

**Learning Frameworks and Technological Traditions:  
Pottery Manufacture in a Chaco Period Great House Community on the Southern  
Colorado Plateau**

By

Alissa L. Nauman

A Thesis Submitted in Partial Fulfillment of the  
Requirements for the Degree of

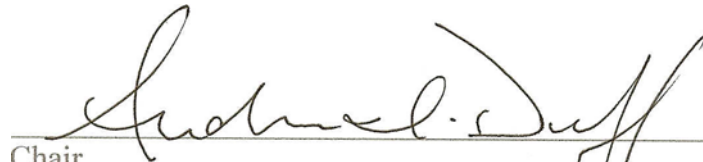
Master of Arts in Anthropology

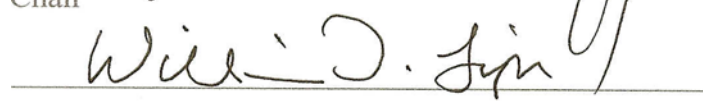
Washington State University  
Department of Anthropology


December, 2007

To the Faculty of Washington State University:

The members of the Committee appointed to examine the thesis of Alissa L. Nauman find in satisfactory and recommend that it be accepted.

  
Chair





## *Abstract*

The manufacture of ceramic wares in Chaco-era (A.D. 1000-1150) communities provides a unique opportunity to explore how women lived and portrayed their identity through the products that they produced. During this time in the southern Cibola region, people with traditions indicative of archaeological cultures residing north of the Mogollon Rim (Ancestral Puebloan) and those residing below the rim (Mogollon) were coming together and likely residing within the same communities. This is reflected in the archaeological record by the production of both brown and gray plain ware pottery. This thesis addresses one main concern; whether or not it is possible to examine women's roles within Chaco-era communities based on the production of ceramics. More specifically, I address how several attributes of the technological manufacture of ceramics can be reflective of both conscious and unconscious choices that women made and ultimately how this may reflect several aspects of the social situation that women were living within a multi-ethnic community.

In this thesis I utilize several low technological means of examining ceramic wares focused on both utilitarian and decorated wares and the ability to locally produce them. The examined attributes reflect the entire operation sequence from clay procurement to the final visible product. Subsequently, the analysis presented here allows for an interpretation of how members produced pottery at community, roomblock and household levels. The technological production of the ceramic wares is then compared to several aspects of social theory including how ethnic, kinship and gender roles are signified in material culture.

The results of the thesis suggest that at a community level, unpainted, textured pottery wares were manufactured with techniques indicative of two different learned traditions. However, at the roomblock and household levels, unpainted, textured wares were produced distinctly differently in only some areas in the community. I argue that this reflects social situations where women were participating in potting groups differently in different areas of the community, possibly resultant of post-marital residence. However, the general patterns in the distribution of the ceramic assemblage suggest that there was no restricted access in terms of ceramics wares or the raw materials used to produce them. I suggest this indicates a social setting where there was little pressure to conform to a predominant method of ceramic manufacture.

Ultimately, this thesis provides additional data to interpret Chaco-era great house communities and differences in technological manufacture. While I have found it difficult to interpret some aspects of life at Cox Ranch Pueblo and its relationship within the Chacoan landscape, I suggest that the continued exploration of social patterns via technological choices that individuals make will allow us to examine how people negotiated their role in life as reflected in the material objects they create.

### *Acknowledgements*

Many thanks to the New Mexico Bureau of Land Management, facilitated by Brenda Wilkinson of the Socorro Resource Office, the National Geographic Society (#7427-03 and 7822-05), the National Science Foundation (BCS-0514595), and Washington State University for enabling and supporting the Cox Ranch Pueblo Archaeological Project. Also much appreciation to Washington State University (2003-2005) field school students and TA's for all of their invested labor. Darin McDougal deserves special recognition for his help crosschecking databases and collecting data. Thank you to the Washington State University Department of Anthropology, Museum of Anthropology and Cedar Mesa Research Project who provided funding while completing this degree. This project could not have been possible without my committee chair Dr. Andrew Duff. Andrew, thank you for the opportunity, fun filled summers in the field, countless revisions, and your patience while I sorted this all out. Dr. Lipe, thank you for insightful and helpful comments. You are truly a guru of knowledge and I am honored to have been one of your students. Dr. Bowser, your understanding of social theory is incredible; your comments on my thesis were very helpful and really inspired me to keep plugging away.

A large amount of gratitude goes to my family for supporting and putting up with me throughout this process. Mom and Skip – Remember how I always hated it when you mentioned that dreadful “G” word? I know that at times it was difficult, but thank you for your persistence in encouraging me to set my own GOALS and your support to help me follow through. Dad and Arlinda- Though I wish I would have finished this degree

sooner, I am happy that it took awhile because I got to spend more time living near you. Thanks for bringing me back to the Northwest and supporting me through finishing my degrees. Mancos man, you're the best furry buddy a girl could have, thanks for being patient all of those days that we spent in the office. And to my partner in life, Nathan, thank you for helping me to become a check plus girl. Though at times we have distracted one another from our research, I am eternally grateful that you have been there to hold my hand every step of the way – even when you dragged it to my computer to finish this thing. I am a better person because of it. After all that the last few years have entailed, I am certain that we can make it through anything, and excited to experience together all that is to come.

## *Table of Contents*

Abstract	iii
Acknowledgements	v
Table of Contents	vii
List of Tables	xi
List of Figures	xiii
<b>Chapter One</b>	
Thesis Outline	6
<b>Chapter Two: Identity in Ceramic Materials</b>	<b>8</b>
Information used to Convey Identity	10
Ethnicity	11
Post-marital Residence	15
Matrilocal Residence	16
Patrilocal Residence	19
Multilocal/ Bilocal Residence	20
Post-marital Residence at Chaco Canyon (AD 870-1130)	20
Residence Patterns at Cox Ranch Pueblo	22
Gender and Archaeology	23
Gender Identity, Ethnicity, Residence and the Material Correlates	27
Summary	29
<b>Chapter Three: Southwestern Culture History and the Cox Ranch Pueblo Research Project</b>	<b>30</b>
Defining Cultures through Time and Space: Cultural Areas and Chronology in the American Southwest	30
Culture Areas Above and Below the Mogollon Rim	31
Living on the Periphery	34
Ancestral Puebloans Living South of the Mogollon Rim: Mogollon Culture Chronology	35
Ancestral Puebloans Living North of the Mogollon Rim: Anasazi Culture Chronology	36
Research at Chaco and the Hinterland (A.D. 1000-1150)	39
Discovery, Exploration and Continuing Research	40
Summary	46

<b>Chapter Four: Archaeological Investigation at Cox Ranch Pueblo</b>	<b>47</b>
Cox Ranch Pueblo	47
Excavation Methods and Goals	48
Midden Excavations	50
Great House Excavations	52
Excavation of Non-Great House Architecture	58
Roomblock 2	58
The Depression	61
Roomblock 7	61
Roomblocks 15 and 16	61
Summary	62
<b>Chapter Five: Ceramic Ware, Type and Form</b>	<b>63</b>
Assessing Ware, Type, and Form	63
Ware and Type	64
Vessel Form	67
The Cox Ranch Pueblo Ceramic Assemblage	68
Painted Wares	68
Cibola White Ware	68
White Mountain Red Ware	73
Unpainted, Textured Ceramics	76
Brown Ware	77
Gray Ware	80
Brown Ware versus Gray Ware	82
Summary	83
<b>Chapter Six: An Examination of Intra-Site Distribution and Chronology: The Cox Ranch Pueblo Ceramic Assemblage</b>	<b>84</b>
Frequency Seriation: Intra-site Chronology at Cox Ranch Pueblo	84
Correspondence Analysis	86
Midden Only	90
Midden and Architectural Units	93
Lowest Levels of Midden Units	96
Summary	98
Distribution of Brown and Gray Ware Jar Assemblage	100
Intra-site Distribution of Brown and Gray Ware Jars	101
Summary	104
<b>Chapter Seven: Technological Means of Assessing Ceramic Variation and Raw Material Sources</b>	<b>106</b>
Coil, Indentation Count and Sherd Maximum Thickness	107
Apparent Porosity	110
Assessment of Firing Mechanics and Paint Composition	113



Oxidation Analysis	115
Apparent Porosity of Refired Sherds	118
Assessment of Local Clay Resources	119
Workability	123
Oxidized Paste Color	123
Apparent Porosity	124
Summary	124
<b>Chapter Eight: Brown versus Gray: Learning Frameworks and Technological Production in the Manufacture of Brown and Gray Ware Jars</b>	<b>125</b>
Learning Frameworks at the Community Level	126
Coil, Indentation Count and Sherd Maximum Thickness	126
Apparent Porosity	129
Original Firing Temperature	129
Oxidation Analysis	129
Apparent Porosity and Paste Color of Oxidized Pottery	131
Raw Material Availability	
Oxidized Clay Color	133
Oxidized Apparent Porosity and Paste Color of Raw Materials and Refired Pottery	135
Learning Frameworks at the Household Level	138
Inter-household Variation	138
Intra-household Variation	140
Oxidation Analysis	144
Summary	145
<b>Chapter Nine: Availability, Production, and Restriction: Results of the Analysis of Painted Wares and Brown Ware Bowls</b>	<b>147</b>
White Mountain Red Ware, Cibola White Ware and Mogollon	147
Brown Ware Bowls	
Local Production or Trade?	150
Paste Color and Apparent Porosity of Refired Painted Pottery and Raw Materials	151
Paste Color and Apparent Porosity of Brown Ware Bowls and Raw Materials	155
A Comparative Analysis of Technological Attributes	156
Oxidized Paste Color	157
Original Apparent Porosity	159
Original Firing Temperature, Smudging and Paint Composition	160
Specialized Production or Use?	161
Inter-household Distribution	161
Oxidized Paste Color of Brown, Red and White Ware Bowls	162
Summary	164

<b>Chapter Ten: Technological Choice and the Organization of Pottery at Cox Ranch Pueblo</b>	<b>167</b>
Ceramic Technology and Ethnic, Kinship and Gender Identity	168
Unpainted, Textured Wares	169
Evidence for Kinship and Post-marital Residence	176
Painted Wares and Smudged Brown Ware Bowls	179
Conclusions	181
Future Research Concerning Ceramic Technology and the Cox Ranch Pueblo Community	182
<b>References Cited:</b>	<b>184</b>
<b>Appendix A:</b> Ceramic Tabulation Form	<b>A.1</b>
<b>Appendix B:</b> Cox Ranch Pueblo ceramic assemblage	<b>B.1</b>
<b>Appendix C:</b> Ceramic database used for correspondence analysis.	<b>C.1</b>
<b>Appendix D:</b> Database of measured attributes including coil, indentation count and sherd maximum thickness.	<b>D.1</b>
<b>Appendix E:</b> Database of measured attributes including paste color, original firing temperature and apparent porosity.	<b>E.1</b>
<b>Appendix F:</b> Results of the raw material analysis of locally gathered materials.	<b>F.1</b>

### *List of Tables*

Table 4.1	Description of midden units, excavated midden volumes and ceramic density.	51
Table 4.2	Great House provenience, size, volume of excavation, ceramic count and density.	53
Table 4.3	Roomblock 2 size, volume of excavation, ceramic count and density by unit.	60
Table 4.4	Non-Great House Areas volume of excavation, ceramic count and density.	62
Table 5.1	Ceramic Assemblage at Cox Ranch Pueblo, LA 13681.	65
Table 5.2	Cibola ceramic typologies by multiple researchers.	66
Table 5.3	Frequency and percent of Cibola White Ware types at Cox Ranch Pueblo.	70
Table 5.4	Frequency and percent of Cibola White Ware forms at Cox Ranch Pueblo.	70
Table 5.5	Frequency and percent of White Mountain Red Ware types at Cox Ranch Pueblo.	74
Table 5.6	Frequency and percent of White Mountain Red Ware forms at Cox Ranch Pueblo.	74
Table 5.7	Frequency and percent of Mogollon Brown Ware varieties at Cox Ranch Pueblo.	78
Table 5.8	Frequency and percent of Mogollon Brown Ware forms at Cox Ranch Pueblo.	79
Table 5.9	Frequency and percent of Cibola Gray Ware varieties at Cox Ranch Pueblo.	81
Table 5.10	Frequency and percent of Cibola Gray Ware forms at Cox Ranch Pueblo.	82
Table 6.1	Brown and gray ware jar counts by area as utilized in figure 6.9.	102

***List of Tables Continued***

Table 7.1	Pottery sherds sampled for indentation count, coil count and maximum thickness by ware and type.	109
Table 7.2	Counts of pottery sherds used for apparent porosity.	113
Table 7.3	Counts of pottery sherds used for original firing temperature.	115
Table 7.4	Color groups with corresponding Munsell colors.	117
Table 7.5	Counts of sampled pottery sherds used for paste color analyses.	118
Table 7.6.	Counts of sampled pottery sherds used for apparent porosity of re-fired pottery.	119
Table 7.7.	Description and location of raw material samples	122
Table 8.1.	Independent sample <i>t</i> -test results for brown and gray corrugated jars coil, indentation and sherd maximum thickness.	127
Table 8.2.	Independent sample <i>t</i> -test results for the apparent porosity of pottery and raw materials by color group.	137
Table 8.3.	Descriptive statistics of measured attributes of coil and Indentation count and sherd maximum thickness by household area.	139
Table 8.4.	Independent Sample <i>t</i> -test of measured attributes within households.	141
Table 9.1.	White Mountain Red Ware and Cibola White Ware types by oxidized color group.	153
Table 9.2.	Two sample <i>t</i> -test results for apparent porosity of Mogollon Brown Ware and White Mountain Red Ware bowls.	159
Table 9.3.	Counts and percentages of red and white wares fired in oxidized and reduced/ neutral atmospheres.	162

## *List of Figures*

Figure 3.1	Defined archaeological culture areas in the American Southwest.	32
Figure 4.1	Map of Cox Ranch Pueblo showing public architecture, roomblocks and associated middens.	49
Figure 4.2	The Great House at Cox Ranch Pueblo and excavated units.	54
Figure 4.3	Great House wall masonry exhibiting Chacoan characteristics.	55
Figure 4.4	Roomblock 2 and excavated units.	59
Figure 6.1	Ceramic chronology for groups used in CA seriation.	86
Figure 6.2	Map of Cox Ranch Pueblo highlighting Groups A-D utilized in correspondence analysis.	89
Figure 6.3	Correspondence analysis of upper, middle and lower level grouping of midden area units and diagnostic ceramic types.	91
Figure 6.4	Correspondence analysis of upper, middle, and lower level groupings of midden area units and diagnostic ceramic types displayed by spatially associated groups.	92
Figure 6.5	Correspondence analysis of upper, middle, and lower level groupings of midden and architectural area units and diagnostic ceramic types.	94
Figure 6.6	Correspondence analysis of upper, middle, and lower level groupings of midden and architectural area units and diagnostic ceramic types displayed by spatially associated groups.	95
Figure 6.7	Correspondence analysis of lower level groupings of midden area units and diagnostic ceramic types.	97
Figure 6.8	Correspondence analysis of lower level groupings of midden area units and diagnostic ceramic types displayed by spatially associated groups.	98
Figure 6.9	Percent brown and gray ware jars by area.	103
Figure 7.1	Method of analysis for indentation and coil count attributes	110

*List of Figures Continued*

Figure 7.2.	Clay raw materials gathered for study. Topographic maps Fence Lake (USGS 1981) and Quemado (USGS 1983), New Mexico, 1:100,000.	121
Figure 8.1.	Brown and gray are coil count and wall maximum thickness means with standard deviations. Figures show the overlap of each type providing evidence that they can be grouped together.	128
Figure 8.2	Cibola Gray ware and Mogollon Brown Ware jars by color group.	130
Figure 8.3.	Boxplots of apparent porosity values of refired brown and gray ware jars by oxidized color group.	131
Figure 8.4.	Percentage of raw material samples by color group.	133
Figure 8.5.	Map of red and buff firing clay samples.	
Figure 8.6.	Percentage of raw material samples within a 7 km radius of Cox Ranch Pueblo by color group.	135
Figure 8.7.	Apparent porosity of raw material and refired brown and gray ware jars by oxidized color group.	136
Figure 8.8.	Map of Cox Ranch Pueblo highlighting sampled areas where brown and gray ware jar attributes are and are not significantly different.	142
Figure 8.9	Percentage of oxidized paste color groups by household.	145
Figure 9.1.	Percentage of painted wares by color group.	152
Figure 9.2.	Percentage of raw material samples by color group.	154
Figure 9.3.	Refired apparent porosity of painted pottery and local raw materials.	154
Figure 9.4.	Unpainted, textured brown ware bowls by color group.	155
Figure 9.5.	Refired apparent porosity of unpainted, textured brown ware bowls and local raw material.	156

*List of Figures Continued*

Figure 9.6.	Comparison of brown, red and white ware bowls paste color.	158
Figure 9.7.	Percentage of paste color by household for Mogollon Brown, White Mountain Red and Cibola White Ware bowls.	164

## CHAPTER ONE

The Pueblo II period (A.D. 900-1150) was a dynamic time in the prehistory of the American Southwest. During this era, Ancestral Puebloans living on the Colorado Plateau of current northwestern New Mexico were building magnificent stone pueblos known as “great houses,” some of which were connected to one another by a series of roads. These houses were centered on a place we now call Chaco Canyon. Great house buildings in Chaco Canyon were planned structures constructed by architects with a shared knowledge of masonry techniques. Generations of scholars have formulated interpretations about what these structures and their associated materials reveal about their Ancestral Puebloan inhabitants.

The movement of people and ideas across the Southwestern landscape was prevalent during the height of constructions in Chaco Canyon (ca. A.D. 1030-1100). Great house structures reminiscent of those seen in the canyon appeared throughout the Colorado Plateau and south towards the Mogollon Rim. Encompassing portions of west-central New Mexico and east-central Arizona centered on the modern Zuni Reservation, the Cibola region contains several great house communities that thrived during the Chaco era (Duff and Lekson 2006; Duff and Schachner 2007). Archaeological investigations suggest that occupation of the Cibola region increased substantially after A.D. 1000, while great house sites became prevalent after A.D. 1050 (Duff 2003). Although great houses are present throughout the Cibola region they are remarkably variable, most are quite small when compared with great houses in Chaco Canyon, and they exhibit both Chacoan and non-Chacoan characteristics. These constructions have become a focus for

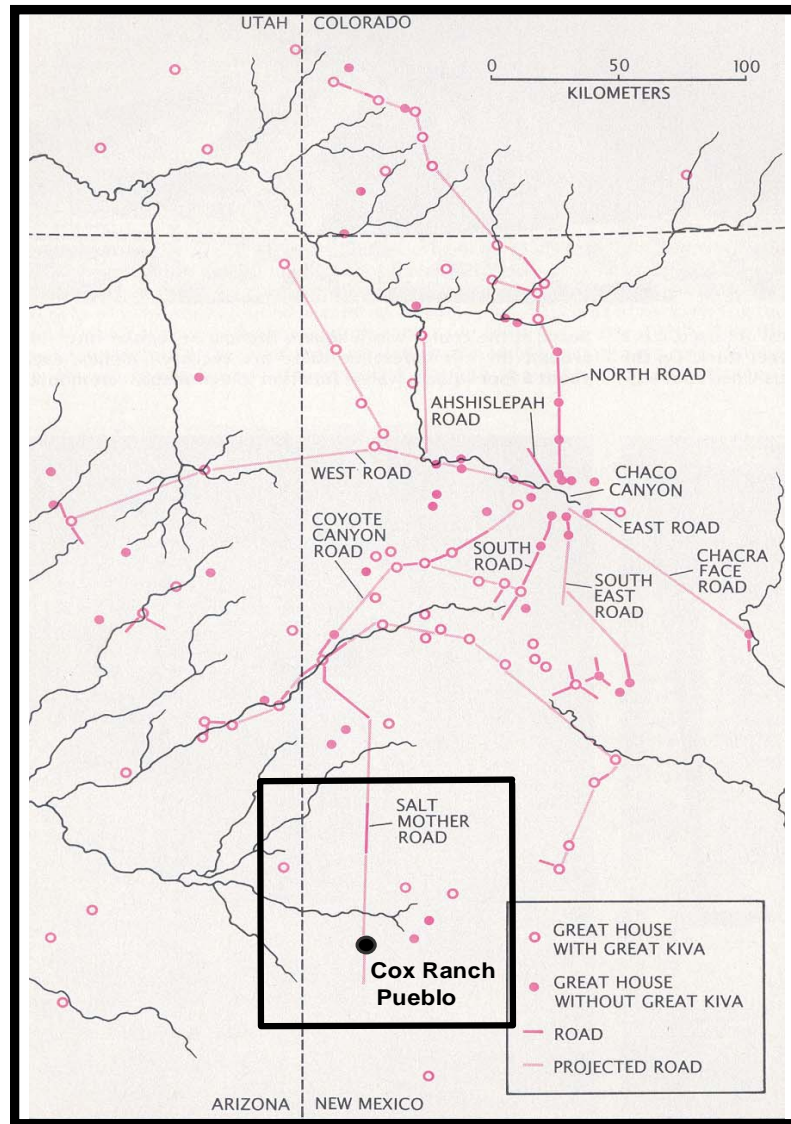


Chacoan researchers in the past two decades. However, the nature of their relationship to Chaco Canyon remains debated.

The relationships of people outside of the canyon to those in the canyon have been interpreted in multiple ways. Interpretations of Chacoan social organization vary from egalitarian (Toll 1984; Vivian 1989, 1992), to a ranked chiefdom (Schelberg 1984, 1992), a hierarchal system (Sebastian 1991, 1992) to a full state society maintained through elite leadership, military coercion and warfare (Wilcox 1993). The degree to which Ancestral Puebloans living along the rim of the Colorado Plateau and the mountains participated in or had knowledge of things Chacoan is unknown. Nevertheless, great houses in this region indicate the likelihood that there was some type of connection.

Cox Ranch Pueblo is one of the several Chaco-era communities located on the southern fringes of the great house distribution in the southern Cibola region (Duff and Schachner 2007; Figure 1.1). This site is unique because the ceramic assemblage is composed of wares from archaeological cultures usually associated with Ancestral Pueblo populations from both north and south of the Mogollon Rim. These populations have been viewed as ethnically disparate because of archaeological differences in pottery assemblages and architecture (Duff 2003:1). Due to very limited settlement in the region before A.D. 1000, the geographic source of the probable migrants is interesting to consider (Duff 2003:1). The influence and change in material culture in the Cibola region during the Pueblo II period on the Colorado Plateau has commonly been attributed to migrants. The presence of a great house at Cox Ranch Pueblo suggests a possible connection with Chaco Canyon, while the presence of corrugated gray ware reinforces some relationship with communities to the north. The presence of material goods

associated with communities from below the Mogollon Rim includes an abundance of corrugated brown ware pottery. White Mountain Red Ware and Cibola White Ware ceramics recovered at Cox Ranch Pueblo suggest ties to communities throughout the region.



**Figure 1.1.** Distribution of Chaco-Era Great House Communities highlighting Cox Ranch Pueblo (Adapted from Lekson et al. 1988:108).

The analysis of both painted and unpainted pottery has been essential to understanding pre-contact cultures of the American Southwest. Pottery technologies and

styles have been fundamental to the formulation of ceramic classifications which have shaped archaeologists' interpretations of past cultures for over a century. Ceramics have facilitated a definition of the spatial and temporal variability in the archaeological record through the characterization of culture areas and regional chronologies. Patterning in ceramic variation has led to a number of interpretations contributing to our understanding of ancestral Native American cultures including cultural and ethnic affiliations, movement of populations and goods, organization of communities, social and economic interactions and sociopolitical complexity.

Ceramic attributes have commonly been used to assess the cultural affiliation of a site's residents and to decipher patterns of migration and ethnic interactions. Specifically, unpainted, textured ceramics have been viewed by many archaeologists as diagnostic of household level production because they had low contextual visibility and were not intended for use in contexts where it is important to signify identity (Clark 2001). Conversely, painted vessels have been considered as products of greater visibility with a higher level of circulation through exchange. However, even plain, unpainted household pottery has the potential to signify identity in many ways (e.g., Gosselain 2000). Empirically, the continuation of cultural traditions can be observed in the process by which raw materials are transformed into cultural objects, or the *chaîne opératoire* of production. Learned methods of manufacture encode one's enculturation in the making of material objects and thus leave fingerprints of an individual's tradition visible through the analysis of artifacts (Dobres 1999, 2000). As well as being a product of an individual's learned past, ethnic and gendered identity, political affiliation and kinship/descent relationships, the technological production of material culture serves as an arena in which

different kinds of interests can be defined, expressed, and negotiated within the household and community (Dobres 1995). The choices made in the operation sequence of producing a material object are sometimes conscious signals, while at other times they are more passive. Socially negotiated meaning is encoded in material culture and is associated with statements of identity, such as “This is who I am and where I came from” or “This is who I want to be.” Through the technological style and use of material objects, an individual may reaffirm her or his identity to their self as well as signify their group membership to others. These actions are distinctively tied to gender, kinship, and identity and I explore these at Cox Ranch Pueblo.

This thesis presents an assessment of prehistoric ceramics and their possible social meanings pertaining to gender, migration, ethnicity and post-marital residence rules at Cox Ranch Pueblo. This is conducted through the examination of the technological choices evident in the construction of unpainted, textured and painted ceramic wares at the community and household levels. Raw material sources are identified to distinguish local and non-local manufacture of pottery wares. Through seriation, I also assess temporal variation exhibited in the Cox Ranch Pueblo painted ceramic assemblage and how this relates to the distribution of unpainted textured wares. These analyses are geared to help answer questions including: Are women with different ethnic traditions living at Cox Ranch Pueblo? Are they using ceramics to signify identity? If so, is this conducted differently in any areas of the community? And what does this suggest about post-marital residence patterns at Cox Ranch Pueblo?

The Cox Ranch Pueblo ceramic assemblage is particularly suited to address these questions because it contains ceramics attributed to two ceramic traditions. Additionally,

the site was systematically excavated by a field school through Washington State University, providing data on both midden and architectural deposits. Moreover, it is one of few outlying great house communities on the southernmost frontier of the Colorado Plateau to have been excavated with specific attention given to defining great house architecture and collecting household assemblages.

The findings of this thesis indicate that brown and gray unpainted textured jars were produced by women of two different learned traditions and could have been manufactured at the site from local raw materials. The distribution of brown and gray wares at Cox Ranch Pueblo indicates that women of two different learning frameworks lived within the same roomblocks, if not in the same households, suggesting the possibility of several post-marital residence patterns and not exclusively matrilocality. Household-level production of both painted and unpainted wares is supported, with relatively equal access to raw material resources and knowledge of how to make each ware; however, choices made in the production sequence of some ceramic wares differ between some households. If the different learning traditions are attributable to women of different ethnic groups, these results suggest that ethnic relationships were likely fluid and to some degree exogamous, with intermarriage between members of different ethnic groups.

### **Thesis Outline**

The following chapter provides an explanation of theories of technological choice, or technological style, as it pertains to ethnicity, gender, and post-marital residence. This chapter also outlines the basic expectations for ceramic technology at Cox Ranch Pueblo.

Chapter Three provides a brief review of the history of archaeological research in the American Southwest with attention to Ancestral Puebloans living above and below the Mogollon Rim. This chapter also presents a review of theories and interpretations of the sociopolitical organization of Chaco Canyon and outlying great house communities, setting Cox Ranch Pueblo into both regional and theoretical contexts. Chapter Four presents a description of the community of Cox Ranch Pueblo, the goals and methods used in excavation and a summary of research conducted at the site. Chapter Five details the analytical techniques utilized in the typological assessment of the ceramic assemblage at Cox Ranch Pueblo. Chapter Six explores the intra-site chronology of temporally diagnostic ceramic types and the distribution of the unpainted, textured jar assemblages at Cox Ranch Pueblo.

The next four chapters are dedicated to the larger issues to be addressed, how I address them, and the results of analysis. Chapter Seven defines my research objectives and methods for the technological analysis of ceramics from the site. I offer the results of the technological analysis of unpainted, textured jars in Chapter Eight and in Chapter Nine I address the results of the analysis of painted wares and brown ware bowls. Chapter Ten discusses the implications of this research for understanding ethnicity, identity and post-marital residence patterns at Cox Ranch Pueblo, the community's relationship with Chaco Canyon and possibilities for future research questions concerning the technological manufacture of ceramics on the Colorado Plateau.

## CHAPTER TWO

### Identity in Ceramic Materials

At the most general level, anthropologists have long recognized that humans tend to form social groups based on several common processes. We recognize past generations of family members, learn from each other, often make distinctions between “us and them,” and communicate complex ideas about our relationships through language, non-verbal behaviors, and material culture. How humans form groups can be understood by considering the concept of identity. However, the concept of identity is as complex as the actual processes that bind us together. In general, the term identity has been theorized as having two principal dimensions (see Weissner 1983). The first dimension of identity is at the group level. Identity at the group level usually functions to consolidate people who maintain several common social characteristics vis-à-vis another group (e.g. see Barth 1969). The second way identity is understood is at the individual level. This dimension of identity is usually associated with how individuals relate to others within a group. Both dimensions of identity often correspond with behaviors by which people identify themselves and signify their identity through material goods (e.g., Lemmonier 1986) and can therefore be examined in the archaeological record.

Therefore, each person’s identity encompasses several variables, including, but not exclusive to kinship/residence, ethnicity, political alliances, social class and gender. These are aspects of identity by which a person identifies individually in a society to how others perceive that person’s membership (Moerman 1965, cited in Duff 2002:19). An individual plays more than one role in his or her everyday life and as such, the variables making up one’s identity may be emphasized more in some contexts than others. For

example, my political allegiance may be an important dimension of my identity at a political rally, whereas in another context, such as a holiday dinner, my relatives may serve as a more salient identifier. These different dimensions of identity may be signified differently, whether materially or behaviorally. Therefore, archaeologists have long utilized material goods ranging from ceramics to household structures to examine personal and group identity.

Of particular importance for archaeologists, identity is often reflected in the choices that people make during production of products as well as in their final appearance. Identity displayed in material goods has been traditionally discussed by archaeologists in two ways (see Bowser 2000; Hegmon 1998). The first emphasizes the conscious display of highly visible symbols that are consistent through space and time and that are intended to be viewed by an audience (Weissner 1983; Wobst 1977). Second, identity is discussed in terms of material goods by the importance of the overall sequence of steps involved in production. The latter approach is the focus of this thesis. It was first emphasized by French and American researchers in the late 1970s and early 1980s (e.g., Lechtman 1977; Lemmonier 1986, 1993; Sackett 1977) and has recently become a popular topic in American archaeology (Chilton 1998, 1999; Dietler and Herbich 1998; Hegmon 1998; Stark 1998, 1999; Wright 1993). From an Americanist view, this approach is usually focused on understanding technological choice which is reflected in the technological style (e.g., the temper used in a certain vessel or class of ceramic vessels) of the final product. Identity in material culture at this level is often associated with the unconscious, less visible aspects of the production sequence (Duff 2002; Gosselain 2000; Longacre et. al 2000).



The focus of this thesis is on individual choice in the production of pottery. Subsequently, this chapter explores the literature centered on how people display identity through the technological style represented in the production sequence of pottery. This chapter is organized into two main parts. The first is focused on the components that make up identity. To accomplish this, I explore issues related to identity including ethnicity, kinship, residence rules and gender roles to develop a greater contextual understanding of how women potters may have lived and interacted during the occupation of Cox Ranch Pueblo. The second part of the chapter focuses on how identity is displayed in material goods. This discussion focuses on the theoretical aspects applied to producers and their relationship to the items that they choose to produce, the choices that are known and chosen/not chosen, and the identity signified in the process of production and the actual final product(s).

### **Information used to Convey Identity**

Identity is constituted by several interrelated variables, including ethnicity, kinship, residence, and gender roles. As components of identity, ethnicity is defined here as the general idea reflecting where a person came from and the social group with which they interacted, kinship as how one traces their descent, residence as where they live and with whom they live, and gender roles as the differences between male and female and age-based social responsibilities within a given society. All of these aspects of identity can be reflected in the learning frameworks that ultimately guide how people produce material goods.

## *Ethnicity*

The term ethnicity has been used to describe several different attributes of identity (Barth 1969). Arguably, in its most basic form, ethnicity reflects the general idea that a person is influenced by where they came from and the people with whom they have been in contact. This may be correlated today as saying “I am Hopi,” or “I am Acoma.” As a trait of identity, ethnicity may encompass many of the variables, such as residence and kinship, which also make up the broader category of identity. However, the distinction between ethnicity and identity is important because ethnicity is often used to create “us-versus-them” relationships, and a group’s ethnicity can simultaneously reflect several different kinship, residence, or gendered roles.

Among archaeologists, the main questions surrounding ethnicity have been: (1) is ethnicity manifest in conscious (Wobst 1977) or unconscious choices (Jones 1997; Sackett 1977, 1990), (2) is it socially manifested in some social contexts and not others (Cohen 1978), and (3) do some situations cause ethnicity to be displayed more prominently than other situations (Duff 2002; Hodder 1978). In general anthropology, the approaches to ethnicity have been categorized into two general perspectives (see Stone 2003 for a detailed discussion).

The first perspective tends to think about ethnicity as a consequence of people making conscious decisions to produce visible and active markings that ultimately stress us versus them distinctions (Barth 1969; Duff 2002; Keyes 1979). Researchers from this perspective usually focus on understanding how people define and maintain ethnic boundaries by viewing those boundaries as permeable and the group composition as ever changing. Groups are composed of interacting individuals who continually and

consciously negotiate their group membership through active decision-making in accordance with their own agenda. Because boundaries are dynamic, group membership can change. Individuals from outside a group can attain group membership by affirming their identity in the group which must then be reaffirmed by people both in and out of the group. Because groups are dynamic, an individual is not necessarily guaranteed life membership; consequently they must continually negotiate and reaffirm their membership. The way that they do this may change as the common identity of the group changes. The prominence in display of ethnic traits (i.e., symbols, knowledge) may vary in different contexts dependent on the agenda of the individual. Researchers linking ethnicity to this perspective suggest that different ethnic groups can join together through the process of ethnogenesis to become a new group. When members of two ethnicities that are co-residing in a community stop reaffirming ethnic differences, it may indicate assimilation of one ethnic group by the other, the redefinition of ethnic boundaries, and/or a situation in which previous traits of ethnic identity are no longer recognized as markers of difference.

The second perspective in viewing ethnicity applies Bourdieu's (1977) idea of habitus (see Dietler and Herbich 1998), generally defined as the unconscious social rules that condition how an individual acts based on his or her history of interactions, where an individual's history will shape how all following interactions will be structured (Jones 1997). Habitus forms early in an individual's life through enculturation (the process of becoming socialized as a member of a particular culture) within the family and community but also continues to be modified throughout a person's life. Learning frameworks are maintained through everyday activities, or social practice, and are

reaffirmed through interactions with others who share the same general knowledge of those social practices. Habitus of an individual or group can change through contact with an individual or group with a very different habitus (e.g., migration), or through negotiations of power relations within existing social structures, but habitus tends to be conservative, both slow and resistant to change. Therefore, even under these circumstances change does not always readily take place. Thus, according to Bourdieu's conception of habitus, individuals have the ability to actively enable change in accordance with their own agenda; however, this process is usually the outcome of individual agents negotiating their own positions unconsciously, rather than purposefully and actively, a conception that is the idea of ethnicity as active and conscious decision making. Consequently, the negotiation of ethnicity within or between groups may contribute to change in ethnic boundaries, or lead to ethnogenesis, but the process of change is largely unconscious, rather than the express intent of individuals to fulfill their own agenda.

Archaeologists that subscribe to habitus view material culture as a reflection of an individual's enculturation and/or learning framework. Material culture both structures and is structured by an individual's agency (Jones 1997). Subsequently, "technological variants can be used to pinpoint and to define small, coherent combinations of technical features that correspond directly to given social groups" (Mahias 1993:170). These notions correspond with the discussion of technology and isochrestic style (Sackett 1977, 1990) and have led to a focus on technological choice. As defined by Lemmonier (1993:7), "technological choice is the sorting out of possibilities on which the development of a technical system is de facto based, although usually in an unconscious

and unintentional way.” By examining the chaîne opératoire, or the technical chain of sequential operations by which natural resources are obtained and transformed into cultural goods (Dobres 2000:167), one can begin to understand the decision-making strategies, sequences and choices that individuals practiced in manufacturing goods. This is representative of an individual’s enculturation, ethnicity and ultimately, personal identity.

While there are several distinctions between the ways ethnicity is examined, in both perspectives one could argue that it functions to establish us versus them relationships between individuals and/or groups. I agree with several researchers who have recently combined ideas from both perspectives (e.g., Bowser 2000; Crown 2002; Dobres 1995, 2000; Duff 2002; Mills 2000; Zedeño 1995, 1998). By accepting the general assumptions of both schools of thought, the very basic definition of ethnicity as a reflection of where a person came from and the people they have been in contact with remains substantial in how people display their ethnicity in the goods that they produce. Subsequently, I view habitus as an unconscious indicator of ethnicity (and more broadly identity). Using this definition I believe that enculturation and learning frameworks strongly influence the choices an individual or group has available (Gosselain 1992), and how they produce material goods. However, I also argue that learning does not always occur in parent-offspring or grandparent-offspring relationships and can take place throughout an individual’s life. Additionally, individuals exist within a social structure that they are at least partially conscious of. Even though an individual may have unconsciously learned how to do something, they are most likely aware of how they do/make/display it and the way it differs or is similar to the way others do/make/display

it. Consequently, in different situations, an individual or group of individuals may express a characteristic or select an item that displays (or doesn't display) certain characteristics of their identity (including ethnicity) dependent upon their agenda. This may be to affirm membership in another group or to assert membership of their own group. In sum, I see that ethnicity (as displayed in material goods) is dependent on different roles, can be both consciously and unconsciously displayed, can be represented by everyday social norms or used as an active and purposeful signal. In other words, ethnic display is variable in nature and dependent upon context and an individual or groups agenda.

### ***Post-marital Residence***

As with ethnicity, post-marital residence, or where a married couple resides, often brings about the close interaction of individuals of different backgrounds and can influence ones' identity through social interaction. Migration of a bride, groom, or newly wedded couple in or out of a community influences both inter and intra-community dynamics as well as household relationships and subsequently, can influence learning frameworks within a given group. As a component of inter-community relationship building, post-marital residence frequently serves to join communities together by integrating people within a regional network (Schillaci and Stojanowski 2002:343) and to maintain solidarity between ethnically diverse communities that find themselves living in close proximity (Divale 1974). Intra-community relationships often begin in the household, where they are created, participated in, and maintained. The ethnic and/or kinship identity of the migrant(s) who move into a new community may influence how

they relate to others (us-versus-them), and what unconscious or conscious social rules they choose or are required to abide by, at both the household and community level.

Determining post-marital residence in the archaeological record (Deetz 1968; Hill 1966; Longacre 1966; Peregrine 2001; Schillaci and Stojanowski 2002) has largely been guided by the findings of ethnographic cross-cultural comparisons and has sometimes been viewed as problematic (Allen and Richardson 1971; Conkey and Spector 1984). Results of ethnographic studies suggest that post-marital residence can be influenced by a number of sociopolitical factors that persuade a community to abide by a specific set of residence rules. Based upon ethnographic reports (Murdock 1967) there are 10 different types of post-marital residence. Patrilocality is the most common and occurs in approximately 70 percent of the world's population (Murdock 1967). Here I will briefly address three of the most common patterns of post-marital residence: matrilocal, patrilocal, and multilocal, and discuss some of the factors ethnologists have suggested influence why communities participate in these different residence practices. I will also review two opposing recent interpretations of post-marital residence at Chaco Canyon and what pattern of residence we might expect at Cox Ranch Pueblo based upon ethnology and ethnographic studies.

### *Matrilocal Residence*

Matrilocal residence is when a groom takes up residence at his bride's home. The groom may be from another community (exogamy) or from the bride's community (endogamy), but he usually also continues to have responsibilities to his natal family. This creates a unique situation where men living together are bonded by marriage and not

by blood, while they have significant blood ties with members of another community. Ethnographic data has suggested several situations that may influence the adoption of matrilocality and/or result from the acceptance of matrilocality. Much of this discussion has been based upon warfare, status, and the division of labor in subsistence activities.

Ember and Ember (1971) suggest that matrilocality may arise in communities that have established a pattern of purely external warfare (where they only fight with communities outside of their political and/or inter-community marriage network) and where there is a substantial female contribution to the primary subsistence (Ember and Ember 1983:192). External warfare is suggested to be compatible for in-marrying males to avoid fighting with their blood kin. Males in this situation would instead fight with communities outside of their inter-community marriage network resulting in the frequent absence of males encouraging a substantial female contribution to subsistence. When combined with external warfare practices, a significant contribution of women to subsistence would enable women to be the gender that stays put after marriage. Conversely, Ember and Ember (1971) indicate that when warfare is internal (fighting within the same political and/or inter-community marriage network) residence patterns will be patrilocal regardless of who contributes most to subsistence.

Divale (1974) believes that the Embers' (1971) conclusions failed to provide a sufficient explanation for why matrilocality occurs. Specifically, although external warfare is specified as the primary indicator of post-marital residence they do not address why external warfare may come about. Based on tests of HRAF data, Divale (1974) found significant correlations among migration, matrilocality and external warfare and posits that fairly recent migration (within 500 years) will result in



matrilocal, which in turn will result in purely external warfare. Under these conditions, Divale (1974) suggests that societies that recently migrated will be matrilineal and will establish purely external warfare at the same time ending internal warfare to prohibit the break up of fraternal interest groups. This scenario would promote internal peace so that group cohesion could be maintained and the new in-migrating community members accepted.

In response to Divale (1974), Ember (1974) agrees that matrilineality is more commonly selected by recently migrating communities but maintains that matrilineality will arise in those societies where women contribute the majority of subsistence and which have purely external pattern of warfare; and that patrilineality will be found whenever internal warfare is present or when men contribute more to subsistence, even if warfare is purely external. However, the conditions in which warfare is internal or external could be different. Ember (1974) argues for a model that inter-societal competition is more severe for migrating than non-migrating societies. Migrating societies are often small, and warfare provokes circumstances where small societies will generally fight externally. Under this model small migrating societies would adopt external warfare practices which would then lead to the adoption of matrilineality (Ember 1974).

Other explanations for the selection of matrilineality include Gough's (1961) interpretation that societies that have matrilineal descent are more often horticultural than agricultural. Her results suggest that in societies where there is lower subsistence productivity matrilineal descent is favored and where high productivity is present avunculocal or multilocal descent is selected (Gough 1961:491). However, Divale (1974)

tests Gough's (1961) conclusions using HRAF data, and concludes that neither matrilineal or patrilineal residence associate with horticulture. However, societies with matrilineal descent do associate slightly with horticulture. This suggests that matrilineal residence patterns may not occur in greater frequency in horticultural than agricultural societies but occur at greater rates in societies with matrilineal descent.

Ember (1973) indicates that the size of residence and living floor area can be an archaeological predictor of matrilineal or patrilineal residence. He utilized HRAF data to compare the average living floor areas of patrilineal and matrilineal societies and concludes that matrilineal societies will have significantly larger living spaces than patrilineal societies. Divale (1977) replicates this study using additional data and finds that there is an association of matrilineality and large living floors, but cautions that floor area should not be the only factor used to determine residence (Divale 1977:113)

### *Patrilineal Residence*

Patrilineal societies are where the bride takes up residence with the groom and his natal family or near his natal family. Similar to matrilineality, the bride may be from another community or from the same community as the groom. However, the bride does not usually maintain responsibility to her natal family. Patrilineality has commonly been interpreted as occurring in societies where men dominate subsistence and/or have more prestige (Driver and Massey 1957:425) and in societies that practice animal husbandry. Ember and Ember (1971) characterize patrilineal societies as having internal disharmony and feuding. As mentioned above, they conclude that patrilineal societies will arise where there is internal warfare whether or not men dominate subsistence. Additionally,

patrilocal societies might be identified archaeologically through the examination of living space size, where patrilocal societies tend to have smaller living floor spaces than matrilineal societies (Ember 1973).

### *Multilocal/ Bilocal Residence*

Multilocal residence is when two or more patterns of residence frequently occur within a community. This could include combinations of matrilineality and patrilineality or a combination of any other type of residence pattern, such as neolocal (apart from relatives of both spouses and at a place not determined by kin ties) or avunculocal residence (where a married couple lives with or near the husband's mother's brother). Through examination of ethnographic data, multilocal residence has been interpreted to occur where (1) a community is nomadic for at least half of the year and is not dependent of agriculture (Murdock 1967); (2) there is equality of males and females (Murdock 1949:204); or (3) significant depopulation takes place in a community where agriculture makes up at least 15 percent of subsistence (Ember and Ember 1972).

### *Post-marital Residence at Chaco Canyon (AD 870-1130)*

Recently, researchers have discussed possible patterns of residence for communities in Chaco Canyon (AD 870-1130). As much of the research that attempts to define Chacoan sociopolitical organization, opposing interpretations result. Peregrine (2001) argued for the formation of matrilineality, while Schillaci and Stojanowski (2002) suggest a model of patrilineality. Both arguments are based primarily on ethnographic analogy and utilize arguments based upon ethnographic studies discussed above.

Peregrine (2001) argues for the formation of matrilocality as a corporate political strategy in Chaco Canyon based on two assumptions. First, matrilocality in the descendants of the Chacoans at Hopi and Zuni suggests the practice of matrilocality for their ancestors, and second, the living area of households at Chaco were quite large, a trait considered indicative of female-based households ethnographically (e.g., Ember 1973). The thesis of his argument suggests that a female-based pattern of post-marital residence provided the social structure allowing women to develop agricultural communities while men took part in long-distance trade and raw material procurement. This argument follows Ember and Ember (1971), where matrilocal societies are characterized by women contributing substantially to subsistence, however, instead of men participating in external warfare (e.g., Ember and Ember 1971; Ember 1974) they participate in long distance hunting and trade. Matrilocality enables the group of men the ability to be absent for long periods of time without affecting the core community (Peregrine 2001:39). The unique situation (men living together are only bonded by marriage, while they continue to have responsibility to their natal community) caused by matrilocality is solved by the establishment of work and craft groups to integrate men into their new community, with inter-community feasting and trade to keep them associated with their natal communities.

Conversely, Schillaci and Stojanowski (2002) suggest that archaeological evidence better supports a system of patrilocality for the Chaco world. The authors view Peregrine's assumptions of household size and cultural continuity as insufficient to empirically support a model of matrilocality. They indicate that Chacoan descendents include not only the matrilocal Hopi and Zuni, but based upon skeletal data from Pueblo

Bonito, also have genetic ties with bilocal and patrilocal Tewa-speaking groups in the northern Rio Grande of New Mexico. Subsequently, they argue that a cultural continuity model does not solely support matrilocality at Chaco Canyon. The authors also retest the mean household floor area data at Chaco Canyon based upon Ember's (1973) and Divale's (1977) findings. Contrary to Peregrine's (2001) results, they observe that the floor area size is more consistent with a male-based pattern of residence concluding that patrilocality was the system of post-marital residence in Chaco Canyon.

#### *Residence Patterns at Cox Ranch Pueblo*

Consideration of possible residence patterns at Cox Ranch Pueblo (A.D. 1050-1130) based upon ethnographic rules discussed above, both in general, and for Chaco Canyon, would also ultimately provide conflicting results. However, based upon several of the generalizations above and assumptions about gendered roles, matrilocality residence could reasonably be argued to be the predominant residence pattern at Cox Ranch Pueblo.

Subsistence at Cox Ranch Pueblo appears to have been dependent on agriculture, specifically maize production and lagomorph consumption, with lesser quantities of large game (Mueller 2006). If we were to accept that women were responsible for work near their homes (Crown and Wills 1995; Peregrine 2001), including agriculture, small game hunting and the production of pottery, this would suggest that women likely contributed to a significant portion of subsistence as well as the methods of preparing and serving food at Cox Ranch Pueblo. According to Ember and Ember (1971) and Ember (1974) this would support a matrilocality residence system. While this time period on the Colorado Plateau has been characterized as one of "unprecedented peace" (LeBlanc 1999:196)

making external warfare unlikely, there is also no evidence to suggest intra-community warfare. However, similar to Peregrine's (2001) argument, there could be several other aspects that suggest men may have been more actively engaged in activities outside of the community including long distance hunting, acquisition of raw materials (obsidian), trade (shell, turquoise, possibly salt), and maintaining inter-community relationships through events such as feasts (Mueller 2006) that would benefit by a matrilineal system of residence. Additionally, a relative paucity of Pueblo I communities in the surrounding region (Duff 2003) suggests Cox Ranch Pueblo was likely founded by recent migrants, supporting the formation of matrilineality (Divale 1974; Ember 1974). Considering these ethnographic studies, it seems possible that matrilineality would be the residence pattern in Chaco-era agricultural communities including Cox Ranch Pueblo.

### ***Gender and Archaeology***

To examine how identity was signified in the past, one has to make inferences about women and men's roles and although it can be very useful, we can not always rely on ethnographically documented roles of women, men and children. Since the late 1970s, researchers concerned with engendering the past have posed a number of questions concerning the methods of archaeological inference and interpretation. The two main critiques of the gender in archaeology movement include (1) that archaeologists have had an androcentric understanding of the past and (2) interpretations of the past are always influenced by the political present (Conkey and Spector 1984; Sorenson 2000; Wylie 1997). Given this discourse, it is easy to get discouraged when attempting to interpret gendered identities in the past. However, if we keep these critiques in mind,

attempting to investigate gender roles in the past can help us to gain a better understanding of the archaeological record. Through examining gendered agency in the technological manufacture and use of material goods, we can begin to consider the active roles of women, men and children in the prehistoric past.

At first, gender roles in anthropology were most commonly supported by evidence from ethnology. Levine (1968:151) states: “Prehistory which seeks to reconstruct ancient cultures can do so only by applying lessons learned from ethnology.” To an extent, I agree with this statement. Ethnology is extremely helpful when attempting to give faces to individuals who lived and breathed in the prehistoric past, especially when all that we have to work with is a pile of rocks, a few broken pots, bones, or alignments of architectural debris. However, gendered archaeology has shown us that caution must be extended when accepting prehistoric gender roles based on ethnographic studies. Conkey and Spector (1984) acknowledge this and argue that much of archaeology has drawn upon gender-biased ethnography that both imposed and supported ethnocentric assumptions about the nature, role, and social significance of males and females. Because ethnography was essentially a gentlemen’s profession, most of the older ethnographic literature was based predominately upon the perspectives of white, middle-to-upper class men who had access to predominantly male informants (Conkey and Spector 1984:4). Conkey and Spector argued that this created an ethnographic perspective that offers a limited view of what the lives of women participating in everyday activities were like, making it difficult for archaeologists to use only ethnographic descriptions for engendered inquiries into the past.

Ceramic sociologists Hill (1966), Longacre (1966) and Deetz (1968) were a part of the “new archaeology” movement who aimed to make social anthropological interpretations in archaeology. They attempted this through the examination of post-marital residence patterns of pueblo communities in the prehistoric Southwest using ethnographic and archaeological data. While their endeavors were anthropological in nature, their approaches remained androcentric (Conkey and Spector 1984:11). Their conclusions were based on examining materials associated with women’s activities. However, they failed to consider the complexity of gender and the roles of power attributed to women. Considering the sociopolitical setting that these researchers were a part of, their failure to address women as active individuals in the past is not surprising.

Following the lead of feminist archaeologists, the post-modern critique established that one can never remove themselves from their own experiences and beliefs when interpreting the archaeological past or the ethnographic present (Shanks and Tilley 1987; Tilley 1993). Post-modernists suggested that because of our false consciousness of reality “(archaeologists have) no better understanding of the past, just a babble of contradictory voices and a saturation of meaning with an emphasis on material forms...”(Tilley 1993:4).

By viewing the critiques of an archaeology of gender and post-modernism with Levine’s (1968) statement, epistemological inquiry into the prehistoric past begins to seem somewhat hopeless. Ethnological investigations into residence patterns as described above are derived from ethnographies written by individuals living in a specific sociopolitical climate that no doubt influenced the contents. Peregrine (2001) and Schillaci and Stojanowski (2002) both rely on ethnology and ethnography and end with



different conclusions. Since there is no one meaning of the past, and all research is tainted by the political present, how are we supposed to examine anthropological questions in the prehistoric record?

Conkey and Spector (1984; also Conkey 1991; Dobres 1995, 2001; Mills 2000) suggest that the best approach to the archaeology of gender is through an ethnoarchaeological approach, where ethnographic gender dynamics are reconsidered by focusing on social, temporal, spatial and material dimensions of gendered tasks. Even while understanding the limitations of ethnography, it is difficult to talk about gendered organization in the past without utilizing cross-cultural studies or ethnographic literature. It is certain that ethnography does not document all of the ways gender roles might be displayed, but it does highlight patterns in the gender roles of human societies (Mills 2000:303) and provides a framework for constructing research questions.

All human cultures have division of labor based on gender and age. It is through the gendered practices of labor that raw materials are transformed into cultural objects for use and exchange (Dobres 1995). Ethnographic data indicate that before the potters' wheel, pottery production was mostly, but not entirely carried out by women (Skibo and Schiffer 1995:87). Puebloan ethnography also indicates that women were the primary producers of pottery (Dillingham and Elliott 1992:20; Parsons 1932). The use of pottery in situations such as cooking, fetching water, and washing clothes are also suggested to have been activities with greater participation by women (Mills 2000:303). For this study, I will assume that women were predominantly the producers of pottery at Cox Ranch Pueblo and also the users of pottery in many situations.

Women making pottery at Cox Ranch Pueblo likely worked with other women and children in their household to construct and fire pottery on a regular basis (Dillingham and Elliott 1992:9-10). Through this process women likely created and maintained relationships while exchanging knowledge of their skills. The manufacturing techniques encapsulated in the final product ultimately reflect the gendered identity of an individual and their everyday practices. Like ethnicity, gendered identities are defined, performed and reaffirmed through daily activities and interactions that include the transformation of raw materials into material culture. The process includes not only the chaîne opératoire of production, but also the final product and its contexts of use. Subsequently, through the empirical study of artifacts one can examine the social, material and symbolic dimensions of material culture production. As well, the dynamic processes of both gender and ethnic affiliation and differentiation can be viewed by how material culture was displayed contextually and potentially limited by material and/or social constraints.

### **Gender Identity, Ethnicity, Residence and the Material Correlates**

In terms of the ways that identity can be portrayed, pottery production is arguably one of the best technologies to examine because it is additive rather than reductive. Therefore, deducing the sequence of pottery production can help establish elements of both conscious and unconscious decision-making processes. If we accept that pottery in prehistoric pueblo communities was a product made and used by women most of the time, examining pottery in the archaeological record reflects a woman's gendered identity and her relationships within the household and the community.

Ethnographically, many of the women in post-contact pueblo societies passed the knowledge of pottery production down through their families, and instruction that usually took place from the grandmother and mother to the daughter (Dillingham and Elliott 1992:9-10). If pottery was produced and used at the household level and the technology used to produce them was passed down within household [and/or kinship] groups, the examination of technological attributes can identify discrete ethnic or kinship ties and possibly intermarriage (MacEachern 1998; Zedeño 1994).

Generally, archaeologists tend to think that potters symbolize identity in their products in two different ways: through their choices of techniques and materials used during the production sequence (Lemmonier 1986) and the design style of the final product (Wobst 1977). Thus, the information that signifies people's identities takes two different forms including decorative traits that are visible on the final product and technical traits that are not (although this dichotomy is not unproblematic; see Bowser 2000, 2002; Gosselain 2000). Additionally, whether or not a trait is visible influences how easily it may be decoded and replicated (DeBoer 1990; Gosselain 2000). Because of these aspects, teaching elements of production that are not visible, are usually more important within learning groups (Stanislawski and Stanislawski 1978) and therefore should be representative of specific learned traditions. The scale of visibility is important, because more visible elements of pottery (such as color, painted designs, or texture) are more likely to signify identity consciously to a large audience, whereas less visible elements (such as temper, minor differentiation in manipulated texture design, invisible variation in raw material) are more likely to mark identity unconsciously with groups of practitioners. Further, low visibility traits are not adopted easily by non-group

members. Consequently, techniques of manufacture that have low visibility in the final product should be shared among people who work closely together such as a group of women potters, and learned and transmitted from generation to generation by members of that group. Thus, archaeologists expect that similarity in low-visibility production sequence variables in archaeological pottery should be representative of women's potting groups.

### **Summary**

To evaluate if learning frameworks guided by technological choice are representative of different learned traditions that may be attributed to different groups with distinct identities, particularly ethnic or kin groups. I examine attributes of the technological construction of pottery on both plain ware and painted ceramic assemblages from Cox Ranch Pueblo. The attributes that I measured reflect the production sequence from raw material acquisition to firing. As noted above, these include attributes that may represent unconscious and conscious decision making; some traits would be visible to only a small number of people where others could be obvious to a larger group. My results suggest that there were several potting cohorts at Cox Ranch Pueblo represented by women from at least two backgrounds who employed different technological choices in the production of ceramics. I find patterns in the technological style and archaeological distribution of unpainted textured pottery that indicate that post-marital residence patterns at Cox Ranch Pueblo may not have been what we would have expected based on the examination of cross cultural ethnographic data. These findings reinforce the importance of a gendered approach.

## **CHAPTER THREE**

### **Southwestern Culture History and the Cox Ranch Pueblo Research Project**

This chapter has several goals. The first is to present an overview of archaeological research that has prompted the definition of culture areas above and below the Mogollon Rim, traditionally known as the Anasazi and the Mogollon. I also focus on the Cibola Region, an area that encompasses cultural materials affiliated with Ancestral Puebloans above and below the Mogollon Rim. This facilitates discussion of ceramic analyses at Cox Ranch Pueblo in the following chapters. Second, I present a history of archaeological research on Chaco-era (A.D. 1000-1150) communities because it shapes current interpretations of great house communities on the Colorado Plateau. I suggest that the social organization of these communities likely influenced local potters manufacturing ceramics within the Cox Ranch Pueblo community.

### **Defining Cultures through Time and Space: Cultural Areas and Chronology in the American Southwest**

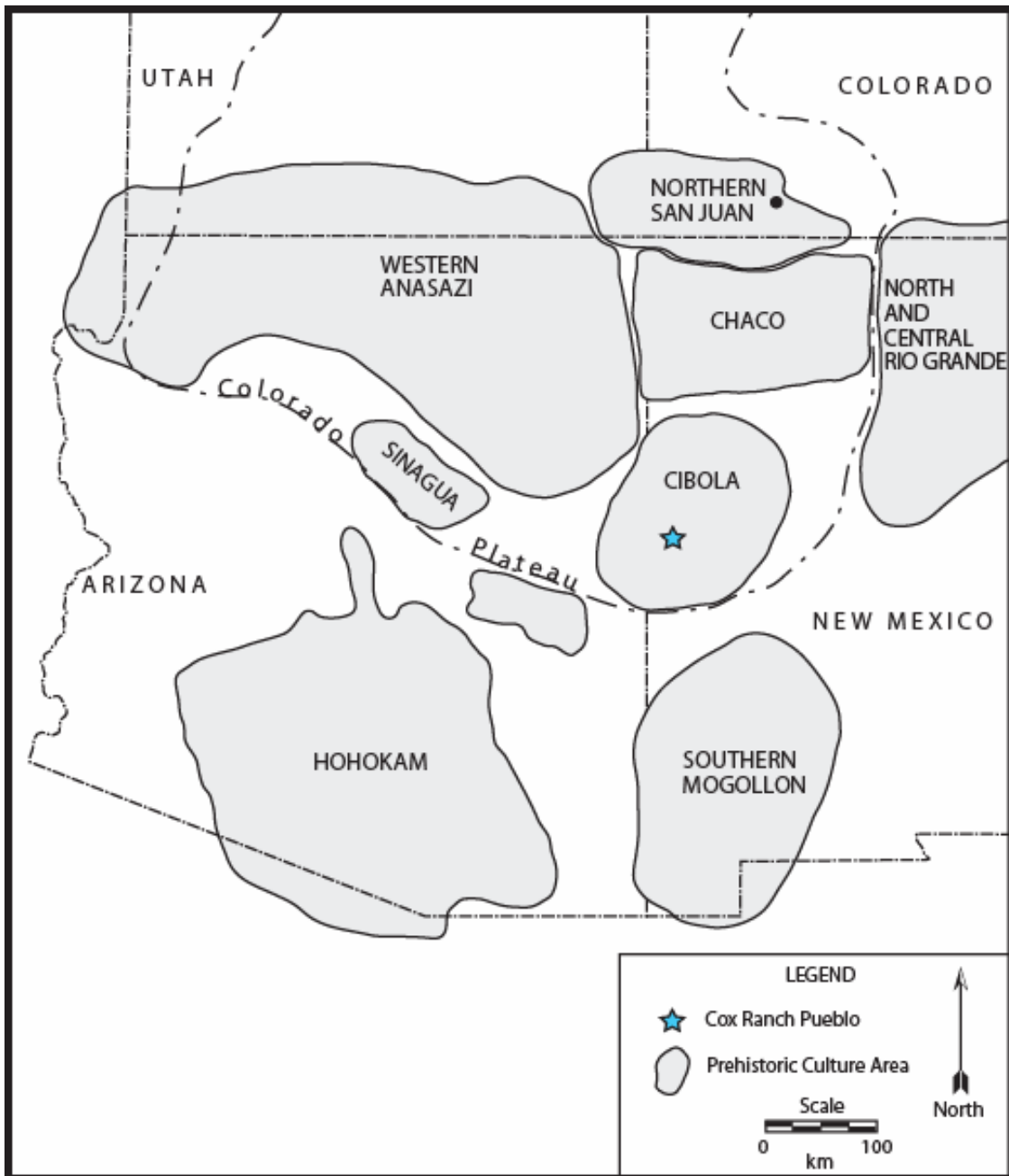
Archaeological “culture areas” have been characterized chronologically and spatially through the analysis of material culture. Culture areas are meant to define unified traditions of learned behavior that are long lasting, passed generationally, and reflect a common heritage (Tainter 1984:47). Areas exhibiting homogeneity of material goods are thought to represent interactions among members of the same cultural group in an area over time. The culture-area concept is challenged when heterogeneous material goods are found within a community and/or area. This occurs most often in communities located on the fringes of culture areas. These communities raise the question of what

archaeological culture areas meant for people who lived in the past and provide an interesting setting for exploring several facets of identity.

The development of methods to examine time and space were vital to defining culture areas and chronologies throughout the American Southwest. Temporally discrete cultural periods have been characterized through analytical methods including relative ceramic chronology (Kidder 1927), artifact seriation, dendrochronology (Dean 1992), radiocarbon dating, and building techniques. Such techniques have been used to define prehistoric time periods and to develop classification systems such as the well known Pecos Classification System (Kidder 1927), originally intended to encompass the entire Southwest. However, although the Pecos system remains a commonly used tool, more regionally specific phase sequences have developed in the Anasazi area.

### ***Culture Areas Above and Below the Mogollon Rim***

The “Anasazi” and “Mogollon” culture areas are located in regions that lie roughly above and below the Mogollon Rim (Figure 3.1). The Anasazi area encompassed much of the southern Colorado Plateau and includes the magnificent pueblos of Chaco Canyon, whereas the Mogollon, or “Mountain People” lived along the southeastern rim of the Colorado Plateau and in the Mogollon Mountains. Following Mills et al. (1999:3-4), where possible, I refer to the cultural characteristics of the people that inhabited the Mogollon and Anasazi as Ancestral Puebloan, with exceptions made for characteristics *linked* to southern traditions near and below the Mogollon Rim (Mogollon) and others associated with northern traditions on the Colorado Plateau (Anasazi). I use the term “Ancestral Pueblo” where possible because the terms Anasazi



**Figure 3.1.** Defined archaeological culture areas in the American Southwest. Note the location of Cox Ranch Pueblo in the Cibola Region (Redrawn after Cordell and Gumerman 1989: Figure 1).

and Mogollon imply bounded cultural areas rather than those that in reality may have been more fluid and also because many of the ethnographic groups considered to be descendants of the Ancestral Puebloans feel that the label “Anasazi” is inappropriate

(Mills et al. 1999:4). Nevertheless, due to their extensive use in archaeological literature, the terms “Mogollon” and “Anasazi” are difficult to avoid and are also utilized in portions of this text.

Culture areas above and below the Mogollon Rim were defined due to large scale survey in the late 1920s and early 1930s sponsored by the Gila Pueblo Archaeological Foundation (Haury 1985:xv; Schroeder 1979:9) and are largely based on the spatiotemporal distribution of diagnostic artifacts and architecture styles. There are several attributes to support, and in some cases not support, the distinction between these Anasazi and Mogollon culture areas. Both groups of people lived in pithouses early on, practiced agriculture with the same crops, later lived in pueblos (Haury 1985:xvii) and manufactured both painted and plain pottery. Although there were similarities in many facets of their lives, variation in plain ware ceramic vessels and architecture differentiate them. The most notable differences are the presence of brown ware ceramics and square kivas found in a generally more mountainous landscape (Haury 1985:403-407; Martin 1979: 61-74; Wheat 1955).

Haury (1985:xvii) suggests that Mogollon differed from Anasazi based on the production of brown-paste, red-paste and slipped-red ceramics fired in oxidizing atmospheres, while Anasazi pottery was commonly fired in reduced environments and displays gray-paste, white-paste, white kaolinitic slip and black painted designs. Differences in northern and southern populations are also seen in the timing of the transition from pithouse to pueblo, the adoption of agriculture and ceramic production, and the scale of integration into a “regional system” (Crown and Judge 1991).



### *Living on the Periphery*

The mixing of cultural characteristics some communities on the boundaries of each “culture area” has led researchers to ponder interaction, and ultimately, the meaning of “cultural groups.” Much of this research has been focused on the influence of northern populations on more southern populations (Haury 1985:404; 405). In turn, several ideas regarding a dominant cultural force in the Ancestral Puebloan Southwest have been generated. For example, did one culture (Anasazi) “swamp” the other (Mogollon) (e.g. Haury 1985:404), or conversely, were the ethnic lines between the two cultural traditions “permeable” (Mills et al. 1999:3; Tainter 1984:53), allowing characteristics of different “cultural groups” to exist together within an area and/or a community? I envision that the differences in Mogollon and Anasazi cultural traditions were multi-variate and likely of some time depth. Understanding this is important because it allows us to talk about, and to possibly distinguish how people from different traditions may have come to together to live and interact.

Cox Ranch Pueblo is situated within the Cibola Region at the southern edge of the Colorado Plateau in current west-central New Mexico (Figure 3.1) and is unique because the people who inhabited it from ca A.D. 1050-1130 possessed cultural attributes similar to archaeological cultures to the north and to the south. It contains both brown and gray plain ware ceramics and characteristics that are considered “Chacoan,” in the form of a great house. The co-occurrence of traits associated with more than one archaeological culture at Cox Ranch Pueblo indicates that the social boundaries of these culture areas were likely fluid. In the following sections, I summarize the culture history of areas north and south of Cox Ranch Pueblo and the specific characteristics used to define them. I

conclude with discussion of the history of research and interpretation of Chaco Canyon and outlying great house designed to help to place Cox Ranch Pueblo into a broader framework.

*Ancestral Puebloans Living South of the Mogollon Rim: Mogollon Culture Chronology*

The start of the Mogollon tradition is recognized by the addition of brown ware pottery to an early agricultural system characterized by pithouse architecture as early as A.D. 200 (Cordell 1997:203). In general, the period from A.D. 200-1000 below the Mogollon Rim is characterized by several major changes. In addition to a hunting and gathering subsistence strategy there was an increasing reliance on agriculture (Cordell 1997:206; Diehl 1996). Additionally, there was a substantial population increase that began around A.D. 850 indicated by a shift from communities with a few large pithouses to communities that were comprised of many smaller pithouses (Cordell 1997:206; Stuart and Gauthier 1981:189, 194). Cordell (1997:206) suggests that this may indicate a shift from extended family cooperative groups to nuclear family group residential strategies for agricultural, hunting and gathering responsibilities. Anyon and LeBlanc (1980) have also noted that large communal structures first appear in the 700s at large village sites and then become more elaborate through time.

Between A.D. 950 and 1150, settlement patterns changed from semi-subterranean pithouses to above-ground pueblo dwellings that incorporated open courtyards and contiguous rectangular rooms. In some areas, brown ware pottery was replaced by black-on-white slipped pots and in other areas both red and white wares were produced.

Additionally, there was population growth and expansion into less agriculturally productive areas (Cordell 1997:206).

The first pueblos built below the Mogollon Rim have been viewed as the result of information introduced by Ancestral Puebloans living to the north (Cordell 1997:206). Another possible influence is the regional change to black-on-white painted wares after A.D. 950. Black-on-white wares were originally thought to have been a characteristic attributed of northern Ancestral Puebloans. Pre-A.D. 1000 potters living below the Mogollon Rim continued to produce brown ware ceramics and incorporated red slipped pottery into their ceramic repertoire. Mimbres Classic pottery incorporates a brown paste similar to earlier brown wares with color schemes first characteristic of red on white (Mimbres Classic Three Circle Red-on-white) and then to black on white (Mimbres Boldface Black-on-white) (Brody 1977). However, it is important to note that these two pottery types are technologically similar and only vary in decoration (Cordell 1977: 208). Based on this transition, Brody (1977) and LeBlanc (1989) have argued that the change in pottery and possibly to above ground dwellings was a local cultural development without influence from their northern neighbors.

#### *Ancestral Puebloans Living North of the Mogollon Rim: Anasazi Culture Chronology*

People living on the Colorado Plateau began to develop out of a lifestyle of predominately hunting and gathering nearly 4000 years ago. The appearance of maize around 2000 BC on the southern Colorado Plateau suggests a shift in diet to incorporate cultivated foods. By A.D. 400, ancestors to the Puebloans were living in pithouse structures throughout the region (Judge 1991:23; Sebastian 1992:25). The first pithouse

communities surrounding Chaco Canyon were likely built on the surrounding mesas (Cordell 1997:190) although several researchers have argued that people were also settling within Chaco Canyon but sites are buried by flood deposits in the canyon bottom (Cordell 1997:190; Sebastian 1992:26 and Hayes et al. 1981 cited in Sebastian 1992). Around A.D. 400 some Ancestral Puebloan potters of the Colorado Plateau began to produce pottery (Toll 2001). Pottery initially consisted of only plain brown ware but it was well made suggesting the technology may have diffused from the Mogollon area. Around A.D. 500-600, black-on-white pottery first appeared in the San Juan area. Kivas were constructed at some sites on the Colorado Plateau about A.D. 500-750.

At the start of the Pueblo I period (A.D. 700-900/925), populations began to congregate into villages throughout the Colorado Plateau. Characterized as densely occupied settlements of 7 to 10 households or more, villages during the Pueblo I period were comprised of large rectangular pithouses called protokivas and above ground blocks of contiguous surface rooms of pole-and-mud construction (Lipe 2006:262). In Chaco Canyon, many pithouse structures were replaced by above ground masonry roomblock architecture (Judge 1991:23; Plog 1979:114). During this time, there was also an expansion in the types of painted pottery produced throughout the Colorado upland (Plog 1979:114).

The Pueblo II (A.D. 900-1150) period is characterized by a shift to above ground masonry construction, some of which had multistory and adjoining pueblos. Magnificent stone structures became known as “great houses” and were centered on Chaco Canyon. Great houses appear to have been constructed according to a preconceived plan and exhibited a level of excellence and standardization in masonry techniques, including

core-and-veneer masonry. Additionally, at this time traditional pit structures became kivas, labor investments likely increased in the construction and expansion of existing pueblos, roads were built linking outlier sites and the major sites within the canyon were completed (Cordell 1997:191).

By A.D. 1000 four pottery wares were being manufactured on the Colorado Plateau, Gray Ware, Brown Ware, White Ware and Red Ware. All of these wares continued to be produced in the region throughout and beyond the Pueblo II period. Although these wares overlap spatially, there are very few locations where all of them were produced (Toll 2001). Gray and white wares were by far the most abundant in the Chaco Region. As products of similar material and production techniques, they are thought to have been locally produced. As mentioned previously, brown wares are thought to have characteristic of Ancestral Puebloan groups below the Mogollon Rim. At this time, these wares also occurred on southern fringes of the Colorado Plateau and in minimal quantities in the San Juan Basin. The presence of brown wares in the San Juan Basin is suggested as a marker of trade with populations to the south (Toll 2001). The origin of red wares throughout the Colorado Plateau in the Pueblo II period is not as easily deciphered as during this time they appear to have been produced and distributed over a wide area. In the Chaco Region the prevalence of red wares is continuous in small numbers and was likely product of both trade and local manufacture. A further and more in depth discussion of ceramic wares and types of the Pueblo II period will be provided in Chapter Five.

Around A.D. 1020 several major architectural changes occurred within Chaco Canyon and throughout the Colorado Plateau. The founding and construction of great

house communities outside of the canyon took place and subsequently the Chaco road system emerged (Judge 1991:25; Lekson 1984). By A.D. 1050 Chaco's influence increased and great house communities were prevalent throughout the region. The population in Chaco Canyon and throughout the Colorado Plateau reached its prehistoric pinnacle from A.D. 1075 to 1115 (Judge 1991:25) and at this time, whatever Chaco was, it had reached its full glory. Prior to A.D. 1100 the layout of great house sites remained consistent with the arc-shaped room layout of Pueblo I however, the size of rooms and kivas did increase significantly (Judge 1991:24).

At the end of the Pueblo II period (A.D. 1100-1140) there were significant changes in architecture and ceramics in Chaco Canyon. Ceramic changes in the northern plateau included the introduction of carbon painted wares including Chaco-McElmo black-on-white. Architectural changes included a different building style reliant on large blocks (similar to later Mesa Verde construction techniques) and a change in the layout of sites to enclosed rectangles (Judge 1991:26). By A.D. 1140 Chaco Canyon was likely abandoned and it appears that many of the outlying communities including Cox Ranch Pueblo were also abandoned. There are many interpretations as to why this large scale abandonment occurred and several are discussed below.

### **Research at Chaco and the Hinterland ca A.D. 1000-1150**

During the eleventh and twelfth centuries A.D., the construction of several large buildings in the San Juan Basin of northwestern New Mexico reflected a complexity previously unknown in the greater Southwest. These structures combined several elements of distinct and sophisticated architecture, had associated roads, earthen works

and material goods. Many communities throughout the Colorado Plateau, have architectural elements similar to the grandiose communities in the canyon, however, on a much smaller scale. The arrangement of these structures across the Southwestern landscape composes has been referred to as the Chaco World (Kantner 2003; Kintigh 2003; Van Dyke 2003).

This section is intended to provide a brief background discussion of Chacoan archaeology, and the changing interpretations of what defines “Chaco.” A complete history of early exploration and research in the canyon is far beyond the scope of this project but can be seen in detailed discussions by Vivian (1970), Lister and Lister (1981), Judge (1991), Doyel and Lekson (1991), and Sebastian (1992). More specifically and relevant to the larger scope of this project, reviews of research focused on “outlying” Chaco communities include Judge (1991), Doyel and Lekson (1992), and Kintigh (2003).

### ***Discovery, Exploration and Continuing Research***

The first official archaeological excavation was conducted in the mid to late 1890s by the Hyde Exploring Expedition and was mostly concerned with the recovery of antiquities for museum display rather than the interpretation of broad cultural patterns (Lister and Lister 1981). During the early 1900s Nels Nelson and Earl Morris produced the first formal observations on the differences and similarities between large structures and small sites within the canyon based upon ceramic seriation (Sebastian 1992:16). By the 1930s, research focused on the development of spatial and temporal chronologies. Edgar Hewett, Neil Judd and Frank Roberts conducted projects at various Chaco sites including Chetro Ketl, Pueblo Bonito, Pueblo del Arroyo and Shabik’eshchee Village.

Their main interests were to create ceramic, architectural, and dendrochronological sequences within and between the canyon sites.

In the early 1930s Chacoan archaeologists began to understand the broader archaeological record of the northern Southwest by looking outside of the canyon. To facilitate this, researchers began to focus their attention to sites exhibiting similar characteristics as those in the San Juan Basin. Excavations conducted at Village of the Great Kivas, a site on the Zuni reservation (Roberts 1932) and at Lowry Ruin in southwestern Colorado (Martin 1936), offered early archaeological evidence of traits found outside the canyon considered to be exclusively “Chacoan.” Chronological and spatial classifications previously applied to the canyon were applied to these sites in attempt to understand the connections between Chaco and communities with similar characteristics. Under the popular normative concept of the culture area, Chaco Canyon became viewed as the spatial center of an archaeological culture associated with the San Juan Basin (Gladwin 1945, Kidder 1962). Communities outside the San Juan Basin with similar traits were considered directly associated with this archaeologically defined culture. Although many have expressed concern about the use of culture areas (e.g., Cordell and Plog 1979), this concept continues to structure many arguments associated with past cultures in a general archaeological paradigm.

During the 1970s and 1980s, the recognition of connections between small sites and the large great house structures at Chaco Canyon was elaborated as the concept of an integrated system was established through large scale surveys (Fowler et al. 1987; Marshall et al. 1979; Powers et al. 1983). In addition to survey and excavation in the canyon, the focus of Chacoan research shifted to identifying the expanse of the Chaco



system through the identification of *outliers* (Fowler et al. 1987; Marshall et al. 1979). Outlier communities have been described by Judge (1991:27-28), based on Marshall et al. (1979) and Powers et al. (1983). The traits include:

- 1) A central, relatively large masonry structure or “great house.” A great house is defined as a massive structure with regular and symmetrical layouts and core-and-veneer masonry and may have a number of other characteristics including tower and above ground kivas (Vivian and Mathews 1965 cited in Lekson 1991:33-34).
- 2) Great house rooms are larger than those in surrounding small houses.
- 3) A large kiva in relation to kivas in small-house sites.
- 4) Formalized or planned site layout.
- 5) A great kiva(s) (not always) usually in direct association or in close proximity to the great house.
- 6) Prehistoric roads (not always).
- 7) Other influences include ceramic styles associated with to Chaco Canyon however, the farther away from Chaco the more variable the ceramic assemblages become.

This collective landscape of outlier sites linked to Chaco Canyon was defined by Cynthia Irwin William as the “Chacoan Phenomenon” and was thought to involve a regional system of considerable size with Chaco at its nucleus that was connected by a system of formally engineered roads (Doyel 1992).

As empirical investigations of the spatial extent of Chaco grew, so did the value of utilizing empirical data in interpretation. Researchers began focusing on particular elements of material culture to facilitate interpretation, including ceramics (Toll 1984), lithics (Cameron 1984; Cameron and Sappington 1984), fauna (Akins 1984), architecture (Lekson 1984), jewelry (Mathien 1984), and mortuary remains (Akins and Schelberg 1984). These interpretations centered on models of exchange, redistribution, and specialization to make a connection between outlier and canyon sites (Altschul 1978; Grebinger 1973; Judge et al. 1981; Judge and Schelberg 1984; Schelberg 1984). Several

researchers suggested that Chaco was an exchange or redistribution center, its primary function to store surplus and overcome productive shortfalls within a regional network (Judge et al. 1981; Powers et al. 1983). However, others envisioned redistribution as a means to maintain a relationship between the so called “village” and “town” sites within the canyon proper (Grebinger 1973; Vivian 1970).

By evaluating various models through the analysis of empirical data, the expanse of what was considered “Chacoan” grew. Artifacts considered to be “prestige goods” such as copper bells, macaws, turquoise and shell, led some to suggest there was a connection between Chaco and Mesoamerica (Mathien 1986). Although this interpretation was popular for a time, this relationship has not held up.

Focus on an understanding of the initiation, growth, and decline of the Chacoan system (Crown and Judge 1991) has been a dominant topic of discussion. Several sociopolitical models offer explanations of the Chaco emergence (Kantner 1996; Saitta 1997; Schelberg 1992; Sebastian 1991, 1992; Wilcox 1993; Wills 2000; Toll 1991; Vivian 1989, 1992). Archaeologists argued for a Chacoan political center for chiefs, patrons and elites exercising control over outlier communities (Kantner 1996; Schelberg 1992; Sebastian 1991, 1992). Researchers have also suggested that Chaco was a militaristic state (Wilcox 1993), a non residential ceremonial center (Toll 1991), or a cluster of agrarian settlements differentiated along ethnic lines (Vivian 1989, 1992). However, with so many models offered, there is little consensus to what “Chaco” actually represented and its expanse across the landscape.

In the early 1990s, Lekson (1991) proposed that archaeologists should identify great house communities not only by a list of traits, but with additional reference to the

contextual landscape. This has led to more loosely defined “great house communities” and subsequently, the magnitude of Chaco increased to incorporate nearly the entire Anasazi region. This caused researchers to reconsider previous interpretations of Chaco as an interacting “regional system” and focus on the relationship of outlying great house communities with Chaco Canyon (Judge 1991; Kendrick and Judge 2000; Kintigh 2003; Kantner 2003; Lekson 1991; Van Dyke 2003; Warburton and Graves 1992). Landscape reconstructions offered interpretation of Chaco as a regional ceremonial center that integrated populations with ritual (Fowler and Stein 1992; Stein and Lekson 1992); this was further supported by cosmological interpretations (Marshall 1997; Sofaer 1997) that focused on the placement of roads and structures throughout the landscape. This discussion has continued, as Ruth Van Dyke (2004) suggests that social memory and meaning embedded in the construction of roads, buildings, and earthen works serves to integrate people throughout the Chacoan landscape.

Investigations by Chacoan researchers in the late 1990s and the early 21<sup>st</sup> Century have focused on great house communities in the hinterlands of the Chacoan system. There is a continued interest in defining the relationship of outlying great house sites to those within the canyon proper (Hurst 2000; Kantner 2003; Kendrick and Judge 2000; Kintigh 2003; Van Dyke 2003), however, researchers increasingly focus on understanding the function of outlying great house structures with respect to their own communities (Kendrick and Judge 2000; Mahoney 2000).

To date, there is still really no agreement on what “Chaco” is, especially outside of the canyon (Kintigh 2003). Van Dyke (2003) attempted to rectify this by creating a list of architectural variables that would help define outlying great house communities

that may represent participation in a common learning framework. These variables include: the sites distance from the canyon, regional location, and the presence of great kivas, road segments and earthen works, and internal great house construction attributes of core-and-veneer masonry, banded facing, symmetry, and the presence of elevated kivas. Although this list of traits is similar to that proposed by Judge (1991), unlike several researchers in the 1970s and 1980s who considered the Chaco proper and the communities on the hinterland as a single regularly interacting system, current views suggest that outlying great houses were independent entities, that did not regularly interact but were tied by some commonality, possibly by people who shared a similar learning framework of great house construction and a knowledge that could have spread out from the canyon (Van Dyke 2003).

Through time, defining and describing what Chaco is has changed dramatically, becoming more widespread and loosely defined. Recent research suggests that many far outlying communities that display Chacoan characteristics, such as Cox Ranch Pueblo, may have had indirect connections based more on ideology and symbolism than participated in direct neo-evolutionary social forms like complex chiefdoms or semi-states. Interestingly, as discussed above, Cox Ranch Pueblo rests not only in the hinterland of things Chacoan but also displays characteristics of communities to the south. Addressing, technological variability in ceramic production within this community A.D. 1050-1130 may help further define the role of the great house at Cox Ranch Pueblo and its possible relationship with the Chaco Canyon.

## **Summary**

This chapter has provided background to a number of issues relevant to this thesis. The archaeological research that enabled researchers to define two culture areas as the Chaco Anasazi and the Mogollon were described to provide context for Cox Ranch Pueblo, which contains elements of both culture areas. This indicates that social boundaries of these culture areas were fluid, with several overlapping cultural characteristics in an area and/or community. The history of archaeological research on Chaco-era communities serves to situate discussion of Cox Ranch Pueblo as a Chaco-period great house community and its relationship, if any, to Chaco Canyon.

## **CHAPTER FOUR**

### **Archaeological Investigations at Cox Ranch Pueblo**

This chapter briefly describes the goals, methods and preliminary interpretations of the archaeological investigations at Cox Ranch Pueblo. The primary function of this section is to provide a general description of excavations conducted at the site to introduce site-level interpretations providing context for further discussion of the ceramic assemblage in the following chapters. Specific attention is given to ceramic counts and densities, architectural description and construction sequences as they apply to excavated areas.

#### **Cox Ranch Pueblo**

Cox Ranch Pueblo is located in west-central New Mexico south of the current Zuni Reservation in the Cibola region. Cox Ranch Pueblo is comprised of multiple roomblocks, middens, and one feature interpreted as a Chaco-era great house. The excavations at Cox Ranch Pueblo (LA 13681) were conducted from 2003-2005 revealing a large community with a great house that may have been linked to the poorly defined Chacoan regional system. This possible link makes the site significant for addressing issues of sociopolitical organization in outlying communities.

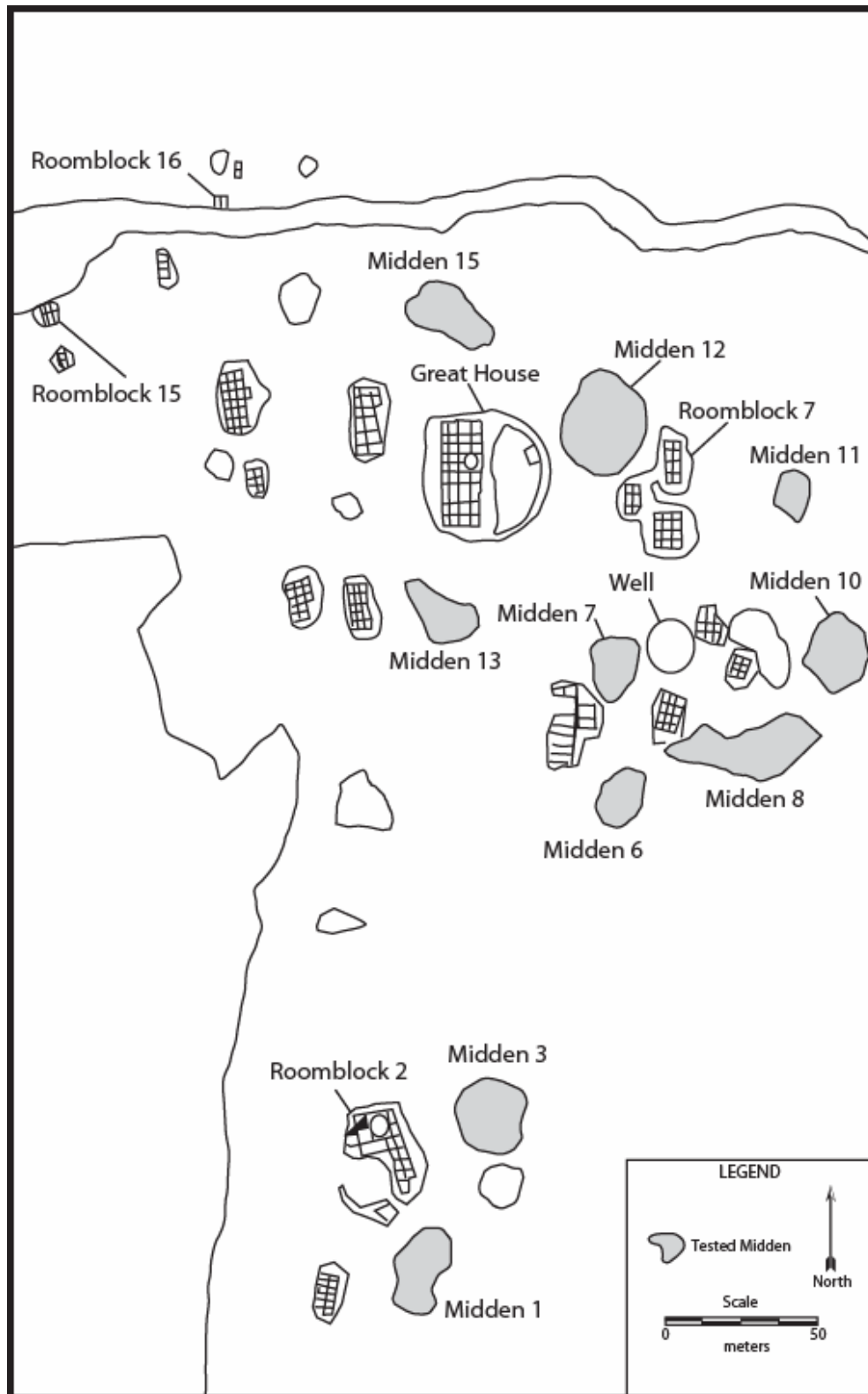
Excavations at Cox Ranch Pueblo are a result of the new direction in Chaco research to interpret the role of outlying great house communities. In general, the goals of the Cox Ranch Pueblo Community Research Project are to explore the nature of community organization in the Cibola Region with an emphasis on the time period from

A.D. 1030-1130 (Duff and Nauman 2004). By focusing on this time period, the project's aim is to collect data on the influence, or lack of influence, that Chaco Canyon had on outlying communities. One of the main interests is to document the founding, maintenance, and decline of a community that had a relationship with Chaco Canyon but is located a long distance away.

Cox Ranch Pueblo is an aggregated roomblock settlement comprised of a great house with an elevated D-shaped plaza, approximately 50 ground story rooms, an associated midden, and an enclosed kiva. In addition, there are 19 additional collapsed masonry buildings that are smaller than the great house, 18 midden areas, and a depression thought to be a well. (Duff and Nauman 2004) (Figure 4.1). At the south end of the site is Roomblock 2 which includes a large elliptical area bounded by walls, but that is open on both ends. This feature has been referred to as ballcourt-like (Fowler et al. 1987:161) and is about the size of a great kiva.

### ***Excavation Methods and Goals***

The excavations at Cox Ranch Pueblo were conducted as a field school through Washington State University during the summers of 2003-2005. Provenience for all materials recovered used the Area, Unit, Level, and Locus system (Duff and Nauman 2004). The hierarchy begins with the site number (LA13681) and follows with Area, Unit, Level, and Locus. Each spatially defined part of the site (such as a midden or roomblock) was given an Area designation, and excavations within those were designated units. Units can be arbitrary or relate to architectural features such as rooms. Levels were excavated in arbitrary 10 to 30 cm vertical subdivisions within Units, but natural



**Figure 4.1.** Map of Cox Ranch Pueblo showing public architecture, roomblocks and associated middens.



stratigraphic changes were also noted. Most units were excavated in arbitrary 10 cm levels. Features are defined as spatially discrete, immovable constructions usually linked to specific functions, such as fire hearths or mealing bins, and were designated with their own locus number so that they could be subdivided for excavation. Materials were field sorted by material type, bagged by Unit, Level, Locus provenience, provided a unique Field Specimen Number, and catalogued.

All materials recovered from the 2003-2005 excavations were sieved through ¼ inch mesh with the exception of one unit in Midden 3, the depression feature and portions of the unit in Roomblock 7. One unit from Midden 3 was sieved through 1/8<sup>th</sup> inch mesh screen to compare the results with the recovery of fauna from sediments screened through ¼ inch mesh. The results of faunal analyses indicated no significant difference between identifiable faunal materials. Deposits excavated from the depression feature were sampled, with 10-50% of the sediment screened (Duff and Nauman 2004:22). The rationale for this was two fold. First, the purpose of this unit was to identify a possible function of the depression feature. Second, during excavation few cultural materials were found to be associated with this unit. Only 25 percent of the sediments from Roomblock 7, Unit 1, Level 2 was screened. The purpose of the unit was to define this feature and initial levels revealed few artifacts. A greater number of artifacts were encountered in Level 3 and the sediments from the unit were then screened at 100%.

### *Midden Excavations*

Middens were systematically sampled by first delineating their areas with respect to the site grid. Units were assigned a number from 1-n excluding partial cells around the

perimeter. The total number of complete units, the sample universe, was then placed into a random number generator selecting without replacement. Units, or 1-x-1m squares, were then chosen for excavation in the order that they were randomly selected until the number of desired units had been reached (Duff and Nauman 2004). This sampling strategy was used to test ten of the eighteen identified middens at the site (Figure 4.1). All midden units were excavated in arbitrary 10 cm levels.

The depth and density of midden deposits varied across the site; cultural deposition ranged from 15- 160 cm. On average, midden units were excavated from 30 to 50 cm before reaching culturally sterile deposits. A total of five or six 1-x-1 m units were excavated from each midden area (Table 4.1). The volume excavated from each midden was dependant on the depth of cultural deposits. Midden 12 was the densest and deepest, while, Midden 8 contained the fewest artifacts and shallow deposits.

**Table 4.1.** Description of midden units, excavated midden volumes and ceramic density.

Area	Associated Architecture	Number of Units	Volume (m <sup>3</sup> )	Total Ceramic Count*	Density* (ceramics/m <sup>3</sup> )
Midden 1	Untested Household Roomblock	5	2.47	1327	537.2
Midden 3	Roomblock 2	5	2.53	1268	501.2
Midden 6	Untested Household Roomblock	5	2.42	1681	694.6
Midden 7	Untested Household Roomblock	5	2.2	1017	462.3
Midden 8	Untested Household Roomblock	5	1.74	699	401.7
Midden 10	Untested Household Roomblock	6	1.42	719	506.3
Midden 11	Roomblock 7	6	2.06	1499	727.7
Midden 12	Great House	6	3.94	5329	1352.5
Midden 13	Untested Household Roomblock	5	1.37	1065	777.4
Midden 15	Untested Household Roomblock	6	2.59	2250	868.7
Total Midden		54	22.74	16854	6829.7

\*Excludes sherds less than ½" in size.

In theory, all middens at Cox Ranch Pueblo are located slightly north and east of their associated roomblock. For example, Midden 12 is thought to have been associated with the Great House, Midden 11 with Roomblock 7, and Midden 3 with Roomblock 2 (Table 4.1). This differs slightly from the placement of middens in northern Ancestral Pueblos, where they were commonly located southeast of their respective households (Prudden 1903).

### *Great House Excavations*

Excavations in the Great House were guided by several questions. First, units were placed to expose masonry, to see if it resembled that used in Chaco Canyon. Every unit positioned in the Great House exposed at least one masonry wall (Figure 4.2). Second, excavations sought to define the construction sequence through examination of bond-and-abut relationships and architectural variation and, ideally, by obtaining datable wood. Third, attention was given to salvaging archaeological deposits disturbed by previous looters. Chaco style core-and-veneer masonry walls were exposed similar to those found in other great house communities and in Chaco Canyon. Excavations also resulted in the recovery of a number of cultural materials indicative of both primary and secondary cultural deposits. Table 4.2 provides a summary of provenience, size, ceramic count and density for each excavated Great House unit.

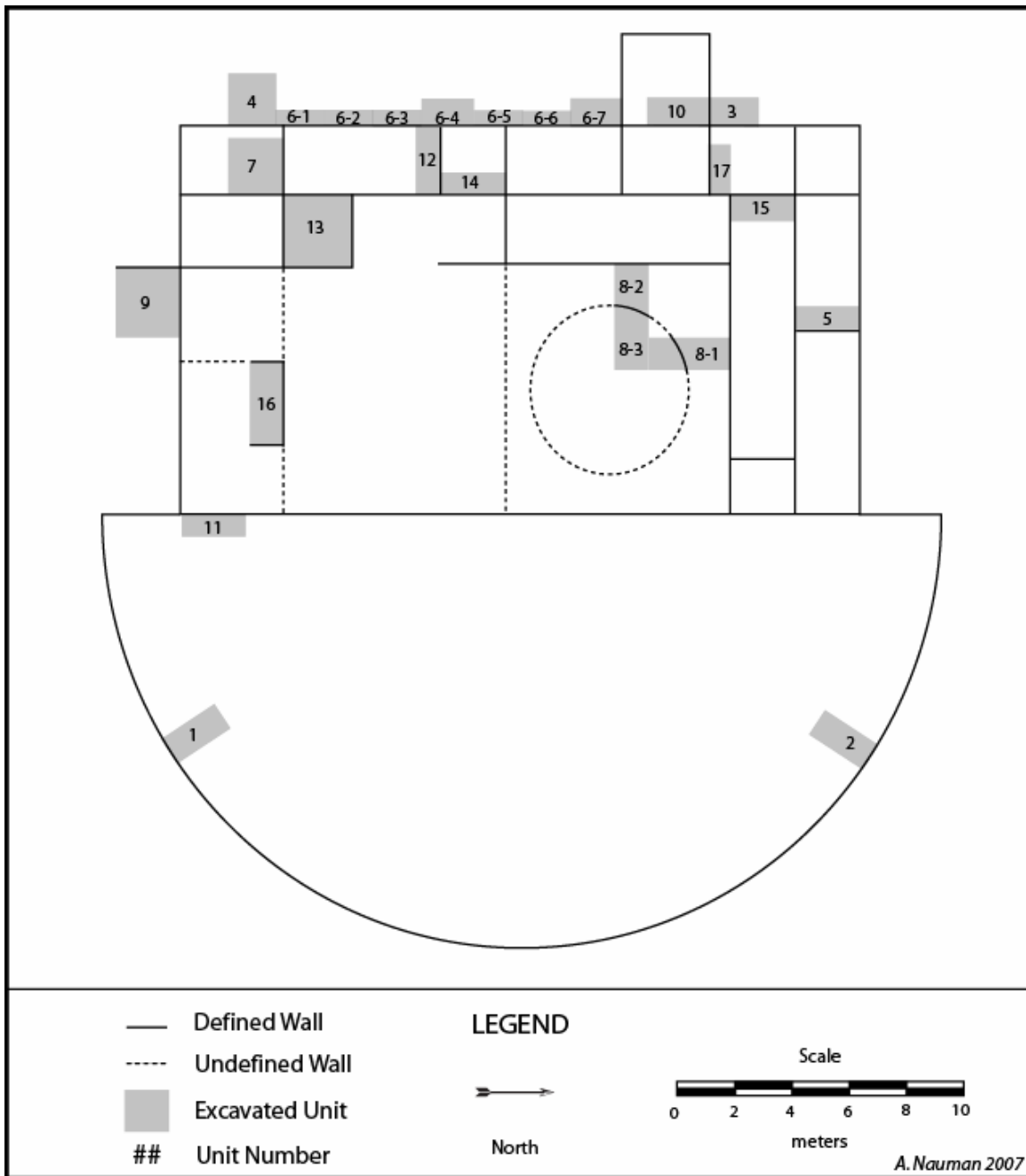
Units placed to define Great House masonry included Units 1, 2, 3, 4 and 11, were positioned to expose exterior walls. Units 1 and 2 were located in the interior curve of the D-shaped plaza and revealed a substantial bounding wall that was two courses wide, but only two-to-three courses high. This relatively low plaza wall indicates

activities in the plaza were likely visible to the community. Unit 11 abutted the front wall of the Great House in effort to better define this wall. Relatively few ceramics were recovered from these plaza units. Ceramic density in Unit 1 was influenced by the presence of a large broken indented corrugated brown ware jar (see Chapter Five for discussion of types) found resting on the plaza floor.

**Table 4.2.** Great House provenience, size, volume of excavation, ceramic count and density.

Great House Unit	Unit Provenience	Unit Size	Volume (m <sup>3</sup> )	Total Ceramic Count*	Density* (ceramics*/ m <sup>3</sup> )
1	Plaza	1m x 2m	0.71	178	250.7
2	Plaza	1m x 2m	1.21	122	100.8
3	Exterior Backwall	1m x 2m	2.52	360	142.9
4	Exterior Backwall	2m x 2m	6.55	1932	295.0
5	Room 5	1m x 2.3m	2.27	1415	623.3
6.1- 6.7	Exterior Backwall	14m x 0.5 - 1m	6.28	1857	295.7
7	Room 7	1.5m x 2.5m	7.93	656	82.7
8.1	Kiva	1m x 3m	10.26	491	47.9
8.2- 8.3	Kiva	1.5m x 2m	8.02	432	53.9
9	Room 9	2m x 2m	2.44	1220	500.0
10	Room 10	1m x 2m	2.11	650	308.1
11	Plaza	1m x 2m	1.16	245	211.2
12	Room 12	1m x 3m	5.52	2101	380.6
13	Room 13	2m x 2m	5.55	919	165.6
14	Room 14	1m x 1.7m	3.24	116	35.8
15	Room 15	1m x 2.65m	2.77	1908	688.8
16	Room 16	1m x 3.2m	7.68	2120	276.0
17	Room 17	1m x 2m	2.74	1062	387.6
Total			78.96	17784	4846.6

\*Excludes sherds less than ½" in size.

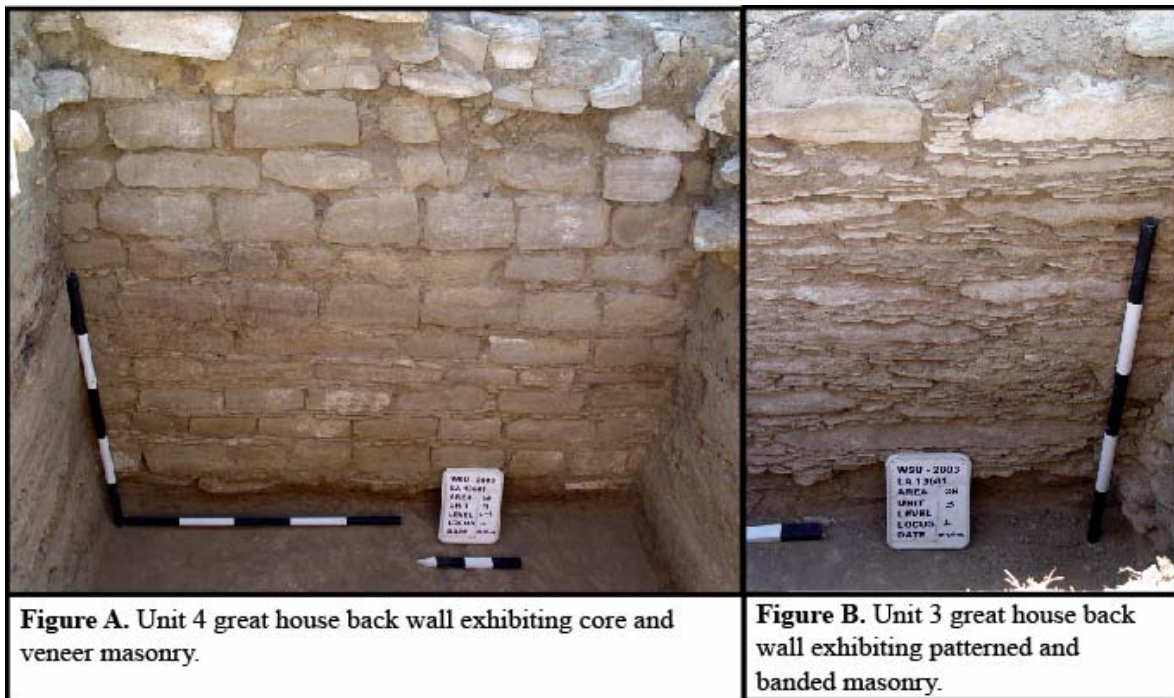


**Figure 4.2.** The Great House at Cox Ranch Pueblo and excavated units.

Units 3, 4 and 6 exposed Great House exterior masonry and structure height. Unit 4 was located at the tallest part of the mound and indicated that this section of the Great House was either two stories or had over-tall rooms. The remaining exposed wall stood two meters in height and was constructed of core-and-veneer masonry with tabular

chinking preserved on the lower courses (Figure 4.3a). Core-and-veneer masonry is one characteristic associated with Chacoan buildings (Lekson 1984). Dense trash deposits recovered from this unit were most likely dumped from the roof of the Great House.

Unit 3 excavations indicate the Great House was a single story. Unit 3 exposed a segment of the back wall that was only one meter tall, a single stone wide and constructed with long tabular-pieces forming alternate banded courses (Figure 4.3b). The style of the wall segment exposed in Unit 3 could be classified as Type II Chacoan masonry, which tentatively dates between A.D. 1020-1060 (Lekson 1984). This type is generally viewed as earlier than the core-and-veneer masonry exhibited in Unit 4. Dense trash deposits identified in Unit 4 were not present in Unit 3. Data obtained from these units indicate that the Great House is Chacoan in character, with patterned banded masonry and core-and-veneer sections.



**Figures 4.3A and B.** Great House wall masonry exhibiting Chacoan characteristics.

Unit 6, Loci 1-7 were placed as a trench that followed the exterior wall to define where the change in masonry occurred between Units 3 and 4; the change from the core-and-veneer wall occurred in Unit 6 Locus 4. This indicates a sequence of artifact deposition across the back wall of the two story, or over-tall, section of the Great House that did not continue into the single storied northern section.

The difference in construction and style on this back wall indicates at least two construction events. The northern section of the Great House is not as tall and the architectural styles differ. Based on wall bonding, the northern portion of the Great House was constructed first. Additionally, the plaza was likely attached in later stages of construction.

Most remaining units were placed within Great House rooms. Of these units, 5, 9, 10, 12, 15, 16 and 17 were later used as contexts of primary trash deposition and contained abundant ceramics (Table 4.2), faunal remains (Mueller 2006), and other debris. Units 5, 9 and 15 exhibit the greatest densities of ceramic material in the Great House. The density of ceramics in Units 5 and 15 suggest they were certainly used as midden contexts. The abundance of ceramics in Unit 9 may have been the result of primary trash deposition or secondary slumping of trash deposits from adjacent rooms. Units 10, 12, 16 and 17 had moderate ceramic deposition atop floors. The high density of artifacts at lower levels is most likely due to the rooms being trash filled, with low density upper levels the product of post-occupation collapse. Units 15 and 17 indicated that the shared wall was of single coursed construction comprised of long tabular slabs and an abundance of chinking similar to the Type II Chacoan style wall identified in Unit 3.

The Great House also had rooms that were not trash-filled, but contained in-tact cultural deposits. Excavations in Unit 7 demonstrated that rooms in this portion of the Great House were over-tall, while Unit 13 indicates that this room was possibly two stories. These units both indicate that the first interior wall east of the Great House back wall is core-and-veneer construction. Unit 7 revealed a large hearth on the roof. With a diameter of approximately 40 cm, while burning, fires would likely be visible from some distance. Relatively few ceramics were recovered from this unit; however, several burnt roof beams were located within the fill and were sampled for dendrochronological analysis.

Unit 13 was situated at the highest point of the Great House. This unit initially spanned the entire north to south and east to west width of Room 13. However, the upper section of the east wall of this room had been removed by a looter's backhoe trench. Unit 13 revealed two discrete household levels/floors; however, the second story level may not have been roofed. The upper surface had several large pieces of groundstone, two or three broken vessels, and two mealing bins that abutted the north wall. Excavation of the fill in this room used a 1.5-x-2m window along the eastern wall of Unit 13. This portion of the prehistoric second story floor had already been destroyed by the backhoe trench. In relation to other trash-filled rooms at the site, the lower story of this room contained a paucity of artifacts and very few if any artifacts were associated with the floor. The east wall was composed of tabular stones with no chinking. Pecked geometric shapes were visible on approximately ten of the construction stones, possibly indicating the importance of this room.



Unit 14 revealed the fewest ceramics per cubic meter of the Great House units and was mostly composed of rubble fill. The eastern wall of this unit was double-coursed. The north and south walls of this room were single coursed.

Excavations in Unit 8 were positioned to define a circular kiva. The interior of the kiva contained a clay plastered earthen bench around the edge. A portion of a hearth was also encountered. The hearth is located in what is assumed to be near the center of the kiva. Few artifacts were found in these units, but some ceramics, fauna, shell and lithic materials were recovered.

### ***Excavation of Non-Great House Architecture***

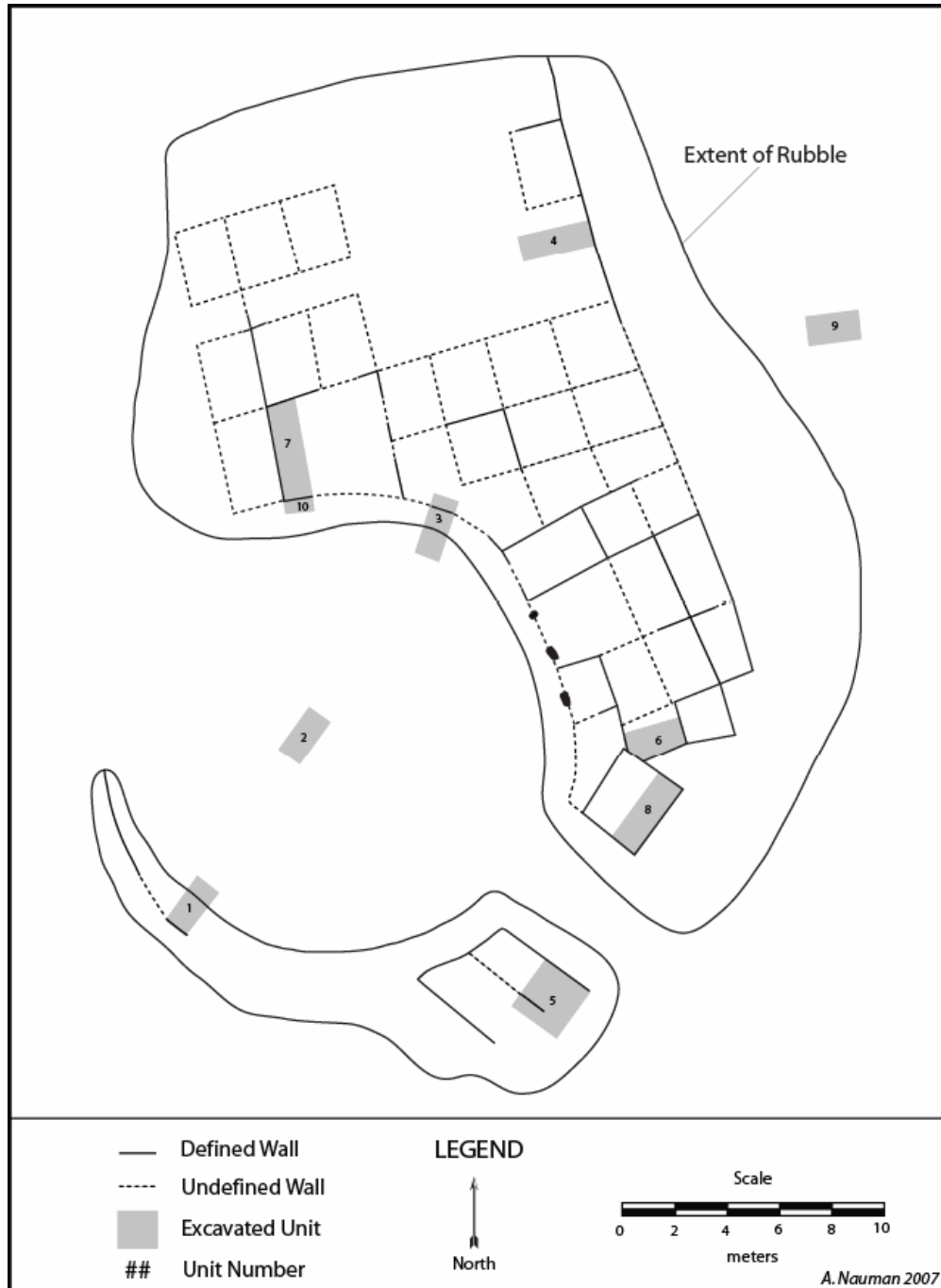
Architecture outside the Great House were also tested. Possible public architecture tested includes portions of Roomblock 2 and the Depression. Tested households are Roomblocks 7, 15 and 16. With the exception of Roomblocks 15 and 16, all of these areas are examined in greater depth later in this thesis.

#### ***Roomblock 2***

After the Great House, Roomblock 2 is the most prominent architectural feature at Cox Ranch Pueblo (Figure 4.1). A total of ten units were excavated to identify different contexts of the roomblocks' architecture and deposition (Figure 4.4; Table 4.3). Roomblock 2 is unique because it contains a large ball-court like feature that was never roofed (Duff and Nauman 2004).

Three units were located across the open area of the ball-court like feature to provide a cross section of the feature. These units produced few artifacts, but indicate that this feature was never roofed. The walls of the partially enclosed plaza were constructed

coarsely with oversized sandstone blocks. Unit 4 was situated in an open area within the northern end of the roomblock initially thought to be an interior kiva. Testing suggests this area was a small plaza but not a kiva.



**Figure 4.4.** Roomblock 2 and excavated units.

**Table 4.3.** Roomblock 2 size, volume of excavation, ceramic count and density by unit.

Roomblock 2 Units	Unit Provenience	Unit Size	Volume m <sup>3</sup>	Total Ceramic Count*	Density* (ceramics*/ m <sup>3</sup> )
1	Plaza	1m x 2m	0.754	7	9.3
2	Plaza	1m x 2m	0.712	2	2.8
3	Plaza	1m x 2m	1.209	41	33.9
4	Possible Kiva	1m x 2.3m	2.07	424	204.8
5	Room 5	2m x 2m	2.99	174	58.2
6	Room 6	1m x 2.5m	4.67	281	60.2
7	Room 7	1m x 3.74m	3.72	341	91.7
8	Room 8	1m x 3m	2.21	1222	552.9
9	Anomaly	1m x 2m	3.28	45	13.7
10	Exterior Room	1m x 1m	0.81	34	42.0
Total			22.425	2571	1069.5

\*Excludes sherds less than ½” in size.

Units 5, 6, 7 and 8 were located within rooms of Roomblock 2. Unit 10 was positioned on the exterior of Unit 7 to better define a wall. Relatively robust ceramic densities in Unit 8 indicate that it may have been trash filled. Units 5, 6, 7 and 10 had moderate ceramic assemblages for Roomblock 2. Several walls were constructed of well shaped and regularly sized large blocky stones with chinking, while others were constructed of much smaller irregularly shaped stones with minimal chinking. All of the walls exposed in Roomblock 2 appear to have been a single course wide; no core-and-veneer walls have yet been identified. Excavation in Unit 7 revealed a mealing bin feature and a hearth. Units 6 and 8 also had hearth features.

Unit 9 was situated to test an anomaly identified through magnetometer testing. Excavations revealed a deep pit, several artifacts and burned roofing materials, indicating a pit house structure of some sort.

### *The Depression*

The depression (Figure 4.1) at Cox Ranch Pueblo was initially interpreted as a possible great kiva (Fowler et al 1987:161-162). Excavations confirmed (Table 4.4) that the feature is definitively cultural and contemporaneous with the occupation of the rest of the site, though this feature still remains poorly defined. Identification of a series of ponding events suggest that this area may have formed a walk-in-well or reservoir (Duff and Nauman 2004:23; Landt et al. 2005).

### *Roomblock 7*

Excavation was conducted in a magnetic anomaly distinguished outside of Roomblock 7. The purpose of this unit was to identify the feature and find datable wood materials. Few artifacts were located in the upper strata of this unit but lower strata contained dense trash deposits. Only 25% of Level 2 was screened, while all other levels were screened at 100%. The density of artifacts in lower strata indicates primary deposition of trash materials (Table 4.4). No structural beams or stone architecture was defined in this feature. Extensive daub (burnt clay) was located within the fill suggesting the feature was roofed. The diameter of the concave pit floor was between 6- 8 m., though the nature and original function of this pit feature is unknown.

### *Roomblocks 15 and 16*

Roomblocks 15 and 16 are located on the edge of the arroyo on the northernmost edge of the site (Figure 4.1). They were excavated in 2003 as part of a salvage effort to gather data before these roomblocks were destroyed by erosion. Roomblock 16 had two remaining rooms, both of which had recently been looted. A unit placed in one of these

rooms unearthed traces of a mealing room. Two rooms in Roomblock 15 were excavated. Few artifacts and features were encountered in these rooms. Because of severe disturbance and few recovered artifacts, these units are omitted from further ceramic analysis in this thesis.

**Table 4.4.** Non- Great House Areas volume of excavation, ceramic count and density.

Area	Unit	Unit Size	Volume m <sup>3</sup>	Total Ceramic Count*	Density* (ceramics*/ m <sup>3</sup> )
Depression	1	1m x 3m	7.162	424	59.2
Roomblock 7	1	1m x 2m	3.12	956	306.4
Roomblock 15	1	1.8m x 1.3m	0.63	63	100.0
	2	0.5m x 0.5m	0.039	14	359.0
	3	2.3m x 1.6m	1.057	36	34.1
Roomblock 16	1	1.4m x 1.25m	0.799	250	312.9

\*Excludes sherds less than ½” in size.

## Summary

This chapter has summarized the excavations of Cox Ranch Pueblo to provide context for the ceramic analysis presented in the following chapters. It has outlined the spatial layout of the site for interpreting the social significance of pottery production at Cox Ranch Pueblo, the subject of the following chapters.

## **CHAPTER FIVE**

### **Ceramic Ware, Type and Form**

The purpose of this chapter is to introduce the ceramic materials identified at Cox Ranch Pueblo and summarize the criteria used to classify ceramic wares and types in the region, with a specific focus on criteria used to assess the ceramic materials identified in the Cox Ranch Pueblo community assemblage. These are used to produce a seriation of assemblages from excavated contexts at the site in Chapter Six, and to provide the basis for the detailed technological analyses presented in Chapters Eight and Nine.

#### **Assessing Ware, Type and Form**

The first objective of research with the ceramic collection from the Cox Ranch Pueblo community was to identify the ceramic wares and types present. This primary analysis helps to both define the temporal span of the site and offer general insight into the community, aiding in the exploration of questions such as: When did this community flourish and for how long? Was it inhabited relatively contemporaneously (by an aggregate group) or were there a series of occupations? Where did the members of this community come from and who were their ethnic affiliates?

Identifications of each ceramic piece included assessing ware, type and form. These classifications were based on design style and technological attributes following Colton and Hargrave (1937), Colton (1953, 1965), Carlson (1970), Fowler (1985), Hays-Gilpin and van Hartesveldt (1998), Mills (1999), Eckert et al. (1995), Duff (1996, 2002), and Kintigh (1996, 2004).

### ***Ware and Type***

Ware is based on similar observable features that weigh heavily on color, but are also dependant on manufacturing process, temper and clay (Colton 1953). Wares persist in an area through time, and refer to tradition of pottery-making that involves use of similar materials, forming techniques and firing conditions. Pottery identified at Cox Ranch Pueblo is first divided in two distinct groups: 1) painted and 2) plain or textured ceramics. Painted ceramics include Cibola White Ware and White Mountain Red Ware while unpainted, textured ceramics consist of Cibola Gray Ware and Mogollon Brown Ware.

Types characterize temporal changes among vessels of a given ware, and are differentiated by attributes of decoration, surface treatment and sometimes vessel form. Types embody a number of variables that co-occur spatially and temporally, making them useful for discussing chronology and in addressing questions of cultural affiliation, production and distribution. In the Cox Ranch Pueblo assemblage, types were defined by painted design on painted wares and the organization of textures present on unpainted wares. However, technological distinctions were also examined. Attributes of design and technology used to define types at Cox Ranch Pueblo are fully articulated below. Table 5.1 provides a summary of the ceramic assemblage recovered from Cox Ranch Pueblo by ware and type.

**Table 5.1.** Ceramic Assemblage at Cox Ranch Pueblo LA 13681.

<b>Type</b>	<b>Frequency*</b>	<b>Percent*</b>
<b>Cibola Gray Ware</b>		
Lino Gray	4	0.01%
Neckbanded Gray	2	0.01%
Clapboard Corrugated	8	0.02%
Plain Gray	281	0.72%
Plain Corrugated	170	0.44%
Indented Corrugated	3945	10.13%
Patterned Corrugated	30	0.08%
Incised Corrugated	2	0.01%
Unidentified	26	0.07%
<i>Subtotal</i>	<i>4468</i>	<i>11.47%</i>
<b>Mogollon Brown Ware</b>		
Plain Brown	2688	6.90%
Plain Brown Smudged	4217	10.83%
Plain Corrugated	2811	7.22%
Plain Corrugated Smudged	998	2.56%
Indented Corrugated	3070	7.88%
Indented Corrugated Smudged	1776	4.56%
Patterned Corrugated	473	1.21%
Patterned Corrugated Smudged	381	0.98%
Incised Corrugated	115	0.30%
Incised Corrugated Smudged	67	0.17%
Unidentified	96	0.25%
<i>Subtotal</i>	<i>16692</i>	<i>42.85%</i>
<b>Cibola White Ware</b>		
Kiatuthlanna	25	0.06%
Red Mesa	107	0.27%
Gallup	588	1.51%
Escavada	104	0.27%
Puerco	3570	9.17%
Reserve	3945	10.13%
Unidentified	7455	19.14%
<i>Subtotal</i>	<i>15794</i>	<i>40.55%</i>
<b>White Mountain Red Ware</b>		
Puerco	493	1.27%
Wingate	730	1.87%
Wingate Poly	44	0.11%
Unidentified	731	1.88%
<i>Subtotal</i>	<i>1998</i>	<i>5.13%</i>
<b>Total</b>	<b>38952</b>	<b>100.00%</b>

\*Excludes sherds less than 1/2" in size.



Types identified at Cox Ranch Pueblo are part of a well developed chronology centered on the Zuni region (Colton and Hargrave 1937), although production dates for chronologically sensitive types vary slightly between researchers. Table 5.2 displays the chronological range of each type used by different researchers and the dates used in this thesis. The date ranges used for Cox Ranch Pueblo are based on a combination of dates for pottery from sites located to the north and south.

**Table 5.2.** Cibola ceramic typologies by multiple researchers.

<i>Type</i>	<i>Dates (AD)</i>					
	Hays-Gilpin and Van Hartesveldt (1998)	Mills and Herr (1999: 280)	Kintigh (1996: 134 2004:437)	Eckert, Duff and Kintigh (1993)	Carlson (1970)	Dates used in this manuscript
<b><i>Cibola White Ware</i></b>						
Kiatuthlanna B/w	850- 950	850- 930	850- 1050	850- 950	n/a	850-950
Red Mesa B/w	900- 1050	880- 1040	850- 950	900- 1030/50	n/a	900-1050
Gallup B/w	1030-1125	1040- 1160	1050- 1100	1030- 1125/50	n/a	1030- 1125/50
Escavada B/w	1000-1130	1000- 1100	1050- 1100	1000/30 -1130	n/a	1000/30 -1130
Puerco B/w	1030- 1150	1030- 1200	925- 1200	1030- 1150/75	n/a	1030-1150/75
Reserve B/w	1030- 1200	1100- 1200	950- 1175	1030/50- 1175/1200	n/a	1030-1175/1200
Tularosa B/w	1175- 1300	1180- 1300	1125- 1225	1175- 1325	n/a	n/a
<b><i>White Mountain Red Ware</i></b>						
Puerco B/r	1030- 1150	1000- 1180	1025- 1175	1000/30- 1150/80	1000- 1200	1000-1175
Wingate B/r	1050/1100- 1200	1050- 1200	1050- 1200	1050- 1175	1050- 1200	1050-1200
Wingate Polychrome	1125- 1200/ 25	1100- 1200	1125- 1225	1125- 1200	1125- 1200	1100-1225
<b><i>Cibola Gray Ware</i></b>						
Lino Gray	500- 800	n/a	800- 950	n/a	n/a	500- 800
Plain	900-1300	n/a	n/a	n/a	n/a	900-1300
Clapboard Corrugated	900- 1300	n/a	n/a	n/a	n/a	900- 1300
Plain Corrugated	900- 1300	n/a	n/a	n/a	n/a	900- 1300
Indented Corrugated	925- 1300	n/a	n/a	n/a	n/a	925- 1300
Patterned Corrugated	1050-1300	n/a	n/a	n/a	n/a	1050-1300
<b><i>Mogollon Brown Ware</i></b>						
Corrugated Smudged	1050- 1250	1150- 1280	n/a	n/a	n/a	1050- 1250

To reduce inconsistency of typological assignment, all of the identifications in the Cox Ranch Pueblo assemblage were made by one analyst, the author. In addition, all ceramics were shaken through a one-half inch mesh screen before assignment of type.

This method assured that only those sherds larger than one-half inch were assigned to a type. Those that could not be confidently assigned to a type were assigned to one of a number of “unidentified” categories. Sherds smaller than one-half inch were grouped and counted by ware.

### ***Vessel Form***

Vessel form was also assigned to sherds larger than one-half inch. These designations include bowl, jar, ladle, worked sherd and unidentifiable. Few whole vessels were recovered at Cox Ranch Pueblo, so form was inferred from sherds. When working with body sherds, painted bowls were defined by the presence of paint or slip on the interior curve of the sherd, whereas jars will have paint and/or slip on the exterior curve. Unpainted, textured bowls and jars have texture on the exterior. Unpainted, textured bowls were defined by either their smudged or highly smoothed and polished interior surface.

Ladles are defined by their distinct handles and/or a small rim diameter with a worn rim surface. Painted ladles often display more tightly executed design styles reflective of their shape and small size. Worked sherds are ceramic pieces that are deliberately ground and/or smoothed. These are frequently represented at Cox Ranch Pueblo as circular pendants about the size of a half dollar, made from both painted and unpainted sherds. The function of these worked pieces is unknown. Sherds that can not be confidently assigned to any other vessel form are recorded as “unidentifiable.”

The count and weight of each grouping of ware, type and form by site-level provenience Unit, Level and Locus were recorded. Appendix A provides a sample of the

coding form used in the ceramic analysis. These data were input into an Access database and crosschecked for error by the author and two work study students at Washington State University.

### **The Cox Ranch Pueblo Ceramic Assemblage**

Excavations conducted at Cox Ranch Pueblo from the 2003 through 2005 seasons produced a ceramic assemblage totaling over 69,000 sherds, nearly 40,000 of which were larger than one-half inch. Approximately 48 percent of the total assemblage is painted (n=33,056) and 52 percent are unpainted, textured ceramics (n=36,313). Appendix B presents ceramic counts of types and forms by Unit.

#### *Painted Wares*

The painted assemblage at Cox Ranch Pueblo is composed of Cibola White Ware and White Mountain Red Ware. Cibola White Ware dominates the assemblage while White Mountain Red Ware is present in much lower frequencies. Analyses of painted ceramics were based on the presence of slip and its color, as well as the presence of design elements and their combination on the ceramic vessel or sherd.

#### *Cibola White Ware*

Cibola White Ware was a widespread tradition throughout most of eastern Arizona and western New Mexico for at least six centuries (Zedeño 1994:72) and displays a large amount of variation in attributes (Mills et. al 1999: 244). Vessels were constructed by coiling and scraping. Early types were tempered with sand and later types with crushed sherd or a combination of the two (Colton 1953; Hays-Gilpin and van

Hartesveldt 1998:58-59). Cibola White Ware vessels were coated with a white slip that is usually well polished and painted with a black mineral paint. However, exceptions have been noted and carbon paint was occasionally used (Mills et. al 1999:245). In order to maintain a white appearance, Cibola White Wares were typically fired in a neutral or reducing atmosphere (Duff 2002). Paste color varies from white to dark gray (Fowler 1985:109; Hays-Gilpin and van Hartesveldt 1998:58-59; Mills et. al 1999:245) and vessels are usually manufactured from clays low in iron that usually re-fire to buff. At Cox Ranch Pueblo, Cibola White Ware most commonly has a light gray paste that re-fires to a buff color.

Cibola White Ware makes up over 40 percent of the wares in the Cox Ranch Pueblo assemblage (n= 29,457), almost 50 percent of which are less than one-half inch (n=13,663). When examining only sherds larger than one-half inch, the most common identifiable types include Puerco and Reserve black-on-whites, while Escavada, Gallup, Kiatuthlanna and Red Mesa black-on-whites are less common (Table 5.3). The majority of Cibola White Ware sherds that are larger than one-half inch are jars; lesser amounts of bowls, ladles and worked sherds are also present (Table 5.4).

*Kiatuthlanna Black-on-white* is the earliest painted type identified in the Cox Ranch Pueblo assemblage. Elements diagnostic to this type consist of sets of parallel line work, nested chevrons and fine lines, line elaborations such as cross ticking or pendant dots (Hays-Gilpin and van Hartesveldt 1998:64), single zigzag lines, reverse F's and occasional solid elements (Eckert et al. 1995). A solid line is always painted on the rim (Hays-Gilpin and van Hartesveldt 1998:64). These vessels are generally well polished with a thick white slip and well executed designs in black to dark brown mineral paint

(Eckert et al. 1995, Hays-Gilpin and van Hartesveldt 1998:64). Its paste is white or light gray and generally refires to buff.

**Table 5.3.** Frequency and percent of Cibola White Ware types at Cox Ranch Pueblo.

<b>Cibola White Ware</b>			
<b>Type</b>	<b>Frequency</b>	<b>Percent of Typed White Ware Assemblage</b>	<b>Percent of Typed Total Assemblage (n=38,952)</b>
Kiatuthlanna	25	0.16%	0.06%
Red Mesa	107	0.68%	0.27%
Gallup	588	3.72%	1.51%
Escavada	104	0.66%	0.27%
Puerco	3570	22.60%	9.17%
Reserve	3945	24.98%	10.13%
Unidentified	7455	47.20%	19.14%
<b>Total Typed Assemblage</b>	<b>15794</b>	<b>100.00%</b>	<b>40.55%</b>
< 1/2 " Sherds	13663	-	-
<b>Total</b>	<b>29457</b>	-	-

**Table 5.4.** Frequency and percent of Cibola White Ware forms at Cox Ranch Pueblo.

<b>Cibola White Ware</b>			
<b>Form</b>	<b>Frequency</b>	<b>Percent of Typed White Ware Assemblage</b>	<b>Percent of Typed Total Assemblage (n=38,952)</b>
Bowl	2007	12.71%	5.15%
Jar	12909	81.73%	33.14%
Ladle	450	2.85%	1.16%
Worked	126	0.80%	0.32%
Unidentified	302	1.91%	0.78%
<b>Total Typed Assemblage</b>	<b>15794</b>	<b>100.00%</b>	<b>40.55%</b>

*Red Mesa Black-on-white* is defined by squiggly lines, dots and scrolls where the design is often busier than Kiatuthlanna Black-on-white and the polish is uneven (Eckert et al. 1995). Additionally, Red Mesa Black-on-white includes areas of solid and geometric motifs, triangles and scrolls with pendant appendages often in opposed pairs (Fowler 1985:110), chevrons, checkerboard and parallel line panel dividers (Eckert et al. 1995). As the type preceding Puerco Black-on-white, Red Mesa is often confused with Puerco; however Puerco usually displays bolder motifs with more solid than negative elements (Eckert et al. 1995).

Puerco, Gallup and Escavada are all varieties of the *Puerco Black-on-white* type and, by definition of Puerco Black-on-white given by the Cibola White Ware Conference 1958, should all be included as Puerco Black-on-white. These types generally date to the same time (Table 5.2), and because Gallup and Escavada are relatively rare at Cox Ranch Pueblo, all three are usually collapsed to form one type labeled Puerco Black-on-white throughout this study. The Puerco varieties tend to exhibit similar technological characteristics with the use of white-to-light gray slip, mineral paint and a combination of sherd and sand temper. Most of their differences are in design style.

*Gallup Black-on-white* design is composed of oblique or diagonal hatching in parallel bands or triangles. Minor solid elements are occasionally present, especially near the rim (Hays-Gilpin and van Hartesveldt 1998:71), but are only a minor component of the hatched design. Gallup vessels are commonly coated with a thin and streaky slip or no slip at all (Eckert et al. 1995). Solid and bold design elements with no line elaboration distinguish *Escavada Black-on-white* which commonly displays parallel solid bands that form nested chevrons, running bands of large and pendant triangles, barbs and pennants

(Eckert et al. 1995). Escavada is often distinguished by its lightning bolt designs viewed in negative space. Although Escavada is not very common at Cox Ranch Pueblo, when found, it frequently displays a lightning bolt motif.

*Puerco Black-on-white* is one of the two most frequent types recovered from Cox Ranch Pueblo. It consists of banded designs and banding lines. Solid geometric elements include triangles, rectangles, diamonds, scrolls, parallelograms and squares are often separated by sets of vertical parallel lines or checkerboards that serve as panel dividers. Cross hatching and dot-filled checkerboard squares are frequent. The surface texture of Puerco Black-on-white can vary. Bowl interiors are commonly thinly slipped and unevenly polished (Fowler 1985:110), whereas exteriors can also exhibit a well polished thick slip (Eckert et al. 1995; Fowler 1985:110).

*Reserve Black-on-white* is also very common at Cox Ranch Pueblo. It is most often painted with opposed or interlocking oblique hachure and solid elements (Eckert et al. 1995). Elements are either curvilinear, rectilinear or opposed triangular elements of solid and hachure (Fowler 1985:110). The hatched elements normally take up more space than the solid design areas (Mills et. al 1999:249) and there is commonly considerable spacing between elements. Bowls and jars can be finished with a thin and streaky (Fowler 1985:110), thick and dull (Colton 1953, 1965), or thick and polished (Eckert et al. 1995) slip. Reserve is often tempered with a combination of sand and sherd and painted with a black to reddish brown mineral paint (Hays-Gilpin and van Hartesveldt 1998:81). The design style of Reserve mimics that of Wingate style (Carlson 1970:8).

### *White Mountain Red Ware*

Red slipped pottery known as White Mountain Red Ware was produced in east-central Arizona and western New Mexico starting about A.D. 1000 (Carlson 1970:1). The similarity in painted design with black-on-white wares suggests that it emerged out of the black-on-white tradition. All attributes and characteristics of White Mountain Red Ware except for its red slip and oxidized firing atmosphere occur in the production of Cibola White Ware, including similarity in paste, paint and form. The manifestation of White Mountain Red Ware in the Cibola Region has been viewed as occurring simultaneously with the appearance of the Anasazi into traditional Mogollon territory (Carlson 1970:97).

White Mountain Red Ware is characterized by thick, well polished red, orange-red, or light orange-to-buff slipped surface (Mills et. al 1999:251). It is normally painted with black or black-brown and white paint. The black paint is a mineral paint or glaze while the white paint is usually kaolin (Carlson 1970:4; Colton and Hargrave 1937:102-3). White Mountain Red Ware vessels were constructed by coiling and scraping. They were most often tempered with crushed sherd and were fired in an oxidizing atmosphere (Carlson 1970:2). White Mountain Red Ware is manufactured in the form of bowls, jars, pitchers and ladles, but bowls dominate most assemblages in the region, something also true at Cox Ranch Pueblo. At Cox Ranch Pueblo, White Mountain Red Ware most commonly has a buff colored paste that re-fires buff or yellowish-red.

White Mountain Red Ware is the least abundant ware at Cox Ranch Pueblo, comprising five percent (n=3,599) of the total assemblage. Sherds less than one-half inch are approximately 44 percent of the Red Ware assemblage. Wingate and Puerco black-on-red are the most commonly identified types, while Wingate Polychrome, though



present, is rare. (Table 5.5). When examining White Mountain Red Ware sherds larger than one-half inch, the majority are bowls, and no White Mountain Red Ware ladles were identified (Table 5.6).

**Table 5.5.** Frequency and percent of White Mountain Red Ware types at Cox Ranch Pueblo.

<b>White Mountain Red Ware</b>			
<b>Type</b>	<b>Frequency</b>	<b>Percent of Typed Red Ware Assemblage</b>	<b>Percent of Typed Total Assemblage (n=38,952)</b>
Puerco	493	24.67%	1.27%
Wingate	730	36.54%	1.87%
Wingate Poly	44	2.20%	0.11%
Unid	731	36.59%	1.88%
<b>Total Typed Assemblage</b>	<b>1998</b>	<b>100.00%</b>	<b>5.13%</b>
< 1/2" Sherds	1601	-	-
<b>Total</b>	<b>3599</b>	<b>-</b>	<b>-</b>

**Table 5.6.** Frequency and percent of White Mountain Red Ware forms at Cox Ranch Pueblo.

<b>White Mountain Red Ware</b>			
<b>Form</b>	<b>Frequency</b>	<b>Percent of Typed Red Ware Assemblage</b>	<b>Percent of Typed Total Assemblage (n=38,952)</b>
Bowl	1774	88.79%	4.55%
Jar	162	8.11%	0.42%
Ladle	0	0.00%	0.00%
Worked	38	1.90%	0.10%
Unidentified	24	1.20%	0.06%
<b>Total Typed Assemblage</b>	<b>1998</b>	<b>100.00%</b>	<b>5.13%</b>

*Puerco Black-on-red* is the earliest type in the White Mountain Red Ware tradition. At Cox Ranch Pueblo, it includes most design styles seen on Puerco, Escavada and Red Mesa black-on-white types. These include banded and paneled design elements with parallel lines or checkerboards as dividers. Puerco Black-on-red also exhibits dotted triangles, interlocking triangles and frets, thick banded lines and stripes, sometimes in the form of bands without panel dividers (Hays-Gilpin and van Hartesveldt 1998:162). Technological characteristics for Puerco Black-on-red include the use of sherd or sand temper, a deep red-to-maroon chalky slip and mineral or organic paint that varies from black to a dark brown color (Eckert et al. 1995). Paste varies from light brown to orange, is occasionally light gray (Carlson 1970:7), and re-fires from buff to red.

*Wingate Black-on-red* design is identical to Reserve Black-on-white. Both display opposed and interlocking solid and hatched elements. The hatched element is usually twice the size of its opposed solid (Eckert et al. 1995; Hays-Gilpin and van Hartesveldt 1998:164) in rectilinear, curvilinear and triangular layouts (Fowler 1985:107). The hachure is always oblique in running bands or triangles. Design elements commonly continue to the edge of the rim (Eckert et al. 1995). Bowls are slipped on the interior and exterior of the vessel with painted designs most commonly only on the interior. Although infrequent, occasional small black or brown designs have been noted on vessel exteriors (Carlson 1970:13). Jars are slipped and painted with black or brown motifs on the exterior. Slip on bowls and jars range from maroon to dark red to orange-red in color. Paint is mineral and varies from black to brown. Temper is a mixture of coarsely ground sherds and sand, with occasional crushed rock inclusions (Eckert et al. 1995). Paste can

vary from white to gray, buff red, orange or pink (Carlson 1970:13; Hays-Gilpin and van Hartesveldt 1998:164), and re-fire to buff, yellowish-red and red.

*Wingate Polychrome* is identical in painted design to Wingate Black-on-red on vessel interiors, but it additionally displays broad white lines on the vessel exterior (Eckert et al. 1995). White lines can either be painted with kaolin or left unslipped to form a negative space. Wingate Polychrome at Cox Ranch Pueblo regularly displays the latter with unslipped broad light colored bands on the exterior of bowls, something that may be indicative of the paucity of kaolin in the region. Relatively few sherds identified as Wingate Polychrome occur at Cox Ranch Pueblo. This identification can be, but is not necessarily influenced by the number of sherds from a broken Wingate Polychrome vessel that display exterior white banding. Technologically, Wingate Polychrome is also similar to Wingate Black-on-white. It displays sherd and sand temper, a chalky dark red or maroon slip that can be thin or thick and black to brown mineral or organic paint (Eckert et al. 1995). Paste can vary from white to gray, buff or pink (Carlson 1970; Hays-Gilpin and van Hartesveldt 1998:164), and typically re-fires from buff to yellowish-red.

### ***Unpainted, Textured Ceramics***

Unpainted ceramics are often referred to as plain ware. Functionally, unpainted ceramics are considered to be utilitarian or culinary wares. At Cox Ranch Pueblo, unpainted ceramics are one of two wares: Cibola Gray Ware or Mogollon Brown Ware. During the Pueblo II period, Cibola Gray ware has traditionally been associated with populations in the Cibola Region, while Mogollon Brown Ware has typically been

associated with communities located in regions just south, near and below the Mogollon Rim (Fowler 1985; Hays-Gilpin and van Hartesveldt 1998:136).

### *Brown Ware*

Brown ware ceramics from the Mogollon region are constructed by coil and smoothing. The interior of the vessel is often entirely smoothed, while the exterior is either smoothed so that the coils are no longer visible or corrugations are indented, incised or patterned. The size and spacing of corrugations and indentations on brown ware vessels vary substantially within the Cox Ranch Pueblo assemblage. Coils range from thin with almost complete overlap, to a combination of both thick to thin coils with spacing between each coil, to thick with substantial overlap. Indentations vary from being highly regulated and precise to more uneven, less pronounced and irregular.

Brown ware is generally fired in an oxidizing environment. Its surface and paste color ranges from a light-to-dark-reddish brown, and the paste re-fires from yellowish-red to red. The paste color of brown ware sherds recovered from Cox Ranch Pueblo is most commonly dark brown, while re-fired paste color ranges from yellowish-red to red; this is further explored in Chapter Eight. These vessels are tempered with sand, crushed sherd or rock (Eckert et al. 1995; Hays-Gilpin and van Hartesveldt 1998; Mills et. al 1999).

Brown ware ceramics are the most abundant unpainted, textured ware at Cox Ranch Pueblo, representing over 40 percent of the total assemblage. The most common brown wares are plain brown smudged, indented corrugated, plain corrugated and plain brown with no smudging (Table 5.7).

**Table 5.7.** Frequency and percent of Mogollon Brown Ware varieties at Cox Ranch Pueblo.

<b>Mogollon Brown Ware</b>			
<b>Type</b>	<b>Frequency</b>	<b>Percent of Typed Brown Ware Assemblage</b>	<b>Percent of Typed Total Assemblage (n=38,952)</b>
Plain Brown	2688	16.10%	6.90%
Plain Brown Smudged	4217	25.26%	10.83%
Plain Corrugated	2811	16.84%	7.22%
Plain Corrugated Smudged	998	5.98%	2.56%
Indented Corrugated	3070	18.39%	7.88%
Indented Corrugated Smudged	1776	10.64%	4.56%
Patterned Corrugated	473	2.83%	1.21%
Patterned Corrugated Smudged	381	2.28%	0.98%
Incised Corrugated	115	0.69%	0.30%
Incised Corrugated Smudged	67	0.40%	0.17%
Unid	96	0.58%	0.25%
<b>Total of Typed Assemblage</b>	<b>16692</b>	<b>100.00%</b>	<b>42.85%</b>
<i>Sherds &lt; 1/2 "</i>	<i>12884</i>	-	-
<b>Total</b>	<b>29576</b>	-	-

Brown ware is manufactured in the form of both bowls and jars, often distinguished by interior smudging present on many brown ware bowls (Eckert et al. 1995; Mills 1987) whereas theoretically, smudging is not present on brown ware jars. Smudging occurs during the firing process when the fire is smothered with a dense layer of organics so that no oxygen reaches the vessel (Rice 1987). In turn, carbon from the smoldering organics is deposited on the surface of the vessel causing it to turn black (Rice 1987:335). Before firing, the interior of the vessel is often highly polished to create a nearly reflective surface. Brown ware sherds with a well smoothed and polished interior surface are categorized as bowls whether they exhibit smudging or not. Those that are not

smudged or polished were typed as jars. When examining brown ware sherds larger than one-half inch, the most abundant form is jar. However, brown ware bowls are also relatively abundant, while worked sherds and ladles occur infrequently (Table 5.8).

**Table 5.8.** Frequency and percent of Mogollon Brown Ware forms at Cox Ranch Pueblo.

<b>Mogollon Brown Ware</b>			
<b>Form</b>	<b>Frequency</b>	<b>Percent of Typed Brown Ware Assemblage</b>	<b>Percent of Typed Total Assemblage (n=38,952)</b>
Bowl	7819	46.84%	20.07%
Jar	8674	51.97%	22.27%
Ladle	31	0.19%	0.08%
Worked	70	0.42%	0.18%
Unidentified	98	0.59%	0.25%
<b><i>Total Typed Assemblage</i></b>	<b><i>16692</i></b>	<b><i>100.00%</i></b>	<b><i>42.85%</i></b>

Brown ware varieties were identified as follows. *Plain brown* consists of sherds where the exterior surface has been completely smoothed and occasionally polished leaving no visible coils. *Plain corrugated* sherds have visible coils. Coils are characteristically thin, well executed and slightly overlapping. Occasionally, sherds classified as plain corrugated exhibit exaggerated coil separation, creating a clapboard pattern. *Indented corrugated* sherds are produced by making a repetitive indentation of each coil with the finger, usually patterned diagonally across the coils. These indentations are present across the entire vessel and are generally thin and finely executed. *Patterned corrugated* sherds are characterized as indentations and plain

corrugation executed in systematic patterns around the entire vessel. *Incised corrugated* sherds usually display thin and finely executed incisions made with a sharp tool.

### *Gray Ware*

Similar to Mogollon Brown Ware, gray ware from the Cibola region is constructed by coil and smoothing. The interior of the vessel is often entirely smoothed, while the exterior is either smoothed to the point where coils are completely obliterated or decorated with a plain or indented corrugation. Unlike brown ware, gray ware occurs nearly exclusively as jars. Cibola Gray Ware firing atmosphere is neutral or reducing to produce the gray appearance, usually using light firing clays. However, gray ware ceramics can be produced with iron rich clays (Duff 1993, 2002). Cibola Gray Ware ceramics are tempered with crushed sherds and/or quartz sand.

At Cox Ranch Pueblo, Cibola Gray Ware occurs less frequently than Mogollon Brown Ware, representing a little over eleven percent of the entire assemblage (Table 5.9). The majority of the gray ware assemblage consists of indented corrugated, while plain smoothed, and plain and patterned corrugated represent a small fraction. Lino Gray, Neckbanded Gray and incised corrugated are rare. Throughout the regional sequence, gray wares most commonly occur in jar form, which also holds true at Cox Ranch Pueblo. Of gray ware sherds at the site that are larger than one-half inch, nearly the entire assemblage is jar form (Table 5.10).

At Cox Ranch Pueblo, several different surface treatments are visible on gray ware sherds and include: Lino and Neckbanded Gray, plain, indented and patterned and clapboard corrugated. *Lino Gray* sherds are characterized by a smoothed surface with course grained temper visible on the surface. *Neckbanded Gray* vessels have wide

flattened coils around the top half of the jar and the lower half of the jar has the appearance of Lino gray. *Plain* Gray sherds are smoothed with no visible corrugations. *Plain corrugated* sherds have visible coils ranging from medium sized overlapping coils to a clapboard pattern. *Indented corrugated* sherds are characterized by each coil textured by finger indentation diagonally and patterned across the coil. Indentations can occur across the entire vessel, or just on the neckband with a plain smoothed or plain corrugated body (Eckert et al. 1995). Patterned corrugated gray ware vessels occur when indentations and plain corrugation are executed in systematic patterns on the vessel.

**Table 5.9.** Frequency and percent of Cibola Gray Ware varieties at Cox Ranch Pueblo.

<b>Cibola Gray Ware</b>			
<b>Type</b>	<b>Frequency</b>	<b>Percent of Typed Gray Ware Assemblage</b>	<b>Percent of Typed Total Assemblage (n=38,952)</b>
Lino Gray	4	0.09%	0.01%
Neckbanded Gray	2	0.04%	0.01%
Clapboard Corrugated	8	0.18%	0.02%
Plain Gray	281	6.29%	0.72%
Plain Corrugated	170	3.80%	0.44%
Indented Corrugated	3945	88.29%	10.13%
Patterned Corrugated	30	0.67%	0.08%
Incised Corrugated	2	0.04%	0.01%
<i>Other</i>	26	0.58%	0.07%
<b><i>Total Typed Assemblage</i></b>	<b>4468</b>	<b>100.00%</b>	<b>11.47%</b>
Sherds < 1/2"	2269	-	-
<b><i>Total</i></b>	<b>6737</b>	-	-



**Table 5.10.** Frequency and Percent of Cibola Gray Ware forms at Cox Ranch Pueblo.

<b>Cibola Gray Ware</b>			
<b>Form</b>	<b>Frequency</b>	<b>Percent of Typed Gray Ware Assemblage</b>	<b>Percent of Typed Total Assemblage (n=38,952)</b>
Bowl	3	0.07%	0.01%
Jar	4446	99.51%	11.41%
Ladle	0	0.00%	0.00%
Worked	4	0.09%	0.01%
Unidentified	15	0.34%	0.04%
<b>Total Typed Assemblage</b>	<b>4468</b>	<b>100.00%</b>	<b>11.47%</b>

*Brown Ware versus Gray Ware*

Mogollon Brown and Cibola Gray Ware vessels are distinguished from one another by several attributes. In addition to firing atmosphere and clay composition, there are commonly differences in surface treatment, form and paste (Crown 1981; Duff 2002; Hays-Gilpin and van Hartesveldt 1998:120-136). At Cox Ranch Pueblo, surface treatment of brown and gray wares differs in both coil and indentation widths and thicknesses. Where brown ware corrugation and indentation is often thin and finely executed, gray ware exhibits wider coils and indentations that on average, are further apart. Gray ware also occurs only in the form of jars, whereas brown ware is common in bowl form. However, typing sherds in the Cox Ranch Pueblo assemblage as brown or gray ware was ultimately dependent on color. For example, if a sherd exhibited wider coils and indentations indicative of gray ware but its paste color was brown it would be typed as brown ware. Similarly, if the appearance of it were gray it would be categorized as gray ware. Brown ware bowl sherds in the Cox Ranch Pueblo assemblage often

resemble what has traditionally been considered as Mogollon Brown Ware bowls (Rinaldo and Bluhm 1956) with finely executed exteriors and smudged, well polished interiors. These attributes will be further explored in Chapter Eight.

### **Summary**

This chapter has described the ceramic typology and characteristics of the Cox Ranch Pueblo ceramic assemblage. The ceramic assemblage is comprised of over 69,000 painted and unpainted textured sherds that were analyzed by the author. The following chapters build from this to address the chronology of site occupation, the learning frameworks of those who made the ceramics, and the production or exchange of the ceramics at Cox Ranch Pueblo.

## CHAPTER SIX

### **An Examination of Intra-Site Distribution and Chronology: The Cox Ranch Pueblo Ceramic Assemblage**

This chapter provides a temporal seriation of the Cox Ranch Pueblo ceramic assemblage using the types just discussed. Utilizing a multivariate statistic technique, Correspondence Analysis, a seriation of the painted assemblage was performed to examine the occupational history of the community. I suggest that, although the Cox Ranch Pueblo is relatively contemporaneous, at least portions of the two forms of public architecture and their middens were constructed at the onset of site occupation. Additionally, several other middens also appear to have been established early. The seriation also suggests that other middens and at least one other architectural feature were constructed later. The occupational history of the community is then compared to the spatial distribution of unpainted, textured brown and gray ware jars. While every excavated area at the site contains both brown and gray ceramics, I found that there is an intra-site difference where Roomblock 2 is more strongly associated with brown ware and the Great House is more associated with gray wares. This may be indicative of people from two traditions who built and inhabited Cox Ranch Pueblo (Nauman and Duff 2004).

#### **Frequency Seriation: Intra-site Chronology at Cox Ranch Pueblo**

Frequency seriation has been conducted with ceramic assemblages in and around the Cibola region since the early 1900s (Kroeber 1916; Spier 1917). The technique is useful for answering questions focused on time and space. Nevertheless, recently there

has been debate focused on whether the use of traditional “types” is as suitable as high resolution “microseriations” of attribute frequencies (LeBlanc 1975) to demonstrate temporal resolution (Duff 1996). Duff (1996) concluded, based on the analysis of the assemblage from Pueblo de los Muertos analyzed by LeBlanc (1975), that traditional types are just as useful as attribute frequencies for examining time in the Cibola region.

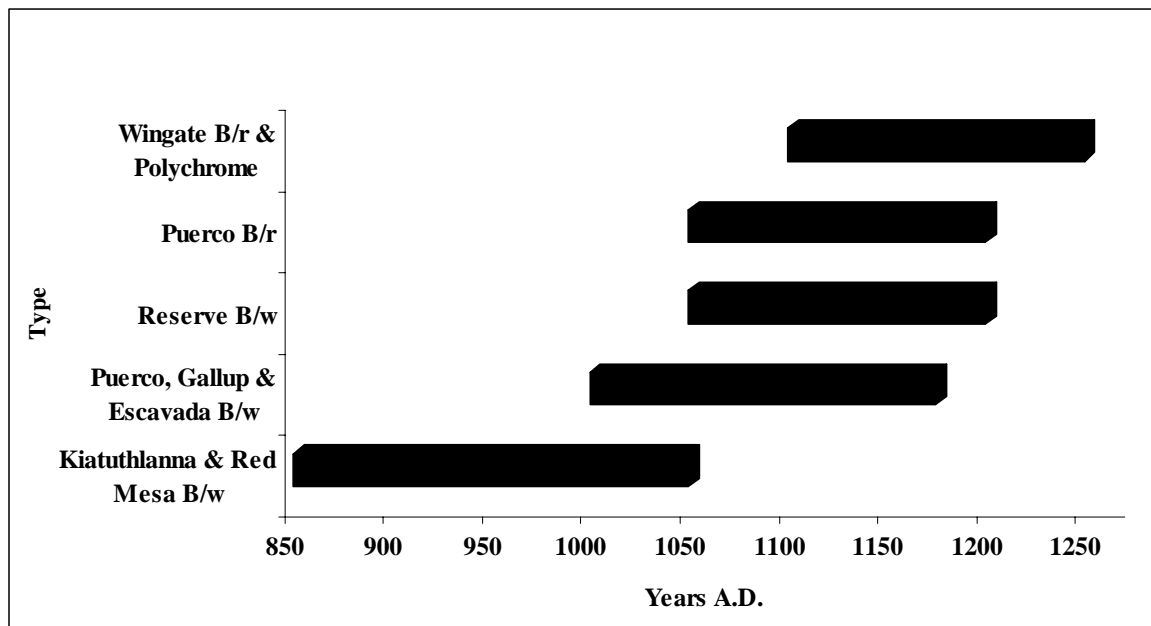
The seriation provided here is based on counts of the following painted types: Kiatuthlanna Black-on-white, Red Mesa Black-on-white, Puerco Black-on-White, Gallup Black-on-white, Escavada Black-on-white, Reserve Black-on-white, Puerco Black-on-red, Wingate Black-on-red and Wingate Polychrome. First, due to the relative paucity of Kiatuthlanna and Red Mesa black-on-whites (< ½ %), these two types were collapsed to form one temporally sensitive type category “Kiatuthlanna and Red Mesa Black-on-white” that represents the earliest ceramics in the Cox Ranch Pueblo assemblage. Second, given that Puerco, Gallup and Escavada black-on-whites are all varieties of the Puerco Black-on-white type, they were also collapsed to form one type category known as “Puerco Black-on-white.” Lastly, Wingate Black-on-red and Wingate Polychrome were relatively sparse in the assemblage so they were combined to form one type category “Wingate Black-on-red and Wingate Poly.” These types and Reserve Black-on-white represent the latest ceramics at the site.

As previously discussed, the ceramic assemblage from Cox Ranch Pueblo was grouped using a typological framework that is linked to a well developed chronology based on multiple researchers’ results (Table 5.1). Although there is slight variation between each researcher in which specific dates are associated with each type, there is

general agreement. Figure 6.1 displays a chart of the types and corresponding dates used in this seriation.

### *Correspondence Analysis*

Correspondence analysis (CA) is a multivariate data analysis technique which uses data consisting of counts in nominal categories (Shennan 2001:308). Most commonly thought of as an exploratory data technique, CA is designed to analyze two-way and multi-way tables that contain measures of correspondence between row and column variables (Shennan 2001:320-321). CA provides a Euclidean distance plot with axes that represent the major dimensions of variability; these can be interpreted as tracking variability in time, space, or other dimensions depending on the input variables.



**Figure 6.1** Ceramic chronology for groups used in CA seriation.

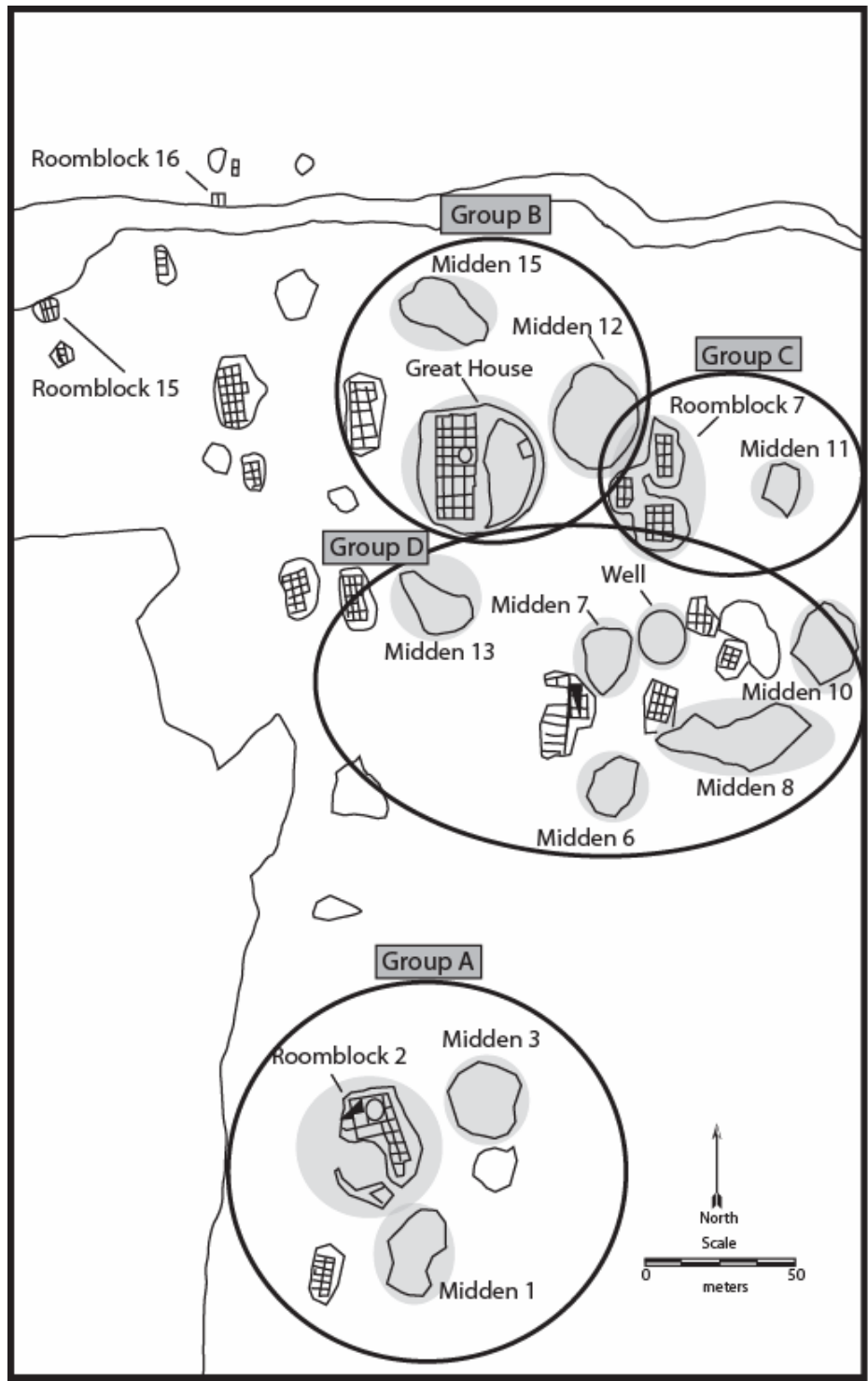
In this analysis, CA is used for depiction of groupings from which I infer patterns of temporal change within the site by using temporally sensitive ceramic types. Each unit of excavation was subdivided into upper, middle, and lower level groups (Appendix C). These groups were defined by examining each unit individually, assessing their depth and stratigraphy, and subdividing them accordingly. The lowest level group was designed to capture the earliest deposits, while the upper level group represents later deposits within each unit. Middle level groupings were only assigned to Units with ten or more levels. The number of levels assigned to each group was dependent on both the total number of levels as well as the number of sherds recovered from the lowest levels. In determining the lowest level groupings, it was important to consider the number of sherds present because the lowest levels were commonly excavated into sterile deposits. In most cases the bottom two or three levels were combined to make the lowest level grouping, but in cases where there were three or fewer total sherds in the lowest level, additional levels were included. Upper level groups were composed of the uppermost levels and were highly dependent on the total number of levels in the Unit. The purpose of dividing the units into upper, middle and lower level grouping is to attempt to assess occupational trends in the different areas of the site that may correlate with time. Upper, middle and lower level groupings are not identified on the CA plots presented here but allow the display to incorporate the variation.

In utilizing CA to conduct a seriation, I hoped to answer three questions. First, is there any temporal variability reflected spatially across the site? Second, if so, how does it link to the different architectural components? Third, if there is variability, which areas were occupied first? The methods for addressing these questions were to first produce a

plot with ceramic type counts by midden. The purpose of using only midden areas was to explore the variation in the ceramic assemblage across the site. Next, a CA plot was produced with both architectural units and midden areas. This analysis explored spatio-temporal patterns reflected by the ceramics compared to architectural units and associated middens. For both analyses, each Unit within each architecture and midden area was subdivided into lower, middle and upper levels by the methods presented above. These CA outputs depict temporal variation in deposition through time. To determine which Area(s) may have been occupied first, only lower level groups of midden units were seriated.

To better understand temporal variability across the site, in each CA display, midden and architectural units are subdivided into four different groups, A through D (Figure 6.2). Where possible, groups were aggregated based on spatial proximity. However, some groups were established based on the current samples recovered from Cox Ranch Pueblo. In these situations, where association has not been sampled or determined, I grouped those features that were likely comparable in terms of use (i.e., household level refuse disposal).

In general, all middens at Cox Ranch Pueblo are located slightly north and east of their associated roomblock. As clearly the most isolated features at the community, I defined Group A as Roomblock 2 and Middens 1 and 3. Midden 3 is positioned to have been utilized by members of Roomblock 2. Midden 1 was grouped based on its close proximity with Roomblock 2. However, it is likely the midden associated with a smaller untested roomblock. The Great House and Middens 12 and 15 make up Group B. Midden 12 is thought to have been the Great House deposition area. Midden 15 may have also



**Figure 6.2** Map of Cox Ranch Pueblo highlighting Groups A-D utilized in correspondence analysis displays.



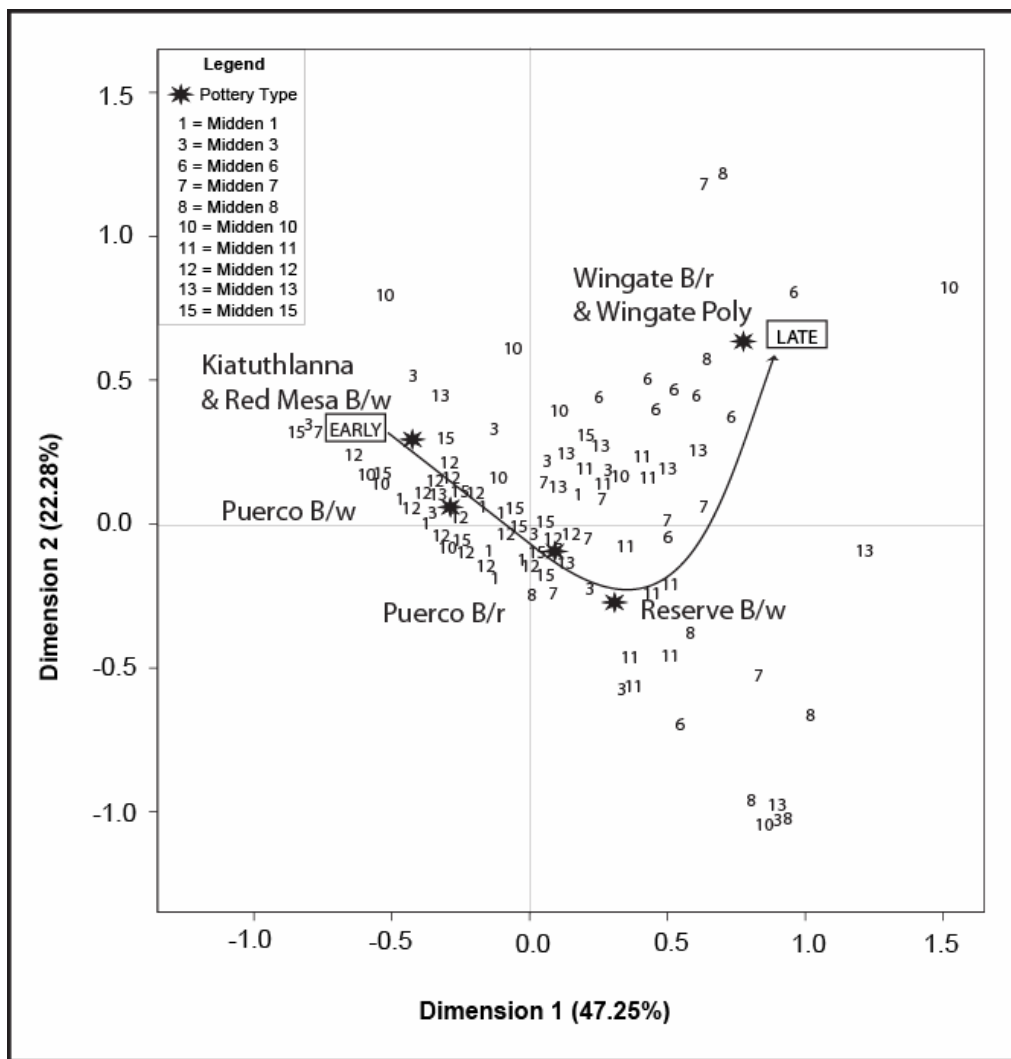
been used by individuals in the Great House or by an untested roomblock. Group C is composed of Roomblock 7 and Midden 11, which are likely associated. Group D encompasses several midden areas (6, 7, 8, 10 and 13) that were likely used by people residing in un-sampled roomblocks or households. Midden 13 does not fit as well spatially with the other middens in this group, but I chose to group them together because they all likely reflect household middens associated with roomblocks that have not been sampled.

### *Midden Only*

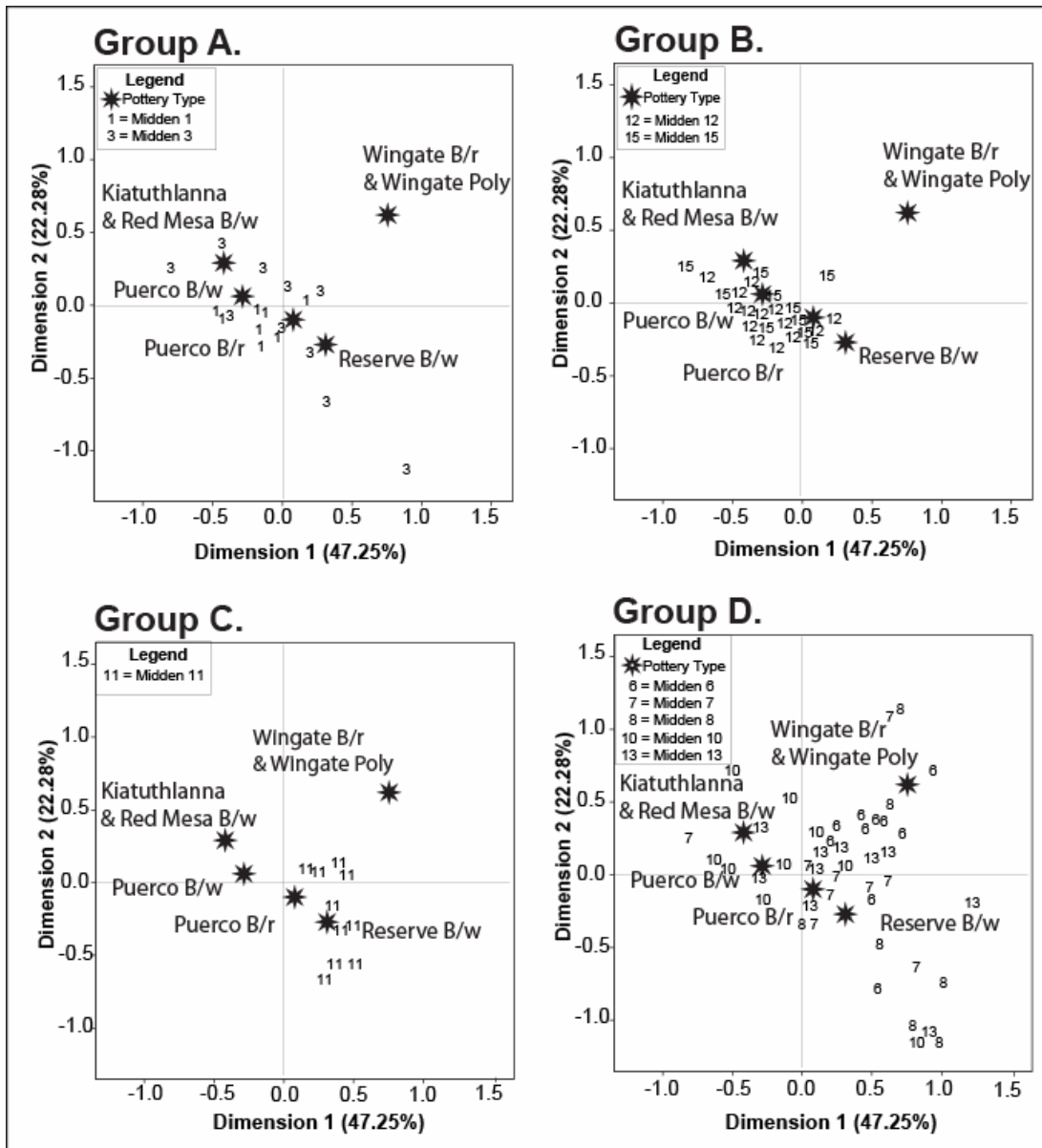
To explore general patterns of chronological variability at Cox Ranch Pueblo, middens and temporally diagnostic ceramic types were combined in a CA analysis. Comparing midden areas only should allow relatively equal comparison of areas as they have similar deposition and were excavated with the same techniques. The results of this analysis are presented in Figures 6.3 and 6.4. The general trend posits that time is shown in a horseshoe pattern where the oldest ceramic types have a negative loading on the X and Y-axis and the youngest ceramic types have positive loadings on the X and Y-axis.

Figure 6.3 exhibits some spread between individual midden assemblages. Nevertheless, the majority appear to cluster together near the graph's origin and are characterized by similar assemblages consisting primarily of Puerco and Reserve black-on-whites and Puerco Black-on-red. This implies relatively contemporaneous habitation across the site. To highlight intra-site spatial pattern, Figure 6.4 plots spatial groups separately. As displayed in this figure, several of the upper, middle and lower level unit divisions for each midden area appear contemporaneous. For example, cases from

Groups A, B representing Middens 1, 3, 12, and 15, all cluster closely with Kiatuthlanna/Red Mesa and Puerco Black-on-white and Puerco Black-on-red types. In contrast, Group C or Midden 11 plots most tightly with Reserve Black-on-white and Puerco Black-on-red. Group D corresponds with numerous household middens and displays a greater spread in the CA plot interpreted to represent the full temporal spectrum.



**Figure 6.3** Correspondence analysis of upper, middle and lower level grouping of midden area units and diagnostic ceramic types.



**Figure 6.4** Correspondence analysis of upper, middle, and lower level groupings of midden area units and diagnostic ceramic types displayed by spatially associated groups.

When examining individual middens within Group D, Middens 6 and 8 cluster closer to Puerco Black-on-red, Wingate Black-on-red/ Polychrome and Reserve Black-on-white, while, Middens 7, 10 and 13 correlate with both early and late ceramic types.

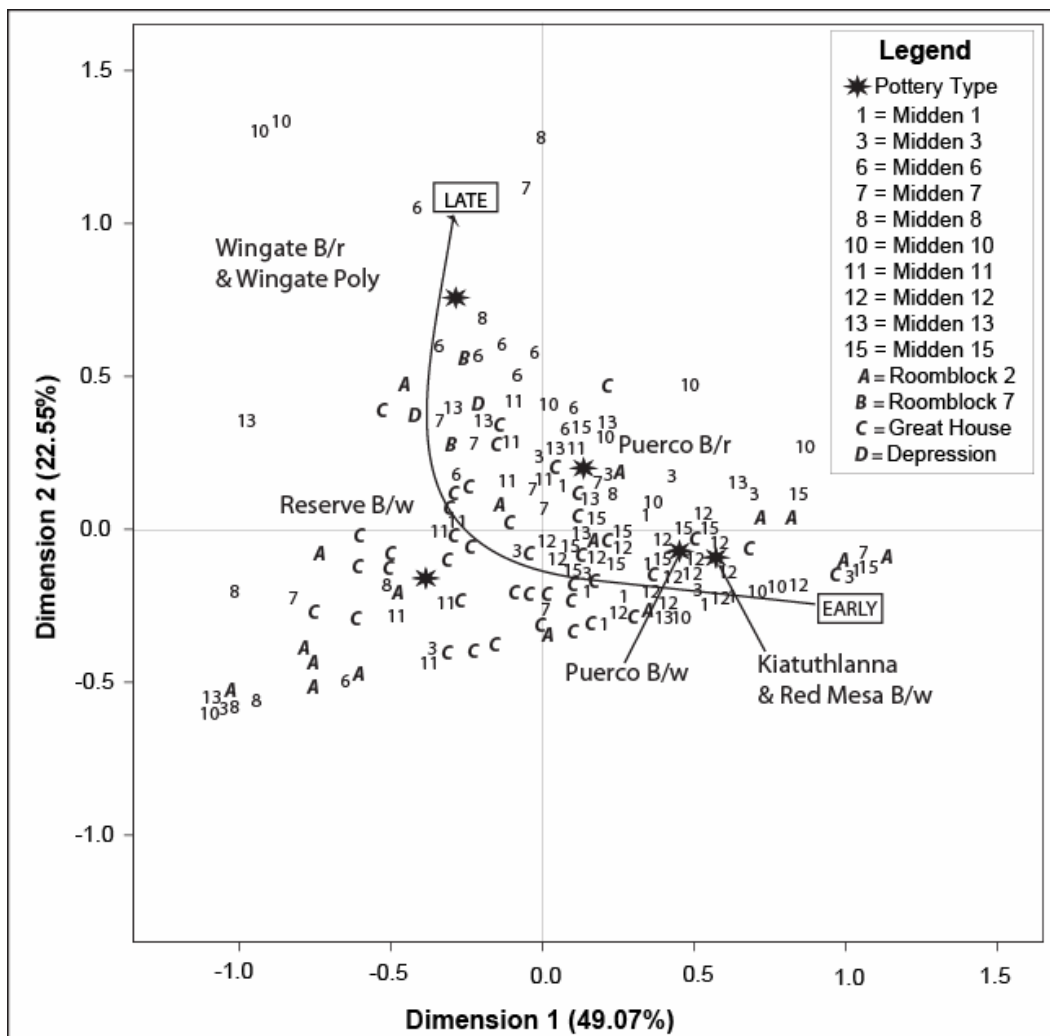
These data suggest that although the habitation areas at site are likely relatively contemporaneous, some of the areas appear to have been constructed slightly earlier or

later than others. Based on this analysis, I suggest that Middens 1 and 3 (Group A), and 12 and 15 (Group B), and 10 and 13 (part of Group D), were constructed simultaneously during the earliest stage of occupation. This may indicate the construction of public architecture, associated middens and a couple of smaller household roomblocks was foremost in the formation of the community. Midden 11 (Group C), and most of Middens 6, 7 and 8 (Group D) appear to date slightly later. Middens 10 and 13 (Group D) also have later components. These middens are thought to have been associated with smaller roomblocks at Cox Ranch Pueblo and likely represent single family households that may have migrated in and constructed homes or split from other family units in the community.

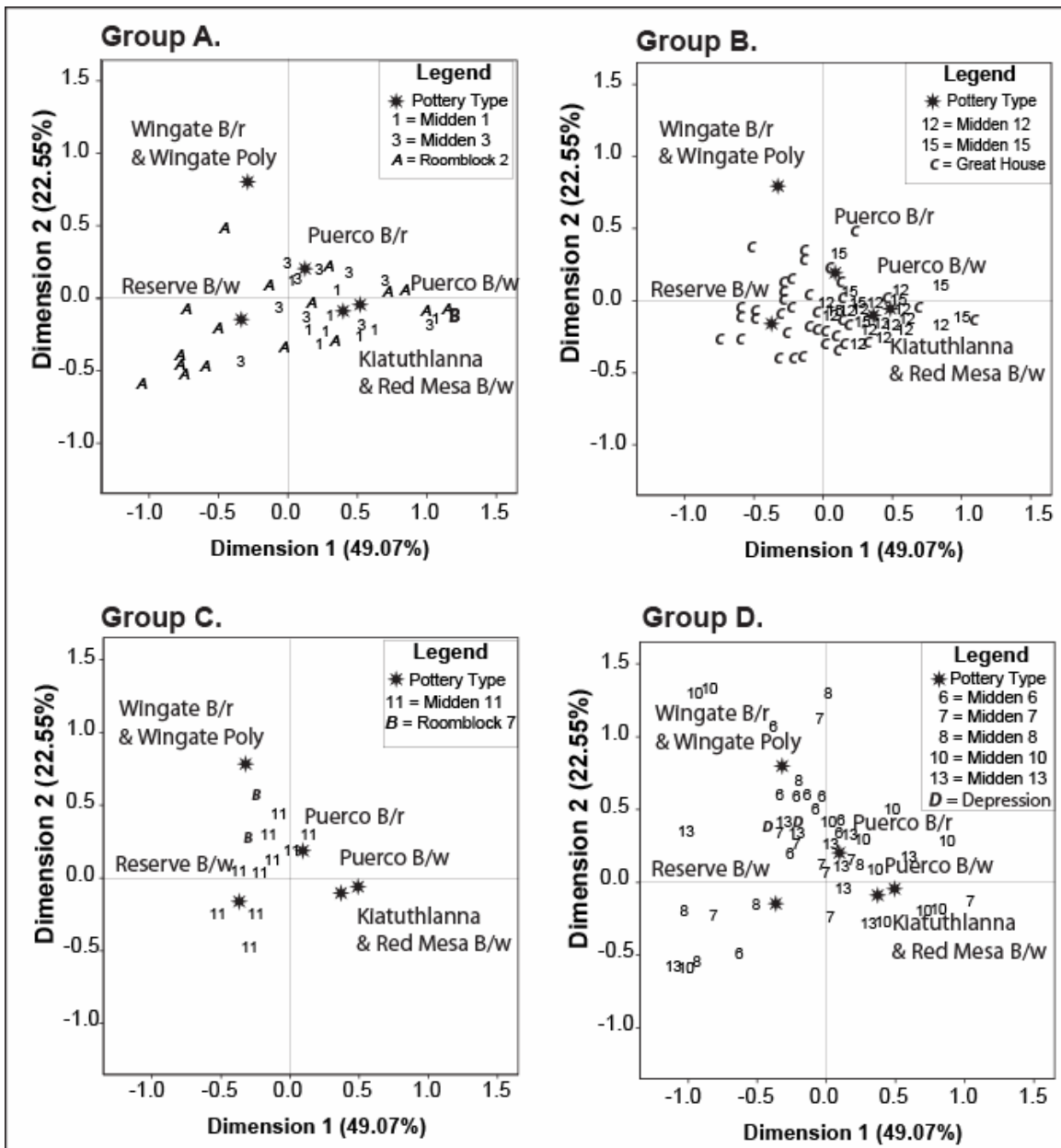
#### *Midden and Architectural Units*

As discussed in Chapter Four, architectural units are disparate in depositional context and were approached differently in excavation than middens. For example, units placed in architectural features were not randomly selected and were excavated in levels of varying depths dependent on the context. In contrast, midden units at Cox Ranch Pueblo were sampled randomly and excavated in systematic arbitrary levels. Dividing architectural units into upper, middle, and lower level groupings is an efficient way to account for vertical variation. Yet, because the function of architectural rooms can vary, level divisions can represent contextually different deposits. For example, the majority of excavated units in the Great House were trash filled while units excavated in Roomblock 2 were not. This analysis is intended to explore how architectural features pattern spatio-temporally on a CA plot in comparison to their associated middens.

In this analysis, architectural units were analyzed with midden areas and displayed in a CA plot with ceramic types (Figures 6.5 and 6.6). Groups A-D used in this analysis are the same as used previously (see Figure 6.2). Although less distinct, Figure 6.5 shows what appears to be a temporally sensitive horseshoe pattern depicting the earliest ceramic types with positive loadings on the X-axis and a negative loadings on the Y-axis. In contrast, the most recent ceramic types have negative loadings on the X-axis and a positive loadings on the Y-axis. Figure 6.6 highlights each Group individually.



**Figure 6.5** Correspondence analysis of upper, middle, and lower level groupings of midden and architectural area units and diagnostic ceramic types.



**Figure 6.6** Correspondence analysis of upper, middle, and lower level groupings of midden and architectural area units and diagnostic ceramic types displayed by spatially associated groups.

The results of this analysis indicate that in general the deposits from rooms spatially associated with middens have similar painted ware assemblages, and should be contemporaneous. Groups A and B indicate a slightly wider spread of the architectural

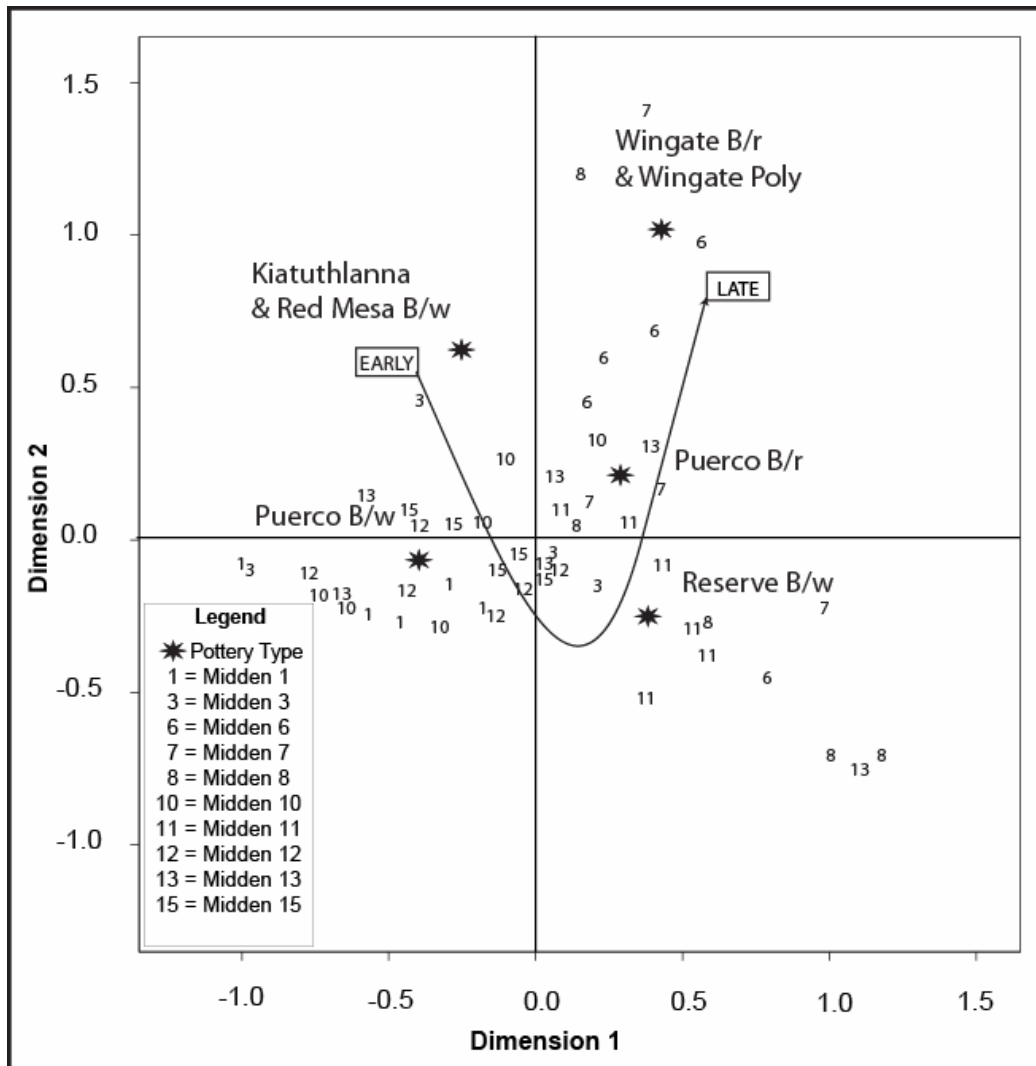
units than their associated middens indicative of later use of the architectural features than the middens. For example, in Group B, the Great House rooms correlate slightly with Kiatuthlanna/Red Mesa and Puerco Black-on-whites, but not as strongly as Middens 12 and 15 (Figure 6.6B). Instead, the majority of the Great House plots occur in proximity to Reserve Black-on-white and Puerco Black-on-red. This suggests that Middens 12 and 15 were likely used at the onset of Great House occupation, whereas many of the Great House rooms later became places for the deposition of trash refuse. A similar pattern of deposition may have occurred in some areas Roomblocks 2 and the pitstructure near Roomblock 7.

#### *Lowest Levels of Midden Units*

To further explore the question of which area was occupied first, an analysis using only the lowest levels of midden units was conducted. Only midden units were used in this analysis because they represent similar types of deposition and were all randomly sampled in the same way. Lower level groups should theoretically represent the earliest deposition in that midden area. The results of this analysis are displayed in Figures 6.7 and 6.8. Groups A-D used in this analysis are the same as in the previous graphs.

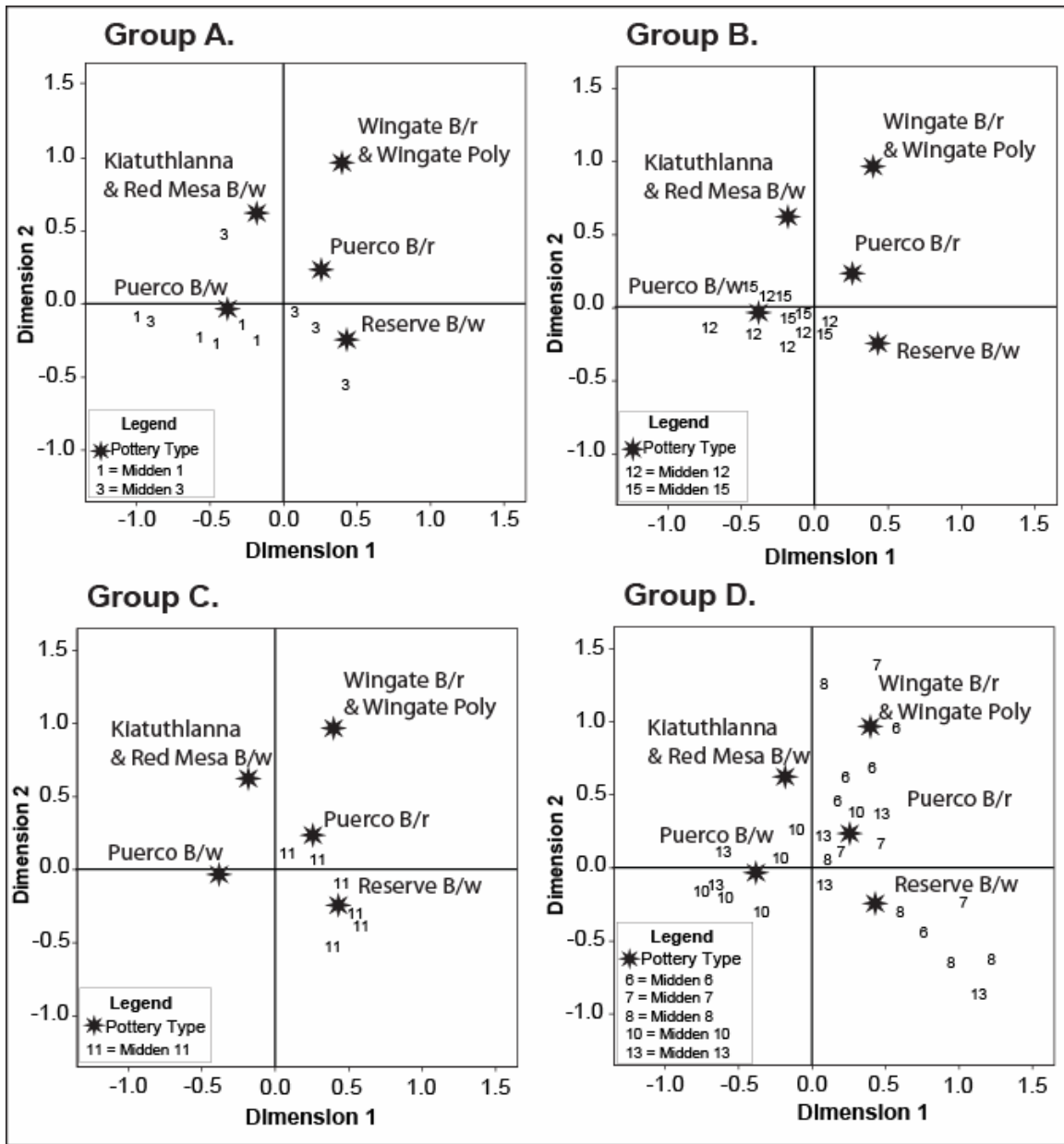
The results are consistent with the previously identified pattern. Again, temporal variation is displayed in a horseshoe pattern where the oldest types negatively load on the X-axis and the youngest types positively load on the X-axis (Figures 6.7 and 6.8). Lowest level groupings in Middens 1 and 3 (Group A) 12 and 15 (Group B) and 10 and 13 (Group D) are predominantly associated with Puerco Black-on-white ceramic types. Middens 6, 7, 8, 11 and 13 (Group D) are associated with Reserve Black-on-white and

Puerco Black-on-red. The majority of the lowest levels of units in Midden 6 are associated with Wingate Black-on-red and Polychrome suggesting that this midden was likely established and used later in the occupation of the site.



**Figure 6.7** Correspondence analysis of lower level groupings of midden area units and diagnostic ceramic types.





**Figure 6.8** Correspondence analysis of lower level groupings of midden area units and diagnostic ceramic types displayed by spatially associated groups.

**Summary**

These seriations have shown that there is slight temporal variation represented in the ceramic assemblage at Cox Ranch Pueblo. By sorting the assemblage into four distinct spatial groups, a pattern of occupation can be inferred. At the onset of

occupation, all parts of the community except the pit-structure near Roomblock 7 and Middens 6, 8 and 11 appear to have been in use. This includes public architecture of Roomblock 2 and the Great House, features likely used throughout most of the occupation, with middens replaced by rooms as the predominant refuse areas in the Great House. Middens 10 and 13 appear to have early and late components and Middens 6, 8, 11, Roomblock 7 and the depression (interpreted as a well) were likely constructed and used later. Seriation of the basal deposits is consistent with the overall assemblage and indicates that the first deposits in all midden areas except for Middens 6, 7, 8, and 11 have early components.

This analysis also demonstrates that ceramic assemblages from architectural units correspond temporally to their spatially associated middens. However, the data also suggest that the Great House and the pit-structure near Roomblock 7 were used for a longer duration than the associated middens. This may represent the use of architectural rooms for trash deposition during the late occupation of the site.

The general seriation of the ceramic types at Cox Ranch Pueblo suggests that the site was occupied at some time between A.D. 1050 and 1130. During this period, the community flourished rather quickly with the early construction of at least portions of two forms of public architecture and the build up of associated middens. Due to the initial construction of both forms of public architecture, it is plausible to suggest that the site was occupied contemporaneously by one aggregate group migrating together from another location. This suggests a degree of communal planning. As noted in Chapter Four, initial small scale building events are noted at Cox Ranch Pueblo by the northern section of the Great House with the later addition of the larger southern section and plaza.

Additionally, community expansion is also highlighted by the later construction of at least one Roomblock and the continued build-up of several middens. Expansion might have occurred through the migration of people moving as small family groups and/or through intermarriage into the community. It is also possible that some population growth was due to internal expansion.

In this and previous chapters, I have argued that at least portions of the two forms of public architecture and associated middens were constructed during the founding of the community. Because these structures are distinct in their construction and are spatially separated, it is important to examine how the ethnically diagnostic ceramic wares fit within the chronological sequence provided above. Next I address how these ceramic wares pattern spatially with respect to those areas founded in both early and late temporal contexts.

### **Distribution of Brown and Gray Ware Jar Assemblages**

Previous chapters discussed how brown ware ceramics have traditionally been associated with Ancestral Puebloans south of the Mogollon Rim and distinct from gray wares associated with Ancestral Puebloans living on the Colorado Plateau. The co-occurrence of brown and gray wares at Cox Ranch Pueblo is interesting. While both brown and gray ware vessels are present at Cox Ranch Pueblo, plain ware assemblages from contemporaneous sites twenty miles to the north are exclusively indented gray corrugated. Simultaneously, brown ware occurs to the near exclusion of gray ware below the Mogollon Rim thirty miles to the south (Danson 1957). This variation has commonly

been interpreted as two traditions with a permeable boundary of interaction facilitating the migrations of people, trade of vessels, and/or diffusion of ideas (Crown 1981).

As discussed in Chapter Five, brown ware makes up a higher percentage of the Cox Ranch Pueblo ceramic assemblage than does gray ware. However, when functionally equivalent jar forms are compared, approximately two-thirds are brown and one-third gray. Both wares make up a significant proportion in the assemblage.

The circulation of plain ware ceramics has been suggested to result from informal, interactions or exchange between close kin and affinal relationships (Duff 2002:26, citing David and Hennig 1972; Graves 1991; Zedeño 1994:55, 1995, 1998). Ethnographically, plain ware is not normally exchanged over long distances and may indicate close social relationships between different communities. In other words, the exchange of these vessels may result from intermarriage or kin relationships. Applying these ideas to the assemblage at Cox Ranch Pueblo may provide a method of examining general trends of occupation. For example, if brown and gray ware ceramics are representative of two different traditions, we may also see spatio-temporal variation across the site.

#### ***Intra-site Distribution of Brown and Gray Ware Jars at Cox Ranch Pueblo***

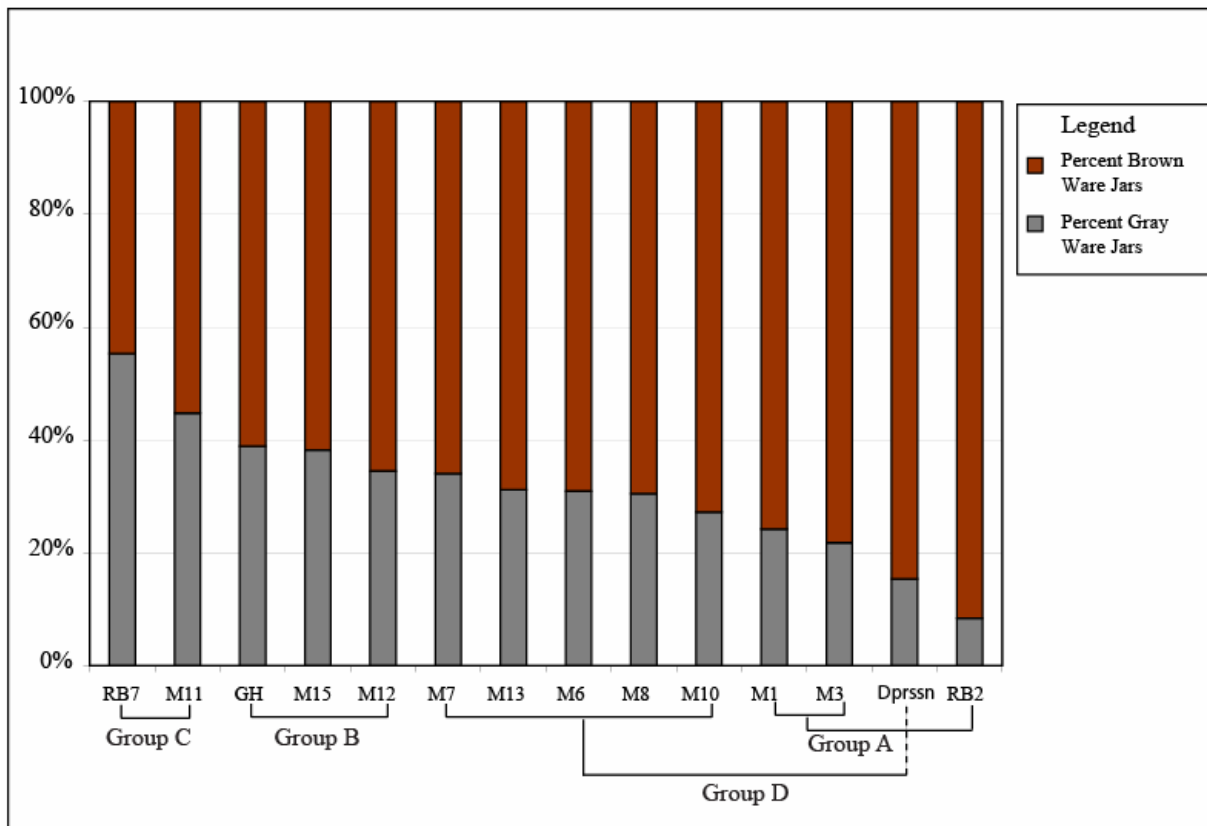
To examine variation in the distribution of brown and gray ware jars at the site, all deposits from each area were aggregated (Table 6.1). Figure 6.9 provides the percentage of brown and gray ware jars by area. Areas are displayed by the decreasing percentage of gray ware and then labeled with their spatially associated group (Figure 6.2). The results indicate that although gray and brown ware jars are present in every area of the site, there is spatial variation. The greatest amount of variation is exhibited between Groups A and

C. Roomblock 7 and Midden 11 have the greatest percentage of gray ware jars, while, Roomblock 2 and Middens 1 and 3 have the lowest percentage of gray ware jars.

When comparing the percentage of brown and gray ware jars to the slight temporal variation at Cox Ranch Pueblo, there is little indication that either ware was more or less abundant early or later in the development of the community. The conclusion of the frequency seriations presented previously in this chapter suggests that Roomblock 7 and Middens 6, 8 and 11 were possibly constructed during later stages of habitation at the site. Roomblock 7 and Midden 11 do show relatively higher percentages of gray ware than any other area at the site; in fact, the trash filled pitstructure in Roomblock 7 is the only area with more gray ware than brown ware. On the other hand, Middens 6 and 8 display only moderate percentages of gray ware. This leads me to suggest that any temporal connection between the percentage of gray and brown ware is tenuous.

**Table 6.1.** Brown and gray ware jar counts by area as utilized in Figure 6.9.

Area	Jar Count		
	Gray Ware	Brown Ware	Total
Roomblock 7	182	147	329
Midden 11	187	233	420
Great House	2395	3833	6228
Midden 15	233	377	610
Midden 12	583	1131	1714
Midden 7	98	191	289
Midden 6	146	326	472
Midden 13	124	278	402
Midden 8	64	147	211
Midden 10	59	158	217
Midden 1	96	302	398
Midden 3	82	295	377
Depression	16	88	104
Roomblock 2	98	1071	1169
<b>Total</b>	<b>4363</b>	<b>8577</b>	<b>12940</b>



**Figure 6.9** Percent brown and gray ware jars by area.

The variation between the plain jar assemblage between Groups A and B represents the two areas of public architecture likely developed during the earliest stages of the community. Although this variation is not great, a chi-square test on the counts of brown and gray jars recovered in Groups A and B indicates significant difference ( $\chi^2 = 389$ ;  $df = 1$ ;  $p = <.0001$ ). This suggests some difference in the composition and/or use of these structures exemplified by architectural techniques more common to the north of Cox Ranch Pueblo (the Great House), and the ballcourt-esque plaza attached to Roomblock 2 more indicative of another tradition.

In sum, there is variation in the distribution of brown and gray ware jars across the site, though both wares are present in every area. This suggests that every household

in the community used both wares. The percentages of brown and gray jars found across the site have little correlation with time. In contrast, there does seem to be a significant difference in the percentage of brown and gray wares between the two areas with public architecture. These preliminary results call for further analyses to determine if the technological processes used to produce brown and gray ware ceramics at Cox Ranch Pueblo *do* actually represent two different learned frameworks and hence perhaps two different ethnic identities and learned frameworks. This is explored further in subsequent chapters by considering the technological characteristics of both the plain and painted wares.

## **Summary**

This chapter has provided a context to further investigate the technological production of ceramic wares found at Cox Ranch Pueblo. Based on the initial spatio-temporal examination of the ceramic wares at Cox Ranch Pueblo I have argued that the public forms of architecture were likely constructed in the early occupational history of the site and were likely used until the community was abandoned. Additionally, the middens associated with the public forms of architecture and other areas appear to have been established and utilized early. The Great House middens appear to be abandoned before the structure, possibly indicating rooms then became the major refuse disposal areas. The seriation also suggests that several middens and at least one architectural feature were constructed slightly later, possibly as a result of community expansion due to outside migrants or *in situ* population growth. Finally, I have suggested that when plain ware jars are compared to the seriation, there is little evidence to link the percentage of

brown and gray wares by area to time. However, there is a correlation between the distribution of brown and gray wares and public forms of architecture, where more gray ware jars are associated with the Great House and a greater percentage of brown ware jars are located in Roomblock 2 rooms.



## CHAPTER SEVEN

### **Technological Means of Assessing Ceramic Variation and Raw Material Sources**

The focus of this chapter is the methodological approach utilized in the technological analyses of the Cox Ranch Pueblo ceramic assemblage. This links learning traditions to ceramic production. First, a brief description of each method is presented, and I explain why each technique was used. Each component of the analysis aims to address several questions explored further in Chapters Eight and Nine.

The sample used for this study includes unpainted textured and painted wares. The unpainted textured sample included unpainted gray ware jars and brown ware bowls and jars. The painted sample included black-on-red and black-on-white bowls and jars. The sample was obtained from the 2003 through 2005 excavations at Cox Ranch Pueblo. The artifacts are currently housed at Washington State University in Pullman and I conducted the analysis between January 2006 and August 2006. Most of the data collected in this study is from pottery sherds obtained during the 2003 and 2004 seasons, with a smaller sample collected during the 2005 field season. The clay raw materials used in this study were collected within the vicinity of Cox Ranch Pueblo in 2003, 2004 and 2005.

The analysis has three facets. First, I investigate three attributes that reflect the manufacturing process of unpainted, brown and gray ware jars. The attributes include coil count, indentation count, and maximum sherd thickness. Second, data was collected to determine apparent porosity, original firing temperature, refired/oxidized paste color, and refired/ oxidized apparent porosity. This analysis was conducted on a sample of unpainted and painted bowls and jars. I also assessed the firing atmosphere of painted

bowls and jars. Third, I compiled data on paste color and apparent porosity for a collection of clays obtained from the vicinity of Cox Ranch Pueblo. The purpose of examining local raw materials is to determine whether pottery recovered at Cox Ranch Pueblo could have been manufactured locally.

### **Coil, Indentation Count and Sherd Maximum Thickness**

While it is believed that brown and gray jars represent two different manufacturing traditions, they are thought to be functionally equivalent. In order to determine if these ceramics do reflect different learning traditions at Cox Ranch Pueblo, aspects that encode production variation — coil count, indentation count, and sherd maximum thickness — were analyzed. The purpose of this analysis is to detect if potters from different learning traditions produced vessels differently. Ultimately, this analysis is focused on understanding if the brown and gray wares at Cox Ranch Pueblo were in fact produced by potters from different learned traditions.

The size of coils, indentations and the thickness of pottery vessels are attributes of technological, stylistic, and/or functional construction of pottery (Crown 1981:256, 2002). These attributes represent a potter's knowledge of pottery production and are learned through interaction and information exchange (Dillingham and Elliott 1992:9-10), such as within a woman's potting group, and may be unconsciously transmitted. The examination of these attributes on brown and gray ware vessels is an attempt to decipher variation in the potter's techniques of manufacture and to see if brown and gray wares differ from each other. Examining these attributes reflective of the entire operation chain

can aid in detecting the display of *identity* both through the production sequence (Van der Leeuw 2002:241) and also the final product (Bowser 2000; Bowser and Patton 2004).

As described in Chapter Five, brown and gray ware vessels found at Cox Ranch Pueblo are built by the coil and smoothing method. The interior of the vessel is often entirely smoothed. The exterior is either smoothed so that the coils are no longer visible or it is decorated with a plain, indented, incised or patterned corrugation. Indentations are made with the finger during the process of coiling a vessel. In some cases, fingerprint and fingernail impressions remain visible. The size and spacing of corrugations and indentations on brown and gray ware vessels tends to vary. Coil size ranges from thin to thick, with minimal to substantial overlap. Indentations are sometimes executed with precision and at other times are less pronounced and uneven.

Since gray ware is present only in jar form, only brown ware jars were compared. Sampling was done by sorting through each bag of sherds grouped by Area, Unit, Level and Locus and obtaining an opportunistic sample of sherds that were at least three centimeters in height and/or width. The aim of the sample was to obtain sherds representing the spatial extent of the excavated areas at the site. The representation of some areas is restricted where the pottery assemblage is limited or most of the sherds are less than three centimeters in height or width. A total sample of 1266 plain ware sherds was analyzed, including 770 brown ware and 496 gray ware sherds. Stylistically, the sample included indented, plain, and patterned corrugated types (Table 7.1; Appendix D).

Indentation count was obtained by counting the number of indentations that occur on two coils within a three centimeter horizontal window (Figure 7.1a). Similarly, coil count was obtained by counting the number of coils within a three centimeter vertical

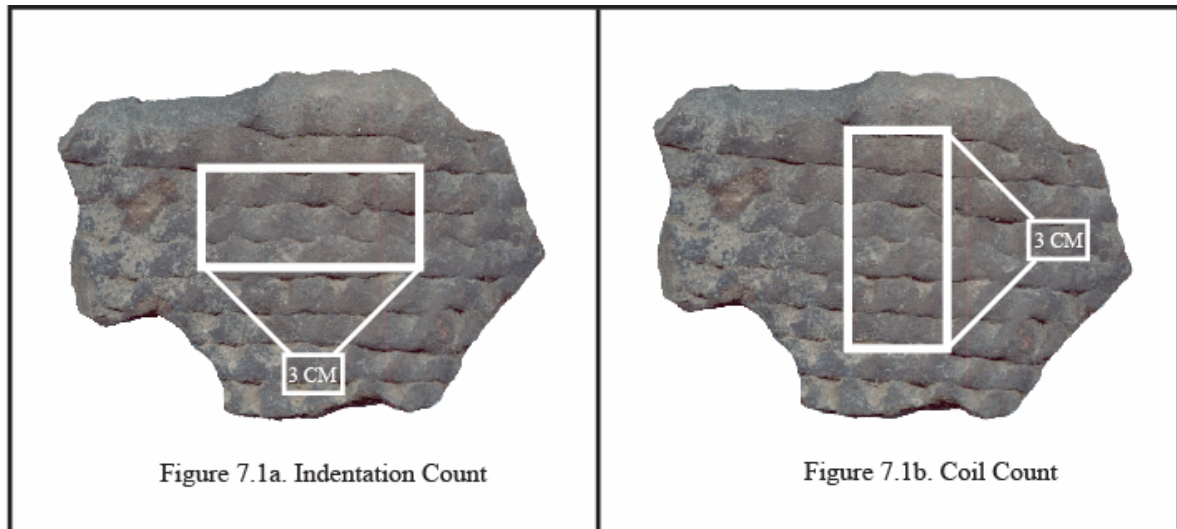
window of each specimen (Figure 7.1b). Maximum thickness was measured using digital calipers recording to the nearest tenth of a millimeter. Because indented corrugated, plain corrugated, and patterned corrugated were all sampled, all measured attributes were not present on each specimen. If an attribute could not be recorded for a specific specimen, that specimen was omitted from analysis for that specific attribute. For example, data for indentation count was not obtained on plain corrugated sherds because there are no indentations present, but data for number of coils and maximum thickness could be collected.

**Table 7.1.** Pottery sherds sampled for indentation, coil count and maximum thickness by ware and type.

	Brown Ware			Gray Ware		
	Indented Corrugated	Plain Corrugated	Patterned Corrugated	Indented Corrugated	Plain Corrugated	Patterned Corrugated
<b>Sherd Count by Type</b>	375	301	94	464	20	12
<b>Sherd Count by Ware</b>	770			496		

Analysis of these attributes provides site and household data pertaining to the learning frameworks of those making brown and gray ware vessels recovered at Cox Ranch Pueblo. If methods used to produce these wares are significantly different, it is likely that brown and gray ware vessels were made by women from different learning traditions. If they are the same, it is possible that people from the same learning traditions made both wares. Additionally, variation within the production of brown and gray ware vessels between households may suggest a distinction between households, while

similarity in their production may imply a unified framework of pottery production at a community level.



**Figures 7.1a and 7.1b.** Method of analysis for indentation and coil count attributes

### **Apparent Porosity**

Apparent porosity is defined by Shepard (1956:126) as “the relative volume of the open pores” in a piece of fired pottery. The analysis of apparent porosity is a technological measure that approximates the true porosity, or the total volume of pores within a pottery piece of low-fired pottery (Rice 1987:351). Apparent porosity is influenced by the mineralogical composition of the clay, natural inclusions or temper, and treatment applied during vessel manufacture (Rice 1987:351).

Clay undergoes changes in porosity throughout the firing process (Shepard 1956: 126). As water evaporates out of the clay, its porosity will increase and continue to increase with the oxidation of carbonaceous material. The porosity of a material decreases when vitrification begins. Grain size, or the fineness of paste, also influences

porosity. A vessel with a uniformly fine-grained paste will have a lower porosity than one with a uniform coarse paste. When fine and coarse grained tempers are combined they are packed together producing a lower porosity.

In order to measure apparent porosity a number of attributes must be measured one each sample, including: 1) the dry weight; 2) the saturated weight of a piece (a sherd boiled for two hours or soaked for 24 hours), and 3) the submerged weight indicating the sherd volume (saturated weight – submerged weight). Apparent porosity is then calculated by the following equation:

$$\frac{\text{Saturated Weight} - \text{Dry Weight}}{\text{Volume of Sample}} * 100 = \% \text{ Apparent Porosity}$$

As discussed in Chapter Two, technological characteristics of pottery are influenced by cultural norms influencing production and the transmission of this knowledge from one generation to the next. Although these characteristics can be used to assess past cultures and their interaction, it is important to acknowledge that function also plays a very important role in determining a vessel's characteristics. Porosity is fundamental to the function of pottery. Pore volume strongly influences the functional capabilities of a vessel. Mechanical stress, thermal stress and thermal shock are dependent on the size, shape, and distribution of pores within the paste (Steponaitis 1984:97). A vessel with a fine paste and low apparent porosity would have a high initial strength, but would break down very quickly if exposed to thermal shock. Conversely, a vessel with course paste and high apparent porosity would have less initial strength, but would stay intact even after prolonged thermal shock (Shepard 1956:127; Steponaitis 1984:108). This later situation produces a vessel that is more suitable for cooking.

Although I do not directly examine the paste texture of pottery through temper analysis, the use of apparent porosity allows for a proxy of grain size.

In social terms, the technological choices employed in clay and temper selection produce vessels indicative of the ways in which women learned to make functionally specific vessels. However, vessels of the same form may or may not be functionally equivalent. For example, ethnographic Acoma and Laguna vessels have several functions and/or the function usually changes through time (Dillingham and Elliott 1992:81-82). While apparent porosity does not specifically indicate the exact function of each vessel, it does provide a proxy for comparison in the Cox Ranch Pueblo assemblage.

Measuring apparent porosity of pottery before refiring reflects the apparent porosity as the vessel would have been used. This allows us to determine if brown and gray ware jars had different functions. If apparent porosity is similar for each ware, we can infer that they were utilized in a similar fashion. Conversely, if apparent porosity differs significantly, the use of brown and gray jar vessels most likely also differed. Second, it allows us to compare the apparent porosity of brown ware bowls and painted black-on-white and black-on-red bowls. This could also help to determine if these vessels were functionally equivalent. Third, it allows for a discussion of intra-site functional variation of wares highlighting possible differences between how households produced and/or used vessels.

Apparent porosity was measured on a total of 538 unpainted, textured specimens. Types sampled include indented corrugated, plain corrugated and patterned corrugated varieties. A total of 283 painted sherds were examined for apparent porosity (Table 7.2; Appendix E). The samples were obtained during the 2003 and 2004 field seasons.

Because the 2005 assemblage was not examined for this portion of the analysis, household comparisons are limited to Middens 1, 3, 7, 10, 12, 15, the Great House and the depression (Figure 3.1).

**Table 7.2.** Counts of pottery sherds used for apparent porosity.

	<b>Brown Ware</b>		<b>Gray Ware</b>		<b>White Ware</b>		<b>Red Ware</b>	
	Bowls	Jars	Bowls	Jars	Bowls	Jars	Bowls	Jars
<b>Sherd Count by Form</b>	193	185	n/a	160	58	168	55	2
<b>Sherd Count by Ware</b>	378		160		226		57	

### **Assessment of Firing Mechanics and Paint Composition**

Temperature is one of the primary variables affecting the physical and chemical characteristics of clay. The firing temperature, length of time that a vessel is exposed to heat and the atmosphere directly relate to its color, durability, functionality and overall appearance (Gosselain 1992:253; Rice 1987: 80). Although it is best to address all three variables of firing when inferring firing technology, assessing original firing temperature on prehistoric pottery provides a preliminary means of interpreting the firing technology of pottery.

Assessing prehistoric firing temperature has been viewed as problematic (Gosselain 1992). Variability in the temperature reached within and between firings is common (Gosselain 1992:256). Even so, it is recognized that through experience and



tradition, potters learn to how to manipulate firing technologies to achieve the effects they desire (with minimal variability).

An easy means of assessing ceramic original firing temperature is through the process of refiring pottery chips in an oxidizing environment. The principle behind refiring pottery is that after a clay has been heated to several hundred degrees C and then cooled, the physical and chemical transformations will be halted at the point of maximum firing temperature. Physical transformations in the clay will not resume until the maximum firing temperature is exceeded (Rice 1987:427). When temperatures exceed the maximum firing temperature, changes will be seen in the clay, usually including a transformation in color, size and porosity. Thus, an estimation of original firing temperature can be approximated by refiring pottery sherds in a controlled environment.

In addition, refiring pottery can provide information concerning paint composition. Specifically, refiring can establish whether the paint used to decorate a vessel was mineral or organic. Cibola White Ware and White Mountain Red Ware production use mineral paint nearly exclusively. However, there have been some instances where organic paint was employed (Mills et. al 1999:245). Organic paint will burn off after the painted specimen is fired for fifteen minutes at 500° C in an oxidizing environment. Conversely, if the paint is mineral, it will not change.

Whether or not a vessel has been smudged can also be detected through refiring experiments. As discussed in Chapter Five, smudging is a firing technique that creates a blackened appearance to pottery. Smudging is a common practice in the manufacture of Mogollon Brown Ware bowls. The principle behind this technique is to close off the supply of oxygen to the part of the vessel where smudging is desired; this forces carbon

to deposit on the surface and in the pores (Rice 1987:158). Because carbon is organic, smudging can be detected through refiring experiments akin to those used to detect mineral or organic paint. At 300-500° C, depending on the amount of organics present, the carbon produced by smudging will begin to burn off (Rice 1987:334). To determine whether brown ware bowls classified as smudged at Cox Ranch Pueblo were truly smudged, chips were refired to 500° C for one hour and examined for the loss of blackened surfaces.

In this experiment, sherds were heated in an electric kiln and Munsell colors were recorded at 500°, 600°, 700°, 800° and 900° C. Samples were soaked in an oxidizing atmosphere at each temperature for 45 minutes. The sample included 541 unpainted, textured bowls and jars and 380 black-on-red and black-on-white bowls and jars (Table 7.3).

**Table 7.3.** Counts of pottery sherds used for original firing temperature.

	<b>Brown Ware</b>		<b>Gray Ware</b>		<b>White Ware</b>		<b>Red Ware</b>	
	Bowls	Jars	Bowls	Jars	Bowls	Jars	Bowls	Jars
Sherd Count by Form	196	185	n/a	160	55	217	106	2
Sherd Count by Ware	381		160		272		108	

### *Oxidation Analysis*

The purpose of oxidation analysis is to focus on the clay raw materials utilized in pottery production. By refiring specimens past their original firing temperature, it is

possible to examine the variability in clays used to produce a ceramic assemblage. This procedure exposes a group of pottery chips to the same firing temperature in an oxidizing environment, which allows a comparison of the original clay sources used in production.

The color of fired pottery is determined by the firing conditions of atmosphere, soaking time, temperature and the composition of the raw materials (Shepard 1956:103). When clays are fired in an oxidizing environment under constant firing conditions, the carbon burns out and iron is converted to oxides, which leaves the remaining color of the fired clay as a measure of the iron content (Rice 1987:81).

When sherds from different vessels are fired under the same conditions, their clays can be directly compared. If the color of refired sherds is similar, we can infer that the samples may derive from a similar clay source. Conversely, if they differ substantially, we can infer that they were produced from different clay sources. Refired specimens can also be compared with fired geological clay samples as a proxy for raw material sourcing.

For the oxidation analysis, sherds were broken into two pieces. One piece was kept as the control and the other was fired in a kiln. All ceramics were refired at 900° C for one hour. The assessment of the original firing temperature discussed in Chapters Eight and Nine suggests that 900° C is well above the prehistoric firing temperature and will fully oxidize the pottery piece. After refiring, Munsell colors were assigned to each individual pottery piece corresponding to its paste color (Munsell 1994). Seven color groups were then defined based on Munsell color following the analyses of Mills (1987), Windes (1977), Shepard (1956), Fowler (1991) and Duff (1993:41), studies that

identified distinctions in clay paste colors. The Munsell color values assigned for each group are provided in Table 7.4.

For the oxidation analysis, 544 unpainted, textured bowl and jar sherds and 380 black-on-red and black-on-white bowl and jar sherds were fired in an oxidizing environment at 900°C for one hour (Table 7.5; Appendix E). These samples were obtained from the 2003 and 2004 collections.

**Table 7.4** Color groups with corresponding Munsell colors.

Analysis Group		Munsell Color
Number	Name	
1	Buff	10YR (8/1-8/4) 10YR (7/1-7/4) 2.5Y (N8/-8/4) 2.5Y (N7/-7/4) 5Y (8/1-8/4)
2	Buff	7.5YR (N8/-8/4) 7.5YR (N7/-7/4) 10YR (8/6-8/8) 10YR (7/6-7/8)
3	Buff	5YR (8/1-8/4) 5YR (7/1-7/4)
4	Yellowish Red	7.5YR (8/6) 7.5YR (7/6-7/8) 7.5YR (6/6-6/8) 7.5YR (5/4-5/8)
5	Yellowish Red	5YR (7/6-7/8) 5YR (6/6-6/8) 5YR (5/4-5/8)
6	Red	2.5YR (6/4-6/8) 2.5YR (5/4-5/8) 2.5YR (4/4-4/8)
7	Red	10R (6/3-6/8) 10R (5/3-5/8)

**Table 7.5** Counts of pottery sherds used for paste color analyses.

	<b>Brown Ware</b>		<b>Gray Ware</b>		<b>White Ware</b>		<b>Red Ware</b>	
	Bowls	Jars	Bowls	Jars	Bowls	Jars	Bowls	Jars
Sherd Count by Form	196	188	n/a	160	55	217	106	2
Sherd Count by Ware	384		160		272		108	

***Apparent Porosity of Re-fired Pottery***

Measuring apparent porosity of pottery pieces fired past their original firing temperature provides another assessment of original clay properties. The purpose of this analysis was to examine apparent porosity variability in the clay used to make different wares, and to determine if it is similar to local clay sources.

There are several complications in comparing pottery sherds to raw materials based on apparent porosity. The apparent porosity of fired clay is strongly associated with particle size. The handling of clay by potters regularly modifies the particle composition of a natural clay (an ethnographic example is noted by Dillingham and Elliott 1992:44). This occurs through the cleaning of the raw material to remove coarse particles and/or with the addition of temper. Pottery is commonly produced with between 20 and 30 percent temper composed of organic materials, sand, grog (crushed and recycled pottery), crushed rock or a mixture of these materials. Pottery at Cox Ranch Pueblo was likely tempered in this way. When paired with the paste color analysis of refired sherds and local raw materials, comparisons offer a simple method of comparing sherds and possible raw material resources.

Apparent porosity was measured on 415 unpainted, textured bowl and jar sherds and 275 black-on-red and black-on-white bowl and jar sherds (Table 7.6). These sherds were re-fired past their original firing temperature and soaked at 900°C for one hour. Apparent porosity of the re-fired pottery was examined using the same methods discussed above.

**Table 7.6.** Counts of pottery sherds used for apparent porosity of re-fired pottery.

	Brown Ware		Gray Ware		White Ware		Red Ware	
	Bowls	Jars	Bowls	Jars	Bowls	Jars	Bowls	Jars
Sherd Count by Form	194	170	n/a	151	53	165	55	2
Sherd Count by Ware	264		151		218		57	

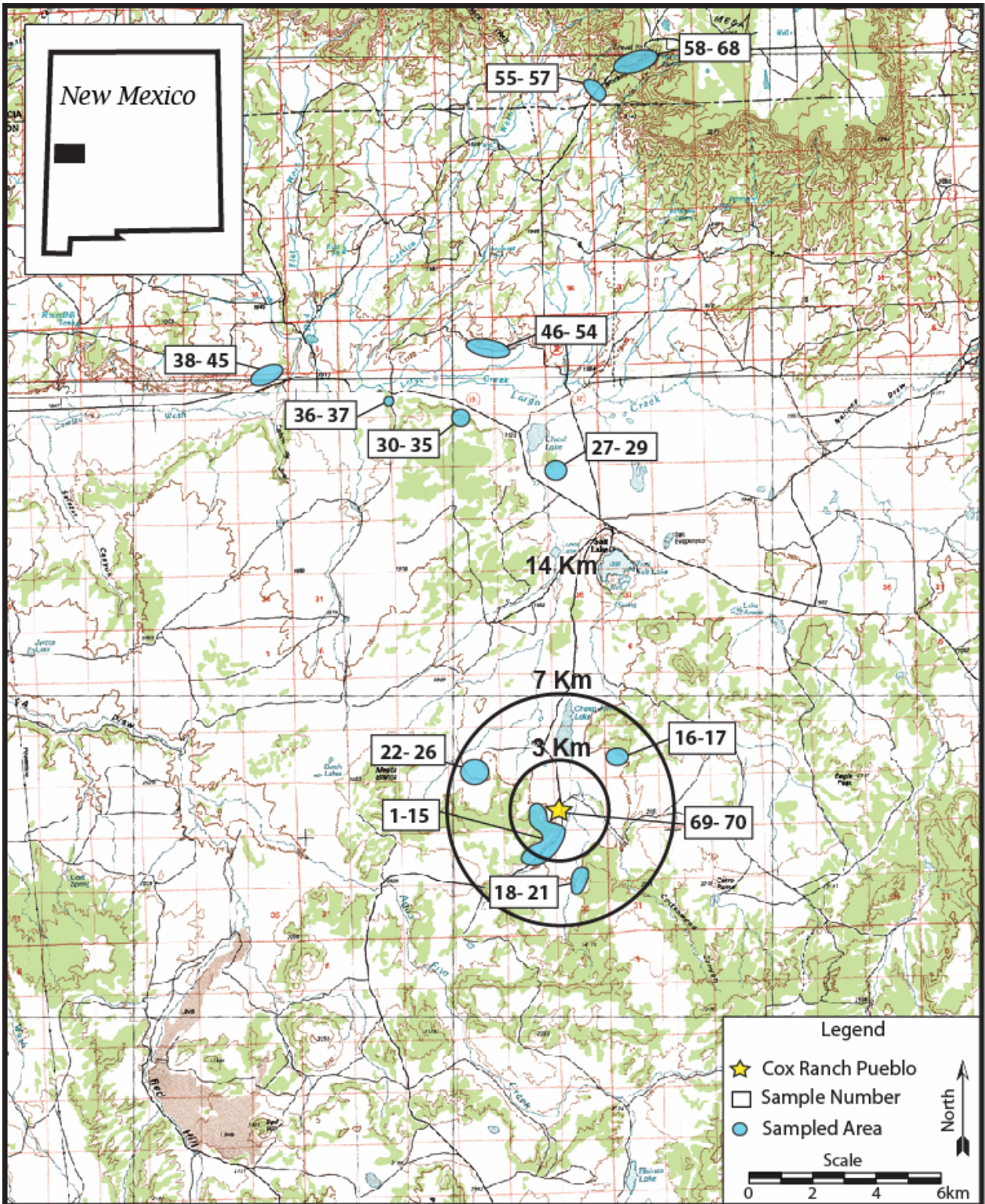
### Assessment of Local Clay Resources

The type of clay used in the manufacture of pottery is determined by cultural choices and the available raw materials. The rudimentary difference between brown and gray wares and red and white wares is based on the type of clay used in production and firing atmosphere. Although they can be manufactured with iron rich clay, buff-firing Cretaceous clays are traditionally used to produce gray wares, white wares and many red wares; these clays are widely available throughout the Colorado Plateau. In contrast, there is a relative paucity of light-firing clay located in the Mogollon territory. Conversely, red-firing clays used to produce brown wares and some red wares are abundant in the Mogollon area and occur less frequently in neighboring geographical areas to the north (Fowler 1991:125).

Assessment of the availability and variability of potential clay resources in the vicinity of Cox Ranch Pueblo focused on detecting local raw materials used to produce pottery at Cox Ranch Pueblo. This aids in determining whether pottery recovered from the site could have been produced from local clays or if the pottery/raw materials present were obtained by trade or as a result of migration.

A total of 70 clay samples were obtained from within 25 km (15 miles) of Cox Ranch Pueblo (Figure 7.2; Table 7.7). Of the total number of samples, 28 were obtained within a 7 km (about 4 miles) radius of Cox Ranch Pueblo. This distance has been suggested to represent the primary territory of clay procurement (Arnold 1985:35). While several of the samples were from sources farther away than 7 km, these data are useful for comparison with closer resources. Two clay samples from archaeological contexts were also included. The material recovered from the Great House was found as a small compact clay mass within fill and the specimen from Roomblock 2 was an unfired sherd that is likely a portion of a pot that broke during the pre-firing production process. These samples offered insight into possible raw material sources in the area.

Specimens were obtained from visible clay outcrops during a survey of the area. Sampling strategies may have introduced bias to the sample, as some samples were obtained from roadcuts and nearby visible exposures. Sampling was intended to include the range of geological resources available locally. This area includes exposures of Marino Hill, Chinle, Dakota Sandstone and Mancos Shale formations. With the exception of archaeological contexts, subsurface deposits were not sampled. Ethnographic evidence suggests that traditional potters tend to procure raw materials that are readily accessible with basic mining techniques (Dillingham and Elliott 1992).



**Figure 7.2.** Clay raw materials gathered for study. Topographic maps Fence Lake (USGS 1981) and Quemado (USGS 1983), New Mexico, 1:100,000.



**Table 7.7.** Description and location of raw material samples

Sample Number	Description	Location	Context
1		Capstone Top	Hill Side Outcrop
2		Upper terrace directly under sandstone talus	Hill Side Outcrop
3		Upper terrace 10 m below sandstone talus	Hill Side Outcrop
4		Capstone Middle; 2-3 m below sandstone talus	Hill Side Outcrop
5		Middle tier top of shelf	Hill Side Outcrop
6		Middle tier talus; directly below capstone sandstone	Hill Side Outcrop
7		Middle tier talus; 2-3 m below capstone	Hill Side Outcrop
8	Moreno Hill	Middle tier talus-half way up	Hill Side Outcrop
9		Middle tier talus (1) at base	Hill Side Outcrop
10		Capstone low; 10 m below sandstone	Hill Side Outcrop
11		Lowest tier Upper Most Strat	Hill Side Outcrop
12		Lowest tier Upper Middle Strat	Hill Side Outcrop
13		Lowest tier Middle Strat	Hill Side Outcrop
14		Lowest tier Lower Middle Strat	Hill Side Outcrop
15		Lowest tier Lower-most Strat	Hill Side Outcrop
16	Moreno Hill	East of Cheap John Lake; lower tier 12S E0704021 N3804319	Hill Side Outcrop
17		East of Cheap John Lake; upper tier 12S E0704021 N3804319	Hill Side Outcrop
18		South of Cox Ranch Pueblo; lowest 1 12S E704743 N3808359	Hill Side Outcrop
19	Moreno Hill	South of Cox Ranch Pueblo; middle	Hill Side Outcrop
20		South of Cox Ranch Pueblo; upper	Hill Side Outcrop
21		South of Cox Ranch Pueblo; Clay 3 E704120 N3808790	Hill Side Outcrop
22		upper terrace point directly under sandstone	Hill Side Outcrop
23		50 m down from upper terrace point	Hill Side Outcrop
24	Moreno Hill	10 m below lowest terrace	Hill Side Outcrop
25		20 m below lowest terrace	Hill Side Outcrop
26		40 m below lowest terrace	Hill Side Outcrop
27		Chical Lake; Lower Chinle	Hill Side Outcrop
28	Chinle	Chical Lake; Upper Chinle Gray	Hill Side Outcrop
29	Possible Dakota Sandstone	Chical Lake; Dakota Capstone; above Chinle	Hill Side Outcrop
30		Near Largo Creek; 12700357E 38118668N	Hill Side Outcrop
31		Near Largo Creek; 12700386E 3818606N	Hill Side Outcrop
32	Chinle	Near Largo Creek; 12700347E 3818643N	Hill Side Outcrop
33		Near Largo Creek; 12700349E 3818655N	Hill Side Outcrop
34		12700345E 3818656N	Hill Side Outcrop
35		12700386E 3818608N	Hill Side Outcrop
36		Near Largo Creek	Road Cut
37		Near Largo Creek 12698444E 3819484N	Road Cut
38		Near Carrizo Wash; 12693820E 3819875N	Hill Side Outcrop
39		Near Carrizo Wash; 12693851E 3819864N	Hill Side Outcrop
40		Near Carrizo Wash; 12693873E 3819830N	Hill Side Outcrop
41	Dakota Sandstone	Near Carrizo Wash; 12693814E 3819878N	Hill Side Outcrop
42		Near Carrizo Wash; 12693798E 3819889N	Hill Side Outcrop
43		Near Carrizo Wash; 12693810E 3819886N	Hill Side Outcrop
44		Near Carrizo Wash; 12693818E 3819875N	Hill Side Outcrop
45		Near Carrizo Wash; 12693794E 3819907N	Hill Side Outcrop
46		Chinle; 12700833E 3821026N	Hill Side Outcrop
47		Chinle; 12700851E 38209824N	Hill Side Outcrop
48		Chinle; 12700840E 3821014N	Hill Side Outcrop
49	Chinle	Chinle; 12700891E 3820966N	Hill Side Outcrop
50		Chinle; 12700855E 3820994N	Hill Side Outcrop
51		Chinle; 12700859E 3820996N	Hill Side Outcrop
52		Chinle; 12700875E 3820979N	Hill Side Outcrop
53		Chinle; 12700856E 3821011N	Hill Side Outcrop
54		Chinle; 12700856E 3820989N	Hill Side Outcrop
55	Mancos Shale	Mancos Shale; Upper at contact to Atarque sandstone	Hill Side Outcrop
56		Mancos Shale; Middle zone	Hill Side Outcrop
57		Mancos Shale; Lower Zone	Hill Side Outcrop
58		Moreno Hill Road; lowest zone, #1	Road Cut
59		Moreno Hill Road; lowest zone, #2	Road Cut
60		Moreno Hill Road; lowest zone, #3	Road Cut
61		Moreno Hill Road; lowest zone #4	Road Cut
62		Moreno Hill Road; lowest zone #5	Road Cut
63	Moreno Hill	Moreno Hill Road; middle #1	Road Cut
64		Moreno Hill Road; middle #2	Road Cut
65		Moreno Hill Road; middle #3	Road Cut
66		Moreno Hill Road; upper #1	Road Cut
67		Moreno Hill Road; upper #2	Road Cut
68		Moreno Hill Road; upper #3	Road Cut
69	Unfired Pottery	Cox Ranch Pueblo Roomblock 2	Room floor
70	Unfired Clay	Cox Ranch Pueblo Great House Unit 6 Locus 6	Room

### ***Workability***

Plasticity was measured on each sample as an approximation of workability. Plasticity is the ability of a clay to hold its shape with the addition of a small amount of water (Rice 1987:58). For this analysis, approximately 300 grams of each sample were ground in a mortar to a fine powder and sifted through a fine sieve to remove coarse particles. One hundred grams of each ground sample was used to conduct the “water of plasticity test” (Shepard 1956). A recorded amount of water was added to the ground clay until it could be shaped with the thumb and forefinger into a one inch ribbon that did not crack. Samples that did not form a ribbon were eliminated at this time. A recorded additional amount of water was added to the remaining samples until they became sticky. For 100 grams of clay, the volume of water added is equivalent to the percentage of its water of plasticity. When converted into percentages, the water volumes gave the range of workability for each clay sample.

### ***Oxidized Paste Color***

Each clay specimen was formed into small blocks, dried, and then fired in an oxidizing environment at 900°C for one hour. Firing the specimens in this environment and to this temperature provided data comparable to the refired sherds. Fired clay specimens were examined for paste color based on the Munsell (1994) color spectra. Color groups were assigned to each specimen utilizing the same methods described above. Paste color groups of local clay source specimens are compared with pottery from Cox Ranch Pueblo as one means of clay sourcing. If the color groups exhibited in

unpainted and painted wares are present in the local clay samples, then it is plausible to suggest that the pottery could have been produced at the site.

### ***Apparent Porosity***

Apparent porosity was calculated on each fired clay specimen utilizing the same methods discussed previously. In spite of the limitations mentioned above, apparent porosity of sampled clay sources is explored as a proxy for general comparison with the paste color analysis of re-fired sherds. These data provide further comparative measures for the detection of potential raw material sources available locally.

### **Summary**

This chapter has described the methods used in the analysis of pottery and provided the basis for making several interpretations and conclusions about pottery production at Cox Ranch Pueblo. First, these methods allow for interpretation of the learning frameworks exhibited by the unpainted brown and gray wares at the site. Second, they provide data useful in assessing the function of different wares. Third, these methods provide the opportunity to assess whether the ceramics at Cox Ranch Pueblo are a result of local production or trade. Overall, the results of these analyses are examined on a community and inter-household level at Cox Ranch Pueblo. The following chapter provides the results of the technological analysis of unpainted, textured brown and gray jars.

## CHAPTER EIGHT

### **Brown versus Gray: Learning Frameworks and Technological Production in the Manufacture of Brown and Gray Ware Jars**

This chapter focuses on brown and gray unpainted corrugated ceramic traditions at Cox Ranch Pueblo to determine if women making the pottery were signifying their identity through plain ware ceramics. To accomplish this, I utilize a variety of statistical methods to highlight embedded aspects of the plain ware production sequence through analysis of attributes from the pottery.

Because unpainted, textured and corrugated ceramics were likely produced and used by women within their households, and the technology used to manufacture them was likely to have been passed down within household groups (Crown 2002:171; Dillingham and Elliott 1992:9-10), examination of technological attributes can help to identify learning frameworks at the household level. Furthermore, the occurrence of both brown and gray ware ceramics at Cox Ranch Pueblo can provide insight into expressions of identity in a community where difference may have been a facet of everyday living.

I first address distinct learning frameworks evident in the production of brown and gray ware pottery at Cox Ranch Pueblo at the community level. Second, I assess local raw materials to determine whether the pottery at the site could be locally produced, or if it is more likely a product of trade and/or exchange. Third, I explore intra-ware variation in the production of brown and gray ware vessels between households within the community. Lastly, I examine variation between the manufacture of brown and gray ware assemblages within each household.

The results of these analyses provide the basis to argue that women in the Cox Ranch Pueblo community did utilize the plain ware ceramics to signify their *identity* in some form. Additionally, I argue that the identity displayed functioned to reaffirm group membership differently in different contexts.

### **Learning Frameworks at the Community Level**

Ethnographically, in Pueblo communities knowledge of pottery production was passed through formal instruction from grandmother and mother to daughters (Dillingham and Elliott 1992:9-10). For Acoma and Laguna Pueblos, every woman should know how to make pottery, however, only certain people were designated to make ceremonial or kiva pottery (Dillingham and Elliott 1992:9). Zedeño (1994) suggests that utilitarian ceramics were produced at the household level with techniques passed down within household groups or between closely interacting households. Assuming that this accurately describes learning transmission in ancestral pueblos, evidence for distinct learning frameworks in the production of brown and gray unpainted jar assemblages should also represent distinct ethnic or kinship affiliations (Lathrap 1983). In the following section, I discuss analysis of several attributes used to determine if there were different technological choices made in the production of brown and gray ware vessels at Cox Ranch Pueblo.

### ***Coil, Indentation Count and Sherd Maximum Thickness***

The examination of the attributes of coil count, indentation count and sherd maximum thickness on brown and gray ware vessels is an attempt to decipher variation in

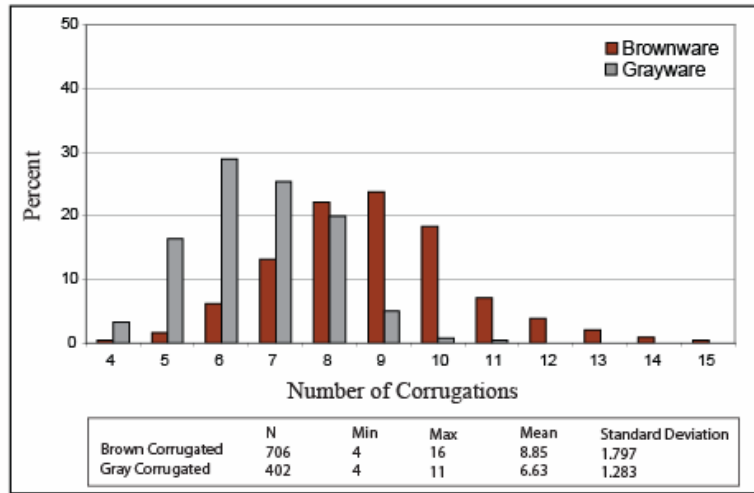
the potter's techniques of manufacture indicative of learning frameworks and suggestive of identity. An Independent Sample *t*-test was used to compare the means of data gathered for these attributes on brown and gray ware jars. The results of this test are summarized in Table 8.1 and show that indentation and coil count are significantly different, while sherd maximum thickness is not. This suggests that coil and indentation size may indicate different learning frameworks for the production of brown and gray wares. Maximum thickness appears to be similar for both wares and may relate to vessel function, which provides support to the suggestion that brown and gray vessels were functionally equivalent.

**Table 8.1.** Independent sample *t*-test results for brown and gray corrugated jars coil, indentation count and sherd maximum thickness.

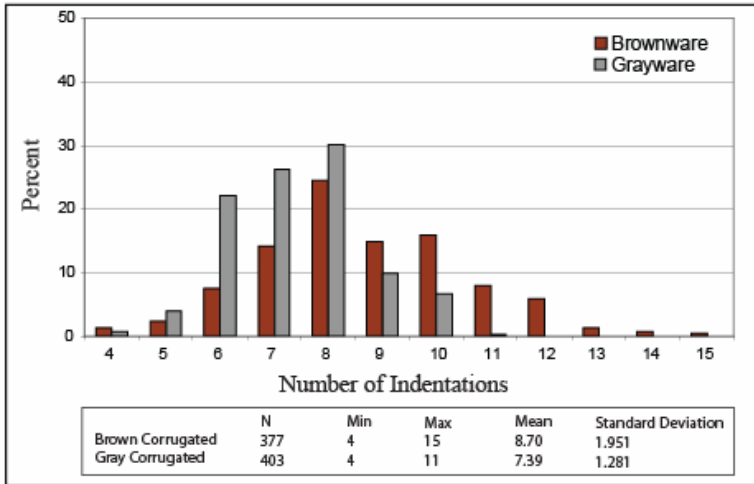
<b>Attribute Measured</b>	<b><i>t</i>-value</b>	<b>df</b>	<b>p-value</b>
Indentation Count	8.841	785	<.0001
Coil Count	21.946	1100	<.0001
Maximum Thickness	12.703	1263	0.101

Histograms of measured attributes visually display the distinctiveness of brown and gray corrugated pottery (Figure 8.2a-c). Brown ware jars were made with significantly thinner coils than gray ware jars, and also demonstrate wider variation in the number of corrugations per 3 cm area. Though statistically different, indentation count indicates that indentations are closer together on brown ware jars than gray ware jars (Figure 8.2b). The number of indentations on brown ware jars displays more variation than gray ware jars, suggesting less standardization. The distribution of maximum wall thickness values shows little difference (Figure 8.2c).

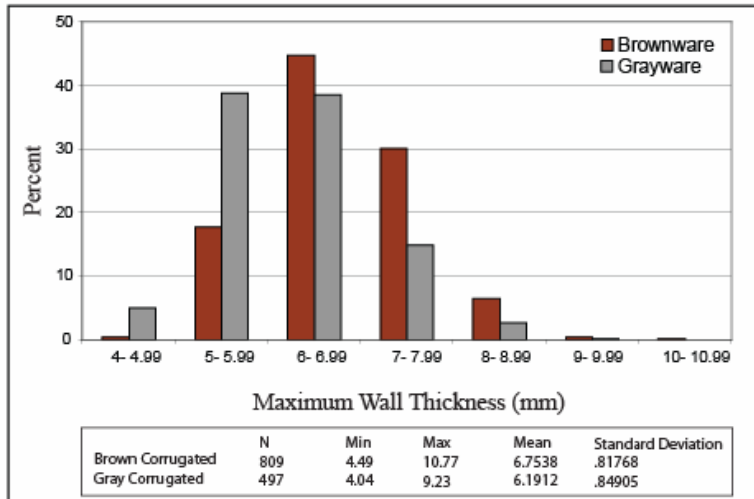
**Figure 8.1a.**  
Number of corrugations per 3 square cm on brown and gray ware jars.



**Figure 8.1b.**  
Number of indentations on 2 coils per 3 square cm on brown and gray ware jars.



**Figure 8.1c.**  
Maximum wall thickness of brown and gray ware jars.



**Figure 8.1 a-c.** Histograms of brown and gray ware coil, indentation count and wall thickness.

The wider range of variation in coil and indentation counts within the brown ware jar assemblage suggests less standardization in production. One possible interpretation of this result is that more potters were manufacturing the brown ware jars than were producing gray ware jars. Although speculative, this may reflect stronger ties among community residents to traditions and people living below the Mogollon Rim.

### ***Apparent Porosity***

An Independent Sample *t*-test of the apparent porosity values for brown and gray ware jar sherds indicate that brown and gray ware jars have similar apparent porosities ( $t=-5.844$ ,  $df=344$ ,  $p=0.188$ ), and hence were probably made for similar intended uses.

### ***Original Firing Temperature***

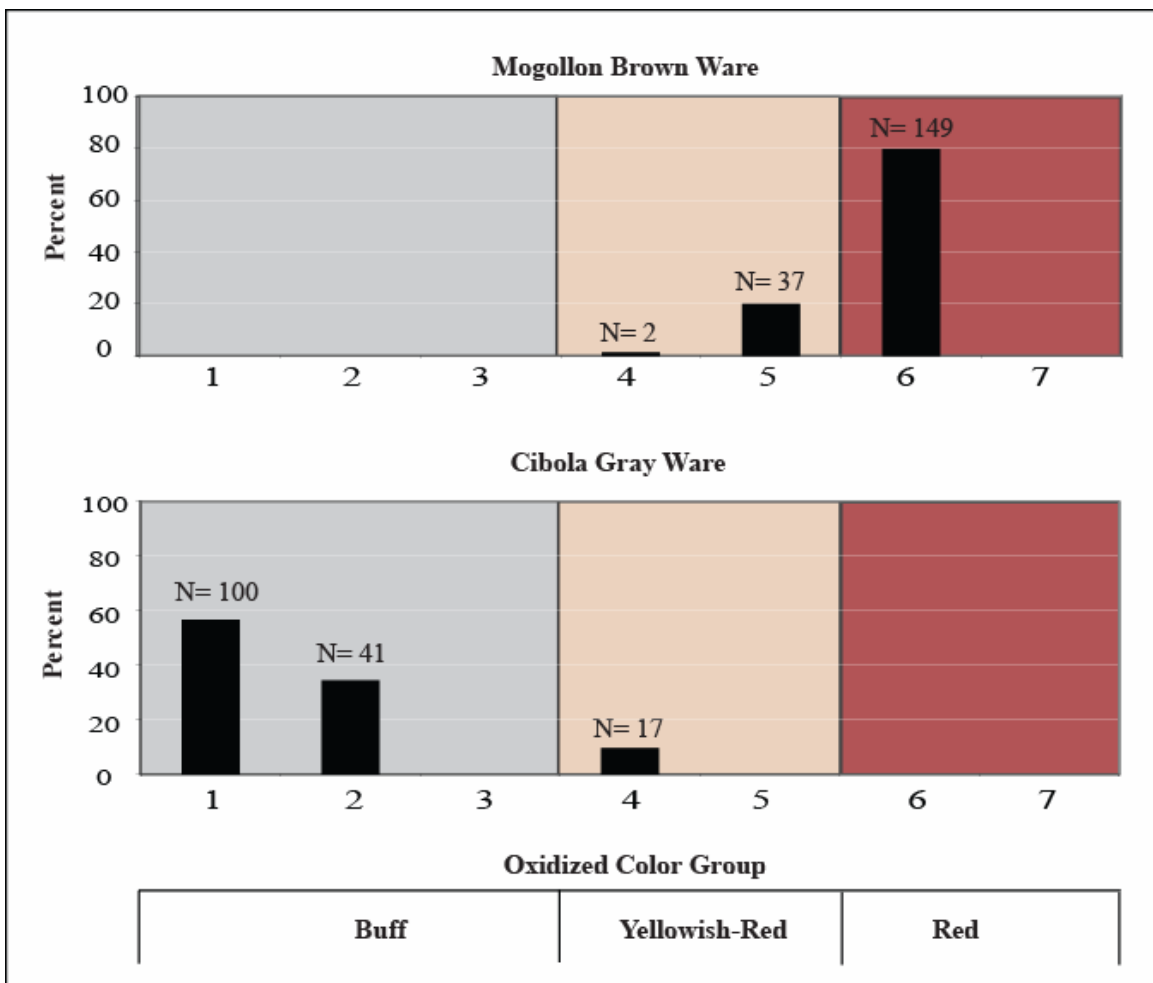
Examination of the original firing temperature of brown and gray ware jars indicates minor variation. Changes in paste color show that the approximate original firing temperature of gray ware jars was between 600 and 800°C and between 700 and 900°C for brown ware, consistent with ethnographically-reported firing temperatures for utility wares (Rice 1987:157). The slightly greater range in brown ware values might also suggest a larger number of producers. These results are helpful in estimating approximate original firing temperature and indicate that providing a maximum firing to 900°C for comparative paste color analysis of refired sherds.

### ***Oxidation Analysis***

The purpose of oxidation analysis is to focus on the clay raw materials utilized in pottery production. By refiring specimens past their original firing temperature, it is



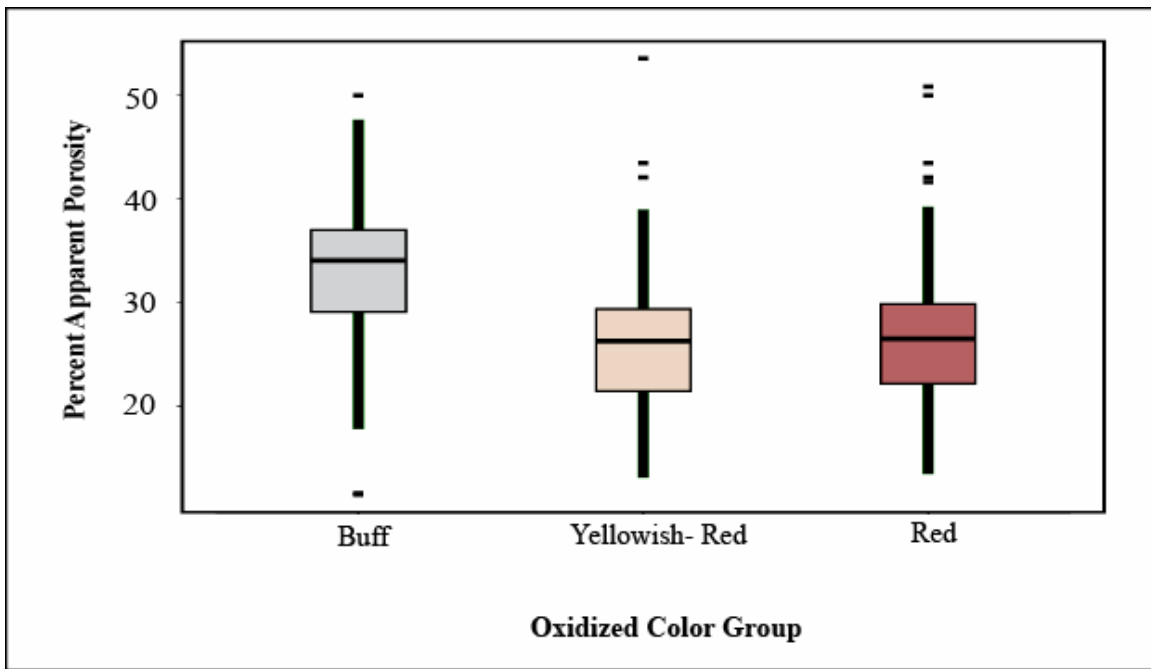
possible to examine the variability in clays used to produce a ceramic assemblage. Refiring brown and gray ware pottery at Cox Ranch Pueblo resulted in paste colors that range from buff to dark red. Buff firing pastes were exclusively associated with gray ware, while red firing pastes were strongly associated with brown ware pottery (Figure 8.2). Aggregating these to three broad color groups indicates that brown and gray ware pottery was produced from different clays ( $\chi^2= 542.2384, df=2, p < .0001$ ).



**Figure 8.2.** Cibola Gray Ware and Mogollon Brown Ware jars by color group.

### *Apparent Porosity and Paste Color of Oxidized Pottery*

Box plots of apparent porosity by oxidized color group indicate that the refired apparent porosity of yellowish-red and red firing jar sherds overlaps, while buff firing pottery values are slightly higher (Figure 8.3). An ANOVA statistical test indicates a significant difference ( $F=51.199$ ,  $df=2$ ,  $p=.000$ ) in the refired apparent porosity of sherds that fire buff, yellowish-red and red. These results further support the interpretation that brown ware and gray ware were produced from clays derived from different sources.



**Figure 8.3.** Boxplots of apparent porosity values of refired brown and gray ware jars by oxidized color group.

These analyses indicate that it is likely that potters from different learned traditions produced the brown and gray ware assemblage at the site and also mined different clay outcrops for their raw materials. Yet these vessels appear to have been made to fulfill a similar function. The distribution of brown and gray ware jars explored

in Chapter Five indicates the presence of both wares in every household midden in the community. However, it is yet to be demonstrated whether these vessels were products of local manufacture or were imported into Cox Ranch Pueblo. Next, I provide results of the analysis of local clay resources which suggests the raw materials used to make both plain wares are available relatively close to the site.

### **Raw Material Availability**

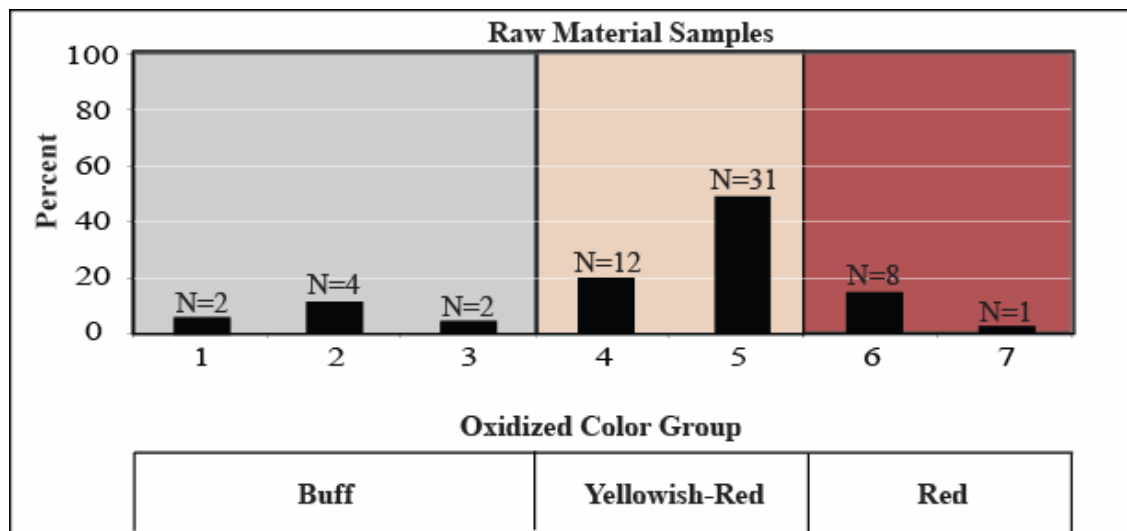
Cretaceous clay outcroppings, traditionally suitable for making gray ware ceramics, are generally scarce below the Mogollon Rim. However, iron rich clays used in the production of brown ware are readily available. The distribution of brown and gray ware vessels in these regions has led to the generalization that gray ware vessels were produced by potters living north in the Colorado Plateau and brown ware vessels were produced by potters living in communities in the south. This in part is because clays that are available to the north predominantly fire buff, while raw material sources below the Mogollon Rim are dominated by yellowish-red and red firing clays. Until recently, clay resources in the vicinity of Cox Ranch Pueblo had not been examined (Mills 1987). Assessment of local clay resources through paste color and apparent porosity provides an avenue of determining whether brown and gray ware jars could have been produced at Cox Ranch Pueblo from local raw materials by potters who intentionally sought out clays that would produce these wares.

A total of 70 clay samples were obtained within 25 km (15 miles) of Cox Ranch Pueblo, of which 28 were collected from within a 7 km radius of Cox Ranch Pueblo. Tests of workability eliminated ten samples, while the remaining 60 appear to be viable

raw materials and were examined for oxidized paste color and apparent porosity (Appendix F). All 28 of the samples obtained within a 7 km distance of Cox Ranch Pueblo appear to be viable.

***Oxidized Clay Color***

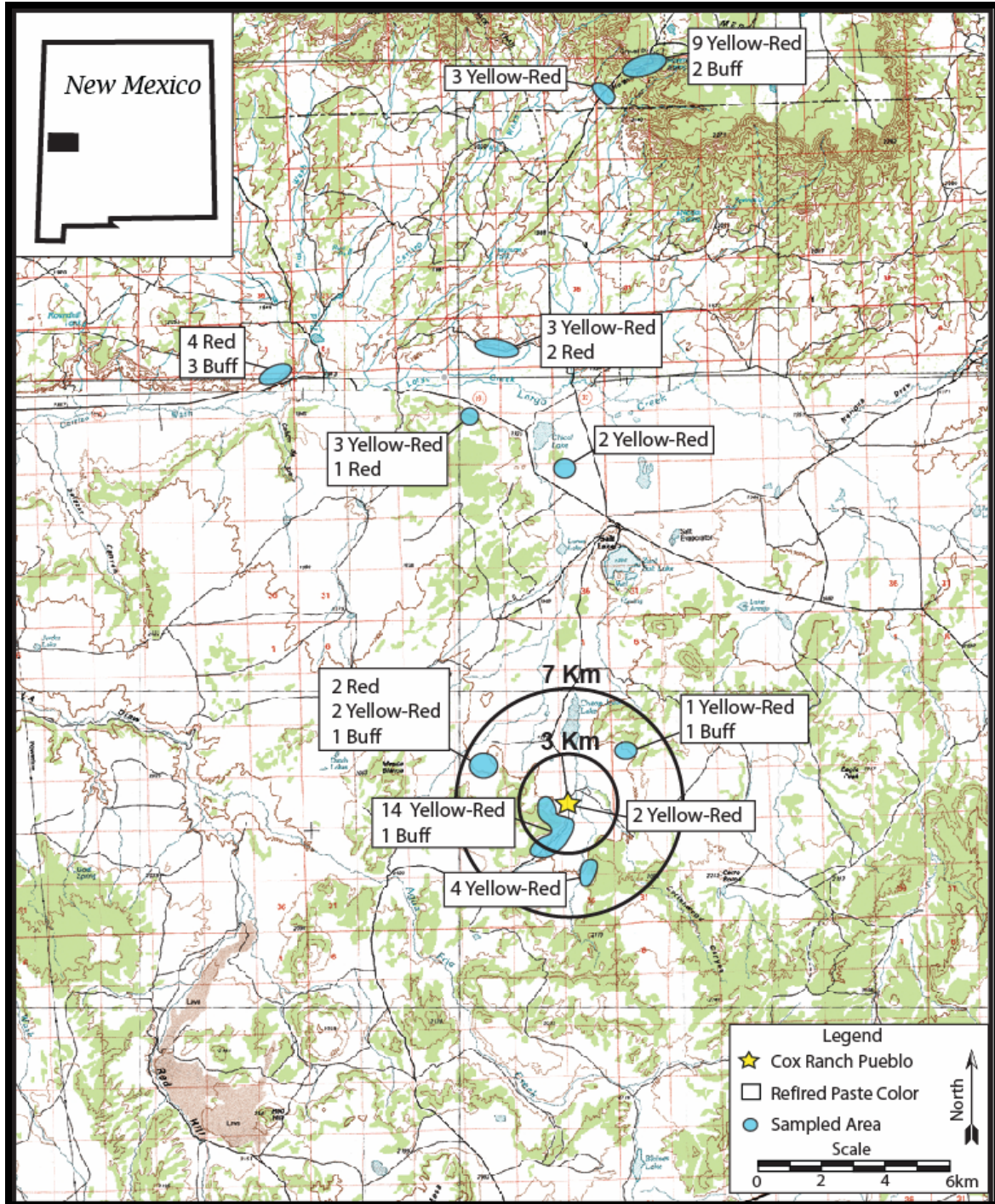
Raw material test tiles fire to a range of paste colors (Figure 8.4). Comparison of raw material paste color with refired sherd data offers the preliminary conclusion that the raw materials utilized to manufacture both brown and gray ware jars were available within the vicinity of Cox Ranch Pueblo (Figures 8.2 and 8.4). However, it is necessary to reiterate that the majority of brown ware sherds at Cox Ranch Pueblo refired red, and the majority of gray ware sherds samples refired buff. In contrast, the majority of raw material sampled fire yellowish- red.



**Figure 8.4.** Percentage of raw material samples by color group.

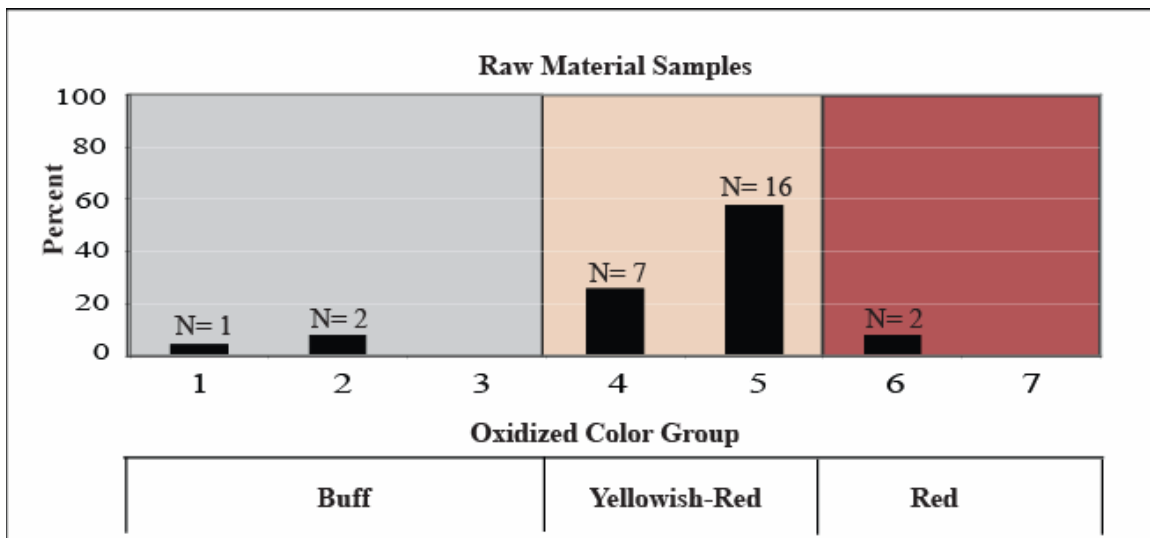
The geographic location of raw material samples and their fired paste color is provided in Figure 8.5 in reference to Cox Ranch Pueblo. This illustrates that buff,

yellowish-red and red firing clays are available within the ethnographic clay procurement distance of 7 km (Arnold 1985:86). The raw material samples obtained from archaeological contexts at Cox Ranch Pueblo both fired yellowish-red.



**Figure 8.5.** Map of clay samples by refired color.

This indicates that the most abundant raw materials in the area were used by past residents of Cox Ranch Pueblo but not for all pottery wares. Raw material samples procured from the formation directly adjacent to Cox Ranch Pueblo fired predominantly yellowish-red and one viable sample fired buff. This demonstrates that clays used to produce both brown and gray wares were available extremely close to the site. Similarly, Figure 8.6 shows that the raw materials firing yellowish-red are the most abundant within 7 km of the site, while buff and red firing clays are also present.



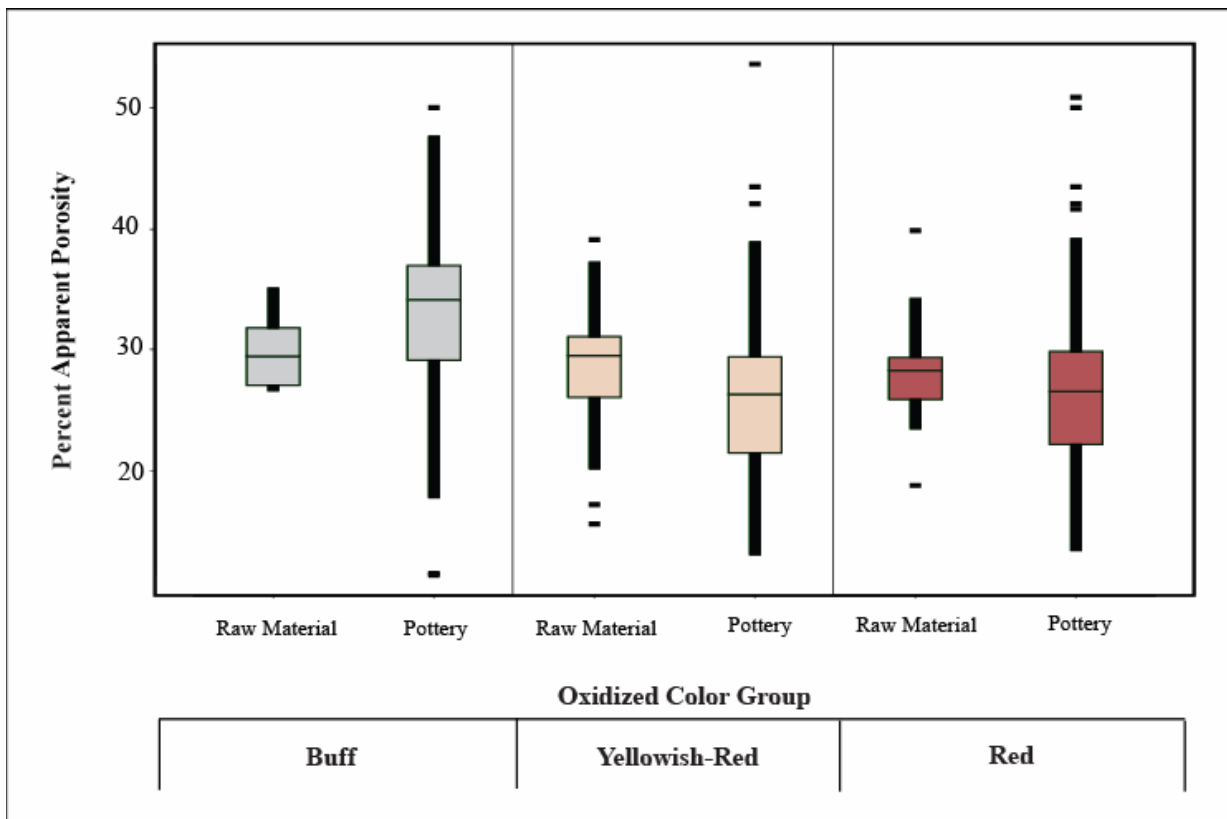
**Figure 8.6.** Percentage of raw material samples within a 7 km radius of Cox Ranch Pueblo by color group.

***Oxidized Apparent Porosity and Paste Color of Raw Materials and Refired Pottery***

Examination of the paste color and apparent porosities of the fired raw material samples using ANOVA statistical analysis indicates that there is no statistical difference in the apparent porosity of buff, yellowish-red and red firing natural clays tested from the vicinity of Cox Ranch Pueblo ( $F=.250, d=2, p=.779$ ). This differs from the statistically

distinct oxidized pottery color groups of pottery sherds and apparent porosity detailed above.

Box plots of the apparent porosity of fired raw material test tiles by color groups demonstrate overlap with the apparent porosity of refired pottery paste color groups (Figure 8.7). When this visual inference is tested statistically using multiple *t*-tests, the results suggest that buff and yellowish-red firing sherds may have been constructed out of local clays, while the apparent porosity of red firing sherds is not statistically similar to sampled red firing clays near the site (Table 8.2). These results suggest that brown and gray pottery wares recovered at Cox Ranch Pueblo could have been made out of local clays.



**Figure 8.7.** Apparent porosity of raw material and refired brown and gray ware jars by oxidized color group.

Fired clay test tiles that do not have apparent porosities statistically similar to pottery wares may indicate that these clays were not used or were adjusted significantly with the addition of temper. Unfortunately, temper was not accounted for in the raw material samples analyzed in this study. Future analysis of local raw materials with additions of temper may provide further information in the comparison of raw materials and pottery wares at Cox Ranch Pueblo.

**Table 8.2.** Independent sample *t*-test results for the apparent porosity of pottery and raw materials by color group.

<b>Color Group</b>	<b>Attribute</b>	<b><i>t</i></b>	<b><i>df</i></b>	<b><i>p</i></b>
Buff	Apparent Porosity	1.4	142	0.06
Yellowish-Red	Apparent Porosity	-2.973	55	<b>0.01</b>
Red	Apparent Porosity	-0.833	148	0.551

To summarize, examination of local natural clay materials utilizing methods to test for workability, oxidized paste color and apparent porosity indicate that local materials suitable for producing brown and gray ware jars at Cox Ranch Pueblo were available to Ancestral Pueblo potters. The higher frequency of brown ware jars recovered at the site suggests that the past residents of Cox Ranch Pueblo preferred brown corrugated vessels. This could relate to the ethnic affiliation of community members with historic connections to the south. The presence of gray ware within each household in substantial but lesser quantities could be evidence for the production of gray wares using local raw materials. The information presented here offers support for the coexistence of at least two technological traditions within the community and provides initial support for the interpretation that women from different backgrounds were likely



co-residing within the community and within individual households, and were producing pottery at Cox Ranch Pueblo.

### **Learning Frameworks at the Household Level**

On a community level, the assessment of brown and gray ware jars established that there are distinct differences in the production of both wares. This is likely indicative of technologies representing different learned traditions. If both brown and gray ware jars were produced at Cox Ranch Pueblo, the women who produced these wares may have co-resided in the roomblocks at the site. As a result, in this section I explore whether or not there is a distinction in the technological production of brown and gray ware jars at the household level. To accomplish this, I revisit the attributes of coil count, indentation count, sherd maximum thickness and refired paste color. I examine these attributes of brown and gray ware jars within each excavated midden and architectural area with the hope of distinguishing variation between wares both within and between households.

### ***Inter-household Variation***

Differentiation between households in the production of indented corrugated brown ware and gray ware jars in attributes of coil count, indentation count, and maximum wall thickness may indicate variation in learning technologies between households within wares. A total of six ANOVA tests were conducted on the brown and gray ware attributes of indentation count, coil count and sherd maximum thickness as dependent variables and site areas as the independent variable. The results of these tests are summarized in Table 8.3 and indicate that brown ware jars were manufactured with significantly different coil and indentation counts between households while the

maximum wall thicknesses are statistically similar. Analysis of gray ware corrugated jars also indicates variability between households in coil and wall thickness. The number of indentations on gray ware jars does not appear to be significantly different between households.

**Table 8.3.** Descriptive statistics of measured attributes of coil and indentation count and sherd maximum thickness by household area.

<b>Ware</b>	<b>Attribute</b>	<b>Test</b>	<b><i>F</i></b>	<b><i>df</i></b>	<b><i>p</i></b>
Brown Ware	Coil Count	ANOVA	3.17	13	<b>0.0002</b>
	Indentation Count	ANOVA	2.07	13	<b>0.0155</b>
	Maximum Thickness	ANOVA	0.96	13	0.4864
Gray Ware	Coil Count	ANOVA	1.9	13	<b>0.0286</b>
	Indentation Count	ANOVA	1.59	13	0.0848
	Maximum Thickness	ANOVA	3.38	13	<b>&lt;.0001</b>

While there are overall differences in the production of brown and gray ware ceramics at the site, analysis of intra-ware production suggests that there are also differences within the production of wares between households. In other words, when the technological attributes of brown ware sherds are compared between architectural and midden areas there production is significantly different. The same pattern occurs with gray ware sherds. This could represent distinct techniques of manufacture within wares indicative of individuality or learning frameworks within households. Similarly, because there is variability at the inter-household level, it is likely that the production of brown and gray wares took place at the household level, suggesting that the production of brown and gray wares was not a result of specialization.

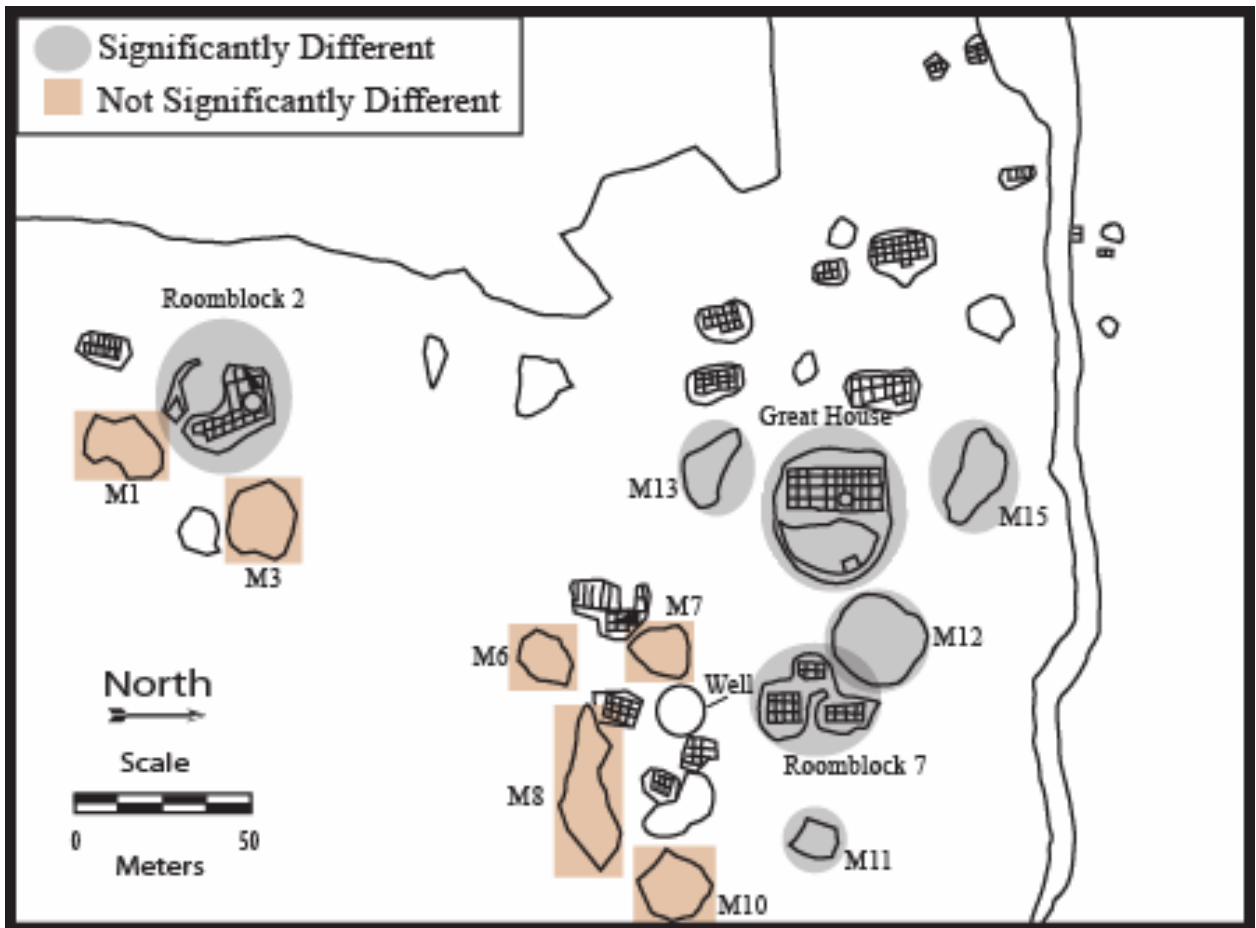
### ***Intra-household Variation***

Examining the variables of coil, indentation, and maximum thickness of indented corrugated brown and gray wares within each household (Midden or Architectural Unit) produced several interesting patterns, summarized in Table 8.4. First, there is difference in the coil and indentation count within some but not in all households. The variable jar maximum thickness is not significant in any area of the site. Households that indicate statistical significance in at least one attribute at the 95% confidence level include the Great House, Roomblock 2, Roomblock 7, and Middens 11, 12, 13, and 15. The only area that exhibits difference on both attributes is the Great House. On the other hand, Middens 1, 3, 6, 7, 8 and 10 do not show statistically significant differences for any variables (Figure 8.8). It could be argued that the lack of significant difference in some areas is influenced by relatively small sample size. However, this may not be an issue given that there are areas with relatively small sample sizes where brown and gray wares were manufactured with significantly different attributes.

The similarities and differences in the production of brown and gray wares within households support the conclusion that pottery production of these wares *was* at the household level. Consequently, there are several viable social situations that may have occurred. First, it is likely that the similarity in brown and gray ware production indicates women from different backgrounds were likely living within the same households and participating in household level potting groups.

**Table 8.4.** Independent Sample *t*-test of measured attributes within households.

	Area	Brown Count	Gray Count	Attribute Measured	<i>t</i> -value	df	p-value	
Significantly Different	<b>Great House</b>	162	272	Indentation Count	5.995	432	<b>0.003</b>	
		311	269	Coil Count	13.954	578	<b>0.001</b>	
		342	327	Wall Thickness	11.334	667	0.941	
	<b>Roomblock 2</b>	103	18	Indentation Count	1.778	119	<b>0.002</b>	
		200	15	Coil Count	3.342	213	0.706	
		213	22	Wall Thickness	0.413	233	0.683	
	<b>Roomblock 7</b>	10	13	Indentation Count	3.339	21	0.125	
		19	14	Coil Count	6.873	31	<b>0.037</b>	
		21	15	Wall Thickness	1.437	34	0.263	
	<b>Midden 11</b>	6	10	Indentation Count	5.396	14	<b>0.002</b>	
		7	9	Coil Count	3.803	14	0.42	
		10	13	Wall Thickness	2.455	21	0.138	
	<b>Midden 12</b>	16	20	Indentation Count	3.389	34	<b>0.009</b>	
		23	22	Coil Count	4.976	43	0.113	
		27	26	Wall Thickness	2.542	51	0.363	
	<b>Midden 13</b>	8	8	Indentation Count	1.85	14	<b>0.015</b>	
		13	8	Coil Count	1.8	19	0.633	
		16	12	Wall Thickness	0.043	26	0.335	
	<b>Midden 15</b>	17	4	Indentation Count	0.628	19	0.896	
		30	10	Coil Count	5.11	38	<b>0.008</b>	
		30	10	Wall Thickness	0.845	38	0.085	
	Not Significantly Different	<b>Midden 1</b>	10	12	Indentation Count	3.913	20	0.091
			16	11	Coil Count	4.336	25	0.156
			16	12	Wall Thickness	1.184	26	0.617
<b>Midden 3</b>		12	4	Indentation Count	1.388	14	0.663	
		16	7	Coil Count	3.297	21	0.353	
		17	8	Wall Thickness	2.631	23	0.203	
<b>Midden 6</b>		18	20	Indentation Count	2.174	36	0.576	
		33	18	Coil Count	5.577	49	0.116	
		37	26	Wall Thickness	2.137	61	0.352	
<b>Midden 7</b>		11	14	Indentation Count	3.873	23	0.057	
		18	9	Coil Count	3.88	25	0.344	
		21	15	Wall Thickness	1.822	34	0.452	
<b>Midden 8</b>		n/a	n/a	Indentation Count	n/a	n/a	n/a	
		3	4	Coil Count	2.96	5	0.75	
		4	4	Wall Thickness	0.021	6	0.688	
<b>Midden 10</b>		2	3	Indentation Count	0	3	n/a	
		3	3	Coil Count	2.6	4	0.093	
		4	4	Wall Thickness	0.778	6	0.533	



**Figure 8.8.** Map of Cox Ranch Pueblo highlighting sampled areas where brown and gray ware jar attributes are and are not significantly different within households.

Through the process of making pottery together these women likely learned from each other, taught children together, and were able to choose from a range of production techniques. Through this transmission, women may have passed on knowledge commonly considered unconscious, including how thick coils are formed and the how far indentations are spaced, both to their children and each other. Similarly, women may have shared knowledge about raw material procurement and consciously sought out raw material sources that produced the visible appearance of brown or gray ware. This

process may have served as a means of solidarity within the household, both through the practice of collecting and processing clays and the visible result in the final product.

The differences in the manufacture of brown and gray wares in many contexts affirm that there *were* different learned traditions used to produce them. Both areas of public architecture including the Great House, its surrounding middens (Midden 12, 13, 15) and Roomblock 2 exhibit difference in at least one of the measured attributes. As does Roomblock 7 and its midden (Midden 11). Interestingly, the Great House is the only area that exhibits difference in both measured attributes and the middens associated with Roomblock 2 do not exhibit difference (Middens 1 and 3).

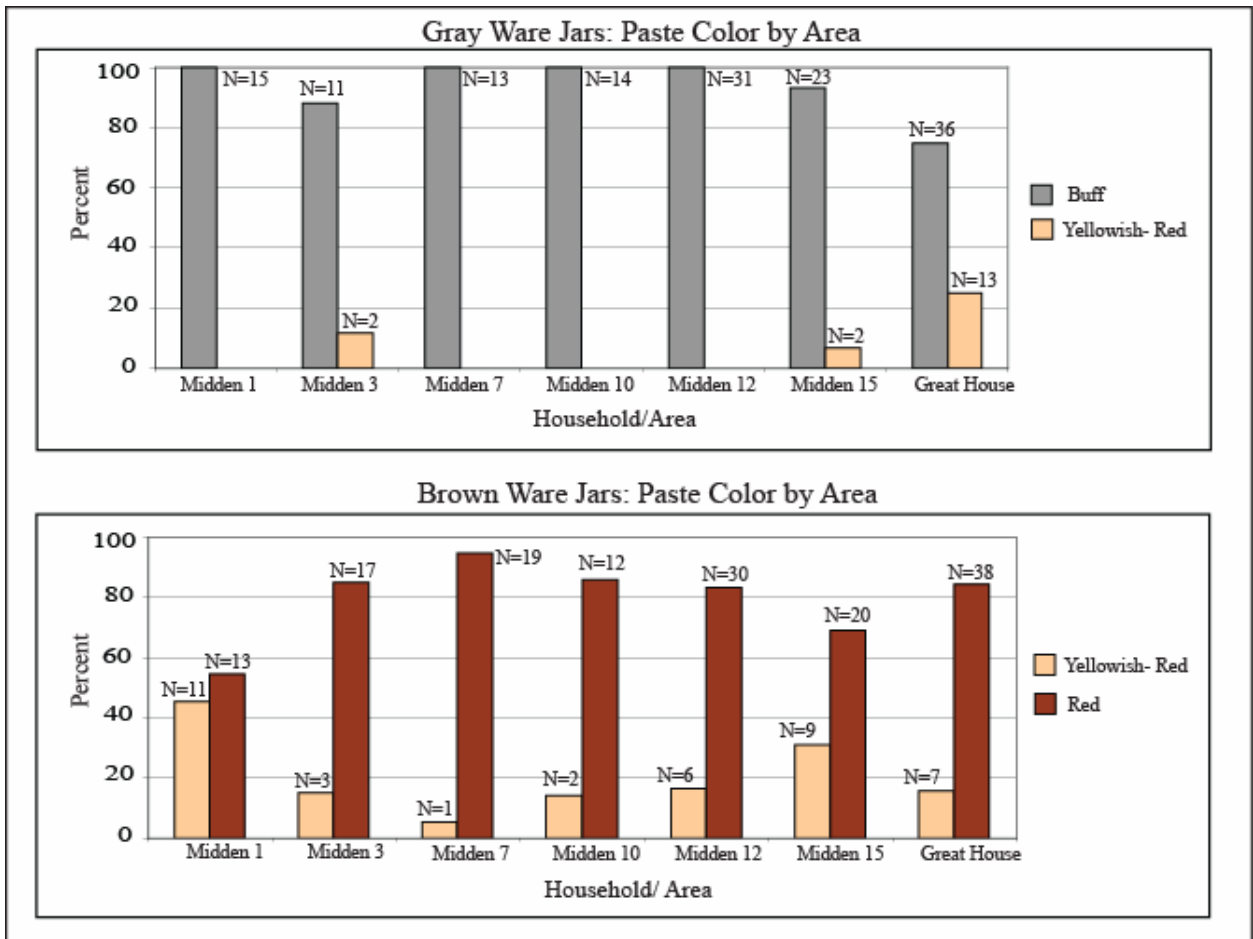
When households that exhibit similarity and difference in the production of brown and gray wares are compared with the seriation provided in Chapter Six, it is difficult to substantiate the assimilation of production techniques through time. Areas that should be the earliest, Middens 1, 3, and 10, display similarities in production. Areas that were determined to be the latest, Middens 6, 7, and 8, do not display difference, but Midden 11 and Roomblock 7 do. Due to the inability to provide an explanation for the intra-household variability through time with the seriation, it appears that the variation is more likely a consequence of dynamic household relationships and how they were practiced in different areas of the community. This may have resulted from the conscious and/or unconscious assimilation of pottery techniques through the active practices and relationships of different household potting groups.

One plausible explanation of the variation present in different household assemblages is in the number of households the midden and/or architectural assemblage represents. Roomblock 2, 7 and the Great House are the largest Roomblocks in the

community and thus may represent multiple household potting groups, whereas, Middens 1, 6, 7, 8 and 10 are representative of smaller roomblocks and plausibly individual households. The difference exhibited in the large roomblock and for the most part their middens (except for the midden associated with Roomblock 2), is likely representative of deposition from multiple households. These households may be comprised of women from two different ethnic backgrounds living together and participating in potting groups of the same ethnic identity outside of their household but within their roomblock, or of households where women from different ethnic identities are living in separate households within the same roomblock, participating in different potting groups with those with their similar ethnic identity, but depositing their trash in the same midden or architectural area.

### ***Oxidation Analysis***

Examination of paste color data of oxidized pottery at the household level indicates little differentiation within wares between households (Figure 8.9). Middens 3, 15, and the Great House have a small percentage of gray ware pottery manufactured out of yellowish-red firing clay. Relatively little inter-household variation is exhibited in the refired paste color of the brown ware jar assemblage. All of the excavated areas are represented with yellowish-red and red firing brown ware. These results suggest that there was likely relatively equal access to raw material resources used to make brown and gray ware jars by household.



**Figure 8.9.** Percentage of oxidized paste color groups by household.

### Summary

This chapter has provided a number of interpretations and conclusions drawn from the analysis of the brown and gray ware jar assemblage recovered from Cox Ranch Pueblo. At the community level, there *were* distinct learning frameworks used in the production of brown and gray wares exhibited by variation in coil and indentation counts. The co-occurrence of brown and gray ware vessels across the site indicates that women from different learning frameworks were likely co-residing within the community, if not within households. While apparent porosity results suggest that the wares were functionally equivalent, the wider range of variation in coil and indentation counts, and



original firing temperature indicate that the brown ware assemblage is representative of more potters than the gray ware assemblage. Based on these conclusions, I argued that plain ware ceramics were produced at the household level and were not a result of specialization. Additionally, the overall higher percentage of brown ware than gray ware jars at the site may suggest a stronger affiliation within the potting community to peoples living below the Mogollon Rim. Post-marital residence may have been organized in a manner where women with different backgrounds were co-residing in the household.

Based on the sampling of local geological sources, I also determined that the raw materials used to produce both wares are locally available. Additionally, all raw materials *are* equally represented in each household. This suggests that there was little to no restrictive access to raw material sources.

In contrast to the community-level results, at the household level, brown and gray wares were not made significantly differently in all households. I suggest that manufacturing techniques are similar in the production of brown and gray ware jars in middens representative of small roomblocks and likely individual households. In these households, women from both ethnic traditions are co-residing, producing pottery together and passing knowledge about the manufacturing process, specifically clay acquisition. The areas that are significantly different, represent multiple households where women from different ethnic traditions may not be potting together, or for some reason, choose to maintain selecting raw materials indicative of their cultural heritage.

## CHAPTER NINE

### **Availability, Production, and Restriction: Results of the Analysis of Painted Wares and Brown Ware Bowls**

Previous chapters used painted assemblages to explore variation in time and space through typological seriation. The purpose of this chapter is to explore technological variability in the painted pottery assemblage at Cox Ranch Pueblo. I then compare the painted wares to the unpainted, plain ware bowl and jar assemblages and local raw material resources to determine if there is a technological relationship between brown ware, red ware, and white ware bowls, and to determine if there evidence for local production of these wares.

#### **White Mountain Red Ware, Cibola White Ware and Mogollon Brown Ware Bowls**

Investigating the widespread spatial and temporal distributions of prehistoric painted pottery has been a central facet of the analysis of prehistoric cultures in the American Southwest (e.g., Carlson 1970; Colton and Hargrave 1937; Lightfoot and Jewett 1984; Hays-Gilpin and van Hartesveldt 1998; Mills et al. 1999). The distribution of Cibola White Ware and White Mountain Red Ware over a large part of eastern Arizona and western New Mexico is no exception. Painted ceramics were used in everyday household activities, but are often also associated with areas of public activity. My investigation of these painted pottery types at Cox Ranch Pueblo provides an additional avenue of understanding social dynamics within the community.

Throughout their broad range of distribution, White Mountain Red Ware and Cibola White Ware exhibit similar stylistic and technological attributes, including similar

paste, tempers, surface treatments, and paint types. These similarities provoke questions regarding their production, distribution and use. The first question is if painted wares were a result of household level production, with little emphasis on exchange. This assumes that local potters had both the knowledge and the desire to produce painted vessels. This knowledge may have been transferred through multiple avenues of regional interaction including social networks created by marriage, resource exchange, ritual interaction, migration, and possibly emulation. Subsequently and more easily deciphered archaeologically, the raw materials used to produce the painted wares must have been locally available.

The second question relates to the complexity of painted ware production. Some have argued that for later time periods (Pueblo IV) painted wares were produced by ceramic specialists and distributed widely via exchange (Plog 1977 cited in Lightfoot and Jewett 1984:38; Upham et al. 1981). Distribution could be representative of small-scale reciprocal exchange (Plog 1980) or a more complex social network (Plog 1977 cited in Lightfoot and Jewett 1984:38). I examine the intra-site distribution of painted wares and brown ware bowls, and attributes of their technological manufacture to suggest that at Cox Ranch Pueblo these wares could have been produced at the household level. Additionally, the variability in elements of the technological manufacture of these wares suggests that they were not the result of specialist production.

The presence of Cibola White Ware ceramics in Mogollon territory has long been described as a tradition that originated from sites north of the Mogollon Rim (McGregor 1965: 262-263; Martin et al. 1952:52; Plog 1980; Shepard 1956; Sullivan and Hantman 1984). Whether this occurrence is due to the diffusion of ideas or trade of vessels is

debated. Some have considered their presence as a union of Mogollon pottery tradition with painted designs that diffused southward from northern Colorado Plateau groups (Fowler 1991; McGregor 1965: 262-263; Martin et al. 1952:52) during the early Pueblo II period. This would have occurred through the influence of migrating families, marriage networks or a more complex regional social organization. If Cibola White Ware vessels at Cox Ranch Pueblo could have been produced with local materials, it may indicate that individuals had the knowledge of white ware technology and did not rely on trade networks. Subsequently, the knowledge of white ware manufacturing technologies has also been linked as precedent to the manufacture of White Mountain Red Ware (Van Keuren 1999). Analysis of production techniques of the painted wares at Cox Ranch Pueblo may also help to understand if there is a relationship between the technological styles of Cibola White Ware and White Mountain Red Ware.

The ornately decorated smudged brown ware bowls at Cox Ranch Pueblo are typically associated with populations residing below the Mogollon Rim (Cordell 1997:202; Haury 1985:403). These bowls are more comparable to the painted white and red wares than are the unpainted, textured jars. Brown ware bowls likely had a function similar to painted red and white ware bowls. It has been suggested that smudged brown ware bowls may have served as a southern counterpart to red ware painted vessels with similar function (Duff, personal communication, 2005; Elkins 2007). Equally, researchers have proposed that red wares are a sequential derivative of smudged brown wares produced by Anasazi potters (Fowler 1991:123).

Analysis of brown and gray ware jars in Chapter Eight provided evidence to suggest the co-residence of individuals with technological traditions typically associated

with populations to the north and the south. This likely indicates a resettlement of migrants from further north on the Colorado Plateau and also people previously living below the Mogollon Rim. As discussed above, the production techniques for brown and gray ware jars were different in some households, and not in others. This may indicate some level of blending of pottery production between traditions. These results raise a number of interesting questions related to ceramic manufacture of painted wares, brown ware bowls and community organization.

This chapter is an attempt to evaluate the production of the three varieties of bowls found at Cox Ranch Pueblo. Through technological analysis of Cibola White Ware, White Mountain Red Ware, Mogollon Brown Ware bowls, and local raw material resources I attempt to answer three questions. First, is there evidence for local production of painted ceramics and unpainted, textured brown ware bowls at Cox Ranch Pueblo? Second, is there a technological relationship between brown ware, red ware, and white ware bowls? Third, is there evidence for specialized production or restricted access of these wares? The answers to these questions suggest that the bowl forms could be produced locally, are technologically related and were produced on the household level without restricted access to raw materials.

### ***Local Production or Trade?***

White ware vessels were typically produced from clay outcroppings that fire buff in a reduced or neutral environment. Buff-firing clays would be less visible through a white slip if accidentally exposed to oxygen during firing. However, they could also be produced with clays that fire red (iron rich). As mentioned in Chapter Seven, while

prevalent throughout much of the Colorado Plateau, these buff-firing clays are rare below the Mogollon Rim and are relatively uncommon near Cox Ranch Pueblo based on the clay survey. Although White Mountain Red Ware decoration is nearly identical to Cibola White Ware, the paste can be made from clays that fire to any color. The exception is the false-slipped Wingate Polychrome, where the light-firing paste is intentionally exposed instead of painting white on the exterior. This type of White Mountain Red Ware requires the use of buff-firing clay. My examination of painted red and white ware paste color seeks to determine whether or not these wares were locally produced.

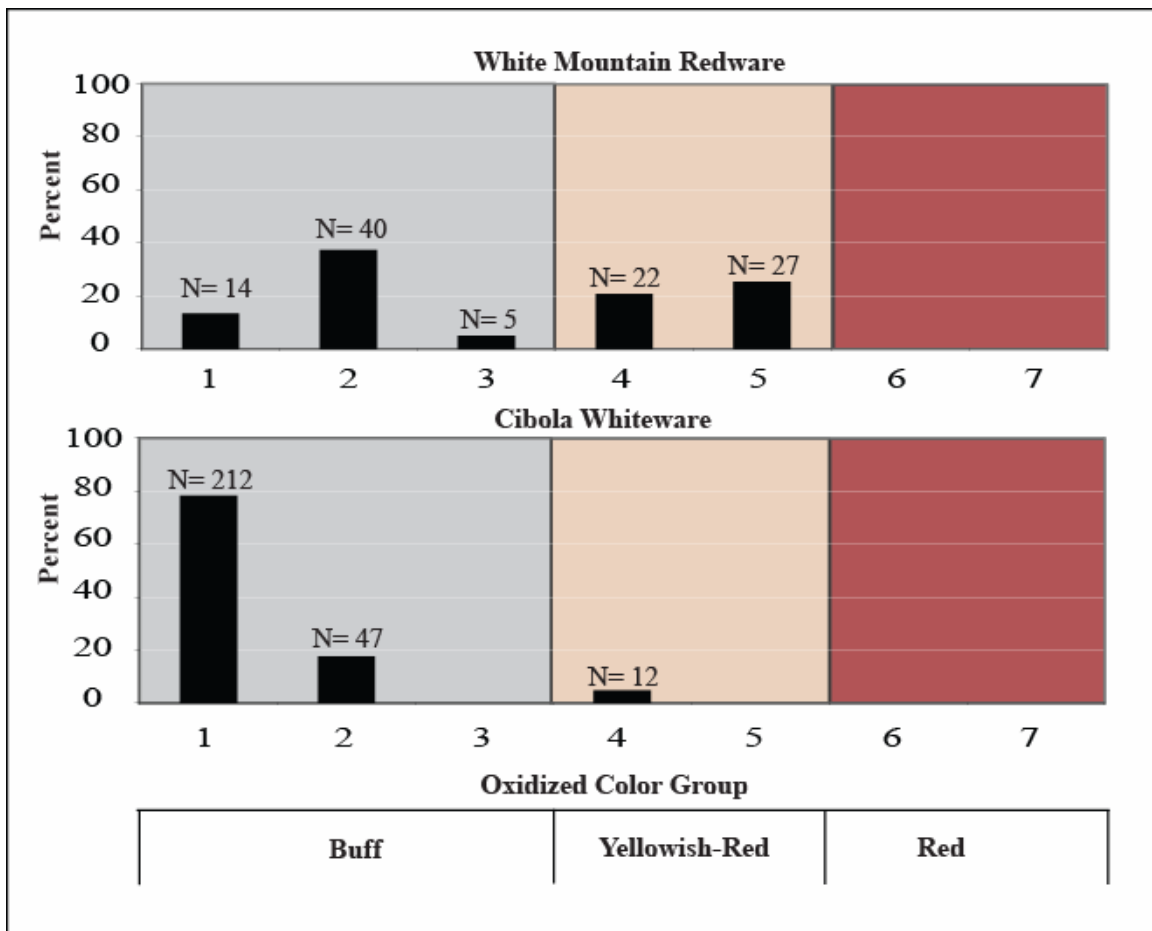
#### *Paste Color and Apparent Porosity of Refired Painted Pottery and Raw Materials*

Refiring red and white wares from Cox Ranch Pueblo exposed a range of paste colors from buff to yellowish-red. Figure 9.1 depicts the distribution of color type by ware. Cibola White Ware fires mostly buff (color groups one and two), and a very small percentage fire yellowish-red (color group four). These results correspond closely with the Cibola Gray Ware oxidation analysis. The paste color of White Mountain Red Wares also fires both buff and yellowish-red, however, the range in color groups represented is more diverse and a higher percentage fired yellowish-red.

Changes in raw material use through time might be evident through the analysis of painted ware refired paste color by type. Types analyzed for oxidized paste color included Puerco and Wingate black-on-red, Wingate Polychrome, and Kiatuthlanna, Red Mesa, Puerco, Gallup, Escavada and Reserve black-on-white (refer to Chapter Five for explanation of types). Types collapsed to form more robust groups include Wingate

Black-on-red and Wingate Polychrome, Kiatuthlanna and Red Mesa black-on-whites, and Puerco, Gallup and Escavada black-on-whites.

Results demonstrate that there is no relative change in the clays used to produce painted wares through time (Table 9.1). Therefore, throughout this study I collapse types into two categories, White Ware and Red Ware. Comparing painted ware refired paste color with the results of fired raw materials discussed in Chapter Eight (Figure 9.2) shows that available clay resources could be used to produce the painted wares at Cox Ranch Pueblo (Figure 9.1).



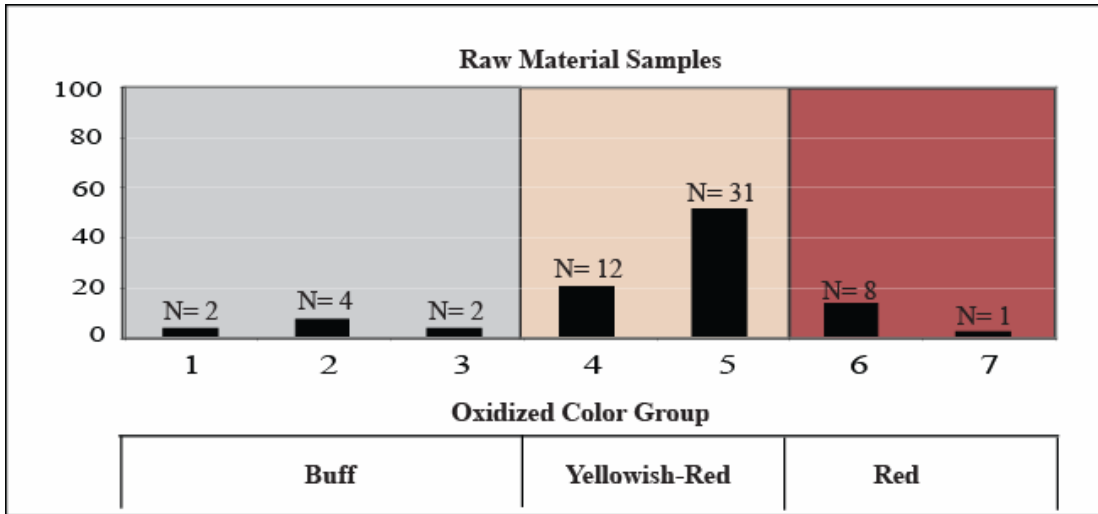
**Figure 9.1.** Percentage of painted wares by color group.

**Table 9.1.** White Mountain Red Ware and Cibola White Ware types by oxidized color group.

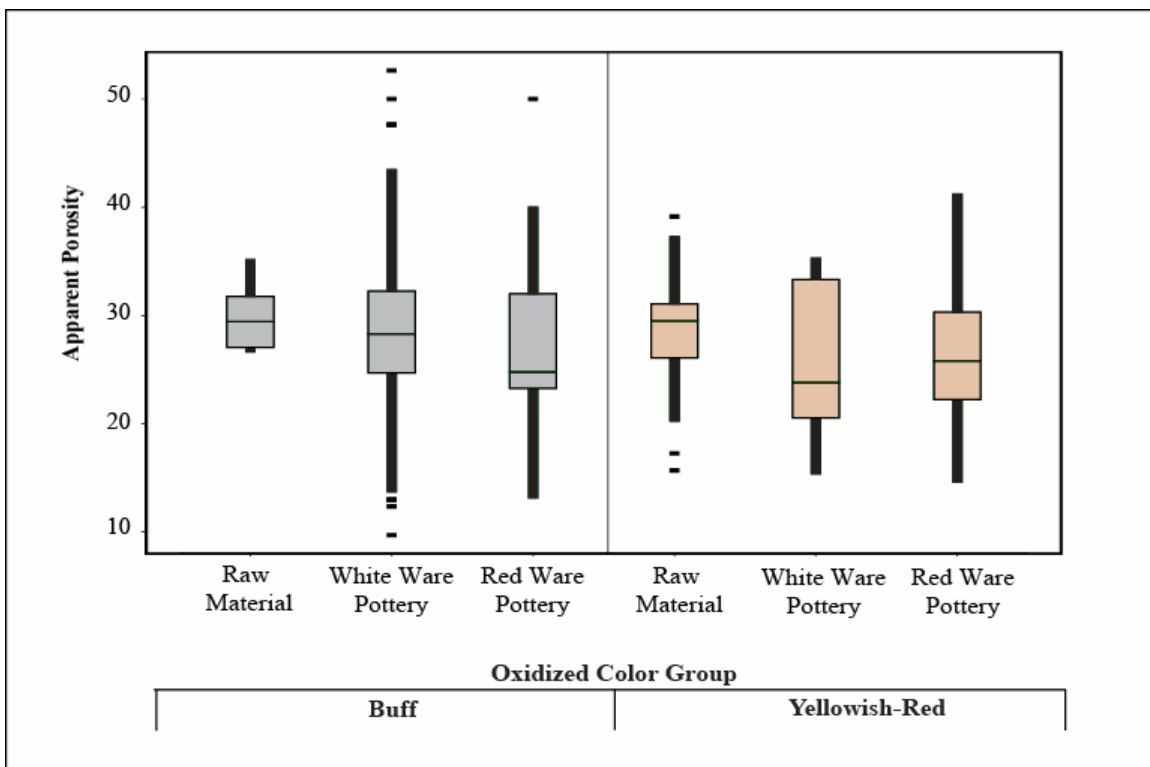
		Color Group									
		Buff						Yellowish- Red			
		1		2		3		4		5	
		Count	%	Count	%	Count	%	Count	%	Count	%
<b>White Ware</b>	Kiatuthlanna B/w & Red Mesa B/w	9	90%	0	0%	0	0%	1	10%	0	0%
	Puerco B/w (Puerco, Gallup, Escavada)	99	78%	22	17%	0	0%	6	5%	0	0%
	Reserve B/w	104	81%	18	14%	0	0%	5	4%	0	0%
<b>Red Ware</b>	Puerco B/r	5	15%	12	35%	1	3%	9	26%	7	21%
	Wingate B/r & Polychrome	8	14%	19	33%	3	5%	12	21%	16	28%

Apparent porosity was also measured for the red and white wares. Figure 9.3 demonstrates that the apparent porosity of local raw materials overlaps with the apparent porosity of refired pottery paste color groups for red and white wares. However, there is also little difference in the apparent porosity of buff and yellowish-red firing clays. Examination of apparent porosities of the fired raw material samples and refired red and white ware pottery sherds by color group using ANOVA statistical analysis indicates that there is no statistical difference in the apparent porosity of buff ( $F=.628$ ;  $df=2$ ;  $p=.535$ ) or yellowish-red ( $F=1.552$ ;  $df=2$ ;  $p=.218$ ) potteries and local clays. These results further support the suggestion that red and white wares recovered from Cox Ranch Pueblo *could* have been produced from local clays.





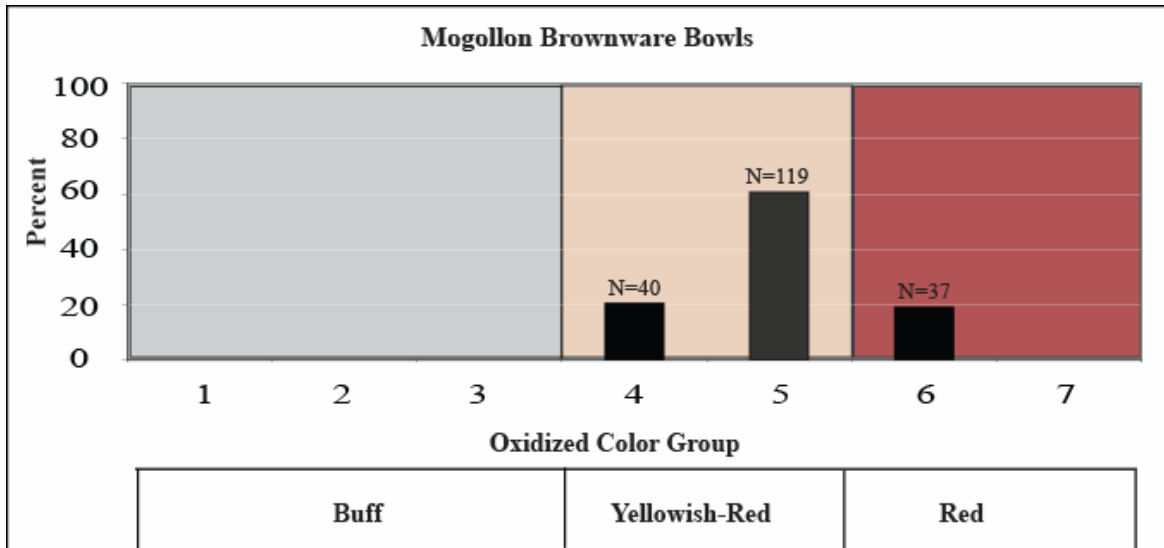
**Figure 9.2.** Percentage of raw material samples by color group.



**Figure 9.3.** Refired apparent porosity of painted pottery and local raw materials.

*Paste Color and Apparent Porosity of Refired Brown Ware Bowls and Raw Materials*

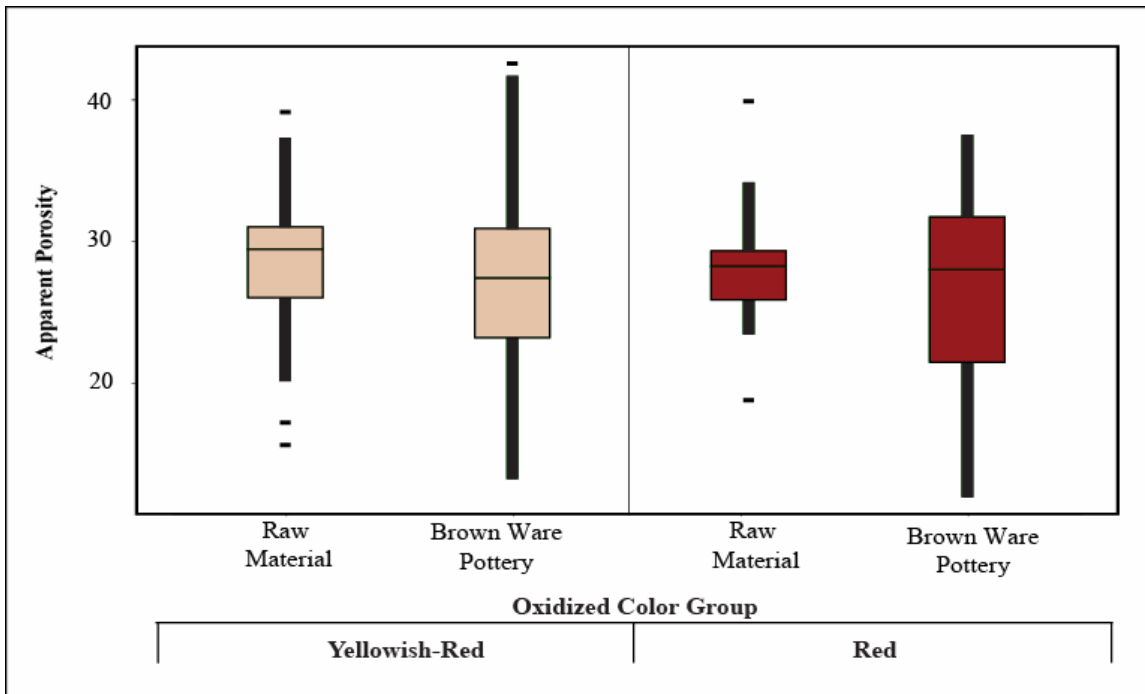
Refiring brown ware bowls in an oxidizing environment revealed little variation in paste color. The majority of bowls were manufactured out of yellowish-red firing clay and a smaller percentage fired red (Figure 9.4). In fact, brown ware bowl refired paste color is more similar to the fired paste color of local clays than any other ware (Figure 9.2). A comparison of refired apparent porosity of brown ware bowls and untempered raw material test tiles indicates a large amount of overlap between bowls and raw material oxidized apparent porosity.



**Figure 9.4.** Unpainted, textured brown ware bowls by color group.

When this visual inference is tested statistically using two *t*-tests, the results suggest that red firing bowl sherds may have been constructed out of local clays ( $t=.705$ ;  $df=42$ ;  $p=.302$ ), while the apparent porosity of yellowish-red firing sherds is not statistically similar to sampled yellowish-red firing clays near the site ( $t=1.294$ ;  $df=199$ ;  $p=.012$ ). However, this difference could be due to the addition of materials such as

temper and/or the removal of inclusions in raw material. Although yellowish-red firing material is not statistically similar, overall these results support the conclusion that brown ware bowls also *could* have been produced from local clays (Figure 9.5).



**Figure 9.5.** Refired apparent porosity of unpainted, textured brown ware bowls and local raw material.

### *A Comparative Analysis of Technological Attributes*

The data presented above established that painted black-on-red, black-on-white and brown ware bowls recovered at Cox Ranch Pueblo could have all been produced locally. However, it is still uncertain how the knowledge of technological production was manifested in the community.

It is generally accepted that White Mountain Red Ware technology emerged out of the manufacture of Cibola White Ware bowls and jars because of similarity in paste, paint and form. The White Mountain Red Ware tradition appeared around A.D. 1000 in

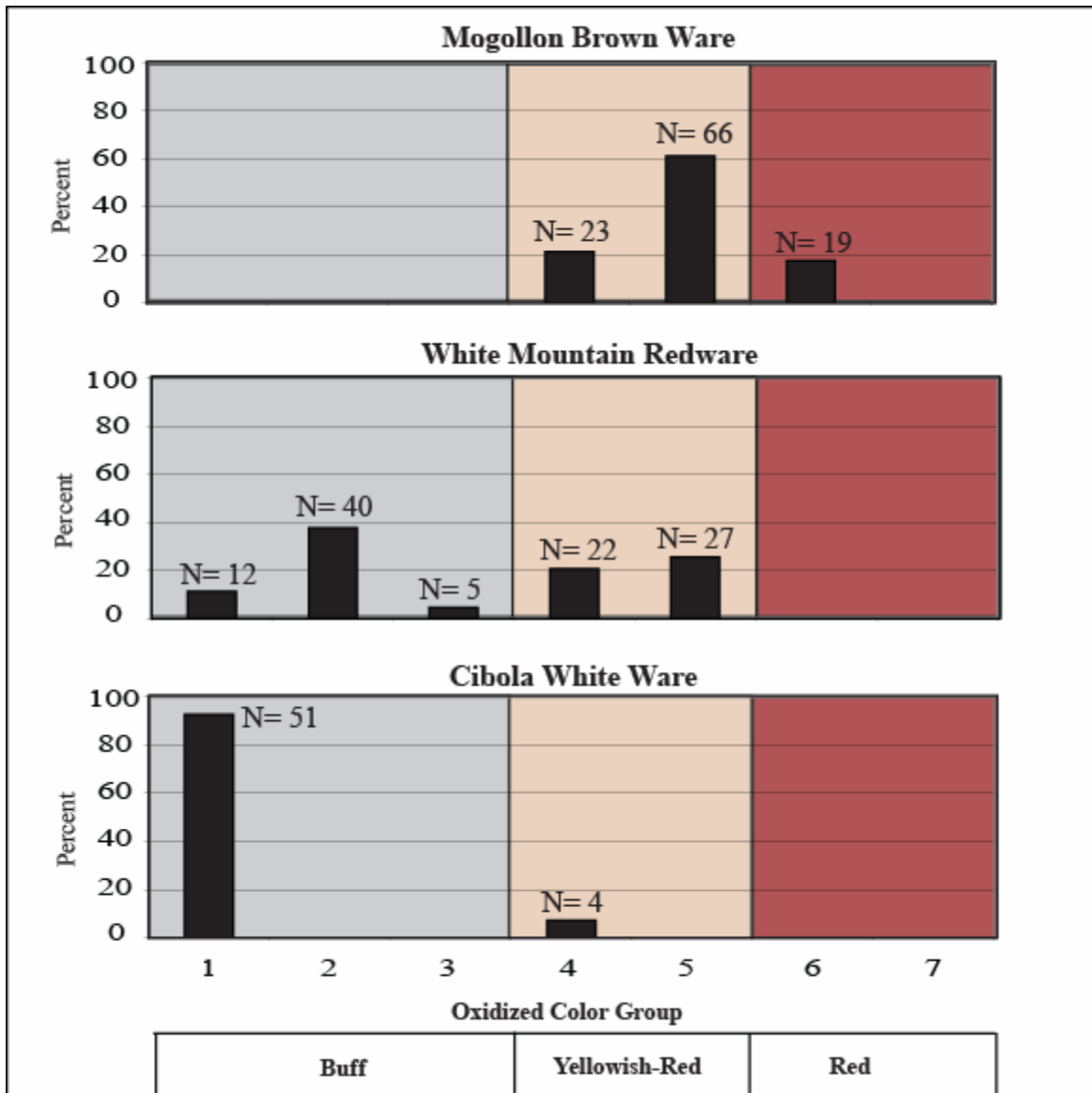
the Cibola region (Carlson 1970:1) and has been viewed as contemporaneous with the appearance of the Anasazi into traditionally Mogollon territory (Carlson 1970:97). Researchers have suggested that White Mountain Red Ware is a product of pueblo potters from the Colorado Plateau who combined their knowledge of slipped and painted white wares with the production techniques of brown wares made by potters living below the Mogollon Rim (McGregor 1965:262-263; Martin et al. 1952:52). In turn, the manufacture of red ware pottery has also been suggested to be an “Anasazi” development (Fowler 1991). Similarly, it has been suggested that smudged brown ware bowls served as functional equivalents to red ware painted bowls but produced by potters with ethnic affiliation to the south (Duff, personal communication, 2007; Elkins 2007).

To examine these issues, I provide a comparative analysis of the technological characteristics of brown, red and white ware bowls recovered from Cox Ranch Pueblo. This allows an assessment of the similarities and dissimilarities in the production techniques of all three wares in bowl form.

#### *Oxidized Paste Color*

Comparison of Mogollon Brown Ware, White Mountain Red Ware and Cibola White Ware bowl paste color indicates both similarities and differences between wares (Figure 9.6). Brown and red wares were made with predominantly yellowish-red firing clay, while only ten percent of white ware bowls are manufactured from yellowish-red firing clay. Similarly, a large percentage of White Mountain Red Wares and Cibola White Wares were made from buff-firing clays. These results provide evidence for a relationship between painted red and white ware bowls in the use of buff firing clays, and

a connection between red and brown ware bowls in the use of yellowish-red firing clays. Additionally, it appears that Mogollon Brown Ware and Cibola White Ware are the most dissimilar based on clays used in production, although a small percentage of White Ware bowls fire yellowish-red.



**Figure 9.6.** Comparison of brown, red and white ware bowls paste color.

### *Original Apparent Porosity*

Analysis of the original apparent porosity (before refiring) of pottery sherds can provide information about vessel function for jars, but on bowls the apparent porosity does not much matter in reference to its functional capabilities. If we infer that the function of bowls was for serving and not cooking, they do not have to be manufactured to withstand significant thermal shock (Bronitsky et al. 1986; Bronitsky 1989). Nevertheless, results of independent sample *t*-tests conducted on these data (Table 9.2) indicate a significant difference only between Mogollon Brown Ware and Cibola White Ware bowls. This suggests that there are similar choices made in the technological production of white and red wares, and red and brown ware bowls, including the selection of raw material and additions of temper. This indicates that red ware pottery is associated with the manufacture of both white and brown ware bowls, results that are consistent with the hypothesis that White Mountain Red Ware emerged from a combination of Cibola White Ware and Mogollon Brown Ware technologies.

**Table 9.2.** Two sample *t*-test results for apparent porosity of Mogollon Brown Ware and White Mountain Red Ware bowls.

<b>Wares</b>	<b>Attribute Measured</b>	<b><i>t</i>-value</b>	<b>df</b>	<b>p-value</b>
Brown and Red Ware	Apparent Porosity	1.251	246	0.653
Red and White Ware	Apparent Porosity	-1.921	108	0.144
Brown and White Ware	Apparent Porosity	-2.944	246	<b>0.012</b>

### *Original Firing Temperature, Smudging and Paint Composition*

Assessing original firing temperature of painted vessels and brown ware bowls by examining changes in paste color could indicate similarity in the final stage of vessel production. Change in paste color shows that the approximate original firing temperature for brown, red and white ware bowls occurred between 700 and 900°C, similar to the cooking vessels, revealing consistency between all wares. This falls within the ethnographic range of painted and plain ware Puebloan pottery vessels.

Well executed smudging on the interior of Mogollon Brown Ware bowls is one of their main decorative attributes. This smudging is traditionally created on Mogollon Brown Ware Bowls during the firing process by cutting off the oxygen supply (creating a reduced atmosphere) to the interior of a bowl and introducing carbon, which promotes the deposition of carbon on the bowl interior (Rice 1987). Carbonaceous materials will begin to burn off when reaching temperatures between 300 and 500° C in an oxidizing atmosphere (Rice 1987). By refiring brown ware bowls classified as “smudged” in an oxidizing atmosphere at 500° C for one hour, I was able to confirm that smudging techniques were used during the original firing process. During this process, the blackened surfaces on the interior of each sherd burned off, indicating that the smudging was composed of organic materials.

Assessment of paint composition indicates that mineral paints were used to decorate black-on-white and black-on-red vessels. Mineral paint is the most common paint utilized in the production of Cibola White Ware and White Mountain Red Ware, with few exceptions (Mills et al. 1999:245). The use of mineral paint to decorate vessels

illustrates that white and red ware vessels recovered at Cox Ranch Pueblo fit traditional definitions of Cibola White Ware and White Mountain Red Ware.

### *Specialized Production or Use?*

This section is focused on the intra-site spatial distribution of painted and unpainted bowls within Cox Ranch Pueblo. The distribution of white, red and brown ware bowls in household contexts could provide information concerning whether or not there was restricted access or the use of these wares at Cox Ranch Pueblo. If differential distribution occurred it may indicate 1) certain wares were a result of specialized production and/or use, 2) there was restricted access to certain wares in particular households or 3) variation in raw material selection between households used to produce particular wares. Alternatively, relative consistency of each ware within households may indicate equal access and/or use of vessels across the spatial extent of the site and probable household level production.

### *Inter-household Distribution*

First, the distribution of brown, red and white ware bowls at Cox Ranch Pueblo (Table 9.3) is relatively consistent across the site ( $\chi^2=40.25$ ;  $df=26$ ;  $p=.1287$ ) and when architectural areas are analyzed separately ( $\chi^2= 10.94$ ;  $df=6$ ;  $p=.0901$ ) suggesting that there was *not* restricted access to any of these wares in any one area of the community. About two-thirds of the bowl assemblage is brown ware, with the remainder almost equally split between white and red ware bowls. This pattern holds true for the Great House assemblage and indicates similarity in access or use of these vessels in this context. Although there is relative consistency between areas, the distribution of brown



and red ware bowls tends to vary and in relation to each other. In other words, where brown ware bowls form a larger percentage of the household bowl assemblage, red wares tend to compose a slightly lesser percentage; the percentage of white ware bowls remains relatively consistent. This may indicate that brown and red ware bowls are used in similar contexts and could support the idea that brown ware bowls served as a counterpart to red ware bowls.

**Table 9.3.** Counts and percentages of brown, red and white ware bowls by excavated area.

Area	Brown Ware Bowls		Red Ware Bowls		White Ware Bowls		Total Count
	Count	Percent	Count	Percent	Count	Percent	
Midden 1	332	75%	50	11%	61	14%	443
Midden 3	308	72%	65	15%	53	12%	426
Midden 6	363	59%	148	24%	107	17%	618
Midden 7	258	69%	55	15%	61	16%	374
Midden 8	133	63%	48	23%	29	14%	210
Midden 10	214	67%	62	19%	45	14%	321
Midden 11	276	59%	113	24%	79	17%	468
Midden 12	1165	70%	145	9%	343	21%	1653
Midden 13	175	57%	67	22%	65	21%	307
Midden 15	490	66%	119	16%	131	18%	740
Great House	3652	68%	743	14%	975	18%	5370
Depression	102	63%	48	30%	12	7%	162
Roomblock 2	225	64%	75	21%	49	14%	349
Roomblock 7	166	60%	69	25%	42	15%	277
<b>Total Assemblage</b>	<b>7859</b>	<b>67%</b>	<b>1807</b>	<b>15%</b>	<b>2052</b>	<b>18%</b>	<b>11718</b>

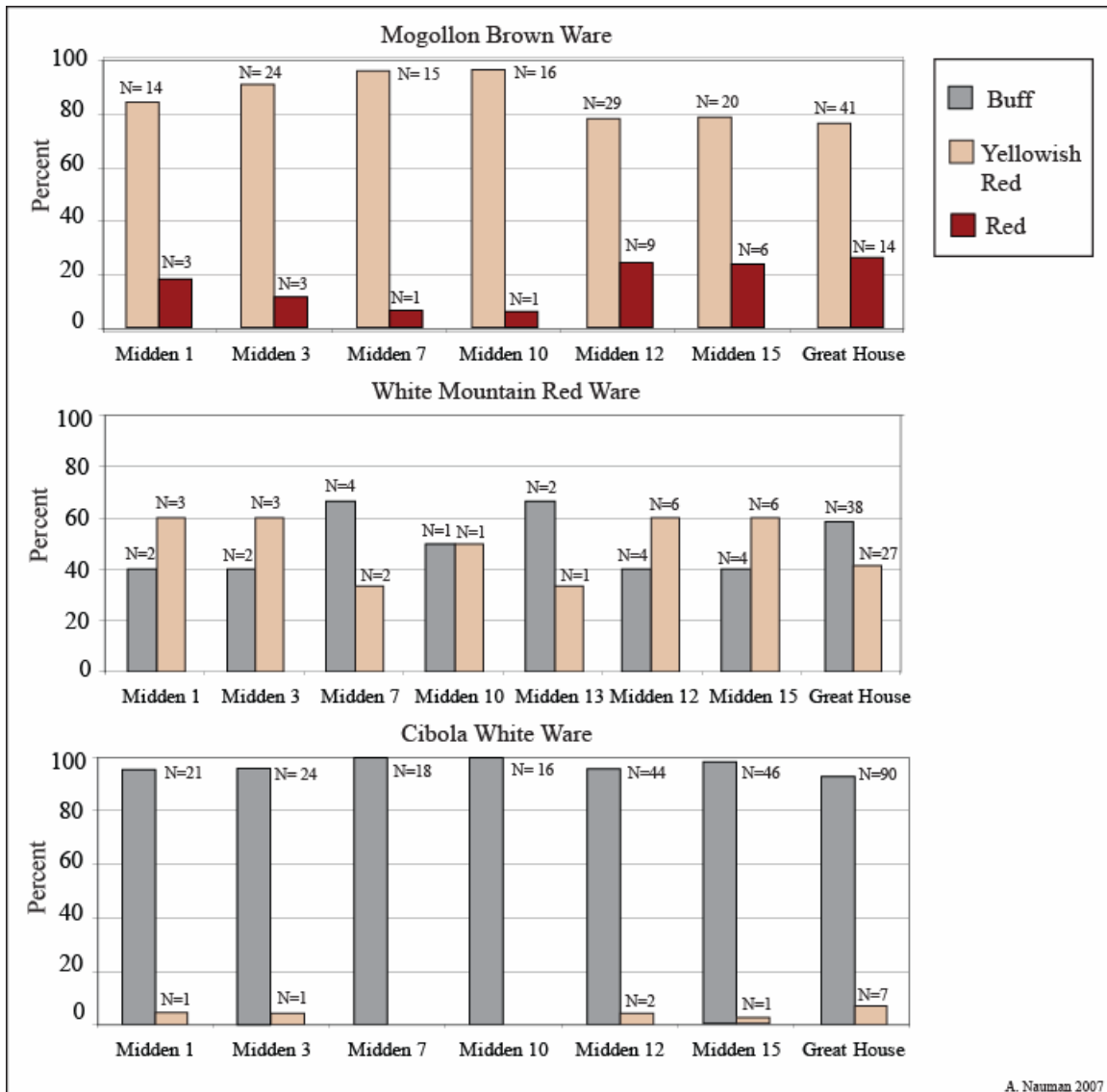
#### *Oxidized Paste Color of Brown, Red and White Ware Bowls*

Assessment of the variation of sherd paste color within wares could offer insight into whether or not the vessels were produced by specialists. Although it is possible that several of the painted bowls were traded into the community, theoretically, clays are locally available to produce all of the wares. If the vessels were being made locally by a

specialist then one would expect little variation in the clays used to produce them. Conversely, if vessels were made locally by several non-specialists, greater variation would be expected.

To test for household level production of white, red and brown ware bowls, I assessed variability in sherd paste color within wares and between households. If refired paste color remained consistent between household areas, the manufacture of the vessels was likely not specialized. Conversely, if some areas use a limited number of clays that fire a certain color while other areas do not, it may suggest specialized production at the household level or the ownership of certain clay resources. Examination of paste color data of oxidized pottery at the household level indicates little differentiation within wares between households (Figure 9.7).

Brown ware bowls fire yellowish-red and red in every sampled household. Similarly, buff and yellowish-red firing clay is used in the manufacture of red ware bowls recovered from each household. White ware bowls were constructed of mostly buff firing clays in all households. At this level of analysis, if these vessels were products of local manufacture, there was likely equal access to raw material resources used to make bowls. Additionally, if vessels were traded into the community each household had relatively equal access to the traded vessels.



**Figure 9.7.** Percentage of paste color by household for Mogollon Brown, White Mountain Red and Cibola White Ware bowls.

## Summary

The purpose of this chapter was to explore technological variability in the painted pottery assemblage and compare it with the brown ware bowl assemblage. This examination focused on production techniques and the raw materials utilized to manufacture these wares.

Results suggest that all wares *could* have been produced at the site. Additionally, both White Mountain Red Ware and Cibola White Ware types, which are temporally diagnostic, demonstrate that raw material selection did not change through time. Results of the paste color and original apparent porosity analyses demonstrate an overlap of White Mountain Red Ware and Cibola White Ware, White Mountain Red Ware and Mogollon Brown Ware, but not between Cibola White Ware and Mogollon Brown Ware. This could support the idea that White Mountain Red Ware derived from a union of Cibola White Ware and Mogollon Brown Ware technologies. This argument is similar to that made by Fowler, where he argued that “brown wares were an integral part of Anasazi ceramic developments and lead directly into the development of the red-slipped wares commonly associated with the late Pueblo II period” (1991:123) in the Zuni region.

I also show that all vessels were originally fired to temperatures between 700-900°C, and that the painted vessels used mineral paint. The smudging of brown ware bowls demonstrates that the technique used at Cox Ranch Pueblo is comparable to areas south of the Mogollon Rim. These characteristics of technological manufacture correspond with smudged brown ware bowls found below the Mogollon Rim and painted wares across the Colorado Plateau. These wares appear to have been manufactured at Cox Ranch Pueblo, suggesting that the members of the community had knowledge of these techniques.

Finally, the last section examined whether there was overall similarity to the distribution of vessel types and the raw materials used in their production, suggesting that the white, red, or brown ware bowls were a result of specialist or non-specialist production and/or use. The distribution of brown and red ware bowls mirror each other

in all areas of the site. This may support the interpretation that brown ware bowls could have served as a southern counterpart to red ware bowls. The analysis of oxidized paste color at the household level shows little differentiation in raw materials used. Variation in raw materials at the site level supports the interpretation of household-level production of painted and unpainted bowls by demonstrating that *all* clays were used in *all* parts of the site. This also suggests that there were no restriction on clay resources.

When paired with the results of the brown and gray ware jar analyses, these results further suggest that the social climate at Cox Ranch Pueblo was not strict, at least not for women potters. All of the ceramic wares found at the site *could* have been produced within the community and manufactured within household based potting groups with no limit or access to raw materials. The presence of brown and gray ware jars in every household and the apparent knowledge of painted and smudged brown ware bowl manufacturing techniques suggest that this community was well versed in both pottery traditions more prevalent to the north and to the south and may have been comprised of migrants from each area.

## CHAPTER TEN

### **Technological Choice and the Organization of Pottery Production at Cox Ranch Pueblo**

Preceding chapters presented results of the technical analysis of the ceramic assemblage from Cox Ranch Pueblo. This chapter incorporates the theoretical issues presented in Chapter Two regarding technological choice and how it is influenced by ethnic, kinship and gendered identities, with the results of the technological examination of painted and unpainted textured pottery at Cox Ranch Pueblo. Looking at the technological production of pottery at Cox Ranch Pueblo with anthropological questions in mind allows us to think about the roles and relationships of Ancestral Puebloan women, men and children had in the pre-contact Puebloan past. The material fingerprints indicative of learning frameworks also allow us to try and interpret past social contexts empirically. Broadly, the association of these topics with the data presented here offers us the opportunity to think about the active production of material goods and their meaning in the construction of social identity in a locality where the negotiation of identity may have been a significant part of daily activities.

Here, I discuss the results of this study in terms of the larger social context that they represent. I offer several conclusions scaled from basic kinship systems to possible organizational similarities and differences in Chaco-era communities throughout the region. The results are applied directly to the concepts of technological manufacture of pottery and the significance of its display in ethnic identity and possible kinship and gender relationships. I therefore propose scenarios that could have produced the variability seen in the assemblage.

## **Ceramic Technology and Ethnic, Kinship and Gender Identity**

The results of this study suggest that unpainted, textured brown and gray ware jars and painted bowls at Cox Ranch Pueblo display variation in technological manufacture that is indicative of two different ethnic groups. This conclusion is based upon the examination of a number of attributes of ceramic manufacture that revealed choices made in their production; I believe that these traits are associated with how Ancestral Puebloan women potters signified their ethnic identity. As noted in Chapter Two, the main controversies surrounding the debate of ethnic identity depiction are whether 1) ethnicity is manifested in conscious (Barth 1969) or unconscious choices (Bourdieu 1977, Jones 1997), 2) is socially manifested in some social contexts and not others (Cohen 1978) and 3) some situations cause signaling of ethnicity to be more evident than others (e.g., Duff 2002; Hodder 1978).

Under the rules of habitus, choices in ceramic production are confined to possibilities that have been learned by an individual through the enculturation process and are largely unconscious. By examining the choices made in the production of material goods, one can decipher rules learned during an individual's life. While habitus is suggested to be largely unconscious, the material expressions of identity often are not, especially when visible to an audience. A gendered approach to identity suggests that it is not only the final product that signifies a person's identity. Rather it is through the active choices that a person makes throughout the process of manufacture that may signify their allegiances. These choices may not always be visible in the final product but may be identified by others in everyday practices.

The ceramic assemblage from Cox Ranch Pueblo shows evidence for both the explicit portrayal of difference as well as the assimilation of attributes of technological manufacture. The differences in the technological style of unpainted, textured wares suggest that people of at least two different ethnicities occupied Cox Ranch Pueblo. In some areas of the community, the similarity of these wares indicates the transmission of knowledge about their production between women of different ethnic traditions. This suggests that women from different ceramic traditions were likely living within the same roomblocks, if not part of the same households. Analysis of painted and brown ware bowls suggests that potters at Cox Ranch Pueblo could have produced these wares at a household level, and if they did, were aware of the manufacturing techniques used to produce them below the Mogollon Rim and throughout the Colorado Plateau. No pottery wares or the raw materials used to produce them appear to have been under restricted access at Cox Ranch Pueblo. This suggests that the social climate in the community was relatively equal at least among women potters.

### *Unpainted, Textured Wares*

In the American Southwest, unpainted, textured brown and gray ware jars are ceramic types that archaeologists associate with the past Mogollon and Anasazi cultures. Examination of attributes was conducted to determine whether or not brown and gray ware jars were (1) produced by women of different learning frameworks, (2) manufactured at Cox Ranch Pueblo out of local clays, (3) products of household level production, and (4) produced differently within each household. The results indicate that women of two different learning frameworks lived at Cox Ranch Pueblo likely within the



same roomblocks and they produced pottery in their households using local clays. Because unpainted, textured wares are commonly associated with household contexts, researchers have assumed that they have low visibility, do not actively or consciously signify identity (Clark 2001) and are thus resistant to change (Stark et al. 1995). Results presented here suggest that unpainted, textured utilitarian wares may signify more than previously thought.

The examination of the technological manufacture of brown and gray ware jars included measuring attributes of coil size, indentation size and spacing, sherd thickness, refired paste color and apparent porosity to determine whether these wares were produced by women with distinct learning frameworks. Coil size, indentation size and spacing, sherd thickness and apparent porosity are considered unconscious production signals. On the other hand, the selection of clays and firing conditions must have been conscious decisions. When these attributes were examined at the community level, variation in the clays used to produce them, indentation size and coil size suggest that the process of manufacturing vessels represents two distinct ways of making vessels. However, attributes of maximum thickness and apparent porosity were not significantly different, indicating that the wares likely had a similar function.

To determine whether or not brown and gray ware jars could have been made by women living at Cox Ranch Pueblo, a total of 28 clay samples was gathered within a 7 km of the site and tested for viability for pottery manufacture and likeness in paste color. Results indicate that although brown and gray ware jars were made from different clay resources, raw materials that could have been used to produce both wares were available within the vicinity of the community. This suggests that women living at Cox Ranch

Pueblo *could* have made brown and gray ware jars in the Cox Ranch community from local materials.

Brown ware jars are present in greater frequency than gray ware jars at Cox Ranch Pueblo. In Chapter Six, I examined the intrasite distribution of brown and gray ware jars. Although slight variation was noted between some midden and architectural areas, the presence of significant amounts of both wares in all contexts suggests that women from both traditions co-resided within roomblocks, if not within households. This likely made the negotiation of identity an important part of daily activity in the household.

Examination of the attributes of coil size, and indentation size and spacing on brown and gray ware jars indicates statistically significant differences between the two wares. However, more variation is seen among the brown than gray ware assemblage. This may point toward more producers of brown wares than gray wares at Cox Ranch Pueblo, a conclusion supported by the higher relative percentage of brown ware jars at the site. Intra-site examination of these attributes indicates significant differences in the construction of brown and gray ware jars between households. Variability within the production of these wares between households supports the presence of household-level potting groups that produced unpainted jars at Cox Ranch Pueblo.

In many cases within household middens, coil size and indentation size of brown and gray wares were not significantly different. This may indicate a level of assimilation within the household by women who made brown and women who made gray ware jars. This could have occurred unconsciously or consciously. Because women from two different ethnic backgrounds were living within the same roomblock and possibly the

same households and participating in household-level potting groups, they likely exchanged potting knowledge with each other as well as passed on potting techniques to their children. In these circumstances, they were able to choose from a range of production techniques. Throughout this process women may have unconsciously passed knowledge about potting techniques including how thick coils are and the spacing of indentations. Conversely, they may have maintained their learned method of pottery production (the size and spacing of coils and indentations) and consciously manipulated raw material sources to alter the color of the final products. The practice of obtaining raw materials and processing them together with other women may have served as one means of solidarity in everyday practice in the household. Either way, whether conscious or unconscious, the mixing of traditions in some areas suggests there were close interactions between women potters from both ethnic traditions at Cox Ranch Pueblo.

A comparison of households that exhibit similarity and difference in the production of brown and gray wares with the temporal seriation provided in Chapter Six suggests that it is difficult to substantiate the assimilation of production techniques through time. Areas that should be the earliest, Middens 1, 3, and 10, display similarities in production. Areas that were determined to be the latest, Middens 6, 7, and 8, do not display difference. However, Midden 11 and Roomblock 7 do show difference. Due to the inability to provide a temporal explanation for the intra-household variability, I suggest that the lack of variation in some households and not in others is more likely a consequence of dynamic social relationships within roomblocks and households throughout the community.

In the several areas of the community where manufacturing techniques of brown and gray ware jars are statistically different, it indicates that women also *did* maintain their own traditions. The architectural and midden areas that exhibit differences in at least one attribute include both areas of public architecture (the Great House and Roomblock 2), the middens surrounding the Great House (Middens 12, 13 and 15) and Roomblock 7 and its midden (Midden 11). Several interpretations could explain why manufacturing techniques of unpainted wares were exhibited differently in different households. However, the variation does suggest that women were not participating in potting groups in the same way in all households and roomblocks in the community.

One possible explanation is the number of households that the midden and/or architectural assemblage represent. Roomblock 2, 7 and the Great House are the largest roomblocks in the community and may represent multiple household potting groups. Middens 1, 6, 7, 8 and 10 are linked to smaller roomblocks and could represent individual households. The difference exhibited in the larger roomblocks and their middens (except for the midden associated with Roomblock 2) may be due to deposition from multiple households. Several different living situations within the larger roomblocks could have produced what we see in the archaeological record, but I suggest that women with different potting traditions may not have been potting together in these roomblocks. Women with different potting traditions living in the larger roomblocks may have lived in separate households within the same roomblock, participated in household level potting groups (with women of the same potting tradition) and deposited their trash in the same midden or architectural area as women of other traditions. Under these circumstances, the variation exhibited between the manufacture of brown and gray ware

jars indicates that women in these households maintained their learned potting traditions unconsciously (there was no transmission of potting knowledge between ethnic traditions) and consciously by actively seeking clays similar to those used in their learned tradition.

It is interesting to note, that when the intra-household results of coil size and indentation size and spacing are compared with the relative percentages of brown to gray ware jars in each area explored in Chapter Six (Figure 6.9) there is some patterning. Roomblock 7, Midden 11, the Great House, and Middens 12 and 15 exhibit larger percentages of gray to brown ware jars than other areas at the site, while Roomblock 2 exhibits the greatest percentage of brown to gray ware jars. These areas also exhibit difference in the technological construction of the assemblages. Middens 1, 3, 6, 7, 8, 10 and 13 also all show greater percentages of brown than gray jars, but fall in the middle of the percentage of brown to gray spectrum. All of these middens, except Midden 13, show no significant difference in the manufacturing techniques of brown and gray ware jars. Although subtle, this pattern may support an interpretation of social situations tied to ethnic affiliation that led to households being organized in a different manner. Where some households were organized in a way that encouraged women from different ethnic traditions to pot and/or actively procure clays together, others were structured in a manner where women from both traditions were living within the same roomblock, but their potting cohorts remained segregated and they continued to consciously select clays similar to their learned tradition. Because the areas that display difference are also those that exhibit the most disparate percentages of brown and gray wares, it is possible that

these areas were organized differently with women consciously choosing to manufacture their pottery by their learned tradition.

It is difficult to determine from the archaeological record whether women consciously maintained the choice to procure clays *similar* to their own tradition and unconsciously adopted other manufacturing attributes, or conversely, consciously obtained clays *different* from their learned tradition but maintained their unconscious manufacturing techniques. Because human relationships and the expression of identity are complex, and vary for each individual, both scenarios are quite possible and may have changed throughout a woman's life. It could also be situational where individuals made choices to suit their own agenda. Regardless of whether the difference we see between the wares was the result of conscious or unconscious acts, the process of their manufacture was result of an active display of identity that has to do with who women choose to associate, spend their time, and exchange knowledge with. These relationships are expected to have been paramount in structuring everyday practices, which no doubt influenced pottery manufacture and possibly other facets of daily life.

The pattern of variation in the technological manufacture of unpainted, textured pottery at Cox Ranch Pueblo indicates that unpainted, textured cooking vessels may express more than people have previously thought. The dominant assumption that utilitarian wares have low visibility, do not actively or consciously signify identity (Clark 2001) and are thus resistant to change (Stark et al. 1995), may be somewhat misleading. I suggest this for two reasons. First, the context of the household is usually not considered to be an important place for signifying identity. However, Bowser (2000) suggests that this context can be very important (also see Bowser and Patton 2004).

Second, researchers examining technological choice as an unconscious marker of identity do not often look at the entire production sequence, namely clay acquisition. In a context where clays are available to make both color of vessels and access to raw material sources are not restricted (as they appear not to be at Cox Ranch Pueblo), women potters' had the choice to participate in different potting traditions or maintain the appearance of their own tradition.

### *Evidence for Kinship and Post-marital Residence*

There were certainly a number of social situations in the community and household that influenced a women's desire or need to form relationships. One of several situations that influences whom one associates with is kinship, or with whom you have familial ties. Although kinship is not entirely dependent upon living arrangements, who one lives with structures the way that they conduct their daily activities, with whom they conduct them, and how they demonstrate their allegiances. Kinship and post-marital residence in the Cox Ranch Pueblo archaeological record is especially interesting because material culture indicates residents from different ethnic groups lived within the community, presenting the opportunity to *consider* their residence patterns.

As noted in Chapter 2, determining post-marital residence patterns in the archaeological record has been based on ethnographic efforts that examine residence rules. Results suggest that post-marital residence is influenced by a number of sociopolitical factors, including warfare (Ember 1974; Ember and Ember 1971, 1972), migration (Divale 1974), subsistence strategy (Gough 1961), and active extra-community roles that regularly take men out of the community (Peregrine 2001). Peregrine (2001)

suggested that matrilocality was the basis for social organization in Chacoan society, though Schillaci and Stojanowski (2002) suggest that Chacoan society was patrilocal.

If we were to base our interpretations on probable gender roles at Cox Ranch Pueblo based entirely on ethnology, I would suggest that Peregrine's (2001) conclusion seems to be the best fit with much of what we know about Pueblo II communities in the American Southwest. Women likely performed many activities close to the home including a portion of agricultural subsistence, food processing, pottery production and child rearing. In contrast, men likely participated in activities outside of the community including trade (shell and turquoise) and maintaining inter-community relationships. Considering ethnographic studies, it seems possible that matrilocality would be the residence pattern in Chaco-era agricultural communities including Cox Ranch Pueblo.

However, examination of ceramic data at Cox Ranch Pueblo may indicate that matrilocality was not the most likely pattern of residence in the community. Divale (1974) indicates that the recent migration of a group into a previously inhabited area influences the acceptance of matrilocality to limit warfare between the groups. At Cox Ranch Pueblo, frequency seriation of painted wares indicates neither brown or gray ware was more or less abundant early or later in the development of the community. Therefore, with the current data, I am unable to determine whether one ethnic group was arrived first in the community. Alternatively, the data do suggest that the community was founded with a degree of communal planning, possibly by a small cohort of individuals with roots to both northern and southern traditions. This indicates that matrilocality may not have been needed to keep peace between these ethnic traditions.



The unpainted, textured ceramic assemblage at Cox Ranch Pueblo suggests that women from both ceramic traditions were living within the same roomblocks if not within the same households. However, examination of these wares within roomblocks indicates that some households may have been structured differently with relation to how women from different traditions interacted, specifically with relation to potting groups. Women who lived in households located in smaller roomblocks appear to have participated in potting groups comprised of women (and possibly their children) of both ethnic traditions. Within these groups women exchanged potting and clay acquisition knowledge. If potting groups *are* representative of households in these roomblocks, it suggests that residence patterns were structured such that women from both traditions *were* living within the same household. Within these households, post-marital residence patterns could be explained as either multilocal, neolocal or patrilocal, but not solely matrilineal like much ethnographic evidence suggests.

In other areas of the site, including larger roomblocks and possible locations of public interaction, women of different ceramic traditions appear to have lived within the same roomblocks and used the same areas of trash deposition. Yet, the ceramic data suggests that they may have participated in potting groups composed of women of their own ethnic tradition and/or for some reason continued to consciously procure raw materials indicative of their learned tradition. I am uncertain whether women with different ceramic traditions were living within the same households in the larger roomblocks at Cox Ranch Pueblo. In light of these results, I am hesitant to suggest that I can decipher post-marital residence patterns from the archaeological data presented here, but I think that I can suggest that it was not entirely matrilineal. As such, this research

indicates that although we may not be able to decipher anthropological patterns of residence in the archaeological record with certainty, through empirical investigation, we can begin to think again about how the kinship relationships of women and men may have been structured and how it influenced their relationships in the household and in everyday activities.

### ***Painted Wares and Smudged Brown Ware Bowls***

Cibola White Wares are widespread in the region, but the methods of their manufacture are thought to have originated north of the Mogollon Rim (Haury and Hargrave 1931; McGregor 1965:262-263; Martin et al 1952:52; Sullivan and Hantman 1984). In contrast, Mogollon Brown Ware bowls most commonly occur south of the Mogollon Rim. The results here demonstrate that the Cibola White and Mogollon Brown Ware bowls were produced with significantly different technological styles in terms of clay selection, apparent porosity, and decoration techniques (use of organic smudging versus mineral painting). In contrast, White Mountain Red Ware appears to have been constructed with a technological style that shares some manufacturing characteristics found in both Cibola White Ware and Mogollon Brown Ware. In terms of the general assumption that White Mountain Red Ware emerged out of the manufacture of Cibola White Ware these results are particularly interesting. For Cox Ranch Pueblo, it can be at least suggested that the technological style of White Mountain Red Ware incorporated elements of both white and brown wares.

The availability of clay resources in the vicinity of Cox Ranch Pueblo indicates that Cibola White Ware, White Mountain Red Ware and Mogollon Brown Ware bowls

all *could* have been produced at Cox Ranch Pueblo. However, iron-rich clays used to manufacture the brown ware and some of the red ware bowls are more abundant. The selection of clays varies between wares and slightly within wares, yet the analysis of refired ceramic paste color by painted types indicates no variation in the selection of clay resources through time. There is also little to no variation in the selection of clays between households. Additionally, the distribution of White Mountain Red Ware, Cibola White Ware and Mogollon Brown Ware bowls was relatively consistent in all areas at the site; no residents appear to have had exclusive access to clays firing to a certain paste color, nor did they have greater access to any of these wares. This indicates that everyone in the community had equal access to all wares. However, the percentage of brown and red ware bowls varies by household. In areas where the percentage of brown ware bowls is higher, red ware bowls are present in slightly lower quantity and vice versa; while white ware bowl frequency remains consistent. This indicates that red ware and brown ware bowls were used in similar contexts (see Elkins 2007).

When paired with the results of the brown and gray ware jar analyses, these results further suggest that the social climate at Cox Ranch Pueblo was relatively accepting, at least in terms of pottery production, with technological manufacturing techniques representing two ceramic traditions. All of the ceramic wares found at the site *could* have been produced within the community and manufactured by household-based potting groups with no limitations on their access to raw materials or wares. The presence of brown and gray ware jars in every household, and the apparent knowledge of painted and smudged brown ware bowl manufacturing techniques suggest that women who lived in this community were knowledgeable about pottery traditions more prevalent

to the north and to the south and may have been comprised of migrants with links to both areas.

## **Conclusions**

Several general statements about Chaco-era prehistory can be made from this study. First, the portrayal of two traditions in the ceramic assemblage suggests that migrants were accepted into the community and practiced their learned histories. Second, the assimilation of pottery technological styles as seen in some areas of the community may indicate assimilation through the transmission of knowledge. Third, I have suggested that the prior two statements occurred under the guise of a social environment that was flexible and was in general uncompetitive. In turn, this allowed women, men and children of different learned traditions to live together, both maintaining and blending their traditions at conscious and unconscious levels.

The relationship of Cox Ranch Pueblo to Chaco Canyon still remains largely unknown. The pottery assemblage suggests that there was relatively equal access to all ceramic wares and the clays used to produce them in all areas of the community, including the Great House. Although this research does indicate knowledge of the manufacture of some pottery associated with Chaco Canyon at Cox Ranch Pueblo, because this study was intra-community based, I can not distinguish whether this knowledge represents direct participation in some type of network or is the result of knowledge obtained through indirect participation in a larger extra-community landscape. Similarly, architecture at the Great House suggests some knowledge of things “Chacoan” but other elements of the site, including the absence of a great kiva suggest that it may

not be directly linked. Further investigation of the presence or absence of kivas associated with roomblocks and their layout may help to better define how this community fits into the Chacoan world.

Post-marital residence in pre-contact Puebloan communities may continue to remain a mystery. However, continued exploration of such social patterns through examination of the technological choices that individuals made, we may at least be able to talk about how such rules may have influenced everyday interactions. Ultimately, it is through these everyday practices that women lived, breathed, had relationships with one another and in part, negotiated their role in life with material objects.

### ***Future Research Concerning Ceramic Technology and the Cox Ranch Pueblo Community***

To confirm the validity of the results of the technological analyses presented here for raw material sourcing, it would be interesting to apply high technological and micro-scale analyses. These methods would be useful to determine if ceramic wares identified at Cox Ranch Pueblo were without a doubt manufactured out of local clays and further, whether variation in the use of raw materials is visible between roomblocks or roomblock middens. Similarly, a thorough analysis of temper composition could provide substantial information concerning the choices made in manufacture. These studies are currently underway.

Additionally, to take the research presented here a step further, it would be useful to examine the learning frameworks embedded in the construction of brown and gray ware jars at a regional level. Examination of these pottery wares from several Chaco-era

communities throughout the Colorado Plateau and below the Mogollon Rim may provide insight into not only the role of Cox Ranch Pueblo as a great house community, but the relationship of ceramic technological practice throughout the landscape.

## References Cited:

Akins, Nancy J.

1984 Temporal Variation in Faunal Assemblages From Chaco Canyon. In *Recent Research on Chaco Prehistory*, edited by James W. Judge and John D. Schelberg, pp. 225-240. Reports of the Chaco Center Number Eight: Division of Cultural Research, U.S. Department of the Interior National Park Service.

Akins, Nancy J., and John D. Schelberg

1984 Evidence for Organizational Complexity as Seen from Mortuary Practices at Chaco Canyon. In *Recent Research on Chaco Prehistory*, edited by James W. Judge and John D. Schelberg, pp. 89-102. Reports of the Chaco Center Number Eight: Division of Cultural Research, U.S. Department of the Interior National Park Service, Albuquerque, New Mexico.

Altschul, Jeffrey

1978 The Development of the Chacoan Interaction Sphere. *Journal of Anthropological Research* 34(1): 109-146.

Allen, William L., and James B. Richardson III

1971 The Reconstruction of Kinship from Archaeological Data: The Concepts, the Methods, and the Feasibility. *American Antiquity*, 36(1): 41-53.

Anyon, Roger, and Steven LeBlanc

1980 The Architectural Evolution of Mogollon- Mimbres Ceremonial Structures. *The Kiva* 45:253-277.

Arnold, Dean E.

1985 *Ceramic Theory and Cultural Process*, edited by Dean E. Arnold. Cambridge University Press, Cambridge.

Barth, Fredrik

1969 Introduction. In *Ethnic Groups and Boundaries: The Social Organization of Culture Difference*, edited by Fredrick Barth, pp. 9-38. George Allen and Unwin, London.

Bourdieu, Pierre

1977 *Outline of a Theory of Practice*, Cambridge University Press, Cambridge.

Bowser, Brenda

2000 From Pottery to Politics: An Ethnoarchaeological Study of Political Factionalism, Ethnicity, and Domestic Pottery Style in the Ecuadorian Amazon. *Journal of Archaeological Method and Theory* 7(3):219-248.

Bowser, Brenda

2002 *The Perceptive Potter: And Ethnoarchaeological Study of Pottery, Ethnicity, and Political Action in Amazonia*, PhD Dissertation, Department of Anthropology, University of California, Santa Barbara.

Bowser, Brenda, and John Q. Patton

2004 Domestic Spaces as Public Places: An Ethnoarchaeological Case Study of Houses, Gender, and Politics in the Ecuadorian Amazon. *Journal of Archaeological Method and Theory* 11(2):157-182.

Brody, J.J.

1977 *Mimbres Painted Pottery*. University of New Mexico Press, Albuquerque.

Bronitsky, Gordon

1989 Ceramics and Temper: A Response to Feathers. *American Antiquity* 54(3):589-593.

Bronitsky, Gordon, and Robert Hamer

1986 Experiments in Ceramic Technology: The Effects of Various Tempering Materials on Impact and Thermal-Shock Resistance. *American Antiquity* 51(1):80-101.

Cameron, Catherine M.

1984 A Regional View of Chipped Stone Raw Material Use in Chaco Canyon. In *Recent Research on Chaco Prehistory*, edited by James W. Judge and John D. Schelberg, pp. 137-152. Reports of the Chaco Center Number Eight: Division of Cultural Research, U.S. Department of the Interior National Park Service, Albuquerque, New Mexico.

Cameron, Catherine M. and Lee Sappington

1984 Obsidian Procurement at Chaco Canyon, A.D. 500-1200. In *Recent Research on Chaco Prehistory*, edited by James W. Judge and John D. Schelberg, pp. 153-173. Reports of the Chaco Center Number Eight: Division of Cultural Research, U.S. Department of the Interior National Park Service Albuquerque, New Mexico.

Carlson, Roy L.

1970 *White Mountain Redware: A Pottery Tradition of East-central Arizona and Western New Mexico*. Anthropological Papers of the University of Arizona 19, Tucson.

Chilton, Elizabeth

1998 The Cultural Origins of Technical Choice: Unraveling Algonquian and Iroquoian Ceramic Traditions in the Northeast. In *The Archaeology of Social Boundaries*, edited by Miriam T. Stark, pp. 132-160. Smithsonian Institution Press, Washington, D.C.



1999 One Size Fits All: Typology and Alternatives for Ceramic Research. In *Material Meanings: Critical Approaches to the Interpretation of Material Culture*, edited by Elizabeth Chilton, pp.44-60. The University of Utah Press, Salt Lake City.

Clark, Jeffery

2001 *Tracking Prehistoric Migrations, Pueblo Settlers among the Tonto Basin Hohokam*. Anthropological Papers of the University of Arizona 65, Tucson.

Cohen, Ronald

1978 Ethnicity: Problem and Focus in Anthropology. *Annual Review in Anthropology* 7:379-403.

Colton, Harold S.

1953 *Potsherds: An Introduction to the Study of Prehistoric Southwestern Ceramics and Their Use in Historic Reconstruction*. Museum of Northern Arizona Bulletin 25. Northern Arizona Society of Science and Art, Flagstaff.

1965 *Checklist of Southwestern Pottery Types*. Museum of Northern Arizona Ceramic Series No. 2 Revised. Northern Arizona Society of Science and Art, Flagstaff.

Colton, Harold S., and Lyndon L. Hargrave

1937 *Handbook of Northern Arizona Pottery Wares*. Museum of Northern Arizona Bulletin II. Northern Arizona Society of Science and Art, Flagstaff.

Conkey, Margaret

1991 Contexts of Action, Contexts for Power: Material Culture and Gender in the Magdalenian. In *Engendering Archaeology: Women in Prehistory*, edited by J. M. Gero and M. W. Conkey, pp 57-91. Blackwell Publishing, Oxford.

Conkey, Margaret, and Janet Spector

1984 Archaeology and the Study of Gender. In *Advances in Archaeological Method and Theory*, edited by M.B. Schiffer, 7:1-38. Academic Press, New York.

Cordell, Linda S.

1997 *Archaeology of the Southwest*. Academic Press, University of Colorado, Boulder, Colorado.

Cordell, Linda, and George Gumerman

1989 Cultural Interaction in the Prehistoric Southwest. In *Dynamics of Southwest Prehistory*, edited by L.S. Cordell and G.J. Gumerman, pp. 1-17. Smithsonian Institution Press, Washington D.C.

Cordell, Linda S., and Fred Plog

1979 Escaping the Confines of Normative Thought: A Reevaluation of Puebloan Prehistory. *American Antiquity* 44(3):405-429.

Crown, Patricia L.

- 1981 The Ceramic Assemblage. In *Prehistory of the St. Johns Area, East-Central Arizona: The TEP St. Johns Project*, edited by Deborah Westfall, pp. 233-290, Archaeological Series No. 153. Arizona State Museum, Tucson.
- 2002 Learning and Teaching in the Prehispanic American Southwest. In *Children in the Prehistoric American Southwest*, edited by Kathryn A. Kamp, pp. 108-124. University of Utah Press, Salt Lake City.

Crown, Patricia, and James W. Judge

- 1991 Introduction. In *Chaco and Hohokam: Prehistoric Regional Systems in the American Southwest*; edited by Patricia Crown and W. James Judge, pp. 1-9. School of American Research Press, Santa Fe, New Mexico.

Crown, Patricia L., and W.H. Wills

- 1995 Economic Intensification and the Origins of Ceramic Containers in the American Southwest. In *The Emergence of Pottery: Technology and Innovation in Ancient Societies*, edited by William Barnett and John Hoopes, pp. 241-254. Smithsonian Institution Press, Washington, D.C.

Danson, Edward B.

- 1957 *An Archaeological Survey of West Central New Mexico and East Central Arizona*. Papers of the Peabody Museum of Archaeology and Ethnology, Harvard University, Vol. XLIV, No.1. The Peabody Museum, Cambridge, Massachusetts.

David, Nicholas, and Hilke Hennig

- 1972 *The Ethnography of Pottery: A Fulani Case Study*. McAleb Modules in Anthropology no. 21. Addison Wesley, Reading, Massachusetts.

Dean, Jeffrey

- 1992 Environmental Factors in the Evolution of the Chacoan Sociopolitical System. In *Anasazi Regional Organization and the Chaco System*, edited by David E. Doyel, pp.35-43. Maxwell Museum of Anthropology; Anthropological Papers No. 5. University of New Mexico, Albuquerque.

DeBoer, Warren

- 1990 Interaction, Imitation, and Communication as Expressed in Style: The Ucayali Experience. In *The Uses of Style in Archaeology*, edited by Margaret Conkey and Christine Hastorf, pp. 82-104. Cambridge University Press, Cambridge.

Deetz, James

- 1968 The Inference of Residence and Descent Rules from Archaeological Data. In *New Perspectives in Archaeology*, edited by Sally R. Binford and Lewis R. Binford, pp. 41-48. Aldine, Chicago.

Diehl, Michael

1996 The Intensity of Maize Processing and Production in Upland Mogollon Pithouse Villages, A.D. 200-1000. *American Antiquity* 61:145-204.

Dietler, Michael and Ingrid Herbich

1998 Habitus, Techniques, Style: An Integrated Approach to the Social Understanding of Material Culture Boundaries. In *The Archaeology of Social Boundaries*, edited by Miriam T. Stark, pp. 232-263. Smithsonian Institution Press, Washington.

Dillingham, Rick, with Melinda Elliott

1992 *Acoma and Laguna Pottery*. School of American Research Press, Santa Fe.

Divale, William Tulio

1974 Migration, External Warfare, and Matrilocal Residence. In *Behavior Science Research*, 2:75-133.

1977 Living Floor Area and Marital Residence: A Replication. In *Behavior Science Research*, 12:109-115.

Dobres, Marcia Anne

1995 Gender and Prehistoric Technology: On the Social Agency of Technical Strategies. In *World Archaeology* 27(1):25-49.

1999 Of Paradigms and Ways of Seeing: Artifact Variability as if People Mattered. In *Material Meanings: Critical Approaches to the Interpretation of Material Culture*, edited by Elizabeth Chilton, pp. 7-23. The University of Utah Press, Salt Lake City.

2000 *Technology and Social Agency: Outlining a Framework for Archaeology*. Blackwell Publishing, Oxford.

Doyel, David (editor)

1992 *Anasazi Regional Organization and the Chaco System*. Maxwell Museum of Anthropology; Anthropological Papers No. 5 University of New Mexico, Albuquerque.

Doyel, David and Stephen Lekson

1992 Regional Organization in the American Southwest. In *Anasazi Regional Organization and the Chaco System*; edited by David E. Doyel, pp.15-21. Maxwell Museum of Anthropology; Anthropological Papers No. 5 University of New Mexico, Albuquerque.

Driver, Harold E., and William C. Massey

1957 Comparative Studies of North American Indians. *Transactions of the American Philosophical Society* 47(2):165-456.

Duff, Andrew I.

1993 *An Exploration of Post Chacoan Community Organization through Ceramic Sourcing*. MA. Thesis, Arizona State University, Phoenix.

- 1996 Ceramic Micro-Seriation: Types of Attributes? *American Antiquity*, 61(1): 89-101.
- 1998 The Process of Migration in the Late Prehistoric Southwest. In *Migration and Reorganization: The Pueblo IV Period in the American Southwest*, edited by Katherine A. Spielmann, pp. 31-52. Anthropological Research Papers No. 51. Arizona State University, Tempe.
- 2002 *Western Pueblo Identities: Regional Interaction, Migration, and Transformation*. The University of Arizona Press, Tucson.
- 2003 Research Design for Archaeological Testing at Cox Ranch Pueblo (LA 13681, BLM NM-02-185), Catron County New Mexico. Submitted to Bureau of Land Management Socorro Field Office Socorro, NM. Manuscript on file at Washington State University and the BLM Santa Fe and Socorro, NM.

Duff, Andrew I., and Alissa L. Nauman

- 2004 *Washington State University Excavations at Cox Ranch Pueblo (LA13681), Catron County, New Mexico, 2003 Season*. Submitted to the Bureau of Land Management, Santa Fe, New Mexico. Manuscript on file at Washington State University and the BLM Santa Fe and Socorro, NM.

Duff, Andrew I., and Stephen Lekson

- 2006 Notes from the South. In *The Archaeology of Chaco Canyon, An Eleventh Century Pueblo Regional Center*, edited by Stephen Lekson, pp. 315-337. School of American Research Press, Santa Fe.

Duff, Andrew I., and Gregson Schachner

- 2007 Becoming Central Organizational Transformations in the Emergence of Zuni. In *Hinterlands and Regional Dynamics in the Ancient Southwest*, edited by Alan Sullivan and James Bayman, pp. 185-200. University of Arizona Press, Tucson.

Eckert, Suzanne, Andrew Duff and Keith Kintigh

- 1995 *Arizona State University Upper Little Colorado Prehistory Project Field and Laboratory Manual*. Document on file, Department of Anthropology, Washington State University.

Elkins, Melissa

- 2007 *Serving Up Ethnic Identity in Chacoan Frontier Communities: The Technology and Distribution of Mogollon and Puebloan Ceramic Wares in the Southern Cibola Region*. Masters Thesis, Department of Anthropology, Washington State University.

Ember, Carol

- 1974 An Evaluation of Alternative Theories of Matrilocal versus Patrilocal Residence. *Behavior Science Research* 9:135-49.

- Ember, Carol, and Melvin Ember  
 1972 The Conditions Favoring Multilocal Residence. *Southwestern Journal of Anthropology* 28:382-400.
- Ember, Melvin  
 1973 An Archaeological Indicator of Matrilocal Versus Patrilocal Residence. *American Antiquity* 38:177-182.
- Ember, Melvin and Carol Ember  
 1971 The Conditions Favoring Matrilocal Versus Patrilocal Residence. *American Anthropologist* 73:571-594.
- Fowler, Andrew P.  
 1985 Ceramic Analysis. In *Prehistoric Settlement Patterns in West-Central New Mexico: The Fence Lake Coal Lease Surveys*, edited by Patrick Hogan, pp. 99-133. Prepared for the Salt River Project; Submitted by Joseph C. Winter, Ph.D. UNM Proposal No 1 1985-211; New Mexico State Permit No. 83-017.  
 1991 Brown Ware and Red Ware Pottery: An Anasazi Ceramic Tradition. *Kiva* 56 (2):123-144.
- Fowler, Andrew P., and John Stein  
 1992 The Anasazi Great House in Space, Time, and Paradigm. In *Anasazi Regional Organization and the Chaco System*, edited by David E. Doyel, pp.101-122. Maxwell Museum of Anthropology; Anthropological Papers No. 5 University of New Mexico, Albuquerque.
- Fowler, Andrew P., John R. Stein, and Roger Anyon  
 1987 *An Archaeological Reconnaissance of West-Central New Mexico: The Anasazi Monuments Project*. Draft Report submitted to the Historic Preservation Division, Office of Cultural Affairs, State of New Mexico, Santa Fe.
- Gladwin, Harold S.  
 1945 *The Chaco Branch Excavations at White Mound and in the Red Mesa Valley*. Medallion Papers Number XXXIII. Lancaster Press, Lancaster, PA.
- Gosselain, Olivier P.  
 2000 Materializing Identities: An African Perspective. *Journal of Archaeological Method and Theory* 7(3):187-217.  
 1992 Technology and Style: Potters and Pottery among Bafia of Cameroon. *Man* 27(3):559-586.
- Gough, Kathleen  
 1961 Variation in Matrilineal Systems: Variation in Residence. In *Matrilineal Kinship*, edited by David M. Schneider and Kathleen Gough, pp. 545-576. University of California Press, Berkeley.

Graves, Michael W.

1991 Pottery Production and Distribution among the Kalinga: A Study of Household and Regional Organization and Differentiation. In *Ceramic Ethnoarchaeology*, edited by W. Longacre, pp. 112-143. University of Arizona Press, Tucson.

Grebinger, Paul

1973 Prehistoric Social Organization in Chaco Canyon, New Mexico: An Alternative Reconstruction. *The Kiva* 39(1):3-23.

Haury, Emil W.

1985 *Mogollon Culture in the Forestdale Valley, East-Central Arizona*. University of Arizona Press, Tucson.

Haury, Emil W., and Lyndon L. Hargrave

1931 *Recently Dated Pueblo Ruins in Arizona*. Smithsonian Miscellaneous Collections 82(II). Smithsonian Institution, Washington, D.C.

Hayes, Alden C., David M. Brugge, and W. James Judge

1981 *Archaeological Surveys of Chaco Canyon, New Mexico*. Publication in Archaeology 18A, Chaco Canyon Studies. National Park Service, Albuquerque.

Hays-Gilpin, Kelly, and E. van Hartesveldt (editors)

1998 *Prehistoric Ceramics of the Puerco Valley, Arizona*. Museum of Northern Arizona Ceramic Series No. 7. Museum of Northern Arizona, Flagstaff.

Hegmon, Michelle

1998 Technology, Style, and Social Practices: Archaeological Approaches. In *The Archaeology of Social Boundaries*, edited by Miriam T. Stark, pp. 264-279. Smithsonian Institution Press, Washington.

Hegmon, Michelle, Margaret Nelson, and Mark Ennes

2000 Corrugated Pottery, Technological Style, and Population Movement in the Mimbres Region of the American Southwest. *Journal of Anthropological Research* 56:217-240.

Hill, James N.

1966 A Prehistoric Community in Eastern Arizona. *Southwestern Journal of Anthropology* 22:9-30.

Hodder, Ian

1978 The Maintenance of Group Identities in the Baringo District, West Kenya. In *Social Organization and Settlement*, edited by D. Green, C. Haselgrove, and M. Springs, pp. 47-73. International Series 47, British Archaeological Reports, Oxford.

Hurst, Winston B.

2000 Chaco Outlier or Backwoods Pretender? A Provincial Great House at Edge of Cedars Ruin, Utah. In *Great House Communities Across the Chacoan Landscape*, edited by John Kantner and Nancy M. Mahoney, pp 63-76. The University of Arizona Press, Tucson, Arizona.

Jones, Siân

1997 *The Archaeology of Ethnicity, Constructing Identities in the Past and Present*. Routledge, London.

Judge, W. James

1991 Chaco: Current Views of Prehistory and the Regional System. In *Chaco and Hohokam: Prehistoric Regional Systems in the American Southwest*, edited by Patricia Crown and W. James Judge, pp. 11-30. School of American Research Press, Santa Fe.

Judge, W. James, and John D. Schelberg (editors)

1984 *Recent Research on Chaco Prehistory*. Reports of the Chaco Center Number Eight: Division of Cultural Research, U.S. Department of the Interior National Park Service, Albuquerque, New Mexico.

Judge, W. James, W.B Gillespie, S.H. Lekson, and H.W. Toll

1981 *Tenth Century Developments in Chaco Canyon*. Archaeological Society of New Mexico Anthropological Papers: 6: 65-98.

Kantner, John

1996 Political Competition among the Chaco Anasazi of the American Southwest. *Journal of Anthropological Archaeology* 15(3):41- 105.

2003 Rethinking Chaco as a System. *Kiva* 69(2) 93-116.

Kendrick, James W., and James Judge

2000 Household Economic Autonomy and Great House Development in the Lowry Area. In *Great House Communities Across the Chacoan Landscape*, edited by John Kantner and Nancy M. Mahoney, pp. 113-129. Anthropological Papers of The University of Arizona, No. 64. The University of Arizona Press, Tucson.

Keyes, Charles F.

1979 Introduction. In *Ethnic Adaptation and Identity*, edited by C. Keyes, pp.1-24. Institute for the Study of Human Issues, Philadelphia.

Kidder, Alfred

1927 Southwestern Archaeological Conference. *Science* 66:489-491.

1962 [1924] *An Introduction to the Study of Southwestern Archaeology*. Yale University Press, New Haven.

Kintigh, Keith W.

- 1996 The Cibola Area in the Post-Chacoan Era. In *The Prehistoric Pueblo World, AD 1100-1300*, edited by M. Adler, pp. 131-144. University of Arizona Press, Tucson.
- 2003 Coming to Terms with the Chaco World. *Kiva* 69(2): 93-116.

Kroeber, Alfred L.

- 1916 *Zuni Potsherds*. Anthropological Papers of the American Museum of Natural History 18(1):1-37.

Landt, Matthew, Andrew Duff, and Fumi Arakawa

- 2005 *Results from the Cox Ranch Pueblo Community Research Project*. Poster Presented at the 70<sup>th</sup> Annual meeting for the Society for American Archaeology Meetings, Salt Lake City Utah.

Lathrap, Donald W.

- 1983 Recent Shipibo-Conibo Ceramics and their implications for Archaeological Interpretation. In *Structure and Cognition in Art*, edited by D.K. Washburn, pp. 25-39. Cambridge University Press, Cambridge.

LeBlanc, Steven A.

- 1975 Micro-Seriation: A Method for Fine Chronological Differentiation. *American Antiquity* 40:22-38.
- 1989 Cibola: Shifting Cultural Boundaries. In *Dynamics of Southwest Prehistory*, edited by L. Cordell and G. Gumerman, pp. 337-369. Smithsonian Institution Press, Washington, D.C.
- 1999 *Prehistoric Warfare in the American Southwest*. University of Utah Press, Salt Lake City.

Lechtman, Heather

- 1977 Style in Technology-Some Early Thoughts. In *Material Culture: Styles, Organization, and Dynamics of Technology*, edited by Heather Lechtman and Robert Merrill, pp. 3-20. West Publishing, St. Paul.

Lekson, Stephen H.

- 1984 Standing Architecture at Chaco Canyon and the Interpretation of Local and Regional Organization. In *Recent Research on Chaco Prehistory*, edited by James W. Judge and John D. Schelberg, pp 55-74. Reports of the Chaco Center Number Eight: Division of Cultural Research, U.S. Department of the Interior National Park Service, Albuquerque, New Mexico.
- 1991 Settlement Pattern and the Chaco Region. In *Chaco and Hohokam: Prehistoric Regional Systems in the American Southwest*, edited by Patricia Crown and W. James Judge, pp.31-55. School of American Research Press, Santa Fe.

Lekson, Stephen H., Thomas C. Windes, John R. Stein, and W. James Judge

- 1988 The Chaco Canyon Community. *Scientific American* 259(1):100-109.



Lemmonier, Pierre

- 1986 The Study of Material Culture Today: Toward and Anthropology of Technical Systems. *Journal of Anthropological Archaeology* 5(2):147-186.
- 1993 Introduction. In *Technological Choices*, edited by Pierre Lemmonier. Routledge, London.

Levine, Morton H.

- 1968 Review of Three Books on Prehistoric Art. *Science* 161:150-152.

Lightfoot, Kent G., and Roberta Jewett

- 1984 Late Prehistoric Ceramic Distributions in East-Central Arizona: An Examination of Cibola Whiteware, White Mountain Redware, and Salado Redware. In *Regional Analysis of Prehistoric Ceramic Variation: Contemporary Studies of the Cibola Whitewares*, edited by A. Sullivan and J. Hantman, pp. 36-73. Anthropological Research Papers No. 31. Arizona State University, Tempe.

Lipe, William D.

- 2006 Notes from the North. In *The Archaeology of Chaco Canyon, an Eleventh Century Pueblo Regional Center*, edited by Stephen J. Lekson, pp. 261-313. School of American Research Press, Santa Fe, New Mexico.

Lister, Robert H., and Florence C. Lister

- 1981 *Chaco Canyon: Archaeology and Archaeologists*. University of New Mexico Press, Albuquerque.

Longacre, William A.

- 1966 Changing Patterns of Social Integration: A Prehistoric Example from the American Southwest. *American Anthropologist* 68: 94-102.

Longacre, William A., and Jingfeng Xia, and Tao Yang

- 2000 I Want to Buy a Black Pot. *Journal of Archaeological Method and Theory* 7(4):273-293.

Mahias, Marie-Claude

- 1993 Pottery Techniques in India: Technical Variants and Social Choice. In *Technological Choices*, edited by Pierre Lemmonier, pp. 157-180. Routledge, London.

MacEachern, Scott

- 1998 Scale, Style, and Cultural Variation: Technological Traditions in the Northern Madara Mountains. In *The Archaeology of Social Boundaries*, edited by Miriam T. Stark, pp. 107-131. Smithsonian Institution Press, Washington D.C.

Mahoney, Nancy

2000 Redefining the Scale of Chacoan Communities. In *Great House Communities Across the Chacoan Landscape*, edited by John Kantner and Nancy M. Mahoney, pp. 19-27. The University of Arizona Press, Tucson.

Marshall, Michael P.

1997 The Chacoan Roads: A Cosmological Interpretation. In *Anasazi Architecture and American Design*, edited by Baker H. Morrow and V.B. Price, pp. 62-74. University of New Mexico Press, Albuquerque.

Marshall, Michael P., John R. Stein, Richard W. Loose, and Judith E. Novotny

1979 *Anasazi Communities of the San Juan Basin*. Public Service Company of New Mexico and New Mexico State Planning Division, Albuquerque and Santa Fe.

Martin, Paul S.

1968 [1936] *Archaeology of Southwestern Colorado*. Anthropological Series Field Museum of Natural History Volume XXIII, 1936- 1939, Chicago, IL. Reprint by Kraus Reprint Co, New York.

1979 Prehistory: Mogollon. In *Southwest*, edited by Alfonso A. Ortiz, pp. 61-74. Handbook of North American Indians vol. 9, William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

Martin, Paul S., John Rinaldo, Elaine Bluhm, Hugh Cutler, and Roger Grange Jr.

1952 Mogollon Cultural Continuity and Change: The Stratigraphic Analysis of Tularosa and Cordova Caves. *Fieldiana: Anthropology* 40. Chicago.

Mathien, Frances Joan

1986 *Ripples in the Chichimec Sea: New Considerations of Southwestern – Mesoamerican Interactions*, edited by Frances Joan Mathien and Randall H. McGuire, Southern Illinois University Press, Carbondale.

McGregor, John C.

1965 *Southwestern Archaeology*. Second edition. University of Illinois Press, Urbana.

Mills, Barbara J.

2000 Gender, Craft Production and Inequality. In *Women and Men in the Prehispanic Southwest*, edited by Patricia L. Crown, pp. 301-343. School of American Research Press, Santa Fe.

1987 Ceramic Analysis. In *Archaeological Investigation at Eight Small Sites in West-Central New Mexico*. By Patrick Hogan with contributions by Glenna Dean, Janette M. Elyea, Elizabeth M. Garrett, Linda Mick-O'Hara, and Barbara J. Mills, pp. 83-130. Office of Contract Archaeology, University of New Mexico, Albuquerque.

- Mills, Barbara J., Sarah A. Herr, and Scott Van Keuren (editors)  
 1999 *Living on the Edge of the Rim: Excavations and Analysis of the Siver Creek Archaeological Research Project, 1993-1998*. Arizona State Museum Archaeological Series No. 192. Arizona State Museum, Tucson.
- Moerman, Michael  
 1965 Ethnic Identification in a Complex Civilization: Who Are the Lue? *American Anthropologist* 67(5):1215-1230.
- Mueller, Jennifer L.  
 2006 *Ritual, Feasting and Trajectories to Social Power in a Southern Chacoan Great House Community*. Masters Thesis, Department of Anthropology, Washington State University.
- Munsell  
 1994 Munsell Color Charts. Revised Edition. Munsell Color, New Windsor.
- Murdock, George P.  
 1949 *Social Structure*. Macmillan Company, New York.  
 1967 Ethnographic Atlas: A Summary. *Ethnology* 6(2).
- Nauman, Alissa, and Andrew I. Duff  
 2004 *The Founding, Growth, and Decline of the Cox Ranch Community: A Chaco-Period Settlement on the System's Southern Frontier*. Paper presented at the 69<sup>th</sup> Annual Meeting of the Society for American Archaeology, Montreal.
- Parsons, Elsie Clews  
 1932 The Kinship Nomenclature of the Pueblo Indians. *American Anthropologist* 34: 372- 389.
- Peregrine, Peter N.  
 2001 Matrilocality, Corporate Strategy, and the Organization of Production in the Chacoan World. *American Antiquity* 66(1) 36-46.
- Plog, Fred  
 1979 Prehistory: Western Province. In *Southwest*, edited by Alfonso A. Ortiz, pp. 108-130. Handbook of North American Indians vol. 9, William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.
- Plog, Stephen  
 1977 *A Multivariate Approach to the Explanation of Ceramic Design Variation*. PhD Dissertation, University of Michigan, Ann Arbor.  
 1980 Village Autonomy of the American Southwest: An Evaluation of the Evidence. *Society for American Archaeology Papers* 1:135-145.

- Powers, Robert P., William B. Gillespie, and Stephen H. Lekson  
1983 *The Outlier Survey: A Regional View of Settlement in the San Juan Basin*. Reports of the Chaco Center No. 3. Division of Cultural Research, National Park Service, Albuquerque.
- Prudden, Mitchell T.  
1903 The Prehistoric Ruins of the San Juan Watershed in Utah, Arizona, Colorado and New Mexico. *American Anthropologist* 5:224-288.
- Rice, Prudence M.  
1987 *Pottery Analysis: A Sourcebook*. The University of Chicago Press, Chicago.  
1991 Women and Prehistoric Pottery Production. In *The Archaeology of Gender: Proceedings of the 22<sup>nd</sup> Annual Chacmool Conference*, edited by Dale Walde and Noreen Willows, pp. 436-443. Archaeological Association of the University of Calgary, Calgary.
- Rinaldo, John B., and Elaine A. Bluhm  
1956 Late Mogollon Pottery Types of the Reserve Area. *Fieldiana*, 36(7).
- Roberts, Frank H. H.  
1932 *The Village of the Great Kivas on the Zuni Reservation New Mexico*. Smithsonian Institution Bureau of American Ethnology, Bulletin 111. United States Government Printing Office, Washington D.C.
- Sackett, James R.  
1977 The Meaning of Style in Archaeology: A General Model. *American Antiquity* 42:369-380.  
1990 Style and Ethnicity in Archaeology: The Case for Isochrestism. In *The Uses of Style in Archaeology*, edited by Margaret W. Conkey and Christine A. Hastorf, pp. 32-43. Cambridge University Press, Cambridge.
- Saitta, Dean J.  
1997 Power, Labor and the Dynamics of Change in Chacoan Political Economy. *American Antiquity* 62(1): 7-26.
- Schelberg, John D.  
1984 Analogy, Complexity, and Regionally-Based Perspectives. In *Recent Research on Chaco Prehistory*, edited by James W. Judge and John D. Schelberg, pp. 5-22. Reports of the Chaco Center Number Eight: Division of Cultural Research, U.S. Department of the Interior National Park Service, Albuquerque, New Mexico  
1992 Hierarchical Organization as a Short-term Buffering Strategy in Chaco Canyon. In *Anasazi Regional Organization and the Chaco System*, edited by David E. Doyel, pp. 59-75. Maxwell Museum of Anthropology Anthropological paper No. 5. University of New Mexico, Albuquerque.

- Schillaci, Michael A., and Christopher M. Stojanowski  
 2002 A Reassessment of Matrilocality in Chacoan Culture. *American Antiquity* 67(2)  
 343-356.
- Schroeder, Albert  
 1979 Prehistory: Hakataya. In *Southwest*, edited by Alfonso A. Ortiz, pp. 236-254.  
 Handbook of North American Indians vol. 9, William C. Sturtevant, general  
 editor, Smithsonian Institution, Washington, D.C.
- Sebastian, Lynne  
 1991 Sociopolitical Complexity and the Chacoan System. In *Chaco and Hohokam:  
 Prehistoric Regional Systems in the American Southwest*, edited by Patricia L.  
 Crown and W. James Judge, pp. 109-134. School of American Research Press,  
 Santa Fe, New Mexico.  
 1992 *The Chaco Anasazi: Sociopolitical Evolution in the Prehistoric Southwest*.  
 Cambridge University Press, Cambridge.
- Shafer, Harry J.  
 1995 Architecture and Symbolism in Transitional Pueblo Development in Mimbres  
 Valley, Southwest New Mexico. *Journal of Field Archaeology* 22(1):23-47.
- Shanks, M., and Christopher Tilley  
 1987 *Social Theory and Archaeology*. Polity Press, Cambridge.
- Shennan, Stephen  
 2001 *Quantifying Archaeology*. Edinburgh University Press, Edinburgh.
- Shepard, Anna O.  
 1956 *Ceramics for the Archaeologist*. Carnegie Institution of Washington Publications  
 No. 609, Washington, D.C.
- Skibo, James M., and Michael Brian Schiffer  
 1995 The Clay Cooking Pot: An Exploration of Women's Technology. In *Expanding  
 Archaeology*, edited by James Skibo, William Walker, and Axel Nielson, pp. 80-  
 91. University of Utah Press, Salt Lake City.
- Sofaer, Anna  
 1997 The Primary Architecture of the Chacoan Culture: A Cosmological Expression. In  
*Anasazi Architecture and American Design*, edited by Baker H. Morrow and V.B.  
 Price, pp. 88-131. University of New Mexico Press, Albuquerque.
- Sørensen, Marie Louise Stig  
 2000 *Gender Archaeology*. Polity Press, Cambridge.

- Stanislawski, M.B., and B.B. Stanislawski  
1978 Hopi and Hopi-Tewa Ceramic Tradition Networks. In *The Spatial Organization of Culture*, edited by I. Hodder, pp. 61-76. Gerald Duckworth, London.
- Stark, Miriam  
1998 Technological Choices and Social Boundaries in Material Culture Patterning: An Introduction. In *The Archaeology of Social Boundaries*, edited by Miriam T. Stark, pp. 1-11. Smithsonian Institution Press, Washington.  
1999 Social Dimensions of Technological Choice in Kalinga Ceramic Traditions. In *Material Meanings: Critical Approaches to the Interpretation of Material Culture*, edited by Elizabeth Chilton, pp. 24-43. University of Utah Press, Salt Lake City.
- Spier, Leslie  
1917 *An Outline for a Chronology of Zuni Ruins*. Anthropological Papers of the American Museum of Natural History 18(3): 207-331.
- Stark, Miriam, Jeffery Clark, and Mark Elson  
1995 Causes and Consequences of Migration in the 13<sup>th</sup> Century Tonto Basin. *Journal of Anthropological Archaeology*, 14: 212-246.
- Stein, John, and Stephen Lekson  
1992 Anasazi Ritual Landscapes. In *Anasazi Regional Organization and the Chaco System*, edited by David E. Doyel, pp. 87-100. Maxwell Museum of Anthropology; Anthropological Papers No. 5 University of New Mexico, Albuquerque.
- Steponaitis, Vincas P.  
1984 Technological Studies of Prehistoric Pottery from Alabama: Physical Properties and Vessel Function. In *The Many Dimensions of Pottery: Ceramics in Archaeology and Anthropology*, edited by Sander van der Leeuw and Alison Pritchard, pp. 79-122. Universteit van Amsterdam, Amsterdam.
- Stone, Linda  
2000 *Kinship and Gender: An Introduction*. Westview Press, Boulder.
- Stone, Tammy  
2003 Social Identity and Ethnic Interaction in the Western Pueblos of the American Southwest. *Journal of Archaeological Method and Theory* 10(1):31-67.
- Stuart, David E., and Rory P. Gauthier  
1981 *Prehistoric New Mexico: Background for Survey*. University of New Mexico Press, Albuquerque, New Mexico.

Tainter, Joseph A.

- 1984 Perspectives of the Northern Mogollon Boundary Phenomenon. In *Recent research in Mogollon Archaeology*, edited by Steadman Upham, Fred Plog, David G. Batcho, and Barbara E. Kauffman, pp.45-58. The University Museum New Mexico State University Occasional Papers, No. 10. Las Cruces, New Mexico.

Tilley, Christopher

- 1993 Introduction: Interpretation and a Poetics of the Past. In *Interpretive Archaeology*, edited by Christopher Tilley, pp. 1-27. Berg Press, Oxford.

Toll, Wolcott

- 1984 Trends in Ceramic Import and Distribution in Chaco Canyon. In *Recent Research on Chaco Prehistory*, edited by James W. Judge and John D. Schelberg, pp. 115-135. Reports of the Chaco Center Number Eight: Division of Cultural Research, U.S. Department of the Interior National Park Service, Albuquerque, New Mexico.
- 1991 Material Distributions and Exchange in the Chaco System. In *Chaco and Hohokam: Prehistoric Regional Systems in the American Southwest*; edited by Patricia Crown and W. James Judge, pp.77-108. School of American Research Press, Santa Fe.
- 2001 Making and Breaking Pots in the Chaco World. *American Antiquity* 66(1):56-78.

Upham, Steadman, Kent Lightfoot, and Gary Feinman

- 1981 Explaining socially determined ceramic distributions in the prehistoric Plateau Southwest. *American Antiquity* 46:822-833.

van der Leeuw, Sander

- 2002 Giving the Potter a Choice: Conceptual Aspects of Pottery Techniques. In *Technological Choices: Transformation in Material Cultures since the Neolithic*, edited by Pierre Lemonnier, pp. 238-288. Routledge, New York.

Van Dyke, Ruth

- 2003 Great House Architectural Variability across Time and Space. *Kiva* 69(2):117-139.
- 2004 Memory, Meaning, and Masonry: The Late Bonito Chacoan Landscape. *American Antiquity* 69(3):413-431.

Van Keuren, Scott

- 1999 *Ceramic Design Structure and the Organization of Cibola White Ware Production in the Grasshopper Region, Arizona*. Arizona State Museum Archaeological Series No. 191, University of Arizona, Tucson.

Vivian, R. Gwinn

- 1970 An Inquiry into Prehistoric Social Organization in Chaco Canyon, New Mexico. In *Reconstructing Prehistoric Pueblo Societies*, edited by William A. Longacre, pp. 59-83. University of New Mexico Press, Albuquerque.

- 1989 Kluckhohn Reappraised: The Chacoan system as an Egalitarian Enterprise. *Journal of Anthropological Research* 45(1):101-113.
- 1992 Chacoan Water Use and Managerial Decision Making. In *Anasazi Regional Organization and the Chaco System*, edited by David E. Doyel, pp. 45-59. Maxwell Museum of Anthropology Anthropological paper No. 5. University of New Mexico, Albuquerque.
- Vivian, Gordon, and Tom W. Mathews
- 1965 *Kin Kletso: A Pueblo III community in Chaco Canyon, New Mexico*. Southwestern Monuments Association Technical Series, no. 6(1). Globe, Arizona.
- Warburton, Miranda, and Donna K. Graves
- 1992 Navajo Springs, Arizona: Frontier Outlier or Autonomous Great House? *Journal of Field Archaeology* 19(1): 51-69.
- Weissner, Polly
- 1983 Style and Social Information in Kalahari San Projectile Points. *American Antiquity* 48(2):253-276.
- Whalen, Michael E.
- 1984 Settlement System Evolution on the Mogollon-Anasazi Frontier. In *Recent research in Mogollon Archaeology*, edited by Steadman Upham, Fred Plog, David G. Batcho, and Barbara E. Kauffman, pp. 75-89. The University Museum New Mexico State University Occasional Papers, Number 10. Las Cruces, New Mexico.
- Wheat, Joe B.
- 1955 Mogollon Culture Prior to A.D. 1000. *American Anthropologist* 57(2) part 3.
- Wilcox, David
- 1993 The Evolution of the Chacoan Polity. In *The Chimney Rock Archaeological Symposium*, pp. 76-90. On file at Rocky Mountain Forest and Range Experiment Station U.S. Department of Agriculture Fort Collins, Colorado
- Wills, W. H.
- 2000 Political Leadership and the Construction of Chacoan Great Houses, A.D. 1020-1140. In *Alternative Leadership Strategies in the Prehispanic Southwest*, edited by Barbara J. Mills, pp. 19-44. The University of Arizona Press, Tucson.
- Windes, Thomas C.
- 1977 Typology and Technology of Anasazi Ceramics. In *Settlement and Subsistence along the Lower Chaco River: The CGP Survey*, edited by Charles A. Reher, pp. 279-370. University of New Mexico Press, Albuquerque.



Wobst, H. Martin

- 1977 Stylistic Behavior and Information Exchange. In *For the Director, Research Essays in Honor of James B. Griffin*, edited by Charles Cleland, pp. 317-342. Museum of Anthropology Paper 61, University of Michigan, Ann Arbor.

Wright, Rita P.

- 1993 Technological Styles: Transforming a Natural Material into a Cultural Object. In *History from Things: Essays on Material Culture*, edited by Steven Lubar and W. David Kingery, pp. 242-269. Smithsonian Institution Press, Washington, D.C.

Wylie, Alison

- 1997 The Engendering of Archaeology: Refiguring Feminist Science Studies. *OSIRIS* 12: 80-99.

Zedeño, Maria Nieves

- 1994 *Sourcing Prehistoric Ceramics at Chodistaas Pueblo, Arizona: The Circulation of People and Pots in the Grasshopper Region*. Anthropological Papers of the University of Arizona No. 58. University of Arizona Press, Tucson.
- 1995 The Role of Population Movement and Technology Transfer in the Manufacture of Prehistoric Southwestern Ceramics. In *Ceramic Production in the American Southwest*, edited by Barbara J. Mills and Patricia L. Crown, pp. 115-141. The University of Arizona Press, Tucson.
- 1998 Defining Material Correlates for Ceramic Circulation in the Prehistoric Puebloan Southwest. *Journal of Anthropological Archaeology* (54)4: 461-476.

## Appendix A



## Appendix B

Cox Ranch Pueblo (LA 13681) Cibola White Ware Ceramic Counts (1 of 4)

Unit	Kiatuthlanna					Red Mesa					Galup					
	B	J	L	W	U	B	J	L	W	U	B	J	L	W	U	
Great House	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
	3	0	0	0	0	0	0	0	0	0	0	4	20	0	0	0
	4	0	1	0	0	0	0	1	1	0	0	23	69	0	0	0
	5	0	3	0	0	0	0	2	0	0	0	1	13	0	1	0
	6	0	1	0	0	0	0	1	0	0	0	1	5	0	0	0
	7	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	8	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9	3	2	0	0	0	0	2	0	0	0	0	5	0	0	0
	10	0	0	0	0	0	0	1	0	0	0	0	4	0	0	0
	11	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0
	12	0	0	0	0	0	3	0	0	1	0	1	3	0	0	0
	13	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0
	14	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
	15	2	0	0	0	0	2	8	0	0	0	0	0	0	0	0
	16	0	0	0	0	0	3	2	1	1	0	1	4	0	0	0
17	0	0	0	0	0	0	1	0	0	0	0	3	0	0	0	
Well	1	0	0	1	0	0	0	0	0	0	0	11	0	0	0	
Midden 1	1	0	0	0	0	0	0	0	0	0	1	3	0	0	0	
	2	0	0	0	0	1	3	0	0	0	2	13	0	0	0	
	3	0	0	0	0	0	0	0	0	0	2	10	0	0	0	
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Midden 3	1	0	3	0	0	1	1	0	0	0	0	3	0	0	0	
	2	0	0	0	0	0	1	0	0	0	0	2	0	0	0	
	3	0	0	0	0	0	1	0	0	0	2	6	0	1	0	
	4	0	0	0	0	0	3	0	0	0	2	11	0	0	0	
	5	0	0	0	0	0	0	0	0	0	0	4	0	0	0	
Midden 6	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	
	2	0	0	0	0	0	1	0	0	0	1	1	0	0	0	
	3	0	0	0	0	1	0	0	0	0	0	0	0	0	0	
	4	0	0	0	0	1	1	0	0	0	0	0	0	0	0	
	5	0	0	0	0	2	1	0	0	0	0	1	0	0	0	
Midden 7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
	5	0	0	0	0	0	3	0	0	0	0	0	0	0	0	
Midden 8	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
	3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Midden 10	1	0	0	0	0	0	0	0	0	0	0	4	0	0	0	
	2	0	0	0	0	0	0	0	0	0	2	2	0	0	0	
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4	0	0	0	0	0	0	0	0	0	1	10	1	0	0	
	5	0	0	0	0	3	0	0	0	0	0	3	0	0	0	
	6	0	0	0	0	0	0	0	0	0	0	7	0	0	0	
Midden 11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6	0	0	0	0	0	0	1	0	0	0	0	0	0	0	
Midden 12	1	0	0	0	0	0	4	0	0	0	6	51	0	0	0	
	2	0	0	0	0	4	2	0	0	0	8	43	0	0	0	
	3	2	0	0	0	0	3	0	0	0	8	25	0	0	0	
	4	0	0	0	0	0	5	0	0	0	5	36	0	0	0	
	5	0	0	1	0	0	4	0	0	0	6	16	1	0	0	
	6	0	2	0	0	0	3	0	0	0	7	41	0	2	0	
Midden 13	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6	0	0	0	0	4	0	0	0	0	0	0	0	0	0	
	Midden 15	1	0	1	0	0	2	3	2	0	0	2	25	0	0	0
2		0	0	0	0	0	0	0	1	0	0	8	0	0	0	
3		0	0	0	0	1	1	0	0	0	0	0	0	0	0	
4		0	0	0	0	0	0	0	0	0	0	5	0	0	0	
5		0	0	0	0	3	2	0	0	0	2	3	0	0	0	
Roomblock 2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3	1	0	0	0	0	0	0	0	0	1	1	0	0	0	
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5	0	1	0	0	0	0	0	0	0	0	1	0	0	0	
	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Roomblock 7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Roomblock 15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Roomblock 16	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	
Total		8	15	2	0	34	66	4	3	0	91	490	3	4	0	
Total by Type		25					107					588				

Cox Ranch Pueblo (LA 13681) Cibola White Ware Ceramic Counts (2 of 4)

Unit	Escavada						Puerco						Reserve					
	B	J	L	W	U		B	J	L	W	U		B	J	L	W	U	
Great House	1	0	0	0	0	0	2	22	1	0	0	0	1	13	0	0	1	0
	2	0	0	0	0	0	2	13	2	0	0	0	1	7	0	0	0	0
	3	0	0	0	0	0	3	27	1	1	0	0	1	76	0	0	0	0
	4	2	0	0	0	0	43	143	3	1	0	0	50	138	6	2	0	0
	5	2	4	0	0	0	28	118	2	5	0	0	28	123	1	1	0	0
	6	0	1	0	0	0	39	110	10	4	0	0	30	207	3	2	0	0
	7	0	0	0	0	0	4	30	2	2	0	0	10	73	9	1	1	0
	8	0	0	0	0	0	6	27	2	0	0	0	6	51	1	1	1	0
	8	0	0	0	0	0	14	30	2	0	0	0	14	26	0	1	1	0
	9	0	2	0	0	0	17	107	5	4	0	0	7	97	0	3	0	0
	10	0	1	0	0	0	5	48	0	1	0	0	7	55	1	0	0	0
	11	0	0	0	0	0	2	6	0	0	0	0	4	37	0	0	0	0
	12	3	0	0	0	0	12	58	10	0	1	0	15	129	1	0	0	1
	13	1	1	0	0	0	3	43	3	0	0	0	9	182	1	1	0	0
	14	0	0	0	0	0	2	3	0	0	0	0	0	14	0	0	0	0
	15	0	0	0	0	0	38	100	0	3	0	0	19	218	3	2	0	0
	16	1	1	2	0	0	48	161	23	3	0	0	27	237	3	3	0	0
17	0	0	0	0	0	16	44	5	1	0	0	24	76	0	1	0	0	
Well	1	0	0	0	0	0	3	29	1	0	0	4	52	2	2	0	0	
Midden 1	1	0	0	0	0	0	2	10	1	0	0	0	0	6	0	0	0	0
	2	0	0	0	0	0	16	49	0	1	0	0	5	51	0	0	0	0
	3	0	0	0	0	0	10	22	1	0	0	0	3	15	0	0	0	0
	4	0	0	0	0	0	0	17	1	0	0	0	1	11	0	0	0	0
	5	0	0	0	0	0	0	13	2	0	0	0	0	8	0	0	0	0
Midden 3	1	0	0	0	0	0	2	11	0	0	0	0	0	4	0	0	0	0
	2	0	0	0	0	0	0	18	7	0	2	2	7	0	0	0	0	
	3	0	0	0	0	0	9	22	1	1	2	0	16	0	0	0	0	
	4	0	0	0	0	0	12	40	3	0	0	0	5	32	1	0	0	
	5	0	0	0	0	0	3	18	1	0	0	0	3	19	1	0	0	
Midden 6	1	0	0	0	0	0	7	4	6	0	0	0	2	29	1	0	0	
	2	0	1	0	0	0	8	19	1	0	0	0	2	27	0	1	0	
	3	0	0	0	0	0	4	22	3	0	0	0	4	38	2	1	0	
	4	0	0	0	0	0	8	19	1	0	0	0	1	16	0	0	0	
	5	0	0	0	0	0	13	22	4	0	0	0	6	30	0	0	0	
Midden 7	1	0	0	0	0	0	1	2	0	0	0	0	0	3	0	0	0	
	2	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	
	3	1	2	0	0	0	6	38	1	1	0	0	9	53	2	3	0	
	4	0	0	0	0	0	1	0	0	0	0	0	1	8	1	0	0	
	5	0	0	0	0	0	4	9	0	1	0	0	2	12	0	0	0	
Midden 8	1	0	0	0	0	0	1	1	0	0	0	0	1	7	0	0	0	
	2	0	0	0	0	0	0	0	0	0	0	0	0	28	0	0	0	
	3	0	0	0	0	0	0	8	2	1	0	0	1	10	0	0	0	
	4	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	
	5	0	0	0	0	0	4	0	0	0	0	0	0	1	0	0	0	
Midden 10	1	0	0	0	0	0	0	7	0	0	0	0	0	3	0	0	0	
	2	0	0	0	0	0	2	3	1	0	0	0	1	8	0	0	0	
	3	0	0	0	0	0	1	6	0	0	0	0	0	4	0	0	0	
	4	0	0	0	0	0	6	19	0	0	0	0	0	5	0	0	0	
	5	0	0	0	0	0	3	13	0	0	0	0	0	3	0	0	0	
	6	0	0	0	0	0	5	11	1	0	0	0	0	9	0	0	0	
Midden 11	1	0	1	0	0	0	8	40	0	0	0	0	2	31	0	0	0	
	2	0	0	0	0	0	4	10	0	0	0	0	8	20	0	0	0	
	3	0	0	0	0	0	1	11	2	0	0	0	5	20	0	0	0	
	4	0	0	0	0	0	0	19	0	0	0	0	1	23	2	0	0	
	5	0	0	0	0	0	2	7	1	0	0	0	11	0	0	1	0	
	6	0	0	0	0	0	2	9	0	0	0	0	3	23	0	0	0	
Midden 12	1	0	0	0	0	0	26	88	4	0	0	0	13	58	1	0	0	
	2	0	4	0	1	0	30	99	9	3	0	0	12	50	0	1	0	
	3	0	1	1	0	0	15	41	1	0	0	0	8	31	1	0	0	
	4	1	1	0	0	0	28	78	4	0	0	0	6	51	0	0	0	
	5	0	0	0	0	0	14	81	0	0	0	0	6	28	0	0	0	
	6	1	1	0	0	0	40	145	10	2	0	0	10	73	1	1	0	
Midden 13	1	0	0	0	0	0	5	17	0	1	0	0	1	7	0	0	0	
	3	0	1	0	0	0	3	15	1	0	0	0	4	9	0	0	0	
	4	0	0	0	0	0	3	19	2	0	0	0	2	20	1	0	0	
	5	0	0	0	0	0	1	2	0	0	0	0	0	7	0	0	0	
	6	0	1	0	0	0	0	7	0	0	0	0	5	5	0	0	0	
	6	1	1	0	0	0	32	123	10	0	0	0	13	103	2	1	0	
Midden 15	1	0	0	0	0	0	7	46	1	0	0	0	4	34	0	0	0	
	3	0	0	0	0	0	3	17	2	0	0	0	0	5	1	0	0	
	4	0	0	0	0	0	7	35	6	0	0	0	2	31	0	0	0	
	5	0	0	0	0	0	6	37	0	0	0	0	2	14	0	0	0	
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Roomblock 2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	
	3	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	
	4	0	2	0	0	0	5	35	0	0	0	0	3	27	1	0	0	
	5	1	0	0	0	0	1	13	0	0	0	0	1	10	0	0	0	
	6	0	0	0	0	0	1	16	0	0	0	0	4	72	0	0	0	
	7	0	58	0	0	0	2	38	2	0	0	0	0	36	0	1	0	
	8	0	0	0	0	0	1	32	0	0	0	0	1	226	0	0	0	
	9	0	0	0	0	0	0	1	0	0	0	0	2	3	0	0	0	
	10	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	1	0
Roomblock 7	1	0	0	0	0	0	18	41	3	0	0	0	9	99	0	0	0	
Roomblock 15	1	0	2	0	0	0	0	1	0	0	0	0	0	3	0	0	0	
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3	0	0	0	0	0	0	2	0	0	0	0	0	7	0	0	0	
Roomblock 16	1	0	0	0	0	0	9	0	0	0	0	1	9	1	0	0		
Total		14	86	3	1	0	681	2681	167	36	5	445	3417	50	32	1	0	
Total by Type				104					3570					3945				

Cox Ranch Pueblo (LA 13681) Cibola White Ware Ceramic Counts (3 of 4)

	Unit	Unid Plain						Unid Painted					
		B	J	L	W	U	B	J	L	W	U		
Great House	1	0	12	0	0	0	3	1	11	0	0	0	1
	2	7	9	1	0	0	0	0	0	0	0	0	0
	3	2	28	0	0	0	2	0	8	0	0	0	0
	4	11	133	2	2	8	8	12	29	4	1	4	4
	5	15	153	1	0	0	0	22	92	1	0	0	0
	6	15	175	2	1	4	4	26	68	11	2	0	0
	7	0	57	1	0	3	3	5	28	1	0	2	2
	8	6	40	0	0	1	1	7	40	3	0	0	0
	8	5	38	0	1	1	1	7	33	0	0	0	0
	9	20	106	3	0	13	13	14	58	3	0	0	0
	10	1	50	0	0	10	10	2	49	2	0	2	2
	11	0	17	0	0	2	2	4	13	2	0	0	0
	12	4	103	1	0	0	0	14	88	4	1	0	0
	13	0	84	1	1	0	0	3	42	0	1	0	0
	14	0	11	0	0	0	0	3	8	0	0	0	0
	15	1	137	2	2	0	0	28	88	7	1	0	0
	16	5	124	4	3	0	0	30	106	7	3	0	0
17	2	74	1	0	0	0	8	52	2	0	0	0	
Well	1	0	23	3	0	3	1	11	2	0	0	1	
Midden 1	1	1	5	0	0	4	1	4	0	0	0	0	
	2	8	50	3	1	9	1	24	1	0	0	0	
	3	0	19	1	0	1	1	4	0	0	0	0	
	4	0	16	0	0	0	1	20	3	0	0	0	
	5	0	32	0	0	1	1	5	9	1	0	0	
Midden 3	1	1	20	0	0	1	1	5	0	0	0	0	
	2	2	14	0	1	0	0	4	0	0	0	0	
	3	0	27	0	0	1	1	15	0	0	0	0	
	4	1	27	2	0	9	1	7	1	1	0	0	
	5	0	36	1	0	1	2	2	4	0	0	0	
Midden 6	1	1	35	3	0	0	3	8	0	0	0	0	
	2	2	29	1	0	0	4	19	0	0	0	0	
	3	1	39	0	1	0	12	18	33	1	0	0	
	4	0	24	0	0	0	2	9	0	0	0	0	
	5	7	24	0	0	0	2	16	0	0	0	0	
Midden 7	1	0	8	0	0	1	4	6	0	0	0	0	
	2	0	19	0	0	0	0	7	0	0	0	0	
	3	4	45	2	1	1	5	24	2	0	0	0	
	4	0	13	1	0	0	1	13	0	0	0	0	
	5	7	12	2	0	0	2	11	0	1	0	0	
Midden 8	1	1	10	0	0	0	1	14	0	0	0	0	
	2	0	38	0	0	0	0	25	0	0	0	0	
	3	0	23	0	0	0	8	20	5	0	0	0	
	4	0	17	0	0	0	0	8	0	0	0	0	
	5	2	7	3	0	0	3	12	0	0	0	0	
Midden 10	1	0	14	0	0	0	1	1	0	0	0	0	
	2	0	16	1	0	0	1	5	0	0	0	0	
	3	0	9	0	0	1	1	2	0	0	0	0	
	4	1	24	0	0	9	0	12	6	0	0	0	
	5	0	13	0	0	0	0	3	0	0	0	0	
	6	0	12	2	0	0	0	4	0	0	0	0	
Midden 11	1	1	43	0	0	0	2	21	1	0	0	0	
	2	0	22	2	1	0	5	12	0	0	0	0	
	3	0	22	0	0	0	2	9	0	0	0	0	
	4	2	50	3	0	0	7	38	1	2	0	0	
	5	1	17	0	0	0	0	0	0	0	0	0	
	6	2	38	0	0	0	2	22	0	1	0	0	
Midden 12	1	16	117	1	2	5	4	25	0	0	1	1	
	2	1	78	4	0	28	10	27	0	0	0	0	
	3	3	62	0	0	8	11	17	0	0	0	0	
	4	4	66	0	0	22	5	30	0	0	0	0	
	5	5	54	2	0	7	5	10	0	0	0	0	
	6	5	94	7	1	45	7	46	3	2	1	1	
Midden 13	1	0	23	0	0	1	1	18	0	0	0	0	
	3	0	19	0	0	0	2	16	0	0	0	0	
	4	5	34	0	0	0	2	19	0	0	0	0	
	5	9	5	0	0	0	0	11	1	0	0	0	
	6	0	37	0	0	0	6	22	0	0	0	0	
	Midden 15	1	8	58	4	1	24	12	38	10	0	1	1
2		1	38	0	0	16	2	12	0	0	0	0	
3		1	11	1	0	3	5	4	0	0	0	0	
4		3	14	4	0	12	2	8	1	0	0	0	
5		3	16	0	1	14	3	7	0	0	0	0	
Roomblock 2	1	0	1	0	0	0	0	0	0	0	0	0	
	2	0	0	0	0	0	0	0	0	0	0	0	
	3	0	3	1	0	0	0	2	0	0	0	0	
	4	6	45	2	0	0	5	41	4	0	0	0	
	5	2	19	0	0	2	1	6	0	0	0	0	
	6	0	33	0	0	0	7	8	0	0	0	0	
	7	0	36	1	0	0	0	9	1	0	0	0	
	8	0	47	0	0	0	0	72	0	0	0	0	
	9	0	6	1	0	0	0	5	0	0	0	0	
	10	0	2	0	0	0	0	0	0	0	0	0	
Roomblock 7	1	0	89	0	0	0	9	62	9	1	0	0	
Roomblock 15	1	0	1	0	0	0	0	0	0	0	0	0	
	2	0	0	0	0	0	0	1	0	0	0	0	
	3	1	4	0	0	0	1	0	0	0	0	0	
Roomblock 16	1	0	4	0	0	0	0	1	0	0	0	0	
Total		212	3259	77	20	276	369	1774	136	18	13	13	
Total by Type				3844					2310				

Cox Ranch Pueblo (LA 13681) Cibola White Ware Ceramic Counts (4 of 4)

Unit	Unid Hatched						Other						<1/2"	Total
	B	J	L	W	U	B	J	L	W	U				
Great House	1	1	6	0	0	1	0	0	0	0	0	51	129	
	2	0	2	0	0	0	0	0	0	0	0	32	78	
	3	0	1	0	0	0	0	0	0	0	0	47	221	
	4	0	0	0	0	0	0	0	0	0	0	278	967	
	5	15	47	0	0	1	0	0	0	0	0	314	993	
	6	11	71	1	0	1	0	0	0	0	0	362	1164	
	7	2	21	0	0	0	2	0	0	0	0	83	337	
	8	1	24	0	0	0	0	1	0	0	0	184	404	
	8	2	12	0	0	0	0	0	0	0	0	629	815	
	9	4	51	0	2	0	0	0	0	0	0	255	783	
	10	2	27	0	0	0	0	0	0	0	0	110	378	
	11	2	15	0	0	1	0	0	0	0	0	84	193	
	12	7	47	0	0	0	0	0	0	0	0	218	725	
	13	1	33	0	0	0	0	0	0	0	0	125	538	
	14	0	5	0	0	0	0	0	0	0	0	51	100	
	15	17	92	0	1	0	0	0	0	0	0	418	1189	
	16	12	59	4	2	0	0	0	0	0	0	213	1093	
17	9	44	1	0	0	0	0	0	0	0	223	587		
Well	1	0	2	0	0	0	4	0	1	0	3	122	281	
Midden 1	1	0	0	0	0	0	0	0	0	0	0	27	65	
	2	0	7	0	0	0	0	0	0	0	0	116	361	
	3	0	0	0	0	0	0	0	0	0	0	67	156	
	4	0	0	0	0	0	0	0	0	0	0	121	191	
	5	0	7	0	0	0	0	0	0	0	0	97	175	
Midden 3	1	0	0	0	0	0	0	0	0	0	0	62	115	
	2	1	1	0	1	0	0	0	0	0	0	46	109	
	3	1	4	1	0	0	0	0	0	0	0	139	250	
	4	0	9	0	0	0	0	0	0	0	0	152	319	
	5	1	7	0	0	0	0	0	0	0	0	110	213	
Midden 6	1	1	10	0	0	0	0	0	0	0	0	164	275	
	2	2	21	0	0	0	0	0	0	0	0	172	312	
	3	3	17	0	0	0	0	0	0	0	0	299	499	
	4	1	14	0	1	0	0	0	0	0	0	95	193	
	5	1	21	0	1	0	0	0	0	0	0	140	291	
Midden 7	1	0	8	0	0	0	0	0	0	0	0	40	73	
	2	0	5	0	0	0	0	0	0	0	0	77	111	
	3	5	14	0	0	0	0	0	0	0	0	147	367	
	4	2	9	0	0	0	0	0	0	0	0	114	165	
	5	4	10	0	0	0	0	0	0	0	0	66	146	
Midden 8	1	0	11	0	0	0	0	0	0	0	0	110	158	
	2	0	10	0	0	0	0	0	0	0	0	820	922	
	3	4	13	0	0	0	0	0	0	0	0	191	288	
	4	0	8	0	0	0	0	0	0	0	0	132	171	
	5	0	2	0	0	0	0	0	0	0	0	88	122	
Midden 10	1	0	2	0	0	0	0	0	0	0	0	81	113	
	2	0	2	0	0	0	0	0	0	0	0	57	101	
	3	0	0	0	0	0	0	0	0	0	0	78	102	
	4	0	0	0	0	0	0	0	0	0	0	239	333	
	5	0	3	0	0	0	0	0	0	0	0	73	117	
	6	0	0	0	0	0	0	0	0	0	0	55	106	
Midden 11	1	1	19	0	1	0	0	0	0	0	0	233	404	
	2	0	13	0	0	0	0	0	0	0	0	106	204	
	3	0	7	0	0	0	0	0	0	0	0	49	128	
	4	2	20	0	0	0	0	0	0	0	0	263	433	
	5	0	2	0	0	0	0	0	0	0	0	134	176	
	6	2	20	0	0	0	0	0	0	0	0	140	265	
Midden 12	1	0	0	0	0	0	0	0	0	0	0	351	773	
	2	3	10	0	0	0	0	0	0	0	0	382	809	
	3	0	1	0	0	0	0	0	0	0	0	185	424	
	4	1	1	0	0	0	0	0	0	0	0	315	659	
	5	5	2	0	0	0	0	0	0	0	0	179	426	
	6	2	16	0	0	0	0	0	0	0	0	390	958	
Midden 13	1	0	15	0	0	0	0	0	0	0	0	107	196	
	3	2	4	0	1	0	0	0	0	0	0	121	199	
	4	0	8	0	0	0	0	0	0	0	0	231	346	
	5	0	10	0	0	0	0	0	0	0	0	118	164	
	6	4	7	0	0	0	0	0	0	0	0	114	212	
	Midden 15	1	1	27	0	0	0	0	0	0	0	0	330	835
2		0	6	0	0	0	0	0	0	0	0	167	343	
3		1	5	0	0	0	0	0	0	0	0	108	169	
4		0	8	0	0	0	0	0	0	0	0	210	348	
5		2	8	0	0	0	0	0	0	0	0	215	338	
Roomblock 2	1	0	0	0	0	0	0	0	0	0	0	2	3	
	2	0	0	0	0	0	0	0	0	0	0	1	2	
	3	0	0	0	0	0	0	0	0	0	0	15	26	
	4	1	24	0	1	0	0	0	0	0	0	243	445	
	5	0	8	0	0	0	0	0	0	0	0	52	118	
	6	1	18	0	0	0	0	0	0	0	0	119	279	
	7	0	11	0	0	0	0	0	0	0	0	89	284	
	8	1	43	0	0	0	0	0	0	0	0	278	701	
	9	0	2	0	0	0	0	0	0	0	0	15	35	
	10	0	0	0	0	0	0	0	0	0	0	9	15	
Roomblock 7	1	6	29	0	1	0	0	0	0	0	0	404	780	
Roomblock 15	1	0	1	0	0	0	0	0	0	0	0	4	12	
	2	0	0	0	0	0	0	0	0	0	0	0	1	
	3	0	0	0	0	0	0	0	0	0	0	4	19	
Roomblock 16	1	0	1	0	0	0	0	0	0	0	0	6	34	
Total		147	1120	7	12	4	6	1	1	0	3	13663	29457	
Total by Type				1290					11			43120		



Cox Ranch Pueblo (LA 13681) White Mountain Red Ware Ceramic Counts (1 of 2)

Unit	Puerco					Wingate					Wingate Polychrome					Unid Plain					
	B	J	L	W	U	B	J	L	W	U	B	J	L	W	U	B	J	L	W	U	
Great House	1	5	0	0	0	0	4	0	0	0	0	0	0	0	0	1	3	0	0	0	0
	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0
	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0
	4	37	2	0	1	0	21	0	0	1	0	0	0	0	0	31	2	0	0	0	0
	5	14	1	0	0	0	11	0	0	1	0	0	0	0	0	16	0	0	0	0	0
	6	12	0	0	0	0	54	0	0	2	0	0	0	0	0	11	0	0	0	0	1
	7	2	0	0	0	0	28	0	0	0	0	0	0	0	0	6	3	0	0	0	0
	8	5	0	0	0	0	12	1	0	1	0	6	0	0	0	3	0	0	0	0	0
	8	2	0	0	0	0	12	0	0	0	0	0	0	0	0	7	0	0	0	0	1
	9	15	8	0	0	0	30	4	0	0	0	0	0	0	0	13	0	0	0	0	0
	10	1	1	0	0	0	10	1	0	0	0	0	0	0	0	2	1	0	0	0	0
	11	1	0	0	0	0	2	0	0	0	0	1	0	0	0	4	0	0	0	0	0
	12	24	1	0	1	0	8	0	0	0	0	0	0	0	0	7	0	0	0	0	0
	13	5	0	0	0	0	11	0	0	0	0	3	0	0	0	5	0	0	0	0	0
	14	1	0	0	0	0	2	0	0	0	0	0	0	0	0	2	2	0	0	0	0
	15	25	2	0	2	0	28	0	0	1	0	0	0	0	0	14	0	0	0	0	0
	16	11	3	0	2	2	36	0	0	1	0	0	0	0	0	10	0	0	1	0	0
17	39	0	0	0	0	23	1	0	4	0	0	0	0	0	15	2	0	0	0	0	
Well	1	6	0	0	0	23	5	0	0	0	0	0	0	0	8	1	0	0	0	1	
Midden 1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	
	2	5	1	0	0	5	1	0	1	0	4	0	0	0	0	1	0	0	0	0	
	3	8	0	0	1	0	3	0	0	0	0	0	0	0	4	0	0	0	0	0	
	4	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	
Midden 3	1	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	2	
	2	2	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	
	3	2	0	0	0	0	7	0	0	0	0	0	0	0	3	0	0	0	0	2	
	4	7	0	0	0	0	10	2	0	0	0	1	0	0	0	7	0	0	1	0	
	5	3	0	0	0	0	6	1	0	0	0	0	0	0	0	6	0	0	0	0	
Midden 6	1	2	0	0	0	12	0	0	0	0	3	0	0	0	0	9	0	0	0	0	
	2	1	0	0	0	22	0	0	0	0	0	0	0	0	8	0	0	0	0	0	
	3	6	0	0	0	20	2	0	0	0	1	0	0	0	4	3	0	0	0	0	
	4	2	0	0	0	6	2	0	1	0	2	0	0	0	1	1	0	0	0	0	
	5	3	2	0	0	22	0	0	0	0	3	0	0	0	0	4	0	0	0	0	
Midden 7	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	
	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3	11	0	0	0	17	1	0	1	0	0	0	0	0	3	1	0	0	0	0	
	4	0	0	0	0	1	0	0	0	0	0	0	0	0	5	0	0	0	0	0	
	5	3	0	0	0	0	4	0	0	0	0	0	0	0	1	0	0	0	0	0	
Midden 8	1	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	
	2	0	0	0	0	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	
	3	3	0	0	0	8	0	0	0	0	0	0	0	0	4	0	0	0	0	0	
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	
	5	0	0	0	0	3	1	0	0	0	0	0	0	0	2	0	0	0	0	2	
Midden 10	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	
	2	5	0	0	0	5	0	0	0	0	0	0	0	0	3	0	0	0	0	0	
	3	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	
	4	2	0	0	0	6	2	0	0	0	0	0	0	0	1	0	0	0	0	0	
	5	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	
	6	3	0	0	0	2	0	0	0	0	1	0	0	0	0	1	0	0	0	0	
Midden 11	1	7	0	0	0	10	1	0	0	0	3	0	0	0	0	4	0	0	0	0	
	2	5	0	0	0	4	0	0	0	0	0	0	0	0	1	0	0	0	0	0	
	3	4	0	0	0	5	0	0	0	0	0	0	0	0	6	0	0	0	0	0	
	4	0	0	0	0	6	1	0	0	0	0	0	0	0	4	0	0	0	3	0	
	5	4	0	0	0	3	0	0	0	0	0	0	0	0	3	0	0	0	0	0	
	6	3	0	0	1	0	0	1	0	0	0	0	0	0	6	0	0	0	0	0	
Midden 12	1	12	1	0	0	11	0	0	0	0	0	0	0	0	11	2	0	0	1	1	
	2	9	2	0	0	3	1	0	0	0	0	0	0	0	2	4	0	0	0	0	
	3	4	0	0	0	4	0	0	0	0	0	0	0	0	5	0	0	0	0	1	
	4	13	0	0	0	7	0	0	0	0	0	0	0	0	9	1	0	1	0	0	
	5	3	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	
	6	19	2	0	0	11	0	0	0	0	0	0	0	0	10	0	0	0	0	0	
Midden 13	1	4	0	0	0	5	0	0	0	0	0	0	0	0	5	0	0	0	0	0	
	3	1	0	0	0	5	0	0	0	0	0	0	0	0	5	0	0	0	0	0	
	4	4	0	0	1	0	7	0	0	1	0	0	0	0	6	0	0	0	0	0	
	5	0	0	0	0	2	1	0	0	0	0	0	0	0	3	0	0	0	0	0	
	6	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	
	Midden 15	1	17	0	0	1	0	16	2	0	0	0	2	0	0	0	10	1	0	0	0
2		6	3	0	0	0	17	0	0	0	0	0	0	0	12	2	0	0	0	0	
3		0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	
4		7	0	0	0	0	7	0	0	0	0	0	0	0	6	1	0	0	0	0	
5		8	0	0	0	0	2	0	0	0	0	0	0	0	3	1	0	0	0	0	
Roomblock 2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	
	4	4	0	0	0	0	5	1	0	1	0	1	0	0	0	0	0	0	0	5	
	5	3	0	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0	0	0	
	6	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	
	7	2	1	0	1	0	12	0	0	0	0	0	0	0	5	1	0	0	0	0	
	8	0	0	0	0	0	7	1	0	0	0	0	0	0	7	0	0	0	0	0	
	9	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	
	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Roomblock 7	1	22	2	0	1	0	32	4	0	2	0	0	0	0	12	0	0	0	0	0	
Roomblock 15	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	
	3	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	
Roomblock 16	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Total</b>		<b>447</b>	<b>32</b>	<b>0</b>	<b>12</b>	<b>2</b>	<b>674</b>	<b>37</b>	<b>0</b>	<b>18</b>	<b>1</b>	<b>44</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>394</b>	<b>38</b>	<b>0</b>	<b>5</b>	<b>20</b>	
<b>Total by Type</b>																					

Cox Ranch Pueblo (LA 13681) White Mountain Red Ware Ceramic Counts (2 of 2)

	Unit	Unid Painted					Unid Hatched					Other					Total	<1/2"
		B	J	L	W	U	B	J	L	W	U	B	J	L	W	U		
Great House	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	4
	2	1	0	0	0	0	0	0	0	0	0	0	3	0	0	0	12	10
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	3
	4	4	2	0	0	0	1	0	0	0	0	0	0	0	0	0	102	39
	5	3	0	0	0	0	0	0	0	0	0	1	0	0	0	0	47	28
	6	12	0	0	1	0	1	0	0	0	0	0	0	0	0	0	94	50
	7	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51	13
	8	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	36	48
	8	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	29	57
	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70	25
	10	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	13
	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	20
	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41	22
	13	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	29	4
	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	3
	15	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	80	63
	16	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68	21
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84	28	
Well	1	7	0	0	0	0	4	0	0	0	0	0	0	0	0	55	44	
Midden 1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5	2	
	2	1	1	0	0	0	1	0	0	0	0	0	0	0	0	21	15	
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	9	
	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	7	18	
	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	7	9	
Midden 3	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	7	8	
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	1	
	3	0	1	0	0	0	0	2	0	0	0	0	0	0	0	17	10	
	4	0	1	0	1	0	3	0	0	0	0	0	0	0	0	33	30	
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	19		
Midden 6	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	30	31	
	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	34	28	
	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	39	63	
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	10	
	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	38	32	
Midden 7	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	11	
	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	7	
	3	2	0	0	0	0	0	2	0	0	0	0	0	0	0	41	41	
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	17	
	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	9	9	
Midden 8	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	8	11	
	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	7	17	
	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	16	32	
	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	5	19	
	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	11	13	
Midden 10	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5	6	
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	8	
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	14	
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	28	
	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	15	
	6	2	0	0	0	0	0	0	0	0	0	0	1	0	0	10	17	
Midden 11	1	9	3	0	0	0	0	0	0	0	0	0	0	0	0	37	34	
	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	11	10	
	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	18	6	
	4	9	0	0	0	0	0	0	0	0	0	0	0	0	0	23	42	
	5	3	12	0	0	0	0	5	0	0	0	0	0	0	0	30	22	
	6	4	1	0	0	0	0	0	0	0	0	0	0	0	0	16	37	
Midden 12	1	6	4	0	0	0	0	0	0	0	0	0	0	0	0	49	31	
	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	23	18	
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	6	
	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	32	27	
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	4	
	6	1	2	0	0	1	0	0	0	0	0	0	0	0	0	46	26	
Midden 13	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	2	
	3	6	0	0	0	0	0	0	0	0	0	0	0	0	0	17	19	
	4	0	2	0	0	0	0	0	0	0	0	0	0	0	0	21	18	
	5	3	1	0	0	0	0	0	0	0	0	0	0	0	0	10	19	
	6	1	0	0	0	0	1	0	0	0	0	0	0	0	0	6	1	
	Midden 15	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	51	38
2		1	1	0	0	0	0	0	0	0	0	0	0	0	0	42	22	
3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	10	
4		0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	10	
5		1	1	0	0	0	0	0	0	0	0	0	0	0	0	16	27	
Roomblock 2		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
		2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
		4	7	0	0	0	0	0	0	0	0	0	0	0	0	0	24	2
		5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	1
	6	2	1	0	0	0	0	0	0	0	0	0	0	0	0	6	3	
	7	2	0	0	0	0	1	0	0	0	0	0	0	0	0	25	6	
	8	3	0	0	0	0	0	0	0	0	0	0	0	0	0	18	19	
	9	3	0	0	0	0	0	0	0	0	0	0	0	0	0	6	6	
	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
Roomblock 7	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	78	81	
Roomblock 15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	
Roomblock 16	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	
Total		198	42	0	3	1	12	9	0	0	5	4	0	0	0	1998	1601	
Total by Type			244					21				9				3599		

**Cox Ranch Pueblo (LA 13681) Cibola Gray Ware Ceramic Counts (1 of 3)**

Area	Unit	Lino Gray					Plain Gray					Plain Corrugated						
		B	J	L	W	U	B	J	L	W	U	B	J	L	W	U		
Great House	1	0	0	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	4	0	0	0	0	0	13	0	0	0	0
	5	0	1	0	0	0	0	14	0	0	0	0	0	5	0	0	0	0
	6	0	0	0	0	0	0	17	0	0	0	0	0	1	0	0	0	1
	7	0	0	0	0	0	0	7	0	0	0	0	1	3	0	0	0	0
	8	0	1	0	0	0	0	5	0	0	0	0	0	2	0	0	0	0
	8	0	0	0	0	0	0	1	0	0	0	0	0	4	0	0	0	0
	9	0	0	0	0	0	0	11	0	0	0	0	0	4	0	0	0	0
	10	0	0	0	0	0	0	3	0	0	0	0	0	1	0	0	0	0
	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12	0	0	0	0	0	0	29	0	0	0	0	0	11	0	0	0	0
	13	0	0	0	0	0	0	3	0	0	0	0	0	6	0	0	0	0
	14	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
	15	0	0	0	0	0	0	28	0	0	0	0	0	6	0	0	0	0
	16	0	0	0	0	0	0	27	0	0	0	0	0	7	0	0	0	0
17	0	0	0	0	0	0	18	0	0	0	0	0	3	0	0	0	0	
Depression	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
Midden 1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
	3	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Midden 3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3	0	0	0	0	0	0	2	0	0	0	0	4	0	0	0	0	
	4	0	0	0	0	0	0	4	0	0	0	0	5	0	0	0	0	
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Midden 6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3	0	0	0	0	0	0	3	0	0	0	0	1	0	0	0	0	
	4	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Midden 7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
Midden 8	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	
	4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
	5	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	
Midden 10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Midden 11	1	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	
	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	
	3	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Midden 12	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	
	2	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	
	3	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	
	4	0	0	0	0	0	0	10	0	0	0	0	8	0	0	0	0	
	5	0	2	0	0	0	0	6	0	0	0	0	6	0	0	0	0	
	6	0	0	0	0	0	0	24	0	0	0	0	6	0	0	0	0	
Midden 13	1	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	
	Midden 15	1	0	0	0	0	0	0	7	0	0	0	0	17	0	0	0	0
2		0	0	0	0	0	0	4	0	0	0	0	2	0	0	0	0	
3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4		0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	
5		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Roomblock 2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	
	5	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	
	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7	0	0	0	0	0	0	1	0	0	0	0	5	0	0	0	0	
	8	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
Roomblock 7	1	0	0	0	0	0	0	13	0	0	0	0	3	0	0	0	0	
Roomblock 15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Roomblock 16	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
Total by Form		0	4	0	0	0	0	281	0	0	0	0	1	168	0	0	1	
Total by Type			4					281					170					

**Cox Ranch Pueblo (LA 13681) Cibola Gray Ware Ceramic Counts (2 of 3)**

Area	Unit	Clapboard Corrugated					Neckbanded Gray					Indented Corrugated				
		B	J	L	W	U	B	J	L	W	U	B	J	L	W	U
Great House	1	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0
	2	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0
	3	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0
	4	0	1	0	0	0	0	0	0	0	0	0	203	0	0	0
	5	0	0	0	0	0	0	0	0	0	0	0	176	0	0	0
	6	0	1	0	0	0	0	0	0	0	0	0	210	0	0	4
	7	0	0	0	0	0	0	0	0	0	0	2	80	0	1	0
	8	0	0	0	0	0	0	0	0	0	0	0	41	0	0	0
	8	0	0	0	0	0	0	0	0	0	0	0	45	0	0	0
	9	0	0	0	0	0	0	0	0	0	0	0	145	0	0	0
	10	0	0	0	0	0	0	0	0	0	0	0	70	0	0	0
	11	0	0	0	0	0	0	0	0	0	0	0	27	0	0	0
	12	0	1	0	0	0	0	0	0	0	0	0	403	0	3	0
	13	0	1	0	0	0	0	0	0	0	0	0	41	0	0	0
	14	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0
	15	0	0	0	0	0	0	0	0	0	0	0	237	0	0	0
	16	0	1	0	0	0	0	0	0	0	0	0	169	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	218	0	0	0	
Depression	1	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0
Midden 1	1	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0
	2	0	0	0	0	0	0	0	0	0	0	0	34	0	0	0
	3	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0
	4	0	0	0	0	0	0	0	0	0	0	0	25	0	0	8
	5	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0
Midden 3	1	0	1	0	0	0	0	0	0	0	0	0	3	0	0	0
	2	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0
	3	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0
	4	0	0	0	0	0	0	0	0	0	0	0	30	0	0	0
	5	0	0	0	0	0	0	0	0	0	0	0	16	0	0	0
Midden 6	1	0	0	0	0	0	0	0	0	0	0	0	27	0	0	0
	2	0	0	0	0	0	0	0	0	0	0	0	23	0	0	0
	3	0	0	0	0	0	0	0	0	0	0	0	31	0	0	0
	4	0	0	0	0	0	0	0	0	0	0	0	23	0	0	0
	5	0	0	0	0	0	0	0	0	0	0	0	36	0	0	0
Midden 7	1	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0
	2	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0
	3	0	1	0	0	0	0	0	0	0	0	0	53	0	0	0
	4	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0
	5	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0
Midden 8	1	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0
	2	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0
	3	0	0	0	0	0	0	0	0	0	0	0	33	0	0	0
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0
Midden 10	1	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0
	2	0	0	0	0	0	0	0	0	0	0	0	13	0	0	0
	3	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0
	4	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0
	5	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0
	6	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0
Midden 11	1	0	0	0	0	0	0	0	0	0	0	0	50	0	0	0
	2	0	0	0	0	0	0	0	0	0	0	0	35	0	0	0
	3	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0
	4	0	0	0	0	0	0	0	0	0	0	0	41	0	0	0
	5	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0
	6	0	0	0	0	0	0	0	0	0	0	0	22	0	0	0
Midden 12	1	0	0	0	0	0	0	0	0	0	0	0	124	0	0	0
	2	0	0	0	0	0	0	0	0	0	0	0	61	0	0	0
	3	0	0	0	0	0	0	0	0	0	0	0	61	0	0	0
	4	0	0	0	0	0	0	0	0	0	0	0	69	0	0	0
	5	0	0	0	0	0	0	0	0	0	0	0	69	0	0	0
	6	0	0	0	0	0	0	0	0	0	0	0	104	0	0	0
Midden 13	1	0	0	0	0	0	0	0	0	0	0	0	30	0	0	0
	3	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0
	4	0	1	0	0	0	0	0	0	0	0	0	16	0	0	0
	5	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0
	6	0	0	0	0	0	0	0	0	0	0	0	39	0	0	0
	5	0	0	0	0	0	0	0	0	0	0	0	26	0	0	0
Midden 15	1	0	0	0	0	0	0	2	0	0	0	0	90	0	0	0
	2	0	0	0	0	0	0	0	0	0	0	0	36	0	0	0
	3	0	0	0	0	0	0	0	0	0	0	0	21	0	0	0
	4	0	0	0	0	0	0	0	0	0	0	0	24	0	0	0
	5	0	0	0	0	0	0	0	0	0	0	0	26	0	0	0
Roomblock 2	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0
	4	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0
	5	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0
	6	0	0	0	0	0	0	0	0	0	0	0	18	0	0	0
	7	0	0	0	0	0	0	0	0	0	0	0	14	0	0	0
	8	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0
	9	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
	10	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0
Roomblock 7	1	0	0	0	0	0	0	0	0	0	0	0	165	0	0	0
Roomblock 15	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Roomblock 16	1	0	0	0	0	0	0	0	0	0	0	0	80	0	0	0
<b>Total by Form</b>		0	8	0	0	0	0	2	0	0	0	2	3927	0	4	12
<b>Total by Type</b>				8					2				3945			

Cox Ranch Pueblo (LA 13681) Cibola Gray Ware Ceramic Counts (3 of 3)

Area	Unit	Patterned Corrugated					Incised Corrugated					Unidentified					Total <1/2"	
		B	J	L	W	U	B	J	L	W	U	B	J	L	W	U		
Great House	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	4
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	9
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	6
	4	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	225	53
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	196	54
	6	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	235	57
	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	94	13
	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49	28
	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	98
	9	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	161	39
	10	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	78	31
	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	18
	12	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	449	121
	13	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	53	13
	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	3
	15	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	274	162
	16	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	226	44
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	239	67	
Depression	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	4
Midden 1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	3
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	24
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	13
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33	41
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	6
Midden 3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	5
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	10
	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	17	4
	4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	40	19
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	12
Midden 6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27	16
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23	19
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	38
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	14
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	19
Midden 7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	6
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	9
	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	58	48
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	7
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	10
Midden 8	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	10	11
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	42
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	12
Midden 10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	8
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	19
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	2
	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	16
Midden 11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53	43
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	16
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	8
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41	49
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	22
	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	25
Midden 12	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	126	119
	2	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	86	39
	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	64	46
	4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	88	64
	5	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	84	77
	6	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	135	40
Midden 13	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	31
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	20
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	26
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	18
	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41	58
	Midden 15	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	118
2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42	19
3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	42
4		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	13
5		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	29
Roomblock 2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	11
	5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	17	2
	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	10
	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	4
	8	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	9	5
	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	2
Roomblock 7	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	182	112
Roomblock 15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0
Roomblock 16	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	82	8
<b>Total by Form</b>		0	30	0	0	0	0	2	0	0	0	0	24	0	0	2	4468	2269
<b>Total by Type</b>		30					2					26					6737	

**Cox Ranch Pueblo (LA 13681) Mogollon Brown Ware Ceramic Counts (1 of 3)**

Area	Unit	Plain Brown					Plain Brown Smudged					Plain Corrugated					Plain Corrugated Smudged					
		B	J	L	W	U	B	J	L	W	U	B	J	L	W	U	B	J	L	W	U	
Great House	1	1	6	0	0	0	19	0	0	0	0	1	5	0	0	0	3	0	0	0	0	1
	2	0	6	2	0	5	11	0	0	0	0	0	2	0	0	0	10	0	0	0	0	0
	3	2	9	0	0	0	31	0	0	0	0	3	4	0	0	0	11	0	0	0	0	0
	4	11	83	0	1	0	320	0	1	5	0	8	87	0	0	0	107	1	0	0	0	0
	5	13	117	0	2	4	152	0	0	2	0	0	61	0	0	0	22	0	0	0	0	0
	6	12	80	0	0	1	248	0	0	0	0	0	98	0	0	0	39	0	0	0	0	0
	7	1	43	0	0	0	56	0	0	0	0	1	30	0	0	0	5	0	0	0	0	0
	8	0	25	0	1	1	59	0	0	1	0	0	24	0	0	0	14	0	0	0	0	0
	8	4	14	0	0	1	40	0	0	0	0	0	27	0	0	0	10	0	0	1	0	0
	9	0	65	0	0	0	146	0	0	1	0	0	75	0	0	0	24	0	0	0	0	0
	10	5	37	0	0	0	72	0	0	0	0	3	38	0	0	0	10	0	0	0	0	0
	11	0	12	1	0	0	28	0	0	0	0	0	11	0	0	0	10	0	0	0	0	0
	12	56	440	1	0	0	117	0	0	1	0	2	180	0	0	0	19	0	0	0	0	0
	13	0	31	0	0	0	57	0	0	1	0	0	109	0	0	0	9	0	0	0	0	0
	14	1	5	0	0	0	10	1	0	0	0	0	13	0	0	0	2	0	0	0	0	0
	15	8	157	3	1	0	217	0	0	5	0	0	206	0	0	0	33	0	0	0	0	0
	16	123	116	0	4	0	280	0	0	4	0	0	103	0	1	0	38	0	0	0	0	0
17	2	93	0	0	0	148	0	0	1	0	1	46	0	0	0	8	0	0	0	0	0	
Depression	1	6	2	0	0	1	22	0	1	0	0	2	30	0	0	0	12	0	0	0	0	
Midden 1	1	0	4	0	0	0	9	0	0	0	0	6	0	0	0	2	0	0	0	0	0	
	2	4	20	0	1	5	74	1	0	1	1	0	31	0	0	0	22	1	0	0	0	
	3	2	9	0	0	0	29	0	0	1	0	1	21	0	0	0	10	0	0	0	0	
	4	2	9	0	0	2	29	0	0	0	0	0	28	0	0	0	3	0	0	0	0	
	5	0	12	0	0	0	24	0	0	0	0	0	19	0	0	0	7	0	0	0	0	
Midden 3	1	0	20	0	0	0	8	0	0	0	0	0	20	0	0	0	5	2	0	0	0	
	2	4	2	0	0	0	5	0	0	0	0	9	0	0	0	1	0	0	0	0	0	
	3	0	7	0	0	0	35	0	1	0	0	0	10	0	0	0	11	0	0	0	0	
	4	0	15	0	0	0	35	0	0	1	0	0	28	0	0	0	13	1	0	0	0	
	5	0	8	0	0	1	42	0	0	0	0	0	6	0	0	0	20	0	0	0	0	
Midden 6	1	0	7	0	0	0	19	0	0	0	0	0	18	0	1	0	6	0	0	0	0	
	2	0	8	9	1	0	36	0	0	0	0	0	19	0	0	0	13	0	0	0	0	
	3	3	6	0	0	0	25	0	0	0	0	0	13	0	1	0	7	0	0	0	0	
	4	3	12	0	0	1	36	0	0	1	0	0	13	0	0	0	12	0	0	0	0	
	5	2	11	0	1	0	25	0	0	0	0	2	24	0	0	0	12	0	0	0	0	
Midden 7	1	0	4	0	0	0	9	0	0	0	0	0	6	0	0	0	4	0	0	0	0	
	2	0	1	0	0	0	6	0	0	0	0	0	5	0	0	0	2	0	0	0	0	
	3	1	23	0	1	0	103	0	0	1	0	1	39	0	0	0	15	2	0	0	0	
	4	0	2	0	0	0	5	0	0	0	0	0	6	0	0	0	2	0	0	0	0	
	5	0	0	1	0	1	14	0	0	0	0	2	8	0	0	0	3	0	0	0	0	
Midden 8	1	3	0	0	0	0	5	0	0	0	0	0	13	0	0	0	3	0	0	0	0	
	2	0	0	0	0	0	2	0	0	0	0	0	11	0	0	0	0	0	0	0	0	
	3	5	7	0	0	0	47	0	0	0	0	0	21	0	0	0	5	0	0	0	0	
	4	0	1	0	0	0	1	0	0	0	0	0	23	0	0	0	0	0	0	0	0	
	5	0	5	0	0	0	10	0	0	0	0	0	11	0	0	0	3	0	0	0	0	
Midden 10	1	0	6	0	0	0	4	0	0	0	0	0	5	0	0	0	4	0	0	0	0	
	2	0	0	0	0	0	9	0	0	0	0	0	2	0	0	0	1	0	0	0	0	
	3	0	3	0	0	0	10	0	0	0	0	0	8	0	0	0	1	0	0	0	0	
	4	0	19	1	0	0	32	0	0	0	0	0	18	0	0	0	10	0	0	0	0	
	5	0	2	0	0	0	7	0	0	0	0	0	9	0	0	0	7	0	0	0	0	
	6	0	4	0	0	0	18	0	0	0	0	0	11	0	0	0	3	0	0	0	0	
Midden 11	1	4	16	0	0	0	44	0	0	0	0	0	23	0	0	0	14	0	0	0	0	
	2	0	9	0	0	0	16	0	0	0	0	0	16	0	0	0	8	0	0	0	0	
	3	1	9	0	0	0	19	0	0	0	0	0	10	0	0	0	2	0	0	0	0	
	4	0	9	0	0	0	19	0	0	0	0	0	17	0	0	0	10	0	0	0	0	
	5	0	1	0	0	0	11	0	0	0	0	0	7	0	0	0	2	0	0	0	0	
	6	1	9	0	0	0	10	0	0	0	0	0	16	0	0	0	8	0	0	0	0	
Midden 12	1	5	83	0	0	0	124	1	0	0	0	3	69	0	0	1	43	0	0	0	0	
	2	0	43	0	0	5	111	0	0	1	0	0	79	0	0	0	42	12	0	0	0	
	3	7	57	0	0	0	83	0	0	0	0	0	44	0	0	0	12	1	0	0	0	
	4	0	65	0	0	4	92	0	0	0	0	0	67	0	0	0	20	0	0	0	0	
	5	8	52	0	0	0	83	0	0	1	1	6	33	0	0	0	14	11	0	0	0	
	6	7	70	2	0	10	177	0	0	0	0	3	90	0	0	1	49	3	0	0	0	
Midden 13	1	0	15	0	1	0	18	0	0	0	0	0	26	0	0	0	5	0	0	0	0	
	3	0	13	0	0	0	21	0	0	0	0	1	5	0	0	0	7	0	0	0	0	
	4	0	8	0	0	0	13	0	0	0	0	0	11	0	0	0	8	0	0	0	0	
	5	0	5	0	0	0	5	0	0	0	0	0	13	0	0	0	3	0	0	0	0	
	6	1	43	0	0	0	19	0	0	0	0	0	20	0	0	0	0	0	0	0	0	
	Midden 15	1	18	20	1	0	3	165	1	1	1	0	0	53	0	0	1	25	3	0	0	0
2		4	16	0	0	1	65	2	0	0	0	0	44	0	0	0	19	1	0	0	0	
3		0	2	0	0	1	9	0	0	0	0	0	7	0	0	0	1	0	0	0	0	
4		0	7	0	0	1	25	0	0	0	0	0	27	0	0	0	9	0	0	0	0	
5		1	11	0	0	0	9	0	0	0	0	0	15	0	0	0	6	0	0	0	0	
Roomblock 2	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
	3	2	0	0	1	0	2	2	0	0	0	0	3	0	0	0	2	0	0	0	0	
	4	0	23	0	0	0	27	0	0	0	0	0	33	0	0	0	8	1	0	0	0	
	5	0	30	0	0	0	17	0	0	0	0	0	14	0	0	0	3	0	0	1	0	
	6	4	8	0	0	0	26	0	0	0	0	1	13	0	0	0	4	0	0	0	0	
	7	0	11	0	0	0	19	0	0	0	0	0	26	0	0	0	10	0	0	0	0	
	8	0	19	1	0	0	18	0	0	0	0	0	247	0	0	0	3	0	0	0	0	
	9	0	1	0	0	0	0	0	0	0	0	0	5	0	0	0	1	0	0	0	0	
	10	0	1	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	
Roomblock 7	1	0	29	0	4	0	111	0	0	1	0	0	54	0	1	0	18	0	0	0	0	
Roomblock 15	1	7	0	0	0	0	0	0	0	0	0	0	40	0	0	0	0	0	0	0	0	
	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
	3	0	0	0	0	0	3	0	0	0	0	0	7	0	0	0	3	0	0	0	0	
Roomblock 16	1	1	0	0	0	0	65	0	0	0	0	0	0	0	0	0	3	0	0	0	0	
<b>Total</b>		<b>345</b>	<b>2253</b>	<b>22</b>	<b>19</b>	<b>49</b>	<b>4173</b>	<b>8</b>	<b>4</b>	<b>30&lt;/</b>												

Cox Ranch Pueblo (LA 13681) Mogollon Brown Ware Ceramic Counts (2 of 3)

Area	Unit	Indented Corrugated					Indented Corrugated Smudged					Patterned Corrugated					Patterned Corrugated Smudged					
		B	J	L	W	U	B	J	L	W	U	B	J	L	W	U	B	J	L	W	U	
Great House	1	0	15	0	0	0	3	0	0	0	0	0	2	0	0	0	0	4	0	0	0	0
	2	2	2	0	0	0	17	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
	3	0	22	0	0	0	60	0	0	0	0	0	2	5	0	0	0	5	0	0	0	0
	4	14	88	0	0	1	121	0	0	0	0	0	0	20	0	0	0	32	0	0	0	0
	5	0	42	0	0	0	43	0	0	0	0	0	3	7	0	0	0	12	0	0	0	0
	6	0	81	0	0	0	115	0	0	0	0	0	1	19	0	0	0	22	0	0	0	0
	7	0	68	0	0	0	31	0	0	0	0	0	0	5	0	0	0	9	2	0	0	0
	8	0	39	0	0	0	13	0	0	0	0	0	0	2	0	0	0	5	0	0	0	0
	8	0	20	0	0	0	19	0	0	0	0	0	0	6	0	0	0	24	0	0	0	0
	9	0	60	0	0	0	49	0	0	0	0	0	0	17	0	1	0	15	0	0	0	0
	10	1	75	0	0	0	23	0	0	0	0	0	0	9	0	0	0	5	0	0	0	0
	11	0	22	0	0	0	9	0	0	0	0	0	0	2	0	0	0	3	2	0	0	0
	12	0	154	0	0	0	21	0	0	0	0	0	0	76	0	0	0	0	0	0	0	0
	13	0	164	0	0	0	22	0	0	0	0	0	0	16	0	0	0	13	0	0	0	0
	14	0	11	0	0	0	4	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
	15	0	77	0	1	0	30	0	0	0	0	0	1	26	0	0	0	14	0	0	0	0
	16	0	84	0	1	0	143	0	0	1	0	0	1	20	0	0	0	22	0	0	0	0
17	0	28	0	1	0	19	0	0	0	0	0	0	5	0	0	0	10	0	0	0	0	
Depression	1	4	40	0	0	0	50	11	0	1	0	0	4	0	0	0	6	0	0	0	0	
Midden 1	1	1	3	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	0	79	0	0	0	53	1	0	0	1	0	2	0	0	0	1	2	0	0	0	
	3	4	9	0	0	0	11	1	0	0	0	0	0	0	0	0	0	5	0	0	0	
	4	0	17	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5	0	25	0	0	0	10	0	0	0	0	0	2	2	0	0	0	0	0	0	0	
Midden 3	1	0	15	0	0	1	5	0	0	0	0	0	1	0	0	0	0	1	0	0	0	
	2	0	25	0	0	0	23	0	0	0	0	0	1	0	0	0	0	1	0	0	0	
	3	0	8	0	0	0	12	0	0	0	0	0	2	0	0	0	0	1	0	0	0	
	4	1	51	0	0	0	37	0	0	0	0	0	6	0	0	0	0	5	0	0	0	
	5	0	50	0	0	0	27	0	0	0	0	0	3	0	0	0	0	3	0	0	0	
Midden 6	1	0	56	0	0	0	22	0	0	0	0	0	3	0	0	0	0	3	0	0	0	
	2	0	36	0	0	0	29	0	0	0	0	0	8	0	0	0	0	4	0	0	0	
	3	1	47	0	0	0	26	0	0	0	0	0	0	0	0	0	0	3	0	0	0	
	4	0	3	0	0	0	15	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
	5	3	40	0	0	0	23	0	0	0	0	0	5	1	0	0	0	1	0	0	0	
Midden 7	1	0	13	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	
	2	0	11	0	0	0	5	0	0	0	0	0	1	0	0	0	0	3	0	0	0	
	3	9	44	0	0	0	30	0	0	0	0	0	1	0	0	0	0	8	1	0	0	
	4	0	9	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5	0	14	0	0	0	9	0	0	0	0	0	0	0	0	0	0	2	0	0	0	
Midden 8	1	0	8	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	0	11	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3	0	12	0	0	0	10	0	0	0	0	0	2	0	0	0	0	2	0	0	0	
	4	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5	0	11	0	0	0	2	0	0	0	0	0	3	0	0	0	0	1	0	0	0	
Midden 10	1	0	5	0	0	0	3	0	0	0	0	0	2	0	0	0	0	5	0	0	0	
	2	0	4	0	0	1	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
	3	0	18	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4	0	19	0	0	0	10	0	0	0	0	0	1	0	0	0	0	2	0	0	0	
	5	0	10	0	0	0	8	0	0	0	0	0	2	0	0	0	0	2	0	0	0	
	6	0	7	0	0	0	8	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
Midden 11	1	0	22	0	0	0	16	0	0	2	0	0	2	0	0	0	0	3	0	0	0	
	2	0	11	0	0	0	6	0	0	0	0	0	1	0	0	0	0	1	0	0	0	
	3	2	9	0	0	0	12	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
	4	0	14	0	0	0	10	0	0	0	0	0	2	0	0	0	0	0	0	0	0	
	5	0	12	0	0	0	11	0	0	0	0	0	0	0	0	0	0	2	0	0	0	
	6	0	16	0	0	0	20	0	0	0	0	0	0	0	0	0	0	2	0	0	0	
Midden 12	1	1	43	0	0	0	60	1	0	0	0	0	12	0	0	0	0	15	0	0	0	
	2	0	58	0	0	0	37	0	0	0	0	0	16	0	0	0	0	18	0	0	0	
	3	0	41	0	0	0	15	0	0	0	0	0	3	0	0	0	0	2	0	0	0	
	4	1	44	0	0	0	21	0	0	0	0	0	12	0	0	0	0	7	0	0	0	
	5	4	29	0	0	0	9	0	0	0	0	0	1	0	0	0	0	2	0	0	0	
	6	1	53	1	0	0	51	0	0	2	0	0	3	7	0	0	0	15	3	0	0	
Midden 13	1	0	38	0	1	0	9	0	0	0	0	0	1	0	0	0	0	0	0	0	0	
	3	0	14	0	0	0	18	0	0	1	0	0	1	0	0	0	0	4	0	0	0	
	4	1	32	0	0	0	19	0	0	0	0	0	0	0	0	0	0	3	0	0	0	
	5	0	18	0	0	0	2	0	0	0	0	0	1	0	0	0	0	1	0	0	0	
	6	0	10	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6	1	62	0	0	0	46	0	0	0	0	0	1	7	0	0	0	11	0	0	0	
Midden 15	2	0	39	0	0	0	24	0	0	0	0	0	2	0	0	0	0	0	0	0	0	
	3	0	17	0	0	0	10	0	0	0	0	0	1	0	0	0	0	1	0	0	0	
	4	0	25	0	0	0	21	0	0	0	0	0	0	0	0	0	0	3	0	0	0	
	5	0	11	0	0	0	6	0	0	0	0	0	1	0	0	0	0	1	0	0	0	
	5	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Roomblock	4	0	7	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4	0	60	0	0	0	22	0	0	0	0	0	2	0	0	0	0	0	0	0	0	
	5	0	13	0	0	0	3	0	0	0	0	0	1	0	0	0	0	1	0	0	0	
	6	0	34	0	0	0	6	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
	7	0	15	0	0	0	15	0	0	0	0	0	4	0	0	0	0	0	0	0	0	
	8	0	403	0	0	0	13	0	0	0	0	0	67	0	0	0	0	1	0	0	0	
Roomblock 1	9	0	4	0	0	0	5	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
	10	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1	0	59	0	0	0	24	0	0	0	0	1	5	0	0	0	0	12	0	0	1	
	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total		52	3009	1	4	4	1754	14	0	7	1	20	449	0	3	1	372	8	0	1	0	
Total by Type																						

Cox Ranch Pueblo (LA 13681) Mogollon Brown Ware Ceramic Counts (3 of 3)

Area	Unit	Incised Corrugated					Incised Corrugated Smudged					Unidentified					Total	<1/2"	
		B	J	L	W	U	B	J	L	W	U	B	J	L	W	U			
Great House	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	67	66
	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	61	157
	3	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	155	34
	4	1	3	0	0	0	3	0	0	0	0	8	1	0	0	0	0	916	384
	5	0	8	0	0	0	3	0	0	0	0	0	2	0	0	0	0	493	240
	6	0	9	0	0	0	0	1	0	0	0	0	0	0	0	0	0	726	350
	7	2	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	257	101
	8	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	186	187
	8	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	167	244
	9	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	6	461	201
	10	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	279	86
	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	80
	12	0	36	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1104	450
	13	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	424	170
	14	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	39
	15	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	783	542
	16	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	946	314
17	0	3	0	0	0	0	0	0	0	0	0	0	0	0	10	0	375	320	
Depression	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	194	80	
Midden 1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	31	22	
	2	0	0	0	0	0	10	0	0	0	0	0	1	0	0	0	311	165	
	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	104	113	
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	156	
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	101	78	
Midden 3	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	80	63	
	2	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	79	48	
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	90	75	
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	194	208	
	5	0	0	0	0	0	2	0	0	0	0	2	4	0	0	0	168	111	
Midden 6	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	136	102	
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	163	171	
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	132	263	
	4	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	98	101	
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	150	158	
Midden 7	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	41	99	
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34	76	
	3	0	0	0	0	0	3	0	0	0	0	3	0	0	0	0	285	199	
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	58	
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54	59	
Midden 8	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	40	68	
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35	89	
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	111	203	
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	67	
	5	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	50	78	
Midden 10	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	35	52	
	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5	28	32	
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	106	
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	112	196	
	5	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	51	65	
	6	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	53	71	
Midden 11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	148	282	
	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	69	91	
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	65	60	
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	81	159	
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46	103	
	6	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	83	89	
Midden 12	1	0	6	0	0	0	0	0	0	0	7	3	0	0	0	0	477	565	
	2	0	2	0	0	0	0	0	0	0	1	1	0	0	0	0	426	250	
	3	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	270	203	
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	333	373	
	5	0	6	4	0	0	1	0	0	0	0	0	1	0	0	0	266	253	
	6	0	5	0	0	0	1	0	0	0	0	3	0	0	0	0	557	386	
Midden 13	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	115	133	
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	85	128	
	4	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	96	123	
	5	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	51	85	
	6	0	3	0	0	0	2	0	0	0	0	0	0	0	0	0	100	90	
	Midden 15	1	0	0	0	0	0	5	0	0	0	0	1	1	0	0	4	431	276
2		0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	218	188	
3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49	99	
4		0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	120	207	
5		0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	63	127	
Roomblock	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	7	
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	27	
	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	177	120	
	5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	84	69	
	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	97	88	
	7	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	101	67	
	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	772	402	
	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	14	
	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21	12	
Roomblock	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	320	341	
Roomblock 1	1	0	0	0	0	0	0	0	0	0	2	0	0	0	0	3	53	25	
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	9	
Roomblock 1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	137	29	
<b>Total</b>		<b>3</b>	<b>107</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>65</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>38</b>	<b>22</b>	<b>0</b>	<b>0</b>	<b>36</b>	<b>16692</b>	<b>12884</b>		
<b>Total by Type</b>				<b>115</b>				<b>67</b>				<b>96</b>					<b>29576</b>		



## Appendix C

Group Designation	Area	Unit	Level	Locus	Kiatuthlanna and Red Mesa B/w	Puerco B/w (includes Gallup, Escavada & Puerco B/w)	Reserve B/w	Puerco B/r	Wingate B/r and Wingate Polychrome
Up	Great House	1	0	1	0	0	0	0	1
Up	Great House	1	1	1	0	12	9	0	1
Up	Great House	1	2	1	0	9	5	4	2
Low	Great House	1	3	1	0	4	0	1	0
Low	Great House	1	4	1	0	2	1	0	0
Up	Great House	2	0	1	0	0	0	0	0
Up	Great House	2	1	1	0	10	3	3	0
Low	Great House	2	2	1	0	9	4	0	0
Low	Great House	2	3	1	0	0	1	0	0
Up	Great House	3	0	1	0	0	0	0	0
Up	Great House	3	1	1	0	15	2	2	0
Up	Great House	3	2	1	0	3	6	2	0
Middle	Great House	3	3	1	0	4	5	0	0
Middle	Great House	3	4	1	0	0	1	0	0
Low	Great House	3	5	1	0	3	2	1	0
Low	Great House	3	6	1	0	30	61	0	0
Low	Great House	3	7	1	0	1	0	0	0
Up	Great House	4	0	1	0	0	1	1	0
Up	Great House	4	1	1	0	60	53	6	7
Up	Great House	4	2	1	0	107	64	11	7
Middle	Great House	4	3	1	1	21	11	3	0
Middle	Great House	4	4	1	0	37	24	9	6
Middle	Great House	4	5	1	1	28	15	8	2
Middle	Great House	4	6	1	1	16	16	2	0
Low	Great House	4	7	1	0	11	6	0	0
Low	Great House	4	8	1	0	4	6	0	0
Up	Great House	5	1	1	1	61	40	8	4
Up	Great House	5	2	1	0	23	16	2	0
Up	Great House	5	3	1	0	8	8	1	1
Up	Great House	5	4	1	2	16	18	1	2
Low	Great House	5	5	1	2	31	30	1	1
Low	Great House	5	6	1	0	14	13	0	2
Low	Great House	5	7	1	0	21	28	2	2
Up	Great House	6	1	2	0	1	7	1	1
Up	Great House	6	1	4	0	20	18	2	4
Up	Great House	6	1	7	0	40	58	3	10
Up	Great House	6	1	3	0	2	4	0	0
Up	Great House	6	1	6	0	0	7	0	0
Up	Great House	6	1	5	0	7	8	0	2
Up	Great House	6	1	1	0	11	38	0	30
Up	Great House	6	2	4	0	9	20	1	4
Up	Great House	6	2	7	0	25	25	4	3
Up	Great House	6	3	4	0	13	18	0	0
Up	Great House	6	4	4	0	5	7	0	1
Up	Great House	6	5	4	0	13	12	0	0
Up	Great House	6	6	4	0	4	13	1	0
Middle	Great House	6	7	4	0	6	2	0	1
Middle	Great House	6	8	4	0	2	2	0	0
Middle	Great House	6	9	4	1	1	4	0	0
Middle	Great House	6	10	4	0	0	3	0	0
Low	Great House	6	11	4	0	1	2	0	0
Low	Great House	6	12	4	0	3	3	0	0

Group Designation	Area	Unit	Level	Locus	Kiatuthlanna and Red Mesa B/w	Puerco B/w (includes Gallup, Escavada & Puerco B/w)	Reserve B/w	Puerco B/r	Wingate B/r and Wingate Polychrome
Low	Great House	6	13	4	1	7	4	0	0
Up	Great House	7	1	1	0	3	13	0	2
Up	Great House	7	2	1	0	9	35	0	19
Up	Great House	7	3	1	0	7	5	0	2
Up	Great House	7	4	1	0	1	4	0	0
Up	Great House	7	5	1	0	3	0	0	1
Up	Great House	7	6	1	0	0	1	1	0
Middle	Great House	7	7	1	0	0	0	0	0
Middle	Great House	7	8	1	0	4	2	0	0
Middle	Great House	7	9	1	0	2	6	0	0
Low	Great House	7	10	1	0	2	10	0	0
Low	Great House	7	11	1	0	2	11	0	1
Low	Great House	7	12	1	0	6	6	1	3
Up	Great House	8	1	2	0	12	8	1	2
Up	Great House	8	1	1	2	13	16	3	14
Up	Great House	8	1	3	1	11	10	0	2
Up	Great House	8	2	3	0	0	1	0	0
Up	Great House	8	2	1	0	1	0	0	0
Up	Great House	8	3	1	0	0	0	1	0
Up	Great House	8	3	3	0	0	3	0	0
Up	Great House	8	4	3	0	1	2	0	0
Up	Great House	8	4	1	0	1	4	0	0
Middle	Great House	8	5	3	0	9	19	1	0
Middle	Great House	8	5	1	0	7	7	0	0
Middle	Great House	8	6	1	0	6	2	0	0
Middle	Great House	8	6	3	0	8	17	0	3
Middle	Great House	8	7	1	0	1	2	1	2
Middle	Great House	8	7	3	0	0	3	0	5
Middle	Great House	8	7	4	0	0	0	0	0
Low	Great House	8	8	3	0	1	2	0	0
Low	Great House	8	8	1	0	0	0	0	3
Low	Great House	8	9	3	0	1	1	0	0
Low	Great House	8	10	3	0	0	0	0	0
Low	Great House	8	11	1	0	0	0	0	0
Low	Great House	8	12	1	0	9	1	0	1
Up	Great House	9	1	1	6	85	55	17	26
Up	Great House	9	2	1	0	12	23	2	2
Low	Great House	9	3	1	1	39	26	3	6
Low	Great House	9	4	1	0	4	3	1	0
Up	Great House	10	1	1	0	16	24	1	6
Up	Great House	10	2	1	1	15	13	0	4
Up	Great House	10	3	1	0	14	12	0	1
Low	Great House	10	4	1	0	12	12	1	0
Low	Great House	10	5	1	0	2	1	0	0
Low	Great House	10	6	1	0	0	1	0	0
Up	Great House	11	0	1	0	0	0	0	0
Up	Great House	11	1	1	0	0	21	0	1
Up	Great House	11	2	1	0	6	15	0	2
Low	Great House	11	3	1	0	6	5	1	0
Up	Great House	12	1	1	0	9	9	0	0
Up	Great House	12	2	1	0	14	10	2	0
Up	Great House	12	3	1	0	3	6	1	1

Group Designation	Area	Unit	Level	Locus	Kiatuthlanna and Red Mesa B/w	Puerco B/w (includes Gallup, Escavada & Puerco B/w)	Reserve B/w	Puerco B/r	Wingate B/r and Wingate Polychrome
Up	Great House	12	4	1	0	2	3	1	0
Middle	Great House	12	5	1	0	13	39	3	1
Middle	Great House	12	6	1	0	21	33	4	1
Middle	Great House	12	7	1	1	21	27	7	2
Low	Great House	12	8	1	3	5	12	8	2
Low	Great House	12	9	1	0	0	7	0	1
Low	Great House	12	10	1	0	0	0	0	0
Up	Great House	13	1	4	0	15	16	2	5
Up	Great House	13	1	1	0	2	15	0	2
Middle	Great House	13	2	4	0	5	17	2	2
Up	Great House	13	2	2	0	0	1	0	0
Up	Great House	13	2	3	0	0	4	0	0
Up	Great House	13	2	1	0	12	71	0	0
Middle	Great House	13	3	4	0	6	33	0	1
Middle	Great House	13	4	4	0	6	14	0	1
Low	Great House	13	5	4	0	7	9	1	0
Low	Great House	13	6	4	0	0	10	0	2
Low	Great House	13	7	4	0	1	3	0	1
Up	Great House	14	1	1	3	0	11	0	1
Up	Great House	14	1	2	0	0	0	0	0
Up	Great House	14	2	1	0	0	1	0	1
Up	Great House	14	3	1	0	0	0	0	0
Middle	Great House	14	4	1	0	4	0	0	0
Middle	Great House	14	5	1	0	1	0	0	0
Low	Great House	14	6	1	0	0	0	0	0
Low	Great House	14	7	1	0	0	2	1	0
Low	Great House	14	8	1	0	0	0	0	0
Up	Great House	15	1	1	4	27	89	6	11
Up	Great House	15	1	2	0	0	3	0	0
Up	Great House	15	2	1	5	20	46	5	4
Up	Great House	15	3	1	1	46	52	9	8
Low	Great House	15	4	1	2	39	41	8	4
Low	Great House	15	5	1	0	9	11	0	2
Low	Great House	15	6	1	0	0	0	1	0
Up	Great House	16	1	1	0	4	4	0	1
Up	Great House	16	2	1	0	2	2	0	3
Up	Great House	16	3	1	0	1	5	1	1
Up	Great House	16	4	1	0	4	10	0	4
Up	Great House	16	5	1	0	16	32	0	5
Up	Great House	16	6	1	1	43	60	4	15
Up	Great House	16	7	1	2	55	71	0	3
Low	Great House	16	8	1	2	66	50	4	0
Low	Great House	16	9	1	2	44	34	8	4
Low	Great House	16	10	1	0	9	2	1	1
Up	Great House	17	1	1	0	8	10	9	4
Up	Great House	17	2	1	0	5	7	9	6
Up	Great House	17	3	1	0	11	12	5	0
Up	Great House	17	4	1	0	11	17	3	6
Low	Great House	17	5	1	1	23	27	7	6
Low	Great House	17	6	1	0	11	28	6	7
Up	Great Kiva	1	1	1	0	1	0	0	0
Up	Great Kiva	1	2	1	0	3	2	0	1

Group Designation	Area	Unit	Level	Locus	Kiatuthlanna and Red Mesa B/w	Puerco B/w (includes Gallup, Escavada & Puerco B/w)	Reserve B/w	Puerco B/r	Wingate B/r and Wingate Polychrome
Up	Great Kiva	1	3	1	0	3	10	0	1
Up	Great Kiva	1	4	1	0	8	10	3	3
Up	Great Kiva	1	5	1	1	9	8	2	6
Up	Great Kiva	1	6	1	0	10	12	1	9
Low	Great Kiva	1	7	1	0	5	8	0	6
Low	Great Kiva	1	8	1	0	5	10	0	2
Low	Great Kiva	1	9	1	0	0	0	0	0
Low	Great Kiva	1	10	1	0	0	0	0	0
Up	Midden 1	1	0	1	0	3	0	0	0
Low	Midden 1	1	1	1	0	14	6	0	1
Up	Midden 1	2	0	1	0	6	4	1	0
Up	Midden 1	2	1	1	1	22	19	5	8
Up	Midden 1	2	2	1	1	10	7	0	1
Up	Midden 1	2	3	1	0	2	1	0	1
Low	Midden 1	2	4	1	2	23	8	0	1
Low	Midden 1	2	5	1	0	14	12	0	0
Low	Midden 1	2	6	1	0	4	5	0	0
Up	Midden 1	3	0	1	0	1	0	0	0
Up	Midden 1	3	1	1	0	26	9	8	3
Up	Midden 1	3	2	1	0	9	6	1	0
Low	Midden 1	3	3	1	0	6	1	0	0
Low	Midden 1	3	4	1	0	1	1	0	0
Low	Midden 1	3	5	1	0	2	1	0	0
Up	Midden 1	4	0	1	0	0	0	0	0
Up	Midden 1	4	1	1	0	4	5	0	0
Up	Midden 1	4	2	1	0	12	2	0	0
Up	Midden 1	4	3	1	0	1	5	0	1
Low	Midden 1	4	4	1	0	1	0	0	0
Low	Midden 1	4	5	1	0	0	0	0	0
Low	Midden 1	4	6	1	0	0	0	0	0
Up	Midden 1	5	0	1	0	0	1	0	0
Up	Midden 1	5	1	1	0	11	6	0	0
Low	Midden 1	5	2	1	0	4	1	0	0
Low	Midden 1	5	3	1	0	0	0	0	0
Up	Midden 10	1	0	1	0	0	1	0	1
Low	Midden 10	1	1	1	0	10	2	0	0
Low	Midden 10	1	2	1	0	1	0	0	0
Up	Midden 10	2	0	1	0	0	1	0	1
Low	Midden 10	2	1	1	0	10	8	5	4
Up	Midden 10	3	0	1	0	0	1	0	0
Low	Midden 10	3	1	1	0	6	3	0	2
Low	Midden 10	3	2	1	0	1	0	0	0
Up	Midden 10	4	0	1	0	1	0	0	0
Up	Midden 10	4	1	1	0	29	4	2	8
Low	Midden 10	4	2	1	0	7	1	0	0
Low	Midden 10	4	3	1	0	0	0	0	0
Up	Midden 10	5	0	1	0	0	0	0	1
Up	Midden 10	5	1	1	3	12	0	0	1
Low	Midden 10	5	2	1	0	5	1	0	0
Low	Midden 10	5	3	1	0	2	2	0	0
Up	Midden 10	6	0	1	0	0	0	0	0
Low	Midden 10	6	1	1	0	22	8	2	1

Group Designation	Area	Unit	Level	Locus	Kiatuthlanna and Red Mesa B/w	Puerco B/w (includes Gallup, Escavada & Puerco B/w)	Reserve B/w	Puerco B/r	Wingate B/r and Wingate Polychrome
Low	Midden 10	6	2	1	0	2	1	1	2
Up	Midden 11	1	0	1	0	2	0	0	2
Up	Midden 11	1	1	1	0	15	12	0	7
Up	Midden 11	1	2	1	0	15	8	7	0
Low	Midden 11	1	3	1	0	10	6	0	5
Low	Midden 11	1	4	1	0	4	5	0	0
Low	Midden 11	1	5	1	0	3	2	0	0
Up	Midden 11	2	0	1	0	0	2	0	1
Up	Midden 11	2	1	1	0	13	22	5	3
Low	Midden 11	2	2	1	0	2	2	0	0
Low	Midden 11	2	3	1	0	0	2	0	0
Up	Midden 11	3	0	1	0	2	2	1	1
Low	Midden 11	3	1	1	0	12	23	3	4
Up	Midden 11	4	0	1	0	2	0	0	3
Up	Midden 11	4	1	1	0	12	13	0	3
Low	Midden 11	4	2	1	0	5	13	0	1
Low	Midden 11	4	3	1	0	0	0	0	0
Up	Midden 11	5	0	1	0	0	0	0	0
Low	Midden 11	5	1	1	0	10	11	4	3
Low	Midden 11	5	2	1	0	0	1	0	0
Up	Midden 11	6	0	1	0	0	0	0	0
Low	Midden 11	6	1	1	1	11	23	3	1
Low	Midden 11	6	2	1	0	0	3	1	0
Up	Midden 12	1	0	1	0	10	3	2	0
Up	Midden 12	1	1	1	0	20	11	3	2
Up	Midden 12	1	2	1	1	42	12	2	2
Up	Midden 12	1	3	1	3	14	8	1	2
Middle	Midden 12	1	4	1	0	17	17	4	1
Middle	Midden 12	1	5	1	0	23	5	1	2
Low	Midden 12	1	6	1	0	24	7	0	2
Low	Midden 12	1	7	1	0	17	4	0	0
Low	Midden 12	1	8	1	0	8	5	0	0
Up	Midden 12	2	0	1	0	10	1	0	0
Up	Midden 12	2	1	1	3	91	14	2	3
Up	Midden 12	2	2	1	1	51	25	7	1
Middle	Midden 12	2	3	1	1	13	7	1	0
Middle	Midden 12	2	4	1	0	20	8	1	0
Low	Midden 12	2	5	1	1	10	8	0	0
Low	Midden 12	2	6	1	0	2	0	0	0
Up	Midden 12	3	0	1	3	17	5	1	0
Up	Midden 12	3	1	1	2	55	22	2	1
Up	Midden 12	3	2	1	0	12	7	1	2
Low	Midden 12	3	3	2	0	8	4	0	1
Low	Midden 12	3	3	1	0	0	0	0	0
Low	Midden 12	3	4	1	0	0	2	0	0
Up	Midden 12	4	0	1	0	10	2	0	0
Up	Midden 12	4	1	1	3	87	27	3	1
Up	Midden 12	4	2	1	0	40	14	8	3
Up	Midden 12	4	3	1	2	10	9	2	2
Low	Midden 12	4	4	1	0	6	4	0	1
Low	Midden 12	4	5	1	0	0	1	0	0
Up	Midden 12	5	0	1	0	9	2	0	0

Group Designation	Area	Unit	Level	Locus	Kiatuthlanna and Red Mesa B/w	Puerco B/w (includes Gallup, Escavada & Puerco B/w)	Reserve B/w	Puerco B/r	Wingate B/r and Wingate Polychrome
Up	Midden 12	5	1	1	3	27	11	0	0
Up	Midden 12	5	2	1	1	30	7	1	0
Middle	Midden 12	5	3	1	0	14	5	1	0
Middle	Midden 12	5	4	1	0	10	6	1	0
Low	Midden 12	5	5	1	0	18	2	0	0
Low	Midden 12	5	6	1	1	10	1	0	0
Low	Midden 12	5	7	1	0	0	0	0	0
Up	Midden 12	6	0	1	0	3	0	0	0
Up	Midden 12	6	1	1	0	69	23	4	2
Up	Midden 12	6	2	1	1	48	10	1	0
Up	Midden 12	6	3	1	2	35	6	3	1
Up	Midden 12	6	4	1	1	22	8	2	3
Middle	Midden 12	6	5	1	0	17	12	1	2
Middle	Midden 12	6	6	1	0	7	9	3	1
Middle	Midden 12	6	7	1	0	21	10	4	0
Low	Midden 12	6	8	1	0	17	3	0	1
Low	Midden 12	6	9	1	1	5	0	1	0
Low	Midden 12	6	10	1	0	3	3	2	1
Low	Midden 12	6	11	1	0	2	1	0	0
Up	Midden 13	1	0	1	0	0	0	0	0
Up	Midden 13	1	1	1	0	8	7	4	0
Up	Midden 13	1	2	1	0	7	0	0	4
Low	Midden 13	1	3	1	0	4	0	0	0
Low	Midden 13	1	4	1	0	4	1	0	1
Up	Midden 13	3	0	1	0	2	0	1	0
Up	Midden 13	3	1	1	0	13	9	0	3
Low	Midden 13	3	2	1	0	6	4	0	2
Low	Midden 13	3	3	1	0	0	0	0	0
Up	Midden 13	4	0	3	0	0	1	0	0
Up	Midden 13	4	1	1	0	13	14	2	7
Low	Midden 13	4	2	1	0	11	6	3	0
Low	Midden 13	4	3	1	0	0	2	0	1
Up	Midden 13	5	0	1	0	0	3	0	1
Low	Midden 13	5	1	1	0	3	4	0	2
Up	Midden 13	6	0	1	0	0	2	0	0
Up	Midden 13	6	1	1	4	8	4	0	0
Low	Midden 13	6	2	1	0	0	4	0	0
Up	Midden 15	1	0	1	2	2	1	0	1
Up	Midden 15	1	1	1	1	25	12	3	2
Up	Midden 15	1	2	1	2	9	12	0	1
Up	Midden 15	1	3	1	0	20	6	4	2
Up	Midden 15	1	4	1	1	30	16	2	3
Up	Midden 15	1	5	1	0	22	14	2	3
Middle	Midden 15	1	6	1	0	18	7	1	2
Middle	Midden 15	1	7	1	1	12	16	3	1
Middle	Midden 15	1	8	1	0	14	10	1	1
Low	Midden 15	1	9	1	0	14	6	1	0
Low	Midden 15	1	10	1	1	7	4	0	2
Low	Midden 15	1	11	1	0	17	15	1	2
Low	Midden 15	1	12	2	0	2	0	0	0
Low	Midden 15	1	13	2	0	0	0	0	0
Low	Midden 15	1	14	2	0	2	0	0	0

Group Designation	Area	Unit	Level	Locus	Kiatuthlanna and Red Mesa B/w	Puerco B/w (includes Gallup, Escavada & Puerco B/w)	Reserve B/w	Puerco B/r	Wingate B/r and Wingate Polychrome
Low	Midden 15	1	15	2	0	0	0	0	0
Up	Midden 15	2	0	1	0	0	1	1	0
Up	Midden 15	2	1	1	0	31	24	5	13
Up	Midden 15	2	2	1	1	18	3	0	3
Low	Midden 15	2	3	1	0	12	9	2	0
Low	Midden 15	2	4	1	0	1	1	1	1
Low	Midden 15	2	5	1	0	0	0	0	0
Low	Midden 15	2	6	1	0	0	0	0	0
Up	Midden 15	3	0	1	0	1	0	0	0
Low	Midden 15	3	1	1	2	21	6	0	2
Low	Midden 15	3	2	1	0	0	0	0	0
Up	Midden 15	4	0	1	0	3	1	1	0
Low	Midden 15	4	1	1	0	50	28	4	6
Low	Midden 15	4	2	1	0	0	3	2	1
Low	Midden 15	4	3	1	0	0	1	0	0
Up	Midden 15	5	0	1	0	6	0	2	0
Low	Midden 15	5	1	1	5	37	16	6	2
Low	Midden 15	5	2	1	0	5	0	0	0
Low	Midden 15	5	3	1	0	0	0	0	0
Up	Midden 3	1	0	1	0	0	1	0	0
Low	Midden 3	1	1	1	4	11	3	1	1
Low	Midden 3	1	2	1	0	2	0	0	1
Low	Midden 3	1	3	1	1	3	0	0	0
Low	Midden 3	1	4	1	0	0	0	0	0
Low	Midden 3	1	5	1	0	0	0	0	0
Up	Midden 3	2	0	1	0	1	0	0	0
Up	Midden 3	2	1	1	0	23	7	2	0
Up	Midden 3	2	2	1	1	3	0	0	0
Up	Midden 3	2	3	1	0	0	1	0	0
Up	Midden 3	2	4	1	0	0	1	0	0
Low	Midden 3	2	5	1	0	2	0	0	0
Low	Midden 3	2	6	1	0	0	0	0	0
Low	Midden 3	2	7	1	0	0	0	0	0
Low	Midden 3	2	8	1	0	0	0	0	0
Up	Midden 3	3	0	1	0	2	1	0	0
Up	Midden 3	3	1	1	0	33	6	2	7
Up	Midden 3	3	2	1	1	7	5	0	0
Low	Midden 3	3	3	1	0	1	3	0	0
Low	Midden 3	3	4	1	0	1	0	0	0
Low	Midden 3	3	5	1	0	0	0	0	0
Low	Midden 3	3	6	1	0	0	1	0	0
Up	Midden 3	4	0	1	0	7	3	1	1
Up	Midden 3	4	1	1	0	40	13	5	8
Up	Midden 3	4	2	1	1	10	12	0	3
Low	Midden 3	4	3	1	1	3	7	1	1
Low	Midden 3	4	4	1	1	5	2	0	0
Low	Midden 3	4	5	1	0	3	1	0	0
Up	Midden 3	5	0	1	0	2	4	0	0
Up	Midden 3	5	1	1	0	8	4	0	3
Up	Midden 3	5	2	1	0	8	6	1	3
Low	Midden 3	5	3	1	0	0	2	1	0
Low	Midden 3	5	4	1	0	8	7	1	1



Group Designation	Area	Unit	Level	Locus	Kiatuthlanna and Red Mesa B/w	Puerco B/w (includes Gallup, Escavada & Puerco B/w)	Reserve B/w	Puerco B/r	Wingate B/r and Wingate Polychrome
Up	Midden 6	1	0	1	0	4	0	0	0
Up	Midden 6	1	1	1	0	12	23	2	15
Low	Midden 6	1	2	1	1	0	7	0	0
Low	Midden 6	1	3	1	0	1	2	0	0
Up	Midden 6	2	0	1	0	0	2	0	3
Up	Midden 6	2	1	1	0	25	23	0	15
Low	Midden 6	2	2	1	0	2	3	1	2
Low	Midden 6	2	3	1	1	2	2	0	2
Low	Midden 6	2	4	1	0	2	0	0	0
Up	Midden 6	3	0	1	0	3	11	0	2
Up	Midden 6	3	1	1	0	19	23	5	8
Low	Midden 6	3	2	1	1	4	7	0	7
Low	Midden 6	3	3	1	0	3	4	1	5
Low	Midden 6	3	4	1	0	0	0	0	1
Up	Midden 6	4	0	1	0	1	0	0	1
Up	Midden 6	4	1	1	0	17	10	0	5
Up	Midden 6	4	2	1	0	3	1	0	2
Low	Midden 6	4	3	1	2	6	5	2	3
Low	Midden 6	4	4	1	0	0	1	0	0
Low	Midden 6	4	5	1	0	1	0	0	0
Up	Midden 6	5	0	1	0	4	3	0	1
Up	Midden 6	5	1	1	0	19	16	3	14
Up	Midden 6	5	2	1	1	12	10	0	5
Low	Midden 6	5	3	1	1	4	7	2	5
Low	Midden 6	5	4	1	1	1	0	0	0
Low	Midden 6	5	5	1	0	0	0	0	0
Up	Midden 7	1	0	1	0	1	0	0	0
Low	Midden 7	1	1	1	0	2	3	1	1
Low	Midden 7	1	2	1	0	0	0	0	0
Low	Midden 7	1	3	1	0	0	0	0	0
Low	Midden 7	2	0	1	0	0	0	0	0
Low	Midden 7	2	1	1	1	1	1	0	2
Up	Midden 7	3	0	1	0	0	1	0	1
Up	Midden 7	3	1	1	0	8	7	3	2
Up	Midden 7	3	2	1	0	2	14	0	4
Up	Midden 7	3	3	1	0	2	9	4	1
Up	Midden 7	3	4	1	0	10	10	2	8
Middle	Midden 7	3	5	1	0	8	5	0	0
Middle	Midden 7	3	6	1	0	3	8	0	1
Middle	Midden 7	3	7	1	0	7	4	0	0
Low	Midden 7	3	8	1	0	1	3	2	2
Low	Midden 7	3	9	1	0	8	1	0	0
Low	Midden 7	3	10	1	0	1	3	0	0
Low	Midden 7	3	11	1	0	0	2	0	0
Up	Midden 7	4	0	1	0	1	0	0	0
Low	Midden 7	4	1	1	1	0	9	0	1
Low	Midden 7	4	2	1	0	0	0	0	0
Low	Midden 7	4	3	1	0	0	1	0	0
Up	Midden 7	5	0	1	0	0	0	0	0
Up	Midden 7	5	1	1	2	4	4	2	1
Low	Midden 7	5	2	1	0	7	3	0	1
Low	Midden 7	5	3	1	1	3	7	1	2

Group Designation	Area	Unit	Level	Locus	Kiatuthlanna and Red Mesa B/w	Puerco B/w (includes Gallup, Escavada & Puerco B/w)	Reserve B/w	Puerco B/r	Wingate B/r and Wingate Polychrome
Up	Midden 8	1	0	1	0	0	0	0	0
Low	Midden 8	1	1	1	0	2	6	0	1
Low	Midden 8	1	2	1	0	1	1	0	0
Low	Midden 8	1	3	1	0	0	1	0	0
Low	Midden 8	1	4	1	0	0	0	0	0
Up	Midden 8	2	0	1	0	0	9	0	1
Low	Midden 8	2	1	1	0	1	19	0	0
Low	Midden 8	2	2	1	0	0	0	0	0
Up	Midden 8	3	0	1	0	0	0	0	0
Up	Midden 8	3	1	1	0	9	8	0	6
Up	Midden 8	3	2	1	0	1	1	0	2
Low	Midden 8	3	3	1	0	3	1	3	0
Low	Midden 8	3	4	1	0	0	1	0	0
Up	Midden 8	4	0	1	0	0	0	0	0
Low	Midden 8	4	1	1	0	0	6	0	0
Low	Midden 8	4	2	1	0	0	0	0	0
Up	Midden 8	5	0	1	0	0	0	0	0
Low	Midden 8	5	1	1	0	4	1	0	4
Low	Midden 8	5	2	1	0	0	0	0	0
Low	Midden 8	5	3	1	0	0	0	0	0
Low	Midden 8	5	4	1	0	0	0	0	0
Up	Roomblock 2	1	1	1	0	0	0	0	0
Up	Roomblock 2	1	3	1	0	0	0	0	0
Low	Roomblock 2	1	4	1	0	0	0	0	0
Low	Roomblock 2	1	5	2	0	0	0	0	0
Up	Roomblock 2	3	1	1	0	1	0	0	0
Up	Roomblock 2	3	2	1	0	0	1	0	0
Low	Roomblock 2	3	3	1	0	0	0	0	0
Low	Roomblock 2	3	4	1	1	2	0	0	0
Low	Roomblock 2	3	5	1	0	0	0	0	0
Low	Roomblock 2	3	6	1	0	0	0	0	0
Up	Roomblock 2	4	0	1	0	0	1	0	0
Up	Roomblock 2	4	1	1	0	25	28	3	7
Low	Roomblock 2	4	2	1	0	17	2	1	1
Low	Roomblock 2	4	3	1	0	0	0	0	0
Low	Roomblock 2	4	4	1	0	0	0	0	0
Up	Roomblock 2	5	1	1	1	12	9	3	1
Low	Roomblock 2	5	2	1	0	3	2	0	0
Low	Roomblock 2	5	3	1	0	1	0	0	0
Up	Roomblock 2	6	1	1	0	2	18	0	0
Up	Roomblock 2	6	2	1	0	4	22	0	1
Middle	Roomblock 2	6	3	1	0	4	16	0	0
Middle	Roomblock 2	6	4	1	0	3	10	0	0
Low	Roomblock 2	6	5	1	0	4	8	0	1
Low	Roomblock 2	6	6	1	0	0	2	0	0
Up	Roomblock 2	7	0	1	0	0	0	0	0
Up	Roomblock 2	7	1	1	0	0	3	0	1
Up	Roomblock 2	7	1	2	0	0	3	0	0
Up	Roomblock 2	7	2	1	0	0	2	0	0
Up	Roomblock 2	7	3	1	0	2	4	0	1
Up	Roomblock 2	7	4	1	0	1	11	2	1
Middle	Roomblock 2	7	5	1	0	6	1	0	0

Group Designation	Area	Unit	Level	Locus	Kiatuthlanna and Red Mesa B/w	Puerco B/w (includes Gallup, Escavada & Puerco B/w)	Reserve B/w	Puerco B/r	Wingate B/r and Wingate Polychrome
Middle	Roomblock 2	7	6	1	0	63	2	0	5
Middle	Roomblock 2	7	6	3	0	4	0	0	0
Middle	Roomblock 2	7	7	1	0	4	2	0	0
Low	Roomblock 2	7	8	1	0	3	5	0	1
Low	Roomblock 2	7	9	1	0	6	4	1	1
Low	Roomblock 2	7	10	1	0	11	0	1	2
Low	Roomblock 2	7	11	1	0	0	0	0	0
Up	Roomblock 2	8	1	1	0	0	6	0	0
Up	Roomblock 2	8	2	1	0	3	13	0	0
Low	Roomblock 2	8	3	1	0	21	76	0	2
Low	Roomblock 2	8	4	2	0	2	4	0	0
Low	Roomblock 2	8	4	1	0	6	128	0	6
Low	Roomblock 2	8	5	1	0	1	0	0	0
Low	Roomblock 2	8	6	1	0	0	0	0	0
Low	Roomblock 2	8	7	1	0	0	0	0	0
Up	Roomblock 2	9	1	1	0	0	1	0	0
Up	Roomblock 2	9	2	1	0	0	2	0	0
Low	Roomblock 2	9	3	1	0	1	0	0	0
Low	Roomblock 2	9	4	1	0	0	2	0	1
Low	Roomblock 2	9	5	1	0	0	0	0	0
Up	Roomblock 2	10	1	1	0	2	0	0	0
Low	Roomblock 2	10	2	1	0	1	1	0	0
Up	Roomblock 7	1	1	1	0	0	0	0	0
Up	Roomblock 7	1	2	1	0	8	9	0	6
Low	Roomblock 7	1	3	1	0	6	24	6	7
Low	Roomblock 7	1	4	1	0	30	37	12	11
Low	Roomblock 7	1	5	1	0	18	38	7	14

## Appendix D

## Appendix D

ID	Specimen #	Area	Unit	Level	Locus	Ware	Type	Coil Count	Indent Count	Max Thickness
1	192	Great House	1	1	1	Brown	Plain Corrugated	8	n/a	5.88
2	403	3 Midden	4	3	1	Brown	Plain Corrugated	9	n/a	5.89
3	403	3 Midden	4	3	1	Brown	Indented Corrugated	10	7	5.69
4	137	3 Midden	5	2	1	Brown	Indented Corrugated	8	9	7.46
5	137	3 Midden	5	2	1	Brown	Indented Corrugated	10	10	6.16
6	137	3 Midden	5	2	1	Brown	Plain Corrugated	11	n/a	7.11
7	137	3 Midden	5	2	1	Brown	Indented Corrugated	14	10	6.46
8	54	15 Midden	2	2	1	Brown	Indented Corrugated	11	11	6.56
9	54	15 Midden	2	2	1	Brown	Plain	n/a	n/a	5.84
10	54	15 Midden	2	2	1	Brown	Plain	n/a	n/a	4.49
11	146	3 Midden	2	1	1	Brown	Indented Corrugated	8	n/a	7.23
12	146	3 Midden	2	1	1	Brown	Indented Corrugated	n/a	9	6.51
13	146	3 Midden	2	1	1	Brown	Plain Corrugated	14	n/a	5.54
14	669	1 Midden	2	4	1	Gray	Indented Corrugated	6	9	8.82
15	669	1 Midden	2	4	1	Brown	Indented Corrugated	9	n/a	6.33
16	166	3 Midden	2	2	1	Gray	Indented Corrugated	8	9	5.05
17	134	15 Midden	1	5	1	Brown	Indented Corrugated	10	8	5.85
18	134	15 Midden	1	5	1	Brown	Plain Corrugated	11	n/a	6.41
19	134	15 Midden	1	5	1	Gray	Indented Corrugated	6	8	6.53
20	134	15 Midden	1	5	1	Gray	Plain Corrugated	7	n/a	6.45
21	177	15 Midden	1	7	1	Brown	Indented Corrugated	7	10	7.49
22	177	15 Midden	1	7	1	Brown	Indented Corrugated	6	8	7.67
23	177	15 Midden	1	7	1	Brown	Indented Corrugated	10	n/a	5.58
24	177	15 Midden	1	7	1	Brown	Plain Corrugated	8	n/a	5.91
25	177	15 Midden	1	7	1	Brown	Indented Corrugated	9	9	5.7
26	177	15 Midden	1	7	1	Gray	Indented Corrugated	6	10	6.53
27	177	15 Midden	1	7	1	Gray	Plain Corrugated	6	n/a	7.98
28	587	Great House	3	6	1	Brown	Indented Corrugated	10	10	7.05
29	587	Great House	3	6	1	Brown	Indented Corrugated	9	8	6.49
30	587	Great House	3	6	1	Brown	Indented Corrugated	9	9	7.43
31	157	3 Midden	3	1	1	Brown	Indented Corrugated	7	7	6.25
32	157	3 Midden	3	1	1	Gray	Plain Corrugated	5	n/a	7.5
33	637	1 Midden	2	2	1	Brown	Indented Corrugated	12	11	6.37
34	637	1 Midden	2	2	1	Brown	Indented Corrugated	11	10	9.13
35	637	1 Midden	2	2	1	Gray	Indented Corrugated	7	7	6.31
36	672	1 Midden	2	5	1	Brown	Plain Corrugated	8	n/a	6.79
37	672	1 Midden	2	5	1	Gray	Indented Corrugated	7	7	6.24
38	672	1 Midden	2	5	1	Gray	Indented Corrugated	5	6	7.45
39	672	1 Midden	2	5	1	Gray	Indented Corrugated	6	7	5.8
40	603	1 Midden	2	1	1	Brown	Indented Corrugated	9	9	7.03
41	603	1 Midden	2	1	1	Brown	Indented Corrugated	11	9	7.45
42	603	1 Midden	2	1	1	Brown	Indented Corrugated	9	8	7.48
43	603	1 Midden	2	1	1	Brown	Plain Corrugated	11	n/a	7.28
44	603	1 Midden	2	1	1	Brown	Plain	n/a	n/a	7.79
45	603	1 Midden	2	1	1	Gray	Indented Corrugated	6	7	6.13
46	603	1 Midden	2	1	1	Gray	Indented Corrugated	9	6	5.78
47	603	1 Midden	2	1	1	Gray	Indented Corrugated	8	7	6.36
48	133	Well	1	1	1	Brown	Plain Corrugated	8	n/a	6.85

## Appendix D

ID	Specimen #	Area	Unit	Level	Locus	Ware	Type	Coil Count	Indent Count	Max Thickness
49	133	Well	1	1	1	Brown	Indented Corrugated	12	10	6.78
50	133	Well	1	1	1	Brown	Indented Corrugated	n/a	9	6.28
51	133	Well	1	1	1	Gray	Indented Corrugated	5	8	5.12
52	162	Well	1	3	1	Brown	Indented Corrugated	11	n/a	6.62
53	337	Well	1	6	1	Brown	Indented Corrugated	7	5	7.43
54	337	Well	1	6	1	Brown	Indented Corrugated	9	12	7
55	337	Well	1	6	1	Brown	Indented Corrugated	n/a	9	6.42
56	337	Well	1	6	1	Brown	Plain Corrugated	10	n/a	6.62
57	206	Well	1	4	1	Brown	Indented Corrugated	7	10	6.37
58	206	Well	1	4	1	Brown	Indented Corrugated	6	6	5.68
59	234	Well	1	5	1	Gray	Indented Corrugated	8	8	6.32
60	234	Well	1	5	1	Brown	Indented Corrugated	9	10	6.17
61	279	12 Midden	2	3	1	Brown	Indented Corrugated	9	6	5.99
62	279	12 Midden	2	3	1	Brown	Indented Corrugated	7	8	6.39
63	279	12 Midden	2	3	1	Brown	Indented Corrugated	10	8	6.55
64	279	12 Midden	2	3	1	Brown	Indented Corrugated	9	8	6.31
65	91	12 Midden	3	2	1	Brown	Indented Corrugated	n/a	6	5.66
66	91	12 Midden	3	2	1	Brown	Indented Corrugated	10	10	6.74
67	91	12 Midden	3	2	1	Brown	Indented Corrugated	n/a	11	7.07
68	91	12 Midden	3	2	1	Brown	Plain Corrugated	n/a	7	5.63
69	91	12 Midden	3	2	1	Brown	Plain	n/a	n/a	5.14
70	91	12 Midden	3	2	1	Brown	Plain	n/a	n/a	4.96
71	91	12 Midden	3	2	1	Brown	Plain	n/a	n/a	6.49
72	91	12 Midden	3	2	1	Gray	Indented Corrugated	n/a	4	6.55
73	91	12 Midden	3	2	1	Gray	Plain Corrugated	5	n/a	6.25
74	335	3 Midden	4	1	1	Brown	Indented Corrugated	9	10	7.31
75	335	3 Midden	4	1	1	Brown	Plain Corrugated	7	n/a	7.29
76	335	3 Midden	4	1	1	Gray	Indented Corrugated	n/a	8	6.44
77	335	3 Midden	4	1	1	Gray	Indented Corrugated	6	6	6.4
78	335	3 Midden	4	1	1	Gray	Indented Corrugated	6	8	4.89
79	335	3 Midden	4	1	1	Gray	Indented Corrugated	8	9	7.14
80	529	Great House	4	3	1	Brown	Plain Corrugated	9	n/a	5.63
81	529	Great House	4	3	1	Brown	Plain	n/a	n/a	5.58
82	529	Great House	4	3	1	Brown	Plain	n/a	n/a	7.48
83	529	Great House	4	3	1	Gray	Indented Corrugated	9	8	4.7
84	529	Great House	4	3	1	Gray	Indented Corrugated	8	8	4.97
85	529	Great House	4	3	1	Gray	Indented Corrugated	6	n/a	5.53
86	469	Great House	4	1	1	Brown	Plain	n/a	n/a	5.77
87	469	Great House	4	1	1	Brown	Plain	n/a	n/a	6.28
88	469	Great House	4	1	1	Brown	Plain	n/a	n/a	5.25
89	469	Great House	4	1	1	Brown	Indented Corrugated	15	13	6.64
90	469	Great House	4	1	1	Brown	Plain Corrugated	9	n/a	6.22
91	469	Great House	4	1	1	Brown	Plain Corrugated	9	n/a	6.43
92	469	Great House	4	1	1	Brown	Indented Corrugated	11	n/a	5.4
93	469	Great House	4	1	1	Brown	Indented Corrugated	n/a	10	6.32
94	469	Great House	4	1	1	Brown	Indented Corrugated	9	n/a	7.46
95	469	Great House	4	1	1	Gray	Indented Corrugated	n/a	8	6.21
96	469	Great House	4	1	1	Gray	Indented Corrugated	n/a	9	5.99

## Appendix D

ID	Specimen #	Area	Unit	Level	Locus	Ware	Type	Coil Count	Indent Count	Max Thickness
97	469	Great House	4	1	1	Gray	Indented Corrugated	8	n/a	5.25
98	469	Great House	4	1	1	Gray	Indented Corrugated	8	n/a	5.76
99	525	12 Midden	5	3	1	Brown	Plain	n/a	n/a	6.24
100	525	12 Midden	5	3	1	Brown	Indented Corrugated	8	n/a	6.73
101	525	12 Midden	5	3	1	Gray	Indented Corrugated	5	6	5.57
102	525	12 Midden	5	3	1	Gray	Indented Corrugated	5	n/a	5.29
103	525	12 Midden	5	3	1	Brown	Plain	n/a	n/a	6.12
104	208	15 Midden	1	8	1	Brown	Indented Corrugated	9	7	6.88
105	208	15 Midden	1	8	1	Brown	Plain Corrugated	12	n/a	7.48
106	208	15 Midden	1	8	1	Brown	Plain Corrugated	9	n/a	6.2
107	726	12 Midden	6	6	1	Brown	Indented Corrugated	7	10	6.12
108	726	12 Midden	6	6	1	Brown	Indented Corrugated	12	9	6.99
109	726	12 Midden	6	6	1	Brown	Indented Corrugated	n/a	10	5.42
110	726	12 Midden	6	6	1	Brown	Plain Corrugated	10	n/a	7.2
111	726	12 Midden	6	6	1	Brown	Plain Corrugated	11	n/a	5.97
112	187	15 Midden	4	1	1	Brown	Indented Corrugated	10	8	8.1
113	187	15 Midden	4	1	1	Brown	Indented Corrugated	10	8	7.5
114	187	15 Midden	4	1	1	Brown	Indented Corrugated	10	10	6.79
115	187	15 Midden	4	1	1	Brown	Indented Corrugated	8	9	6.55
116	187	15 Midden	4	1	1	Brown	Plain Corrugated	7	n/a	7.46
117	494	Great House	4	2	1	Brown	Indented Corrugated	9	7	6.2
118	494	Great House	4	2	1	Brown	Indented Corrugated	6	8	6.47
119	494	Great House	4	2	1	Brown	Indented Corrugated	7	n/a	7.68
120	494	Great House	4	2	1	Brown	Plain Corrugated	10	n/a	8.15
121	494	Great House	4	2	1	Brown	Plain Corrugated	11	n/a	6.54
122	494	Great House	4	2	1	Brown	Plain Corrugated	12	n/a	6.64
123	494	Great House	4	2	1	Gray	Indented Corrugated	6	8	5.81
124	494	Great House	4	2	1	Gray	Indented Corrugated	6	6	6.06
125	494	Great House	4	2	1	Gray	Indented Corrugated	6	7	5.82
126	494	Great House	4	2	1	Gray	Indented Corrugated	8	8	6.13
127	378	3 Midden	4	2	1	Brown	Indented Corrugated	9	9	8.37
128	378	3 Midden	4	2	1	Brown	Indented Corrugated	11	12	6.69
129	378	3 Midden	4	2	1	Brown	Indented Corrugated	11	7	6.11
130	378	3 Midden	4	2	1	Brown	Indented Corrugated	9	8	5.51
131	378	3 Midden	4	2	1	Gray	Plain Corrugated	9	n/a	5.5
132	570	Great House	4	5	1	Brown	Plain Corrugated	8	n/a	6.91
133	570	Great House	4	5	1	Brown	Plain Corrugated	7	n/a	6.51
134	570	Great House	4	5	1	Brown	Plain	n/a	n/a	5.51
135	570	Great House	4	5	1	Brown	Plain	n/a	n/a	5.26
136	570	Great House	4	5	1	Brown	Plain	n/a	n/a	6.43
137	570	Great House	4	5	1	Brown	Plain	n/a	n/a	5.5
138	570	Great House	4	5	1	Gray	Indented Corrugated	8	8	5.32
139	570	Great House	4	5	1	Gray	Indented Corrugated	7	6	5.04
140	570	Great House	4	5	1	Gray	Indented Corrugated	6	8	4.98
141	570	Great House	4	5	1	Gray	Indented Corrugated	8	8	5.57
142	570	Great House	4	5	1	Gray	Indented Corrugated	8	8	5.48
143	570	Great House	4	5	1	Gray	Indented Corrugated	n/a	6	5.23
144	539	Great House	4	4	1	Brown	Indented Corrugated	8	8	5.93

## Appendix D

ID	Specimen #	Area	Unit	Level	Locus	Ware	Type	Coil Count	Indent Count	Max Thickness
145	539	Great House	4	4	1	Brown	Plain	n/a	n/a	7.05
146	539	Great House	4	4	1	Brown	Plain	n/a	n/a	5.42
147	539	Great House	4	4	1	Brown	Plain	n/a	n/a	4.85
148	539	Great House	4	4	1	Gray	Indented Corrugated	8	7	5.4
149	539	Great House	4	4	1	Gray	Indented Corrugated	7	6	5.23
150	539	Great House	4	4	1	Gray	Indented Corrugated	7	7	6.16
151	539	Great House	4	4	1	Gray	Indented Corrugated	7	6	6.14
152	539	Great House	4	4	1	Gray	Indented Corrugated	8	6	5.15
153	36	15 Midden	2	1	1	Brown	Plain Corrugated	10	n/a	7.39
154	36	15 Midden	2	1	1	Brown	Plain Corrugated	11	n/a	5.92
155	36	15 Midden	2	1	1	Brown	Plain Corrugated	10	n/a	5.8
156	36	15 Midden	2	1	1	Brown	Indented Corrugated	9	8	6.82
157	36	15 Midden	2	1	1	Brown	Indented Corrugated	8	8	7.95
158	36	15 Midden	2	1	1	Brown	Indented Corrugated	5	10	6.7
159	36	15 Midden	2	1	1	Brown	Plain	n/a	n/a	5.39
160	36	15 Midden	2	1	1	Brown	Plain	n/a	n/a	6.93
161	36	15 Midden	2	1	1	Gray	Indented Corrugated	5	n/a	5.35
162	355	Great House	2	1	1	Brown	Indented Corrugated	10	9	7.81
163	355	Great House	2	1	1	Brown	Indented Corrugated	10	8	8.25
164	613	12 Midden	6	2	1	Brown	Plain Corrugated	11	n/a	6.28
165	613	12 Midden	6	2	1	Brown	Indented Corrugated	8	10	6.69
166	613	12 Midden	6	2	1	Brown	Indented Corrugated	12	n/a	5.32
167	613	12 Midden	6	2	1	Brown	Indented Corrugated	8	7	5.73
168	613	12 Midden	6	2	1	Brown	Plain	n/a	n/a	6.56
169	613	12 Midden	6	2	1	Brown	Plain	n/a	n/a	7.31
170	613	12 Midden	6	2	1	Gray	Indented Corrugated	6	8	5.56
171	613	12 Midden	6	2	1	Gray	Indented Corrugated	6	8	5.72
172	623	12 Midden	4	2	1	Brown	Indented Corrugated	6	6	8.42
173	623	12 Midden	4	2	1	Brown	Indented Corrugated	13	12	7.03
174	623	12 Midden	4	2	1	Brown	Plain Corrugated	6	n/a	7.43
175	623	12 Midden	4	2	1	Brown	Plain Corrugated	9	n/a	5.28
176	623	12 Midden	4	2	1	Brown	Plain	n/a	n/a	5.11
177	623	12 Midden	4	2	1	Brown	Plain	n/a	n/a	5.53
178	623	12 Midden	4	2	1	Gray	Indented Corrugated	8	6	5.1
179	623	12 Midden	4	2	1	Gray	Indented Corrugated	9	8	5.38
180	623	12 Midden	4	2	1	Gray	Indented Corrugated	6	8	6.12
181	623	12 Midden	4	2	1	Gray	Indented Corrugated	6	6	5.49
182	623	12 Midden	4	2	1	Gray	Indented Corrugated	9	n/a	5.25
183	730	12 Midden	6	7	1	Brown	Plain	n/a	n/a	5.85
184	730	12 Midden	6	7	1	Gray	Indented Corrugated	6	6	6.46
185	730	12 Midden	6	7	1	Gray	Indented Corrugated	6	8	6.2
186	730	12 Midden	6	7	1	Gray	Indented Corrugated	7	8	6.75
187	730	12 Midden	6	7	1	Gray	Indented Corrugated	6	8	4.62
188	60	10 Midden	3	1	1	Gray	Indented Corrugated	5	7	6.74
189	60	10 Midden	3	1	1	Gray	Plain Corrugated	6	n/a	7.12
190	60	10 Midden	3	1	1	Brown	Indented Corrugated	7	6	5.94
191	60	10 Midden	3	1	1	Brown	Indented Corrugated	n/a	8	6.43
192	518	12 Midden	5	2	1	Gray	Indented Corrugated	6	7	6.47



## Appendix D

ID	Specimen #	Area	Unit	Level	Locus	Ware	Type	Coil Count	Indent Count	Max Thickness
193	518	12 Midden	5	2	1	Gray	Indented Corrugated	8	n/a	6.04
194	518	12 Midden	5	2	1	Gray	Indented Corrugated	7	n/a	6.04
195	518	12 Midden	5	2	1	Brown	Plain	n/a	n/a	5.25
196	518	12 Midden	5	2	1	Brown	Plain	n/a	n/a	6.15
197	126	15 Midden	1	4	1	Brown	Indented Corrugated	6	8	7.92
198	126	15 Midden	1	4	1	Brown	Indented Corrugated	8	7	5.22
199	126	15 Midden	1	4	1	Brown	Indented Corrugated	6	n/a	7.31
200	126	15 Midden	1	4	1	Brown	Plain Corrugated	8	n/a	7.05
201	126	15 Midden	1	4	1	Gray	Indented Corrugated	6	7	6.91
202	126	15 Midden	1	4	1	Gray	Indented Corrugated	7	n/a	6.69
203	150	15 Midden	1	6	1	Brown	Indented Corrugated	7	9	6.18
204	150	15 Midden	1	6	1	Brown	Indented Corrugated	10	9	5.35
205	150	15 Midden	1	6	1	Brown	Plain Corrugated	11	n/a	7.05
206	150	15 Midden	1	6	1	Brown	Plain Corrugated	11	n/a	7.3
207	150	15 Midden	1	6	1	Brown	Plain Corrugated	10	n/a	8.82
208	150	15 Midden	1	6	1	Gray	Indented Corrugated	7	8	6.04
209	150	15 Midden	1	6	1	Gray	Indented Corrugated	5	n/a	6.17
210	150	15 Midden	1	6	1	Gray	Plain Corrugated	6	n/a	6.59
211	443	3 Midden	5	3	1	Brown	Indented Corrugated	11	9	6.53
212	443	3 Midden	5	3	1	Brown	Plain	n/a	n/a	5.92
213	443	3 Midden	5	3	1	Gray	Indented Corrugated	8	n/a	4.71
214	443	3 Midden	5	3	1	Gray	Indented Corrugated	7	n/a	4.26
215	654	12 Midden	4	3	1	Brown	Indented Corrugated	8	10	6.82
216	654	12 Midden	4	3	1	Brown	Indented Corrugated	8	10	7.38
217	654	12 Midden	4	3	1	Brown	Plain	n/a	n/a	6.36
218	654	12 Midden	4	3	1	Brown	Plain	n/a	n/a	5.97
219	654	12 Midden	4	3	1	Brown	Plain	n/a	n/a	6.41
220	643	12 Midden	6	3	1	Brown	Indented Corrugated	9	12	5.42
221	643	12 Midden	6	3	1	Gray	Indented Corrugated	7	7	5.73
222	168	10 Midden	4	1	1	Brown	Plain Corrugated	11	n/a	7.92
223	168	10 Midden	4	1	1	Brown	Plain Corrugated	13	n/a	7.15
224	168	10 Midden	4	1	1	Gray	Indented Corrugated	n/a	7	5.51
225	168	10 Midden	4	1	1	Gray	Indented Corrugated	6	7	6.35
226	325	12 Midden	1	5	1	Brown	Plain Corrugated	9	n/a	6.25
227	325	12 Midden	1	5	1	Brown	Plain Corrugated	6	n/a	6.42
228	325	12 Midden	1	5	1	Gray	Indented Corrugated	7	6	5.89
229	325	12 Midden	1	5	1	Gray	Indented Corrugated	n/a	9	0.24
230	325	12 Midden	1	5	1	Brown	Plain	n/a	n/a	5.82
231	325	12 Midden	1	5	1	Brown	Plain	n/a	n/a	5.65
232	564	12 Midden	4	1	1	Gray	Indented Corrugated	5	7	5.56
233	564	12 Midden	4	1	1	Gray	Indented Corrugated	n/a	7	5.21
234	564	12 Midden	4	1	1	Gray	Indented Corrugated	8	7	5.45
235	318	12 Midden	2	4	1	Brown	Indented Corrugated	8	8	6.58
236	318	12 Midden	2	4	1	Brown	Plain Corrugated	8	n/a	7.11
237	318	12 Midden	2	4	1	Brown	Indented Corrugated	8	n/a	6.11
238	318	12 Midden	2	4	1	Gray	Indented Corrugated	7	6	7.57
239	318	12 Midden	2	4	1	Gray	Plain Corrugated	8	n/a	4.54
240	318	12 Midden	2	4	1	Gray	Plain Corrugated	n/a	n/a	8.12

## Appendix D

ID	Specimen #	Area	Unit	Level	Locus	Ware	Type	Coil Count	Indent Count	Max Thickness
241	587	Great House	3	6	1	Brown	Indented Corrugated	9	6	6.52
242	587	Great House	3	6	1	Brown	Indented Corrugated	9	8	5.48
243	529	Great House	4	3	1	Brown	Indented Corrugated	6	n/a	7.25
244	529	Great House	4	3	1	Brown	Indented Corrugated	8	12	5.07
245	529	Great House	4	3	1	Brown	Plain Corrugated	12	n/a	6.86
246	529	Great House	4	3	1	Gray	Indented Corrugated	n/a	6	5.18
247	529	Great House	4	3	1	Gray	Indented Corrugated	n/a	7	4.88
248	529	Great House	4	3	1	Gray	Indented Corrugated	6	6	5.01
249	529	Great House	4	3	1	Gray	Indented Corrugated	n/a	7	6.03
301	917	Great House	5	1	1	Brown	Indented Corrugated	8	8	6.23
302	917	Great House	5	1	1	Brown	Indented Corrugated	7	8	6.72
303	917	Great House	5	1	1	Brown	Plain Corrugated	9	n/a	6.59
304	917	Great House	5	1	1	Brown	Plain Corrugated	7	n/a	6.49
305	974	Great House	5	3	1	Brown	Indented Corrugated	6	n/a	6.36
306	974	Great House	5	3	1	Gray	Indented Corrugated	7	7	5.53
307	974	Great House	5	3	1	Gray	Indented Corrugated	8	n/a	6.14
308	974	Great House	5	2	1	Gray	Indented Corrugated	8	10	6.59
309	974	Great House	5	2	1	Gray	Indented Corrugated	5	10	5.84
310	974	Great House	5	2	1	Gray	Indented Corrugated	8	8	6.54
311	974	Great House	5	2	1	Gray	Indented Corrugated	6	6	6.77
312	947	Great House	5	2	1	Brown	Plain Corrugated	9	n/a	6.81
313	947	Great House	5	2	1	Brown	Patterned Corrugated	12	n/a	6.07
314	947	Great House	5	2	1	Brown	Patterned Corrugated	8	10	5.81
315	947	Great House	5	1	1	Brown	Patterned Corrugated	7	9	7.35
316	917	Great House	5	1	1	Gray	Indented Corrugated	5	7	5.67
317	917	Great House	5	1	1	Gray	Indented Corrugated	n/a	8	5.01
318	917	Great House	5	1	1	Gray	Indented Corrugated	8	6	6.79
319	917	Great House	5	1	1	Gray	Indented Corrugated	7	8	6.13
320	917	Great House	5	1	1	Gray	Indented Corrugated	6	5	6.48
321	917	Great House	5	1	1	Gray	Indented Corrugated	5	9	8.15
322	917	Great House	5	1	1	Gray	Indented Corrugated	5	n/a	5.74
323	917	Great House	5	1	1	Gray	Indented Corrugated	4	n/a	5.69
324	917	Great House	5	1	1	Gray	Indented Corrugated	5	n/a	8.58
325	917	Great House	5	1	1	Gray	Indented Corrugated	6	7	5.42
326	917	Great House	5	1	1	Gray	Indented Corrugated	n/a	6	5.47
327	917	Great House	5	1	1	Gray	Indented Corrugated	n/a	6	6.6
328	1003	Great House	5	4	1	Gray	Indented Corrugated	4	7	5.32
329	1003	Great House	5	4	1	Gray	Indented Corrugated	6	8	5.38
330	1003	Great House	5	4	1	Gray	Indented Corrugated	n/a	10	6.07
331	1003	Great House	5	4	1	Gray	Indented Corrugated	6	8	6.9
332	1003	Great House	5	4	1	Gray	Indented Corrugated	6	6	6.3
333	1003	Great House	5	4	1	Brown	Plain Corrugated	10	n/a	5.88
334	1003	Great House	5	4	1	Brown	Patterned Corrugated	n/a	8	6.53
335	1003	Great House	5	4	1	Brown	Patterned Corrugated	6	n/a	7.03
336	1003	Great House	5	4	1	Brown	Patterned Corrugated	7	n/a	6.85
337	1003	Great House	5	4	1	Brown	Plain Corrugated	8	n/a	6.99
338	1003	Great House	5	4	1	Brown	Plain Corrugated	7	n/a	7.70
339	1045	Great House	5	5	1	Brown	Plain Corrugated	6	n/a	7.14

## Appendix D

ID	Specimen #	Area	Unit	Level	Locus	Ware	Type	Coil Count	Indent Count	Max Thickness
340	1045	Great House	5	5	1	Brown	Plain Corrugated	8	n/a	563
341	1045	Great House	5	5	1	Brown	Plain Corrugated	10	n/a	6.43
342	1045	Great House	5	5	1	Brown	Patterned Corrugated	9	11	7.27
344	1045	Great House	5	5	1	Gray	Plain Corrugated	7	6	5.76
345	1045	Great House	5	5	1	Gray	Indented Corrugated	7	6	6.56
346	1045	Great House	5	5	1	Gray	Indented Corrugated	7	9	676
347	1045	Great House	5	5	1	Gray	Indented Corrugated	n/a	8	6.05
348	1045	Great House	5	5	1	Gray	Indented Corrugated	7	8	6.12
349	1045	Great House	5	5	1	Gray	Indented Corrugated	7	8	5.33
350	1045	Great House	5	5	1	Gray	Indented Corrugated	4	5	4.81
351	1054	Great House	5	6	1	Brown	Plain Corrugated	8	n/a	6.44
352	1054	Great House	5	6	1	Brown	Indented Corrugated	10	11	6.72
353	1054	Great House	5	6	1	Gray	Indented Corrugated	7	6	7.83
354	1054	Great House	5	6	1	Gray	Indented Corrugated	5	7	7.22
355	1054	Great House	5	6	1	Gray	Indented Corrugated	5	7	6.08
356	1089	Great House	5	6	1	Gray	Indented Corrugated	n/a	9	5.5
357	1089	Great House	5	7	1	Gray	Patterned Corrugated	5	6	6.95
358	1089	Great House	5	7	1	Gray	Indented Corrugated	6	n/a	5.57
359	1089	Great House	5	7	1	Brown	Plain Corrugated	8	n/a	6.34
360	1089	Great House	5	7	1	Brown	Plain Corrugated	6	n/a	8.89
361	1089	Great House	5	7	1	Brown	Plain Corrugated	7	n/a	8.02
362	928	Great House	6	7	1	Brown	Indented Corrugated	8	n/a	7.75
363	928	Great House	6	1	1	Brown	Indented Corrugated	8	10	6.07
364	986	Great House	6	1	3	Gray	Patterned Corrugated	7	n/a	8.9
365	986	Great House	6	1	3	Brown	Patterned Corrugated	8	n/a	8.1
366	986	Great House	6	1	3	Brown	Indented Corrugated	10	8	6.9
367	1020	Great House	6	1	4	Gray	Indented Corrugated	7	7	6.82
368	1020	Great House	6	1	4	Gray	Indented Corrugated	7	8	5.25
369	1020	Great House	6	1	4	Brown	Plain Corrugated	9	n/a	7.17
370	1020	Great House	6	1	4	Brown	Plain Corrugated	7	n/a	7.01
371	1020	Great House	6	1	4	Brown	Patterned Corrugated	n/a	6	7.72
372	1243	Great House	6	1	6	Brown	Patterned Corrugated	n/a	12	8.58
373	1228	Great House	6	1	7	Gray	Indented Corrugated	9	7	8.87
374	1228	Great House	6	1	7	Gray	Indented Corrugated	9	7	7.28
375	1228	Great House	6	1	7	Gray	Indented Corrugated	5	6	6.12
376	1228	Great House	6	1	7	Gray	Indented Corrugated	8	8	7.64
377	1228	Great House	6	1	7	Gray	Indented Corrugated	8	8	6.1
378	1228	Great House	6	1	7	Gray	Indented Corrugated	9	9	7.4
379	1228	Great House	6	1	7	Gray	Indented Corrugated	9	7	7.17
380	1228	Great House	6	1	7	Gray	Indented Corrugated	8	n/a	5.94
381	1228	Great House	6	1	7	Gray	Indented Corrugated	9	8	7.77
382	1228	Great House	6	1	7	Gray	Indented Corrugated	6	5	5.81
383	1228	Great House	6	1	7	Gray	Indented Corrugated	6	9	5.03
384	1228	Great House	6	1	7	Gray	Indented Corrugated	8	8	5.54
385	1228	Great House	6	1	7	Brown	Patterned Corrugated	12	n/a	5.58
386	1228	Great House	6	1	7	Brown	Patterned Corrugated	11	10	7.2
387	1228	Great House	6	1	7	Brown	Patterned Corrugated	10	n/a	6.14
388	1228	Great House	6	1	7	Brown	Indented Corrugated	10	10	6.68

## Appendix D

ID	Specimen #	Area	Unit	Level	Locus	Ware	Type	Coil Count	Indent Count	Max Thickness
389	1228	Great House	6	1	7	Brown	Indented Corrugated	7	9	6.94
390	1228	Great House	6	1	7	Brown	Indented Corrugated	12	9	5.43
391	1228	Great House	6	1	7	Brown	Indented Corrugated	n/a	8	6.74
392	1228	Great House	6	1	7	Brown	Indented Corrugated	n/a	9	
393	1228	Great House	6	1	7	Brown	Indented Corrugated	n/a	10	6.8
394	1228	Great House	6	1	7	Brown	Plain Corrugated	12	n/a	6.24
395	1228	Great House	6	1	7	Brown	Plain Corrugated	11	n/a	5.05
396	1228	Great House	6	1	7	Brown	Plain Corrugated	11	n/a	6.25
397	1228	Great House	6	1	7	Brown	Plain Corrugated	10	n/a	5.93
398	1228	Great House	6	1	7	Brown	Plain Corrugated	8	n/a	6.25
399	1220	Great House	6	2	4	Gray	Indented Corrugated	7	7	5.9
400	1220	Great House	6	2	4	Gray	Indented Corrugated	n/a	9	5.16
401	1220	Great House	6	2	4	Gray	Indented Corrugated	7	9	4.45
402	1220	Great House	6	2	4	Gray	Indented Corrugated	7	10	5.8
403	1220	Great House	6	2	4	Gray	Indented Corrugated	n/a	8	4.94
404	1220	Great House	6	2	4	Brown	Indented Corrugated	n/a	7	7.42
405	1220	Great House	6	2	4	Brown	Indented Corrugated	n/a	10	7.3
406	1220	Great House	6	2	4	Brown	Indented Corrugated	7	6	6.98
407	1220	Great House	6	2	4	Brown	Indented Corrugated	n/a	8	5.51
408	1220	Great House	6	2	4	Brown	Plain Corrugated	8	n/a	6.89
409	1220	Great House	6	2	4	Brown	Plain Corrugated	8	n/a	7.05
410	1220	Great House	6	2	4	Brown	Plain Corrugated	9	n/a	7.47
411	1428	Great House	6	2	7	Gray	Patterned Corrugated	7	7	7.8
412	1428	Great House	6	2	7	Gray	Indented Corrugated	7	8	5.4
413	1428	Great House	6	2	7	Gray	Indented Corrugated	8	8	5.96
414	1428	Great House	6	2	7	Gray	Indented Corrugated	7	8	5.72
415	1428	Great House	6	2	7	Gray	Indented Corrugated	9	10	5.51
416	1428	Great House	6	2	7	Gray	Indented Corrugated	6	10	5.18
417	1428	Great House	6	2	7	Gray	Indented Corrugated	n/a	10	5.78
418	1428	Great House	6	2	7	Gray	Indented Corrugated	6	n/a	5.57
419	1428	Great House	6	2	7	Gray	Indented Corrugated	7	n/a	6.29
420	1428	Great House	6	2	7	Gray	Indented Corrugated	7	8	6.2
421	1428	Great House	6	2	7	Brown	Patterned Corrugated	16	10	6.3
422	1428	Great House	6	2	7	Brown	Patterned Corrugated	9	7	7.21
423	1428	Great House	6	2	7	Brown	Plain Corrugated	9	n/a	5.72
424	1428	Great House	6	2	7	Brown	Plain Corrugated	10	n/a	5.64
425	1428	Great House	6	2	7	Brown	Indented Corrugated	9	8	7.19
426	1428	Great House	6	2	7	Brown	Indented Corrugated	8	10	6.87
427	1428	Great House	6	2	7	Brown	Indented Corrugated	6	7	6.55
428	1428	Great House	6	2	7	Brown	Indented Corrugated	n/a	12	6.6
429	1428	Great House	6	2	7	Brown	Indented Corrugated	9	8	6.26
430	1428	Great House	6	2	7	Brown	Indented Corrugated	7	10	6.97
431	1428	Great House	6	2	7	Brown	Indented Corrugated	12	10	6.95
432	1267	Great House	6	3	4	Gray	Patterned Corrugated	6	n/a	6.08
433	1267	Great House	6	3	4	Gray	Indented Corrugated	5	9	7.15
434	1267	Great House	6	3	4	Gray	Indented Corrugated	5	6	5.78
435	1267	Great House	6	3	4	Gray	Indented Corrugated	5	9	5.92
436	1267	Great House	6	3	4	Gray	Indented Corrugated	6	6	7.23

## Appendix D

ID	Specimen #	Area	Unit	Level	Locus	Ware	Type	Coil Count	Indent Count	Max Thickness
437	1267	Great House	6	3	4	Gray	Indented Corrugated	n/a	10	5.96
438	1267	Great House	6	3	4	Gray	Indented Corrugated	6	8	7.07
439	1267	Great House	6	3	4	Gray	Indented Corrugated	6	8	6.11
440	1267	Great House	6	3	4	Gray	Indented Corrugated	7	n/a	7
441	1267	Great House	6	3	4	Gray	Indented Corrugated	9	10	5.81
442	1267	Great House	6	3	4	Gray	Indented Corrugated	7	7	5.86
443	1267	Great House	6	3	4	Gray	Indented Corrugated	n/a	8	5.96
444	1267	Great House	6	3	4	Gray	Indented Corrugated	n/a	8	5.06
445	1267	Great House	6	3	4	Brown	Patterned Corrugated	8	n/a	6.06
446	1267	Great House	6	3	4	Brown	Plain Corrugated	5	n/a	6.94
447	1267	Great House	6	3	4	Brown	Plain Corrugated	8	n/a	6.45
448	1267	Great House	6	3	4	Brown	Plain Corrugated	7	n/a	7.1
449	1267	Great House	6	3	4	Brown	Plain Corrugated	9	n/a	6.97
450	1294	Great House	6	4	4	Gray	Indented Corrugated	8	8	5.44
451	1294	Great House	6	4	4	Gray	Indented Corrugated	6	7	5.86
452	1294	Great House	6	4	4	Gray	Indented Corrugated	6	8	7.35
453	1294	Great House	6	4	4	Gray	Indented Corrugated	6	n/a	5.24
454	1294	Great House	6	4	4	Gray	Indented Corrugated	8	8	5.28
455	1294	Great House	6	4	4	Gray	Indented Corrugated	7	n/a	5.96
456	1294	Great House	6	4	4	Gray	Indented Corrugated	4	8	6.81
457	1294	Great House	6	4	4	Gray	Indented Corrugated	6	n/a	4.78
458	1294	Great House	6	4	4	Brown	Plain Corrugated	8	n/a	7.81
459	1341	Great House	6	5	4	Gray	Indented Corrugated	6	7	5.72
460	1341	Great House	6	5	4	Gray	Indented Corrugated	6	7	6.71
461	1341	Great House	6	5	4	Gray	Indented Corrugated	6	6	6.29
462	1341	Great House	6	5	4	Brown	Patterned Corrugated	7	6	7.81
463	1341	Great House	6	5	4	Brown	Plain Corrugated	9	n/a	7.19
464	1347	Great House	6	6	4	Gray	Indented Corrugated	7	8	4.92
465	1347	Great House	6	6	4	Brown	Indented Corrugated	n/a	7	5.81
466	1392	Great House	6	7	4	Gray	Indented Corrugated	5	7	6.06
467	1392	Great House	6	7	4	Gray	Indented Corrugated	6	6	6.18
468	1392	Great House	6	7	4	Gray	Indented Corrugated	6	6	6.45
469	1392	Great House	6	7	4	Gray	Indented Corrugated	7	5	6.93
470	1392	Great House	6	7	4	Brown	Plain Corrugated	7	n/a	7.53
471	1495	Great House	6	10	4	Gray	Indented Corrugated	7	9	6.09
472	1573	Great House	6	12	4	Gray	Indented Corrugated	n/a	10	5.69
473	1573	Great House	6	12	4	Gray	Indented Corrugated	n/a	4	5.24
474	1577	Great House	6	13	4	Gray	Indented Corrugated	n/a	7	5.37
475	1577	Great House	6	13	4	Gray	Indented Corrugated	n/a	8	5.94
476	1577	Great House	6	13	4	Gray	Indented Corrugated	7	6	6.16
477	1577	Great House	6	13	4	Gray	Indented Corrugated	7	8	5.81
478	1577	Great House	6	13	4	Gray	Indented Corrugated	8	6	6.31
479	1577	Great House	6	13	4	Brown	Plain Corrugated	5	n/a	6.24
480	969	Great House	7	1	1	Gray	Indented Corrugated	n/a	7	8.2
481	969	Great House	7	1	1	Gray	Indented Corrugated	6	7	5.11
482	969	Great House	7	1	1	Gray	Indented Corrugated	6	7	5.3
483	969	Great House	7	1	1	Gray	Indented Corrugated	10	7	5.21
484	969	Great House	7	1	1	Gray	Plain Corrugated	6	n/a	5.48

## Appendix D

ID	Specimen #	Area	Unit	Level	Locus	Ware	Type	Coil Count	Indent Count	Max Thickness
485	969	Great House	7	1	1	Gray	Indented Corrugated	7	7	5.75
486	969	Great House	7	1	1	Gray	Indented Corrugated	n/a	9	6.82
487	969	Great House	7	1	1	Brown	Indented Corrugated	7	9	7.3
488	969	Great House	7	1	1	Brown	Indented Corrugated	5	10	7.23
489	969	Great House	7	1	1	Brown	Indented Corrugated	9	n/a	6.6
490	969	Great House	7	1	1	Brown	Indented Corrugated	10	9	8.26
491	969	Great House	7	1	1	Brown	Patterned Corrugated	8	8	6.97
492	969	Great House	7	1	1	Brown	Patterned Corrugated	12	10	6.39
493	969	Great House	7	1	1	Brown	Plain Corrugated	10	n/a	6.9
494	969	Great House	7	1	1	Brown	Plain Corrugated	9	n/a	7.6
495	1023	Great House	7	2	1	Gray	Indented Corrugated	5	7	5.87
496	1023	Great House	7	2	1	Gray	Indented Corrugated	5	6	5.56
497	1023	Great House	7	2	1	Gray	Indented Corrugated	7	7	7.02
498	1023	Great House	7	2	1	Gray	Indented Corrugated	7	6	7.03
499	1023	Great House	7	2	1	Gray	Indented Corrugated	5	7	6.5
500	1023	Great House	7	2	1	Gray	Indented Corrugated	6	6	5.19
501	1023	Great House	7	2	1	Gray	Indented Corrugated	5	6	5.51
502	1023	Great House	7	2	1	Gray	Indented Corrugated	5	n/a	5.93
503	1023	Great House	7	2	1	Gray	Indented Corrugated	n/a	6	6.86
504	1023	Great House	7	2	1	Gray	Indented Corrugated	7	n/a	5.49
505	1023	Great House	7	2	1	Gray	Indented Corrugated	4	7	7.03
506	1023	Great House	7	2	1	Gray	Indented Corrugated	7	n/a	5.52
507	1023	Great House	7	2	1	Gray	Indented Corrugated	n/a	6	6.43
508	1023	Great House	7	2	1	Gray	Indented Corrugated	n/a	10	5.64
509	1023	Great House	7	2	1	Gray	Indented Corrugated	6	9	7.35
510	1023	Great House	7	2	1	Gray	Indented Corrugated	7	9	6.43
511	1023	Great House	7	2	1	Gray	Indented Corrugated	n/a	8	4.62
512	1023	Great House	7	2	1	Gray	Indented Corrugated	4	n/a	7.1
513	1023	Great House	7	2	1	Gray	Indented Corrugated	7	n/a	5.43
514	1023	Great House	7	2	1	Gray	Indented Corrugated	8	n/a	5.59
515	1023	Great House	7	2	1	Brown	Patterned Corrugated	6	10	7.47
516	1023	Great House	7	2	1	Brown	Patterned Corrugated	8	n/a	6.8
517	1023	Great House	7	2	1	Brown	Plain Corrugated	11	n/a	8.73
518	1023	Great House	7	2	1	Brown	Indented Corrugated	6	7	6.75
519	1023	Great House	7	2	1	Brown	Indented Corrugated	7	8	7.42
520	1023	Great House	7	2	1	Brown	Indented Corrugated	8	9	7.04
521	1023	Great House	7	2	1	Brown	Indented Corrugated	9	8	5.84
522	1023	Great House	7	2	1	Brown	Indented Corrugated	8	9	6.57
523	1023	Great House	7	2	1	Brown	Indented Corrugated	9	8	6.36
524	1023	Great House	7	2	1	Brown	Indented Corrugated	6	7	6.58
525	1023	Great House	7	2	1	Brown	Indented Corrugated	9	n/a	6.63
526	1023	Great House	7	2	1	Brown	Indented Corrugated	8	8	6.93
527	1023	Great House	7	2	1	Brown	Indented Corrugated	n/a	7	6.34
528	1023	Great House	7	2	1	Brown	Indented Corrugated	n/a	8	6.57
529	1023	Great House	7	2	1	Brown	Indented Corrugated	7	8	7.12
530	1023	Great House	7	2	1	Brown	Indented Corrugated	8	9	6.19
531	1023	Great House	7	2	1	Brown	Indented Corrugated	n/a	8	7.37
532	1023	Great House	7	2	1	Brown	Indented Corrugated	7	8	7.2

## Appendix D

ID	Specimen #	Area	Unit	Level	Locus	Ware	Type	Coil Count	Indent Count	Max Thickness
533	1023	Great House	7	2	1	Brown	Indented Corrugated	6	10	5.74
534	1023	Great House	7	2	1	Brown	Indented Corrugated	n/a	8	6.83
535	1023	Great House	7	2	1	Brown	Indented Corrugated	7	n/a	7
536	1023	Great House	7	2	1	Brown	Indented Corrugated	7	10	7.2
537	1023	Great House	7	2	1	Brown	Indented Corrugated	8	9	6.64
538	1064	Great House	7	3	1	Gray	Indented Corrugated	6	n/a	5.66
539	1064	Great House	7	3	1	Gray	Indented Corrugated	6	8	5.46
540	1064	Great House	7	3	1	Gray	Indented Corrugated	n/a	6	5.6
541	1064	Great House	7	3	1	Brown	Plain Corrugated	10	n/a	6.84
542	1064	Great House	7	3	1	Brown	Indented Corrugated	7	8	6.89
543	1064	Great House	7	3	1	Brown	Indented Corrugated	n/a	7	6.46
544	1096	Great House	7	4	1	Gray	Indented Corrugated	n/a	6	5.75
545	1096	Great House	7	4	1	Brown	Indented Corrugated	n/a	8	7.34
546	1096	Great House	7	4	1	Brown	Indented Corrugated	7	8	6.68
547	1096	Great House	7	4	1	Brown	Indented Corrugated	n/a	7	6.41
548	1134	Great House	7	5	1	Brown	Indented Corrugated	9	8	5.85
549	1186	Great House	7	7	1	Brown	Indented Corrugated	7	10	6.75
550	1212	Great House	7	7	1	Gray	Indented Corrugated	8	10	5.56
551	1212	Great House	7	7	1	Gray	Indented Corrugated	4	7	5.75
552	1247	Great House	7	8	1	Gray	Indented Corrugated	6	5	6.23
553	1247	Great House	7	8	1	Gray	Indented Corrugated	n/a	6	6.35
554	1247	Great House	7	8	1	Gray	Indented Corrugated	6	7	4.91
555	1247	Great House	7	8	1	Gray	Indented Corrugated	6	5	6.72
556	1247	Great House	7	8	1	Brown	Plain Corrugated	8	n/a	8.16
557	1247	Great House	7	8	1	Brown	Plain Corrugated	8	n/a	7.93
558	1316	Great House	7	9	1	Gray	Plain Corrugated	7	n/a	6.12
559	1316	Great House	7	9	1	Gray	Indented Corrugated	5	10	5.44
560	1316	Great House	7	9	1	Gray	Indented Corrugated	n/a	8	7.17
561	1316	Great House	7	9	1	Brown	Plain Corrugated	7	n/a	5.11
562	1316	Great House	7	9	1	Brown	Plain Corrugated	8	n/a	7.6
563	1316	Great House	7	9	1	Brown	Plain Corrugated	7	n/a	5.54
564	1300	Great House	7	10	1	Brown	Plain Corrugated	8	n/a	8.05
565	1300	Great House	7	10	1	Brown	Indented Corrugated	n/a	8	5.71
566	1300	Great House	7	10	1	Brown	Indented Corrugated	8	9	5.79
567	1300	Great House	7	10	1	Brown	Plain Corrugated	9	n/a	5.37
568	1351	Great House	7	10	1	Gray	Indented Corrugated	6	8	7.56
569	1351	Great House	7	12	1	Gray	Indented Corrugated	6	8	7.79
570	1604	Great House	7	12	1	Gray	Indented Corrugated	6	7	5.33
571	1604	Great House	7	1	1	Brown	Plain Corrugated	7	n/a	6.54
572	1060	Great House	8	1	1	Gray	Plain Corrugated	5	n/a	5.36
573	1060	Great House	8	1	1	Gray	Indented Corrugated	7	n/a	5.18
574	1060	Great House	8	1	1	Gray	Indented Corrugated	7	n/a	5.51
575	1060	Great House	8	1	1	Gray	Indented Corrugated	7	8	4.98
576	1060	Great House	8	1	1	Gray	Indented Corrugated	6	7	7.62
577	1060	Great House	8	1	1	Brown	Plain Corrugated	10	n/a	5.28
578	1060	Great House	8	1	1	Brown	Indented Corrugated	n/a	7	6.42
579	1060	Great House	8	1	1	Brown	Indented Corrugated	n/a	7	6.82
580	1060	Great House	8	1	1	Brown	Indented Corrugated	8	10	6.05

## Appendix D

ID	Specimen #	Area	Unit	Level	Locus	Ware	Type	Coil Count	Indent Count	Max Thickness
581	1117	Great House	8	2	1	Brown	Indented Corrugated	n/a	10	7.43
582	1117	Great House	8	2	1	Brown	Indented Corrugated	8	8	6.96
583	1132	Great House	8	3	1	Gray	Indented Corrugated	6	6	5.39
584	1132	Great House	8	3	1	Brown	Indented Corrugated	n/a	9	5.9
585	1184	Great House	8	4	1	Brown	Patterned Corrugated	9	8	5.65
586	1184	Great House	8	4	1	Brown	Patterned Corrugated	10	9	5.39
587	1242	Great House	8	5	1	Gray	Indented Corrugated	7	n/a	6.02
588	1242	Great House	8	5	1	Gray	Indented Corrugated	7	n/a	4.95
589	1286	Great House	8	7	1	Gray	Indented Corrugated	7	5	6.72
590	1286	Great House	8	7	1	Brown	Plain Corrugated	11	n/a	5.85
591	1372	Great House	8	8	1	Brown	Indented Corrugated	6	5	7.99
592	1578	Great House	8	12	1	Gray	Indented Corrugated	6	6	7.21
593	1578	Great House	8	12	1	Brown	Patterned Corrugated	7	n/a	5.89
594	1578	Great House	8	12	1	Brown	Plain Corrugated	11	n/a	7.61
595	1578	Great House	8	12	1	Brown	Plain Corrugated	13	n/a	7.54
596	1277	Great House	9	1	1	Gray	Indented Corrugated	7	8	5.42
597	1277	Great House	9	1	1	Gray	Indented Corrugated	7	6	7.05
598	1277	Great House	9	1	1	Gray	Indented Corrugated	8	9	5.94
599	1277	Great House	9	1	1	Gray	Indented Corrugated	6	7	6.16
600	1277	Great House	9	1	1	Gray	Indented Corrugated	7	7	5.54
601	1277	Great House	9	1	1	Gray	Indented Corrugated	n/a	10	6.81
602	1277	Great House	9	1	1	Gray	Patterned Corrugated	5	n/a	8.39
603	1277	Great House	9	1	1	Gray	Indented Corrugated	n/a	4	7.81
604	1277	Great House	9	1	1	Gray	Indented Corrugated	8	n/a	6.32
605	1277	Great House	9	1	1	Gray	Indented Corrugated	8	n/a	6.94
606	1277	Great House	9	1	1	Gray	Indented Corrugated	n/a	5	9.23
607	1277	Great House	9	1	1	Gray	Indented Corrugated	6	6	6.89
608	1277	Great House	9	1	1	Gray	Indented Corrugated	6	n/a	6.29
609	1277	Great House	9	1	1	Gray	Indented Corrugated	6	7	6.61
610	1277	Great House	9	1	1	Gray	Indented Corrugated	6	7	6.07
611	1277	Great House	9	1	1	Gray	Indented Corrugated	7	n/a	5.56
612	1277	Great House	9	1	1	Gray	Indented Corrugated	n/a	8	7.41
613	1277	Great House	9	1	1	Brown	Plain Corrugated	7	n/a	6.56
614	1277	Great House	9	1	1	Brown	Plain Corrugated	10	n/a	7.7
615	1277	Great House	9	1	1	Brown	Plain Corrugated	12	n/a	8.41
616	1277	Great House	9	1	1	Brown	Plain Corrugated	9	n/a	7.94
617	1277	Great House	9	1	1	Brown	Plain Corrugated	6	n/a	6.74
618	1277	Great House	9	1	1	Brown	Plain Corrugated	9	n/a	5.56
619	1277	Great House	9	1	1	Brown	Plain Corrugated	9	n/a	5.94
620	1277	Great House	9	1	1	Brown	Patterned Corrugated	7	8	7.52
621	1277	Great House	9	1	1	Brown	Patterned Corrugated	9	n/a	7.23
622	1277	Great House	9	1	1	Brown	Patterned Corrugated	n/a	13	6.56
623	1277	Great House	9	1	1	Brown	Patterned Corrugated	7	n/a	6.25
624	1277	Great House	9	1	1	Brown	Patterned Corrugated	9	n/a	7.55
625	1277	Great House	9	1	1	Brown	Patterned Corrugated	8	n/a	6.05
626	1277	Great House	9	1	1	Brown	Indented Corrugated	9	9	5.38
627	1277	Great House	9	1	1	Brown	Indented Corrugated	10	10	8.91
628	1277	Great House	9	1	1	Brown	Indented Corrugated	8	n/a	7.91



## Appendix D

ID	Specimen #	Area	Unit	Level	Locus	Ware	Type	Coil Count	Indent Count	Max Thickness
629	1277	Great House	9	1	1	Brown	Indented Corrugated	7	9	5.38
630	1277	Great House	9	1	1	Brown	Indented Corrugated	10	n/a	6.56
631	1277	Great House	9	1	1	Brown	Indented Corrugated	n/a	9	6.45
632	1375	Great House	9	2	1	Gray	Indented Corrugated	6	7	6.08
633	1375	Great House	9	2	1	Gray	Indented Corrugated	n/a	6	7.21
634	1375	Great House	9	2	1	Gray	Indented Corrugated	6	n/a	5.6
635	1375	Great House	9	2	1	Gray	Indented Corrugated	n/a	7	7.22
636	1375	Great House	9	2	1	Gray	Indented Corrugated	6	n/a	6.08
637	1375	Great House	9	2	1	Gray	Indented Corrugated	n/a	8	5.06
638	1375	Great House	9	2	1	Brown	Plain Corrugated	7	n/a	7.54
639	1375	Great House	9	2	1	Brown	Plain Corrugated	10	n/a	6.41
640	1375	Great House	9	2	1	Brown	Patterned Corrugated	8	9	7.57
641	1413	Great House	9	3	1	Gray	Indented Corrugated	5	8	7.28
642	1413	Great House	9	3	1	Gray	Indented Corrugated	n/a	8	6.33
643	1413	Great House	9	3	1	Gray	Indented Corrugated	8	8	5.98
644	1413	Great House	9	3	1	Gray	Indented Corrugated	6	6	6.66
645	1413	Great House	9	3	1	Gray	Indented Corrugated	6	7	5.6
646	1413	Great House	9	3	1	Gray	Indented Corrugated	n/a	8	6.37
647	1413	Great House	9	3	1	Gray	Indented Corrugated	n/a	8	6.93
648	1413	Great House	9	3	1	Gray	Indented Corrugated	n/a	9	5.25
649	1413	Great House	9	3	1	Gray	Indented Corrugated	5	n/a	6.47
650	1413	Great House	9	3	1	Gray	Indented Corrugated	6	7	6.27
651	1413	Great House	9	3	1	Gray	Indented Corrugated	5	6	6.83
652	1413	Great House	9	3	1	Gray	Indented Corrugated	n/a	8	5.6
653	1413	Great House	9	3	1	Gray	Indented Corrugated	n/a	8	6.6
654	1413	Great House	9	3	1	Brown	Plain Corrugated	10	n/a	7.49
655	1413	Great House	9	3	1	Brown	Plain Corrugated	12	n/a	6.93
656	1413	Great House	9	3	1	Brown	Plain Corrugated	9	n/a	7.3
657	1413	Great House	9	3	1	Brown	Plain Corrugated	10	n/a	7.17
658	1413	Great House	9	3	1	Brown	Plain Corrugated	12	n/a	8.01
659	1413	Great House	9	3	1	Brown	Indented Corrugated	8	n/a	6.12
660	1413	Great House	9	3	1	Brown	Indented Corrugated	8	7	5.45
661	1413	Great House	9	3	1	Brown	Indented Corrugated	10	10	7.05
662	1413	Great House	9	3	1	Brown	Indented Corrugated	8	6	7.41
663	1504	Great House	9	4	1	Gray	Indented Corrugated	6	n/a	6.79
664	1504	Great House	9	4	1	Brown	Plain Corrugated	7	n/a	8.8
665	1380	Great House	10	2	1	Gray	Patterned Corrugated	7	n/a	6.65
666	1380	Great House	10	2	1	Gray	Patterned Corrugated	8	6	7.49
667	1380	Great House	10	2	1	Gray	Indented Corrugated	6	6	6.7
668	1380	Great House	10	2	1	Gray	Indented Corrugated	n/a	8	5.55
669	1380	Great House	10	2	1	Gray	Indented Corrugated	6	6	7.33
670	1380	Great House	10	2	1	Brown	Plain Corrugated	10	n/a	6.17
671	1380	Great House	10	2	1	Brown	Indented Corrugated	7	6	6.85
672	1380	Great House	10	2	1	Brown	Indented Corrugated	10	10	7.67
673	1380	Great House	10	2	1	Brown	Plain Corrugated	10	n/a	5.88
674	1380	Great House	10	2	1	Brown	Plain Corrugated	8	n/a	8.69
675	1380	Great House	10	2	1	Brown	Plain Corrugated	11	n/a	7.56
676	1387	Great House	10	3	1	Gray	Indented Corrugated	8	9	5.88

## Appendix D

ID	Specimen #	Area	Unit	Level	Locus	Ware	Type	Coil Count	Indent Count	Max Thickness
677	1387	Great House	10	3	1	Gray	Indented Corrugated	4	n/a	7.07
678	1387	Great House	10	3	1	Gray	Indented Corrugated	7	7	7.44
679	1387	Great House	10	3	1	Gray	Indented Corrugated	n/a	7	7.17
680	1387	Great House	10	3	1	Gray	Indented Corrugated	n/a	10	6.26
681	1387	Great House	10	3	1	Gray	Indented Corrugated	6	8	6.62
682	1387	Great House	10	3	1	Gray	Indented Corrugated	n/a	8	6.71
683	1387	Great House	10	3	1	Brown	Patterned Corrugated	10	12	7.72
684	1407	Great House	10	4	1	Gray	Indented Corrugated	5	8	6.79
685	1407	Great House	10	4	1	Gray	Indented Corrugated	5	8	6.39
686	1407	Great House	10	4	1	Gray	Indented Corrugated	6	7	7.16
687	1407	Great House	10	4	1	Gray	Indented Corrugated	5	8	6.43
688	1407	Great House	10	4	1	Gray	Indented Corrugated	5	9	5.75
689	1407	Great House	10	4	1	Gray	Indented Corrugated	6	6	6.69
690	1407	Great House	10	4	1	Brown	Plain Corrugated	7	n/a	6.12
691	1407	Great House	10	4	1	Brown	Plain Corrugated	7	n/a	6.25
692	1429	Great House	10	5	1	Brown	Plain Corrugated	8	n/a	7.15
693	1393	Great House	11	2	1	Gray	Indented Corrugated	n/a	6	6.08
694	1393	Great House	11	2	1	Gray	Indented Corrugated	n/a	8	6.22
695	1393	Great House	11	2	1	Gray	Indented Corrugated	7	n/a	5.6
696	1393	Great House	11	2	1	Brown	Plain Corrugated	8	n/a	6.43
697	1396	Great House	11	3	1	Gray	Indented Corrugated	8	n/a	5.63
698	1177	1 Midden	4	1	1	Brown	Indented Corrugated	8	7	8.28
699	1177	1 Midden	4	1	1	Brown	Indented Corrugated	10	n/a	6.21
700	1209	1 Midden	4	2	1	Gray	Patterned Corrugated	7	6	6.15
701	1209	1 Midden	4	2	1	Brown	Plain Corrugated	11	n/a	6.38
702	1222	1 Midden	4	3	1	Gray	Indented Corrugated	4	7	6.75
703	1332	1 Midden	4	5	1	Brown	Indented Corrugated	6	8	6.29
704	1337	1 Midden	5	1	1	Gray	Indented Corrugated	n/a	8	6.25
705	1337	1 Midden	5	1	1	Brown	Indented Corrugated	7	8	7.27
706	1337	1 Midden	5	1	1	Brown	Indented Corrugated	7	8	6.53
707	1401	1 Midden	5	2	1	Gray	Indented Corrugated	6	6	6.54
708	1401	1 Midden	5	2	1	Brown	Indented Corrugated	8	12	5.66
709	1401	1 Midden	5	2	1	Brown	Patterned Corrugated	11	n/a	6.5
710	892	7 Midden	1	0	1	Brown	Indented Corrugated	7	8	7.76
711	894	7 Midden	1	1	1	Brown	Indented Corrugated	7	8	7.84
712	894	7 Midden	1	1	1	Brown	Plain Corrugated	9	n/a	6.67
713	894	7 Midden	1	1	1	Brown	Plain Corrugated	5	n/a	8.83
714	870	7 Midden	3	3	1	Brown	Indented Corrugated	n/a	8	6.16
715	870	7 Midden	3	3	1	Brown	Plain Corrugated	10	n/a	5.7
716	930	7 Midden	3	2	1	Gray	Indented Corrugated	5	7	7.43
717	959	7 Midden	3	3	1	Brown	Plain Corrugated	9	n/a	7.49
718	982	7 Midden	3	4	1	Brown	Indented Corrugated	9	11	6.24
719	982	7 Midden	3	4	1	Gray	Indented Corrugated	6	7	5.11
720	982	7 Midden	3	4	1	Gray	Indented Corrugated	7	8	6.18
721	982	7 Midden	3	4	1	Gray	Indented Corrugated	7	7	6.32
722	982	7 Midden	3	4	1	Brown	Indented Corrugated	9	9	7.35
723	982	7 Midden	3	4	1	Brown	Indented Corrugated	7	7	6.32
724	982	7 Midden	3	4	1	Brown	Plain Corrugated	10	n/a	6.15

## Appendix D

ID	Specimen #	Area	Unit	Level	Locus	Ware	Type	Coil Count	Indent Count	Max Thickness
725	1002	7 Midden	3	5	1	Brown	Indented Corrugated	8	10	7.73
726	1002	7 Midden	3	5	1	Gray	Indented Corrugated	4	8	7.06
727	1002	7 Midden	3	5	1	Gray	Indented Corrugated	5	8	6.69
728	1002	7 Midden	3	5	1	Gray	Indented Corrugated	5	7	6.65
729	1002	7 Midden	3	5	1	Gray	Indented Corrugated	n/a	5	5.67
730	1012	7 Midden	3	6	1	Brown	Plain Corrugated	5	n/a	6.27
731	1012	7 Midden	3	6	1	Brown	Plain Corrugated	13	n/a	7.25
732	1025	7 Midden	3	7	1	Gray	Indented Corrugated	n/a	6	6.93
733	1025	7 Midden	3	7	1	Brown	Indented Corrugated	n/a	8	6.83
734	1025	7 Midden	3	7	1	Gray	Indented Corrugated	8	8	4.91
735	1025	7 Midden	3	7	1	Gray	Indented Corrugated	n/a	7	6.58
736	1030	7 Midden	3	8	1	Gray	Indented Corrugated	n/a	7	6.25
737	1030	7 Midden	3	8	1	Gray	Indented Corrugated	6	n/a	7.02
738	963	7 Midden	4	2	1	Brown	Indented Corrugated	n/a	8	7.37
739	922	7 Midden	5	2	1	Brown	Indented Corrugated	9	8	7.59
740	922	7 Midden	5	2	1	Brown	Plain Corrugated	10	n/a	5.88
741	922	7 Midden	5	2	1	Brown	Indented Corrugated	9	n/a	6.92
742	922	7 Midden	5	2	1	Brown	Plain Corrugated	10	n/a	5.9
743	922	7 Midden	5	2	1	Gray	Indented Corrugated	n/a	6	6.57
744	922	7 Midden	5	2	1	Gray	Indented Corrugated	n/a	7	7.12
745	967	7 Midden	5	3	1	Brown	Indented Corrugated	10	11	6.9
746	907	13 Midden	1	1	1	Gray	Indented Corrugated	7	n/a	6.61
747	907	13 Midden	1	1	1	Brown	Plain Corrugated	8	n/a	7.03
748	907	13 Midden	1	1	1	Brown	Plain Corrugated	9	n/a	5.73
749	907	13 Midden	1	1	1	Brown	Plain Corrugated	9	n/a	5.67
750	907	13 Midden	1	1	1	Brown	Indented Corrugated	7	8	6.76
751	1008	13 Midden	1	2	1	Gray	Indented Corrugated	n/a	5	6.05
752	1008	13 Midden	1	2	1	Gray	Plain Corrugated	4	n/a	6.06
753	1008	13 Midden	1	2	1	Brown	Indented Corrugated	7	n/a	7.63
754	1008	13 Midden	1	2	1	Brown	Indented Corrugated	n/a	4	6.65
755	1008	13 Midden	1	2	1	Brown	Plain Corrugated	8	n/a	7.44
756	897	13 Midden	3	0	1	Gray	Indented Corrugated	5	n/a	7.16
757	899	13 Midden	3	1	1	Gray	Indented Corrugated	6	7	4.93
758	899	13 Midden	3	1	1	Gray	Indented Corrugated	7	9	5.52
759	899	13 Midden	3	1	1	Brown	Indented Corrugated	n/a	11	5.85
760	899	13 Midden	3	1	1	Brown	Indented Corrugated	8	10	6.04
761	933	13 Midden	3	2	1	Brown	Indented Corrugated	10	12	7.05
762	933	13 Midden	3	2	1	Gray	Indented Corrugated	n/a	7	7.46
763	989	13 Midden	3	3	1	Gray	Indented Corrugated	7	5	7.6
764	874	13 Midden	4	1	1	Brown	Indented Corrugated	11	n/a	6.26
765	874	13 Midden	4	1	1	Brown	Indented Corrugated	10	n/a	7.05
766	874	13 Midden	4	1	1	Gray	Indented Corrugated	11	5	8.42
767	942	13 Midden	4	2	1	Brown	Indented Corrugated	7	11	5.97
768	978	13 Midden	4	3	1	Brown	Plain Corrugated	8	n/a	5.63
769	916	13 Midden	5	1	1	Gray	Indented Corrugated	n/a	7	5.91
770	916	13 Midden	5	1	1	Brown	Indented Corrugated	5	6	7.97
771	916	13 Midden	5	1	1	Brown	Indented Corrugated	n/a	6	7.45
772	863	13 Midden	6	1	1	Gray	Indented Corrugated	8	n/a	7.68

## Appendix D

ID	Specimen #	Area	Unit	Level	Locus	Ware	Type	Coil Count	Indent Count	Max Thickness
773	863	13 Midden	6	1	1	Gray	Indented Corrugated	n/a	6	6.32
774	863	13 Midden	6	1	1	Brown	Plain Corrugated	8	n/a	7.98
775	1083	Roomblock 2	4	1	1	Gray	Indented Corrugated	8	6	7.93
776	1083	Roomblock 2	4	1	1	Gray	Indented Corrugated	8	7	7.08
777	1083	Roomblock 2	4	1	1	Gray	Indented Corrugated	8	6	7.5
778	1083	Roomblock 2	4	1	1	Brown	Indented Corrugated	8	n/a	5.26
779	1083	Roomblock 2	4	1	1	Brown	Indented Corrugated	10	n/a	5.36
780	1083	Roomblock 2	4	1	1	Brown	Indented Corrugated	9	n/a	5.93
781	1083	Roomblock 2	4	1	1	Brown	Indented Corrugated	8	6	6.16
782	1083	Roomblock 2	4	1	1	Brown	Plain Corrugated	9	n/a	6.25
783	1083	Roomblock 2	4	1	1	Brown	Plain Corrugated	9	n/a	5.97
784	1083	Roomblock 2	4	1	1	Brown	Plain Corrugated	14	n/a	6.91
785	1119	Roomblock 2	4	2	1	Gray	Plain Corrugated	7	n/a	6.59
786	1119	Roomblock 2	4	2	1	Gray	Indented Corrugated	n/a	6	7.54
787	1119	Roomblock 2	4	2	1	Gray	Indented Corrugated	7	6	7.6
788	1119	Roomblock 2	4	2	1	Gray	Indented Corrugated	8	7	6.95
789	1119	Roomblock 2	4	2	1	Gray	Indented Corrugated	8	6	7.14
790	1119	Roomblock 2	4	2	1	Brown	Patterned Corrugated	6	5	7.14
791	1119	Roomblock 2	4	2	1	Brown	Indented Corrugated	9	n/a	5.69
792	1119	Roomblock 2	4	2	1	Brown	Indented Corrugated	9	n/a	6.33
793	1119	Roomblock 2	4	2	1	Brown	Indented Corrugated	7	n/a	5.81
794	1119	Roomblock 2	4	2	1	Brown	Indented Corrugated	8	8	6.11
795	1122	Roomblock 2	4	3	1	Gray	Indented Corrugated	8	7	6.87
796	1801	6 Midden	2	2	1	Gray	Indented Corrugated	7	6	5.67
797	1801	6 Midden	2	2	1	Brown	Plain Corrugated	13	n/a	7.29
798	1727	6 Midden	2	1	1	Brown	Indented Corrugated	14	n/a	7.33
799	1727	6 Midden	2	1	1	Brown	Indented Corrugated	12	8	6.15
800	1727	6 Midden	2	1	1	Brown	Patterned Corrugated	9	8	6.64
801	1727	6 Midden	2	1	1	Brown	Patterned Corrugated	10	11	6.8
802	1727	6 Midden	2	1	1	Brown	Plain Corrugated	11	n/a	8.5
803	1727	6 Midden	2	1	1	Gray	Indented Corrugated	5	n/a	8.76
804	1727	6 Midden	2	1	1	Gray	Indented Corrugated	n/a	9	6.51
805	1783	6 Midden	1	2	1	Brown	Indented Corrugated	7	n/a	7.42
806	1783	6 Midden	1	2	1	Brown	Indented Corrugated	11	10	6.45
807	1783	6 Midden	1	2	1	Brown	Indented Corrugated	9	n/a	6.68
808	1783	6 Midden	1	2	1	Gray	Indented Corrugated	n/a	10	5.71
809	1783	6 Midden	1	2	1	Gray	Indented Corrugated	7	n/a	6.44
810	1717	6 Midden	1	1	1	Gray	Indented Corrugated	9	10	5.08
811	1717	6 Midden	1	1	1	Gray	Indented Corrugated	8	7	6.91
812	1717	6 Midden	1	1	1	Gray	Indented Corrugated	n/a	6	7.13
813	1717	6 Midden	1	1	1	Gray	Indented Corrugated	8	n/a	7.15
814	1717	6 Midden	1	1	1	Brown	Plain Corrugated	9	n/a	6.33
815	1717	6 Midden	1	1	1	Brown	Indented Corrugated	n/a	10	8.45
816	1717	6 Midden	1	1	1	Brown	Indented Corrugated	10	9	7.14
817	1717	6 Midden	1	1	1	Brown	Indented Corrugated	9	8	6.86
818	1717	6 Midden	1	1	1	Brown	Indented Corrugated	n/a	10	6.19
819	1717	6 Midden	1	1	1	Brown	Indented Corrugated	8	8	6.3
820	1891	Great House	8	1	2	Gray	Indented Corrugated	4	8	7.17

## Appendix D

ID	Specimen #	Area	Unit	Level	Locus	Ware	Type	Coil Count	Indent Count	Max Thickness
821	1891	Great House	8	1	2	Brown	Indented Corrugated	10	10	8.35
822	1956	11 Midden	1	4	1	Brown	Indented Corrugated	10	n/a	6.97
823	1956	11 Midden	1	4	1	Brown	Indented Corrugated	9	12	8.14
824	1956	11 Midden	1	4	1	Gray	Indented Corrugated	n/a	7	6.66
825	1956	11 Midden	1	4	1	Gray	Indented Corrugated	n/a	7	5.24
826	1939	11 Midden	1	3	1	Gray	Indented Corrugated	5	n/a	6.52
827	1939	11 Midden	1	3	1	Gray	Indented Corrugated	6	6	6.14
828	1939	11 Midden	1	3	1	Gray	Indented Corrugated	7	6	7.08
829	1939	11 Midden	1	3	1	Gray	Indented Corrugated	7	6	6.41
830	1939	11 Midden	1	3	1	Brown	Indented Corrugated	n/a	9	5.08
831	1939	11 Midden	1	3	1	Brown	Indented Corrugated	10	12	8.24
832	1939	11 Midden	1	3	1	Brown	Plain Corrugated	13	n/a	8.05
833	1775	11 Midden	1	2	1	Brown	Patterned Corrugated	9	8	7.61
834	1775	11 Midden	1	2	1	Brown	Plain Corrugated	7	n/a	6.18
835	1775	11 Midden	1	2	1	Brown	Indented Corrugated	n/a	11	6.02
836	1707	11 Midden	1	1	1	Gray	Indented Corrugated	6	n/a	5.34
837	1707	11 Midden	1	1	1	Gray	Indented Corrugated	7	7	6.48
838	1642	11 Midden	4	1	1	Brown	Patterned Corrugated	8	n/a	7.17
839	1738	11 Midden	2	1	1	Gray	Indented Corrugated	9	8	5.11
840	1738	11 Midden	2	1	1	Brown	Indented Corrugated	n/a	9	6.51
841	1738	11 Midden	2	1	1	Gray	Indented Corrugated	5	n/a	6.27
842	1757	6 Midden	3	2	1	Brown	Plain Corrugated	13	n/a	6.44
843	1757	6 Midden	3	2	1	Gray	Indented Corrugated	n/a	8	5.07
844	1757	6 Midden	3	2	1	Gray	Indented Corrugated	7	8	5.25
845	1746	6 Midden	3	1	1	Brown	Plain Corrugated	10	n/a	7.01
846	1746	6 Midden	3	1	1	Brown	Plain Corrugated	10	n/a	7.37
847	1746	6 Midden	3	1	1	Gray	Indented Corrugated	n/a	6	6.01
848	1746	6 Midden	3	1	1	Gray	Indented Corrugated	9	8	6.65
849	1746	6 Midden	3	1	1	Gray	Indented Corrugated	n/a	10	6.01
850	1746	6 Midden	3	1	1	Gray	Indented Corrugated	6	7	6.63
851	1746	6 Midden	3	1	1	Brown	Indented Corrugated	6	n/a	6.5
852	1746	6 Midden	3	1	1	Brown	Indented Corrugated	11	8	7.24
853	1746	6 Midden	3	1	1	Brown	Indented Corrugated	8	n/a	7.78
854	1746	6 Midden	3	1	1	Brown	Indented Corrugated	9	13	6.82
855	1746	6 Midden	3	1	1	Brown	Indented Corrugated	10	8	6.96
856	1746	6 Midden	3	1	1	Brown	Indented Corrugated	10	n/a	7.38
857	1798	6 Midden	3	2	1	Brown	Indented Corrugated	8	7	7.4
858	1798	6 Midden	3	2	1	Brown	Indented Corrugated	9	10	7.46
859	1683	6 Midden	4	0	1	Brown	Plain Corrugated	9	n/a	6.01
860	1779	6 Midden	4	2	1	Gray	Indented Corrugated	7	8	6.54
861	1841	6 Midden	3	3	1	Brown	Indented Corrugated	n/a	10	6.74
862	1825	6 Midden	4	3	1	Gray	Indented Corrugated	8	9	8.24
863	1825	6 Midden	4	3	1	Gray	Indented Corrugated	7	7	7.25
864	1825	6 Midden	4	3	1	Brown	Plain Corrugated	9	n/a	6.32
865	1849	6 Midden	2	3	1	Gray	Plain Corrugated	5	n/a	7.86
866	1687	6 Midden	4	1	1	Brown	Plain Corrugated	10	n/a	5.93
867	1687	6 Midden	4	1	1	Brown	Plain Corrugated	11	n/a	5.71
868	1687	6 Midden	4	1	1	Gray	Indented Corrugated	6	8	6.2

## Appendix D

ID	Specimen #	Area	Unit	Level	Locus	Ware	Type	Coil Count	Indent Count	Max Thickness
869	1661	6 Midden	5	1	1	Brown	Plain Corrugated	9	n/a	8.62
870	1661	6 Midden	5	1	1	Brown	Plain Corrugated	8	n/a	8.15
871	1661	6 Midden	5	1	1	Brown	Indented Corrugated	8	8	6.58
872	1661	6 Midden	5	1	1	Gray	Indented Corrugated	7	n/a	7.18
873	1661	6 Midden	5	1	1	Gray	Indented Corrugated	8	8	5.7
874	1661	6 Midden	5	1	1	Gray	Indented Corrugated	8	n/a	6.25
875	1742	6 Midden	3	0	1	Brown	Indented Corrugated	n/a	7	6.41
876	1729	6 Midden	5	2	1	Brown	Indented Corrugated	9	8	6.9
877	1729	6 Midden	5	2	1	Brown	Plain Corrugated	11	n/a	6.49
878	1729	6 Midden	5	2	1	Gray	Indented Corrugated	n/a	7	5.79
879	1729	6 Midden	5	2	1	Gray	Indented Corrugated	7	10	6.61
880	1729	6 Midden	5	2	1	Gray	Indented Corrugated	n/a	6	6.41
881	1695	8 Midden	3	1	1	Brown	Plain Corrugated	11	n/a	6.61
882	1695	8 Midden	3	1	1	Brown	Patterned Corrugated	8	n/a	6.98
883	1695	8 Midden	3	1	1	Gray	Indented Corrugated	5	n/a	7.67
884	1673	8 Midden	4	1	1	Brown	Indented Corrugated	10	5	6.51
885	1681	8 Midden	1	1	1	Gray	Indented Corrugated	8	n/a	6.29
886	1836	8 Midden	3	4	1	Gray	Indented Corrugated	5	7	6.75
887	1656	8 Midden	5	1	1	Brown	Patterned Corrugated	n/a	5	7.41
888	1688	8 Midden	5	2	1	Gray	Indented Corrugated	7	7	6.77
889	2139	Roomblock 2	8	2	1	Brown	Indented Corrugated	n/a	10	6.3
890	2139	Roomblock 2	8	2	1	Brown	Indented Corrugated	9	n/a	7
891	2139	Roomblock 2	8	2	1	Brown	Indented Corrugated	n/a	7	6.81
892	2139	Roomblock 2	8	2	1	Brown	Indented Corrugated	8	8	6.88
893	2139	Roomblock 2	8	2	1	Brown	Indented Corrugated	10	10	7.29
894	2139	Roomblock 2	8	2	1	Brown	Indented Corrugated	8	8	6.7
895	2139	Roomblock 2	8	2	1	Brown	Indented Corrugated	n/a	8	6.8
896	2139	Roomblock 2	8	2	1	Brown	Indented Corrugated	8	7	6.3
897	2139	Roomblock 2	8	2	1	Brown	Indented Corrugated	8	14	7.64
898	2139	Roomblock 2	8	2	1	Brown	Indented Corrugated	9	6	6.62
899	2139	Roomblock 2	8	2	1	Brown	Indented Corrugated	9	8	6.41
900	2139	Roomblock 2	8	2	1	Brown	Indented Corrugated	n/a	8	7.12
901	2139	Roomblock 2	8	2	1	Brown	Plain Corrugated	9	n/a	7.01
902	2139	Roomblock 2	8	2	1	Brown	Plain Corrugated	9	n/a	7.05
903	2139	Roomblock 2	8	2	1	Brown	Plain Corrugated	9	n/a	6.8
904	2139	Roomblock 2	8	2	1	Brown	Plain Corrugated	10	n/a	6.22
905	2139	Roomblock 2	8	2	1	Brown	Plain Corrugated	9	n/a	7.25
906	2139	Roomblock 2	8	2	1	Brown	Plain Corrugated	8	n/a	7.22
907	2139	Roomblock 2	8	2	1	Brown	Plain Corrugated	10	n/a	6.4
908	2139	Roomblock 2	8	2	1	Brown	Plain Corrugated	8	n/a	7.18
909	2139	Roomblock 2	8	2	1	Brown	Plain Corrugated	10	n/a	5.93
910	2139	Roomblock 2	8	2	1	Brown	Indented Corrugated	4	7	6.28
911	2139	Roomblock 2	8	2	1	Brown	Plain Corrugated	6	n/a	8.92
912	2139	Roomblock 2	8	2	1	Gray	Plain Corrugated	10	n/a	6
913	2395	Great House	17	2	1	Brown	Plain Corrugated	10	n/a	5.56
914	2271	Roomblock 2	8	4	1	Brown	Patterned Corrugated	10	5	5.81
915	2271	Roomblock 2	8	4	1	Brown	Patterned Corrugated	10	5	7.68
916	2271	Roomblock 2	8	4	1	Brown	Patterned Corrugated	9	n/a	6.5

## Appendix D

ID	Specimen #	Area	Unit	Level	Locus	Ware	Type	Coil Count	Indent Count	Max Thickness
917	2271	Roomblock 2	8	4	1	Brown	Patterned Corrugated	9	6	7.3
918	2271	Roomblock 2	8	4	1	Brown	Patterned Corrugated	9	6	5.96
919	2271	Roomblock 2	8	4	1	Brown	Patterned Corrugated	9	4	7.15
920	2271	Roomblock 2	8	4	1	Brown	Patterned Corrugated	9	n/a	7.05
921	2271	Roomblock 2	8	4	1	Brown	Patterned Corrugated	10	9	7.14
922	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	8	n/a	7.18
923	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	9	n/a	7.28
924	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	9	n/a	6.61
925	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	8	n/a	7.83
926	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	8	n/a	7.08
927	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	8	n/a	6.85
928	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	9	n/a	6.85
929	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	9	n/a	6.38
930	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	9	n/a	7.17
931	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	9	n/a	7.32
932	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	10	n/a	6.87
933	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	9	n/a	6.63
934	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	10	n/a	6.91
935	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	9	n/a	6.56
936	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	9	n/a	6.34
937	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	9	n/a	7.08
938	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	9	n/a	7.15
939	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	9	n/a	7.26
940	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	10	n/a	7.35
941	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	9	n/a	7.98
942	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	10	n/a	6.99
943	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	8	n/a	7.02
944	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	10	n/a	8.15
945	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	8	n/a	7.63
946	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	9	n/a	7.36
947	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	9	n/a	7.92
948	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	10	n/a	6.36
949	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	9	n/a	6.49
950	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	9	n/a	6.25
951	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	8	n/a	6.11
952	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	9	n/a	6.4
953	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	9	n/a	6.6
954	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	10	n/a	7.51
955	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	9	n/a	5.71
956	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	9	n/a	6.73
957	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	10	n/a	6.43
958	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	10	n/a	7.31
959	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	9	n/a	6.45
960	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	10	n/a	7.73
961	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	8	12	8.26
962	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	7	7	6.1
963	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	8	10	6.65
964	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	8	12	7.35

## Appendix D

ID	Specimen #	Area	Unit	Level	Locus	Ware	Type	Coil Count	Indent Count	Max Thickness
965	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	8	8	7.72
966	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	8	13	6.51
967	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	9	11	5.96
968	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	7	7	6.52
969	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	9	12	6.76
970	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	9	6	6.79
971	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	8	12	6.79
972	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	9	11	6.28
973	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	7	12	6.11
974	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	9	11	6.78
975	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	9	11	6.54
976	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	8	7	6.86
977	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	9	10	5.86
978	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	n/a	11	8.49
979	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	10	12	6.08
980	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	9	11	7.07
981	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	8	11	6.6
982	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	8	7	6.36
983	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	8	8	6.29
984	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	8	6	6.86
985	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	8	8	6.63
986	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	8	8	6.34
987	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	9	7	6.23
988	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	9	13	7.49
989	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	9	11	7.19
990	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	9	11	7.11
991	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	8	7	6.5
992	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	8	11	6.92
993	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	8	12	6.75
994	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	6	8	6.45
995	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	8	7	6.56
996	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	8	6	6.31
997	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	7	n/a	6.43
998	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	8	11	6.5
999	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	8	n/a	6.3
1000	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	8	n/a	6.81
1001	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	n/a	9	6.35
1002	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	8	7	6.74
1003	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	9	n/a	6.45
1004	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	9	n/a	6.09
1005	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	7	n/a	5.96
1006	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	n/a	7	6.42
1007	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	n/a	12	6.87
1008	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	n/a	15	6.2
1009	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	9	n/a	6.19
1010	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	n/a	8	6.35
1011	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	9	14	6.31
1012	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	8	n/a	6.45



## Appendix D

ID	Specimen #	Area	Unit	Level	Locus	Ware	Type	Coil Count	Indent Count	Max Thickness
1013	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	n/a	7	5.81
1114	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	8	12	10.77
1115	2271	Roomblock 2	8	4	1	Brown	Indented Corrugated	8	11	9.4
1116	2271	Roomblock 2	8	4	1	Brown	Plain Corrugated	10	n/a	7.12
1117	2271	Roomblock 2	8	4	1	Brown	Patterned Corrugated	10	5	8.4
1118	2607	Great House	16	9	1	Brown	Indented Corrugated	10	6	6.71
1119	2607	Great House	16	9	1	Brown	Plain Corrugated	7	n/a	7.2
1120	2607	Great House	16	9	1	Brown	Plain Corrugated	7	n/a	7.42
1121	2607	Great House	16	9	1	Brown	Plain Corrugated	8	n/a	7.09
1122	2607	Great House	16	9	1	Brown	Patterned Corrugated	7	7	5.73
1123	2607	Great House	16	9	1	Brown	Indented Corrugated	7	8	5.94
1124	2607	Great House	16	9	1	Gray	Patterned Corrugated	7	6	7.17
1125	2607	Great House	16	9	1	Gray	Indented Corrugated	n/a	10	5.67
1126	2607	Great House	16	9	1	Gray	Indented Corrugated	5	8	7.09
1127	2607	Great House	16	9	1	Gray	Indented Corrugated	5	6	6.31
1128	2607	Great House	16	9	1	Gray	Indented Corrugated	6	8	5.16
1129	2607	Great House	16	9	1	Gray	Indented Corrugated	6	n/a	6.78
1130	2607	Great House	16	9	1	Gray	Indented Corrugated	6	6	6.69
1131	2607	Great House	16	9	1	Gray	Indented Corrugated	5	6	7.46
1132	2607	Great House	16	9	1	Gray	Indented Corrugated	n/a	8	5.46
1133	2607	Great House	16	9	1	Gray	Indented Corrugated	7	n/a	6.6
1134	2054	Roomblock 2	2	5	1	Brown	Plain Corrugated	10	n/a	5.9
1135	2054	Roomblock 2	2	5	1	Gray	Indented Corrugated	7	7	6.94
1136	1910	Roomblock 2	5	2	1	Brown	Indented Corrugated	n/a	6	6.35
1137	2597	Great House	17	6	1	Brown	Plain Corrugated	5	n/a	6.84
1138	2597	Great House	17	6	1	Brown	Plain Corrugated	6	n/a	5.88
1139	2597	Great House	17	6	1	Brown	Plain Corrugated	5	n/a	7.18
1140	2597	Great House	17	6	1	Brown	Indented Corrugated	8	10	6.7
1141	2597	Great House	17	6	1	Brown	Plain Corrugated	6	n/a	6.43
1142	2597	Great House	17	6	1	Gray	Indented Corrugated	6	11	6.32
1143	2597	Great House	17	6	1	Gray	Indented Corrugated	6	8	7.07
1144	2597	Great House	17	6	1	Gray	Indented Corrugated	8	8	6.73
1145	2597	Great House	17	6	1	Gray	Indented Corrugated	8	9	5.82
1146	2597	Great House	17	6	1	Gray	Indented Corrugated	5	8	5.71
1147	2597	Great House	17	6	1	Gray	Indented Corrugated	5	9	5.73
1148	2597	Great House	17	6	1	Gray	Indented Corrugated	5	8	5.78
1149	2597	Great House	17	6	1	Gray	Indented Corrugated	5	10	5.63
1150	2597	Great House	17	6	1	Gray	Indented Corrugated	6	9	5.86
1151	2597	Great House	17	6	1	Gray	Indented Corrugated	6	8	7.91
1152	2597	Great House	17	6	1	Gray	Indented Corrugated	9	7	5.77
1153	2597	Great House	17	6	1	Gray	Indented Corrugated	5	10	5.81
1154	2437	Great House	17	3	1	Gray	Plain Corrugated	5	n/a	7.45
1155	2437	Great House	17	3	1	Gray	Indented Corrugated	5	7	5.71
1156	2543	Roomblock 7	1	4	1	Brown	Patterned Corrugated	n/a	8	6.43
1157	2543	Roomblock 7	1	4	1	Brown	Plain Corrugated	9	n/a	7
1158	2543	Roomblock 7	1	4	1	Brown	Plain Corrugated	11	n/a	6.44
1159	2543	Roomblock 7	1	4	1	Brown	Indented Corrugated	n/a	10	6.02
1160	2543	Roomblock 7	1	4	1	Brown	Indented Corrugated	6	8	8.41

## Appendix D

ID	Specimen #	Area	Unit	Level	Locus	Ware	Type	Coil Count	Indent Count	Max Thickness
1161	2543	Roomblock 7	1	4	1	Brown	Indented Corrugated	9	n/a	7.11
1162	2543	Roomblock 7	1	4	1	Gray	Indented Corrugated	5	7	5.86
1163	2543	Roomblock 7	1	4	1	Gray	Indented Corrugated	5	7	5.75
1164	2543	Roomblock 7	1	4	1	Gray	Indented Corrugated	6	8	6.25
1165	2215	Great House	12	8	1	Brown	Patterned Corrugated	4	7	7.31
1166	2215	Great House	12	8	1	Brown	Patterned Corrugated	7	7	8.4
1167	2215	Great House	12	8	1	Brown	Patterned Corrugated	9	9	7.09
1168	2215	Great House	12	8	1	Brown	Indented Corrugated	8	9	5.9
1169	2215	Great House	12	8	1	Brown	Indented Corrugated	8	6	5.21
1170	2215	Great House	12	8	1	Brown	Indented Corrugated	9	9	6.02
1171	2215	Great House	12	8	1	Brown	Plain Corrugated	9	n/a	8.04
1172	2215	Great House	12	8	1	Brown	Plain Corrugated	8	n/a	7.89
1173	2215	Great House	12	8	1	Brown	Plain Corrugated	10	n/a	7.95
1174	2215	Great House	12	8	1	Gray	Indented Corrugated	6	7	5.65
1175	2215	Great House	12	8	1	Gray	Indented Corrugated	7	7	6.64
1176	2215	Great House	12	8	1	Gray	Indented Corrugated	7	8	6.45
1177	2562	Great House	17	5	1	Brown	Patterned Corrugated	8	10	5.97
1178	2562	Great House	17	5	1	Brown	Patterned Corrugated	8	10	6.5
1179	2562	Great House	17	5	1	Brown	Indented Corrugated	10	10	6.46
1180	2562	Great House	17	5	1	Brown	Plain Corrugated	8	n/a	6.3
1181	2562	Great House	17	5	1	Brown	Plain Corrugated	6	n/a	6.93
1182	2562	Great House	17	5	1	Gray	Indented Corrugated	9	8	6.05
1183	2562	Great House	17	5	1	Gray	Indented Corrugated	8	6	6.43
1184	2562	Great House	17	5	1	Gray	Indented Corrugated	8	8	6.52
1185	2317	Great House	15	4	1	Brown	Patterned Corrugated	9	5	5.55
1186	2317	Great House	15	4	1	Gray	Indented Corrugated	7	8	6.34
1187	2317	Great House	15	4	1	Brown	Indented Corrugated	8	8	8.98
1188	2317	Great House	15	4	1	Brown	Indented Corrugated	n/a	8	5.62
1189	2317	Great House	15	4	1	Brown	Plain Corrugated	10	n/a	6.96
1190	2317	Great House	15	4	1	Brown	Plain Corrugated	10	n/a	5.51
1191	2317	Great House	15	4	1	Brown	Plain Corrugated	11	n/a	6.16
1192	2317	Great House	15	4	1	Gray	Plain Corrugated	6	n/a	6.01
1193	2317	Great House	15	4	1	Gray	Indented Corrugated	8	8	5.57
1194	2317	Great House	15	4	1	Gray	Indented Corrugated	8	7	5.6
1195	2317	Great House	15	4	1	Gray	Indented Corrugated	6	9	5.64
1196	2317	Great House	15	4	1	Gray	Indented Corrugated	8	6	5.73
1197	2471	Great House	17	4	1	Brown	Indented Corrugated	7	8	6.75
1198	2471	Great House	17	4	1	Brown	Indented Corrugated	10	9	6.46
1199	2471	Great House	17	4	1	Gray	Indented Corrugated	8	5	5.91
1200	2471	Great House	17	4	1	Gray	Indented Corrugated	7	6	6.22
1201	2471	Great House	17	4	1	Gray	Indented Corrugated	8	6	5.88
1202	2471	Great House	17	4	1	Gray	Indented Corrugated	8	6	6.43
1203	2588	Great House	16	8	1	Brown	Patterned Corrugated	7	n/a	6.35
1204	2588	Great House	16	8	1	Brown	Patterned Corrugated	6	n/a	7.38
1205	2588	Great House	16	8	1	Brown	Indented Corrugated	5	n/a	6.8
1206	2588	Great House	16	8	1	Brown	Indented Corrugated	7	6	9.11
1207	2588	Great House	16	8	1	Brown	Plain Corrugated	7	n/a	8.01
1208	2588	Great House	16	8	1	Brown	Plain Corrugated	8	n/a	6.9

## Appendix D

ID	Specimen #	Area	Unit	Level	Locus	Ware	Type	Coil Count	Indent Count	Max Thickness
1209	2588	Great House	16	8	1	Brown	Plain Corrugated	4	n/a	7.97
1210	2588	Great House	16	8	1	Gray	Indented Corrugated	8	10	6.14
1211	2588	Great House	16	8	1	Gray	Indented Corrugated	7	9	6.4
1212	2576	Roomblock 7	1	5	1	Brown	Plain Corrugated	7	n/a	7.73
1213	2576	Roomblock 7	1	5	1	Brown	Plain Corrugated	10	n/a	5.77
1214	2576	Roomblock 7	1	5	1	Brown	Indented Corrugated	9	8	6.41
1215	2576	Roomblock 7	1	5	1	Brown	Indented Corrugated	12	11	5.16
1216	2576	Roomblock 7	1	5	1	Gray	Indented Corrugated	7	9	5.53
1217	2576	Roomblock 7	1	5	1	Gray	Indented Corrugated	7	7	5.74
1218	2576	Roomblock 7	1	5	1	Gray	Indented Corrugated	7	8	5.75
1219	2576	Roomblock 7	1	5	1	Gray	Indented Corrugated	7	7	5.2
1220	2361	Roomblock 2	6	6	1	Brown	Indented Corrugated	11	n/a	6.91
1221	1889	Roomblock 2	6	2	1	Brown	Plain Corrugated	11	n/a	6.33
1222	1889	Roomblock 2	6	2	1	Brown	Indented Corrugated	8	7	7.92
1223	1889	Roomblock 2	6	2	1	Gray	Indented Corrugated	5	n/a	7.53
1224	1998	Roomblock 2	7	4	1	Brown	Indented Corrugated	10	11	7.32
1225	1998	Roomblock 2	7	4	1	Brown	Indented Corrugated	8	n/a	5.57
1226	2191	Roomblock 2	8	3	1	Brown	Plain Corrugated	9	n/a	6.51
1227	2191	Roomblock 2	8	3	1	Brown	Plain Corrugated	10	n/a	6.46
1228	2191	Roomblock 2	8	3	1	Brown	Plain Corrugated	10	n/a	7.89
1229	2191	Roomblock 2	8	3	1	Brown	Plain Corrugated	10	n/a	7.55
1230	2191	Roomblock 2	8	3	1	Brown	Plain Corrugated	9	n/a	6.68
1231	2191	Roomblock 2	8	3	1	Brown	Plain Corrugated	9	n/a	7.51
1232	2191	Roomblock 2	8	3	1	Brown	Indented Corrugated	8	8	6.33
1233	2191	Roomblock 2	8	3	1	Brown	Indented Corrugated	9	12	7.2
1234	2191	Roomblock 2	8	3	1	Brown	Indented Corrugated	8	10	7.21
1235	2191	Roomblock 2	8	3	1	Brown	Indented Corrugated	8	11	7.16
1236	2191	Roomblock 2	8	3	1	Brown	Indented Corrugated	8	7	6.53
1237	2191	Roomblock 2	8	3	1	Brown	Patterned Corrugated	9	2	5.79
1238	2191	Roomblock 2	8	3	1	Brown	Patterned Corrugated	9	2	6.22
1239	2191	Roomblock 2	8	3	1	Brown	Patterned Corrugated	9	3	6.38
1240	2191	Roomblock 2	8	3	1	Brown	Patterned Corrugated	10	3	6.01
1241	2179	Great House	15	3	1	Brown	Patterned Corrugated	8	3	5.85
1242	2179	Great House	15	3	1	Brown	Patterned Corrugated	8	4	7.1
1243	2179	Great House	15	3	1	Brown	Patterned Corrugated	10	8	6.53
1244	2179	Great House	15	3	1	Brown	Patterned Corrugated	9	9	7.3
1245	2179	Great House	15	3	1	Brown	Plain Corrugated	10	n/a	5.3
1246	2179	Great House	15	3	1	Brown	Plain Corrugated	10	n/a	5.49
1247	2179	Great House	15	3	1	Brown	Plain Corrugated	8	n/a	6.41
1248	2179	Great House	15	3	1	Brown	Indented Corrugated	7	8	5.94
1249	2179	Great House	15	3	1	Brown	Indented Corrugated	7	7	7.14
1250	2179	Great House	15	3	1	Brown	Indented Corrugated	7	8	6.98
1251	2179	Great House	15	3	1	Gray	Indented Corrugated	n/a	8	6.17
1252	2179	Great House	15	3	1	Gray	Indented Corrugated	n/a	7	6.04
1253	2179	Great House	15	3	1	Gray	Indented Corrugated	6	9	5.1
1254	2179	Great House	15	3	1	Gray	Indented Corrugated	6	8	5.89
1255	2179	Great House	15	3	1	Gray	Indented Corrugated	6	8	6.56
1256	2248	Roomblock 2	6	5	1	Brown	Plain Corrugated	10	n/a	6.24

## Appendix D

ID	Specimen #	Area	Unit	Level	Locus	Ware	Type	Coil Count	Indent Count	Max Thickness
1257	2248	Roomblock 2	6	5	1	Brown	Plain Corrugated	12	n/a	8.28
1258	2248	Roomblock 2	6	5	1	Brown	Indented Corrugated	10	9	5.31
1259	2248	Roomblock 2	6	5	1	Brown	Indented Corrugated	10	9	7.49
1260	1886	Roomblock 2	6	1	1	Brown	Indented Corrugated	10	8	6.56
1261	1886	Roomblock 2	6	1	1	Brown	Indented Corrugated	n/a	9	7.58
1262	1886	Roomblock 2	6	1	1	Gray	Indented Corrugated	n/a	9	5.95
1263	1886	Roomblock 2	6	1	1	Gray	Indented Corrugated	9	5	6.71
1264	1886	Roomblock 2	6	1	1	Gray	Indented Corrugated	n/a	5	6.09
1265	2125	Roomblock 2	7	6	1	Brown	Plain Corrugated	6	n/a	7.56
1266	2125	Roomblock 2	7	6	1	Brown	Plain Corrugated	7	n/a	6.68
1267	2125	Roomblock 2	7	6	1	Brown	Indented Corrugated	8	n/a	5.96
1268	1973	11 Midden	1	5	1	Gray	Indented Corrugated	6	8	6.93
1269	1950	Roomblock 2	7	3	1	Brown	Plain Corrugated	10	n/a	8.21
1270	1950	Roomblock 2	7	3	1	Brown	Plain Corrugated	8	n/a	9.01
1271	1950	Roomblock 2	7	3	1	Brown	Plain Corrugated	9	n/a	6.42
1272	1950	Roomblock 2	7	3	1	Brown	Indented Corrugated	14	12	7.46
1273	1648	11 Midden	3	0	1	Gray	Indented Corrugated	n/a	7	6.07
1274	1787	11 Midden	2	2	1	Gray	Indented Corrugated	n/a	6	5.22
1275	1918	Roomblock 2	6	3	1	Brown	Plain Corrugated	15	n/a	7.23
1276	2212	Roomblock 2	6	4	1	Brown	Plain Corrugated	6	n/a	7.18
1277	2212	Roomblock 2	6	4	1	Brown	Indented Corrugated	7	9	6.11
1278	2212	Roomblock 2	6	4	1	Brown	Indented Corrugated	8	9	6.24
1279	2212	Roomblock 2	6	4	1	Brown	Indented Corrugated	10	n/a	6.93
1280	2212	Roomblock 2	6	4	1	Gray	Indented Corrugated	n/a	7	6.1
1281	1868	Roomblock 2	5	1	1	Brown	Plain Corrugated	9	n/a	7.78
1282	1868	Roomblock 2	5	1	1	Brown	Indented Corrugated	9	9	8.1
1283	1868	Roomblock 2	5	1	1	Gray	Indented Corrugated	8	9	7.02
1284	1868	Roomblock 2	5	1	1	Gray	Indented Corrugated	7	n/a	6.89
1285	1868	Roomblock 2	5	1	1	Gray	Indented Corrugated	n/a	10	6.89
1286	2573	Great House	16	7	1	Brown	Patterned Corrugated	7	3	7.05
1287	2573	Great House	16	7	1	Brown	Patterned Corrugated	7	11	7
1288	2573	Great House	16	7	1	Brown	Patterned Corrugated	9	10	6.45
1289	2573	Great House	16	7	1	Brown	Patterned Corrugated	10	6	6.43
1290	2573	Great House	16	7	1	Brown	Patterned Corrugated	12	7	6.24
1291	2573	Great House	16	7	1	Brown	Plain Corrugated	9	n/a	7.3
1292	2573	Great House	16	7	1	Brown	Plain Corrugated	10	n/a	6.07
1293	2573	Great House	16	7	1	Brown	Plain Corrugated	7	n/a	5.78
1294	2573	Great House	16	7	1	Gray	Indented Corrugated	8	9	6.44
1295	2573	Great House	16	7	1	Gray	Indented Corrugated	n/a	9	5.96
1296	2573	Great House	16	7	1	Gray	Indented Corrugated	8	7	6.35
1297	2573	Great House	16	7	1	Gray	Indented Corrugated	n/a	8	5.17
1298	2573	Great House	16	7	1	Gray	Patterned Corrugated	6	9	5.56
1299	2204	Great House	16	1	1	Brown	Plain Corrugated	7	n/a	8.9
1300	2204	Great House	16	1	1	Gray	Indented Corrugated	6	7	5.7
1301	2204	Great House	16	1	1	Gray	Indented Corrugated	6	n/a	5.33
1302	2357	Roomblock 2	10	1	1	Brown	Plain Corrugated	8	n/a	7.57
1303	2229	Roomblock 2	7	8	1	Brown	Plain Corrugated	10	n/a	6.45
1304	2229	Roomblock 2	7	8	1	Brown	Plain Corrugated	10	n/a	6.69

## Appendix D

ID	Specimen #	Area	Unit	Level	Locus	Ware	Type	Coil Count	Indent Count	Max Thickness
1305	2229	Roomblock 2	7	8	1	Brown	Indented Corrugated	12	9	8.25
1306	2229	Roomblock 2	7	8	1	Brown	Patterned Corrugated	9	4	6.77
1307	2229	Roomblock 2	7	8	1	Gray	Indented Corrugated	n/a	8	4.73
1308	2229	Roomblock 2	7	8	1	Gray	Indented Corrugated	9	9	4.6
1309	2401	Great House	16	4	1	Brown	Plain Corrugated	7	n/a	7.45
1310	2401	Great House	16	4	1	Brown	Plain Corrugated	12	n/a	8.3
1311	2401	Great House	16	4	1	Brown	Plain Corrugated	9	n/a	5.74
1312	2401	Great House	16	4	1	Gray	Indented Corrugated	n/a	8	5.06
1313	2401	Great House	16	4	1	Gray	Indented Corrugated	8	8	5.21
1314	2401	Great House	16	4	1	Gray	Indented Corrugated	5	6	6.53
1315	2383	Roomblock 2	9	1	1	Brown	Indented Corrugated	9	8	7.63
1316	2520	Roomblock 7	1	3	1	Brown	Plain Corrugated	9	n/a	6.51
1317	2520	Roomblock 7	1	3	1	Brown	Indented Corrugated	10	8	6.93
1318	2520	Roomblock 7	1	3	1	Brown	Indented Corrugated	13	10	5.96
1319	2520	Roomblock 7	1	3	1	Brown	Indented Corrugated	11	9	5.22
1320	2520	Roomblock 7	1	3	1	Gray	Indented Corrugated	5	n/a	5.64
1321	2520	Roomblock 7	1	3	1	Gray	Indented Corrugated	8	7	7.1
1322	2520	Roomblock 7	1	3	1	Gray	Indented Corrugated	6	8	6.24
1323	2490	Roomblock 7	1	2	1	Brown	Plain Corrugated	13	n/a	6.38
1324	2490	Roomblock 7	1	2	1	Brown	Plain Corrugated	10	n/a	5.91
1325	2490	Roomblock 7	1	2	1	Brown	Plain Corrugated	13	n/a	7.01
1326	2490	Roomblock 7	1	2	1	Brown	Plain Corrugated	13	n/a	6.83
1327	2490	Roomblock 7	1	2	1	Brown	Indented Corrugated	11	n/a	5.26
1328	2490	Roomblock 7	1	2	1	Brown	Indented Corrugated	11	15	7.61
1329	2490	Roomblock 7	1	2	1	Brown	Indented Corrugated	13	10	6.15
1330	2490	Roomblock 7	1	2	1	Gray	Indented Corrugated	n/a	6	7.02
1331	2490	Roomblock 7	1	2	1	Gray	Indented Corrugated	6	9	6.53
1332	2490	Roomblock 7	1	2	1	Gray	Indented Corrugated	8	6	6.83
1333	2490	Roomblock 7	1	2	1	Gray	Indented Corrugated	7	8	6.01
1334	2490	Roomblock 7	1	2	1	Gray	Plain Corrugated	5	n/a	6.48
1335	2144	Roomblock 2	7	7	1	Brown	Plain Corrugated	11	n/a	6.43
1336	2144	Roomblock 2	7	7	1	Brown	Indented Corrugated	11	n/a	6.13
1337	2294	Great House	12	9	1	Brown	Plain Corrugated	9	n/a	7.77
1338	2294	Great House	12	9	1	Brown	Plain Corrugated	10	n/a	8.09
1339	2294	Great House	12	9	1	Brown	Patterned Corrugated	6	9	7.46
1340	2294	Great House	12	9	1	Gray	Indented Corrugated	9	8	5.67
1341	2294	Great House	12	9	1	Gray	Indented Corrugated	6	5	5.14
1342	2107	Roomblock 2	8	1	1	Brown	Plain Corrugated	11	n/a	6.95
1343	2107	Roomblock 2	8	1	1	Brown	Indented Corrugated	11	n/a	7.34
1344	2064	Great House	13	2	4	Brown	Plain Corrugated	8	n/a	7.8
1345	2064	Great House	13	2	4	Brown	Plain Corrugated	9	n/a	8.12
1346	2064	Great House	13	2	4	Brown	Plain Corrugated	8	n/a	6.79
1347	2064	Great House	13	2	4	Gray	Indented Corrugated	8	6	6.44
1348	2239	Great House	16	2	1	Gray	Patterned Corrugated	10	n/a	6.43
1349	2254	Roomblock 2	7	9	1	Brown	Plain Corrugated	10	n/a	6.08
1350	2254	Roomblock 2	7	9	1	Brown	Plain Corrugated	10	n/a	7.67
1351	2254	Roomblock 2	7	9	1	Brown	Patterned Corrugated	7	1	6.87
1352	2254	Roomblock 2	7	9	1	Gray	Indented Corrugated	n/a	7	6.51

## Appendix D

ID	Specimen #	Area	Unit	Level	Locus	Ware	Type	Coil Count	Indent Count	Max Thickness
1353	2249	Great House	13	4	4	Brown	Plain Corrugated	10	n/a	7.11
1354	2249	Great House	13	4	4	Brown	Plain Corrugated	9	n/a	6.68
1355	2450	Great House	16	5	1	Brown	Plain Corrugated	10	n/a	6.5
1356	2450	Great House	16	5	1	Brown	Indented Corrugated	9	7	6.85
1357	2450	Great House	16	5	1	Brown	Indented Corrugated	8	9	7.15
1358	2450	Great House	16	5	1	Gray	Indented Corrugated	8	7	4.44
1359	2450	Great House	16	5	1	Gray	Indented Corrugated	n/a	7	5.83
1360	2450	Great House	16	5	1	Gray	Patterned Corrugated	5	6	5.13
1361	1981	Great House	15	1	1	Brown	Plain Corrugated	8	n/a	7.23
1362	1981	Great House	15	1	1	Brown	Plain Corrugated	12	n/a	6.78
1363	1981	Great House	15	1	1	Brown	Plain Corrugated	11	n/a	6.23
1364	1981	Great House	15	1	1	Brown	Plain Corrugated	11	n/a	6.57
1365	1981	Great House	15	1	1	Brown	Plain Corrugated	12	n/a	7.01
1366	1981	Great House	15	1	1	Brown	Indented Corrugated	n/a	9	7.32
1367	1981	Great House	15	1	1	Brown	Indented Corrugated	n/a	7	6.65
1368	1981	Great House	15	1	1	Brown	Patterned Corrugated	9	n/a	7.31
1369	1981	Great House	15	1	1	Brown	Patterned Corrugated	9	n/a	7.49
1370	1981	Great House	15	1	1	Gray	Indented Corrugated	8	9	5.41
1371	1981	Great House	15	1	1	Gray	Indented Corrugated	7	8	4.4
1372	1981	Great House	15	1	1	Gray	Indented Corrugated	7	8	5.6
1373	1981	Great House	15	1	1	Gray	Indented Corrugated	7	n/a	5.5
1374	1981	Great House	15	1	1	Gray	Indented Corrugated	8	8	5.91
1375	1981	Great House	15	1	1	Gray	Indented Corrugated	6	6	8.39
1376	2013	Great House	13	2	1	Brown	Indented Corrugated	8	9	6.85
1377	2013	Great House	13	2	1	Brown	Indented Corrugated	6	9	6.99
1378	2013	Great House	13	2	1	Brown	Indented Corrugated	7	9	6.47
1379	2013	Great House	13	2	1	Brown	Indented Corrugated	7	7	6.86
1380	2013	Great House	13	2	1	Brown	Indented Corrugated	9	11	8.01
1381	2013	Great House	13	2	1	Gray	Indented Corrugated	8	n/a	4.04
1382	2424	Roomblock 2	9	2	1	Brown	Plain Corrugated	10	n/a	7.45
1383	2615	Great House	16	10	1	Brown	Indented Corrugated	5	n/a	6.3
1384	2615	Great House	16	10	1	Brown	Indented Corrugated	10	10	5.96
1385	2615	Great House	16	10	1	Gray	Indented Corrugated	8	6	5.57
1386	1857	Great House	13	1	1	Brown	Indented Corrugated	8	8	7.23
1387	1857	Great House	13	1	1	Brown	Indented Corrugated	n/a	8	6.2
1388	1857	Great House	13	1	1	Brown	Indented Corrugated	n/a	7	6.44
1389	1990	Great House	13	1	4	Brown	Plain Corrugated	12	n/a	6.69
1390	1990	Great House	13	1	4	Brown	Plain Corrugated	13	n/a	8.29
1391	1990	Great House	13	1	4	Brown	Indented Corrugated	n/a	9	6.27
1392	1990	Great House	13	1	4	Brown	Patterned Corrugated	15	n/a	7.44
1393	1990	Great House	13	1	4	Brown	Patterned Corrugated	13	8	7.5
1394	2281	Roomblock 2	8	4	2	Brown	Plain Corrugated	10	n/a	6.08
1395	2281	Roomblock 2	8	4	2	Brown	Plain Corrugated	11	n/a	5.74
1396	2281	Roomblock 2	8	4	2	Brown	Indented Corrugated	8	7	6.31
1397	2223	Great House	12	8	1	Brown	Indented Corrugated	6	8	7.3
1398	2445	Great House	13	6	4	Brown	Plain Corrugated	11	n/a	8.13
1399	2445	Great House	13	6	4	Brown	Patterned Corrugated	8	4	6.65
1400	2526	Great House	13	7	4	Brown	Plain Corrugated	12	n/a	7.36

## Appendix D

ID	Specimen #	Area	Unit	Level	Locus	Ware	Type	Coil Count	Indent Count	Max Thickness
1401	2526	Great House	13	7	4	Brown	Plain Corrugated	14	n/a	6.36
1402	2172	Great House	13	3	4	Brown	Plain Corrugated	12	n/a	7.77
1403	2172	Great House	13	3	4	Brown	Plain Corrugated	13	n/a	7.08
1404	2172	Great House	13	3	4	Brown	Plain Corrugated	10	n/a	7.72
1405	2172	Great House	13	3	4	Brown	Plain Corrugated	7	n/a	6.24
1406	2172	Great House	13	3	4	Brown	Indented Corrugated	6	7	6.83
1407	2172	Great House	13	3	4	Gray	Indented Corrugated	11	n/a	5.34
1408	2191	Roomblock 2	8	3	1	Brown	Plain Corrugated	10	n/a	5.03
1409	2191	Roomblock 2	8	3	1	Brown	Plain Corrugated	10	n/a	4.76
1410	2191	Roomblock 2	8	3	1	Brown	Plain Corrugated	10	n/a	6.17
1411	2191	Roomblock 2	8	3	1	Brown	Plain Corrugated	11	n/a	5.65
1412	2191	Roomblock 2	8	3	1	Brown	Plain Corrugated	9	n/a	5.94
1413	2191	Roomblock 2	8	3	1	Brown	Indented Corrugated	8	7	6.32
1414	2191	Roomblock 2	8	3	1	Brown	Indented Corrugated	10	n/a	5.81
1415	2191	Roomblock 2	8	3	1	Brown	Indented Corrugated	8	11	7.1
1416	2191	Roomblock 2	8	3	1	Brown	Indented Corrugated	9	7	6.84
1417	2191	Roomblock 2	8	3	1	Brown	Indented Corrugated	9	11	6.1
1418	2191	Roomblock 2	8	3	1	Brown	Indented Corrugated	9	14	6.49
1419	2191	Roomblock 2	8	3	1	Brown	Patterned Corrugated	10	2	5.6
1420	2191	Roomblock 2	8	3	1	Brown	Patterned Corrugated	10	2	6.22
1421	2191	Roomblock 2	8	3	1	Brown	Patterned Corrugated	10	2	6.75
1422	2191	Roomblock 2	8	3	1	Brown	Patterned Corrugated	10	2	5.46
1423	2110	Great House	12	6	1	Brown	Plain Corrugated	7	n/a	5.71
1424	2110	Great House	12	6	1	Brown	Plain Corrugated	9	n/a	7.5
1425	2110	Great House	12	6	1	Brown	Plain Corrugated	6	n/a	6.66
1426	2110	Great House	12	6	1	Brown	Plain Corrugated	8	n/a	6.79
1427	2110	Great House	12	6	1	Brown	Plain Corrugated	6	n/a	6.97
1428	2110	Great House	12	6	1	Brown	Plain Corrugated	8	n/a	7.53
1429	2110	Great House	12	6	1	Brown	Plain Corrugated	7	n/a	8.33
1430	2110	Great House	12	6	1	Brown	Patterned Corrugated	8	n/a	7.11
1431	2110	Great House	12	6	1	Brown	Patterned Corrugated	7	n/a	7.35
1432	2110	Great House	12	6	1	Brown	Patterned Corrugated	6	n/a	7.56
1433	2110	Great House	12	6	1	Brown	Patterned Corrugated	8	n/a	5.8
1434	2110	Great House	12	6	1	Brown	Patterned Corrugated	6	6	7.7
1435	2110	Great House	12	6	1	Gray	Indented Corrugated	8	7	8.44
1436	2110	Great House	12	6	1	Gray	Indented Corrugated	5	7	5.4
1437	2110	Great House	12	6	1	Gray	Indented Corrugated	6	8	5.61
1438	2110	Great House	12	6	1	Gray	Indented Corrugated	8	8	6.07
1439	2110	Great House	12	6	1	Gray	Indented Corrugated	8	7	5.6
1440	2110	Great House	12	6	1	Gray	Indented Corrugated	8	n/a	5.64
1441	2036	Great House	13	2	2	Brown	Indented Corrugated	8	7	6.7
1442	2036	Great House	13	2	2	Brown	Indented Corrugated	8	n/a	7.62
1443	2162	Great House	12	7	1	Brown	Plain Corrugated	9	n/a	7.08
1444	2162	Great House	12	7	1	Brown	Plain Corrugated	9	n/a	6.84
1445	2162	Great House	12	7	1	Brown	Plain Corrugated	9	n/a	8.32
1446	2162	Great House	12	7	1	Brown	Indented Corrugated	9	6	6.06
1447	2162	Great House	12	7	1	Brown	Indented Corrugated	7	10	5.51
1448	2162	Great House	12	7	1	Brown	Indented Corrugated	7	11	5.3

## Appendix D

<b>ID</b>	<b>Specimen #</b>	<b>Area</b>	<b>Unit</b>	<b>Level</b>	<b>Locus</b>	<b>Ware</b>	<b>Type</b>	<b>Coil Count</b>	<b>Indent Count</b>	<b>Max Thickness</b>
1449	2162	Great House	12	7	1	Brown	Indented Corrugated	6	7	7.55
1450	2162	Great House	12	7	1	Brown	Patterned Corrugated	8	8	7.48
1451	2162	Great House	12	7	1	Brown	Patterned Corrugated	6	7	7.49
1452	2162	Great House	12	7	1	Brown	Patterned Corrugated	7	n/a	7.69
1453	2162	Great House	12	7	1	Brown	Patterned Corrugated	6	6	7.92
1454	2162	Great House	12	7	1	Brown	Patterned Corrugated	6	6	7.31
1455	2162	Great House	12	7	1	Gray	Plain Corrugated	4	n/a	5.14
1456	2162	Great House	12	7	1	Gray	Indented Corrugated	7	8	5.63
1457	2162	Great House	12	7	1	Gray	Indented Corrugated	7	10	6.21
1458	2162	Great House	12	7	1	Gray	Indented Corrugated	7	8	6.2
1459	2162	Great House	12	7	1	Gray	Indented Corrugated	6	10	7.31
1460	2162	Great House	12	7	1	Gray	Indented Corrugated	6	8	5.82



## Appendix E

Area	Unit	Level	Locus	Spec	Type	Sm	Ware	Form	Original A.P.	Refired A.P.	Mun Orig	Mun 900	Color Group
1 Midden	1	1	1	182	Indented Corrugated	No	Brownware	Jar	29.41	30.30	5yr 5/3	7.5yr 7/8	4
1 Midden	1	1	1	182	Plain	No	Brownware	Jar	28.74	17.65	5yr 6/4	5yr 5/8	5
1 Midden	1	1	1	182	Plain Corrugated	No	Brownware	Jar	24.69	37.04	5yr 5/4	2.5yr 4/8	6
1 Midden	1	1	1	182	Indented Corrugated	No	Brownware	Jar	30.30	29.41	5yr 3/2	2.5yr 5/8	6
1 Midden	2	1	1	603	Indented Corrugated	No	Brownware	Jar	25.64	26.42	5yr 5/4	5yr 6/8	5
1 Midden	2	2	1	637	Indented Corrugated	No	Brownware	Jar	26.14	26.32	5yr 5/6	5yr 5/8	5
1 Midden	2	1	1	603	Indented Corrugated	No	Brownware	Jar	17.54	18.18	5yr 5/4	2.5yr 4/8	6
1 Midden	2	1	1	603	Plain Corrugated	No	Brownware	Jar	24.84	26.14	5yr 5/4	2.5yr 4/6	6
1 Midden	2	5	1	672	Plain Corrugated	No	Brownware	Jar	26.67	27.03	5yr 5/4	2.5yr 5/8	6
1 Midden	2	1	1	603	Indented Corrugated	No	Brownware	Jar	36.0	n/a	700-900	2.5yr 6/8	6
1 Midden	2	2	1	637	Indented Corrugated	No	Brownware	Jar	33.3	n/a	700-900	2.5yr 5/6	6
1 Midden	2	3	1	665	Incised Corrugated	Yes	Brownware	Bowl	18.69	27.52	5yr 3/2	5yr 5/8	5
1 Midden	2	3	1	665	Indented Corrugated	Yes	Brownware	Bowl	27.52	25.00	5yr 4/3	2.5yr 5/8	6
1 Midden	2	6	1	696	Indented Corrugated	Yes	Brownware	Bowl	16.39	31.25	7.5yr 3/3	5yr 5/8	5
1 Midden	2	3	1	665	Plain	Yes	Brownware	Bowl	22.22	22.73	5yr 5/4	5yr 6/8	5
1 Midden	2	5	1	672	Plain	Yes	Brownware	Bowl	32.79	16.95	5yr 5/4	5yr 5/8	5
1 Midden	2	2	1	637	Plain Corrugated	Yes	Brownware	Bowl	20.83	20.41	5yr 4/3	2.5yr 4/8	6
1 Midden	2	5	1	672	Plain Corrugated	Yes	Brownware	Bowl	22.99	34.48	7.5yr 6/4	5yr 5/8	5
1 Midden	3	1	1	662	Plain	No	Brownware	Jar	26.85	27.40	5yr 6/6	7.5yr 7/8	4
1 Midden	3	2	1	677	Plain Corrugated	No	Brownware	Jar	27.40	27.78	2.5yr 5/6	2.5yr 4/8	6
1 Midden	3	2	1	677	Patterned Corrugated	Yes	Brownware	Bowl	28.17	28.17	7.5yr 5/4	5yr 5/8	5
1 Midden	3	3	1	686	Plain	No	Brownware	Bowl	31.25	31.75	5yr 5/6	2.5yr 4/8	6
1 Midden	3	2	1	677	Plain	Yes	Brownware	Bowl	14.93	30.30	5yr 6/4	7.5yr 6/6	4
1 Midden	3	3	1	686	Plain	Yes	Brownware	Bowl	29.13	20.41	5yr 5/6	5yr 6/8	5
1 Midden	4	2	1	1209	Plain	No	Brownware	Jar	23.81	16.26	5yr 5/6	5yr 5/8	5
1 Midden	4	3	1	1222	Plain	No	Brownware	Jar	n/a	30.61	5yr 6/6	5yr 6/8	5
1 Midden	4	4	1	1327	Plain	No	Brownware	Jar	28.57	20.83	5yr 4/1	5yr 6/8	5
1 Midden	4	1	1	117	Indented Corrugated	No	Brownware	Jar	21.58	29.85	5yr 4/2	2.5yr 4/8	6
1 Midden	4	3	1	1222	Indented Corrugated	No	Brownware	Jar	20.69	21.58	2.5yr 4/6	2.5yr 4/8	6
1 Midden	4	2	1	1209	Plain Corrugated	No	Brownware	Jar	11.90	24.10	5yr 3/2	2.5yr 4/8	6
1 Midden	4	3	1	1222	Plain Corrugated	Yes	Brownware	Jar	30.30	29.41	5yr 3/2	2.5yr 5/8	6
1 Midden	4	5	1	1332	Plain	Yes	Brownware	Bowl	30.30	28.57	5yr 3/1	7.5yr 7/8	4
1 Midden	4	5	1	1332	Plain	Yes	Brownware	Bowl	26.32	18.35	5yr 5/2	5yr 5/8	5
1 Midden	4	4	1	1327	Plain Corrugated	Yes	Brownware	Bowl	25.64	25.64	5yr 5/6	5yr 5/8	5
1 Midden	4	4	1	1327	Plain Corrugated	Yes	Brownware	Bowl	43.48	41.67	5yr 5/6	5yr 5/8	5
1 Midden	5	1	1	1337	Indented Corrugated	No	Brownware	Jar	22.73	22.22	5yr 5/4	5yr 6/8	5
1 Midden	5	2	1	1401	Indented Corrugated	No	Brownware	Jar	26.55	27.78	5yr 5/6	5yr 5/8	5
1 Midden	5	2	1	1401	Indented Corrugated	No	Brownware	Jar	25.32	25.64	5yr 3/2	5yr 4/6	5
1 Midden	5	1	1	1337	Indented Corrugated	No	Brownware	Jar	31.91	22.47	5yr 6/6	2.5yr 4/6	6
1 Midden	5	2	1	1401	Plain	Yes	Brownware	Bowl	27.78	27.03	5yr 5/4	5yr 6/8	5
1 Midden	5	1	1	1337	Plain Corrugated	Yes	Brownware	Bowl	26.79	27.03	5yr 5/4	5yr 5/8	5
10 Midden	1	1	1	38	Plain	No	Brownware	Jar	17.54	35.71	5yr 6/6	2.5yr 4/8	6
10 Midden	2	1	1	24	Indented Corrugated	No	Brownware	Jar	18.52	37.74	2.5yr 5/6	2.5yr 5/8	6
10 Midden	2	1	1	24	Plain	Yes	Brownware	Bowl	24.79	25.42	7.5yr 6/3	7.5yr 7/6	4
10 Midden	2	1	1	24	Plain Corrugated	Yes	Brownware	Bowl	22.39	30.08	5yr 2.5/1	5yr 5/8	5
10 Midden	3	1	1	337	Indented Corrugated	No	Brownware	Jar	35.7	n/a	800-900	5yr 7/6	5
10 Midden	3	1	1	60	Indented Corrugated	No	Brownware	Jar	23.53	35.71	2.5yr 5/6	2.5yr 4/8	6
10 Midden	3	1	1	60	Plain	Yes	Brownware	Bowl	35.09	36.36	7.5yr 5/3	5yr 5/6	5
10 Midden	3	1	1	60	Plain	Yes	Brownware	Bowl	25.97	20.41	7.5yr 3/1	5yr 5/6	5
10 Midden	4	1	1	168	Indented Corrugated	No	Brownware	Jar	20.41	31.58	2.5yr 5/4	5yr 5/6	5
10 Midden	4	3	1	102	Plain	No	Brownware	Jar	12.82	25.97	5yr 6/4	2.5yr 6/8	6
10 Midden	4	1	1	168	Plain Corrugated	No	Brownware	Jar	24.59	24.59	5yr 5/6	2.5yr 4/8	6
10 Midden	4	1	1	168	Plain Corrugated	No	Brownware	Jar	21.74	22.47	5yr 4/6	2.5yr 5/8	6
10 Midden	4	1	1	168	Indented Corrugated	Yes	Brownware	Bowl	24.59	33.33	7.5yr 6/6	7.5yr 7/8	4
10 Midden	4	1	1	168	Plain	Yes	Brownware	Bowl	36.36	18.87	7.5yr 3/1	5yr 6/8	5
10 Midden	4	2	1	216	Plain	Yes	Brownware	Bowl	15.87	15.38	Gley 4/N	5yr 7/8	5
10 Midden	4	1	1	168	Plain Corrugated	Yes	Brownware	Bowl	23.62	24.39	5yr 4/4	5yr 5/8	5
10 Midden	5	1	1	143	Indented Corrugated	No	Brownware	Jar	21.74	43.48	5yr 2.5/1	2.5yr 4/8	6
10 Midden	5	1	1	143	Plain	No	Brownware	Jar	37.04	25.00	5yr 2.5/1	2.5yr 5/8	6
10 Midden	5	1	1	143	Plain Corrugated	No	Brownware	Jar	28.57	28.57	5yr 2.5/1	2.5yr 4/8	6
10 Midden	5	3	1	247	Plain Corrugated	No	Brownware	Jar	12.99	26.67	5yr 5/6	2.5yr 4/8	6
10 Midden	5	1	1	143	Indented Corrugated	Yes	Brownware	Bowl	18.02	27.03	7.5yr 2.5/1	7.5yr 6/8	4
10 Midden	5	3	1	247	Patterned Corrugated	Yes	Brownware	Bowl	23.81	36.14	7.5yr 4/3	5yr 5/6	5
10 Midden	5	2	1	197	Plain	Yes	Brownware	Bowl	23.26	33.61	Gley 4/N	5yr 7/8	5
10 Midden	5	2	1	197	Plain Corrugated	Yes	Brownware	Bowl	20.41	34.97	5yr 2.5/1	5yr 5/8	5
10 Midden	5	2	1	197	Plain Corrugated	Yes	Brownware	Bowl	n/a	n/a	n/a	n/a	n/a
10 Midden	6	1	1	476	Indented Corrugated	No	Brownware	Jar	26.79	26.79	5yr 3/2	2.5yr 4/8	6

Area	Unit	Level	Locus	Spec	Type	Sm	Ware	Form	Original A.P.	Refired A.P.	Mun Orig	Mun 900	Color Group
10 Midden	6	1	1	476	Indented Corrugated	No	Brownware	Jar	24.59	25.42	2.5yr 5/6	2.5yr 4/8	6
10 Midden	6	1	1	476	Plain	Yes	Brownware	Bowl	40.00	40.00	5yr 4/3	5yr 5/8	5
10 Midden	6	1	1	476	Plain	Yes	Brownware	Bowl	22.99	35.71	5yr 5/4	7.5yr 7/6	4
10 Midden	6	1	1	476	Plain Corrugated	Yes	Brownware	Bowl	27.78	18.87	10yr 5/4	5yr 5/8	5
10 Midden	6	1	1	476	Plain Corrugated	Yes	Brownware	Bowl	22.22	22.22	7.5yr 5/4	2.5yr 4/8	6
10 Midden	6	2	1	491	Plain Corrugated	Yes	Brownware	Bowl	37.04	20.41	10yr 6/4	7.5yr 6/8	4
12 Midden	1	3	1	275	Indented Corrugated	No	Brownware	Jar	20.00	53.57	5yr 2.5/1	5yr 6/6	5
12 Midden	1	1	1	28	Plain	No	Brownware	Jar	25.64	25.64	5yr 5/4	5yr 5/8	5
12 Midden	1	1	1	28	Plain	No	Brownware	Jar	21.74	21.98	5yr 5/2	5yr 5/8	5
12 Midden	1	5	1	325	Plain Corrugated	No	Brownware	Jar	18.52	18.87	5yr 3/1	5yr 5/6	5
12 Midden	1	7	1	396	Incised Corrugated	No	Brownware	Jar	34.88	34.88	5yr 5/6	2.5yr 4/8	6
12 Midden	1	4	1	306	Indented Corrugated	No	Brownware	Jar	21.05	21.74	5yr 4/4	2.5yr 4/8	6
12 Midden	1	5	1	325	Indented Corrugated	No	Brownware	Jar	30.77	31.75	5yr 3/2	2.5yr 4/8	6
12 Midden	1	2	1	77	Patterned Corrugated	No	Brownware	Jar	22.22	n/a	5yr 4/3	2.5yr 4/8	6
12 Midden	1	8	1	16	Patterned Corrugated	No	Brownware	Jar	33.71	22.99	5yr 5/6	2.5yr 5/8	6
12 Midden	1	1	1	28	Plain	No	Brownware	Jar	27.03	27.40	5yr 5/6	2.5yr 4/8	6
12 Midden	1	2	1	77	Plain	No	Brownware	Jar	25.00	25.64	5yr 3/2	2.5yr 4/8	6
12 Midden	1	2	1	17	Plain Corrugated	No	Brownware	Jar	21.28	21.74	5yr 4/4	2.5yr 4/8	6
12 Midden	1	4	1	306	Plain Corrugated	No	Brownware	Jar	25.32	25.64	5yr 5/4	2.5yr 4/8	6
12 Midden	1	1	1	28	Indented Corrugated	Yes	Brownware	Bowl	30.77	31.75	5yr 5/6	5yr 5/8	5
12 Midden	1	2	1	77	Indented Corrugated	Yes	Brownware	Bowl	22.47	34.48	5yr 6/4	5yr 5/6	5
12 Midden	1	3	1	275	Indented Corrugated	Yes	Brownware	Bowl	27.52	n/a	7.5yr 4/3	2.5yr 4/8	6
12 Midden	1	6	1	374	Patterned Corrugated	Yes	Brownware	Bowl	26.79	37.04	7.5yr 5/1	5yr 6/8	5
12 Midden	1	4	1	306	Plain	No	Brownware	Bowl	16.95	17.54	5yr 4/6	2.5yr 4/8	6
12 Midden	1	1	1	28	Plain	Yes	Brownware	Bowl	26.32	25.32	7.5yr 2.5/1	7.5yr 7/8	4
12 Midden	1	2	1	77	Plain	Yes	Brownware	Bowl	24.39	27.03	7.5yr 2.5/1	7.5yr 6/8	4
12 Midden	1	2	1	77	Plain	Yes	Brownware	Bowl	34.78	18.35	7.5yr 5/4	5yr 6/8	5
12 Midden	1	3	1	275	Plain	Yes	Brownware	Bowl	20.41	21.28	7.5yr 5/3	7.5yr 6/8	4
12 Midden	1	4	1	306	Plain	Yes	Brownware	Bowl	36.36	19.23	7.5yr 5/6	7.5yr 6/8	4
12 Midden	1	5	1	325	Plain	Yes	Brownware	Bowl	16.13	33.33	Gley 4/N	7.5yr 7/6	4
12 Midden	1	6	1	374	Plain	Yes	Brownware	Bowl	20.83	20.83	7.5yr 4/2	5yr 6/8	5
12 Midden	1	8	1	16	Plain	Yes	Brownware	Bowl	22.22	23.26	7.5yr 4/4	5yr 6/8	5
12 Midden	1	8	1	16	Plain	Yes	Brownware	Bowl	37.50	37.50	7.5yr 5/4	2.5yr 4/8	6
12 Midden	1	1	1	28	Plain Corrugated	Yes	Brownware	Bowl	19.05	19.80	7.5yr 6/4	5yr 5/8	5
12 Midden	1	3	1	275	Plain Corrugated	Yes	Brownware	Bowl	21.51	30.93	7.5yr 2.5/1	5yr 5/6	5
12 Midden	1	4	1	306	Plain Corrugated	Yes	Brownware	Bowl	15.63	28.57	7.5yr 4/1	2.5yr 5/8	6
12 Midden	1	4	1	306	Plain Corrugated	Yes	Brownware	Bowl	32.79	16.95	7.5yr 4/2	5yr 5/8	5
12 Midden	1	6	1	374	Plain Corrugated	Yes	Brownware	Bowl	24.39	37.50	7.5yr 4/2	2.5yr 4/8	6
12 Midden	2	2	1	99	Plain	No	Brownware	Jar	27.40	14.49	5yr 4/1	5yr 6/8	5
12 Midden	2	1	1	51	Incised Corrugated	No	Brownware	Jar	26.32	20.27	5yr 5/4	2.5yr 4/8	6
12 Midden	2	1	1	51	Indented Corrugated	No	Brownware	Jar	32.61	33.33	5yr 5/6	2.5yr 4/8	6
12 Midden	2	3	1	279	Indented Corrugated	No	Brownware	Jar	31.25	32.26	5yr 4/3	2.5yr 5/8	6
12 Midden	2	3	1	279	Indented Corrugated	No	Brownware	Jar	23.81	24.69	5yr 5/6	2.5yr 4/8	6
12 Midden	2	1	1	51	Patterned Corrugated	No	Brownware	Jar	28.85	29.13	5yr 5/6	2.5yr 4/8	6
12 Midden	2	1	1	51	Plain Corrugated	No	Brownware	Jar	28.57	29.13	5yr 5/4	2.5yr 4/8	6
12 Midden	2	2	1	99	Plain Corrugated	No	Brownware	Jar	28.37	28.78	5yr 5/6	2.5yr 4/8	6
12 Midden	2	3	1	318	Indented Corrugated	No	Brownware	Jar	25.0	n/a	800-900	2.5yr 6/6	6
12 Midden	2	1	1	51	Patterned Corrugated	Yes	Brownware	Bowl	25.32	25.64	7.5yr 5/2	5yr 6/8	5
12 Midden	2	2	1	99	Patterned Corrugated	Yes	Brownware	Bowl	24.39	24.69	5yr 5/4	5yr 5/6	5
12 Midden	2	3	1	279	Patterned Corrugated	Yes	Brownware	Bowl	25.00	33.33	5yr 5/6	2.5yr 5/8	6
12 Midden	2	1	1	51	Plain	No	Brownware	Bowl	35.09	36.36	7.5yr 5/4	5yr 5/8	5
12 Midden	2	1	1	51	Plain	Yes	Brownware	Bowl	23.26	12.05	7.5yr 2.5/1	2.5yr 4/6	6
12 Midden	2	1	1	51	Plain	Yes	Brownware	Bowl	21.05	21.05	Gley 4/N	5yr 6/8	5
12 Midden	2	2	1	99	Plain	Yes	Brownware	Bowl	n/a	30.30	7.5yr 4/2	7.5yr 6/8	4
12 Midden	2	3	1	279	Plain	Yes	Brownware	Bowl	28.57	27.78	7.5yr 5/3	7.5yr 7/8	4
12 Midden	2	3	1	279	Plain	Yes	Brownware	Bowl	26.32	26.67	7.5yr 5/4	5yr 6/8	5
12 Midden	2	1	1	51	Plain Corrugated	Yes	Brownware	Bowl	16.95	32.26	7.5yr 5/3	5yr 5/8	5
12 Midden	2	3	1	279	Plain Corrugated	Yes	Brownware	Bowl	11.49	23.53	5yr 5/6	2.5yr 4/8	6
12 Midden	3	1	1	43	Plain Corrugated	No	Brownware	Jar	27.27	37.04	5yr 4/4	5yr 5/8	5
12 Midden	3	1	1	43	Plain	No	Brownware	Jar	27.03	28.57	5yr 4/1	2.5yr 4/8	6
12 Midden	3	2	1	91	Plain	No	Brownware	Jar	30.30	15.38	5yr 4/4	2.5yr 4/8	6
12 Midden	3	3	1	272	Plain	No	Brownware	Jar	21.28	21.74	5yr 5/4	2.5yr 4/8	6
12 Midden	3	2	1	91	Plain Corrugated	No	Brownware	Jar	24.19	24.79	5yr 5/4	2.5yr 4/8	6
12 Midden	3	3	1	272	Plain Corrugated	No	Brownware	Jar	18.52	18.18	5yr 5/4	2.5yr 4/8	6
12 Midden	3	1	1	43	Plain	Yes	Brownware	Bowl	29.13	29.13	7.5yr 6/4	5yr 6/8	5
12 Midden	3	2	1	91	Plain	Yes	Brownware	Bowl	26.67	25.97	7.5yr 4/4	5yr 5/8	5
12 Midden	3	3	1	272	Plain	Yes	Brownware	Bowl	28.17	27.78	7.5yr 4/6	5yr 5/6	5

Area	Unit	Level	Locus	Spec	Type	Sm	Ware	Form	Original A.P.	Refired A.P.	Mun Orig	Mun 900	Color Group
12 Midden	3	3	1	272	Plain	Yes	Brownware	Bowl	n/a	n/a	n/a	n/a	n/a
12 Midden	4	2	1	623	Indented Corrugated	No	Brownware	Jar	33.33	22.73	5yr 4/3	2.5yr 4/8	6
12 Midden	4	3	1	654	Patterned Corrugated	No	Brownware	Jar	23.62	32.00	5yr 3/2	2.5yr 4/8	6
12 Midden	4	1	1	564	Plain	No	Brownware	Jar	28.57	28.85	5yr 5/4	2.5yr 4/8	6
12 Midden	4	1	1	564	Plain Corrugated	No	Brownware	Jar	21.98	33.71	5yr 5/6	2.5yr 4/8	6
12 Midden	4	2	1	623	Plain Corrugated	No	Brownware	Jar	13.70	28.17	5yr 5/4	2.5yr 4/8	6
12 Midden	4	1	1	564	Indented Corrugated	Yes	Brownware	Bowl	29.70	30.30	7.5yr 5/4	5yr 5/8	5
12 Midden	4	3	1	654	Indented Corrugated	Yes	Brownware	Bowl	25.64	26.32	7.5yr 4/3	5yr 5/6	5
12 Midden	4	2	1	623	Plain	Yes	Brownware	Bowl	34.48	35.09	7.5yr 6/1	5yr 6/8	5
12 Midden	4	1	1	564	Plain Corrugated	Yes	Brownware	Bowl	15.38	15.63	5yr 5/6	2.5yr 4/8	6
12 Midden	4	3	1	654	Plain Corrugated	Yes	Brownware	Bowl	34.48	26.09	5yr 5/4	5yr 5/8	5
12 Midden	5	2	1	518	Plain	No	Brownware	Jar	30.0	n/a	800-900	2.5yr 6/6	6
12 Midden	5	2	1	518	Plain	No	Brownware	Jar	30.0	n/a	800-900	2.5yr 6/6	6
12 Midden	6	2	1	613	Indented Corrugated	No	Brownware	Jar	37.5	n/a	800-900	2.5yr 6/6	6
15 Midden	1	1	1	21	Indented Corrugated	No	Brownware	Jar	29.41	30.30	5yr 5/4	5yr 6/8	5
15 Midden	1	6	1	150	Indented Corrugated	No	Brownware	Jar	20.00	20.41	5yr 6/4	5yr 6/8	5
15 Midden	1	7	1	177	Indented Corrugated	No	Brownware	Jar	28.57	14.93	5yr 5/4	5yr 5/8	5
15 Midden	1	1	1	21	Patterned Corrugated	No	Brownware	Jar	12.35	25.00	5yr 5/4	5yr 5/8	5
15 Midden	1	4	1	126	Plain	No	Brownware	Jar	16.81	25.42	5yr 5/6	5yr 5/8	5
15 Midden	1	9	1	226	Plain	No	Brownware	Jar	25.64	26.55	5yr 5/1	5yr 7/8	5
15 Midden	1	10	1	250	Plain	Yes	Brownware	Jar	23.81	26.32	5yr 5/4	5yr 6/8	5
15 Midden	1	6	1	150	Plain Corrugated	No	Brownware	Jar	21.39	21.51	5yr 5/4	5yr 5/8	5
15 Midden	1	1	1	21	Indented Corrugated	No	Brownware	Jar	22.39	22.90	5yr 4/3	2.5yr 4/8	6
15 Midden	1	3	1	82	Indented Corrugated	No	Brownware	Jar	20.83	31.58	5yr 5/6	2.5yr 4/8	6
15 Midden	1	4	1	126	Indented Corrugated	No	Brownware	Jar	25.00	14.29	5yr 4/6	2.5yr 4/8	6
15 Midden	1	7	1	177	Indented Corrugated	No	Brownware	Jar	26.67	28.17	5yr 4/3	2.5yr 4/8	6
15 Midden	1	15	1	134	Indented Corrugated	No	Brownware	Jar	25.32	13.70	5yr 4/4	2.5yr 4/8	6
15 Midden	1	5	1	134	Plain	No	Brownware	Jar	17.54	26.79	5yr 5/4	2.5yr 4/8	6
15 Midden	1	6	1	150	Plain	No	Brownware	Jar	15.15	29.41	5yr 4/3	2.5yr 4/6	6
15 Midden	1	9	1	226	Plain	No	Brownware	Jar	25.00	25.00	5yr 5/2	2.5yr 5/8	6
15 Midden	1	1	1	21	Plain Corrugated	No	Brownware	Jar	18.69	28.30	5yr 3/1	2.5yr 4/8	6
15 Midden	1	2	1	70	Plain Corrugated	No	Brownware	Jar	39.22	39.22	5yr 3/2	2.5yr 4/8	6
15 Midden	1	3	1	82	Plain Corrugated	No	Brownware	Jar	13.33	13.51	5yr 2.5/2	2.5yr 4/8	6
15 Midden	1	5	1	134	Plain Corrugated	No	Brownware	Jar	16.95	35.09	5yr 4/3	2.5yr 4/8	6
15 Midden	1	6	1	150	Plain Corrugated	No	Brownware	Jar	28.78	29.63	5yr 5/6	2.5yr 5/8	6
15 Midden	1	8	1	208	Plain Corrugated	No	Brownware	Jar	24.00	24.39	5yr 4/4	2.5yr 4/8	6
15 Midden	1	7	1	177	Indented Corrugated		Brownware	Jar	25.0	n/a	700-900	2.5yr 5/6	6
15 Midden	1	7	1	177	Plain Corrugated	No	Brownware	Jar	33.3	n/a	700-900	2.5yr 5/6	6
15 Midden	1	8	1	208	Indented Corrugated	No	Brownware	Jar	19.4	n/a	700-900	2.5yr 6/6	6
15 Midden	1	8	1	208	Indented Corrugated	No	Brownware	Jar	19.4	n/a	700-900	2.5yr 6/6	6
15 Midden	1	3	1	82	Indented Corrugated	Yes	Brownware	Bowl	17.24	34.48	5yr 3/3	2.5yr 4/8	6
15 Midden	1	3	1	82	Indented Corrugated	Yes	Brownware	Bowl	42.86	28.99	5yr 5/3	2.5yr 4/8	6
15 Midden	1	4	1	126	Indented Corrugated	Yes	Brownware	Bowl	22.73	34.09	5yr 5/2	5yr 5/6	5
15 Midden	1	4	1	126	Indented Corrugated	Yes	Brownware	Bowl	35.71	18.18	5yr 4/4	2.5yr 4/8	6
15 Midden	1	6	1	150	Indented Corrugated	Yes	Brownware	Bowl	24.69	25.32	5yr 2.5/1	2.5yr 4/8	6
15 Midden	1	7	1	177	Indented Corrugated	Yes	Brownware	Bowl	25.32	25.64	5yr 4/1	5yr 6/8	5
15 Midden	1	8	1	208	Indented Corrugated	Yes	Brownware	Bowl	28.99	28.99	5yr 6/6	5yr 6/8	5
15 Midden	1	2	1	70	Patterned Corrugated	Yes	Brownware	Bowl	31.25	21.51	5yr 4/6	2.5yr 4/8	6
15 Midden	1	8	1	208	Plain	No	Brownware	Bowl	27.78	29.85	5yr 5/6	7.5yr 7/8	4
15 Midden	1	1	1	21	Plain	Yes	Brownware	Bowl	30.77	32.26	5yr 5/4	7.5yr 7/6	4
15 Midden	1	3	1	82	Plain	Yes	Brownware	Bowl	19.61	40.82	5yr 5/6	7.5yr 7/6	4
15 Midden	1	4	1	126	Plain	Yes	Brownware	Bowl	18.18	19.23	5yr 5/1	7.5yr 6/8	4
15 Midden	1	5	1	134	Plain	Yes	Brownware	Bowl	32.79	33.90	5yr 4/2	5yr 6/8	5
15 Midden	1	6	1	150	Plain	Yes	Brownware	Bowl	31.25	33.90	5yr 4/1	7.5yr 6/8	4
15 Midden	1	7	1	177	Plain	Yes	Brownware	Bowl	22.22	35.29	5yr 4/1	5yr 6/8	5
15 Midden	1	7	1	177	Plain	Yes	Brownware	Bowl	21.98	33.71	5yr 4/1	7.5yr 6/8	4
15 Midden	1	8	1	208	Plain	Yes	Brownware	Bowl	15.87	34.48	Gley 2.5/1	7.5yr 7/8	4
15 Midden	1	8	1	208	Plain	Yes	Brownware	Bowl	19.61	21.74	5yr 4/2	5yr 6/8	5
15 Midden	1	9	1	226	Plain	Yes	Brownware	Bowl	28.17	30.30	5yr 5/4	7.5yr 7/8	4
15 Midden	1	4	1	126	Plain Corrugated	Yes	Brownware	Bowl	31.25	31.25	5yr 4/6	2.5yr 4/8	6
15 Midden	1	4	1	126	Plain Corrugated	Yes	Brownware	Bowl	n/a	n/a	n/a	n/a	n/a
15 Midden	1	7	1	177	Plain Corrugated	Yes	Brownware	Bowl	24.69	38.46	Gley 2.5/N	5yr 5/8	5
15 Midden	1	7	1	177	Plain Corrugated	Yes	Brownware	Bowl	39.22	20.41	5yr 5/3	5yr 5/6	5
15 Midden	2	3	1	96	Plain	No	Brownware	Jar	21.05	33.71	5yr 5/4	5yr 5/8	5
15 Midden	2	2	1	74	Patterned Corrugated	No	Brownware	Jar	35.71	24.39	5yr 4/4	2.5yr 4/8	6
15 Midden	2	1	1	36	Plain	No	Brownware	Jar	22.22	23.08	5yr 5/6	2.5yr 4/8	6
15 Midden	2	1	1	36	Indented Corrugated	Yes	Brownware	Bowl	28.85	20.20	5yr 2.5/1	7.5yr 7/8	4

Area	Unit	Level	Locus	Spec	Type	Sm	Ware	Form	Original A.P.	Refired A.P.	Mun Orig	Mun 900	Color Group
15 Midden	2	1	1	36	Indented Corrugated	Yes	Brownware	Bowl	16.67	34.48	5yr 5/6	5yr 5/6	5
15 Midden	2	2	1	74	Indented Corrugated	Yes	Brownware	Bowl	12.99	13.33	5yr 3/2	5yr 5/6	5
15 Midden	2	3	1	96	Indented Corrugated	Yes	Brownware	Bowl	22.73	23.26	5yr 2.5/1	5yr 5/6	5
3 Midden	1	3	1	299	Plain	No	Brownware	Jar	29.63	22.90	5yr 5/6	2.5yr 4/8	6
3 Midden	1	2	1	237	Plain Corrugated	No	Brownware	Jar	30.30	15.87	5yr 3/2	2.5yr 4/8	6
3 Midden	1	2	1	237	Plain Corrugated	No	Brownware	Jar	20.20	25.25	5yr 4/3	2.5yr 4/8	6
3 Midden	1	2	1	237	Plain	Yes	Brownware	Bowl	30.00	30.61	7.5yr 6/4	5yr 5/8	5
3 Midden	2	1	1	146	Indented Corrugated	No	Brownware	Jar	24.00	23.44	5yr 5/4	2.5yr 5/8	6
3 Midden	2	1	1	146	Indented Corrugated	No	Brownware	Jar	21.90	29.85	5yr 5/6	2.5yr 4/8	6
3 Midden	2	1	1	146	Plain Corrugated	No	Brownware	Jar	25.00	23.62	5yr 5/6	2.5yr 5/8	6
3 Midden	2	1	1	146	Indented Corrugated	Yes	Brownware	Bowl	29.70	29.41	5yr 6/4	5yr 6/8	5
3 Midden	2	2	1	166	Indented Corrugated	Yes	Brownware	Bowl	34.48	22.73	5yr 5/2	5yr 6/8	5
3 Midden	2	8	1	365	Indented Corrugated	Yes	Brownware	Bowl	21.74	22.73	5yr 6/4	5yr 6/8	5
3 Midden	2	4	1	214	Patterned Corrugated	Yes	Brownware	Bowl	24.79	28.04	7.5yr 3/1	5yr 5/8	5
3 Midden	2	1	1	146	Plain	Yes	Brownware	Bowl	28.57	30.00	5yr 5/4	5yr 6/8	5
3 Midden	2	2	1	166	Plain	Yes	Brownware	Bowl	25.64	27.03	5yr 3/2	5yr 5/8	5
3 Midden	2	1	1	146	Plain Corrugated	Yes	Brownware	Bowl	24.69	25.16	5yr 4/4	5yr 5/8	5
3 Midden	3	1	1	157	Indented Corrugated	No	Brownware	Jar	14.93	15.38	5yr 3/2	2.5yr 4/8	6
3 Midden	3	1	1	157	Plain	No	Brownware	Jar	24.19	24.19	2.5yr 5/6	2.5yr 5/8	6
3 Midden	3	1	1	157	Plain Corrugated	No	Brownware	Jar	26.79	27.27	5yr 5/4	2.5yr 4/8	6
3 Midden	3	2	1	201	Indented Corrugated	Yes	Brownware	Bowl	26.67	27.03	5yr 4/4	5yr 5/8	5
3 Midden	3	3	1	230	Indented Corrugated	Yes	Brownware	Bowl	29.41	29.41	5yr 5/4	2.5yr 4/8	6
3 Midden	3	3	1	203	Patterned Corrugated	Yes	Brownware	Bowl	23.26	24.10	7.5yr 3/1	7.5yr 7/6	4
3 Midden	3	1	1	157	Plain	Yes	Brownware	Bowl	28.17	28.99	5yr 4/2	5yr 5/8	5
3 Midden	3	2	1	201	Plain	Yes	Brownware	Bowl	26.67	13.33	5yr 3/1	5yr 5/8	5
3 Midden	3	2	1	201	Plain	Yes	Brownware	Bowl	21.98	32.26	5yr 4/6	2.5yr 4/8	6
3 Midden	3	1	1	157	Plain Corrugated	Yes	Brownware	Bowl	22.56	22.56	5yr 4/3	5yr 5/6	5
3 Midden	4	2	1	378	Indented Corrugated	No	Brownware	Jar	16.39	33.33	5yr 5/6	5yr 6/8	5
3 Midden	4	5	1	446	Patterned Corrugated	No	Brownware	Jar	34.09	22.99	5yr 3/2	5yr 5/8	5
3 Midden	4	4	1	424	Plain	No	Brownware	Jar	20.83	30.30	Gley 5/N	5yr 6/8	5
3 Midden	4	2	1	378	Indented Corrugated	No	Brownware	Jar	19.61	19.23	5yr 4/3	2.5yr 4/8	6
3 Midden	4	3	1	403	Indented Corrugated	No	Brownware	Jar	12.20	23.53	5yr 6/6	2.5yr 6/8	6
3 Midden	4	3	1	403	Indented Corrugated	No	Brownware	Jar	20.13	20.41	5yr 5/6	2.5yr 6/8	6
3 Midden	4	1	1	335	Plain Corrugated	No	Brownware	Jar	22.22	27.21	5yr 3/1	2.5yr 5/6	6
3 Midden	4	3	1	403	Plain Corrugated	No	Brownware	Jar	30.30	15.87	5yr 4/6	2.5yr 4/6	6
3 Midden	4	3	1	403	Plain Corrugated	No	Brownware	Jar	22.22	34.88	5yr 6/6	2.5yr 5/8	6
3 Midden	4	2	1	378	Indented Corrugated	No	Brownware	Jar	29.4	34.88	5yr 6/6	2.5yr 5/8	6
3 Midden	4	0	1	255	Indented Corrugated	Yes	Brownware	Bowl	28.04	28.04	5yr 2.5/1	2.5yr 4/8	6
3 Midden	4	1	1	335	Indented Corrugated	Yes	Brownware	Bowl	21.58	28.99	5yr 6/4	5yr 5/8	5
3 Midden	4	1	1	335	Indented Corrugated	Yes	Brownware	Bowl	37.74	28.57	5yr 5/4	5yr 6/8	5
3 Midden	4	2	1	378	Indented Corrugated	Yes	Brownware	Bowl	28.99	22.06	5yr 6/4	7.5yr 6/6	4
3 Midden	4	3	1	403	Indented Corrugated	Yes	Brownware	Bowl	19.80	29.41	7.5yr 5/2	5yr 5/8	5
3 Midden	4	1	1	335	Plain	Yes	Brownware	Bowl	26.09	26.79	5yr 3/1	7.5yr 7/6	4
3 Midden	4	2	1	378	Plain	Yes	Brownware	Bowl	28.17	28.17	5yr 5/4	7.5yr 5/8	4
3 Midden	4	3	1	403	Plain	Yes	Brownware	Bowl	17.39	26.55	5yr 5/4	7.5yr 7/6	4
3 Midden	4	3	1	403	Plain	Yes	Brownware	Bowl	32.61	33.33	5yr 2.5/1	7.5yr 7/8	4
3 Midden	4	2	1	378	Plain Corrugated	Yes	Brownware	Bowl	17.09	26.09	5yr 4/3	7.5yr 7/6	4
3 Midden	5	1	1	431	Plain	No	Brownware	Jar	30.30	22.56	5yr 5/4	2.5yr 4/8	6
3 Midden	5	2	1	437	Indented Corrugated	Yes	Brownware	Bowl	25.00	17.86	7.5yr 6/4	5yr 6/8	5
3 Midden	5	1	1	431	Plain	Yes	Brownware	Bowl	23.81	24.69	5yr 3/1	7.5yr 6/6	4
7 Midden	1	1	1	894	Plain Corrugated	No	Brownware	Jar	21.98	22.47	5yr 3/2	5yr 5/8	5
7 Midden	1	1	1	894	Indented Corrugated	No	Brownware	Jar	24.79	25.86	5yr 4/6	2.5yr 4/8	6
7 Midden	1	1	1	894	Plain Corrugated	No	Brownware	Jar	20.83	21.74	5yr 4/4	2.5yr 4/8	6
7 Midden	1	1	1	894	Indented Corrugated	Yes	Brownware	Bowl	19.61	20.00	7.5yr 6/3	5yr 5/8	5
7 Midden	1	1	1	894	Plain	Yes	Brownware	Bowl	23.53	37.04	5yr 5/4	5yr 6/8	5
7 Midden	3	1	1	870	Indented Corrugated	No	Brownware	Jar	18.35	28.04	2.5yr 5/6	2.5yr 4/8	6
7 Midden	3	2	1	930	Indented Corrugated	No	Brownware	Jar	24.10	25.32	5yr 5/4	2.5yr 4/8	6
7 Midden	3	3	1	959	Indented Corrugated	No	Brownware	Jar	28.57	29.41	5yr 5/3	2.5yr 5/8	6
7 Midden	3	4	1	982	Indented Corrugated	No	Brownware	Jar	30.77	23.81	5yr 4/6	2.5yr 4/8	6
7 Midden	3	4	1	982	Indented Corrugated	No	Brownware	Jar	20.83	20.83	5yr 5/4	2.5yr 5/8	6
7 Midden	3	5	1	1002	Indented Corrugated	No	Brownware	Jar	22.99	35.29	5yr 5/6	2.5yr 5/8	6
7 Midden	3	5	1	1002	Indented Corrugated	No	Brownware	Jar	23.95	30.49	5yr 4/6	2.5yr 5/8	6
7 Midden	3	1	1	870	Plain	No	Brownware	Jar	40.00	20.83	7.5yr 4/1	2.5yr 5/8	6
7 Midden	3	10	1	1205	Plain	No	Brownware	Jar	22.22	23.53	5yr 5/4	2.5yr 4/8	6
7 Midden	3	1	1	870	Plain Corrugated	No	Brownware	Jar	20.41	20.83	5yr 4/4	2.5yr 4/8	6
7 Midden	3	1	1	870	Plain Corrugated	No	Brownware	Jar	22.22	33.71	5yr 4/3	2.5yr 4/8	6
7 Midden	3	3	1	959	Plain Corrugated	No	Brownware	Jar	23.26	22.99	2.5yr 4/6	2.5yr 5/8	6

Area	Unit	Level	Locus	Spec	Type	Sm	Ware	Form	Original A.P.	Refired A.P.	Mun Orig	Mun 900	Color Group
7 Midden	3	3	1	959	Indented Corrugated	No	Brownware	Jar	22.73	21.74	5yr 3/2	2.5yr 4/8	6
7 Midden	3	2	1	930	Indented Corrugated	Yes	Brownware	Bowl	25.97	19.74	7.5yr 6/3	5yr 4/6	
7 Midden	3	3	1	959	Indented Corrugated	Yes	Brownware	Bowl	23.62	24.39	7.5yr 2.5/1	7.5yr 7/6	4
7 Midden	3	1	1	870	Plain	Yes	Brownware	Bowl	14.93	31.25	5yr 2.5/1	5yr 5/8	5
7 Midden	3	2	1	930	Plain	Yes	Brownware	Bowl	30.77	33.33	7.5yr 6/3	5yr 6/8	5
7 Midden	3	3	1	959	Plain	Yes	Brownware	Bowl	24.69	25.48	7.5yr 2.5/1	7.5yr 7/6	4
7 Midden	3	4	1	982	Plain	Yes	Brownware	Bowl	18.52	36.36	7.5yr 6/3	7.5yr 7/6	4
7 Midden	3	5	1	1002	Plain	Yes	Brownware	Bowl	22.39	30.53	7.5yr 2.5/1	7.5yr 7/6	4
7 Midden	3	8	1	1130	Plain	Yes	Brownware	Bowl	24.39	37.50	7.5yr 5/4	7.5yr 7/6	4
7 Midden	3	10	1	1205	Plain	Yes	Brownware	Bowl	20.41	42.55	7.5yr 2.5/1	7.5yr 6/8	4
7 Midden	3	2	1	930	Plain Corrugated	Yes	Brownware	Bowl	18.18	37.04	7.5yr 3/2	2.5yr 4/8	6
7 Midden	3	5	1	1002	Plain Corrugated	Yes	Brownware	Bowl	13.70	27.78	7.5yr 3/2	5yr 5/8	5
7 Midden	3	8	1	1130	Plain Corrugated	Yes	Brownware	Bowl	19.61	29.41	7.5yr 3/3	5yr 5/8	5
7 Midden	5	2	1	922	Indented Corrugated	No	Brownware	Jar	30.30	30.61	5yr 5/6	2.5yr 4/8	6
7 Midden	5	3	1	967	Indented Corrugated	No	Brownware	Jar	30.30	23.44	7.5yr 4/2	2.5yr 5/8	6
7 Midden	5	2	1	922	Plain Corrugated	No	Brownware	Jar	30.30	22.56	5yr 4/3	2.5yr 4/8	6
7 Midden	5	2	1	922	Plain Corrugated	No	Brownware	Jar	22.73	21.74	5yr 3/2	2.5yr 4/8	6
7 Midden	5	2	1	922	Plain	Yes	Brownware	Bowl	26.67	27.21	7.5yr 6/4	5yr 5/8	5
7 Midden	5	3	1	967	Plain	Yes	Brownware	Bowl	20.62	31.91	7.5yr 5/2	7.5yr 7/6	4
Great House	1	1	1	192	Plain Corrugated	No	Brownware	Jar	50.0	n/a	800-900	2.5yr 5/6	6
Great House	1	1	1	539	Plain Corrugated	No	Brownware	Jar	26.7	n/a	800-900	2.5yr 4/6	6
Great House	1	5	1	539	Indented Corrugated	No	Brownware	Jar	36.4	n/a	800-900	2.5yr 6/6	6
Great House	3	6	1	587	Indented Corrugated	No	Brownware	Jar	29.85	15.63	5yr 4/2	5yr 5/8	5
Great House	3	6	1	587	Indented Corrugated	No	Brownware	Jar	32.26	16.67	5yr 3/2	2.5yr 4/8	6
Great House	3	6	1	587	Indented Corrugated	No	Brownware	Jar	22.22	22.99	5yr 3/2	2.5yr 4/8	6
Great House	3	6	1	587	Indented Corrugated	No	Brownware	Jar	27.40	25.97	5yr 3/2	2.5yr 5/8	6
Great House	3	6	1	587	Indented Corrugated	No	Brownware	Jar	31.3	n/a	800-900	2.5yr 6/6	6
Great House	4	3	1	244	Indented Corrugated	No	Brownware	Jar	30.30	31.25	5yr 6/6	5yr 5/8	5
Great House	4	3	1	243	Indented Corrugated	No	Brownware	Jar	14.08	29.41	5yr 5/6	5yr 5/8	5
Great House	4	5	1	469	Indented Corrugated	No	Brownware	Jar	17.70	18.69	5yr 5/4	5yr 6/8	5
Great House	4	5	1	469	Indented Corrugated	No	Brownware	Jar	28.17	29.41	5yr 4/4	5yr 6/8	5
Great House	4	1	1	469	Indented Corrugated	No	Brownware	Jar	14.29	27.40	5yr 6/6	2.5yr 6/8	6
Great House	4	1	1	469	Indented Corrugated	No	Brownware	Jar	27.03	28.99	5yr 5/6	2.5yr 4/8	6
Great House	4	5	1	469	Indented Corrugated	No	Brownware	Jar	19.80	21.05	5yr 4/4	2.5yr 4/8	6
Great House	4	1	1	469	Plain	No	Brownware	Jar	20.00	20.41	5yr 2.5/1	2.5yr 4/8	6
Great House	4	1	1	469	Plain	No	Brownware	Jar	21.28	21.74	5yr 4/3	2.5yr 4/8	6
Great House	4	1	1	469	Plain	No	Brownware	Jar	20.83	41.67	5yr 5/4	2.5yr 4/8	6
Great House	4	3	1	529	Plain	No	Brownware	Jar	27.03	27.03	5yr 4/3	2.5yr 5/8	6
Great House	4	3	1	529	Plain	No	Brownware	Jar	20.62	21.74	5yr 4/6	2.5yr 4/8	6
Great House	4	1	1	469	Plain Corrugated	No	Brownware	Jar	31.25	31.75	5yr 4/4	2.5yr 4/8	6
Great House	4	1	1	469	Plain Corrugated	No	Brownware	Jar	32.26	33.90	5yr 4/3	2.5yr 4/8	6
Great House	4	3	1	529	Plain Corrugated	No	Brownware	Jar	35.71	25.00	5yr 4/4	2.5yr 4/8	6
Great House	4	4	1	539	Plain	No	Brownware	Jar	29.2	n/a	800-900	2.5yr 5/6	6
Great House	4	3	1	529	Plain Corrugated	Yes	Brownware	Bowl	28.85	29.70	5yr 4/2	5yr 5/8	5
Great House	9	2	1	1375	Patterned Corrugated	No	Brownware	Jar	21.74	33.33	5yr 5/6	2.5yr 4/8	6
Great House	9	3	1	1413	Patterned Corrugated	No	Brownware	Jar	31.25	21.74	5yr 4/6	2.5yr 4/6	6
Great House	9	3	1	1413	Plain Corrugated	No	Brownware	Jar	21.43	29.41	5yr 4/6	2.5yr 4/8	6
Great House	9	1	1	1277	Indented Corrugated	Yes	Brownware	Bowl	26.79	30.00	5yr 5/4	5yr 5/8	5
Great House	9	1	1	1277	Indented Corrugated	Yes	Brownware	Bowl	26.55	26.79	5yr 3/2	5yr 5/8	5
Great House	9	2	1	1375	Indented Corrugated	Yes	Brownware	Bowl	21.98	33.33	5yr 3/4	2.5yr 4/8	6
Great House	9	3	1	1413	Indented Corrugated	Yes	Brownware	Bowl	21.51	28.57	5yr 5/4	2.5yr 6/8	6
Great House	9	2	1	1375	Patterned Corrugated	Yes	Brownware	Bowl	29.85	30.08	5yr 4/4	5yr 5/8	5
Great House	9	3	1	1413	Patterned Corrugated	Yes	Brownware	Bowl	22.90	31.25	7.5yr 6/4	5yr 5/8	5
Great House	9	1	1	1277	Plain	Yes	Brownware	Bowl	13.89	28.99	5yr 2.5/1	5yr 6/8	5
Great House	9	1	1	1277	Plain	Yes	Brownware	Bowl	25.21	17.86	5yr 3/2	5yr 6/8	5
Great House	9	2	1	1375	Plain	Yes	Brownware	Bowl	20.83	21.90	5yr 4/1	5yr 6/8	5
Great House	9	3	1	1413	Plain	Yes	Brownware	Bowl	28.57	29.70	5yr 5/3	5yr 6/8	5
Great House	9	3	1	1413	Plain	Yes	Brownware	Bowl	25.00	25.97	5yr 2.5/1	2.5yr 4/8	6
Great House	9	4	1	1504	Plain	Yes	Brownware	Bowl	33.33	17.54	5yr 5/4	2.5yr 4/8	6
Great House	9	1	1	1277	Plain Corrugated	Yes	Brownware	Bowl	31.01	23.62	5yr 4/4	2.5yr 4/6	6
Great House	9	3	1	1413	Plain Corrugated	Yes	Brownware	Bowl	22.90	24.19	5yr 2.5/1	5yr 5/8	5
Great House	10	1	1	1274	Patterned Corrugated	No	Brownware	Jar	24.79	25.42	5yr 2.5/1	2.5yr 4/8	6
Great House	10	2	1	1380	Indented Corrugated	Yes	Brownware	Bowl	21.74	22.73	7.5yr 5/4	5yr 5/8	5
Great House	10	3	1	1387	Indented Corrugated	Yes	Brownware	Bowl	29.41	18.69	7.5yr 2.5/1	7.5yr 7/6	4
Great House	10	1	1	1274	Patterned Corrugated	Yes	Brownware	Bowl	20.13	27.40	5yr 4/4	5yr 5/8	5
Great House	10	1	1	1274	Patterned Corrugated	Yes	Brownware	Bowl	n/a	n/a	n/a	n/a	n/a
Great House	10	2	1	1380	Patterned Corrugated	Yes	Brownware	Bowl	22.06	15.50	Gley 3/N	7.5yr 7/6	4

Area	Unit	Level	Locus	Spec	Type	Sm	Ware	Form	Original A.P.	Refired A.P.	Mun Orig	Mun 900	Color Group
Great House	10	1	1	1274	Plain	Yes	Brownware	Bowl	32.26	22.99	5yr 6/2	5yr 6/8	5
Great House	10	2	1	1380	Plain	Yes	Brownware	Bowl	n/a	27.03	5yr 4/3	5yr 5/8	5
Great House	10	1	1	1274	Plain Corrugated	Yes	Brownware	Bowl	23.81	24.59	5yr 4/3	5yr 6/8	5
Great House	12	4	1	1962	Incised Corrugated	No	Brownware	Jar	23.26	23.53	5yr 5/4	5yr 5/8	5
Great House	12	8	1	2215	Plain Corrugated	No	Brownware	Jar	21.13	28.99	5yr 5/3	5yr 6/8	5
Great House	12	4	1	1962	Patterned Corrugated	No	Brownware	Jar	18.69	28.57	5yr 4/2	2.5yr 5/8	6
Great House	12	5	1	2045	Patterned Corrugated	No	Brownware	Jar	22.22	32.97	5yr 6/6	2.5yr 5/8	6
Great House	12	6	1	2110	Patterned Corrugated	No	Brownware	Jar	26.32	26.55	5yr 5/6	2.5yr 5/8	6
Great House	12	8	1	2215	Patterned Corrugated	No	Brownware	Jar	26.79	26.79	5yr 7/4	2.5yr 5/8	6
Great House	12	8	1	2215	Indented Corrugated	Yes	Brownware	Bowl	23.26	23.81	2.5yr 4/6	2.5yr 4/8	6
Great House	12	4	1	1962	Plain	No	Brownware	Bowl	18.87	28.57	5yr 4/4	2.5yr 4/8	6
Great House	12	7	1	2162	Plain	No	Brownware	Bowl	18.02	27.03	5yr 5/4	5yr 5/8	5
Great House	12	4	1	1962	Plain	Yes	Brownware	Bowl	19.42	29.41	5yr 4/3	5yr 5/8	5
Great House	12	5	1	2045	Plain	Yes	Brownware	Bowl	28.57	29.41	5yr 3/3	5yr 5/8	5
Great House	12	6	1	2110	Plain	Yes	Brownware	Bowl	15.38	31.25	5yr 4/1	2.5yr 4/8	6
Great House	12	7	1	2162	Plain	Yes	Brownware	Bowl	n/a	19.61	5yr 5/4	2.5yr 4/8	6
Great House	12	7	1	2162	Plain	Yes	Brownware	Bowl	n/a	n/a	n/a	n/a	n/a
Great House	15	3	1	2179	Incised Corrugated	No	Brownware	Jar	19.61	20.69	5yr 4/6	2.5yr 4/8	6
Great House	15	3	1	2179	Patterned Corrugated	No	Brownware	Jar	15.38	15.38	5yr 4/4	2.5yr 5/8	6
Great House	15	3	1	2179	Patterned Corrugated	No	Brownware	Jar	20.62	31.58	5yr 2.5/1	2.5yr 4/8	6
Great House	15	2	1	2071	Plain	No	Brownware	Jar	32.26	25.00	5yr 4/2	2.5yr 4/8	6
Great House	15	3	1	2179	Plain	No	Brownware	Jar	25.00	25.64	5yr 5/4	2.5yr 4/8	6
Great House	15	5	1	2430	Plain	No	Brownware	Jar	22.99	23.53	5yr 4/6	2.5yr 4/8	6
Great House	15	5	1	2430	Plain	No	Brownware	Jar	16.00	24.39	5yr 4/2	2.5yr 4/8	6
Great House	15	2	1	2071	Plain Corrugated	No	Brownware	Jar	25.00	25.64	5yr 4/3	2.5yr 4/8	6
Great House	15	3	1	2179	Plain Corrugated	No	Brownware	Jar	22.39	22.73	5yr 5/4	2.5yr 4/8	6
Great House	15	5	1	2430	Plain Corrugated	No	Brownware	Jar	25.00	26.09	5yr 4/6	2.5yr 4/8	6
Great House	15	3	1	2179	Indented Corrugated	Yes	Brownware	Bowl	18.52	36.70	5yr 5/6	5yr 5/8	5
Great House	15	3	1	2179	Indented Corrugated	Yes	Brownware	Bowl	20.73	26.18	7.5yr 3/2	5yr 5/8	5
Great House	15	3	1	2179	Indented Corrugated	Yes	Brownware	Bowl	n/a	n/a	n/a	n/a	n/a
Great House	15	5	1	2430	Patterned Corrugated	No	Brownware	Bowl	37.74	n/a	5yr 4/6	2.5yr 4/8	6
Great House	15	1	1	1981	Patterned Corrugated	Yes	Brownware	Bowl	27.03	20.41	7.5yr 5/4	5yr 6/8	5
Great House	15	3	1	2179	Patterned Corrugated	Yes	Brownware	Bowl	16.81	25.64	5yr 4/3	5yr 5/6	5
Great House	15	1	1	1981	Plain	No	Brownware	Bowl	28.17	28.57	5yr 5/4	5yr 5/8	5
Great House	15	1	1	1981	Plain	No	Brownware	Bowl	24.84	32.89	5yr 5/4	5yr 5/8	5
Great House	15	1	1	1981	Plain	Yes	Brownware	Bowl	13.70	28.17	5yr 5/2	5yr 5/8	5
Great House	15	2	1	2071	Plain	Yes	Brownware	Bowl	23.08	23.81	5yr 4/3	5yr 6/8	5
Great House	15	3	1	2179	Plain	Yes	Brownware	Bowl	23.62	17.96	5yr 4/1	5yr 6/8	5
Great House	15	5	1	2430	Plain	Yes	Brownware	Bowl	29.85	15.63	5yr 6/2	5yr 6/8	5
Great House	15	2	1	2071	Plain Corrugated	Yes	Brownware	Bowl	30.00	31.25	5yr 4/4	2.5yr 4/8	6
Great House	15	3	1	2179	Plain Corrugated	Yes	Brownware	Bowl	17.70	27.52	5yr 3/2	5yr 5/8	5
Great House	16	6	1	2519	Patterned Corrugated	No	Brownware	Jar	18.18	27.27	5yr 5/6	2.5yr 5/6	6
Great House	16	6	1	2519	Indented Corrugated	Yes	Brownware	Bowl	27.03	27.52	7.5yr 5/6	5yr 5/8	5
Great House	16	6	1	2519	Patterned Corrugated	Yes	Brownware	Bowl	25.97	26.67	5yr 6/4	5yr 6/8	5
Great House	16	6	1	2519	Plain	Yes	Brownware	Bowl	22.22	23.53	5yr 5/3	5yr 5/8	5
Great House	16	6	1	2519	Plain Corrugated	Yes	Brownware	Bowl	32.79	33.90	5yr 4/6	5yr 6/8	5
Great House	17	2	1	2395	Indented Corrugated	Yes	Brownware	Bowl	24.10	24.39	7.5yr 4/3	5yr 5/6	5
Great House	17	4	1	2471	Indented Corrugated	Yes	Brownware	Bowl	23.81	24.39	5yr 4/3	2.5yr 4/8	6
Great House	17	4	1	2471	Patterned Corrugated	Yes	Brownware	Bowl	21.28	21.58	5yr 6/1	5yr 6/8	5
Great House	17	5	1	2562	Patterned Corrugated	Yes	Brownware	Bowl	20.62	20.62	5yr 4/4	2.5yr 4/8	6
Great House	17	4	1	2471	Plain	Yes	Brownware	Bowl	19.23	30.30	5yr 3/1	5yr 6/8	5
Great House	17	5	1	2562	Plain	Yes	Brownware	Bowl	28.04	28.85	5yr 4/4	5yr 5/8	5
Great House	17	6	1	2597	Plain	Yes	Brownware	Bowl	22.73	23.26	5yr 4/3	5yr 5/8	5
Great House	17	6	1	2597	Plain Corrugated	Yes	Brownware	Bowl	21.28	33.33	5yr 4/2	2.5yr 4/8	6
Great House	18	8	1	2215	Plain	No	Brownware	Bowl	29.41	29.85	5yr 5/6	5yr 5/8	5
1 Midden	2	1	1	603	Indented Corrugated	No	Grayware	Jar	36.14	36.14	Gley 8/N	10yr 8/3	1
1 Midden	2	1	1	603	Indented Corrugated	No	Grayware	Jar	24.39	32.00	10yr 5/2	10yr 8/2	1
1 Midden	2	5	1	672	Indented Corrugated	No	Grayware	Jar	21.28	20.83	10yr 7/2	10yr 8/3	1
1 Midden	2	5	1	672	Indented Corrugated	No	Grayware	Jar	28.99	28.99	10yr 7/3	10yr 8/4	1
1 Midden	2	1	1	603	Indented Corrugated	No	Grayware	Jar	34.88	34.88	10yr 6/2	10yr 8/3	1
1 Midden	2	1	1	603	Indented Corrugated	No	Grayware	Jar	25.00	32.26	10yr 7/3	10yr 8/4	1
1 Midden	2	5	1	672	Indented Corrugated	No	Grayware	Jar	18.35	21.28	10yr 7/2	10yr 8/3	1
1 Midden	2	5	1	672	Indented Corrugated	No	Grayware	Jar	29.41	28.57	10yr 5/2	10yr 8/2	1
1 Midden	2	1	1	603	Indented Corrugated	No	Grayware	Jar	37.5	n/a	700-900	7.5yr 8/1	2
1 Midden	2	5	1	672	Indented Corrugated	No	Grayware	Jar	30.8	n/a	700-900	7.5yr 8/3	2
1 Midden	2	1	1	603	Indented Corrugated	No	Grayware	Jar	37.5	37.5	700-900	7.5yr 8/1	2
1 Midden	2	1	1	603	Indented Corrugated	No	Grayware	Jar	33.3	36.14	700-900	7.5yr 8/1	2

Area	Unit	Level	Locus	Spec	Type	Sm	Ware	Form	Original A.P.	Refired A.P.	Mun Orig	Mun 900	Color Group
1 Midden	4	2	1	1209	Patterned Corrugated	No	Grayware	Jar	37.74	18.52	10yr 6/2	10yr 8/3	1
1 Midden	4	2	1	1209	Patterned Corrugated	No	Grayware	Jar	35.71	17.86	Gley 8/N	10yr 8/3	1
1 Midden	4	2	1	1209	Patterned Corrugated	No	Grayware	Jar	30.8	37.74	700-900	7.5yr 8/1	2
10 Midden	2	1	1	24	Indented Corrugated	No	Grayware	Jar	35.71	37.74	10yr 8/1	10yr 8/4	1
10 Midden	2	1	1	24	Indented Corrugated	No	Grayware	Jar	17.86	34.48	10yr 7/1	10yr 8/2	1
10 Midden	2	1	1	24	Indented Corrugated	No	Grayware	Jar	33.90	35.71	10yr 7/1	10yr 8/3	1
10 Midden	2	1	1	24	Indented Corrugated	No	Grayware	Jar	18.52	36.36	10yr 3/1	10yr 8/3	1
10 Midden	3	1	1	60	Indented Corrugated	No	Grayware	Jar	41.10	n/a	10yr 7/1	10yr 7/4	1
10 Midden	3	1	1	60	Plain Corrugated	No	Grayware	Jar	31.6	n/a	600-700	7.5yr 8/2	2
10 Midden	3	1	1	60	Indented Corrugated	No	Grayware	Jar	39.47	n/a	10yr 7/1	7.5yr 8/4	2
10 Midden	4	1	1	168	Indented Corrugated	No	Grayware	Jar	25.0	n/a	600-700	7.5yr 8/3	2
10 Midden	5	2	1	197	Indented Corrugated	No	Grayware	Jar	18.69	31.58	10yr 7/1	10yr 7/4	1
10 Midden	5	2	1	197	Indented Corrugated	No	Grayware	Jar	20.83	31.25	10yr 7/1	7.5yr 8/4	2
10 Midden	6	1	1	476	Indented Corrugated	No	Grayware	Jar	32.61	43.48	10yr 3/1	10yr 8/3	1
10 Midden	6	1	1	476	Indented Corrugated	No	Grayware	Jar	13.70	27.78	10yr 7/1	10yr 8/3	1
10 Midden	6	1	1	476	Indented Corrugated	No	Grayware	Jar	31.58	42.11	10yr 7/1	10yr 8/2	1
10 Midden	6	1	1	476	Indented Corrugated	No	Grayware	Jar	13.33	27.40	10yr 8/1	10yr 8/4	1
12 Midden	1	1	1	28	Indented Corrugated	No	Grayware	Jar	28.85	38.46	10yr 7/2	10yr 8/1	1
12 Midden	1	5	1	325	Indented Corrugated	No	Grayware	Jar	27.78	11.63	10yr 6/1	10yr 8/2	1
12 Midden	1	7	1	396	Indented Corrugated	No	Grayware	Jar	16.39	32.79	10yr 7/1	10yr 8/4	1
12 Midden	1	7	1	396	Plain Corrugated	No	Grayware	Jar	24.10	36.14	10yr 7/1	10yr 8/4	1
12 Midden	1	1	1	28	Indented Corrugated	No	Grayware	Jar	29.13	37.38	10yr 7/1	10yr 8/4	1
12 Midden	1	2	1	77	Indented Corrugated	No	Grayware	Jar	28.17	40.00	10yr 8/1	10yr 8/3	1
12 Midden	1	2	1	77	Indented Corrugated	No	Grayware	Jar	25.21	22.73	10yr 7/1	10yr 8/4	1
12 Midden	1	4	1	306	Indented Corrugated	No	Grayware	Jar	24.79	39.37	10yr 7/1	10yr 8/3	1
12 Midden	1	5	1	325	Indented Corrugated	No	Grayware	Jar	28.17	11.49	10yr 8/1	10yr 8/3	1
12 Midden	1	7	1	396	Indented Corrugated	No	Grayware	Jar	15.87	33.33	10yr 3/1	10yr 8/3	1
12 Midden	1	7	1	396	Plain Corrugated	No	Grayware	Jar	25.00	34.88	10yr 7/2	10yr 8/1	1
12 Midden	1	2	1	77	Indented Corrugated	No	Grayware	Jar	27.78	41.67	10yr 8/1	7.5yr 8/4	2
12 Midden	1	2	1	77	Indented Corrugated	No	Grayware	Jar	24.59	24.79	10yr 8/1	7.5yr 8/4	2
12 Midden	1	4	1	306	Indented Corrugated	No	Grayware	Jar	24.19	40.32	10yr 8/1	7.5yr 8/2	2
12 Midden	2	1	1	51	Indented Corrugated	No	Grayware	Jar	30.30	30.30	10yr 3/1	10yr 8/3	1
12 Midden	2	2	1	99	Indented Corrugated	No	Grayware	Jar	36.36	45.05	10yr 8/1	10yr 8/3	1
12 Midden	2	2	1	99	Indented Corrugated	No	Grayware	Jar	50.00	23.81	10yr 7/1	10yr 8/3	1
12 Midden	2	1	1	51	Indented Corrugated	No	Grayware	Jar	33.33	29.41	10yr 7/1	10yr 8/4	1
12 Midden	2	2	1	99	Indented Corrugated	No	Grayware	Jar	35.40	43.86	10yr 6/1	10yr 8/2	1
12 Midden	2	4	1	318	Indented Corrugated	No	Grayware	Jar	35.9	n/a	600-700	7.5yr 8/3	2
12 Midden	2	2	1	99	Indented Corrugated	No	Grayware	Jar	46.51	24.39	10yr 8/1	7.5yr 8/2	2
12 Midden	2	1	1	51	Indented Corrugated	No	Grayware	Jar	26.32	35.40	10yr 8/1	7.5yr 8/4	2
12 Midden	2	1	1	51	Indented Corrugated	No	Grayware	Jar	26.09	36.36	10yr 8/1	7.5yr 8/4	2
12 Midden	3	3	1	272	Indented Corrugated	No	Grayware	Jar	20.83	41.24	10yr 7/1	10yr 8/4	1
12 Midden	3	3	1	272	Indented Corrugated	No	Grayware	Jar	18.69	40.00	10yr 8/1	7.5yr 8/4	2
12 Midden	3	2	1	91	Incised Corrugated	No	Grayware	Jar	23.53	35.71	10yr 8/1	7.5yr 8/4	2
12 Midden	3	2	1	91	Incised Corrugated	No	Grayware	Jar	24.39	37.04	10yr 8/1	7.5yr 8/4	2
12 Midden	4	1	1	564	Patterned Corrugated	No	Grayware	Jar	20.62	30.93	10yr 8/1	10yr 8/3	1
12 Midden	4	2	1	623	Indented Corrugated	No	Grayware	Jar	36.4	n/a	600-700	7.5yr 8/3	2
12 Midden	4	1	1	564	Patterned Corrugated	No	Grayware	Jar	21.05	31.25	10yr 8/1	7.5yr 8/4	2
12 Midden	6	2	1	613	Indented Corrugated	No	Grayware	Jar	29.6	n/a	600-700	7.5yr 8/2	2
15 Midden	1	1	1	21	Indented Corrugated	No	Grayware	Jar	27.27	27.03	10yr 5/2	10yr 8/3	1
15 Midden	1	2	1	70	Indented Corrugated	No	Grayware	Jar	28.57	42.86	10yr 8/1	10yr 8/3	1
15 Midden	1	5	1	134	Indented Corrugated	No	Grayware	Jar	27.03	40.54	10yr 8/1	10yr 8/4	1
15 Midden	1	6	1	150	Indented Corrugated	No	Grayware	Jar	20.20	29.41	10yr 4/1	10yr 8/4	1
15 Midden	1	7	1	177	Indented Corrugated	No	Grayware	Jar	33.90	50.00	10yr 7/1	10yr 8/3	1
15 Midden	1	7	1	177	Patterned Corrugated	No	Grayware	Jar	22.73	33.71	10yr 5/1	10yr 8/2	1
15 Midden	1	4	1	126	Plain Corrugated	No	Grayware	Jar	26.32	26.32	10yr 8/1	10yr 8/4	1
15 Midden	1	1	1	21	Indented Corrugated	No	Grayware	Jar	27.52	27.78	10yr 8/1	10yr 8/4	1
15 Midden	1	6	1	150	Indented Corrugated	No	Grayware	Jar	40.00	22.73	10yr 5/1	10yr 8/2	1
15 Midden	1	6	1	150	Indented Corrugated	No	Grayware	Jar	20.62	29.13	10yr 8/1	10yr 8/3	1
15 Midden	1	7	1	177	Indented Corrugated	No	Grayware	Jar	32.26	47.62	10yr 7/1	10yr 8/3	1
15 Midden	1	8	1	208	Patterned Corrugated	No	Grayware	Jar	35.46	36.50	10yr 8/1	10yr 8/4	1
15 Midden	1	3	1	82	Plain Corrugated	No	Grayware	Jar	32.26	35.71	10yr 8/1	10yr 8/3	1
15 Midden	1	4	1	126	Plain Corrugated	No	Grayware	Jar	26.09	27.03	10yr 5/2	10yr 8/3	1
15 Midden	1	6	1	150	Indented Corrugated	No	Grayware	Jar	42.55	21.74	10yr 6/1	7.5yr 8/4	2
15 Midden	1	3	1	82	Plain Corrugated	No	Grayware	Jar	33.90	33.90	10yr 7/2	7.5yr 8/4	2
15 Midden	1	2	1	177	Plain Corrugated	No	Grayware	Jar	35.7	n/a	700-900	7.5yr 8/3	2
15 Midden	1	5	1	134	Indented Corrugated	No	Grayware	Jar	27.8	n/a	700-900	7.5yr 8/1	2
15 Midden	1	5	1	208	Indented Corrugated	No	Grayware	Jar	33.3	n/a	700-900	7.5yr 8/1	2



Area	Unit	Level	Locus	Spec	Type	Sm	Ware	Form	Original A.P.	Refired A.P.	Mun Orig	Mun 900	Color Group
15 Midden	1	2	1	70	Indented Corrugated	No	Grayware	Jar	28.99	41.10	10yr 7/2	7.5yr 8/4	2
15 Midden	1	7	1	177	Patterned Corrugated	No	Grayware	Jar	23.53	34.09	10yr 6/1	7.5yr 8/4	2
15 Midden	1	8	1	208	Patterned Corrugated	No	Grayware	Jar	36.23	37.31	10yr 6/3	7.5yr 7/6	4
15 Midden	1	5	1	134	Indented Corrugated	No	Grayware	Jar	27.40	38.96	10yr 6/3	7.5yr 7/6	4
15 Midden	2	3	1	96	Indented Corrugated	No	Grayware	Jar	24.79	31.50	10yr 8/1	10yr 8/3	1
15 Midden	2	3	1	96	Indented Corrugated	No	Grayware	Jar	25.42	31.75	10yr 4/1	10yr 8/4	1
3 Midden	1	1	1	182	Indented Corrugated	No	Grayware	Jar	31.25	30.77	10yr 8/1	10yr 8/3	1
3 Midden	1	4	1	361	Plain Corrugated	No	Grayware	Jar	19.80	29.70	10yr 8/1	10yr 8/4	1
3 Midden	1	4	1	361	Plain Corrugated	No	Grayware	Jar	20.20	29.41	Gley 8/N	10yr 8/3	1
3 Midden	1	1	1	182	Indented Corrugated	No	Grayware	Jar	32.79	31.25	10yr 8/1	7.5yr 7/6	4
3 Midden	2	2	1	166	Indented Corrugated	No	Grayware	Jar	26.7	n/a	700-900	7.5yr 8/2	2
3 Midden	3	2	1	201	Indented Corrugated	No	Grayware	Jar	18.18	28.57	Gley 8/N	10yr 8/3	1
3 Midden	3	1	1	157	Indented Corrugated	No	Grayware	Jar	24.24	31.54	10yr 7/2	10yr 8/3	1
3 Midden	3	2	1	201	Indented Corrugated	No	Grayware	Jar	18.52	28.30	10yr 8/1	10yr 8/4	1
3 Midden	4	3	1	403	Indented Corrugated	No	Grayware	Jar	27.21	34.72	10yr 6/2	10yr 8/2	1
3 Midden	4	3	1	403	Indented Corrugated	No	Grayware	Jar	27.40	35.46	10yr 6/2	10yr 8/2	1
3 Midden	4	2	1	378	Plain Corrugated	No	Grayware	Jar	30.61	31.58	10yr 8/1	10yr 8/3	1
3 Midden	4	1	1	335	Indented Corrugated		Grayware	Jar	n/a	n/a	700-900	7.5yr 8/1	2
3 Midden	4	2	1	378	Plain Corrugated	No	Grayware	Jar	31.58	31.25	10yr 8/1	7.5yr 7/6	4
7 Midden	3	1	1	870	Indented Corrugated	No	Grayware	Jar	n/a	37.04	10yr 8/1	10yr 8/4	1
7 Midden	3	3	1	959	Indented Corrugated	No	Grayware	Jar	35.71	35.71	10yr 4/1	10yr 8/3	1
7 Midden	3	4	1	982	Indented Corrugated	No	Grayware	Jar	21.74	43.48	10yr 3/2	10yr 8/3	1
7 Midden	3	5	1	1002	Indented Corrugated	No	Grayware	Jar	27.78	37.04	7.5yr 3/1	10yr 8/3	1
7 Midden	3	8	1	1130	Indented Corrugated	No	Grayware	Jar	25.32	37.97	10yr 7/1	10yr 8/3	1
7 Midden	3	5	1	1002	Indented Corrugated	No	Grayware	Jar	n/a	n/a	10yr 8/1	10yr 8/4	1
7 Midden	3	1	1	870	Indented Corrugated	No	Grayware	Jar	n/a	35.71	10yr 8/2	10yr 8/4	1
7 Midden	3	3	1	959	Indented Corrugated	No	Grayware	Jar	32.26	40.00	10yr 7/1	10yr 8/3	1
7 Midden	3	4	1	982	Indented Corrugated	No	Grayware	Jar	19.80	42.11	7.5yr 3/1	10yr 8/3	1
7 Midden	3	5	1	1002	Indented Corrugated	No	Grayware	Jar	28.04	36.04	10yr 3/2	10yr 8/3	1
7 Midden	3	8	1	1130	Indented Corrugated	No	Grayware	Jar	25.00	36.59	10yr 4/1	10yr 8/3	1
7 Midden	5	2	1	922	Indented Corrugated	No	Grayware	Jar	23.62	23.62	10yr 8/2	10yr 8/4	1
7 Midden	5	2	1	922	Indented Corrugated	No	Grayware	Jar	24.19	22.06	10yr 8/1	10yr 8/4	1
Great House	1	5	1	248	Indented Corrugated	No	Grayware	Jar	36.4	n/a	600-700	7.5yr 8/4	2
Great House	4	1	1	469	Indented Corrugated	No	Grayware	Jar	21.74	32.97	10yr 7/1	10yr 8/3	1
Great House	4	1	1	469	Indented Corrugated	No	Grayware	Jar	29.41	29.85	10yr 3/2	10yr 8/4	1
Great House	4	3	1	529	Indented Corrugated	No	Grayware	Jar	23.44	23.81	10yr 7/1	7.5yr 8/4	1
Great House	4	3	1	529	Indented Corrugated	No	Grayware	Jar	35.71	37.04	10yr 7/1	10yr 8/4	1
Great House	4	3	1	529	Indented Corrugated	No	Grayware	Jar	35.29	36.14	10yr 5/1	10yr 8/3	1
Great House	4	3	1	529	Indented Corrugated	No	Grayware	Jar	31.01	31.50	10yr 6/1	10yr 8/2	1
Great House	4	3	1	529	Indented Corrugated	No	Grayware	Jar	22.47	35.71	10yr 7/1	10yr 8/4	1
Great House	4	5	1	469	Indented Corrugated	No	Grayware	Jar	18.52	28.30	10yr 7/1	10yr 8/4	1
Great House	4	1	1	469	Indented Corrugated	No	Grayware	Jar	19.80	33.33	10yr 7/1	10yr 8/3	1
Great House	4	1	1	469	Indented Corrugated	No	Grayware	Jar	29.85	29.41	10yr 3/2	10yr 8/4	1
Great House	4	3	1	529	Indented Corrugated	No	Grayware	Jar	24.00	20.41	10yr 7/1	7.5yr 8/4	1
Great House	4	3	1	529	Indented Corrugated	No	Grayware	Jar	34.48	35.71	10yr 7/1	10yr 8/4	1
Great House	4	3	1	529	Indented Corrugated	No	Grayware	Jar	34.09	34.88	10yr 5/1	10yr 8/3	1
Great House	4	3	1	529	Indented Corrugated	No	Grayware	Jar	31.75	31.75	10yr 6/1	10yr 8/2	1
Great House	4	3	1	529	Indented Corrugated	No	Grayware	Jar	23.26	37.04	10yr 7/1	10yr 8/4	1
Great House	4	5	1	469	Indented Corrugated	No	Grayware	Jar	18.87	28.04	10yr 7/1	10yr 8/4	1
Great House	4	3	1	248	Indented Corrugated	No	Grayware	Jar	23.26	21.98	10yr 7/1	10yr 8/4	1
Great House	4	3	1	529	Indented Corrugated	No	Grayware	Jar	18.35	27.27	10yr 7/1	7.5yr 8/4	2
Great House	4	2	1	494	Indented Corrugated	No	Grayware	Jar	26.3	n/a	600-700	7.5yr 8/2	2
Great House	4	2	1	494	Plain Corrugated	No	Grayware	Jar	33.3	n/a	600-700	7.5yr 8/1	2
Great House	4	4	1	539	Indented Corrugated	No	Grayware	Jar	33.3	n/a	600-700	7.5yr 8/2	2
Great House	4	3	1	529	Indented Corrugated	No	Grayware	Jar	18.69	28.04	10yr 7/1	7.5yr 8/4	2
Great House	4	3	1	246	Indented Corrugated	No	Grayware	Jar	23.26	23.81	10yr 5/1	7.5yr 6/6	4
Great House	4	4	1	539	Indented Corrugated	No	Grayware	Jar	22.73	22.99	10yr 6/1	7.5yr 7/6	4
Great House	4	4	1	539	Indented Corrugated	No	Grayware	Jar	20.20	30.30	10yr 6/1	7.5yr 7/6	4
Great House	4	4	1	539	Indented Corrugated	No	Grayware	Jar	17.54	26.32	10yr 6/1	7.5yr 7/6	4
Great House	4	3	1	248	Indented Corrugated	No	Grayware	Jar	23.26	n/a	10yr 7/1	7.5yr 6/6	4
Great House	4	3	1	246	Indented Corrugated	No	Grayware	Jar	24.10	18.35	10yr 5/1	7.5yr 6/6	4
Great House	4	4	1	539	Indented Corrugated	No	Grayware	Jar	23.53	18.87	10yr 6/1	7.5yr 7/6	4
Great House	4	4	1	539	Indented Corrugated	No	Grayware	Jar	20.62	30.61	10yr 6/1	7.5yr 7/6	4
Great House	4	4	1	539	Indented Corrugated	No	Grayware	Jar	17.24	27.03	10yr 6/1	7.5yr 7/6	4
Great House	9	3	1	1413	Plain	No	Grayware	Jar	27.03	27.52	10yr 6/1	10yr 8/4	1
Great House	9	3	1	1413	Plain	No	Grayware	Jar	27.27	28.30	10yr 6/1	10yr 8/4	1
Great House	9	3	1	1413	Plain	No	Grayware	Jar	24.39	24.39	10yr 7/1	7.5yr 7/6	4

Area	Unit	Level	Locus	Spec	Type	Sm	Ware	Form	Original A.P.	Refired A.P.	Mun Orig	Mun 900	Color Group
Great House	9	3	1	1413	Plain	No	Grayware	Jar	25.32	21.98	10yr 7/1	7.5yr 7/6	4
Great House	10	2	1	1380	Patterned Corrugated	No	Grayware	Jar	36.36	37.74	Gley 8/N	10yr 8/1	1
Great House	10	2	1	1380	Indented Corrugated	No	Grayware	Jar	n/a	n/a	10yr 6/2	10yr 8/2	1
Great House	10	2	1	1380	Patterned Corrugated	No	Grayware	Jar	34.48	35.71	Gley 8/N	10yr 8/1	1
Great House	12	5	1	2045	Plain Corrugated	No	Grayware	Jar	28.85	38.10	10yr 8/1	10yr 8/1	1
Great House	12	5	1	2045	Plain Corrugated	No	Grayware	Jar	29.13	37.04	10yr 8/1	10yr 8/1	1
Great House	12	7	1	2162	Plain Corrugated	No	Grayware	Jar	27.40	42.25	10yr 7/2	7.5yr 8/4	2
Great House	12	7	1	2162	Plain Corrugated	No	Grayware	Jar	27.78	40.54	10yr 7/2	7.5yr 8/4	2
Great House	15	5	1	2430	Indented Corrugated	No	Grayware	Jar	33.33	33.71	10yr 8/1	7.5yr 8/4	2
Great House	15	5	1	2430	Indented Corrugated	No	Grayware	Jar	32.26	34.09	10yr 8/1	7.5yr 8/4	2
Great House	16	6	1	2519	Indented Corrugated	No	Grayware	Jar	30.61	31.25	10yr 3/1	7.5yr 8/4	2
Great House	16	6	1	2519	Indented Corrugated	No	Grayware	Jar	31.58	31.58	10yr 3/1	7.5yr 8/4	2
Great House	16	6	1	2519	Patterned Corrugated	No	Grayware	Jar	31.91	43.48	10yr 7/1	7.5yr 7/6	4
Great House	16	6	1	2519	Patterned Corrugated	No	Grayware	Jar	30.93	42.11	10yr 7/1	7.5yr 7/6	4
1 Midden	2	2	1	0	Wingate	No	Redware	Bowl	20.83	38.46	5yr 7/4	7.5yr 7/6	4
1 Midden	4	1	1	1177	Puerco	No	Redware	Bowl	n/a	n/a	5yr 8/1	7.5YR 8/2	2
1 Midden	5	1	1	1337	Wingate	No	Redware	Bowl	n/a	n/a	5yr 6/6	5YR 7/6	5
1 Midden	5	1	1	1337	Wingate	No	Redware	Bowl	n/a	n/a	5yr 8/1	7.5YR 8/2	2
1 Midden	5	1	1	1337	Puerco	No	Redware	Bowl	n/a	n/a	5yr 5/6	5YR 7/6	5
10 Midden	2	1	1	21	Puerco	No	Redware	Bowl	30.53	32.26	5yr 8/4	7.5yr 8/4	2
10 Midden	6	1	1	476	Puerco	No	Redware	Bowl	23.81	28.37	5yr 5/6	5yr 5/6	5
12 Midden	1	1	1	28	Puerco	No	Redware	Bowl	30.30	21.98	5yr 7/4	7.5yr 7/6	4
12 Midden	1	1	1	28	Puerco	No	Redware	Bowl	10.87	10.64	Gley 4/N	7.5yr 6/4	
12 Midden	1	5	1	325	Wingate	No	Redware	Bowl	36.36	20.00	5yr 8/3	7.5yr 8/3	2
12 Midden	1	2	1	77	Wingate Poly	No	Redware	Bowl	26.84	23.26	5yr 8/2	7.5yr 8/4	2
12 Midden	1	5	1	325	Wingate Poly	No	Redware	Bowl	27.03	27.03	5yr 6/6	5yr 6/6	5
12 Midden	1	3	1	275	Puerco	No	Redware	Jar	24.10	23.26	5yr 7/4	10yr 8/4	1
12 Midden	3	2	1	91	Wingate	No	Redware	Bowl	41.67	41.10	5yr 8/3	7.5yr 7/6	4
12 Midden	4	1	1	564	Puerco	No	Redware	Bowl	21.90	28.17	5yr 6/4	5yr 6/6	5
12 Midden	4	3	1	654	Puerco	No	Redware	Bowl	32.97	22.73	5yr 7/4	7.5yr 8/3	2
12 Midden	4	1	1	564	Wingate	No	Redware	Bowl	19.23	18.87	Gley 4/N	7.5yr 6/6	4
13 Midden	1	1	1	863	unid painted red	No	Redware	Bowl	n/a	n/a	5yr 6/4	5YR 6/6	5
13 Midden	3	1	1	899	unid painted red	No	Redware	Bowl	n/a	n/a	7.5yr 8/2	7.5YR 8/3	2
13 Midden	5	1	1	916	unid plain red	No	Redware	Bowl	n/a	n/a	5yr 8/1	7.5YR 8/2	2
15 Midden	1	0	1	9	Puerco	No	Redware	Bowl	26.55	20.20	Gley 4/N	7.5yr 7/6	4
15 Midden	1	1	1	21	Puerco	No	Redware	Bowl	23.53	23.53	5yr 8/2	10yr 8/3	1
15 Midden	1	1	1	21	Puerco	No	Redware	Bowl	13.70	13.16	5yr 6/1	10yr 8/4	1
15 Midden	1	3	1	82	Puerco	No	Redware	Bowl	17.05	22.35	5yr 6/1	7.5yr 7/6	4
15 Midden	1	4	1	126	Puerco	No	Redware	Bowl	31.50	30.30	5yr 7/4	7.5yr 8/4	2
15 Midden	1	7	1	177	Puerco	No	Redware	Bowl	28.78	32.00	5yr 7/4	7.5yr 8/4	2
15 Midden	1	1	1	21	Wingate	No	Redware	Bowl	19.42	30.30	5yr 6/6	5yr 7/6	5
15 Midden	1	3	1	82	Wingate	No	Redware	Bowl	22.56	22.22	Gley 5/N	7.5yr 7/6	4
15 Midden	1	5	1	134	Wingate	No	Redware	Bowl	32.26	22.99	5yr 6/4	5yr 7/6	5
15 Midden	1	10	1	250	Wingate	No	Redware	Bowl	24.69	23.81	5yr 7/2	7.5yr 7/6	4
3 Midden	1	1	1	182	Wingate Poly	No	Redware	Bowl	21.74	30.61	5yr 8/4	7.5yr 7/6	4
3 Midden	1	2	1	237	Wingate Poly	No	Redware	Bowl	22.47	32.61	5yr 8/1	7.5yr 8/3	2
3 Midden	3	1	1	157	Puerco	No	Redware	Bowl	26.32	34.19	7.5yr 8/3	7.5yr 8/4	2
3 Midden	3	1	1	157	Wingate	No	Redware	Bowl	24.69	41.24	5yr 5/3	5yr 7/6	5
3 Midden	4	2	1	378	Wingate	No	Redware	Bowl	21.74	28.57	5yt 5/6	5yr 5/8	5
7 Midden	1	1	1	894	Puerco	No	Redware	Bowl	n/a	n/a	Gley 5/N	7.5YR 7/6	4
7 Midden	3	8	1	1130	Puerco	No	Redware	Bowl	20.62	30.61	5yr 6/6	7.5yr 7/6	4
7 Midden	3	1	1	870	Wingate	No	Redware	Bowl	13.16	28.99	5yr 8/3	7.5yr 8/3	2
7 Midden	3	4	1	982	Wingate	No	Redware	Bowl	n/a	n/a	7.5yr 4/1	7.5YR 8/3	2
7 Midden	3	4	1	982	Wingate	No	Redware	Bowl	n/a	n/a	Gley 6/N	7.5YR 8/2	2
7 Midden	3	3	1	959	Wingate	No	Redware	Jar	20.41	19.23	5yr 8/3	10yr 8/4	1
Great House	5	1	1	917	Puerco	No	Redware	Bowl	n/a	n/a	Gley 5/2	5yr 7/4	3
Great House	5	1	1	917	unid plain red	No	Redware	Bowl	n/a	n/a	5yr 8/3	7.5yr 8/3	2
Great House	5	1	1	917	unid plain red	No	Redware	Bowl	n/a	n/a	5yr 7/1	5yr 8/4	3
Great House	5	1	1	917	unid plain red smudged	No	Redware	Bowl	n/a	n/a	5yr 5/1	7.5yr 8/4	2
Great House	5	1	1	917	unid plain red	No	Redware	Bowl	n/a	n/a	5yr 5/3	7.5yr 7/6	4
Great House	5	2	1	917	unid plain red smudged	No	Redware	Bowl	n/a	n/a	5yr 5/1	7.5yr 8/4	2
Great House	5	2	1	947	Puerco	No	Redware	Bowl	n/a	n/a	5yr 7/4	5yr 7/8	5
Great House	5	5	1	1045	Puerco	No	Redware	Bowl	n/a	n/a	10yr 8/1	7.5YR 8/6	4
Great House	5	6	1	1054	Wingate	No	Redware	Bowl	n/a	n/a	7.5yr 7/2	10YR 8/1	1
Great House	5	6	1	1054	Wingate	No	Redware	Bowl	n/a	n/a	5yr 7/4	5yr 6/6	5
Great House	5	7	1	1089	Wingate	No	Redware	Bowl	n/a	n/a	5yr 7/4	7.5yr 8/3	2
Great House	5	7	1	1089	unid plain red	No	Redware	Bowl	n/a	n/a	5yr 5/6	5yr 7/6	5

Area	Unit	Level	Locus	Spec	Type	Sm	Ware	Form	Original A.P.	Refired A.P.	Mun Orig	Mun 900	Color Group
Great House	5	7	1	1089	Puerco	No	Redware	Bowl	n/a	n/a	5yr 6/6	5yr 7/6	5
Great House	6	1	1	928	Wingate	No	Redware	Bowl	n/a	n/a	5yr 7/6	7.5yr 8/4	3
Great House	6	1	1	928	unid painted red	No	Redware	Bowl	n/a	n/a	5yr 7/6	7.5yr 8/4	2
Great House	6	1	4	1020	Wingate	No	Redware	Bowl	n/a	n/a	5yr 7/4	5yr 7/6	5
Great House	6	1	4	1020	Wingate	No	Redware	Bowl	n/a	n/a	5yr 4/3	7.5yr 8/2	2
Great House	6	2	4	1220	Wingate	No	Redware	Bowl	n/a	n/a	5yr 7/4	5yr 7/4	3
Great House	6	1	5	1061	Puerco	No	Redware	Bowl	n/a	n/a	5yr 7/4	7.5yr 8/3	2
Great House	6	1	7	1228	Wingate	No	Redware	Bowl	n/a	n/a	5yr 7/3	10yr 8/2	1
Great House	6	1	7	1228	Wingate	No	Redware	Bowl	n/a	n/a	5yr 5/2	7.5YR 8/2	2
Great House	6	1	7	1228	Wingate	No	Redware	Bowl	n/a	n/a	5yr 2.5/1	7.5YR 8/3	2
Great House	6	1	7	1228	unid plain red	No	Redware	Bowl	n/a	n/a	5yr 7/3	10YR 8/1	1
Great House	6	2	7	1428	unid painted red	No	Redware	Bowl	n/a	n/a	5yr 4/1	5YR 7/6	5
Great House	6	2	7	1428	Wingate	No	Redware	Bowl	n/a	n/a	5yr 7/4	5YR 7/4	3
Great House	6	2	7	1428	Puerco	No	Redware	Bowl	n/a	n/a	5yr 7/4	7.5YR 8/3	2
Great House	7	1	1	969	unid plain red	No	Redware	Bowl	n/a	n/a	7.5yr 7/2	7.5YR 8/3	2
Great House	7	1	1	969	Wingate	No	Redware	Bowl	n/a	n/a	7.5yr 7/4	7.5YR 7/6	4
Great House	7	1	1	969	Wingate	No	Redware	Bowl	n/a	n/a	7.5yr 8/2	7.5YR 8/2	2
Great House	7	1	1	969	Wingate	No	Redware	Bowl	n/a	n/a	7.5yr 7/3	7.5YR 8/4	2
Great House	7	1	1	969	unid plain red	No	Redware	Bowl	n/a	n/a	7.5yr 8/4	7.5YR 8/2	2
Great House	7	2	1	1023	Wingate	No	Redware	Bowl	n/a	n/a	7.5yr 4/3	5YR 7/6	5
Great House	7	2	1	1023	Wingate	No	Redware	Bowl	n/a	n/a	7.5yr 8/4	7.5YR 7/6	5
Great House	7	2	1	1023	Puerco	No	Redware	Bowl	n/a	n/a	Gley 4/N	7.5YR 8/4	2
Great House	9	2	1	1375	Puerco	No	Redware	Bowl	23.26	21.98	5yr 6/1	10yr 7/4	1
Great House	9	1	1	1277	Wingate	No	Redware	Bowl	25.21	23.81	Gley 5/N	7.5yr 8/4	2
Great House	9	1	1	1277	Wingate	No	Redware	Bowl	30.61	29.41	5yr 7/6	7.5yr 8/4	2
Great House	9	3	1	1413	unid plain red	No	Redware	Bowl	n/a	n/a	7.5yr 6/3	5YR 7/8	5
Great House	9	3	1	1413	Puerco	No	Redware	Bowl	n/a	n/a	7.5yr 2.5/1	7.5YR 8/3	2
Great House	9	3	1	1413	Wingate	No	Redware	Bowl	n/a	n/a	2.5yr 6/6	5YR 7/6	5
Great House	10	1	1	1274	Wingate	No	Redware	Bowl	21.43	27.21	5yr 7/6	7.5yr 7/6	4
Great House	10	2	1	1380	Wingate	No	Redware	Bowl	29.20	23.44	Gley 4/N	10yr 8/3	1
Great House	10	2	1	1380	Wingate	No	Redware	Bowl	n/a	n/a	5yr 6/6	5YR 7/6	5
Great House	10	2	1	1380	Wingate	No	Redware	Bowl	n/a	n/a	5yr 8/1	7.5YR 8/3	2
Great House	12	5	1	2045	Puerco	No	Redware	Bowl	15.27	14.60	5yr 7/4	7.5yr 6/6	4
Great House	12	6	1	2110	Puerco	No	Redware	Bowl	27.03	50.00	Gley 5/N	10yr 8/3	1
Great House	12	8	1	2215	Puerco	No	Redware	Bowl	18.35	17.86	Gley 7/N	5yr 5/8	4
Great House	12	5	1	2045	Wingate	No	Redware	Bowl	17.39	24.59	5yr 6/4	7.5yr 6/6	4
Great House	12	6	1	2110	Wingate	No	Redware	Bowl	24.79	23.44	Gley 5/N	7.5yr 6/6	4
Great House	12	7	1	2162	Wingate	No	Redware	Bowl	21.28	21.74	Gley 4/N	5yr 5/6	5
Great House	12	8	1	2215	Wingate	No	Redware	Bowl	18.52	23.81	5yr 5/1	7.5yr 7/6	4
Great House	15	1	1	1981	Puerco	No	Redware	Bowl	18.69	17.86	5yr 6/1	5yr 6/6	5
Great House	15	2	1	2071	Puerco	No	Redware	Bowl	29.13	20.62	5yr 7/4	7.5yr 8/4	2
Great House	15	3	1	2179	Puerco	No	Redware	Bowl	29.41	31.91	5yr 6/3	5yr 6/8	5
Great House	15	1	1	1981	Wingate	No	Redware	Bowl	29.27	28.30	5yr 5/6	5yr 5/6	5
Great House	15	2	1	2071	Wingate	No	Redware	Bowl	34.09	32.97	5yr 7/3	7.5yr 8/4	2
Great House	15	3	1	2179	Wingate	No	Redware	Bowl	25.42	24.39	5yr 5/6	5yr 6/6	5
Great House	15	3	1	2179	Wingate	No	Redware	Bowl	31.65	26.32	5yr 8/3	10yr 8/4	1
Great House	16	6	1	2519	Puerco	No	Redware	Bowl	25.00	23.81	5yr 7/4	7.5yr 7/4	2
Great House	16	6	1	2519	Wingate	No	Redware	Bowl	24.54	24.24	Gley 4/N	10yr 8/4	1
Great House	17	1	1	2367	Wingate	No	Redware	Bowl	30.93	30.00	5yr 5/6	5yr 6/8	5
Great House	17	2	1	2395	Wingate	No	Redware	Bowl	26.67	25.32	5yr 8/3	10yr 8/4	1
Great House	17	4	1	2471	Wingate	No	Redware	Bowl	42.25	40.00	5yr 7/3	7.5yr 8/4	2
Great House	17	5	1	2562	Wingate	No	Redware	Bowl	30.61	30.61	5yr 7/3	7.5yr 8/4	2
Great House	17	6	1	2597	Wingate	No	Redware	Bowl	27.78	35.29	5yr 6/2	7.5yr 7/6	4
Roomblock 2	4	1	1	1083	Wingate	No	Redware	Bowl	n/a	n/a	10yr 6/2	10yr 8/3	1
Roomblock 2	4	1	1	1083	unid plain red	No	Redware	Bowl	n/a	n/a	5yr 7/6	7.5yr 8/3	2
1 Midden	1	1	1	612	Puerco	No	Whiteware	Jar	30.30	n/a	Gley 7/N	10yr 8/4	1
1 Midden	2	4	1	669	Gallup	No	Whiteware	Jar	32.26	32.52	Gley 6/N	10yr 7/6	2
1 Midden	2	6	1	696	Puerco	No	Whiteware	Jar	28.30	28.30	Gley 7/N	10yr 8/4	1
1 Midden	2	4	1	669	Reserve	No	Whiteware	Jar	29.70	30.00	Gley 7/N	10r 6/1	7
1 Midden	2	5	1	672	Reserve	No	Whiteware	Jar	34.48	34.19	Gley 8/N	10yr 8/4	1
1 Midden	2	6	1	696	Reserve	No	Whiteware	Jar	24.39	24.69	Gley 7/N	10yr 8/3	1
1 Midden	3	2	1	677	Puerco	No	Whiteware	Jar	32.14	52.63	Gley 4/N	10yr 8/4	1
1 Midden	3	3	1	686	Puerco	No	Whiteware	Jar	33.61	26.79	10yr 8/1	10yr 8/3	1
1 Midden	4	1	1	1177	Reserve	No	Whiteware	Bowl	18.52	34.19	Gley 8/N	10yr 8/3	1
1 Midden	4	2	1	1209	Puerco	No	Whiteware	Jar	25.97	26.32	10yr 7/1	10yr 8/3	1
1 Midden	4	3	1	1222	Reserve	No	Whiteware	Jar	26.13	26.63	2.5yr 8/1	10yr 8/3	1
1 Midden	4	1	1	1177	Puerco	No	Whiteware	Jar	n/a	n/a	Gley 8/N	7.5YR 8/2	2

Area	Unit	Level	Locus	Spec	Type	Sm	Ware	Form	Original A.P.	Refired A.P.	Mun Orig	Mun 900	Color Group
1 Midden	4	1	1	1177	Puerco	No	Whiteware	Jar	n/a	n/a	Gley 8/N	7.5YR 8/2	2
1 Midden	4	1	1	1177	Reserve	No	Whiteware	Jar	n/a	n/a	Gley 7/N	7.5YR 8/3	2
1 Midden	4	1	1	1177	Reserve	No	Whiteware	Jar	n/a	n/a	Gley 8/N	10YR 7/4	1
1 Midden	5	1	1	1337	Puerco	No	Whiteware	Jar	38.46	41.67	Gley 8/N	10yr 8/3	1
1 Midden	5	2	1	1401	Puerco	No	Whiteware	Jar	21.43	15.38	Gley 6/N	7.5yr 6/6	4
1 Midden	5	1	1	1337	Reserve	No	Whiteware	Jar	25.86	26.09	Gley 8/N	10yr 8/2	1
1 Midden	5	1	1	1337	Unid White	No	Whiteware	Jar	n/a	n/a	Gley 8/N	7.5YR 8/2	2
1 Midden	5	1	1	1337	Puerco	No	Whiteware	Jar	n/a	n/a	Gley 8/N	7.5YR 8/2	2
1 Midden	5	1	1	1337	Reserve	No	Whiteware	Jar	n/a	n/a	Gley 8/N	7.5YR 8/2	2
1 Midden	5	1	1	1337	Puerco	No	Whiteware	Jar	n/a	n/a	Gley 8/N	7.5YR 8/2	2
1 Midden	5	1	1	1337	Puerco	No	Whiteware	Jar	n/a	n/a	Gley 8/N	7.5YR 8/2	2
10 Midden	1	1	1	38	Gallup	No	Whiteware	Jar	32.47	27.59	2.5y 8/1	10yr 8/3	1
10 Midden	1	1	1	38	Puerco	No	Whiteware	Jar	45.45	47.62	Gley 8/N	10yr 8/3	1
10 Midden	1	1	1	38	Reserve	No	Whiteware	Jar	24.10	24.39	Gley 8/N	10yr 8/2	1
10 Midden	2	1	1	24	Puerco	No	Whiteware	Jar	31.25	30.77	Gley 8/N	10yr 8/4	1
10 Midden	2	1	1	24	Puerco	No	Whiteware	Jar	30.53	30.53	2.5y 8/1	10yr 8/3	1
10 Midden	2	1	1	24	Reserve	No	Whiteware	Jar	31.25	31.25	Gley 8/N	10yr 8/3	1
10 Midden	4	1	1	168	Puerco	No	Whiteware	Jar	14.93	27.78	Gley 7/N	10yr 7/4	1
10 Midden	4	2	1	216	Puerco	No	Whiteware	Jar	37.50	37.97	Gley 8/N	10yr 8/3	1
10 Midden	4	1	1	168	Reserve	No	Whiteware	Jar	40.82	38.46	Gley 7/N	10yr 8/3	1
10 Midden	5	1	1	143	Puerco	No	Whiteware	Jar	17.24	17.86	Gley 8/N	10yr 8/3	1
10 Midden	5	1	1	143	Puerco	No	Whiteware	Jar	34.48	34.48	Gley 8/N	10yr 8/3	1
10 Midden	5	2	1	197	Puerco	No	Whiteware	Jar	13.70	13.70	Gley 6/N	10yr 6/6	2
10 Midden	5	2	1	197	Reserve	No	Whiteware	Jar	31.25	32.26	Gley 8/N	10yr 8/3	1
10 Midden	5	3	1	247	Reserve	No	Whiteware	Jar	32.26	22.99	Gley 8/N	10yr 8/4	1
10 Midden	6	1	1	476	Puerco	No	Whiteware	Jar	24.10	36.14	Gley 7/N	10yr 8/3	1
10 Midden	6	1	1	476	Reserve	No	Whiteware	Jar	21.98	21.98	Gley 8/N	10yr 8/3	1
12 Midden	1	7	1	396	Gallup	No	Whiteware	Bowl	26.32	27.40	Gley 8/N	10yr 8/3	1
12 Midden	1	2	1	77	Puerco	No	Whiteware	Bowl	21.90	29.85	Gley 8/N	10yr 8/3	1
12 Midden	1	3	1	275	Reserve	No	Whiteware	Bowl	18.18	18.52	2.5yr 5/1	10yr 7/4	1
12 Midden	1	5	1	325	Reserve	No	Whiteware	Bowl	32.26	29.41	Gley 8/N	10yr 8/4	1
12 Midden	1	6	1	374	Gallup	No	Whiteware	Jar	37.04	37.04	Gley 7/N	2.5yr 7/2	1
12 Midden	1	2	1	77	Puerco	No	Whiteware	Jar	14.08	24.69	Gley 7/N	10yr 8/2	1
12 Midden	1	2	1	77	Puerco	No	Whiteware	Jar	23.26	24.39	10yr 8/1	10yr 8/3	1
12 Midden	1	4	1	306	Puerco	No	Whiteware	Jar	22.22	22.22	Gley 8/N	7.5yr 7/6	4
12 Midden	1	5	1	325	Puerco	No	Whiteware	Jar	27.40	26.67	Gley 8/N	10yr 8/3	1
12 Midden	1	7	1	396	Puerco	No	Whiteware	Jar	20.41	30.00	10yr 8/1	10yr 7/4	1
12 Midden	1	8	1	16	Puerco	No	Whiteware	Jar	13.89	27.03	Gley 8/N	10yr 8/3	1
12 Midden	1	1	1	28	Reserve	No	Whiteware	Jar	17.54	32.79	Gley 8/N	10yr 8/2	1
12 Midden	1	1	1	28	Reserve	No	Whiteware	Jar	43.48	n/a	Gley 5/N	10yr 8/3	1
12 Midden	1	2	1	77	Reserve	No	Whiteware	Jar	23.26	32.26	Gley 7/N	10yr 7/4	1
12 Midden	1	3	1	275	Reserve	No	Whiteware	Jar	25.00	36.59	Gley 8/N	10yr 8/4	1
12 Midden	1	3	1	275	Reserve	No	Whiteware	Jar	28.30	27.78	Gley 8/N	10yr 8/3	1
12 Midden	1	4	1	306	Reserve	No	Whiteware	Jar	32.79	31.75	10yr 7/1	10yr 8/2	1
12 Midden	1	4	1	306	Reserve	No	Whiteware	Jar	32.26	31.25	Gley 6/N	10yr 8/3	1
12 Midden	1	5	1	325	Reserve	No	Whiteware	Jar	22.22	21.28	Gley 8/N	10yr 8/3	1
12 Midden	1	6	1	374	Reserve	No	Whiteware	Jar	28.99	27.78	Gley 8/N	10yr 8/3	1
12 Midden	1	8	1	16	Reserve	No	Whiteware	Jar	35.09	34.48	Gley 8/N	10yr 8/3	1
12 Midden	2	1	1	51	Red Mesa	No	Whiteware	Bowl	35.71	34.48	10yr 6/2	10yr 8/3	1
12 Midden	2	2	1	99	Gallup	No	Whiteware	Jar	19.61	41.67	Gley 8/N	10yr 8/3	1
12 Midden	2	1	1	51	Puerco	No	Whiteware	Jar	31.75	30.77	Gley 8/N	10yr 8/4	1
12 Midden	2	2	1	99	Puerco	No	Whiteware	Jar	22.22	21.74	Gley 7/N	10yr 8/4	1
12 Midden	2	3	1	279	Puerco	No	Whiteware	Jar	62.50	50.00	Gley 8/N	10yr 8/3	1
12 Midden	2	3	1	279	Puerco	No	Whiteware	Jar	23.81	23.26	Gley 6/N	7.5yr 7/6	4
12 Midden	2	2	1	99	Red Mesa	No	Whiteware	Jar	16.13	31.75	Gley 7/N	10yr 8/4	1
12 Midden	2	1	1	51	Reserve	No	Whiteware	Jar	21.74	41.67	Gley 6/N	10yr 8/3	1
12 Midden	2	1	1	51	Reserve	No	Whiteware	Jar	20.41	21.05	Gley 7/N	10yr 7/4	1
12 Midden	3	1	1	43	Puerco	No	Whiteware	Bowl	18.35	25.42	Gley 8/N	10yr 8/4	1
12 Midden	3	2	1	91	Puerco	No	Whiteware	Bowl	24.39	30.86	Gley 8/N	10yr 8/2	1
12 Midden	3	1	1	43	Puerco	No	Whiteware	Jar	11.76	12.35	Gley 4/N	10yr 8/3	1
12 Midden	3	1	1	43	Reserve	No	Whiteware	Jar	23.53	23.53	Gley 7/N	10yr 8/3	1
12 Midden	3	2	1	91	Reserve	No	Whiteware	Jar	29.41	29.41	10yr 8/1	10yr 8/3	1
12 Midden	4	2	1	623	Gallup	No	Whiteware	Bowl	30.77	31.25	5yr 5/1	10yr 8/4	1
12 Midden	4	1	1	564	Puerco	No	Whiteware	Bowl	24.19	25.00	Gley 8/N	10yr 8/4	1
12 Midden	4	1	1	564	Puerco	No	Whiteware	Bowl	32.00	31.25	Gley 5/N	10yr 7/4	1
12 Midden	4	2	1	623	Puerco	No	Whiteware	Jar	30.30	29.41	Gley 6/N	10yr 8/3	1
12 Midden	4	2	1	623	Puerco	No	Whiteware	Jar	29.85	28.17	Gley 8/N	10yr 8/2	1

Area	Unit	Level	Locus	Spec	Type	Sm	Ware	Form	Original A.P.	Refired A.P.	Mun Orig	Mun 900	Color Group
12 Midden	4	3	1	654	Red Mesa	No	Whiteware	Jar	22.22	21.74	Gley 7/N	10yr 8/3	1
12 Midden	4	1	1	564	Reserve	No	Whiteware	Jar	26.32	34.48	10yr 8/1	10yr 8/3	1
12 Midden	4	1	1	564	Reserve	No	Whiteware	Jar	29.41	16.67	Gley 8/N	10yr 8/2	1
12 Midden	4	1	1	564	Reserve	No	Whiteware	Jar	28.85	28.57	Gley 7/N	10yr 8/3	1
12 Midden	4	2	1	623	Reserve	No	Whiteware	Jar	34.48	20.41	Gley 7/N	10yr 8/3	1
12 Midden	4	3	1	654	Reserve	No	Whiteware	Jar	30.77	29.85	Gley 7/N	10yr 8/3	1
15 Midden	1	1	1	21	Puerco	No	Whiteware	Bowl	25.64	26.32	Gley 8/N	10yr 8/3	1
15 Midden	1	2	1	70	Puerco	No	Whiteware	Bowl	26.67	27.03	Gley 8/N	10yr 8/3	1
15 Midden	1	3	1	82	Puerco	No	Whiteware	Bowl	26.32	27.40	Gley 8/N	10yr 8/3	1
15 Midden	1	7	1	177	Puerco	No	Whiteware	Bowl	39.47	40.54	Gley 8/N	10yr 8/4	1
15 Midden	1	9	1	226	Puerco	No	Whiteware	Bowl	28.71	43.48	5yr 6/3	10yr 7/4	1
15 Midden	1	10	1	250	Puerco	No	Whiteware	Bowl	20.41	41.67	Gley 8/N	10yr 8/4	1
15 Midden	1	2	1	70	Reserve	No	Whiteware	Bowl	25.32	26.32	Gley 7/1	10yr 7/4	1
15 Midden	1	3	1	82	Reserve	No	Whiteware	Bowl	21.98	33.71	Gley 8/N	10yr 8/3	1
15 Midden	1	1	1	21	Gallup	No	Whiteware	Jar	26.55	26.09	Gley 8/N	10yr 8/3	1
15 Midden	1	3	1	82	Gallup	No	Whiteware	Jar	20.00	39.22	Gley 8/N	10yr 8/3	1
15 Midden	1	3	1	82	Puerco	No	Whiteware	Jar	31.25	22.73	Gley 8/N	10yr 8/3	1
15 Midden	1	3	1	82	Puerco	No	Whiteware	Jar	30.22	n/a	n/a	n/a	1
15 Midden	1	4	1	126	Puerco	No	Whiteware	Jar	28.17	27.40	Gley 7/N	10yr 8/3	1
15 Midden	1	5	1	134	Puerco	No	Whiteware	Jar	22.73	22.22	Gley 5/N	10yr 8/3	1
15 Midden	1	5	1	134	Puerco	No	Whiteware	Jar	19.80	26.32	Gley 8/N	10yr 8/2	1
15 Midden	1	5	1	134	Puerco	No	Whiteware	Jar	33.33	32.79	Gley 8/N	10 yr 8/6	1
15 Midden	1	6	1	150	Puerco	No	Whiteware	Jar	28.04	28.04	Gley 8/N	10yr 8/4	1
15 Midden	1	8	1	208	Puerco	No	Whiteware	Jar	28.57	27.40	Gley 7/N	10yr 8/3	1
15 Midden	1	8	1	208	Puerco	No	Whiteware	Jar	26.67	25.97	Gley 8/N	10yr 8/2	1
15 Midden	1	8	1	208	Puerco	No	Whiteware	Jar	24.00	25.64	5yr 8/2	7.5yr 7/6	2
15 Midden	1	9	1	226	Puerco	No	Whiteware	Jar	20.00	21.98	Gley 6/N	10yr 8/4	1
15 Midden	1	2	1	70	Red Mesa	No	Whiteware	Jar	23.81	28.17	Gley 7/N	10yr 8/3	1
15 Midden	1	1	1	21	Reserve	No	Whiteware	Jar	52.63	22.73	Gley 7/N	10yr 8/3	1
15 Midden	1	2	1	70	Reserve	No	Whiteware	Jar	19.23	47.62	Gley 8/N	10yr 8/3	1
15 Midden	1	3	1	82	Reserve	No	Whiteware	Jar	32.61	28.57	Gley 8/N	10yr 8/2	1
15 Midden	1	4	1	126	Reserve	No	Whiteware	Jar	28.57	21.74	Gley 7/N	10yr 8/3	1
15 Midden	1	4	1	126	Reserve	No	Whiteware	Jar	25.32	27.03	Gley 8/N	10yr 8/3	1
15 Midden	1	5	1	134	Reserve	No	Whiteware	Jar	33.33	25.00	Gley 8/N	10yr 8/3	1
15 Midden	1	5	1	134	Reserve	No	Whiteware	Jar	26.32	31.25	Gley 7/N	10yr 8/2	1
15 Midden	1	6	1	150	Reserve	No	Whiteware	Jar	22.22	25.32	Gley 8/N	10yr 8/3	1
15 Midden	1	6	1	150	Reserve	No	Whiteware	Jar	25.42	33.33	Gley 8/N	10yr 8/3	1
15 Midden	1	7	1	177	Reserve	No	Whiteware	Jar	29.70	28.30	Gley 7/N	10yr 8/3	1
15 Midden	1	7	1	177	Reserve	No	Whiteware	Jar	23.26	34.09	Gley 8/N	10yr 8/3	1
15 Midden	1	8	1	208	Reserve	No	Whiteware	Jar	27.78	27.03	Gley 8/N	10yr 8/2	1
15 Midden	1	8	1	208	Reserve	No	Whiteware	Jar	34.88	35.29	Gley 8/N	7.5yr 7/6	4
15 Midden	1	8	1	208	Reserve	No	Whiteware	Jar	22.22	20.83	Gley 7/N	10yr 8/2	1
15 Midden	1	9	1	226	Reserve	No	Whiteware	Jar	46.51	37.74	Gley 8/N	10yr 8/1	1
15 Midden	1	9	1	226	Reserve	No	Whiteware	Jar	35.29	33.71	10yr 8/1	10yr 8/4	1
15 Midden	1	10	1	250	Reserve	No	Whiteware	Jar	32.79	31.25	Gley 8/N	10yr 8/3	1
15 Midden	2	3	1	96	Puerco	No	Whiteware	Bowl	26.32	27.03	5yr 7/1	10yr 8/3	1
15 Midden	2	1	1	36	Reserve	No	Whiteware	Bowl	28.99	29.85	Gley 7/N	10yr 7/4	1
15 Midden	2	1	1	36	Puerco	No	Whiteware	Jar	25.32	14.08	Gley 7/N	10yr 8/3	1
15 Midden	2	2	1	74	Puerco	No	Whiteware	Jar	27.27	24.10	Gley 8/N	10yr 8/2	1
15 Midden	2	2	1	74	Puerco	No	Whiteware	Jar	33.33	26.55	10yr 8/3	10yr 8/3	1
15 Midden	2	3	1	90	Puerco	No	Whiteware	Jar	28.99	32.79	Gley 7/N	10yr 8/3	1
15 Midden	2	1	1	36	Reserve	No	Whiteware	Jar	24.10	35.29	Gley 8/N	10yr 8/3	1
15 Midden	2	1	1	36	Reserve	No	Whiteware	Jar	25.97	25.00	Gley 7/N	10yr 8/2	1
15 Midden	2	2	1	74	Reserve	No	Whiteware	Jar	19.61	37.74	Gley 8/N	10yr 8/4	1
3 Midden	1	3	1	299	Red Mesa	No	Whiteware	Bowl	16.95	20.00	Gley 7/N	7.5yr 7/6	4
3 Midden	2	1	1	146	Gallup	No	Whiteware	Jar	39.47	28.99	Gley 7/N	10yr 8/3	1
3 Midden	2	1	1	146	Puerco	No	Whiteware	Jar	29.41	29.70	Gley 8/N	10yr 8/2	1
3 Midden	2	1	1	146	Puerco	No	Whiteware	Jar	21.74	21.98	Gley 7/N	10yr 8/2	1
3 Midden	2	2	1	166	Red Mesa	No	Whiteware	Jar	33.33	32.97	Gley 6/N	10yr 8/3	1
3 Midden	2	1	1	146	Reserve	No	Whiteware	Jar	30.77	18.52	Gley 8/N	10yr 8/3	1
3 Midden	3	2	1	201	Puerco	No	Whiteware	Bowl	18.52	33.90	Gley 8/N	10yr 8/1	1
3 Midden	3	1	1	157	Puerco	No	Whiteware	Jar	27.78	30.93	Gley 7/N	10yr 8/3	1
3 Midden	3	1	1	157	Puerco	No	Whiteware	Jar	23.53	23.81	Gley 8/N	10yr 8/3	1
3 Midden	3	1	1	157	Reserve	No	Whiteware	Jar	22.47	12.99	Gley 7/N	10yr 8/3	1
3 Midden	3	2	1	201	Reserve	No	Whiteware	Jar	17.24	35.09	Gley 8/N	10yr 8/3	1
3 Midden	3	2	1	201	Reserve	No	Whiteware	Jar	22.73	30.30	Gley 6/N	10yr 8/3	1
3 Midden	3	3	1	230	Reserve	No	Whiteware	Jar	31.25	31.25	Gley 8/N	10yr 8/3	1

Area	Unit	Level	Locus	Spec	Type	Sm	Ware	Form	Original A.P.	Refired A.P.	Mun Orig	Mun 900	Color Group
3 Midden	4	0	1	255	Puerco	No	Whiteware	Bowl	22.22	34.48	5yr 5/1	10yr 8/3	1
3 Midden	4	2	1	378	Puerco	No	Whiteware	Bowl	47.62	n/a	Gley 6/N	10yr 8/3	1
3 Midden	4	0	1	255	Puerco	No	Whiteware	Jar	28.78	25.00	Gley 8/N	10yr 8/3	1
3 Midden	4	1	1	335	Puerco	No	Whiteware	Jar	31.58	23.81	Gley 7/N	10yr 8/3	1
3 Midden	4	1	1	335	Puerco	No	Whiteware	Jar	25.00	25.00	Gley 8/N	10yr 8/3	1
3 Midden	4	2	1	378	Puerco	No	Whiteware	Jar	29.13	9.71	2.5yr 8/1	10yr 8/4	1
3 Midden	4	3	1	403	Puerco	No	Whiteware	Jar	27.97	28.37	10yr 7/1	10yr 8/4	1
3 Midden	4	4	1	424	Puerco	No	Whiteware	Jar	36.59	37.04	Gley 8/N	10yr 8/3	1
3 Midden	4	5	1	446	Puerco	No	Whiteware	Jar	22.47	12.99	Gley 6/N	10yr 7/4	1
3 Midden	4	2	1	378	Reserve	No	Whiteware	Jar	31.58	31.91	Gley 8/N	10yr 8/3	1
3 Midden	4	2	1	378	Reserve	No	Whiteware	Jar	29.41	29.13	Gley 8/N	10yr 8/2	1
3 Midden	4	3	1	403	Reserve	No	Whiteware	Jar	16.13	16.26	Gley 7/N	10yr 8/3	1
7 Midden	1	1	1	894	Puerco	No	Whiteware	Jar	25.86	25.86	Gley 8/N	10yr 8/3	1
7 Midden	1	1	1	894	Reserve	No	Whiteware	Jar	n/a	n/a	Gley 7/N	7.5YR 8/2	2
7 Midden	1	1	1	894	Unid White	No	Whiteware	Jar	n/a	n/a	Gley 8/N	7.5YR 8/2	2
7 Midden	2	1	1	889	Reserve	No	Whiteware	Jar	20.00	32.79	Gley 8/N	10yr 8/3	1
7 Midden	3	5	1	1002	Puerco	No	Whiteware	Bowl	26.79	27.27	7.5yr 7/1	10yr 8/3	1
7 Midden	3	2	1	930	Reserve	No	Whiteware	Bowl	20.55	20.98	Gley 7/N	10yr 8/3	1
7 Midden	3	3	1	959	Puerco	No	Whiteware	Jar	24.39	24.39	Gley 7/N	10yr 8/3	1
7 Midden	3	5	1	1002	Puerco	No	Whiteware	Jar	22.73	23.26	Gley 7/N	10yr 8/3	1
7 Midden	3	10	1	1205	Puerco	No	Whiteware	Jar	30.61	22.99	2.5yr 7/1	10yr 8/4	1
7 Midden	3	1	1	870	Reserve	No	Whiteware	Jar	16.00	29.85	Gley 8/N	10yr 7/3	1
7 Midden	3	2	1	930	Reserve	No	Whiteware	Jar	23.81	32.00	Gley 6/N	10yr 8/4	1
7 Midden	3	3	1	959	Reserve	No	Whiteware	Jar	15.63	31.25	Gley 8/N	10yr 8/3	1
7 Midden	3	4	1	982	Reserve	No	Whiteware	Jar	26.55	18.02	Gley 8/N	10yr 8/2	1
7 Midden	3	5	1	1002	Reserve	No	Whiteware	Jar	30.30	30.30	Gley 8/N	10yr 8/3	1
7 Midden	3	4	1	982	Reserve	No	Whiteware	Jar	n/a	n/a	Gley 8/N	7.5YR 8/2	2
7 Midden	3	4	1	982	Puerco	No	Whiteware	Jar	n/a	n/a	Gley 8/N	7.5YR 8/2	2
7 Midden	5	2	1	922	Puerco	No	Whiteware	Jar	20.62	30.93	Gley 7/N	10yr 8/3	1
7 Midden	5	3	1	967	Red Mesa	No	Whiteware	Jar	26.32	27.03	Gley 7/N	10yr 8/3	1
Great House	5	1	1	917	Gallup	No	Whiteware	Jar	n/a	n/a	Gley 8/N	7.5YR 8/2	2
Great House	5	1	1	917	Reserve	No	Whiteware	Jar	n/a	n/a	Gley 8/N	7.5YR 8/3	2
Great House	5	1	1	917	Unid White	No	Whiteware	Jar	n/a	n/a	Gley 8/N	7.5YR 8/2	2
Great House	5	1	1	917	Reserve	No	Whiteware	Jar	n/a	n/a	Gley 8/N	10YR 8/2	1
Great House	5	1	1	917	Reserve	No	Whiteware	Jar	n/a	n/a	Gley 8/N	7.5YR 8/2	2
Great House	5	7	1	1089	Reserve	No	Whiteware	Jar	n/a	n/a	Gley 7/N	7.5YR 8/2	2
Great House	5	7	1	1089	Reserve	No	Whiteware	Jar	n/a	n/a	Gley 7/N	7.5YR 8/2	2
Great House	5	7	1	1089	Puerco	No	Whiteware	Jar	n/a	n/a	Gley 8/N	7.5YR 8/2	2
Great House	5	7	1	1089	Puerco	No	Whiteware	Jar	n/a	n/a	Gley 7/N	7.5YR 8/4	2
Great House	6	1	1	928	Reserve	No	Whiteware	Jar	22.99	22.47	Gley 7/N	10yr 6/6	1
Great House	6	1	1	928	Reserve	No	Whiteware	Jar	n/a	n/a	Gley 7/N	10YR 7/4	1
Great House	6	1	1	928	Puerco	No	Whiteware	Jar	n/a	n/a	Gley 7/N	7.5YR 8/3	2
Great House	6	2	7	1428	Reserve	No	Whiteware	Jar	n/a	n/a	Gley 8/N	7.5YR 8/3	2
Great House	6	2	7	1428	Puerco	No	Whiteware	Jar	n/a	n/a	Gley 6/N	10YR 7/4	1
Great House	6	2	7	1428	Reserve	No	Whiteware	Jar	n/a	n/a	Gley 8/N	7.5YR 8/2	2
Great House	6	2	7	1428	Puerco	No	Whiteware	Jar	n/a	n/a	Gley 2.5/N	7.5YR 8/3	2
Great House	6	3	4	1267	Puerco	No	Whiteware	Jar	n/a	n/a	Gley 8/N	7.5YR 8/2	2
Great House	6	3	4	1267	Puerco	No	Whiteware	Jar	n/a	n/a	Gley 8/N	7.5YR 8/4	2
Great House	6	3	4	1267	Reserve	No	Whiteware	Jar	n/a	n/a	Gley 8/N	7.5YR 8/2	2
Great House	6	3	4	1267	Reserve	No	Whiteware	Jar	n/a	n/a	Gley 6/N	7.5YR 7/6	4
Great House	6	3	4	1267	Unid White	No	Whiteware	Jar	n/a	n/a	Gley 8/N	7.5YR 8/2	2
Great House	7	2	1	1023	Reserve	No	Whiteware	Jar	18.04	21.28	Gley 8/N	10yr 8/2	1
Great House	7	1	1	969	Reserve	No	Whiteware	Jar	n/a	n/a	Gley 8/N	7.5YR 8/2	2
Great House	7	1	1	969	Reserve	No	Whiteware	Jar	n/a	n/a	Gley 5/N	10YR 7/4	1
Great House	7	2	1	1023	Reserve	No	Whiteware	Jar	n/a	n/a	Gley 7/N	7.5YR 8/2	2
Great House	7	2	1	1023	Reserve	No	Whiteware	Jar	n/a	n/a	Gley 8/N	7.5YR 8/3	2
Great House	7	2	1	1023	Puerco	No	Whiteware	Jar	n/a	n/a	Gley 8/N	7.5YR 8/3	2
Great House	8	1	1	1060	Puerco	No	Whiteware	Jar	n/a	n/a	Gley 7/N	7.5YR 8/4	2
Great House	8	1	1	1060	Unid White	No	Whiteware	Jar	n/a	n/a	Gley 7/N	7.5YR 8/4	2
Great House	8	1	1	1060	Reserve	No	Whiteware	Jar	n/a	n/a	Gley 7/N	7.5YR 8/3	2
Great House	9	1	1	1277	Reserve	No	Whiteware	Bowl	37.04	38.46	7.5yr 7/1	10yr 8/3	1
Great House	9	2	1	1375	Reserve	No	Whiteware	Jar	16.00	23.62	Gley 7/N	10yr 8/3	1
Great House	9	3	1	1413	Reserve	No	Whiteware	Jar	29.85	37.50	Gley 8/N	10yr 8/3	1
Great House	9	3	1	1413	Puerco	No	Whiteware	Jar	n/a	n/a	Gley 7/N	7.5YR 8/3	2
Great House	9	3	1	1413	Puerco	No	Whiteware	Jar	n/a	n/a	Gley 8/N	7.5YR 8/3	2
Great House	9	3	1	1413	Reserve	No	Whiteware	Jar	n/a	n/a	Gley 7/N	7.5YR 7/4	2
Great House	9	3	1	1413	Puerco	No	Whiteware	Jar	n/a	n/a	Gley 7/N	7.5YR 7/4	2

Area	Unit	Level	Locus	Spec	Type	Sm	Ware	Form	Original A.P.	Refired A.P.	Mun Orig	Mun 900	Color Group
Great House	9	3	1	1413	Reserve	No	Whiteware	Jar	n/a	n/a	Gley 7/N	7.5YR 8/3	2
Great House	10	2	1	1380	Puerco	No	Whiteware	Bowl	22.47	34.88	Gley 7/N	10yr 8/4	1
Great House	10	3	1	1387	Puerco	No	Whiteware	Bowl	39.22	25.00	Gley 6/N	10yr 8/4	1
Great House	10	1	1	1274	Reserve	No	Whiteware	Bowl	29.41	29.41	Gley 8/N	10yr 8/3	1
Great House	10	3	1	1387	Reserve	No	Whiteware	Bowl	41.67	27.78	Gley 8/N	10yr 8/2	1
Great House	10	4	1	1407	Reserve	No	Whiteware	Bowl	14.93	30.30	Gley 7/N	10yr 8/4	1
Great House	10	4	1	1407	Reserve	No	Whiteware	Bowl	22.73	26.32	Gley 4/N	10yr 8/4	1
Great House	10	2	1	1380	Puerco	No	Whiteware	Jar	28.85	27.52	Gley 4/N	10yr 8/4	1
Great House	10	3	1	1387	Puerco	No	Whiteware	Jar	22.73	21.74	Gley 8/N	10yr 8/3	1
Great House	10	1	1	1274	Reserve	No	Whiteware	Jar	13.89	20.55	Gley 5/N	7.5yr 6/6	4
Great House	10	2	1	1380	Reserve	No	Whiteware	Jar	n/a	n/a	Gley 7/N	7.5YR 8/3	2
Great House	10	2	1	1380	Puerco	No	Whiteware	Jar	n/a	n/a	Gley 8/N	7.5YR 8/2	2
Great House	10	2	1	1380	Unid White	No	Whiteware	Jar	n/a	n/a	Gley 8/N	7.5YR 8/2	2
Great House	10	2	1	1380	Unid White	No	Whiteware	Jar	n/a	n/a	Gley 8/N	7.5YR 8/2	2
Great House	12	6	1	2110	Puerco	No	Whiteware	Bowl	57.14	30.30	Gley 4/N	7.5yr 6/6	4
Great House	12	4	1	1962	Puerco	No	Whiteware	Bowl	30.30	30.30	7.5yr 5/1	7.5yr 5/6	4
Great House	12	7	1	2162	Gallup	No	Whiteware	Bowl	28.17	33.33	Gley 8/N	10yr 8/4	1
Great House	12	7	1	2162	Red Mesa	No	Whiteware	Bowl	14.71	29.85	Gley 8/N	10yr 8/3	1
Great House	12	6	1	2110	Reserve	No	Whiteware	Bowl	26.09	26.79	Gley 8/N	10yr 8/3	1
Great House	12	8	1	2215	Reserve	No	Whiteware	Bowl	30.93	22.99	Gley 8/N	10yr 8/3	1
Great House	12	8	1	2215	Reserve	No	Whiteware	Bowl	25.00	28.99	10yr 3/1	10yr 8/3	1
Great House	12	5	1	2045	Puerco	No	Whiteware	Jar	24.69	24.39	Gley 7/N	10yr 8/4	1
Great House	12	6	1	2110	Puerco	No	Whiteware	Jar	23.81	21.74	Gley 7/N	10yr 8/4	1
Great House	12	4	1	1962	Reserve	No	Whiteware	Jar	28.57	27.78	Gley 7/N	10yr 8/4	1
Great House	12	5	1	2045	Reserve	No	Whiteware	Jar	23.62	33.33	Gley 7/N	7.5yr 6/6	4
Great House	12	6	1	2110	Reserve	No	Whiteware	Jar	31.25	31.25	Gley 8/N	10yr 8/3	1
Great House	12	7	1	2162	Reserve	No	Whiteware	Jar	18.52	18.52	10yr 8/2	10yr 8/4	1
Great House	15	3	1	2179	Puerco	No	Whiteware	Bowl	35.09	34.48	Gley 7/N	7.5yr 6/6	4
Great House	15	3	1	2179	Puerco	No	Whiteware	Bowl	17.24	35.09	Gley 8/N	10yr 8/4	1
Great House	15	1	1	1981	Reserve	No	Whiteware	Bowl	26.32	26.67	Gley 8/N	10yr 8/3	1
Great House	15	2	1	2071	Reserve	No	Whiteware	Bowl	28.17	16.67	10yr 4/1	10yr 8/4	1
Great House	15	3	1	2179	Reserve	No	Whiteware	Bowl	35.71	37.04	Gley 8/N	10yr 8/3	1
Great House	15	1	1	1981	Puerco	No	Whiteware	Jar	27.03	37.97	Gley 8/N	10yr 8/4	1
Great House	15	2	1	2071	Puerco	No	Whiteware	Jar	25.32	25.32	Gley 8/N	10yr 8/3	1
Great House	15	3	1	2179	Puerco	No	Whiteware	Jar	28.64	27.78	Gley 7/N	10yr 8/3	1
Great House	15	3	1	2179	Puerco	No	Whiteware	Jar	25.86	25.21	Gley 7/N	10yr 8/3	1
Great House	15	5	1	2430	Puerco	No	Whiteware	Jar	35.09	35.71	Gley 8/N	10yr 8/3	1
Great House	15	1	1	1981	Red Mesa	No	Whiteware	Jar	35.71	17.54	Gley 7/N	10yr 8/3	1
Great House	15	3	1	2179	Red Mesa	No	Whiteware	Jar	31.25	30.61	Gley 7/N	10yr 8/3	1
Great House	15	1	1	1981	Reserve	No	Whiteware	Jar	30.61	30.00	Gley 8/N	10yr 8/3	1
Great House	15	1	1	1981	Reserve	No	Whiteware	Jar	36.59	24.39	Gley 8/N	10yr 8/3	1
Great House	15	2	1	2071	Reserve	No	Whiteware	Jar	28.57	28.57	Gley 8/N	10yr 8/3	1
Great House	15	2	1	2071	Reserve	No	Whiteware	Jar	29.41	28.99	Gley 8/N	10yr 8/3	1
Great House	15	3	1	2179	Reserve	No	Whiteware	Jar	17.54	33.33	Gley 5/N	10yr 8/3	1
Great House	15	3	1	2179	Reserve	No	Whiteware	Jar	15.87	15.63	Gley 8/N	10yr 8/3	1
Great House	15	5	1	2430	Reserve	No	Whiteware	Jar	26.67	26.67	Gley 8/N	10yr 8/2	1
Great House	15	5	1	2430	Reserve	No	Whiteware	Jar	22.73	22.22	Gley 8/N	10yr 8/2	1
Great House	16	6	1	2519	Puerco	No	Whiteware	Bowl	27.03	29.85	Gley 8/N	10yr 8/3	1
Great House	16	6	1	2519	Reserve	No	Whiteware	Bowl	23.53	23.81	Gley 8/N	10yr 8/3	1
Great House	16	6	1	2519	Puerco	No	Whiteware	Jar	31.58	30.00	Gley 7/N	10yr 8/4	1
Great House	16	6	1	2519	Puerco	No	Whiteware	Jar	15.15	28.99	Gley 8/N	10yr 8/2	1
Great House	16	6	1	2519	Reserve	No	Whiteware	Jar	28.99	28.57	Gley 8/N	10yr 8/3	1
Great House	16	6	1	2519	Reserve	No	Whiteware	Jar	24.39	23.81	Gley 8/N	7.5yr 7/6	4
Great House	17	3	1	2437	Puerco	No	Whiteware	Bowl	30.04	n/a	Gley 8/N	10yr 8/3	1
Great House	17	4	1	2471	Puerco	No	Whiteware	Bowl	17.86	19.23	Gley 8/N	10yr 8/3	1
Great House	17	5	1	2562	Puerco	No	Whiteware	Bowl	38.96	30.77	Gley 7/N	10yr 8/4	1
Great House	17	5	1	2562	Puerco	No	Whiteware	Bowl	41.67	41.67	Gley 8/N	10yr 8/3	1
Great House	17	1	1	2367	Reserve	No	Whiteware	Bowl	37.04	37.74	Gley 5/N	10yr 8/3	1
Great House	17	5	1	2562	Reserve	No	Whiteware	Bowl	31.25	32.26	Gley 4/N	10yr 8/4	1
Great House	17	5	1	2562	Reserve	No	Whiteware	Bowl	27.03	27.03	10yr 6/2	10yr 8/2	1

## Appendix F



Sample Number	Color Before Firing	Color After 900	Color Group	Apparent Porosity	Workability Evaluation	Context	Description	Location
1	2.5Y 7/2 - 6/2	5YR 6/8	5	28.80	Workable	Hill Side Outcrop	Moreno Hill (?)	Cox Ranch Pueblo Formation; Capstone Top
2	2.5Y 6/2	5YR 6/8	5	29.44	Workable	Hill Side Outcrop	Moreno Hill (?)	Cox Ranch Pueblo Formation; Upper terrace directly under sandstone talus
3	2.5Y 7/1 - 6/1	7.5YR 7/6	4	26.67	Workable	Hill Side Outcrop	Moreno Hill (?)	Cox Ranch Pueblo Formation; Upper terrace 10 m below sandstone talus
4	2.5Y 7/1 - 6/1	10YR 8/6	2	27.44	Workable	Hill Side Outcrop	Moreno Hill (?)	Cox Ranch Pueblo Formation; Capstone Middle; reddish purple, 2-3 m below sandstone talus
5	2.5Y 7/2	7.5YR 7/6-7/8	4	24.74	Workable	Hill Side Outcrop	Moreno Hill (?)	Cox Ranch Pueblo Formation; middle tier top of shelf
6	2.5Y 7/1	7.5YR 7/6	4	33.14	Workable	Hill Side Outcrop	Moreno Hill (?)	Cox Ranch Pueblo Formation; middle tier talus; directly below capstone sandstone
7	5Y 7/2	5YR 5/8	5	29.57	Workable	Hill Side Outcrop	Moreno Hill (?)	Cox Ranch Pueblo Formation; middle tier talus; 2-3 m below capstone
8	2.5Y 7/2	7.5YR 7/6	4	29.83	Workable	Hill Side Outcrop	Moreno Hill (?)	Cox Ranch Pueblo Formation; middle tier talus-half way up
9	5Y 7/3	5YR 6/8	5	31.36	Workable	Hill Side Outcrop	Moreno Hill (?)	Cox Ranch Pueblo Formation; middle tier talus (1) at base
10	5Y 7/2	5YR 6/8	5	28.19	Workable	Hill Side Outcrop	Moreno Hill (?)	Cox Ranch Pueblo Formation; Capstone low; 10 m below sandstone
11	5Y 7/3	5YR 6/8	5	28.76	Workable	Hill Side Outcrop	Moreno Hill (?)	Cox Ranch Pueblo Formation; lowest tier Upper Most Strat
12	5Y 6/3	5YR 5/8	5	29.73	Workable	Hill Side Outcrop	Moreno Hill (?)	Cox Ranch Pueblo Formation; lowest tier Upper Middle Strat
13	5Y 6/2	5YR 6/8	5	24.16	Workable	Hill Side Outcrop	Moreno Hill (?)	Cox Ranch Pueblo Formation; lowest tier Middle Strat
14	5Y 7/4	5YR 5/8	5	31.13	Workable	Hill Side Outcrop	Moreno Hill (?)	Cox Ranch Pueblo Formation; lowest tier Lower Middle Strat
15	5Y 7/3	5YR 5/8	5	30.05	Workable	Hill Side Outcrop	Moreno Hill (?)	Cox Ranch Pueblo Formation; lowest tier Lower-most Strat
16	2.5Y 6/2	5YR 6/8-5/	5	25.28	Workable	Hill Side Outcrop	Moreno Hill (?)	East of Cheap John Lake; lower tier 12S E0704021 N3804319 +/- 5.2 m
17	2.5Y 6/1	7.5YR 8/4	2	26.69	Workable	Hill Side Outcrop	Moreno Hill (?)	East of Cheap John Lake; upper tier 12S E0704021 N3804319
18	2.5Y 7/1-6/2	7.5YR 8/6-7/6	4	29.04	Workable	Hill Side Outcrop	Moreno Hill (?)	South of Cox Ranch Pueblo; lowest 1 12S E704743 N3808359
19	5Y 7/2	7.5YR 6/6	4	29.88	Workable	Hill Side Outcrop	Moreno Hill (?)	South of Cox Ranch Pueblo; middle

Sample Number	Color Before Firing	Color After 900	Color Group	Apparent Porosity	Workability Evaluation	Context	Description	Location
20	5Y 7/4	5YR 6/6-5/6	5	33.33	Workable	Hill Side Outcrop	Moreno Hill (?)	South of Cox Ranch Pueblo; upper
21	5Y 3/1	5YR 7/8-6/8	5	15.68	Workable	Hill Side Outcrop	Moreno Hill (?)	South of Cox Ranch Pueblo; Clay 3 E704120 N3808790
22	2.5Y 7/6	2.5YR 6/8	6	28.27	Workable	Hill Side Outcrop	Moreno Hill	NW of Cox Ranch Pueblo; Georch Arroyo; upper terrace point directly under sandstone
23	2.5Y 6/6	2.5YR 5/8	6	34.16	Workable	Hill Side Outcrop	Moreno Hill	NW of Cox Ranch Pueblo; Georch Arroyo; 50 m down from upper terrace point
24	5Y 7/2	5YR 7/8	5	17.26	Workable	Hill Side Outcrop	Moreno Hill	NW of Cox Ranch Pueblo; Georch Arroyo; 10 m below lowest terrace
25	10YR 7/1 -6/2	10YR 8/4	1	29.01	Workable	Hill Side Outcrop	Moreno Hill	NW of Cox Ranch Pueblo; Georch Arroyo; 20 m below lowest terrace
26	5Y 7/3	5YR 6/6	5	33.26	Workable	Hill Side Outcrop	Moreno Hill	NW of Cox Ranch Pueblo; Georch Arroyo; lowest under lowest terrace
27	2.5YR 5/3-6/3	5YR 6/6-5/6	5	24.09	Workable	Hill Side Outcrop	Chinle	Chical Lake; Lower Chinle
28	5Y 7/1	7.5YR 6/6	4	39.15	Workable	Hill Side Outcrop	Chinle	Chical Lake; Upper Chinle Gray
29	5Y 7/2	5YR 6/8	5	n/a	Unsuitable	Hill Side Outcrop	Possibly Dakota Sandstone	Chical Lake; Dakota Capstone; above Chinle
30	5Y 7/2 -6/2	5yr 7/6	5	n/a	Unsuitable	Hill Side Outcrop	Largo Creek	Near Largo Creek; 12700357E 38118668N
31	2.5Y 7/2-7/3	5yr 6/8	5	26.06	Workable	Hill Side Outcrop	Largo Creek	Near Largo Creek; 12700386E 3818606N
32	2.5Y 6/6	2.5yr 5/6	6	23.50	Workable	Hill Side Outcrop	Largo Creek	Near Largo Creek; 12700347E 3818643N
33	2.5Y 7/2	5yr 6/8	5	37.29	Workable	Hill Side Outcrop	Largo Creek	Near Largo Creek; 12700349E 3818655N
34	5Y 7/1	7.5yr 7/6	4	33.05	Workable	Hill Side Outcrop	Largo Creek	12700345E 3818656N
35	2.5Y 6/6	2.5yr 5/6	6	n/a	Unsuitable	Hill Side Outcrop	Largo Creek	12700386E 3818608N
36	2.5Y 7/1	7.5YR 7/4	2	n/a	Unsuitable	Road Cut	Possibly Dakota Sandstone	Roadside, near Largo Creek
37	2.5Y 6/1	7.5yr 8/4	2	n/a	Unsuitable	Road Cut	Possibly Dakota Sandstone	Roadside, near Largo Creek 12698444E 3819484N
38	10YR 6/2	10yr 7/3	1	30.14	Workable	Hill Side Outcrop	Dakota Sandstone	12693820E 3819875N
39	2.5Y 6/6	2.5yr 5/6	6	29.35	Workable	Hill Side Outcrop	Dakota Sandstone	12693851E 3819864N
40	2.5Y 7/1 - 6/1	10yr 7/3	1	n/a	Unsuitable	Hill Side Outcrop	Dakota Sandstone	Near Carrizo Wash; 12693873E 3819830N
41	2.5Y 6/6	2.5yr 5/6	6	26.82	Workable	Hill Side Outcrop	Dakota Sandstone	Near Carrizo Wash; 12693814E 3819878N
42	2.5Y 6/6	2.5yr 5/6	6	28.59	Workable	Hill Side Outcrop	Dakota Sandstone	Near Carrizo Wash; 12693798E 3819889N
43	5Y 7/1	7.5yr 7/4	2	35.17	Workable	Hill Side Outcrop	Dakota Sandstone	Near Carrizo Wash; 12693810E 3819886N
44	2.5Y 6/1	7.5yr 8/3	2	33.39	Workable	Hill Side Outcrop	Dakota Sandstone	Near Carrizo Wash; 12693818E 3819875N

Sample Number	Color Before Firing	Color After 900	Color Group	Apparent Porosity	Workability Evaluation	Context	Description	Location
45	2.5Y 6/6	2.5yr 5/6	6	25.91	Workable	Hill Side Outcrop	Dakota Sandstone	Near Carrizo Wash; 12693794E 3819907N
46	2.5Y 6/2	7.5yr 7/6	4	n/a	Unsuitable	Hill Side Outcrop	Chinle	12700833E 3821026N
47	2.5Y 6/6	10r 5/3	7	39.89	Workable	Hill Side Outcrop	Chinle	12700851E 38209824N
48	2.5Y 7/1-6/2	7.5yr 7/6	4	n/a	Unsuitable	Hill Side Outcrop	Chinle	12700840E 3821014N
49	2.5Y 7/2	5yr 6/6	5	n/a	Unsuitable	Hill Side Outcrop	Chinle	12700891E 3820966N
50	2.5YR 5/3	5yr 6/6	5	30.71	Workable	Hill Side Outcrop	Chinle	12700855E 3820994N
51	2.5Y 7/2	5yr 5/8	5	26.57	Workable	Hill Side Outcrop	Chinle	12700859E 3820996N
52	2.5Y 6/6	2.5yr 5/8	6	18.84	Workable	Hill Side Outcrop	Chinle	12700875E 3820979N
53	2.5YR 5/3-6/3	5yr 6/6	5	25.40	Workable	Hill Side Outcrop	Chinle	12700856E 3821011N
54	2.5Y 7/2	5yr 6/6	5	n/a	Unsuitable	Hill Side Outcrop	Chinle	12700856E 3820989N
55	2.5Y 7/3	5YR 5/8	5	29.58	Workable	Hill Side Outcrop	Mancos Shale	Mancos Shale; Upper at contact to Atarque sandstone
56	5Y 7/1 - 6/1	7.5YR 6/6	4	28.26	Workable	Hill Side Outcrop	Mancos Shale	Mancos Shale; Middle zone; base of moreno hill road below atarque sandstone
57	2.5Y 6/3	5YR 6/6-6/8	5	25.29	Workable	Hill Side Outcrop	Mancos Shale	Mancos Shale; Lower Zone
58	2.5Y 7/2	5YR 7/8-6/8	5	27.30	Workable	Road Cut	Moreno Hill	Moreno Hill Road; lowest zone, #1 Top gray
59	5Y 7/2 - 7/3	5YR 5/8	5	29.49	Workable	Road Cut	Moreno Hill	Moreno Hill Road; lowest zone, #2 2nd from top; yellowish
60	5Y 5/1	5YR 6/6	5	20.23	Workable	Road Cut	Moreno Hill	Moreno Hill Road; lowest zone, #3 coal; gray
61	10YR 6/3	5YR 7/4	3	26.64	Workable	Road Cut	Moreno Hill	Moreno Hill Road; lowest zone #4 gray below coal
62	2.5Y 7/4	5YR 6/6-5/6	5	29.26	Workable	Road Cut	Moreno Hill	Moreno Hill Road; lowest zone #5
63	2.5Y 7/2	5YR 6/6	5	31.60	Workable	Road Cut	Moreno Hill	Moreno Hill Road; middle #1
64	2.5Y 5/1	7.5YR 7/6	4	25.24	Workable	Road Cut	Moreno Hill	Moreno Hill Road; middle #2
65	2.5Y 7/2-7/3	5YR 6/8	5	30.73	Workable	Road Cut	Moreno Hill	Moreno Hill Road; middle #3
66	5Y 7/2 -6/2	5YR 7/6-6/6	5	31.06	Workable	Road Cut	Moreno Hill	Moreno Hill Road; upper #1
67	2.5Y 6/1	5YR 7/4	3	29.86	Workable	Road Cut	Moreno Hill	Moreno Hill Road; upper #2
68	2.5Y 6/2	7.5YR 7/6	4	30.09	Workable	Road Cut	Moreno Hill	Moreno Hill Road; upper #3
69	2.5Y 7/2	5yr 6/8	5	32.65	Workable	Unfired Pottery	?	Cox Ranch Pueblo Roomblock 2
70	10YR 6/2-5/2	7.5YR 7/6	4	29.61	Workable	Unfired Clay	?	Cox Ranch Pueblo Great House Unit 6, Level 1, Locus 6