

**MEDIO PERIOD SITES IN THE SANTA MARÍA VALLEY  
OF WEST-CENTRAL CHIHUAHUA, MEXICO**

by

Jane Holden Kelley

with contributions by

Charles Knight  
A. C. MacWilliams  
Loy Neff



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## ACKNOWLEDGMENTS

The Medio period sites of the upper Santa María Valley, in the *municipio* of Namiquipa, occur on both *ejido* and private land; typically, the private holdings have changed hands several times since the early 1990s when the PAC carried out its Medio period research. While individual plots within *ejidos* can now be sold, common lands belonging to *ejidos* still mostly remain under the control of those communal entities. In most cases we visited sites repeatedly, each time with the permission of *ejido* and municipal officials or the current owners. Acknowledging those who granted us access to sites over a period covering more than twenty-five years is therefore a complex task.

Several individuals and families owned parts of the Raspadura site (Ch-11) over the years, and the number of owners varied. In 1990 the owners were Jesús and Inez Reyes of El Molino, Hector Borunda of Chihuahua City, and Jesús Molinar of Soto Maynez. Abelardo Valenzuela and his son Adrián Valenzuela took over the Borunda parcel, which they sold to Sixto Chavez or his sons, Sixto and Hector Chavez, who also took over the Reyes land. El sitio de los Cochinos (Ch-152) was owned in 1990 by Luís Andujo, who also owned a supermarket in Oscar Soto Maynez. After his death in later years, the family inherited the land, which became involved in legal disputes and ceased being a pig farm. Ch-12, the Alarcón site, was owned by the Luís and José Alarcón in the early 1990s. The Palacios site (Ch-157) was owned by Juan Palacios in the early 1990s, and by Isidro Molinar Rodriguez in 2012. (The widow of Amalfo Palacios was helpful to us regarding this site.) The Parcela site is on land belonging to the Sección de Oscar Soto Maynez of the Municipio of Namiquipa. The Picacho site (Ch-156) is on common land pertaining to the *ejido* of Guadalupe Hidalgo, while the Buenavista site is on land in the *ejido* of Buenavista farmed in the early 1990s by Jose Barragon. The San Blas site (Ch-268) is on the San Blas *ejido*, and the adjacent field to the west where Ch-269 is located was leased to a potato growing consortium whose local manager gave permission for us to walk over the field. Ch-253 A and B were owned by Solomon Quintana and Rosalio García. We appreciate the access granted to us by municipal, *sección*, and *ejido* officials, landowners, and lessees, as our work on these sites would have been impossible without their permission. We especially appreciate the good will displayed by of all the individuals just named.

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Eduardo Gamboa, Arturo Marquez Alameda, Suzanne Lewenstein, and David Phillips were working visitors. Our heartfelt thanks to all of the above, and to the crews.

Our debt of gratitude also includes INAH's Consejo de Arqueología for granting us permission to work in Mexico, and the Social Sciences and Humanities Research Council of Canada for funding our research.



The 1990 crew with some of the working visitors. Back row, left to right: Warren Hill, David Pearson, Jane Kelley, Tico Kelley, Ronna Jane Bradley, and Jamie MacPhearson. Bottom row, left to right: Joe Stewart, Sharon Viera, Jeannette Smith, Richard Garvin, Rafael Cruz, and Art MacWilliams.

## Chapter 1

### INTRODUCTION

Like most efforts before it, the Proyecto Arqueológico Chihuahua (PAC) began its work on the Chihuahua culture<sup>1</sup> by examining obvious sites of the Medio period. We made extensive surface collections from sites with house mounds in the Babícora basin, then excavated at El Zurdo, which also has a Viejo period component. We also recorded, surface collected, and tested sites in the upper Santa María Valley (Figure 1.1). Through our efforts we became aware that the Medio period occupation of west-Central Chihuahua—or, as we termed it, the “southern zone” of the Chihuahua culture—was preceded by an extensive Viejo period occupation. Since the Viejo period was less well understood than the Medio period, the project shifted its focus to the earlier sites (Kelley and Garvin 2013, 2014; Kelley et al. 2014).<sup>2</sup> Together with the published descriptions of El Zurdo (Kelley 2008, 2009a, 2009b), this report provides a record of what we did in the early years of the project, thereby offering baseline information in the face of ongoing site destruction.

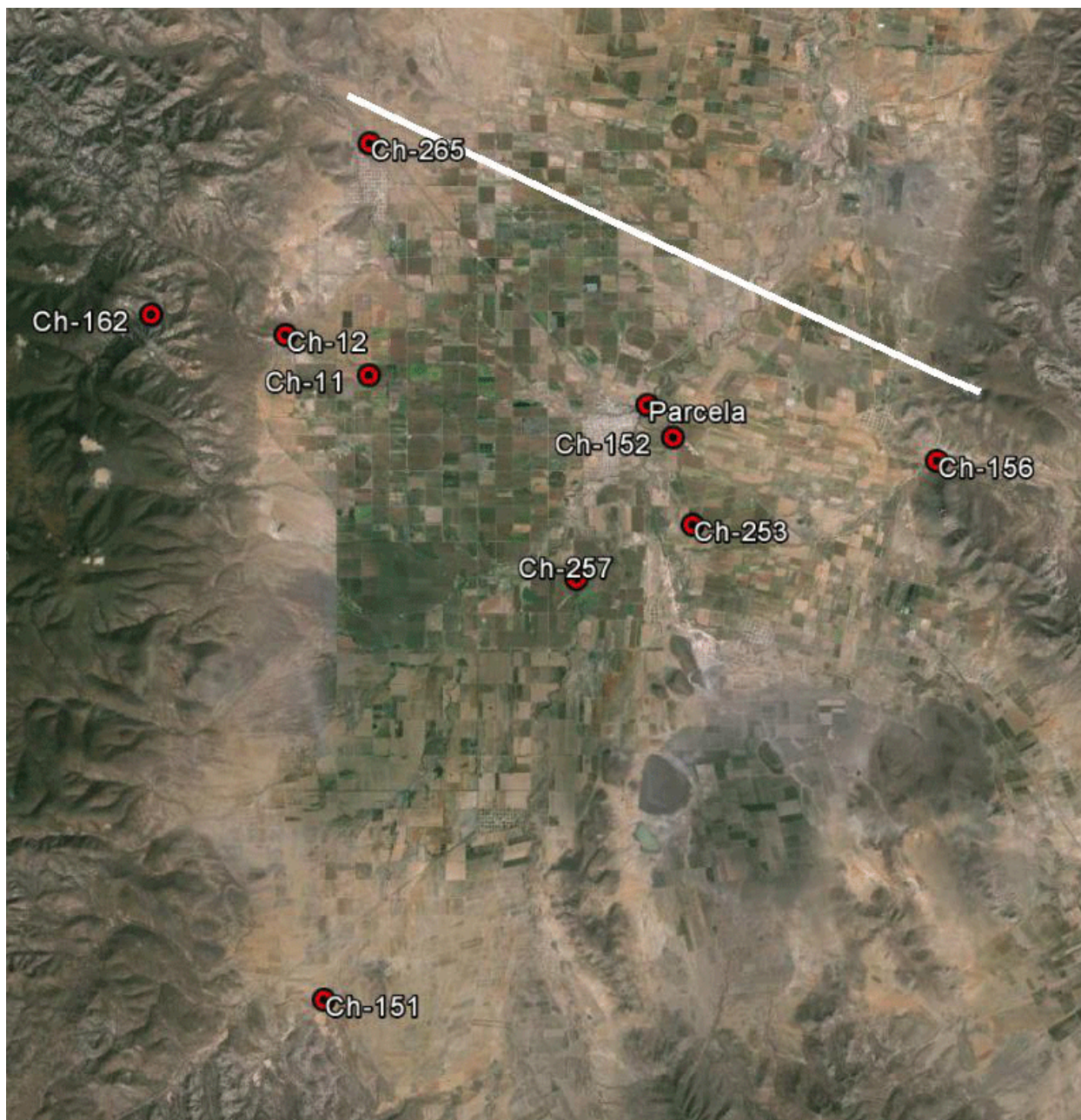
We visited seven sites within the big bend area of the Santa María Valley with Medio period artifacts on the surface and adobe architecture, so their Medio period age is not in doubt. Four of the sites were tested and are described in Chapters 2 through 5. Possible Medio period sites are described in Chapter 6. We have heard of other Medio period mound sites that we did not visit, and there are large areas of the upper Santa María drainage basin that have not been visited by archaeologists. The information we do have indicates a respectable Medio period population within the upper valley, albeit the exact chronology of that occupation remains unclear.

The natural setting in the upper Santa María Valley (Figures 1.2 and 1.3) differs from those in the Babícora Basin to the northwest and the Santa Clara Valley to the east. The Babícora Basin is a closed basin with a lake at its center, mandating settlement around the basin’s periphery and along side drainages. In the Santa Clara Valley, a linear distribution of sites reflects the locations of springs along the river. In contrast to both patterns, the upper Santa María flows through a broad basin with good soils and substantial side drainages. The Viejo and Medio period settlements of the Santa María Valley are therefore more dispersed than in the adjacent drainage basins.

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<sup>1</sup> Also known as the Casas Grandes culture. In the various project reports to date we have preferred the term Chihuahua culture because of the historical precedence of Donald Brand’s designation, and because use of that term de-emphasized the Casas Grandes area (which may have been the most important sub-area within the culture, but was not the only one). The term Chihuahua culture is not ideal either, as the culture in question does not cover the entire state of Chihuahua and extends into adjacent states. We have listened to a plea from Mexican archaeologists to refer to the culture as the Casas Grandes culture, consistent with Mexican usage, and will switch to that name in the synthetic volume for the project.

<sup>2</sup> During the final years of the PAC Jerimy Cunningham located a number of Medio period sites in the Santa Clara Valley, and he has launched the Santa Clara Archaeological Project (SCAP) to pursue research into the sites in that valley.



**Figure 1.1.** Upper Santa María River Valley, showing site locations. Viejo and Medio period sites cluster south of the white line. Image source: Google Earth.



**Figure 1.2.** View east across the Santa María Valley. Photo taken from above the Cuesta del Toro, on the pass to the Babícora Basin. Cerro Picacho, a prominent landform, is visible in the distance to the right of center.



**Figure 1.3.** Cerro Picacho. Looking north.

In the upper Santa María Valley, both Viejo and Medio period sites cluster south of a line drawn from the Ejido Cerro Pelón on the west side of the valley to the Ejido Guadalupe Victoria on the east side of the valley (see Figure 1.1). The PAC found only one possible Medio period site north of this line, at Amera. Sayles (1936, unpublished field notes at the Arizona State Museum) and Brand (1933) noted few sites between Buenaventura (on the same river, in the lower elevation grasslands to the north) and Namiquipa (the *municipio* that occupies most of the upper Santa María valley).

The upper Santa María Valley narrows markedly as it extends southeast of Oscar Soto Maynez (Santa Ana de Bavícora) toward Bachíniva. We found only one small Medio period site in that section of the valley (Ch-267/268, on Ejido San Blas lands), but other possible Medio period sites are known to exist on the south side of the narrowing valley. At Bachíniva the Santa María emerges from the mountainous area that provide its head waters. PAC did not survey the headwaters area; it lacks the good agricultural land that the region's prehistoric farmers preferred.

Several tributary drainages join the Santa María from the south at Oscar Soto Maynez, and their combined broad valley supports a 20 km southward extension of the local belt of modern farms. The southernmost known Medio period site was built near the point where one of these streams, Arroyo El Pino, flows from the high sierras onto the valley floor (Ch-151, Buenavista, named after the local ejido). Farther north, along the same arroyo, the Palacios Site (Ch-257) is located in the middle of the valley.

## Chapter 2

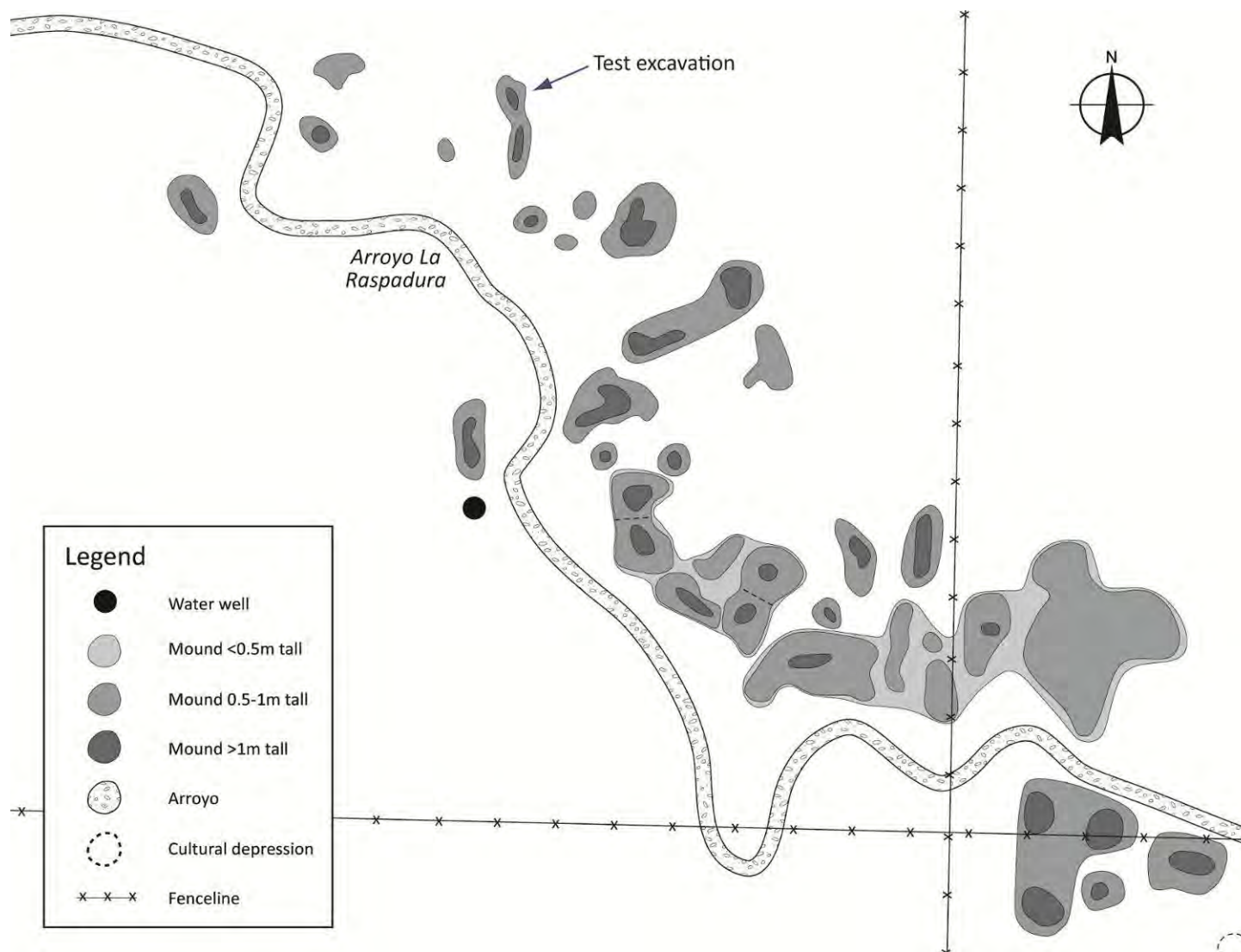
### LA RASPADURA

We first heard about La Raspadura (Ch-11) when we visited the municipal offices in Bachíniva in 1989. The stone tools displayed in the offices came from sites in the mountainous headwaters of the Santa María drainage basin, to the south. But, they said, you must go to La Raspadura if you wish to see the “best” archaeological site in the area. We learned that anyone in the area with any knowledge of archaeological sites considered La Raspadura the “best,” and were repeatedly told about the site and about things that had come from the site. If nothing else it the largest known site in the southern zone, with more house mounds (and therefore more rooms) than any other found by the project. Although the total room counts is an estimate, by that measure the site is the equal of Galeana, farther north on the same drainage. Even so, La Raspadura is typical of southern zone sites in that it lacks many features found in and near the culture’s principal site, Paquimé. As far as we know, La Raspadura did not have a floored or enclosed plaza, a peripheral wall, a ball court, or a platform mound.

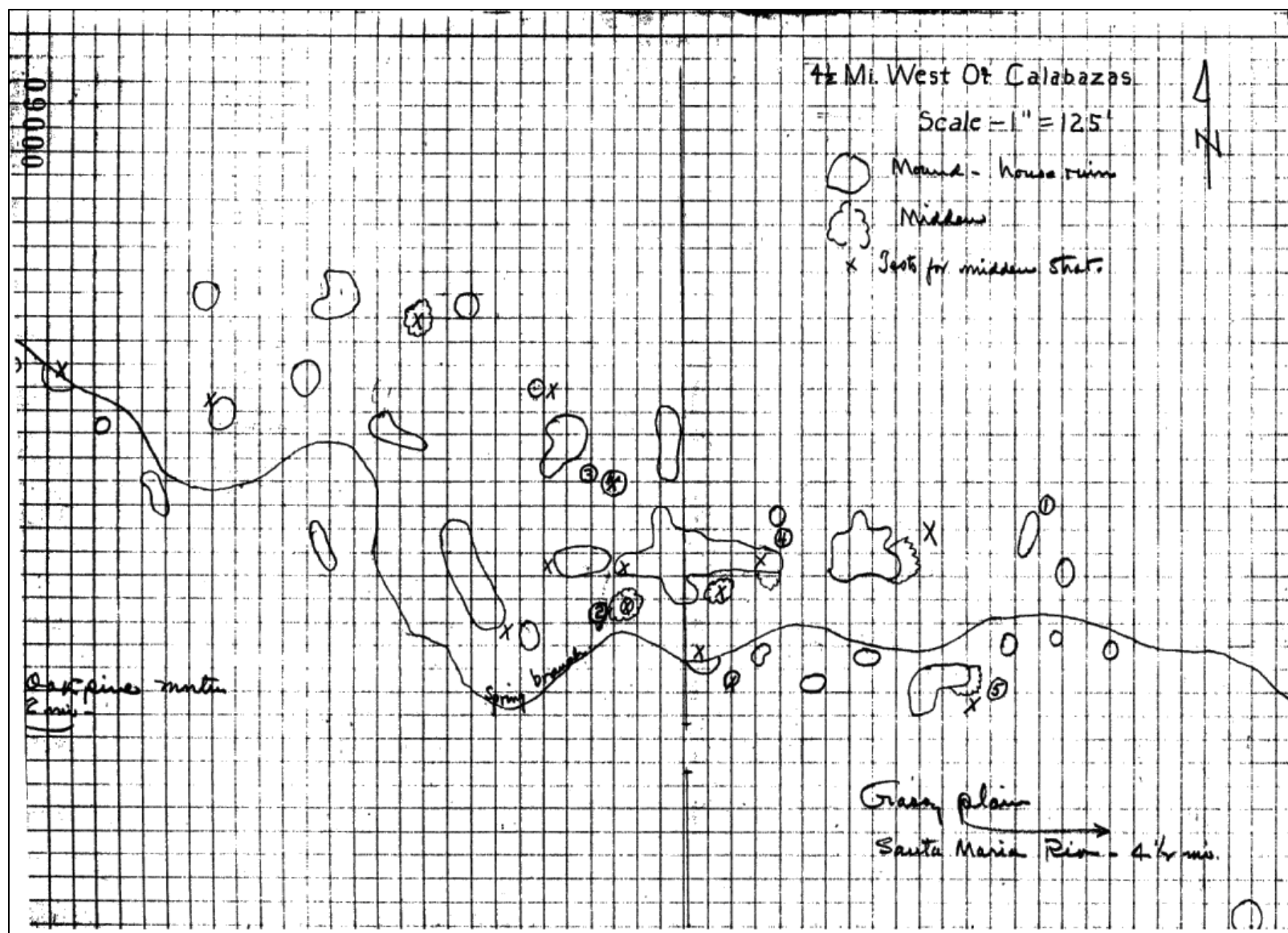
La Raspadura is next to the arroyo of the same name, near the west edge of the valley (Figures 1.1 and 2.1–2.3). Like so many sites in the southern zone, this one maximized access to water. A spring at this location formerly fed the stream, but since 1991 has been diverted into a dirt storage tank.



**Figure 2.1.** Aerial image of La Raspadura. The site is in the unplowed area extending from upper left to lower right. North is to the top of the image. Source: Google Earth.



**Figure 2.2.** La Raspadura as mapped in 1991. Since then the arroyo channel has straightened, impinging on the adjacent mounds. “Test excavation” indicates the low mound with the excavated T-shaped room.



**Figure 2.3.** La Raspadura in 1933. Sketch map by E. B. Sayles, now in the Arizona State Museum archives.

The site was visited by E. B. Sayles in 1933; it is his Chih I:15:1. He placed several test pits here, and his collections from this site (and others) are in the Arizona State Museum. Donald Brand did not visit the site on his earlier survey of 1928, though he too journeyed up the Santa María Valley to the general vicinity.

Sayles specified that the site was 4 1/2 miles (ca. 7 km) west of “Calabazas.” For years we sought information about that location, as we looked for the large site Sayles recorded. There is, today, an Arroyo Calabazas west of El Terrero and El Molino, and we walked that arroyo in vain looking for a large site. It wasn’t until Loy Neff was working on the La Raspadura site map in Calgary that he noticed the similarity to Sayles’ site. We then used Sayles’ photographs of the site to confirm that our La Raspadura is Sayles’ Chih I:15:1.

Sayles’ 1933 map shows mounds east and west of those mapped in 1991. The mounds appear to be more clearly delimited, and what now appears to be the east end of the largest mound appears to have been a separate mound in 1933. The north-south fence in Figure 2.2. was there in 1933, when the land was part of the Hearsts’ hacienda, but the east-west fences were not. In recent decades, changes to the arroyo channel have damaged the site. My journal entry for June 3, 1991 notes, “Since the crew’s last visit ten days ago, the arroyo has been diverted into a newly excavated earth tank at the west end of the site, thereby eliminating at least one small mound.” Based on Google Earth imagery, by 2010 the arroyo was straightened to cut off a meander, in order to claim land for cultivation.

When one adds the other observations we made about site condition, during site visits over two decades, the picture becomes quite depressing. During the first years of the PAC, in 1990 and 1991, the upper Santa María valley was still getting enough annual rainfall to sustain the ground cover (long-term drought had not yet hit the area), and the core of the site had not yet seen sustained mechanical disturbance (Figure 2.4). Extensive looting was ongoing, however (Figure 2.5). Then the drought hit, ground cover became scarce, and the main part of the site was fenced and turned into a feed lot for cattle. While the new landowners curtailed looting, the combination of drought and sustained trampling denuded and deflated the surface (Figure 2.6). The surface sherds that were so plentiful in 1990 and 1991 were mostly eliminated from the site surface by the early 2000s.

### **Survey of the Arroyo Raspadura**

In 2008, the PAC conducted a pedestrian survey of the Arroyo Raspadura, from within the sierra to the outskirts of Oscar Soto Maynez (Santa Ana Bavícora). Given our experience in the Babícora Basin (where we surveyed Arroyo el Zurdo) and elsewhere, we expected to encounter a series of sites along the drainage. This proved not to be the case; instead, small lithic artifact scatters and occasional sherds were found. It is not clear whether the negative results stemmed from the narrow survey corridor (10m on each side of the arroyo), from mechanical alteration of the landscape during the more than half a century of cultivation since the land redistributions of the 1950s, or because this important site stood alone on the drainage.



**Figure 2.4.** La Raspadura in 1990. View to west from Mound 1.



**Figure 2.5.** Mound 1 at La Raspadura in 1990, showing looters' holes. Looking southwest.



**Figure 2.6.** Mound 1 at La Raspadura in 1996. Looking northeast toward the abandoned adobe house that stood there until during the 1990s, but is now demolished. Figures 2.4 through 2.6 were taken in the early summer.

### **The 1990 Field Season**

In 1990 we mapped the site and surface collected artifacts. Concentrations of sherds were found on recent looters' backdirt piles; some of those concentrations appeared to have been from a single room, as was the case for Collecting Area 4, while others were from multiple rooms, as was the case for Collecting Area 1 (where the backdirt was from a single hole exposing parts of four rooms). We decided to take advantage of the otherwise unfortunate situation by collecting sherds recently discarded by the looters, thus obtaining a sample of artifact variability over the site (see Tables A.1 and A.2). More than 2,500 sherds were collected in this fashion.

Based on what we observed in mid-1990, the preceding few years had been a period of especially active looting. Local residents further explained that looting had not been particularly serious while the land was part of the Hearst's hacienda, which was among the last of the big private holdings to be broken up by the Mexican government. In the 1950s the hacienda was turned into a series of smaller privately owned properties. As long as the new landowners lived on their plots (and the former adobe house on Mound 1 indicates that at La Raspadura they did), archaeological sites were fairly safe unless the landowners were inclined to looting. In time, however, the owners of the plots moved into local towns and the land was left untended during

the winter. This is when serious looting of La Raspadura site began as an off-season occupation. We are told the looted pots were mostly taken to Palomas for sale, or otherwise disposed of; few remained in the vicinity.

### **Collecting Areas (CAs)**

For the 1990 surface collections, sample sizes reflect the degree of looting at a given spot more than anything else. Ramos Polychrome is the most common import, occurring in 11 of the 20 Collecting Areas (CAs). Madera Black-on-red and Villa Ahumada Polychrome were both found in two CAs. The presumed imports are not concentrated in one part of the site.

CAs 1, 16 and 17 were spread over the largest mound (Mound 1), with CA 1 on the north side of the mound, 16 at the west end, and 17 at the east end. Each collecting area appeared to represent recent looting from a confined area, so the three collections are samples of different parts of the mound. CAs 1 and 16 produced large numbers of sherds. Mound 1 is more than 160 m long (more or less east-west), with a section at the east end that appears as a separate mound on Sayles' map. Mound 1 is broader north-south just west of the north-south fence and is almost T-shaped. To judge by surface indications, the mound's entire surface was looted over several generations.

CAs 2 and 20 were south of the arroyo, toward the east end of the site, on an east-west oriented mound. CA 2 was the east end of the top of the mound, while CA 20 consisted of 30 neatly pile sherds at the west end of the mound. The mound was about 2 m tall, making it the highest mound on the site and raising the possibility of a two-story structure. The entire top of the mound was covered in looters' holes of various ages. The room block was probably four to six rooms wide (north-south) and could have been 12 rooms long (east-west), for an estimated 48 to 72 ground floor rooms. At the southwest corner of the mound, a small wing extended to the south, indicating an additional room or rooms. The looters had exposed a number of adobe walls along with adobe, burned pine bark, and charcoal. The crew collected three pieces of shell from the mound. Lot 1173, from the southeast corner of the mound, included a small stone bowl or mortar (7.3 by 6.0 by 4.9 cm), a possible agave knife, a mano fragment, and an additional ground stone fragment. In later years the west end of this mound was used as a source of adobe, which was extracted with a backhoe.

CA 3 was a low mound just west of the mound described for CAs 2 and 20; the CA 3 mound does not appear on the PAC site map. The entire top of the mound had been looted, revealing adobe walls and room corners. From these exposures we infer that the original room block was oriented northwest-southeast, and was five to six rooms long and two to four rooms wide.

CA 4 was on a mound whose main axis extended SSW-NNE; the mound had a wing extending to the northwest and was almost T-shaped. The mound was badly disturbed, with looters' holes of various ages (including very fresh ones). One room in the north-central part of the mound had been dug recently; the backdirt included numerous large sherds (suggesting that vessels had been present on the room floor) and 13 manos.

CA 5 was on the largest mound in the northwest part of the site, also badly disturbed. Exposed walls and room corners suggested a block seven rooms long and three rooms wide, with the long axis extending SSW-NNE. The block included an extension to the northwest. The total number of rooms probably was between 21 and 37. Wall plaster adhered to some exposed walls, and badly burned plaster was seen in the backdirt. Thin sheets of rhyolite (from what we called hatch cover rocks) were present. A chert ball shaped by pecking, hammering and grinding, with one flat area, measured 5.8 cm in diameter was 5.8 cm and weighed 245 g.

CA 6 was on the westernmost mound on the south side of the arroyo. This mound was also thoroughly disturbed. The collection consisted of items from the edges of recent looters' holes, plus a few sherds from elsewhere on the mound.

CA 7 was on a linear (north-south) mound on the south side of the arroyo. In 1990 it was the least vandalized mound at the site, having only one small looter's hole in the north part of the mound and another on the south side. The tenant farmer plowed just to the edge of the mound. Visible artifacts were scarce.

CA 8 was on the most completely dug-up mound, with exposed walls and doorways. The block would have included six to nine rooms.

CA 9 was on a roughly 18 m long mound. A large pit was present at the center of the mound, and most of the surface of the mound appeared to consist of dispersed backdirt.

CA 10 was on a mound that originally measured about 22 m north-south by 20m east-west. The mound was thoroughly dug up, and one section had been excavated mechanically.

CA 11 was on a severely looted mound whose south edge bordered the Arroyo Raspadura arroyo. Walls were visible in the largest of the looters' holes. This mound was continuous with the one sampled by CA 12.

CA 12 was on another severely looted mound, with at least six open pits in which walls could be seen.

CA 13 was on a 1.5 m high mound. Walls were exposed in the extensive looters' holes.

CA 14 was at a small feature, about 5 m long, that had been thoroughly dug.

For CA 15, no notes were kept or else the notes were lost.

CAs 18 and 19 were at a linear mound that paralleled the north-south fence and was directly north of the west half of Mound 1. CA 18 was at the south end of the mound, while CA 19 was at the north end. Both ends of the mound exhibited looters' holes, with tunneling in the largest hole at the south end.

## **The 1991 Field Season**

We returned to the Raspadura site in 1991 to further evaluate the condition of the site, to find the outside wall of the Mound 1 room block, to test areas between mounds (in particular, we wished to see whether there were features or prepared surfaces in those areas), and to test a very low mound that had not been looted. Perhaps unwisely, we felt that we lacked the people and other resources to create large horizontal exposures of room blocks.

### **Surface Collection, Mound 1**

In the interval since the collections of 1990 were made, a large new looter's hole appeared in Mound 1. This disturbance yielded large portions of an undecorated bowl and of a Babícora Polychrome jar. The vertical provenience was 93 to 102 cm BD.

### **Outside Wall of Mound 1**

A 3 m long, 0.5 m wide trench into Mound 1 from the north was intended to intersect the external wall of the room block, but the wall was not found. No artifacts were collected from the highly disturbed fill down to 92 cm BD. At that depth, a hard surface was found. The surface was just below the bottoms of most of the looters' holes; one had gone through this surface.

### **Test 1**

A 1 by 1 m test in a low, rocky mound between the obvious mounds was dug in two levels. The fill contained more rocks than dirt. Artifacts were plentiful through Level 1, to about 30 cm BD (a depth from the surface of about 15 cm). Artifacts became scarce in Level 2, to 61 cm BD (about 45 cm below the surface). No artifacts came from Level 3, which ended in sterile sand at a depth of 80 cm BD.

### **Test 2**

A 1 by 1 m test unit on the northwest slope of Mound 1 was intended to sample a room within the largest mound.

Excavation of Level 1 (8 to 34cm BD) created a level surface across the unit; modern glass was found in the fill.

Level 2, excavated to 58cm BD, exposed adobe wall fall and a plastered wall in the southeast corner of the unit, a complete vesicular basalt metate (Figure 2.7), and a possible hatch cover rock (a large, thin sheet of rhyolite). The metate was the shallow trough type, with a lip on three edges. Toward the bottom of the unit, the soil became quite ashy; the bottom of the level contained more adobe wall fall.

The metate found in Level 2 was on edge and continued into Level 3, where a mano was found under the metate.



**Figure 2.7.** La Raspadura: metate found in Test 2, Levels 2 and 3.

A floor was encountered at the bottom of Level 4, at 104 cm BD. The plastered wall found in Level 2 continued downward to the floor, and horizontally to the east side of the unit. A 30 cm wide, filled-in doorway became visible in the wall; the excavator thought that the doorway was remodeled from rectangular to T-shaped by cutting into the adobe wall and adding an upright stone to either side of lower part of the opening (Figure 2.8). The floor was hard-packed but not plastered. A 20 cm diameter hole through the floor, interpreted as a possible post hole (Feature 1), was found just northeast of the door. Sherds from a Babícora Polychrome jar were dispersed over the floor.

Level 5 extended from the floor to 115 cm BD. The possible post hole turned out to be 25 cm deep, ending at what appeared to be another floor or surface of hard-packed clay. A substantial ash lens was found in the east half of the unit, and the floor or clay surface below the lens was quite oxidized.

Level 6 proceeded through the lower floor or clay surface to a depth of 122cm BD, ending at a deposit of fine sand and gravel. An augur test of this apparently natural deposit produced no artifacts, charcoal, or other evidence of human activity.

We concluded that Unit 2 was in an outer room in the largest mound at La Raspadura, and exposed two floors and a possible post hole.



**Figure 2.8.** La Raspadura, Test 2. The filled-in modified doorway is to the right, the wall is to the left, and the unexcavated “post hole” is at the bottom center.

### **Test 3**

This 1 by 1 m test sampled the part of the site between the obvious mounds, and was excavated in a single level (from 30 to 45 cm BD). At the bottom of the level, the deposits were sandy and rocky and apparently sterile. A shovel test in the center of the unit continued downward to 70 cm BD, ending in river gravel. The unit fill yielded sherds, but no features were found.

### **Test 4**

This 1 by 1 m test was also placed off the obvious mounds, on a slight rise that was considered a possible low mound. Two large rocks visible on the surface, at the south edge of the unit, did not appear to be architectural or otherwise cultural. The test was excavated in two levels. Level 1, from 5 cm to 31 cm BD, exposed a fairly homogeneous fill and produced few artifacts. In Level 2 (to 53 cm BD) exposed the same fill but yielded fewer artifacts. At the bottom of Level 2, stream gravels were encountered. A shovel test from the bottom of Level 2 (to 67 cm BD) was in the culturally sterile gravel deposits that underlie the site.

## Tests 6 and 9

There was some discussion about where a ball court might be at La Raspadura, if a ball court was present, and this long trench was the result. The trench was 17.65 m long, 1 m wide, and oriented east-west (Figure 2.9). The trench was west of Tests 1, 3, and 4 and east of a room block. Like the other tests in the areas between obvious mounds, the trench exposed shallow sheet trash overlying the natural sand and gravel deposits. A low, rocky mound was present at the east end of the trench. The west end of the trench cut through a depression that could have been a borrow pit for adobe, some other sort of shallow pit, or perhaps a ditch; this possible feature was not further examined.



**Figure 2.9.** La Raspadura, Tests 6 and 9.

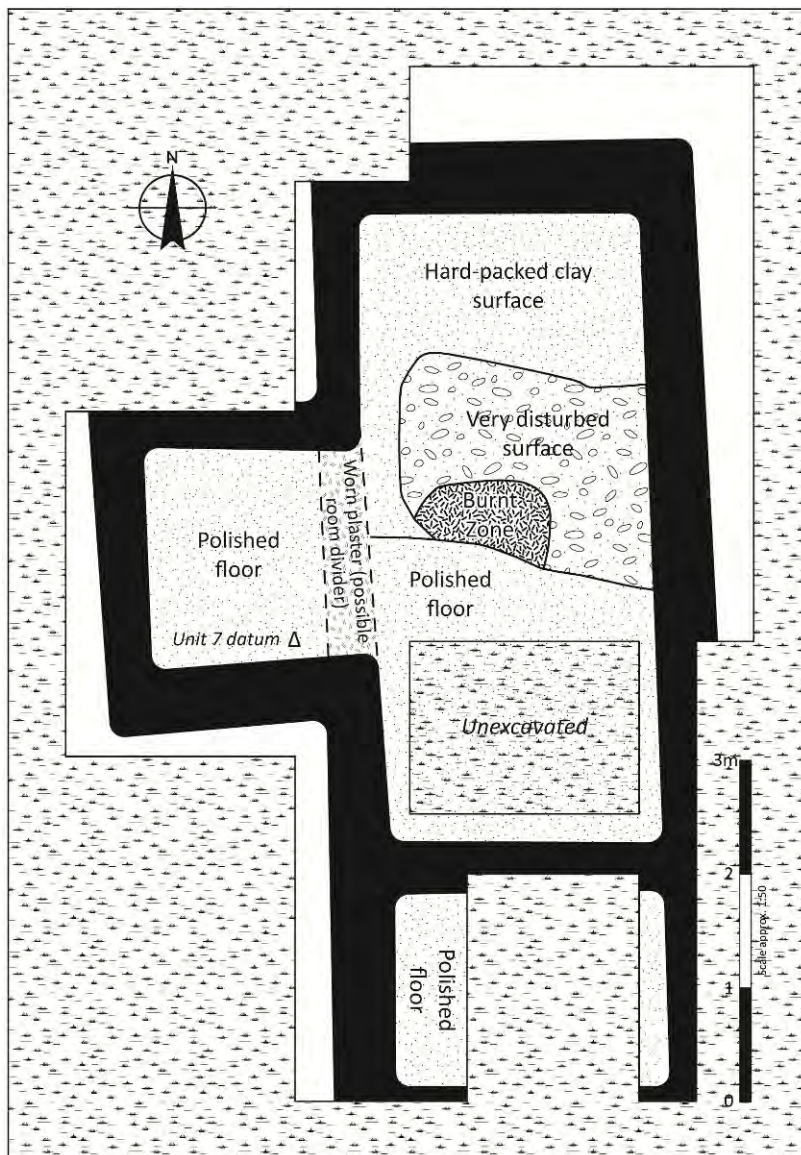
## Discussion: Tests 1, 3, 4, 6, and 9

Tests 1, 3, 4, 6, and 9 failed to find plaza surfaces or other formal features in the low areas between house mounds. Instead we found fairly shallow sheet deposits with artifacts and a good many rocks, as well as low, rocky mounds that may or may not have been cultural.

## T-shaped Room

An additional test of an area between obvious mounds yielded very different results. In this case, a low mound in the north part of the site was chosen. It was a slightly larger bump than the small rises previously tested, and had not been looted. Excavation began with a single 1 by 1 m unit,

Test 7, but was expanded repeatedly as a large T-shaped room was traced (Figure 2.10). In the end, work in the low mound included Tests 7, 10 through 12, and 14 through 19, with Test 14 and most of Test 16 falling outside the walls of the room. The west exterior wall of the room block was 48 cm thick while the east wall, which also appeared to be an exterior wall, was half that thickness.



**Figure 2.10.** The T-shaped room at La Raspadura. Drafted by Hugh Gibbon.

A metate was found in the room fill, in the northwest corner of the west extension of the room. (It was left in place overnight, only to be stolen.)

The room had remnants of a polished plastered floor, which can be seen in Figure 2.11. The plaster between the west room extension and the main part of the room was worn. Two large crushed jars, one a Babícora Polychrome and the other plain brown, rested on the floor. The floor assemblage also included a possible Babícora Polychrome ceramic drum or upper part of a flanged vessel (Figure 2.12), part of a Madera Black-on-red jar (Figure 2.12), a Ramos Polychrome *adorno* (appliqué element) that had been repurposed by smoothing its edges, and dispersed sherds.



Figure 2.11. La Raspadura: the T-shaped room under excavation.

What appeared to be a small depression or pit in Test 10 turned out to be a collapsed bit of floor due to extensive burrowing immediately below. During the project we saw several instances of burrowing animals using hard layers (such as floors or the intact bottoms of large jars) as the ceilings of their abodes.

The T-shaped room was part of a small room block; at least one small additional room was present south of the T-shaped room. A small burned area, probably a small external hearth, was located just outside the north wall of the T-shaped room, in Test 19. Part of a small plain brown jar was also found in unit north of the room. Subfloor tests showed that the room block was not built on cultural fill.



**Figure 2.12.** La Raspadura: possible ceramic drum. The lower edge of the pot fragment is smoothed. Found in Test 7 (Lot 2220).



**Figure 2.13.** La Raspadura: partial Madera Black-on-red jar. Found in Test 7 (Lot 2226).

## **Test 8**

Test 8 was placed in a badly looted room in one of the larger room blocks, to evaluate the effort involved in clearing looted rooms versus the information obtained. The northwest room corner was cleared to the floor, revealing a doorway 50 cm wide, and a still older looter's pit (1.5 by 0.5 m) that cut through the floor. The east part of the room appeared to have undisturbed deposits beneath the backdirt from looters' pits. The test suggests that during some future project at La Raspadura, extensive excavation could locate useful undisturbed deposits despite the extensive looting. This is assuming that the site is not destroyed by development before such a project takes place.

## **Test 13**

Test 13 was in the southeast sector of the site, just west of the large mound at the southeast end of the site. The attraction was a circular depression some 4 to 5 m in diameter, with more visible rocks than was usual in the area. A 1 by 1 m unit placed in the center of the depression was excavated in 5 cm levels, from 69 cm to 157 cm BD. Rocks were encountered in each level, and became more frequent toward the bottom of the test. Artifacts were sparse throughout; only 10 sherds were recovered from Level 4 and Level 5 appeared to be sterile. We concluded that while the circular depression was unusually rocky, it did not mark the location of a feature. Instead it was an area of dispersed artifacts not unlike those found in other tests not on the obvious mounds.

## **Pottery**

Undecorated (plain) sherds were the most common type (Table 2.1). The Black category was rather fluid: we were mostly dealing with sherds, often small ones; plain brown vessels often had sections that fired black; and primarily black sherds often shaded into brown. Some vessels were clearly intentionally black, paralleling Ramos Black in the north. Red-slipped sherds were less common than black ones. Red paint was used to create bands on the lips of plain, textured, and painted vessels, although the practice was less common than during the Viejo period. Textured wares also became less common after the Viejo period, but they appear to have been made in small amounts throughout the Medio period.

Ramos Polychrome is the most numerous of the presumed imports, all of which come from within the Chihuahua culture area. Ramos was found across the site: in 11 of the 1990 collecting areas and in seven of the 1991 tests. Madera Black-on-red was the second most common import, being found in two collecting areas and seven tests. Villa Ahumada Polychrome was collected from two collecting areas. A fourth type of import, a single sherd, was identified by Gloria Fenner as *Dublán* polychrome.

The formed ceramic spindle whorl (No. 3002-100) should be mentioned as a possible import. It measures 4.0 by 3.8 by 1.8 cm, weighs 17.7 gm, and has incised dots in a star pattern on the upper surface. The diameter of the hole is 0.3 cm.

**Table 2.1. La Raspadura: Sherd Counts from the 1991 and 1992 Field Seasons.**

(See Tables A.1. and A.2 for full tabulations.)

<b>Season (all lots)</b>	<b>Undec.</b>	<b>Black</b>	<b>Red- slipped</b>	<b>Red-on- brown</b>	<b>Tex- tured</b>	<b>Babí- cora Poly.</b>	<b>Ramos Poly.</b>	<b>Madera Black- on-red</b>	<b>Villa Ahu- mada Poly.</b>	<b>Other</b>	<b>Total</b>	<b>Weight (grams)</b>
1990	1663	81	45		88	490	50	11	2	82	2512	17402
1991	1015	315	16	13	26	412	14	32		22	1865	13267
Total	2678	396	61	13	114	902	64	43	2	104	4377	30669
Percent	61.2	9.0	1.4	0.3	2.6	20.6	1.5	1.0	0.0	2.4	100.0	

The Other category included black-on-brown sherds, white sherds and black-on-creamy-white sherds that were not Villa Ahumada, and what we called Combos (combinations of local techniques that usually occur separately). The Combos included sherds with polished black interiors and textured exteriors, sherds with incisions through polished black surfaces, red-on-cream sherds, and red-on white sherds (among others).

The rare flanged jar form was represented by a Babícora Polychrome sherd and a black-on-cream sherd. The latter is shown in Figure 2.14.



Figure 2.14. La Raspadura: black-on-cream sherd from a flanged jar. Top: showing the flange. Bottom: showing the painted design. From site surface east of Mound 1 (Lot 2004).

Jars were mostly globular or low-shouldered, but an unusual high-shouldered jar was collected at La Raspadura in 2007 (Figure 2.15) (Lot 2559). A similarly high-shouldered jar, found at El Zurdo (Ch-159) in the Babicora basin, was incised on the upper shoulder rather than painted (Lot 3050)



Figure 2.15. La Raspadura: fragment of a high-shouldered Babicora Polychrome jar.  
Left: showing the painted decoration. Right: showing the profile  
of the fragment. Lot 2559.

*Tecomate* forms (rounded neckless jars) were seen in sherds of local brown ware, black-on-cream ware, Madera Black-on-red, and Babicora and Ramos Polychrome.

Lot 1175 included a miniature vessel.

One sherd from Collecting Area 1 (Lot 1172) appeared to be from a Ramos or Babicora Polychrome effigy jar, otherwise virtually unknown in the PAC collections.

An unusual sherd was from an annular base (Lot 1210).

As is mentioned above, a possible ceramic drum was found in the T-shaped room. The functional identification was suggested by John Roney, who thought that if a skin drumhead was attached to the top of the jar neck, and possibly another one at the lower opening, a suitable drum sound

might result. As David Phillips has pointed out, these could also be the upper parts of two-piece flanged jars (similar to the flanged jars modeled in one piece), with the lower part being a standard bowl.

While Babícora painted designs were normally placed on vessel exteriors, some bowls had designs on the interior. Most of the Babícora designs consisted of lines and filled shapes, the latter including elongated triangles. A bichrome lattice design was present on one Babícora sherd.

## **Other Artifacts**

### **Stone**

Suffice it to say that flaked and ground stone artifacts were present (see Tables A.3–A.5). We know that many manos and metates have been removed from the site, including a metate removed from one of our test units before it was measured or photographed.

A floor polisher was triangular in cross-section and had one highly polished face.

A stone pendant (Lot 4590) was made from an opaque off-white, tear-shaped stone with a hole drilled through the narrow end.

Unusual stone artifacts include an obsidian cruciform (Lot 7133-1) collected from the surface in 1996 (Figure 2.16), and two ground stone pieces, also surface finds. One of the latter is the possible agave knife mentioned for Collecting Area 2 (Lot 1173-1). One end was squared off; the sides tapered a bit to the other end, which was slightly convex, with striations paralleling the edge. A second, similarly shaped ground stone item (Lot 3002) had a powdery red residue on its surface.



**Figure 2.16.** La Raspadura: obsidian cruciform. Lot 7133-1.

## Shell

The seven pieces of shell recovered from La Raspadura represent six species, of which three were identified by Ronna Jane Bradley.

A *Conus* tinkler fragment was found in Collecting Area 2. It measures 1.8 by 1.4 by 1.0 cm and weights 0.3 g (Lot 1171-1).

A *Haliotis* “strand divider” (elongated beadlike object with two holes) fragment was found in Level 3 of Test 2. The object was broken at one of two perforations. It measures 1.3 by 0.6 by 0.2 cm and weighs 0.1 g (Lot 2166).

A piece of *Laevicardium elatum* was found on the surface of Mound 1. It measures 1.1 cm in diameter and 0.1 cm thick, and weights 0.3 g (Lot 2005-4). A second piece of shell of the same species was found elsewhere on the site surface; it measures 0.9 by 0.8 cm (Lot 3202).

Three pieces of shell were found on the surface of a mound at the southeast end of the site. One is a heavy, curved piece of marine shell. A drilled hole is present near one end. On the outer surface, a deep incision crosses the hole. This piece of shell measures 3.3 by 2.4 by 0.5 cm (Lot 1524-2). A shell pendant made from a bivalve measures 1.8 by 1.4 by 0.1 cm (Lot 1524-3). An unworked shell measures 2.5 by 2.5 cm; the taxon was not identified but resembles *Pecten* (Lot 2504).

A pendant found on the site surface corresponds to Type VII from Paquimé (Di Peso et al. 1974, Vol. 6). The pendant was 6.0 cm long and 4.0 cm wide at the top.

## Metal?

I suspect that a copper bell at the Arizona State Museum (Catalogue No. 20729) is from La Raspadura. The bell is part of a small collection that Byron Cummings purchased from the estate of Edward H. Ledwidge of El Paso on October 6, 1934. The catalog card provides this information: “Plowed up on the Santana Hearst Ranch in making a horizontal silo in January 1933.”<sup>1</sup> Victoria Vargas included this item in her copper bell study (as No. 56) and lists it as Type IB1a (Vargas 1995, Figure 4.2 and Table 4.2). La Raspadura is the largest and best known of the sites on the former “Santana Hearst Ranch” (Santa Ana de Babícora, of the upper Santa María Valley portion of the Hearst Hacienda).

## Botanical Remains

Karen Adams analyzed flotation and macrobotanical samples from La Raspadura collected in 1991 and 1992. Based primarily on 1 to 2 liter soil samples from 13 locations sampled in 1991, she recorded *Zea mays*, *Quercus*, *Gramineae*, *Panicaceae*, *Pinus*, *Juniperus*, *Physalis*, *Portulaca*,

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<sup>1</sup> Information provided by Mike Jacobs, Arizona State Museum, on August 27, 2014.

Chemo-ams and unknowns among the macrofossils (Adams 1992, Appendix 1). *Pinus*, *Quercus*, and *Juniperus* were present in 12 flotation samples (Adams 1992, Appendix 2).

### Radiocarbon Dates

The radiocarbon dates from La Raspadura (Table 2.2) include one date that falls within the Viejo period. We have no reason to question the date itself, and it may indicate an earlier occupation at the site. However, the date in question is from Level 5 of Test 1 in the main mound. The next level down (Level 6) clearly belongs to the Medio period, as Ramos and Carretas Polychromes sherds were found in that level. Thus, if the maize cob that yielded the early date was from the Viejo period, it was out of context. As a whole, the Raspadura dates suggest that this is one of the later sites in the Santa María valley, or that its peak of occupation was fairly late.

**Table 2.2. La Raspadura: Radiocarbon Dates from 1991.**

Isotrace No.	Lot No.	Provenience	Sample Material	Conventional Date BP	2 Sigma Calibrated Age A.D.
5033 (PAC 35)	2166	Mound 1, Test 2, Level 3	Carbon from sherd	500 ± 60	1301–1371 (0.216) 1379–1494 (0.767)* 1501–1506 (0.005) 1601–1613 (0.012)
5034 (PAC 36)	2241	Test 10, Level 2, floor of T- shaped room	Carbon from sherd	500 ± 40	1327–1346 (0.075) 1393–1469 (0.925)*
5035 (PAC 37)	2197	Mound 1, Test 2, Level 5	Maize	880 ± 50	1035–1145 (0.487) 1146–1254 (0.513)*
5036 (PAC 38)	2173	Mound 1, Test 2, Level 4	Maize	540 ± 40	1306–1356 (0.337) 1337–1365 (0.024) 1386–1440 (0.640)*

\*Age ranges with the highest probability.

### Discussion

In 1990 and 1991 we knew that this was the largest site we had seen in the PAC study areas, but at the time we had no other way to judge its importance relative to that other sites in the study area or to the north. We felt that we lacked the resources to undertake major horizontal exposures of room blocks, the obvious next step to take at the site.

In hindsight the site is an important one, and I regret not expending more of our resources on it. Despite the damage the site has suffered, much could be learned from an extensive excavation. Most of the overall site plan, and specific architectural details, can still be recorded. Some deposits will have been missed by the looters. This site should be a high priority for the next archaeological project in the upper Santa María Valley.

The site shows the common Chihuahua culture pattern of adobe-walled room blocks of various sizes. The ball courts, walled plazas, and platform mounds sometimes found in northern zone sites are lacking. However, one room found by the project has unusually thick walls and a non-standard shape. Also, the room yielded objects (such as the possible ceramic drum) that are not typical for local sites (but see the discussion of the Picacho site).

The pottery appears to be mostly of local manufacture, with some imports from other parts of the Chihuahua culture area, but with little or no pottery from outside that area. The *malacate* or formed spindle whorl is likely to be from outside the culture area, as such spindle whorls were made in Mesoamerica but not by the cultures to the north. One copper object suspected to have come from this site also originated in Mesoamerica. On the whole, this largest of southern zone Medio period sites upholds the area's reputation as one mostly lacking in exotic goods.

In summary, the present evidence suggests that La Raspadura was a local center. The residents of La Raspadura had pottery, other artifacts, and domestic architecture much like that found in the northern zone and no doubt they were aware of Paquimé. Given La Raspadura's size and apparent status as a local center, we might expect it to yield more evidence of contact with distant places than the area's smaller villages. Thus far, that does not seem to be the case—but additional excavation could change our understanding of the site.



## Chapter 3

### THE PIG SITE

The second most commonly mentioned site, among local residents, is *el sitio de los cochinos* or the Pig Site (Ch-152). The site is on the outskirts of Oscar Soto Maynez (formerly Santa Ana Babícora), next to the highway between that town and Cuauhtémoc (Figure 3.1). The site is about 100 m east of and 5 m higher than the main channel of the Santa María River.



**Figure 3.1.** Aerial image of the Pig Site. North is to the top of the page. The pig shed is marked “A.” A water tank visible in Figure 3.4 is marked “B.” The reservoir is marked “C.” The looted contiguous storage rooms were south of these points. The Santa María River is at the left edge of the image. Source: Google Earth.

For many years a pig farm at this location furnished pork to the farm owner’s supermarket in town. The main mound was cut to create a loading dock (with the top of the mound as the loading platform and the cut-down area as the parking spot for backed-up trucks). Perhaps a quarter of the mound was cut away for this purpose, revealing plastered walls within the mound (Figure 3.2).



**Figure 3.2.** Plastered walls at the Pig Site. The walls were exposed when the main mound was cut to create a loading dock. Photographed in 1990.

More recently, a small drainage crossing the southern part of the site was deepened to trap water that was to be stored in a deep earthen tank (“C” in Figure 3.1). The newly cut side of the earthen tank revealed floors at the south edge of the room block, and a burial under a floor.

In 1990, PAC crew members made a rough sketch map that shows four mounds, including one north of the highway, and made modest surface collections. We were told that a still larger mound had been present on the property to the east, but was leveled by the land owner. We walked that field and can say that artifacts are present there, but could not confirm that a mound had been present.

In the early 1990s, a group of contiguous rooms was present in an unplowed area south of the main mound. The rooms had been looted some time before, and the adobe walls were melting into the room interiors. We interpreted them as storage rooms because of their small size (ca. 1.5 by 1 m wide). The long axis each rooms extended roughly east-west, and the line of rooms extended roughly north-south. If a large mound had been present in the adjacent field, as we were told, these rooms would have been at the southwest corner of that mound.

A 1992 a sketch map shows exposed walls within the mound (Figure 3.3). During that field season three tests were placed next to the cuts for the loading dock. These tests were identified in the field records as TT1 or TU1, TT2 or TU2, and the Room Block.



Figure 3.3. Sketch map of exposed walls at the Pig Site in 1992.

### TT 1

A 1 by 2 m test pit oriented north-south was placed north of the most exposed set of looted rooms. The entire unit was excavated to a depth of 30 cm, below which the north and south parts were excavated separately. A floor spanning the unit was encountered at 94 to 97 cm BS. The unit is assumed to have been entirely within a room. Charcoal was present in the southwest corner of the unit.

## TT 2

This test was placed east of the most exposed group of looted rooms (Figure 3.4). The test measured 1 by 2 m, with the long axis oriented east–west. Once the test reached a depth of 40 cm, a west extension was added to the unit. At 105 cm BS, a floor with a post hole was exposed. Like TT1, this test was entirely within a room. Three metates were encountered in the fill; one is visible in Figure 3.5. A turquoise tessera was found near the floor.



**Figure 3.4.** Location of TT2 at the Pig Site. View to the southeast, across the top of the remaining mound.



**Figure 3.5.** Pig Site: excavation of TT 2. Left: at 60 cm BS, metate fragments are exposed in the fill. Right: after excavation to 134 cm BS, with the floor at 105 cm BS. A metate in the upper fill is visible in the right half of both photos.

### Room Block

The room excavated under this moniker was one of several exposed by the cut to create the loading dock, then further exposed by looters. The room was near the room corner with surviving wall plaster seen in Figure 3.2. The shallow fill in the room contained glass and other modern items down to the floor, indicating that the room was completely exposed by the looters, but the floor and wall plaster was intact (Figure 3.6).



**Figure 3.6.** Pig Site: the Room Block test, showing the room floor. Also visible are the doorway (upper right), the adobe wall or room divider base with post hole (lower center), and the small ash pit (lower right).

A plastered wall or room divider base extended halfway across the room from the west wall. In this low wall, a 47 cm deep post hole was found. The organic-rich post hole fill, which appeared to be undisturbed, yielded two projectile points (Lot 3167). A flat stone served as a footer at the base of the post hole. The purpose of this low wall is not known, but is similar to a low dividing wall with a post hole seen at the Picacho site.

A small, plastered, fired feature some 5 to 6 cm deep (an ash pit or small hearth), was present in the floor, just south of the post hole.

The east wall incorporated a rectangular doorway near the southeast corner of the room. Looters' holes had destroyed parts of the north wall. A sub-floor shovel test exposed culturally sterile deposits.

## Artifacts

See Tables A.6–A.8 for artifact tabulations for the Pig Site. Artifacts were scarce at this well-looted site, and one test consisted mainly of cleaning out a looted room.

The 740 sherds from the site include 471 undecorated (plain) (63.6 percent), 60 black (8.1 percent), eight red-slipped (1.1 percent), three red-on-brown (0.4 percent), 29 textured (3.9 percent), 129 Babícora Polychrome (17.4 percent), two Ramos Polychrome (0.3 percent), one Madera Black-on-red (0.1 percent), and 37 Other (5.0 percent).

Flaked stone included eight projectile points, a drill, three bifaces, a scraper, 13 retouched or utilized flakes, and an obsidian bipolar core.

A variety of grinding tools were collected from the site surface, and some were found in the fill of TT 1 and TT2, as well as on the cleared floor in the Room Block test. Stone bowls are well represented and on one visit to the site, we met a man who had just dug up a complete, rectangular stone bowl with a rim tab. We found no grooved axes, which are valued by local collectors. The turquoise tessera from TT 1 measured 8 by 6 by 2 mm (Lot 3165).

No imported shell was recorded. Numerous pieces of local shell (probably *Anadonta californiensis*) were found on the site surface and in the test excavations; one piece had been made into a small pendant.

## Radiocarbon Dates

Two of the three radiocarbon dates from the Pig Site suggest an occupation earlier in the Medio period than at La Raspadura (Table 3.1). The third date, from below the floor in the room block test, is one of several dates falling in the Viejo period range from the upper Santa María valley.

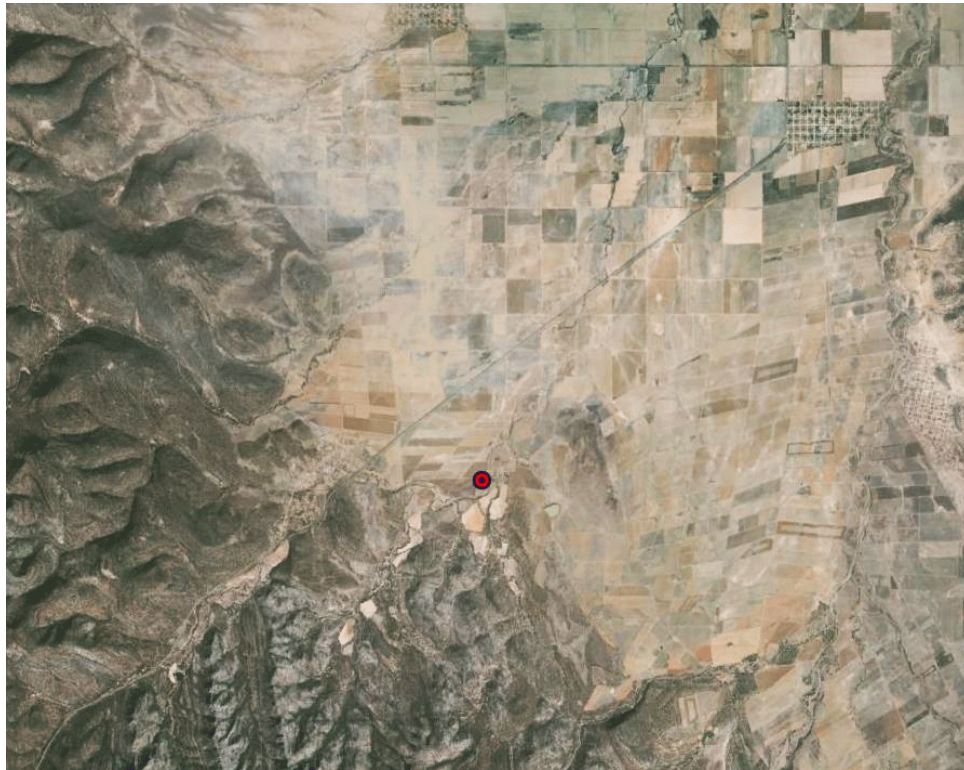
**Table 3.1. Pig Site: Radiocarbon Dates.**

Lab Code	Lot No.	Provenience	Sample material	Conventional age BP	2 Sigma Cal Age A. D. Ranges with Probabilities
AA16832	3016	TT2, Level 4	<i>Fulica Americana</i> (coot) bone collagen	780 ± 65	1042–1093 (0.055) 1118–1140 (0.027) 1153–1305 (0.894) 1366–1386 (0.024)
TO-4119	3247	Room block baulk	<i>Phragmites</i> stem	640 ± 50	1284–1403 (1.000)
TO-5040	3166	Room Block, Hole 2, Subfloor	<i>Zea mays</i> cupules (composite sample) from flotation	1070 ± 60	781–791 (0.011) 806–1042 (0.954) 1094–1118 (0.021) 1141–1153 (0.014)

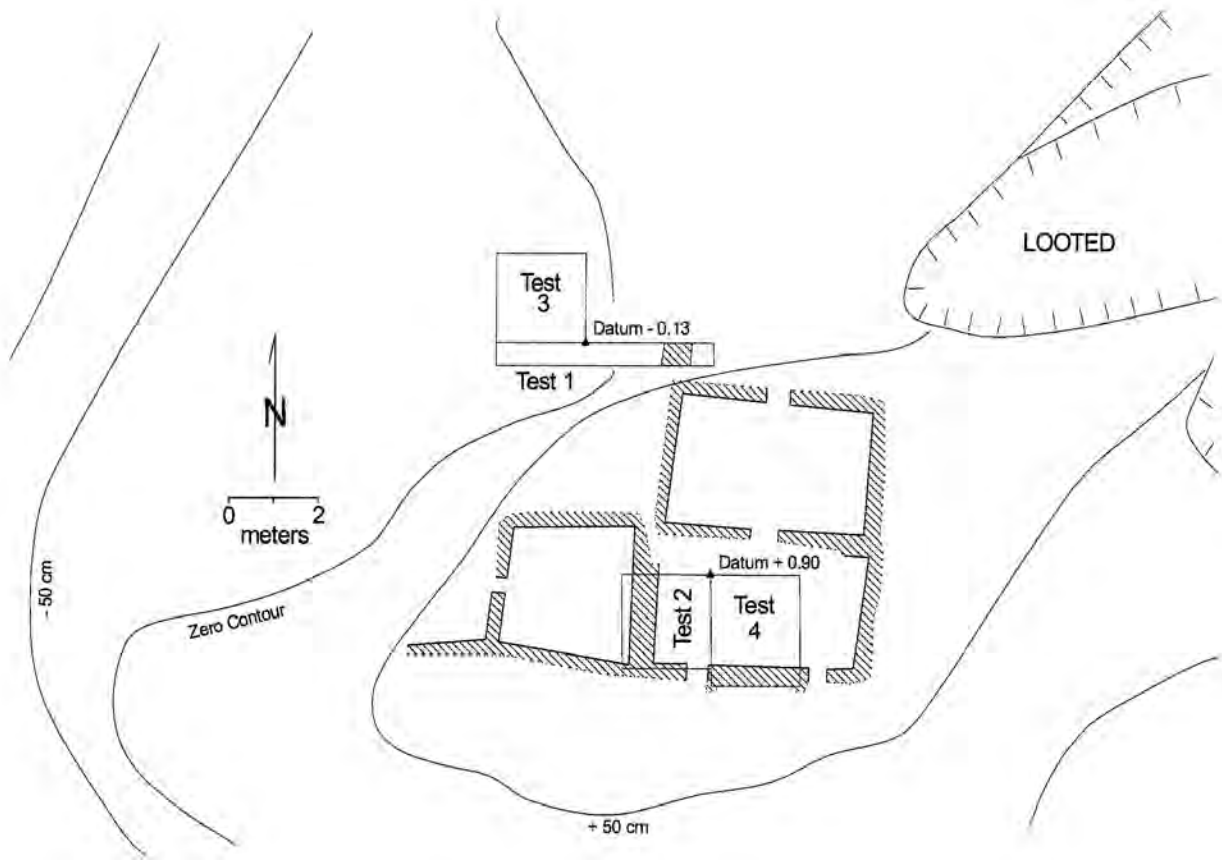
## Chapter 4

### THE BUENAVISTA SITE

The Buenavista Site (Ch-151) is the southernmost known Medio period site. It is in the southwest corner of the upper Santa María Valley, just east of the community of the same name, near a mountain pass to the Matachic area (Figure 4.1). The elevation at the site is 1950 m. The site consists of a single small mound but is prominent on the landscape, as it perches on a low natural rise and reaches about 1.5 m above the surrounding terrain. At the base of the low rise is a seep. The Arroyo el Pino is just to the east—so as at other Chihuahua culture sites, this location combines both a surface drainage and a spring. As far as we know, the Buenavista Site more than 15 km south of other Medio period sites in the valley—a figure that may reflect our knowledge more than reality. Our minimal excavations at this site, in 1991, included clearing part of one room, exposing the walls of two adjacent rooms, and trenching from the edge of the mound to a wall (Figure 4.2).



**Figure 4.1.** The southwest corner of the Santa María Valley. The approximate site location is shown by the dot. The modern settlement of Buenavista is west of the dot. Image source: Google Earth.



**Figure 4.2.** Tests and wall exposures at the Buenavista Site.

The site did not appear to have been badly looted in recent years—we saw only two large looters’ pits—but we were told that the site had produced a fair number of pots in previous years, and that the site’s surface was healing itself. In fact, testing exposed a ‘healed’ looter’s tunnel that extended to 110cm BS.

Given the many Ramos Polychrome and Madera Black-on-red sherds found at this site, we guessed that it was the latest site in our sample. The radiocarbon dates provided later in the chapter are consistent with that interpretation, but are not conclusive. Artifacts were scarce, especially on the surface, leading us to postulate that the site had not been occupied for very long. We did not consider the previous looting to be a factor in that assessment, since at the time (the early 1990s) other, even more badly looted sites usually had quantities of sherds and stone artifacts.

### **Tests 1 and 3**

Test 1 was a 4.8 by 0.5 m trench unit placed on the northwest side of the mound in order to search for an outside wall of the room block. Test 3 was a 2 by 2 m unit placed at the west end of

Test 1. An east-west wall was encountered near the east end of Test 1. It was plastered on both sides, leading us to conclude that it was not an outside wall.

### Tests 2 and 4

Tests 2 and 4 were adjacent 2 by 2 m units that exposed part of a adobe-walled room. Before testing began, the outline of the room could be seen on the surface. The interior dimensions of the room were about 4.5 m east-west by 2.5 m north-south. Tests 2 and 4 had reached a point just above the room floor just before a weekend; when the crew returned to the site the next week, they found that looters had destroyed the floor in the southwest corner of the room. Figure 4.3 shows the south wall of the room after excavation.



**Figure 4.3.** Buenavista Site: exposed walls and bottom of excavation, after the looting episode. The hole is a burrow. This level was below the lowest floor level, which was 30 cm above the bases of the walls.

Test 2 exposed a rectangular doorway in the room's south wall. A second doorway in the same wall, east of Test 4, was identified during shallow wall trenching. The same effort identified a doorway into the north wall. The entire room had been re-floored at least once, with 5 cm of fill between the two floors. In one part of the room (unfortunately, the part that was looted) the crew found four layers of floor plaster over burned areas, with a raised floor in these areas. The burned areas between the two main floors may have featured a hearth that was mostly destroyed by the looters. Otherwise, no floor features were found. Testing and auguring to 2.27 m BD indicated that the room was built directly on a natural surface, with no underlying cultural fill. Four auger holes in other parts of the mound and next to the mound showed the same pattern.

### **Shallow Trenching**

Shallow trenching was used to “chase” the walls of the tested room and of the rooms to the north and west. The room to the north had doorways in its north and south walls, while the room to the west had a doorway in its west wall. These additional rooms and doorways are shown in Figure 4.2.

### **Pottery**

The assemblage has relatively few textured ware sherds and relatively high frequencies of Black and Babícora Polychrome sherds. The two major imports from within the Chihuahua culture area, Ramos Polychrome and Madera Black-on-red, are also well represented. The 1,237 sherds include 710 undecorated (plain unslipped) (57.4 percent), 205 black (16.6 percent), 15 red-slipped (1.2 percent), 17 red-on-brown (1.4 percent), 22 textured (1.8 percent), 207 Babícora Polychrome (16.7 percent), 18 Ramos Polychrome (1.5 percent), 16 Madera Black-on-red (1.3 percent), and 27 Other (2.2 percent).

### **Other Artifacts**

Table 4.1 summarizes the flaked stone from the Buenavista Site (see also Tables A.9 and A.10). The ground stone is listed in Table A.11. Ground stone items from upper fill included a cruciform, metate, a mano, a pestle, and a macaw stone. A second mano was found near the room floor, and a pestle was found on the site surface. A resident gave us a stone bowl he had collected from the site.

The metate was found in Test 2, in room fill. It is shown in Figure 4.4, in part to stress the fact that in the southern zone, the carefully squared metates known from Paquimé are all but absent. The mano from upper room fill was found near the open end of the metate trough, but was dwarfed by the metate so the association is most likely accidental.

**Table 4.1. Buenavista Site: Flaked Stone Artifacts, 1991.**

	Points	Biface	Utilized Flakes	Flakes	Cores	Total
Surface	1	1			1	3
Upper Fill	3		4	356	1	364
Near floor	1		2	42	2	47
Totals	5	1	6	398	4	414



**Figure 4.4.** Buenavista Site: metate found in room fill in Test 2.

The “macaw stones” from the PAC study area are referred to as such based only on their form, and so far have not been linked to macaw husbandry. Such stones have also been documented for a Viejo period site (Ch-254), for El Zurdo in the Babícora basin (where they were found in Medio period deposits), and at Ch-212 in the Bustillos Basin.

Pestles were rarely found by PAC, but are seen in private collections. We do not know how they were used. If the stone bowls were or mortars, they show no evidence of crushing and grinding. Perhaps the pestles were used with wood mortars.

A cruciform was found on the site surface. Never numerous, cruciforms have been found on two other southern zone Casas Grandes sites (one is shown in the chapter on La Raspadura), in the northern part of the Chihuahua culture area, and elsewhere in the Southwest/Northwest.

Two *Glycymeris* ornaments were found at this site. The first, collected during the initial site visit in 1990, is a bracelet or pendant fragment with incised zoomorph design at the umbo (Lot 1234). The second was collected in 1991, also from the site surface (Lot 2067). While freshwater shell was quite common in the excavations, suggesting the use of freshwater shellfish as a food source, no worked pieces of that shell were found.

### Botanical Remains

Wood species dominated the macrobotanical remains. The identified taxa included *Juniperus*, *Physsalis*, *Pinus*, *Portulaca*, *Quercus*, cheno-ams, Gramineae, *Arcto-Arbustus*, and *Zea mays* (Adams 1992, Appendix 1). *Pinus*, *Juglans*, *Phragmites australis*, and *Zea mays* were recovered from the flotation samples (Adams 1992, Appendix 2).

### Radiocarbon Dates

The three radiocarbon dates from the Buenavista Site are summarized in Table 4.2. The broad date ranges do not allow us to confirm or dispel our initial impression that the site is a late one.

**Table 4.2. Buenavista Site: Radiocarbon Dates.**

Lab No.	Lot No.	Context	Sample Material	Radiocarbon Age BP	2 Sigma Ranges with Probabilities
TO 5037	2119	Test 4, Level 7 (subfloor)	<i>Zea mays</i> cob	700 ± 40	1245–1246 (0.002) 1251–1254 (0.006) 1256–1327 (0.690) 1346–1396 (0.302)
TO 5038	2111	Test 4, fill disturbed by looters; Level 4 to below floor	<i>Zea mays</i> cob	630 ± 40	1292–1335 (0.389) 1335–1404 (0.611)
TO 5039	2112	Test 4, Level 5, undisturbed fill on or just above floor	<i>Juglans</i> nutshell	580 ± 60	1298–1436 (1.000)

## Chapter 5

### THE PICACHO SITE

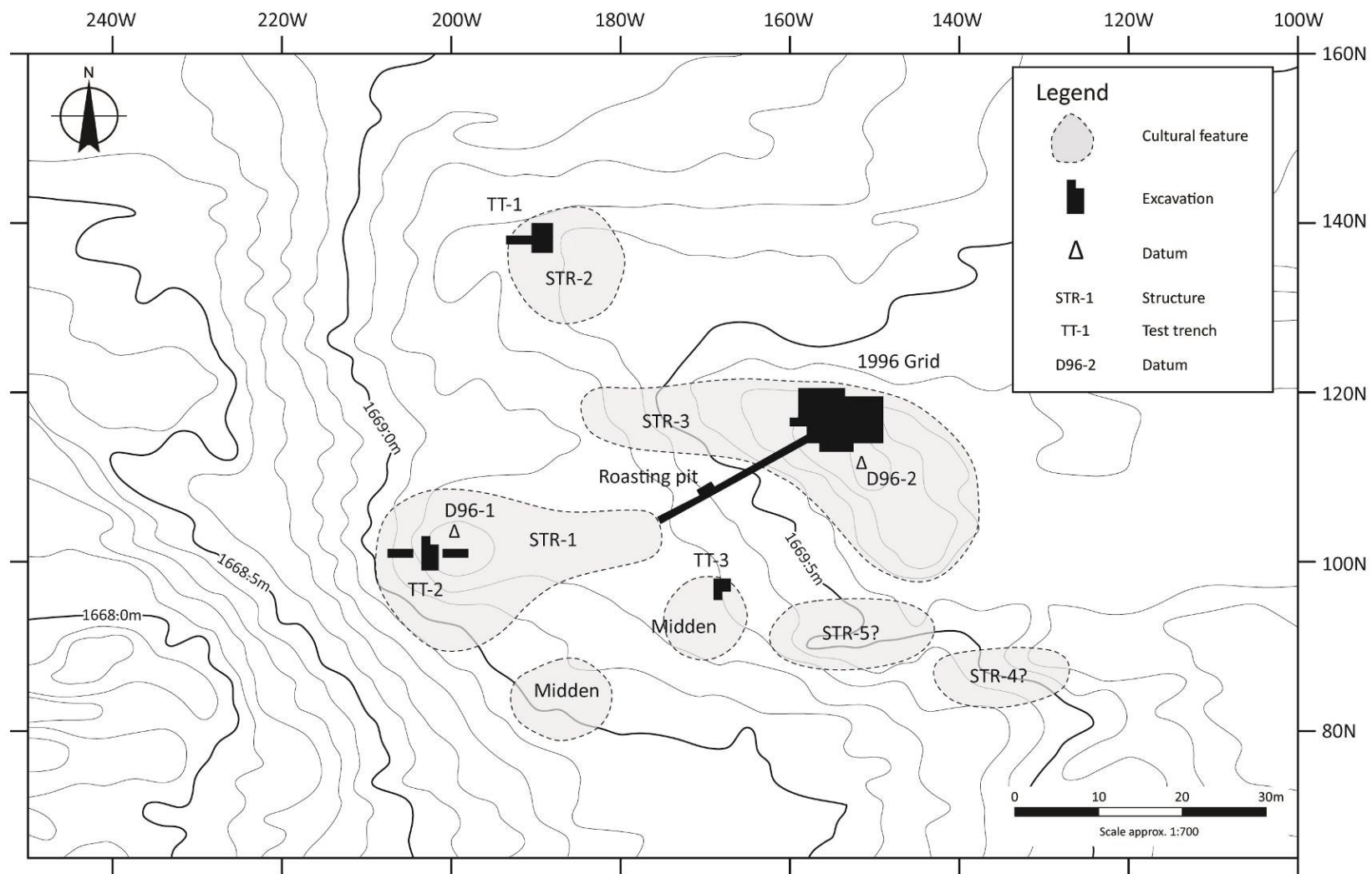
*Jane H. Kelley, Loy Neff, A. C. MacWilliams, and Charles Knight*

Located at the northern foot of Cerro Picacho, Ch-156 is, unusually, just within a side drainage rather than in the main valley of the Río Santa María (Figure 5.1). Ch-156 was first visited and recorded in 1990; excavations were carried out in 1992 and 1996. Three geographic factors may have affected the decision to locate the site where it is. First, the side valley is a pass on a route to the Santa Gertrudis and Santa Clara regions to the northeast. Second, Cerro Picacho is the most prominent landmark in the entire upper Santa María basin. Third, the site is at a point where a seep and a spring (now capped with a pump) rise in the arroyo bottom.



**Figure 5.1.** Location of the Picacho Site. Oscar Soto Maynez is indicated by the white arrow near the left edge of the picture. The site location is shown by the red dot. The white arrow to the right shows the location of the camp where Pancho Villa is said to have prepared for the raid on Columbus, New Mexico, in 1916. North is to the top. Image source: Google Earth.

The site was more or less intact, probably because the mounds are low and surface artifacts are sparse. The structural remains consisted of discrete mounds assumed to contain adobe room blocks (designated Structures 1–3) and other small mounds, although the nature of Structure 2 in TT-1 is in doubt (see below). Figure 5.2 shows the excavations of 1992 and 1996; Figure 5.3 shows the site from ground level.



**Figure 5.2.** Picacho Site: plan of the 1992 and 1996 units. Drawn by Hugh Gibbins.



**Figure 5.3.** Picacho Site: TT-1 area in 1992. Looking northeast. (PAC photo)

In 1992, tests were placed in Structures 1, 2, 3, and a smaller mound. In 1996, the earlier tests in Structure 3 were enlarged to completely expose two rooms and parts of others. A long trench connected Structures 1 and 3. The trench was expanded to expose a large roasting pit in the area between Structures 1 and 3; the trench also revealed the stratigraphy between the two main room blocks.

Crew members working at the site in 1992 came from two quite different archaeological field traditions, which resulted in different emphases in the field records. Excavation depths given in this report are from the datum established for each excavation unit. Figure 5.2 shows the placement of each excavation unit relative to the contours of the site, as well as Datums 1 and 2 for the 1996 map.

## **The 1992 Tests**

### **TT-1 in Structure 2**

A low mound in the northwest part of the site, designated Structure 2, was selected for the first test unit. TT1 was a 1 by 2 m test oriented east-west. The number of cultural items (sherds, flaked stone, shell, charcoal, and fire-cracked rock) decreased with depth to about 50 cm BD. From 60–87cm BD the deposits contained small bone fragments and a few sherds, pieces of flaked stone, and charcoal mixed with cobbles and sand, the latter part of the fluvial deposits on which the site is built. We suspect that these lower artifacts were introduced into pre-occupation deposits by the animals whose burrows were highly visible in the excavation.

A pit, 25 to 30 cm in diameter and 10 to 12 m deep, was encountered 43 to 55 cm BD in TT1. The pit contained pieces of charcoal 2 to 3 cm in diameter but the pit walls and adjacent surfaces were not oxidized. Adobe chunks were found in the pit fill and an adobe wall was exposed along the north edge of the unit. The crew expanded the test to the east to follow this east-west wall, establishing two additional units, TT-1A and TT-1B.

TT-1A was placed on the south side of the adobe wall and measured 1.5 by 2m. The exposed area appeared to be exterior space, and yielded cultural materials similar to those found in TT-1. Two long bones from a medium-sized animal or animals were found in the upper level of the unit, and ceramics and flaked stone were common. Adobe chunks and charcoal were present but scarce. The unit ended 31 to 33 cm BD.

TT-1B was placed on the north side of the adobe wall. At the time this unit was thought to be inside a room, but no floor was found, nor were other walls or features. Two manos found at a depth of 35 cm were interpreted as lying on an occupation surface associated with the possible structure. Excavation ended at 45 cm BD.

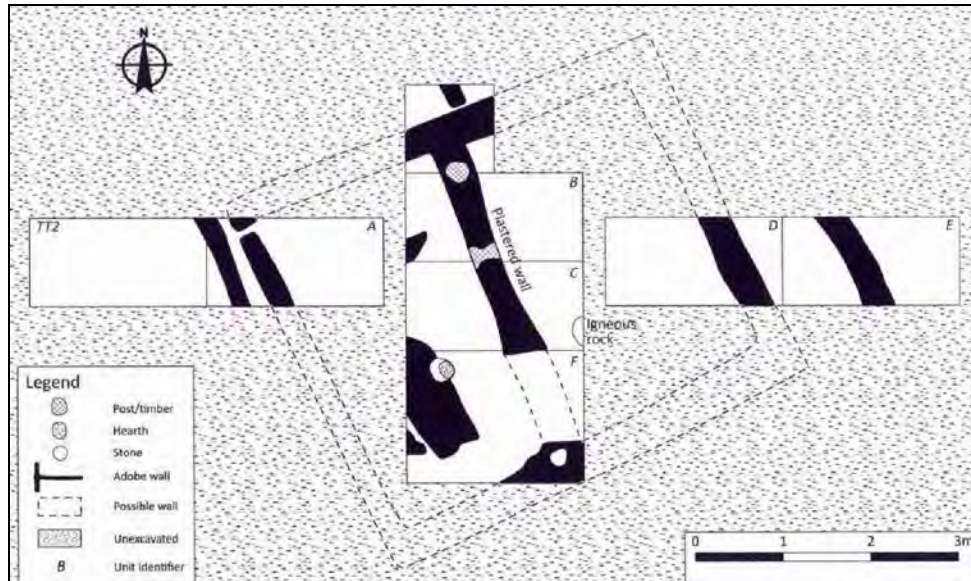
The wall exposed by TT-1A and TT-1B was 30 cm thick. Its purpose remained unclear.

The fill from the TT-1 group of units had an estimated volume of 3.67 m<sup>3</sup> and yielded 2,278 sherds together weighing 7150 g. The approximate average of 620 sherds per cubic meter made this the most dense artifact concentration of all the excavation units at the site. In TT-1 and TT-1A the sherds were concentrated in the upper 20 cm of deposits, while in TT-1B sherds were most concentrated 20 to 45 cm below the surface. This high density of sherds suggests a midden deposit. Two of the three Ramos Polychrome sherds tabulated from this site came from the TT-1B units below 16 cm BD, suggesting that these deposits are among the latest at the site. The third was collected from the surface in 1990.

### **TT-2 in Structure 1**

The tallest mound, designated Structure 1, was chosen for the second set of tests in 1992. The tests (including TT-2 and TT-2A–TT-2G) created a cross-shaped exposure that measured 6 m east-west and 4.4 m north-south (Figure 5.4).

The TT-2 group of units included five 1 by 2 m and one 1 by 1 m excavation units. The 1 by 2 m excavation units were separated by 30 cm wide baulks. The east-west TT-2 units exposed walls of three rooms, and the north-south series of units further traced one of the walls. The long axes of the rooms were oriented northwest-southeast. This orientation is unusual for Medio period sites in the southern zone and elsewhere. The most fully exposed wall, shown in Figure 5.5, was an interior wall dividing rooms to the east and west. Plaster was present in patches on the top and both sides of the wall, so its limited height was intentional and not the result of erosion or other damage. This conclusion was reinforced by a post, 9 cm in diameter, set into the top of the wall, toward its north end. The wall and post extended below the floor on the west side of the wall (which was 45 cm BD in TT-2B).



**Figure 5.4.** Picacho Site: the TT-2 tests in Structure 1. Drafted by Hugh Gibbins.



**Figure 5.5.** Picacho Site: photograph of the TT-2 tests. The east-west baulks (almost perpendicular to the adobe wall with a conical cross-section) indicate the actual floor level; excavation proceeded to the bases of the foundation trenches. View to north.

The dimensions of the rooms on either side of the wall could be estimated with confidence: 3.6 m long and 2.0 to 2.2 m wide. The east side of the wall and room floor included remnants of three layers of plaster; the accumulated floor plaster was 3 cm thick. This room had burned. On

the west side of the wall a great deal of adobe was found, including what appeared to be two sections of a fallen wall.

The apparent triangular cross-section of the south end of the dividing wall, seen in Figure 5.5, is due to two factors. First, definition of the western base of the wall, at its the south end, was complicated by wall fall in the southwest corner of TT-2C. Likely wall fall was left in place at the base of the wall, making the wall base look wider than it was. Second, the plaster at the base of the wall's east face flared outward at the floor. In fact the wall was of a consistent width, as was evident elsewhere along the wall.

The room floors were found 40 to 45 cm BS. A piece of ground stone in the wall of unit TT-2C, at floor level, was not removed. Parts of a large black jar were found in units TT-2B and TT-2C, at floor level. In TT-2C a heavily burned area on the floor suggested an informal hearth, and a small hole in the floor could have been an ash pit. A hollowed-out section in the west face of the wall likely was due to erosion.

### Rock Alignment Tests in Structure 3

A third set of tests is not shown in Figure 5.2 since the 1992 excavations in that area, called the Rock Alignment area, were later encompassed by the 1996 excavations of Structure 3. The three 1 m wide trenches excavated in 1992 (Figure 5.6) revealed adobe walls with cobble footing stones (*cimientos*) with additional cobbles in the lower walls (the aligned rocks), as well as the room floors, dateable materials, and two *in situ* possible ceramic drums.



**Figure 5.6.** Picacho Site: 1992 tests in the Rock Alignment Area of Structure 3. View to the north. The wall visible in the upper left of the photo was re-excavated in 1996, and is the wall between Rooms 1 and 7.

Two upper halves of jars (which may have been ceramic drums or the upper parts of two-piece flanged jars) were found resting on the floor of a room later designated as Room 1. Both partial jars were found upside-down (with the jar rims on the floor), close together and next to the west wall of the room. Both are made from plain brown jars; one has surface colors ranging from red-orange to brown and black. Both have rims about 20 cm diameter and are about 20 cm tall; the lower edges (where the original jars continued) are smoothed. One is shown in Figure 5.7. These are very like the Babícora polychrome upper body found in the T-shaped room at La Raspadura (Figure 2.12).



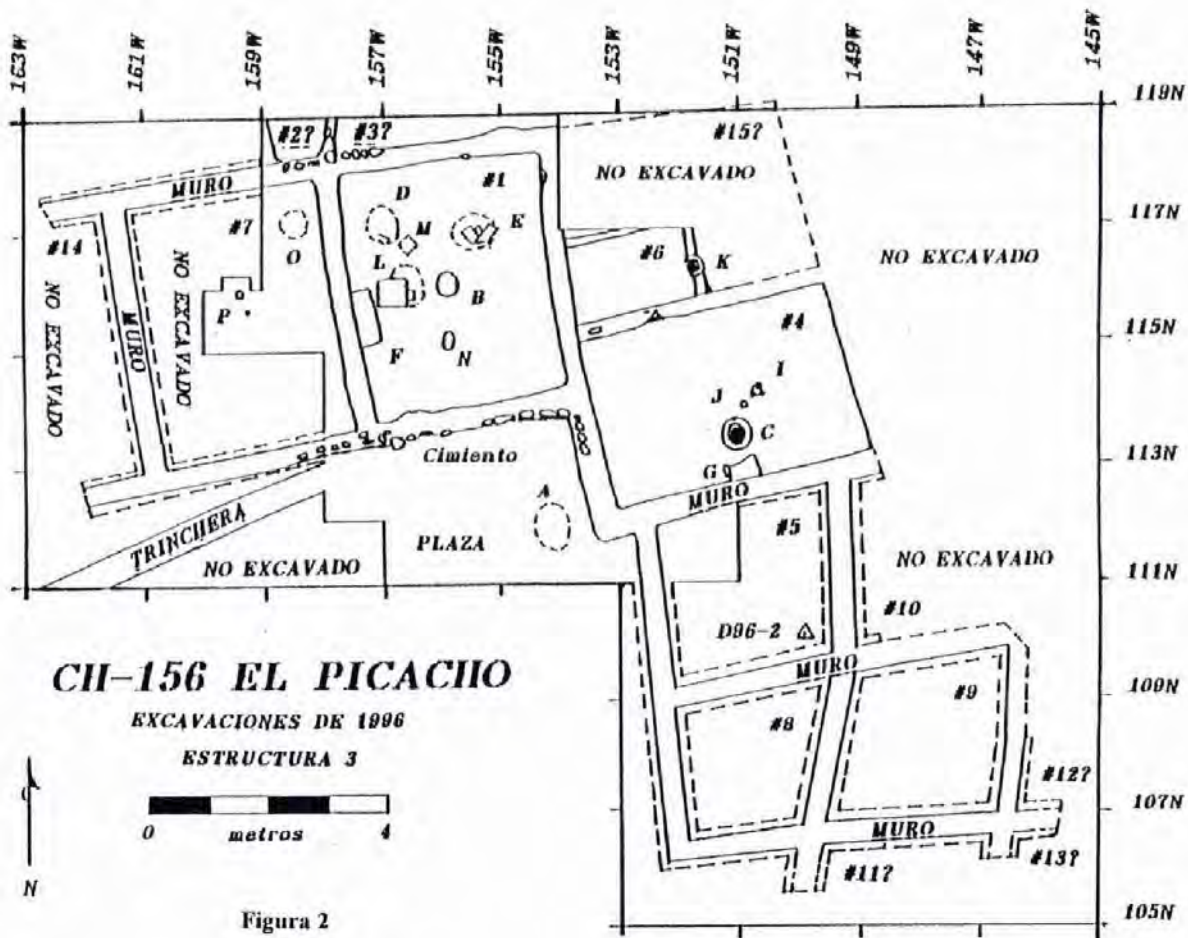
**Figure 5.7.** Picacho Site: one of two possible “ceramic drums” found in the Rock Alignment Area.

### **TT-3**

The final 1992 test was placed in a low mound near Structure 1. TT-3 measured 1 by 2 m; the west half of the unit was excavated to sterile soils at a depth of 1 m BD, while the east half was only excavated to a depth of 65 BD. To a depth of 20 to 30 cm BS, the fill consisted of very loose, dark gray midden with numerous artifacts; the stratum was extensively disturbed by burrowing. The stratum below the midden consisted of equally loose, light brown silty loam that exhibited extensive burrowing. Artifacts were found in this lower stratum, but quickly decreased with depth, and most likely were introduced from above by the burrowing. The artifacts recovered from the midden included debitage, sherds, bone, and fragments of ground stone and shell. Well-defined middens are rare in Medio period sites, so the presence of one at this site is noteworthy.

## The 1996 Excavations

The 1996 fieldwork focused on excavating the area in Structure 3 where rock alignments were tested in 1992. Two rooms were completely excavated and four others were outlined or tested or both (Figure 5.8 and Table 5.1). Rooms 13 and 15 were partly excavated and appear to have been part of this room block, while additional rooms are assumed on the bases of walls noted outside the excavated areas. The overall orientation of the room block was closer to the cardinal directions than at Structure 2, but the orientation of individual rooms varied. Room shapes also varied, from rectangular to rhomboid, and in size from about 1 by 1.5 m to 3.3 by 4 m. The adobe walls had *cimientos* (cobble footers) and cobbles were incorporated into the lower parts of the walls. The surviving portions of walls extended about 25 cm above the floors, too low to retain evidence of doorways. The walls also extended below floors.



**Figure 5.8.** Picacho Site: plan of the work in Structure 3 in 1996.

Table 5.1 provides the key to the floor features.

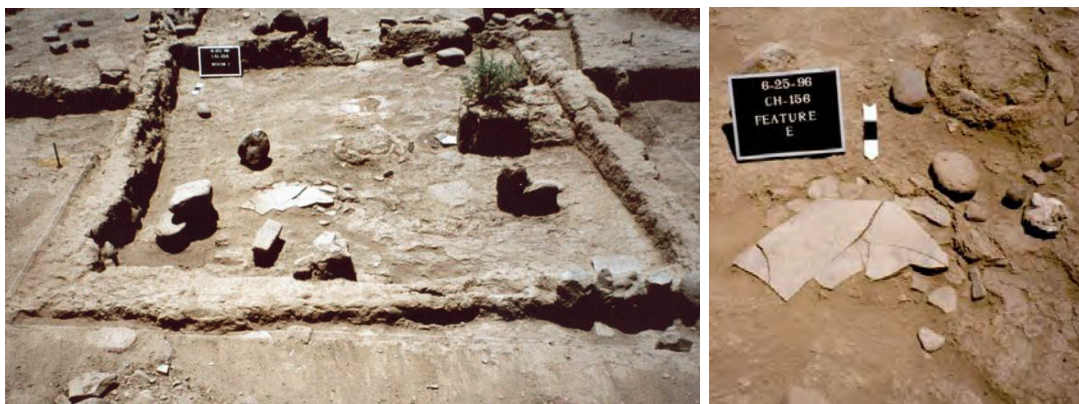
**Table 5.1. Picacho Site: Features of Structure 3 Excavated in 1996.**

(Locations are shown in Figure 5.8)

<b>Feature</b>	<b>Location</b>	<b>Description</b>	<b>Comment</b>
A	Plaza area outside Rooms 1 and 4	External hearth	Maize cob fragment from deep in hearth used for radiocarbon dating
B	Center of Room 1	Interior hearth	
C	South side of Room 4	Burned collared post hole and post	This post and post in Feature K were from the same juniper tree
D	Northwest part of Room 1	Subfloor pit feature	Feature was partly dug in 1992. A very early radiocarbon date came from this pit
E	Northeast quadrant of Room 1	Large flat stones on floor	Possible burial, not excavated
F	West wall of Room 1	Adobe “bench” or step	
G	South wall of Room 4	Adobe “bench” or step	
H	Plaza trench	Large external hearth with fire-cracked rock	30 cm deep
I	South side of Room 4	Small, plaster-lined hearth	Bottom not well defined
J	Near center of Room 1	Small ash pit	
K	Center of Room 6	Burned collared post and post hole	See comment for Feature C
L	West of center in Room 1	Patched plaster over a subfloor pit	Pit not excavated. A Babícora polychrome sherd was found on top of the pit fill.
M	NW quadrant of Room 1	Small rectangular patch of floor plaster over a small pit feature	Pit not excavated
N	South of center of Room 1	Small, over fire pit, partly plaster-lined	The clay lining was limited to a ring at the top. The bottom was unlined but thoroughly baked. Full of ash.
O	Northeast corner of Room 7	Rock-lined hearth below (and sealed by) the floor of Room 7	
P	Near center of Room 7	Plastered hearth with associated ash pit	A radiocarbon sample was obtained from this feature

## Room 1

The 1992 trenches in the Rock Alignment area crossed this room, cutting into an adobe wall and through the floor, exposing a subfloor pit. A radiocarbon sample from the pit yielded an impossibly early date, and one reason for returning to the site in 1996 was to understand the date.<sup>1</sup> The exposed room is shown in Figure 5.9.



**Figure 5.9.** Picacho Site: 1996 Room 1. Left: general view of the room. View to the south. Right: close-up of the rock feature (possibly over a burial) and of the adobe-plugged central hearth.

An unusually large hearth (Feature B) occupied the center of the room. The hearth was first described as collared but as excavation showed, the “collar” consisted of built-up of layers of floor plaster (at least three such layers were present)—i.e., the hearth ended up as collared, but through accretion. The walls of the hearth were baked hard. The hearth lacked a prepared base; instead, hard-packed, burned earth ended 15 to 18 cm below floor level. In the fill of the hearth was a blob of clay. Some Viejo period hearths were sealed by pouring adobe or mud into them (for example, Structure 2 at Ch-254) or by plastering over them (the external hearth recorded as Feature 14 at the same site). The hearth fill in Room 1 at 156 suggests a continuation of the same behavior during the Medio period.

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<sup>1</sup> 4540 ± 220 BP (TO-4141). A second sample obtained from this room in 1992 (TO-5042, from the floor), yielded a date consistent with our understanding of the local chronology. TO-4141 was one of three very early dates on PAC samples run by Isotracer; the other two were TO-4138 (Ch-212 in the Bustillos basin; 4810 ± 120 BP) and TO-4140 (Ch-152, 3410 ± 120 BP).

Rolf Beukens of Isotracer could detect no malfunction of the equipment and although the three lab numbers are almost sequential, the samples were not run together. All three dates were run on *Zea mays* identified by Karen R. Adams, and all three samples were associated with Medio period materials. We have never published the dates (except in this footnote) because they are so out of line with the contexts from which the samples were taken.

Below the hearth, silty deposits interspersed with artifacts continued for another 23 to 25 cm; excavation ended in sterile deposits 50 cm below the floor. The presence of artifacts below the hearth suggests that this room was, unusually, built on older cultural fill.

A plastered fire or ash pit (Feature N) was found in the south half of the room. Other room features included an adobe step at the west wall (Feature F) and several pits. Feature D, the subfloor pit that yielded the impossibly early date, was sealed by a plaster patch in the floor. The pit originated from the uppermost of the three floors, cutting through the lower two.

A set of large rhyolite slabs covered a level of fist-sized cobbles; this rock feature was not excavated but probably covered a burial, as was the case at El Zurdo in the Babícora basin (Kelley 2008:85–87).

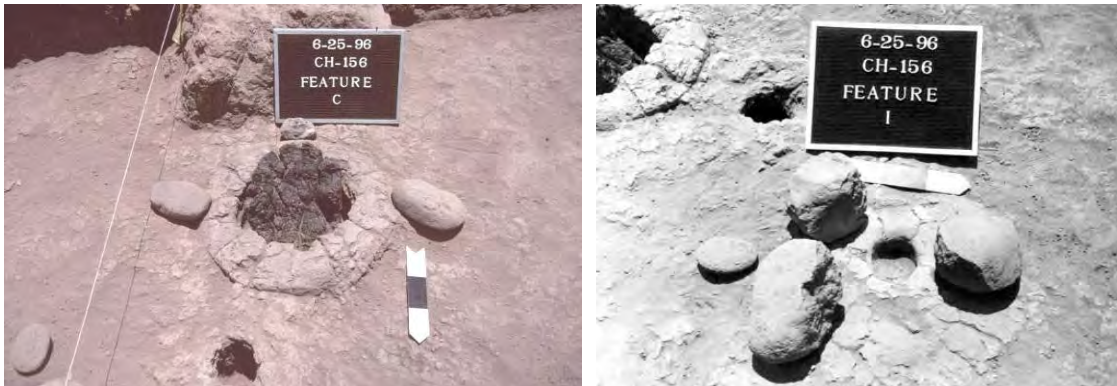
The two ceramic “drums” found in 1992 came from the floor of this room and were part of its floor assemblage, which also included flakes stone, ceramics, several manos and a metate fragment (including ones collected in 1992; see Appendix A).

#### **Room 4**

Room 4 had burned. The long axis of the room was at roughly a right angle to that of Room 1. The floor features included an adobe bench or step against the south wall, a collared post, a plastered pit identified as a hearth (though rather small for that function; east of the center of the room), and an ash pit (Figures 5.10 and 5.11). The collared juniper post was 28 cm in diameter and had burned to floor level. The post hole was 56 cm deep and ended in culturally sterile soil. After the post had been placed, the hole was packed with sandy fill. The floor plaster lapped onto to the post collar, which thus was modeled before floor plastering was completed. The floor assemblage of multiple manos, a metate, two shaft straighteners, and rocks (possible pot rests) placed around the hearth (Appendix A).



**Figure 5.10.** Picacho Site: 1996 Room 4. View to the northwest.



**Figure 5.11.** Picacho Site: features in 1996 Room 4. Left: the collared post with two manos; a small pit (identified as an ash pit) is present at the bottom edge of the photo. View to the south. Right: The plastered hearth with surrounding rocks. The collared post and small pit are shown in the upper left corner of the photo. View to the southwest.

## Room 5

One-fifth of Room 5 was excavated (Figure 5.8). In the excavated northwest corner, a large pot (ca. 60 cm in diameter) sat directly on the plastered floor (Figure 5.12). Plaster fragments occurred in the excavated fill, but excavations did not extend to the walls because the crew was reluctant to fully open another room. A core was recovered from the pot interior; the remaining contents were collected for flotation, with negative results. We assume that the pot was a stationary water or food storage jar.



**Figure 5.12.** Picacho Site: large pot sitting on the floor of 1996 Room 5.

## **Room 6**

A narrow room extended east beyond the excavation limits. A collared post was set into a low adobe wall that crossed the room. Karen Adams took this post and the one from Room 4 to the tree-ring lab at the University of Arizona; although the two samples could not be dated, Jeffrey Dean determined that posts came from the same juniper tree, suggesting that at least two rooms in the block were built about the same time. The low wall in Room 6 was similar to the one in the cleared room at the Pig site (see Chapter 3) and both contained a post set into the wall. Given that the wall appears to be a room divider rather than a load-bearing wall, it is likely that Room 6 was a partitioned-off area within Room 15.

## **Room 7**

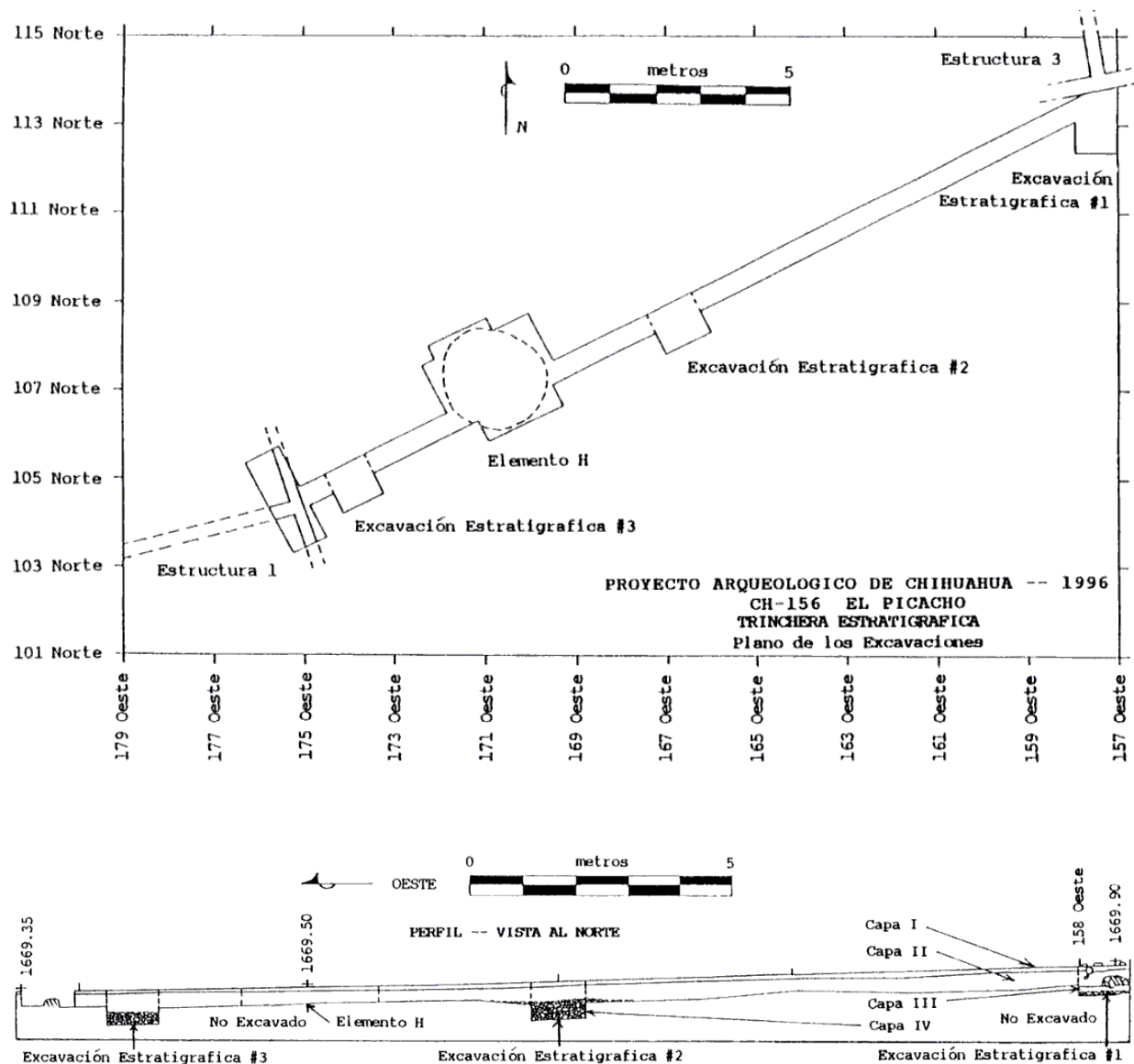
The east side and center of Room 7 was excavated; the walls of the room were traced, providing room dimensions. Room 7 had a plastered hearth and an ash pit near the center of the room (Feature P). At the center of the room, the floor had been replastered several times; although only the upper plaster floor was fully exposed within the excavated area, it appeared that earlier ash pits had been plastered over by successive floors.

Feature O was sealed under floor plaster in the northeast corner of the room and appeared to be an exterior hearth predating construction of the room block. The feature consisted of an oval mass of fire-cracked rock, measuring 52 by 50 cm with a maximum depth of 30 cm. The feature fill consisted of charcoal fragments of various sizes, small mammal bones, burned corn cobs, and a few artifacts including plainware sherds. A radiocarbon date on a sample from Feature O is well within our expectations for the Medio period.

## **The Long Trench**

South of Structure 3 and east of Structure 1 was a slightly lower area that we called “the plaza” but that should probably be called an exterior area between Structures 2 and 3. A 22 m long trench extended from the exterior wall of Structure 3 (the south walls of Rooms 1 and 7) to the southwest to the exterior wall of Structure 1 (Figure 5.13).

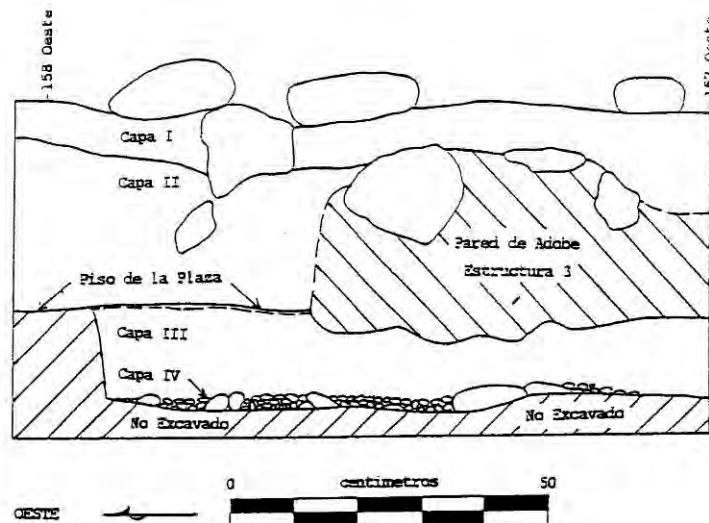
Level 1 of the trench consisted of recent sediment. Level 2 consisted of undifferentiated sediments and varied from 50 to 75 cm in depth. Flaked stone, sherds, and charcoal were distributed throughout Level 2 but the only concentration of cultural materials was found in Feature H, a large roasting pit. The long trench was excavated to the bottom of the Medio period materials; Level 3 was a compact surface marking the lower limit of the cultural materials. We infer that the area between the room blocks was used for exterior activities throughout the occupation of the site. This in-between area was not paved; it sloped slightly to the southwest.



**Figure 5.13.** Picacho Site: long trench in the plaza. Top: plan. Bottom: profile.

Three stratigraphic tests were placed toward each end of the trench, and at its middle (Figures 5.13 and 5.14). These tests were deeper than the trench and showed that the site rests on top of fluvial gravels (Level 4), as is to be expected given the site's proximity to a stream. In the tests Level 3, overlying the gravels, included charcoal and burned earth. Stratum 3 predated construction of the site's Medio period architecture and it was not clear whether the charcoal and burned earth were intrusive Medio period material or indications of an earlier occupation.

A small stratigraphic test was placed in the northeast quadrant of the site, where looters had been active; no architecture was found but the stratigraphic profile fit well with that seen in the long trench: a thin layer of post-occupation sediment underlain by undifferentiated Medio period deposits with cultural materials.



**Figure 5.14.** North profile of Stratigraphic Test 1, at the northeast end of the long trench. *Capa I* is post-occupation sediment. *Capa II* is the undifferentiated Medio period cultural deposit. *Capa III* consists of fine sediments with charcoal and burned earth and predates the construction of Structure 3. *Capa IV* is water-lain rocks and gravel. The “floor” of the so-called “plaza” is the base of *Capa II*.

When Feature H, the large roasting pit 4 m from the Structure southwest end of the trench, was encountered, the excavation area was expanded to reveal the entire feature. This was oval, with a maximum diameter of 2.2 m. The hearth fill included a mix of charcoal, fire-cracked rock, pottery (including Babícora Polychrome and Madera Black-on-red), and bone. Based on the hearth’s appearance (Figure 5.15), it was used repeatedly.

### Pottery

During the PAC work at the Picacho site, 6,007 sherds were collected, three-quarters of them during the 1992 field season. The count includes 4,861 undecorated (plain; 80.9 percent), 420 black (7.0 percent), 190 red-slipped (3.2 percent), 23 red-on-brown (0.4 percent), 20 black-on-brown (0.3 percent), two black-on-red (0.0 percent), 88 Babícora Polychrome (1.5 percent), 25 Babícora series red-on-brown (0.4 percent), 15 Babícora series black-on-brown (0.2 percent), three Ramos Polychrome (0.0 percent), one Villa Ahumada Polychrome (0.0 percent), 4 Madera Black-on-red (0.1 percent), 330 textured (5.5 percent), and 25 Other (0.4 percent). Unsurprisingly, the ceramics are dominated by undecorated pottery. Carey (1931) similarly reported abundant plain pottery, modest amounts of black sherds, and a few polychrome sherds from the Babícora basin.



**Figure 5.15.** Picacho Site: large roasting pit in the 1996 long trench.

Figure 5.16 shows a plainware bowl found in the fill of Room 4. Some plainware sherds had crackled exteriors. A plainware possible annular base was found (Lot 7067). One group of undecorated sherds from the fill of Room 1 began to dissolve when washed and must have been from an unfired pot, indicating on-site manufacture.



**Figure 5.16.** Picacho Site: reconstructed bowl from the fill of House 4. Lot 7073.

The assemblage included an unusual sherd with red slip applied over cream-colored slip; the sherd had finer temper than is usual in the area and is a good candidate for an import. Some of the textured sherds are fingernail-impressed or have thickened or folded rims, or both. Such rims seem more common in the upper Santa María Valley sites than elsewhere.

Two of the Ramos Polychrome sherds came from TT-1, while the third was a surface find in 1990. The Madera Black-on-red came from TT-1, TT-3, and the long trench, while the Villa Ahumada Polychrome came from TT-2. A sherd with eroding white slip may have been Villa Ahumada but was counted in the “Other” category. This category also included an unidentified polychrome and a variety of unusual sherds or combinations of normally separate decorative techniques (for example, black-on-cream [Lot 3177], black-on brown [Lot 3177], a tan sherd with a yellow slip band carried over the rim [Lot 3171], a Babícora Polychrome bowl sherd with a red-slipped interior [Lot 7081], a sherd with a black-on brown exterior and a red-on brown interior [Lot 3379], a sherd with a black exterior and a red-slipped interior [Lot 3377], and two corrugated sherds with red-slipped interiors [Lot 3325]). In addition, the Other category included 11 sherds from the lower wall of a yellow-brown vessel with burned-out paint, the latter used to create a design like fingers or branches splaying out from the bottom of the vessel (Lot 3322; TT2-B, 50–60 cm BD).

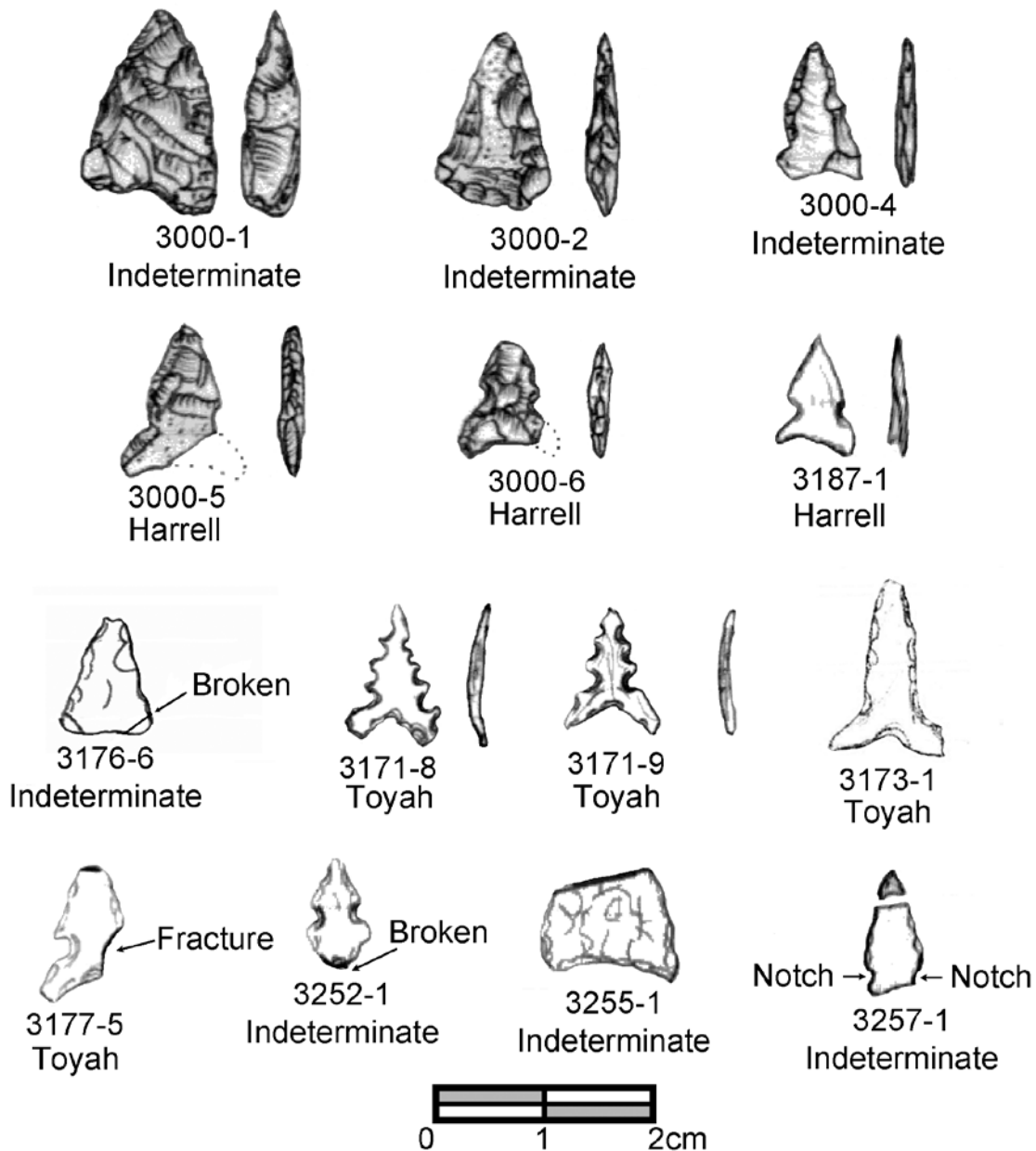
Although Babícora polychrome was not abundant compared to other Medio period sites in the upper Santa María Valley, it was widely distributed within the site, being found in the large roasting pit (Feature H), in the long trench and in other extramural excavations, on or near the floors in Houses 1, 2, 4, 5, and 7, and below the floors in House 1. Since the radiocarbon dates indicate that the Picacho site is the earliest known Medio period site in the upper Santa María valley, the low frequency for the combined Babícora series (1.9 percent) is not surprising.

This site produced three ceramic “drums.” As was mentioned, two are from the floor of House 1 (both from Lot 3416). One is from the fill of House 7 (Lot 7256).

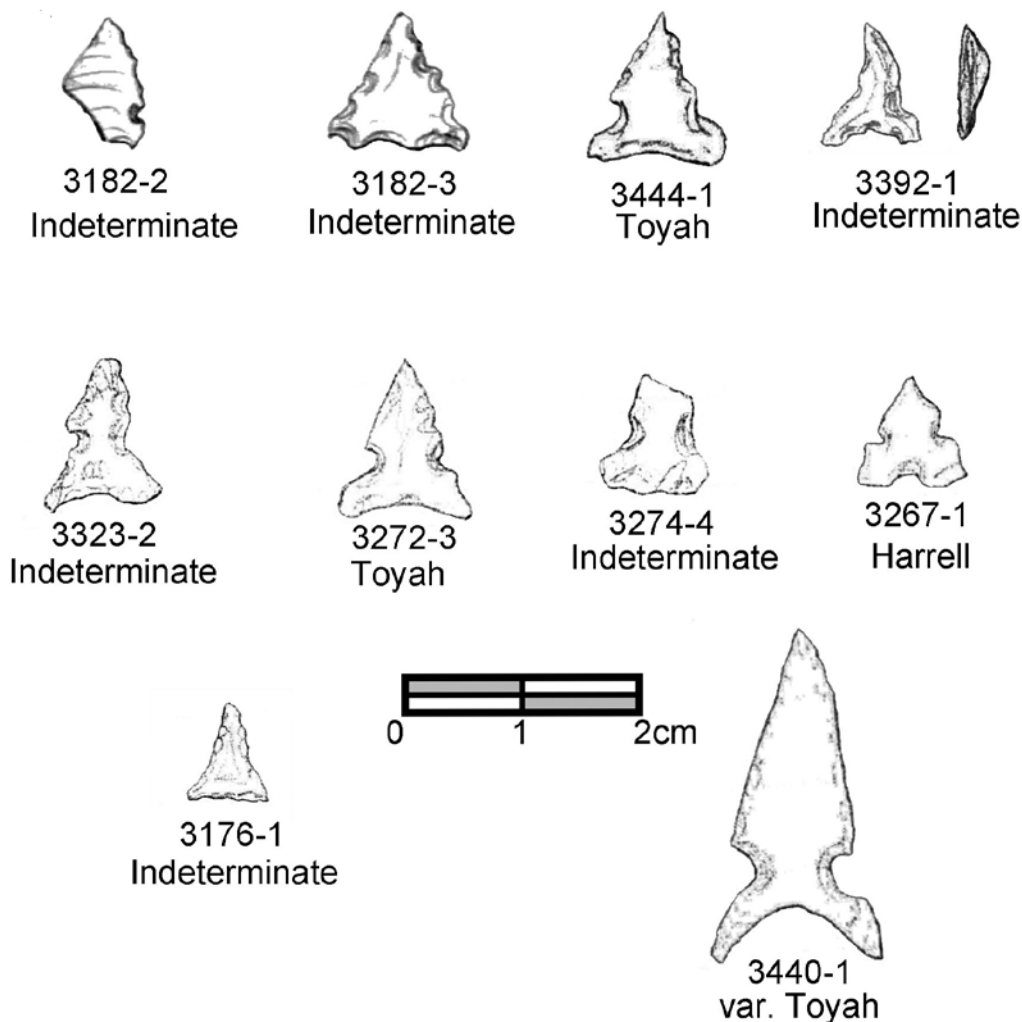
A fragmentary molded spindle whorl found in the fill of House 4 (Lot 7097) may be an import from the south. Worked sherds included spindle whorls, scrapers, and a possible “counter” or gaming piece.

### **Other Artifacts**

The flaked stone assemblage includes 44 points, two bifaces, three scrapers, a chopper, 59 retouched and utilized flakes, 12 cores (includes one flake core and two bipolar obsidian cores), 727 pieces of debitage, and three hammerstones. The large number of projectile points is unusual. Most of the points are triangular or side-notched, with concave bases; one and possibly two Archaic points (using Texas types, a Frio point and a possible Tortugas point) were found among them. Given the quality of the sketches made in the field lab, we have reproduced several of them here (Figures 5.17 and 5.18). In a group of chert flakes from Room 5, 11 were from the same core, indicating knapping within room.



**Figure 5.17.** Selected projectile points from the Picacho site. Top row, left to right: Nos. 3000-1 (obsidian, 1.8 cm), 3000-2 (basalt, 1.7 cm), and 3003-4 (basalt, 1.2 cm). Second row, left to right: Nos., 3000-5 (obsidian, 1.2 cm), 3000-6 (obsidian, 1.1 cm), and 3187-1 (chert, 1.1 cm). Third row, left to right: Nos. 3171-6 (in two pieces, obsidian, 1.4 cm), 3171-8 (white chert, 1.6 cm), 3171-9 (chalcedony, 1.4 cm), and 3173-1 (basalt, 1.6 cm). Bottom row: Nos. 3177-5 (chert, 1.4 cm), 3252-1 (basalt, 1.2 cm), 3255-1 (chert, 1.3 cm), and 3257-1 (unknown white stone, 0.9 cm). Original sketches by Hugh Gibbins; additional rendering by A. C. MacWilliams.



**Figure 5.18.** Additional projectile points from the Picacho Site. Top row, left to right: Nos. 3182-2 (chert, 1.4 cm), 3182-3 (basalt, 1.5 cm), 3444-1 (basalt, 1.0 cm), and 3392-1 (obsidian, 1.1 cm). Middle row, left to right: No. 3323-2 (chalcedony, 1.4 cm), 3272-3 (basalt, 1.3 cm), 3272-4 (basal fragment, chert, 1.0 cm), and 3267-1 (basalt, 0.9 cm). Bottom row, left to right: Nos. 3176-1 (chert, 1.2 cm) and 3440-1 (quartzite? 2.6 cm). Original sketches by Hugh Gibbins; additional rendering by A. C. MacWilliams.

The ground stone includes 30 manos, six metates, two shaft straighteners (rarely found in the area), a stone bowl and a pestle. The site also yielded a number of the thin rhyolite slabs that we call hatch cover rocks, but the flat slabs undoubtedly served a number of purposes. .

A disk bead (No.7011-11) was collected from the site surface. It measures 0.9 cm in diameter and is 0.5cm thick.

A bone awl (Lot 7074-1) from Level 2 in the fill of Room 4 is 7.5 cm long, 1.1 cm wide, and 0.6 cm thick.

A broken shell bead from general site fill (Lot 7110-1) was not identified by taxon.

Broken freshwater mussel shell, probably *Anodonta californiensis*, is not as common at the Picacho Site as at sites along the El Pino drainage (such as Viejo period sites Ch-218 and -254), but does occur. It seems likely that these shells were brought from other drainages in the upper Santa María basin; the stream at the site would not provide a good habitat for the species, as it is very rocky.

### **Faunal Remains**

The faunal remains have not been analyzed but we can say that they include artiodactyl bone (including one piece of antler), highly processed bones from medium-sized to large mammals, and rodent bones. Bone fragments were encountered in fill in all excavation areas, and in the large external hearth or roasting area as well as in small internal hearths.

### **Human Remains**

A human incisor was found in the fill of Room 4 (Lot 7086).

### **Radiocarbon Dates**

Radiocarbon dates from the Picacho Site are summarized in Table 5.2. A footnote in this chapter discusses an anomalous date from the site.

### **Discussion**

Ch-156 stands apart from other Medio period sites we have investigated, in large part because it is the earliest. Its location is peripheral to the main valley and it has fewer unusual or imported objects than most other Medio period sites (in these regards, it is reminiscent of El Zurdo in the Babícora Basin [Kelley 2008a, 2008b, 2009]). Architecture is within the typical range of Medio period structures, notwithstanding the atypical orientation. Walls were placed in trenches with abundant *cimientos* or foundation stones and stones incorporated into the lower levels. Collared hearths and posts occur, although the most completely excavated hearth collar proved to have resulted from floor plaster build-up during multiple plastering episodes.

The Picacho site provided clues about room design and function. As was the case as the Pig site (Ch-152), we found a room with a low internal divider supporting a post. It seems likely that Room 5 was a storeroom, given its small size and the presence of the large storage jar. The work at the site also provided information about extramural activities, reinforcing Sayles' (1933) notion that exterior hearths or roasting pits are a prominent feature of Medio period sites in the southern zone (as is the case for Viejo period sites as well).

**Table 5.2. Picacho Site: Radiocarbon Dates.**

(TO- dates are from the 1992 field season. AA dates are from the 1996 field season.)

Lab No.	Lot No.	Context	Sample Material	Conventional Age B.P.	2 sigma calibrated Age A.D.*
TO-4120	3380	Structure 1, TT2E, 30–40cm, outside room block	<i>Zea mays</i> kernel	560 ± 60	1284–1403 (1.000)
TO-4121	3343	Structure 1, TT2C, Room interior, on or just above floor	<i>Zea mays</i> cob	640 ± 60	1278–1413 (1.000)
TO-4122	3181	TT1, Level 3. Midden in Structure 2 area.	<i>Zea mays</i> kernel	700 ± 60	1220–1332 (0.660) 1339–1398 (0.340)
TO-5041	3388	Structure 1, TT2F, room fill .	<i>Zea mays</i> cob	670 ± 50	1268–1334 (0.497) 1336–1401 (0.503)
TO-5042	3427	Structure 1, TT2 E, floor	<i>Phragmites</i> stem	1110 ± 70	771–744 (0.016) 769–1036 (0.983) 1144–1147 (0.001)
TO-5043	3343	Structure 1, TT2C, Level 6, floor	<i>Zea mays</i> cob	610 ± 50	1292– 1414 (1.000)
AA23202	7102	Structure 3, 113N 151W, Room 4, Feature J	<i>Zea mays</i> cupule	820 ± 55	1042–1093 (0.097) 1118–1140 (0.048) 1154–1288 (0.855)
AA23203	7130	Structure 3, Feature A, small external hearth, lower fill	<i>Zea mays</i> cob	620 ± 55	1286–1413 (1.000)
AA23204	7151	Structure 3, Feature O, hearth in Room 1	<i>Zea mays</i> cob	750 ± 55	1163–1172 (0.011) 1179–1314 (0.921) 1353–1388 (0.067)

\*Probabilities in parentheses

The many projectile points and two shaft straighteners suggest that hunting was more important at this site than at other Medio period sites examined by the project, but the low number of recovered faunal materials fails to support that idea. Perhaps the lack of looting accounts for the many projectile points. The remains found at the site indicate that pottery and flaked stone tools were produced there.

The radiocarbon dates suggest that Structure 3 is earlier than other room blocks, and that the main occupation of the site was in the 1200s and 1300s. Further support for the relative ages of the different units comes from the occurrence of three imported types, Villa Ahumada Polychrome, Madera Black-on-red, and Ramos Polychrome. At El Zurdo (Kelley 2009b) it appeared that Villa Ahumada was the earliest of the three imports to reach the Southern Zone, with Madera and Ramos arriving later. If this inference holds up, TT-1 and TT3 contain some of the most recent deposits at the Picacho site while TT-2 and Structure 3 are earlier. We can further postulate a sequence that begins with Structure 3, followed by TT-2, with TT-1 and TT-3 yielding the latest deposits.



## Chapter 6

### OTHER SITES

#### The Fresno Boulder

The Sierra La Catarina, on the west side of the big bend of the Río Santa María, gives rise to arroyos that flow into the basin both north and south of the modern highway between Oscar Soto Maynez and the Babícora Basin. One of these is the Arroyo la Raspadura, along which Ch-11 was built. Shortly before the arroyo emerges from the sierra, a side arroyo joins it from the south: the Arroyo el Fresno, which today includes a track into the sierra (used for higher elevation logging). At the edge of the track one finds the petroglyph panel we named the Fresno Boulder (Ch-162) (Figure 6.1). Because the panel is visible to passing trucks, and so close to the track, it is highly susceptible to vandalism. During the life of the project the boulder was used for target practice, and its surface was partly defaced.



**Figure 6.1.** The Fresno Boulder.



**Figure 6.2.** Fresno Boulder petroglyph panels. Top: main (east) panel. Bottom: west panel.

Although rock art occurs elsewhere in the upper Santa María Valley,<sup>1</sup> the Fresno boulder is the most convincing example of Chihuahua culture rock art, specifically rock art likely to date to the Medio period. As Michael Mathiowetz noticed in 2011, the main panel includes a scarlet macaw in profile, about one-third of the way down the boulder (Figure 6.3).



**Figure 6.3.** Detail of the Fresno Boulder main panel, showing the stylized macaw.

During our visit to the boulder in 2012, Art MacWilliams located a feature on the adjacent ridge. A natural “box” or depression in the bedrock on top of the ridge is 60 cm long and 40 to 45 cm in width; an artificial hole, 20 cm in diameter, had been dug into the depression. We speculated that the hole in the bedrock was for offerings associated with this location. The Fresno boulder offers a glimpse of the possibilities for a fuller landscape approach to the upper Santa María.

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<sup>1</sup> A large boulder in the bottom of the Arroyo el Toro drainage (Ch-255), just north of Independencia, features circles and concentric circles as well as honing areas on the top of the boulder. It is a popular place for graffiti, and throughout the 1990s boasted a large PAN sign and other contemporary art work. The petroglyphs are most likely pre-Medio. Immediately east of the boulder, a volcanic hill forms the northern boundary of Independencia. The hill (Ch-266) is covered with volcanic cobbles, some of which include petroglyphs. On the top of the hill there are cleared spaces resembling sleeping circles. None of the rock art at this site appears to be from the Medio period.

### The Alarcón Site

First visited in 1989, the Alarcón Site (Ch-12) is a site with a single mound (Figure 6.4). The site is near the west edge of the Santa María Valley, 5 km northwest of La Raspadura. The mound measures 52 by 47 m; the artifact scatter extends 50 m out from the mound in all directions. The mound is heavily looted; it was more than 2 m tall when first seen by PAC personnel in 1989, but has subsided since then as part of “healing itself.”



**Figure 6.4.** The Alarcón Site. Top: looking southwest in 2012. Bottom: looking south in 1989.

The collected sherd assemblage includes 173 sherds: 111 undecorated (plain unslipped) (64.2 percent); six black-on-red (3.5 percent); 26 Babícora Polychrome (15.0 percent); 24 textured (13.9 percent); one each of red-slipped, black-on-brown, and Ramos Polychrome (0.6 percent each); and three Other (1.7 percent). The high number of textured sherds suggests that the site was not occupied at the end of the Medio period. The Other category includes one unusual polychrome with oblique black and red lines crossed by a swath of red. Several black-on-red sherds in the same category may be Madera Black-on-red. Two unusual Babícora Polychrome sherds are shown in Figure 6.5. Seven of the Babícora “Polychrome” sherds have only black paint (N=7) and one has only red paint, suggesting that the local variants in the Babícora “series” were in use here. A red on creamy white sherd may have been imported.



**Figure 6.5.** Alarcón Site: two unusual Babícora Polychrome sherds. Left: the painted design is on a restricted zone of white slip (a technique usually found only on Huérigos Polychrome). Right: a tooled rim. Lot 2749

The collected flaked stone includes an older projectile point with ground edges (Figure 6.6). A notched obsidian projectile point is 2 cm long by 1 cm at its widest point (near the base, which was broken) (No. 1223-3). Two retouched chert flakes had graver points (Lot 1222).



**Figure 6.6.** An early projectile point from the Alarcón Site. Lot 2749.

Ground stone is uncommonly common at the site. While most ground stone artifacts encountered in the southern zone are best described as expedient, one of just three carefully shaped metates known from the southern zone (resembling the ones found in quantity at Paquimé) was found lying on the side of the mound. The juxtaposition of an artifact thought to produced by specialists at Paquimé (VanPool and Leonard 2002) and an unusually tall Medio period mound is suggestive.

A white stone bead from the site has a biconically drilled hole. The bead measures 0.8 by 1.0 by 0.6 cm.

### **Ch-228**

Two rock shelters 50 m west of the Río Santa María, just north of Gracia (itself north of Namiquipa), are listed here because the one sherd seen and collected at this site was Three Rivers Red-on-Terracotta—one of the very few sherds found by the PAC that came from outside the Chihuahua culture area, contemporary with the Medio period.

### **Ch-229**

Like Ch-228, this site is far north of the line in Figure 1.1 indicating the apparent northern boundary of the Chihuahua culture site cluster in the Santa María Valley (for both the Viejo and Medio periods). Ch-229 is located in the ejido pueblo of Amara (north of Namiquipa along the Río Santa María). Ch-229 has long been under cultivation; a small rise visible in the floodplain may indicate a former mound.

Sherds and stone artifacts are still present on the site surface, and the land owners report that such items continue to appear. The sherds collected by the PAC included plain brown, red-slipped, and Babicora polychrome as well as china and pieces with green glaze. The small rise notwithstanding, we saw no firm evidence of prehistoric architecture. This may have a small site strategically placed between the upper Santa María Valley and the lower elevation grasslands of the Buenaventura and Galeana areas.

### **Ch-253 A and B**

In 1996 we briefly visited this pair of sites, which are north of the main stream channel northwest of Abraham Gonzalez. No architecture was visible at either location.

Ch-253 A is now an apple orchard; the land leveling and deep planting involved in establishing the orchard is said to have destroyed the Medio period site that once was there. A few artifacts can be found in the orchard. The PAC collected 18 sherds (11 undecorated, one black, one Madera Black-on-red, two black-on-red not identified by type, and three Babicora series; Lot 7019) as well as two chert flakes and a core (Lot 7017).

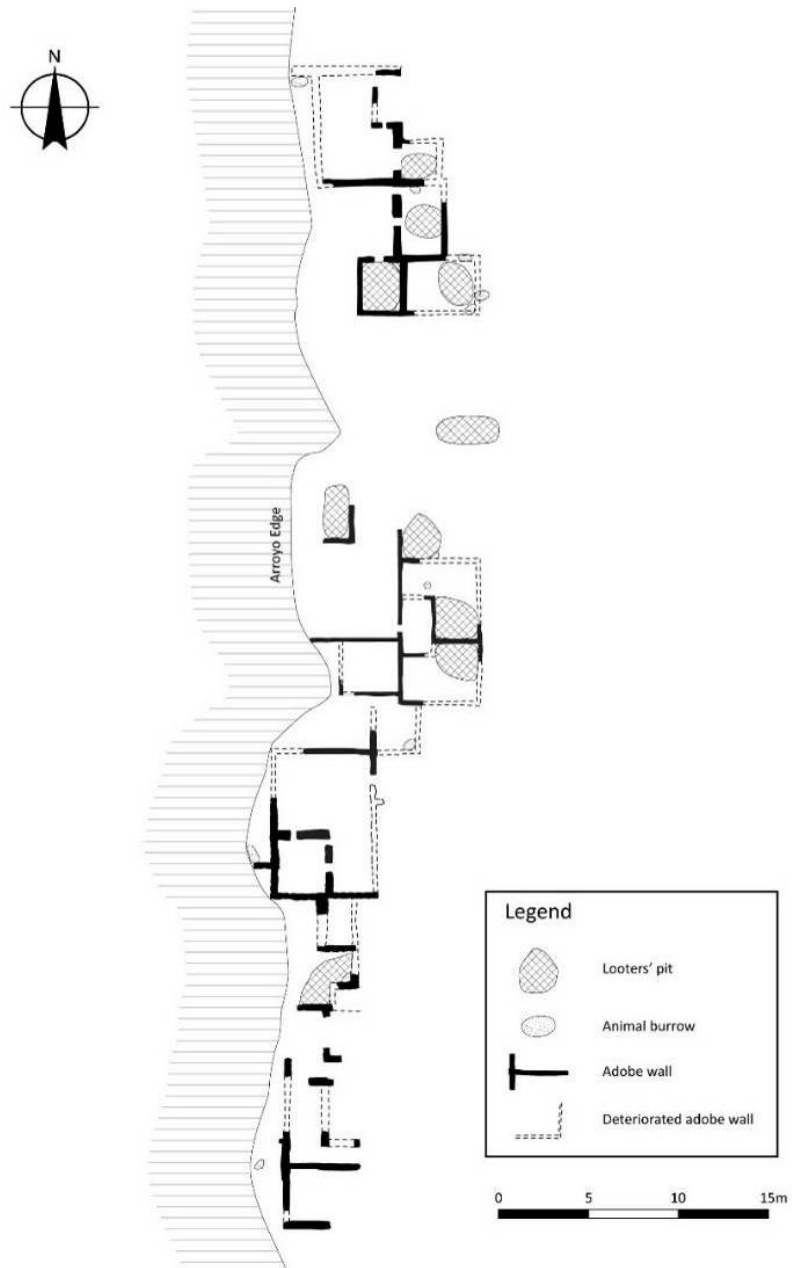
Ch-253 B is on a rise just southwest of the orchard. Although that field has been plowed, the site has fared better than the one in the orchard. It reminded us of mound sites in the Las Varas Valley in the Babícora Basin that have been plowed regularly since the 1950s. There, both room blocks and looters' dirt piles have been smoothed over and are now minor prominences with darker than usual soil on and immediately around the rise. The same seems to be the case at Ch-253 B. The PAC collected eight sherds from the site (three undecorated, one black, three Babícora series, and one Madera Black-on-red) (Lot 7020). Stone artifacts collected from the site (as Lot 7020) include a fragment of a small triangular chert point with a broken base and shallow indentations at the midpoint of the blade (1.1 by 0.6 by 0.2 cm); four retouched chert flakes; a proximal fragment of a trough metate (No. 7020-3; 9.1 by 6.5 by 4.3 cm); and a full-grooved axe minimally shaped from a cobble (No. 7020-2; 11.0 by 6.7 by 4.8 cm).

### The Palacios Site

By the time we first visited the Palacios Site (Ch-257) site in 1996, a secondary school teacher and his students from Oscar Soto Maynez had excavated two or three rows of rooms along the edge of the Arroyo el Pino (Figure 6.7). We have no way of knowing how much of the site had fallen into the arroyo. Attempts to meet the *maestro* and see the rumored collections were unsuccessful, and in time the teacher died and the collections are said to have been lost. In 2012 we returned to the property, which was under new ownership, and were given permission to map the site (Figure 6.8). Although we visited the site in other years, the only collections were made in 1996.



**Figure 6.7.** The Palacios Site in 1996. Looking north along the edge of the terrace, where the school teacher and his students had dug.



**Figure 6.8.** Plan of the Palacios Site as it appeared in 2012. Drafted by Hugh Gibbins.

Walnut and willow trees grow in the floodplain below the site, and a spring is located there. This site therefore conforms to the common pattern of locating a site next to both an arroyo and a spring. A great many freshwater shell fragments were visible on the surface, indicating a probable food source. This part of the El Pino drainage supported local bivalves as recently as the 1980s.

The numerous exposed walls showed clearly that the preferred method of construction was to build an adobe wall on *cimientos* or footer stones (Figure 6.9).



Figure 6.9. Palacios Site, 2012: exposed adobe wall showing *cimientos*. The latter can be seen in the right half of the photograph.

In 2012, adobe walls were showing in the plowed area east of the dug-out rooms, and we estimated that perhaps 30 percent of the site survived in that area. Based on a count of exposed rooms and an estimate of unexcavated rooms, the site once included 80 to 100 rooms in a single room block. Concentrations of fire-cracked rock were present in the plowed area east of the mound, probably representing exterior hearths disturbed by plowing.

The pottery collection from the site includes 78 sherds: 23 undecorated (29.5 percent), seven black (9.0 percent), two red-on-brown (2.6 percent), 35 Babícora series (44.9 percent), three Ramos Polychrome (3.8 percent), two Villa Ahumada Polychrome (2.6 percent), three black-on-red sherds not assigned to a type, and one each of Madera Black-on-red, black-on-brown, and textured (1.3 percent each). While the sample size is small, it is interesting that the Babícora series sherds accounts for close to half of the assemblage. One Babícora sherd is from a flanged jar. The three black-on-red sherds not assigned to a type may be Madera Black-on-red.

In 2012 the new landowner showed us a modeled spindle whorl that he had just picked up at the site; he gave this piece to Rafael Cruz Antillón as a representative of INAH Chihuahua. This is one of three such spindle whorls we know of from Medio period sites in the Santa María Valley; all are possible imports from the south.

In 1996 the crew collected a proximal point fragment with shallow side notches and a convex base. The point fragment measures 1.4 by 1.1 by 0.9 cm. At the same time, seven flakes were collected: four chert, two rhyolite, and one obsidian. Three of the chert flakes one rhyolite flakes was retouched.

### **Ch-258**

Visited only briefly in 1996, this site is upstream from the Palacios Site (Ch-257) along the same drainage, between the Palacios Site and the Buenavista Site. The site lacks a mound. The small collection includes both Babícora series and red-on-brown pottery, suggesting an earlier Medio period occupation. The site appears to be fairly intact.

### **Ch-265**

Located just north of Independencia, on the back road from Independencia to División del Norte, Ch-265 is pockmarked with looters' holes. It is also being used as a source of adobe and as a place to dump garbage. There is no visible mound, but adobe walls are visible on the surface. The 47 sherds collected in 1999 did not include polychromes but did include undecorated, red-slipped, red-on-tan, and textured wares. If this is a Medio site, as the architecture suggests, it is fairly early.

### **The San Blas Sites**

Ejido San Blas is located on the north side of the valley between the big bend of the Santa María River and the pueblo of Bachiniva—the latter being where the valley narrows at the sierras that are the headwaters of the river. From Bachiniva to the big bend the valley trends west and north; there (just southeast of Oscar Soto Maynez) it turns north. As far as we know, the San Blas Sites are the easternmost Chihuahua culture sites in the upper Santa María Valley. Very little is left of the sites. The collected sherds include thin-lined red-on-tan with corrugations (Mata Red-on-brown), other variations on red-on-tan, Santa Ana Polychrome, red-slipped, black, textured and undecorated. The sherds suggest a Viejo period occupation, but the *ejidatarios* insisted that there had once been a mound and that they had found polychrome pottery.

Ch-268 was said to have been a small mound site that was completely destroyed by the planting of an apple orchard on ejido land. Ch-269 is artifact scatter in a plowed field on private land, just west of the orchard. Ground stone tools have been parked along the fence that divides the two properties, as is so often the case when people encounter stone tools while plowing. The number of ground stone tools is diminishing over time, as pieces are taken away.

Whether the sites are Viejo or Medio period, their location suggests that upstream from San Blas, the valley lacked the arable land and water needed by prehistoric farmers. These sites were also closer to the Bustillos Basin than any other Upper Santa María Valley Chihuahua culture sites.

### The Parcela Site

This site was named for parcel of land on which is located; we were told that the land belongs to the schools of Oscar Soto Maynez. The site is on the west bank of the Río Santa María, just north of the town. The river channel has been altered by heavy equipment, and any archaeological remains at the river's edge have been destroyed. Back from the river, a long, low rise (standing about 1 m above the terrain to the south) trends north and west. Along this ridge there are a few looters' pits and occasional sherds and other artifacts. Our 2008 collection of nine sherds included Babícora Polychrome, Madera Black-on-red, and modern china. We also found a grooved stone that could have functioned as a net sinker (Figure 6.10). The stone measures 7.2 by 7.1 by 4.4 cm (Lot 2921). In 2012, a stone bead was found on the surface (Figure 6.11).



**Figure 6.10.** A grooved stone from the Parcela Site.



**Figure 6.11.** Stone bead found on the surface of the Parcela Site.

## Abraham Gonzalez Site

Ch-270 is a short distance upriver from the pueblo of Abraham Gonzalez, on the north bank of the main river channel, at an oxbow. Features such as hearths and pits are visible in the river bank. The north side of the river is perhaps 3 m higher than the south bank at this location, so flooding usually would not have been a problem. When we first visited the site in 1999, artifacts were abundant on the surface but there was no visible mound. We were told by the farmer that polychrome pottery had been found, so we expected this to be a Medio period site—as our surface collection indicates. The latter includes 135 sherds: 89 undecorated (65.9 percent), three black (2.2 percent), 22 red-slipped (16.3 percent), one red-on-brown (0.7 percent), four textured (3.0 percent), 15 Babícora Polychrome (11.1 percent), and one Jornada Polychrome (0.7 percent). One Babícora Polychrome had widely spaced lines, a variant we think is late. We also collected a net sinker, a mano, a projectile point, two pendants, and a sherd spindle whorl. Figure 6.12 shows additional flaked stone items collected in 2008, and provides a good sense of how expediently shaped the local arrow points can be.



**Figure 6.12.** Surface artifacts collected at the Abraham Gonzalez Site in 2008. Lot 2720.

In 2005, a GPR survey appeared to show two or three circles that could have been Viejo period houses. A second GPR survey in 2010 confirmed the imagery of 2005 and showed a possible third feature. Testing in 2010 failed to find any of the features suggested by the GPR work and by then surface artifacts were no longer abundant. A cache of 32 Apache tears, a couple of hearths and dispersed artifacts were found in the 2010 testing, but no architecture (Kelley et al. 2012). Additional Babicora Polychrome sherds and a Villa Ahumada Polychrome sherd were found during this testing, but so were Viejo period red-on brown and Santa Ana Polychrome sherds. The site may have been used sporadically to exploit riverine resources during the entire local Chihuahua culture occupation.

## Chapter 7

### THOUGHTS ON THE MEDIO PERIOD

The PAC's contribution to northwest Mexican archaeology has been, in part, to paint previously blank spots on the archaeological canvas. The narrative we can present for the southern zone involves a widespread Medio period occupation, characterized by adobe room blocks and polychrome pottery, derived from an equally widespread Viejo period occupation (with pit houses and, by the end, polychrome pottery directly ancestral to Babícora). A large series of radiocarbon dates, along with the occasional trade sherd, indicates that the Medio period started and ended at roughly the same time in both the northern and southern zones.

Michael Whalen and Paul Minnis are now considering an account of the end of the Medio period which correlates that period to a ritual system, of which Ramos polychrome is one expression. Both the belief system and its expressions abruptly disappeared when the key site of Paquimé came to an end. This narrative draws on Mitchel Hendrickson's (2003) insights into Chihuahuan polychromes; Hendrickson distinguishes the more generalized and long-lasting polychromes (his Horizon A) from the symbolically laden Ramos Polychrome that appeared about 1300 (his Horizon B). Whalen now reasons that a post-Paquimé period (in which the Medio ritual system was seen to have failed), would look a lot like the Medio before the rise of Paquimé. In this new interpretation the Medio period could have continued after the fall of Paquimé, but in simpler, smaller communities dispersed across the landscape. There need not have been a complete population collapse at the end of the Medio period, and continuity into the historical period is a real possibility. Whalen believes that he now has evidence for a post-Paquimé Medio period occupation.

It is difficult to evaluate Whalen's hypothesis against the information from the southern zone. We don't have a Paquimé that collapsed, nor do we have evidence of ritual intensity to match that of the Medio period in and near Paquimé. Although we counted some sherds as Ramos Polychrome, they mostly lack representations of human or of supernatural figures such as horned serpents. The occasional button or circle motifs seen on Babícora and Ramos Polychrome sherds is more typical of southern zone design motifs. The PAC study area may have shared the northern Chihuahua culture area's fascination with macaws; the stylized macaw head motif occurs now and again on Babícora Polychrome, a scarlet macaw appears in a petroglyph panel at the Fresno site, and macaw pen stones (if that is what they are) occur throughout the southern zone and into the Bustillos basin to the south. Until we find remains of macaws, however, arguing for southern zone macaw aviculture is a stretch. On the whole, local evidence for the ritual system seen at Paquimé is weak to lacking.

The Medio period radiocarbon dates obtained by the project are in line with the idea that the period ended no later than 1450 (see Phillips and Gamboa 2015). A few 2 sigma date ranges extend beyond 1450, but we found no evidence to support a Chihuahua culture occupation that extended to the arrival of the Spanish. The apparent depopulation of the Bustillos Basin at the start of the Medio period is a reminder that demographic variability (for reasons including migrations) is not be underestimated.

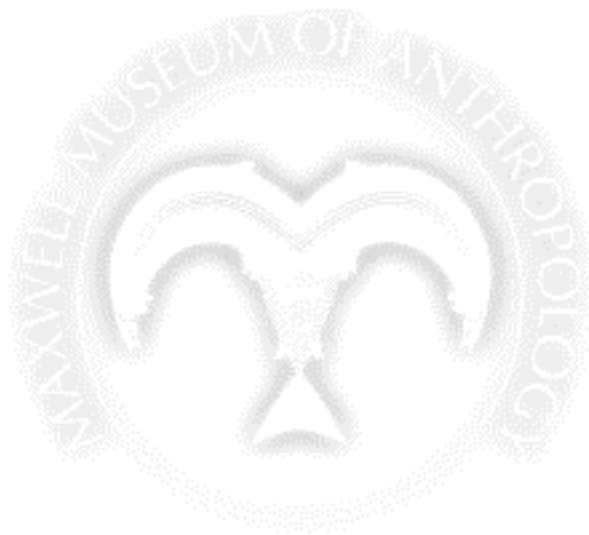
The project results indicate that the northern and southern zones of the Chihuahua culture were more similar in the Viejo period than in the Medio. To put it differently, the trajectories of the two zones diverged through time. In the north, Paquimé emerged as a center, exotic materials and even exotic birds became common, and Ramos Polychrome emerged as a new and distinctive pottery type, sometimes in the form of masterpieces crafted by specialists. It is easy to conclude that during the Medio period, at least part of the northern zone (but probably not all of it; see Whalen and Minnis 2001, 2009) constituted an interaction sphere centered, at least ritually, on Paquimé. In contrast, the southern zone remained “countrified.” We are now aware of large sites such as La Raspadura and one example of public architecture (the ball court at Ciénega Apache in the Santa Clara Valley) in the south, but those were rare compared to what happened in the north. More markedly, the exotic items found repeatedly in the north are rare in the south. If there was, in fact, an interaction sphere centered on Paquimé during the Medio period, the south seems to have held back from that interaction sphere—and as one consequence, mostly missed out on the exotics distributed within the interaction sphere.

It is not clear whether the southern detachment from events in and around Paquimé was due to remoteness or to decisions to not participate. Although many past inferences about the Chacoan phenomenon, north of the border, were positive (for example, it allowed resource sharing in an uncertain environment), we hear rumblings about that phenomenon’s possibly less savory aspects (see Fowles 2013 and Wilcox 1993, for example) . Are similar doubts around the corner for Paquimé? In particular, will Paquimé shift from being a locus for ancestor worship, or for pilgrimages, to an unequal system that people may not have wished to join?

In part, PAC’s contribution has been to deflate notions of what southern zone archaeology should look like, based on theories of what was happening to the south or north. Nothing in the PAC data reveals a hegemonic system controlled from Paquimé, as Charlie Di Peso so eloquently argued for after his work at that site. Nor do we see any evidence of J. Charles Kelley’s mobile Mesoamerican merchants; if they passed through, they carefully avoided trading any of their goods to the good people of west-central Chihuahua. More generally, the PAC evidence for any sort of Mesoamerican role in the area is abysmal. With the possible exception of one sherd and several molded *malacates* or spindle whorls, the goods that made life worth living, in Mesoamerica—tripod vessels and legged metates, obsidian prismatic blades—simply didn’t make it to the PAC study area. The Medio period material culture of the southern zone is thoroughly, even boringly, like that of the Northwest/Southwest as a whole.

I cannot close without commenting on a newer theory of outside connection, in which Medio period culture was derived from a southward migration of Chaco Canyon’s former elite. Steve Lekson’s (1999) arguments depended on the existence of a relative demographic vacuum in the Chihuahua culture area before the Medio period, so that his wandering Chacoans could find a place to settle and flourish. In the southern zone, at least, there was no such vacuum; instead we found evidence of a widespread Viejo period population that morphs (without anyone’s help) into an equally widespread Medio period population. This does not disprove Lekson’s hypothesis but at the same time, we are able to account for the demographic and cultural trajectory of the southern zone without help from Chaco Canyon.

The real story of the southern zone's Medio period seems to be one of mostly rural, modestly well-off, mostly insular farmers with, at most, a modest division between leaders and followers. That narrative raises questions of its own, however. Why did the local farmers not partake of the temptations of Mesoamerica to the south, for example? And why weren't they more involved in the Paquimé-centered interaction sphere to the north? If they were so successful for so many generations (perhaps a millennium or more, including the Viejo period), why did they fail? And why did that failure coincide, in time, with demographic failures across so much of the Northwest/Southwest? Clearly, the PAC only scratched the surface of the southern Medio period.



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**Appendix A**  
**DATA TABLES**

In the tables that follow, some flaked stone is “tallied.” In those cases, items were counted and often weighed, but were not subjected to further study.

**Table A.1. Ch-11: Pottery from the 1990 Collecting Areas.**

Collecting Area No.	Lot No.	Undeco-rated	Black	Red-slipped	Tex-tured	Babícora Series	Ramos Poly.	Madera Black-on-red	Villa Ahumada Poly.	Other	Total	Weight in grams
1	1172	107	5	4	10	13	2		1	10	152	148
2	1173	61	3	2	0	12		6	1		85	875
3	1174	10				3					13	265
4	1175	158	20		2	83	11			7	281	4387
5	1176	50	11			17	1				79	?
6	1203	163	1			24				1	189	1906
7	1198	23				4	1				28	176
8	1199	49	3	2	32	24				8	118	643
9	1200	40	9	7	9	6		5		2	78	319
10	1201	43	1	6		18	1				69	334
11	1202	108	18	1	3	16				5	151	759
12	1208	93	8	3	4	16	2			1	127	93
13	1210	49	5	6	3	25				5	93	267
14	1211	35	1	1		13	3			1	54	243
15	1212	122	9			29				7	167	1003
16	1219	213	22	3	6	75	17			28	364	2309
17	1214	71	4	2	4	18				2	101	706
18	1213	96	1	7	8	32	1			1	146	546
19	1215	153			7	53	1			4	218	873
20	1217	19		1		9	1				30	281
Total		1663	121	45	88	490	41	11	2	82	2553	17403+
Percent		65.4	4.8	1.8	3.5	19.3	1.6	0.4	0.1	3.2	100.0	

**Table A.2. Ch-11: Pottery from the 1991 Tests.**

<b>Prove- nience</b>	<b>Lot No.</b>	<b>Undec.</b>	<b>Black</b>	<b>Red- slipped</b>	<b>Red-on- brown</b>	<b>Tex- tured</b>	<b>Babícora Series</b>	<b>Ramos Poly.</b>	<b>Madera Black- on-red</b>	<b>Other</b>	<b>Total</b>	<b>Weight In Grams</b>
Mound A backdirt	2002	30	1			1	78			1	111	743
Mound A TT 1, Level 1	2003	12					5			2	19	43
E of Mound A, surface	2004									2	2	32
General Surface	2153					2	1	1	1		5	30
T1 L1	2160	106	108	1	5	2	37	2		1	262	608
T 1 L2	2158	38	9	4	3	1	13			2	70	188
T 2 L1	2161	21	2								23	73
T2 L2	2162	42	7	1				3	1		54	645
T2 L3	2166	85	38			1	8		1	3	136	879
T2 L4	2173	7	13	2			32				54	613
T2 L5	2197	33	6			6	4		1		50	237
T2 L5, Feature 1	2198	3									3	74
T2 L6	2199	42	7			1	14	1		1	66	168
T3 L1	2180	134	10	2		1	42	1		2	192	638
T3 L2	2200	16	1			1	4			1	23	84
T4 L1	2201	43	4	1	2	3	4				57	220
T4 L2	2202	27	4	3	1	1	9				45	136
T 6 L 1	2245	5					20				25	116
T6 L 1	2210	16	8	1						2	27	194
T7 L2	2220	9					77		2		88	1163
T8 L1	2221	164	92	1			26	1	3	1	288	29089
T9 L1	2215	1				1	1				3	16
T10 L1	2262	1									1	8
T 10 Ext	2290	1									1	11
T 10 L2	2241	30									30	?
T 10 L2 Ext	2258	1									1	6

**Table A.2. Ch-11: Pottery from the 1991 Tests.**

<b>Prove- nience</b>	<b>Lot No.</b>	<b>Undec.</b>	<b>Black</b>	<b>Red- slipped</b>	<b>Red-on- brown</b>	<b>Tex- tured</b>	<b>Babícora Series</b>	<b>Ramos Poly.</b>	<b>Madera Black- on-red</b>	<b>Other</b>	<b>Total</b>	<b>Weight In Grams</b>
T 11 L2	2224	6					1				7	60
T11 L3	2246	4				1	1				6	31
T 12 L1	2247	3	1				1				5	18
T 13 L1	2227	15					5	1			21	65
T13 L1	2244	14				2	12	1			29	114
T13 L3	2297	21					6			1	28	145
T 13 L3	2253	1					1			1	3	23
T13 L4	2287	3			1	1	2				7	61
T 14 L1	2251		1								1	4
T 14 L2	2260					1				1	2	17
T 14, S room	2291	2	1								3	30
T 15 L1	2259	4								1	5	48
T15 L2	2226	29						1	23		53	2004
T16 L1	2261	2									2	16
T16 L2	2284	9									9	46
T16 L2	2256						1				1	3
T 16 L3	2248	1									1	?
T7 L1	2263	1					2				3	7
T 17 L2	2257	1									1	2
T 17 L3	2264							1			1	9
T 18 L1	2254	2			1						3	7
T18 L3	2285	4	2				1				7	33
T19 L1	2267	6									6	32
T 19 L3	2268	20					4	1			25	1387
Total		1015	315	16	13	26	412	14	32	22	1865	40176
Percent		54.4	16.9	0.9	0.7	1.4	22.1	0.8	1.7	1.17	99.96	

**Table A.3. Ch-11: Flaked Stone (Analyzed).**

Item	Lot No.	Provenience	Level	Description, Comments	Dimensions (cm)
Projectile point	1176-1	CA 5 mound	Surface	Stemmed, Archaic	3.3 by 2.5
Bipolar core	1176-2	CA 5 mound	Surface	Exhausted obsidian core	2.0 by 1.5
Projectile point	1197-1	CA 6	Surface	Basalt, side-notched, concave base	1.7 by 0.8
Chert flake	1197-2	CA 6	Surface	Dorsal plus ventral retouch	3.0 by 2.5 by 0.5
Basalt flake	1197-3	CA6	Surface	Edge use wear and a concave edge	2.5 by 1.5
Projectile point	1199-1	CA 8	Surface	Obsidian, side-notched, concave base, corner missing	1.3 by 1.0
Graver	1200-1	CA 9	Surface	Flake with graver end	2.9 by 2.0
Retouched flake	1200-2	CA 9	Surface	Retouch on end of flake	1.9 by 0.9
Chert flake	1201-1	CA 10	Surface	Unifacial flaking	3.0 by 2.7
Biface	1201-2	CA 10	Surface	Stemmed chert biface preform (?)	2.6 by 0.9
Biface fragment	1201.3	CA 10	Surface	Use evidence on edge	2.0 by 2.8
Bipolar core	1202-1	CA 11	Surface		Not measured
Projectile point	1208-2	CA 12	Surface	Basalt, crude, side notches, concave base, asymmetrical	1.4 by 0.9
Flake graver	1208-3	CA 12	Surface	Graver on narrow end of flake	3.8 by 2.5
Retouched flake	1208-4	CA 12	Surface	Dorsal plus ventral retouch; possible drill; chert	2.4 by 2.1
Possible broken drill	1208-5	Ca 12	Surface	Chert; end missing.	2.4 by 1.5 at base
Retouched flake	1208-6	CA 12	Surface	Dorsal plus ventral retouch along edge	1.8 by 2.5
Retouched flake	1208-7	CA 12	Surface	Obsidian	Not measured
Core fragment	1208-8	CA 12	Surface	Obsidian	Not measured
Projectile point	1210-2	CA 13	Surface	White chert, concave base	1.9 by 1.3
Retouched flake	1212-1	CA 15	Surface	Rhyolite	3.7 by 3.0
Retouched flake	1212-2	CA 15	Surface	Rhyolite; unifacial retouch and use wear	5.0 by 3.5
Retouched flake	1212-3	CA 15	Surface	Very fine retouch and use wear	3.6 by 1.7
Graver	1212-4	CA 15	Surface	Obsidian flake with retouch to form a graver point on one end	3.1 by 1.0
Obsidian	1213-2	CA 18	Surface	Fragment	Not measured
Plano scraper	1214-1	CA 17	Surface	Rhyolite	4.5 by 3.5 by 2.0
Projectile point	1216-1	CA 19	Surface	Obsidian, triangular, concave base	1.4 by 1.1
Graver	1219-1	CA 16	Surface	Rhyolite flake with graver point	2.6 by 2.0
Retouched flake	1219-2	CA 16	Surface	Chalcedony, end of a worked flake	2.2 by 1.1
Projectile point	1291	General	Surface	Basalt, triangular, concave base, tip missing	1.8 by 1.3
Projectile point	2005-1	Mound 1, E of fence	Surface	Black basalt, corner-notched, one tang missing	2.3 by 1.2 by 0.4

**Table A.3. Ch-11: Flaked Stone (Analyzed).**

<b>Item</b>	<b>Lot No.</b>	<b>Provenience</b>	<b>Level</b>	<b>Description, Comments</b>	<b>Dimensions (cm)</b>
Projectile point	2005-2	Mound 1, E of fence	Surface	Chert, side-notched, concave base, fragment	1.2 by 0.8 by 0.3
Projectile point	2005-3	Mound 1, E of fence	Surface	Chert, side-notched, concave base.	1.2 by 0.8 by 0.3
Worked flake	2160-1	Test 1	Level 1	Large rhyolite flake with edge retouch and possible graver	6.9 by 5.0 by 2.3
Projectile point	2161-1	Test 2	Level 1	Rhyolite, triangular, asymmetrical	1.9 by 1.3 by 0.4
Hammerstone	2166-2	Test 2	Level 1	Rhyolite	7.2 by 7.0 by 6.5
Projectile point	2199-1	Test 2	Level 6	Chert, fragment, remaining side not notched	2.3 by 1.1 by 0.3
Scraper	2221-1	Test 8	Level 1	Rhyolite flake scraper	4.3 by 3.6 by 1.1
Wedge	2288-1	Mound 1	Looter's backdirt	Large rhyolite flake with wedge end	7.9 by 6.2 by 1.6
Flakes	2244	Test 13	Level 1	2 chert, 7 rhyolite, 5 vesicular basalt	Not measured

**Table A.4. Ch-11: Flaked Stone (Tallied).**

Lot	Provenience	Debitage Count	Weight (grams)	Comments
2158	Test 1, Level 2	15	36	Also 2 retouched flakes (30 g), 1 core (65 g)
2161	Test 2, Level 1	7	24	Also 1 retouched flake (5 g), 1 core (15 g)
2162	Test 2, Level 2	10	30	
2166	Test 2, Level 3	27	57	
2180	Test 3, Level 1	29	76	Includes 1 piece of obsidian
2197	Test 2, Level 5	5	19	
2199	Test 2, Level 6	15	12	
2201	Test 4, Level 1	9	26	
2202	Test 2, Level 2		18	
2210	Test 6, Level 1	2	5	
2221	Test 8, Level 1	28	63	Also 1 retouched flake (7 g), 1 core (53 g)
2224	Test 11, Level 2	1	2	
2227	Test 13, Level 2	11	149	Also 1 core (583 g)
2247	Test 12, Level 1	6	21	
2254	Test 18, Level 1	1	6	
2264	Test 17, Level 3	1	7	
2267	Test 19, Level 1	7	19	
2268	Test 19, Level 3	3	73	
2284	Test 18, Level 2	1	2	
2285	Test 18, Level 1	1	1	
2286	Test 17, Level 1	2	5	
2287	Test 13, Level 4	1	3	
2297	Test 13, Level 3	2	6	Debitage includes 1 piece of obsidian. Lot also includes 1 core (125 g).

**Table A.5. Ch-11: Ground Stone.**

<b>Lot No.</b>	<b>Provenience</b>	<b>Item</b>	<b>Description</b>	<b>Dimensions (cm)</b>
1173-1	General surface	Agave knife?	Almost rectangular. One backed edge and one long beveled edge with striations parallel to the beveled edge.	9.3 by 8.3 by 2.5–4.5
1173-4	General surface	Mano fragment	Very thin mano end	8.0 by 8.0 by 2.0
1173-6	General Surface	Stone bowl	Small, ovoid	7.3 by 6.0 by 4.9
2289-1	Mound 2 Surface	Floor polisher	Triangular cross section. One highly polished surface. Weight 730 g	11.9 by 6.1 by 6.7
3002	General surface	Agave Knife?	Rectangular form with one backed lateral edge and one beveled lateral edge. Red powder residue on one surface. Pink to purple rhyolite. Weight 176 g	10.8 by 7.5 by 0.87

Table A.6. Ch-152: Pottery.

Provenience	Lot No.	Undecorated	Black	Red-slipped	Red-on-brown	Textured	Babícora Series	Ramos Poly	Madera Black-on-red	Other	Total
Surface, Mound 1	1229	54	4		1	4	25	2		5	95
Surface, Mound 4	1230	6	3	2			1			8	20
Surface, Mound 1	1232	12	3			1	4				20
Surface, Mound 2	1233			1							1
Surface, Mound 3	1231	55	1	3		1	39				99
Surface	2248						1				1
Surface	3001						3			1	4
TT1, 0–10 cm	3092	4					1				5
TT1, 0–10 cm	3093	3									3
TT1, Surface	3094	21									21
TT1, 10–20 cm	3095	4				1				1	6
TT1, S half, 10–20 cm	3096	3								1	4
TT1, S half, 20–30 cm	3097	7								1	8
TT1, N half, 20–30 cm	3098	6				1				1	8
TT1, S half, 30–40 cm	3099	7	3								10
TT1, N half, 30–40 cm	3100	4				1	1				6
TT1, 40–50 cm	3110	5	2			2	2				11
TT1, 50–60 cm	3111	15				1	2				18
TT1, S half, 60–80 cm	3112	12	9			3					24
TT1, N half, 60–80 cm	3113	4	2			2	1			1	10
TT1, 80–90 cm	3114	37	11	1		2	2				53
TT1, 90–97 cm	3115	7								7	14
Room block surface	3119	27		1		3	4		1		36
Room block surface	3120	10	3			3					16
Room block, hole in floor	3166	1									1
Room block, subfloor	3243										0
Room block, floor	3244	21	8			1	9			1	40
Room block, floor	3103	25	4				3			6	38
Room block, floor cleaning	3246	1	1							1	3

**Table A.6. Ch-152: Pottery.**

<b>Provenience</b>	<b>Lot No.</b>	<b>Undeco-rated</b>	<b>Black</b>	<b>Red-slipped</b>	<b>Red-on-brown</b>	<b>Tex-tured</b>	<b>Babícora Series</b>	<b>Ramos Poly</b>	<b>Madera Black-on-red</b>	<b>Other</b>	<b>Total</b>
Baulk removal	3247	10	3								13
TT2, 0–10 cm	3105	19				2	4				25
TT2, 10–20 cm	3101	6				1				1	8
TT2, 30–40 cm (Level 4)	3106	38	2				5			1	46
TT2, 40–50 cm (Level 5)	3107	4					3				7
TT2, 40–50 cm (Level 5)	3108	5									5
TT2, 60–70 cm	3122	5			2		2				9
TT2, 80–90 cm (Level 9)	?	5					2				7
TT2, 90–105 cm (Level 10)	3109	3									3
TT2, 105–115 cm (Level 11)	3248	10									10
TT2, Level 12	3165										0
TT2, Level 13	3250	4	1				1				6
TT2, Level 12	3249	11					1			1	13
Surface	8072						13				13
Total		471	60	8	3	29	129	2	1	37	740
Percent		63.6	8.1	1.1	0.4	3.9	17.4	0.3	0.1	5.0	100.0

**Table A.7. Ch-152: Flaked Stone (Analyzed).**

<b>Lot No.</b>	<b>Provenience</b>	<b>Item</b>	<b>Description, Comments</b>	<b>Dimensions (cm)</b>
1229-2	Mound 1, surface	Retouched and utilized flake	Rhyolite, unifacially worked	3.7 by 3.0
1229-3	Mound 1, surface	Biface fragment	Chert preform	2.0 by 3.0
1229-4	Mound 1, surface	Graver	Chert; with utilized edge	2.8 by 2.8
1229-5	Mound 1, surface	Retouched flake	Chert; bifacial edge retouch	2.0 by 2.6
1229-6	Mound 1, surface	Retouched flake	Chert ; bifacial edge retouch	1.7 by 1.4
1229-9	Mound 1, surface	Side scraper	Chert	4.2 by 3.0
1229-10	Mound 1, surface	Core	Bipolar, obsidian (Apache tear)	Not measured
1230-2	Mound 4, surface	Projectile point	Obsidian, one side notch and concave base	1.8 by 1.0
1230-3	Mound 4 , surface	Graver	Retouch on one edge to create graver	3.5 by 2.7
1230-4	Mound 4, surface	Drill fragment	Chert	2.5 by 1.0
1231-1	Mound 3, surface	Projectile point	Side-notched, concave base, tip missing. Fine-grained black basalt	1.0 by 1.2
1231-2	Mound 3, surface	Retouched and utilized blade	Rhyolite; unifacial retouch	3.4 by 1.5
1231-3	Mound 3, surface	Utilized flake	Rhyolite, retains cortex; large striking platform with unifacial retouch	3.8 by 4.0
1231-4	Mound 3, surface	Side scraper	Chert	3.3 by 3.1
1231-5	Mound 3, surface	Graver	Black basalt; retouched to create graver and a concave edge	3.1 by 2.8
1231-6	Mound 3, surface	Biface	Small white chert biface with worn working edge	3.5 by 2.8
1231-8	Mound 3, surface	Graver	Brown chert flake with hinge fracture and one worked edge	3.5 by 2.5
1231-9	Mound 3, surface	Graver	Black basalt flake with graver tip	3.5 by 1.5
1231-10	Mound 3 , surface	Retouched flake	Clear chalcedony or quartz with one edge unifacially retouched	4 by 3.2
1231-11	Mound 3, surface	Core	Gray chert	Not measured
1231-17	Mound 3 , surface	Graver	Graver made on a black basalt flake	3.5 by 2
2208	Mound1 , surface	Projectile point	Asymmetrical, side-notched, concave bottom	1.6 by 0.8 by 0.2
3001-1	Surface	Biface	White chert biface; 6 g	4.1 by 1.8 by 0.7
3104-1	Room block floor	Unifacially worked flake	Rhyolite; 3 g	3.3 by 1.7 by 0.6
3104-2	Room block floor	Bifacially worked flake	20–30 degree cutting edge; 4 g	2.0 by 2.4 by 0.8

**Table A.7. Ch-152: Flaked Stone (Analyzed).**

<b>Lot No.</b>	<b>Provenience</b>	<b>Item</b>	<b>Description, Comments</b>	<b>Dimensions (cm)</b>
3104-3	Room block floor	End bifacially worked	5 g	2.0 by 2.7 by 0.6
3105-1	TT2, 0–10 cm	Retouched and utilized flake	Siliceous basalt, bifacially prepared 30–40 degree edges	3.3 by 1.9 by 1.1
3106-1	TT2 Level 4, 30–40 cm	Bifacially retouched flake	Obsidian flake with 30–40 degree angle use edge; use wear	1.6 by 2.2 by 0.4
3115-1	TT1, Floor, 90–97 cm	Bifacially retouched flake tool	Rhyolite; 50–60 degree angle use edge; use wear. Also two polished facets (use as polishing stone?).	6.0 by 6.1 by 2.5
3167-1	Room block floor	Projectile point	Fine-grained black basalt; side-notched, slightly concave base; asymmetrical	1.4 by 0.7 by 0.2
3244-1	Room block floor	Utilized cortex flake		5.2 by 2.2 by 1.2
3247-1	Room block, removal of baulk	Utilized flake	Rhyolite secondary flake; large striking platform; distal edge use wear	2.2 by 2.6 by 0.4

**Table A.8. Ch-152: Ground Stone.**

<b>Lot No.</b>	<b>Provenience</b>	<b>Item</b>	<b>Description</b>	<b>Dimensions (cm)</b>
1231-12	Mound 3, surface	Stone bowl fragment	Light-colored granite. Original diameter ca. 16 cm. Wall from 2 to 4 cm thick. Height 8 cm, with a 6 cm deep depression. Probably ovoid.	Currently 12 by 8 by 9
1231-13	Mound 3, surface	Sandstone slab	Edges appear shaped. Small pecked area and small honing scar.	15.5 by 10.5 by 1.7–2.0
1231-14	Mound 3, surface	Stone bowl fragment	Vesicular basalt. Fragment is part of the side wall, which is 1.5 cm thick	4.5 cm along rim, 4.5 cm deep.
1232-1	Mound 1, surface	Grinding slab fragment	Sandstone. Flat slab ground on both surfaces.	8.5 by 3.3 by 2.5
1232-2	Mound 1, surface	Polisher	Heavily ground, faceted stone, triangular in cross section. Two flat sides, one of which is especially polished. Some cortex present. Secondary use as a hammerstone.	6.0 by 5.5 by 4.2

**Table A.8. Ch-152: Ground Stone.**

<b>Lot No.</b>	<b>Provenience</b>	<b>Item</b>	<b>Description</b>	<b>Dimensions (cm)</b>
1232-3	Mound 1, surface	Polisher	Fine-grained black basalt. Triangular cross section. Four polished facets. Some scratches on one face, some chipping.	5.3 by 4.0 by 4.0
1232-4	Mound 1, surface	Polisher	One polished face. Also used as a core and as a hammerstone	7.0 by 6.4 by 5.0
1232-5	Mound 1, surface	Polisher	Rhyolite pebble with one polished facet	7.5 by 6.5 by 3.0
3104-200	Room block floor	Ground stone	Flat rock with grinding on both faces. Found in corner of room (1592 g).	16.8 by 13.8 by 4.7
3104-201	Room block floor	Complete mano	One face well ground; light grinding on other side (405g).	20.5 by 12.4 by 2.7
3108-200	TT2, 40–50cm BD	Complete metate	Very vesicular basalt. Both ends of the trough are open. Grinding surface highly concave, both front to back and side to side.	43.0 by 33.0 by 13.0
3121-200	TT3, Level 8	Metate fragment	Part of one side wall and of the bottom . Weighs more than 3110 g.	24.3 by 11.8 by 6.0
3167 -200	Room block post hole	Post support	Flat pieces of rhyolite (from a broken “hatch cover rock”?) now broken into two pieces. Found at the base of a post hole. One of the fragments has a stain on one face (338 g).	16.4 by 12.0 by 2.3 (conjoined pieces)
3244-200	Room block floor	Rock on floor	Igneous. Roughly triangular (423 g).	10.1 by 7.0
3244-201	Room block floor	Mano fragment	Rhyolite. Roughly half (1045 g).	10.7 by 9.0
3244-202	Room block floor	Ground stone	Basalt. Grinding on edge (1716 g)	15.3 by 14.0 by 2.5
3245-200	Room block, Hole 3, subfloor	Mano	Vesicular basalt cobble that is fairly flat and more or less rectangular (1816 g).	18.2 by 11.8 by 7.0.

**Table A.9. Ch-151: Flaked Stone (Analyzed).**

<b>Item</b>	<b>Lot No.</b>	<b>Provenience</b>	<b>Material</b>	<b>Description, Comments</b>	<b>Dimensions (cm)</b>
Projectile point	1234-1	Surface	Black basalt	Asymmetrical triangle	1.9 by 1.3
Biface fragment	1234-3	Surface	Basalt		2.8 by 1.5
Core	1234-5	Surface	Obsidian		Not measured
Worked flake	2066-1	Test 1, Level 1	Quartzite	Unifacially worked margins	2.7 by 2.3 by 0.3
Worked flake	2066-2	Test 1, Level 1	Black basalt	Retouched edges	2.8 by 2.0 by 0.4
Bifacial fragment	2106-1	Test 1, Level 2	Pink chert	Possible base of point?	2.3 by 0.9 by 0.4
Projectile point	2106-2	Test 1, Level 2	Chert	Triangular. One corner of base missing.	2.0 by 1.1 by 0.3
Worked flake	2106-3	Test 1, Level 2	Rhyolite	Lateral edge wear	3.1 by 1.0 by 0.5
Projectile point tip (?)	2107-1	Test 4, Level 3	Rhyolite	Edges bifacially retouched	1.5 by 1.2 by 0.3
Side scraper	2111-1	Test 4, Level 4	Chert	One lateral edge unifacially retouched and utilized	3.5 by 2.8 by 0.8
Projectile point tip	2111-2	Test 4, Level 3	Chert		1.7 by 1.5 by 0.3
Worked blade	2111-3	Test 4, Level 4	Chert	Lateral edges have unifacial retouch. Both ends snapped off.	1.6 by 0.7 by 0.2
Worked flake	2111-4	Test 4, Level 4	Chert	Retouch at one end and along one lateral edge	2.5 by 0.9
Projectile point	2111-5	Test 4, Level 4	Chert	Concave base. Broken longitudinally; remaining edge serrated	1.8 by 0.8 by 0.3
Projectile point fragment	2111-6	Test 4, Level 4	Chert	Midsection	1.3 by 1.1 by 0.3
Worked flake	2111-8	Test 4, Level 4	Chert	Very curved triangular flake with unifacial edge retouch along narrow end	1.8 by 1.5 by 0.2
Primary flake	2111-9	Test 4, Level 4	Black basalt	Large striking platform. No reworking.	2.2 by 1.9 by 1.8
Projectile point	2119-2	Test 4, Level 7	Black basalt	Broad straight base. Tapering, asymmetrical .	1.0 by 1.1 by 0.3

**Table A.10. Ch-151: Flaked Stone, 1992 (Tallied).**

<b>Lot No.</b>	<b>Provenience</b>	<b>Flakes (Weight)</b>	<b>Worked Flakes (Weight)</b>	<b>Cores (Weight)</b>	<b>No. of Obsidian Items</b>
2084	Test 4, Level 1	129 (322 g)	4 (9 g)		1
2107	Test 4 Level 3	31 (63 g)			2
2111	Test 4, Level 4	18 (255 g)	2 (6 g)	1 (18 )	4
2119	Test 4 Level 7	42 (65 g)	1 (5 g)	2 (16 g)	0

**Table A.11. Ch-151: Ground Stone.**

<b>Lot No.</b>	<b>Provenience</b>	<b>Item</b>	<b>Description</b>	<b>Dimensions (cm)</b>
n/a	Test 2, Levels 4 and 5	Metate	Complete. Deep trough with closed proximal end. Not collected.	31 by 37 by 12
2067	Surface	Pestle	Vesicular basalt. Broadens to distal end (184 g)	7.0 by 3.8–4.8 by 4.5–4.8
2072	Test 2, Level 4	Mano	Complete. Vesicular basalt (2529 g).	21.5 by 13.5 by 5.3
2073	Test 2 Level 5	Mano	Complete. Vesicular basalt. Retains irregular shape of original pebble. Grinding area almost flat across length and width, but quite convex at ends. Found sitting in the metate in Test 2.	19.0 by 8.7 by 3.0
2075-1	Test 3 Level 1	Ground stone fragment	Vesicular basalt (26 g)	4.5 by 3.3 by 1.9
2080	Test 2 Level 7	Ground slab	Flat slab that has ground area (but no depression) on one side. Possible grinding on the other side.	9.1 by 6.0 by 1.3
2148	Wall trenching of room N of Tests 2 and 4, fill	“Macaw stone”	Vesicular basalt. Flat bottom. Opening would have been more than 18 cm across.	33 by 23 by 15 ½
3999	Surface?	Stone bowl	Complete, shallow stone bowl said to be from Ch-151. Given to PAC by resident of Buenavista (640 g)	11.3 x 9.4 x 4.0

**Table A.12. Ch-156: Pottery.**

	Lot No.	Un-deco-rated	Black	Red-slipped	Red-on-brown	Black-on-brown	Babí-cora Poly.	Madera Black-on-red	Tex-tured	Other, Minor	Total	Weight (g)
<i>1990 Collections</i>	1227 1229 1230	67	7	3			13		4	28	122	1306
Other/Minor: 1 Ramos Polychrome, 18 Babícora series red-on-brown, 6 Babícora series black-on-brown, 1 black-on-red, 2 Other												
<i>1992 Collections</i>												
T 1, datum to 10 cm	3171	276	19	12	1	1	1		22	3	335	1216
Other/Minor: 1 Babícora series black-on-brown, 2 Other												
T 1, surface to datum	3172	63	7	4			1		1		76	277
TT2, surface leveling	3163	30		2					2		34	183
TT3, surface leveling	3174	214	24	13	1	12	3		12		279	1182
TT3, S half, 0–10 cm	3175	79	6	6	1				4		96	534
T 1A, 20–30 cm	3176	50	10						5	1	66	258
Other/Minor: 1 Babícora series red-on-brown												
T1A, 10–20 cm	3177	191		8	2		5			3	209	745
Other/Minor: 1 black-on-red, 2 Other												
TT3, S half, 40–50 cm	3178	9							1		10	48
TT2A, L2 10–20 cm	3179	39	6	3					4		52	380
T1A, 0–10 cm	3180	161	3	5			1		15		185	560
T1, 10–20 cm	3181	270	14	6	1		2	1	18	2	314	1191
Other/Minor: 2 Babícora series red-on-brown												
T1, 30–40 cm	3182	25	6				1		2		34	
T3A, L1, 20–30 cm	3183	41	7	7			1	1	4		61	587
T1, 40–50 cm	3184	9	5								14	52
T1, 50–70	3185	5	2								7	13
TT3, S half, 30–40 cm	3186	16	2				1		2		21	117
TT3, S half, 20–30 cm	3187	26	6						4	1	37	126
Other/Minor: 1 Babícora series black-on-brown												
TT3, S half, 10–20 cm	3189	39	5	2			3		4		53	299
TT2A, 10 E 20–25 cm	3308	15	1								16	48
TT2A surf. cleaning	3251	10							1		11	138
TT2A	3252	6	1								7	56
TT2A, 0–10 cm	3253	24	2	3					2		29	228
TT2, 20–30 cm	3254	39	4						2	1	46	438

**Table A.12. Ch-156: Pottery.**

	Lot No.	Un-deco-rated	Black	Red-slipped	Red-on-brown	Black-on-brown	Babí-cora Poly.	Madera Black-on-red	Tex-tured	Other, Minor	Total	Weight (g)
Other/Minor: Babícora series black-on-brown												
TT2, 30–40 cm	3255	19	2								21	118
TT2, 10–20 cm	3256	9	1	1							11	43
TT1, 20–30 cm	3257	112	11	3			1		9		136	650
TT1A, surf. to datum	3259	128		5			4		10	1	148	304
Other/Minor: 1 Babícora series black-on-brown												
TT3, 0–10 cm, N 1/2	3260	81	2			1			5		89	537
TT3, 10–20 cm, N 1/2	3261	27	2								29	116
TT3, 20–30 cm, N 1/2	3262	15	5								10	92
TT3, 30–40 cm, N 1/2	3263	3	1								4	16
TT3, 40–50 cm, N 1/2	3264	8							2		10	45
TT3, 50–60 cm, N 1/2	3265	4									4	8
TT3A, surf. leveling	3266	40	1	1	1		2		5		50	310
TT3A, 20–30 cm	3267	20							1		21	71
TT3A, 30–40 cm	3268	18	3		1		1				23	108
TT3A, 40–50 cm	3269	11									11	45
TT2B, 40–50 cm, W 1/2	3271	1									1	6
10N 12E, Level 2	3272	38	2								40	88
10N 12E, Level 2	3274	19	4								23	102
13N 13E, 15–20 BD	3275	7							5		12	50
TT2B, 20–30 cm, W 1/2	3276	2									2	23
TT2B, 50–60 cm	3277	3	1								4	24
TT2C, surf. leveling	3279	6	1								7	22
TT3 60–70 cm, N 1/2	3296	9	1				1		1		12	33
TT2D, 0–10 cm	3297	10	4			1			1		16	120
TT2C, 10–10 cm	3298	4	3								7	68
TT2E 0–10 cm, E 1/2	3300	3									3	10
12N 9E & 12N, 14E	3301	11									11	34
13N 13E, 20–30 cm	3302	7	2								8	126
13N 13E, 30–35 cm	3303	10	1								11	272
13N 13E, 40–45 cm	3306	23		1					1		25	97

**Table A.12. Ch-156: Pottery.**

	Lot No.	Un-deco-rated	Black	Red-slipped	Red-on-brown	Black-on-brown	Babí-cora Poly.	Madera Black-on-red	Tex-tured	Other, Minor	Total	Weight (g)
12N 10 E, NE quadrant, 10–15 cm	3307	2									2	3
TT2A, 30–40 cm	3311	2	1								3	15
TT2A, 40–50 cm	3312	3									3	11
10N 12E, Level 1	3313	3									3	2
TT2B, surf. leveling	3314	3	1						1		5	38
TT2B, 10–20 cm, W 1/2	3315	4									4	125
TT2B, 10–20 cm	3316	3	1								4	14
TT2B, 0–10 cm, W 1/2	3317	8	3						1		12	126
TT2B, 0–10 cm, E 1/2	3318	8								1	9	83
Other/Minor: 1 Villa Ahumada Polychrome												
TT2B, 20–30 cm, E 1/2	3319	5	1				1			1	8	43
Other/Minor: 1 Babícora series black-on-brown												
TT2B, 30–40 cm, E 1/2	3320	3									3	20
TT2B, 30–40 cm, E 1/2	3321	2									2	20
TT2B, 50–60 cm, E 1/2	3322	1								11	12	458
Other/Minor: 11 Other												
TT2B, 50–60 cm, E 1/2	3323		1								1	3
11N 10E, 15–25 cm	3324	11		1							12	24
11N 10E, 30–35 cm	3325	17	3	2						1	23	54
Other/Minor: 1 Other												
11N 10E, 35–45 cm	3326	16	8						43		67	382
TT2D, 10–20 cm	3337	8	4				1				13	73
TT2E, 0–10 cm, W 1/4	3339	12	2						1		15	61
TT2C, 30–40 cm, E 1/2	3340	1							1		2	15

**Table A.12. Ch-156: Pottery.**

	Lot No.	Un-deco-rated	Black	Red-slipped	Red-on-brown	Black-on-brown	Babí-cora Poly.	Madera Black-on-red	Tex-tured	Other, Minor	Total	Weight (g)
TT2D, 20–30 cm	3341	9							1		11	57
TT2D, 40–50 cm, floor	3342	19	1						1		21	300
TT2C, 50–60 cm, W 1/2	3343	4									4	34
TT2C, 20–30 cm, W 1/2	3346								1		1	17
TT2C, 20–30 cm, E 1/2	3347	4	1								5	44
TT2C, 30–40 cm, W 1/2	3348	3	1								4	65
TT2C, 10–20 cm W 1/2	3349	13	1								14	225
TT2C, 40–50 cm, W 1/2	3350	5							1		6	526
TT2C, 10–20 cm, E 1/2	3351		1								1	7
TT2F, 0–10 cm	3352	1									1	4
TT2F, Surface	3353	2	3						2		7	38
12N 10 E, SE 1/4, 25–35 cm	3354	1									1	9
TT1B, Level 2	3355	346	46	19					9	1	421	1238
Other/Minor: 1 Babícora series black-on-brown												
13N 10E, 25–35 cm	3356	7									7	76
13N 13E, 50–55 cm	3357	13	9						1		23	179
13N 13E, 15–25 cm	3358	3	4	1							13	36
11N 1E, 45–55 cm	3359	25	5	1					4		35	122
TT1B, 4–15 cm	3360	77	3	2			1			1	84	192
Other/Minor: Ramos Polychrome												
13N 13E, Level 10 (55–60 cm)	3362	5		1			1				7	45
TT2E, 10–20 cm, E 1/2	3376	12		3			8				23	824

**Table A.12. Ch-156: Pottery.**

	Lot No.	Un-deco-rated	Black	Red-slipped	Red-on-brown	Black-on-brown	Babí-cora Poly.	Madera Black-on-red	Tex-tured	Other, Minor	Total	Weight (g)
TT2E, 10–20 cm, W 1/2	3377	55								1	56	2029
Other/Minor: 1 Other												
TT2E, 20–30 cm	3379	11	1	1		1			1	1	16	240
Other/Minor: 1 Other												
TT2E, 30–40 cm, E 1/2	3380	4									4	42
TT2B, baulk removal, S wall	3381	4	3								7	62
TT2 baulk removal, all levels	3382	4									4	14
TT2C baulk removal, all levels	3383	11	1		1				1		15	138
TT2E, 0–10 cm, E 1/2	3384	11	1								12	102
TT2F, 10–10 cm	3385	6									6	58
TT2F, 10–20 cm, E 1/2	3386	3							2		5	20
TT2F, 20–30 cm, W 1/2	3387	2	1								3	21
TT2F, 20–30 cm, E 1/2	3388	7							1		8	52
TT2F, 30–40 cm, W 1/2	3389	1									1	17
TT2F, 30–40 cm, E 1/2	3390	4									4	17
TT2F, 40–50 cm, W 1/2	3391		3								3	38
TT1B, 25–45 cm	3393	491	63	10			5		13	3	585	2591
Other/Minor: 1 Ramos Polychrome, 2 Other												
Rock Alignment Area 2, W of wall	3394	3							2		5	16
Rock Alignment Area 1	3395	1	2								3	22

**Table A.12. Ch-156: Pottery.**

	<b>Lot No.</b>	<b>Un-deco-rated</b>	<b>Black</b>	<b>Red-slipped</b>	<b>Red-on-brown</b>	<b>Black-on-brown</b>	<b>Babí-cora Poly.</b>	<b>Madera Black-on-red</b>	<b>Tex-tured</b>	<b>Other, Minor</b>	<b>Total</b>	<b>Weight (g)</b>
TT2F, 50–60 cm, E 1/2	3410								1		1	9
TT2C, baulk removal, all levels	3411	6	2				1		1		10	129
TT2G, Level 1	3412	4		1							5	19
TT2E, W baulk removal	3413	1					1				2	19
Rock Alignment Area 3	3414	12	5	1					2		20	136
Rock Alignment Area 2, Floor, 40 cm	3415	15	2							1	18	50
Other/Minor: 1 Babícora series red-on-brown												
Rock Alignment Area 2, Floor, 40 cm	3416	16					2				18	2617
TT2E, surf. cleaning	3429	2									2	5
Total, 1992		3625	361	123	9	16	49	3	237	40	4463	26277
Other/Minor: 1 black-on-red, 2 Ramos Polychrome, 7 Babícora series red-on-brown, 9 Babícora series black-on-brown, 1 Villa Ahumada Polychrome, 20 Other												
<i>1996 Collections</i>												
113N 155W, baulk removal	7020	16			1	1			1		19	224
111N 157W, L1	7055	23							2		25	23
111N 153W, L1	7056	15									15	84
111N 155W, L2	7057	22		1		1			1		25	79
111N 155W, L2	7058	3		1							4	15
117N 157W, L2	7059	19		1					3		23	150
111N 157W, L3	7060	93	6	2	2		1				104	1481
11N 157W, L2	7061	61		2	1						64	283
111N 157W, L5	7062	26	3	2	1				1		33	360
111N 155W, L3	7063	19							5		24	188
117N 157W, L3	7064	9	1						1		11	80
117N 157W, L3	7065	3	1		1				1		6	46
111N 157W, L4	7066	46	1		1		2		3		53	334
Trench	7067	56		1			2		3	1	63	589

**Table A.12. Ch-156: Pottery.**

	Lot No.	Un-deco-rated	Black	Red-slipped	Red-on-brown	Black-on-brown	Babí-cora Poly.	Madera Black-on-red	Tex-tured	Other, Minor	Total	Weight (g)
111N 153W, L1	7071	81									81	7258
102N 54W, fill	7072		7								7	30
111.80 151.25W, L1	7073	8									8	731
113N 153W, NE quarter, L1	7075	21									21	318
111N 153W, L1	7076	33			1				1		35	300
113N 153W, L1	7077	44					1		1		46	444
115N 157W, L1	7078	37	1	1			1		2		42	423
111N 157W, L4	7079	26	2		1				1		30	206
111N 155W, L5	7080	25	8						1	1	35	203
117N 159W, L1 to floor	7081	43	6	3			1		13	1	67	527
117N 159W, inside wall	7082	13							2		15	91
113N 157W, L4	7063	29			1				1		31	195
111N 151W, E half, L1	7084	6									6	51
113N 155W, L1	7085	35	2				2				39	236
113N 157W, L1	7087	27	9	5					9		50	380
Feature H, roasting pit	7088	34					4		2		40	498
111N 151W, L1	7089	8									8	568
113N 155W, L1	7092	5									5	76
11N 151W, L1	7093	26		2	1		1		5		35	236
115N 151W, L1	7074	6	1								7	36
115N 155W, L1	7075	13		1					3		17	105
113N 151W, L 1	7097	1									1	?
115N 155W, L1	7078	4							4		8	80
115N 153W, L1	7079	8							1		9	27
113N 151W, SE quarter, L3, floor	7101						2				2	5
Trench fill, L1	7104						1		2		3	56
Trench fill, L2	7105	6					2		1		9	95
Feature H, roasting pit	7106	11	2	1				1	1		16	358

**Table A.12. Ch-156: Pottery.**

	<b>Lot No.</b>	<b>Un-deco-rated</b>	<b>Black</b>	<b>Red-slipped</b>	<b>Red-on-brown</b>	<b>Black-on-brown</b>	<b>Babí-cora Poly.</b>	<b>Madera Black-on-red</b>	<b>Tex-tured</b>	<b>Other, Minor</b>	<b>Total</b>	<b>Weight (g)</b>
113N 157W, Level 2, above floor	7108	3							2		5	42
113N 151W, Level 2, near floor	7109	1									1	4
117N 117W to 161N 163W	7119	15			1				1		17	103
113N 155W, balk removal	7020	16			1	1			1		19	224
113N 157W, balk removal	7121	14							1		15	30
117N 155W, W half, L1	7122	4							2		6	66
111N 151W, L1	7123	14			1						15	100
111N 151 W, L 1	7124	1									1	54
113N 151W, S third, L3, floor	7125	6					1				7	72
156N 153W, L1	7126	6							2		8	51
113N 155W Soil Column	7127	2									2	77
111N 159W, stratigraphic test	7128	2							1		3	15
Feature A fill	7129	1									1	48
Room 1, wall cleaning	7132	26									26	96
Room 1, floor	7134	2									2	10
113N 152W, Feature C, posthole	7135	10							1		11	135
Structure 3W, wall tracing	7131	17									17	558
Room 7, wall tracing	7137	7									7	262
Feature L; below floor in Pit L	7138						1				1	32
111N 155W, Plaza	7139	3									3	63
115N 159W, L1	7140	29	2		1	2			3		37	183
Feature B (below	7143	2							1		3	61

**Table A.12. Ch-156: Pottery.**

	Lot No.	Un-deco-rated	Black	Red-slipped	Red-on-brown	Black-on-brown	Babí-cora Poly.	Madera Black-on-red	Tex-tured	Other, Minor	Total	Weight (g)
hearth base)												
Feature B, hearth fill	7144	3							1		4	59
Feature O, hearth fill	7151	3									3	21
Structure 3W, wall tracing	7153	5							2		7	205
Feature D, subfloor pit in Room 1	7154	1									1	?
115N 161W, L1	7156	18		41			4		1		64	1146
Next to unexcavated pit feature K?	7158	13									13	1891
Total, 1996		1169	52	64	14	4	26	1	89	3	1422	22848
	Other/Minor: 3 Other											
Grand Total		4861	420	190	23	20	88	4	330	71	6007	50431
	Other/Minor: 2 black-on-red, 3 Ramos Polychrome, 25 Babícora series red-on-brown, 15 Babícora series black-on-brown, 1 Villa Ahumada Polychrome, 25 Other											
Percent		80.9%	7.0%	3.2%	0.4%	0.3%	1.5%	0.1%	5.5%	1.2%	100.0%	

**Table A.13. Ch-156: Flaked Stone (Analyzed).**

Item	Lot No.	Provenience	Material	Description	Dimensions (cm)
Projectile point	1227-1	Surface	Obsidian	Shallow side notches, concave base	1.5 by 1.3
Obsidian fragment	1227-2	Surface	Obsidian		Not measured
Projectile point	6052-1	Surface	Chert	Triangular; edge retouch only on one face.	1.8 by 1.2 by 0.4
Projectile point	7013	117N 157W, Level 1, Room 1	Silicified shale?	Broken point, broad base; serrated on remaining edge. Either stemmed or shallow corner notches	2.3 by 1.2 by 0.4
Projectile point	7013	117N 157W, Level 1, Room 1	Obsidian	Widest at convex base. One side notch; other side missing.	1.2 by 0.8 by 0.3
Projectile point	7059	111N 157W, Level 3, Plaza	Obsidian	Tip only	1.3 by 0.8 by 0.3
Projectile point	7063-1	111N 155W, Level 3, Plaza	?	Side-notched; slightly concave base	1.9 by 1.2 by 0.4
Projectile point	7068-1	111N 155W, Level 4, Plaza	Chert	Shallow side notch on one side, no side notch on other side. Concave base	1.8 by 0.8 by 0.3
Projectile point	7068-2	111N 155W, Level 4, Plaza	?	Side notched with concave base. Broken across base.	1.8 by 1.1 by 0.3
Projectile point	7068-3	111N 155W, Level 4, Plaza	Obsidian	Triangular; slightly concave base; complete	1.5 by 0.9 by 0.3
Projectile point	7070-1	117N 159W, fill to floor; north of wall	Obsidian	Tip only	1.9 by 1.4 by 0.6
Worked core	7071	111N 153W, Level 1, pot contents	Chert	Four-sided core with retouched and used edge	4.6 by 1.9 by 1.4
Worked flake	7071	111N 153W, Level 1, pot contents	Rhyolite	Flake. Striking platform has very fine edge wear on one side	3.8 by 2.2 by 0.6
Projectile point	7077-1	113N 153W, Level 1	Chert	Basal "ear," on one side only	1.0 by 0.8 by 0.2
Projectile point	7093-1	111N 153W, Level 1	Chert	Asymmetrical triangular; convex base	1.2 by 0.8 by 0.3
Hammerstone	7134	Room 1 floor	?	Well-used	6.9 by 6.6. by 6.1
Biface	7140	115N 159W, Level 1	Chert	Biface with rounded end	Not measured

**Table A.14. Ch-156: Ground Stone (Collected).**

<b>Lot No.</b>	<b>Provenience</b>	<b>Item</b>	<b>Description</b>	<b>Dimensions (cm)</b>
3173	TT2, Level 1	Mano end	Basalt	7.3 by 9.9 by 3.1
3173	TT2, Level 1	Ground stone fragment	Vesicular basalt; possibly part of a metate	5.7 by 7.3 by 4.7
3174	TT3, Level 1	Grooved stone	Stone with narrow grooves on both faces; possibly for honing (115 g)	6.3 z 5.0j by 2.1
3179	TT3A, Level 2	Mano	Vesicular basalt; complete; one grinding face	9.8 by 6.6 by 3.7
3181	TT1, Level 2	Ground stone fragment	Vesicular basalt	5.0 by 3.2 by ?
3183	TT3A, Level 1	Mano	Vesicular basalt; complete; thin, with two grinding faces.	12.6 by 9.2 by 2.7
3183	TT3A, Level 1	Ground stone fragment	Vesicular basalt; possibly a mano end; ground on all unbroken surfaces	9.2 by 2.9 by 4.1
3252	TT3A, Level 1	Ground stone fragment	Rhyolite; ground on two sides	3.6 by 2.6 by 3.1
3254	TT2, Level 3	Mano fragment	Vesicular basalt; very thin; worn on two sides (131 g)	10.6 by 4.9 by 2.3
3257	TT2A, surface	Mano fragment	Vesicular basalt; very thin; wedge-shaped profile (378 g)	8.8 by 8.8 by 1.1–3.3
3302	Rock alignment area, Levels 3 and 4	Mano	Rhyolite; large, complete; more or less rectangular; ground on two faces (2044 g)	20.4 by 13.3 by 5.1
2213	Rock alignment area, Level 1	Ground stone fragment	Andesite; ground on one face (69 g)	8 cm across
3322	TT2B, Level 5	Metate fragment	Vesicular basalt; trough portion (1827 g)	20.2 by 13.6 by 5.6
3337	TT2B, Level 2	Metate fragment	Vesicular basalt; trough portion (1660 g)	15.2 by 17.2 by 7.2
3341	TT2D, Level 3	Mano	Basalt; complete; thin (1438 g)	19.3 by 12.5 by 2.2–4.9
3342	TT2D, Level 5	Mano	Basalt; complete; one convex grinding face (1763 g)	19.0 by 12.0 by 5.1
3343	TT2C, Level 5	Metate fragment	Vesicular basalt (3 Kg)	14.0 by 12.0
3344	TT2C, east third, Level 6	Cylindrical pestle	Pink basalt; broken longitudinally (271 g)	10.7 by 4.5 by 3.5–4.0

**Table A.14. Ch-156: Ground Stone (Collected).**

<b>Lot No.</b>	<b>Provenience</b>	<b>Item</b>	<b>Description</b>	<b>Dimensions (cm)</b>
3381	TT2B, balk removal, south wall	Mano	Vesicular basalt; complete; ground on one face; . Wedge shaped profile (1293g)	17.0 by 11.8 by 3.3–4.4
3415	Rock alignment, floor	Mano	Basalt; ground on one face (1084 g)	13.3 by 9.1 by 5.3
3415	Rock alignment, floor	Mano end	Basalt (347 g)	8.6 by 5.4 by 4.2
3415	Rock Alignment area, floor	Metate fragment	Vesicular basalt; basin-shaped; proximal end broken (2586 g)	17.3 by 13.1 by 5.7–6.9
6052	Surface	Polishing stone	Chert pebble with flat polishing facet that measures 1.5 by 0.6 cm.	2.3 by 1.3 by 0.8
7059	111N 157W, Level 3	Mano?	Basalt pebble with grinding on one face	8.3 by 5.4 by 3.7
7087	113N 157, Level 1	Mano fragment	Basalt	9.4 by 5.4 by 2.5
7090-1	111N 151W, NW quadrant, Level 1	Polishing stone (?)	One side used for polishing	10.7 by 8.3 by 6.3
7100-1	111N 151W, NW quadrant, Level 3, floor, Room 5	Polishing stone	Banded translucent pebble; end flattened and polished	2.6 by 2.3 by 1.9
7134	Room 1, floor	Polishing stone	Fine-grained vesicular basalt; one highly polished face	7.9 by 3.9 by 4.1
7138	Feature L, subfloor pit, Room 1	Mano fragment	Vesicular basalt; probably about ¾ of mano	13.7 by 10.0 by 4.2
7152	115N 161W, Feature P, floor, Room 7	Mano fragment	Extremely worn	10.5 by 7.2 by 1.4

**Table A.15. Ch-156: Ground Stone (Not Collected).**

(In keeping with instructions from INAH, these items were reburied in the room in which they were found.

Dimensions are given in this order: length, width, thickness.)

Field No.	Provenience	Item	Dimensions (cm)	Comments
1	Room 4, floor	Complete mano	21 by 15 by 3–7	Single grinding face covers entire length. Vesicular basalt.
2	Room 4, floor	Complete mano	19.6 by 9.5–11.0 by 5.0	Single grinding face covers entire length. Vesicular basalt.
3	Room 4, floor	Complete mano	23.5 by 14.0 by 10.0	Single grinding face covers entire length. Vesicular basalt.
4	Room 4, floor	Whole metate	59 by 21–28 by 10–13	Trough with closed proximal end. Vesicular basalt.
5	Room 4, floor	Complete mano	21 by 15 by 8	Very convex grinding surface. Vesicular basalt.
6	Room 4, floor	Complete mano	19 by 13 by 8	Fine-grained basalt
7	Room 4, floor	Complete mano	19.5 by 12.5 by 7.0	Two grinding facets at an angle to each other. Fine-grained basalt.
8	Room 4, floor	Mano fragment	9.8 by 11.0 by 7.5	Two grinding surfaces
9	Room 4, floor	Shaft straightener	8.5 by 6.7 by 4.8	Groove extends longitudinally across middle of top of stone
10	Room 4, floor	Shaft straightener	9.0 by 9.0 by 5.0	Groove runs across one end of stone. Probably made on a mano fragment.
11	Room 4, floor	Polishing stone	13.0 by 9.0 by 4.5	Top and bottom faces very flat and polished
12	Room 4, floor	Polishing stone	9.8 by 7.0 by 4.2–4.4	Wedge-shaped, with two polished faces.
13	Room 4	Complete mano	20.5 by 13.0 by 6.0	Wedge-shaped, with two grinding faces
14	Room 4	Complete mano	19.5 by 10.7 by 4.5–5.0	Single grinding face
15	Room 4	Stone bowl	19.5 by 15.5 by 9.0–10.0	Oval bowl. Vesicular basalt. Bowl depression: 14.9 by 11.0 by 4 cm.
16	Room 4	Compete Mano	21.5 by 14.0 by 7.0	Single grinding face. Vesicular basalt. Very worn.
17	Room 1, floor just inside south wall	Complete mano	22 by 14.5 by 8.0	Wedge shaped. Very little use wear. Vesicular basalt.

**Table A.15. Ch-156: Ground Stone (Not Collected).**

(In keeping with instructions from INAH, these items were reburied in the room in which they were found.

Dimensions are given in this order: length, width, thickness.)

Field No.	Provenience	Item	Dimensions (cm)	Comments
18	115N 157W, Room 1 floor, from pit	Mano fragment	11.5 by 10.5 by 3.0	One grinding face. Fine-grained vesicular basalt.
19	Room 1 floor, Feature B	Mano	21.8 by 13.5 by 8.5	Single grinding face.
20	Room 1 floor, NE of fire pit	Mano (?)	14.5 by 14.2 by 6.5	More or less square stone that was ground
21	115N 159W, Room 1 floor	Mano	24 by 12 by 6	
22	113N 157 W, Plaza area, next to outside wall of Structure 3	Mano	19.0 by 13.5 by 3.5	Convex grinding face has two facets. Fine-grained vesicular basalt.
23	Plaza area, Feature A (exterior hearth)	Mano fragment	14.2 by 8.0 by 6.0	Single grinding face
24	Plaza area, Feature A (exterior hearth)	Mano fragment	12.5–13.0 by 8.0 by 4.5	Coarse vesicular basalt. Completely worn.
25	Plaza area, Feature A (exterior hearth)	Mano midsection	7.0 by 11.0 by 4.0	Single grinding face
26	Plaza area, Feature A (exterior hearth)	Complete mano	11.8 by 9.7 by 4.3	Single grinding face
27	Plaza area, backdirt from 1992 excavation	Small grinding stone	11.8 by 8.5 by 4.0– 5.5	One-hand size, two grinding faces. Slightly wedge-shaped in profile.

**Appendix A.16. Ch-156: Two “Hatch Cover Rocks.”**

<b>Lot No.</b>	<b>Provenience</b>	<b>Description</b>	<b>Dimensions (cm)</b>
7065	1117N 157W, Level 3, south of wall in Plaza	Rhyolite slab. More or less triangular. Broad end shaped by flaking. Fragment of larger slab.	11.9 by 5.4 by 1.9
7087	113N 157W, Level 1, south of wall in plaza	Broken rhyolite slab	7.6 by 7.3 by 2.5

**Appendix A.17. Ch-156: Flaked Stone (Tallied).**

<b>Lot No.</b>	<b>Provenience</b>	<b>Flakes</b>	<b>Cores</b>	<b>Materials, Comments</b>
7012	111N 155W, Level 1	23		7 basalt, 7 rhyolite, 8 chert, 1 obsidian
7013	117N 157W, Level 1	8		6 chert, 1 rhyolite, 1 other igneous
7055	11N 157W, Level 1	30	2	6 chert, 2 quartz, 10 rhyolite, 14 other igneous
7056	111N 153W, Level 1	4		2 rhyolite, 2 other igneous
7057	111N 155 W, Level 2	19		3 chert, 2 quartz, 8 rhyolite, 6 other igneous
7058	117N 157W, Level 2	9		1 chert, 5 rhyolite, 3 other igneous
7059	111N 157W	41	1	7 chert, 13 rhyolite, 22 other igneous
7061	111N 157W, Level 2	41		5 chert, 14 rhyolite, 22 other igneous
7062	111N 153W, Level 5	30		11 chert, 4 rhyolite, 13 other igneous, 2 obsidian
7063	111N 155W, Level 3	27		8 chert, 10 rhyolite, 9 other igneous
7066	117N 157W, Level 3, N of wall	31		2 obsidian, 6 chert, 17 rhyolite, 6 other igneous
7067	Plaza trench	13	1	1 chert, 12 rhyolite, 1 other igneous
7076	111N 153W, Level 1	12		3 chert, 1 quartz, 6 rhyolite, 2 other igneous
7077	113N 153W, Level 1	55	2	14 chert, 36 rhyolite, 6 other igneous, 1 obsidian
7078	115N 157W, Level 1	46	1	8 chert, 31 rhyolite, 7 other igneous, 1 obsidian
7079	111B 155W, Level 4	8	1	7 rhyolite, 2 other igneous
7080	111N 155W, Level 5	32		5 chert, 19 rhyolite, 7 other igneous, 1 obsidian; 1 chert flake is worked.
7081	117N 159W, fill to floor	15	1	4 chert, 9 rhyolite, 1 other igneous, 1 obsidian
7082	117N 159W, fill to floor, S of wall	15	1	6 chert, 9 rhyolite, 1 other igneous
7083	115N 157W, Level 1, fill N of wall	16		4 chert, 10 rhyolite, 2 other igneous; 1 chert flake and 1 other igneous flake are retouched
7084	115N 159W, E half, Level 1	9		1 chert, 7 rhyolite
7085	113N 155W, Level 1	28	1	6 chert, 20 rhyolite, 3 other igneous
7087	113N 157W, Level 1, south of wall	22	1	2 chert, 18 rhyolite, 3 other igneous
7088	Feature H (roasting pit) fill	7		1 chert and 6 rhyolite
7089	111N 151W, Level 1	3		1 chert and 2 rhyolite
7092	113 B 155W, fill south of wall	2		1 chert, 1 rhyolite
7093	111N 151W, Level 1	31		6 chert, 23 rhyolite, 2 other igneous
7094	115N 151W, Level 1	5		3 chert, 2 rhyolite
7095	115N 155W, Level 1	12		3 chert, 9 rhyolite

**Appendix A.17. Ch-156: Flaked Stone (Tallied).**

<b>Lot No.</b>	<b>Provenience</b>	<b>Flakes</b>	<b>Cores</b>	<b>Materials, Comments</b>
7098	115N 155W, Level 1	8		2 chert, 5 rhyolite, 1 other igneous
7099	115N 153W, Level 1	3		3 rhyolite, 1 with retouch
7105	Plaza trench, fill	3		3 rhyolite
7107	111N 155W, NE quadrant of Room 4, Level 3, floor		1	Rhyolite core
7108	113N 153W, Level 2, near floor	2		2 rhyolite
7119	117N 161W, 117N 163W	5		1 chert, 3 rhyolite, 1 other igneous; 1 with edge retouch
7120	113N 155W, balk removal	6		2 chert, 4 rhyolite
7121	113N 157W, baulk removal	2		2 chert
7122	111N 155W, west half, Level 1	6		3 chert, 2 rhyolite, 1 other igneous (last with worked edge)
7123	111N 151W, Plaza	8		2 chert, 6 rhyolite
7124	111N 151 W, Level 3, Room 5	13		11 chert (from same core), 1 quartz, 1 rhyolite
7126	115N 153W Level 1, north of wall	3		1 chert, 2 rhyolite
7127	113 N 155S, removal of datum column	1		Rhyolite
7128	111N 156W, 113N 159W, strat test	1		Rhyolite flake with worked edge
7134	Room 1 floor	3		3 chert, 1 with worked edge
7134	Room 1 floor		1	Large (1864 g) chert core; same material as that seen in the 11 chert flakes from Room 5
7135	113N 152W, Feature C, post hole	7		1 chert, 5 rhyolite, 1 other igneous
7136	Wall tracing in Structure 3	1		Obsidian
7138	Feature L, subfloor pit	1		Chert with worked edges
7140	115N 159W, Level 1	19		7 chert, 11 rhyolite, 1 other igneous
7154	Feature D, from maximum depth	2		1 chert, 1 rhyolite
7156	115N 161W, Level 2	2		1 chert (with a worked edge), 1 rhyolite