007 Charcoal．
125．00008 Slag．
125．00009 Metal fragment． 125．00007 Charcoal．
125．00008 Slag．
125．00009 Metal fragment．而 125．00009 Met
125．00009 Metal fragment．
125．00010 Nail．
125．0001 I Coquina fragmen
125．00012 Brick．
125．00012 Brick
125．00013 Osteichthyes．
125.00015 Vertebrata

125．00016 Mammalia． 125．00017 Mollusca．
125.00018 Fasciolari

125．00019 Ostreidae．
125.00020 Veneroida．

125．00021 Melongen
126．00001 Saint Johns W
126．00001 Saint Johns Ware．
I26．00002 Melongenidae．
126.00002 Melongenidae

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| Material | Cat. \# | Provenience |
| :--- | :--- | :--- |
| Coquina. | DISC | EU01, LV23 |
| Flora Remains. | CASA 006513 | EU01, LV23 |
| Iron. | CASA 006514 | EU01, LV23 |
| Clay. | DISC | EU01, LV23 |
| Mortar. | DISC | EU01, LV23 |
| Slag. | CASA 006515 | EU01, LV23 |
| Fauna Remains. --Shell. | DISC | EU01, LV23 |
| Bone. --Fauna Remains. | CASA 0065I6 | EU01, LV23 |
| Bone. --Fauna Remains. | CASA 006517 | EU01, LV23 |
| Bone. --Fauna Remains. | CASA 006518 | EU01, LV23 |
| Fauna Remains. --Shell | DISC | EU01, LV23 |
| Fauna Remains. --Shell. | DISC | EU01, LV23 |
| Fauna Remains. --Shell. | DISC | EU01, LV23 |
| Clay. | CASA 006519 | EU01, FEATI0 |
| Flora Remains. | CASA 006520 | EU01, FEAT10 |
| lron. | CASA 00652I | EU01, FEAT10 |
| Fauna Remains. --Shell. | DISC | EU01, FEAT10 |
| Clay. | DISC | EU01, FEAT10 |
| Mortar. | DISC | EU01, FEAT10 |
| Bone. --Fauna Remains. | CASA 006522 | EU01, FEAT10 |
| Bone. --Fauna Remains. | CASA 006523 | EU01, FEAT10 |
| Bone. --Fauna Remains. | CASA 006524 | EU01, FEAT10 |
| Slag. | CASA 006525 | EU01, FEAT10 |
| Clay. | CASA 006526 | EU01, LV24 |
| Clay. | CASA 006527 | EU01, LV24 |
| Fauna Remains. --Shell. | DISC | EU01, LV24 |
| Clay. | CASA 006528 | EU01, LV24 |
| Fauna Remains. --Shell. | DISC | EU01, LV24 |
| Fauna Remains. --Shell. | DISC | EU01, LV24 |
| Fauna Remains. --Shell. | DISC | EU01, LV24 |
| Bone. --Fauna Remains. | CASA 006529 | EU01, LV24 |
| Clay. | CASA 006530 | EU01, LV24 |
| Bone. --Fauna Remains. | CASA 00653I | EU01, LV24 |
| Bone. --Fauna Remains. | CASA 006532 | EU01, LV24 |

为

| Count | Weight |
| :---: | :---: |
| 77 | 114.6 |
| 13 | 68.2 |
| 9 | 4.79 |
| 30 | 73.4 |
| 6 | 91.9 |
| 1 | 19.78 |
| 1 | 2.5 |
| 2 | 12.3 |
| 4 | 4.1 |
|  | 30.4 |
|  | 3.1 |
|  | 10.8 |
|  | 9.6 |
| 1 | 2.07 |
|  | 9.4 |
| 5 | 313.4 |
|  | 4.24 |
| 47 | 61.3 |
| 14 | 60 |
| 1 | 7.1 |
|  | 4.6 |
|  | 62.2 |
| 13 | 60.4 |
|  | 921.8 |
| 2 | 0.11 |
| 17 | 51.1 |
| 6 | 36.2 |
|  | 3.8 |
| 1 | 0.2 |
|  | , |
|  | 1.1 |
| 1 | 3.9 |
| 1 | 3.33 |
| 11 | 5.62 |



| Lot Control Name | Material | Cat. \# | Provenience | Count | Weight |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 129.00018 Vertebrata. | Bone. --Fauna Remains. | CASA 006559 | EU01, LV25, ZN 2.5Y4/1 | 26 | 5.5 |
| 129.00019 Sciaenidae. | Bone. --Fauna Remains. | CASA 006560 | EU01, LV25, ZN 2.5Y4/1 | 1 | 0.69 |
| 129.00020 Ariidae. | Bone. --Fauna Remains. | CASA 006561 | EU01, LV25, ZN 2.5Y4/1 | 1 | 0.3 |
| 129.00021 Mollusca. | Fauna Remains, --Shell. | DISC | EU01, LV25, ZN 2.5Y4/1 |  | 1.18 |
| 130.00001 Saint Johns Ware. | Clay. | CASA 006562 | EU01, LV25, ZN 2.5Y6/4 | 3 | 1.29 |
| 130.00002 San Marcos Ware. | Clay. | CASA 006563 | EU01, LV25, ZN 2.5Y6/4 | 3 | 7.66 |
| 130.00003 San Pedro Ware. | Clay. | CASA 006564 | EU01, LV25, ZN 2.5Y6/4 | 1 | 3.58 |
| 130.00004 Charcoal. | Flora Remains. | CASA 006565 | EU01, LV25, ZN 2.5Y6/4 |  | 0.6 |
| 130.00005 Slag. | Slag. | CASA 006566 | EU01, LV25, ZN 2.5Y6/4 |  | 0.7 |
| 130.00006 Ostreidae. | Fauna Remains. --Shell. | DISC | EU01, LV25, ZN 2.5Y6/4 |  | 36.7 |
| 130.00007 Mammalia. | Bone. --Fauna Remains. | CASA 006567 | EU01, LV25, ZN 2.5Y6/4 | 1 | 3.5 |
| 130.00008 Testudines. | Bone. --Fauna Remains. | CASA 006568 | EU01, LV25, ZN 2.5Y6/4 | 1 | 1.3 |
| 130.00009 Aves. | Bone. --Fauna Remains. | CASA 006569 | EU01, LV25, ZN 2.5Y6/4 | 1 | 0.3 |
| 130.00010 Osteichthyes. | Bone. --Fauna Remains. | CASA 006570 | EU01, LV25, ZN 2.5Y6/4 | 2 | 0.56 |
| 130.00011 Ariidae. | Bone. --Fauna Remains. | CASA 006571 | EU01, LV25, ZN 2.5Y6/4 | 2 | 0.3 |
| 131.00001 Saint Johns Check Stamped. | Clay. | CASA 006572 | EU01, LV25, ZN 10YR5/4 | 1 | 3.49 |
| 131.00002 Brick. | Clay. | DISC | EU01, LV25, ZN 10YR5/4 |  | 0.3 |
| 131.00003 Metal fragment. | Iron. | CASA 006573 | EU01, LV25, ZN 10YR5/4 |  | 0.4 |
| 131.00004 Nail. | lron. | CASA 006574 | EU01, LV25, ZN 10YR5/4 | 1 | 7.5 |
| 131.00005 Charcoal. | Flora Remains. | CASA 006575 | EU01, LV25, ZN 10YR5/4 |  | 0.4 |
| 131.00006 Vertebrata. | Bone. --Fauna Remains. | CASA 006576 | EU01, LV25, ZN 10YR5/4 | 1 | 1.3 |
| 131.00007 Osteichthyes. | Bone. --Fauna Remains. | CASA 006577 | EU01, LV25, ZN 10YR5/4 | 2 | 0.2 |
| 131.00008 Ostreidae. | Fauna Remains, --Shell. | DISC | EU01, LV25, ZN 10YR5/4 |  | 75.1 |
| 132.00001 San Marcos Ware. | Clay. | CASA 006578 | EU01, LV26, ZN 2.5Y6/4 | 2 | 2.4 |
| 132.00002 San Marcos Complicated Stamped. | Clay. | CASA 006579 | EU01, LV26, ZN 2.5Y6/4 | 1 | 4.9 |
| 132.00003 Saint Johns Punctated. | Clay. | CASA 006580 | EU01, LV26, ZN 2.5Y6/4 | 1 | 1.13 |
| 132.00004 Saint Johns Check Stamped. | Clay. | CASA 006581 | EU01, LV26, ZN 2.5Y6/4 | 3 | 14.17 |
| 132.00005 Saint Johns Ware. | Clay. | CASA 006582 | EU01, LV26, ZN 2.5Y6/4 | 29 | 61.7 |
| 132.00006 Olive Jar. | Clay. | CASA 006583 | EU01, LV26, ZN 2.5Y6/4 | 1 | 3.74 |
| 132.00007 Metal fragment. | Iron. | CASA 006584 | EU01, LV26, ZN 2.5Y6/4 |  | 1.7 |
| 132.00008 Coquina fragment. | Coquina. | DISC | EU01, LV26, ZN 2.5Y6/4 |  | 1.4 |
| 132.00009 Slag. | Slag. | CASA 006585 | EU01, LV26, ZN 2.5Y6/4 |  | 5.1 |
| 132.00010 Charcoal. | Flora Remains. | CASA 006586 | EU01, LV26, ZN 2.5Y6/4 |  | 0.4 |
| 132.00011 Brick. | Clay. | DISC | EU01, LV26, ZN 2.5Y6/4 |  | 26.7 |

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| Lot Control Name | Material | Cat. \# | Provenience | Count | Weight |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 132.00012 Flake. | Chert. | CASA 006587 | EU01, LV26, ZN 2.5Y6/4 | 2 | 11.2 |
| 132.00013 Melongenidae. | Fauna Remains. --Shell. | DISC | EU01, LV26, ZN 2.5Y6/4 |  | 25.1 |
| 132.00014 Mammalia. | Bone. --Fauna Remains. | CASA 006588 | EU01, LV26, ZN 2.5Y6/4 | 1 | 20.4 |
| 132.00015 Testudines. | Bone. --Fauna Remains. | CASA 006589 | EU01, LV26, ZN 2.5Y6/4 | 4 | 1.5 |
| 132.00016 Vertebrata. | Bone. --Fauna Remains. | CASA 006590 | EU01, LV26, ZN 2.5Y6/4 | 1 | 0.5 |
| 132.00017 Naticidae. | Fauna Remains. --Shell. | DISC | EU01, LV26, ZN $2.5 \mathrm{Y} 6 / 4$ |  | 53.7 |
| 132.00018 Veneroida. | Fauna Remains. --Shell. | DISC | EU01, LV26, ZN $2.5 \mathrm{Y} 6 / 4$ |  | 16.64 |
| 132.00019 Osteichthyes. | Bone. --Fauna Remains. | CASA 006591 | EU01, LV26, ZN $2.5 \mathrm{Y} 6 / 4$ | 23 | 5.3 |
| 132.00020 Mollusca. | Fauna Remains. --Shell. | DISC | EU01, LV26, ZN 2.5Y6/4 |  | 3.9 |
| 132.00021 Ostreidae. | Fauna Remains. --Shell. | DISC | EU01, LV26, ZN 2.5Y6/4 |  | 1549.1 |
| 133.00001 San Marcos Complicated Stamped. | Clay. | CASA 006592 | EU01, LV26, ZN $2.5 \mathrm{Y} 4 / 1$ | 5 | 59.5 |
| 133.00002 San Marcos Ware. | Clay. | CASA 006593 | EU01, LV26, ZN $2.5 \mathrm{Y} 4 / 1$ | 5 | 11 |
| 133.00003 Saint Johns Check Stamped. | Clay. | CASA 006594 | EU01, LV26, ZN $2.5 \mathrm{Y} 4 / 1$ | 2 | 18.2 |
| 133.00004 Saint Johns Ware. | Clay. | CASA 006595 | EU01, LV26, ZN 2.5Y4/1 | 3 | 6.9 |
| 133.00005 Saint Johns Plain. | Clay. | CASA 006596 | EU01, LV26, ZN 2.5Y4/1 | 2 | 6.5 |
| 133.00006 Metal fragment. | Iron. | CASA 006597 | EU01, LV26, ZN $2.5 \mathrm{Y} 4 / 1$ |  | 0.7 |
| 133.00007 Brick. | Clay. | DISC | EU01, LV26, ZN 2.5Y4/1 |  | 0.7 |
| 133.00008 Mammalia. | Bone. --Fauna Remains. | CASA 006598 | EU01, LV26, ZN $2.5 \mathrm{Y} 4 / 1$ | 3 | 7.7 |
| 133.00009 Osteichthyes. | Bone. --Fauna Remains. | CASA 006599 | EU01, LV26, ZN $2.5 \mathrm{Y} 4 / 1$ | 1 | 1.6 |
| 133.00010 Ostreidae. | Fauna Remains. --Shell | DISC | EU01, LV26, ZN 2.5Y4/1 |  | 187.8 |
| 134.00001 Saint Johns Punctated. | Clay. | CASA 006600 | EU01, LV27 | 6 | 26.7 |
| 134.00002 Saint Johns Check Stamped. | Clay. | CASA 006601 | EU01, LV27 | 12 | 58.9 |
| 134.00003 Saint Johns Plain. | Clay. | CASA 006602 | EU01, LV27 | 7 | 25.8 |
| 134.00004 Brick. | Clay. | DISC | EU01, LV27 |  | 9.9 |
| 134.00005 Charcoal. | Flora Remains. | CASA 006603 | EU01, LV27 |  | 0.6 |
| 134.00006 Sciaenidae. | Bone. --Fauna Remains. | CASA 006604 | EU01, LV27 | 3 | 2.14 |
| 134.00007 Osteichthyes. | Bone. --Fauna Remains. | CASA 006605 | EU01, LV27 | 35 | 4.99 |
| 134.00008 Mollusca. | Fauna Remains. --Shell. | DISC | EU01, LV27 |  | 9.35 |
| 134.00009 Testudines. | Bone. --Fauna Remains. | CASA 006606 | EU01, LV27 | 1 | 0.38 |
| 134.00010 Vertebrata. | Bone. --Fauna Remains. | CASA 006607 | EU01, LV27 | 8 | 4.54 |
| 134.00011 Ostreidae. | Fauna Remains. --Shell. | DISC | EU01, LV27 |  | 840 |
| 134.00012 Melongenidae. | Fauna Remains. --Shell. | DISC | EU01, LV27 |  | 8.1 |
| 134.00013 Saint Johns Ware. | Clay. | CASA 006650 | EU01, LV27 | 24 | 35.7 |
| 134.00014 Levy projectile point. | Chert. | CASA 006608 | EU01, LV27 | 1 | 9.4 |

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| Lot Control Name | Material | Cat. \# | Provenience |
| :---: | :---: | :---: | :---: |
| 134.00015 Saint Johns Incised. | Clay. | CASA 006609 | EU01, LV27 |
| 134.00016 San Marcos Ware. | Clay. | CASA 006610 | EU01, LV27 |
| 135.00001 Saint Johns Check Stamped. | Clay. | CASA 006611 | EU01, LV28 |
| 135.00002 Saint Johns Plain. | Clay. | CASA 006612 | EU01, LV28 |
| 135.00003 San Marcos Checked Stamped. | Clay. | CASA 006613 | EU01, LV28 |
| 135.00004 San Marcos Ware. | Clay. | CASA 006614 | EU01, LV28 |
| 135.00005 Olive Jar. | Clay. | CASA 006615 | EU01, LV28 |
| 135.00006 Olive Jar. | Clay. | CASA 006616 | EU01, LV28 |
| 135.00007 Ball, musket. | Lead. | CASA 006617 | EU01, LV28 |
| 135.00008 Metal fragment. | Iron. | CASA 006618 | EU01, LV28 |
| 135.00009 Brick. | Clay. | DISC | EU01, LV28 |
| 135.00010 Charcoal. | Flora Remains. | CASA 006619 | EU01, LV28 |
| 135.00011 Mortar. | Mortar. | DISC | EU01, LV28 |
| 135.00012 Olive Jar. | Clay. | CASA 006620 | EU01, LV28 |
| 135.00013 Osteichthyes. | Bone. --Fauna Remains. | CASA 006621 | EU01, LV28 |
| 135.00014 Vertebrata. | Bone. --Fauna Remains. | CASA 006622 | EU01, LV28 |
| 135.00015 Saint Johns Ware. | Clay. | CASA 006623 | EU01, LV28 |
| 135.00016 Ariidae. | Bone. --Fauna Remains. | CASA 006624 | EU01, LV28 |
| 135.00017 Suidae. | Bone. --Fauna Remains. | CASA 006625 | EU01, LV28 |
| 135.00018 Untyped, Native American. | Clay. | CASA 006651 | EU01, LV28 |
| 135.00019 Testudines. | Bone. --Fauna Remains. | CASA 006626 | EU01, LV28 |
| 135.00020 Ostreidae. | Fauna Remains. --Shell. | DISC | EU01, LV28 |
| 135.00021 Veneroida. | Fauna Remains. --Shell. | DISC | EU01, LV28 |
| 135.00022 Naticidae. | Fauna Remains. --Shell. | DISC | EU01, LV28 |
| 135.00023 Mollusca. | Fauna Remains. --Shell. | DISC | EU01, LV28 |
| 136.00001 San Marcos Ware. | Clay. | CASA 006627 | EU01, LV29 |
| 136.00002 San Marcos Complicated Stamped. | Clay. | CASA 006628 | EU01, LV29 |
| 136.00003 Saint Johns Incised. | Clay. | CASA 006629 | EU01, LV29 |
| 136.00004 Saint Johns Punctated. | Clay. | CASA 006630 | EU01, LV29 |
| 136.00005 Saint Johns Check Stamped. | Clay. | CASA 006631 | EU01, LV29 |
| 136.00006 Saint Johns Ware. | Clay. | CASA 006632 | EU01, LV29 |
| 136.00007 Metal fragment. | lron. | CASA 006633 | EU01, LV29 |
| 136.00008 Brick. | Clay. | DISC | EU01, LV29 |
| 136.00009 Tabby fragment. | Tabby. | DISC | EU01, LV29 |

Lot Control Name
136.00010 Charcoal. 136.00011 Slag.
136.00012 Gastropoda 136.00013 Coquina fra 136.00014 Osteichthyes 136.00015 Sciaenidae. 136.00016 Mugilidae. 136.00017 Mammalia. 136.00018 Vertebrata. 136.00019 Nonfood, shell. 136.00020 Testudines. 136.00021 Ostreidae. 136.00022 Veneroida. 136.00023 Solecurtidae.
137.00001 San Marcos Complicated Stamped. 137.00002 San Marcos Ware. 13700003
37.00004 Ostreidae
137.00004 Ostreidae.
137.00005 San Marcos Simple Stamped. 137.00006 Veneroida.
137.00007 Gastropoda.
138.00001 Untyped, Native American.
138.00002 San Marcos Complicated Stamped. 138.00003 San Marcos Ware.
138.00004 Saint Johns Punctated.
138.00005 Saint Johns Ware.
38.00006 Vertebrata.
138.00007 Gastropoda.
138.00008 Tabby fragment.
138.00009 Charcoal.
138.00010 Brick
138.00011 Ostreidae.
138.00012 Mollusca.
139.00001 Olive Jar.





| Lot Control Name | Material | Cat. \# | Provenience |
| :---: | :---: | :---: | :---: |
| 140.00016 San Marcos Red. | Clay. | CASA 006720 | EU01, LV32 |
| 140.00017 Olive Jar. | Clay. | CASA 006708 | EU01, LV32 |
| 140.00018 Olive Jar. | Clay. | CASA 006696 | EU01, LV32 |
| 140.00019 Tile. | Clay. | CASA 006710 | EU01, LV32 |
| 140.00020 Olive Jar. | Clay. | CASA 006711 | EU01, LV32 |
| 140.00021 Nail. | Iron. | CASA 006712 | EU01, LV32 |
| 140.00022 San Marcos Plain. | Clay. | CASA 006713 | EU01, LV32 |
| 140.00023 Brick. | Clay. | DISC | EU01, LV32 |
| 140.00024 Charcoal. | Flora Remains. | CASA 006714 | EU01, LV32 |
| 140.00025 Puebla Polychrome. | Clay. | CASA 006715 | EU01, LV32 |
| 140.00026 Saint Johns Ware. | Clay. | CASA 006163 | EU01, LV32 |
| 140.00027 Coquina fragment. | Coquina. | DISC | EU01, LV32 |
| 140.00028 Aves. | Bone. --Fauna Remains. | CASA 006717 | EU01, LV32 |
| 140.00029 Testudines. | Bone. --Fauna Remains. | CASA 006718 | EU01, LV32 |
| 140.00030 Plastic fragment. | Plastic. | DISC | EU01, LV32 |
| 140.00031 Bovidae. | Bone. --Fauna Remains. | CASA 006719 | EU01, LV32 |
| 140.00032 Procyonidae. | Bone. --Fauna Remains. | CASA 006684 | EU01, LV32 |
| 140.00033 Nonfood, bone. | Bone. --Fauna Remains. | CASA 006682 | EU01, LV32 |
| 140.00034 Vertebrata. | Bone. --Fauna Remains. | CASA 006707 | EU01, LV32 |
| 140.00035 Mammalia. | Bone. --Fauna Remains. | CASA 006673 | EU01, LV32 |
| 140.00036 Osteichthyes. | Bone. --Fauna Remains. | CASA 006674 | EU01, LV32 |
| 140.00037 Chondrichthyes. | Bone. --Fauna Remains. | CASA 006678 | EU01, LV32 |
| 140.00038 Ariidae. | Bone. --Fauna Remains. | CASA 006675 | EU01, LV32 |
| 140.00039 Mugilidae. | Bone. --Fauna Remains. | CASA 006676 | EU01, LV32 |
| 140.00040 Sciaenidae. | Bone. --Fauna Remains. | CASA 006677 | EU01, LV32 |
| 141.00001 Olive Jar. | Clay. | CASA 006679 | EU01, LV32, (upper coquina layer) |
| 141.00002 Olive Jar. | Clay. | CASA 006680 | EU01, LV32, (upper coquina layer) |
| 141.00003 San Marcos Complicated Stamped. | Clay. | CASA 006681 | EU01, LV32, (upper coquina layer) |
| 141.00004 Untyped, colonoware. | Clay. | CASA 006695 | EU01, LV32, (upper coquina layer) |
| 141.00005 San Marcos Red. | Clay. | CASA 006683 | EU01, LV32, (upper coquina layer) |
| 141.00006 Metal fragment. | Iron. | CASA 006671 | EU01, LV32, (upper coquina layer) |
| 141.00007 Saint Johns Ware. | Clay. | CASA 006685 | EU01, LV32, (upper coquina layer) |
| 141.00008 Mortar. | Mortar. | DISC | EU01, LV32, (upper coquina layer) |
| 141.00009 Brick. | Clay. | DISC | EU01, LV32, (upper coquina layer) |



| Cat. \# | Provenience |
| :--- | :--- |
| CASA 006686 | EU01, LV32, (upper coquina layer) |
| CASA 006687 | EU01, LV32, (upper coquina layer) |
| CASA 006688 | EU01, LV32, (upper coquina layer) |
| CASA 006689 | EU01, LV32, (upper coquina layer) |
| DISC | EU01, LV32, (upper coquina layer) |
| DISC | EU01, LV32, (upper coquina layer) |
| DISC | EU01, LV32, (upper coquina layer) |
| DISC | EU01, LV32, (upper coquina layer) |
| DISC | EU01, LV32, (upper coquina layer) |
| CASA 006694 | EU01, LV32, (upper coquina layer) |
| CASA 006690 | EU01, LV33, (coquina) |
| CASA 006691 | EU01, LV33, (coquina) |
| CASA 006692 | EU01, LV33, (coquina) |
| CASA 006693 | EU01, LV33, (coquina) |
| CASA 006722 | EU01, LV33, (coquina) |
| DISC | EU01, LV33, (coquina) |
| DISC | EU01, LV33, (coquina) |
| CASA 006672 | EU01, LV33, FL (coquina and sand) |
| CASA 006709 | EU01, LV33, FL (coquina and sand) |
| CASA 006747 | EU01, LV33, FL (coquina and sand) |
| CASA 006748 | EU01, LV33, FL (coquina and sand) |
| CASA 006749 | EU01, LV33, FL (coquina and sand) |
| CASA 006750 | EU01, LV33, FL (coquina and sand) |
| CASA 006751 | EU01, LV33, FL (coquina and sand) |
| DISC | EU01, LV33, FL (coquina and sand) |
| DISC | EU01, LV33, FL (coquina and sand) |
| CASA 006697 | EU01, LV33, FL (coquina and sand) |
| DISC | EU01, LV33, FL (coquina and sand) |
| CASA 006752 | EU01, LV33, FILL (10YR3/2) |
| DISC | EU01, LV33, FILL (10YR3/2) |
| CASA 006753 | EU01, LV33, FILL (10YR3/2) |
| DISC | EU01, LV33, F1LL (10YR3/2) |
| DISC | EU01, LV33, FILL (10YR3/2) |
| DISC | EU01, LV33, F1LL (10YR3/2) |


| Lot Control Name | Material |
| :---: | :---: |
| 141.00010 San Marcos Ware. | Clay. |
| 141.00011 Green Bacin. | Clay. |
| 141.00012 Osteichthyes. | Bone. --Fauna Remains. |
| 141.00013 Vertebrata. | Bone. --Fauna Remains. |
| 141.00014 Ostreidae. | Fauna Remains. --Shell. |
| 141.00015 Veneroida. | Fauna Remains. --Shell. |
| 141.00016 Gastropoda. | Fauna Remains. --Shell. |
| 141.00017 Solecurtidae. | Fauna Remains. --Shell. |
| 141.00018 Coquina fragment. | Coquina. |
| 141.00019 Charcoal. | Flora Remains. |
| 142.00001 Tile. | Clay. |
| 142.00002 San Marcos Complicated Stamped. | Clay. |
| 142.00003 Olive Jar. | Clay. |
| 142.00004 Olive Jar. | Clay. |
| 142.00005 Osteichthyes | Bone. --Fauna Remains. |
| 142.00006 Ostreidae. | Fauna Remains. --Shell. |
| 142.00007 Veneroida. | Fauna Remains. --Shell. |
| 143.00001 Saint Johns Check Stamped. | Clay. |
| 143.00002 Nail. | Iron. |
| 143.00003 San Marcos Complicated Stamped. | Clay. |
| 143.00004 San Marcos Ware. | Clay. |
| 143.00005 San Marcos Red. | Clay. |
| 143.00006 Bothidae. | Bone. --Fauna Remains. |
| 143.00007 Mammalia. | Bone. --Fauna Remains. |
| 143.00008 Ostreidae. | Fauna Remains. --Shell. |
| 143.00009 Gastropoda. | Fauna Remains. --Shell. |
| 143.00010 Metal fragment. | Iron. |
| 143.00011 Mortar. | Mortar. |
| 144.00001 Charcoal. | Flora Remains. |
| 144.00002 Brick. | Clay. |
| 144.00003 Vessel fragment. | Glass. |
| 144.00004 Gastropoda. | Fauna Remains. --Shell. |
| 144.00005 Ostreidae. | Fauna Remains. --Shell. |
| 144.00006 Coquina fragment. | Coquina. |



$\begin{array}{ll}\text { Cat．\＃} & \text { Provenience } \\ \text { CASA } 006754 & \text { EU01，LV33，FILL（10YR3／2）}\end{array}$ CASA 006754 EU01，LV33，FILL（10YR3／2）
CASA 006755 EU01，LV33，FILL（10YR3／2） CASA 006756 EU01，LV33，FILL（10YR3／2） CASA 006770 EU01，LV33，F1LL（10YR3／2） CASA 006758 EU01，LV33，FILL（10YR3／2） CASA 006746 EU01，LV33，FILL（10YR3／2） CASA 006760 EU01，LV33，FILL（10YR3／2） CASA 006761 EU01，LV33，FILL（10YR3／2） CASA 006762 EU01，LV33，FILL（10YR3／2） DISC EU01，LV33，FILL（10YR3／2） DISC EU01，LV33，FILL（10YR3／2） CASA 006732 EU01，LV33，FILL（10YR3／2） CASA 006763 EU01，LV33，FILL（10YR3／2） CASA 006764 EU01，LV33，FILL（10YR3／2） CASA 006765 EU01，LV33，FILL（10YR3／2） CASA 006766 EU01，LV33，FILL（10YR3／2） CASA 006767 EU01，LV33，FILL（10YR3／2） CASA 006768 EU01，LV33，FILL（10YR3／2）

 DISC EU01，LV34，FILL（10YR3／2） CASA 006757 EU01，LV34，FILL（10YR3／2） CASA 006723 EU01，LV34，FILL（10YR3／2） CASA 006724 EU01，LV34，FILL（10YR3／2） CASA 006725 EU01，LV34，FILL（10YR3／2） DISC EU01，LV34，FILL（10YR3／2） DISC EU01，LV34，FILL（10YR3／2） DISC EU01，LV34，FILL（10YR3／2） CASA 006726 EU01，LV34，FILL（10YR3／2） CASA 006727 EU01，LV34，F1LL（10YR3／2） （て／Eปג0I）TTIJ＇t\＆ 17 ＇I0חヨ 8zL900 VSVO （て／Eぬג0I）TTIJ＇tモムT＇I0กヨ 6てL900 VSVO CASA 006730 EU01，LV34，FILL（10YR3／2） CASA 006731 EU01，LV34，FILL（10YR3／2）

Material Clay．
Clay．
Clay．
Clay．
Clay．
Clay．
Clay
Clay
Clay Fauna Remains．－－Shell． Fauna Remains，－－Shell． Bone．－－Fauna Remains． Bone．－－Fauna Remains． Bone．－－Fauna Remains Bone．－－Fauna Remains． Bone．－－Fauna Remains Bone．－－Fauna Remains Bone．－－Fauna Remains Bone．－－Fauna Remains． Bone．－－Fauna Remains． Coquina．


Flora Remains．

Fauna Remains．－－Shell． Tabby．
Fauna Remains．－－Shell． Clay．
Clay．
Clay．

Clay．

## Lot Control Name

144．00007 Saint Johns Plain．
144．00008 Saint Johns Check Stamped．
144．00009 Saint Johns Punctated．
144．00010 Saint Johns Ware．
144．00011 San Marcos Ware．
144．00012 San Marcos Simple Stamped．
144．00013 Untyped，Native Anerican．
144．00014 San Marcos Complicated Stamped．
144．00015 San Marcos Red．
144．00016 Mollusca．
144．00017 Veneroida．
144．00018 Aves．
144．00019 Testudines．
144．00020 Vertebrata．
144．00021 Mugilidae．
144．00022 Osteichthyes．
144．00023 Bothidae．
144．00024 Sciaenidae．
144．00025 Ariidae．
144．00026 Anatidae．
145．00001 Coquina fragment．
145．00002 Olive Jar．
145．00003 Charcoal．
145．00004 Olive Jar．
145．00005 Metal fragment．
145．00006 Gastropoda．
145．00007 Tabby fragment．
145．00008 Mollusca．
145．00009 Tile．
145．00010 Olive Jar．
145．00011 San Marcos Simple Stamped．
145．00012 San Marcos Ware．
145．00013 San Marcos Complicated Stamped．
145．00014 Olive Jar．
14．



# Material 

 Bone. --Fauna Remains.
Bone. --Fauna Remains. Bone. --Fauna Remains Bone. --Fauna Remains. Bone. --Fauna Remains. ' Bone. --Fauna Remains. --Fauna Remains. $\cup$
$\sim$
$\square$ CASA 006779 DISC

 Tabby Iron. ron Clay. む

Fauna Remains, --Shell. Bone. --Fauna Remains. Fauna Remains. --Shell. Clay.

Fauna Remains. --Shell. Coquina.
Flora Rem
$\qquad$


Lot Control Name
145.00015 Saint Johns Check Stamped. 145.00016 Saint Johns Punctated.
145.00017 Untyped, Native American. 145.00018 Saint Johns Ware.
145.00019 Untyped, Native American. 145.00020 Untyped, Native American. 145.00021 Vertebrata. 145.00022 Mammalia.
145.00023 Aves.
145.00024 Osteichthyes.
145.00025 Testudines.
145.00026 Ariidae.
145.00027 Sciaenidae.
145.00028 Bothidae.
145.00029 San Marcos Red 145.00030 Veneroida. 145.00031 Ostreidae.
146.00001 Tabby fragment. 146.00002 Metal fragment. 146.00003 Brick. 146.00004 Nail.
146.00005 Olive Jar.
146.00006 San Marcos Simple Stamped.
146.00007 San Marcos Complicated Stamped 146.00008 San Marcos Ware.
146.00009 Untyped, Native American. 146.00010 San Pedro Ware.
146.00011 Gastropoda.
146.00012 Osteichthyes.
146.00013 Ostreidae.
147.00001 Yayal Blue On White. 147.00002 Gastropoda.
147.00003 Coquina fragment 147.00004 Charcoal.
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| Count | Weight |
| ---: | ---: |
| 2 | 36.4 |
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| 2 | 30.8 |
| 3 | 12.3 |
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| 1 | 0.29 |
| 28 | 6.36 |
| 1 | 0.75 |
| 1 | 6.41 |
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|  | 73.4 |
|  | 0.7 |
|  | 6.41 |
|  | 13.7 |
|  | 25 |
|  | 2.7 |
| 1 | 0.6 |
| 5 | 47.4 |
|  | 3 |


| Material | Cat. \# | Provenience |
| :---: | :---: | :---: |
| Clay. | CASA 006781 | EU01, LV35, ZN 10YR3/2 |
| Clay. | CASA 006793 | EU01, LV35, ZN 10YR3/2 |
| Clay. | CASA 006780 | EU01, LV35, ZN 10YR3/2 |
| Clay. | CASA 006783 | EU01, LV35, ZN 10YR3/2 |
| Clay. | CASA 006784 | EU01, LV35, ZN 10YR3/2 |
| Clay. | CASA 006785 | EU01, LV35, ZN 10YR3/2 |
| Clay. | CASA 006786 | EU01, LV35, ZN 10YR3/2 |
| Bone. --Fauna Remains. | CASA 006787 | EU01, LV35, ZN 10YR3/2 |
| Bone. --Fauna Remains. | CASA 006788 | EU01, LV35, ZN 10YR3/2 |
| Bone. --Fauna Remains. | CASA 006789 | EU01, LV35, ZN 10YR3/2 |
| Bone. --Fauna Remains. | CASA 006790 | EU01, LV35, ZN 10YR3/2 |
| Bone. --Fauna Remains. | CASA 006791 | EU01, LV35, ZN 10YR3/2 |
| Fauna Remains. --Shell. | DISC | EU01, LV35, ZN 10YR3/2 |
| Fauna Remains. --Shell. | DISC | EU01, LV35, ZN 10YR3/2 |
| Fauna Remains. --Shell | DISC | EU01, LV35, ZN 10YR3/2 |
| Fauna Remains. --Shell. | DISC | EU01, LV35, ZN 10YR3/2 |
| Coquina. | DISC | EU01, LV35, ZN 10YR6/4, (sand) |
| Clay. | DISC | EU01, LV35, ZN 10YR6/4, (sand) |
| Fauna Remains. --Shell | DISC | EU01, LV35, ZN 10YR6/4, (sand) |
| Clay. | CASA 006802 | EU01, LV35, ZN 10YR6/4, (sand) |
| Clay. | CASA 006801 | EU01, LV35, ZN 10YR6/4, (sand) |
| Slag. | CASA 006795 | EU01, LV35, ZN 10YR6/4, (sand) |
| Iron. | CASA 006796 | EU01, LV35, ZN 10YR6/4, (sand) |
| Clay. | CASA 006797 | EU01, LV35, ZN 10YR6/4, (sand) |
| Clay. | CASA 006798 | EU01, LV35, ZN 10YR6/4, (sand) |
| Clay. | CASA 006799 | EU01, LV35, ZN 10YR6/4, (sand) |
| Clay. | CASA 006803 | EU01, LV35, ZN 10YR6/4, (sand) |
| Clay. | CASA 006800 | EU01, LV35, ZN 10YR6/4, (sand) |
| Clay. | CASA 006794 | EU01, LV35, ZN 10YR6/4, (sand) |
| lron. | CASA 006804 | EU01, FlLL, (removed by maintenance) |
| Clay. | DISC | EU01, FILL, (removed by maintenance) |
| Clay. | CASA 006805 | EU01, FlLL, (removed by maintenance) |
| Bone. --Fauna Remains. | CASA 006806 | EU01, FILL, (removed by maintenance) |
| Bone. --Fauna Remains. | CASA 006807 | EU01, FlLL, (removed by maintenance) |



| Cat. \# | Provenience |
| :---: | :---: |
| DISC | EU01, CORE10, 2'4' below LV35, (1/4"screen) |
| D1SC | EU01, CORE10, 2'8' below LV35, (1/4"screen) |
| DISC | EU0 1, CORE $10,2^{\prime \prime} 8^{\prime \prime}$ below LV35, (1/4"screen) |
| DISC | EU01, CORE10, $3^{\prime}$ below LV35, (1/4"screen) |
| DISC | EU01, COREI0, 3'4' below LV35, (1/4"screen) |
| DISC | EU01, CORE10, 3'8" below LV35, (1/4"screen) |
| DISC | EU01, CORE10, 4' below LV35, (1/4"screen) |
| DISC | EU01, CORE10, 4'4' below LV35, (1/4"screen) |
| DISC | EU01, COREI0, 4'8" below LV35, (1/4"screen) |
| DISC | EU01, CORE10, 4'8" below LV35, (1/4"screen) |
| D1SC | EU01, CORE $10,5{ }^{\prime \prime} 8^{\prime \prime}$ below LV35, (1/4"screen) |
| D1SC | EU01, CORE10, 6'4" below LV35, (1/4"screen) |
| DISC | EU01, CORE10, 6'4" below LV35, (1/4"screen) |
| DISC | EU01, CORE10, 7 ' below LV35, (1/4"screen) |
| DISC | EU01, CORE10, $7^{\prime \prime} 8^{\prime \prime}$ below LV35, (1/4"screen) |
| DISC | EU01, CORE10, 8' below LV35, (I/4"screen) |
| DISC | EU01, CORE10, 8'4' below LV35, (1/4"screen) |
| DISC | EU01, CORE10, 8'4' below LV35, (1/4"screen) |
| DISC | EU01, CORE 10, 8'4' below LV35, (1/4"screen) |
| DISC | EU01, CORE10, $8^{\prime} 8^{\prime \prime}$ below LV35, (1/4"screen) |
| DISC | EU01, CORE10, 8'8' below LV35, (1/4"screen) |
| DISC | EU01, CORE10, $8^{\prime} 8^{\prime \prime}$ below LV35, (1/4"screen) |
| DISC | EU01, CORE10, $9^{\prime}$ below LV35, (1/4"screen) |
| CASA 006808 | EU01, CORE10, 9' below LV35, (1/4'screen) |
| D1SC | EU01, CORE10, 9' below LV35, (1/4"screen) |
| DISC | EU01, CORE10, $2^{\prime}$ below LV35, (1/4"screen) |
| DISC | EU01, CORE10, 7'4' below LV35, (1/4"screen) |
| CASA 006810 | EU01, CORE10, 2 ' below LV35, (1/32"screen) |
| CASA 006809 | EU01, CORE10, $2^{\prime}$ below LV35, (1/32"screen) |
| CASA 006812 | EU01, CORE10, 2'4" below LV35, (1/32"screen) |
| CASA 006811 | EU01, CORE10, 2'4" below LV35, (1/32"screen) |
| CASA 006814 | EU01, CORE10, 2'8' below LV35, (1/32"screen) |
| CASA 006813 | EU01, CORE10, 2'8' below LV35, (1/32"screen) |
| ASA 006816 | 01, CORE 10, 3 ' below LV35, (1/32"screen) |

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Fauna Remains. --Shell.
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Clay.
Coquina.
Fauna Remains. --Shell.
Coquina.
Mortar.
Fauna Remains. --Shell.
Slag.
Tabby.
Fauna Remains. --Shell.
Fauna Remains. --Shell.
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 CASA 006832 EU04, LV02, ZN 2.5 Y6/1 CASA 006843 EU04, LV02, ZN 2.5 Y6/1
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 EU04，LV02，ZN $2.5 \mathrm{Y} 5 / 2$ EU04，LV02，ZN 2.5 Y5／2

 Z／SXS＇Z NZ＇Z0ヘ7＇t0חヨ £s8900 VSVO CASA 006851 EU04，LV02，ZN 2.5 Y5／2 CASA 006850 EU04，LV02，ZN 2.5 Y5／2 DISC EU04，LV02，ZN 2．5Y5／2 て／Sスऽ｀てNZ＇20ヘT＇t0 て／SスS＇て NZ＇20ヘT＇t0חヨ s 88900 VSVO て／Sスऽ＇てNZ＇20ヘT＇t0חヨ 858900 VSVO て／SスS＇てNZ＇20ヘT＇t0กق Lt8900 VSVO て／SXS＇てNZ＇ $0 \wedge 7$＇t0חヨ $9+8900$ VSVO て／SAS＇てNZ ‘20ヘT＇t0
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 EU04，LV03，ZN 2．5Y5／2

 CASA 006868 EU04，LV03，ZN 2.5 Y5／2 CASA 006872 EU04，LV03，ZN 2.5 Y5／2 CASA 006873 EU04，LV03，ZN 2.5 Y5／2 $U$
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Material

## Lot Control Name

188．00009 Pipe，tobacco．
188．00010 Bulb，light．
188．00011 Metal fragment．
188．00012 Spike．
188．00013 Nail．
188．00014 Vessel fragment．
188．00015 Vessel fragment．
188．00016 Vessel fragment．
188．00017 Vessel fragment．
188．00018 Vessel fragment．
188．00019 Vessel fragment．
188．00020 Vessel fragment．
188．00021 Windowpane．
188．00022 Vessel fragment．
188．00023 Vessel fragment．
188．00024 Vessel fragment．
189．00001 Brick．
189．00002 Plastic fragment．
190．00001 Plastic fragment．
190．00002 Mortar．
190．00003 Concrete fragment．
190．00004 Tar fragment．
190．00005 Coquina fragment．
190．00006 Brick．
190．00007 Coin．
190．00008 Olive Jar．
190．00009 Windowpane．
190．00010 Vessel fragment．
190．00011 Vessel fragment．
190．00012 Vessel fragment．
190．00013 Vessel fragment．
190．00014 Vessel fragment．
190．00015 Metal fragment．
190．00016 Mammalia．

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| Lot Control Name | Material | Cat. \# | Provenience | Count | Weight |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 190.00017 Vertebrata. | Bone. --Fauna Remains. | CASA 006896 | EU04, LV04, ZN 2.5Y5/2 | 1 | 2.04 |
| 190.00018 Pipe, tobacco. | Kaolinite Clay, | CASA 006885 | EU04, LV04, ZN 2.5Y5/2 | 1 | 11 |
| 190.00019 Gunflint. | Chert, Dover. | CASA 006884 | EU04, LV04, ZN 2.5Y5/2 | 1 | 7.69 |
| 190.00020 Gunflint. | Chert. | CASA 006883 | EU04, LV04, ZN 2.5Y5/2 | 2 | 4.26 |
| 190.00021 Caulking fragment. | Synthetic. | DISC | EU04, LV04, ZN 2.5Y5/2 |  | 4.8 |
| 190.00022 Metal fragment. | Lead. | CASA 006882 | EU04, LV04, ZN 2.5Y5/2 |  | 13.18 |
| 190.00023 San Marcos Complicated Stamped. | Clay. | CASA 006881 | EU04, LV04, ZN 2.5Y5/2 | 2 | 14.91 |
| 190.00024 Tube. | Glass. | CASA 006887 | EU04, LV04, ZN 2.5Y5/2 | 1 | 0.42 |
| 190.00025 Nail. | Iron. | CASA 006879 | EU04, LV04, ZN $2.5 \mathrm{Y} 5 / 2$ | 26 | 231.2 |
| 191.00001 Plastic fragment. | Plastic. | DISC | EU04, LV05 | 11 | 1.22 |
| 191.00002 Metal fragment. | Iron. | CASA 006897 | EU04, LV05 |  | 3.99 |
| 191.00003 Mortar. | Mortar. | DISC | EU04, LV05 |  | 2.36 |
| 191.00004 Flake. | Chert. | CASA 006906 | EU04, LV05 | 1 | 0.34 |
| 191.00005 Metal fragment. | L̇ead. | CASA 006031 | EU04, LV05 |  | 0.48 |
| 191.00006 Caulking fragment. | Synthetic. | DISC | EU04, LV05 |  | 0.17 |
| 191.00007 Metal fragment. | Brass. | CASA 006905 | EU04, LV05 |  | 0.63 |
| 191.00008 San Marcos Complicated Stamped. | Clay. | CASA 006904 | EU04, LV05 | 1 | 7.55 |
| 191.00009 Ironstone. | Clay. | CASA 006903 | EU04, LV05 | 1 | 0.39 |
| 191.00010 Pipe, tobacco. | Kaolinite Clay. | CASA 006902 | EU04, LV05 | 1 | 0.89 |
| 191.00011 Vessel fragment. | Glass. | CASA 006901 | EU04, LV05 | 5 | 6.44 |
| 191.00012 Vessel fragment. | Glass. | CASA 006900 | EU04, LV05 | 2 | 0.39 |
| 191.00013 Vessel fragment. | Glass. | CASA 006899 | EU04, LV05 | 1 | 3.47 |
| 191.00014 Vessel fragment. | Glass. | CASA 006898 | EU04, LV05 | 1 | 1.06 |
| 191.00015 Windowpane. | Glass. | CASA 006907 | EU04, LV05 | 1 | 0.21 |



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Figure 27

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Figur 29


Fisur 30




Table I


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    N CASA 006063 EU01, LV12, ZN G, CASA 006067 EU01, LV12, ZN G,
    CASA 006068 EU01, LV12, ZN G, CASA 006068 EU01, LV12, ZN
     CASA 006071 EU01, LV12, ZN G, CASA 006072 EU01, LV12, ZN G, CASA 006073 EU01, LV12, ZN G, CASA 006075 EU01, LV 12, ZN G, CASA 006077 EU01, LV12, ZN G, NE Material
    Clay.
    Mortar.
    Iron.
    Iron.
    Slag.
    Brass.
    Kaolinite Clay.
    Coquina.
    Kaolinite Clay.
    Glass.
    Bone. --Fauna Remains.
    Kaolinite Clay.
    Bone. --Fauna Remains.
    Fauna Remains. --Shell.
    Bone. --Fauna Remains.
    Bone. --Fauna Remains.
    Bone. --Fauna Remains.
    Bone. --Fauna Remains.
    Clay.
    Clay.
    Clay.
    Clay.
    Clay.
    Clay.
    Clay.
    Clay.
    Clay.
    Clay.
    Clay.
    Clay.
    Clay.
    Clay.
    Clay.
    Clay.
    Cl
    
    Cat. \#
    DISC
    DISC
    CASA 006048
    CASA 006049
    CASA 006050 $n$
    0
    0
    0
    0
    $\vdots$
    $u$
    $u$ $N$
    N
    8
    8
    K
    U
    U DISC CASA 006053 CASA 006056
     DISC
     CASA 006060 CASA 006062 CASA 006064 CASA 006065 EU01, LV12, 2 C
    CASA 006066 EU01, LV12, Z CASA 006069 EU01, LV12, CASA 006070 EU01, LV12, ASA 06073 EU01 LV12, CASA 006076 EU01, LV12, ZN

