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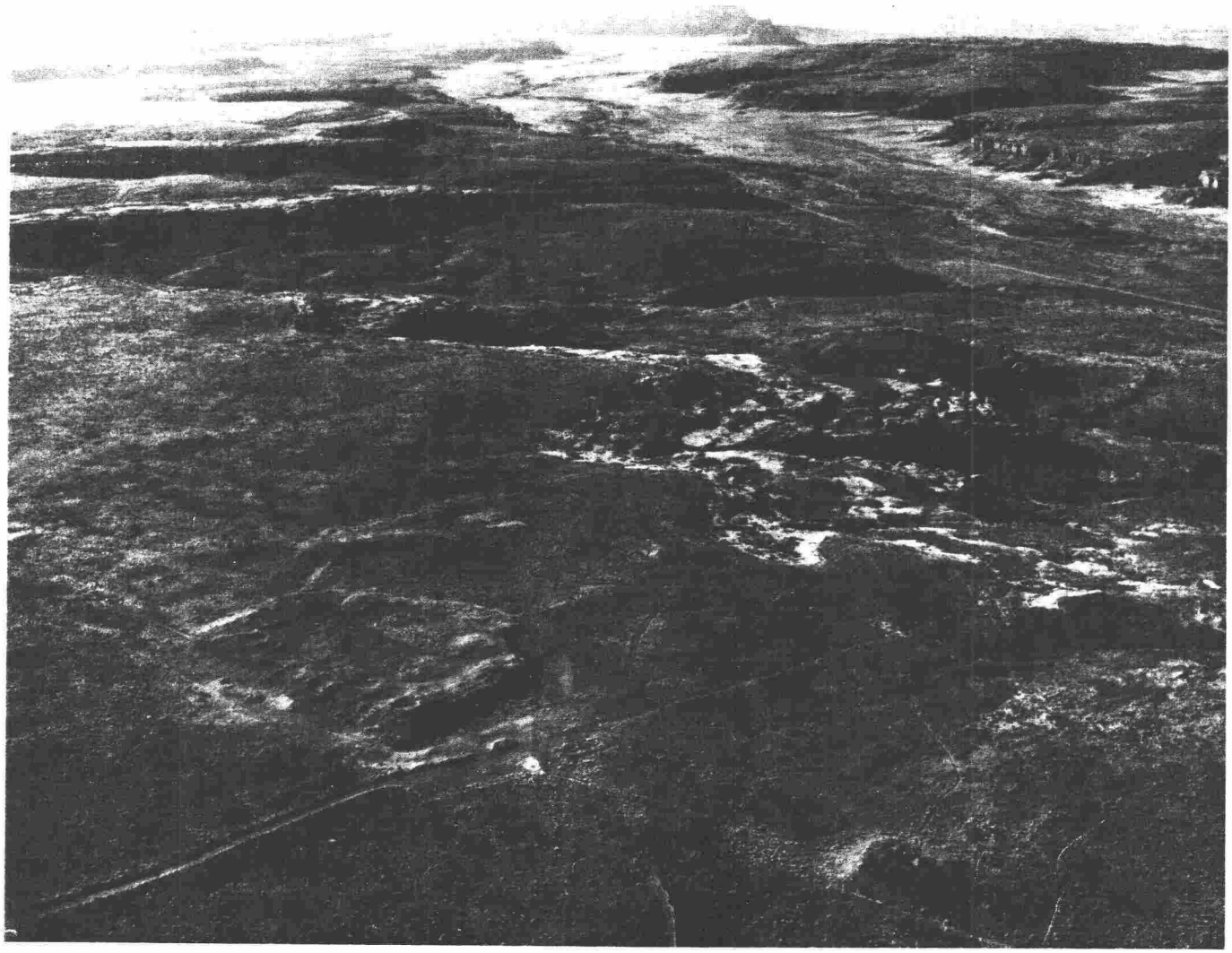
Investigations at the Pueblo Alto Complex

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Front cover: Pueblo Alto and New Alto on the mesa overlooking Chaco Canyon to the southeast (Courtesy of David Brill ©1980).

CHCU_310_D58_VOL 4_00003

Investigations at the Pueblo Alto Complex

Chaco Canyon

New Mexico

1975-1979

Volume IV

Microfiche

for

Volume I: Summary of Tests and Excavations at the Pueblo Alto Community.
by Thomas C. Windes

Volume II: Architecture and Stratigraphy
by Thomas C. Windes

Volume III: Artifactual and Biological Analyses
Edited by
Frances Joan Mathien
and
Thomas C. Windes

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Investigations at the Pueblo Alto Complex

Chaco Canyon

New Mexico

1975-1979

Microfiche

for

Volume I: Summary of Tests and Excavations at the Pueblo Alto Community.

by Thomas C. Windes

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Appendix A

Project Personnel

Chaco Center Staff for the 1976 Field Season

Chief, Chaco Center
Robert H. Lister

Project Supervisor
W. James Judge

Staff Archeologists
Nancy J. Akins
Cory D. Breternitz
William B. Gillespie
Stephen H. Lekson
Peter J. McKenna
Earl Neller
Robert P. Powers
John D. Schelberg
H. Wolcott Toll
Marcia L. Truell (Newren)
Michael Windham

Special Equipment Technician
Robert Greenlee

Lab Director
L. Jean Hooten

Volunteers-Full Time
Victoria Atkins
Fred Burt
Robert Sounart
Wirt H. Wills

Volunteers-Part Time
Jim Cassidy
Terry Czech(?)
David Greenberg
Sarah Gurewitz
John Hildebrand
Buc Holliman
Jay Judge
James Moore
Ellen Reed

Laborers
Gene Begay
Wayne Castiano
Wallace Castillo
Ben Etcitty
Herman Etcitty
Eddy Garcia
Amos Hasuse
Victor Kee
Jimmy Lopez
Lewis Lopez
Johnny Martinez
Paul Tso
John Wero

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Chaco Center Staff for the 1977 Field Season

Chief, Chaco Center
Project Supervisor
W. James Judge

Field Supervisor
Thomas C. Windes

Staff Archeologists
Nancy J. Akins
Cory D. Breternitz
William B. Gillespie
Stephen H. Lekson
Peter J. McKenna
Robert P. Powers
John D. Schelberg
H. Wolcott Toll

Volunteers-Part Time
Lynne Arany
Bruce Burns
Michelle Combellick
Sondra Diepen
Terry Fifer
Bradley Vierra
Mary Joan Windes

Special Equipment Technician
Robert Greenlee

Lab Director
Marcia L. Truell
(Newren)

Laboratory/ Assistant Archeologists
Marcia Donaldson
Lou Ann Jacobson
Bruce Moore
Wirt H. Wills

Laborers
Martin Britt
Wallace Castillo
Susan Cly (NYC)[a]
Eddy Garcia
Gerald Harrison (CETA)[b]
Amos Hasuse
Victor Kee (NYC)[a]
Daniel Lopez (CETA)[b]
Johnny Martinez
Brett Ratti
Steve Roll
Paul Tso

---

[a]NYC = Navajo Youth Corps employee.
[b]CETA = Comprehensive Employment Training Act employee.

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Chaco Center Staff for the 1978 Field Season

Chief, Chaco Center
Project Supervisor
W. James Judge

Field Supervisor
Thomas C. Windes

Staff Archeologists
Nancy J. Akins
Cory D. Breternitz
William B. Gillespie
Lou Ann Jacobson
Stephen H. Lekson
Peter J. McKenna
Robert P. Powers
John D. Schelberg
H. Wolcott Toll
Marcia L. Truell (Newren)[a]
Wirt H. Wills

Special Equipment Archeologist
Robert Greenlee

Lab Director
Cathy M. Cameron

Laborers
Wallace Castillo
Amos Hasuse
Brett Ratti
Paul Tso

Volunteers-Long Term
John Shaffer
Adrian White

Volunteers-Short Term
Mary F. Benson
Alicia Billings
Nancy Billings
Donna Burns
Tom Chadderdon
Joe Cisneros
Ann Corson
Diane Gelburd
Kay Greenlee
Andrea Josephs
John J. Lavino, Jr.
Charles Mobley
Megan Monson
James Snead
Kathleen Sullivan
Emily Werito
Lolita Wilson
Lorraine Wilson
Karen E. Wise

[a]Short term.

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Chaco Center Staff for the 1979 Limited Field Season

Chief, Chaco Center
Project Supervisor
W. James Judge

Field Supervisor
Thomas C. Windes

Staff Archeologists
Robert P. Powers
H. Wolcott Toll

Remote Sensing Volunteers
Art K. Ireland
F. Joan Mathien
Gretchen S. Obenauf

Volunteers after 1978 who assisted with related field and laboratory work:

1979
B. Todd Windes

1980
Cathy Cameron

1981
Barry Cowan[a]
Kelly Cooper[a]

1982
Kaydean Baker[b]
Kelly Cooper[a]
Kim Cooper[a]
Barry Cowan[a]
Brian Cowan[a]
Kathy Neaman[a]
Laura Smith[b]

1983
Cathy Cameron
Kelly Cooper[a]
Suzanne Hunt[a]
Joan Mathien
Natalie Pattison

1984
Julian Anastasio
Kristan Cooper[a]
Matt Hulett[a]
Suzanne Hunt[a]
Cristie McGee[a]
Cindy Terry[b]

1985
Julian Anastasio
Marianito Carbo[b]
Kristan Cooper[a]
Marya Corrigan[b]
Matt Hulett[a]
Suzanne Hunt[a]
Francis Vogel

1986
Julian Anastasio
Suzanne Hunt[a]
Francis Vogel
B. Todd Windes[a]
Connor Windes[a]

1987
Julian Anastasio
Matt Hulett[c]
Suzanne Hunt[d]
Francis Vogel
Connor Windes[a]

---

[a]Albuquerque Public Schools
[b]Bennington College
[c]New Mexico State University
[d]University of New Mexico

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Student Conservation Association Members for the 1978 Field Season

July Team

Chris Conner (St. Louis, MO)
Jesse Haluorsen (New York City, NY)
Shelly Hearne (Princeton, NJ)
Gene Hebert (Carbondale, CO)[a]
Laurie Hebert (Carbondale, CO)[a]
Susan Hueftle (Norfolk, VA)
Todd Kastetter (Boca Raton, FL)
William Martinez (El Paso, TX)
James McCabe (Old Bridge, NJ)
Anna-Lisa Nay (Lexington, VA)
Jeanne Peters (Atlanta, GA)
Craig Salomonsen (Underwood, MN)
Adele Thomas (Cushing, OK)
Mary Wilson (Norfolk, VA)
Karen Wise (Mill Valley, CA)

August Team

Mary Joan Bauermeister (Bourbon, MO)
Corinne Blovin (Mechanicsburg, PA)
Julia Burr (Chevy Chase, MD)
Kelly Carter (Claremont, NH)
Carole Giunta (Irving, NY)
Pam Hiebert (College Station, TX)[a]
Eric Ingbar (Brooklin, MA)[a]
David Klawitter (Aurora, OH)
Michael Leon (Sudbury, MD)
Alexandra Malphail (North Conray, NH)
Joseph Moneghan (Duxbury, MA)
Megan Monson (Liberty Lake, WA)
Stephen Morris (East Hampton, RI)
Sarah Nuding (Vestal, NY)
Leslie Rigby (Washington, DC)
Stuart Sears (Longmouth, MA)

[a]Team leaders.

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Appendix B

Examination of a Cartridge Casing from Pueblo Alto, Other Structure 13

Scott P. Berger

The cartridge (FS# 671) found at Pueblo Alto is a .22 Long Rifle. An indented H-headstamp identifies the manufacturer as the Winchester (formerly Henry) Repeating Arms Co., New Haven, Connecticut, in existence from 1866 until the present. The copper casing and black powder residue make this an early cartridge case because smokeless powder is not present. The latter was first used around 1915. The case mouth still shows a crimp, however, making this casing date after 1900 to approximately 1915 (before 1900 case walls were not crimped). If the crimp was misidentified, however, the mark may have been produced by a heel-seated bullet and, thus, the casing could date as early as 1873. If not, considering the rapid change to brass casings even though black powder was loaded until about 1928, the cartridge may date as early as 1900. The best period for the manufacture of this cartridge, then, is between 1873 and about 1915 (see Barnes 1976; Howe 1934; Sudyam 1979).

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Appendix C

Navajo Agriculture

Thomas C. Windes

Based primarily on the work of Rose et al. (1982), we now have a projected record of seasonal rainfall from A.D. 900 to the present, which marks the precipitation record at Chaco as being dry over the last 1,000 years, but with great seasonal variation. Pollen and seed remains (Cully 1985b; Toll 1984) also reflect an environment that is little changed from today. Therefore, early twentieth-century, Navajo horticultural practices are instructive to understanding the limitations of crop planting and the variability of crop yields by the Chaco Anasazi. Huntington (1914:7) provides an interesting testimony about the early A.D. 1900s:

> In the last sixteen years, according to Mrs. Wetherell [sic], the wife of a trader whose husband was killed by the Indians, there have been only two good crops. In three years, 1902, 1903, and 1904, the Navajos planted corn as usual, but, with the exception of the two fortunate men already mentioned, got no returns. In the remaining years the crop varied all the way from almost nothing to fair. The reason for its failure in the dry years does not appear to be that the method of cultivation is poorer than in the past, but simply that the summer rains, upon which corn and beans (the only possible crops among the aborigines) entirely depend, never fell at all or else did not fall until so late that the frost came before the crops could ripen.

Brugge (1980) provides additional commentary on Navajo horticulture between 1913 and 1920 for a period that is very much like the A.D. 1000s in terms of precipitation. Despite the advantage of some modern technology (i.e., the plow and tractor by 1919), Navajo experiences can illustrate the uncertainties of horticultural success in the Chaco region. From Brugge's account, it is clear that spring and summer rainfall are important factors in planting strategy. Wet springs (i.e., over 70 mm of rain) provide impetus for widespread planting, including maize, whereas dry ones do not. The key to high crop yields, however, is the summer rainfall that exceeds 90 mm of rain. In 1914 (with 76 mm of rain) and 1915 (70 mm of rain), for example, there was widespread planting in the

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Chaco area , whereas the spring (30 mm of rain) and summer (40 mm of rain) of 1913 were so dry that little attempt was made at planting (Brugge 1980: 292). Total rainfall, nevertheless, is only a rough indicator of potential horticultural success. More important, periodicity of the rainfall is a critical factor. Sometimes a major part of the seasonal total may fall in such torrents that crops are washed away (see Brugge 1980:328, 350).

Other factors, not evident in the prehistoric record, also have disastrous effects on crop yields. In 1920, both spring and summer rainfalls were above normal for the region, with 94 mm and 106 mm respectively, but there was so much damage to crops from the cold, cutworms, and prairie dogs that fields were replanted two or three times with only modest results (Brugge 1980:312). It seems that very wet years also bring a plague of insects and rodents that can devastate crops. Toll et al. (1985:13, 18) found that rodents (e.g., rabbits), ants, birds, and deer could devastate crops in Chaco Canyon. Perhaps high frequencies of rodents in the archeological record are related to periods of intensified communal hunting to rid fields of major infestations as well as to provide extra food.

Frosts also have major effects on crop yields. If killing frosts occur late in the spring, planting may be delayed (or redone), which increases the risk of frost damage in the fall because of late plant maturation. The unpredictability of the climate in Chaco was well illustrated in 1941, which had excellent spring moisture (86 mm) and the fourth highest summer total projected over the past 1000 years (Rose et al. 1982). It was the wettest year in New Mexico Weather Bureau history (Tuan et al. 1973:143), but an early September frost killed almost all the crops in the Chaco region (Brugge 1980:461).

Favorable locales for planting seem to have been duplicated by the Navajos and the Anasazi (see Cully et al. 1982; Winter 1983a, 1983b). Both preferred the mouths of side tributaries or the sandy areas within the larger side canyons of Chaco (e.g., see Gillespie 1984:39), not the alkaline Chaco flats (see Brugge 1980; Judd 1964; Vivian 1970, 1972, 1974). The broad, sandy, Escavada Wash with its high water table was intensely farmed by the Navajos north of Alto and near Peñasco Blanco until recently (Cully et al. 1982; Fransted 1979:23; Judd 1954:59; Thomas Mathews to Marcia Truell, personal communication 1978) and may have been ideal for the Anasazi using akchin techniques (see Hack 1942). The Kin Bineola Wash, southwest of Chaco, was also a productive area for Navajo harvests (Plate C.1; Judd 1954).

These sandy locales are the most suitable for local farming because of the availability of water (from a high water table or from runoff) and nutrient replacement from periodic flooding. It is important to note that there is no evidence to suggest that either group practiced dry farming on the mesa tops (i.e., around Pueblo Alto and Tsin Kletzin), presumably

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Plate MF-C.1. Navajos peeling and drying squash from fields planted in the Kin Bineola Valley near Lake Valley, New Mexico. Photo by O. C. Havens. (© National Geographic Society.)

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because of inadequate rainfall. Although there are some small, one-to-three-room sites (fieldhouses?) contemporary with Pueblo Alto on the mesa top, they are few and concentrated around the heads of swales that empty into the major side canyons of Chaco Canyon. Even if mesa tops had been used for dry farming, the soil would have lost its fertility over the short term without crop rotation or natural replacement of nutrients (e.g., Schelberg 1982).

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Appendix D

Postexcavation Field Studies

Thomas C. Windes

A number of ancillary studies were carried out after the field excavations were completed at Pueblo Alto. As mentioned previously, roads were examined in the Alto area, along with the garden terraces and sources of water (Chapter 5; Windes 1982). An examination of other greathouse middens was conducted by Cameron and Windes to compare them with the Alto trash mound ceramics and lithics. Additional studies of the flora and fauna around Alto were conducted by the Castetter Laboratory (A. Cully 1985a; J. Cully 1985; Cully and Cully 1985) and the U.S. Fish and Wildlife Service (Scott 1980a-f; Scott and Szekunda 1980), both located at the University of New Mexico.

In conjunction with the U.S. Geological Survey (Denver), the author collected live pine specimens from selected mountain areas around the San Juan Basin in 1983 to examine the feasibility of identifying timber sources used at Alto and other greathouses in Chaco through trace-elements analysis (Appendix MF-K). Turquoise and travertine sources for Alto and other sites in Chaco were also investigated (Mathien 1980, 1985, Volume III). During our work at Alto, several of the staff were interested in the feasibility of horticulture and spent substantial amounts of time experimenting with gardens and maize agriculture (Toll et al. 1985).

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Appendix E

Recording and Numbering

Thomas C. Windes

Recording

Field recording for the work at Pueblo Alto was outlined and discussed in the field primer (Judge et al. 1976). Each major provenience chief was in charge of all the recording for the excavation carried out in the provenience. All field notes, photographs, samples, and digging were supervised by the chief or delegated to others who assisted. All field notes were recorded in notebooks and then reorganized and submitted in final form after the field season was over. The records were kept in triplicate. The effectiveness of carbonless paper for long-term storage was unfortunately unknown and not considered initially as a future archival problem, particularly for faded print. Feature forms were preprinted and allowed standardization of feature recording across the site.

The only computer coding done in the field was placement of the proper coding (above) on the artifact bags along with provenience description, date, excavator name, material type and frequency, and the site and field specimen numbers. The provenience coding was later placed on FORTRAN sheets at the field laboratory and then keypunched and computerized. Coding was also placed on the feature forms to indicate how the materials from that feature were recorded. Later, the same coding, taken off the bags, was used by the analysts to record provenience during the artifact analyses.

The Inventory Coding

Although there are several lists that cover recording of provenience and artifact categories for the inventory, only the provenience information is pertinent here to acquaint the reader with the basic terminology and coding framework that permeates this report. The listing was primarily designed to assist computer inventory of the collections as well as to provide a basic syntax for recording. This coding is specific to Alto, but for the most part duplicates that for other sites excavated. Missing numbers in the sequence were not used.

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Variable Number	Variable Description and Coding
1	Site Number
2	General Provenience Unit

code

- 05 Kiva
- 08 Circular Structure (CS) (not a kiva)
- 09 Plaza 1
- 12 Major Wall (MW)
- 13 Roadway
- 16 Trash Mound (TM) (Test Trench 1-2, slumps, Stratigraphic Column 1. See also Variable 2, Number 52-56)
- 17 Storage Cist
- 18 Hearth
- 19 Roasting Pit (RP)
- 24 Backdirt
- 25 Plaza Feature (PF)
- 26 Other Structure (OS)
- 27 Plaza Feature 1 (PF 1)
- 28 East Ruin
- 29 Plaza 2
- 30 Plaza 3
- 31 Parking Lot Ruin
- 40 North Trench (test trench against Room 138)
- 52 Trash Mound, Stratigraphic Column 2 (TM, SC 2)
- 53 Trash Mound, Stratigraphic Column 3 (TM, SC 3)
- 54 Trash Mound, Stratigraphic Column 4 (TM, SC 4)
- 55 Trash Mound, Stratigraphic Column 5 (TM, SC 5)
- 56 Trash Mound, Stratigraphic Column 6 (TM, Sc 6)
- 98 Other Occupational Surface
- 99 Unknown

3	Provenience Unit Number
4	General Level Category

- 1 Surface
- 3 Roof fall
- 5 Floor fill
- 6 Floor contact
- 7 Structural association (i.e., pits associated with floor)

9	Unknown (when used for Plaza 1 it indicates that the surface number is 10 or greater).
5	Floor or Use Surface Indicator

- 1 First floor encountered
- 2 Second floor encountered

etc., through 9 floors

6	Layer-Level Number	First 2 digits = natural units (Layers) Last 2 digits = arbitrary units (Levels) Layers over 99, see Variable 2, #52-56 0098 = wall clearing only

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7 Level Characteristics

Fill:

1 Alluvium/aeolian
2 Trash
3 Mixed trash-alluvium/aeolian
4 Structural rubble

Floors and Floor Features:

5 Occupational
6 Plugged feature
7 Intact structural unit (i.e., built-in floor, etc.)
8 Postoccupational (floor fill extends into pit)
9 Unknown

8 Feature Type (see Chapter 10 for definitions)

01 Firepit (FP)
02 Storage pit/cist
03 Other pit (OP)
04 Posthole (PH)
05 Wall (1 = north, 2 = east, 3 = south, 4 = west in Variable 9)
06 Wall niche (WN or N)
07 Door
08 Kiva ventilator
09 Heating pit (HP)
10 Bench
11 Mealing bin (MB)
12 Deflector
14 Grid (for recording floor fill and floor specimens, pollen and flotation, whether triangulated or not)
15 Burial
16 Air vents in room walls (V)
17 Storage bin
18 Floating floor (FF)
19 Test trench (TT) or test pit (TP) within a major provenience unit
20 Trash deposit (TD)
21 Stratigraphic (or strat) column (SC)
25 Partition wall
29 Rodent burrow (R)
30 Kiva interstitial space (1 = northeast, 2 = southeast, 3 = southwest, 4 = northwest in Variable 9)
31 Wall foundation trench (WT)
33 Grid quadrant (1 = northeast, 2 = southeast, 3 = southwest, 4 = northwest in Variable 9). Only for Plaza 2.
89 Slump in trash mound trench (in Test Trench 1)
97 Ant hill or ant nest
98 Other unnamed feature (OUF)
99 Unknown

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9 Feature Number
10 Feature Level Category
- 1 Surface
- 2 Fill
- 6 Floor
- 9 Unknown

Field Specimen Numbers

Unlike the previous methods used at the small sites, field specimen numbers were assigned in blocks to the major proveniences being excavated. Field numbers were assigned to all materials retrieved from a single excavational unit. Materials from a single unit (e.g., the Floor 1, Firepit 3 ash layer) received the same number whereas in previous years each item or class of similar items from that unit received a separate number. Thus, one could readily identify an excavational unit by the number series. This helped to reduce numbering errors and facilitated comparability among different analyses.

Mapping. Aside from mapping the site from aerial imagery, plane table and alidade maps were made of smaller units needing detailed recording that aerials could not produce. The depth of most rooms, however, required floor and elevation maps to be made with the aid of line levels, tape measures, and internal subdatums.

Scale drawings were mandatory for every profile and every architectural manifestation exposed. Generally, two or three sectional profiles were made of the fill within each major provenience. No policy determined which stratigraphic face was to be profiled. All illustrations in this report were oriented with north or east to the right except for the Trash Mound and the exploratory trench against the exterior of Room 181.

Subdatums across the site were set below the site datum (BSD) with a transit and a 4-m stadia board. The site datum (Datum 8) was located at the southeast corner of Room 145, the highest elevation at the site. A common depth below the site datum is indicated on all stratigraphic profiles by a small horizontal arrow to each side of the drawing. Unless otherwise noted, all arrows mark 200 cm BSD from Datum 8.

Scales. All scales used in photos are metric. Generally, a five-increment 15-cm scale, a six-increment 30-cm scale, or an eight-increment 50-cm scale was used for feature photos. Typically, an L-shaped board, 2 m to a side, and a 50-cm, north-arrow scale were used for vertical bipod room photos. Horizontal control in these photos was marked by circular cans painted black and white and set with a line level to facilitate later rectification of the camera tilt. North-arrow scales in photographs were usually set to approximate magnetic north, rarely accurately to true north (e.g., Plaza 2 photos).

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Numbering

Stratigraphic Units. Natural units (layers) were numbered after profile definition. Generally, units were numbered from the top down within each provenience unit; thus, the youngest unit was normally Layer 1. This sequence also applied to arbitrary units (levels). In the Trash Mound natural units were numbered in reverse, starting with the oldest units because recording the layers was started after the trenches were completed.

Floors. Floors were numbered sequentially as they were discovered within a major provenience unit. For instance, Floor 1 is always the uppermost floor encountered, thus representing the last formal use of an area. The highest numbered floor within a provenience usually represents the oldest floor. A notable exception to this rule is found on the eastern side of Plaza 1 where Test Trench 1 floors were numbered in reverse order because the floors were identified in the profile after the digging was done.

Floors and surfaces are similar in meaning with both referring to a horizontal use area. By definition, floors are prepared (and usually found in rooms), and surfaces are trampled or weathered deposits with a notable lack of formal preparation (and usually found in the plazas). Crew members and the original site inhabitants did not always share this distinction, so there is some overlap in the floor/surface usage.

Floor Features. Features were numbered sequentially within classes (i.e., Posthole 1, Posthole 2, etc.) as they were discovered for each floor. Numbering started anew for each floor so that the floor association qualifier was paramount to avoid redundancy of feature numbering except in a few plaza areas. Pre-excavation photos of each feature, however, forced a feature identity to be recorded on the photo board. Sometimes, then, a feature would be misidentified, although the original identity was often kept to avoid lengthy coding changes. In Rooms 139 and 145, however, the features on the lower floor common to both (Floor 2) were renumbered in the east sector (under Room 145) to avoid duplicating feature identity under Room 139.

Wall Features. Features in walls posed a special dilemma and, thus, numbering of them took exception to the rule for floor features. Features limited to within a single general provenience unit (i.e., the walls within a room) were numbered consecutively by feature type without regard to the floor qualifier (because associating wall features to the proper floor was often impossible). For example, all 12 wall niches in a room would be numbered consecutively regardless of the floor series. Features common to two or more architectural spaces (e.g., doors and air vents), however, were numbered consecutively throughout the suite being excavated because of the impracticality of numbering all doors and vents throughout the site. Unfortunately, this led to three numerical sequences of doors and

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site. Unfortunately, ths led to three numerical sequences of doors and vents (in Room 103, in the remainder of the West Wing excavations, and in the Central Roomblock excavations), which will conflict with future numbering if additional excavation ever occurs.

Rooms. Room numbering at Pueblo Alto started with Room 100 in anticipation of multiple stories. This system was to facilitate inventory coding and story recognition by assigning blocks of 100 for each story. Alas, "the best laid plans of mice and men go awry"--much to our surprise, Alto was a single-story house. This discovery explained why viga holes were never observed during wall clearing; the wall tops containing the sockets had all disintegrated. An attempt was made to number contiguous rooms consecutively so that the problem of relocating a room on the map did not suffer the frustrations apparent at other greathouses (e.g., Pueblo Bonito). Room numbers were assigned on the basis of the last enclosed space observable from wall clearing. In one case, two rooms clearly defined on the surface were later found to share common fill and floor surfaces under the uppermost flooring in both rooms. At this point, the room number for the smaller room (Room 145) was dropped and the larger (Room 139) retained for the initial larger space. A similar situation existed in the space designated as Kiva 15 and Room 109, which overlay a larger initial room (Room 110). Room 143 and Room 236 were also partitions of an earlier, larger room designated as Room 143.

Exceptions to the above room numbering scheme were made to facilitate room identification in house blocks unattached to the main Alto rooms. Some of these house blocks were recorded as features of Alto while others retained site numbers assigned during the inventory survey (see Chapter 4). Again, contiguous rooms were numbered consecutively, but starting with 1. Those numbered as features of Alto were the Rabbit, Parking Lot, and East ruins as well as Plaza Feature 1. A slight exception to the rule occurred at East Ruin, where the kiva was assigned 1 and the first room numbered started at 2. The restrictions of the coding forced individual units (rooms and kivas) at these separate house blocks to be given consecutive numerals of the general provenience (e.g., 28-001, 28-002, 28-003, etc., for the East Ruin: Kiva 1, Room 2, and Room 3, respectively). New Alto was given room numbers long before our presence at Pueblo Alto, but the format is similar. A final oddity occurred with the discovery of the two early rooms under the Central Roomblock. We did not wish to give them 100 series numbers, which might confuse the unwary, and thus were left with room coding numbers 1 through 99 to use. Their location in the center of the line of roomblocks prompted usage of the middle numbers; thus Rooms 50 and 51 were born.

Plazas. The three large outdoor spaces partly or wholly enclosed by manmade structures were designated plazas. The central one (Plaza 1), enclosed by the Pueblo Alto rooms and southern arc walls, was divided with a transit into 4-m-square grids. All grids were aligned on true north with rebar placed every four meters across the north and west perimeters.

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Permanent rebars set in concrete at the four corners were left at the conclusion of the work. Starting in the northwestern corner, grids were numbered consecutively from west to east through Grid 270. A narrow strip against the West Wing just outside the initial grid system was also subdivided and assigned grid numbers 300 through 311. The system is designed so that contiguous north-south grids reflect numerical multiples of 20 (e.g., Grids 9, 29, 49, etc.) except in the 300-series grids. A similar system, starting again with Grid 1, was implemented for Plaza 2, the area east of the East Wing. Plaza 3, south of the enclosing arc of the house, was neither gridded nor investigated. When major features (e.g., kivas, etc.) were discovered in the plazas, the grid designation was dropped in favor of the new major provenience designation.

The four initial trenches that crossed Plaza 1 in 1976 were coded as sections of Plaza 1, Test Trench 1. The testing in the plaza by Richard Loose in 1975 was designated Test Trench 2 and those trenches dug in 1977 between the West Wing and Plaza Feature 1 became parts of Test Trench 3. No screening was done for the 1976 testing except where early trash was encountered in Grids 202-203. Otherwise, the trenching was primarily an exercise in aeolian sand removal.

Plaza Features. Major proveniences in the plazas not fitting standard terminology were designated Plaza Features regardless of plaza association. These were numbered consecutively as they were discovered. Plaza Feature 1 turned out to be a small roomblock in Plaza 1 and consequently the rooms within it were numbered from 1 to 5. Plaza Feature 2 is an earthen mound bordering Plaza 2; Plaza Feature 3 was an enclosing wall next to Kiva 12 and was subsequently dropped from usage; Plaza Feature 4 is a small kiva next to Kiva 12; and Plaza Feature 5 is a shrinelike feature in the center of Plaza 1 (see Volume II).

Other Structures. Areas enclosed with walls within Pueblo Alto that did not fit standard room or kiva shapes were designated "Other Structures" (abbreviated OS) and numbered consecutively as they were wall cleared. This designation was not consistently applied, however, and several similar (but smaller) units in association were tagged with room numbers or left unnumbered (next to Kiva 7). Most Other Structures were large, nonrectilinear spaces or long, narrow spaces enclosed by close parallel walls associated with the southern enclosing arc (Table 3.3). (OS 4 and OS 13) were stuck on the exterior southeastern and southwestern corners of the house. Two others (OS 1 and OS 2), located next to Kiva 2, were small masonry boxes that probably are ventilator shafts for a post-A.D. 1100 kiva placed into Room 223. All thirteen are presumed to be post-A.D. 1100 additions on the basis of the masonry style, wall abutments, and ceramics. Many of these are filled with early A.D. 1100s trash. OS 5 was partly excavated and OS 3 was trenched (Volume 2), but none of the others have been investigated.

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Circular Structures. A subclass of Other Structures were areas partly enclosed by circular walls that did not appear to be kivas. Only two areas were so designated and numbered: a small enclosure in the southeastern section of the southern enclosing arc and an area enclosed by two parallel walls built against Rooms 110 and 119 and popularly known among the field staff as the "biwall structure." The latter exhibits "McElmo" block masonry, although both apparently were constructed in the early A.D. 1100s.

Kivas and Miscellaneous. Kivas and most other general proveniences (see inventory coding) were numbered sequentially at the time of discovery starting with number 1 (e.g., Kiva 1, Kiva 2, etc.).

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Appendix F

Analysis of Two Magnetic Surveys in Chaco Canyon National Monument: Pueblo Alto and 29SJ633[a]

Connie Bennett and John Weymouth

Introduction

The ability of a magnetic survey to locate subsurface prehistoric features depends upon the features themselves and the environment in which they are found. Before 1977, the American Southwest was a cultural and environmental region where the technique of magnetic surveying had not been vigorously tested. Thus, as a part of the ongoing archeological investigations at Chaco Canyon National Monument in New Mexico, a series of small magnetic surveys were conducted at two sites, Pueblo Alto and 29SJ 633, as feasibility studies to determine the practicality of magnetic surveying there.

The Pueblo Alto survey took place in 1977 and investigated several distinct kinds of features including stone-lined hearths, kivas, room blocks, walls, and a road located in three different areas of the site.

Survey Procedures

The surveys were conducted using two proton magnetometers of 1-gamma sensitivity, one of which measured the intensity of the earth's magnetic field at grid point locations and the other at a reference station. The data were recorded with the logger system developed by the Midwest Archeological Center, which also provided the survey personnel under the direction of Robert Nickel. Because this investigation was part of a feasibility study, the areas surveyed consisted of traverses as well as large, two-dimensional areas. Regions of varying dimensions were labelled "blocks," which permitted convenient data collection and subsequent manipulation and analysis.

The usual method of survey was to take measurements of the earth's magnetic field from a position 60 cm above the surface with readings

[a]The section relating to 29SJ 633 was not included here but will be incorporated with a forthcoming report on that site (TCW).

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spaced 1 m apart. When necessary, additional information about the subsurface features was obtained by changing the sensor height and decreasing the grid spacing, or by simply repeating the measurements several times to get a more accurate reading for a particular region. The investigatory nature of this study provided the opportunity to test all of these alternative methods at the Chaco Canyon sites. The specific method used in each region along with the rationale for its use and the results will be presented in the results section.

Data Analysis

Once the data were entered into the computer, the first step in the analysis was to subtract the reference values from the data values. The results were then placed in a matrix and used as the basis for the mapping programs developed by NEBCAR (Nebraska Center for Archaeophysical Research). When the measurements of the magnetic field were taken more than once at any location, the different values were averaged and the average value placed in the matrix. The contour maps presented in this report were produced by SYMAP (Harvard Laboratory of Computer Graphics) and usually divided the data into one 1-gamma or 2-gamma contour intervals.

Pueblo Alto Results

The 1977 magnetic survey at Pueblo Alto investigated three major areas. The first region contained four adjacent blocks (A, C, E, and D in the northeast area of Plaza 1) covering 178 m^2. The second area, called the East Ruin, consisted of three traverses across an unexcavated kiva, and the third region measured the magnetic field in two traverses across a prehistoric road (RS 40) and adjacent wall (Major Wall 3). Each area was analyzed separately.

The line drawing in Figure MF-F.1 shows the spatial relationships among Blocks A, C, D, and E. Block A, done at a 1-m-grid spacing, has a coordinate system separate from Blocks C, D, and E, which were surveyed at a 0.5-m interval. Figures MF-F.2 and MF-F.3 present the magnetic data of Blocks A, C, and D at the same scale, along with a blowup of Block E. In Block A (Figure MF-F.2), at the northwestern and southeastern corners (8N-1E and 1N-15E) large, high anomalies indicate the locations of iron rebars used as archeological grid markers. Two other high regions, one centered at 4N-6E and the other at 7N-11E, are anomaly patterns that may reflect prehistoric features, possibly burned. The latter anomaly has an extension to the south that may indicate the continuation of structural remains in that direction. Evidence of plaster pieces on the surface at 7N-6E support this hypothesis.

Figure MF-F.3 displays the data from Blocks C, D, and E. A portion of the rebar anomaly occurs in Block D at 11N-29E. The most obvious

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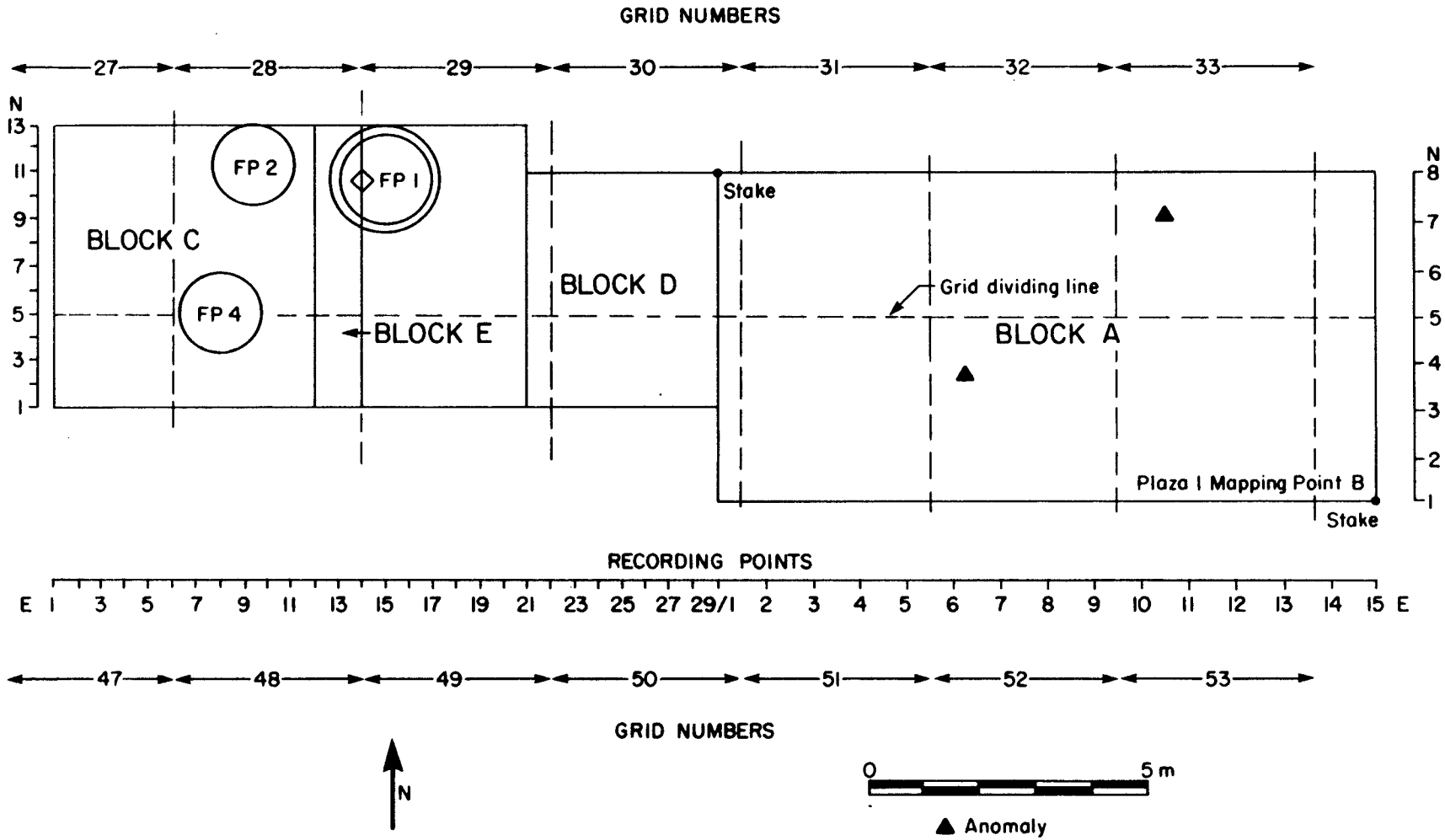


Figure MF-F.1. Magnetic survey blocks in Plaza 1, Grids 27-33 and 47-53, at Pueblo Alto.

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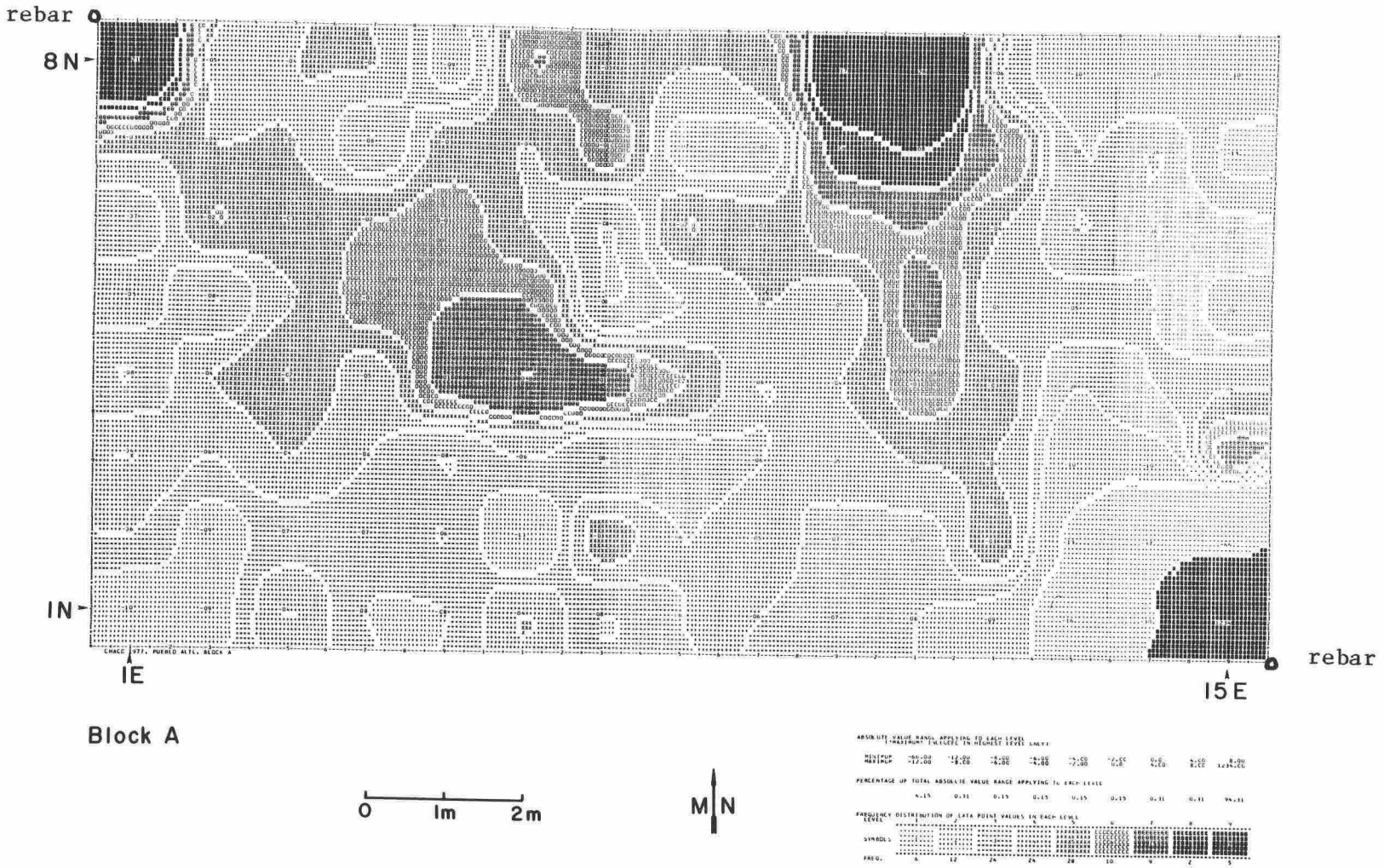


Figure MF-F.2. SYMAP depicting the magnetic field in Block A (Plaza 1, Grids 31-33 and 51-53). Anomalies in the upper left and the lower right corners were caused by rebar grid stakes. Anomaly in the center was not tested.

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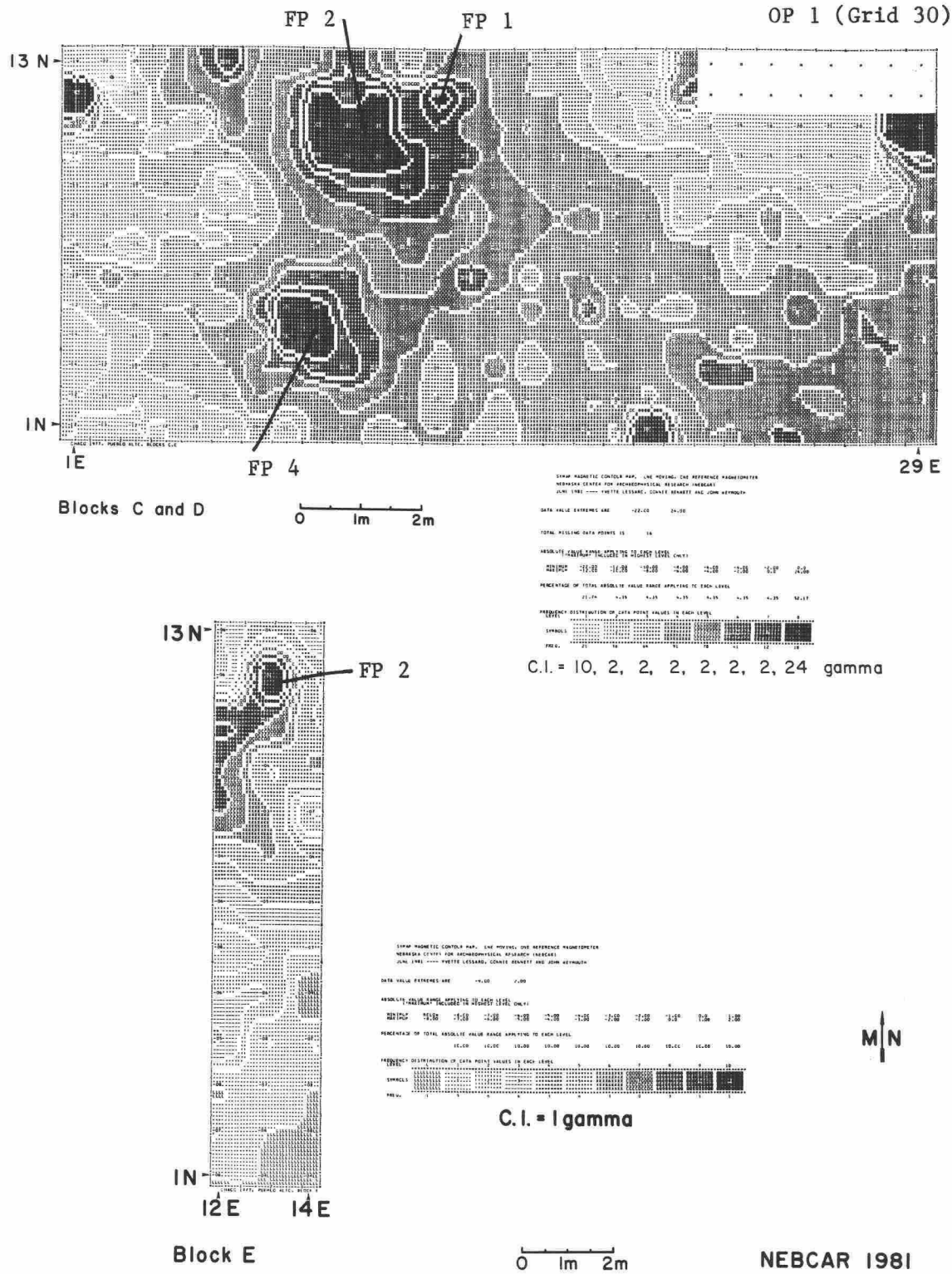


Figure MF-F.3. SYMAP depicting the magnetic field in Blocks C-E (Plaza 1, Grids 27-33 and 47-53). Note the anomalies caused by the burned firepits.

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anomalies in Block C, centered at 4N-8E abd 11N-10E, are caused by stone-lined features, which are thought to be fire hearths. Portions of the stones were visible on the surface. The anomalies themselves are distinctive but not actually very large (10 gamma). This relatively small magnetic response to a burned feature indicates the necessity for sensitive measurement of the earth's magnetic field at this site to locate more subtle features. It also supports the conclusions previously stated about the anomalies in Block A.

The large masonry-lined firepit or tiny kiva (labeled Firepit 1) in Block C (Plaza Grids 28/29), though evident on the surface, does not produce a recognizable anomaly pattern. To get a more sensitive measurement, Block E covered a portion of the firepit in three traverses that were each repeated four times. The averaged data displayed in Figure F.3 give a slight indication of a low anomaly pattern that is probably associated with the firepit. The small, high anomaly at 12N-13E may be caused by a small hearth (Firepit 2) on the edge of the firepit. Two other anomalies occur on the edges of the Block C data (at 1N-20E and 12N-1E). These could have archeological significance, but the data are insufficient to make any speculations.

To get an indication of the reproducibility of the magnetic field measurements, a statistical analysis was performed on the repeated traverses of Block E. For each grid point an average was calculated. The square root of the average of the squares of the deviations of the values from each of their respective grid point averages is 1.34. This means that the repeatability of the measurement was as good as could be expected under good conditions. The averaging of values does eliminate some of the scatter of measurements around the actual reading. Therefore, the averaged value is a more accurate representation.

Figure MF-F.4 shows three traverses crossing a known court kiva and a roomblock wall adjacent to it at the East Ruin. A small backhoe trench ran through the kiva. The only conclusive evidence of features is the wall, which produced a low anomaly surrounded on both sides by high regions--possibly where top soil and/or refuse had accumulated. Neither the kiva nor the backhoe trench show up in the magnetic data. The identification of anomaly patterns on archeological sites, however, particularly when the features produce small changes in the earth's magnetic field, is the basis of most successful interpretation, rather than single-anomaly analysis. In this case, it appears that only three traverses do not provide enough data to allow a pattern to emerge in the anomaly configurations. It is possible that, with more sensitive measurements over a larger area, the kiva could be identified on a magnetic map.

The third region at Pueblo Alto consists of two traverses across a road (RS 40) and adjacent wall (MW 3). The road and wall run north and south by the Trash Mound, and the traverses run east and west. Each

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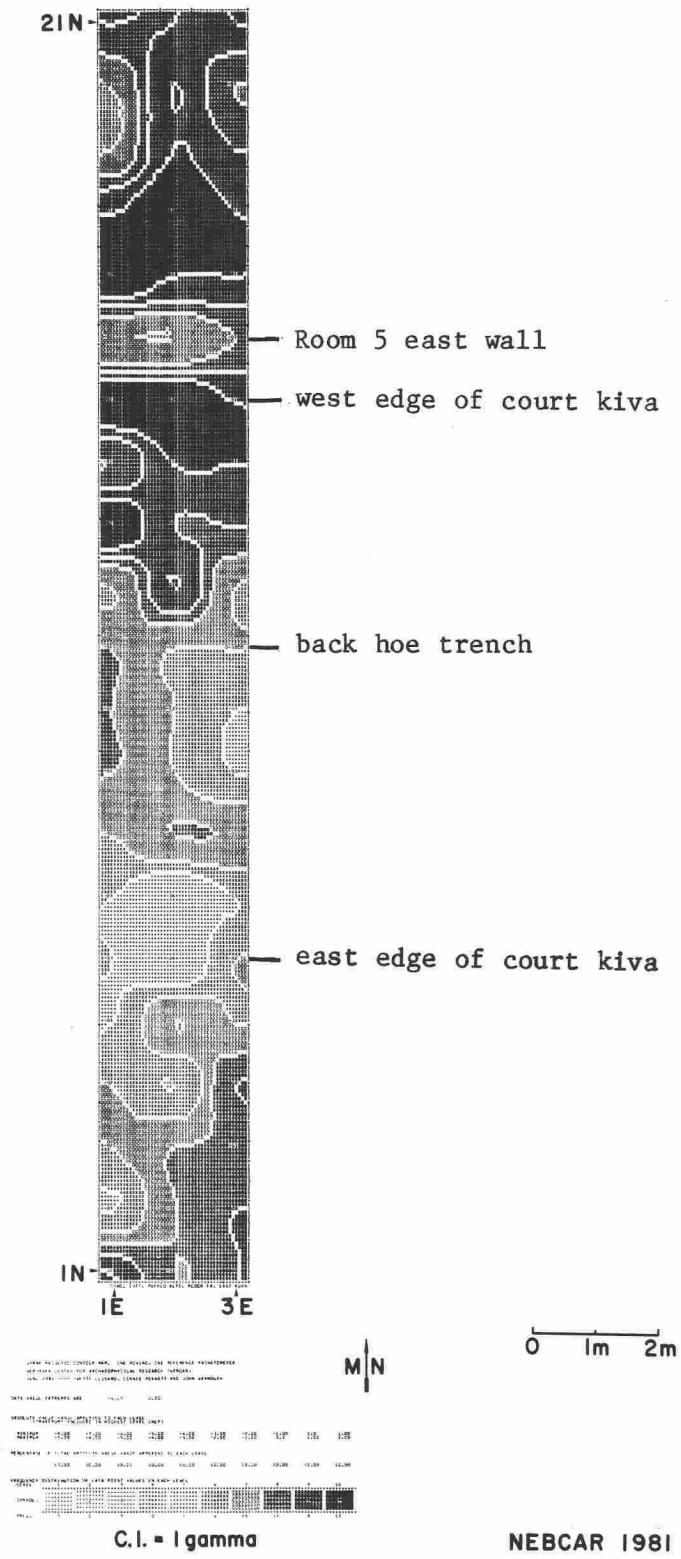


Figure MF-F.4. SYMAP depicting the magnetic field along a transect across the East Ruin court kiva and Room 5.

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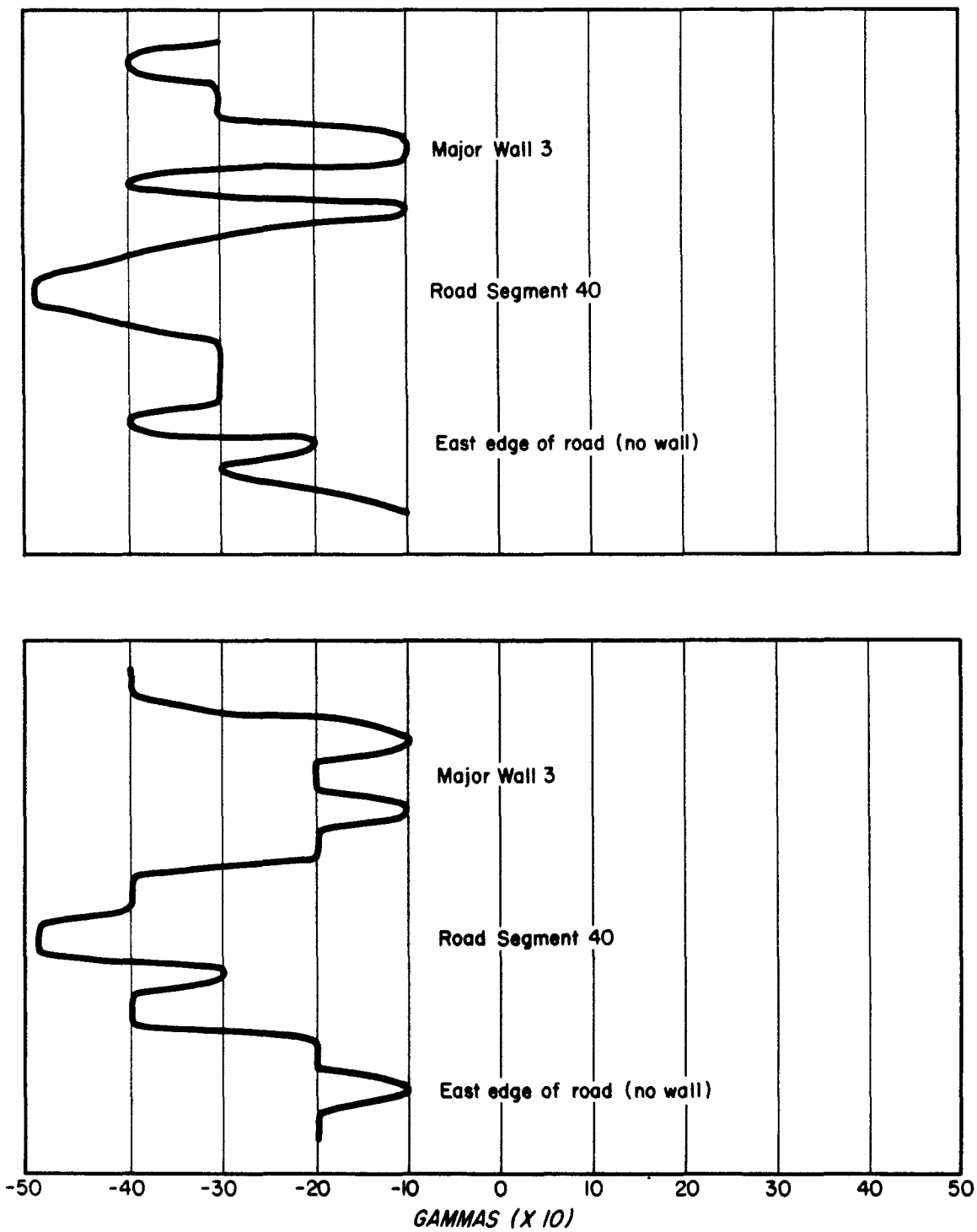


Figure MF-F.5. Graphs of magnetometer readings across prehistoric Road Segment 40 and Major Wall 3 next to the Pueblo Alto Trash Mound.

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traverse was repeated four times so the average values are what appear in the profiles in Figures MF-F.5a and MF-F.5b. On both traverses, the road consistently appears as a low anomaly. The stone wall is relatively higher but shows some fairly strong undulations in the magnetic field.

Summary

The magnetic surveys at Pueblo Alto located indications of burned features, a wall, a road, and possibly a kiva and surface structures. These features would have been better defined had larger areas been surveyed to establish the magnetic background and to allow anomaly patterns to emerge. Given the exploratory nature of the survey, however, the data collected gave positive evidence that proton magnetometers can be used beneficially at sites in Chaco Canyon. The subtle magnetic anomalies observed in these data would be more informative if they had been measured by 1/4-gamma instruments, which are now available. This study shows that the magnetic survey technique is able to locate prehistoric features in the American Southwest cultural and environmental region. Since these data were collected, other research using 1/4-gamma instruments in southwestern Colorado has proven that magnetic surveying not only can locate the features, but can also provide information about size, depth, degree of burning, orientation, and internal feature configuration (see Burns et al. 1984; Huggins and Weymouth 1983).

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Appendix G

Stabilization and Back Filling

Thomas C. Windes

Stabilization

Little stabilization, if any, had been done at Pueblo Alto before the advent of excavation in 1976. Earlier reports of stabilization at "Pueblo Alto" inevitably refer to New Alto (29SJ 388), the smaller multistory "McElmo"-style ruin just west of Pueblo Alto (Morris and Kayser 1966; Vivian 1947). Alto had few exposed standing walls that would have required stabilization before 1976. No concrete, soil cement, or rebar were observed in the site before our work, and the first stabilization report for Alto was compiled only recently (Trott 1982).

When wall clearing started in July 1976, we arranged with the park to have a stabilization crew follow the work to cap the walls. They set the top few courses in soil cement and filled the interstices in exposed wall veneers. At every wall junction, 20d nails were placed as potential subdatums for excavation. The stabilization crew of six to eight men was not supervised by an archeologist so that occasionally features exposed in the tops of walls (i.e., ventilators) disappeared or became filled with masonry that altered the archeology. Rarely there was a noticeable change in the masonry style caused by stabilization (e.g., of Circular Structure 1, better known as the "biwall structure," and the Major Walls) when block masonry began taking on a banded appearance. This is not to say that the stabilization work was poor. In fact, it is quite good, but it can never duplicate the original fabric and sometimes subtly alters the previous masonry style. This is an ongoing problem that has recently been examined (Mathien and Windes 1984). Such changes are difficult to measure quantitatively, and they need much better documentation (see Lekson 1983:7). Closer coordination between the stabilization crews and archeologists is needed, particularly when cultural material is being unearthed.

The speed of the stabilization crew increased the urgency of the wall-clearing crews. In addition, two archeologists were recording each wall abutment by clearing the corners and taking notes and photographs. This was time-consuming and created some delays for the stabilization crew. Coordinating the three wall parties without allowing corners to become stabilized before recording was a task.

At no time during the project was a clear decision made to leave the excavations open for future interpretation, although this was an initial

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goal (Lister and Lister 1981:157). To have left the features open would have entailed stabilizing the exposed wall veneers of the excavated rooms, as well as those unexposed and adjacent, because of pressures exerted by the adjoining fill. This would have necessitated further excavation (along the walls in the unexcavated rooms) with little archeological supervision and would have required long-term maintenance of the ruin. The problem was resolved when the site was backfilled during and at the end of the excavations. For now, there are no plans to reopen Pueblo Alto.

From our viewpoint, backfilling the site was the best solution for several reasons. There were plenty of rooms exposed in other greathouses to allow for interpretation. Shortly afterwards, spiraling ruins-maintenance costs forced the NPS to backfill some other sites (i.e., Una Vida and some Bc sites). And, finally, stabilizing walls in unexcavated rooms has inevitably led to deep trenching and the disturbance of cultural material that is difficult to accurately replace in context for future work. It also is an unjustifiable destruction of the resource.

Backfilling

Backfilling of rooms began before excavation at Pueblo Alto was completed. Two crews of high school students from the Student Conservation Association of Charlestown, New Hampshire, helped substantially with the backfilling. Most excavated rooms were filled by backhoe with white sand from the Escavada Wash and then capped with a layer of backdirt (mostly screened material). The white sand should keep the fill well drained and protect the wall plaster and the few wall paintings encountered. With one or two exceptions, plastic was not left to cover floors or walls because it traps moisture. The breakdown of fill materials for the various backfilled features is as follows.

Plaza Feature 1 (Rooms 3-4): backdirt
Room 103: backdirt
Room 110: white sand
Room 112: white sand
Room 229: backdirt
Trash Mound: white sand/backdirt
East Ruin, Room 6: plastic/backdirt
Plaza 1, east trenches: backdirt
Plaza 1, west trenches: backdirt
Plaza 2 tests: white sand/backdirt
Other Structure 5: white sand
Miscellaneous tests: backdirt
Room 138: white sand
Room 139: white sand
Room 142: white sand
Room 143: white sand
Room 145: white sand
Room 146: white sand
Room 147: white sand + plastic
Kiva 10: lower: white sand
upper: backdirt
Plaza Grid 8: white sand
North Trench: white sand

An effort was made to exclude stone for backfilling, and mostly only small fragments from unscreened wall-fall deposits went back into the rooms. The masses of construction stone pulled from the initial layers of the trash mound, however, were tossed back in, and then the entire trench and booth system filled with sand and capped with dirt.

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Appendix H

Preliminary Sedimentologic Analysis of Roof Adobe from Pueblo Alto

David Love

Abstract

Sedimentologic analysis of 20 specimens (including 6 duplicates) of adobe from roofing materials excavated in Pueblo Alto indicates two major sources for adobe. Six "tan" specimens appear to be derived from soil adjacent to Pueblo Alto (see Appendix MF-I). Seven "gray" specimens appear to be derived from a channel margin in one of the major washes. One specimen was burned and could not be disaggregated. Tan specimens are interpreted to come from the vicinity of Pueblo Alto and appear to have been stripped from soil horizons. Differences in gray specimens may reflect proximity to a through-flowing channel in Chaco Canyon or the Escavada Wash. The overall grain-size distribution of both types of adobe is very similar and may reflect selection of natural sediments with similar physical properties. Mixing of sediments by Anasazi masons is considered unlikely. Inclusion of bark in some specimens from both sources may be intentional. Incorporation of charcoal, seeds, and fragments of sandstone in adobe appears to be incidental. These results suggest that more sophisticated procedures of analysis of roof adobe may be used to interpret details of roof construction, labor investment in obtaining adobe, and perhaps chronology of roofing and room modification.

During excavation of rooms and trash at Pueblo Alto, numerous specimens of roof adobe were found. The roof adobe contained impressions of vegetative materials used in room construction, and varied in color and physical properties. Because these properties could indicate possible choices made by the inhabitants of Pueblo Alto, analyses were run to determine some of the characteristics of roof adobe. The samples were assigned numbers by Tom Windes and the analyses carried out "blind" so there would be no bias in treating the samples. The results of the analyses of the vegetative impressions are found in Ingbar (1979). The physical properties of the adobe were determined by standard sedimentological techniques.

The initial analyses were done in 1979. When problems arose with clay flocculation, the samples were set aside and a preliminery report was written. In 1985 and 1986 the silt-clay fractions were reanalyzed at the New Mexico Bureau of Mines and Mineral Resources.

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Introduction

Procedures

Approximately 30 gm of roofing adobe were dried and weighed to the nearest hundredth of a gram. Each specimen was soaked in 100 milliliters of deionized water for at least 24 hours and stirred with a teflon stirring rod to disaggregate the adobe. Differences in water color, kinds of organic flotsam, and resistance to disaggregation were noted for the specimens during soaking and stirring, but no quantitative data were recorded.

After the specimens were disaggregated, the sand and coarse silt fractions were separated by trapping them on 62-micron and 37-micron sieves and washing the fine silt and clay through the sieves with deionized water. The sand and coarse silt fractions were dried and resieved through 0.5, 0.25, 0.125, 0.0625, and 0.037 millimeter (1, 2, 3, 4, and 4.75 phi) sieves. The size fraction caught on each sieve was weighed to the nearest hundredth of a gram. The size fraction less than 0.037 mm was added to the rest of the fine silt, and clay and water were added to make 850 milliliters of the mixture. The mixture was stirred thoroughly and allowed to settle for 3 hours and 32 minutes at 24°C. Then 10 milliliters of water bearing clay less than or equal to 2 microns was withdrawn using a pipette from a depth of 5 cm. Because all but two of the clay fractions appeared to have flocculated in the beakers, and because of time constraints, it was not possible to determine amounts of clay and clay mineralogy with the use of X-ray diffraction.

In 1985-1986, the flocculated silt-clay fractions were resuspended and washed using deionized water. The silts and clays were settled using a centrifuge and the fluid poured off. The clays were resuspended with deionized water. After four such "washings", the fine fractions were put in a blender with 750 ml of deionized water and totally resuspended. Then they were transferred to 1000 ml settling columns. The size fractions were determined using standard pipette procedures (e.g., Folk 1968). Clay samples were taken for x-ray diffraction following procedures by Love (1980). The clay proportions were then determined using procedures of Austin (n.d.) and are reported in parts per 10 (Table MF-H.1).

The sand-size fractions were examined under a binocular microscope to note any distinguishing characteristics of color, mineralogy, or organic content.

Grain-size distributions were calculated using the weights of the sieved and pipette fractions measured above. The results are given in Table MF-H.1 and in Figure MF-H.1. The data used for illustrating grain size distributions are weight percents. The X axis in the illustrations is the grain size in mm from .01 mm on the left to 1 mm on the right using a logarithmic (base 10) scale. The Y axis is the logarithm of the weight percent of a given size fraction standardized for the interval between

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Table MF-H.1. Characteristics of roof adobe from Pueblo Alto.

Sample Number	Color Group	Munsell Color	Largest Frag. size (mm)	WEIGHT PERCENT Sieve Analysis[a]					Pipette Analysis[a]						Clay Mineralogy				Comments
				1ϕ	2ϕ	3ϕ	4ϕ	4.75ϕ	5ϕ	6ϕ	7ϕ	8ϕ	9ϕ	PAN	Smectite	mixed	Kaolinite	Illite	
1129	gray	10YR6/3	3	0.43	3.47	27.44	19.14	5.74	1.49	2.42	2.99	4.89	6.10	25.90	3/10	<1/10	6/10	<1/10	gray shale frags.
1129D	gray	2.5Y 7/2	1	0.57	3.74	33.63	19.47	6.39	0.65	1.30	2.83	4.20	4.61	22.60	-	-	-	-	
1205	tan	2.5Y 8/4	6	1.93	1.88	18.21	27.91	10.86	2.10	3.34	2.86	3.08	4.03	23.80	1/10	2/10	7/10	1/10	shale and sandstone frags.
2425	gray	2.5Y 6.5/2	2.8	0.40	5.18	38.95	18.03	4.61	0.35	2.38	1.15	4.30	4.90	19.76	-	-	-	-	
2425D	gray	2.5Y 6.5/2	1.9	0.43	4.17	32.24	18.75	5.82	1.59	2.36	2.53	3.79	4.88	23.44	3/10	1/10	6/10	Tr	wood frags.
2745	gray	2.5Y 7/2	2	0.21	1.64	25.75	28.81	7.67	2.52	4.00	1.12	3.35	3.00	21.93	3/10	2/10	5/10	Tr	shale, carbonate, coal, charcoal.
2745D	gray	2.5Y 6/2	1.5	0.19	1.72	27.05	27.92	7.57	1.64	3.33	2.43	2.52	7.71	17.92	3/10	0	7/10	<1/10	
3135	tan	7.5YR7/4	3.5	1.04	0.64	9.64	32.17	16.12	3.78	5.03	2.93	3.20	3.46	21.99	1/10	1/10	7/10	1/10	exhumed B horizon.
5344	gray	?	1	0.34	5.38	34.02	19.96	6.00	0.66	2.35	2.16	3.40	3.79	21.93	-	-	-	-	
5344D	gray	2.5Y 7/2	2.5	0.53	4.32	34.06	21.56	7.03	0.60	2.72	1.80	2.59	3.05	21.73	3/10	4/10	3/10	Tr	bark.
5486	gray	2.5Y 6.5/2	3.5	0.66	2.05	22.90	23.06	7.31	0.27	2.39	2.53	1.81	4.87	32.15	2/10	1/10	6/10	1/10	chips of sandstone from block manufacture.
5807	tan	10YR7.5/4	8	3.18	2.39	18.98	27.77	8.60	1.83	2.49	2.59	3.61	4.02	24.55	-	-	-	-	carbonate and pebbles, bark.
5807D	tan	10YR8/4	6.5	2.17	1.59	18.48	28.42	9.85	1.65	3.23	2.94	3.70	4.59	23.37	<1/10	2/10	7/10	1/10	exhumed B horizon.
6030	tan	10YR8/3	4	3.08	2.61	19.82	24.20	6.79	1.02	2.44	2.34	2.79	3.79	31.12	<1/10	1/10	8/10	<1/10	exhumed C horizon (carbonate), bark.
6271	tan	10YR7.5/3	8	3.54	2.03	20.32	25.59	5.69	1.27	1.93	3.09	5.03	5.19	26.33	1/10	1/10	7/10	1/10	carbonate and pebbles, bark.
6757	tan	7.5YR7/4	3.5	1.16	0.54	9.65	31.55	17.08	4.06	4.34	2.24	2.75	3.09	23.55	2/10	1/10	6/10	1/10	exhumed B horizon.
7029	gray	2.5Y 6/2	1.5	0.23	4.14	32.62	22.57	7.39	1.50	2.56	2.86	3.75	4.58	17.81	-	-	-	-	
7029D	gray	10YR6/3	1.5	0.28	3.34	27.42	23.19	7.79	1.60	2.95	3.05	3.49	4.07	22.81	2/10	1/10	7/10	Tr	
7603	gray	2.5Y 7/2	2.2	0.22	1.03	10.92	8.24	2.32	0.42	1.07	0.84	0.68	0.93	7.06	4/10	2/10	4/10	Tr	bark.

[a] 1ϕ = 0.5 mm, 2ϕ = 0.25 mm, 3ϕ = 0.125 mm, 4ϕ = 0.0625 mm, 4.75ϕ = 0.037 mm, 5ϕ = 0.0313 mm, 6ϕ = 0.0156 mm, 7ϕ = 0.0078 mm, 8ϕ = 0.0039, 9ϕ = 0.002 mm, PAN = 6×10^{-5} mm.

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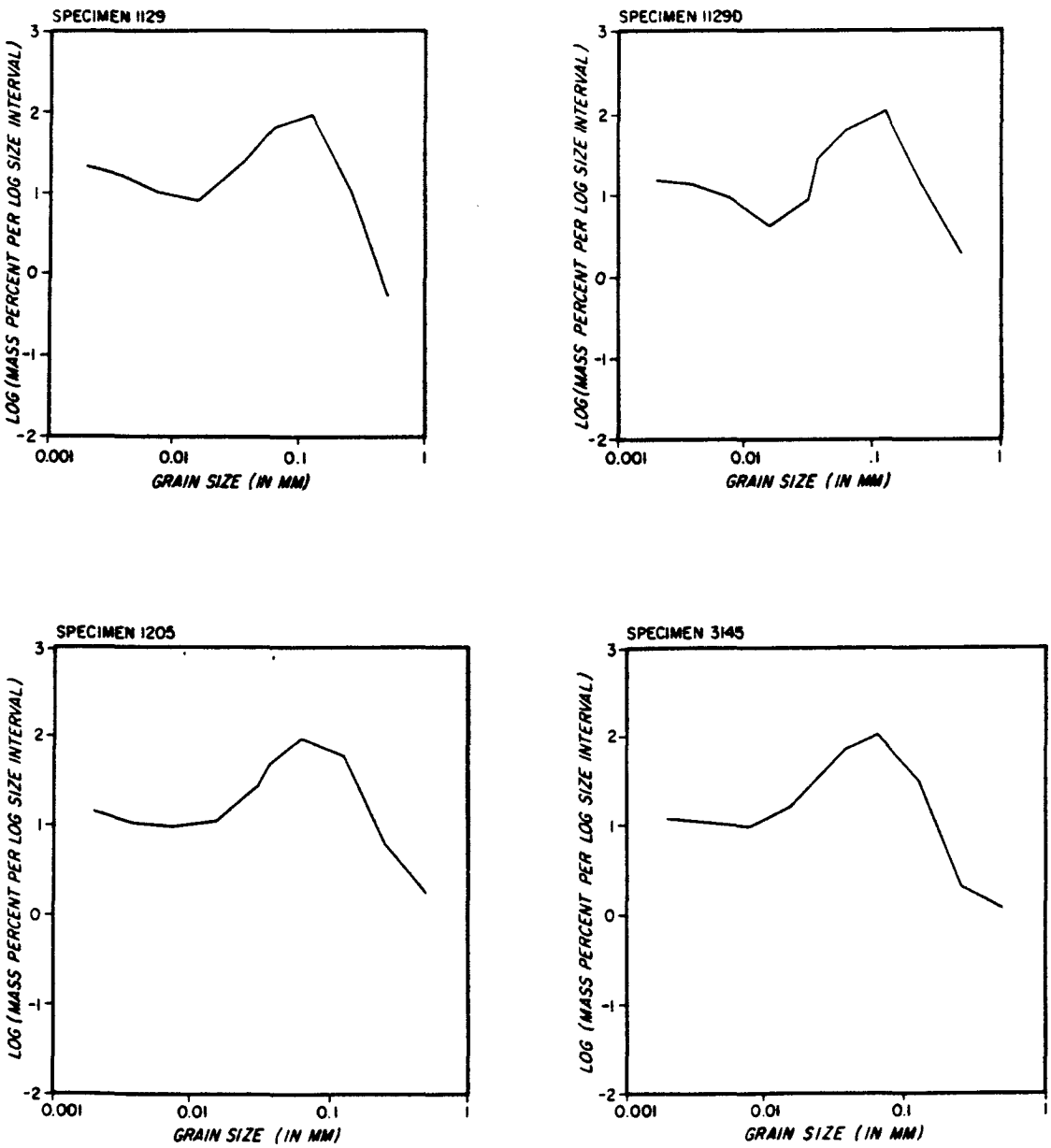


Figure MF-H.1. Grain-size distributions of roofing adobe from Pueblo Alto.

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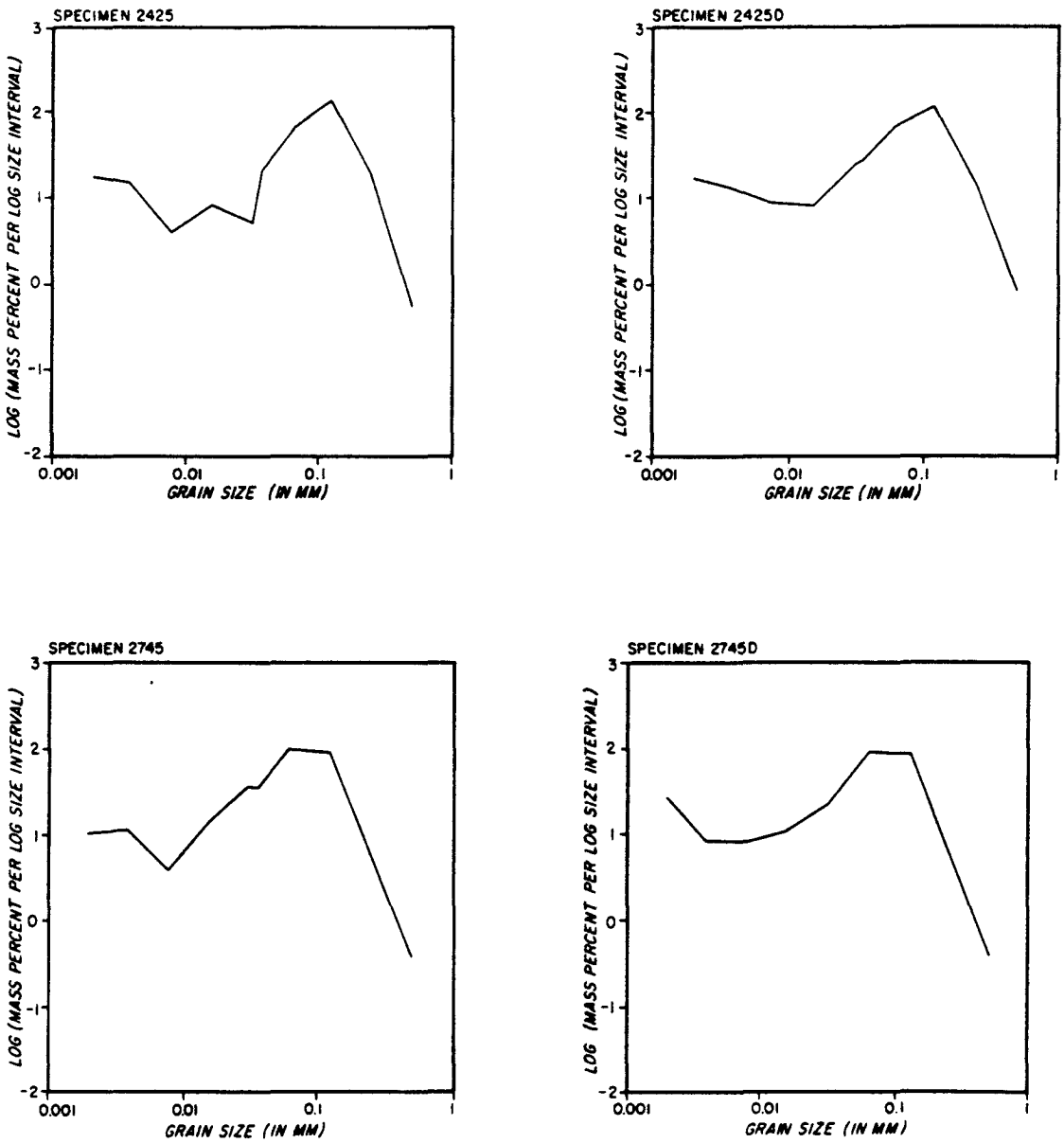


Figure MF-H.2. Grain-size distributions of roofing adobe from Pueblo Alto.

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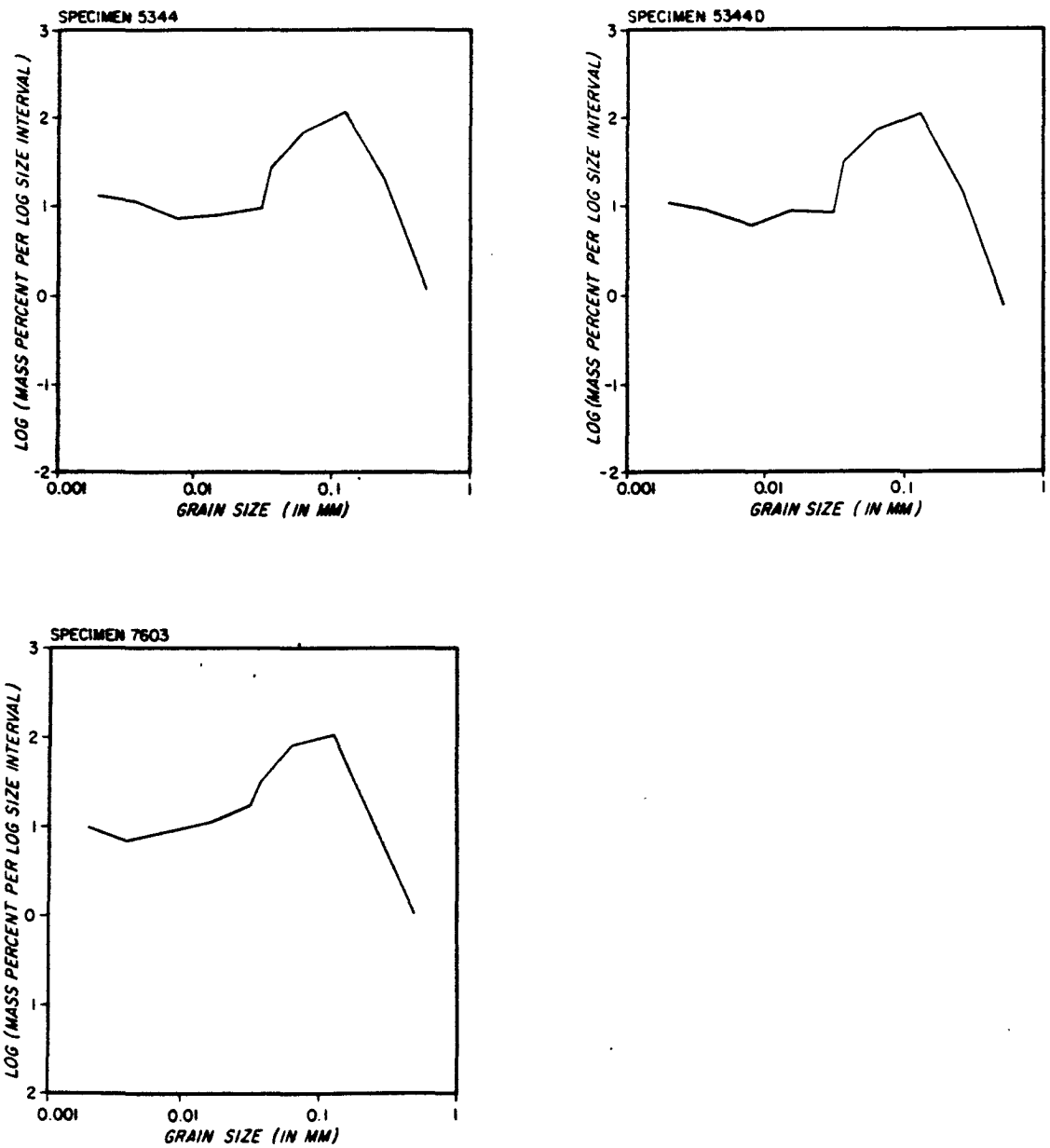


Figure MF-H.3. Grain-size distributions of roofing adobe from Pueblo Alto.

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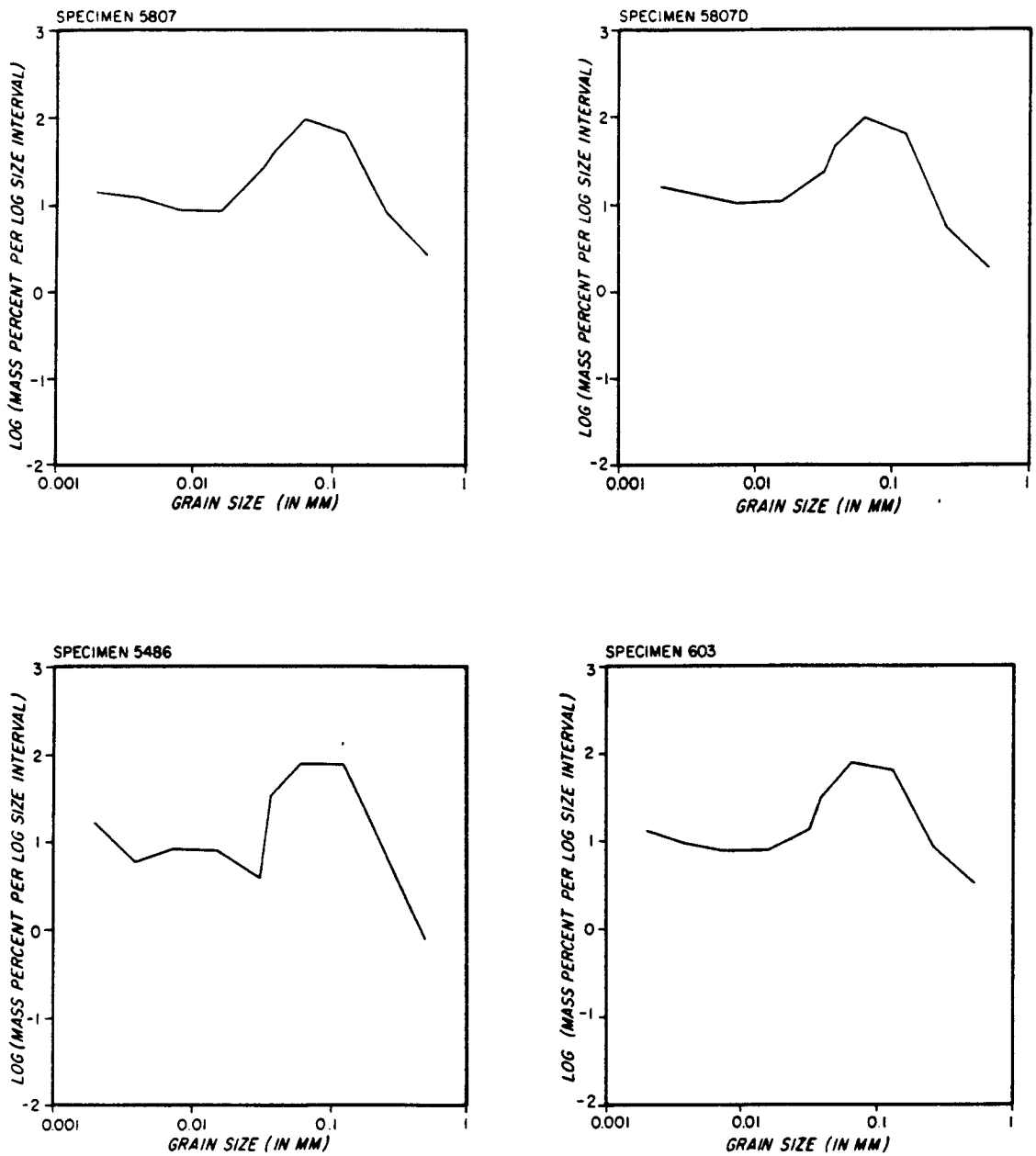


Figure MF-H.4. Grain-size distributions of roofing adobe from Pueblo Alto.

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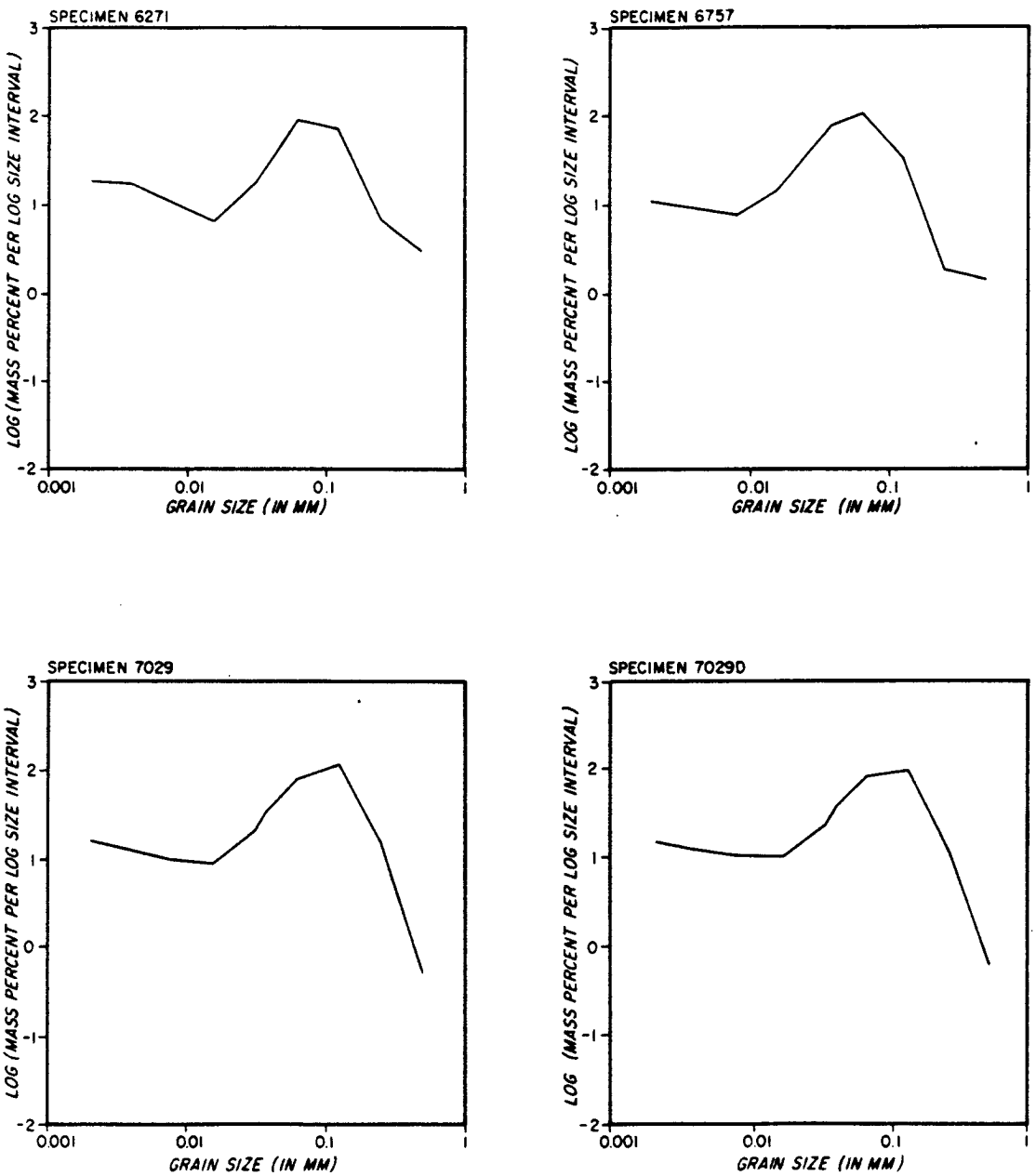


Figure MF-H.5. Grain-size distributions of roofing adobe from Pueblo Alto.

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sieves. The corresponding curve is a logarithmic frequency polygon of the grain-size distribution.

Although the grain-size distributions of adobe from Pueblo Alto were determined with only a few sieves and need to be refined, comparison of distributions with distributions from modern sediments in Chaco Canyon allow the interpretations given below.

Results

Color

Color differences of sand-sized fractions separate the adobe specimens into two major groups.

"gray"			"tan"		
1129	1129D	Room 103, Layer 2	1205		Room 103, Layer 3
2425	2425D	Room 139, Layer 6	3145		East Ruin, Room 6 kiva, Floor 1 fill
2745	2745D	Room 142, Layer 6			
5344	5344D	Kiva 15, Layer 6	5807	5807D	Room 229, Level 8
4536		Trash Mound, Grid 155, Level 10	6030		Room 146, Layer 3
			6271		Room 147, Layer 2
7029	7029D	Room 112, Layer 3	6757		Room 143, Level 7
7603		Room 138, Floor 1			

Within the tan group, 3145, 5807, and 6757 are slightly redder than the rest

Grain Mineralogy

The grain mineralogy of the sand-sized fraction of the adobe specimens is very similar in both "gray" and "tan" categories. The gray specimens appear to have more mica than do the tan specimens. Color appears to be due primarily to clay and iron oxide coatings on the tan grains rather than to differences in grain mineralogy. Rock fragments and root molds of calcium carbonate are more abundant in tan specimens than in gray specimens. Field Specimen 6030, in particular, has abundant clasts of calcium carbonate.

Clay Mineralogy

The "gray" specimens tend to have larger amounts of smectites and mixed layer clays compared to the "tan" specimens, which tend to have more kaolinite. However, the distinction is not clear-cut in all cases.

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Organic Content

Charcoal occurs in most specimens in the sand-sized fraction. Bark or wood chips are common in 5344, 5807, 6030, 6271, and 7603. Red, bean like seeds occur in 2435 and 5344D. Dark brown, flat-ovoid seeds occur in 6271 and 5807D.

Grain Size

The specimens exhibit three kinds of grain-size distributions for sand and silt. First, 1129, 2425, 2425D, 5344, 5344D, 7029, and 7029D have a modal grain size of 0.125 mm, have minor amounts of coarse grains and relatively minor amounts of silt and clay (generally less than 30 percent). Specimen 1129D differs from these only in the amount of the coarsest fraction. Second, 2745, 2745D, and 5486 have modal amounts at 0.0625 mm, but have nearly comparable amounts at 0.125 mm, minor amounts of the coarsest fraction, and nearly constant slopes of Y values between 0.125 and 0.5 mm (see Figures MF-H.1 to MF-H.5). Specimens 7603 and 1129D have similar constant slopes but have peaks at 0.5 mm. The constant slope of 1129D is caused by the amount of the coarsest fraction (well above 1129 or any of the other specimens in group 1 above). The third group of specimens consists of 1205, 3145, 5807, 5807D, 6030, 6271, and 6757. These specimens have modes at 0.0625 mm , have relatively large amounts of coarse grains, minor amounts of grains between 0.5 and 0.25 mm, relatively large amounts of grains between 0.25 and 0.125 mm, and relatively large amounts of silt and clay (generally greater than 31 percent). Specimens 3145 and 6757 are nearly identical and differ from the other tan specimens in the 0.25 and 0.125 mm fractions.

Irregularities in the frequency polygons in grain sizes between 30 and 62 microns probably reflect the change in technique from sieving to settling to determine grain size.

Discussion

The roof adobe specimens are derived from two distinct sources. The gray specimens appear to have come from the margin of a channel in Chaco Canyon or the Escavada Wash that was integrated with the headwaters of the Chaco drainage. Within the group of gray specimens are two subgroups based on grain-size distributions. The two subgroups could have come from different parts of the channel margin.

The tan group of specimens appears to have been derived from fine sandy sources adjacent to Pueblo Alto. Without sampling the deposits around Pueblo Alto for comparison, identification of aeolian versus local fluvial sources is not possible. The range in colors and amount of calcium carbonate nodules suggest that different parts of soil profiles were

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being used for adobe. For example, specimens 3145, 5807, and 6757 were slightly reddish brown and could have been derived from a Bt soil horizon adjacent to Pueblo Alto. Specimen 6030 has numerous calcium carbonate nodules and could be derived from a Bk soil horizon.

Overall, the gray and tan adobe have similar grain sizes. Both varieties may have been selected for their adobe-making properties from specific localities, because neither appears to be mixed artificially.

Bark or wood chips have been mixed with both types of adobe, but not in all specimens. Charcoal appears to be an incidental inclusion in many of the specimens, and seeds are incidental in a few adobe specimens.

Angular fragments of sandstone in specimen 5486 suggest that cleavage of sandstone to make blocks for masonry took place near the deposit that produced 5486.

Recommendations for Changes in Procedures

1. Adobe samples should be examined for vegetal fibers and impressions before disaggregation. Overall color of adobe should be noted.

2. The dry densities of the samples should be determined.

3. Size of sample should be increased from 30 gm to 100 gm. A larger sample will provide more coarse grains and organic flotsam for identification.

4. Behavior of specimens during wetting and disaggregation should be recorded. Water color after disaggregation should also be recorded.

5. Wet sieving should include a 0.25 mm sieve as well as 0.063 and 0.037 mm sieves.

6. Silt and clay should be centrifuged and washed several times to prevent flocculation of clay.

7. Grain-size analysis of sand and coarse silt should use quarter-phi sieves (sieves having at $\sqrt[4]{2}$ progression).

Other Recommendations

1. Samples of soil stratigraphy and fluvial sediments from the vicinity of Pueblo Alto should be taken for comparison with adobe specimens.

2. Channel-margin facies of the buried "post-Bonito" channel should be analyzed for comparison with adobe samples.

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Acknowledgments

The original analyses were done by D.W. Love at the Geology Department, the University of New Mexico. Reanalyses of the clays were done at the New Mexico Bureau of Mines and Mineral Resources by Sylveen Robinson-Cook, Mark Tieff, Chris McKee, and George Austin.

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Appendix I

A Consideration of the Soils and Foundations of Pueblo Alto, Chaco Canyon, New Mexico

Jeff West

Site Soils

Two borings were conducted at Pueblo Alto in early June 1978 by the U. S. Soil Conservation Service to determine local soil conditions. One boring was located 60 ft northwest of the ruin proper. The other was 50 ft south of the ruin on the east-west centerline. Both borings were taken to bedrock.

Pueblo Alto is situated on a soil layer 50-75 in. deep over the sandstone bedrock of the north mesa. The predominate soil type is of a poorly graded sand (SP) occasionally interlaid by lenses of a slightly plastic, silty sand (SM) type soil. The soils are well drained and show a natural water content of between 4 and 10 percent. The soils are predominately light yellowish tan in color.

Construction Factors

As a construction site Pueblo Alto has both positive and negative characteristics. The shallow depth to bedrock and the well-drained, sandy overburden provide an ideal site for adobe and masonry construction. The best case would be to place the walls directly in bearing upon the bedrock or, if this is impractical, to construct a simple foundation into the soil layer. Such a foundation would need to be no wider than the wall it was to support, as load spreading is not important for such soil conditions. As a result of the weight of the foundation and wall, natural consolidation of the site soil would take place. There is no better foundation than a slightly moist sandy material without clays over the bedrock. If the foundation were to be of stone and adobe, the binder material should be plastic to provide for adhesion and resistance to washout resulting from subgrade water percolation. The same materials should be used for the wall construction.

A site such as Pueblo Alto would, thus, be ideal for multiple-story construction. The only restraint on such construction would be that the site provided no protection from wind in any direction. The negative characteristic of the site is that soil types of the plastic nature required for such adobe construction are not available at or adjacent to the site proper. Such soils likely would have to be brought up from the

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canyon bottom for use. Subgrade exploration of several canyon-floor sites has confirmed the presence of substantial lenses of a moderately to highly plastic, grayish clay (SC) type soil that matches quite well with samples taken from construction at Pueblo Alto (Appendix MF-H).

Construction Materials at Pueblo Alto

Material samples were taken from three rooms of those under excavation in June of 1978: Rooms 103, 139, and 145. Results of laboratory tests performed upon these samples give several insights into the construction of Pueblo Alto.

Both the foundation mortar or binder and the plaster of the east wall of Room 103 are composed of a poorly graded, sand (SP) type soil and appear similar enough to suggest a common source. Further, it is reasonable to assume the entire wall was constructed in the same period with all soil materials coming from a single source. It is likely that the soil used for both foundation mortar and the plaster of the east wall of Room 103 was from the Pueblo Alto site. Probably it came from northwest of the pueblo and is quite closely related to the soil found between 36 and 44 in. in borehole No. 9. Both of these samples possess no plasticity and, therefore, contradict the construction methods as outlined above.

Seven samples were taken from the Room 139/145 group. Foundations at the northwest corner of Room 139 were examined, and it was noted that the west foundation was 2 in. shallower than that of the north. In addition, the west foundation contained 15 percent less stone than did the north wall foundation. This occurrence could reflect one of two things. First, construction from two different periods might be evident. Second, the builders may have noted the need for a more substantial foundation under an outside, load-bearing wall than for an interior wall and increased the size and rock content accordingly. If the second case were correct, then the ancient builders closely followed modern theories of optimum construction.

The mortar or binder of the south wall of Room 139 is of a clayey sand (SC) nature, which would be desirable for such an application. In contrast to the binder of the south wall, the plaster is a sandy (SP) type soil.

The foundation binder of the east wall of Room 139 is a soil of a clayey sand (SC) type. This same material is also used for the east wall mortar and is nearly identical to that found on the south wall mortar. As it is believed that the east wall of Room 139 was constructed at a later time than the south wall, it might be possible to conclude that a source of such soil was established and used for some time. Interestingly, the filler material of the east wall is of a sandy (SP) type, which indicates use of the site soil. The important conclusion, however, is that the major source of the adobe binder used in the construction of Pueblo Alto was not on the mesa top but, instead, below in the canyon or wash.

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Summary and Conclusions

The builders of Pueblo Alto chose an excellent building site but sacrificed easy access to preferred building materials. The site choice could also have been made based on a desire to place the pueblo at that location regardless of site considerations. Nevertheless, most of the adobe binder material found at Pueblo Alto in walls and foundations did not come from the immediate vicinity of the site but, instead, from the canyon and wash below. Because of the substantial effort required to bring the necessary quantities of such preferred materials to the Pueblo Alto site, it is reasonable to conclude that either the site or its location was what attracted its builders rather than proximity of building materials. For this, they paid the price with their backs.

With the exception of the materials found in Room 103, the construction materials and techniques found at Pueblo Alto reflect favorably when compared to modern techniques. Given a choice, the builder of Pueblo Alto chose to expend large amounts of additional effort to bring in select materials and to build sound walls and foundation structures. It seems unlikely that this was due merely to either chance or an inclination to masochism. More likely, the builders of Pueblo Alto came to the site, which they had choosen because of its location, and built the best structure they could, given their state-of-the-art technology in construction, and were willing to make the sacrifices that such construction entailed.

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Appendix J

The Origin of Thinly Laminated Sand Layers Beneath the Stairs in Room 112, Pueblo Alto

David Love

In August 1978, during the excavation of Room 112 in Pueblo Alto, stairs were discovered in Grid 29 near the southeastern corner of the room. Beneath the stairs were alternating layers of adobe and building-stone rubble, nonlaminated blocky sand, and extremely thinly laminated sand (Layer 5). The thinly laminated sand had been deposited in nearly horizontal units up to 2 cm thick. The units were thicker where they were draped against the east wall of the room. Two prominent layers of thinly laminated sand had slightly different colors; the upper one was slightly more tan than the lower one. Samples were taken to determine their origin and reasons for their colors. Sedimentologic analysis of the units was done in 1985 by the author, Sylveen Robinson-Cook, and Cris McKee of the New Mexico Bureau of Mines and Mineral Resources.

The lower laminated sand is "pale brown" (dry Munsell color 10YR6/3), whereas the upper laminated sand is "light yellowish brown" (10YR6/4). The colors of both units are probably caused by clay coatings on the grains. The clay fraction of the pale brown unit contains more smectite (i.e., montmorillinate) and less kaolinite than the light yellowish brown unit (Table MF-J.1). Yellowish brown kaolinite coatings in Chaco Canyon are common on sand reworked from the ledges of Cliff House Sandstone. The pale brown colors are associated with grains coated with smectite reworked from shales exposed above and below the Cliff House Sandstone and common in the Chaco and Escavada washes (Love 1980).

The grain-size distributions for the two thinly laminated units are almost identical (Figure MF-J.1 and Table MF-J.1), suggesting that they were laid down under extremely similar conditions.

The occurrence of these laminated units within a sequence of adobe and building-stone rubble within a room suggests that the room had been abandoned and that the roof plaster had begun to erode. The thinly laminated units appear to be wind laid (aeolian) and may be reworked from plaster in the room, once the room was unprotected from wind currents. The lower pale brown unit may have been reworked from outer layers of adobe wall mortar originally obtained from the banks of one of the major washes, whereas the upper, light yellowish brown unit may have been derived from locally-made adobe (inner plaster?) obtained adjacent to the pueblo (see Appendix MF-I) or from aeolian deposits upwind from the pueblo. The stairs were built on top of the rubble at a later time.

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Table MF-J.1. Analyses of laminated sands in Room 112 at Pueblo Alto.

Sample	Color	Clay Analysis: smectite	mixed	kaolinite	illite	Pipette method (in mm): 0.03	0.02	0.008	0.004	0.002	$6x10^{-5}$
gray sand	10YR6/3	2/10-1/10	<1/10-1/10	7/10-7/10	<1/10-<1/10	1.165	0.76	0.37	0.23	0.075	2.23
tan sand	10YR6/4	<1/10	1/10	8/10	1/10	1.25	0.315	0.16	0.205	0.04	1.84

Sample	Max. Inter. Dia.	Grain size analysis (in mm): 0.43	0.36	0.30	0.25	0.21	0.18	0.15	0.13	0.11	0.09	0.08	0.06	0.04
	0.50	0.05	0.05	0.12	0.21	0.58	0.93	2.95	4.91	8.32	5.48	3.91	2.79	2.71
	0.50	0.06	0.05	0.11	0.21	0.53	1.30	3.54	3.79	5.30	3.55	2.98	2.15	1.55

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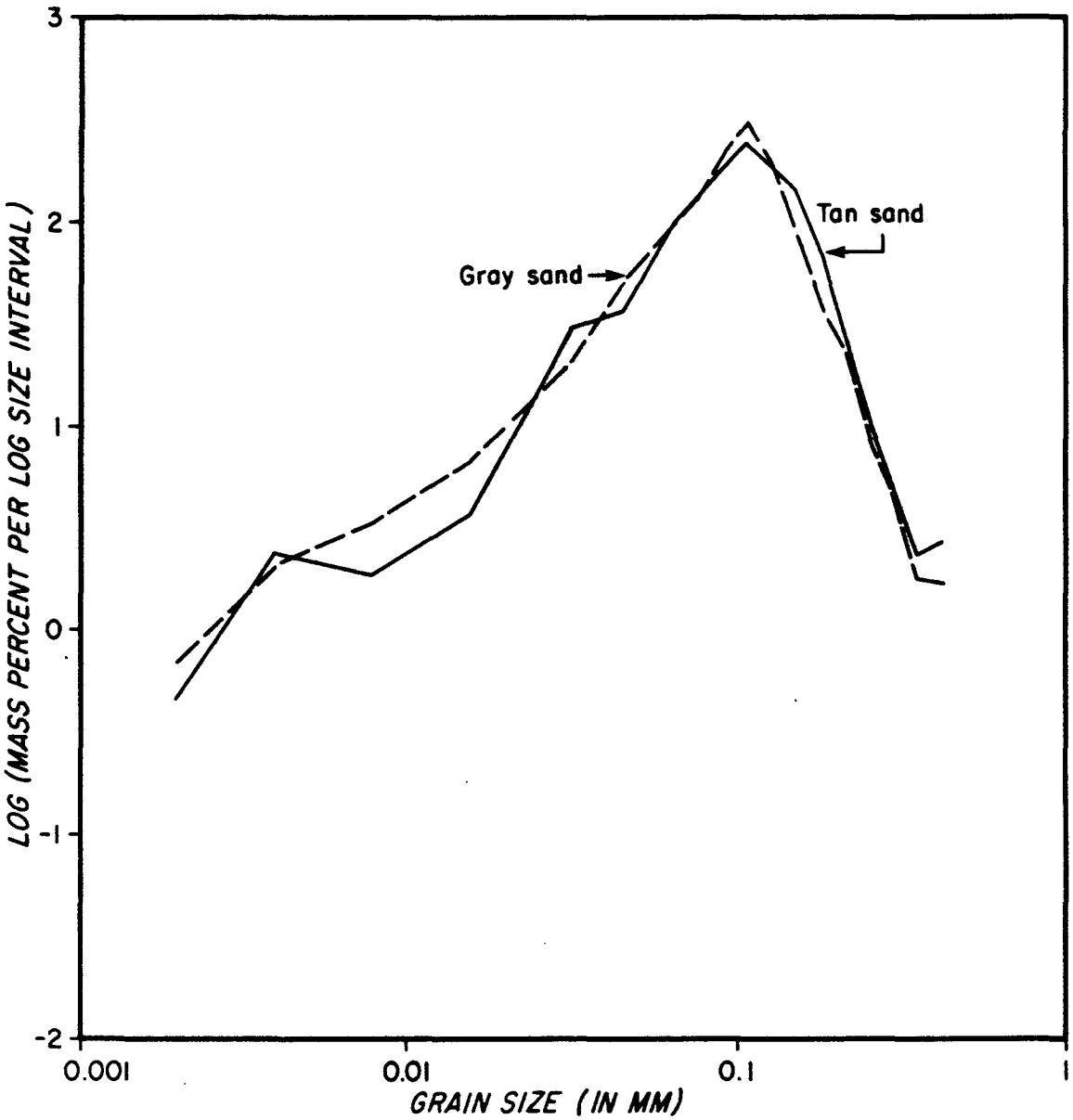


Figure MF-J.1. Grain-size distribution of the laminated sand units in Room 112.

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Appendix K

Trace Elements Analysis of Ponderosa Pine: a Preliminary Report

Thomas C. Windes and Robert Vaughn

Forests that produced the great quantities of large conifers found in the Chaco greathouses have been the subject of much speculation (e.g., Betancourt et al. 1986; Dean and Warren 1983:207; Vivian and Mathews 1965:7). In Chapter 7 the senior author attempted to match present stands of mixed large conifers with the mixed species recovered from greathouse excavations on the premise that there has been little change in the species of conifers present around the San Juan Basin over the past 1,000 years (see Betancourt 1984). An alternative approach to identifying probable timber sources for the Chacoan builders is attempted here by trying to distinguish different trace element signatures from various mountains surrounding the San Juan Basin. We know that a variety of sedimentary and igneous rocks form the different mountain ranges enclosing the San Juan Basin, and it is hoped that these differences would be reflected by the elements found in the conifers. Again, we assume that the ground chemistry has changed little over the past 1,000 years so that accordance between modern and prehistoric samples should be good. Trace elements in trees have been analyzed for other purposes, primarily for studies of air pollution (e.g., Baes 1985; Baes and McLaughlin 1984). Airborne particulates from industrial and chemical sources, and nuclear bombs, will affect the trace elements "signature" of modern trees and will result in differences not noted in prehistoric wood. For instance, radioactive isotopes, such as strontium 90, krypton 85, iodine 131, cesium 137, and barium 140, may be present, particularly after nuclear accidents (e.g., at Chernobyl near Kiev, U.S.S.R. in 1986), but these have not been selected for comparison. In the San Juan Basin, hydrocarbons and sulfates may also enter trees by contamination from nearby power plants. High potassium contents may be related to forest fires (Keith Yarborough, personal communication 1986), although potassium was not detected in any of the samples.

The Prehistoric Samples

During the excavation of Pueblo Alto, a number of pieces of wood were curated expressly for potential trace elements analysis. Eleven of these (Table MF-K.1) were sent to the U.S.G.S. laboratory in Denver for neutron activation analysis, and six were eventually examined after sampling and analysis of two areas of modern trees had taken place. Before analyzing

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Table MF-K.1. Wood samples from Pueblo Alto treated for trace minerals analysis.[a]

FS No.	Location	Species
272	Room 138, south wall intramural beam	ponderosa pine
280	Room 154, north wall intramural beam	fir or spruce
360	Room 166, in room fill	ponderosa pine
363	Room 189, west wall intramural beam	ponderosa pine
364a	Room 138, south wall intramural beam	ponderosa pine?
364b	Room 138, south wall intramural beam	ponderosa pine?
365	Room 190, south wall intramural beam	ponderosa pine
511	Room 100, north wall intramural beam	ponderosa pine
513	Room 100, north wall intramural beam	ponderosa pine
516	Room 100, north wall intramural beam	ponderosa pine
518	Room 100, north wall intramural beam	ponderosa pine

[a]Each piece represents a distinct log.

Table MF-K.2. Trace elements present (in ppm) in sandstone samples from Hosta Butte, New Mexico.[a]

Minerals	Hosta-1	Hosta-2
Zinc	160.	33.
Galliumm	8.1	8.7
Copper	<5.0	9.0
Nickel	22.	10.
Yttriumm	16.	11.
Strontium	62.	109.
Neobium	4.1	7.1
Zirconium	83.	124.
Uranium	<3.0	<3.0
Rubidium	46.	49.
Thorium	10.	9.2
Lead	28.	17.
Gold	0.0	0.0
Silver	0.0	0.0

[a]Analyzed by the New Mexico Bureau of Mines and Mineral Resources, courtesy of David Love.

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the prehistoric wood, however, we wanted to test some modern forests in the San Juan Basin to see if we could detect differences in the tree mineral content of various forests.

The Sampling Strategy

Given the vast conifer forests surrounding the San Juan Basin, it became imperative to impose a simple sample strategy to test the proposition that the mineral content of large conifers could be distinguished in different areas. For this reason, we chose areas with different surface geologies, which were associated with prehistoric roads and Chacoan outliers. The proximity of these areas to roads suggests that they were possible sources for the Chacoan timbers. To the south of Chaco near Crownpoint, New Mexico, lies Hosta Butte, which contains a scattering of old ponderosa pines and young Douglas fir on its high north slope. Additional ponderosa pines are found scattered in isolated pockets along the tops of long, narrow ridges reaching north from Hosta Butte nearly to the head channels of the Rio Puerco of the West. The primary underlying rock at Hosta Butte is composed of Crevasse Canyon Formation sedimentary sandstones capped by Point Lookout Sandstone (Dane and Bachman 1965) while deep, sandy alluvial deposits characterize the Rio Puerco Valley. Prehistoric Road Segment 50 (Chapter 5), which passes the Chacoan outlier of Kin Ya'a, crosses the valley nearby and heads in the general direction of Hosta Butte (Nials et al. 1983:39-40).

Igneous surface geology, the presence of Chacoan outliers in the Chuska Valley below, and the presence of local materials used in Chacoan products (trachybasalt in pottery and Washington Pass chert lithics) prompted selection of the second sample area in the Chuska Mountains at Washington Pass. Small pieces of Washington Pass chert littered the sample area, and all the trees sampled grew in subsurface geology characterized by basaltic and andesitic flows, breccias, tuffs, and tongues of Chuska Sandstone (Dane and Bachman 1965). Surface soil and duff were shallow. The sample area was about 1 km northwest of the north turnoff to Berland Lake, along the road to Todacheene Lake.

Samples from these two areas were taken from every large conifer along a relatively straight transect except where there were multiple trees in a close cluster (where just one would be sampled) or where it was too difficult to rope into the trees to secure limb samples. Ponderosa pines were selected for sampling because of their abundance in the Chacoan ruins and to avoid mixed samples that may have added to the difficulty of discovering mineral differences between areas. Ten trees (including two Douglas firs) were sampled along a 200 m transect just below the top of Hosta Butte between 8,250 and 8,400 ft elevation (in T16N, R13W, Sec. 26) along with five other ponderosas along a 105 m transect in the Puerco Valley nearby (in T16N, R13W, Sec. 14). Samples from these trees weighed between 338 and 636 gm. At Washington Pass, 14 trees were sampled along a

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125 m transect (in T21N, R3W). These samples weighed between 298 and 862 gm.

Multiple samples were frequently taken from the same tree to test the variability of trace minerals. Multiple samples were selected on the basis of height above the ground and the direction of growth from the trunk. Samples were large enough to allow multiple analyses of them. Unfortunately, in an effort to reduce contamination, all samples were sealed in plastic, but because of the delay in starting the laboratory analyses, most samples were reduced to pulp and mold. All of the Rio Puerco samples were thus lost, along with the majority of the Hosta Butte ones. Those on Hosta Butte were resampled in 1986 from the same limbs cut in 1983. In addition, sandstone samples were collected around the Hosta Butte trees to compare trace elements between the trees and the rock in which they were growing (Table MF-K.2), however, there was little similarity between them.

Sample Preparation and Analysis

Bulk samples consisting of branch segments 4-10 cm in diameter were air-dried at room temperature (about 20°C) for several months. All bark and at least 2 mm of outer wood were removed from the samples with a large clean chisel; any insect borings, rotten wood, or defects such as knotholes were cleaned of debris, removed, or avoided when possible. The outermost wood and bark were discarded to minimize particulate contamination. The cleaned branches were then sawed into disks approximately 5 mm thick, and the sawdust was collected in clean containers. Aliquots of the sawdust were used for analysis and the disks were retained for reference and possible future study.

The sample material (sawdust) was air-dried for a further two weeks, homogenized, and pressed into pellets (2-3 gm) with a hydraulic press. Two samples were also ashed to see if sensitivity was improved or whether elements were lost to volatilization or other causes during ashing. Ashing was done over a 24-hour period in an electric muffle furnace with a slow temperature increase (about 75°C/hr) to a maximum of 400°C. Visual inspection showed that ashing appeared to be complete. Ash yields of clean, air-dried sawdust were approximately 0.3 percent; yielding ash samples of about 25 mg, which were placed in precleaned, 2/5 dram, polyvial containers for irradiation.

Standards were prepared by evaporating appropriate standards solutions on Specpure* SiO_2 (for use with ashed samples) and on a carefully selected pine sawdust containing very small initial amounts of trace elements (for use with the unashed sample pellets). Samples and standards were simultaneously irradiated in the rotating "lazy susan" facility of the U.S.G.S. Triage reactor at Denver for 8 hours at a neutron flux of 5 x 10^{12} neutrons/cm^2/sec.

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Irradiated 2/5 dram vials (ashed samples) were rinsed with water and placed in clean 2-dram polyvials for counting. Irradiated pellets (unashed sawdust) were transfered to clean 2-dram polyvials. All samples and standards were counted with an automated system using pneumatic sample chargers and multiple germanium (lithium) gamma-ray detectors, controlled by a Nuclear Data* ND-6620, computer-based, multichannel analyzer. Samples and standards were counted at similar geometries for 60 minutes each after a decay period of 5-6 days, and several were counted again after an additional 5-6 days. The raw spectral data were analyzed using an automated data-reduction program on a VAX 11/730 minicomputer.

Results

Preliminary results from our two sample areas do not easily allow separation of the groups of trees based on their mineral traces (Tables MF-K.3-MF-K.4). Additional ashing of backup samples was done to make the samples comparable to their dry, prehistoric analogs because of the importance of the total sample weight to the ratio of the minerals present. Low-temperature ashing was necessary to avoid losing the volatile elements (e.g., antimony, bromine, arsenic, etc.). Elements are detectable at different levels, so that the absolute values indicated do not necessarily relate to the relative importance of the element detected.

Many samples were destroyed by rot because of moist storage, and not enough were left to apply discriminate or cluster analyses to force clustering of mineral groups. The latter are necessary if we are to assess potential differences between various source areas of trees. The analysis tested for 39 elements of which 23 were detected in the two test groups. The most unusual result was the startling amount of gold from one pine on Hosta Butte (HB-1), which had an amount 19-467 times greater than all other samples with gold present. Neutron activation may suffer from multiple inferences, however, so that some elements may be erroreously measured or detected. High readings of gold, europium, hafnium, and zirconium may sometimes indicate that interferences are a problem (Dave Love, personal communication 1986), although it was not so in this case. Nevertheless, contamination may occur in many ways (e.g., by wearing a gold ring during the sample processing) and, therefore, the gold tree was resampled but has not yet been reanalyzed.

Despite the inadequacy of the number of samples, there were some interesting differences between the two groups that may be meaningful for future testing. Three elements suggest that differences do exist between the two test-sample groups. Lanthanum was always detected in lower amounts in the Hosta Butte group than in the Washington Pass group. Conversely, calcium tested in greater amounts from Hosta Butte than from

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*Trade names used in this paper are for descriptive purposes only and do not imply endorsement by the U.S.G.S.

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Table MF-K.3. Trace elements present (in ppm) in tree samples from Washington Pass, New Mexico.

Minerals	WP-1	WP-4	WP-9	WP-10	WP-11	WP-12	WP-13	WP-14
Sodium	32.5	1.33	0.82	1.46	7.89	6.74	8.48	4.43
Scandium	0.0013	0.0003	0.0003	-	0.0007	0.0007	0.0003	0.0009
Iron	7.62	2.16	3.01	-	-	-	-	-
Antimony	0.0056	0.0014	0.0017	-	-	-	-	-
Lutetium	-	-	-	-	-	0.0001	-	-
Cobalt	0.0247	0.0050	0.0074	0.0081	0.0174	0.0084	0.0096	0.0067
Lanthanum	0.0129	0.0055	0.0041	0.0069	0.0059	0.0057	0.0057	0.0090
Hafnium	0.0017	-	-	-	-	-	-	-
Arsenic	0.0678	0.0041	-	-	0.0205	0.0062	-	-
Cadmium	0.1020	0.0604	0.0729	0.0449	0.0349	0.0407	0.0416	0.1170
Tantalum	-	-	0.0021	-	-	0.0051	0.0124	-
Chromium	0.0556	0.0112	0.0077	-	0.022	-	-	0.0138
Selenium	0.0441	0.0097	0.0149	-	-	-	0.0221	-
Tungsten	0.0081	-	0.0062	-	-	-	0.0093	0.0079
Gold	0.0008	0.0057	0.0001	0.0001	0.0001	0.0002	0.0000	-
Calcium	795.0	217.0	416.0	396.0	347.0	398.0	294.0	461.0
Zinc	16.1	7.51	8.58	-	-	-	-	-
Bromine	1.06	0.0602	0.0347	0.0231	0.0240	0.0995	0.2620	0.0246
Cesium	0.001	-	-	-	-	-	-	-
Neodymium	-	-	-	-	-	-	-	0.0236
Terbium	-	-	-	-	-	-	-	-
Ytterbium	0.0015	-	-	0.0003	-	-	0.0005	0.0003
Rhenium	0.0008	0.0001	-	-	0.0003	0.0001	0.0002	0.0001

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Table MF-K.4. Trace elements present (in ppm) in tree samples from Hosta Butte, New Mexico.

Elements	HB-1	HB-3[a]	HB-5
Sodium	3.07	1.85	1.12
Scandium	0.0004	0.0003	0.0003
Iron	3.17	-	4.2
Antimony	0.001	-	-
Lutetium	-	-	-
Cobalt	0.0056	0.0056	0.0140
Lanthanum	0.0034	0.0024	0.0023
Hafnium	-	-	-
Arsenic	0.0055	0.3130	-
Cadmium	0.063	0.0312	0.1240
Tantalum	0.0029	0.0295	-
Chromium	-	0.0236	0.0095
Selenium	0.0172	0.0888	0.0292
Tungsten	-	0.0198	-
Gold	0.0467	0.0001	0.0002
Calcium	666.0	750.0	627.0
Zinc	11.6	-	13.9
Bromine	0.0269	0.3840	0.1150
Cesium	0.0008	-	-
Neodymium	-	-	0.028
Terbium	-	0.0004	-
Ytterbium	-	0.0009	-
Rhenium	0.0001	0.0003	-

[a]Douglas fir.

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Washington Pass. We obtained mixed results for sodium, iron, selenium, and zinc, for which trends between the two groups could not be more strongly verified without a greater number of samples. Until a large number of samples can be obtained from several sources, we cannot be certain that identifying different tree sources on the basis of wood mineral content is feasible. At best, we can only say that it remains a promising approach.

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Appendix L

Radio Carbon Determinations on Modern Wood from Chaco Canyon

R.E. Taylor
Louis A. Payden
Peter J. Slota, Jr.

Radiocarbon (^{14}C) and stable carbon (^{13}C) analyses were carried out on four species of contemporary plants collected in Chaco Canyon in June 1980 and submitted for analysis by the National Park Service. The purpose of the analysis was to determine if any serious carbon isotope anomalies could be identified in brush-type plants growing in this region. The possibility of such an anomaly was suggested by the difficulties in the interpretations of ^{14}C data obtained from Pueblo Alto (Chapter 8). The ^{14}C and ^{13}C values obtained on the four samples analyzed in this study do not deviate significantly from expected values. We conclude that there are no carbon istope anomalies in the samples of modern wood tested.

Because all of the wood samples were collected in the late spring of 1980, it was expected that the ^{14}C levels in every sample would contain "bomb" ^{14}C activity. Figure MF-L.1, which represents changes in terrestrial ^{14}C activity from 1900 to 1983, indicates the reason for this expectation. In this plot, based on data contained in Cain and Suess (1976) and Levin et al. (1985), the 0 percent line represents the assumed equilibrium ^{14}C concentration in "modern" or contemporary samples not affected by the Industrial/Fossil Fuel (Suess) Effect or the Atomic Bomb (Libby) Effect. The Industrial/Fossil Fuel Effect reflects the influence of the large-scale combustion of fossil fuels such as coal and oil. Because these samples were of great geological age, they contained no measurable ^{14}C. As a consequence, the worldwide ^{14}C activity in the atmosphere was depleted by the addition of "dead" CO_2. The Atomic Bomb Effect reflects the presence of artificial ^{14}C produced primarily in thermonuclear devices exploded in the atmosphere during the late 1950s and 1960s.

As Figure MF-L.1 illustrates, ^{14}C activities in samples growing between about 1900 and 1950 were depressed in their ^{14}C contents by as much as 3 percent from the assumed equilibrium or modern levels. Beginning about 1955, ^{14}C activities began to significantly increase, with atmospheric and biospheric ^{14}C levels rising to almost 90 percent above modern. After 1983-1984, when atmospheric testing was suspended, biospheric ^{14}C activities have decreased as the bomb-produced ^{14}C is mixed on a world-wide scale.

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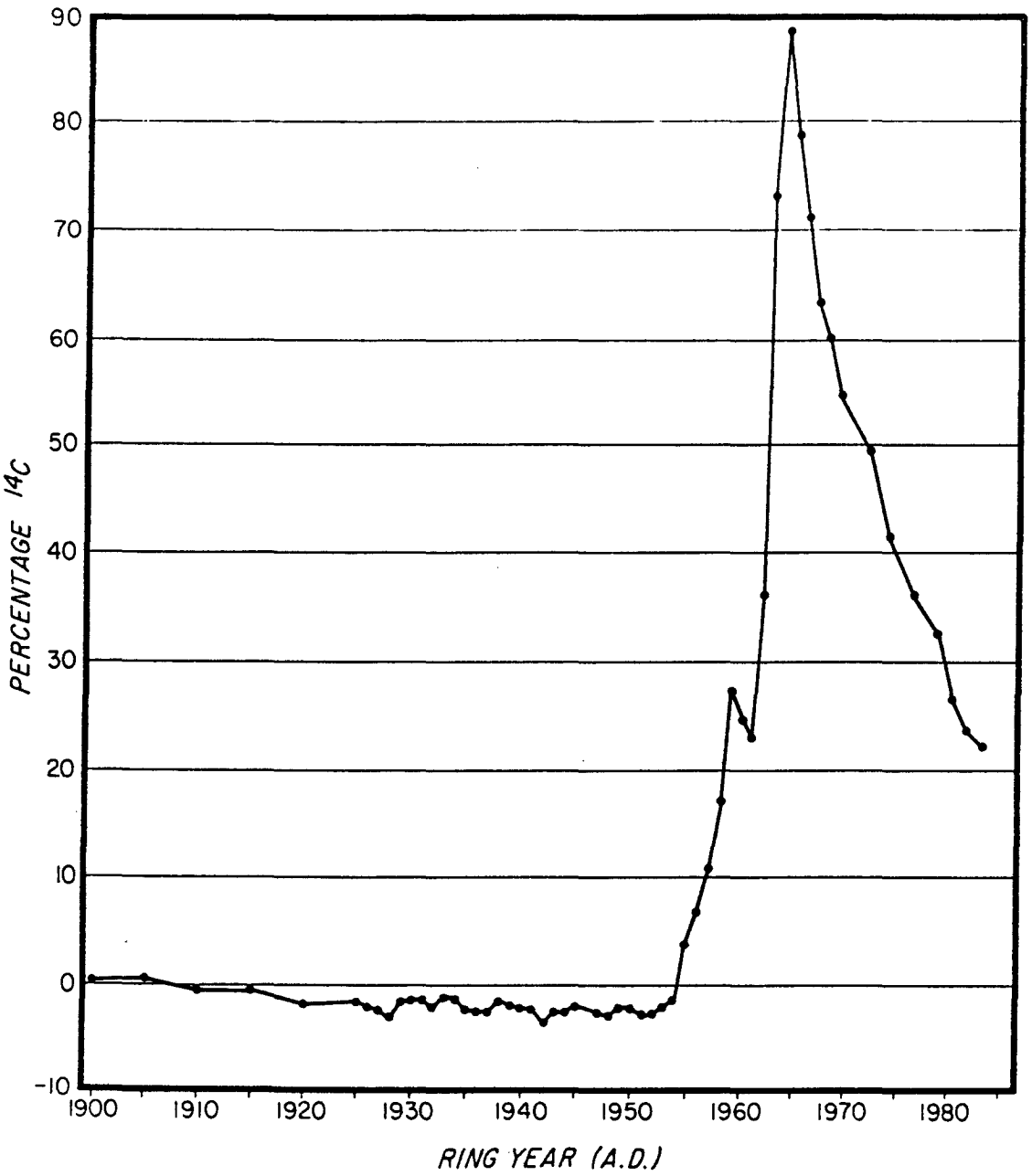


Figure MF-L.1. Suess and Atomic Bomb effects: ^{14}C activity in tree rings (A.D. 1900-1970) and tropospheric CO_2 (1970-1983) expressed as percent above or below 0.95 NBS oxalic acid standard (old). Data on tree rings taken from Cain and Suess (1976:3691). Data on tropospheric CO_2 taken from Levin et al. (1985:10-13).

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By international convention, "modern" ^{14}C activity--the 0 percent value in Figure MF-L.1--is defined as 95 percent of the count rate of a sample of oxalic acid prepared by the National Bureau of Standards (NBS). The use of this modern "contemporary standard" by most radiocarbon laboratories was made necessary primarily because of the Fossil Fuel and Atomic Bomb Effects. Radiocarbon determinations, including conventional age estimates, are typically cited as being calculated with respect to (wrt) 0.95 NBS oxalic acid. (This expression is used with the "old" NBS standards. There is also a "new" NBS oxalic standard for ^{14}C labs that uses a different multiplier factor).

In the citation of ^{14}C values in Table MF-L.1, we have used a conventional method of citing ^{14}C concentrations in geophysical samples, including those exhibiting the presence of "bomb" ^{14}C. $D^{14}C$ expresses the per mil deviation of a sample from a contemporary standard--in our case, the 0.95 NBS oxalic acid value. The per mil value is simply percent multiplied by 10. A value of 100 percent above modern would be equal to a $D^{14}C$ value of +1000 per mil above modern. In Figure MF-L.1, the values are expressed in percent above or below the modern ^{14}C. Table MF-L.1 expresses the ^{14}C values obtained in the Chaco Canyon samples in per mil since they are normalized with reference to their ^{13}C values, which are expressed in per mil units. By general agreement, ^{14}C values are normalized to -25 per mil ^{13}C value expressed with respect to the PDB standard. An explanation of the procedures employed in calculating these values is contained in Stuiver and Polach (1977).

For the reasons cited above, samples growing in the period between 1970 and 1980 would be expected to exhibit ^{14}C activities in the range of +250 to +500 per mil $D^{14}C$ (about 25-50 percent above modern). We are assuming that plant materials would survive on the ground surface in this region for at least 10 years. The $D^{14}C$ measurements on the Chaco Canyon samples range from +313.9 to +489.9 (about 31-49 percent above modern), exactly in the expected range.

The ^{14}C analyses reveal several other interesting aspects. In two cases, a NaOH-extracted fraction of the wood was prepared and its ^{14}C activity was compared to a portion of the same sample treated only with HCl. In both instances, the NaOH-extracted fraction registered a higher ^{14}C activity by about 2-3 percent. It appears that the base soluble material removed from the wood in the NaOH pretreatment exhibited a slightly different ^{14}C activity, perhaps reflecting organics in the plant that had been laid down over more than one growing season. The cellulose fractions exhibited both the highest and lowest $D^{14}C$ value. Finally, the range in ^{13}C values exhibited by the samples is within the normal range for terrestrial plant materials.

It appears that there are no unusual carbon-isotope anomalies for the modern plant materials analyzed from Chaco Canyon. It would be very interesting to check this conclusion on a segment of dendrochronologically-dated sample of wood from Chaco Canyon with a known age in the

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Table MF-L.1. Radiocarbon results on a modern wood series from Chaco Canyon collected in June 1980 from the vicinity of the Park campground.

UCR-1233. Fourwing Saltbush (Atriplex canescens):

A	HCl treated fraction	$D^{14}C$ = +392.8 ± 8.3 per mil $\delta^{13}C$ = -23.58 per mil
B	HCl and NaOH treated fraction	$D^{14}C$ = +431.4 ± 9.1 per mil $\delta^{13}C$ = -25 (est.) per mil

UCR-1234. Rabbitbrush (Chrysothamnus nauseous):

A	Cellulose fraction	$D^{14}C$ = +407.8 ± 8.6 per mil $\delta^{13}C$ = -24.21 per mil

UCR-1235. Black Greasewood (Sarcobatus vermiculatus):

A	HCl treated fraction	$D^{14}C$ = +313.9 ± 8.1 per mil $\delta^{13}C$ = -28.96 per mil
B	HCl and NaOH treated fraction	$D^{14}C$ = +332.6 ± 8.4 per mil $\delta^{13}C$ = -0.25 (est.) per mil

UCR-1236. Cottonwood (Populus fremontii?):

A	Cellulose fraction	$D^{14}C$ = +489.9 ± 9.0 per mil $\delta^{13}C$ = -27.72 per mil

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1,000-2,000-year range and that exhibits a series of at least 30 rings. A to procedure called "wiggle-matching" could be employed in which high-precision ^{14}C determinations are obtained on a series of tree-ring segments The pattern of ^{14}C variations in the closely spaced, known-age, wood samples could then be matched against a master sequence to determine if there was any offset unique to the Chaco area in the ^{14}C values. Unfortunately, such an experiment would be very costly.

Acknowledgments

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Appendix M

Microcomputer Simulation of the Radiocarbon Dates from Pueblo Alto

Donald J. Blakeslee

Rationale

The approach taken here to the analysis of the radiocarbon dates from Pueblo Alto is computer simulation. Basically it is the reverse of the traditional mode of analysis. Rather than starting with the radiocarbon dates and trying to work back through laboratory uncertainties and calibration curves to the calendar ages of the samples, simulation parallels the processes involved in producing radiocarbon dates.

The advantages to this approach are several. One is that the very uncertainties which make interpretation of the dates so difficult, such as counting errors (standard deviations) and inter- and intralaboratory errors, can be mimicked very precisely with a computer. Another advantage is that when one uses a calibration curve to determine radiocarbon age from calendar age, only one answer is possible. When trying to determine calendar age from radiocarbon age, however, the analyst may find that several alternative dates are possible.

In theory, so long as a computer program can accurately mimic each step in the dating process, so long as the input is accurate, and so long as the sample of dates is of adequate size, the simulated dates should match the observed dates. Consider the following precis of the dating process.

1. There is a cultural entity (house, site, phase, etc.) that lasted between Date A and Date B in calendar years.
2. The people who created it left behind organic materials associated with events in the interval A-B.
3. The events chosen for radiocarbon dating have some distribution in the interval A-B. This distribution may have been created in part by the prehistoric people, (through such factors as population growth and decline) and in part by the archeologist (through archeological visibility, interest in particular periods, etc.).
4. The organic samples chosen for dating will be older by some amount than the events with which they are associated. This will vary with the kinds of samples dated; charred wheat will fall within a year or so of the time it was cooked, firewood charcoal will be at least several years older than the fire, and wood from

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structural timbers may be hundreds of years older than the structure.

5. The samples will each have a single, true, radiocarbon age. For the periods covered by the new, high-precision, calibration curves, the uncertainty of our knowledge of the relationship between calendar age and radiocarbon age is about ± 16 years.
6. The radiocarbon age of a sample may be distorted by fractionation or by contamination with younger or older material.
7. A radiocarbon laboratory estimates the radiocarbon age of a sample measuring its radioactivity rate. Uncertainties in this step of the process include the counting error (standard deviation), intralaboratory errors and interlaboratory biases. Only the standard deviation is reported. The total error, however, is about twice the standard deviation.

Method

The computer program used to simulate the Pueblo Alto radiocarbon dates is written in BASIC for the Commodore-128. Versions of the program for Apple and IBM machines are now being written. The program incorporates all of the elements listed above except number 6 (fractionation and contamination). Several stages of the dating process can be simulated very precisely. These are number 5 (calibration) and 7 (laboratory error). The calibration curve used is Stuiver's (1982) high-precision curve for the last two millennia. Standard mathematical methods are used to simulate the uncertainty associated with the curve and with laboratory dating.

These calculations need not concern the user of the program. He or she is asked first for observable attributes of the set of dates to be simulated. These include the name of the site or phase, the number of dates, and the mean standard deviation of the dates. These are the fixed parts of the input. The rest of the elements of the input are estimates of beginning and end dates, distribution of the event dates, and nature of the difference between sample age and age of the event. When necessary, these estimates can be varied one at a time until the simulated dates match the observed dates.

Input

The dates from Pueblo Alto (Table MF-M.1) provide an unusual opportunity for a closely controlled simulation. This is so because the calendar ages of the samples dated are fairly precisely known. The number of dates simulated is 27, and the mean standard deviation is 59 years. Since all but two of the samples are of brush, the sample age function was set so that the mean age was 3 years, with a maximum of 20 years. The function placed half of the sample ages at 1 year or less.

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Table MF-M.1. Radiocarbon dates from Pueblo Alto.

Age (B.P.)	Sample no.	Wood type	Ceramic age[a]
850 ± 60[b]	SI-4594	pine	Red Mesa
1000 ± 55	Dic-1759	pine	Red Mesa
890 ± 50	Dic-1451	brush	Red Mesa
850 ± 45	Dic-1489	brush	Red Mesa
1170 ± 60	SI-4009	brush	Red Mesa
990 ± 60[b]	SI-4011	brush	Red Mesa
1050 ± 70[b]	SI-4011	brush	Red Mesa
1185 ± 60	SI-4011	brush	Red Mesa
980 ± 60	SI-4008	brush	Red Mesa
1290 ± 70	SI-4008	brush	Red Mesa
920 ± 60	SI-4010	brush	Red Mesa
605 ± 65	SI-4007	brush	Red Mesa
1380 ± 60	SI-4007	brush	Red Mesa
1545 ± 65	SI-3711	brush	Gallup
670 ± 50	Dic-1455	brush	Gallup
1000 ± 45	Dic-1452	brush	Gallup
820 ± 50	Dic-1454	brush	Gallup
670 ± 50	Dic-1453	brush	Gallup
1165 ± 65	SI-4503	brush	Gallup
900 ± 50	Dic-1450	brush	Gallup
550 ± 100[b]	SI-4505	brush	Gallup
880 ± 60	SI-4505	brush	Gallup
880 ± 55	Dic-1480	brush	Gallup
790 ± 65	SI-3712	brush	Late Gallup
680 ± 40	Dic-1449	brush	Late Mixed
735 ± 60	SI-4504	brush	Late Mixed
1005 ± 65	SI-4504	brush	Late Mixed

[a]See Table 9.15 for ceramic periods and temporal spans.
[b]Given special pretreatment to remove carbonates.

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The distribution of event ages was forced to fit a pattern implied by the archeological report. The tree-ring dates show three episodes of building in the sampled portion of the site, at A.D. 1021, 1056, and 1132. These construction dates fit with the reported ceramic assemblages as shown in Table MF-M.2.

There are 13 radiocarbon samples with Red Mesa ceramic associations, 11 with Gallup associations, and 3 with Late Mix associations. From information provided by Windes (see Chapter 8), 13 dates were set between A.D. 1021 and 1040 and were weighted toward the early end of this range. These represent the samples with Red Mesa ceramic associations that should date between the initial construction date of A.D. 1021 and the end of the period in which Red Mesa ceramics dominated, i.e., about A.D. 1040. To do this, the computer was programmed to select event dates randomly from this interval with the use of a function that gives a higher probablility to early rather than late dates. Another 11 samples were set between A.D. 1056 and 1100, also weighted somewhat toward the early end of this period. These represent the samples with Gallup ceramic associations. The final three dates were drawn from the interval, A.D. 1100-1132, with the weighting toward the late end.

Results

Ten simulations using these input parameters were run. The results are shown in Table MF-M.3. The results, as can be seen by observation of the tables, were reasonably good, but the discrepancies appear to be significant and potentially informative.

As can be seen in Table MF-M.3, the computer simulates the late end of the observed sequence of dates quite well. The latest dates produced in each simulation of 27 dates ranged from 494 B.P. to 648 B.P. The latest observed date from the site is 550 B.P., which is within this range. The mean of the latest dates in the 10 simulations is 514 B.P. $\pm$ 51.

The computer did far less well for the beginning dates. It generated earliest dates of from 946 to 1078 B.P., with a mean of 1029 B.P. $\pm$ 36 years. This is far from the observed earliest date of 1545 B.P. The difference is over 500 radiocarbon years. The earliest date from the site is an extreme outlier. If it is ignored, however, the difference between the next earliest observed date and the mean earliest date in the simulations is still 351 years. In fact, 6 of the 27 observed dates fall earlier than the earliest of the 270 simulated dates.

The mean of the 27 dates in the 10 simulations ranges from 757 to 809 B.P. The mean of the means in the simulations is 784 B.P. $\pm$ 18. The mean of the observed dates on the other hand is 943. The latter differs from the mean of all of the simulated dates in the ten runs by 159 years. This is unacceptably high--nearly nine standard deviations from the mean of the simulated dates.

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Table MF-M.2. The number of carbon-14 samples associated with the various ceramic assemblages and construction periods at Pueblo Alto.

Tree-ring Dates for Construction	Ceramic Assemblage	Ceramic Dates (A.D.)	Numbers of C-14 Samples associated With assemblage
A.D. 1021	Red Mesa	900-1040/1050	13
A.D. 1056	Gallup	1040/1050-1100	11
A.D. 1132	Late Mixed	1100-1140	3

Table MF-M.3. Summary data from computer simulations of the Pueblo Alto dates.

Simulation	Earliest Date (B.P.)	Last Date (B.P.)	Mean of All dates
1	1060	494	788
2	1078	566	758
3	1045	608	805
4	1004	522	780
5	1019	533	770
6	1038	618	803
7	1057	596	782
8	946	526	757
9	1035	648	809
10	1005	632	792
Mean of 10 Simulations	1029 $\pm$ 36	574 $\pm$ 51	784 $\pm$ 18
Observed	1545	550	943

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Interpretations

The problem here is the proper explanation for the differences between the actual dates and the dates produced by the simulations. The general possibilities are

(1) the simulation program is incorrect,
(2) the input to the simulation is incorrect, or
(3) some important factor(s) were not included in the simulation program and input.

The first possibility can be ruled out because it has been possible to check and recheck each stage of the simulation. One form of output that the operator can request is one that traces each radiocarbon date from the dates for events through sample age in calendar years to the actual carbon-14 age of the sample to the (simulated) age reported by the radiocarbon laboratory. The first two stages of this process are readily checked. The program starts, as it ought to, with 13 event dates near A.D. 1021 and so on. In the second stage, it adds just the sort of sample age one might expect for brush--usually just a few years. An original event date of A.D. 1021 may stay at 1021 or become 1020, 1018, or some other value up to the limit of A.D. 1001 (A.D. 1021 less the maximum sample age of 20 years).

The second two phases of the program cannot be checked as readily as the first two, but they have been completely tested. They involve the calibration curve and random number generators. The calibration curve used is Stuiver's (1982) high-precision curve. Readers are directed to the original article for a thorough discussion of its accuracy, which is on the order of $\pm$ 16 radiocarbon years.

To use the calibration curve in the computer, it was necessary to transform it into a set of linear equations. The accuracy of the equations was checked by having the computer use them to draw a graphic version of the curve. This was compared to the original and found to be quite accurate.

The uncertainty associated with the calibration curve, the laboratory counting statistic, and the total laboratory error are accounted for using the random number generator built into the computer. Various equations for transforming the sequences generated into Gaussian distributions were tested, and the one that worked the best was incorporated into the program. Total laboratory error, which includes inter- and interlaboratory error is estimated at twice the mean standard deviation, in accordance with several recent studies. Thus, there is every reason to have confidence in the accuracy of the program, and the source of the discrepancy must lie elsewhere--in the input or in factors not considered in the program.

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There is nothing in the input that seems likely to have caused errors of the magnitude observed. The small variation among the mean dates produced by successive simulations (± 18 years) shows that the sample size (n = 27) is large enough to rule out sampling error.

The mean standard deviation also cannot lie at the root of the problem. Using the mean of the observed deviations rather than the individual deviations could conceivably affect the dispersal of the simulated dates about the mean (by reducing it somewhat), but it cannot affect the mean simulated date in any significant way.

Likewise, the beginning and end dates and the event distribution used as input are not likely to be in error far enough to produce a 159-year difference in the means of the dates. To produce a mean radiocarbon age of 943 B.P. (the mean of the observed dates), the average sample age would have to be A.D. 937. This is most unlikely, as it contradicts our current understanding of Anasazi chronology. Obviously, if the mean event date must be A.D. 937, no possible distribution between the tree-ring dates of A.D. 1021 and 1132 will produce the observed distribution of carbon-14 dates.

The sample-age function is also unlikely to be the source of the error. For it to account for the observed discrepancy, the brush used as fuel at Pueblo Alto would have to have a mean age (at time of use) of 100 years!

If the difference between the observed and simulated dates cannot be traced either to the way the program is written or to the input, then it must be located in a factor or factors not included in the simulation. There is direct information about two such factors for the Pueblo Alto dates.

In considering these factors, we should note first that the observed dates appear to be too early in comparison to the tree-ring dates. The mean tree-ring equivalent for the samples dated is A.D. 1048 (see Table M.2). Using a mean sample age for the brush of three years, and using the Stuiver calibration curve, we expect the radiocarbon age to be 814 B.P., or nominally A.D. 1136. That is, the expected values of the radiocarbon dates are later than the tree-ring dates. To be precise, the radiocarbon dates should come out about 88 years later than the tree-ring dates before correction for calibration. Exactly the opposite is the case. The observed radiocarbon dates average 943 B.P., or nominally A.D. 1007. This is 41 years earlier than the tree-ring dates. Therefore, we should be looking for a factor or factors that could make the radiocarbon dates come out too early.

A source of contamination likely to be common to all the samples, but perhaps in varying amounts, is soil carbonate. Windes cites a personal communication from Cynthia Irwin-Williams to the effect that soil carbonates affected the samples from the Rio Puerco Project. The Smithsonian Institution laboratory tried to remove such contaminants from some of the

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samples at Pueblo Alto. Three samples (Table MF-M.1) were given special pretreatment. In one case, the effect cannot be determined, as a date for the sample given normal pretreatment was not run. In the other two cases, special pretreatment to remove soil carbonates yielded samples that dated younger than portions of the same samples given normal pretreatment. In one case, two fractions of a sample that were given special pretreatment dated 135 and 195 years younger than the fraction given normal pretreatment. In the second case, a single fraction given special pretreatment dated 330 years earlier than one given normal pretreatment. Unfortunately, the two samples tested are far too few to determine both the average age difference to be expected and the variance in the amount of the contamination from sample to sample. Additional samples should be run to determine both the mean difference in apparent age and the variance.

Another possible source of error that might be common to most of the samples, but one that runs counter to the first, is isotopic fractionation. All but two of the radiocarbon samples are of brush, primarily Atriplex, a C_4 plant. C_4 plants can date several hundred years too late compared to the wood samples on which the calibration curve is based. Maize is the best known example in New World archeology. This C_4 plant normally dates about 225 years too young because its photosynthetic processes raise the levels of carbon-13 above those of its environment.

The effect of fractionation on a particular sample can be estimated by measuring the deviation of its carbon-13 level from the NBS standard. The deviation of the carbon-14 level is then calculated as twice the carbon-13 deviation. This was not done for any of the archeological samples from Pueblo Alto, but Taylor (Appendix MF-L, this report) describes such analyses for modern brush samples from the vicinity of the pueblo. Measurements for four brush species all fell close to the expected value of -25 parts per mil for C_3, not C_4 plants. The sample of Atriplex was slightly enriched in carbon-13, but not nearly to the extent expected for a C_4 plant. The observed carbon-13 deviation of -23.58 parts per mil should give a carbon-14 age correction of 23 years too young. More measurements of Atriplex samples, and especially of archeological samples, from the site are needed. For the present, however, it is sufficient to note that fractionation of this sort can only add to, not subtract from, the apparent discrepancy between the observed dates from Pueblo Alto and the dates produced by the simulations.

Summary

Computer simulations of the radiocarbon dates from Pueblo Alto suggest that the observed radiocarbon dates are too early by an average of 159 radiocarbon years. Two sources of error in the observed dates could not be properly simulated because the necessary information is not available. One is isotopic fractionation in the C_4 plant, Atriplex, used for most of the radiocarbon samples. If this is truly a C_4 plant, the reported dates should be too young. The single available measurement of

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fractionation in this plant suggests that the dates are too young by about 23 years.

An oppòsing and apparently stronger source of error also appears to have been at work. Soil carbonate trapped in the charcoal can produce just such contamination. The few charcoal samples that were subjected to both normal pretreatment and to special pretreatment showed what might be regarded as promising results. The fractions subjected to the special pretreatment dated 135-330 years younger than the normal samples. The magnitude of the difference is about right to counter the 23-year fractionation error for Atriplex samples, plus the 159-year difference between the observed dates and the expected (i.e., simulated) dates:

SIMULATION	+	CARBONATES	-	FRACTIONATION	=	OBSERVED
(757-809)	+	(135-330)	-	(23)	=	(943)

The excellent control provided by the Pueblo Alto tree-ring and ceramic dates should not be wasted. Carbon-13/carbon-12 ratios on charcoal samples from the site should be tested. Further work should also be done on trapped soil carbonates in samples from the site. A third study that should be done is to count the growth rings (if any) in some samples of Atriplex. Windes' strategy of using this material to reduce the sample age problem is an excellent one. When the fractionation effect is measured and the expected range of sample ages is known, use of brush samples for radiocarbon dating should become the standard for the whole region. Pueblo Alto offers a rare opportunity to control these sorts of errors and to provide a baseline study for the whole region. Similar close comparisons of the archeomagnetic, thermoluminescent, and obsidian-hydration dates would be of equal value.

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Appendix N

Thermoluminescence Dating Study of Potsherds from Pueblo Alto, New Mexico

Stephen R. Sutton

Introduction

Reported here are the results of a thermoluminescence (TL) dating study of potsherds from Pueblo Alto, New Mexico, that were submitted by the Chaco Center, National Park Service. The goal of the measurements was to evaluate the suitability for TL dating of ceramics from a southwest U. S. site. TL has been found in previous work to be a successful dating technique for sherds from Missouri, Minnesota, Wisconsin, and North Dakota (see, e.g., Ross and Sutton 1981, and references therein).

A total of eight sherds was obtained for this pilot study plus samples of matrix material. Sherd proveniences are given in Table MF-N.1.

Procedure

The TL dating procedure followed the quartz inclusion method developed for dating archeological pottery (Fleming 1979). The method uses the thermoluminescence response of quartz crystals extracted from the sherd to determine the radiation dose accumulated since the last firing to about 400°C or greater. Quartz is the TL mineral of choice for dating because it has been shown in previous studies to exhibit superior TL stability. The dose rate received by the quartz is determined independently from the radioactive element content of the sherd and its burial matrix. The TL age is obtained by dividing the dose by the dose rate.

Quartz crystals were extracted from the samples in the following manner. First, the exterior of the sherd was removed using a common file to avoid material exposed to daylight and beta rays from the burial matrix. The fragment was then crushed gently in a mortar and sieving was performed to obtain the 74-149 micron fraction. Magnetic separation of this size fraction, using a Frantz separator, was employed to remove clay and other magnetic grains. The remaining powder, composed of nonmagnetic grains, largely quartz and feldspar, was then soaked in concentrated

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Table MF-N.1. Provenience of sherds for thermoluminescence dating study.

NPS no.	WU no.	Provenience	Sherd Type and Form	Weight (g)
FS 947	99a	Room 3, Plaza Feature 1, Grid 18, Layer 4	Chuska Whiteware olla	149
FS 985	99b	Room 3, Plaza Feature 1, Floor 1, Firepit 1 (Layer 2)	Gallup Black-on-white olla	51
FS 3160	99c	East Ruin, Kiva 14, Floor 1, Other Pit 4 (Layer 2)	Mancos Black-on-white bowl	69
FS 5565	99d	Room 110, Floor 1, Surface 1, Firepit 1 (Layer 1)	Chuska Whiteware olla	91
FS 5739	99e	Room 110, Floor 1, Surface 9, Other pit 63 (fill)	Cibola Whiteware olla	22
FS 5744	99f1	Room 110, Floor 1, Surface 9, Other Pit 66 (fill)	Blue Shale Corrugated jar (sooted)	40
FS 5744	99f2	Room 110, Floor 1, Surface 9, Other Pit 66 (fill)	Forestdale Smudged bowl	20
FS 6253	99g	Room 147. Layer 3, Level 4 (fill above uppermost floor)	Nava/Crumbled House Black-on-white olla	48

Table MF-N.2. Accumulated radiation doses for sherd 99f1 quartz.

Glow curve Region	Equivalent Dose (E.D.) (rads)	Supralinearity Correction (I) (rads)	Accumulated Dose (A.D.) (rads)
325°C peak	230 ± 15	130 ± 50	360 ± 55
375-425°C	260 ± 20	260 ± 20	485 ± 30

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hydrofluoric acid at room temperature for 1 hour to dissolve the feldspars and any remaining clay. The final quartz separate was obtained by soaking the acid residue in 20 percent aluminum chloride solution at 50°C for 15 minutes and sieving again to 74-149 microns. The purity of quartz separates was verified using cathodoluminescence (Sutton 1982).

Results

One of the most important factors in determining the suitability of a sherd for TL dating is quartz yield. The amount of quartz separated from a sherd must be about 100 mg to allow accurate TL evaluation of the radiation dose received since manufacture. Only one of the eight sherds in this study, 99f1, contained sufficient quartz. The remainder of this report describes TL dating measurements on this sample.

The TL glow curve of the 99f1 quartz, a plot of TL intensity versus sample temperature during measurement, exhibited a well-defined peak at 325°C. The accumulated radiation dose (A.D.) was obtained by adding the equivalent dose (E.D.) and the supralinearity correction (I). These three quantities are given in Table MF-N.2.

Significantly different values for the supralinearity correction were obtained for two temperature regions. However, the peak result is considered the better determination for two reasons. First, the glow curve near 400°C is rapidly falling and, consequently, slight changes in glow curve shape with increasing dose can result in substantial systematic errors. This problem is minimized if the peak height is used. Second, TL growth curves for the peak height, plots of "TL intensity" versus "dose administered in the laboratory," show no evidence of sensitivity changes, which suggests that the 325°C peak of this quartz is suitable for reliable dose estimates.

The dose rate to the quartz in this sherd was calculated from the concentrations of uranium, thorium, and potassium in the sherd and its burial matrix. Uranium and thorium contents were determined by alpha-particle counting with the Th/U ratio estimated from the rate of a prompt alpha decay in the thorium series ($^{216}P_o$ to $^{212}P_b$, half-life = 0.15 s). Potassium contents were measured by atomic absorption spectrophotometry. The U, Th, and K contents were converted to dose-rates using the data of Bell (1979). Appropriate beta-ray attenuation corrections (Mejdahl 1979) and water-absorption factors (Zimmerman 1971) were applied. A cosmic radiation dose rate of 15 millirads/year^{-1} was used. Dose-rate data are summarized in Tables MF-N.3 and MF-N.4.

The TL age obtained by dividing the radiation dose for the peak, 360 rads, by the quartz dose rate, 390 millirads/year^{-1}, is 920 $\pm$ 150 years before present (e.g., 1980). The age obtained using the higher temperature TL would be 35 percent older.

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Table MF-N.3. Radioactivity data for sherd 99f1 and matrix.

	Sherd 99f1	Other Pit 66 Fill
Uranium	11.9 ppm	2.70 ppm
Thorium	15.1 ppm	6.50 ppm
Potassium	1.63% K_2O	1.93% K_2O

Table MF-N.4. Radiation dose-rates for sherd 99f1 quartz.

	Infinite Matrix Dose-rate	Attenuation Factor	Water Correction	Effective Dose-rate
Alpha dose-rate	-	-	-	0
U, Th Beta dose-rate	217	0.82	0.97	173
K Beta dose-rate	112	0.93	0.97	101
U, Th Gamma dose-rate	64	1.00	0.97	62
K Gamma dose-rate	40	1.00	0.97	39
Cosmic Radiation	15	1.00	1.00	15
Total				390 $\pm$ 40

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Summary

Eight potsherds from Pueblo Alto, New Mexico, were used for a pilot study of TL dating for these materials. Seven of the sherds were found to contain insufficient quartz for TL dating measurements. Accurate dating of the one suitable sherd was complicated by the fact that its quartz inclusions exhibited the 325°C peak rather than the 375°C peak normally used in this technique. However, the 325°C peak showed no significant sensitivity changes, which suggests that it should yield reliable radiation dose evaluations. A TL age of 920 years was obtained using this peak.

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Appendix O

Feature Figures

Thomas C. Windes

With

Illustrations by Gigi Bayliss

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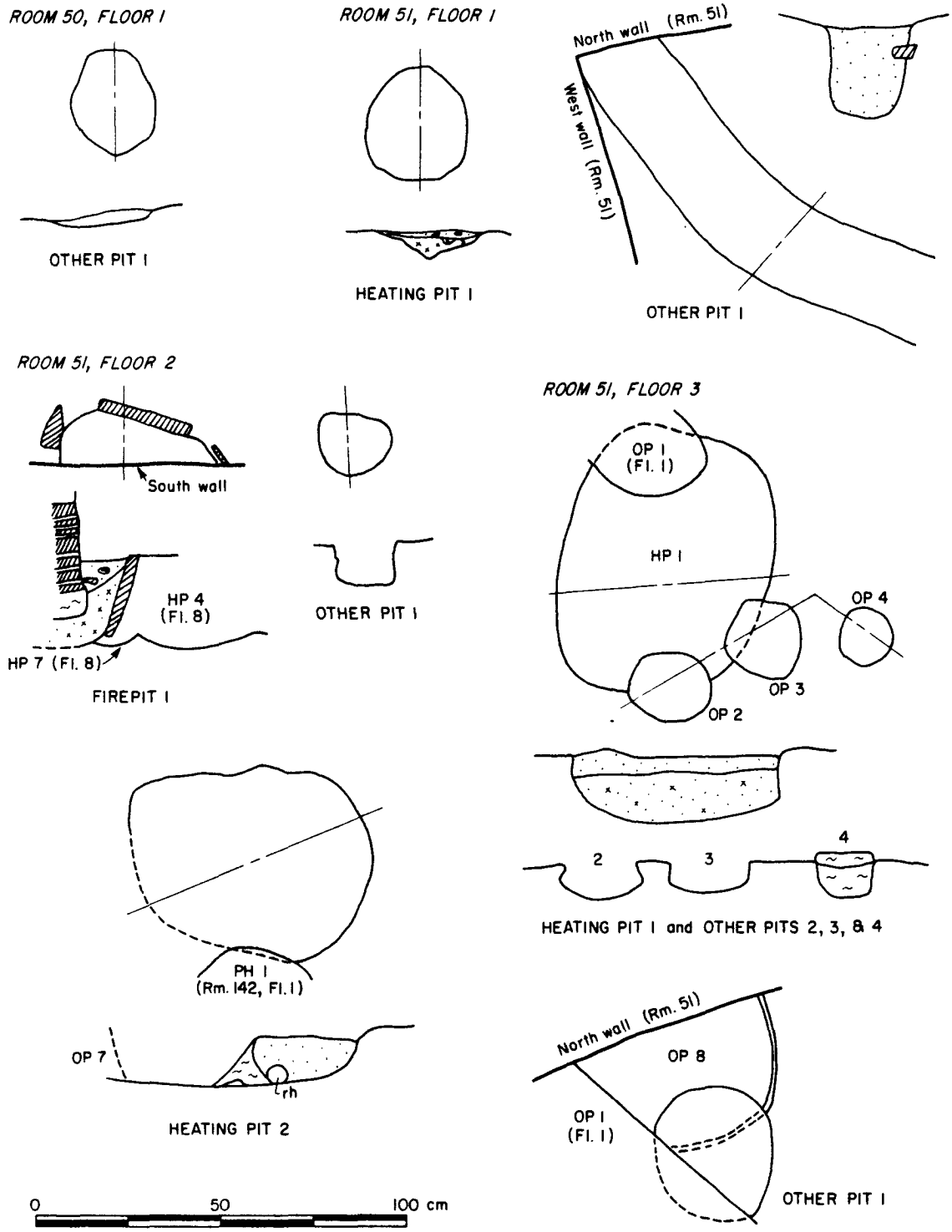


Figure MF-0.1. Rooms 50, Floor 1 and 51, Floors 1-3 features.

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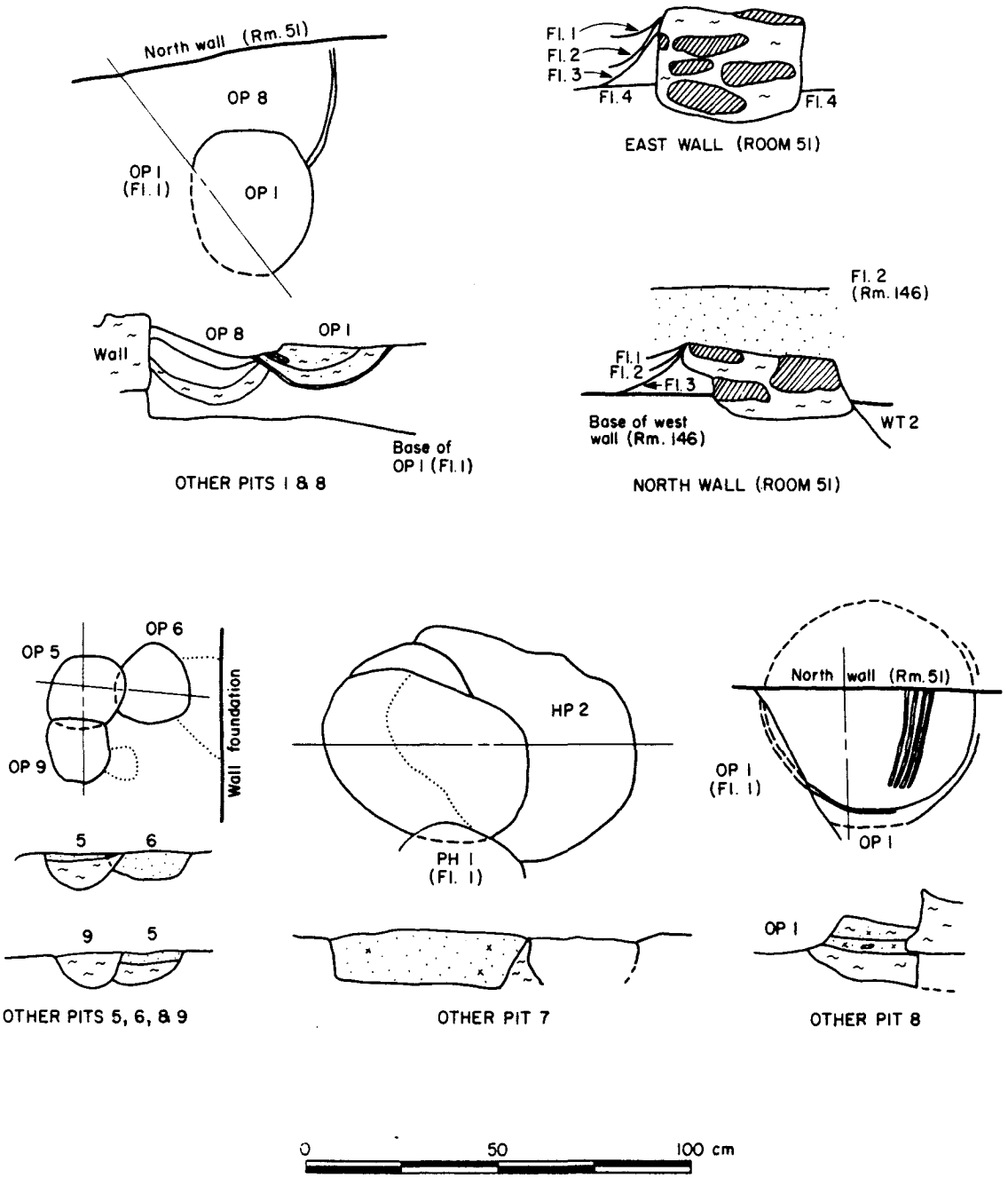


Figure MF-O.2. Room 51, Floor 3 other pits.

CHCU_310_D58_VOL 4_00099

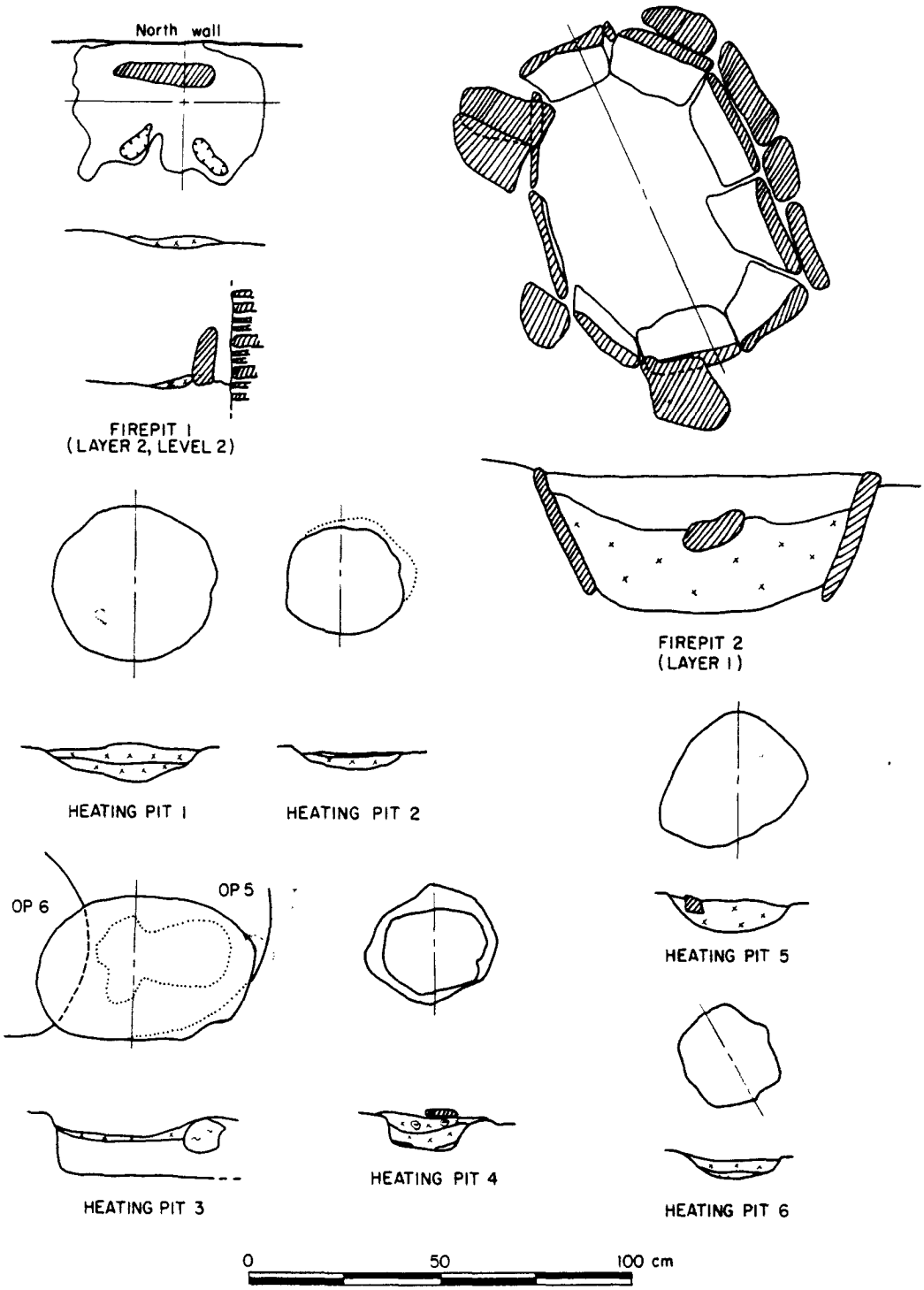


Figure MF-O.3. Room 103, firepits in the fill above Floor 1 and heating pits in Floor 1.

CHCU_310_D58_VOL 4_00100

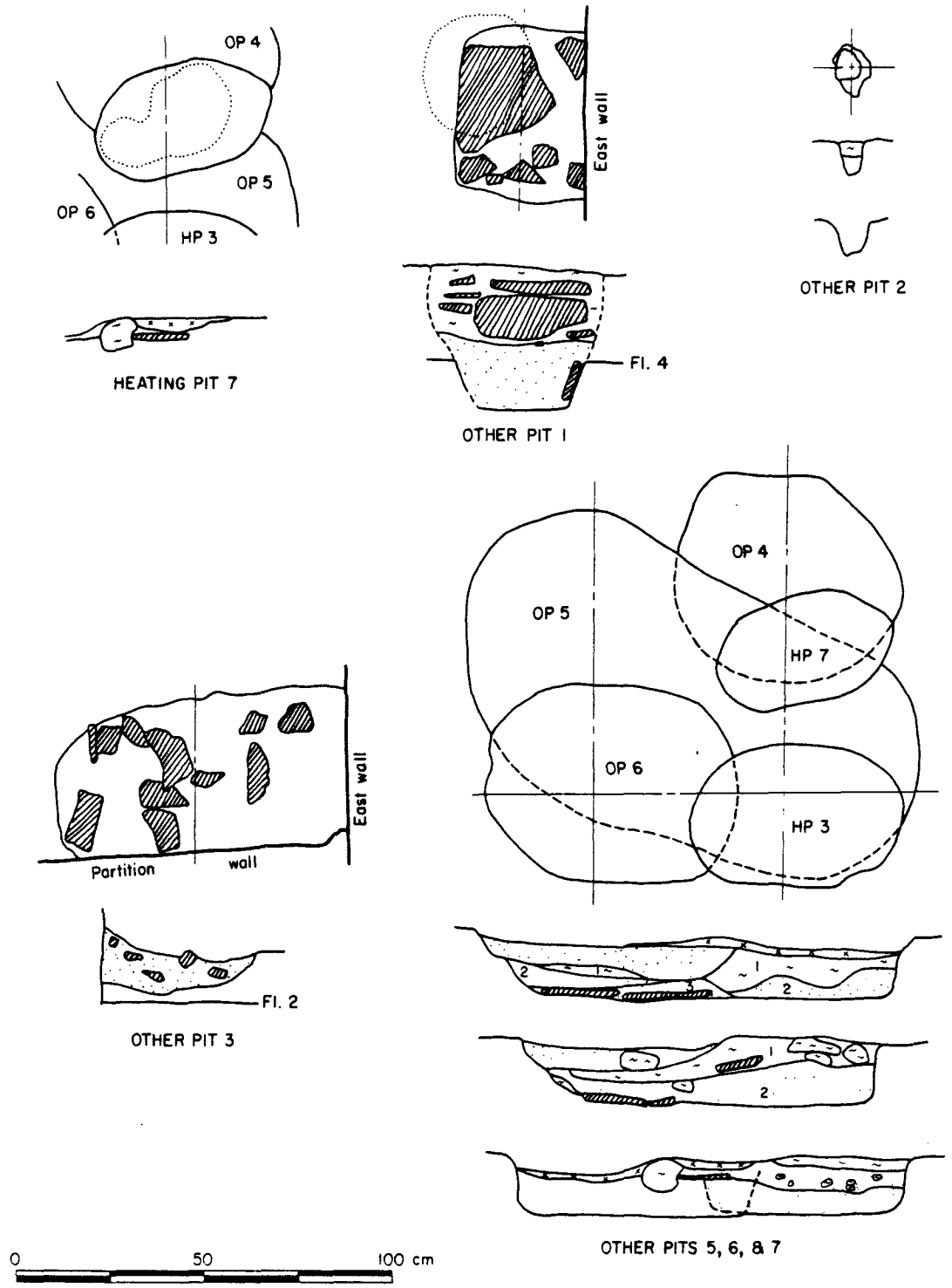


Figure MF-0.4. Room 103, Floor 1 heating pits (concluded) and other pits.

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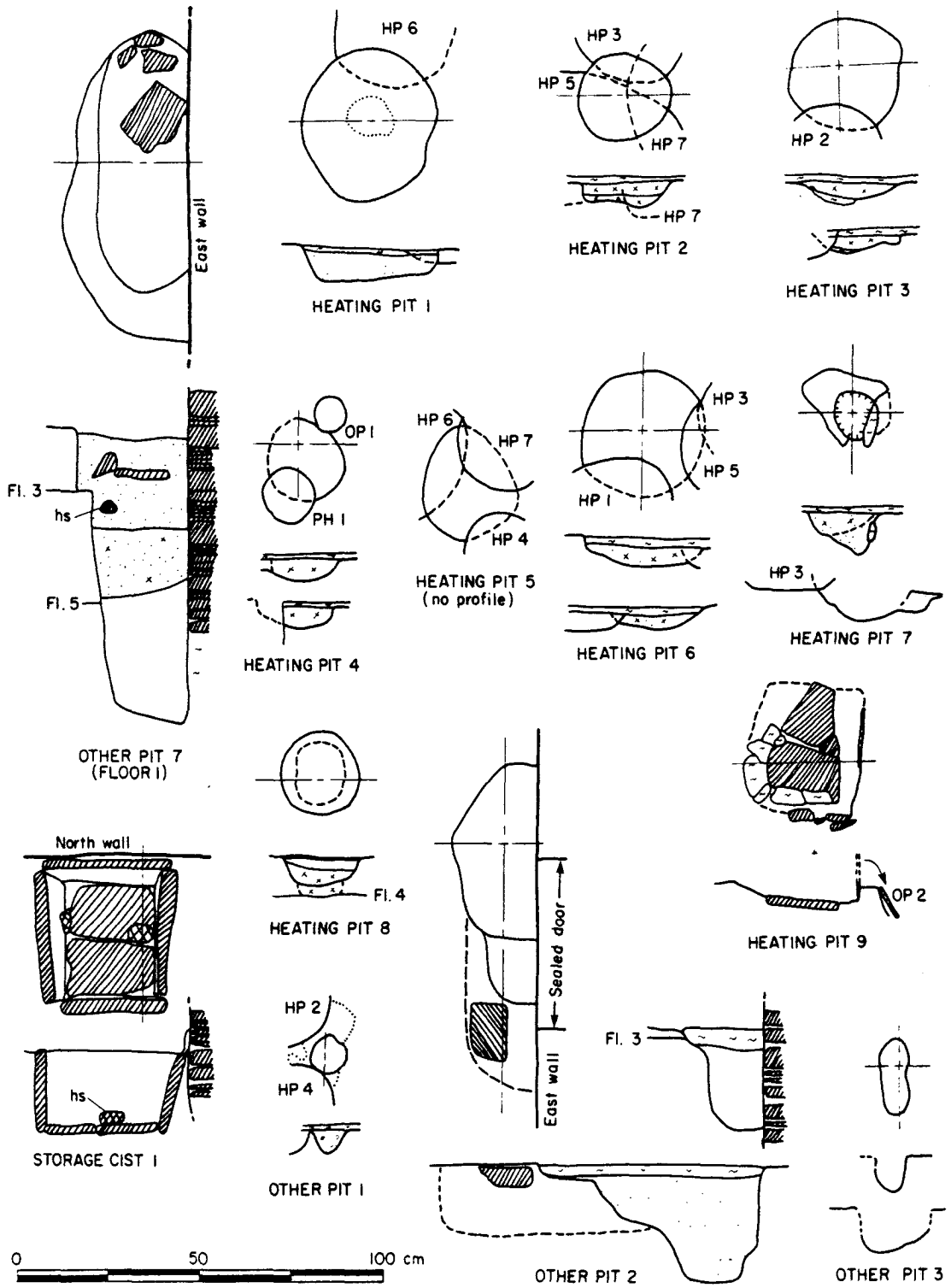


Figure MF-0.5. Room 103, Floors 1 (concluded) and 2 features.

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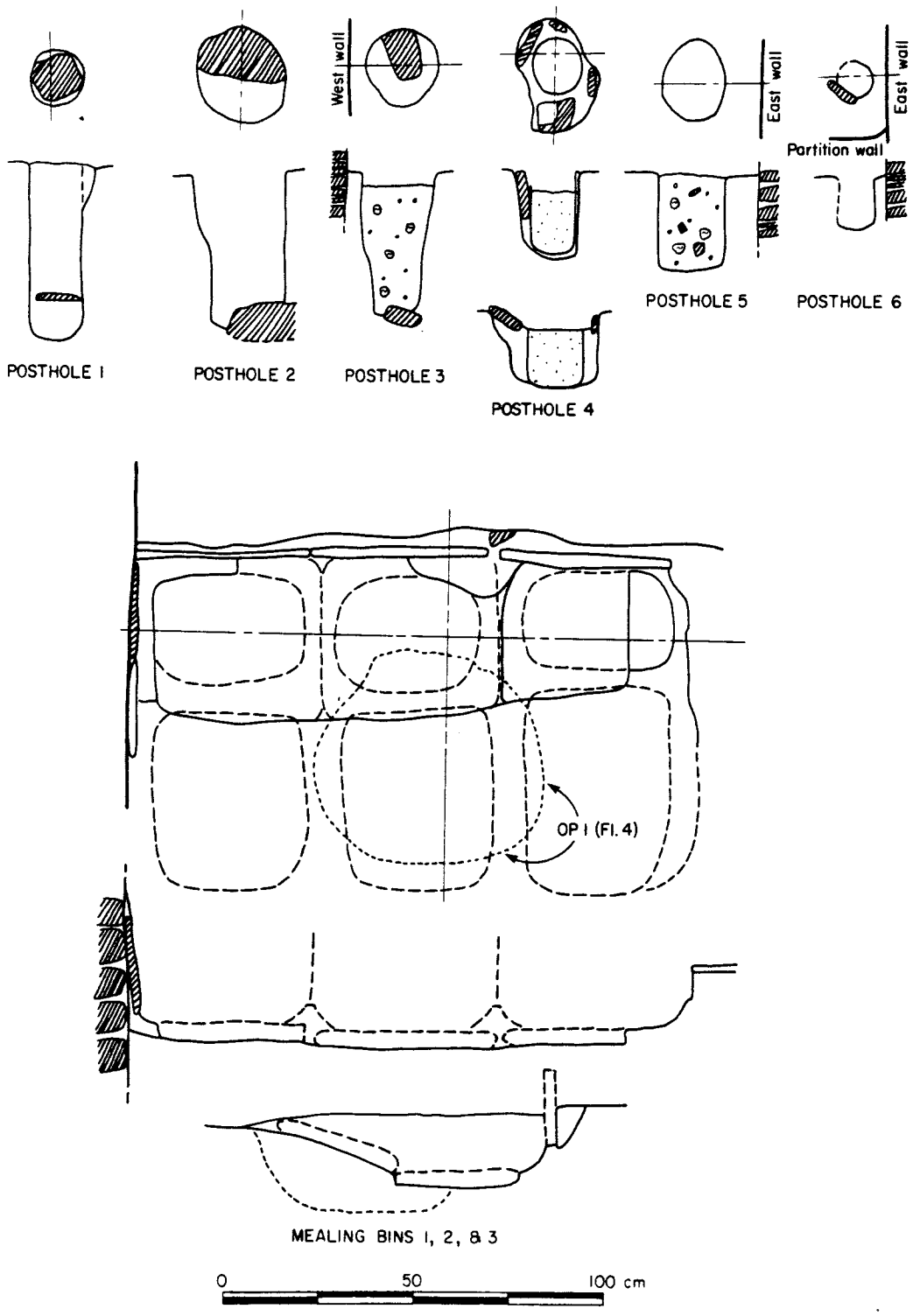


Figure MF-0.6. Room 103, Floor 2 postholes and mealing bins.

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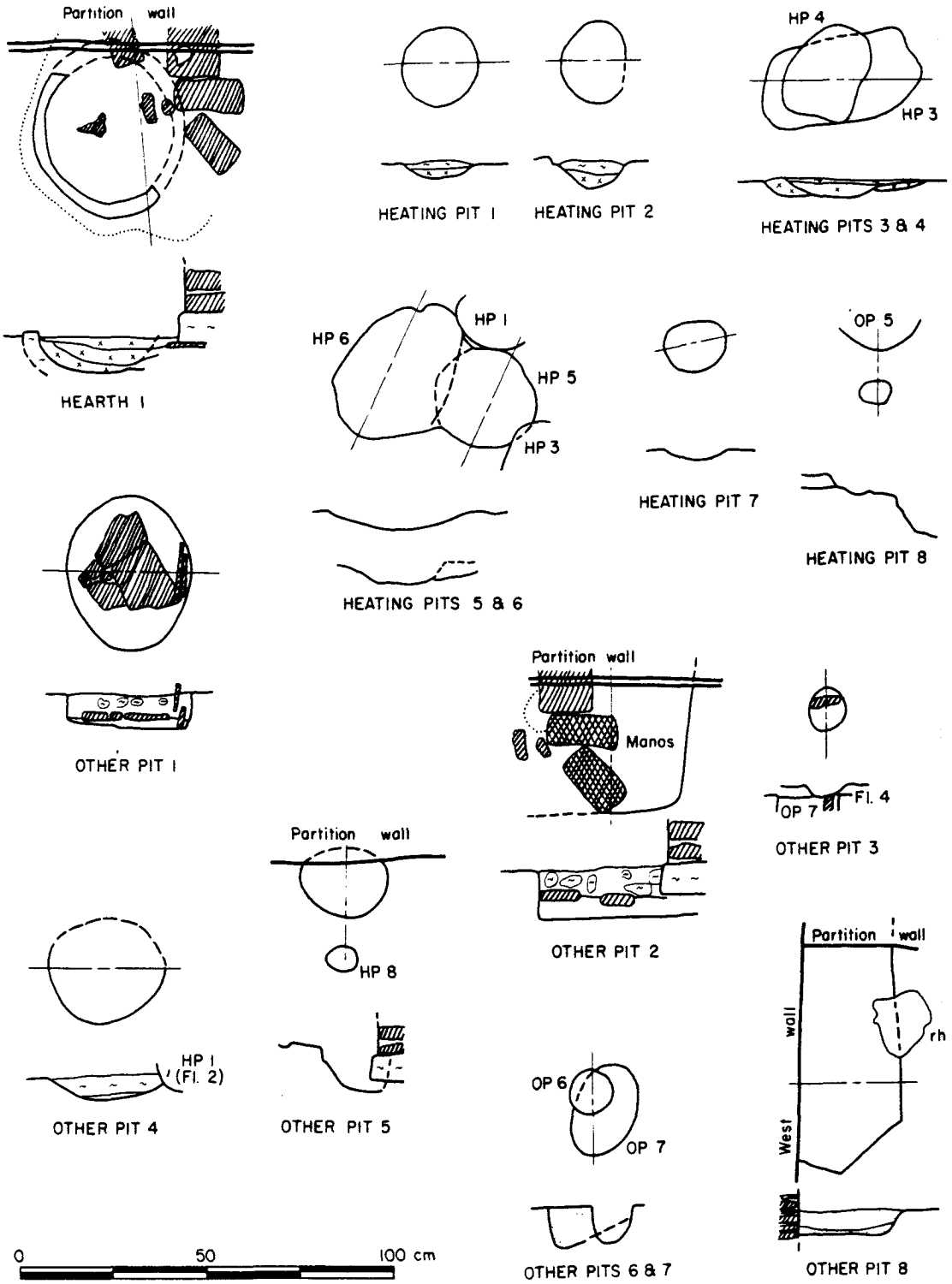


Figure MF-0.7. Room 103, Floor 3 heating pits and other pits.

CHCU_310_D58_VOL 4_00104

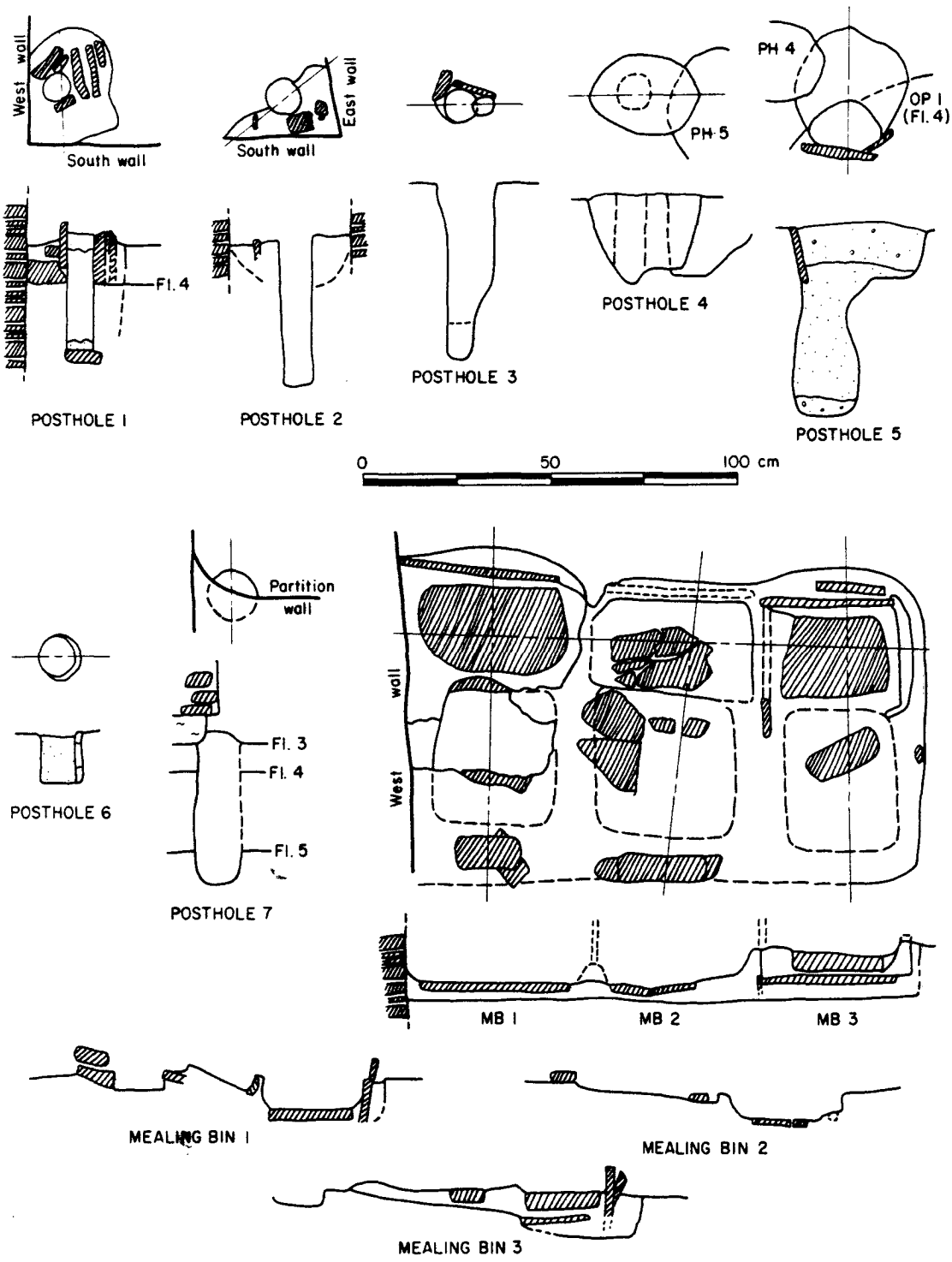


Figure MF-0.8. Room 103, Floor 3 postholes and mealing bins.

CHCU_310_D58_VOL 4_00105

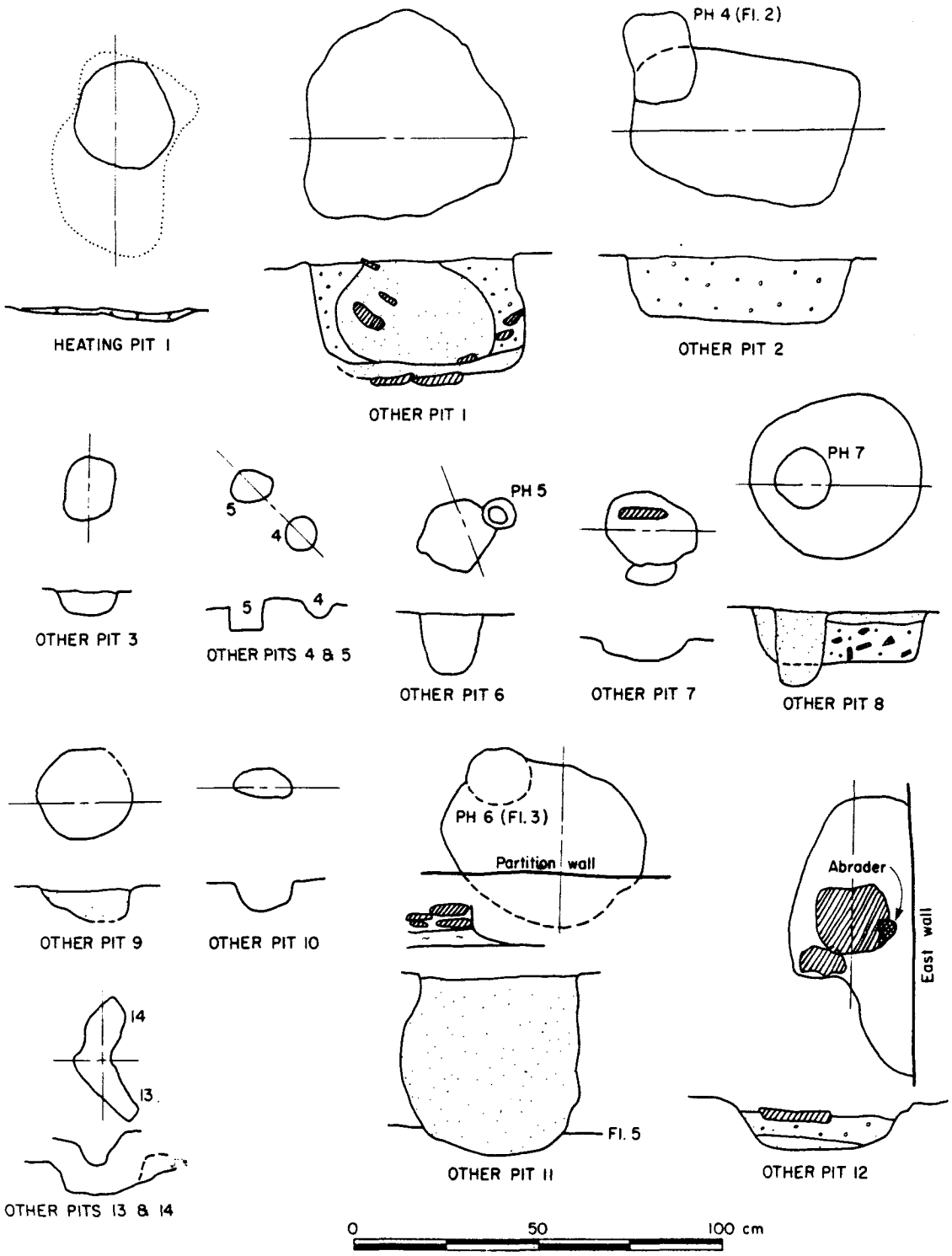


Figure MF-0.9. Room 103, Floor 4 other pits and Heating Pit 1.

CHCU_310_D58_VOL 4_00106

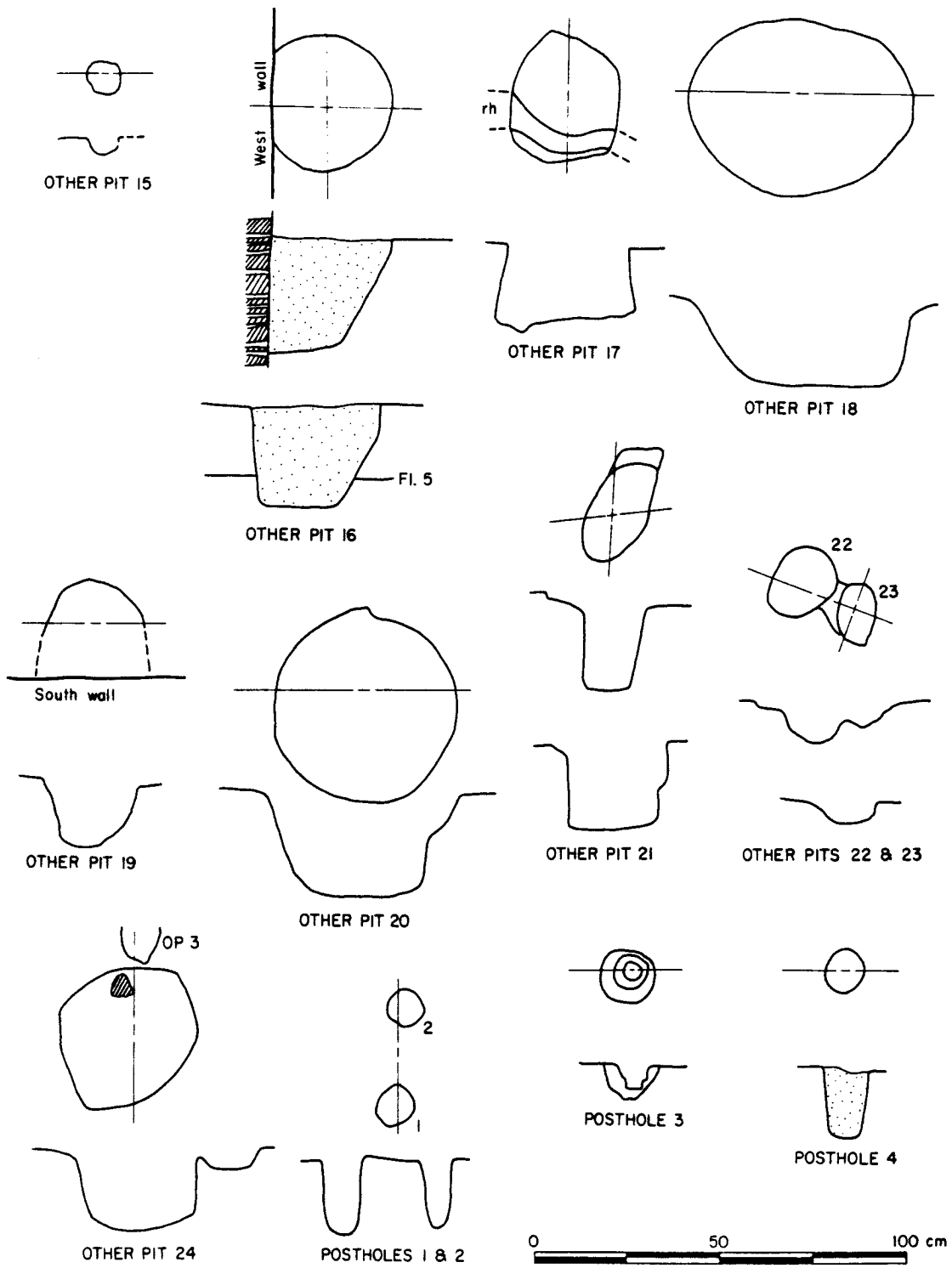


Figure MF-O.10. Room 103, Floor 4 other pits (concluded) and postholes.

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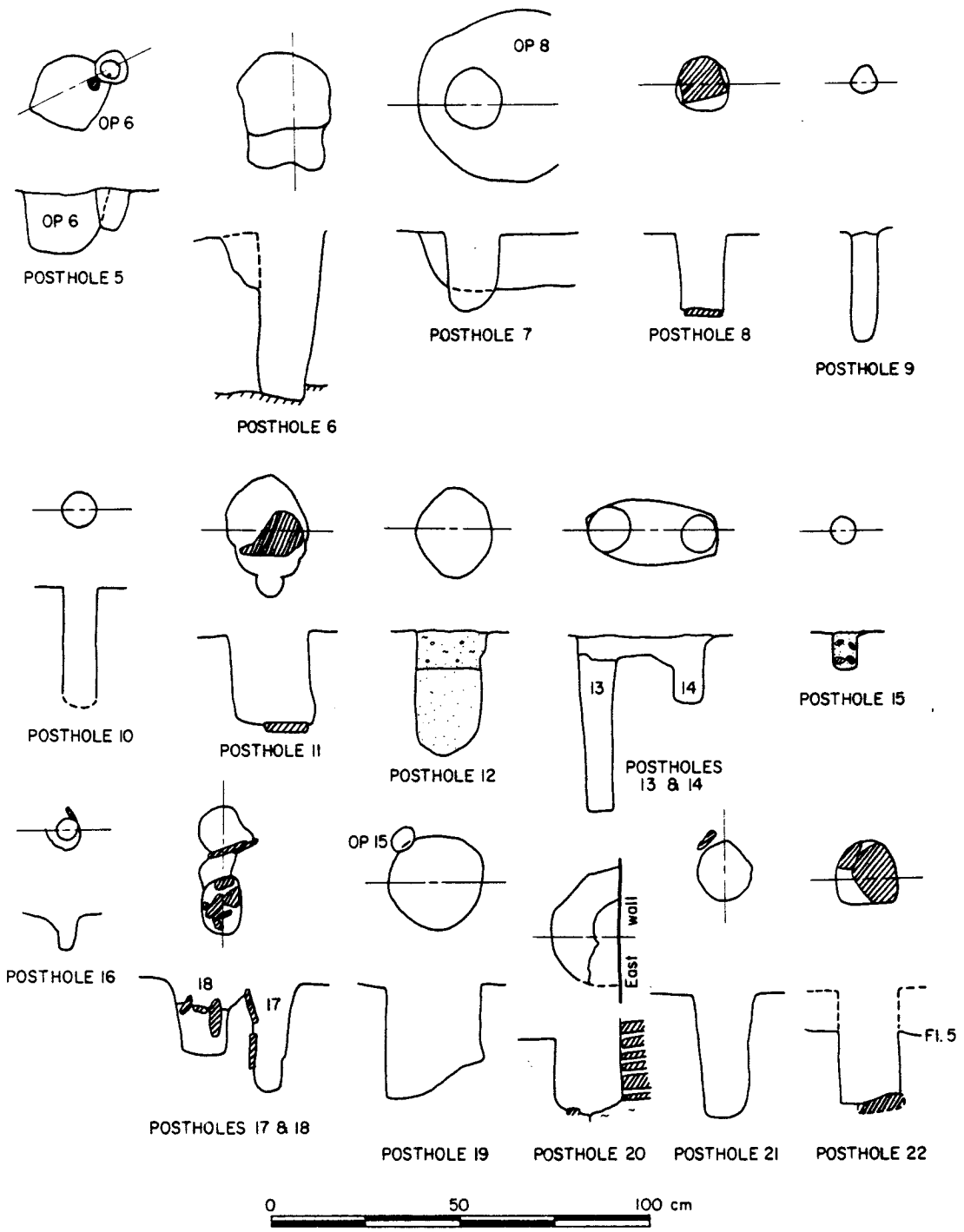


Figure MF-O.11. Room 103, Floor 4 postholes (continued).

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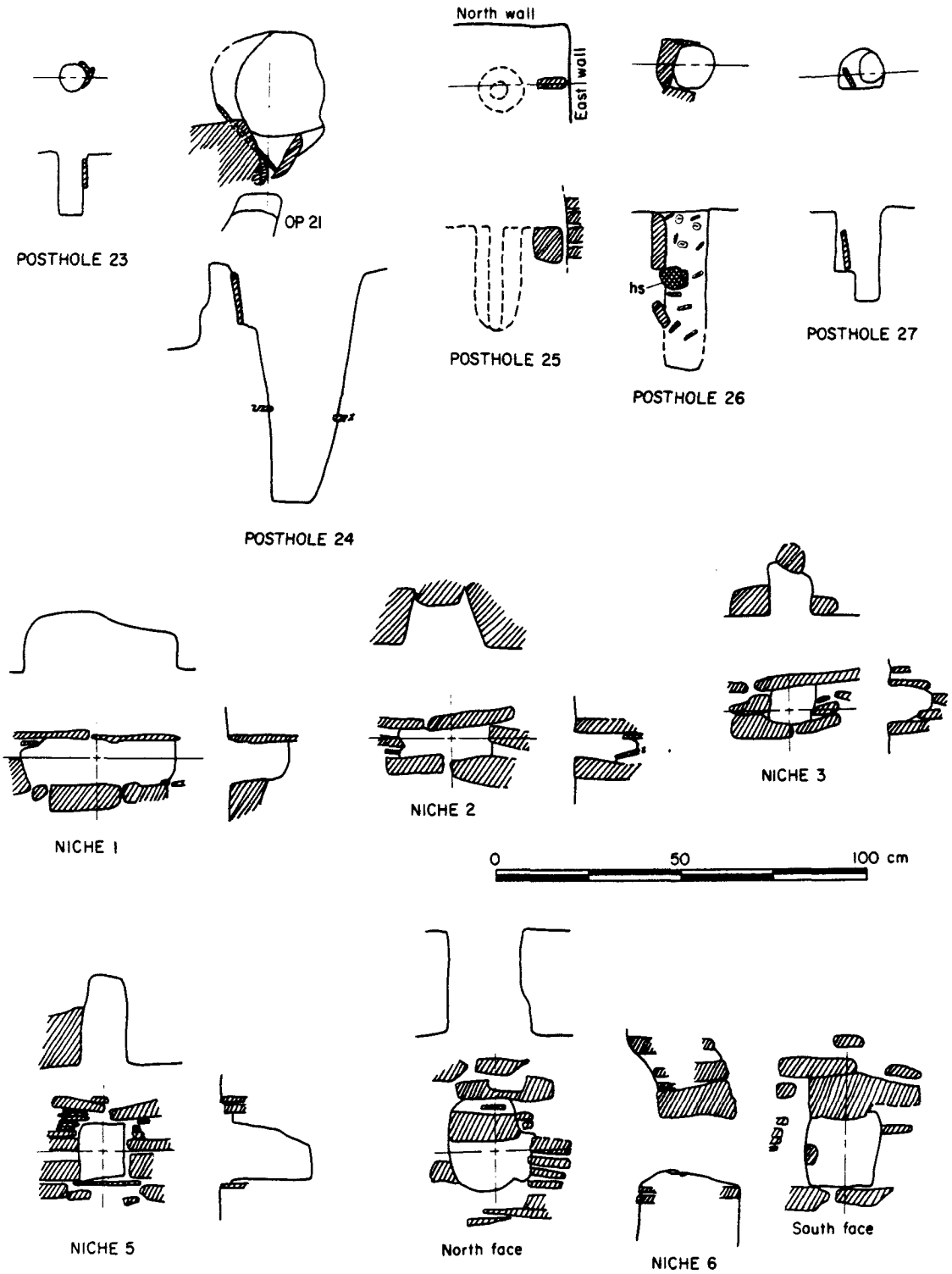


Figure MF-0.12. Room 103, Floor 4 postholes (concluded) and wall niches.

CHCU_310_D58_VOL 4_00109

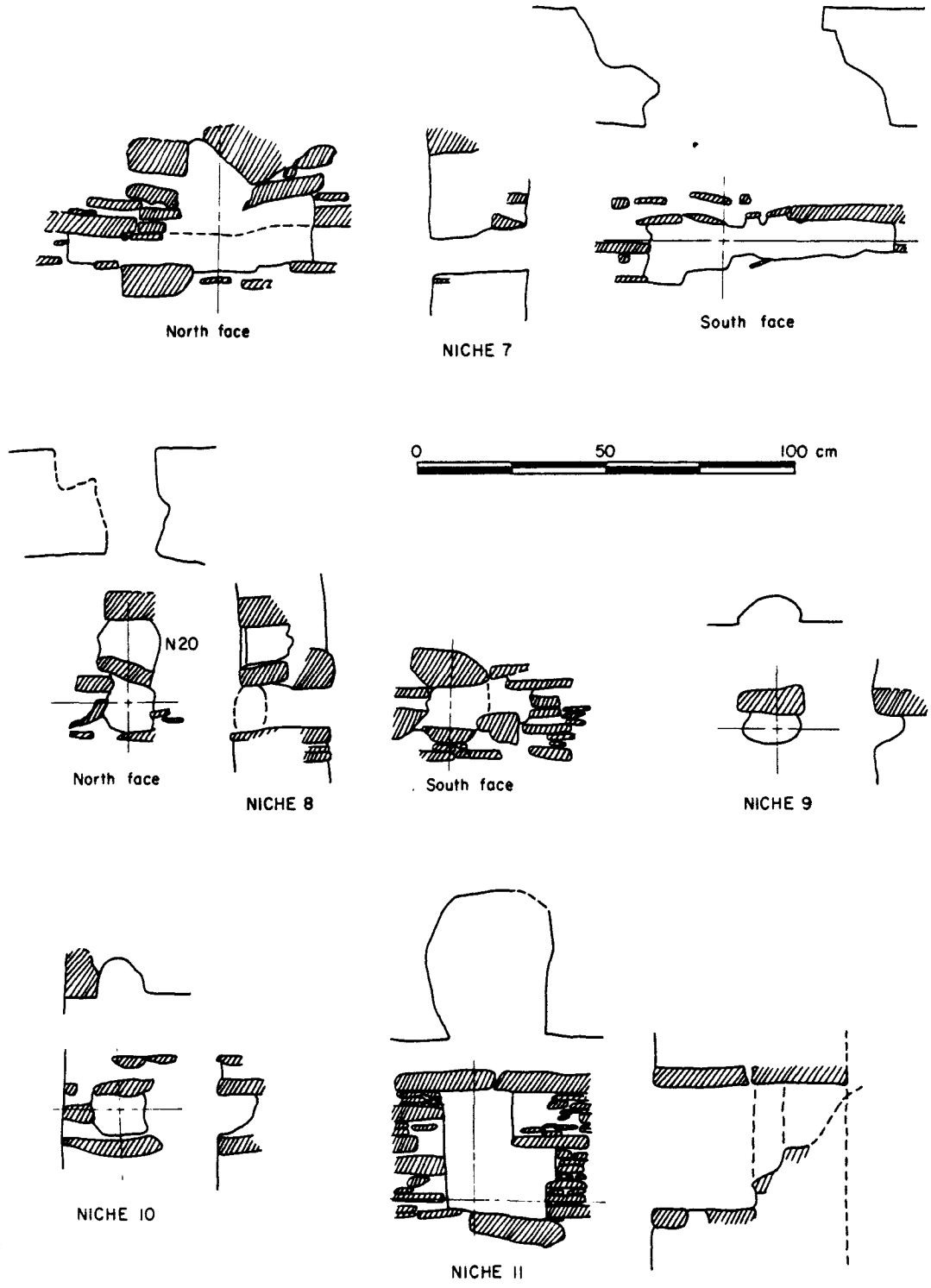


Figure MF-0.13. Room 103, wall niches (continued).

CHCU_310_D58_VOL 4_00110

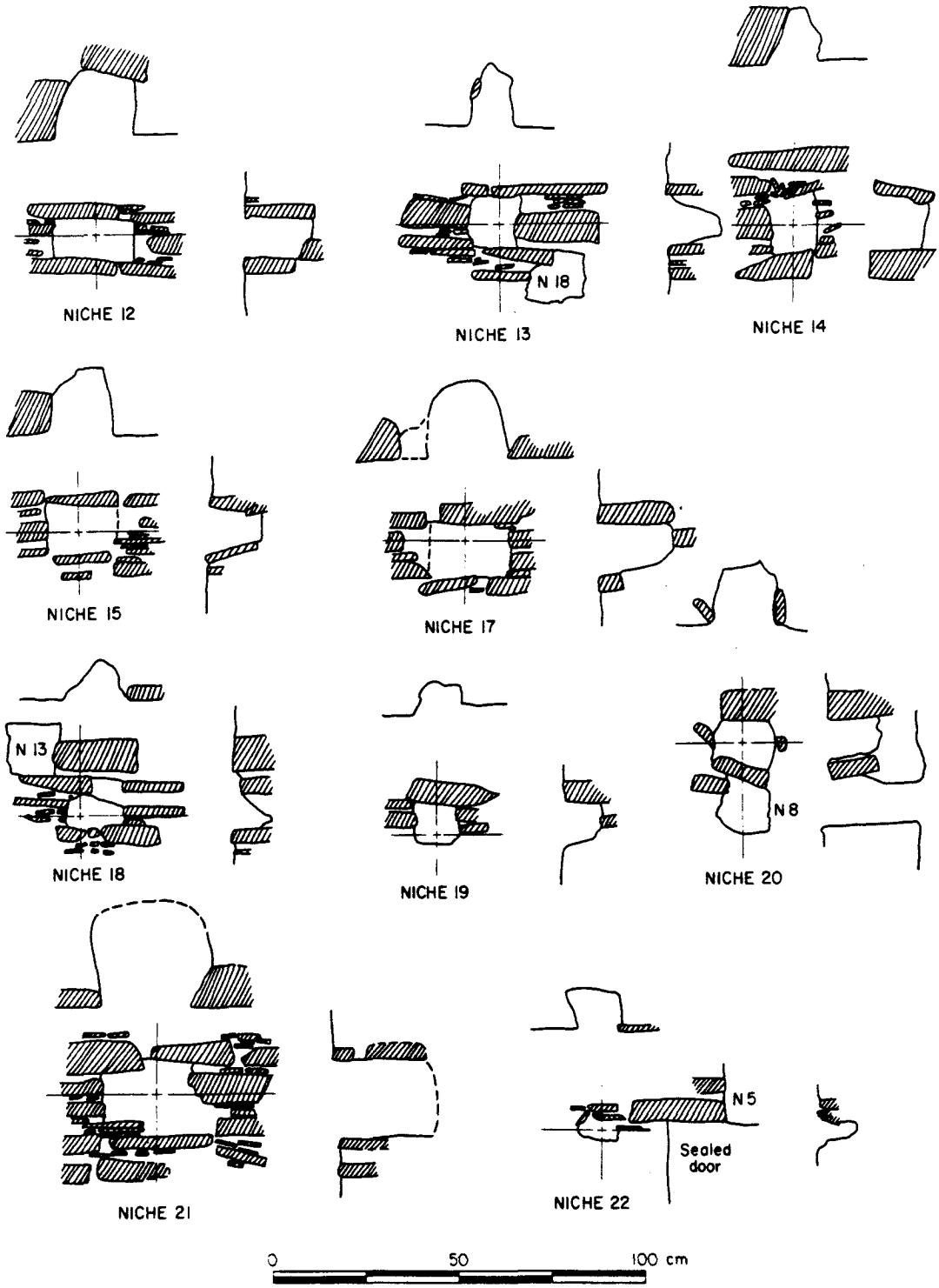


Figure MF-O.14. Room 103, wall niches (concluded).

CHCU_310_D58_VOL 4_00111

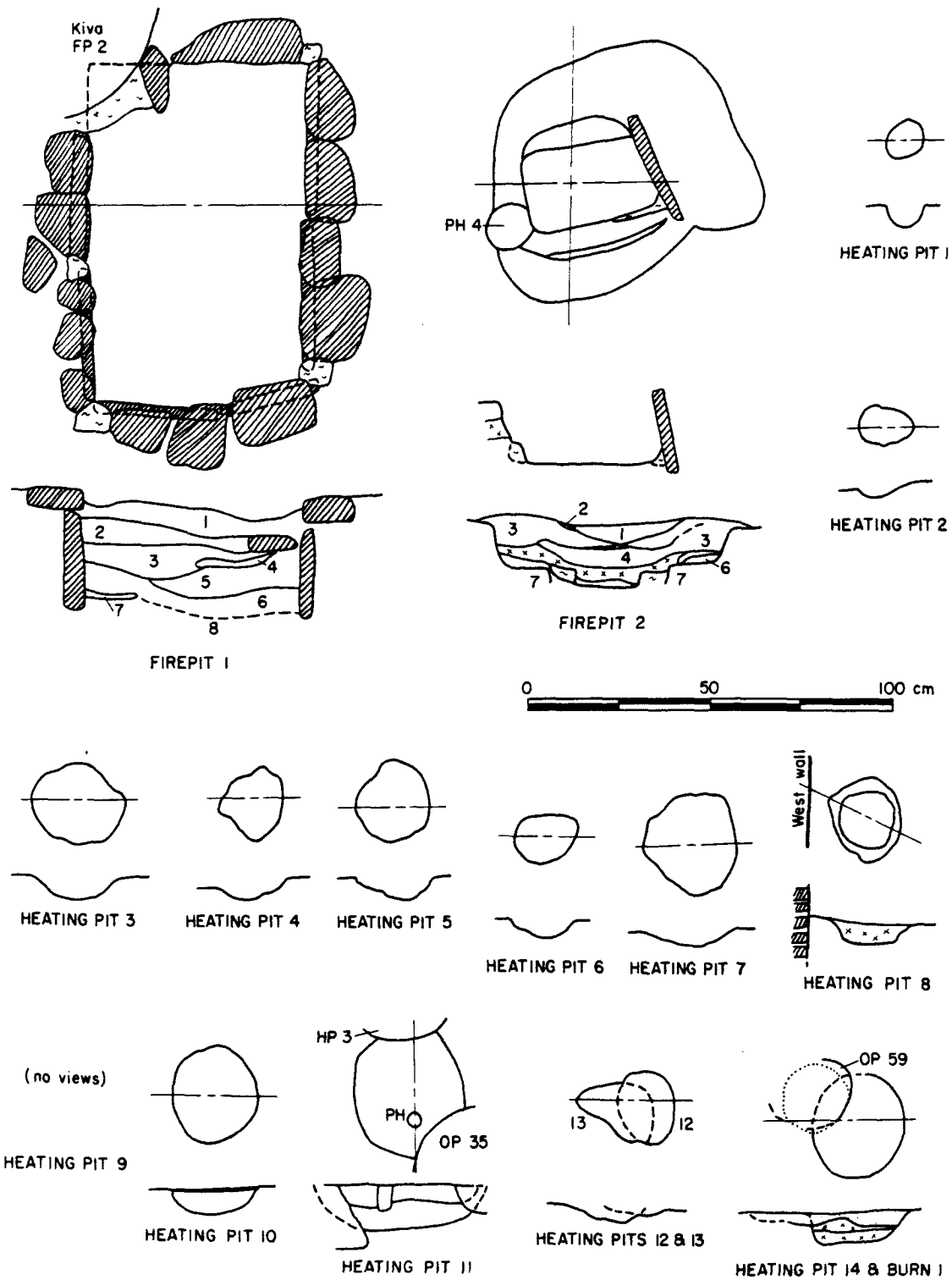


Figure MF-0.15. Room 110, Floor 1 firepits and heating pits.

CHCU_310_D58_VOL 4_00112

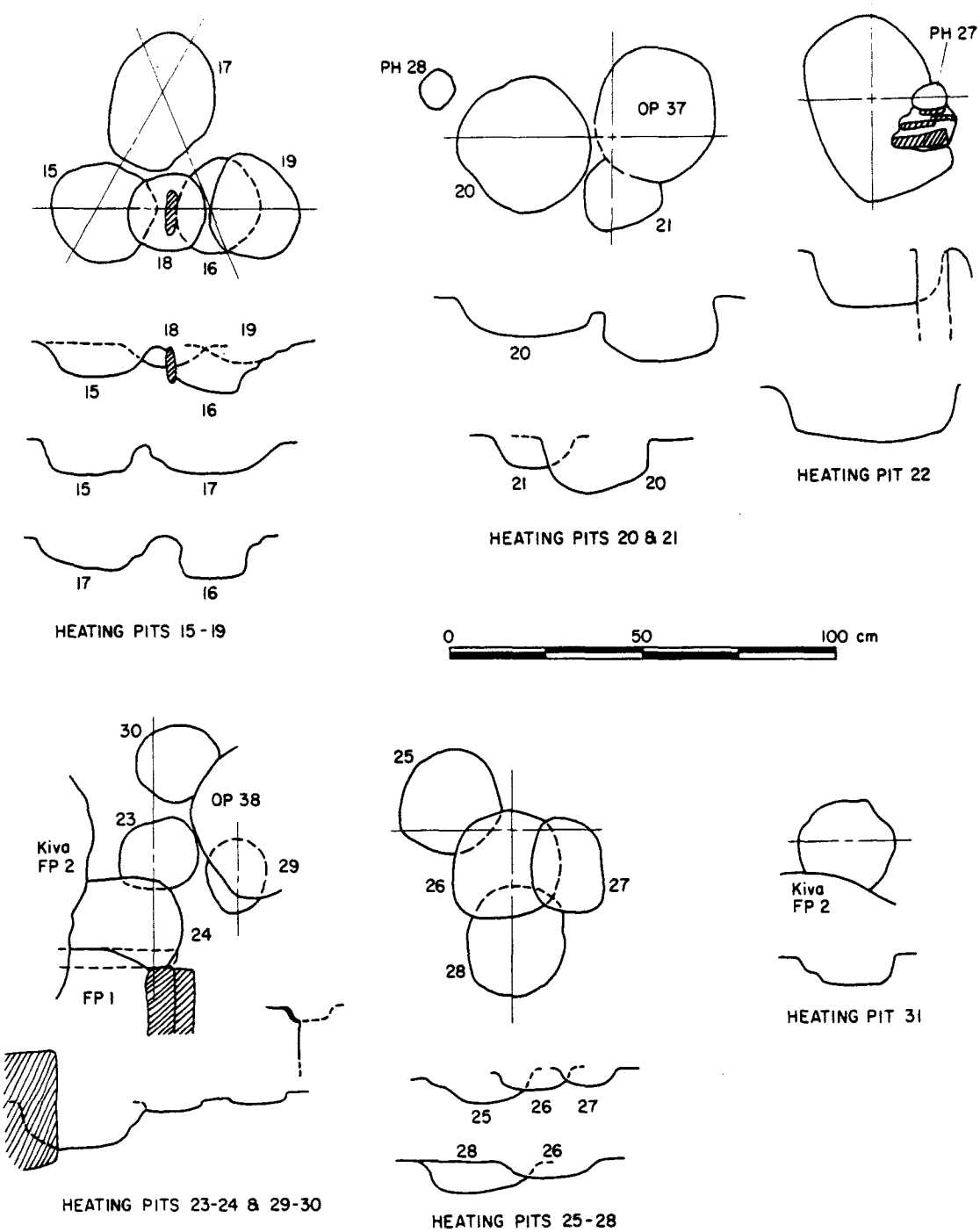


Figure MF-O.16. Room 110, Floor 1 heating pits (continued).

CHCU_310_D58_VOL 4_00113

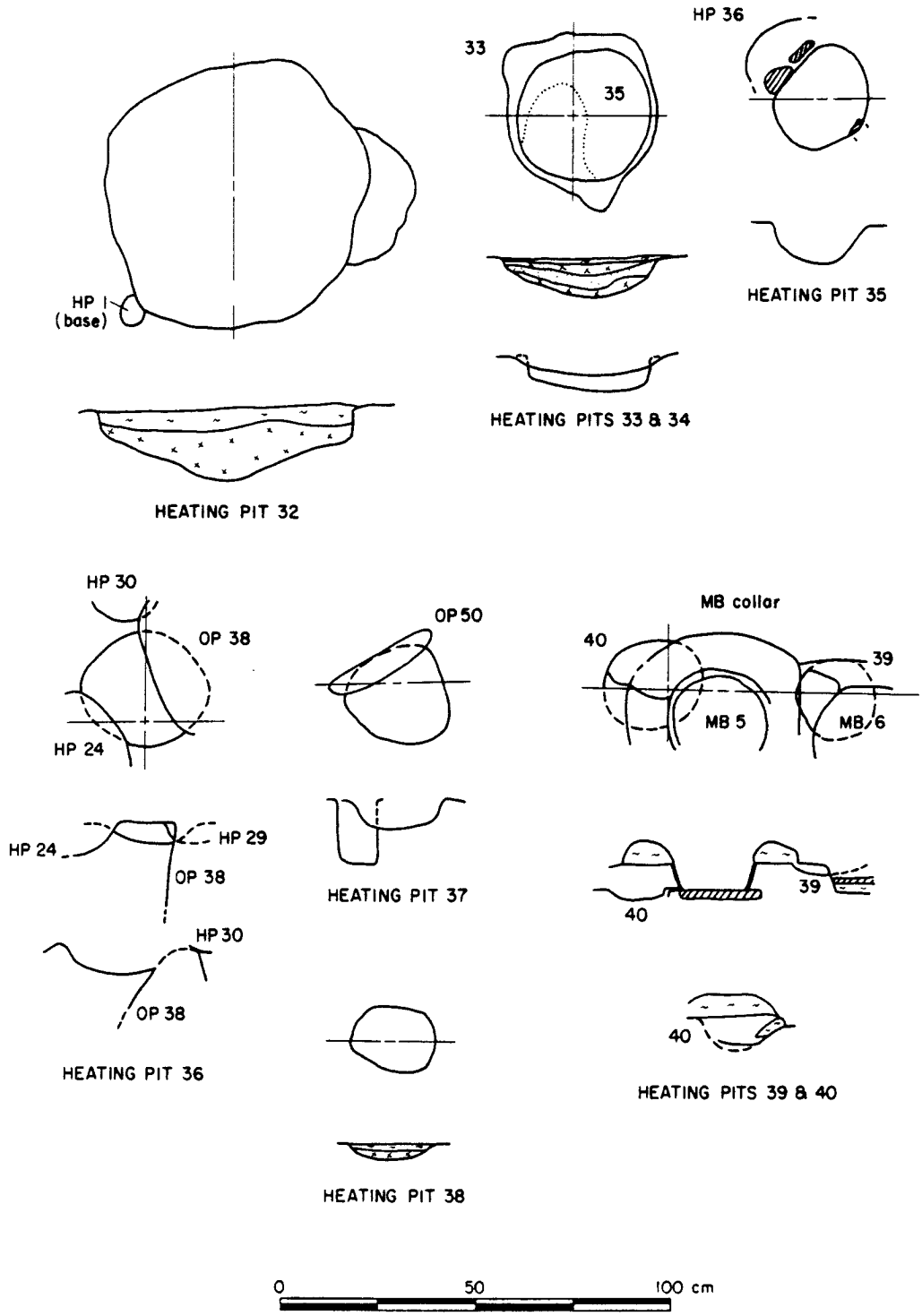


Figure MF-0.17. Room 110, Floor 1 heating pits (concluded).

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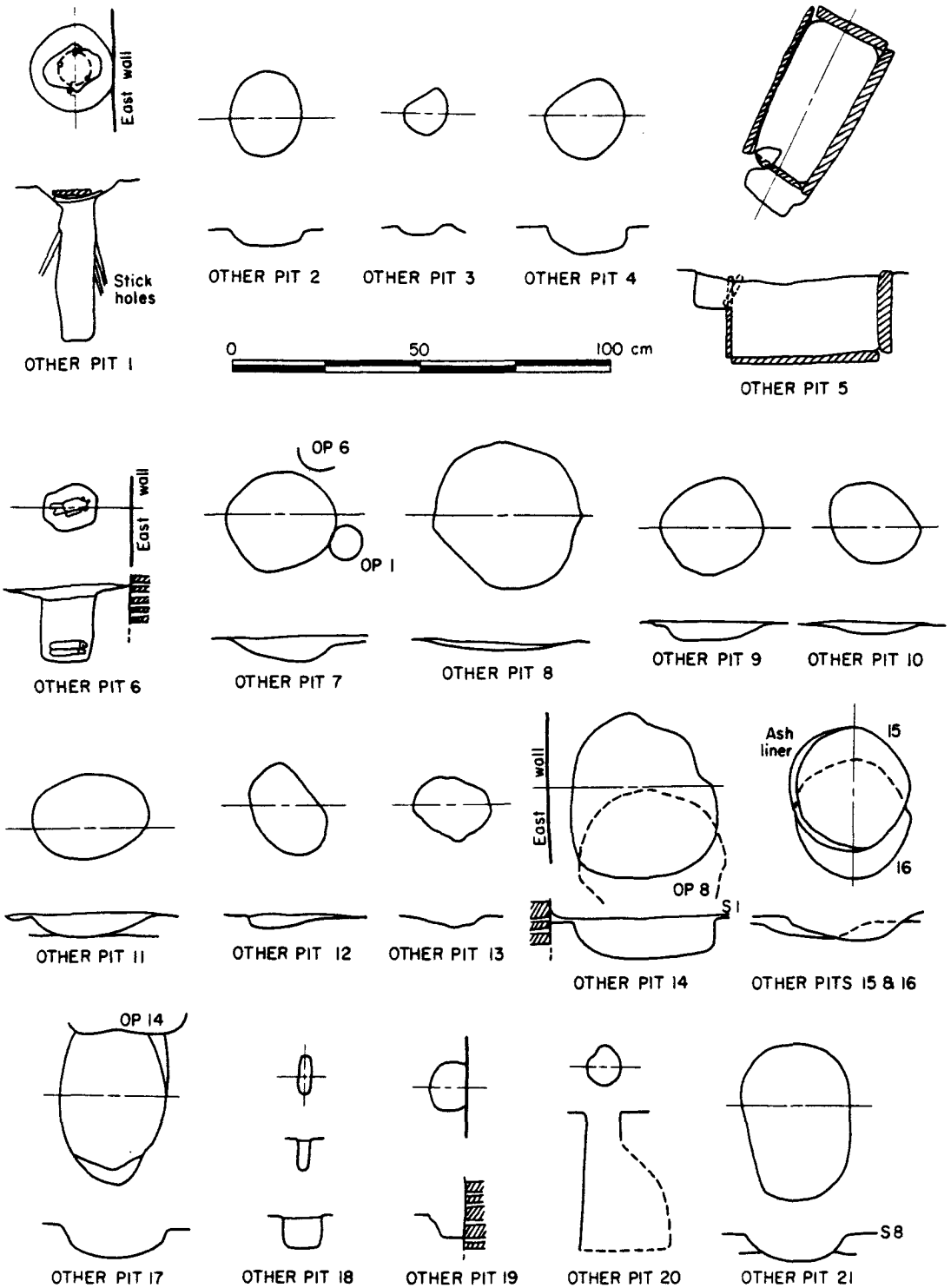


Figure MF-O.18. Room 110, Floor 1 other pits.

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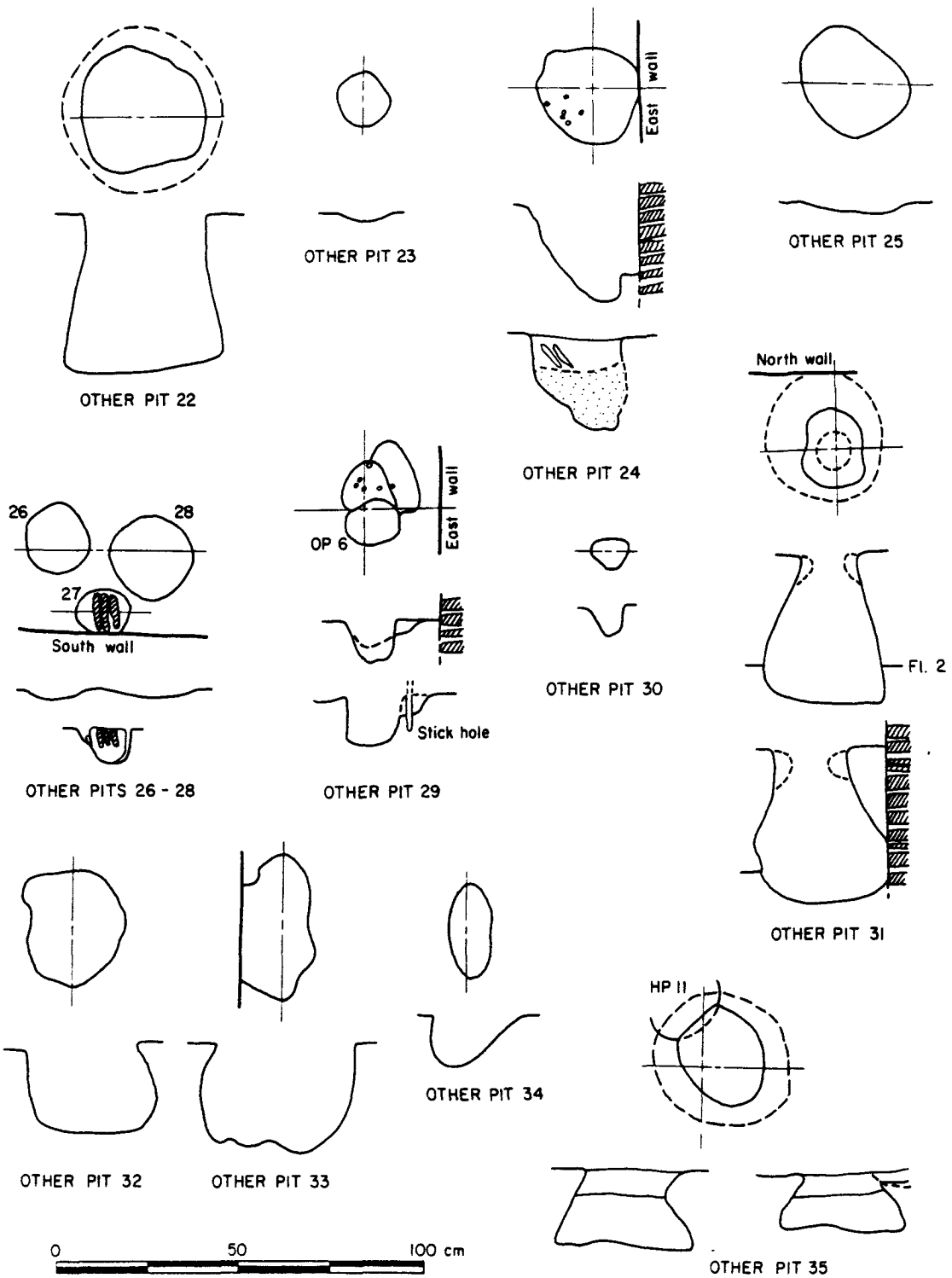


Figure MF-0.19. Room 110, Floor 1 other pits (continued).

CHCU_310_D58_VOL 4_00116

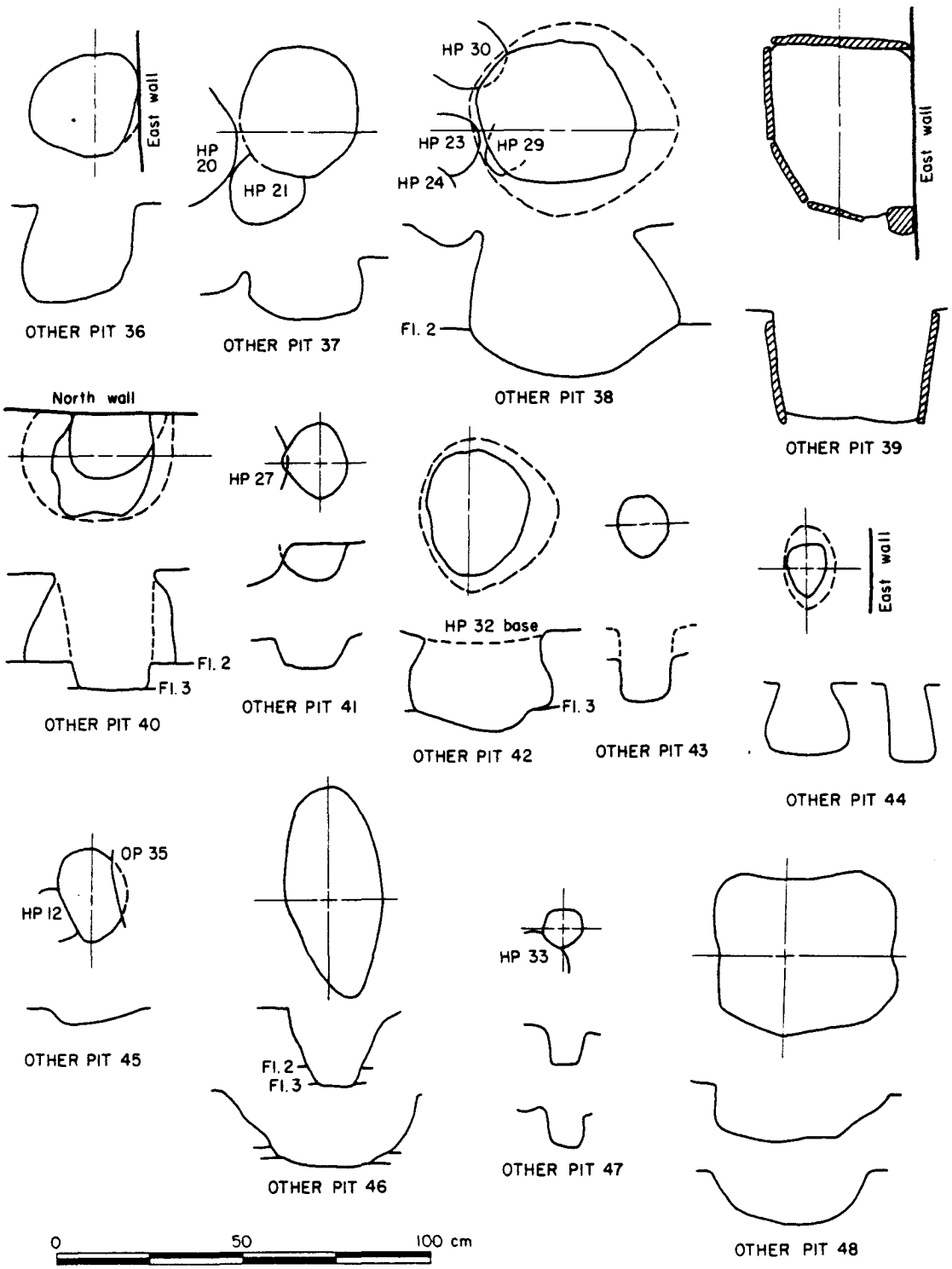


Figure MF-O.20. Room 110, Floor 1 other pits (continued).

CHCU_310_D58_VOL 4_00117

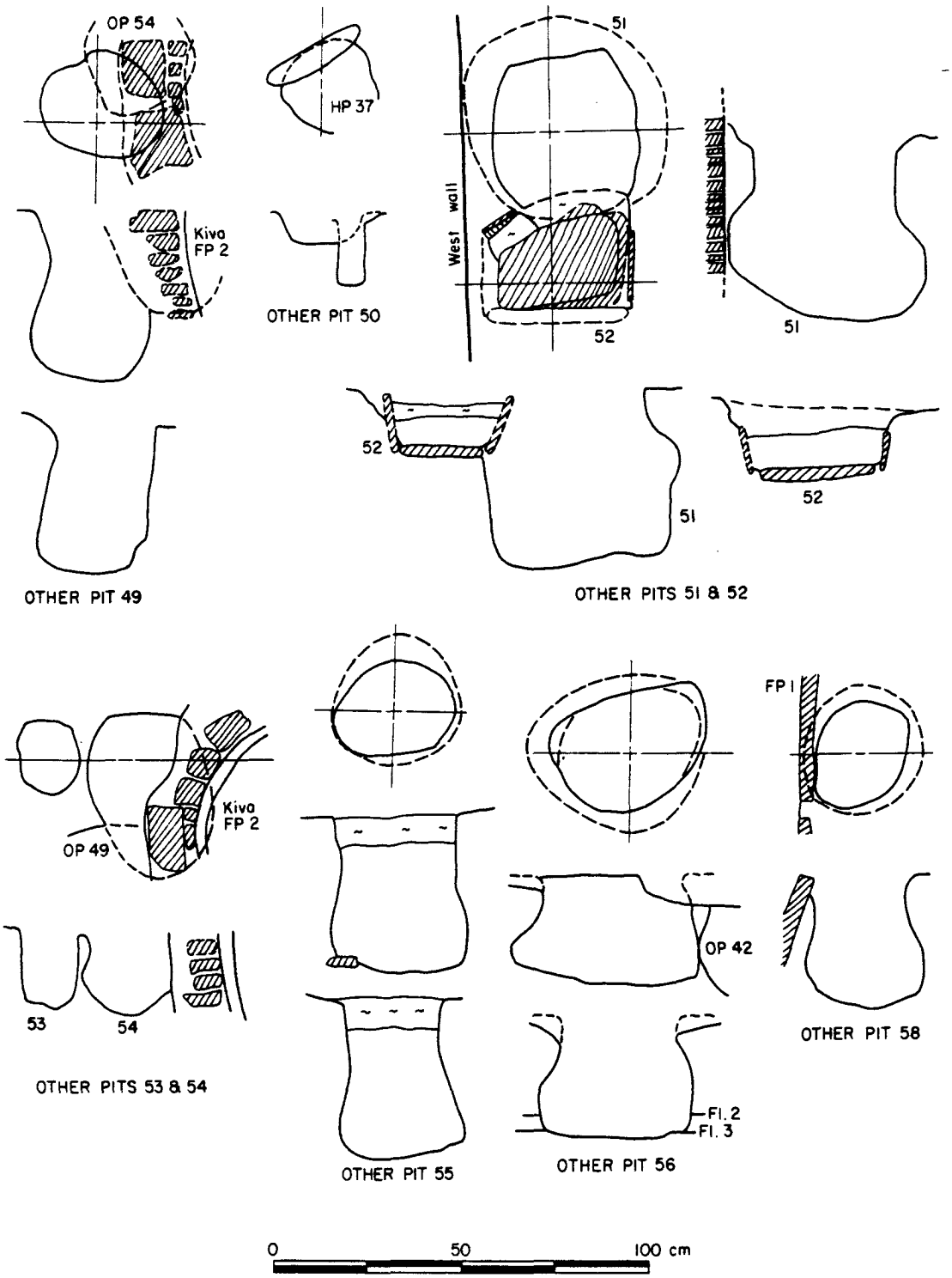


Figure MF-0.21. Room 110, Floor 1 other pits (continued).

CHCU_310_D58_VOL 4_00118

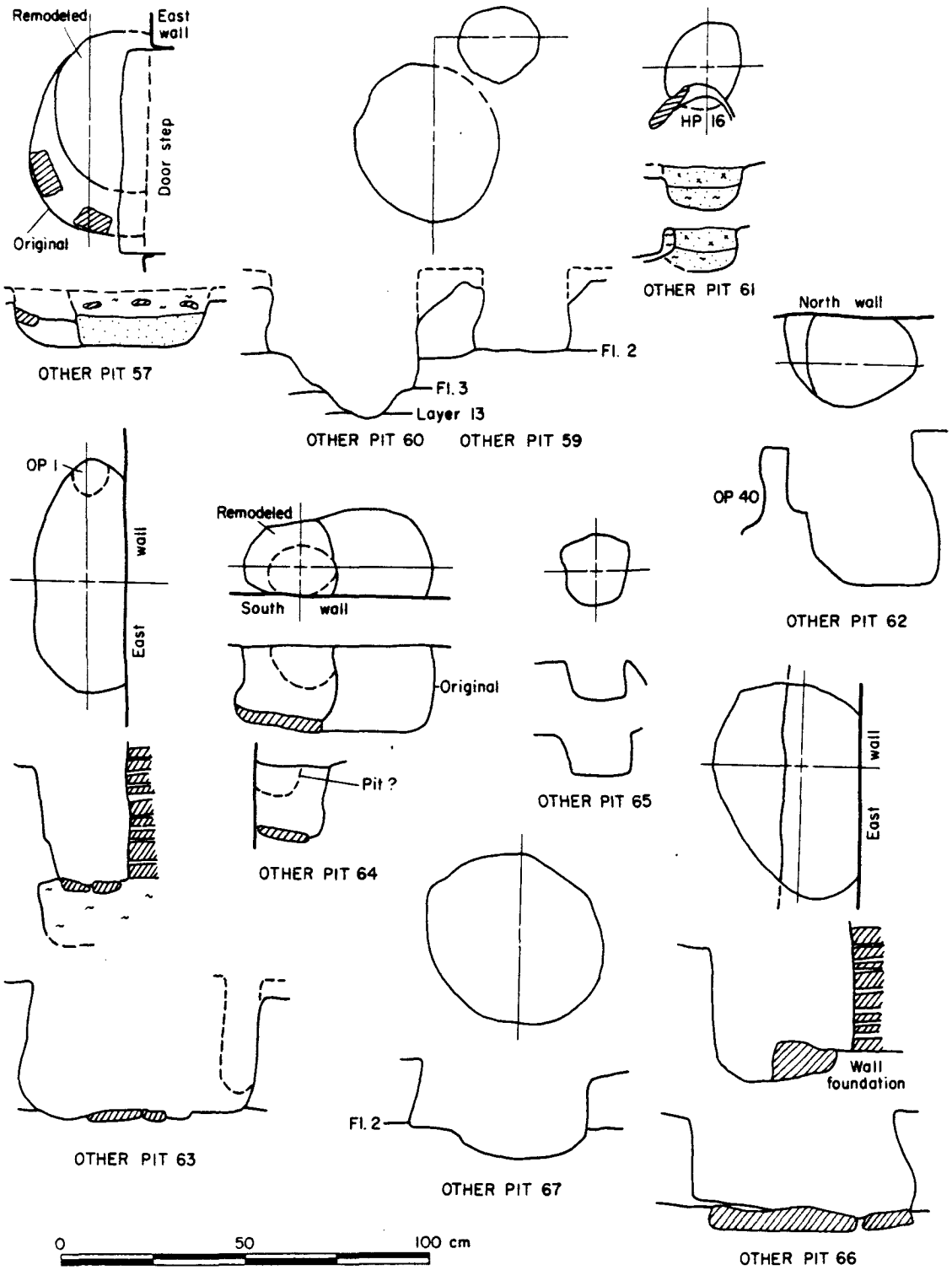


Figure MF-0.22. Room 110, Floor 1 other pits (continued).

CHCU_310_D58_VOL 4_00119

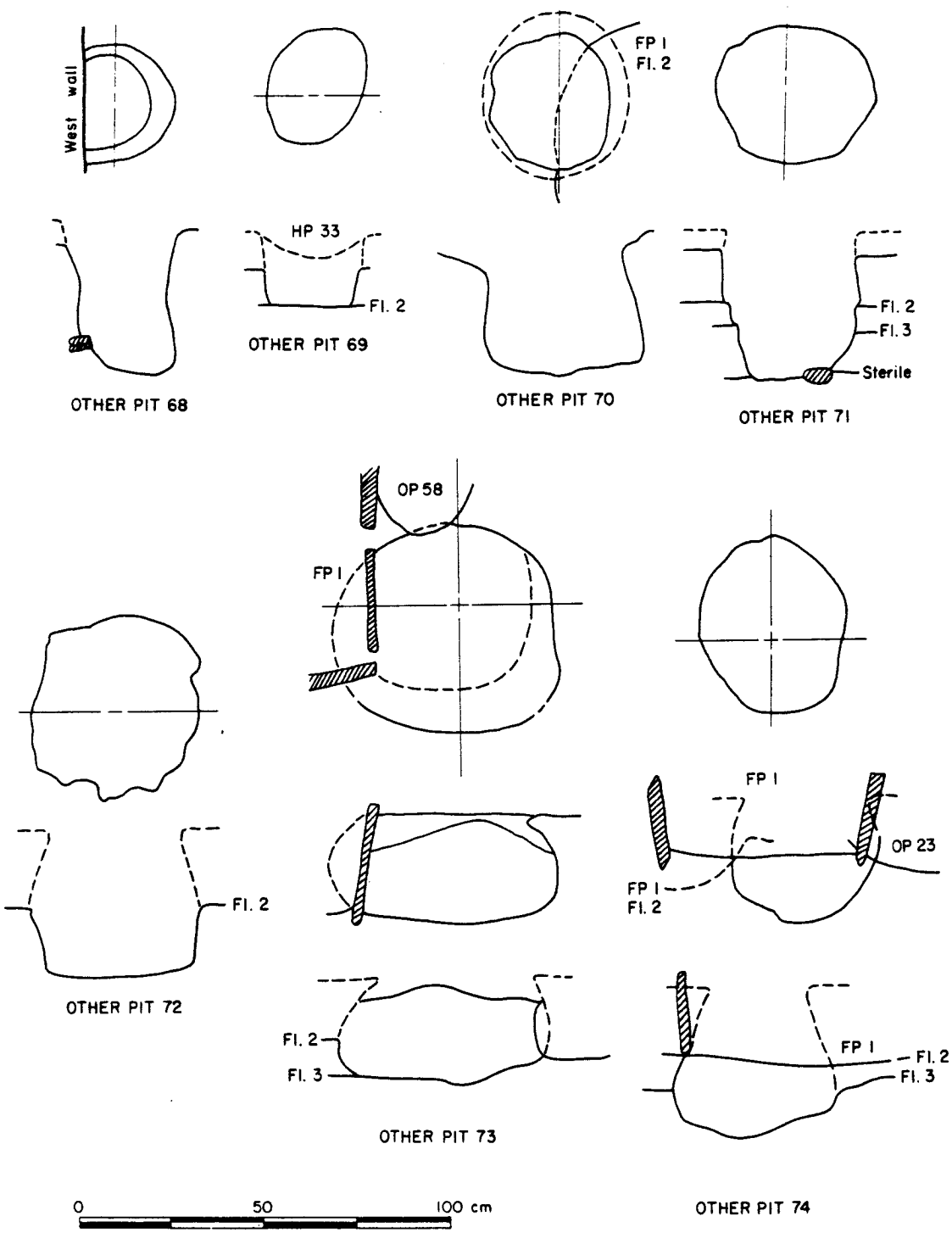


Figure MF-0.23. Room 110, Floor 1 other pits (concluded).

CHCU_310_D58_VOL 4_00120

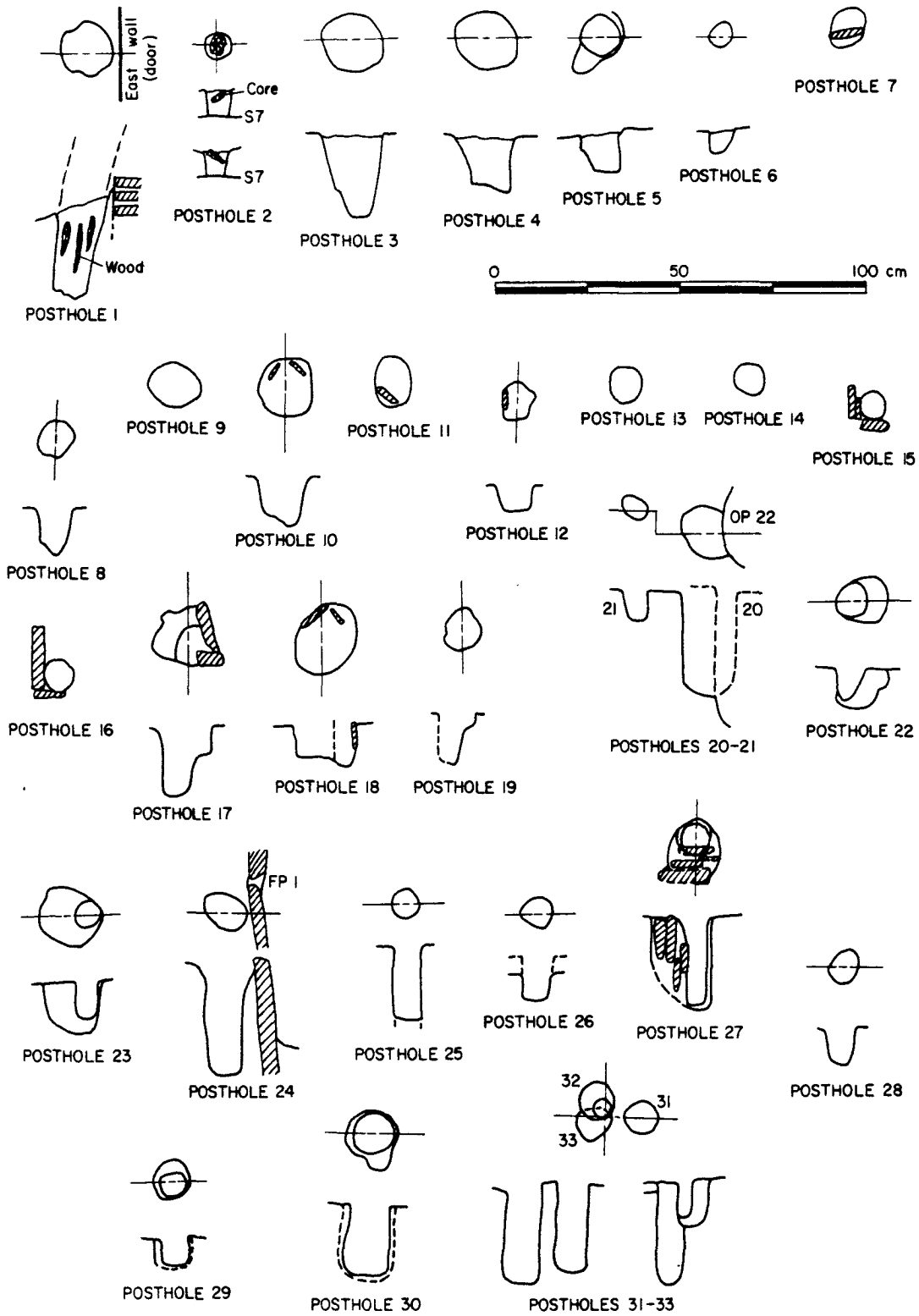


Figure MF-0.24. Room 110, Floor 1 postholes.

CHCU_310_D58_VOL 4_00121

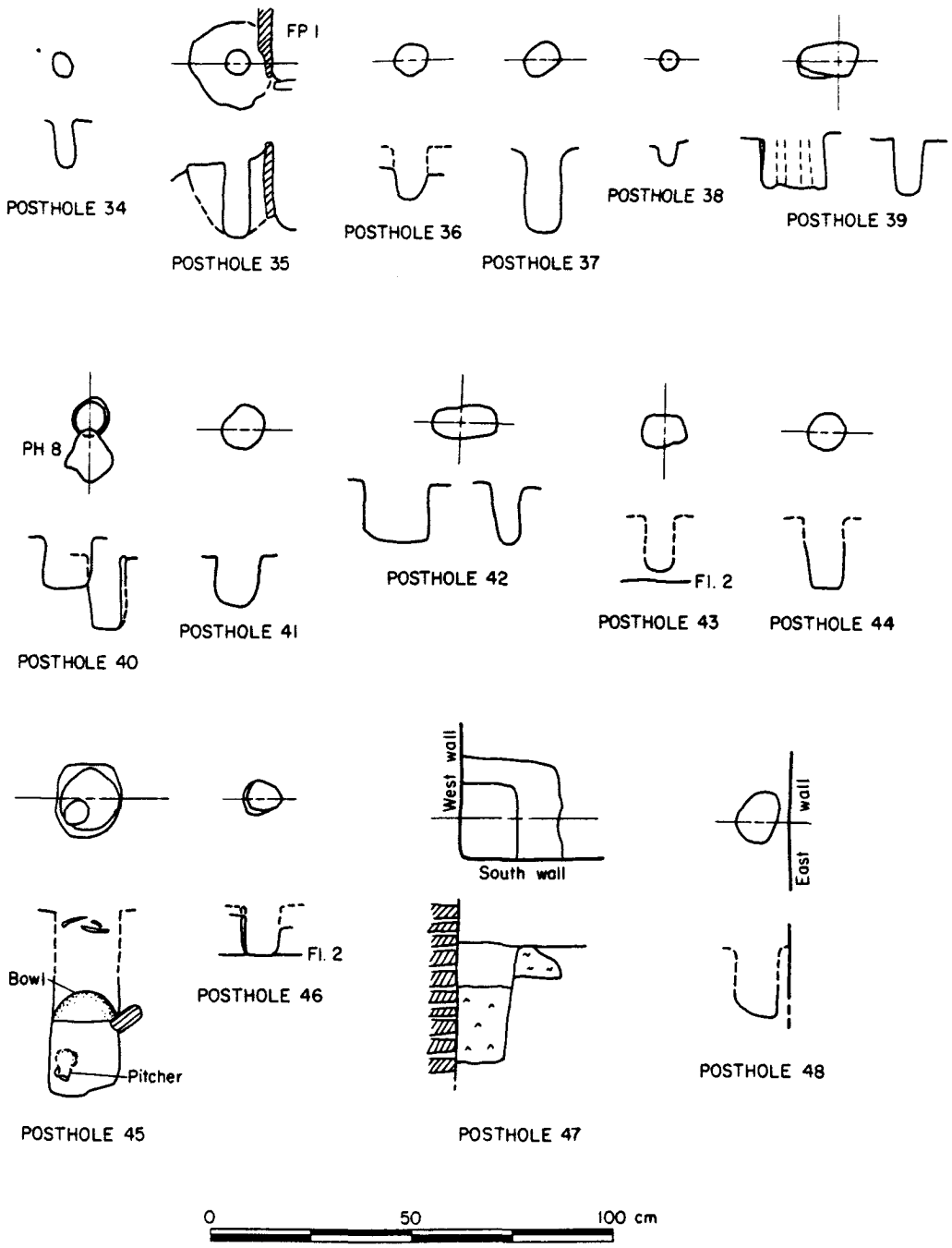


Figure MF-O.25. Room 110, Floor 1 postholes (concluded).

CHCU_310_D58_VOL 4_00122

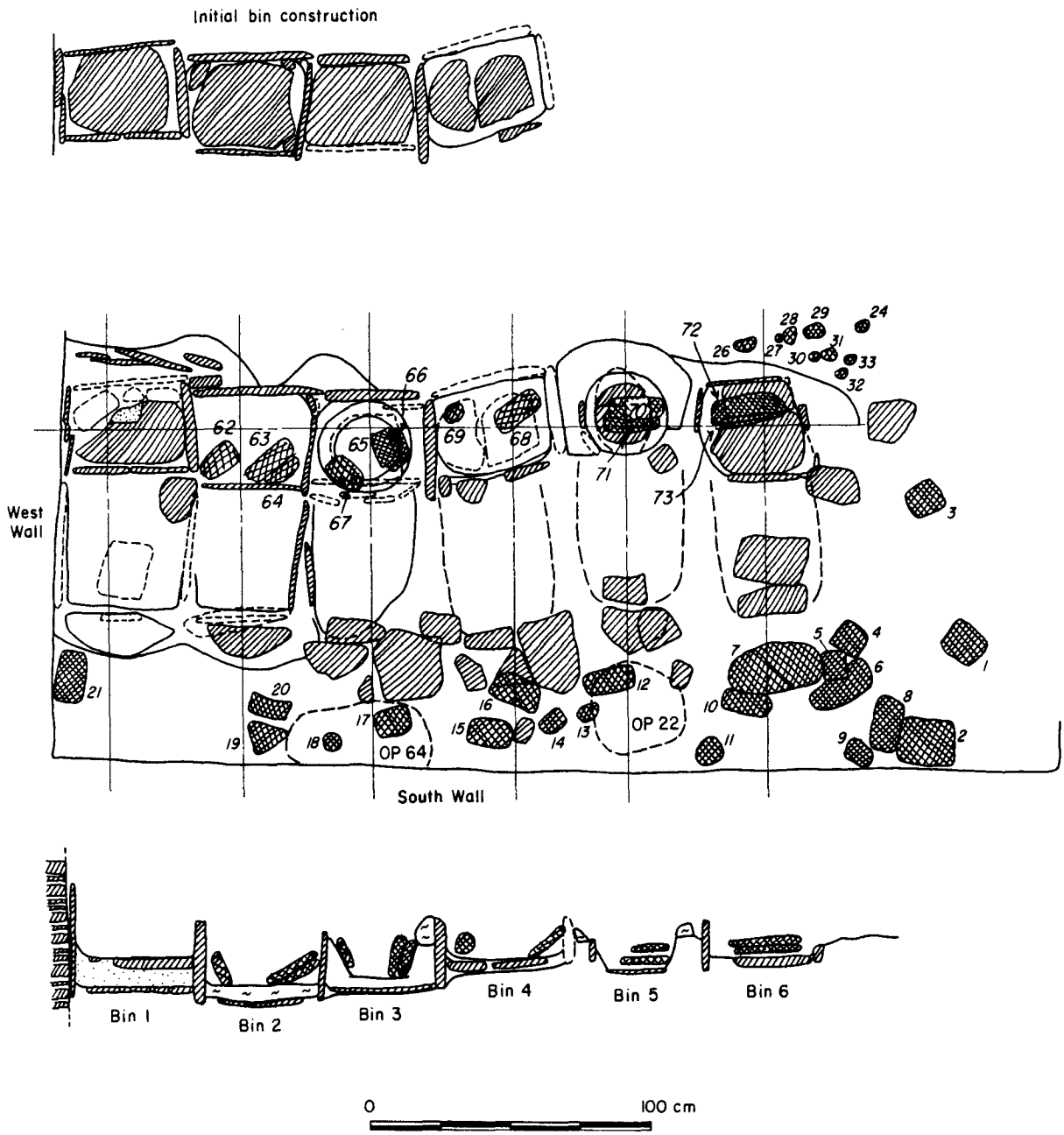


Figure MF-0.26. Room 110, Floor 1 mealing bins.

CHCU_310_D58_VOL 4_00123

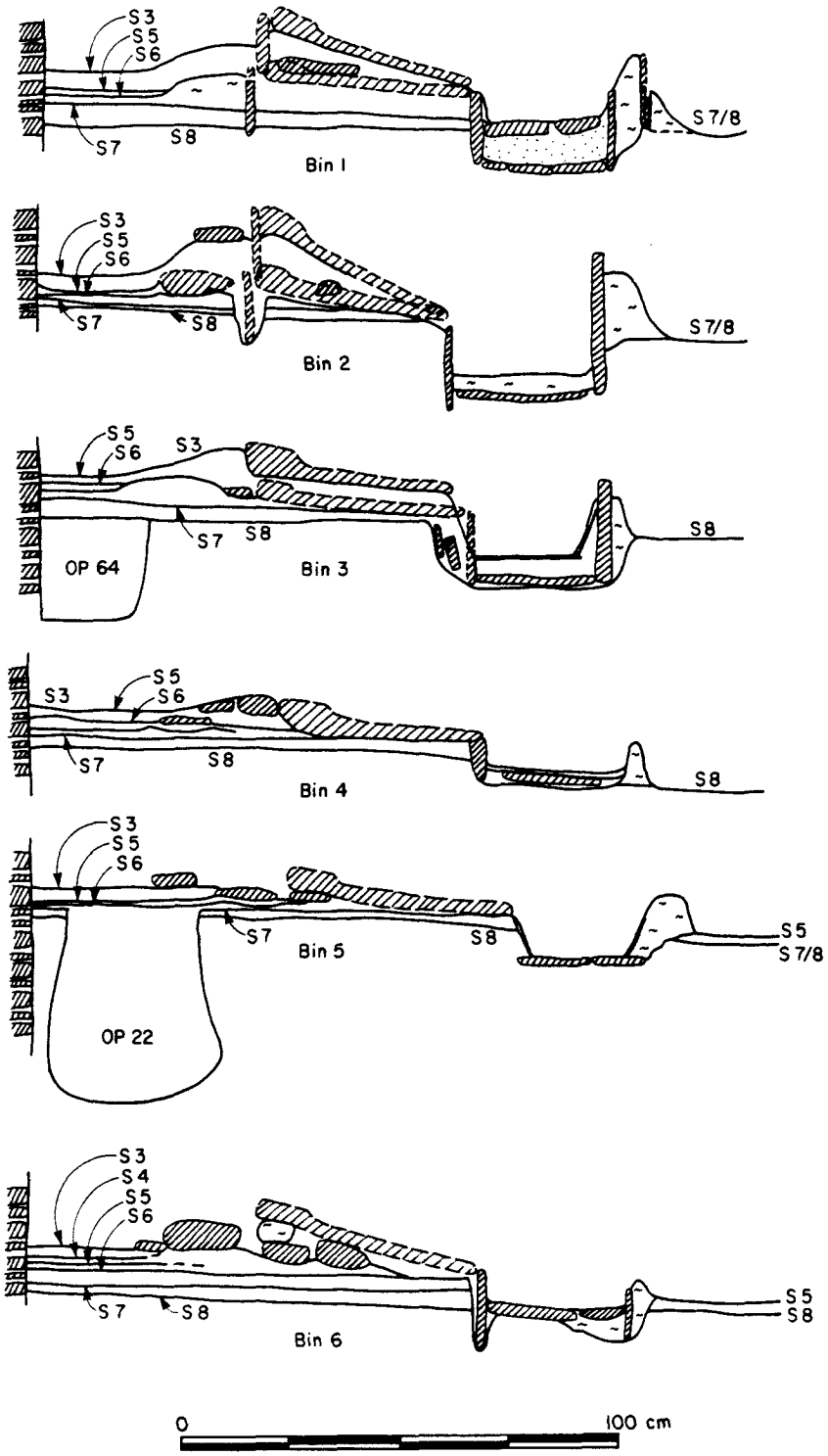


Figure MF-O.27. Room 110, Floor 1 mealing bins (concluded).

CHCU_310_D58_VOL 4_00124

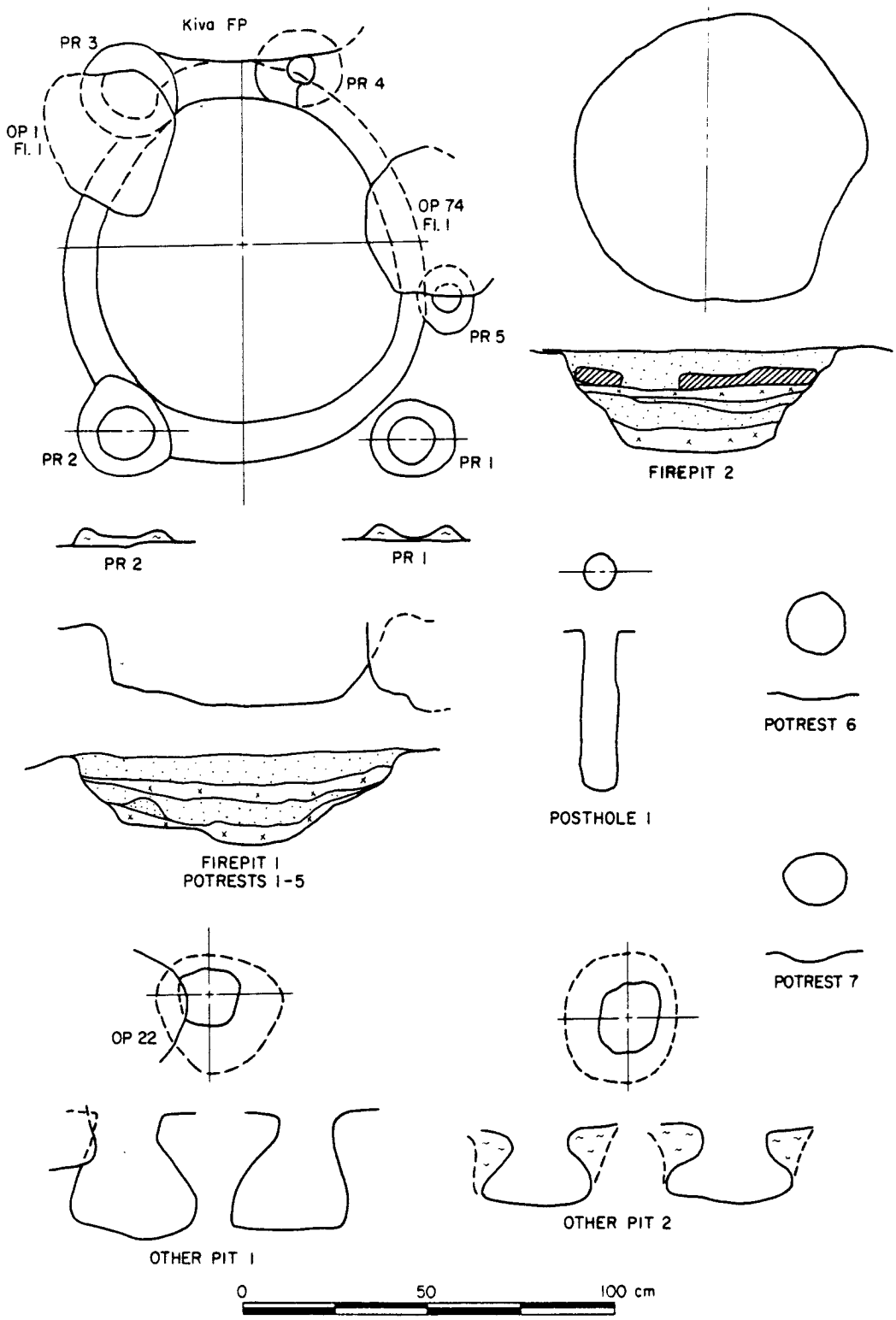


Figure MF-O.28. Room 110, Floor 2 features.

CHCU_310_D58_VOL 4_00125

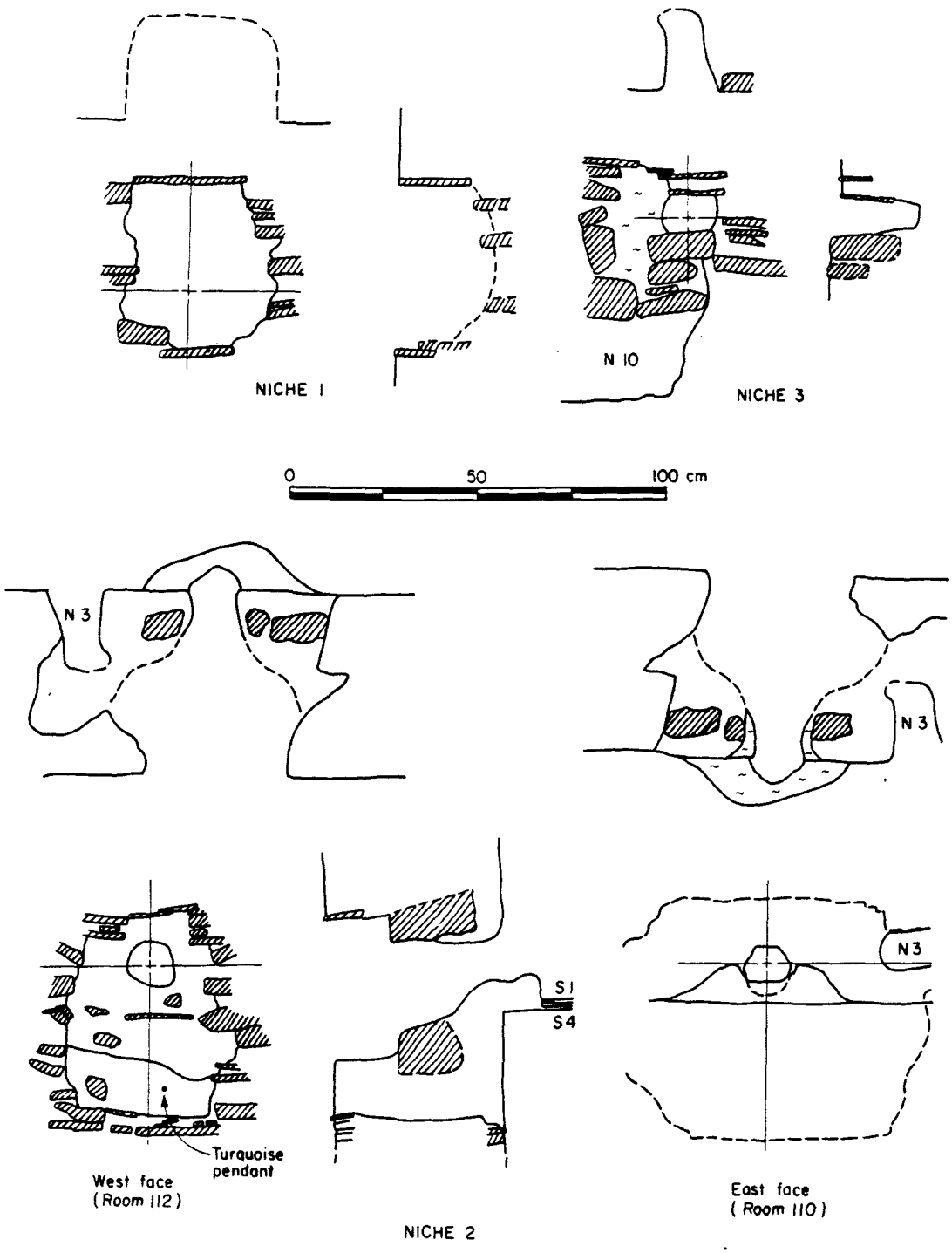


Figure MF-0.29. Room 110, Wall Niches 1-3.

CHCU_310_D58_VOL 4_00126

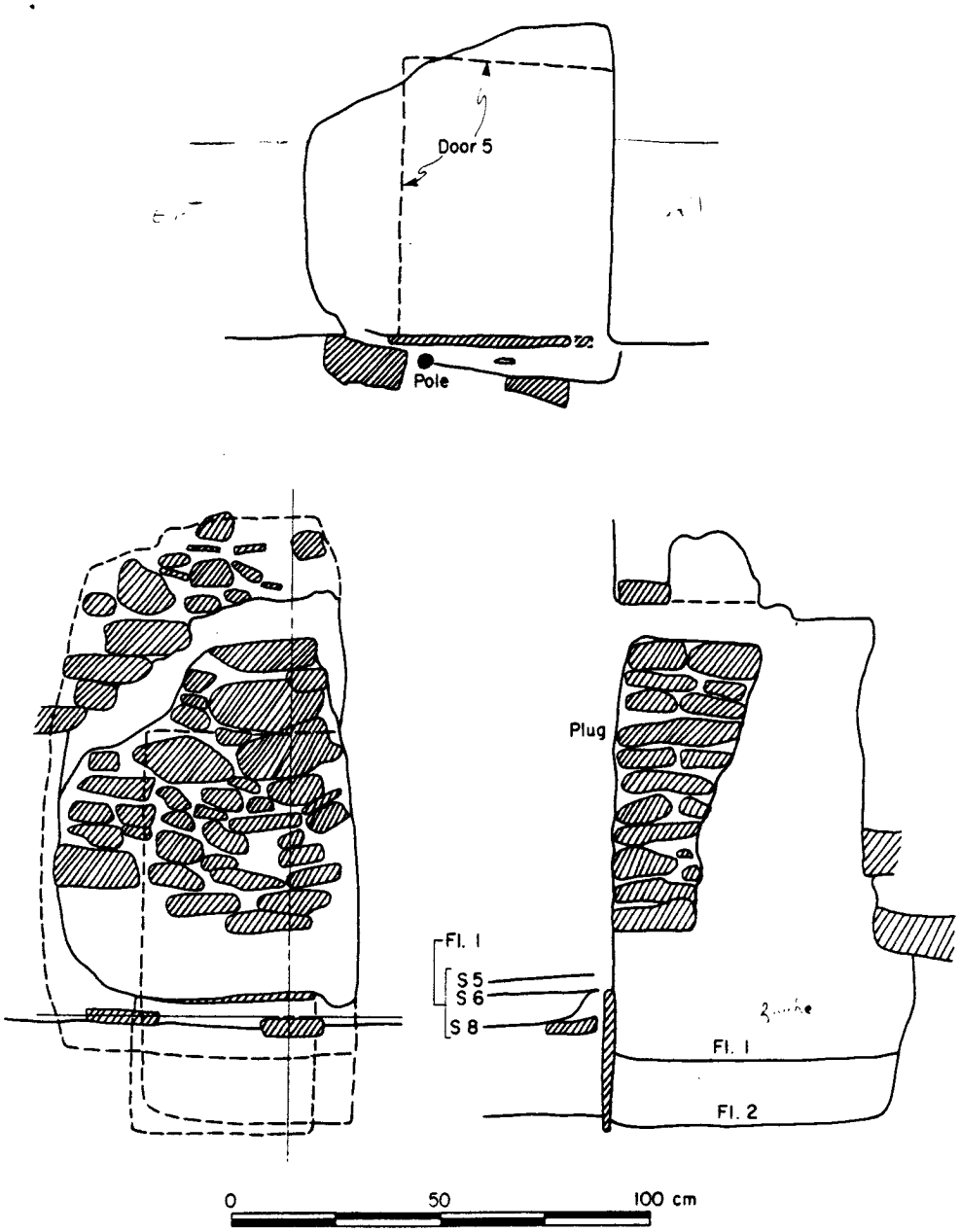


Figure MF-0.30. Room 110, Wall Niche 4 (compare with Figures MF-0.39-MF-0.40).

CHCU_310_D58_VOL 4_00127

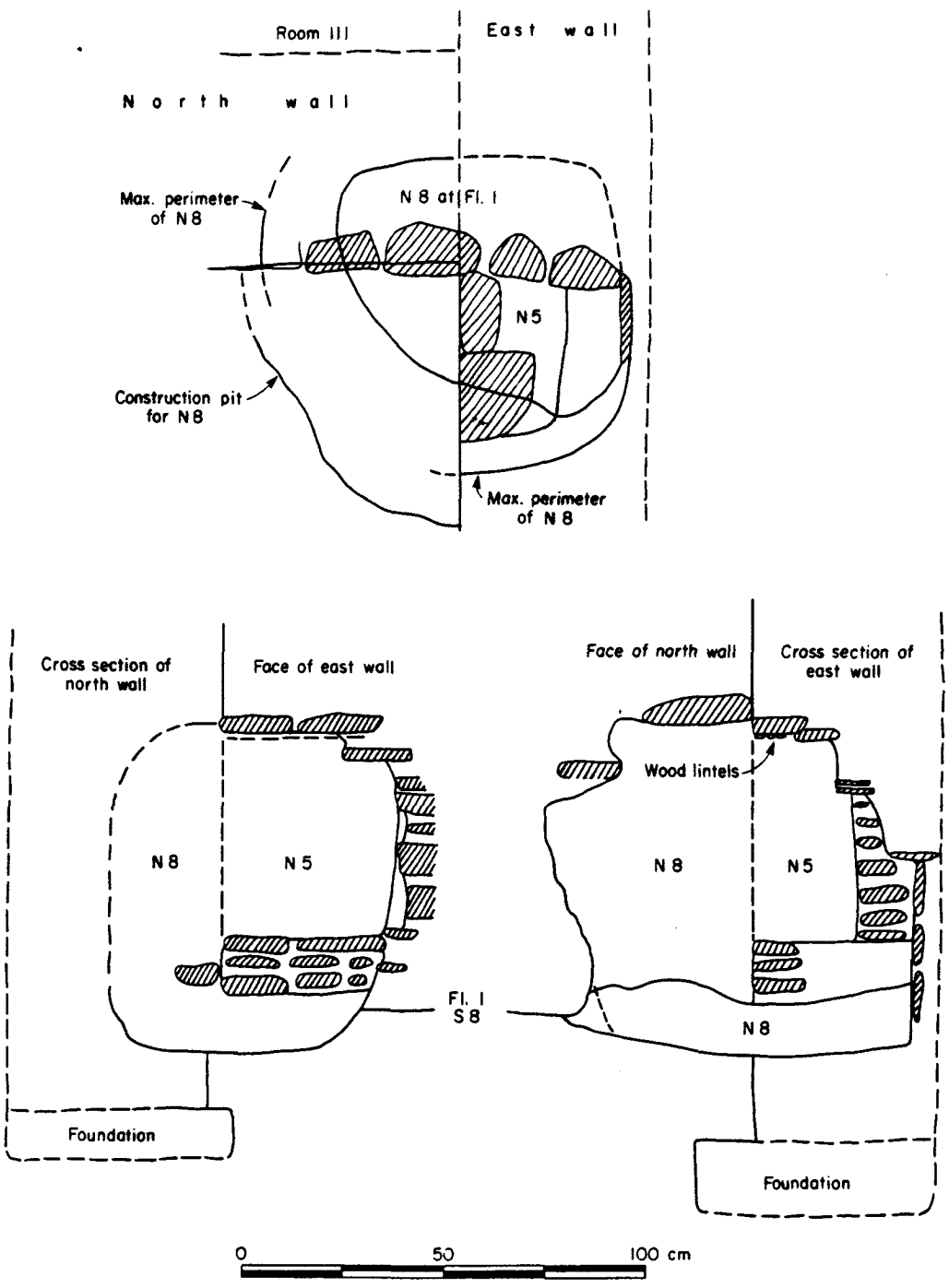


Figure MF-0.31. Room 110, Wall Niches 5 and 8.

CHCU_310_D58_VOL 4_00128

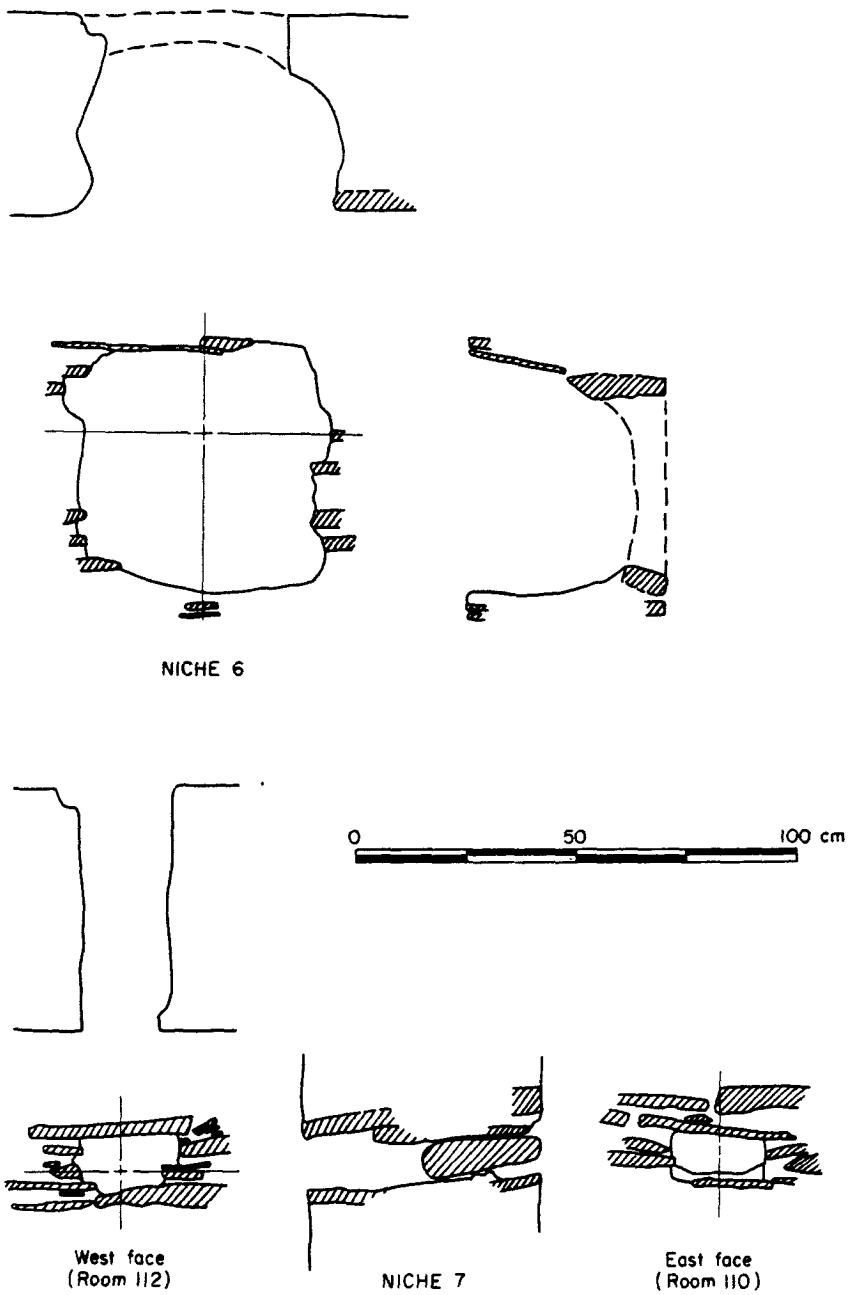


Figure MF-0.32. Room 110, Wall Niches 6 and 7.

CHCU_310_D58_VOL 4_00129

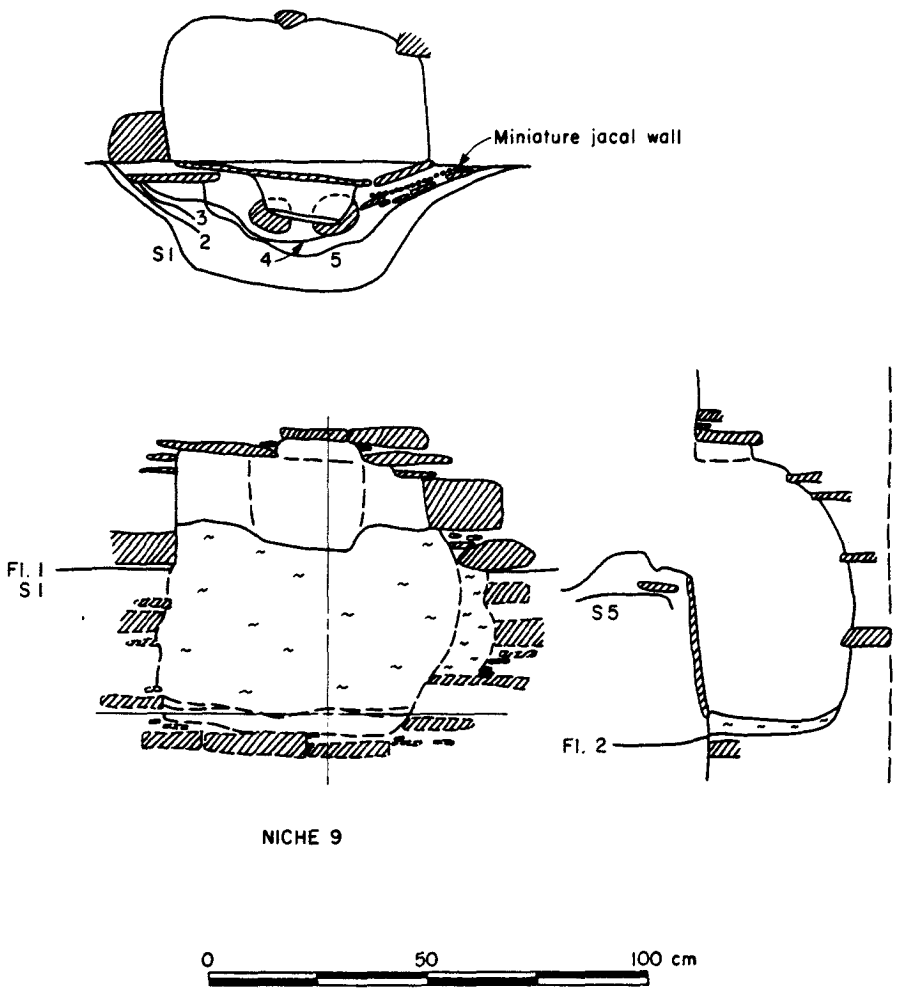


Figure MF-0.33. Room 110, Wall Niche 9.

CHCU_310_D58_VOL 4_00130

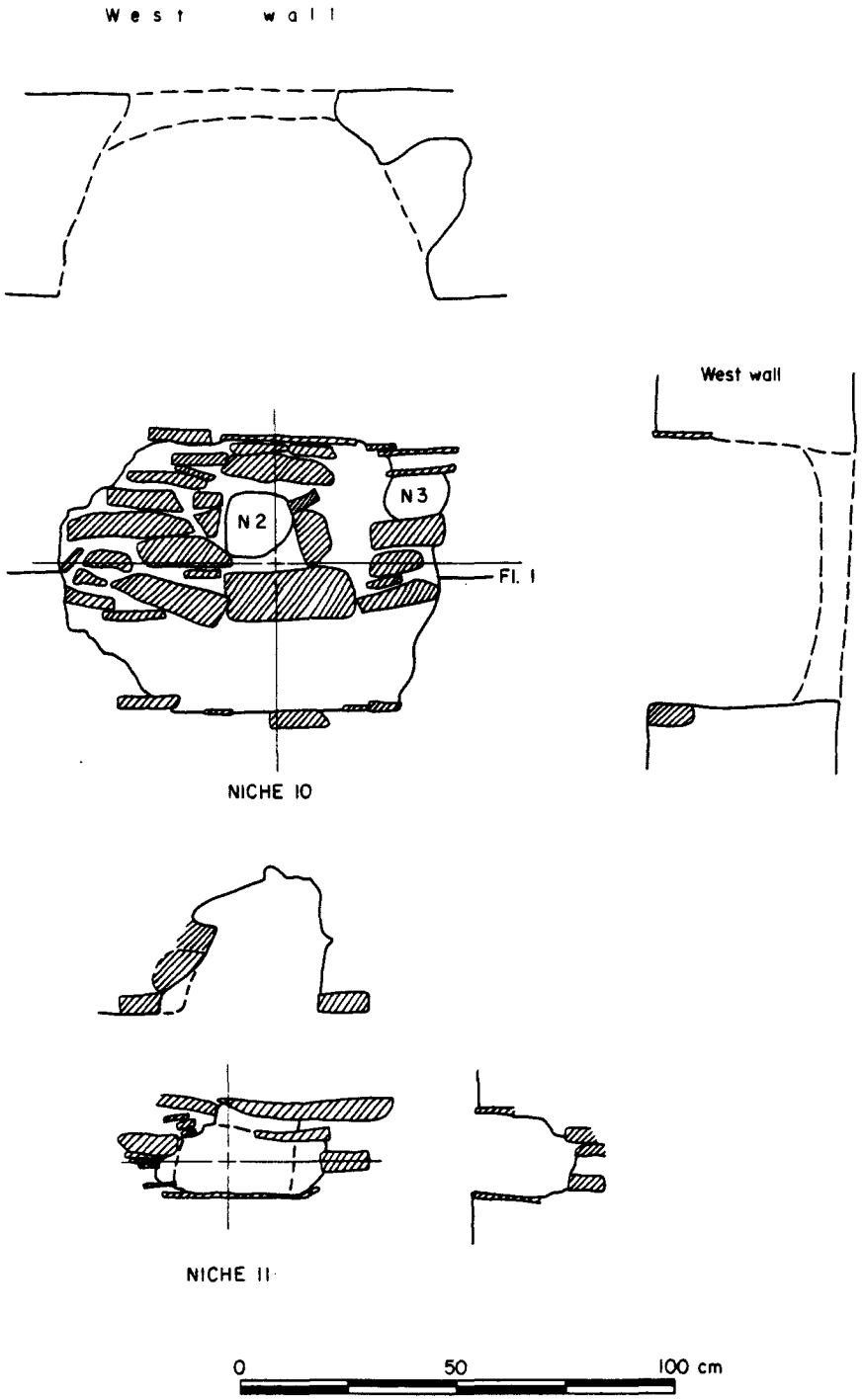


Figure MF-O.34. Room 110, Wall Niches 10 and 11.

CHCU_310_D58_VOL 4_00131

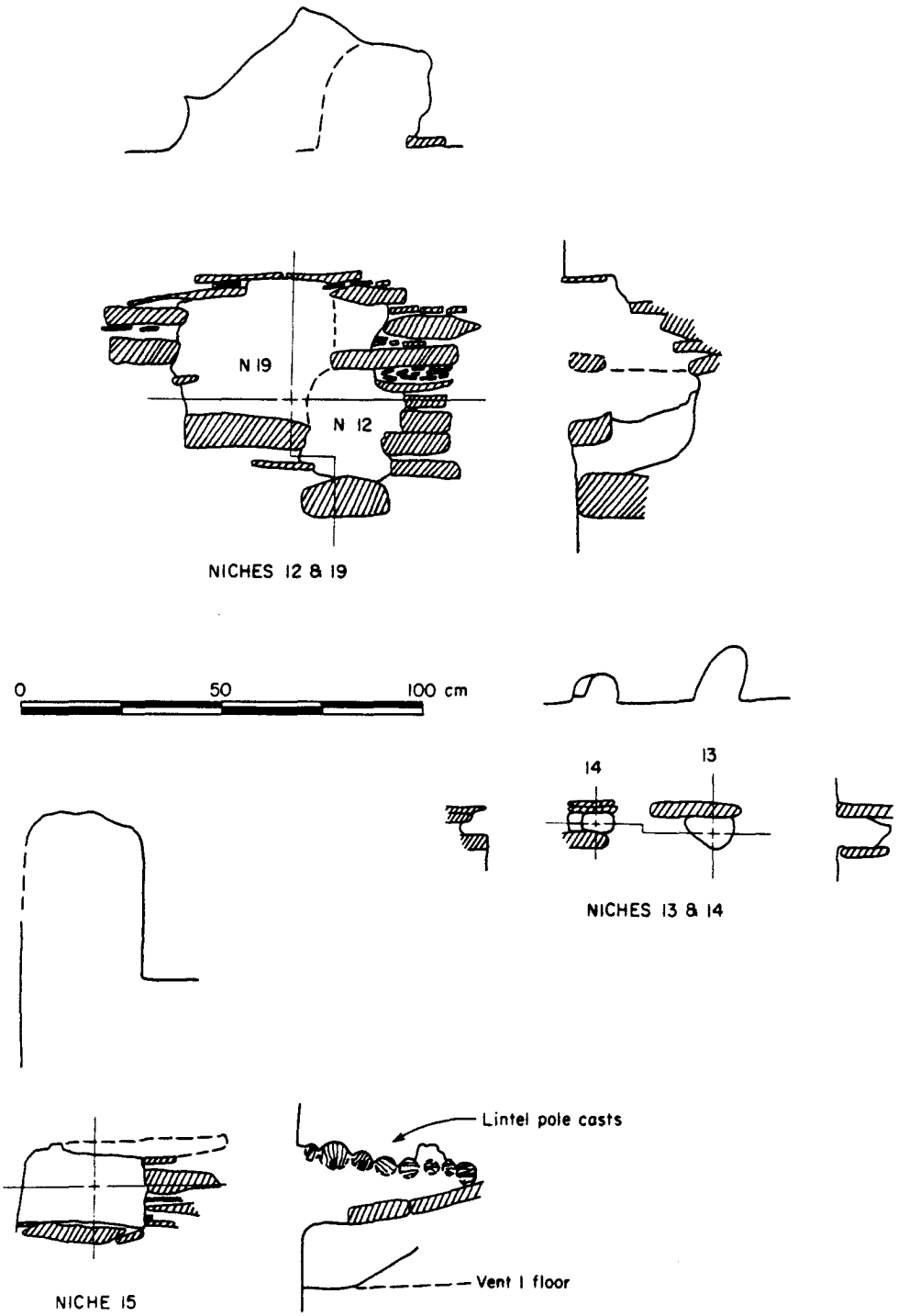


Figure MF-0.35. Room 110, Wall Niches 12-15 and 19.

CHCU_310_D58_VOL 4_00132

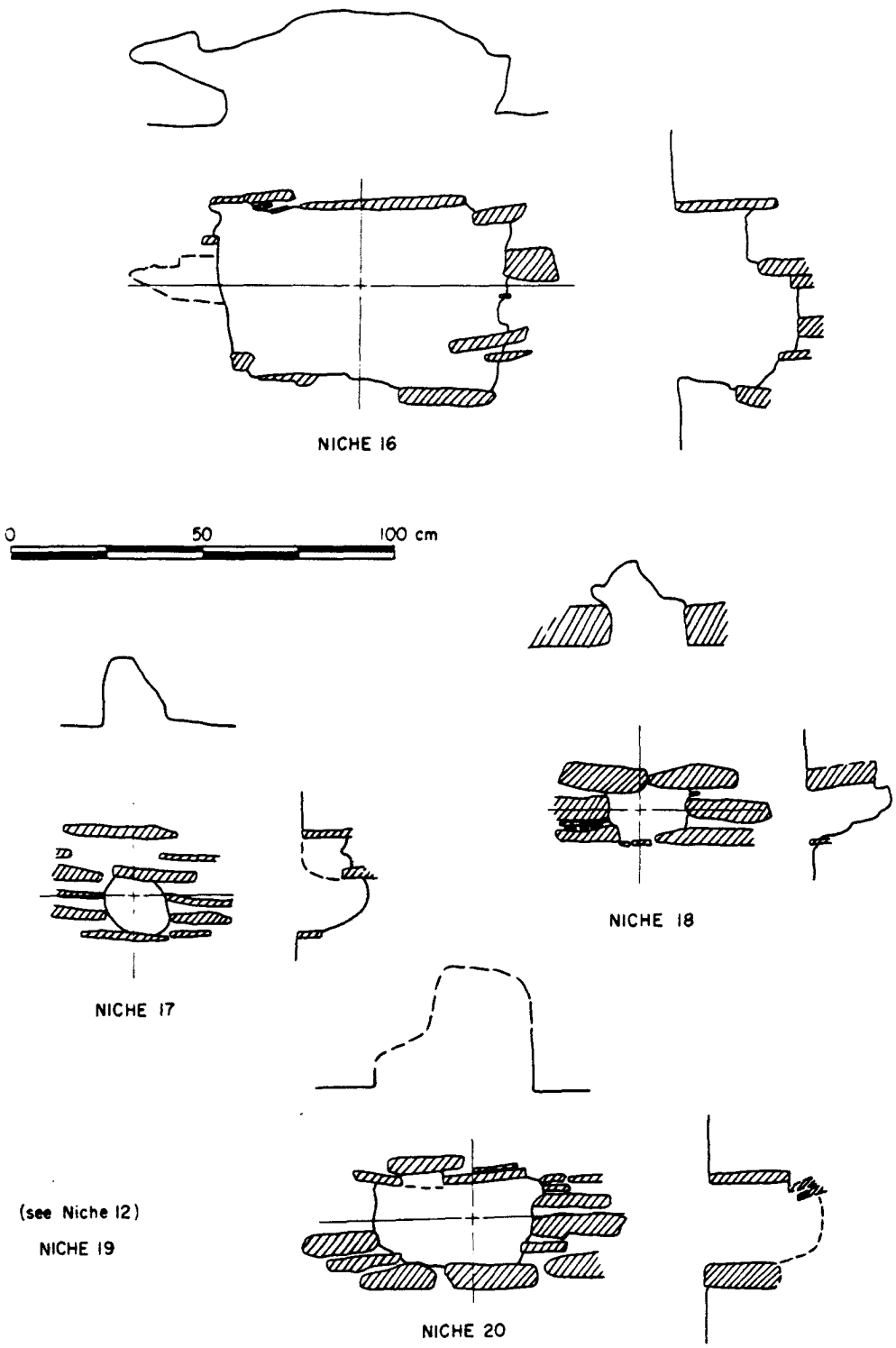


Figure MF-O.36. Room 110, Wall Niches 16-18 and 20.

CHCU_310_D58_VOL 4_00133

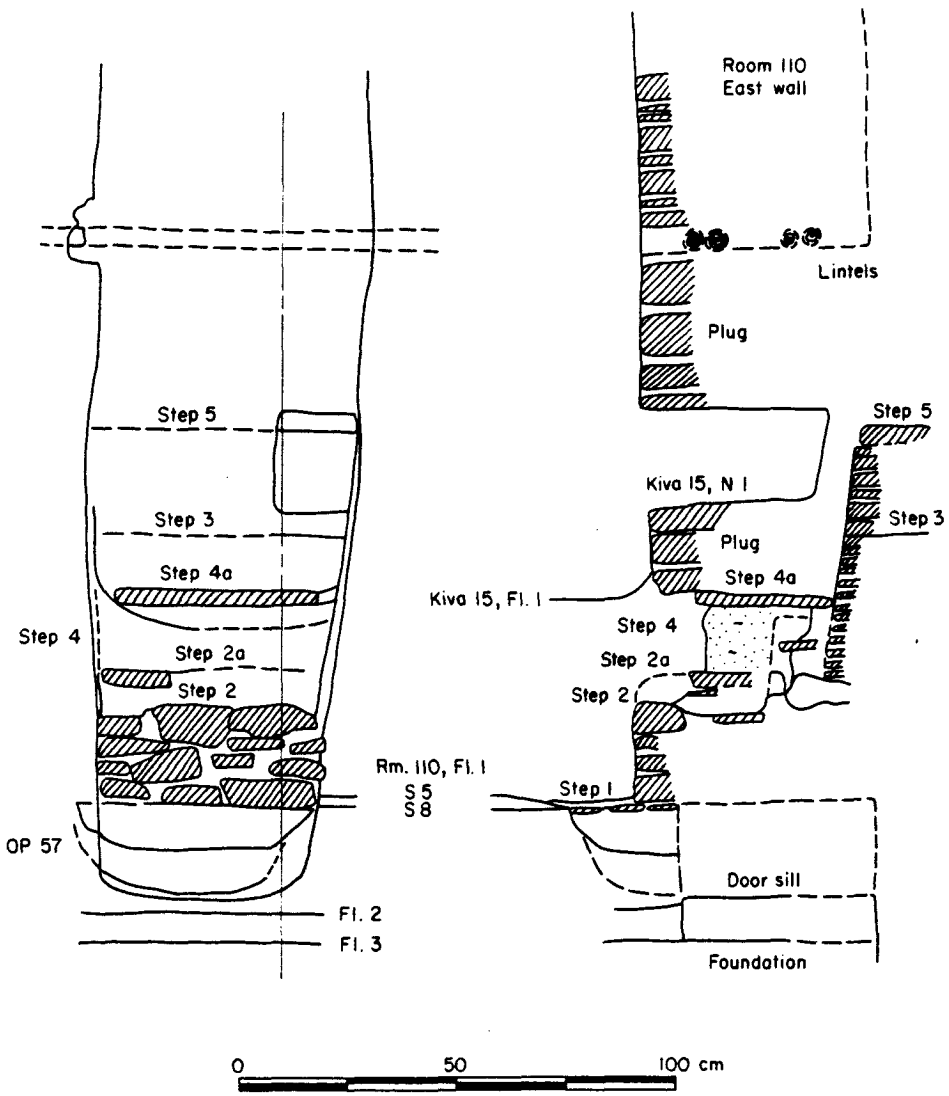


Figure MF-0.37. Room 110, Door 1.

CHCU_310_D58_VOL 4_00134

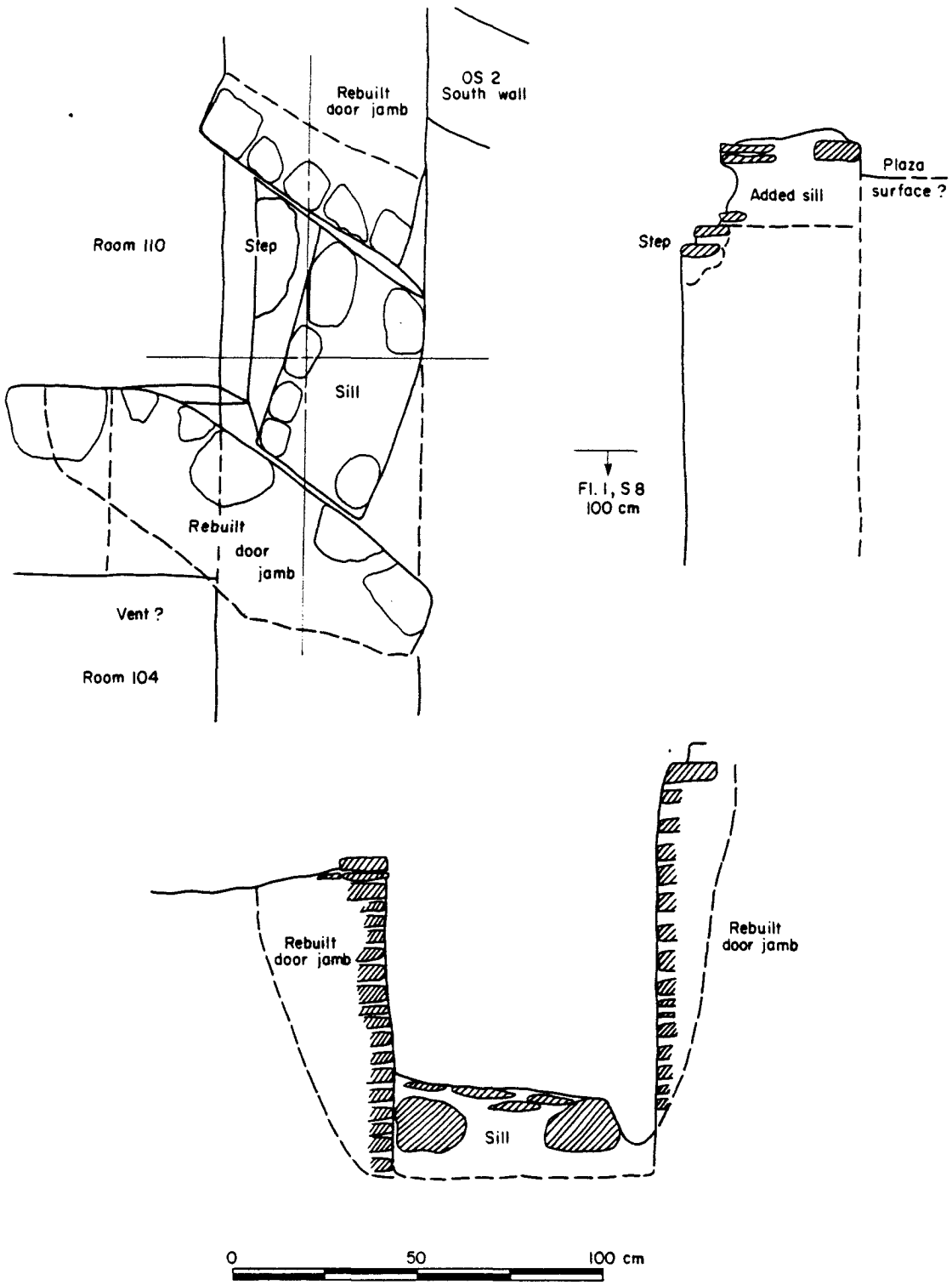


Figure MF-0.38. Room 110, Door 3.

CHCU_310_D58_VOL 4_00135

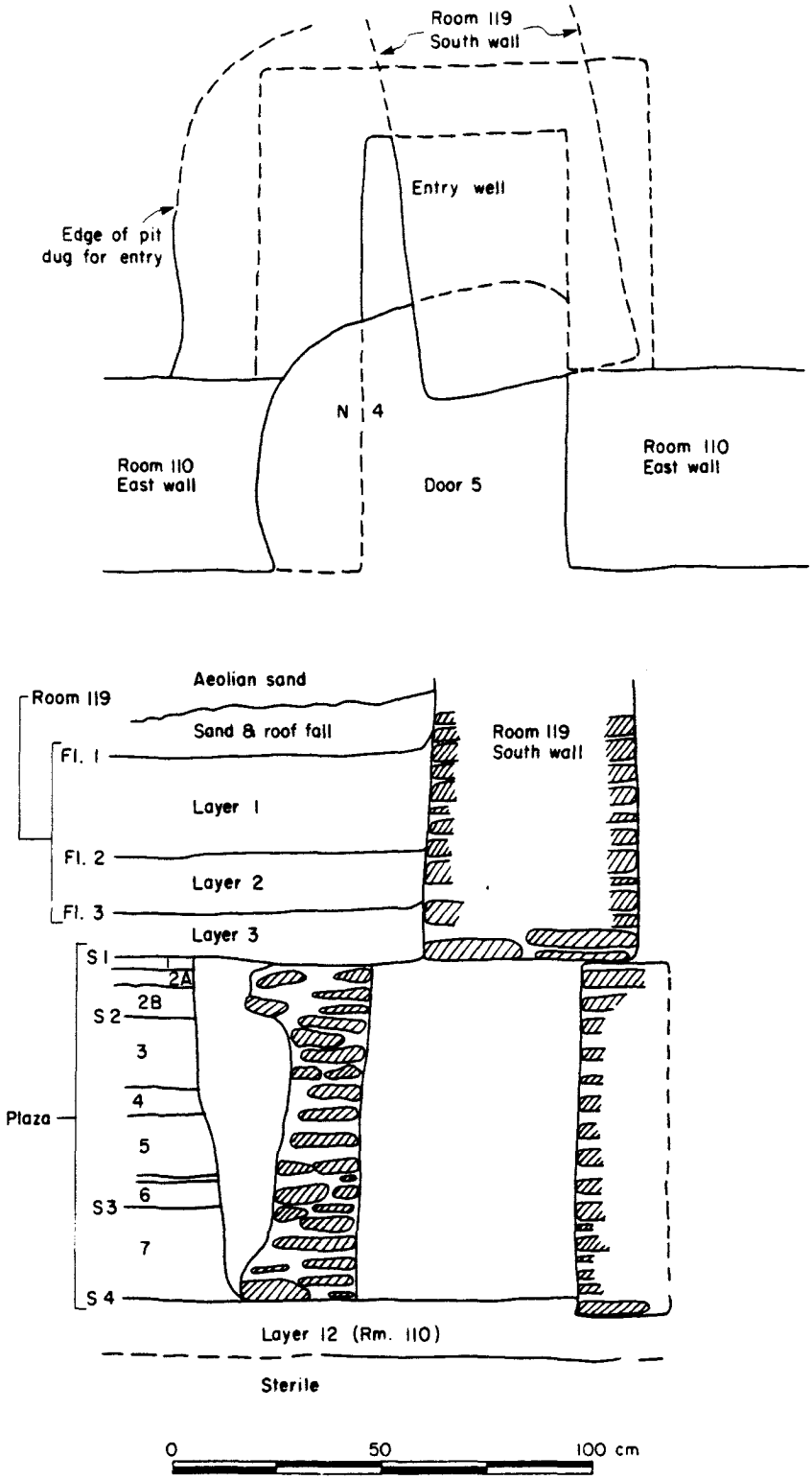


Figure MF-0.39. Room 110, Door 5, Wall Niche 4 and associated sections of Room 119 and Plaza 1 (compare with Figure MF-0.30).

CHCU_310_D58_VOL 4_00136

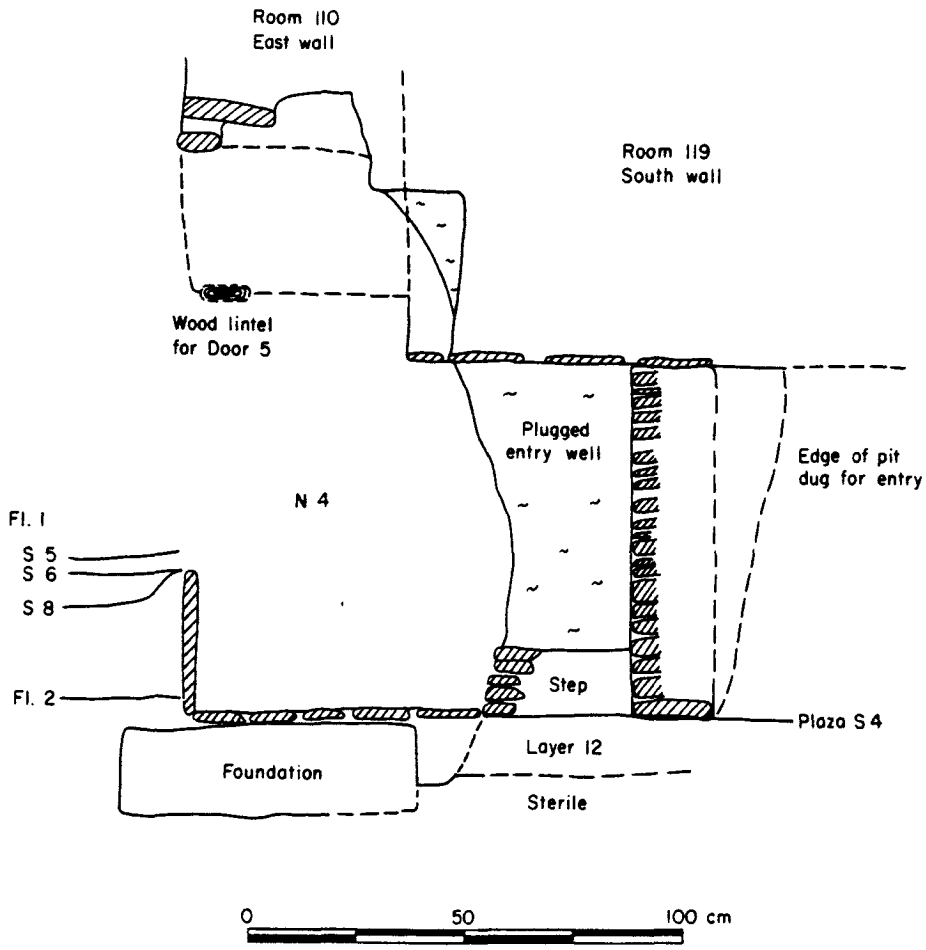


Figure MF-0.40. Room 110, Door 5 and Wall Niche 4 (continued). Compare with Figure MF-0.30.

CHCU_310_D58_VOL 4_00137

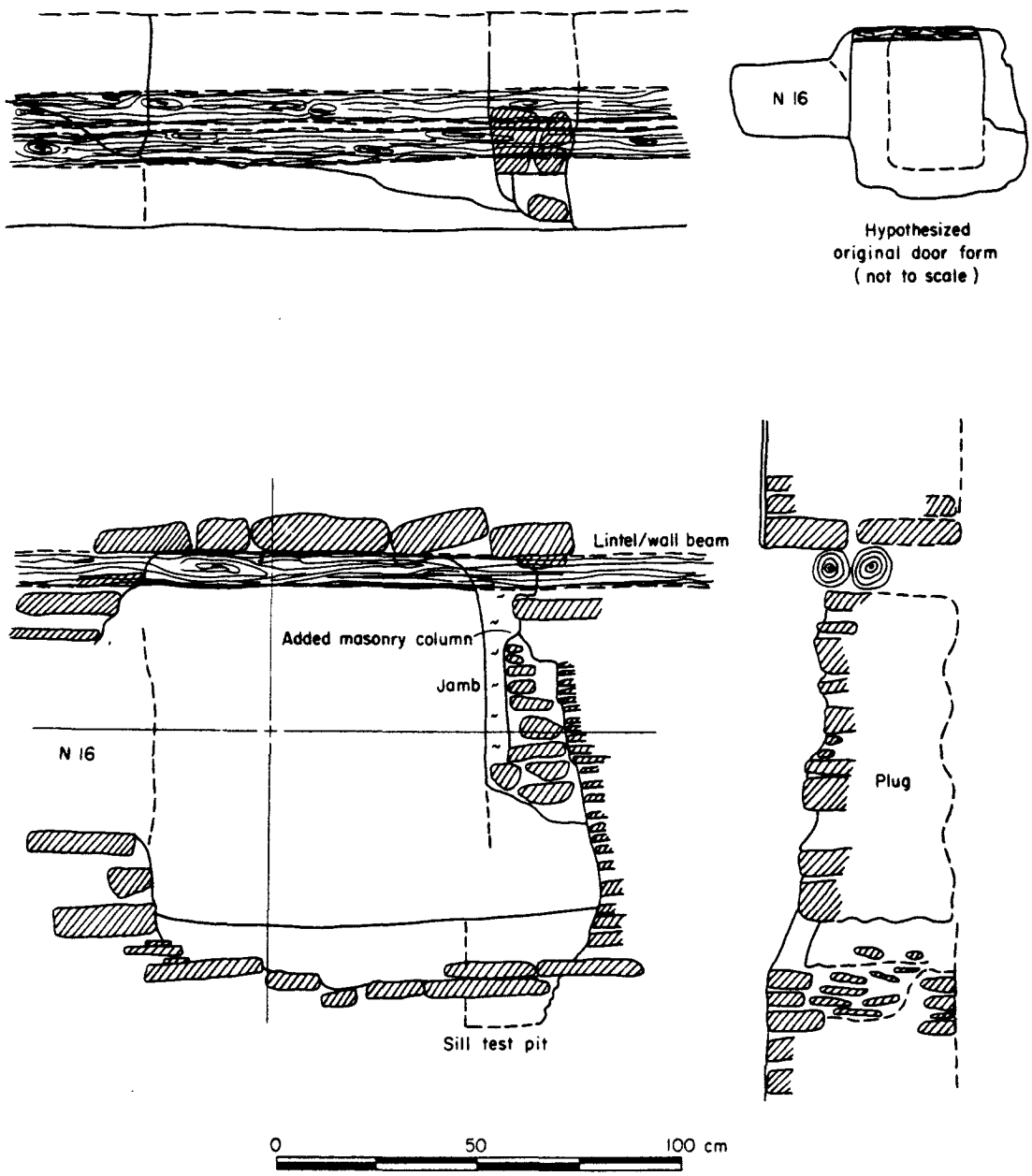


Figure MF-0.41. Room 110, Door 6 (compare with Figure MF-0.36).

CHCU_310_D58_VOL 4_00138

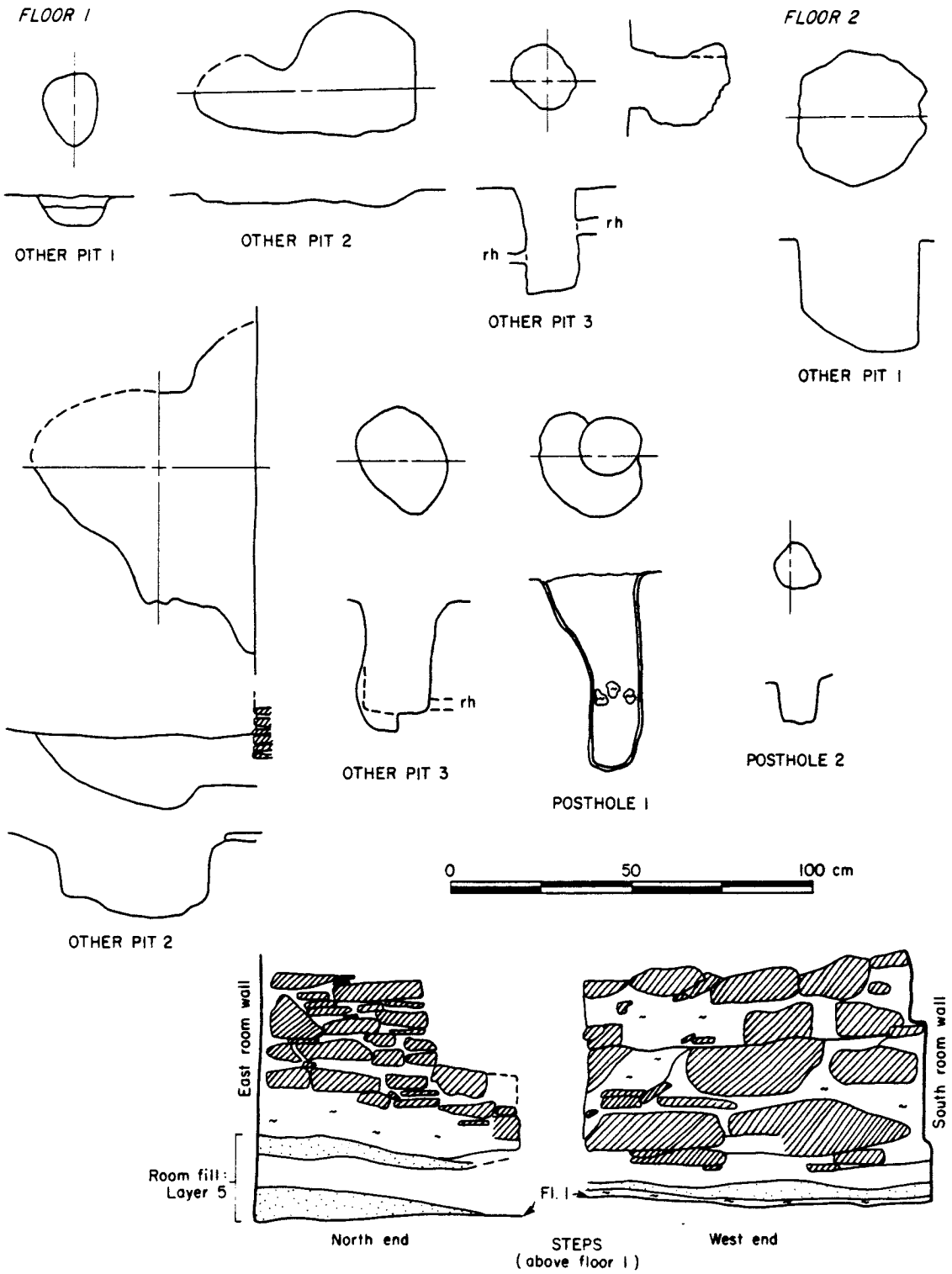


Figure MF-O.42. Room 112, Floors 1 and 2 other pits and postholes.

CHCU_310_D58_VOL 4_00139

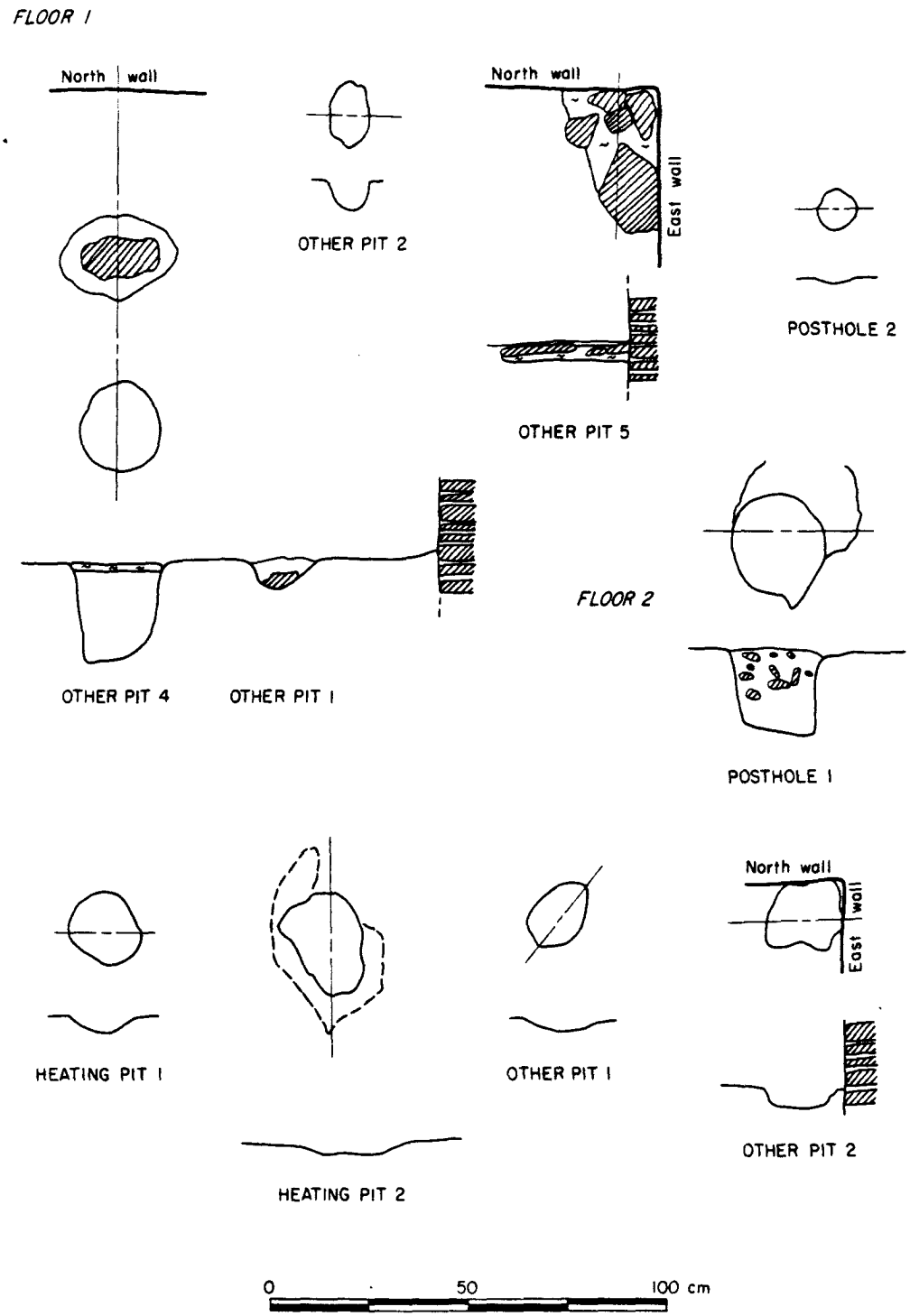


Figure MF-0.43. Room 138, Floors 1 and 2 features.

CHCU_310_D58_VOL 4_00140

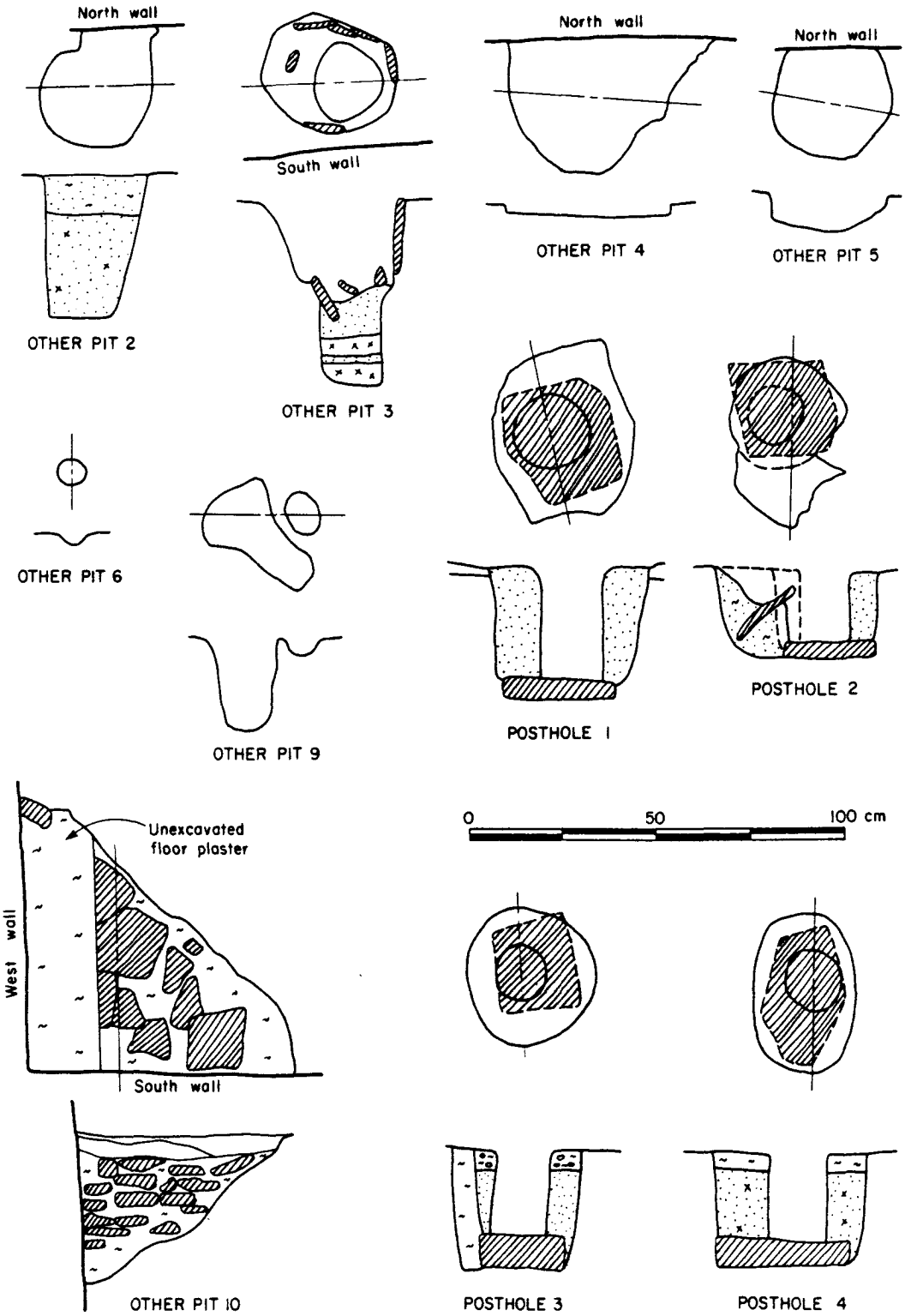


Figure MF-0.44. Room 139, Floor 1 other pits and postholes.

CHCU_310_D58_VOL 4_00141

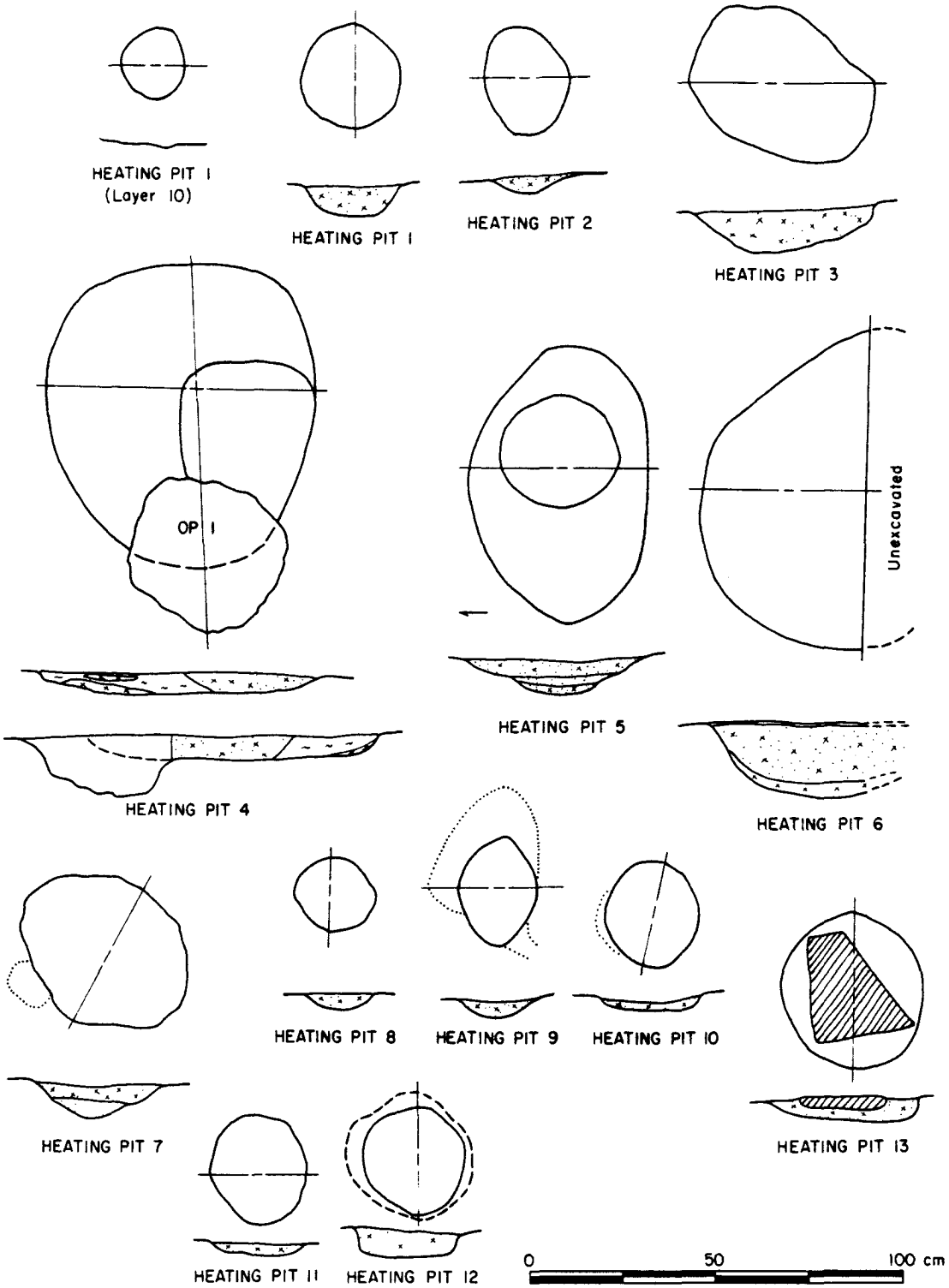


Figure MF-0.45. Room 139, Floor 2 heating pits.

CHCU_310_D58_VOL 4_00142

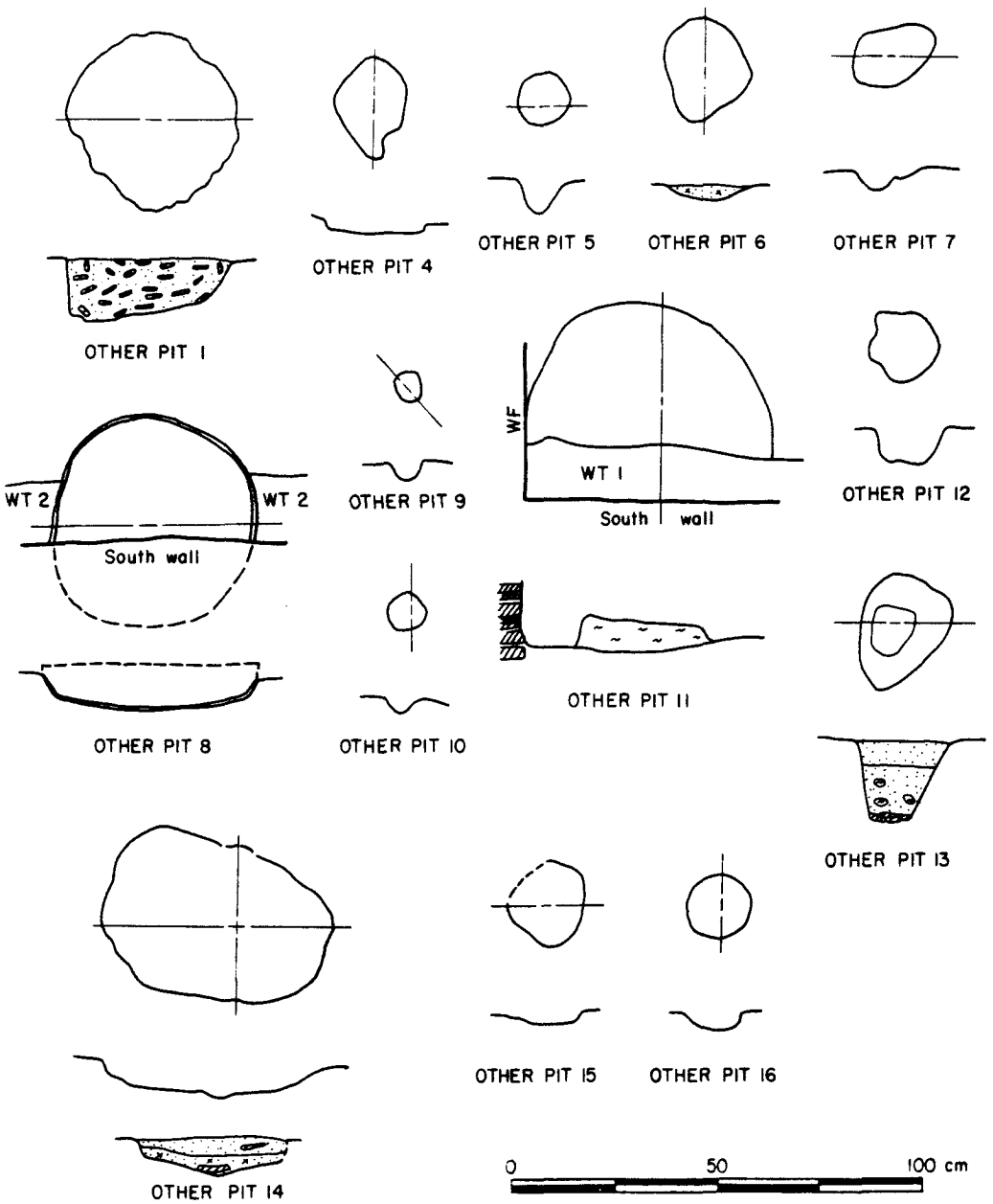


Figure MF-0.46. Room 139, Floor 2 other pits.

CHCU_310_D58_VOL 4_00143

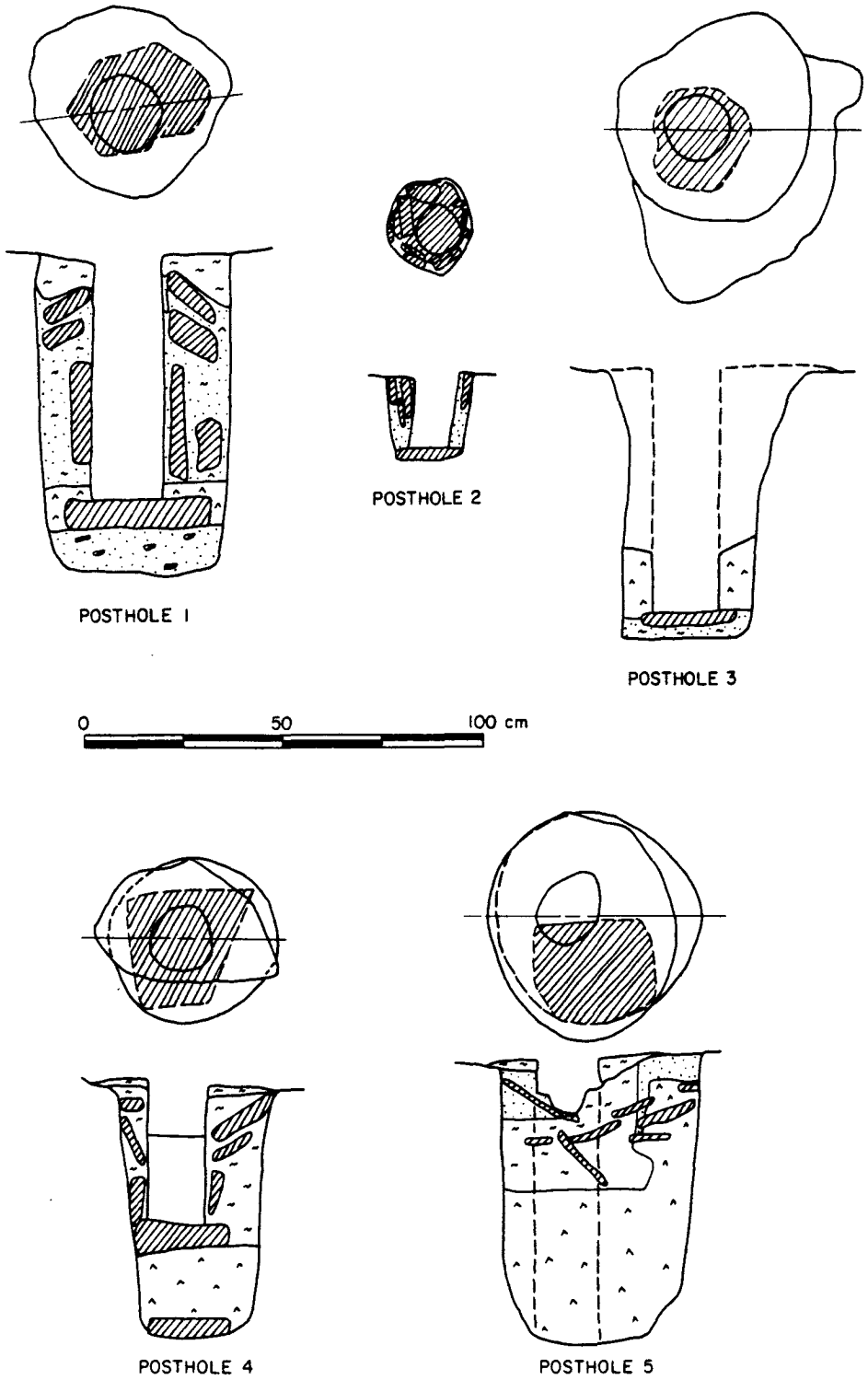


Figure MF-0.47. Room 139, Floor 2 postholes.

CHCU_310_D58_VOL 4_00144

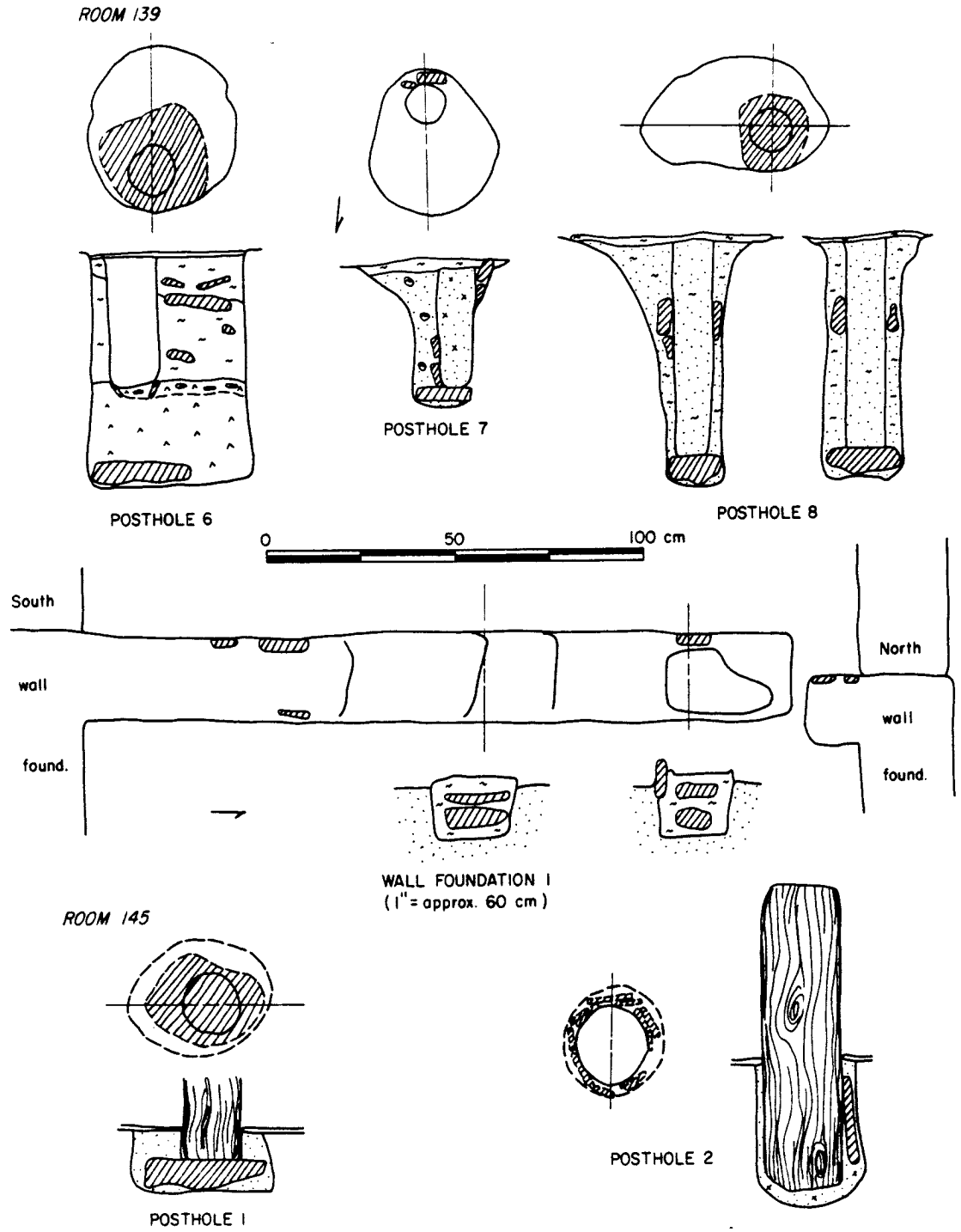


Figure MF-0.48. Room 139, Floor 2 postholes (concluded) and a wall foundation. Room 145, Floor 1 postholes.

CHCU_310_D58_VOL 4_00145

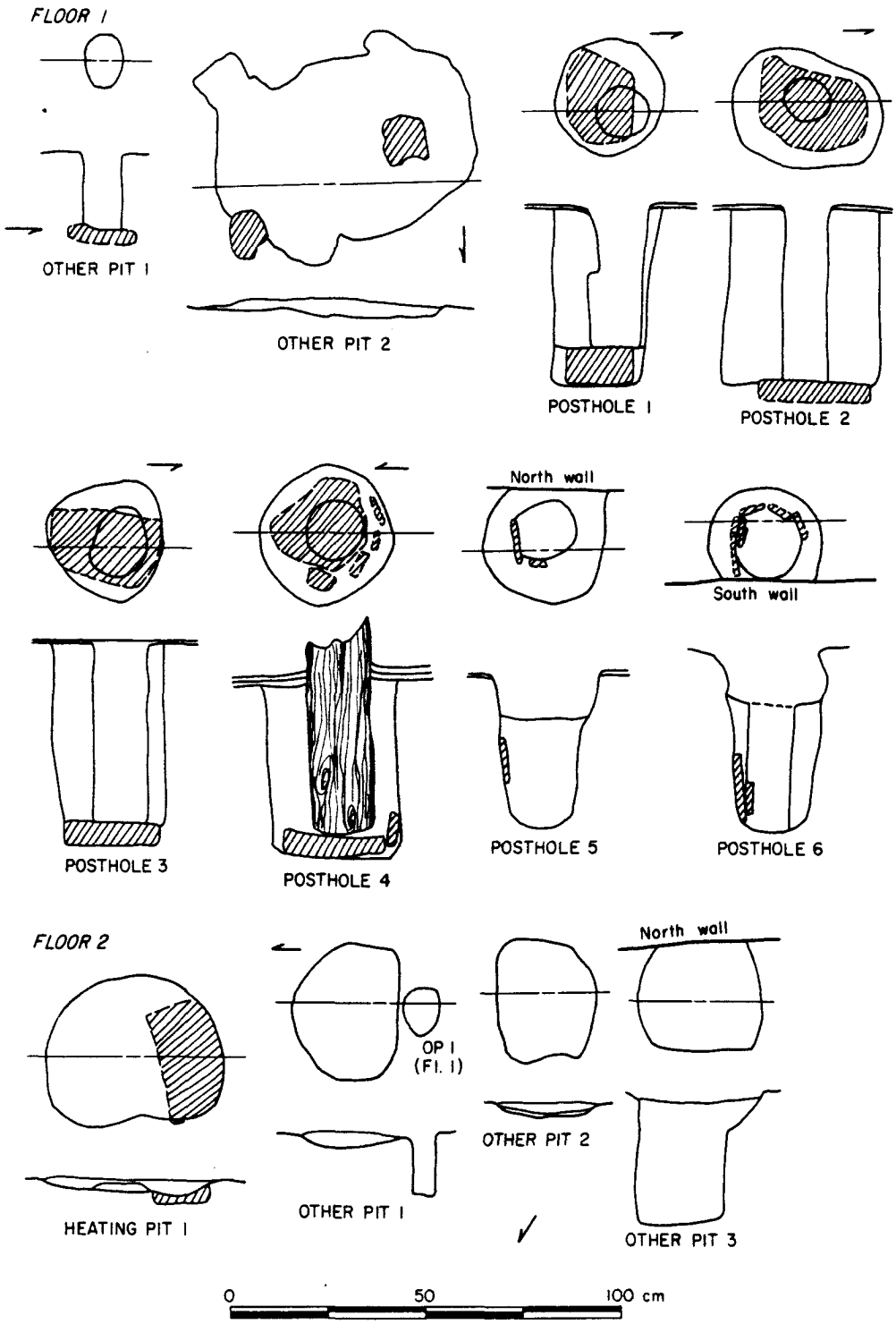


Figure MF-0.49. Room 142, Floors 1 and 2 features.

CHCU_310_D58_VOL 4_00146

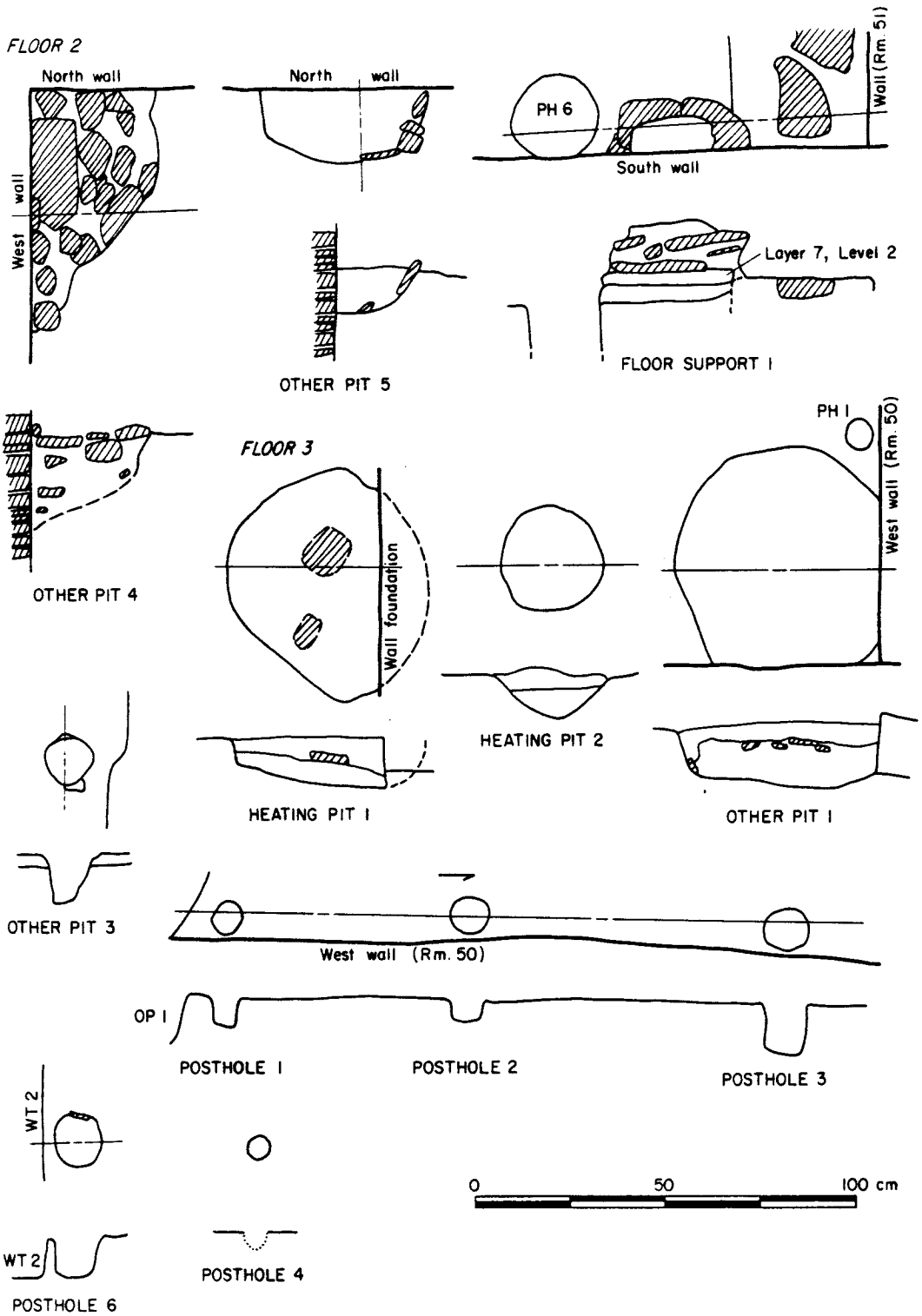


Figure MF-0.50. Room 142, Floors 2 (concluded) and 3 features.

CHCU_310_D58_VOL 4_00147

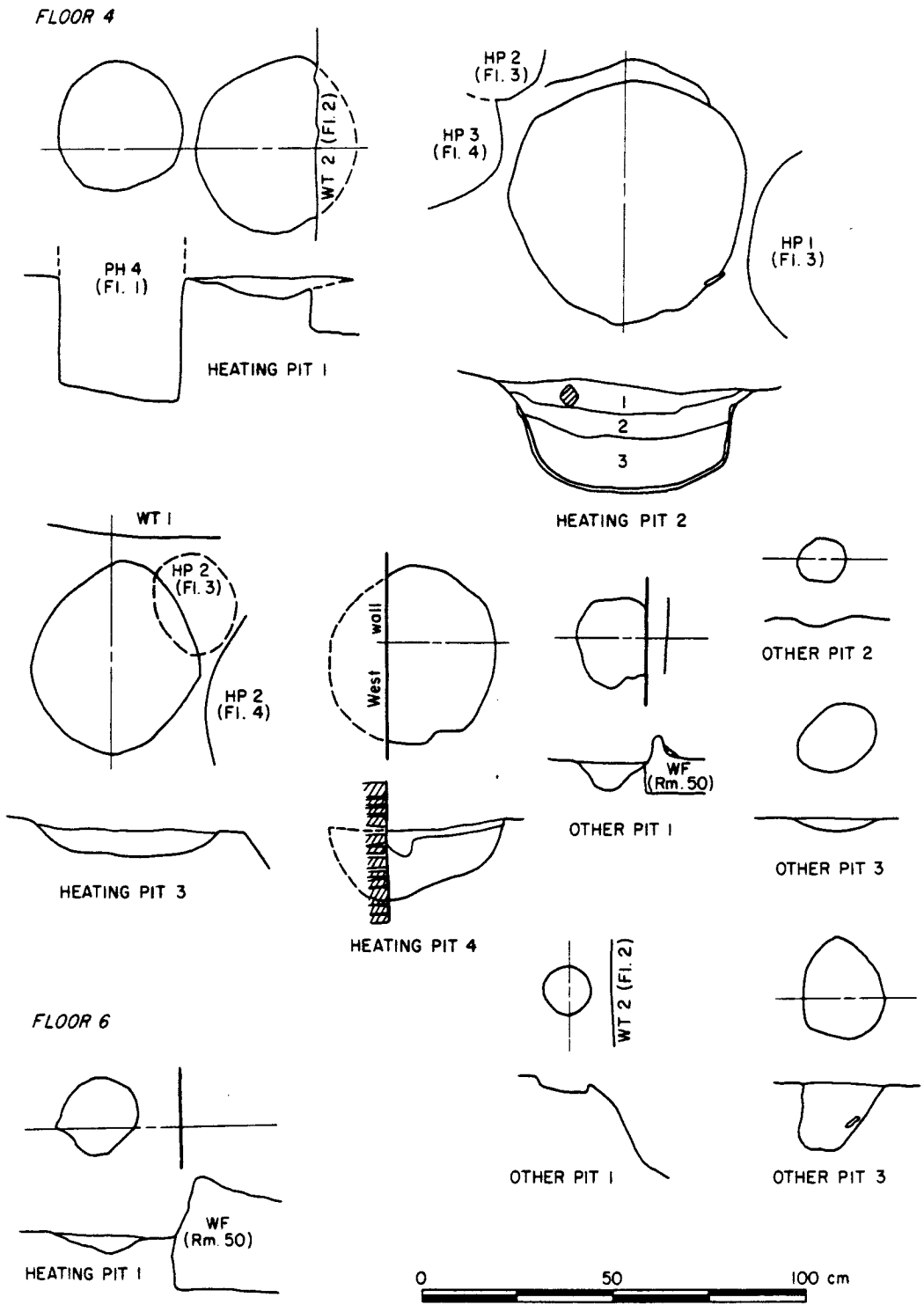


Figure MF-0.51. Room 142, Floors 4 and 6 features.

CHCU_310_D58_VOL 4_00148

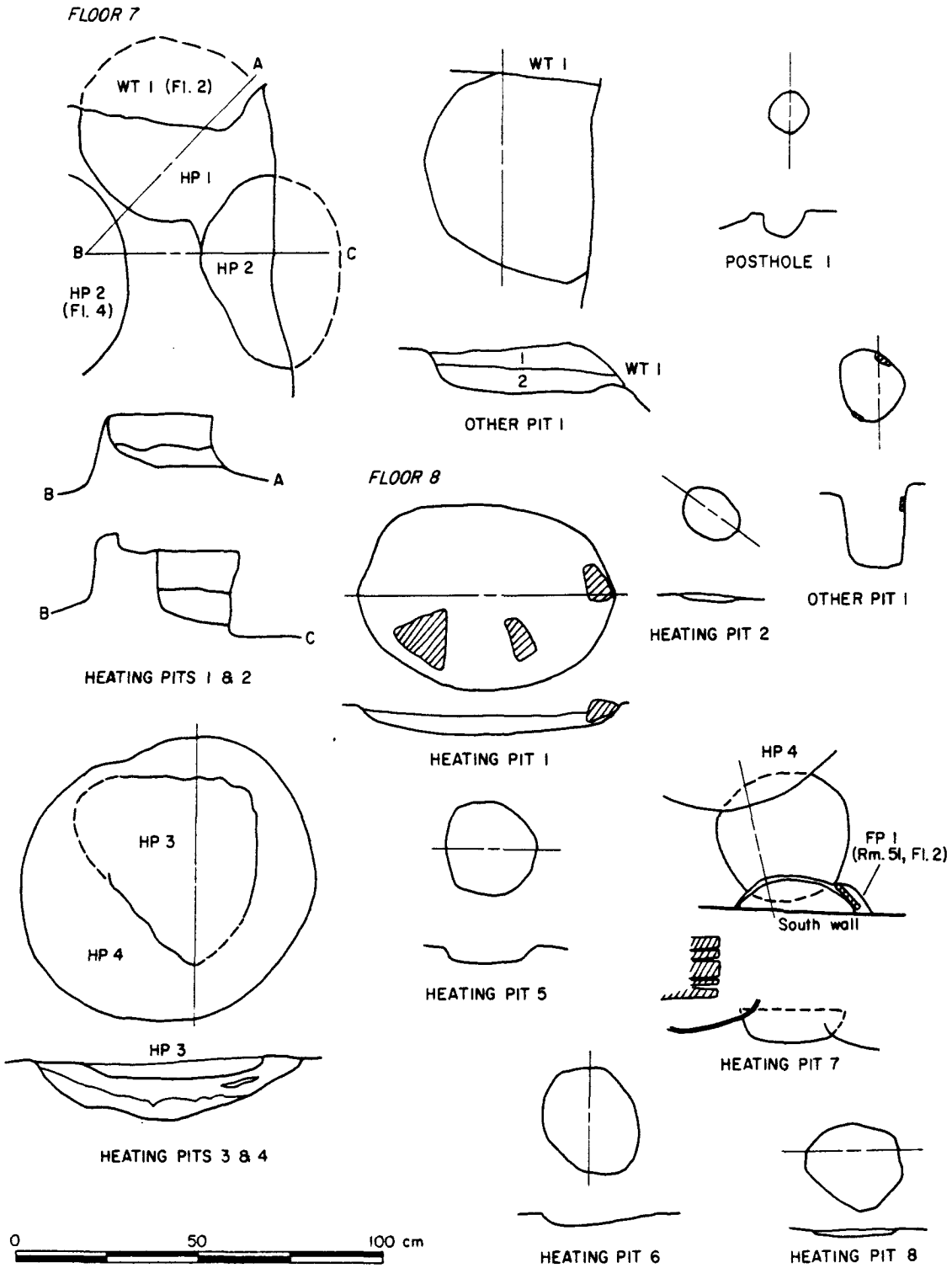


Figure MF-0.52. Room 142, Floors 7 and 8 features.

CHCU_310_D58_VOL 4_00149

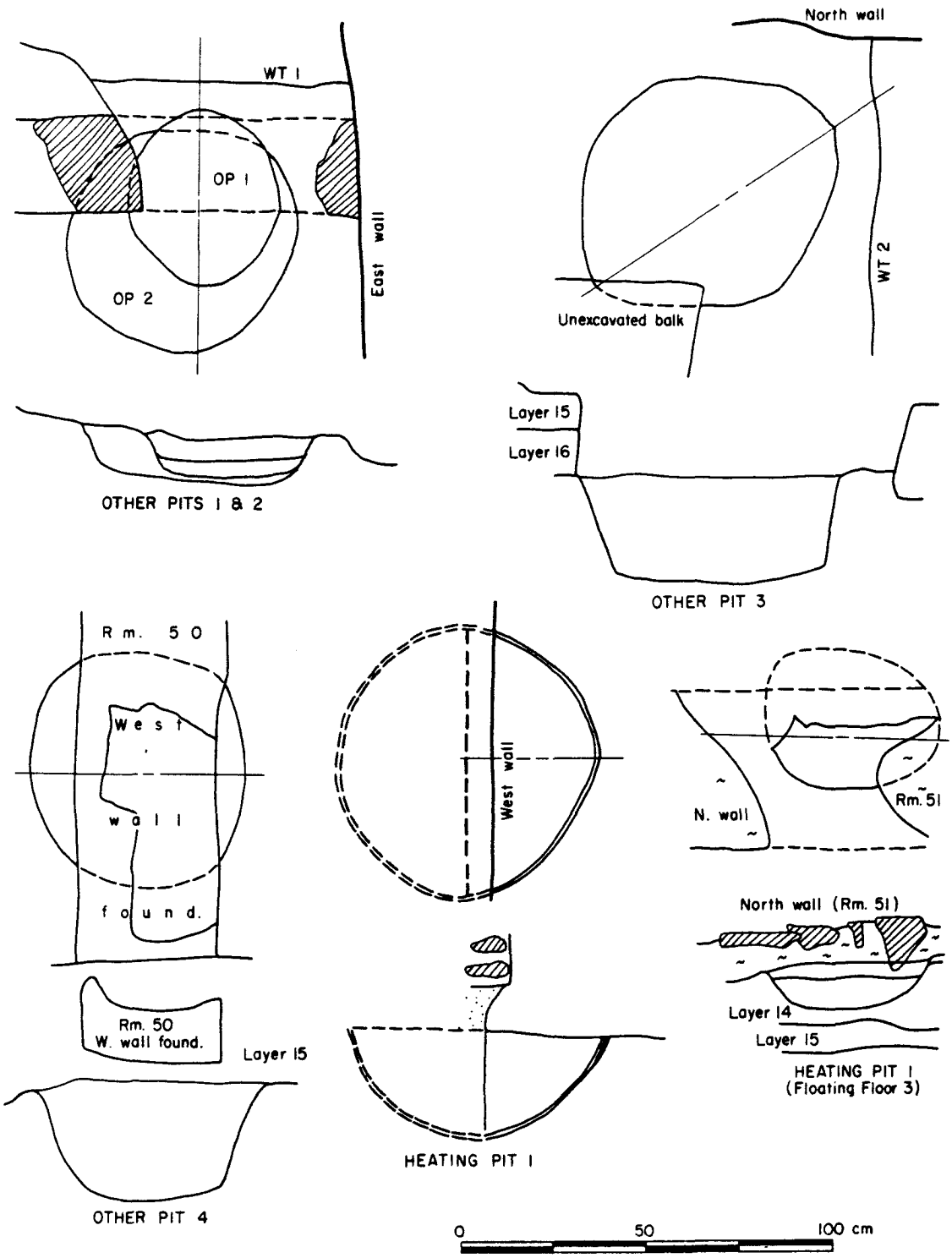


Figure MF-0.53. Room 142, Floor 9 and Floating Floor 3 features.

CHCU_310_D58_VOL 4_00150

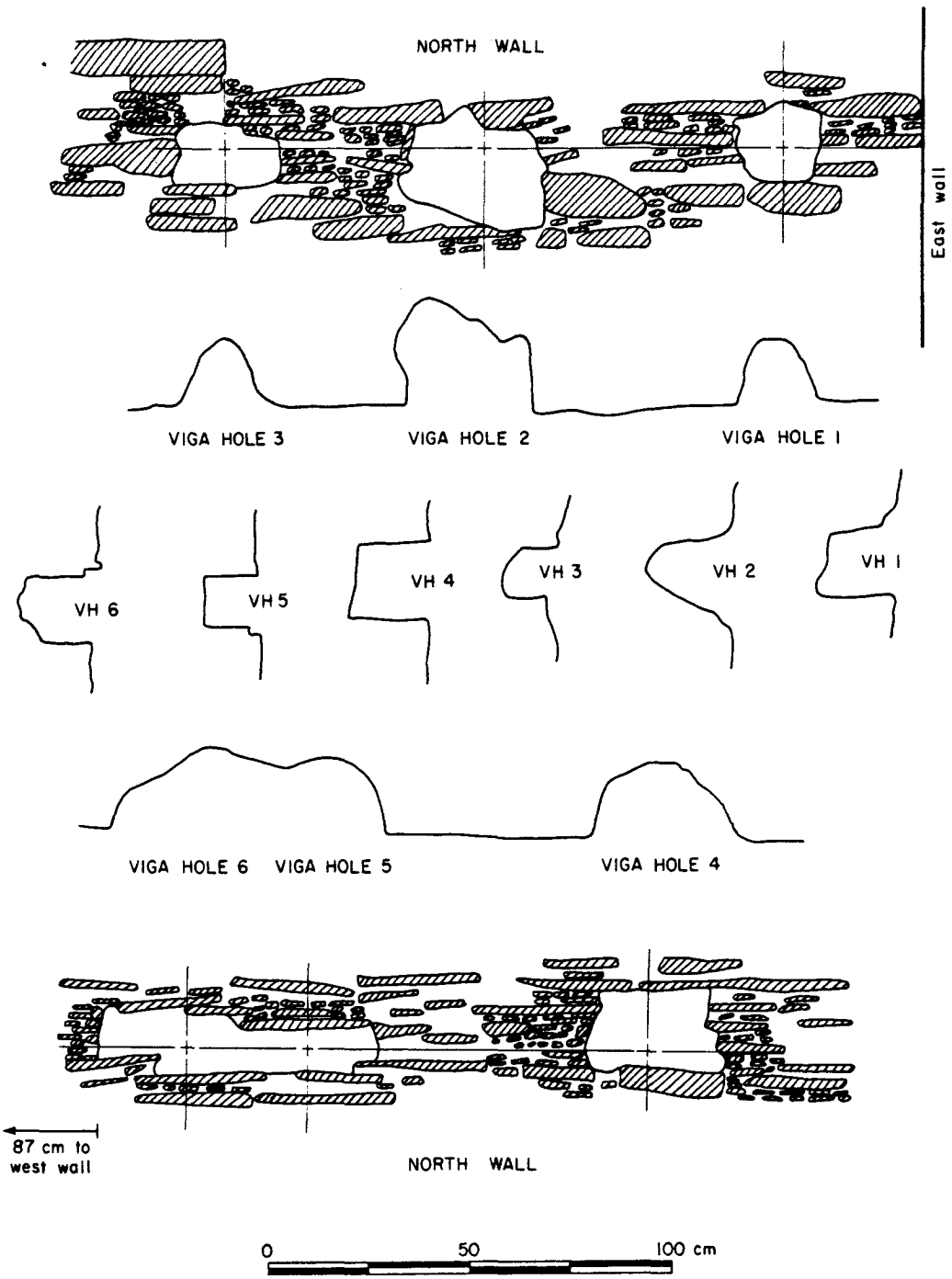


Figure MF-0.54. Room 142, North Wall niches.

CHCU_310_D58_VOL 4_00151

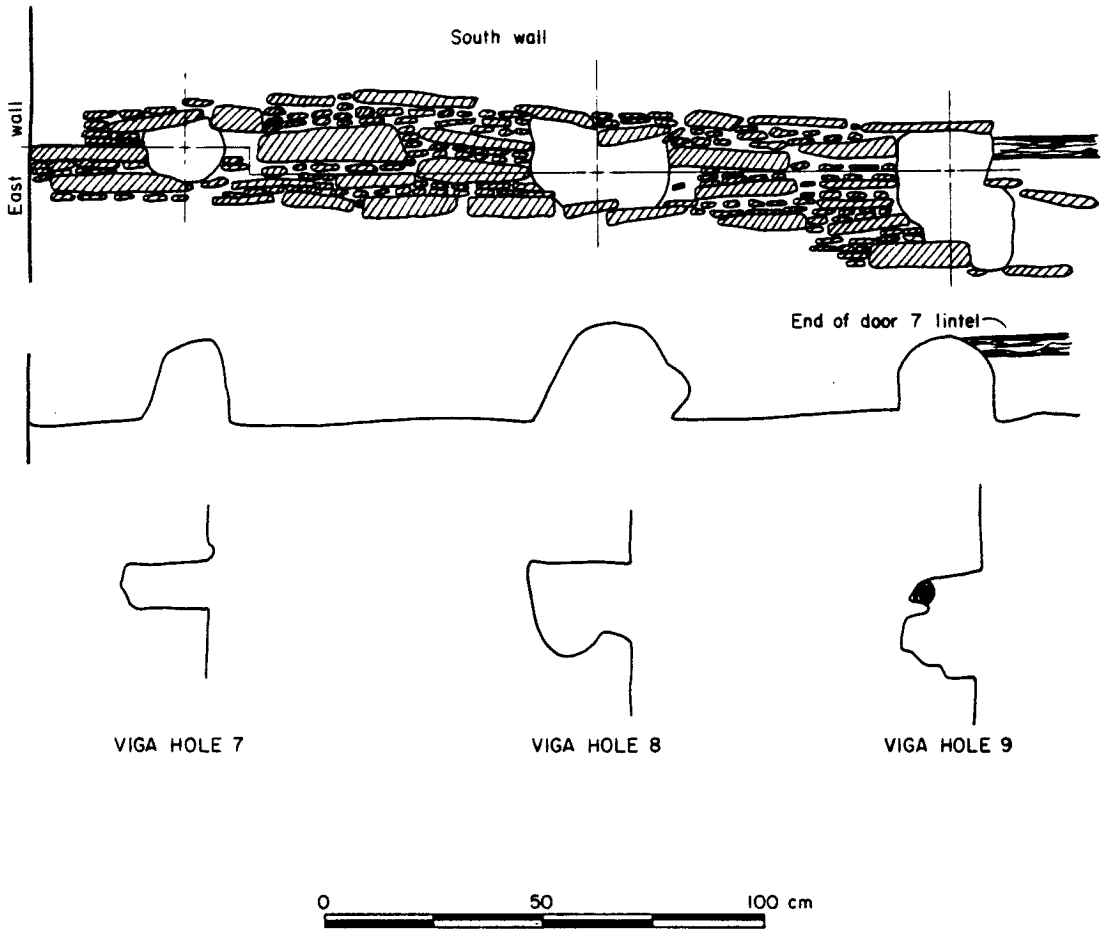


Figure MF-0.55. Room 142, South Wall niches.

CHCU_310_D58_VOL 4_00152

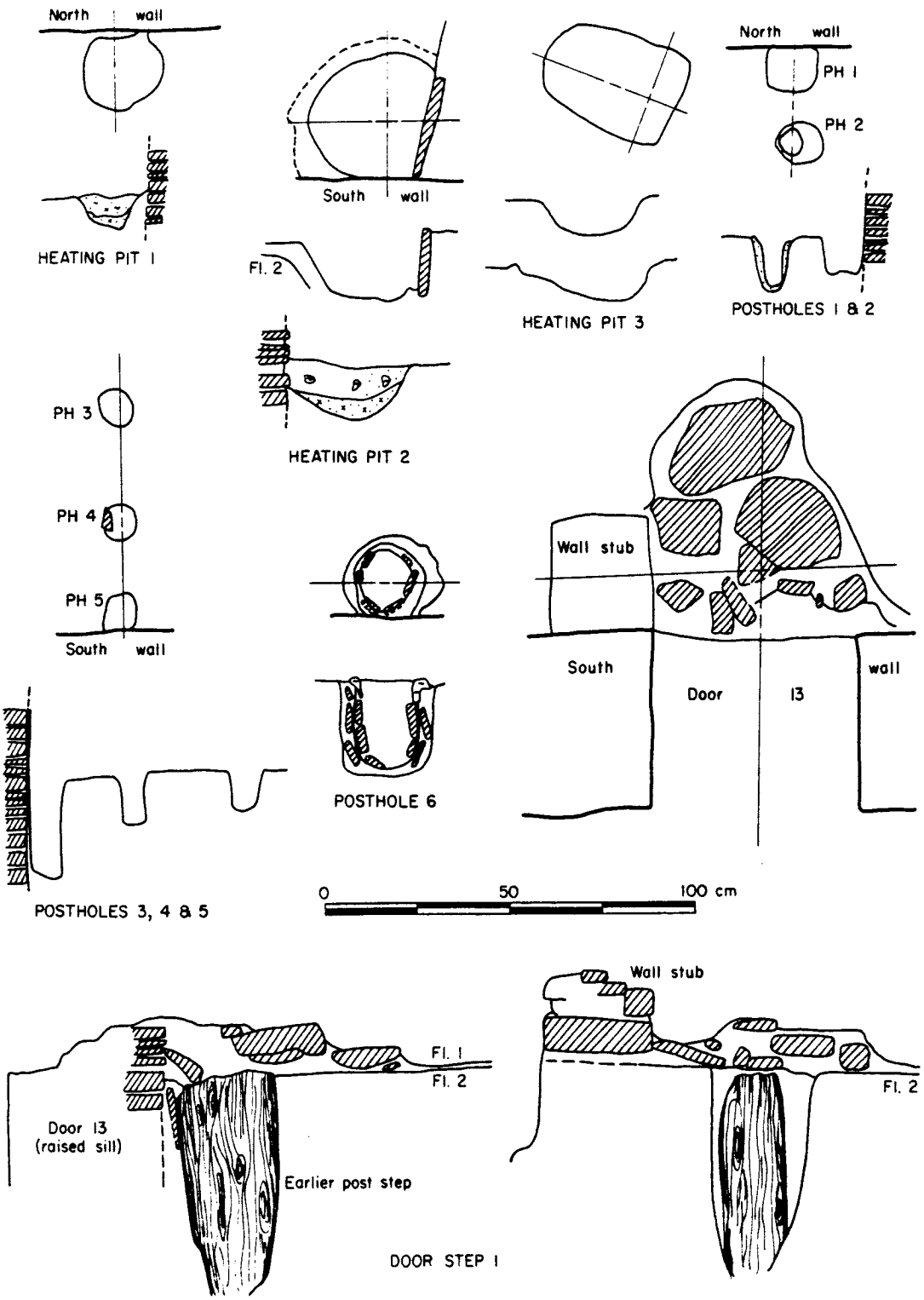


Figure MF-0.56. Room 143/236, Floor 1 features.

CHCU_310_D58_VOL 4_00153

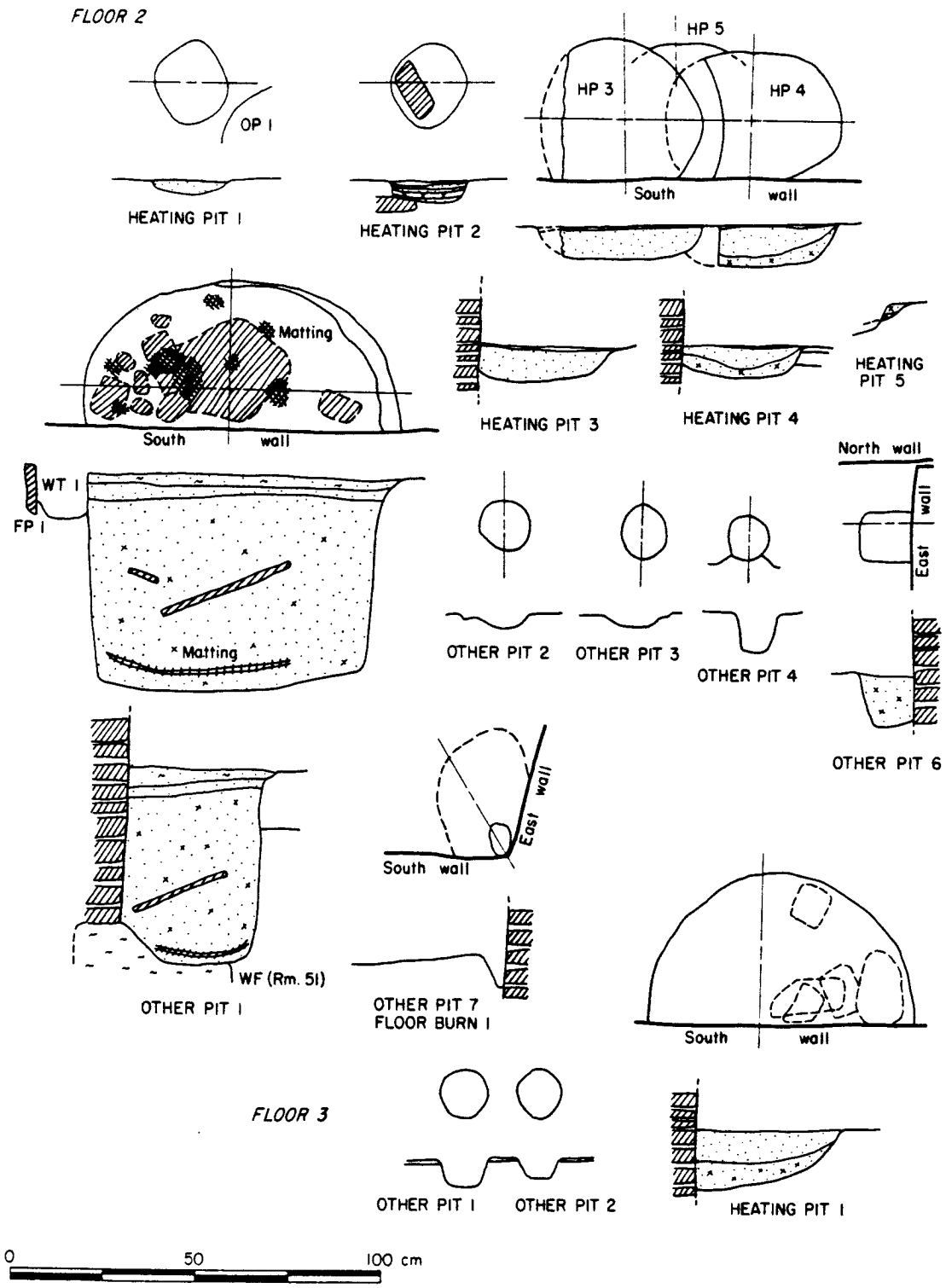


Figure MF-O.57. Room 143, Floors 2 and 3 other pits and heating pits.

CHCU_310_D58_VOL 4_00154

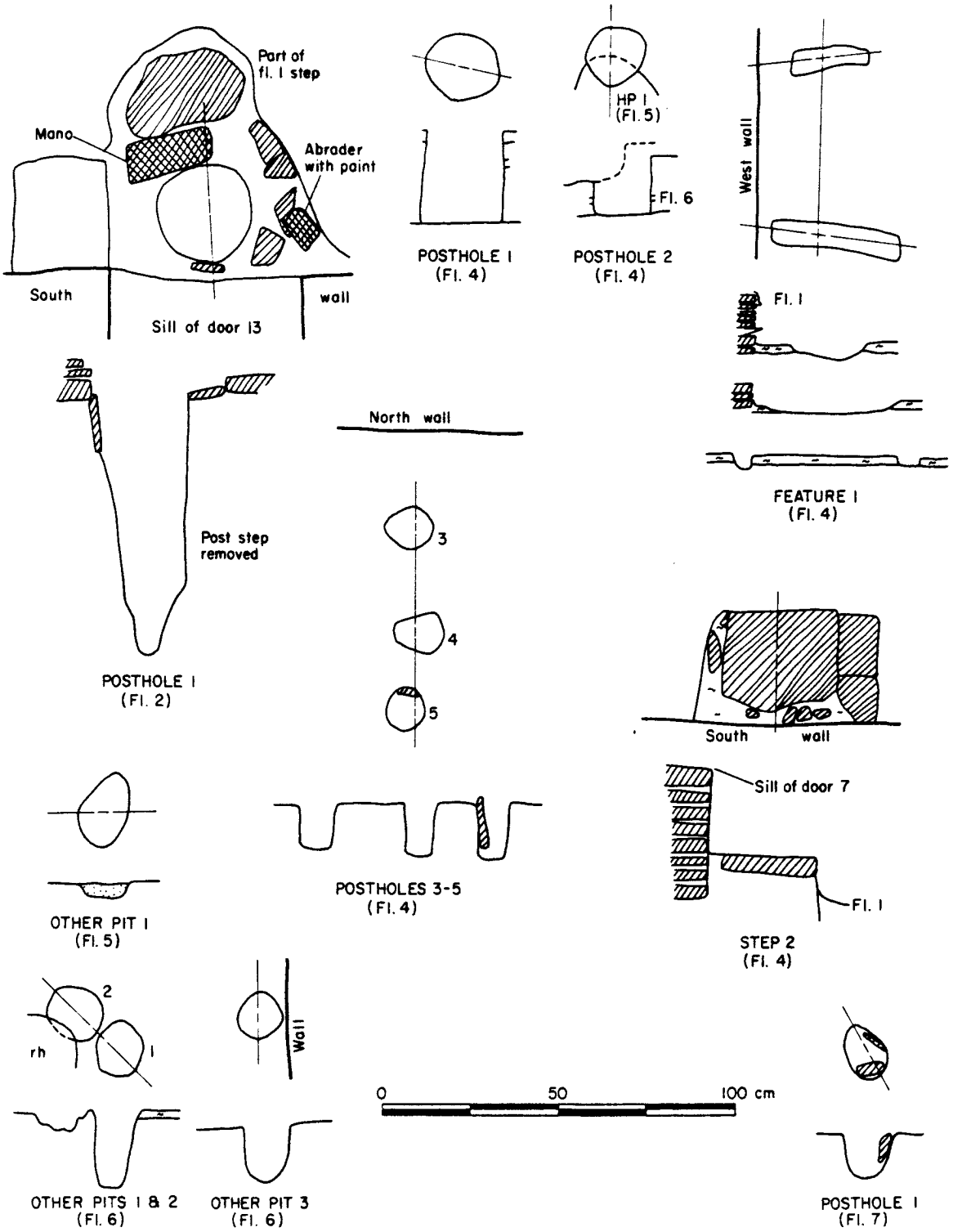


Figure MF-0.58. Room 143 Floors 2 (continued) and 5-7. Room 236, Floor 4 features.

CHCU_310_D58_VOL 4_00155

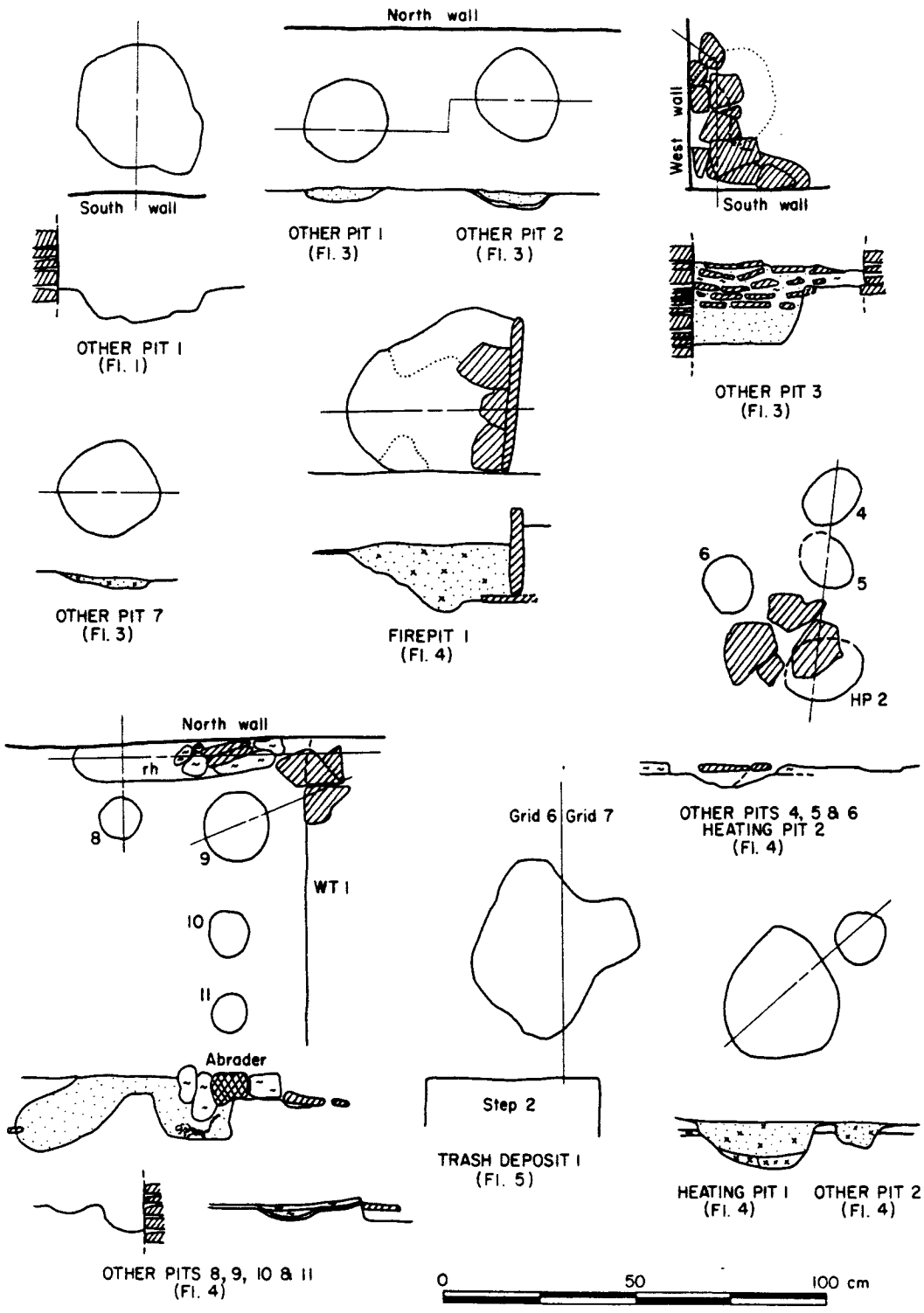


Figure MF-0.59. Room 236, Floors 1 and 3-5 features.

CHCU_310_D58_VOL 4_00156

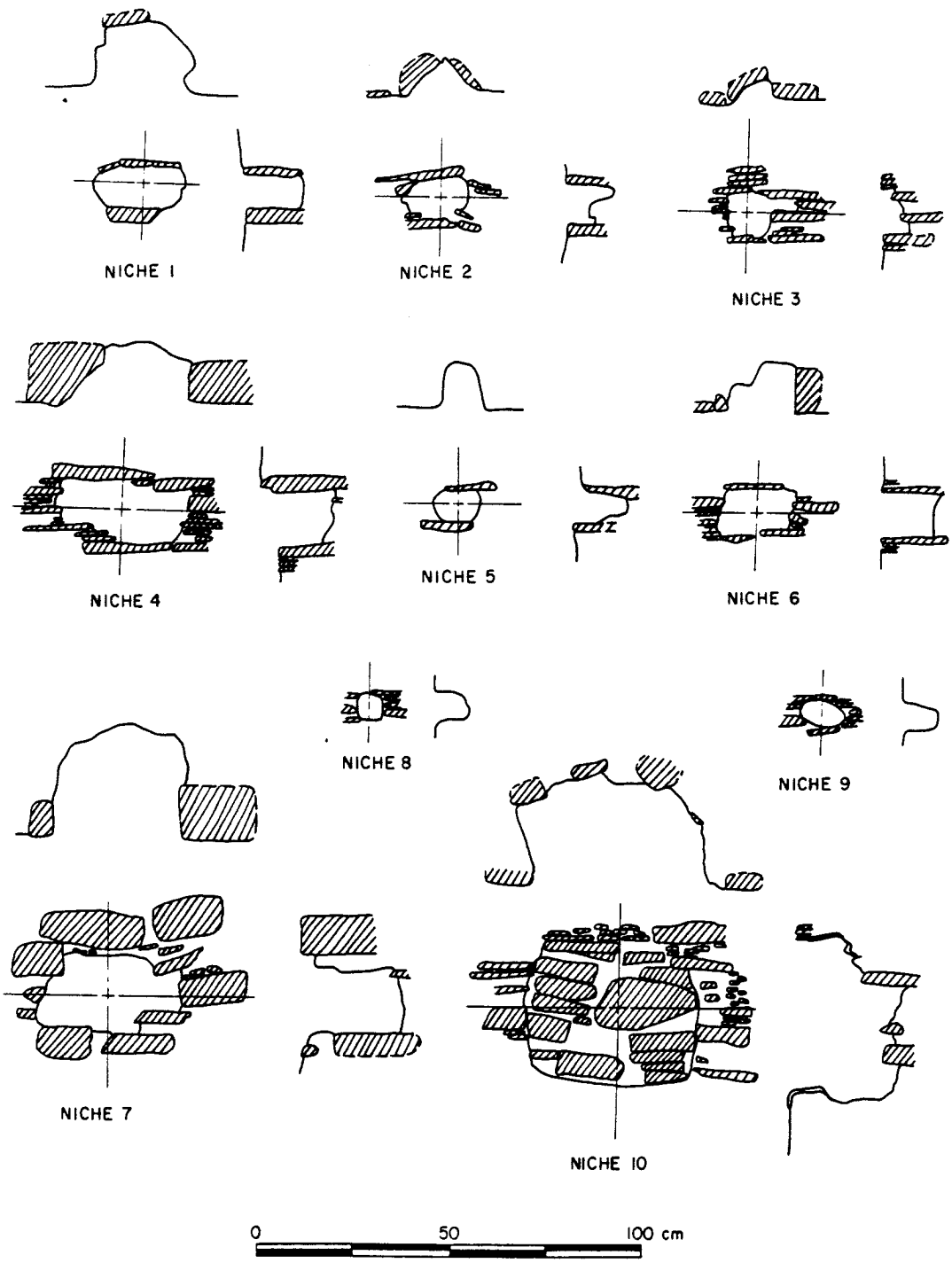


Figure MF-0.60. Room 143, wall niches.

CHCU_310_D58_VOL 4_00157

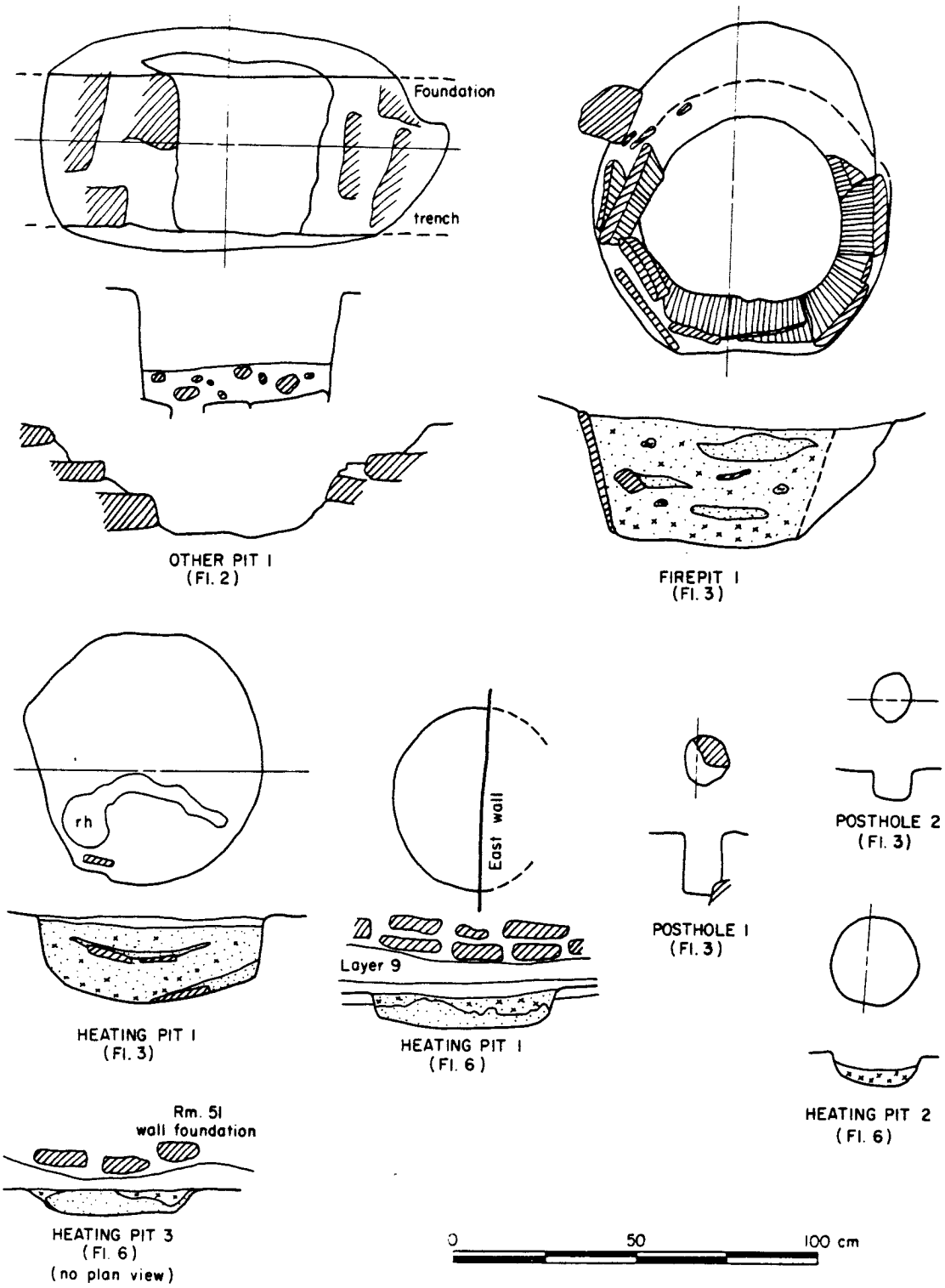


Figure MF-0.61. Room 146, Floors 2-4 and 6 features.

CHCU_310_D58_VOL 4_00158

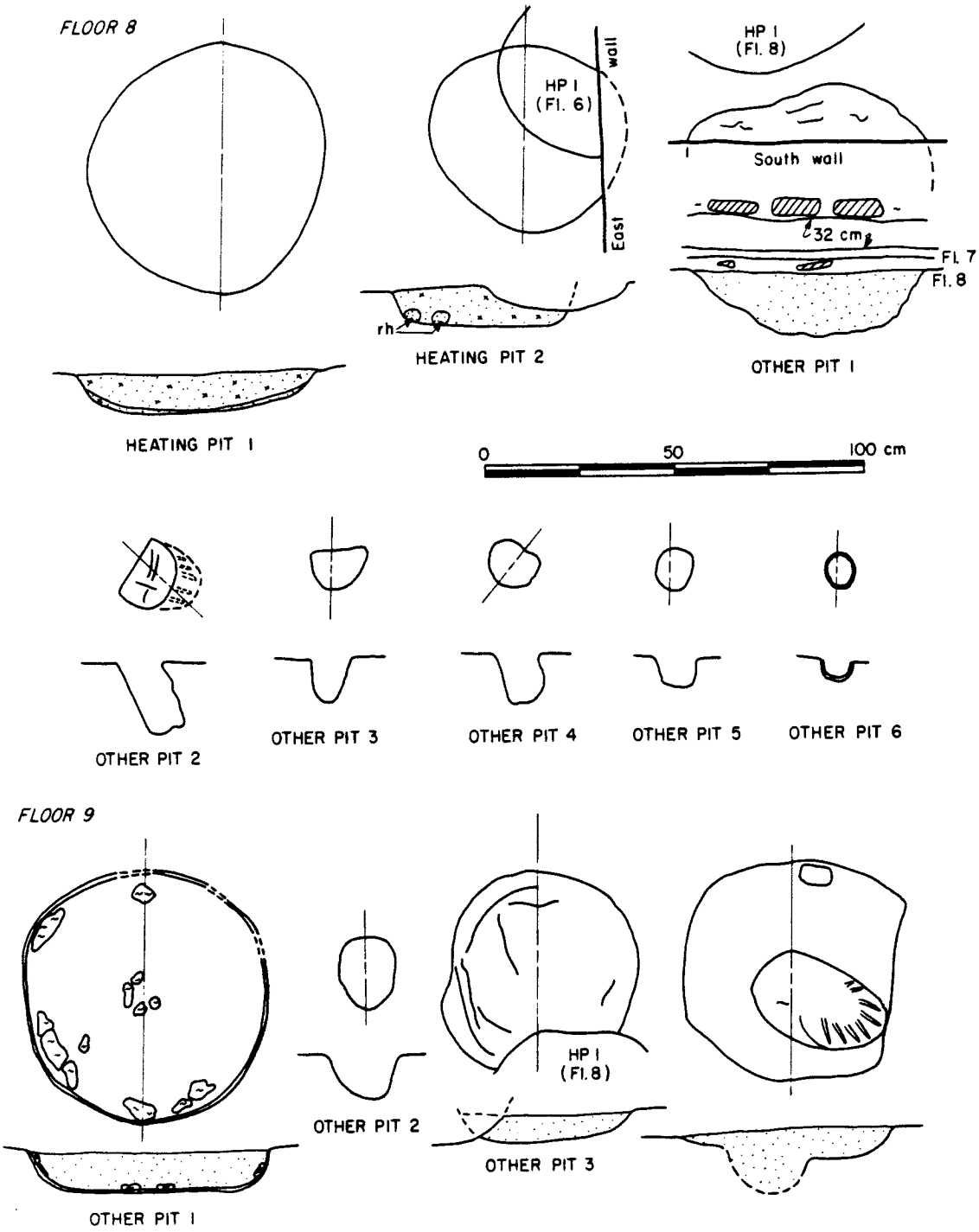


Figure MF-0.62. Room 146, Floors 8 and 9 features.

CHCU_310_D58_VOL 4_00159

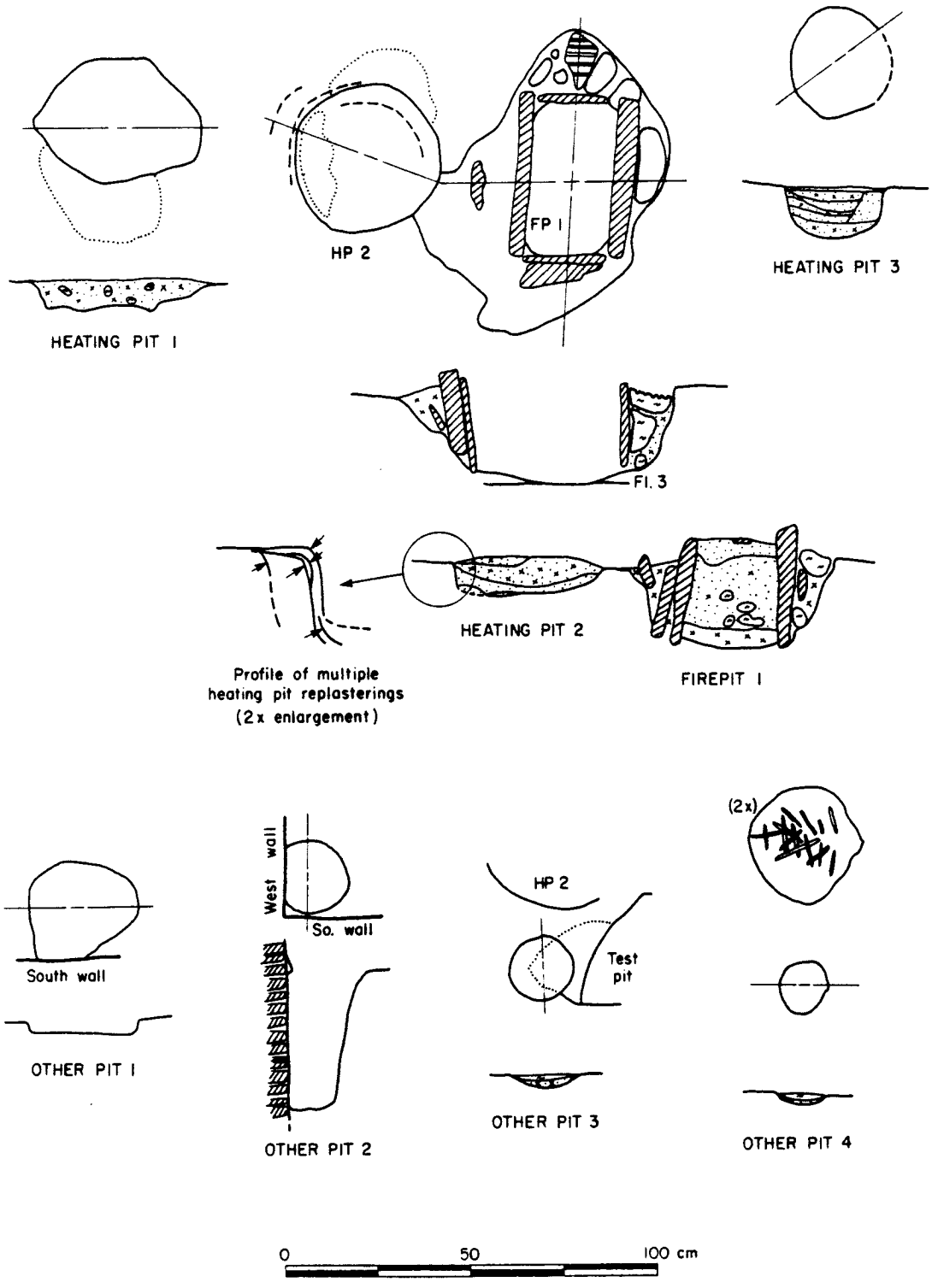


Figure MF-0.63. Room 147, Floor 1 features.

CHCU_310_D58_VOL 4_00160

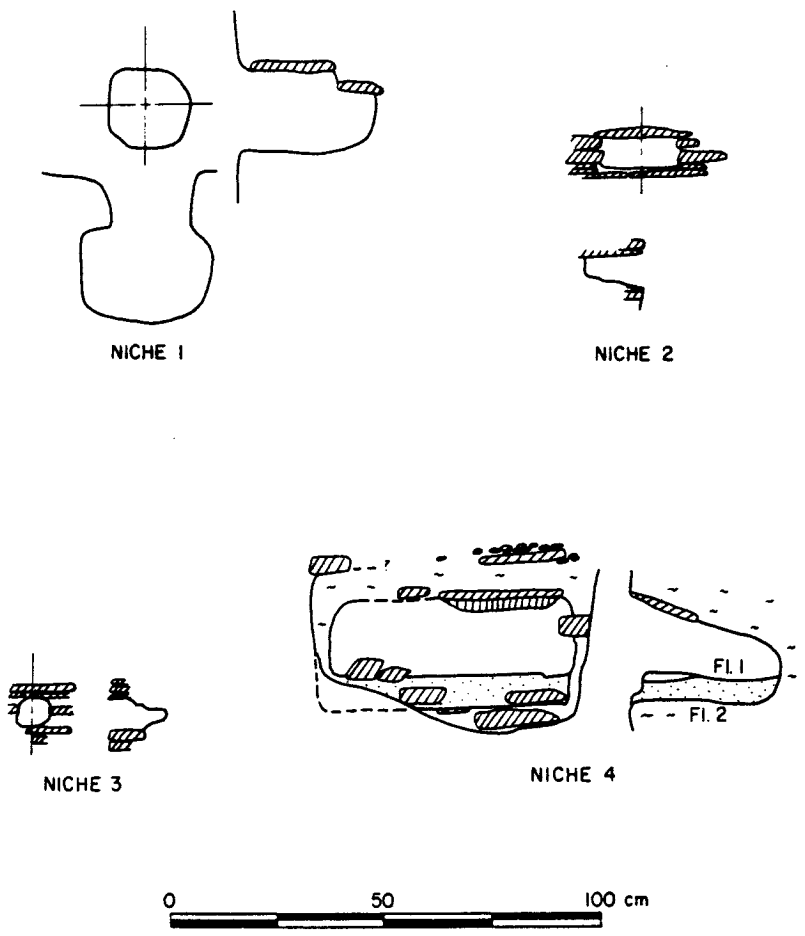


Figure MF-0.64. Room 147 wall niches.

CHCU_310_D58_VOL 4_00161

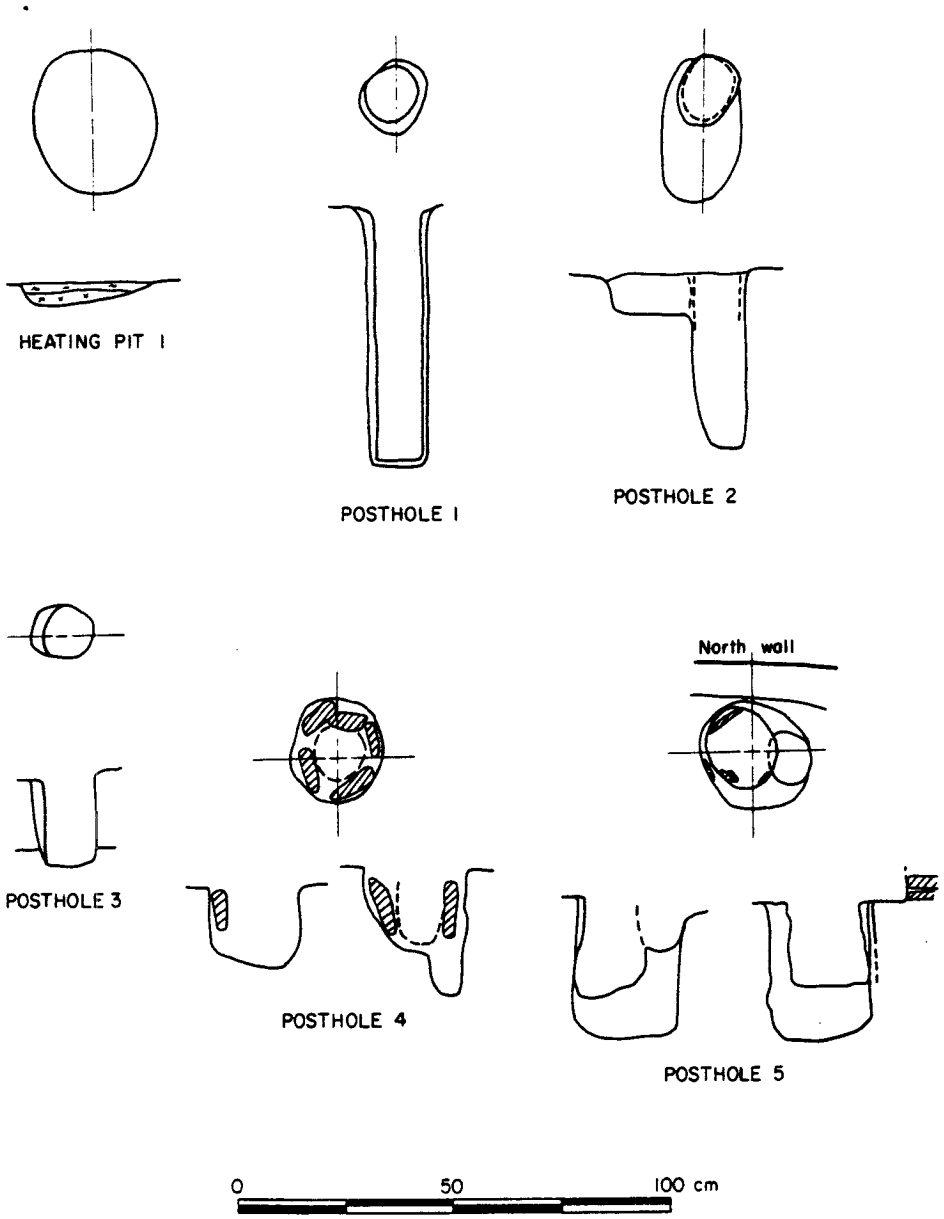


Figure MF-0.65. Room 229, Floor 2 postholes and Heating Pit 1.

CHCU_310_D58_VOL 4_00162

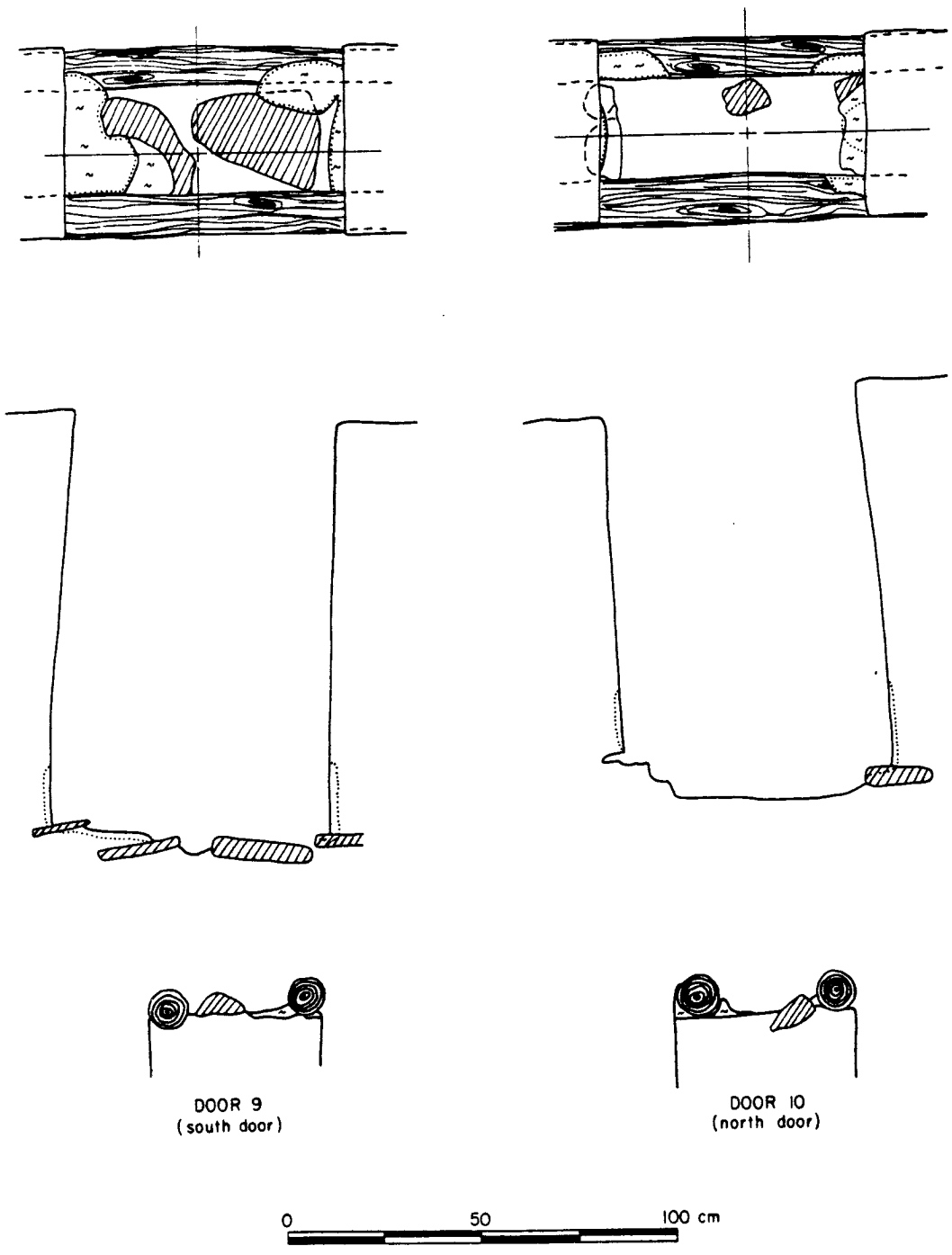


Figure MF-0.66. Room 229, Doors 9 and 10.

CHCU_310_D58_VOL 4_00163

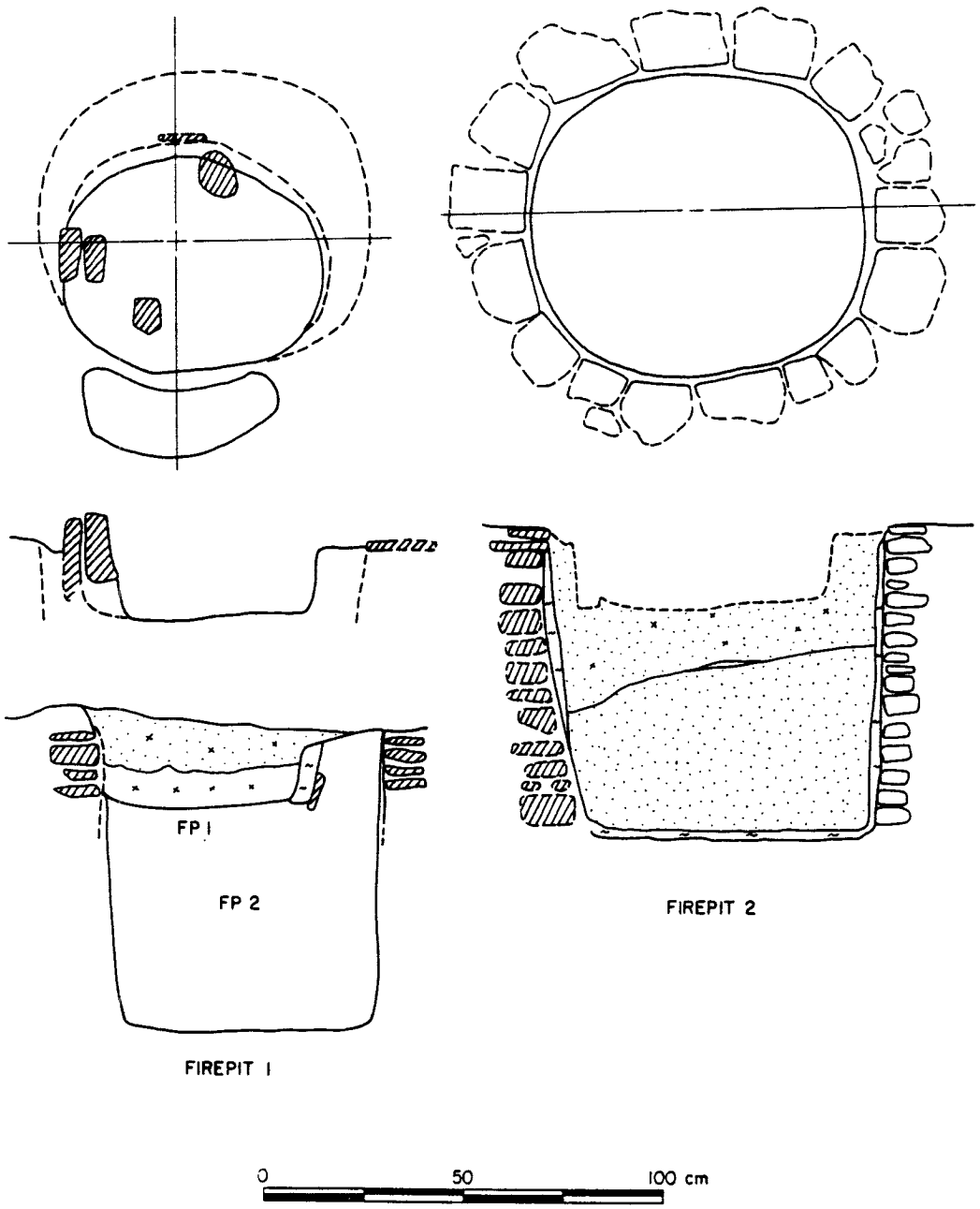


Figure MF-0.67. Kiva 15, Floor 1, Firepits 1-2.

CHCU_310_D58_VOL 4_00164

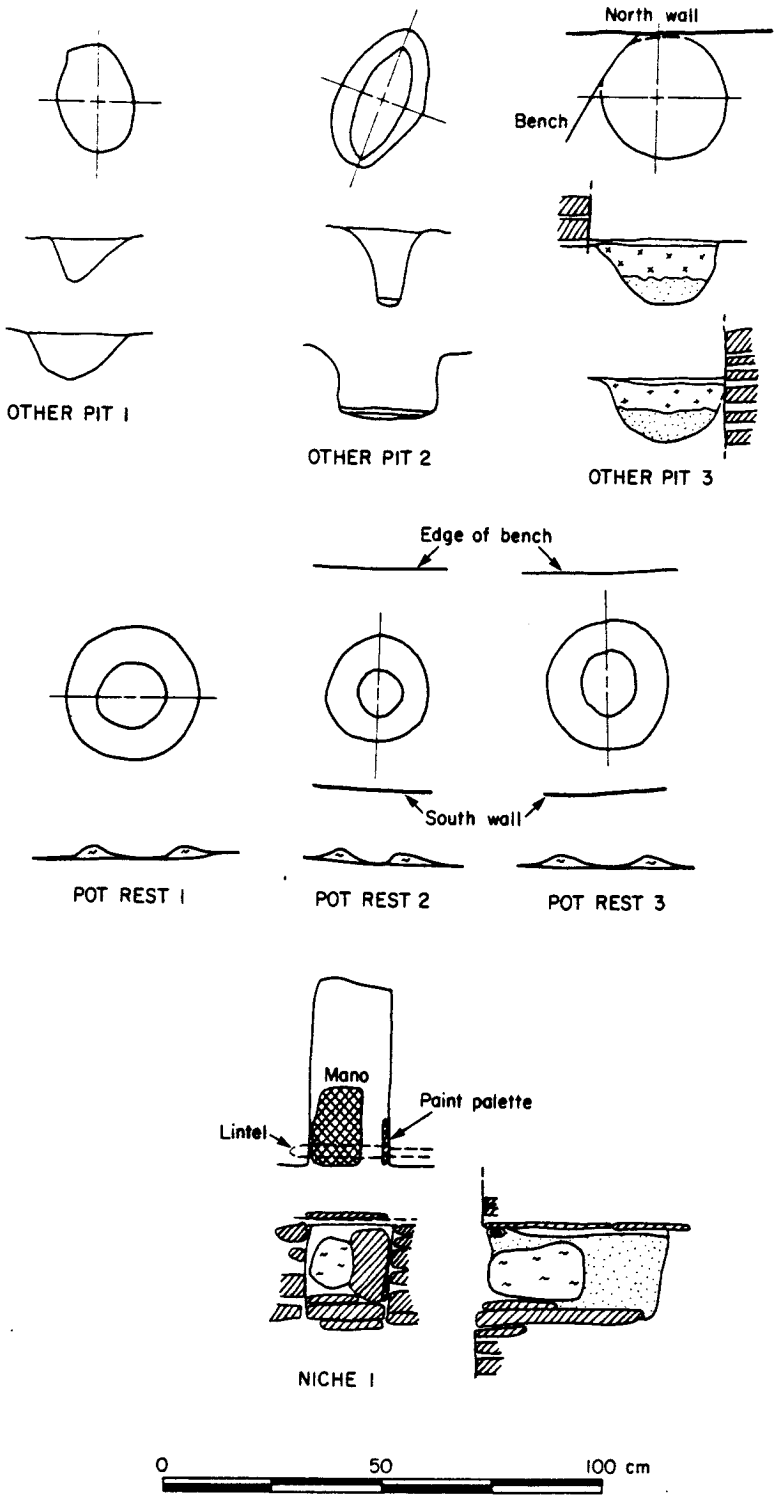


Figure MF-0.68. Kiva 15, Floor 1, other pits, pot rests, and Niche 1.

CHCU_310_D58_VOL 4_00165

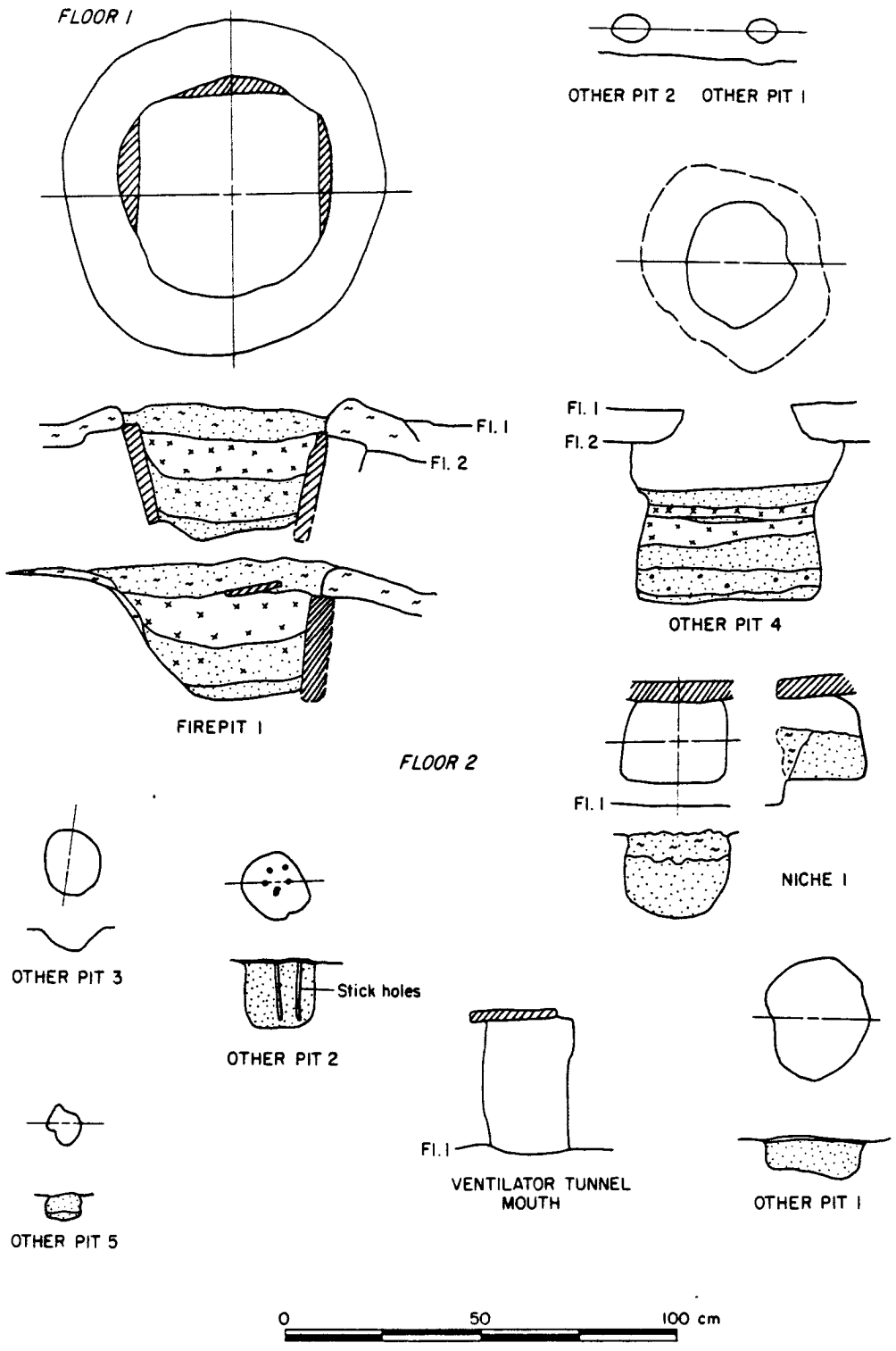


Figure MF-0.69. East Ruin, Kiva 14 (Room 6 kiva) features.

CHCU_310_D58_VOL 4_00166

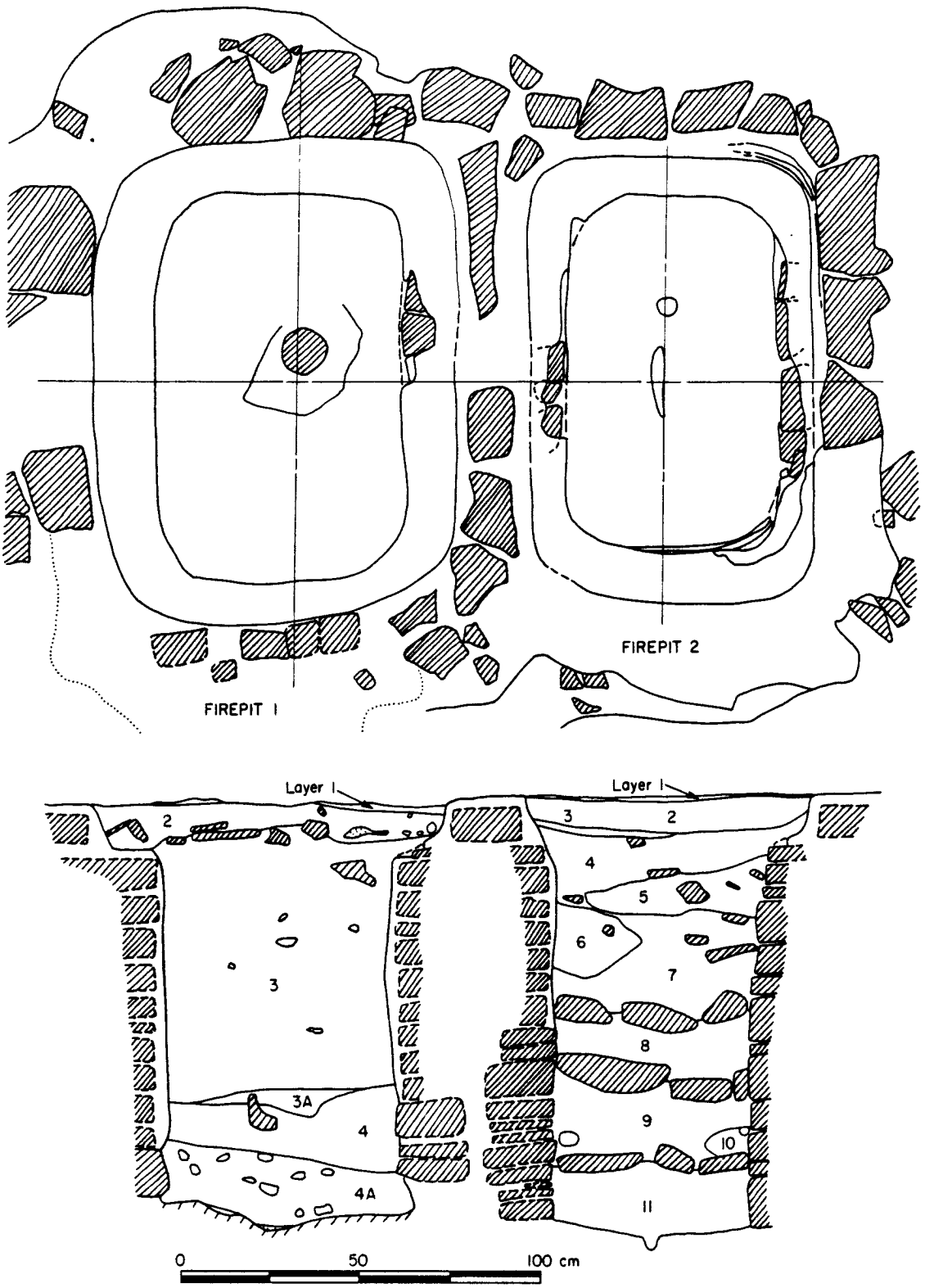


Figure MF-0.70. Plaza Feature 1, Room 3, Floor 1, Firepits 1 and 2.

CHCU_310_D58_VOL 4_00167

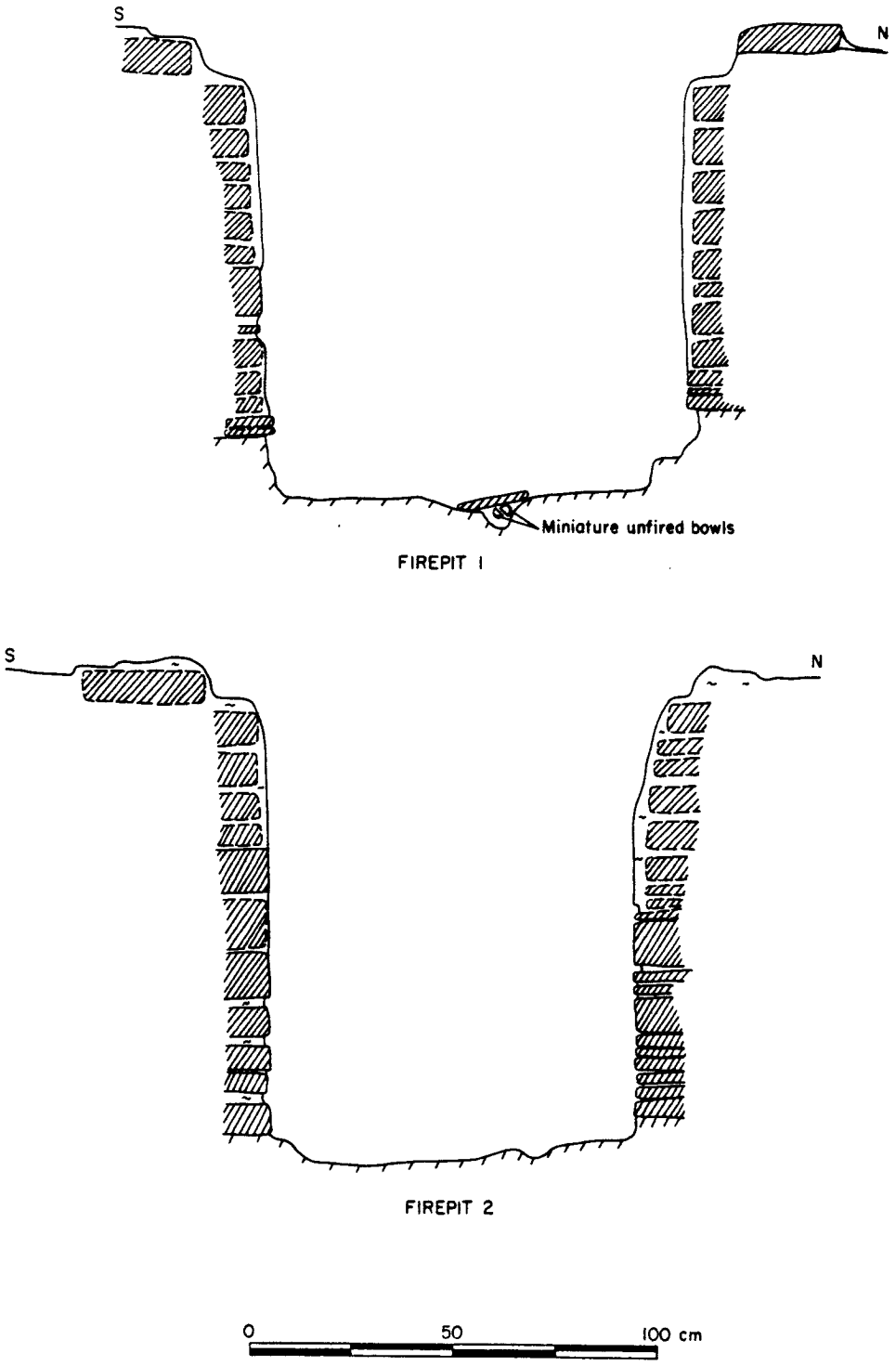


Figure MF-O.71. Plaza Feature 1, Room 3, Floor 1, Firepits 1 and 2 (concluded).

CHCU_310_D58_VOL 4_00168

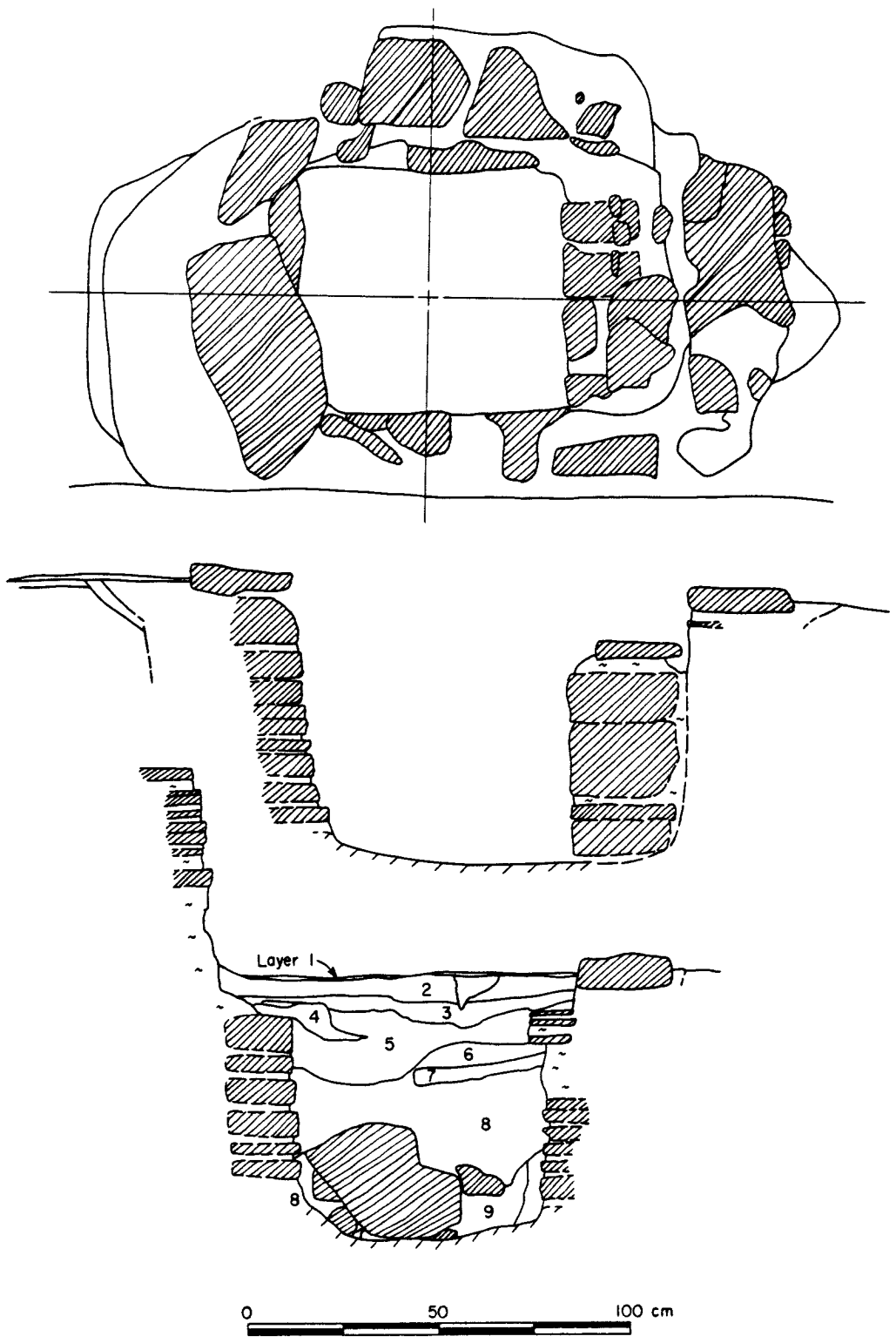


Figure MF-0.72. Plaza Feature 1, Room 3, Floor 1, Firepit 3.

CHCU_310_D58_VOL 4_00169

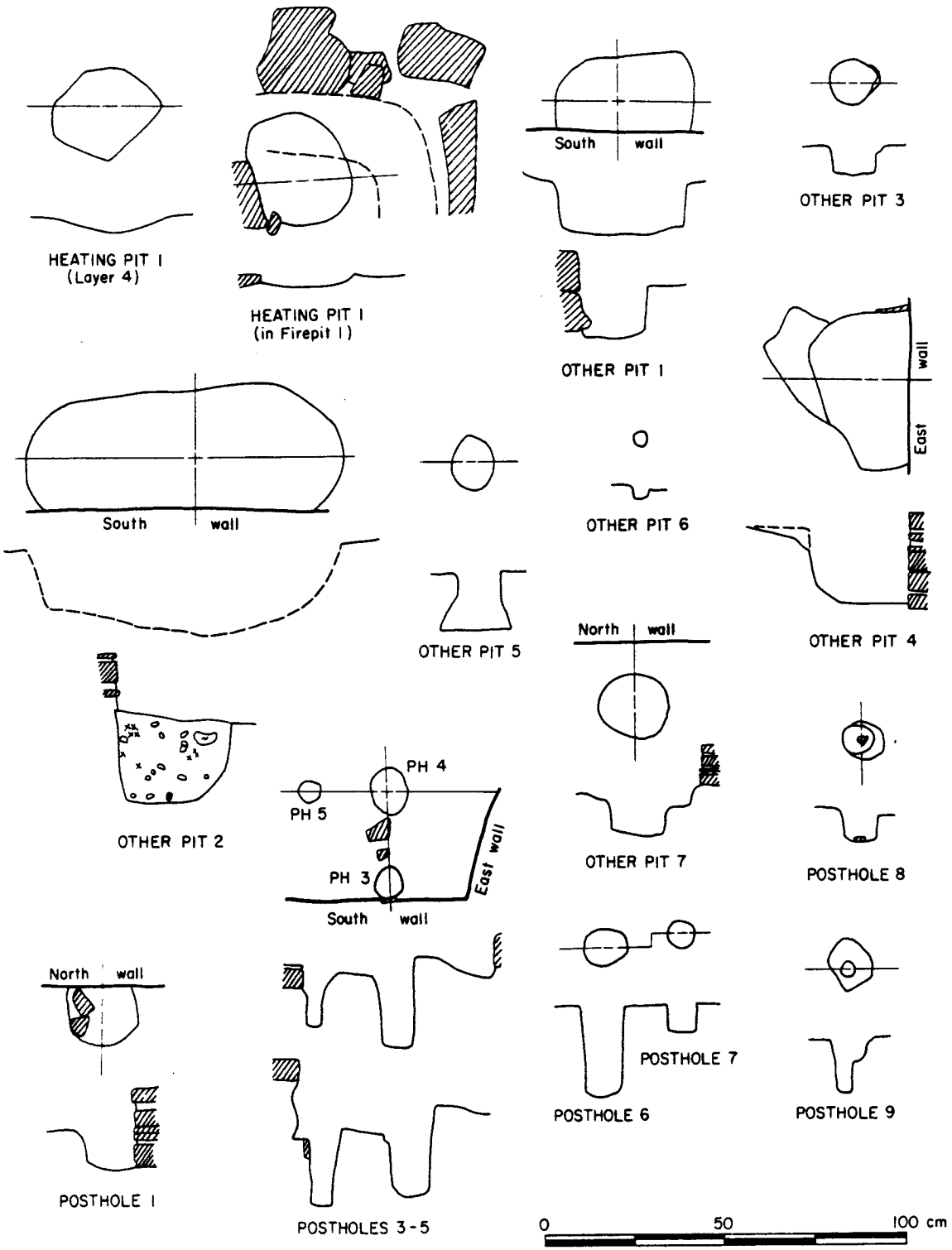


Figure MF-0.73. Plaza Feature 1, Room 3, Floor 1 features.

CHCU_310_D58_VOL 4_00170

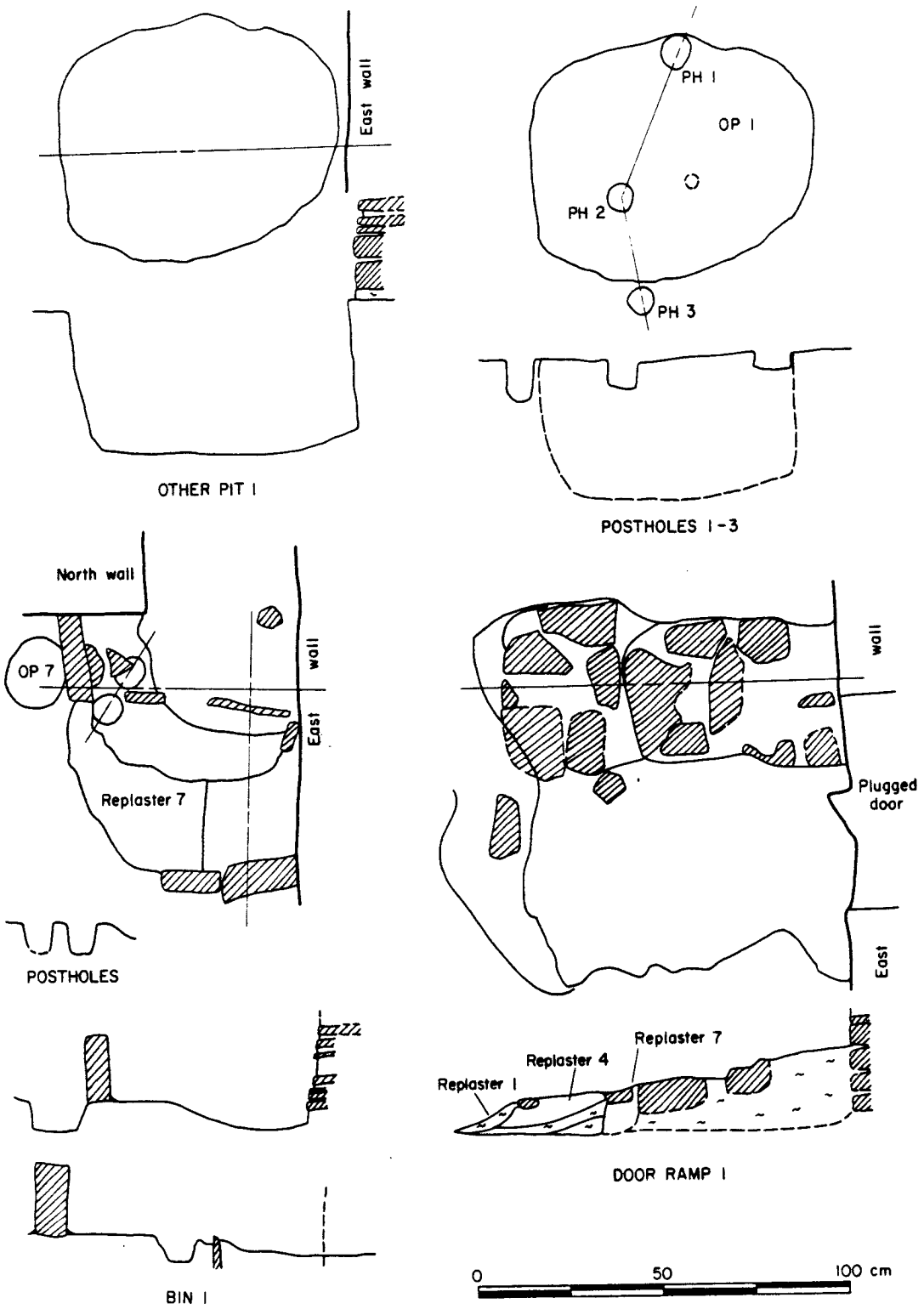


Figure MF-0.74. Plaza Feature 1, Room 3, Floor 2 features.

CHCU_310_D58_VOL 4_00171

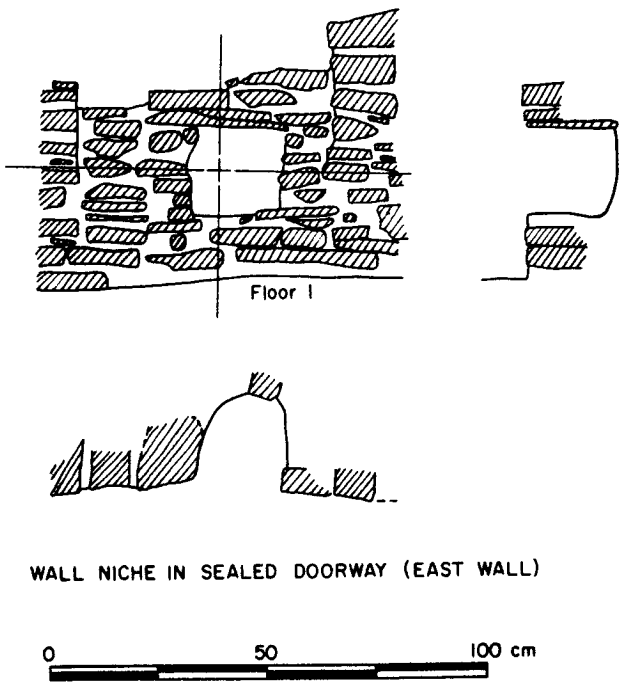


Figure MF-0.75. Plaza Feature 1, Room 3, Wall Niche 1.

CHCU_310_D58_VOL 4_00172

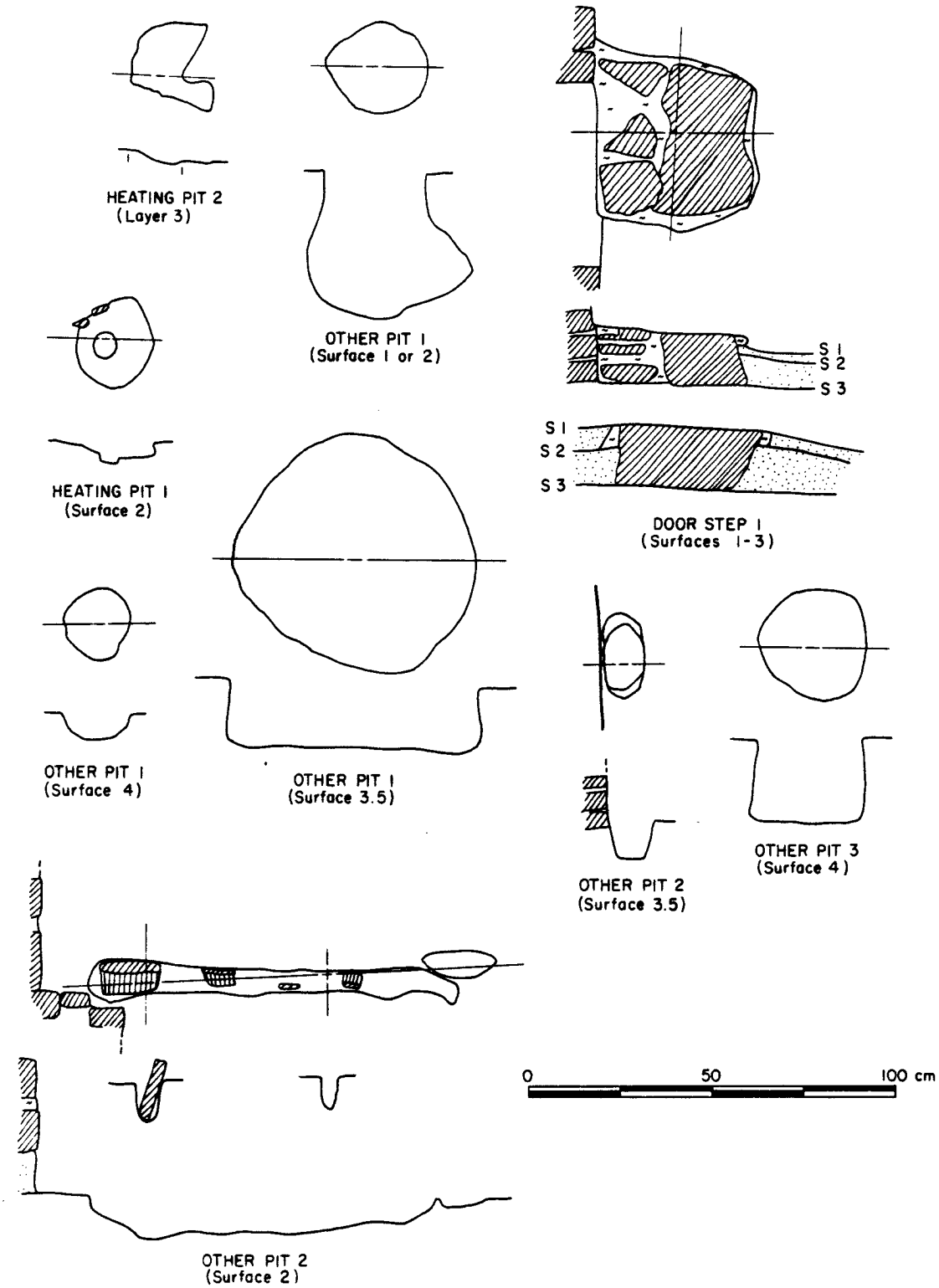


Figure MF-0.76. Plaza Feature 1, Room 4 features.

CHCU_310_D58_VOL 4_00173

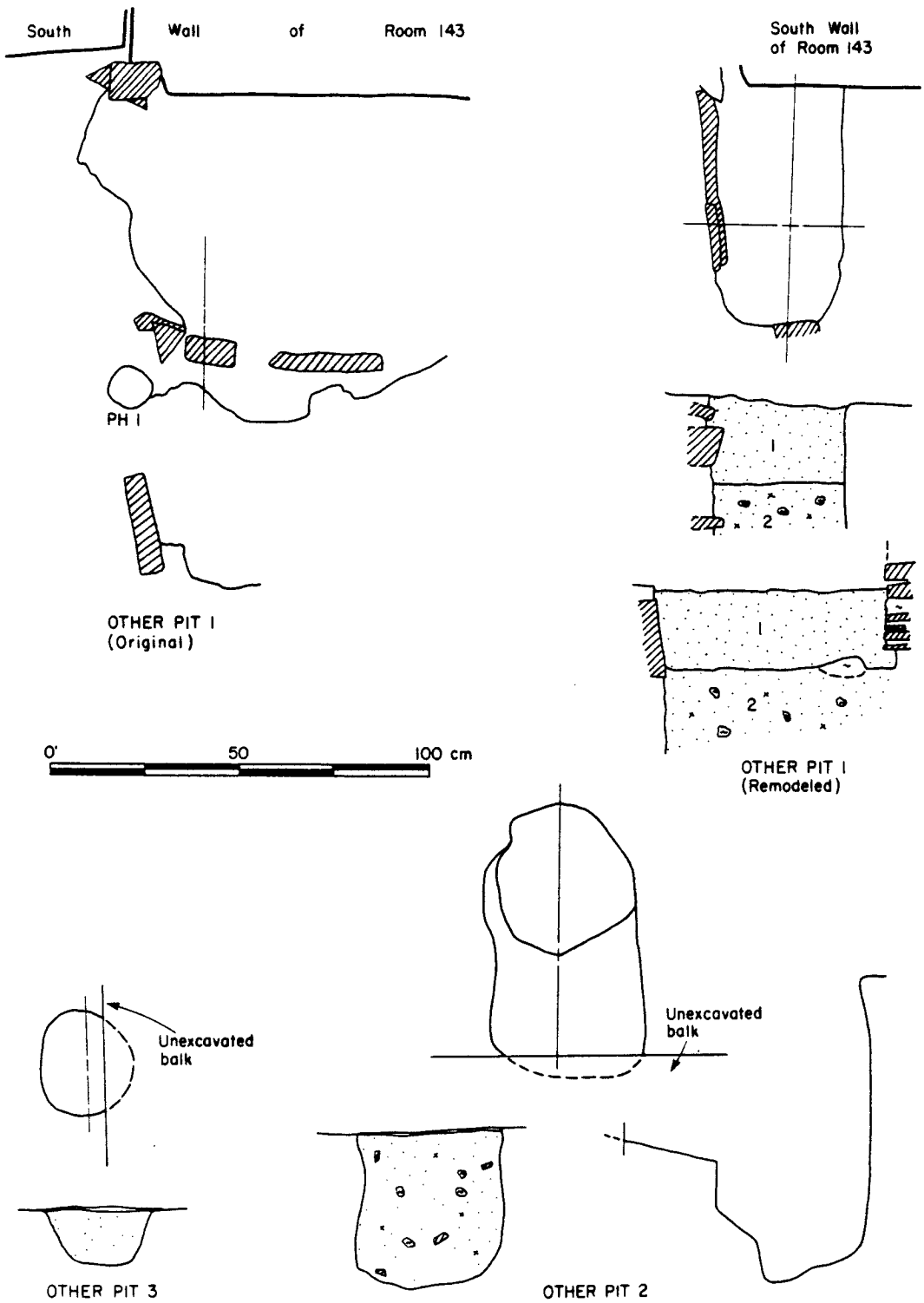


Figure MF-0.77. Plaza 1, Grid 8 other pits.

CHCU_310_D58_VOL 4_00174

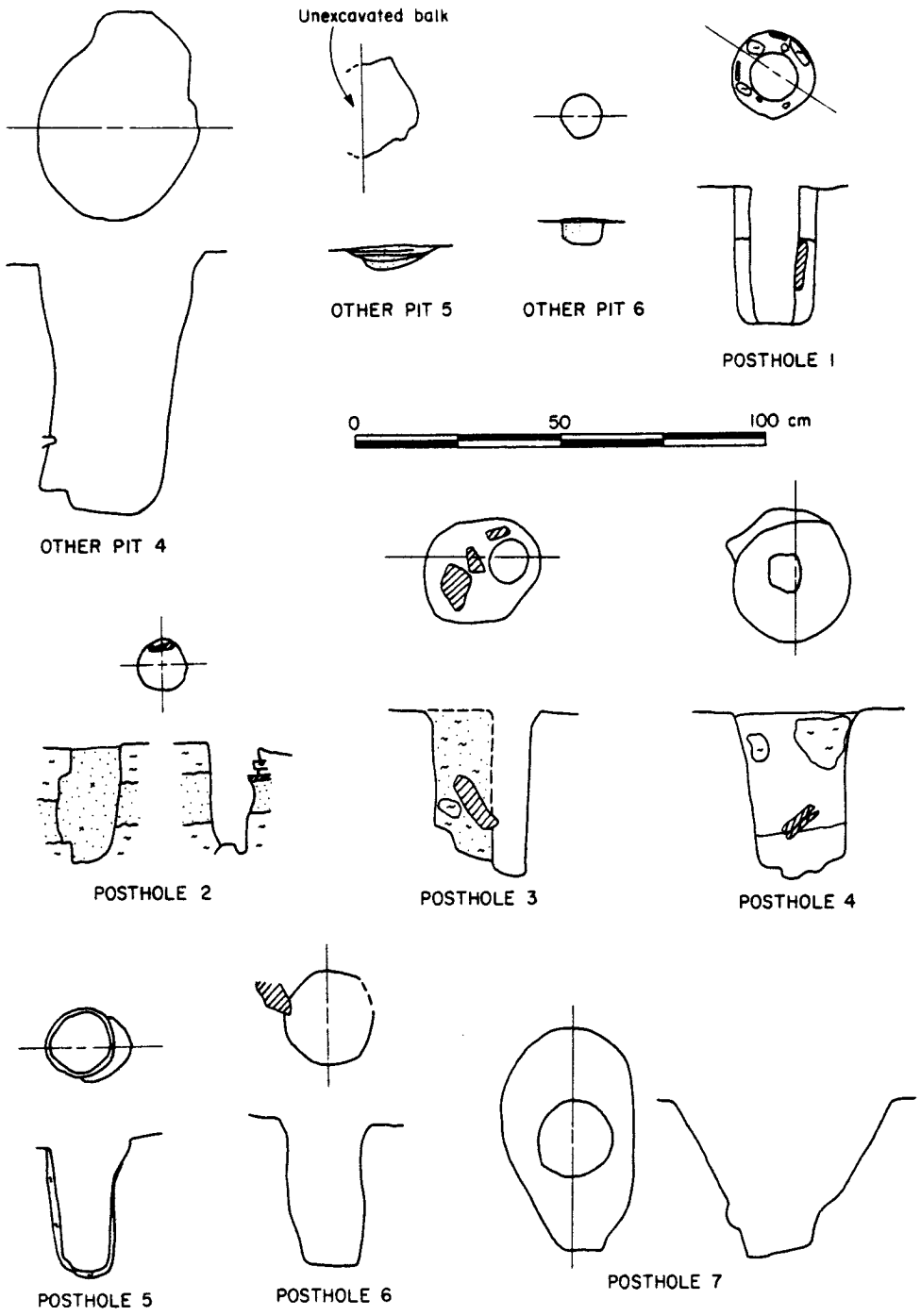


Figure MF-0.78. Plaza 1, Grid 8 other pits (concluded) and postholes.

CHCU_310_D58_VOL 4_00175

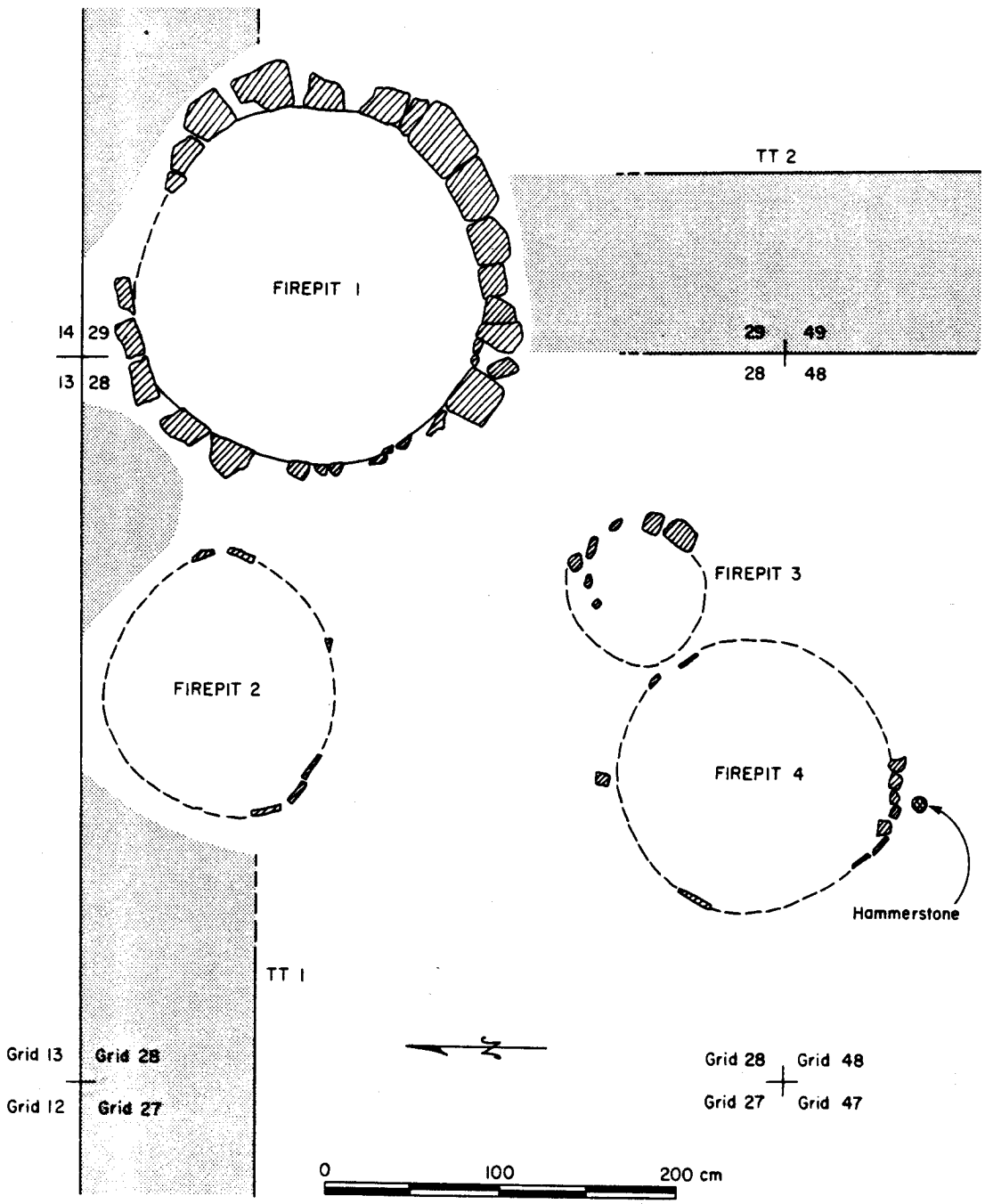


Figure MF-0.79. Plaza 1, Grids 28-29 and 48, Surface 1(?), Firepits 1-4.

CHCU_310_D58_VOL 4_00176

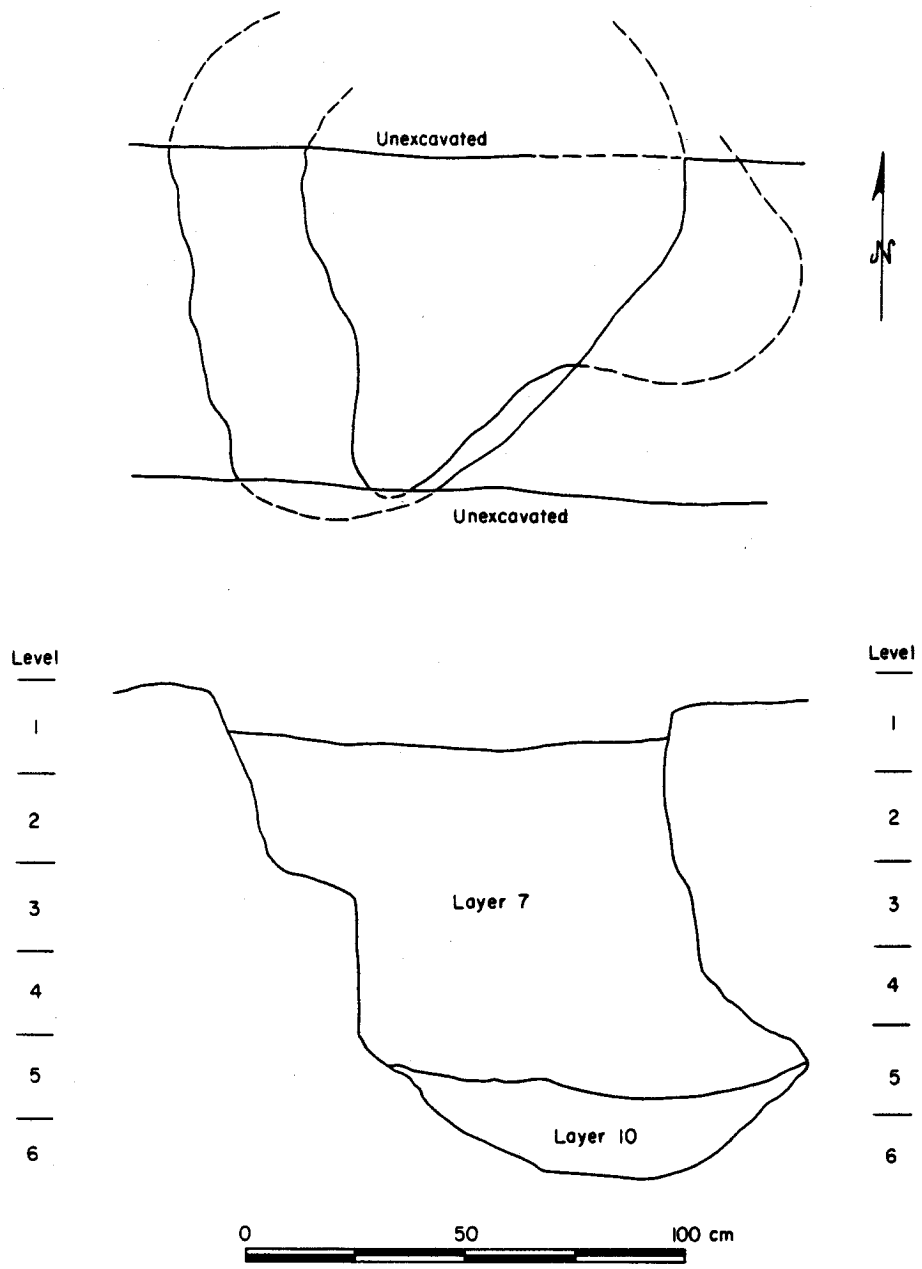


Figure MF-0.80. Plaza 1, Grid 30, Other Pit 1.

CHCU_310_D58_VOL 4_00177

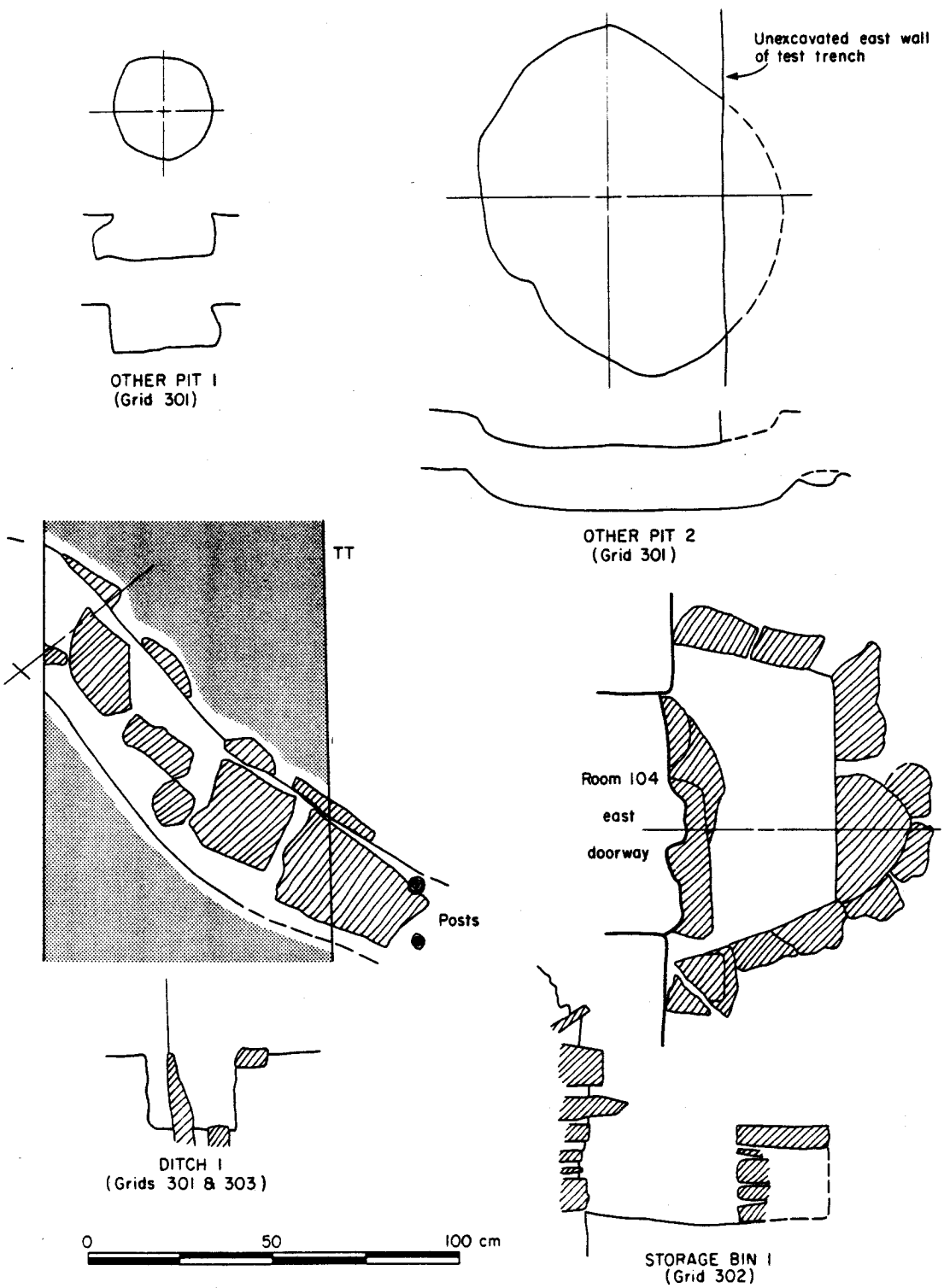


Figure MF-0.81. Plaza 1, Grids 301-303 features.

CHCU_310_D58_VOL 4_00178

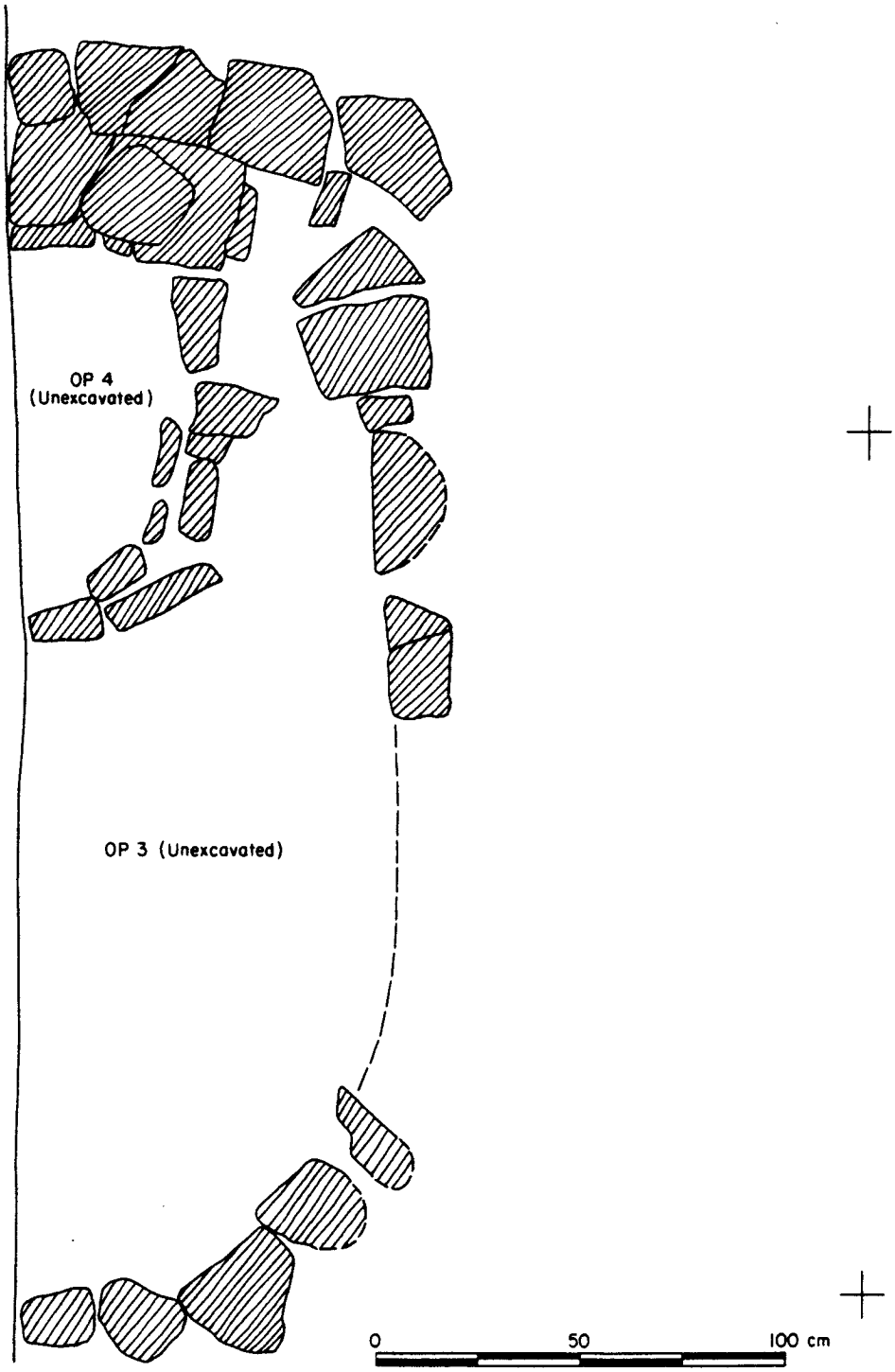


Figure MF-0.82. Plaza 2, Grids 161 & 181, Surface 1, Other Pits 3 and 4 (firepits).

CHCU_310_D58_VOL 4_00179

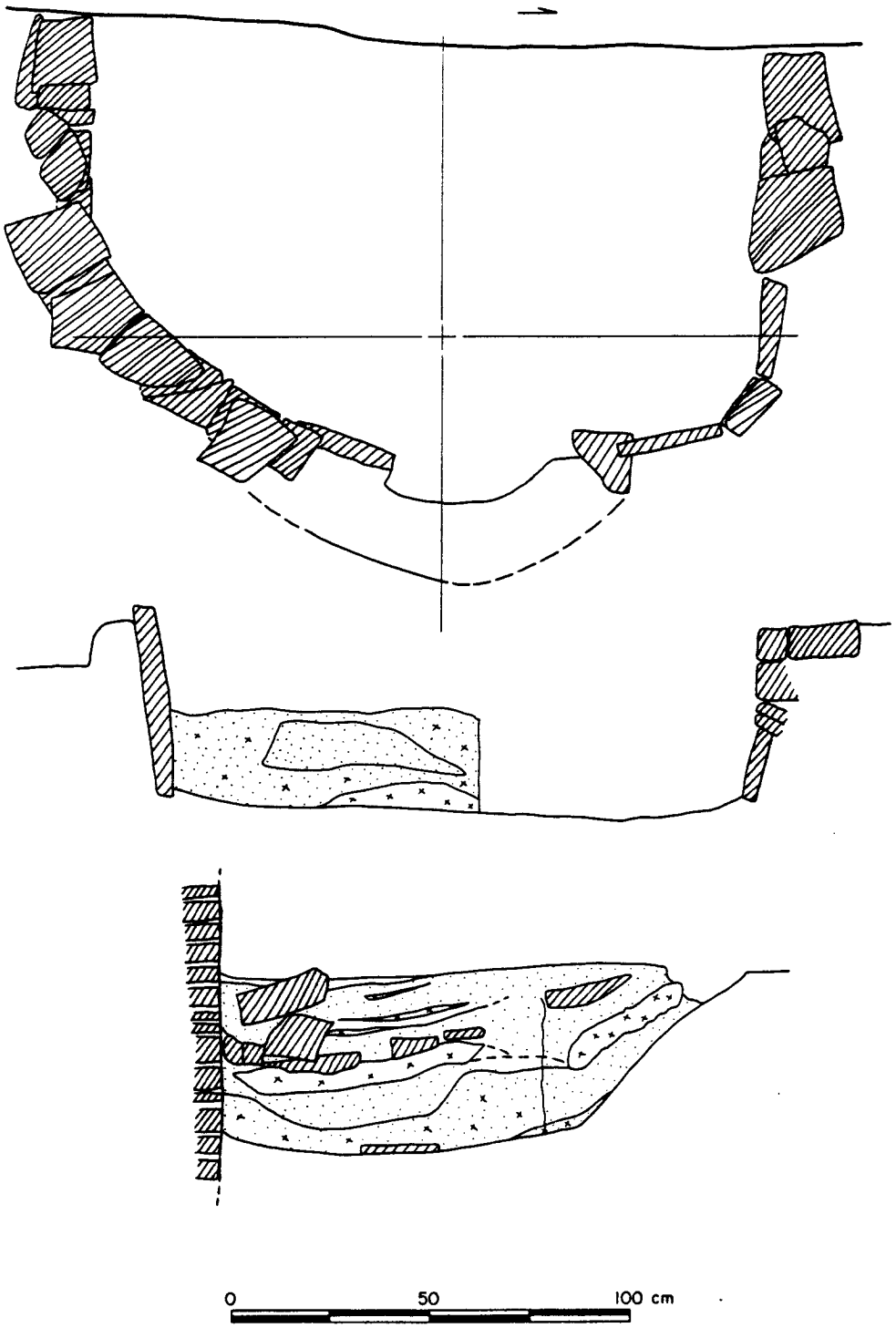


Figure MF-0.83. Plaza 2, Grid 201, Surface 1, Other Pit 2 (firepit).

CHCU_310_D58_VOL 4_00180

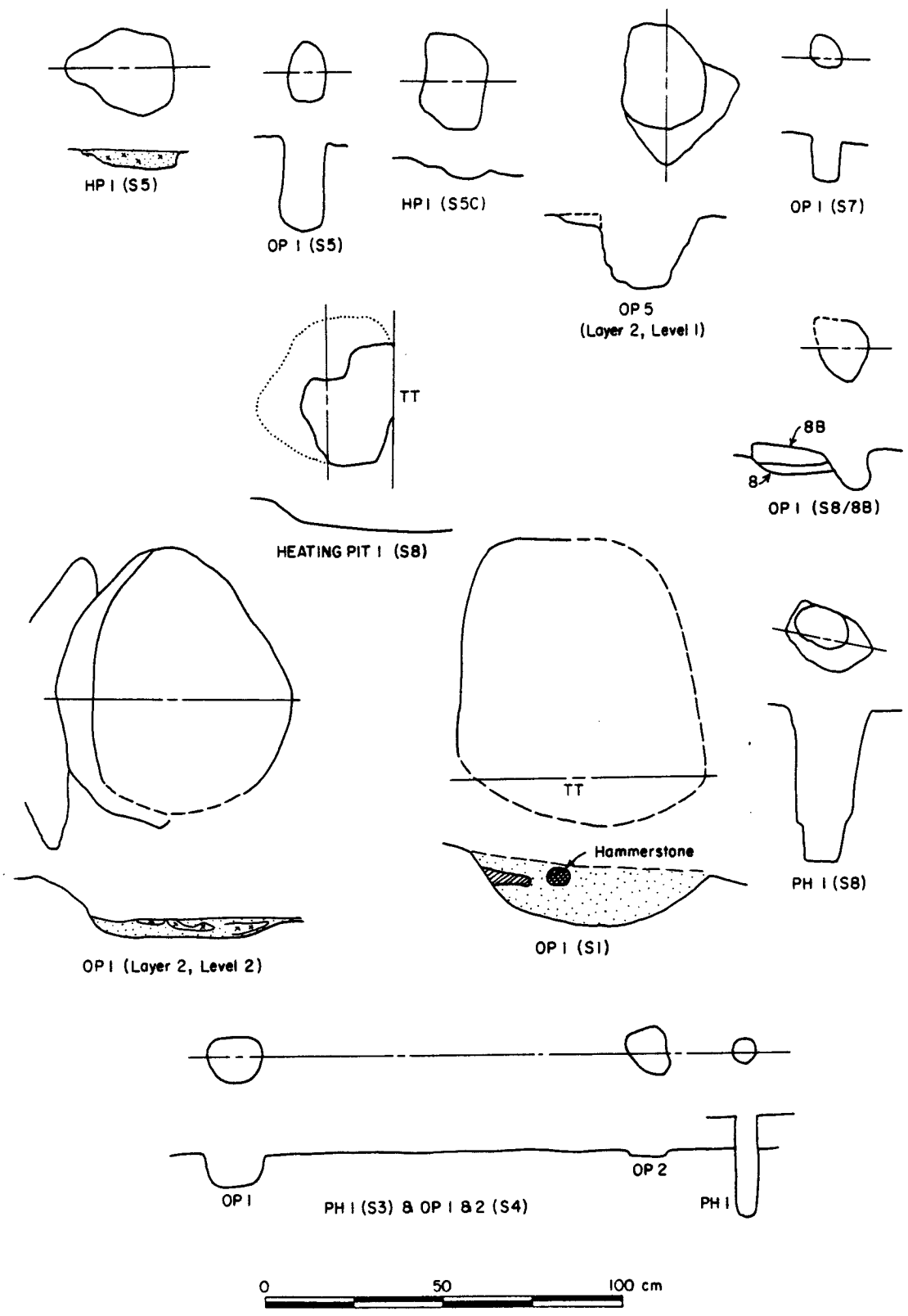


Figure MF-0.84. Plaza 2, Grids 181 and 201 features.

CHCU_310_D58_VOL 4_00181

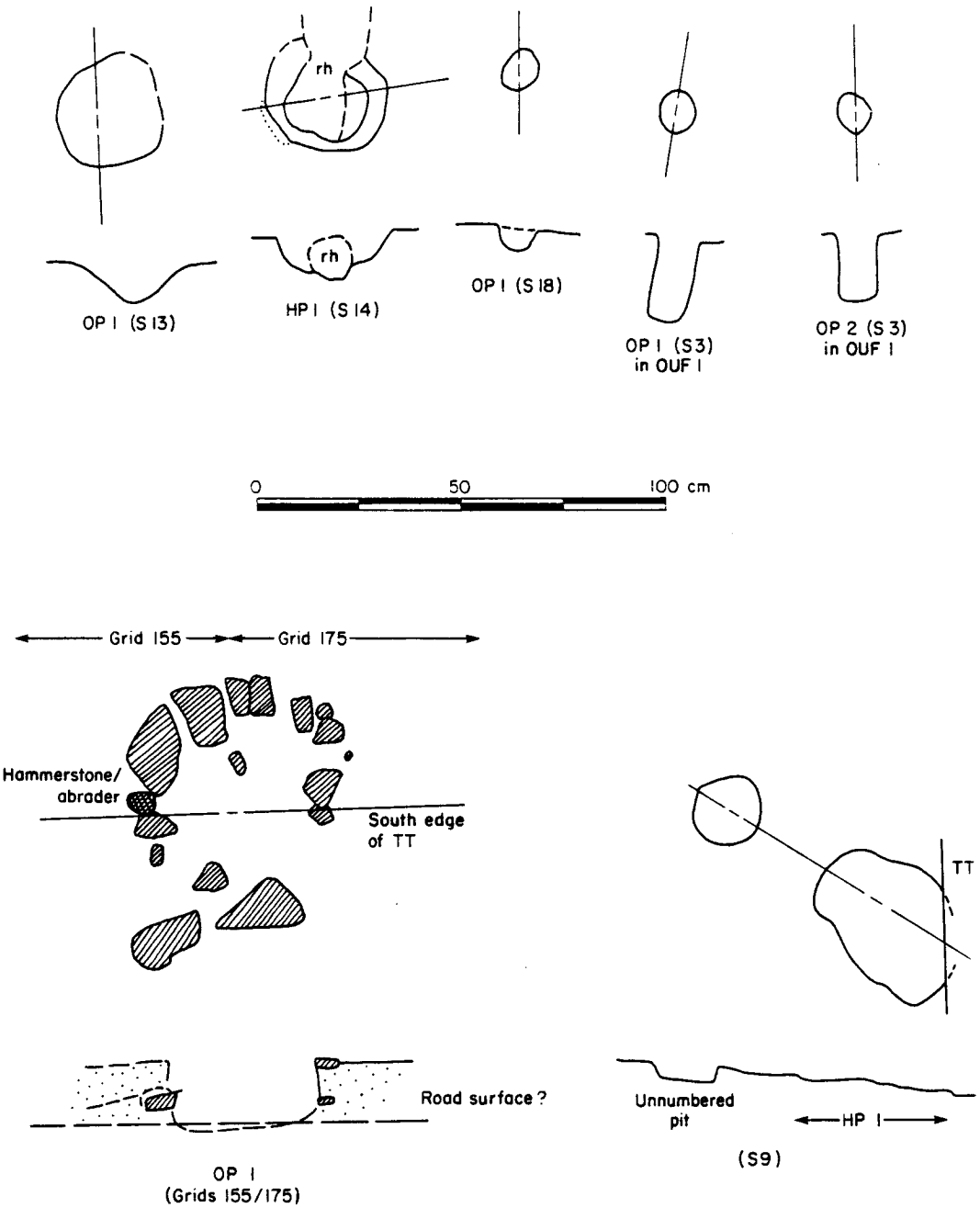


Figure MF-0.85. Plaza 2, Grids 181 and 201 features (concluded). Grids 155/175, Other Pit 1.

CHCU_310_D58_VOL 4_00182

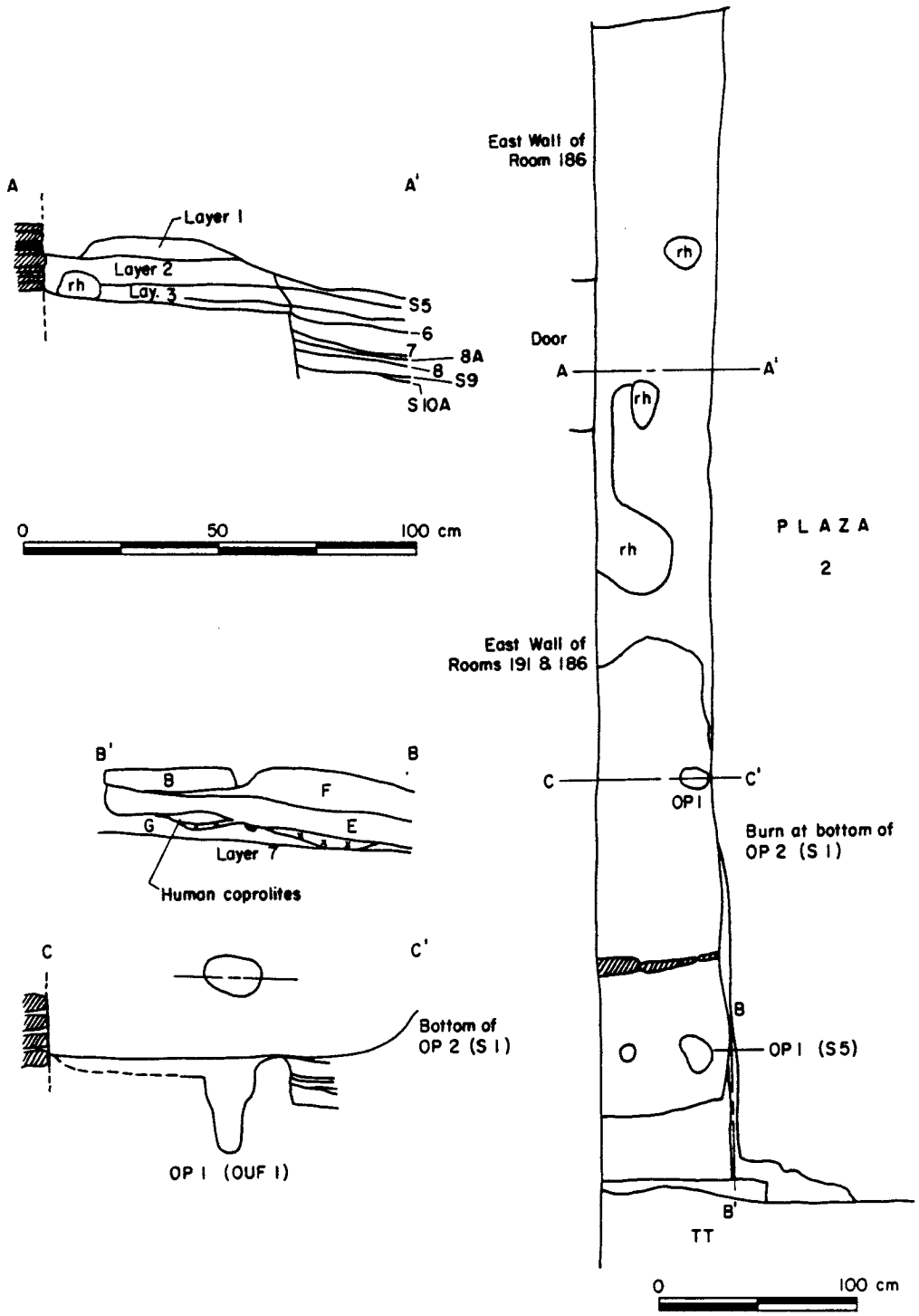


Figure MF-0.86. Plaza 2, Grids 181 and 201, Other Unnamed Feature 1 and associated features.

CHCU_310_D58_VOL 4_00183

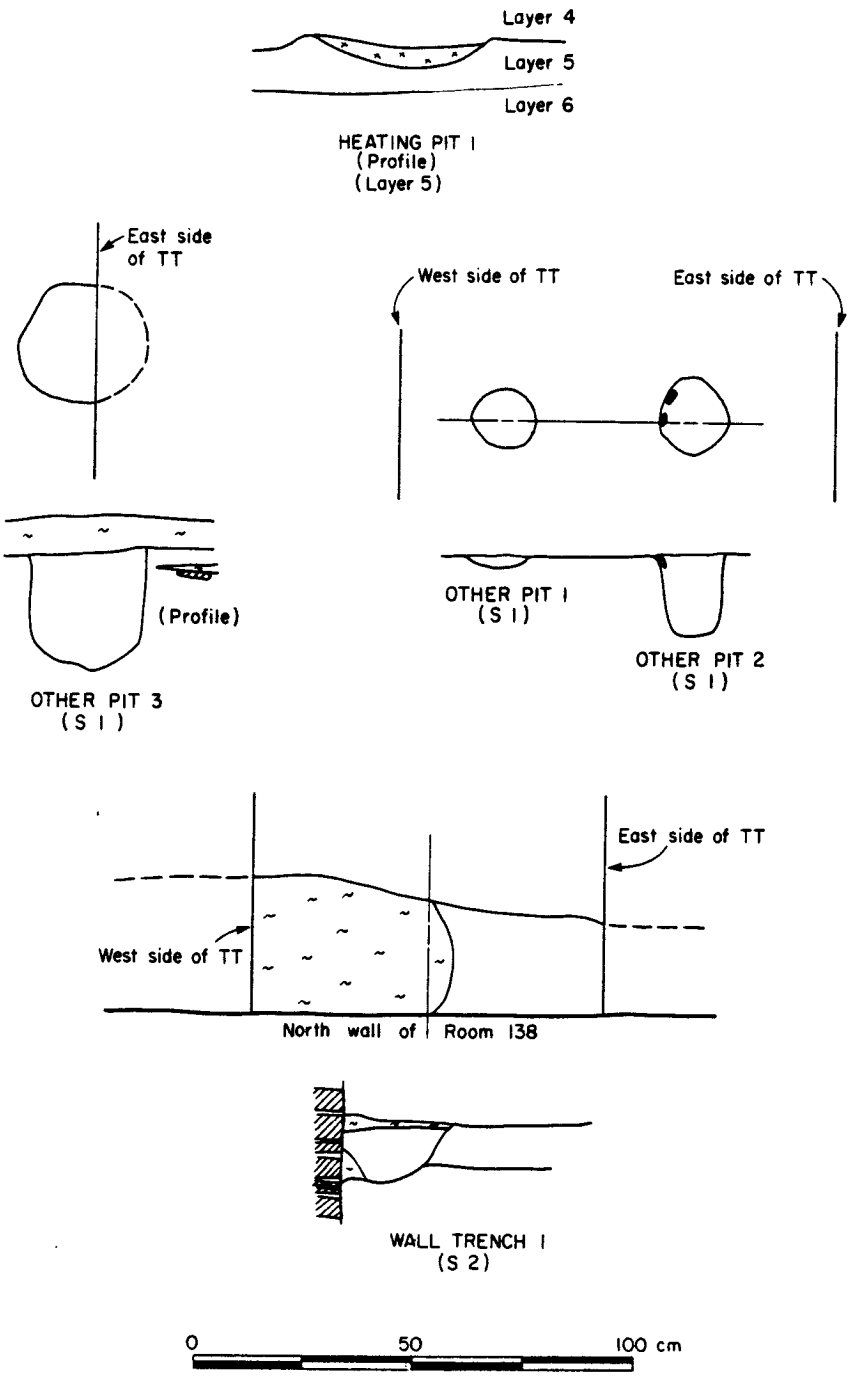
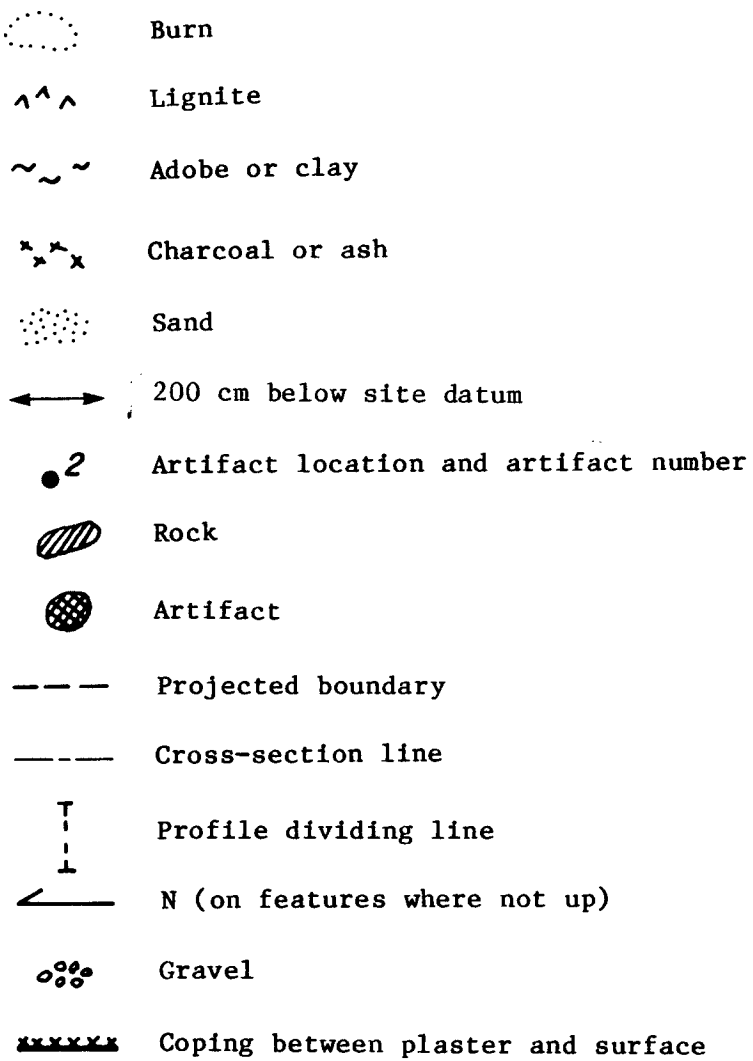


Figure MF-0.87. The North Trench (north of Room 138) features.

CHCU_310_D58_VOL 4_00184

B = Burn
BT = Backhoe Trench
CS = Circular Structure
F = Feature
Fl = Floor
FP = Firepit
H = Hearth
HP = Heating Pit
L = Layer
Lv = Level
MB = Mealing Bin
N = Niche
OP = Other Pit
OUF = Other Unnamed Feature
OS = Other Structure
PG = Plaza Grid
PF = Plaza Feature
PGS = Present Ground Surface
PH = Posthole
P = Wall Peg
PR = Pot Rest
RS = Road Segment
RH = Rodent Hole
RP = Roasting Pit
S = Surface
SB = Storage Bin
SC = Storage Cist
SC (on a TT) = Strat Column in Trash Mound
SF = Subfloor
SP = Storage Pit
TM = Trash Mound
TP = Test Pit
TS = Top Surface
TT = Test Trench
V = Vent
VH = Viga Hole
WF = Wall Foundation
WT = Wall Trench



CHCU_310_D58_VOL 4_00185

Appendix P

Feature Tables

Thomas C. Windes

A key for coded information in the feature tables is presented here. The feature analysis in Chapter 9 has been summarized from data listed below. In order to facilitate analysis, the feature attribute information listed in the tables was changed to a reduced list of numerical data. Feature fill density, however, was monitored with totals for the chipped stone, bone, and sherds recovered. Other artifacts occurred in very low frequencies (generally one or two, if not absent) and only Present-Absent categories were selected. Information for a few plaza features that were not excavated is also listed but was generally not used for the feature analysis.

CERAMIC TIME (listed after floors, surfaces, walls, or fill units)

- ERM - Early Red Mesa Black-on-white assemblage (Early Bonito phase - A.D. 975-1020). Pregreathouse Pueblo Alto.
- RM - Red Mesa Black-on-white assemblage (Early Bonito phase - A.D. 1020-1040/1050). Greathouse construction of Pueblo Alto.
- RMG - Red Mesa/Gallup Black-on-white assemblage (Early/Classic Bonito phase - A.D. 1040-1050).
- G - Gallup Black-on-white assemblage (Classic Bonito phase - A.D. 1040/1050-1100).
- LG - Late Gallup Black-on-white assemblage (Classic Bonito phase - A.D. 1070-1100).
- LM - Late Mix assemblage (Late Bonito phase - A.D. 1100-1140/1150).
- PO - Postoccupational (Post A.D. 1140).
- UNK - Unknown.

FILL

Primarily sand

- 10 - Clean sand. Sterile or nearly sterile sand.
- 11 - Slightly dirty sand. Contains sparse charcoal flecks, ash, or small pieces of carbonized brush.
- 12 - Clayey sand. Sand mixed with clay or small clay nodules.
- 13 - Sand and lignite. Sand mixed with sparse pieces of lignite.
- 14 - Sand and gravel. Sand mixed with small nodules of sandstone or

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harder minerals and caliche common to local subsurface soils.
15 - Sand and unburned wood. Rooted wood fragments in a sand matrix.
16 - Rotted post or beam.

Primarily burned sand and carbonized wood
20 - Unburned sand with pockets or layers of moderate to dense amounts of carbonized brush.
21 - Burned sand with pockets or layers of moderate to dense amounts of carbonized brush.
22 - Dense amount of carbonized brush or smaller vegetal material.
23 - Dense amount of carbonized tree wood.
24 - Dense amount of both carbonized brush and tree wood.
25 - Dense amount of charcoal and ash.
26 - Dense amount of ash with little or no charcoal.
27 - Burned and/or unburned sand with moderate amounts of charcoal and ash.
28 - Burned sand.

Primarily trash
30 - Light trash-artifacts, bone, adobe, rocks and charcoal present in sparse amounts.
31 - Moderate trash. Same as 30 except in moderate amounts.
32 - Dense trash. Large sherds, abundant bone, some lithics, and perhaps wall and roofing debris. Ash and charcoal darkens the sand matrix.
33 - Specific trash - Abundant cultural debris from a single or very few activities (e.g. chipped stone, bone, or coprolites).

Primarily architectural debris
40 - Construction debris. Spalls and gray lumps of clay mixed with a few artifacts, including masons' tools (e.g. hammerstones and abraders).
41 - Wall debris. Rocks, spalls, and mortar with pockets of sand.
42 - Wall?/roof debris. Rocks, roofing adobe, adobe impressions, and redeposited mortar.
43 - Roofing debris. Vegetal material, adobe, and adobe impressions in a sandy matrix. Rocks are rare.
44 - Solid clay. Entire contents are clay.
45 - Adobe chunks or clay lumps only.
46 - Spalls in a sandy matrix.

Miscellaneous
50 - Plug. Most of the pit filled with a plug of adobe and/or rocks.
51 - Construction packing. A liner of mortar and rocks.
52 - Lignite packing (in a posthole).
53 - Wolky feature. Entire feature is of adobe/clay and rocks.
54 - Construction packing. A liner of mortar or clayey sand.
55 - Masonry. Feature is of stacked rock and mortar.

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VEGETAL[a]
- c = corn cob (usually carbonized)
- e = eggshell (probably turkey)
- k = corn kernel (usually carbonized)
- m = matting
- p = pinyon shell fragments
- s = seed (unclassified)
- t = twine
- u = squash seed
- x = coprolite
- y = yucca

MISCELLANEOUS ARTIFACTS PRESENT
- A = abrader
- E = metate fragment
- G = ground stone (misc)
- H = hammerstone or hammerstone/abrader
- M = mano or mano fragment
- O = ornament
- P = polishing stone
- R = projectile point
- T = turquoise or malachite
- Z = azurite

LINING
- U = unlined
- U-DS = unlined and shows digging stick marks on sides
- L-A = lined with a wet ash (may not constitute a true lining)
- L-B = lined with an inset basket
- L-M = lined with masonry and mortar
- L-P = lined with plaster
- L-PR = lined with adobe and rocks (not masonry)
- L-PS = lined with upright slabs and mortar
- L-S = lined with upright slabs
- L-Sa = lined with sand or clayey sand
- L-Sa/S = lined with upright slabs and sand/clayey sand

SEALED
- U = unsealed (pit left open at abandonment or when new floor applied)
- S = sealed with plaster and/or stone during use of the associated floor (not by the addition of a new or resurfaced floor)
- S-FP = covered by floor plaster (pit is in fill below floor plaster)
- S-WP = covered by wall plaster

COMMENTS

The area of floor burns is included here, cases of superimposition, and the presence of shims and base stones in postholes.

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[a]May be more than one item in each category.

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Table MF-P.1. Rooms 50 and 51 (under Room 142).

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Comments
ROOM 50														
Floor 1 (ERM)														
Other Pit 1	29	24	4	40							1.1	U	U	Floor irregularity?
Room 51														
Floor 1 (ERM)														
Heating Pit[a]	39	27	7	27,40	1	0	1				2.4	U	U	Pit mouth = 680 cm^2
Other Pit 1	113	27	22	11,40		0	3		3			U	U	Rodent tunnel
Floor 2 (ERM)														
Firepit 1[a]	15++	39	23	25,45		13	24	4			est. 30.7 act. 7.1	L-PS	U	Pit mouth ca. 1,520 cm^2?, remodeled once, cut by room wall, cuts HP 7 (Room 142, Floor 8)
Other Pit 1	21	19	12	11				2			2.8	U	U	Probably part of Floor 3
Floor 3 (ERM)														
Heating Pit 1[b]	66	57	20	20							55.6	U	U	Pit mouth = 3,500 cm^2, cut by OP 1 (Floor 1) and OP 2 and OP 3 (Floor 3)
Heating Pit 2[a]	65	52	12	11		0	2			0	29.3	U	U	Pit mouth = 2,730 cm^2, cut by rodents, PH 1 (Room 142, Floor 1) and OP 7
Other Pit 1	34	34	11	40					1		6.5	L-P	U	Cuts OP 8, cut by OP 1 (Floor 1)

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Table MF-P.1. (concluded)

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Comments
Other Pit 2	21	21	10	10							3.0	U	U	Overlies HP 1, burned along one side, HP?, pit mouth = 340 cm^2
Other Pit 3	22	21	9	10							2.4	L-P	U	Overlies HP 1, burned along one side, HP?, pit mouth = 340 cm^2
Other Pit 4	16	15	9	12							1.8	L-P	U?	
Other Pit 5	20	17	9	12,45?							2.0	U	U	Cut by OP 9, cuts OP 6
Other Pit 6	22	20	7	11		0	1	1			1.6	U	U	Partly burned as well as adjacent floor, probably not a HP, cut by OP 5
Other Pit 7	53	47	13	11,40						A	18.3	U	U	Cuts HP 2, cut by PH 1, (Floor 1, Room 142)
Other Pit 8	53	30	22	30,40	c	1	5	5	5		est. 45.5 act. 22.8	L-P	S?	Cut by OP 1 and Room 51 wall, adobe mix, pit?
Other Pit 9	16.5	16	9	50	s						1.5	U	S	Cuts OP 5

[a]Yielded archeomagnetic sample.
[b]Yielded archeomagnetic and carbon-14 samples.

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Table MF-P.2. Room 103.

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Pit-form (OPs only)	Comments
Layer 1 (PO)															
Firepit 2[a]	95	64	36	22,41							107.6	L-S	U		Pit mouth = 3,830 cm^2
Layer 2, Level 2 (LM)															
Firepit 1	54	43	5	27							1.8	U	U		Pit mouth = 1,370 cm^2
Floor 1 (G/LM)															
Heating Pit 1[a]	41	38	12	27		7	28	1	1		6.9	U	U		Pit mouth = 1,270 cm^2
Heating Pit 2	29	27	5	27							2.4	U	U		Pit mouth = 660 cm^2
Heating Pit 3	56	35	7	20	e	1	1		1	O	7.8	U	U		Pit mouth = 1,690 cm^2
Heating Pit 4	26	22	8	27?,45	s					E	2.4	U	U		Pit mouth = 440 cm^2
Heating Pit 5[b]	36	32	9	27							5.2	U	U		Pit mouth = 880 cm^2
Heating Pit 6	25	24	6	27?,45							1.8	U	U		Pit mouth = 450 cm^2
Heating Pit 7[a]	46	28	3	20					1		2.8	U	U		Pit mouth = 1,080 cm^2 Cuts OP 4 and OP 6
Other Pit 1	43	33	36	11,22				1	1	AEGMZ	11.7	U	S	1c	
Other Pit 2	7.6	6	10	11							.4	U	S	7	Posthole?
Other Pit 3	76	39	11	11,15,41		0	21		5		27.3	U	U	6	
Other Pit 4	58	52	14	41		1	1	1	2		35.5	U	S	5	
Other Pit 5	125	75	16	10,41		0	5	1	3	EH	110.1	U	U	6	Cuts OP 4, cut by OP 6

[a]Yielded archeomagnetic sample.
[b]Yielded archeomagnetic and carbon-14 sample.

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Table MF-P.2. (continued)

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vege-tal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lin-ing	Sealed	Pit-form (OPs only)	Comments
Other Pit 6	62	50	8	10					1		21.9	U	U	5	Cuts OP 5 and OP 4 Cut by HP 3
Other Pit 7	78	34	45	11,41	c	0	76	5	28	A	66.5	U	U	6	
Floor 2 (G)															
Heating Pit 1	38	36	10	10,14							7.4	U	S		Pitmouth = 1,070 cm^2, Overlies HP 4
Heating Pit 2[a]	25	22	8	25	c				2		2.1	U	S		Pit mouth = 430 cm^2, Cuts HP 3, HP 5 and HP 7
Heating Pit 3[a]	28	28±	5	22				1	2		2.0	U	S		Pit mouth = 700 cm^2, Cut by HP 2
Heating Pit 4[a]	23±	21	7	20							1.5	U	S		Pit mouth = 340 cm^2, Cuts HP 5, cut by OP 1 and PH 1
Heating Pit 5	25?	25?	7±	25	c				2		est. 1.2	U	S		Pit mouth = est. 500 cm^2, Ash Pit?, cut by HP 4 and HP 7, cuts HP 6
Heating Pit 6	28	28	7±	20	ce	1	1	2	4		3.3	U	S		Pit mouth = 820 cm^2, Cut by HP 1, HP 3, HP 5
Heating Pit 7[a]	18	18±	11	27							2.5±	U	U		Pit mouth = 320 cm^2, Cut by HP 2 and HP 3
Heating Pit 8	20	18.5	9	25	ck	3	3	1	1		1.9	L-P	S		Pit mouth = 340 cm^2
Heating Pit 9	30	29	6	20					1		2.4	U?	S		Pit mouth = 770 cm^2?,
orig.	30?	29?	?	?							est. 9.6	L-S	-	3	Small bin
Other Pit 1	9.5	9.5	7	10,14							.3	U	S	7	HP 4, contemp. with HP 1

[a]Yielded archeomagnetic sample.

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Table MF-P.2. (continued)

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Pit-form (OPs only)	Comments
Other Pit 2	45	23	28	11,33	c	0	32	9	9	AO	28.2	U	S	6	
Other Pit 3	18.5	6.8	10	11							.9	L-P?	S?	8	
Storage Cist 1	39	37.5	20	43		0	1			H	17.0	L-S	U	3	
Posthole 1	14	14	44	14,45				1		M	6.7	U	U		Base stone, cuts HP 4
Posthole 2	26	26	42	11,33,45		0	83	2	1		14.8	U-DS	U		Base stone/bedrock
Posthole 3	20	19	36	14,45		0	2				9.2	U-DS	U		Base stone/bedrock
Posthole 4	28	16	28+			0	1			E	7.3	U	U		4 shims
mold	14	12	28	15											
Posthole 5	20	17	23	14,45							6.3	U	U		
Posthole 6	10	10+	15	42							1.0	U	U		1 shim. Auxiliary to PH 5
Mealing Bins 1-3	140	100	18	42,46		1	11	4	7	M	-	L-PS	U		Each basin = 40 x 30x 18 c
Burn 1[a]	35+	23	-	20?							-	U	-		In fill between Floors 1 and 3
Floor 3 (G)															
Hearth 1[b]	37	33+	10	25	c	0	1		2	H	8.1	L-P	U		Pit mouth = ca 1,020 cm^2 Cut by partition wall and ? OP 2
Heating Pit 1	19	18	4	21							.9	U	S		Pit mouth = 310 cm^2
Heating Pit 2	21.5	18	6	21							1.2	U	S		Pit mouth = 290 cm^2

[a]Yielded archeomagnetic sample.
[b]Yielded archeomagnetic and carbon-14 samples.

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Table MF-P-2. (continued)

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vege-tal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lin-ing	Sealed	Pit-form (OPs only)	Comments
Heating Pit 3	41	22	5	21							2.2	U	S		Pit mouth = 810 cm^2 Cut by HP 4. Possibly 2 HPs
Heating Pit 4[a]	25+	23+	5	11				1	2		est. 1.9	U	S		Pit mouth = 430 cm^2 Cuts HP 3
Heating Pit 5	26	26	4	21		0	1	1	1		2.1	U	U		Pit mouth = 510 cm^2 Cut by HP 3 and HP 6
Heating Pit 6	38	27	5	27		?	1		1	A	3.0	U	U?		Pit mouth = 860 cm^2 Cuts HP 5
Heating Pit 7	16	13	2.5	27							0.5	L-P	S?		Pit mouth = 180 cm^2 Pit in floor plaster
Heating Pit 8	8	6	2	22		?	4				0.04	L-P	S		Pit mouth = 40 cm^2 Pit in floor plaster
Other Pit 1	40	33	10	14,43	c						4.5-8.4	L-S?	U	3/5	Base slab, remodeled
Other Pit 2	34.5+	25+	12	43,46							20.0+	U	U	5	Cut by partition wall and ? Hearth 1
Other Pit 3	11.5	11.5	3	11							0.2	L-P	U?	7	Overlies OP 7 (Floor 4)
Other Pit 4	32	26	6	11,20					2		2.5	U	S	2	
Other Pit 5	23	18.5	12	11		0	1	?	2		2.4	U	S	5	
Other Pit 6	11	11	10	10,14							0.7	U	?	7	Cuts OP 7
Other Pit 7	21	16	11	10,14							2.3	U	S	6	Cut by OP 6
Other Pit 8	59+	25	6	11,14		0	7		5		7.5	U	S	6	

[a]Yielded archeomagnetic sample.

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Table MF-P.2. (continued)

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vege-tal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lin-ing	Sealed	Pit-form (OPs only)	Comments
Posthole 1	30	25	33	51						AGM	16.1	L-PS	U		Base stone. 6 shims
mold	7.5	7.5	33	15											
Posthole 2	9.4	9	39	15							3.7	1/2L-PR	U		
Posthole 3	13	8	–						3		3.2	L-P	U		Bedrock base. 2 shims
mold	9	8.5	45	15											
mold	5	5	36	15											
Posthole 4	30	21	23	12,14							7.6	U	U		Cuts PH 5
Posthole 5	31	29	50	14		0	2		5		2.1	U	U		Cut by PH 4. 2 shims
mold	10	6	50	14											
Posthole 6	12	12	13	12		0	1	1	1		1.4	L-Sa	S?		
mold	10	10	13	11											
Posthole 7	13	13	35	43							4.9	U	U		Under partition wa
Mealing Bin 1	85	44	13	40,43		0	1		2	EM	10.9	L-PS	U		Volume is of basin only
Mealing Bin 2	78	44	6	40,43		1	6	4	1	EM	7.5	L-PS	U		Volume is of basin only
Mealing Bin 3	82+	44	13								11.0	L-PS			Volume is of basin only
remod.	82+	44	6	40,43		0	1		4	AEM	5.7	L-PS	U		Volume is of basin only
Floor 4 (G)															
Heating Pit 1[a]	29	26	4	25	ck	2	5				1.4	U	U		Pit mouth = 580 cm^2 Assoc. with floor burn
Other Pit 1	58	54	31	15,40		0	6		1	H	66.6	U-DS	U	1c	Layer of stone at bottom
Other Pit 2	61	36	17	14,40	s						32.7	U	U	5	Cut by PH 4 (Floor 2)

[a]Yielded archeomagnetic sample.

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Table MF-P.2. (continued)

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vege-tal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lin-ing	Sealed	Pit-form (OPs only)	Comments
Other Pit 3	17	13	6.5	14,45							1.0	U	U	2/7	
Other Pit 4	8	8	5	4							0.2	U	U	7	
Other Pit 5	11	8.5	9	14							0.5	U	U	4	Possible PH
Other Pit 6	22	19	16	10,46				3			3.7	U-DS	U	5?	Possible PH? cut by PH 5.
Other Pit 7	25	18	6	11							1.4	U	U	2	
Other Pit 8	46	44	15	46							18.1	U	U	1c	Cut by PH 7
Other Pit 9	24	22.6	10	11,46							3.1	U	U	5	
Other Pit 10	16	7	8.5	11							0.5	U	U	8	
Other Pit 11	54	42	46	31,43		0	39	3	5	AH	84.2	U-DS	U	1b	
max.	60	48													
Other Pit 12	69	32	15	14					2	A	18.1	U	U	6	
Other Pit 13	17	7	9	11							1.8	U-DS	U	8	Part of OP 14
Other Pit 14	17	10	9	11							1.8	U-DS	U	8	Part of OP 13
Other Pit 15	9	8.5	7	11							.3	U-DS	U	7	
Other Pit 16	35	33	30	11		0	4		5		22.1	U	U	1c	Clay clumps on bottom Rodent disturbance
Other Pit 17	32	31	20	40			1				16.3	U	U	1b/1c	Rodent disturbance
max.	38	32													
Other Pit 18	57	44.5	24	15,40							41.1	U	U	1c	
Other Pit 19	26	25	17	11,45		0	11	1	2		9.0	U-DS	U	6	Rodent disturbance
Other Pit 20	49	48	25	40		0	1		1		38.0	U-DS	U	1c	Rodent disturbance

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Table MF-P.2. (continued)

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vege-tal	Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lin-ing	Sealed	Pit-form (OPs only)	Comments
Other Pit 21	30	17	23	10,40,43							7.7	U	U	8	Aeolian? Sand in bottom PH?
Other Pit 22	17	16	8.5	11,46							1.4	U	U	2	Not real?
Other Pit 23	15	9.5	6	11							0.5	U	U	2	
Other Pit 24	38	35	22	40						H	18.0	U-DS	U	1c	
Floor 4 (G)															
Posthole 1	11	10	18	10							1.4	U	U		
Posthole 2	10	10	16	10							1.0	U	U		
Posthole 3	14	14	10	11							1.1	U-DS	U		
mold	5	5	6												
Posthole 4	10	10	19	11,46							1.4	U	U		
Posthole 5	8	8	10	11,46							0.4	U	U		Cuts OP 6
Posthole 6	33	27	43	11		0	3	3	1		16.3	U-DS	U		Bedrock base
Posthole 7	15	15	19	11					1		3.2	U	U		Cuts OP 8
Posthole 8	14	14	20	15,46							3.0	U-DS	U		Base stone
Posthole 9	7	7	30±	11,46							0.9	U	U		
Posthole 10	9	9	33	11,46							2.0±	U	U		Lower 6 cm of spalls
Posthole 11	33	22	26	12,46,43		0	3			E	10.0	U-DS	U?		Base stone (metate fragment)
Posthole 12	23	19	34	14,46?					1		7.9	U	U		Base stone?
mold?	19	15													

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Table MF-P.2. (continued)

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Pit-form (OPs only)	Comments
Posthole 13	10	9	45+	40							3.7	U	U		Set into a 32 x 17 x 19 cm pit along with PH 14
Posthole 14	8	8	18	46		0	4				1.1	U	U		See PH 13
Posthole 15	6.5	6.5	10	46							0.3	U	U		
Posthole 16	12	10	9	11							0.3	U	U		
mold	5	5	5												
Posthole 17	10	10	28	40							ca.2.0	U	U		2 shims
Posthole 18	12	9	16	40						H	ca.1.2	U	U		1 shim
Posthole 19	23	23	28	40							10.3	U	U		Cut by OP 15
Posthole 20	30	18	22	16?		0	9		1		7.7	U	U		Rodent disturbance (nest)
Posthole 21	17	16	33	40(43?)							3.6	U	U		1 shim
Posthole 22	16	16	29	46							6.2	U	S-FP?		Bedrock base
Posthole 23	7	6.5	16	11,15		0	1				0.6	U	U		Clay base, 2 shims, Rodent disturbance
Posthole 24	26	23	63	40,43						H	29.3	U	U		4 shims
Posthole 25	12	12	27	16		0	1			G	2.6	U?	U?		Floor association uncertain
mold	8	8													
Posthole 26	11	11	41	10,40		0	1			H	4.2	L-P	U		3 shims, clean sand in bottom
Posthole 27	16	12	44	10,40,43					1		15.6	U	U		1 shim, clean sand in bottom

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Table MF-P.2. (continued)

Feature	Height (cm)	Width (cm)	Depth (cm)	Fill Type	Vege-tal	Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lin-ing	Sealed	Height above Floor 1	Comments
Walls (LM)															
Niche 1	11	42	14-16	11,45							5.8	L-P	U	80	Small footprint etched in plaster 20 cm below niche
Niche 2	7	20	ca.15	11							ca.2.3	U	U	137	Not real?
Niche 3	10	10	14	10							1.1	U	U	161	Not real
Niche 4															Not a feature
Niche 5	15	12	25	11							3.3	L-P	S-WP	65	Centered above door but built after door
Niche 6 south	18	18	29	11		0	3		1		9.1	U	U	90	Open at both ends
north	24	21	-											90	Beam seat? Opposite N 13
Niche 7 north	10	65	29	10,12	c	0	2		1		21.4	L-P	U	65	Open at both ends
south	11-16	64	-											75	
Niche 8 north	14	13	25			1	1		1		3.5	U/L-P	U	72	Open at both ends and
south	9	16	-											82	bottom plastered
remodeled	9	27	13±	11,12,50							est.3.2			2	North end plugged with 12 cm of clay
Niche 9	8	15	8	11,12							0.5	L-P	U	59	Toe hold to aid retrieval of roof items?
Niche 10	11	14	10	12							1.2	L-P	U	57	Toehold with N 9?
Niche 11	31	27	29?	11,41		0	9				18.7	U	U	120	Goes thru wall? Vent?
Niche 12	10	21	18	11							3.1	U	U	114	
Niche 13	13	13	15	12							1.6	L-P	U	100	Beam seat? Opposite N 6
Niche 14	15	14	14	12							1.8	U/L-P	U	158	

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Table MF-P.2. (continued)

Feature	Height (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Height above Floor 1	Comments
Niche 15	11.5	18	17	12							3.1	U?	U	80	
Niche 16															Not a feature
Niche 17	13	22	20	12							4.7	L-P	U	67	
Niche 18	10	16	10	50							0.6	U/L-P?	S	85	
Niche 19	10	11	10	50							0.8	L-P	S	73	
Niche 20	11	16	14	50							2.0	U/L-P	S	85	
Niche 21	20	29	27	11,41					1		11.3	U	U	ca.100	Not real?
Niche 22	3.5	9.5	10	16							0.5	L-P	S-WP	ca.50	Contained shaped beam that once protruded into room. Sealed at same time as N 5 and assoc. door?

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Table MF-P.3. Room 109 and Kiva 15.

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vege-tal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Comments
ROOM 109														
Floating Floor 1 and 2 (LM)														
Heating Pit 1[a]	68	23	5	20,23		?	1		1		4.2	U	U	Pit mouth = 1,090 cm^2 Marginal feature
Heating Pit 2	24	23	10	27		?	1		1		5.1	U	U	Pit mouth = 800 cm^2 Marginal feature that underlies HP 1
KIVA 15														
Floor 1 (LM)														
Firepit 1[a]	62	52	20	20,25	p?	8	37		17		42.4	L-Sa/PS	U	Pit mouth = 2,560 cm^2 Set into FP 2, contains 2 firedogs
Firepit 2[a]	82	72	74	10,27		1	4	3			324.3	L-PR	U	Pit mouth = 4,790 cm^2
part used	82	72	40	27	ce						153.1			Cut by FP 1, bottom 34 cm of clean sand
Other Pit 1	24	21	11	10							2.0	U	U	
Other Pit 2	33	20	17	12,11		0	7		2		4.6	U	U	Sipapu??
Other Pit 3	29	27	14	10,27							6.2	L-P	S	
Pot Rest 1	31	30	2	11							0.28	L-P	U	Raised ring of floor plaster next to FP 2
inner	15	14												
Pot Rest 2	24	24	3	11							0.11	L-P	U	Raised ring of south bench plaster
inner	11	10												
Pot Rest 3	27	26	2.5	11							0.24	L-P	U	Raised ring of south bench plaster
inner	14	13												
Walls														
Niche 1	39	18	22	10	cu	0	1			GM	15.7	L-P	S	Built into sealed Door 1, 32 cm above Floor 1

[a]Yielded archeomagnetic sample(s).

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Table MF-P.4. Room 110.

Feature	Surface No.	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Pit-mouth Area (cm^2)	Comments
Floor 1 (G)																
Firepit 1[a]	1	80	58	36+	27	c	5	5		434	AM	148.7	L-PR	S	4,960	
Firepit 2[a]	5	35	20	19	20	cku	5	30	1	6		16.1±	L-PS	S	980±	
Heating Pit 1	7	10	10	6	28							0.3	U	S	80	
Heating Pit 2	7	15	10	4	27							0.1	U	S	110	
Heating Pit 3[a]	7	25	22	6	27		0	2	1	2		1.4	L-P?	S	380	Cuts HP 11
Heating Pit 4	7	19	17	4	27		1	6		2		0.5	U	U	220	
Heating Pit 5	7	21	20	5	27							1.1	U	U	310	
Heating Pit 6	7	17	13	5	20		0	3				0.4	U	S?	180	
Heating Pit 7[b]	7	26	25	5	22							1.5	U	U	490	
Heating Pit 8[a]	7	22	19	6	27							1.6	U	U	310	
Heating Pit 9	6	est.15	15	5	11							0.5±	U	S	180±	
Heating Pit 10[a]	7	25	24	7	27							2.4	U	S	440	
Heating Pit 11	8	32	29	12	50							7.5	U	S	830	Cut by HP 3, OP 3 and 4 cm post mol
Heating Pit 12	8	19	15	3	-							0.3	U	S	220	Cut by HP 13
Heating Pit 13	8	26	19	5	50							0.5	U	S	210	Cuts HP 12
Heating Pit 14[a]	7	26	26	8	20/26	ck	1	1	1	4	0	3.4	L-P	S	530	Cut by Burn 1 and OP 59

[a]Yielded archeomagnetic sample(s).
[b]Yielded archeomagnetic and carbon-14 samples.

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Table MF-P.4. (continued)

Feature	Surface No.	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Pit-mouth Area (cm^2)	Comments
Heating Pit 15[b]	8	26	24.5	9.5	27	cp	2	5	1			3.2	U	S	520	Cuts HP 18
Heating Pit 16[a]	8	22	22	11	27	k				4		2.8	L-P	S	360	Cuts HPs 18 and 19
Heating Pit 17	8	35	26	8	27	k						4.1	U	S	710	
Heating Pit 18	9	est20	20	5	?							1.1	U	S?	310	Cut by HPs 15 and 1
Heating Pit 19	9	est26	26	5	27							1.4	U	U?	460	Cut by HP 16
Heating Pit 20	8	34	34	10	27				1	16		6.1	U	S	890	
Heating Pit 21	8	21±	21	7	12		0	2	1	2		1.4	U	S	590	Cut by OP 37
Heating Pit 22	8	47	30	14	11/20							15.2	U	U	1,270	Cut by PH 27
Heating Pit 23[a]	8	20	20	6	27							0.7	L-P	S	300	Cut by HP 24
Heating Pit 24	8	est39	39	16	11				4			5.6	U	S	670	Cuts HP 23
Heating Pit 25[a]	8	26	26	8	20		0	3	2			2.5	L-P	S	540	Cut by HP 26
Heating Pit 26	8	26	26	5	12,20		0	1				2.2	U	S	610	Cuts HPs 25 and 28 Cut by HP 27
Heating Pit 27	8	24	18	4	25				1			1.1	U	S	350	Cuts HPs 26 and 28
Heating Pit 28[a]	8	28	25	8	27		0	1	1	1	6	3.0	U	S	560	Cut by HPs 26 and 2
Heating Pit 29	8	est18	16	6	?							est0.6	L-P	S	230	Destroyed by OP 38
Heating Pit 30	8	21.5	19	3.5	11							0.6	L-P	S	320	
Heating Pit 31	8	25	25	8	20							2.6	U	S	460	Cut by Kiva 15 FP

[a]Yielded archeomagnetic sample(s).
[b]Yielded archeomagnetic and carbon-14 samples.

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Table MF-P.4. (continued)

Feature	Surface No.	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Pit-mouth Area (cm^2)	Comments
Heating Pit 32[c]	8	66	65	17	27	c	1	6	2	8		40.8	U	S	3,500	
Heating Pit 33	8	40	40	5	27							2.9	U/L-P	S	1,240	Overlies HP 34
Heating Pit 34	8	34	32	8	27	c				2		8.1	U	S	890	Underneath HP 33
Heating Pit 35	8	24	23	10	20		0	3	5	2		2.9	L-P	S	450	Slab lined on south side
Heating Pit 36	8	29±	29	8	27							3.0	U	S	680	Cut by HPs 24 and 29, OP 38
Heating Pit 37	8	26	23	8	11/20					1	G	2.8	L-Sa?	S	480	Cuts OP 50
Heating Pit 38	9	21	16	4	27							0.7	U	S	280	
Heating Pit 39	8	est20	20	4	25							est 0.5	U	S	est 310	Destroyed by MB 6
Heating Pit 40	8	est25	25	6	20	c						est 1.4	U/L-P	S	est 450	Destroyed by MB 5 Remodeled twice?
Burn 1[a]	6	34	23	-	-							-			640±	
Burn 2[a]	6	20±	20	-	-							-			310±	From use of FP 1
Burn 3[a]	8	?	?	-	-							-			?	Earlier use of FP 1 or an earlier hearth remnant
Burn 4[a]	7	est20	20	-	-							-			240±	Associated with Hp 14
Other Pit 1	2	9	9	35		c	0	6		5		3.3	L-P	S	4	Six 1 cm diameter holes extend nearly vertically into lower pit sides, sherd and a stone cover mouth

[a]Yielded archeomagnetic sample(s).
[c]Yielded carbon-14 sample(s).

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Table MF-P.4. (continued)

Feature	Surface No.	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Pit-mouth Area (cm^2)	Comments
Other Pit 2	1	21	19	4.5	1							1.1	U	S	2	
Other Pit 3	1	11	11	3	20							0.2	U	U	2	
Other Pit 4	4	20	19	7	11							1.5	U	S	5	
Other Pit 5	4	41	20	25	30	c	0	27	1	3	EH	15.1	L-PS	U	3	Slab-lined box Slab floor
Other Pit 6	3	12	11	17	30	c	0	6		5		2.0	U	S	4	Near bottom were 2 clay figurines (M and F) in sexual embrace
Other Pit 7	4	28	28	5.5	1		0	14				1.9	L-P	S	2	Overlain by OP 1
Other Pit 8	1	39	39	4	11	c(mold)						2.0	U	U	2	Cuts OP 14
Other Pit 9	2	27	25	4.5	11		0	22	3	9		1.3	U	U	2	
Other Pit 10	2	27	22	2.5	11	c(mold)						0.6	U	U	2	
Other Pit 11	2	29	22	4.5	11		0	2				2.0	U	U	2	
Other Pit 12	2	28	25	3	11					1		0.7	U	U	2	
Other Pit 13	3	20	17	3	11							0.4	L-P	S	2	
Other Pit 14	2	43	37	14	12,20	c	0	3				10.7	U	U	6	Cut by OP 8
Other Pit 15	2	30	30	6	12,27?	c	0	16		5		3.4	L-SaA	U	2	Cut by OP 3, cuts OP 16 Limonite stains
Other Pit 16	3	29+	29	4	10							2.4	L-Sa	U	2	Cut by OP 15
Other Pit 17	5	40	29	7	12		0	4		3		5.7	U	U?	5	
Other Pit 18	5	8.5	5	8	11							0.2	U	U	8	
Other Pit 19		13	9	6	10,33				6			0.5	U	U	7	

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Table MF-P.4. (continued)

Feature	Surface No.	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Pit-mouth Area (cm^2)	Comments
Other Pit 20	5	10 max.35	9 24	35	11,43					5		9.8	U	U	1a	Posthole, bell-shaped
Other Pit 21	6	39	28	7	11	c	0	1				4.6	L-P	S	5	
Other Pit 22	7	33 max.43	33 42	44	31,40	cu	1	14	9	46	H	40.2	U	U	1b	Bell-shaped
Other Pit 23	6	14	14	2	25							0.2	L-A	U	2	
Other Pit 24	6	26	24	26	30	puy	0	2	2	4	HO	9.8	U	U	1c	Six 1 cm diameter holes extend nearly vertical in lower fill
Other Pit 25	6	26	24	3	11,25		0	6		2		1.1	L-A	U	2	
Other Pit 26	8	19	18	2	27		1	9				0.3	L-A	S	2	
Other Pit 27	8	12	11	10	50				2			0.9	U	U	7	
Other Pit 28	8	22	22	2	27							0.5	L-A	S	2	
Other Pit 29	8	21	15	6	12					1		1.2	U	U	7	Six 1 cm diameter 10 cm deep holes vertical in fill
Other Pit 30	7	10	8	9.5	11							0.3	U	U	7	
Other Pit 31	7	19 max.33.5	15 31	41	31		?	8	3	23		7.2	L-P	S	1a	Bell-shaped, possibly orifice once 10 cm in diameter
Other Pit 32	7	31	26	22	40				4			14.3	U	S	1c	
Other Pit 33	7	41	20	27	30		0	5		19		15.3	L-P	S	1c	
Other Pit 34	7	24	12.5	13	11				1			2.0	U	S	7	
Other Pit 35	7	24 max.36	20 35	20	31,15	cx	2	8		6	H	10.9	U	S	1b	Bell-shaped, unfired clay in pit

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Table MF-P.4. (continued)

Feature	Surface No.	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Pit-mouth Area (cm^2)	Comments
Other Pit 36	8	29	26	25	31,45		0	6	3	14		13.4	U	U	1b	
Other Pit 37	8	34	32	16	40	c	0	4	2	1		10.3	U	U	1b	Cuts HP 21
Other Pit 38	8	43 max.55	38 51	40	11,45	c	0	17	2	13		53.5	U	U?	1b	Bell-shaped, Cuts HPs 29 and 30
Other Pit 39	8	43	38	29	32	cx	0	8	58	122		39.7	L-PS	S	3	Slab-lined box
Other Pit 40	9	28 max.40	27 29	30	11,30		0		3	12		15.1- 20.3-	U	S	1b	Bell-shaped?? -probably not
Other Pit 41	8	19	16	9	12							1.7	L-P	S	5	Cut by HP 27
Other Pit 42	9	32.5 max.40.5	24 35	24	31	cx	1	6	3	14		19.0	U	U	1b	Overlain by HP 32 Bell-shaped
Other Pit 43	9	15	14	10-18	10							2.7	U	U	4	
Other Pit 44	8	14 max.22	10 12	20	12							2.6	U	U	6	Bell-shaped
Other Pit 45	8	24	24±	6.5	50							0.9	U	S	2	Cut by HP 12 and OP 35
Other Pit 46	8	54	25	20	30,40?		1	5	1	29	H	7.5	U	U	6	
Other Pit 47	8	13	10	9	11,15		0	3				0.6	U	S	7	Posthole? Cuts HP 3
Other Pit 48	8	47	41	14	33,40		0	52			H	18.7	U	S	6	
Other Pit 49	8	30± max.34	28 33	45	31	c	1	10	12	42		24.9	U	S?	1a	Cut by OP 54 and kiva FP, bell-shape
Other Pit 50	8	28.5	5	17	11				1			2.2	L-P	S	8	Cut by HP 37 3 shims?
Other Pit 51	9	38± max.54	38 54	48	32	c	0	21	11	47	AEM	71.3	U	S	1b	Bell-shaped, cut by OP 52, overlain by HP 8

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Table MF-P.4. (continued)

Feature	Surface No.	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Pit-mouth Area (cm^2)	Comments
Other Pit 52	9	39	34	15	31		0	9	1	3	AM	13.5	L-PS	S	3	Slab-lined box Slab floor
Other Pit 53	8	18	16	22	43							4.5	U	S	4	
Other Pit 54	8	41+	32	24	32	cs			2	45	H	12.4-15.8	U	S	1b	Bell-shaped Cuts OP 49 Cut by Kiva FP
	max.	45?	36?													
Other Pit 55	8	31	25	41	32		0	5	2	82		25.3	U	S	1b	Bell-shaped.
	max.	37	34													
Other Pit 56	8	42	30	32	31	x(bits)	0	10	7	16		29.4	U	S	1b	Bell-shaped Overlain by HP 32
	max.	52	38													
Other Pit 57	8	55	31	14+	50					1		20.2	U	S	6	Step support for
remod	el	38	25	14	54							12.9	L-Sa	S	6	east door (Door 1)
Other Pit 58	8	27	23	35	31	x(bits)			2	9		17.1	U	S	1b	Bell-shaped
	max.	31	31													
Other Pit 59	9	24+	21	21	11					8		7.0	U	S	1b	Very slightly bell-shapped Cut by HP 14
Other Pit 60	9	40	36	40+	33	cp	0	21	11	35	D	40.8	U	S	1b	Bell-shaped
	max.	43	42													
Other Pit 61	9	23+	22	14	20/23	c			1	2		3.7	U	S	5	Cut by HP 16
Other Pit 62	9	32	24.5	40	30		0	14	4	13		23.7	U	S	1b	Bell-shaped
	max.	38	25													
Other Pit 63	9	61	25	35+	31	c	0	6	5	23	H	37.2	U	S	1c	Hits offset wall found
Other Pit 64	9	51	25	23	11		0	57	1	2		19.2	U	S	1c	
remodel.		26	20	22	11,15	x(bits)					M	7.4	U	S	4	Posthole?
Poss. pit		19	13	11	11,15							1.7	U	S?		

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Table MF-P.4. (continued)

Feature	Surface No.	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Pit-mouth Area (cm^2)	Comments
Other Pit 65	9	19	18	12	10,11							2.6	U	S	5	
Other Pit 66	9	56	42	34	32	c	1	27	4	26		47.5	U	S	1c	Hits offset wall found
Other Pit 67	9	46	44	28+	32,40	c	0	1	2	305	G	36.3	U	S	1b	
Other Pit 68	9	28	25	43+	30		0	2	1	15	A	19.9	U	S	1c	
Other Pit 69	9	30	26	22+	11/30	cx	0	1	3	2		10.4+	U	S	1c	Not a feature?? Under HP 33
Other Pit 70	9	36 max.43	33 39	35+	31	cx	1	15		21	O	28.8	U-DS	S	1b	Bell-shaped, cuts large Floor 2 firepit
Other Pit 71	9	41	39+	43+	25,32,40	c			8	83		41.9+	U-DS	S	1b	Bell-shaped? Top cut off
Other Pit 72	9	36+ max.48	33 46	40+	30	cx	0	4	1	12		42.2+	U-DS	S	1b	Bell-shaped
Other Pit 73	589	42 max.60	40 55	29+	32		0	23	11	32	HM	66.1+	U	S	1b	Bell-shaped, cut by OP 58 and FP 1
Other Pit 74	9?	31	26	40+	32		0	13	8	34	H	39.0+	U	S	1b	Bell-shaped, cuts OP 73, cut by FP 1, cuts F1. 2 and FP 1
Posthole 1	4 TS	14	14	25	15							2.8	U	U		Door 6 lintel support? (after door blocked) Not a PH?
Posthole 2	4 TS	7.5	7.5	7	33				3			0.3	U	U		Not a PH?
Posthole 3	4 TS	17	16	22+	11		0	1	1			3.3	U	U		PH?
Posthole 4	1	16	15	15.5	11		0	1				2.0	U	U		
Posthole 5	1	10	10	11	43/45							0.8	U	U		

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Table MF-P.4. (continued)

Feature	Surface No.	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Pit-mouth Area (cm^2)	Comments
Posthole 6	4 TS	6.5	6.5	7	11,15	c	1	2				0.2	U	U		
Posthole 7	5	10	9.5	17	11							est. 1.0	U	U		1 shim
Posthole 8	5	11	11	12	11		0	3				0.7	U	U		Cuts PH 40
Posthole 9	5	16	12	21	11	c	0	2				est. 2.6	U	U		
Posthole 10	5	15	14	15.5	11							1.7	U	U		2 shims
Posthole 11	5	12.5	8.5	9.5	11	u	0	2	1	1		est. 2.9	U	U		1 shim
Posthole 12	5	10	9	6	11							0.4	U	U		1 shim
Posthole 13	5	10	8.5	9	11							est. 0.5	U	U		
Posthole 14	5	9	8	6	11					1		est. 0.3	U	U		PH? Overlies PH 34
Posthole 15	5	20	17	12.5	11				1			est. 3.1	U	U		3 shims
Posthole 16	5	21	13	7	11		0	2				est. 1.6	U	U		2 shims
Posthole 17	5	9	9	15	11		0	3				2.9	U	U		2 shims
Posthole 18	5 mold?	20 6	13 6	12	43				1	1		2.0	U	S		2 shims
Posthole 19	5	11	11	22	10,43							0.8	U	U		
Posthole 20	8	est15	13	28	30		0	2	3	1		4.1	U/L-P?	S		Cut by OP 22
Posthole 21	8	7	6	8.5	11							0.2	U	U		
Posthole 22	8 mold	14 9.5	12 8.5	11 9	54? 12							1.2	U	U		
Posthole 23	7 mold	17 7	16 6.5	14 10	11 11,45							2.0	U	U		

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Table MF-P.4. (continued)

Feature	Surface No.	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Pit-mouth Area (cm^2)	Comments
Posthole 24	7	11	9.5	26	11							1.8	L-P	U		Sipapu??
Posthole 25	8	7.5	7.5	18+	11		0	2				0.5+		U		PH?
Posthole 26	5	8.5	8	7	12,14							0.5	U	S?		
Posthole 27	8	17	15	20+	51						G	4.4	L-P/PS	U		4 shims
	mold	9	9	20+	11											
Posthole 28	8	9	8	10	11,45							0.4	U	U		
Posthole 29	10	9.5	8	11	54							0.5	L-Sa	S		
	mold	7.5	6	8	11											
Posthole 30	8	18	14	21	54							3.1+	L-P	S		
	mold	11	10	21	11											
Posthole 31	8	9	8	24	11							1.3	L-P	U		
Posthole 32	8	8.5	8	13	54			2	1			0.8	L-Sa	U		Cuts PH 33
	mold	5	4.5	13	15											
Posthole 33	8	8	8	29	11							1.6	L-P	U		Cut by PH 32
Posthole 34	8	6	5	12	11							0.3	U	U		Overlain by PH 14
Posthole 35	8	20+	20	19	54		0	5				5.0?	L-P	S		
	mold	6	6	19	11							0.6				
Posthole 36	8	8	8	14	10,15							0.5	L-P	U		
Posthole 37	8	9	8	20	10,11							1.1	U/L-Sa	S		
Posthole 38	8	4.5	4.5	6	15							0.08	U	U		
Posthole 39	8	15	7.5	13.5	10,11							1.2	L-P/Sa	S		For multiple posts?

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Table MF-P.4. (continued)

Feature	Surface No.	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Pit-mouth Area (cm^2)	Comments
Posthole 40	8	8	8	18	11	s	0	2		1		0.8	L-P	S		Cut by PH 8
Posthole 41	8	11	10.5	13	11							0.9	L-P	S		
Posthole 42	9	16	8	14	10							1.2	L-P	S		For multiple posts?
Posthole 43	9	10	7	15±	11							0.8±	L-P	U		
Posthole 44	9	10	8.5	17±	10							1.0±	U	S?		
Posthole 45	9	18	16.5	45±	12		0	1	3	6		9.9	U-DS	S		Contained 2 vessels
Posthole 46	9	9	7.5	12±	11							0.5	L-P	S		
Posthole 47	9(8)	18	14	29	32	cx	0	1	2	4		5.7	U	S		
Posthole 48	9	12	10	17±	10							1.4	U	S		
Floor 2 (RMG)																
Firepit 1		85	85	23	25/27		12	32	1	1		90.7	L-P	U	5,380	Assoc. with pot rests
Firepit 2		75	73	28	27	c	5	11	2	4	A	85.4	U/L-P	U	4,450	
Pot Rest 1		20	20	3.5	11							0.2	L-P	U		Raised adobe ring
	inner	12.5	12.5	2.5												Assoc. with FP 1
Pot Rest 2		24	23	3	11							0.3	L-P	U		Raised adobe ring
	inner	16	16	2												Assoc. with FP 1
Pot Rest 3		26±	24±	2	11							0.2	L-P	U		Raised adobe ring
	inner	5	12	1.5												Assoc. with FP 1
Pot Rest 4		24	20±	1	11							0.04	L-P	U		Raised adobe ring
	inner	8	7	1												Assoc. with FP 1
Pot Rest 5		16±	14±	1	11							0.04	L-P	U		Raised adobe ring
	inner	7	7	1												Assoc. with FP 1

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Table MF-P.4. (continued)

Feature	Surface No.	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Pit-mouth Area (cm^2)	Comments
Pot Rest 6		16	15	2-	11							0.3	L-P	U		Floor depression Assoc with PR 7
Pot Rest 7		16	13	-	11							0.3	L-P	U		Floor depression Assoc. with PR 6
Other Pit 1		15 max.34	15 30	33	10/11		0	22		2		9.0	U	U		Pit-form = 1a
Other Pit 2		18 max.33	16 30	21	11							6.5	L-P	U		Pit-form = 1a
Posthole 1	9	9		41	11					1		2.5	U	U		
Floor 3 (RM)																
Burn 1[a]		38±	31±	-	-							-	-	-	1,020	

[a]Yielded archeomagnetic sample(s).

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Table MF-P.4. (continued)

Feature	Surface	Overall Length (cm)	Overall Width (cm)	Overall Depth (cm)	Basin	Basin Length (cm)	Basin Width (cm)	Basin Depth (cm)	Fill	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Basin Volume (liters)	Lining	Sealed	Metate Rest angle (degrees)	Comments
Floor 1																			
Mealing Bin 1	7?	110	45	~	orig.	40	29	25		0	71	1	10	EMO	28.2	L-PS		6	
					remodel	40	29	14	31,45						15.8	L-PS	U	24-27	
Mealing Bin 2	7?	105	43	~	orig.	40	32	25		0	22		12	EHM	30.9	L-PS		8	
					remodel	39	32	20±	31,45						24.7	L-PS	U	23-29	
Mealing Bin 3	7?	112	42	~	orig.	39	29	22		0	19	1	14	EHM	24.0	L-PS		4	
					remodel	36	33	19	31,45						11.7	L-PS/B	U	14	Basket added
Mealing Bin 4	7?	111	44	~	orig.	43	35	15		0	6		17	HM	17.9	L-PS		0-10	
					remodel	43	35	14	45?						16.7	L-PS	U	0-10	
Mealing Bin 5	6?	111	50	~		29	28	15	11,45?				1	AGM	8.9	L-PS/B	U	0-10	Basket basin
Mealing Bin 6	5/6?	?	45	~		36	33	13	11,45				1	A	14.8	L-PS	U	13±	

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Table MF-P.4. (continued)

Feature		Width (cm)	Height (cm)	Depth (cm)	Fill Type	Vege-tal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lin-ing	Sealed	Height above Floor 1[d] (cm)	Comments
Walls (G)																
Niche 1		40	38	25	41		0	6	1			31.9	U	U	64	
Niche 2	east	12	10	50	40		1	125		1		12.9-	U/L-P	U	5	Open between Rm 110 and Rm 112. Adobe collar on Rm 110 side. Vent? In N 10 plug
	west	35	50	-											6	
Niche 3		14	10	20	50		1	130	1	18	AM	4.3	L-P	S	7	In N 10 plug
Niche 4	remodel	73	109	72	31,40	ckmpuy	1	36	11	15	AEGHMO	530.5	L-PR	S	-8	
	orig.	51	88	61								257.2			-23	Originally Door 5
Niche 5		43	45	30	43	c	0	1			AEGM	45.6	L-PR	U	17	Cuts N 8. Contains remains of a jacal wall (impressions)
Niche 6		53	53	38	41		0	59	1	4		91.4	U	S	-6	
Niche 7	east	22	11	53	50		0	1		1		11.0	L-P?	S	150	Open at both ends; plugged on Rm 110 side, then covered with wall plaster. Opens into RM 112
	west	23	12	-	?										185	
Niche 8		88	71	79	40	cp	0	6		4		254.6	L-PS	S	-12	Cut by N 5
Niche 9		est.25	25	?	40,50	ck	1	20	1	20	M	106.8	L-PS	S	-13	Disturbed by rodents Adobe collar around lower mouth incorporated a jacal wall of Cliff Rose branches
		max.67	61	37												
Niche 10		87	61	41	11,50	e	0	84		9	AGMO	162.2	U	S	-29	Plug contained N 2 & N 3
Niche 11		32/38	13/19	22	43?							10.3	U	U	180	Opposite N 12. Beam seat?

[d]Sill distance above Floor 1, Surface 8 in Room 110.

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Table MF-P.4. (concluded)

Feature	Width (cm)	Height (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Height above Floor 1[d] (cm)	Comments
Niche 12	24	26	30	41,50		?	7				17.9	L-P	S	186	Opposite N 11, Beam seat? Overlaps N 19
Niche 13	10	7	14	40							0.9	L-P	U	97	
Niche 14	9	4	7	40							0.2	L-P	U	99	
Niche 15	30	20	27	40?	e	0	116	1	4		15.6	U/L?	U	160	Formed by plugging Vent 1
Niche 16	64	40	30	50						E	69.8	L-P	S	59	
Niche 17	26	23	19	11,45		0	1	1			3.7	U	S	67	
Niche 18	19	9	20	50		0	2			G	3.0	U	S	65	
Niche 19	40	32	32	41,50							28.3	?	S	199	Beam seat?
Niche 20	40	19	30±	41							17.9	U	U	200	Beam seat?

[d]Sill distance above Floor 1, Surface 8 in Rm. 110 or above Floor 1 in Rm. 112 (where appropriate).

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Table MF-P.5. Room 112.

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vege-tal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lin-ing	Sealed	Pit-form (OPs only)	Comments
Floor 1 (LG)															
Burn 1[a]	70	68	-	27							-	-	-		Area = 4,080 cm^2
Burn 2	19	10	-								-	-	-		Area = 180 cm^2
Burn 3	25	20	-								-	-	-		Area = 440 cm^2
Burn 4	15	10	-								-	-	-		Area = 120 cm^2
Burn 5	20	20	-								-	-	-		Area = 310 cm^2
Burn 6	23	20	-								-	-	-		Area = 390 cm^2
Burn 7	45	40	-								-	-	-		Area = 1,430 cm^2
Burn 8	28	23	-								-	-	-		Area = 490 cm^2
Burn 9	20	11	-								-	-	-		Area = 140 cm^2
Burn 10	10	10	-								-	-	-		Area = 80c cm^2
Other Pit 1	18	14	7	24							1.2	U	U		
Other Pit 2	61	31	4	12					1	G	2.9	L-P	U		
Other Pit 3	15	15	28?	15,43	e	0	58				5.1	L-P	U		Disturbed by rodents
Floor 2 (G)															
Other Pit 1	36	33	28	11		0	1	1	8	HM	24.4	U/L-P	U	1c	
Other Pit 2	68	60	20	14,20	e	4	327		5		42.9	U	U	1c	Disturbed by rodents
Other Pit 3	25	22	29	12,46		0	3	1	4	H	10.5	U	U	1c	
Posthole 1	27	23	50	11,45		0	1		1		20.0	L-P	U		Has post impressions
Posthole 2	12	11.5	12+	12,14							1.0	U-DS	U		

[a]Yielded archeomagnetic sample(s).

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Table MF-P.6. Room 138 and the North Trench.

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (Liters)	Lining	Sealed	Comments
ROOM 138														
Floor 1 (LG)														
Burn 1[a]	60	50	-	-										
Other Pit 1	28	18	6	50							1.9	U	S	Floor irregularity?
Other Pit 2	16	11.5	7	10							0.7	U	S	
Other Pit 3	10-15	10-15	10-15	53							1.1±	U	S-FP	Wolky Feature Covered by fl. plaster
Other Pit 4	22	22	24±	50							0.8	U	S	Unused posthole? Covered by fl. plaster
Other Pit 5	51 x 36 x 25		1-8	53							2.1	U	S-FP	Wolky Feature Covered by fl. plaster
Other Pit 6	10-15	10-15	10-15	53							1.1±	U	S-FP	Wolky Feature. Covered by fl. plaster
Posthole 1	27	24	21	15,43							7.9	U	U	Below Door 4. Post step removed. Door sill frag in PH
Posthole 2	10	9.5	2.5	10		0	5				0.06	U	U	Not a posthole
Wall Trench 1	274	6-14	7-15	40							14.4	U	S	Covered by fl. plaster
Floor 2 (RM)														
Heating Pit 1	19	18	4	27							0.6	U	U	Very little burn Pit mouth = 230 cm^2
Heating Pit 2[a]	25	21	4-5	11,26							0.6	U	U	Pit mouth = 360 cm^2

[a]Yielded archeomagnetic sample(s).

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Table MF-P.6. (concluded)

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (Liters)	Lining	Sealed	Comments
Other Pit 1	18	13	4	11					1		0.4	U	U	Not a feature?
Other Pit 2	19	16	5	11							0.9	U	U	
Wall Trench 1	490	2-11	3-8	11,44							22.3	U	U	
Wall Trench 2	230	5-12	4-10	11,40					1	T	19.7	U	U	
Wall Trench 3	86	3	1-3								0.2+	U	U	
NORTH TRENCH														
Layer 5 (LG)														
Heating Pit 1	40+	40	5	20	c						5.2+	U	U	Pit mouth = ca. .1260 cm^2 Pit in Layer 5-unexc.
Floor 1 (LG)														
Other Pit 1	14	13	2.5	12?							0.4	U-DS	S	In Floor 1
Other Pit 2	17	16	18	10							3.0	U	U	In Floor 1
Other Pit 3	29+	26	27	10							est. 13.4 actual 8.4	U	U	In Floor 1
Floor 2 (RM)														
Wall Trench 1	80++	33	15	40	c				2		?	U	U	In Floor 2

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Table MF-P.7. Room 139.

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Comments
Floor 1 (LG)														
Burn 1[a]	50	50	-	-							-	-	-	Area = ca. 1,310 cm^2 Associated with OP 7
Other Pit 1	-	41	22											Offset foundation of east wall
Other Pit 2	32	29	10	11,43				1			7.6	U	U	Fronts Door 3. Post step
Other Pit 3	33	29	48	42							23.5	L-PS	U	6 shims. Fronts
mold	17	17	27	10,26										Door 5. Post step
Other Pit 4	50	34	4	43							3.4	U	U	Floor irregularity
Other Pit 5	30	28	10+	43					1		5.5	U	U	Fronts Door 4. Post step
Other Pit 6														Not a feature
Other Pit 7														Not a feature
Other Pit 8														Not a feature
Other Pit 9														Rodent hole
Other Pit 10	106x69x74		40	53						A	63.7	U	S-FP	Wolky Feature
Posthole 1	40	30	39	51					2		37.4	L-Sa	U	Base stone
mold	18	18	33	16										
Posthole 2	42	39	24	12?							18.8	L-Sa?	U	Base stone. 1 shim?
mold	14	14	18	42										
Posthole 3	38	33	31	51							28.2	L-Sa	U	Base stone. Adobe
mold	13	13	22	15										collar at top of PH
Posthole 4	43	27	31	51					1		26.4	L-Sa	U	Base stone. Adobe
mold	15	15	23	15										collar at top of PH

[a]Yielded archeomagnetic sample(s).

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Table MF-P.7. (continued)

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Comments
Floor 2 fill (Layer 10) (RM)														
Heating Pit 1	17	17	2	20							0.2	U	U	Pit mouth = 240 cm^2 Pit us unburned
Floor 2 (RM)														
Heating Pit 1	28	28	8	20		0	8	1	4		2.8	U	U	Pit mouth = 560 cm^2
Heating Pit 2[a]	28	21	3	20							1.0	U	U	Pit mouth = 490 cm^2
Heating Pit 3[a]	50	36	11	27		8	10		5		10.8	U	U	Pit mouth = 1,490 cm^2
Heating Pit 4[b]	78	66	6	50							27.5	U	S	Pit mouth = 4,650 cm^2
remodel.	43	36	6	27							5.5	U	U	Pit mouth = 1,270 cm^2 Cut by OP 1
Heating Pit 5[a]	70	55	8	27					1		11.1	U	U	Pit mouth = 2,450 cm^2
Heating Pit 6[c]	88	43+	23	27	ckp	1	10	4	12	est.	81.0	U	S	Pit mouth = 5,530 cm^2
										actual	41.0			Pit mouth unburned Ash pit?
Heating Pit 7	48	38	8	20		2	7	1			8.0	U	U	Pit mouth = 1,390 cm^2 Burned spot next to HP, but HP is unburned
Heating Pit 8[a]	21	19	4	20							.8	U	U	Pit mouth = 310 cm^2
Heating Pit 9[a]	25	21	6	20		2	5	1			1.3	U	U	Pit mouth = 410 cm^2
Heating Pit 10[a]	25	25	4	27							1.7	U	U	Pit mouth = 530 cm^2
Heating Pit 11	29	26	3	27							1.6	U	U	Pit mouth = 560 cm^2 Formerly FP1, Rm. 145

[a]Yielded archeomagnetic sample(s).
[b]Yielded archeomagnetic and carbon-14 samples.
[c]Yielded carbon-14 samples.

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Table MF-P.7. (continued)

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Comments
Heating Pit 12	28	27	7	20	s	0	10		6		3.1	U	U	Pit mouth = 580 cm^2 Formerly FP 2, Rm. 145
Heating Pit 13[a]	40	38	6	27							5.9	U	U	Pit mouth = 1,180 cm^2 Formerly FP 3, Rm. 145
Burn 1	57+	33	-	27	ks						-	-	-	Area = 2,000+ cm^2
Other Pit 1	41	41	15	40				3	1		11.3	U-DS	U	Unfinished PH? Cuts HP 4
Other Pit 2														See PH 4
Other Pit 3														See PH 5
Other Pit 4	22	17	4	11							0.7	U	U	
Other Pit 5	12	12	8	15		?	?				0.6	U	U	Small post support?
Other Pit 6	24	22	3	40?							0.7	U	U	Rodent disturbed
Other Pit 7	21	13	5	11							0.5	U	U	
Other Pit 8	52	52	8	40						est. actual	16.1 9.1	L-P	U	Cut by WT 2 and room wall
Other Pit 9	7	6	5	11							0.1	U	U	
Other Pit 10	9	8.5	4	20							0.1	U	U	
Other Pit 11	50	33	6	50							9.5	U	S	Cut by WT 1
Other Pit 12	16	16	9	11							1.4	U	U	Rodent hole?
Other Pit 13	22	21	17	11,45		1	3		1		5.6	U-DS	U	Base stone. A PH
Other Pit 14	53	34	8	11	c	0	1		2		8.9	U	S?	Formerly OP 2, Rm. 145
Other Pit 15	19	16	3	12	s						0.5	U	U	Formerly OP 3, Rm. 145 Not a feature.

[a]Yielded archeomagnetic sample(s).

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Table MF-P.7. (concluded)

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Comments
Other Pit 16	15	13	4	11,46							5.9	U	U	Formerly OP 6, Rm. 145
Posthole 1	52	45	75	51,52						H	103.2	L-PR	U	Base stone. Shimms++?
mold	17	17	60	15				1	1					
Posthole 2	21	21	20	51							6.6	L-PS	U	Base stone
mold	10	10	17	11,45										
Posthole 3	55	45	64	51,52							86.7	L-PR/DS	U	Base stone. Collar
mold	17	17	14?											
Posthole 4[a]	42	42	58	51,52		?	?	1	3		59.5	L-PR/DS	U	Base stones at 2 levels
mold	15	15	35	11,45						remod.	41.2			Collar top Formerly OP 2, Rm. 139
Posthole 5	52	52	70	51,52					6		121.0	L-PR/DS	U	Base stone. Collar
mold	16	16	15											Formerly OP 3, Rm. 139
Posthole 6	45	42	60	51,52					2	HP	86.0	L-PR	S	Base stone. Formerly OP 1
mold	12	12	35	42?		0	1							and OP 7, Rm. 145
Posthole 7	35	33	39	51							20.3±	L-PR	S	Base stone. Formerly
mold	10	10	31	11										OP 4, Room 145
Posthole 8	50	30	65	51		0	3		1		36.8±	L-PR	S	Base stone. Formerly
mold	10	10	56	12										OP 5, Room 145
Wall Trench 1	286	15	5	40				2			12.9	U	U	Cuts WT 1. Extends under wall veneer
Wall Trench 2	445	32	5	40		0	1		1		37.5	U	U	Cuts OP 8
Wall Trench 3	430	12	12	40				1	4		29.2	U	U-W 1/2 S-E 1/2	
Wall Trench 4	192	25	10	40,30		0	1	1	1	AH	31.5	U	U	
Wall Trench 5	256	26	13	40,30		0	3	1	9	H	est. 64.7	U	U	Formerly WT 1, Rm. 145
Wall Trench 6	252	40	12	40,30		?	?	2	5	H	65.5	U	U	Formerly WT 2, Rm. 145
Wall Trench 7	90	20	6	40							6.9	U	U	Formerly WT 3, Rm. 145

[a]Yielded archeomagnetic sample(s).

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Table MF-P.8. Room 142.

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Comments
Floor 1 (LG)														
Burn 1[a]	35	26	-	-										Area = 600 cm^2
Burn 2[a]	99	73	-	-										Area = 4,660 cm^2
Burn 3[a]	43	27	-	-										Area = 840 cm^2
Burn 4[a]	68	65	-	-										Area = 3,140 cm^2
Other Pit 1	10	8	19	11							1.8	L-Sa	U	Base stone. Probably a posthole
Other Pit 2	60	48	4	25							6.9	U	U	Not a feature? Break in floor?
Posthole 1	29	27	44	51					2		22.8	L-PR	U	Base stone. Post removed from hole
mold	15	14	34	11										
Posthole 2	37	29	42	54		0	1		1		39.4	L-P	U	Base stone. 1 shim?
mold	11	11	42	16										
Posthole 3[c]	29	29	49	54							31.6	L-P		Base stone
mold	17	14	43	16										Post of ponderosa pine
Posthole 4	36	36	42	51							35.0	L-PR	U	Base stone and 4 shims
mold	16	15	37	11,16										Post of ponderosa pine about 54 cm long
Posthole 5	32	28	37	11							19.9	?	U	2 shims. Post step
Posthole 6	27	25	48	54							19.9	L-Sa	U	6 shims. Post step
mold	18	18	48	10										

[a]Yielded archeomagnetic sample(s).
[c]Yielded carbon-14 samples.

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Table MF-P.8. (continued)

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vege-tal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Comments
Floor 2 (LG)														
Heating Pit 1	44	35	4	11,42							3.4	U	S-FP	Pit mouth = 1,340 cm^2 Covered by floor plaster
Burn 1[a]	39	33	-	-										Area = 1,090 cm^2
Burn 2[a]	28	17	-	-										Area = 330 cm^2
Burn 3	35	18	-	-										Area = 460 cm^2
Other Pit 1	32	26	3	12(50)							1.6	U	S	Patched floor irreg. Not a feature
Other Pit 2	30	23	3.5	11,50							1.6	U	S	
Other Pit 3	32	29	30	11,14						A	16.7	U	U	Posthole?
Other Pit 4	70x58x33		22	53		0	3	1	2		23.4	U	S-FP	Covered by fl. plaster Wolky Feature
Other Pit 5	43	19	11	10/11							6.0	U?	S-FP	Covered by fl. plaster Cuts WT 1
Floor Support 1	40	14	11	55				2			4.5	-	S-FP	Built next to PH 6 (Fl. 1) for support?
Floor 3 (RM)														
Burn 1	15	14	-	-										Area = 180 cm^2. In SW corner between floors
Heating Pit 1[b]	60	60+	15	20	ct	1	3	3	8		19.8	U	U	Cut by WT 2 Pit mouth = 1,950 cm^2

[a]Yielded archeomagnetic sample(s).
[b]Yielded archeomagnetic and carbon-14 samples.

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Table MF-P.8. (continued)

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vege-tal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Comments
Heating Pit 2	32	26	14	21	ck	0	4	2	2		3.4-4.2	U	U	Pit mouth = 580 cm^2
Other Pit 1	56	55	17	11,40?	es	2			24		34.3	U	S	
Other Pit 2							40							Not a feature
Other Pit 3	11.5	11	13±	11,45		0	2				0.8±	U	U	Posthole?
Posthole 1	9	8	8	11,15							0.9	L-Sa?	U	
Posthole 2	8	8	6	12,15							0.3	L-P	U	
Posthole 3	10	9	14-	11,15							0.7	L-P	U	
Posthole 4	6	6	5±	11?							0.03	?	U	No feature form
Posthole 5														Not a feature
Posthole 6	12	11	10	11,15					1		1.1	U	U	3 shims
Wall Trace 1	11.35m	75-100	27-45	40	pu	2	48	23	138	AHO	est.2,490	U	U	Cuts WT 2. Includes WT 1, Room 146. Foot-prints in clay
Wall Trace 2	360	45-50	38	51	c	1	1	4	15	HO	-	L-PR	U	Cuts HP 1. Cut by WT 1 Wall foundation, tied to south room wall
Floor 4 (ERM)														
Heating Pit 1[a]	43	30	8	27							4.2±	U	U	Cut by WT 2 Pit mouth = 1,390 cm^2
Heating Pit 2[a]	63	55	26	27,40	cpu	14	110	6	13		55.9	L-P	U	Small slab on SE Pit mouth = 2,700 cm^2
Heating Pit 3	47	44	7	20							7.7	U	U	Pinyon frag. identified Pit mouth = 1,540 cm^2

[a]Yielded archeomagnetic sample(s).

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Table MF-P.8. (continued)

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vege-tal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Comments
Heating Pit 4	43+	41	21	25,10	ck				5		22.6	U	S-FP	Cut by room wall Pit mouth = 1,480 cm^2
Other Pit 1	23	16	7	10,14,45		0	2	1			1.0	U-DS	U	Overlaps Room 50 foundation
Other Pit 2	12	11	4	10							0.2	U	U	
Other Pit 3	22	17	3	20							0.7	U	U	Heating Pit Pit mouth = 270 cm^2
Floor 6 (ERM)														
Heating Pit 1	20	20	6	27	c						0.9	U	U	Pit mouth = 300 cm^2
Other Pit 1	13	12	4	11							0.4	U	U	
Other Pit 2	23	21	18	11,40		0	2	1			4.8	U	U	
Floor 7 (ERM)														
Heating Pit 1	54	25+	14	11							est. 28.8 actual 14.4	U	U	Est. pit mouth = 1,170 cm^2. Cut by WT 1 and WT 2
Heating Pit 2	51	20+	19	11,14							est. 24.8 actual 12.4	U	U	Est. pit mouth = 1,520 cm^2. Cut by WT 2 and HP 1 (Floor 3)
Other Pit 1	49+	46+	13	11					1		est. 27.0 actual 20.4	U	U	Est. pit mouth = 2,700 cm^2. Cut by WT 1 and Room 50 wall. HP?
Posthole 1	11	9	6	11,14?							0.5	U	U	Questionable PH
Floor 8 (ERM)														
Heating Pit 1	70	49	8	27	c			5			18.5	U	S-FP	Pit mouth = 2,660 cm^2
Heating Pit 2	16	13	1-2	27							0.2	U	S-FP	Pit mouth = 160 cm^2 Pit is unburned. HP?

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Table MF-P.8. (continued)

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Comments
Heating Pit 2	16	13	1-2	27							0.2	U	S-FP	Pit mouth = 160 cm^2 Pit is unburned. HP?
Heating Pit 3	46	46	4.5	27							5.4	U	U	Pit mouth = 450 cm^2 Overlies HP 4
Heating Pit 4	76	72	15	27							49.2	U	U	Pit mouth = 1,180 cm^2 Under HP 3
Heating Pit 5	23	23	7	11,45							1.7	U	U	Pit mouth = 470 cm^2
Heating Pit 6	29	23	6	11,46							1.3	U	U	Pit mouth = 570 cm^2
Heating Pit 7	36	34	8	21							est. 6.5	U	U	Pit mouth= 1,000 cm^2+ Cut by HP 4 and FP 1 of Room 51 (Floor 2)
Heating Pit 8	24	20	2-3	20	c						0.4	U	U	Pit mouth = 440 cm^2
Other Pit 1	18	18	23	10		0	1				4.4	U	U	2 shims. PH?
Floor 9 (ERM)														
Heating Pit 1[a]	67	67+	27	11,14	c				1		est. 48.9 actual 24.4	L-P	U	Pit mouth = 2,810 cm^2 Goes under room wall Plastered twice
Other Pit 1	41	39	12	20							13.6	U	U	Pit mouth = 1,460 cm^2 A HP. Overlies OP 2
Other Pit 2	63	62	15	40							35.8	U	S	Cut by OP 1. Under Room 51 wall
Other Pit 3	67	63	28	10,14							82.2	U	U	Adobe deposits on sides - mixing pit? Under WT 1
Other Pit 4	60	54	27	10							65.9	U	U	Adobe deposits on sides - mixing pit? Under Room 51 foundation

[a]Yielded archeomagnetic sample(s).

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Table MF-P.8. (concluded)

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Comments
Floating Floor 9 (ERM)														
Heating Pit 1[a]	45	35	12	20	ck						est. 12.9	U	U	Pit mouth = est. 1,400 cm^2. Cut by WT 1 and under Room 51 foundation
actual	42	16									actual 4.5			
Walls		Height (cm)												
Viga Hole 1	24	17	20	11							3.8	U	U	174 cm above Floor 1 Opposite VH 7
Viga Hole 2	32	22	26	11							12.9	U	U	171 cm above Floor 1 Opposite VH 8
Viga Hole 3	26	13	19	11							4.3	U	U	174 cm above Floor 1 Opposite VH 9
Viga Hole 4	30	18	20	11							8.2	U	U	174 cm above Floor 1
Viga Hole 5	30	13	15	11								U	U	170 cm above Floor 1
Viga Hole 6	37	18	18	11							combo = 11.8	U	U	170 cm above Floor 1
Viga Hole 7	14	11	19	41							3.2	U	U	173 cm? above Floor 1 Opposite VH 1
Viga Hole 8	23	12	19	41							9.8	U	U	166 cm? above Floor 1 Opposite VH 2
Viga Hole 9	22	25	18	41							7.9	U	U	159 cm? above Floor 1 Opposite VH 3

[a]Yielded archeomagnetic sample(s).

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Table MF-P.9. Room 143.

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Comments
Floor 1 (LM)														
Heating Pit 1[a]	23	21	9	20,45							1.9	U	U	Pit mouth = 340 cm^2
Heating Pit 2[a]	38	30	15	27,45							6.8	L-PS	U	Pit mouth = 880 cm^2
Heating Pit 3	38	18	11	11	e				1	S	5.7	L-P	U	Pit mouth = 850 cm^2
Burn 1[a]	180	100	-	-										Area = 9,880 cm^2 Associated with HP 1
Burn 2	60	25	-	-										Area = 1,610 cm^2
Burn 3[a]	50	40	-	-										Area = 1,630 cm^2
Burn 4	25	15	-	-										Area = 390 cm^2 Associated with PH 5
Other Pit 1	34	30	10	10							4.8	U	U	
Posthole 1	14	11	12	10							1.2	U	U	
Posthole 2	13	11	13	?							1.1	U?	U	
mold	6	6	12	10										
Posthole 3	10	10	11	10							0.5	U	U	
Posthole 4	10	8	15	10							0.7	U	U	
Posthole 5	11	10	25	15							1.6	U	U	Floor (Burn 4) and wall plaster burned next to PH. Post burned?
Posthole 6	27	21	25	51							9.7	L-PS	U	Mouth had clay collar
mold	16	15	24	11						EM				
Step 1	56	47	65+	55						AM	-	-	-	Fronts Door 13. Built over PH 1 (Floor 2)

[a]Yielded archeomagnetic sample(s).

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Table MF-P.9. (continued)

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Comments
Wall Trench 1	130	15-27	7	40		0	2		2		46.2	U	U	Borders former jacal wall. Fill includes reed impressed adobe
ROOM 143														
Floor 2 (G)														
Heating Pit 1	21	21	4	10?							0.8	U	U	Pit mouth = 320 cm^2
Heating Pit 2	22	22	6	20							1.6	U	U	Pit mouth = 330 cm^2
Heating Pit 3[a]	40	35	10	11	c						est. 10.6 actual 9.4	L-P	S	Pit mouth = 1,320 Cuts HP 4 and HP 5
Heating Pit 4	40	33	8	11/30?							est. 9.9 actual 7.9	U	S	Pit mouth = 1,220 cm^2 Cuts HP5
Heating Pit 5	?	?	?	27							?	U	U	Destroyed by HP 3 & HP 4
Burn 1[a]	33	25	-	-										Area = 640 cm^2 Assoc. with OP 7
Other Pit 1	85	40	55	20,30	c	0	6	6	13		28.6	U	S	Contains matting frags.
Other Pit 2	13	12	3.5	27							0.3	U	U	Pit is unburned
Other Pit 3	15	12	3	11?							0.3	U	U	
Other Pit 4	12	12	11	10							0.9	U	U	Posthole??
Other Pit 5														Not a feature
Other Pit 6	15	12	13	11							2.2	U	U	Not a feature?
Other Pit 7	9	6.5	9	11							0.2	U	U	Surrounded by Burn 1

[a]Yielded archeomagnetic sample(s).

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Table MF-P.9. (continued)

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Comments
Posthole 1[d]	27	27	76	16						A	7.2	U	S	1 shim. Post step of pine covered by Step 1
Floor 3 (G)														
Heating Pit 1	73	39	16	20,46	ce	0	9		8		27.1	U	S	Pit mouth = 2,230 cm^2 ~~Assoc. with Floor 2?~~ Adjacent wall unburned Formerly designated OP 3
Other Pit 1	13	13	7	10							0.8	U	U	
Other Pit 2	12	12	6	10							0.6	U	U	
Floor 5 (G)														
Burn 1[a]	35±	10±	-	-										Area = 300 cm^2±
Other Pit 1	18	14	4	10							0.6	L?-SaSa	S	
Floor 6 (G)														
Other Pit 1	15	14	22	10,46							2.7	U	U	Posthole?
Other Pit 2	16	14.5	4.5	20							0.6	U	U	Pit is unburned
Other Pit 3	14	14	15	15							1.5	U	U	Posthole? Not a feature?
Wall Trench 1	260	5-33	17	40		0	2		1	H	13.9	U	U	Borders south room wall and early Kiva 10 wall
Floor 7 (RM)														
Posthole 1	15	11	12	20							1.1	U	U	2 shims

[a]Yielded archeomagnetic sample(s).
[d]Yielded tree-ring data.

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Table MF-P.9. (concluded)

Feature	Length (cm)	Height (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Comments
Walls (LG/LM)														
Niche 1	25	10	16	10							3.4	U	U	About 110 cm above Fl. 1
Niche 2	16	10	14	10							0.9	U	U	About 95 cm above Fl. 1 Opposite N 5
Niche 3	12	11	7	10							0.5	U	U	About 95 cm above Fl. 1 Opposite N 6
Niche 4	34	14	17+	40							5.8	U	U	About 171 cm above Fl. 1
Niche 5	12	8	12	10							0.7	L-P?	U	About 97 cm above Fl. 1 Opposite N 2
Niche 6	18	11	14	10							2.4	U	U	About 96 cm above Fl. 1 Opposite N 3
Niche 7	36	22	30	10,46							12.7	U	U	About 83 cm above Fl. 1
Niche 8	8	7	9	10,41							0.3	L-P?	S	About 120 cm above Fl. 1
Niche 9	11	7	9	10,41							0.3	L-P?	S	About 150 cm above Fl. 1
Niche 10	45	36	24	11		?	1				35.1	L-P	S	About 35 cm above Fl. 1 Sealed with blocky rocks and adobe roof impress.

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Table MF-P.10. Room 145, Room 147, and Kiva 10.

Feature	Length (cm)	Width/ Height (cm)	Depth (cm)	Fill Type	Vege-tal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Comments
KIVA 10														
Level 14 (LM)														
Burn 1[a]	50	46	2?	20							2.7	U	U	Pit mouth = 1,500 cm^2 HP/Burn in trash lay
ROOM 145														
Floor 1 (LG)														
Posthole 1	38	29	16	11							13.7	L-Sa/S	U	Base stone. 10 shims Fronts Door 1. Post stood 190 cm above floor
mold	16	14.5	8	16										
Posthole 2	30	28	38	20							20.7	L-Sa/S	U	Base stone. Shims Fronts Door 2. Post stood 45 cm above floor
mold	22	22	34	16										
Layer 9 (RM?)														
Burn 1[a]	23	20	-	-				1			-	-	-	Area = 360 $cm^2\pm$
ROOM 147														
Floor 1 (LG/LM)														
Firepit 1[a]	44	22	28	25,43	c	17	27	1	1		21.8	L-PS	U	Pit mouth = 853 $cm^2\pm$
Heating Pit 1	46	35	8	25,43							6.0	U	U	Pit mouth = 1,096 $cm^2\pm$
Heating Pit 2[a]	40	40	8	27	s			1			7.4	L-P	U	4 superimposed HPs Pit mouth = 1,184 $cm^2\pm$
Heating Pit 3	30	27	14	20					6		6.2	U	S	Pit mouth = 593 cm^2
Heating Pit 4[a]	21	16	0	-							-	-	-	Floor burn Area = 242 $cm^2\pm$

[a] Yielded archeomagnetic sample(s).

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Table MF-P.10. (concluded)

Feature	Length (cm)	Width/ Height (cm)	Depth (cm)	Fill Type	Vege-tal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Comments
Other Pit 1														Not a feature
Other Pit 2	18	17	36	42							6.6	U	U	Rodent hole?
Other Pit 3	16	16	3	11							0.04	L-P	S	Seal burned by HP 4
Other Pit 4	15	15	2.5	10							0.03	L-P	S	Incised lines at bottom
Niche 1	19	15	34	11							13.0	L-P	U	22 cm above Floor 1
Niche 2	17	7	13	41							1.2	U?	U	155 cm above Floor 1
Niche 3	8	7	16	41				3			0.04	U	U	116 cm above Floor 1
Niche 4 remod.	53	17	37	11,43		1	23		1	E	19.7	L-P	U	49 cm above Floor 1
orig.	60	30	37	11,30							34.4	L-P	S	42 cm above Floor 1

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Table MF-P.11. Room 146.

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Comments.
Floor 1 (LM)														
Burn 1[a]	54	54	-	22							-		U	Area = 2,660 cm^2
Step 1	60	48	5	-							-			Stone set in floor
Floor 2 (RM)														
Other Pit 1	110	56	35	42					2	0	est. 110.6	U	U	Posthole? Cuts WT 1
Floor 3 (RM)														
Firepit 1[b]	70	670	35	25	ck	44	128	13	158		91.6	L-PS	U	Remodeled north end Pit mouth = 3,400 cm^2
remod.	85	70	35								125.2			Not lined Pit mouth = 4,660 cm^2
Heating Pit 1	65	60	22	20,25	c	1	5	2	12		62.4	U	S	Pit mouth = 3.235 cm^2
Wall Trench 1	234	44-124	40-52	40		0	29	8	63		473.0	U	U	
Floor 4 (ERM)														
Posthole 1	12	10	15	11							1.6	U-DS	U	
Posthole 2	12	11	8	11							0.7	U-DS	U	
Floor 6 (ERM)														
Heating Pit 1	48	48	9	27							est. 15.0	U	U	Extends under wall Pit mouth = 1,790 cm^2
Heating Pit 2	22	20	9	27							3.0	U	S?	Pit mouth = 410 cm^2
Heating Pit 3	40	40	6	27	c						est. 6.4	U	U	Pit mouth = 1,260 cm^2
Heating Pit 4	?	?	?	22							?	U	U?	Destroyed by WT 1

[a]Yielded archeomagnetic sample(s).
[b]Yielded archeomagnetic and C-14 samples.

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Table MF-P.11. (concluded)

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Comments
Floor 8 (ERM)														
Heating Pit 1	64	63	11	20	c						25.5	U	U	Pit mouth = 3,045 cm^2
Heating Pit 2	55	47	10	20	c						15.5	U	U	Extends under wall 1880 cm^2. Pit is unburned
Other Pit 1	70	70+	20	10							est. 35.0	L-P	U	Extends under wall
Other Pit 2	18	12	22	11							2.5	U-DS	U	Angles at 60° to floor Similar to OP 3 and OP 4
Other Pit 3	14	10	12	11							1.0	U	U	Angles at 60° to floor Similar to OP 2 and OP 4
Other Pit 4	11	13	13	11							1.2	U-DS	U	Angles at 60° to floor Similar to OP 2 and OP 3
Other Pit 5	10	9	7	10							0.5	U	U	
Other Pit 6	9	9	4	10							0.1	L-P	U	
Floor 9 (ERM)														
Other Pit 1	65	65	10	12							26.6	L-P	U	Clay lined 3 times
Other Pit 2	16	14	12	40							1.7	U-DS	U	Assoc. with Floor 8?
Other Pit 3	50	50	8	10							12.2	U-DS	U	Cut by HP 2 (Floor 8)
Other Pit 4	57 37	56 22	8 11	10 10							12.3 5.1	U U-DS	U U	Small pit in bottom

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Table MF-P.12. Room 229.

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Comments
Floor 1 (G)														
Burn 1[a]	27	23	-								-	-	-	Area = 505 cm^2
Burn 2[a]	25	23	-								-	-	-	Area = 480 cm^2
Burn 3[a]	62	25	-								-	-	-	Area = 1,440 cm^2
Burn 4	15	15	-								-	-	-	Area = 170 cm^2
Burn 5	18	13	-								-	-	-	Area = 200 cm^2
Burn 6	23	16	-								-	-	-	Area = 250 cm^2
Burn 7	16	13	-								-	-	-	Area = 170 cm^2
Burn 8	14	13	-								-	-	-	Area = 140 cm^2
Burn 9	38	15	-								-	-	-	Area = 420 cm^2
Burn 10	25	15	-								-	-	-	Area = 280 cm^2
Burn 11	42	40	-								-	-	-	Area = 980 cm^2
Burn 12	55	44	-								-	-	-	Area = 1,910 cm^2
Burn 13	55	40	-								-	-	-	Area = 1,800 cm^2
Burn 14[a]	several spots		-								-	-	-	Area = 680 cm^2 On sill of Door 9
Burn 15	several spots		-											On sill of Door 8 Area = ?
Burn 16	several spots		-											Area = 240 cm^2 On sill of Door 10

[a]Yielded archeomagnetic sample(s).

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Table MF-P.12. (concluded)

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Comments
Floor 2 (RMG)														
Heating Pit 1	31	29	5	27							2.2	U	S	Pit mouth = 730 cm^2
Posthole 1	14	12	56	14							9.7	U	U	Full of post wood
mold	11	11	56											
Posthole 2	13	13	41	14							5.5	U	U	
mold	12?	12?						1						
Posthole 3	15	12	21	40							2.6	U	U	
mold	12	12	21											
Posthole 4	23	23	21	14							6.7	L-S/DS	U	5 shims
mold	12	12	15											
Posthole 5	25	24	31	14/40					1		14.0	L-S	U	4 shims. Contained main and secondary posts
mold	18	17	23											
aux. PH	12	12	10											

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Table MF-P.13. Room 236.

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Comments
Floor 3 (G)														
Other Pit 1	22	20	4	11							0.8	U	U	
Other Pit 2	21	21	3	10							0.9	L-P	U	Intrusive from Floor 2?
Other Pit 3	100x40x28		25	53							10.3	U	S-FP	Wolky Feature
Other Pits 4-6														See PH 1-3 (Floor 4)
Other Pit 7	27	27	3.5	11?							1.4	L-P	S	
Floor 4 (G)														
Firepit 1	44	40	16	30	c				2		15.7	L-PS	U	Pit mouth = 5,630 cm^2 Overlain by HP 2 (Fl. 1)
Heating Pit 1[a]	34	30	10	11,25,30		?	?		5		6.6	U	S-FP	Pit mouth = 1,510 cm^2 Cuts PH 2
Heating Pit 2	19	17	6	11	u					A?E	est.0.9	U	U	Pit mouth = 240 cm^2 May be a floor burn
Burn 1[a]	24	20	-	-										Area = 300± cm^2
Burn 2[a]	10	10	-	-										Area = 80 cm^2
Burn 3[a]	15	15	-	-										Area = 180 cm^2
Other Pit 1	13	13	6	11?							0.4	U	S-FP	No feature form.
Other Pit 2														See Floor 3
Other Pit 3														See Floor 3
Other Pit 4	15	12	1	11							0.13	U	U	Floor irregularity?
Other Pit 5	14	11	0.5	11							0.04	U	U	Floor irregularity?

[a]Yielded archeomagnetic sample(s).

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Table MF-P.13. (concluded)

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Comments
Other Pit 6	14	14	2	11							0.15	U	U	Floor irregularity?
Other Pit 7														See Floor 3
Other Pit 8	11	11	1	11							0.10	L-P	S-FP?	
Other Pit 9	18	17	3	11							0.45	L-P	S-FP?	Plug sealing PH 3
Other Pit 10	12	11	2	11	s						0.11	L-P	S-FP?	Plug sealing PH 4
Other Pit 11	10	10	2	11							0.10	L-P	S-FP?	Plug sealing PH 5
Posthole 1	22	17	24	12,46	u(50+)				1		7.9	U	U	
Posthole 2	18	18	15	12,14							3.3	U-DS	U	Cut by HP 1
Posthole 3	14	11	11.5	11							0.50	U	S?	1 shim. See OP 9
Posthole 4	14	10	14	11							0.60	U	S?	1 shim. See OP 10
Posthole 5	11	10	15	11							0.54	U	S?	1 shim. See OP 11
Feature 1 so. no.	37 20	7 5	2 4	12 12							0.47 0.35	U U	U U	Two parallel slots for slab-lined bin? If so, bin size = ca. 43 x 43 cm
Step 2	47	31	10	55							-	-	-	Fronts Door 14. Used until Fl. 1 abandoned
Floor 5 (G)														
Trash Deposit	43	40	3	20,31	ck						-	-	U	Area = 1,200 cm^2 Goes under Step 2

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Table MF-P.14. Plaza Feature 1, Room 3 and Room 14.

Feature	Length (cm)	Width/ Heigth (cm)	Depth (cm)	Fill Type	Vege- tal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lin- ing	Sealed	Comments
ROOM 3														
Layer 4 (LM)														
Heating Pit 1	30	23	4	27							1.2	U	U	Area = 500 cm^2
Floor 1 (LM)														
Firepit 1[a]	130	99	116	24	ce	2	12	9	100	AE	764.5 629.0	L-PR (below recess)	U?	Inner pit mouth = 6,720 cm^2. Recessed lip. Two unfired miniature bowls in pit at bottom
Firepit 2[a]	120	78	125	24	c			3	55	AEOR	588.3 493.3	L-PR (below recess)	U?	Inner pit mouth = 5,220 cm^2. Recessed lip. Two unfired miniature bowls in pit at bottom
Firepit 3[b] orig.	102	71	76								419.1	L-PR	U	Pit mouth - 6,530 cm^2
remodel.	70	62	76	24	c				28	EH	302.2	L-PR	U	Pit mouth = 4,100 cm^2 Partial recessed lip
Heating Pit 1[b]	30	26	4	27							2.1	U	U	Pit mouth = 660 cm^2 Overlies FP 1
Other Pit 1	37	20	13	20,46		0	2	1	4		8.8	U	U	
Other Pit 2	87	31	20	30/31		0	3	1	12	EO	46.8	U	U	
Other Pit 3	15	12	7	11							0.8	U	S	
Other Pit 4	39	26	22	11/20					7		19.7	U	U	
Other Pit 5	14 max. 20	12 17.5	15	11				1		Z	2.2	U	S	Bell-shaped. PH?
Other Pit 6	4	3.5	3+	10/11							0.03+	U	S?	Not a feature?

[a]Yielded archeomagnetic sample(s) and tree-ring data.
[b]Yielded archeomagnetic sample(s).

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Table MF-P.14. (continued)

Feature	Length (cm)	Width/ Heigth (cm)	Depth (cm)	Fill Type	Vege-tal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lin-ing	Sealed	Comments
Other Pit 7	17	16.5	10	20							1.8	U	S	Assoc. with replaster 9
Other Pit 8	?	?	?	?				2	1		?	?	?	No feature form
Posthole 1	19	16	10	11					1		2.2	U	U	2 shims?
Posthole 2														See OP 5
Posthole 3	10	9	22	11							0.8	U	U	1 shim
Posthole 4	14	9	23	11		0	1				1.7	U	U	
Posthole 5	6	5	13	11							0.3	U	U	
Posthole 6	11	10	24	11							1.9	U	U	Associated with replaster 6
Posthole 7	8	8	7	11					1		0.3	U	U	Associated with replaster 6
Posthole 8	11	9.5	9	11		1	1		1		0.4	U	U	Associated with replaster 7
Posthole 9	13	12	14	11							0.8	U	U	Associated with replaster 7
Bin 1	67	56	17	27	e				3		59.1+	L-PS	U	Associated with replaster 7 Dismantled. Next to niche in wall
Door Ramp 1	98	91	12	55		?	3		3	E		-	-	Replastered several times
ROOM 3														
Floor 2 (LG)														
Other Pit 1	77	64	40	11,12		0	2		14		139.5	U	S?	PH 1-2 in pit fill Type 1c pit
Posthole 1	8.5	8	4.5	11					1		0.3	U	U	Cuts OP 1
Posthole 2	7.5	7	5.5	11							0.3	U	U	Cuts OP 1
Posthole 3	8	7.5	11.5	11							0.4	U	U	

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Table MF-P.14. (continued)

Feature	Length (cm)	Width/ Heigth (cm)	Depth (cm)	Fill Type	Vege-tal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lin-ing	Sealed	Comments
Posthole 4	8	8	8	11		0	1				0.3	U	U	Associated with bin?
Posthole 5	8	8	8	11							0.3	U	U	Associated with bin?
Walls (LM)														
Niche 1	21	18	16	11,41							7.6	L-P?	U	Set into plugged door Possible step. 15 cm above Ramp 1
Door 1	58	42+	42	55								L-M	S	Plug contains N 1. Connects Rooms 3 and 4. 12 cm above Ramp 1
ROOM 4														
Layer 3 (LM)														
Heating Pit 2[b]	26	22	3	20							0.3	U	U	Pit mouth = 320 cm^2. No HP 1 for Layer 3
Surfaces 1-3 (LM)														
Door Ramp 1	40	38	20	55							-	-	-	Below Door 1
Surface 1/2 (RMG)														
Other Pit 1	27 max.46	22.5 39	38	24,27	c				9		27.1	U	U	Bell-shaped. Fill from Rm 3 firepits? Type 1b pit
Surface 1 (RM)														
Burn 1[b]	33	22+	-	-							-	-	-	Area = 2,380 cm^2
Surface 2 (RM)														
Heating Pit 1[b]	24	19	4	27							1.1	U	U	Pit mouth = 360 cm^2

[b]Yielded archeomagnetic sample(s).

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Table MF-P.14. (concluded)

Feature	Length (cm)	Width/ Heigth (cm)	Depth (cm)	Fill Type	Vege-tal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lin-ing	Sealed	Comments
Other Pit 2	100	8	12	10					2		5.8	U	U	4 shims. Jacal wall trench
Surface 3.5 (RM)														
Other Pit 1	68	61	17	11,27,46	c	0	2	2	5	M	49.5	U	U	Type 1c pit
Other Pit 2	22	11	11?	12							1.4	U	U	
Surface 4 (RM)														
Other Pit 1	19	18	8	27					1		1.4	U	U	Ash Pit? See Surface 2
Other Pit 3	29	29	22	50							15.6	U	S	

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Table MF-P.15. Plaza 1, North and West Grids.

Feature	Surface and Replaster #	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Comments
Plaza Grid 8															
Other Pit 1	2-3/4 (LM)	65	?	?	11,31	ce	0	43	4	21	AOZ	?	U	U	Covered by roof?
	remodel.	60	32	?								est.37.8	U/L-PS		
Other Pit 2	4-1 (RM)	64+	40	78	12.31	c	1	31	8	64		105.1+	U-DS	S	PH in part?
Other Pit 3	4-1 (RM)	24	17+	15	10/11							5.0±	U	S	
Other Pit 4	6 (RM)	49	40	60±	12,31		0	11		14		69.1±	U	U	PH?
Other Pit 5	6 (RM)	26	17±	6	10							est.0.9	U	U	Not a feature?
Other Pit 6	2 (LM)	10	9	5.5	10							0.4	U	S	
Posthole 1	6 (RM)	20	20	33	51				1	1		9.4	L-PR	U	1 shim
	mold	12	11	33	11,51										
Posthole 2	2-3 (LM)	12	12	27	12							2.8	U	U	Associated with OP 1 Cuts PH 4
Posthole 3	6 (RM)	33	24	40	51		0	2	1	2		16.4	L-PR	U	2 shims
	mold	10	9	40	12										
Posthole 4	4-1 (RM)	28	28	40	45,46					1	A	18.2	U	U	Cut by PH 2
Posthole 5	6 (RM)	18	16	31	11							6.2	U	U	
Posthole 6	8 (ERM)	21	21	36	11		0	1		2		10.0	U-DS	U	Under OP 3
Posthole 7	6 (RM)	52	26	38	45,46		0	4	2	5		30.1	U/L-PS?	U	Used with later floors
	mold	18	16	6											
Posthole 8	8 (ERM)	15+	15	?	?										Unexcavated. Cuts an unexcavated trash pit
Plaza Grid 30															
Other Pit 1	? (RM?)	114 est.	14	112	32,33	ce	9	883	77	707	AEHOR	568.6	U	U	Half excavated. Several eagle and hawk parts
												est.872.6			

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Table MF-P.15. (concluded)

Feature	Surface and Replaster #	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Comments
Plaza Grid 28-29															
Firepit 1	? (unk)	211	206	?	-							-	L-M	U	Pit mouth = 30,330 cm^2 Unexcavated
Firepit 2	? (unk) outer	143	130	?	-							-	L-PS	U	Pit mouth = 14,230 cm^2 Unexcavated
	inner	112	112+	?	-							-	L-PS	U	Pit mouth = 9,850 cm^2 Unexcavated
Firepit 3	? (unk)	92	?	?	-							-	?	U	Pit mouth = 4,730 cm^2 Unexcavated
Firepit 4	? (unk)	149	142	?	-							-	L-PS	U	Pit mouth = 18,000 cm^2 Unexcavated
Plaza Grid 12/27															
Plaza Wall 1	? (unk)	600+	32+	?	-							_	L-M	-	Tested
Plaza Grid 301															
Other Pit 1	6? (G)	27	26	10	40	c	0	2	3	20	A	7.1	U	U	Bell-shaped
	max.	34	30												
Other Pit 2	8 (ERM)	85	76+	10	25	c			2			43.2	U	U	Possible HP but little burn. Pit mouth = 5,240 cm^2
Plaza Grid 302															
Storage Bin 1	? (LM)	76	45	40+	12		0		1		H	20.3+	L-M	U	Blocks Room 104 east door. Vent shaft mouth for Kiva 17?
Plaza Grid 303															
Ditch	8 (ERM)	100++	35	24	11,12		0	8	1	31		-	L-S	U	Tested

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Table MF-P.16. Plaza 1, East Grids.

Feature	Grid #	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vege-tal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Area (cm^2)	Lining	Sealed	Comments
Firepit 1 (LM)	279	73	66	?	?								3,340	L-PS	U	Assoc. with Kiva 12
Firepit 2 (LM)	175	64	60	?	27								2,570	L-PS	U	Assoc. with Kiva 12
Firepit 3 (PO)[a]	75	100	80	?	?								6,790	L-S	U	In top of fill of Kiva 14
Firepit 4 (PO)	75	150±	130±	?	?								?	L-S	?	In top of Kiva 14 fill Destroyed
Heating Pit 1 (LM)	175	42	38	?	?								1,320	?	S	
Roasting Pit 1 (PO)	193	127	110	15±	?								13,240	L-S	U	
Roasting Pit 2 (PO)	73	145	110	?	?								13,650	L-S	U	
Burn 1 (LM)[a]	279	33	30	-	-								990±	-	-	78 cm west of Room 192
Other Pit 1 (LM)																No information
Other Pit 2 (LM)	278	53	36	?	12,15								1,730	L-M	U	Assoc. with Kiva 12? Storage cist or vent
Other Pit 3 (LM)	175	46x36x26		10	27?	ck						1.7		U	U	Dump for FP 2?
Other Pit 4 (LM)	95	88	77	?	20								5,430	U?	U	
Other Pit 5 (LM)	55	42	36	9	12					1		8.3		U	U	Rodent hole?
Other Pit 6 (LM)	55	24+	12+	?	?								200++	U?	U	
Other Pit 7 (LM)	55	130	110	?	11?								10,420±	U	U	Not a feature??
Other Pit 8 (LM)	55	128	54	?	?								7,200++	U?	U	Not a feature??
Other Pit 9 (LM)	55	140±	38±	?	?								4,600±	U?	U	Not a feature??
Other Pit 10 (LM)	55	71	60	12	12							20.3		U?	U	

[a]Yielded archeomagnetic sample(s).

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Table MF-P.16. (concluded)

Feature	Grid #	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vege-tal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Area (cm^2)	Lining	Sealed	Comments
Other Pit 11 (LM)	55	50	34	?	?							est.	1,240	U?	U	Not a feature??
Other Pit 12 (LM)	55	92	70	?	?							est.	4.420	U?	U	Not a feature??
Other Pit 13 (LM)	35	38	30	?	?							est.	1,170	U?	U	Not a feature??
Other Pit 14 (LM)	55	24	23	9	12							3.3		U	U	Not a feature??
Posthole 1 (LM)	175	19	19?	13	12							3.5±		U	S	Cut by 1976 T.T.
Posthole 2 (LM)	175	18	11	16	12							3.4±		U	U	Not a feature??
Posthole 3 (LM)	75	18	15	11?	12							2.2±		U	U	Not a feature??
Posthole 4 (LM)	55	10	6	6	12							0.2		U	U	Not a feature??
Posthole 5 (LM)	55	15	14	5	12							0.6		U	U	
Storage Pit 1 (LM)	35	84	82	55?	45,46								4,940	L-M	U	Assoc. with Surface 11 Storage pit or vent
Wall Foundation Trench 1 (RM)	35	65+	52+	37	40							-	?	U-DS	U	Assoc. with Surface 22 In T.T. 3
Wall Foundation Trench 2 (RM)	35	73+	20+	33+	40							-	?	U-DS	U	Assoc. with Surface 22
Vent. Shaft Mouth	?	52	51	?	11								2,660	L-M	U	Part of Kiva 14
Vent. Shaft Mouth	?	34	29	?	11,45								880	L-M	U	Part of Kiva 12
Vent. Shaft Mouth	?	46	43	?	41								1,870	L-M	U	Part of Kiva 6 but against outside room wall
Vent. Shaft Mouth	?	48	46	?	11								2,190	L-M	U	Part of Plaza Feat. 4
Vent. Shaft Mouth	114	37	36	?	42								1,290	L-M	U	Part of undefined kiva
Niche 1	?	65	30	35	42							28.4		L-M	U	In south wall of Kiva 12

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Table MF-P.17. Plaza 2.

Feature (Grid)	Surface No.	Layer/ Level No.	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Comments
Burn 1 (G.221 NE)	10c (LG)		20+	20+	2	21		1	2					U	U	Pit mouth = 364+ cm^2
Heating Pit 1 (G.201 SW)[a]	5 (LM)		29	21	5	27							1.7	U	U	Pit mouth = 500 cm^2
Heating Pit 1 (G.201 NE)[a]	5c (LM)		24	17	3	11,27	cs				8		2.8	U	U	Pit mouth = 1,510 cm^2
Heating Pit 1 (G.201 SW)[a]	8 (LG)		44	39	2	12,27	c				1		1.0 ca.	U	U	Pit mouth = 990 cm^2 A surface burn
Heating Pit 1 (G.201 T1)[a]	9 (LG)		50	33	0.5	11,27							0.4	U	U	Pit mouth = 800 cm^2 A surace burn
Heating Pit 1 (G.201 T1)	14 (G)		29	27	9	27							4.8	U	U	Pit mouth = 63+ cm^2 Rodent disturbed
Other Pit 1 (G.155/175)	fill (LM)		40	35	12	11					2	H	10.5	L-S	U	
Other Pit 1 (G.201, 221)	1a	2/1 (LM)	80-100	66	15	12,41							66.7 est. 22.1 actual	U	U	Cut by test trenches
Other Pit 2 (G.201)[b]		2/3 (LM)	203	133	55	24,41	e	1	100	7	9	0	626.6	L-RS	U	Pit mouth = 25,130 cm^2 Multiple burn layers A huge firepit
Other Pit 3 (G.161, 181)[c]	1	2/1 (LM)	298	108	20+	24,41		1					831.0 est.	L-RS	U	Pit mouth = 20,780 cm^2 A huge firepit with OP 4 inside. Unexcav.
Other Pit 4 (G.161, 181)	1	2/1 (LM)	94	48	20+	24,41							63.3 est.	L-RS	U	Pit mouth = 3,160 cm^2 Inside OP 3. Unexcav.
Other Pit 5 (G.182 SW)		2/1 (LM)	28	22	20	11		0	1				8.3	U	U	Possibly natural.
Other Pit 1 (G.181)		2/2 (LM)	71	56	6	27	e						13.7	U	U	17 cm high collar on west side. Ash pit?
Other Pit 1 (G.181 SW)	4c (LM)		14	13	9	12							1.0	U	U	Posthole?
Other Pit 2 (G.181 SW)	4c (LM)		12	11	02	12							0.3	U	U	Posthole?
Other Pit 1 (G.201 SW)	5 (LM)		17	11	23	12							3.0	U	U	Posthole?

[a]Yielded archeomagnetic sample(s).
[b]Yielded archeomagnetic and tree-ring dates.
[c]Yielded associated tree-ring dates.

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Table MF-P.17. (concluded)

Feature (Grid)	Surface No. or Layer/ Level No.	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vege-tal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lin-ing	Sealed	Comments
Other Pit 1 (G.201 NW)	7 (LG)	9	7.5	13	11							0.6	U	U	
Other Pit 1 (G.201 SW)	8-8b (LG)	17	13	10.5	11/20							1.1	U	U	Not a feature??
Other Pit 1 (G.201 T1)	13 (G)	33	29	12	11							2.7	U	U	
Other Pit 1 (G.201 T1)	18 (G)	10	10	6	10							0.3	U	U	
Posthole 1 (G.181 SW)	3 (LM)	6	6	26	12							0.7	L-F?	U	
Posthole 1 (G.201 SW)	8 (LG)	23 13 mol d	16 6	41	11/12	u	0	19	1	7		8.3	U	U	
Feature 1 (G.181-221)	5-10 (LG)	600++	66	10-21	11	cu	1	5	1	8		-	U	U	Compacted sand walk-ways along wall?
Other unnamed Feature 1 pits:															
Other Pit 1 (G.201)	1? (LM)	14	14	21	11							1.5	U	U	Posthole?
Other Pit 1 (G.201 SW)	3 (LM)	10	9	19	11							0.9	U	U	Posthole? Rodent hole?
Other Pit 1 (G.201 SW)	3 (LM)	10	8	15	11							0.6	U	U	Posthole?

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Table MF-P.18. East Ruin, Kiva 14 (Room 6)

Feature	Length (cm)	Width (cm)	Depth (cm)	Fill Type	Vegetal	Total Burned Bone	Total Bone	Total Chipped Stone	Total Sherds	Misc. Artifacts Present	Volume (liters)	Lining	Sealed	Comments
Floor 1 (LM)														
Firepit 1[a]	55	50	26	26,28	c	4	6	2	1		55.6	L-PS	U	Pit mouth = 2,200 cm^2 Adobe collar added during remodeling
Other Pit 1	8	7	1	11							0.02	U?	U	Ladder rest? See OP 2
Other Pit 2	10	7	0.5	11							0.03	U?	U	Ladder rest? See OP 1
Other Pit 3	16	14	12	12							1.1±	U	U	
Other Pit 4	46	44	51	27,31		3	28	5	15	D	95.2	U	U	Ash pit for FP 1 Type 1c pit
Other Pit 5	11	8	6	11?							0.3	U	U	
Floor 2 (LM)														
Other Pit 1	30	26	8	11							4.0	U	S	
Other Pit 2	18	16	17	11							2.8	U	S	5-6 vertical stick molds 2 cm diameter in fill
Walls (LM)														
Niche 1	26	20	21	42?							10.0	L-P	U	In NE side of Kiva, 6 cm above Floor 1
Vent. Tunnel Mouth	20	36	?	11							-	L-PM	U	Mouth = 700 cm^2

[a]Yielded archeomagneic sample(s).

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Investigations at the Pueblo Alto Complex

Chaco Canyon

New Mexico

1975-1979

Microfiche

for

Volume II: Architecture and Stratigraphy

by Thomas C. Windes

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Appendix A

Analysis of Pigments from Pueblo Alto Murals

Cory Breternitz and Adrian White

In 1978, painted walls and wall figures were discovered during the excavation of Rooms 143 and 147 in the Central Roomblock (Volume II, Figures 2.27, 2.30-2.31, and 2.33). An attempt was made to expose wider areas of the paint than were visible, but the undertaking was far too tedious and difficult to accomplish at the time. Samples of some of the pigment were collected and analyzed using a petrographic microscope by Fekri Hassan, Sediments Laboratory at the Department of Anthropology, Washington State University, in February 1979. The samples analyzed are listed below.

Room 143, North Wall (East End)

Gold and white pigments used for paintings of figures.
(1) Yellow ochre or, chemically, hydrous iron oxide ($Fe_2O_3 \cdot H_2O$).
(2) Gypsum or, chemically, hydrated calcium sulphate ($CaSO_4 \cdot 2H_2O$).

Room 147, West Wall

Red pigment used for painting of figure.
(1) Hematite (red ochre) or, chemically, ferric oxide (Fe_2O_3).

Room 147, East Wall

White pigment used for painting of figures.
(1) Gypsum or, chemically, hydrated calcium sulphate ($CaSO_4 \cdot 2H_2O$).

Room 147, North Wall

Gold pigment used for painting of designs.
(1) Yellow ochre or, chemically, hydrous iron oxide ($Fe_2O_3 \cdot H_2O$).

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Appendix B

A Study in the Use Wear of Plastered Surfaces

Thomas C. Windes

Because of the differential floor wear often observed in prehistoric sites, and Pueblo Alto was no exception, there was interest in calculating the rate of wear for plastered surfaces to determine objectively the intensity of use. The model chosen was a reconstructed Spanish Colonial village operated as the Old Cienega Village Museum at El Rancho de las Golondrinas, near Santa Fe, New Mexico. It receives a large number of visitors each year, so the mud floors in the rooms need constant upkeep. The curator of the museum, George B. Paloheimo, Jr. (personal communication 1985), was kind enough to supply the following data. Before 1980, floors in all rooms were being replastered every 2-3 years with visitation averaging between 10,000 and 12,000 people per year. Plaster was 7.6 to 10.2 cm thick (3-4 in.) and composed of three parts sand and two parts dirt and straw. In 1980, because of the maintenance problem and dust, the floors were plastered 10.2 cm thick, allowed to dry, and then coated twice with a 2-1 linseed oil-turpentine mixture to harden the surface. The latter application may be similar to the historical use of blood for some Southwestern plastered floors. Visitation since 1980 has been 115,000 people, with anticipated replastering in the fall of 1986.

Clearly, foot traffic today would be more harsh on floors than prehistorically because of modern footwear, although this is compensated somewhat by the straw and the linseed oil-turpentine mixture that create a harder surface than does just a mud plaster. The proximity of the living and kitchen quarters to the museum entrance probably means that most, if not all, the visitors would cross these exhibit rooms. During my visit in October 1985, I noted that deep, longitudinal troughs had been worn in front of each door entry and the wear was clearly evident across the mud floors between doors. The placita surface was gravelly dirt and had been left unprepared, although some repair was necessary after rains. Before 1980, then, we can assume that about 11,000 trips took place through the food-preparation room (door to door) and about 22,000 trips through the living-sleeping rooms (one entrance), or about 31 and 62 trips daily, for the respective rooms. It is not difficult to imagine an Anasazi family of five making 30 to 60 daily traverses across a living room. The impact to the floor, to be sure, would be less than our example above, but the plastered surfaces at Pueblo Alto were also exceedingly thin (<1 cm). If the wear rate of our example was the same at Pueblo Alto, replastering of living room floors might have been necessary every 3.4 months, and storage room floors at longer intervals.

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While there is little question that bare or sandled feet would result in longer-lived floors than those eroded by the constant tread of boots, worn by a bigger person, the thin nature of the Pueblo Alto floors probably would have necessitated repair at least every few years. If Room 110's upper floor (Floor 1) was used over a period of 20-30 years, a span estimated from absolute and relative dating methods, then the 9 major surfaces defined from excavation yield an approximate rate of floor repair every 2-3 year--satisfyingly close to the allowances made from the Old Cienega example. Conversely, the pristine floors encountered in the back rooms in the Central Roomblock could only denote little or no use given their almost total lack of wear.

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Appendix C

Independent Observations of the Plaza 2 Stratigraphy by David Love and David Weide[a]

H. Wolcott Toll

For Plaza 2, a major concern involved the mode of deposition and how much time the laminations would represent in terms of their rate of accumulation. Dave Love (then of the Department of Geology, University of New Mexico), a geologist interested in Chacoan sedimentation, was kind enough to spend some time looking at the stratigraphy in Plaza 2 and made the following observations in 1978.

Love was unable to estimate the rate of accumulation but he agreed with the excavators' (Toll and Powers; TCW) wind-and-water deposition interpretation. Love thought that the portions of the profiles lacking distinct laminae represented churned layers. He said it was not infeasible that a sequence of use followed by disuse followed by use, etc., might be represented by the visible stratigraphy (e.g., churned, laminated, churned, etc.). Churned layers are those that appear porous and have a larger grain size, perhaps from a winnowing effect. More purely aeolian layers are compact and finer-grained. The presence of larger grains and less visible laminae at 3-4 m from the main wall may also be wind-effected with wind removing the finer grains.

Love saw any presence of clay and rock as indicative of human activity because they could not have been wind-deposited. He was particularly impressed by this type of unit at the base of the 1977 excavation in the southeastern quarter of Grid 201. The clay in that layer reminded him of supra-bedrock material and/or construction material, either of which must be humanly deposited.

Love noted that, in looking at natural dunes in the area, he had seen little in the way of laminations--there tends to be one capping layer on the top, which seems to prevent further activity. He thought that for laminae such as those in our profiles to form there would have to be large bare areas in the vicinity, which would allow much soil and sand movement.

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[a]These comments were extracted from Wolky Toll's field notes regarding conversations with Love and Weide during their examination of the Plaza 2 stratigraphy of Grids 181 and 201. Except for minor changes, these are verbatim notes as written by Toll (TCW).

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He also felt that large expanses of smooth surface such as the surfaces cleared suggest that no vegetation was present, as sand tends to accumulate around plants.

Finally, Love conducted an experiment in which he permitted sand to blow into an area, sprinkled the top with water, permitted it to dry, and then repeated the process several times. Upon sectioning the accumulated result, he found laminations similar to those in our cuts; the wetted surfaces were visible as thicker laminae, but interestingly, much finer laminae were also visible between the thick lenses, which indicates that dry wind deposits can also be laminated.

In 1977 David Weide (University of Nevada, Las Vegas), a geologist who was in Chaco mapping the surface geology for the USGS, was asked to comment on the deposition in Plaza 2. The cut he observed was the south face of Grid 201. Weide said the entire fill of the cut can be explained as wind-deposited, with water deposits inconsequential in the actual accretion of material. He believes the laminae that represent especially wet episodes have less or no wind-blown material. Subsequent dry years would account for spaces with no laminae. Weide said that studies in Arizona and Las Vegas indicate that 3-9 cm/year can accumulate from natural, dry deposition. Using laminae as a criteria for surfaces, he counted 20 or more surfaces in the cut.

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Appendix D

Compaction Studies in Plaza 2[a]

Robert H. Webb

The best data for determining differences in soil compaction came from a Plaza 2 profile at Pueblo Alto (see Volume II, Figure 6.4, which is similar to the profile tested) at 90 cm out from the exterior of the East Wing wall. Bulk-density techniques [clod methods using wax-coated soil peds weighed in water (see Blake 1965)] (Table MF-D.1) appeared more reliable for assessing soil density than poking at layers with a knife blade (i.e., Table MF-D.2), but with the exception of Surface 5c (Layer 3, Level 1), I was relatively consistent. These results are consistent with my observations in the field. Unfortunately, interpretation of this data is harder than just expressing it in numerical form.

My argument concerning this profile requires several assertions concerning the behavior of soil under human feet (or any type of load at the soil surface). My research on other compacting mechanisms [off-road vehicles (Webb 1983)] suggests that an appropriate model to apply to any type of compaction is that the bulk density of the soil increases as a logarithmic function of the number of "passes," or the amount of foot traffic in this case. If this is true, then something immediate can be said about the use each of these layers has received, assuming that the aeolian sand was deposited at about the same density before human use. The most obvious thing is that a layer with a higher density has been used more often than a layer with a lower density, so, as a first cut, you might say that at 90 cm, Surface 6 (Layer 3, Level 2) was used most and Surface 1 (Layer 2, Level 2) used least, and then order the rest of the layers accordingly. This would yield a simple scenario of what happened on each of the surface levels, at least with respect to the amount of use.

Unfortunately, there are some complications that may or may not obscure this simple result. Compaction is also strongly dependent on the moisture content of the sand at the time the dwellers trod upon it. I

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[a]In 1980 Robert Webb was working in Chaco Canyon with the USGS in conjunction with studies of prehistoric road compaction. He examined the profile east-west across the middle of Grid 181 and tested various surfaces for compactive strength. His discussion of Plaza 2 followed by Toll's 1981 comments are included here (TCW).

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Table MF-D.1. Bulk density analyses of Plaza 2 deposits.

Grid 181 location	Rating	Bulk Density (g/cm^3)	Distance from East Wing wall (cm)
Surface 1 (Layer 2, Level 2)	Soft	1.75	90
Surface 1 (Layer 2, Level 2)	Very Hard	2.07	250-275
Surface 1 (Layer 2, Level 2)	Soft	1.68	330-350
Surface 3 (Layer 2, Level 3)	Hard	1.85	90
Surface 4 (Layer 2, Level 4)	Hard	1.89	90
Surface 5c (Layer 3, Level 1)	Medium	1.76	90
Surface 6 (Layer 3, Level 2)	Hard	1.94	90
Surface 7 (Layer 4, Level 1)	Soft	1.83	90
Surface 9 (Layer 5, Level 1)	Soft	1.79	170-185

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Table MF-D.2. Correlation of Webb's hardness estimates with layers-levels and surfaces at various horizontal locations east of the main wall on the east-west profile midline of Grid 181, Plaza 2.

	DISTANCE EAST OF MAIN WALL[a]				
Surface, Layer-Level	30 cm	90 cm	150 cm	250 cm	350 cm
Surface 1, L2L2-3	soft--OP 3	soft	soft to medium	hard--poss. foot path; harder near surface @ 235-310	soft to hard; nodules may be wall plaster
L2L3		medium hard			
Surface 3A, L2L3	medium hard	medium			
Surface 3, L2L3	medium hard	hard	hard	⌈	⌈
Surfaces 4B-D, L2L4	medium hard	medium	hard	moderate	moderate (top)
Surface 4B?, L2L4		medium		to	
Surface 4B, L2L4		medium		moderately	to
Surface 4D?, L2L4	⌈ hard	medium hard	⌈ medium hard	hard	
Surface 4, L2L4	⌊ hard	hard	⌊ medium hard	⌊	soft (bottom)
Surface 5C, L3L1	⌈ hard to	medium	soft to hard	moderately hard	
Surface 5, L3L1	⌊ medium	medium hard	medium hard	moderate	⌊
Surface 5D, L3L1			medium		
Surface 5D+5,			soft (b), hard (c)		
Surface 6, L3L2	medium	hard	hard	moderately hard	⌈ hard
Surface 7, L4L1	medium hard	soft	medium hard	soft	to
Surface 8, L4L2		medium hard	soft		⌊ moderately hard
Surface 8 laminae		medium	soft		
Surface 9, L5L1		soft	medium		soft
Surface 10?, L7					soft
under Layer 7					soft

[a] ⌈⌊ layers lumped by Webb.

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suspect this is not of great concern because water must have been in the sand during the time of use. If the sand were dry and did not compact with use, however, it is difficult to interpret the amount of use a layer received, only perhaps the amount of use the layer received when moist. There is a backup check on this, as Dave Love pointed out (see Appendix MF-C). The amount of use the layer received when dry may be reflected in the relative amount of churning the layer shows. This soil will only fail by shearing/churning when it is fairly dry, but sand that was compacted only when moist should not have much churning. Hence, I think that the better structured, soils layers were either unused or compacted when moist. Forces exerted by human feet, especially those of a 5-ft, 100-lb Anasazi, will not cause substantial shear failure unless the soil is dry or, more unlikely, saturated. Furthermore, this soil tends to cement a little (probably with calcium carbonate) when disturbed and then dried, so if the soil was compacted when moist, it probably was not churned when used dry. Therefore, the simple logarithmic model used with the addition of some information on soil structure could reflect the amount of use when the soil is moist. The "amounts of use" are relative anyway, so the most one gets is an ordering of layers with respect to amount of relative use.

Another complication is the influence of compaction at the surface on buried layers. The stresses exerted by the Indians on the soil surface will be felt in the lower layers, although the extent of stress propagation is probably minimal. Nothing can be concluded about the cause of the compaction in any one layer unless the layer overlying it is more than 2-3 cm thick. Again, this is highly dependent on moisture content because, if a short thunderstorm that only penetrated the soil to 2 cm occurred, leaving the underlying soil dry, any amount of walking around will not have an effect at depth because the soil will be too strong. The effect of compaction of the surface on buried layers will not be that important provided at least 2 cm of material overlies the layer. So, again, the simple model can be used with an assumption about effects from above and deemphasizing the importance of thin layers.

I have consistently found platy structure in soil that has been compacted at the surface without much churning. Churned soils should appear relatively massive, especially near the top of the layer, whereas unchurned soil should show a nice platy structure at the surface.

The formation of the layers themselves is a matter of speculation. I think that the layers I saw in the profile were the result of discrete sandstorm events. The distinctness of the layers is sharp; they had to be modified by either rainfall or foot traffic to set them off so well in a uniform material (cf., Appendix MF-C). As noted in the field, some pluvial working of the soil is apparent, but rainfall runoff neither created the layers nor caused the measurable density increases. So, I think we have a preserved set of geomorphic events with possible time bounds, and recurrence intervals for such events can be calculated if care is exercised. Time control of the layers is needed because the amount of use a given layer can sustain is dependent on both the number of Anasazi available to walk on it and the amount of time the layer was exposed. One might assume that the layers were laid down at regular intervals and

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ignore the time element, and this may be a reasonable assumption provided one explicitly recognizes the uncertainty.

In conclusion, the simple model is probably appropriate in the case of Plaza 2, subject to the assumptions and limitations as noted above. Layers with higher densities were probably used more than other layers with lower densities. Surface 1 (Layer 2, Level 2) at 260 cm was probably an old trail, and that use was slight farther away from the wall (Surface 1, Layer 2, Level 2 at 340 cm). The lack of layering and relatively small change in strength at 330-350 cm suggest that use was restricted mainly to the firepit areas along the wall. The key area (90 cm) layers can be ordered by density (and maybe even strength) for use intensity. The areas were not used much when Surfaces 4B, 4C, and 4D were exposed, and that intensity increased along the time of Surface 3, Layer 2, Level 3 (which appears to correspond to the time when the firepit was built).

I see two potentially significant results from an analysis of Profile 5: (1) a discovery of buried, compacted layers that have been preserved for 900 years or more and subsequent speculation and facts about what caused the compaction in the first place, and (2) good time control on what appear to be discrete geomorphic events (i.e., sandstorms) in the area with a good handle on the volume of material deposited during the storm (from the layer thickness) and possibly even on the recurrence intervals for the storms, depending upon whether some of the layers can be dated.

In review of Webb's comments, Toll in 1981 further elaborated on this study (TCW):

> Webb's ideas on the processes involved in the formation of the layers in Plaza 2 are somewhat different from those adopted here. He is less disposed to view churning of deposits as an important factor, and more inclined to emphasize compaction. If I understand the argument, however, it is critical that the soil be sufficiently moist for compaction to occur. Based on current condition of aeolian surface deposits, it seems reasonable to expect that at least some levels would not become compact because of insufficient moisture, timing of use, and length of exposure. Tables MF-D.1 and MF-D.2 show Webb's ratings of hardness of the layers he examined; they suggest that there is variability in hardness within layers and that some of that variability may relate to distance from the main wall. Still, there is also variability from layer to layer within vertical sections, showing that depth and distance from the wall are not sole determinants of hardness, which leaves human use as a probable partial cause.

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Appendix E

Ceramic Frequencies and Distributions from Excavated Units at Pueblo Alto.

Thomas C. Windes

CULINARY

01 Plain gray
02 Lino gray
03 Wide neckbanded
04 Narrow neckbanded
05 PII indented corrugated rim
06 PII-III indented corrugated rim
07 PIII indented corrugated rim
07A Mummy Lake gray
08 Unclassified indented corrugated
09 Neck indented corrugated

CIBOLA

20 BMIII-PI mineral (polished)
21 BMIII-PI mineral (unpolished)
22 Early Red Mesa Black-on-white
22A Kiatuthlanna Black-on-white
23 Red Mesa Black-on-white
24 Escavada Black-on-white
25 Puerco Black-on-white
26 Gallup Black-on-white
27 Chaco Black-on-white
30 Unclassified Cibola mineral
31 Reserve Black-on-white
77 Chaco-McElmo Black-on-white
91 Socorro Black-on-white

UNKNOWN

14 Mud pot
28 Unclassified non-Chacoan mineral
29 Plain whiteware
40 Unclassified carbon

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CHUSKA

18A Theodore Black-on-white
65 Tunicha Black-on-white
65A Tunicha/Newcomb Black-on-white
66 Newcomb and Burnham Black-on-white
66A Newcomb Black-on-white
66B Burnham Black-on-white
67 Chuska Black-on-white
68 Toadlena Black-on-white
68A Toadlena/Nava Black-on-white
69 Nava Black-on-white
69A Nava/Crumbled House Black-on-white
70 Crumbled House Black-on-white
72 Unclassified Chuskan whiteware

TUSAYAN

39 Kana'a Black-on-white
73 Black Mesa Black-on-white
74 Dogoszhi Black-on-white
75 Sosi/Black Mesa Black-on-white
76 Unclassified Tusayan whiteware
78 Sosi Black-on-white
78A Shato Black-on-white
90 Holbrook Black-on-white

MESA VERDE

80 Cortez Black-on-white
81 Mancos Black-on-white
82 McElmo Black-on-white
84 Unclassified Mesa Verde whiteware

SMUDGED

13 Unclassified smudged
13A Forestdale Smudged
13B Forestdale/Reserve Smudged
13C Forestdale/Woodruff Smudged
13D Forestdale Smudged Indented Corrugated
13E Reserve Smudged
13F Showlow Smudged
13G Winona Smudged
13H Woodruff Smudged
13I Forestdale Red
13J Woodruff Red
15A Unclassified brownware
15B Alma Series brownware

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REDWARE

52 Puerco Black-on-red
53 Wingate Black-on-red
56 Unclassified White Mountain redware
57A Tusayan Black-on-red
57B Medicine Black-on-red
57C Middleton Black-on-red
58 Tusayan Polychrome
59 Unclassified Tsegi orangeware
60 Deadmans Black-on-red
60A Deadmans/Tsegi
61 Cameron Polychrome
62 Unclassified San Juan redware
64 Unknown redware
92 LaPlata Black-on-red
92A LaPlata/San Juan redware
93 Bluff Black-on-orange

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Table MF-E.1. Rooms 50 and 51. Ceramics: frequency and distribution.

Provenience	01	04	08	20	22	23	30	29	66B	72	39	76	13A	13H	62	TOTAL	%	Ceramic period
ROOM 50																		
Layer 7[a]	1					1	3	4				1				10	13	
Layer 1	1				1		1								1	4	5	
Floor 1																0		
Layer 1	1	3	1	1		1	6	2		2			1			18	24	
Layer 2	3	2	7			1	3		1		2		1			20	27	
Subfl TT	2		1			2			1	1						7	9	
Floor 2																0		
ROOM 51																		
Layer 1	5					2										7	9	
Floor 1																0		
O.P. 1	2	1														3	4	
Layer 2						1		1								2	3	
Floor 2								1								1	1	
Layer 3														1		1	1	
Floor 3																0		
O.P. 1					1											1	1	
Layer 4	1															1	1	
TOTAL	16	6	9	1	2	8	13	8	2	3	2	1	2	1	1	75	98	Red Mesa
%	21	8	12	1	3	11	17	11	3	4	3	1	3	1	1		100	
Form:																		
bowl					2	3	4	4	1	2			2	1	1			
jar	16	6	9	1		5	9	4	1	1	2	1						
Ware %	43 culinary			30 Cibola				13 unk	6 Chuska		4 Tusayan		4 Smudged		1 SJ rd ware		101	

[a]Layer 7, level 2: Room 142 layer that overlies Room 50.

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Table MF-E.2. Room 103. Ceramics: frequency and distribution.[a]

Provenience	01	04	09	08	05	06	07	21	22	23	24	25	26	27	77	30	29	28	66B	67	68	72
Wall clear																2						
Layer 1	3	3		30	1				1	1	1	1	24	1	2	10	21		2	1		
Layer 2	5	5		428	41		6	1		18	9	27	61	4	1	72	70			14	3	3
Floor fill	1	3		220		1	9				1	3	14		4	12	10	1	2	3	1	
Subtotal	9	11	0	678	42	1	15	1	1	19	11	31	99	5	7	96	101	1	4	18	4	3
%	1	1		50	3	T	1	T	T	1	1	2	7	T	1	7	7	T	T	1	T	T
Floor 1														1								
Plaster				7									1				1					
Heat. Pit 1	1																					
Heat. Pit 3				1																		
Other Pit 1																						1
Other Pit 3		2		1												2						
Other Pit 4				1																		
Other Pit 5				1	1												1					
Other Pit 6				1																		
Other Pit 7				11								1	6			8	2					
Niche 6																	1					
Niche 7																						
Niche 8				1																		
Vent 1				1																		
Wall chink													1									
Subtotal	1	2	0	25	1	0	0	0	0	0	0	1	8	1	0	10	5	0	0	0	0	1
%	2	4		44	2							2	14	2		18	9					2

[a]T = trace (less than 0.5%).

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Table MF-E.2. (continued)[a]

Provenience	75	74	82	84	13A	52	53	56	60	57A	59	62	TOTAL	%	Ceramic period
Wall clear													2	T	
Layer 1			1							1			104	8	
Layer 2	1	1	27	6	17	1	1	2	7	64	2	1	898	66	
Floor fill	1		4	4	2		2			52			350	26	
Subtotal	2	1	32	10	19	1	3	2	7	117	2	1	1,354	100	Late Mix
%	T	T	2	1	1	T	T	T	1	9	T	T		97	
Floor 1													1	2	
Plaster													9	16	
Heat. Pit 1													1	2	
Heat. Pit 3													1	2	
Other Pit 1													1	2	
Other Pit 3													5	9	
Other Pit 4										1			2	3	
Other Pit 5													3	5	
Other Pit 6													1	2	
Other Pit 7													28	49	
Niche 6													1	2	
Niche 7										1			1	2	
Niche 8													1	2	
Vent 1													1	2	
Wall chink													1	2	
Subtotal	0	0	0	0	0	0	0	0	0	2	0	0	57	103	Late Mix?
%										4				103	Gallup?

[a]T = trace (less than 0.5%).

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Table MF-E.2. (continued)

Provenience	01	04	09	08	05	06	07	21	22	23	24	25	26	27	77	30	29	28	66B	67	68	72
Layer 3	3	11	1	72						2		2	26			33	16		1			1
Floor 2				9																		
Heat. Pit 2				1									1									
Heat. Pit 3				2																		
Heat. Pit 5				2																		
Heat. Pit 6				3									1									
Heat. Pit 8																	1					
Heat. Pit 9													1									
Other Pit 2				5									2				2					
Posthole 2													1									
Meal. Bins		2		3									1			1						
Layer 4	1			34						3			11	5		3	2					1
Floor 3				6									7			1						
Hearth 1												1	1									
Heat. Pit 4				2																		
Heat. Pit 5																	1					
Other Pit 5				2																		
Other Pit 4				2																		
Other Pit 8				2									2				1					
Posthole 3																3						
Posthole 5				3									1			1						
Posthole 6																						
Meal. Bin 2													1									
Meal. Bin 3				3									1									
Layer 5	2	5		61			1		1	2		2	39			7	10			4		1
Floor 4																						
Other Pit 1				1																		
Other Pit 11				1					1				1				2					
Other Pit 12				2																		
Other Pit 16				3												1	1					
Other Pit 19				2																		
Other Pit 20																1						

CHCU_310_D58_VOL 4_00279

Table MF-E.2. (continued)

Proveniences	75	74	82	84	13A	52	53	56	60	57A	59	62	Total	%	Ceramic period
Layer 3					2							1	171	35	
Floor 2							1						10	(8)	
Heat. Pit 2													2		
Heat. Pit 3													2		
Heat. Pit 5													2		
Heat. Pit 6													4		
Heat. Pit 8													1		
Heat. Pit 9													1		
Other Pit 2													9		
Posthole 2													1		
Meal. Bins													7		
Layer 4	2								1			2	65	13	
Floor 3													14	(9)	
Hearth 1													2		
Heat. Pit 4													2		
Heat. Pit 5													1		
Other Pit 5													2		
Other Pit 4													2		
Other Pit 8													5		
Posthole 3													3		
Posthole 5													5		
Posthole 6												1	1		
Meal. Bin 2													1		
Meal. Bin 3													4		
Layer 5					10				2				147	30	
Floor 4													(21)	(4)	
Other Pit 1													1		
Other Pit 11													5		
Other Pit 12													2		
Other Pit 16													5		
Other Pit 19													2		
Other Pit 20													1		

CHCU_310_D58_VOL 4_00280

Table MF-E.2. (continued)[a]

Proveniences	01	04	09	08	05	06	07	21	22	23	24	25	26	27	77	30	29	28	66B	67	68	72
Posthole 6													1									
Posthole 7		1																				
Posthole 12									1													
Posthole 20				1																		
Posthole 27	1																					
Subtotal	7	19	1	222	0	0	1	0	3	7	0	5	98	5	0	51	36	0	1	4	0	3
%	1	4	T	46			T		1	1		1	20	1		11	7		T	1		1
Layer 6	6	4		1					2	3			3			6	5		2			
Floor 5																						
Layer 7	14	6							2	1						2	2					
Subtotal	20	10	0	1	0	0	0	0	4	4	0	0	3	0	0	8	7	0	2	0	0	0
%	33	17		2					7	7			5			13	12		3			
TOTAL	37	42	1	926	43	1	16	1	8	30	11	37	208	11	7	165	149	1	7	22	4	7
%	2	2	T	47	2	T	1	T	T	2	1	2	11	1	T	8	8	T	T	1	T	T
Form:																						
bowl								--5--		16	-30-		43	10	6	57	45	1	7	14	3	2
jar	37	42	1	926	43	1	16	--4--		14	-16-		164	1	1	102	97			8	1	5
other											- 2-		1			6	7					
Ware	culinary							Cibola									unk		Chuska			

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00281

Table MF-E.2. (concluded)[a]

Provenience	75	74	82	84	13A	52	53	56	60	57A	59	62	Total	%	Ceramic period
Posthole 6													1		
Posthole 7													1		
Posthole 12													1		
Posthole 20													1		
Posthole 27													1		
Subtotal	2	0	0	0	12	0	1	0	3	0	0	4	485	99	Gallup
%	T				2		T		1			1		99	
Layer 6													32	53	
Floor 5													0		
Layer 7					1								28	47	
Subtotal	0	0	0	0	1	0	0	0	0	0	0	0	60	100	Red Mesa
%					2									101	
TOTAL	4	1	32	10	32	1	4	2	10	119	2	5	1,956		
%	T	T	2	1	2	T	T	T	1	6	T	T		100	
Form:															
bowl	4	1	9	6	32	--2--		2	7		2	3			
jar			21	4		--3--			3	119		2			
other			2												
Ware	Tusayan		Mesa Verde		smu	Wt. Mt. redware			Tsegi	San Juan					

[a]T = trace (less than 0.5%).

Table MF-E.3. Room 109. Ceramics: frequency and distribution.[a]

Provenience	01	04	08	05	06	07	22	23	24	25	26	77	30	29	28	66B	67	68	72
Wall clear	1	1	13	1	1	1					1			1					1
Layer 1	5		19				1	2		2	8	1	10	11			2		
Layer 2	10	1	58	1				5		9	74	2	13	47		1	1	2	1
Layer 3		2	33							7	10	1	6	3					
Floor fill:																			
Layer 3			34					2		3	11		2	5				2	2
Layer 4			10								4		2	2					
Float.Fl.1			4							1	1								
TOTAL	16	4	171	2	1	1	1	9		22	109	4	33	69		1	3	4	4
%	3	1	37	T	T	T	T	2		5	23	1	7	15		T	1	1	1
Form:																			
bowl							1	4		10	5		6	13		1	2		1
jar	16	4	171	2	1	1		4		12	104	4	27	53			1	4	2
other								1						3					1
% Ware	42 culinary						38 Cibola							15 unk		3 Chuska			

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00283

Table MF-E.3. (concluded)[a]

Provenience	75	76	82	83	84	52	60	62	Total	%	Ceramic period
Wall clear									21	4	
Layer 1	1					1		1	64	14	
Layer 2	2		2				1	1	231	49	
Layer 3	1				3				66	14	
Floor fill:											
Layer 3			1						62	13	
Layer 4									18	4	
Float.Fl.1				1					7	2	
TOTAL	4		3	1	3	1	1	2	469	100	Late Mix
%	1		1	T	1	T	T	T		100	
Form:											
bowl	2		2	1	1	1	1	2			
jar	2		1		2						
other											
%	1		1			T	T	T		100	
Ware	Tusayan		Mesa Verde			WM	Tsegi redware	SJ			

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00284

Table MF-E.4. Room 110. Ceramics: frequency and distribution.

Provenience	01	03	04	09	08	05	06	20	22	23	24	25	26	27	77	30	29	28	66B	67	68	72
Layer 1	3		8		60	2				2		2	17			44	30	9		2		
Layer 2	7	1	11		139	3	1			6	1	9	17			25	15	7				3
Floor 1(TS)			5		28	1							20			1	11	1				1
Layer 3 (S2)					11																	
Layer 4 (S3)					1																	
Layer 5 (S4)					6	1							3			10				1		
Gen.fill (S4-5)					2											1						
Layer 6 (S5)					1								1			2						
Layer 7 (S6)	2		1		2						1		2			2	3					
Layer 8 (S7)	3		3		233	2			3	18	2		38			40	23		4		1	
Gen.fill(S4-7)	1		7		35				1		2		4			3	1				1	
Layer 9 (S8)					16								1			8	2					
Trash deposit#1			1		6								1									
Trash deposit#2					3												1					
Surface 8-9:																						
construct.	3	1	1		54							2	7			18	7					
Floor 1 features:																						
Firepit 1:																						
Layer 1			4		268	5		3					4			4	4			13		36
Layer 2					68	2																
Layer 3					8												1			1		
Layer 7					1								1									
Layer 8					5											2	1					
Firepit 2:																						
Layer 1			1										1			1						
Layer 2					1											1						
Layer 3																	1					

CHCU_310_D58_VOL 4_00285

Table MF-E.4. (continued)

Provenience	39	75	13A	13	13F	60	59	92	62	64	TOTAL	%	Ceramic period
Layer 1			10	1	1				2	1	194	6	
Layer 2			1				1			1	248	8	
Floor 1(TS)											68	2	
Layer 3 (S2)											11	T	
Layer 4 (S3)											1	T	
Layer 5 (S4)											21	1	
Gen.fill (S4-5)											3	T	
Layer 6 (S5)											4	T	
Layer 7 (S6)											13	T	
Layer 8 (S7)			29				2			1	402	13	
Gen.fill(S4-7)			13								68	2	
Layer 9 (S8)			1								28	1	
Trash deposit#1											8		
Trash deposit#2											4		
Surface 8-9: construct.			2				2	1			98	3	
Floor 1 features:													
Firepit 1:											(434)	14	
Layer 1								1	2		344		
Layer 2											70		
Layer 3											10		
Layer 7											2		
Layer 8											8		
Firepit 2:											(6)	T	
Layer 1											3		
Layer 2											2		
Layer 3											1		

CHCU_310_D58_VOL 4_00286

Table MF-E.4. (continued)

Provenience	01	03	04	09	08	05	06	20	22	23	24	25	26	27	77	30	29	28	66B	67	68	72
Heating pits:																						
HP 3					1				1													
HP 4					1											1						
HP 14					3											1						
HP 16					1								3									
HP 20					14											2						
HP 21					2																	
HP 28					4								1				1					
HP 32			1		5											2						
HP 34					2																	
HP 35					2																	
HP 37					1																	
Other pits:																						
OP 1					4											1						
OP 6					4											1						
OP 9					3											2	2					
OP 12																1						
OP 15					4																	1
OP 17			1		1											1						
OP 20					5																	
OP 22					18					1			7			10	8					
OP 24					1											1	1				1	
OP 25					2																	
OP 31	1				11							1	2			4	4					
OP 33					11											7	1					
OP 35					2							1	1			2						
OP 36					9								3				2					
OP 37																				1		
OP 38					5								1			2	2					
OP 39			1		86	1							6			16	12	1				
OP 40	1		1		5											2	3					
OP 42					8								3			1	1					
OP 46					26												1					
OP 49			2		34								1			1	4					

CHCU_310_D58_VOL 4_00287

Table MF-E.4. (continued)

Provenience	39	75	13A	13	13F	60	59	92	62	64	TOTAL	%	Ceramic period
Heating pits:											(49)	2	
HP 3											2		
HP 4											2		
HP 14											4		
HP 16											4		
HP 20											16		
HP 21											2		
HP 28											6		
HP 32											8		
HP 34											2		
HP 35											2		
HP 37											1		
Other pits:											(1,197)	40	
OP 1											5		
OP 6											5		
OP 9		1					1				9		
OP 12											1		
OP 15											5		
OP 17											3		
OP 20											5		
OP 22				2							46		
OP 24											4		
OP 25											2		
OP 31											23		
OP 33											19		
OP 35											6		
OP 36											14		
OP 37											1		
OP 38			3								13		
OP 39											123		
OP 40											12		
OP 42		1									14		
OP 46									1	1	29		
OP 49											42		

CHCU_310_D58_VOL 4_00288

Table MF-E.4. (continued)

Provenience	01	03	04	09	08	05	06	20	22	23	24	25	26	27	77	30	29	28	66B	67	68	72
OP 51			4		30					2			2				7					
OP 52					1											1	1					
OP 54	2				11	1					1	2	17			6	4					
OP 55	1		3		64	1							5			1	6					
OP 56			1		12								1									
OP 57					1																	
OP 58					2	1				1			2			2						
OP 59			1		2											2	3					
OP 60					32	2																
OP 61					1											1						
OP 62					8											4	1					
OP 63					17							1				3	2					
OP 64	1															1						
OP 66		3			11								3			5	4					
OP 67	1				279	8							17									
OP 68					14												1					
OP 69													2									
OP 70	1		2		17											1						
OP 71			5		60	3				1			7				4					
OP 72	2				5											2	1					
OP 73	5		4		12								3			5						
OP 74					21	1						1	4			2	2					
Postholes:																						
PH 11			1																			
PH 14					1																	
PH 18																			1			
PH 20																1						
PH 40																1						
PH 45					3					2			1									
PH 47					1											2						
Mealing bins:																						
MB 1					2	3							1			2	2					
MB 2					7								1			3						1
MB 3					9									4	1							
MB 4	1				5								5			3	3					
MB 5																						
MB 6					1																	

CHCU_310_D58_VOL 4_00289

Table MF-E.4. (continued)

Provenience	39	75	13A	13	13F	60	59	92	62	64	TOTAL	%	Ceramic period
OP 51			2								47		
OP 52											3		
OP 54								1			45		
OP 55								1			82		
OP 56			2								16		
OP 57											1		
OP 58			1								9		
OP 59											8		
OP 60									1		35		
OP 61											2		
OP 62											13		
OP 63											23		
OP 64											2		
OP 66											26		
OP 67											305		
OP 68											15		
OP 69											2		
OP 70											21		
OP 71			3								83		
OP 72			2								12		
OP 73			3								32		
OP 74								2	1		34		
Postholes:											(15)	T	
PH 11											1		
PH 14											1		
PH 18											1		
PH 20											1		
PH 40											1		
PH 45											6		
PH 47			1								4		
Mealing bins:											(55)	2	
MB 1											10		
MB 2											12		
MB 3											14		
MB 4											17		
MB 5						1					1		
MB 6											1		

CHCU_310_D58_VOL 4_00290

T[redacted] MF-E.4. (continued)[a]

Provenience	01	03	04	09	08	05	06	20	22	23	24	25	26	27	77	30	29	28	66B	67	68	72
Wall niches:																						
N 2																					1	
N 4:																						
Layer 3					6																	1
Layer 7												2					1			1		
Layer 9																1						
Layer 12										3												
N 7																			1			
N 8					3											1						
N 9			4		3							1	5			6						
N 10			2		6																	1
N 15	1		1										1			1						
Other:																						
Storage Bin #1			1																			
Vent 1					14																	
Vent 5																1	1					
Door 2																			1			
Door 6																	2					1
Subtotal	36	5	77		1,884	37	1	3	5	36	7	22	222	4	1	278	187	18	7	19	4	45
%	1	T	3		63	1	T	T	T	1	T	1	7	T	T	9	6	1	T	1	T	1
Layer 10	6	2	1		10						1	1	5			4	2					
trash deposit #1													1									
trash deposit #2					1								1			1	2					
Floor 2:																						
Firepit 1																	1					
Firepit 2	1		1							1												
Other Pit 1				2																		
Posthole 1										1												
Subtotal	7	2	2	2	11	0	0	0	0	2	1	1	7	0	0	5	5	0	0	0	0	0
%	14	4	4	4	22					4	2	2	14			10	10					

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00291

Table MF-E.4. (continued)[a]

Provenience	39	75	13A	13	13F	60	59	92	62	64	TOTAL	%	Ceramic period
Wall niches:											(54)	2	
N 2											1		
N 4:													
Layer 3											7		
Layer 7											4		
Layer 9											1		
Layer 12											3		
N 7											1		
N 8											4		
N 9								1			20		
N 10											9		
N 15											4		
Other:											(21)	1	
Storage Bin #1											1		
Vent 1											14		
Vent 5											2		
Door 2											1		
Door 6											3		
Subtotal	0	2	73	3	1	1	6	7	7	4	3,002	97	Gallup
%		T	2	T	T	T	T	T	T	T		97	
Layer 10			3								35	71	
trash deposit #1											1	2	
trash deposit #2											5	10	
Floor 2:													
Firepit 1											1	2	
Firepit 2			1								4	8	
Other Pit 1											2	4	
Posthole 1											1	2	
Subtotal	0	0	4	0	0	0	0	0	0	0	49	99	Red Mesa/Gallup
%			8									98	

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00292

Table MF-E.4. (continued)[a]

Provenience	01	03	04	09	08	05	06	20	22	23	24	25	26	27	77	30	29	28	66B	67	68	72
Layer 11	2									1						2						
Floor 3	2															2	1					
Layer 12	42	1	10	8	2			2		28						40	25		4			1
Subtotal	46	1	10	8	2	0	0	2	0	29	0	0	0	0	0	44	26	0	4	0	0	1
%	26	1	6	5	1			1		17						25	15		2			1
TOTAL	89	8	89	10	1,897	37	1	5	5	67	8	23	229	4	1	327	218	18	11	19	4	46
%	3	T	3	T	59	1	T	T	T	2	T	1	7	T	T	10	7	1	T	1	T	1
Form:																						
bowl								--5--		48	8	8	73			157	81	2	9	3		3
jar	89	8	89	10	1,897	37	1	--5--		15		15	156	4	1	165	136	16	2	16	4	40
other										4						5	1					3
Ware	culinary							Cibola									unknown		Chuska			

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00293

Table MF-E.4. (concluded)[a]

Provenience	39	75	13A	13	13F	60	59	92	62	64	TOTAL	%	Ceramic period
Layer 11											5	3	
Floor 3											5	3	
Layer 12	1								1		165	94	
Subtotal	1	0	0	0	0	0	0	0	1	0	175	100	Red Mesa
%	1								1			102	
TOTAL	1	2	77	3	1	1	6	7	8	4	3,226		
%	T	T	2	T	T	T	T	T	T	T		98	
Form:													
bowl	1	2	77	3	1		5	5	3	3			
jar						1	1	2	5	1			
other													
Ware	Tusayan		smudged			Tsegi redware		SanJuan redware		unk			

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00294

Table MF-E.5. Room 112. Ceramics: frequency and distribution.[a]

Provenience	01	03	04	09	08	05	06	07	21	22	23	24	25	26	27	77	30	29	65	66A	69	72
Layer 1	2				1						1					1	4	1				
Layer 2	6		2		6						1			2			8	6				1
Layer 3	11		11	1	27					1	4		1	4			31	10				
Layer 4	2				11												2	1				
Layer 5	2				9				1		2		1	1			1	4				
Floor fill:																						
Layer 3	5				85	1	1	1			1	1	1	8	1		13	11				
Layer 4	2				29						1	13		1			10	6				
Layer 5	3		3		72						2		4	24			13	15			5	
Surface 1																						
Floor 1	1		5		9					1				3			2	5				
Other Pit 2					1																	
Niche 2			4		7									1			2	2				
Niche 6	1				2												1					
Subtotal	35		25	1	259	1	1	1	1	2	12	14	7	44	1	1	87	61			5	1
%	6		4	T	44	T	T	T	T	T	2	2	1	8	T	T	15	10			1	T
Layer 6	4		1		4						2	1	1	1			5	2				
Floor 2														1			1	1				
Other Pit 1					3								1	4								
Other Pit 2		1			2									1			1					
Other Pit 3			1														3					
Posthole 1	1																					
Subtotal	5	1	2		9						2	1	2	7			10	3				
%	12	2	5		21						5	2	5	17			24	7				

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00295

Table MF-E.5. (continued)[a]

Provenience	39	75	80	84	13A	56	92	62	64	TOTAL	%	Ceramic period
Layer 1										10	2	
Layer 2					1	1				34	6	
Layer 3		1		1	1	2				106	18	
Layer 4					1	1			2	20	3	
Layer 5										21	4	
Floor fill:												
Layer 3				1		5				135	23	
Layer 4										62	11	
Layer 5		2			1	2				146	25	
Surface 1										0	0	
Floor 1		2								28	5	
Other Pit 2										1	T	
Niche 2					1					17	3	
Niche 6										4	1	
Subtotal		5		2	5	11			2	584	101	Late? Gallup
%		1		T	1	2			T		97	
Layer 6										21	50	
Floor 2										3	7	
Other Pit 1										8	19	
Other Pit 2										5	12	
Other Pit 3										4	10	
Posthole 1										1	2	
Subtotal										42	100	Gallup
%											100	

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00296

Table MF-E.5. (continued)[a]

Provenience	01	03	04	09	08	05	06	07	21	22	23	24	25	26	27	77	30	29	65	66A	69	72
Layer 7	32	6	4	2	2					2	6						20	15				
Floor fill:																						
Layer 7											2						1					
Surface 2	2		1										1				1					
Layer 8	92	4	24	5	6					7	42						66	32	1	1		2
Subtotal	126	10	29	7	8					9	50		1				88	47	1	1		2
%	32	3	7	2	2					2	13		T				22	12	T	T		1
TOTAL	166	11	56	8	276	1	1	1	1	11	64	15	10	51	1	1	185	111	1	1	5	3
%	16	1	5	1	27	T	T	T	T	1	6	1	1	5	T	T	18	11	T	T	1	T
Form:																						
bowl									--11--		27	14	5	8	1		64	41				
jar	166	11	56	8	276	1	1	1	-- 1--		37	1	5	43		1	120	67	1	1	5	2
other																	1	3				1
Ware	culinary								Cibola									unk	Chuska			

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00297

Table MF-E.5. (concluded)[a]

Provenience	39	75	80	84	13A	56	92	62	64	TOTAL	%	Ceramic period
Layer 7	1				3					93	23	
Floor fill:												
Layer 7										3	1	
Surface 2										5	1	
Layer 8	2		1		6		2	2		295	74	
Subtotal	3		1		9		2	2		396	99	Red Mesa
%	1		T		2		1	1			101	
TOTAL	3	5	1	2	14	11	2	2	2	1,022		
%	T	1	T	T	1	1	T	T	T		97	
Form:												
bowl	3	5	1	2	14	11	2	2	1			
jar									1			
other												
	Tusayan		Mesa Verde		smudged	Wht. Mt. r	Tsegi r e d		SJ w a r e	unk		

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00298

ble MF-E.6. Room 138. Ceramics: frequency and stribution.

Provenience	01	04	09	08	22	23	24	25	26	77	30	29	66B	67	72
Wall clear				1								1			
Layer 1[a]					1	1			1						
Layer 2	11	1		11		1	1	2	5	1	3	6		1	
Floor fill:															
Layer 2	2			1						2	2	1			2
Floor 1 plaster		1													
Subtotal	13	2		13	1	2	1	2	6	3	5	8		1	2
%	21	3		21	2	3	2	3	10	5	8	13		2	3
Layer 3	11	2	2		1	2					2	4	1		
Floor fill:															
Layer 4	1														
Layer 5	4		1	1		1					3	3			
Floor 2	2											1			
Other Pit 1					1										
Wall Tr. 2															1
Wall chinks	3										1	1			
Subtotal	21	2	3	1	2	3					6	9	1		1
%	40	4	6	2	4	6					12	17	2		2
TOTAL	34	4	3	14	3	5	1	2	6	3	11	17	1	1	3
%	30	4	3	12	3	4	1	2	5	3	10	15	1	1	3
Form:															
bowl					2	1		1	3	3	2	6	1		3
jar	34	4	3	14	1	3	1	1	3		8	10		1	
other						1					1	1			
Ware	culinary				Cibola							unk	Chuska		

[a]Artifacts from Levels 1-11 within Layer 1 (Test Trench 1) lost in field.

CHCU_310_D58_VOL 4_00299

Table MF-E.6. (concluded)

Provenience	82	84	13A	62	Total	%	Ceramic period
Wall clear					2	3	
Layer 1[a]					3	5	
Layer 2	1	1			45	73	
Floor fill:							
Layer 2			1		11	18	
Floor 1 plaster					1	2	
Subtotal	1	1	1		62	101	Late Mix
%	2	2	2			102	
Layer 3				1	26	50	
Floor fill:							
Layer 4		1	1		3	6	
Layer 5					13	25	
Floor 2					3	6	
Other Pit 1					1	2	
Wall Tr. 2					1	2	
Wall chinks					5	10	
Subtotal		1	1	1	52	101	Red Mesa
%		2	2	2		101	
TOTAL	1	2	2	1	114		
%	1	2	2	1		103	
Form:							
bowl	1	1	2	1			
jar		1					
other							
Ware	Mesa Verde		smudged	San Juan redware			

[a]Artifacts from Levels 1-11 within Layer 1 (Test Trench 1) lost in field.

CHCU_310_D58_VOL 4_00300

Table MF-E.7. Room 139. Ceramics: frequency and distribution.[a]

Provenience	01	03	04	09	08	05	22	23	25	26	27	77	30	29	66B	67	69A	72
Wall clear														1			1	
Surface												1		1				
Level 5										1								
Level 6	1									2			5	5				
Level 7	1				3					2			3					
Level 8					2			1						2				
Level 10					3					1				1				
Level 11			1					1		1			2					
Level 12					1									1				
Level 13					1			1										
Layer 1					1			1		6			1					
Layer 2					2			1					1					
Layer 3					2			1	1	3			2	4				
Layer 4	7		3		21	1		4	1	19	1		10	12		1		1
Layer 5	2				3	1		5		4			2	1				
Layer 6	2		1		26			1	3	2			1	4				
Layer 7																		
Floor fill:																		
Layer 4								2										
Layer 5										2								
Layer 6																		
Floor 1:																		
Other Pit 5	1																	
Posthole 1	1									1								
Posthole 4				1														
Subtotal	15		5	1	65	2		18	5	44	1	1	27	32		1	1	1
%	6		2	T	28	1		8	2	19	T	T	12	14		T	T	T

[a]T = Trace (less than 0.5%).

CHCU_310_D58_VOL 4_00301

Table MF-E.7. (continued)[a]

Provenience	82	84	13A	52	56	60	62	TOTAL	%	Ceramic period
Wall clear								2	1	
Surface								2	1	
Level 5								1	T	
Level 6								13	6	
Level 7								9	4	
Level 8				1				6	3	
Level 10								5	2	
Level 11								5	2	
Level 12			1					3	1	
Level 13							2	4	2	
Layer 1								9	4	
Layer 2								4	2	
Layer 3		1						14	6	
Layer 4	3	1	1				2	88	38	
Layer 5					1			19	8	
Layer 6								40	17	
Layer 7								0		
Floor fill:								(5)	2	
Layer 4								2		
Layer 5								2		
Layer 6							1	1		
Floor 1:								(4)	2	
Other Pit 5								1		
Posthole 1								2		
Posthole 4								1		
Subtotal	3	2	2	1	1		5	233	101	Late Mix
%	1	1	1	T	T		2		97	

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00302

Table MF-E.7. (continued)[a]

Provenience	01	03	04	09	08	05	22	23	25	26	27	77	30	29	66B	67	69A	72
Layer 9	38	1	6	3	1		1	25					8	15	5			
Layer 10	70	2	24	2	13	1	13	79					44	36	5			1
Floor 2:																		
Heat.Pit 1	1							1						2				
Heat.Pit 3								2						2				1
Heat.Pit 5	1																	
Heat.Pit 6	2		1		4			3					2					
Heat.Pit 12	1						1	3					1					
Other Pit 1													1					
Other Pit 2							1							1				
Other Pit 3	3				3													
Other Pit 13														1				
Other Pit 14					1									1				
Posthole 1								1										
Posthole 6							1											1
Posthole 8	1																	
Wall Tr. 2					1													
Wall Tr. 3			4															
Wall Tr. 4								1										
Wall Tr. 5	5				1			1					1	1				
Wall Tr. 6			1					1					2	1				
Wall chinks								3					3					
Subtotal	122	3	36	5	24	1	17	120					62	60	10			3
%	25	1	7	1	5	T	4	25					13	12	2			1

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00303

Table MF-E.7. (continued)[a]

Provenience	82	84	13A	52	56	60	62	TOTAL	%	Ceramic period
Layer 9			1				3	107	22	
Layer 10			20					310	64	
Floor 2:								(71)	15	
Heat.Pit 1								4		
Heat.Pit 3								5		
Heat.Pit 5								1		
Heat.Pit 6								12		
Heat.Pit 12								6		
Other Pit 1								1		
Other Pit 2						1		3		
Other Pit 3								6		
Other Pit 13								1		
Other Pit 14								2		
Posthole 1								1		
Posthole 6								2		
Posthole 8								1		
Wall Tr. 2								1		
Wall Tr. 3								4		
Wall Tr. 4								1		
Wall Tr. 5								9		
Wall Tr. 6								5		
Wall chinks								6		
Subtotal			21			1	3	488	101	Red Mesa
%			4			T	1		101	

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00304

Table MF-E.7. (continued)[a]

Provenience	01	03	04	09	08	05	22	23	25	26	77	44	30	29	66B	67	69A	72
TOTAL	137	3	41	6	89	3	17	138	5	44	1	1	89	92	10	1	1	4
%	19	T	6	1	12	T	2	19	1	6	T	T	12	13	1	T	T	1
Form:																		
bowl							15	62	1	13		1	29	36	10			
jar	137	3	41	6	89	5	2	72	4	31	1		58	56		1	1	4
other								4					2					
Ware	culinary						Cibola							unk	Chuska			

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00305

Table MF-E.7. (concluded)[a]

Provenience	82	84	13A	52	56	60	62	TOTAL	%	Ceramic period
	—	—	—	—	—	—	—	—		
TOTAL	3	2	23	1	1	1	8	721		
%	T	T	3	T	T	T	1		97	
Form:										
bowl	2	1	23	1	1	1	7			
jar	1	1					1			
other										
Ware	Mesa Verde		smudged	Wt. Mt. Tsegi SJ r e d w a r e						

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00306

Table MF-E.8. Room 142. Ceramics: frequency and distribution.[a]

Provenience	01	03	04	09	08	05	07	06	22	23	24	25	26	77	30	29	28	65	66B	67	69A	72
Wall clear					16	2				1		1	4		1	1						
Layer 1			5		6					1			1	2	1	3				1	4	
Layer 2					2					2			1	2		2					4	
Layer 3	1		1									1	2		1							
Layer 4	54		3		98		1	3	1	6		1	4	1	3	8			1			
Layer 5	10		1		42		2			4				1	1	4				2		
Layer 6	62		7	9	217		6	8		21	1	10	22	106	12	80			1	2	15	8
Floor fill:																						
Layer 6	1													11					1		3	2
Floor 1:																						
Posthole 1	1				1																	
Posthole 2																			1			
Posthole 4									1													
Floor 2:					1																	
Other Pit 4	2																					
Fl. plaster															1							
Subtotal	131		17	9	383	2	9	11	2	35	1	13	34	123	20	98			4	5	26	10
%	13		2	1	38	T	1	1	T	4	T	1	3	12	2	10			T	1	3	1
Layer 7	41	4	6	8	4				1	19					26	12						2
Wall Tr. 1																						
Layer 1	37	4	11	4	1				2	4					11	7		1				
Layer 2	9									1					3	13			2			
Layer 3			1												1	1						
Layer 4	1																					
Layer 5	4		1	1						3					3	3						2
Wall Tr. 2	7								2	1					2	3						

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00307

Table MF-E.8. (continued)[a]

Provenience	39	73	76	80	82	13A	59	62	TOTAL	%	Ceramic period
Wall clear									26	3	
Layer 1					2		1		27	3	
Layer 2					1				14	1	
Layer 3					1				7	1	
Layer 4			2				1		187	19	
Layer 5									67	7	
Layer 6			2		47				636	64	
Floor fill:											
Layer 6					6	1			25	3	
Floor 1:											
Posthole 1									2	T	
Posthole 2									1	T	
Posthole 4									1	T	
Floor 2:									1	T	
Other Pit 4									2	T	
Fl. plaster	1								2	T	
Subtotal	1		4		57	1	2		998	101	Late Mix
%	T		T		6	T	T			99	
Layer 7		2				2			127	16	
Wall Tr. 1											
Layer 1	5					2			89	11	
Layer 2									28	3	
Layer 3									3	T	
Layer 4									1	T	
Layer 5									17	2	
Wall Tr. 2									15	2	

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00308

Table MF-E.8. (continued)[a]

Provenience	01	03	04	09	08	05	07	06	22	23	24	25	26	77	30	29	28	65	66B	67	69A	72
Layer 8	36		4		4					7					10	12						
Wall chinks	1		2	3					1	5					1	4			2			
Floor 3:																						
Heat.Pit 1	6			1											1							
Heat.Pit 2	1															1						
Other Pit 1	6		2							4					2	6	1					1
Posthole 6										1												
Layer 9	12		3	1	1				1						5	12						1
Layer 10	7									1					2							
Floor 4:																						
Heat.Pit 2	3		3	2	1										2	1						
Heat.Pit 4	4														1							
Layer 11	7		2		6					2					13	6						1
Floor 5:																						
Layer 12	15	2	7		1					9					10	7			1			1
Layer 13	3				2										1	1						
Floor 6:																						
Other Pit 8	3															2						
Layer 14A	17	1	4	2	5				1	6					7	12	1					
Floor 7:																						
Other Pit 1	1																					
Layer 14B	17		6	2						4					3	10		1				2
Floor 8:										1												1
Layer 14C	54		19	1										1	4	1						1
Layer 15	20		1	4						1					7	6						
Layer 16	4		1							4												
Floor 9:																						
Heat.Pit 1	1																					
Subtotal	317	11	73	29	25				8	73				1	115	120	2	2	5			12
%	39	1	9	4	3				1	9				T	14	15	T	T	1			1

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00309

Table MF-E.8. (continued)[a]

Provenience	39	73	76	80	82	13A	59	62	TOTAL	%	Ceramic period
Layer 8		2				2			77	9	
Wall chinks									19	2	
Floor 3:											
Heat.Pit 1									8	1	
Heat.Pit 2									2	T	
Other Pit 1		1		1					24	3	
Posthole 6									1	T	
Layer 9	1								37	5	
Layer 10									10	1	
Floor 4:											
Heat.Pit 2						1			13	2	
Heat.Pit 4									5	1	
Layer 11									37	5	
Floor 5:									0	0	
Layer 12									53	6	
Layer 13									7	1	
Floor 6:											
Other Pit 8									5	1	
Layer 14A				1					57	7	
Floor 7:											
Other Pit 1									1	T	
Layer 14B								3	48	6	
Floor 8:									2	T	
Layer 14C						1			82	10	
Layer 15									39	5	
Layer 16									9	1	
Floor 9:											
Heat.Pit 1									1	T	
Subtotal	6	5		2		8		3	817	100	Red Mesa
%	1	1		T		1		T		100	

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00310

Table MF-E.8. (continued)[a]

Provenience	01	03	04	09	08	05	07	06	22	23	24	25	26	77	30	29	28	65	66B	67	69A	72
TOTAL	448	11	90	38	408	2	9	11	10	108	1	13	34	124	135	218	2	2	9	5	26	22
%	25	1	5	2	22	T	T	1	1	6	T	1	2	7	7	12	T	T	T	T	1	1
Form:																						
bowl									7	56		4	12	93	51	110		--3--				11
jar	448	11	90	38	408	2	9	11	3	50	1	9	21	31	83	108	2	--8--		5	26	11
other										2			1		1							
Ware	culinary								Cibola							unk		Chuska				

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00311

Table MF-E.8. (concluded)[a]

Provenience	39	73	76	80	82	13A	59	62	TOTAL	%	Ceramic period
TOTAL	7	5	4	2	57	9	2	3	1,815		
%	T	T	T	T	3	T	T	T		97	
Form:											
bowl	--5	--	2		9	9	2				
jar	--7	--	2	2	48			3			
other											
Ware	Tusayan			Mesa Verde		smud.	Tsegi redware	SJ			

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00312

Table MF-E.9. Room 143. Ceramics: frequency and distribution.[a]

Provenience	01	03	04	09	08	05	06	22	23	24	25	26	77	30	29	28	40
Wall clear					30	1	2		1		2	4		1			
Layer 1	19		28		556	9	8		3	3	2	24	10	36	44	6	19
Layer 2	2		2		105		2		1	3	50	16	22	23	28		
Floor 1:																	
Heat. Pit 3					1												
Wall Tr. 1														1			
Door 13 fill														1	1		
Subtotal	21		30		692	10	12		5	6	54	44	32	62	73	6	19
%	2		3		59	1	1		T	1	5	4	3	5	6	1	2
Layer 3					9							1		2	1		
Floor 2:					1							1			1		
Heat. Pit 2	1				1												
Other Pit 1												6		5	2		
Layer 4	1				2				1		1	5		3	2		
Floor 3:																	
Other Pit 3					7									1			
Layer 5					2							6			1		
Floor 4																	
Layer 6	2				4										2		
Layer 7			2		1							2		1	6		
Layer 8					1				1					1			
Layer 9					1												
Rodent hole					1												
Layer 10	3				2				2		1			2	1		
Rodent hole												1		1	1		
Floor 6:																	
Wall Tr. 1			1														
Subtotal	7		3		32				4		2	22		16	17		
%	7		3		30				4		2	21		15	16		

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00313

Table MF-E.9. (continued)[a]

Provenience	66B	67	68	72	75	82	84	13A	53	52	60	64	TOTAL	%	Ceramic period
Wall clear								2					43	4	
Layer 1		2	3	9		6	10	5	1	1	1		805	69	
Layer 2		1	19	1	17	9	6	2	1			2	312	27	
Floor 1:															
Heat. Pit 3													1	T	
Wall Tr. 1							1						2	T	
Door 13 fill													2	T	
Subtotal		3	22	10	17	15	17	9	2	1	1	2	1,165	100	Late Mix
%		T	2	1	1	1	1	1	T	T	T	T		100	
Layer 3													13	12	
Floor 2													3	3	
Heat. Pit 2													2	2	
Other Pit 1													13	12	
Layer 4				1									16	15	
Floor 3:															
Other Pit 3													8	8	
Layer 5													9	8	
Floor 4															
Layer 6													8	8	
Layer 7											1		13	12	
Layer 8													3	3	
Layer 9													1	1	
Rodent hole													1	1	
Layer 10													11	10	
Rodent hole								1					4	4	
Floor 6:															
Wall Tr. 1													1	1	
Subtotal				1				1			1		106	100	Gallup
%				1				1			1			101	

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00314

Table MF-E.9. (continued)[a]

Provenience	01	03	04	09	08	05	06	22	23	24	25	26	77	30	29	28	40
Layer 11														1			
Floor 7																	
Layer 12	2																
Rodent hole	4							1	1					2	1		
Floor 8					1									1	1		
Layer 13	5		2	1	2				1			1		5	3		
Layer 14	46	1	14		12				23					29	16		
Floor 9			1						3					1	1		
Floor 10			1						1					1			
Subtotal	57	1	18	1	15			1	29			1		40	22		
%	29	1	9	1	8			1	15			1		20	11		
TOTAL	85	1	51	1	739	10	12	1	38	6	56	67	32	118	112	6	19
%	6	T	3	T	50	1	1	T	3	T	4	5	2	8	8	T	1
Form:																	
bowl								1	22		3	17	19	49	37	6	12
jar	85	1	51	1	739	10	12		15	6	53	50	11	68	74		7
other									1				2	1	1		
Ware	culinary							Cibola							unknown		

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00315

Table MF-E.9. (concluded)[a]

Provenience	66B	67	68	72	75	82	84	13A	53	52	60	64	TOTAL	%	Ceramic period
Layer 11													1	1	
Floor 7															
Layer 12													2	1	
Rodent hole				1									10	5	
Floor 8				1							1		5	3	
Layer 13													20	10	
Layer 14	1							1			4	1	148	75	
Floor 9				1				1			1		9	5	
Floor 10	—			—				—			—	—	3	2	
Subtotal	1			3				2			6	1	198	102	Red Mesa
%	1			2				1			3	1		104	
TOTAL	1	3	22	14	17	15	17	12	2	1	8	3	1,469		
%	T	T	1	1	1	1	1	1	T	T	1	T		99	
Form:															
bowl		3	19	12	17	14	14	12	2	1	7	3			
jar	1		2	1		1	3				1				
other			1	1											
Ware	Chuska				Tus.	MesaVerde		smud.	Wt.Mt. red ware		Tse.	un.			

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00316

Table MF-E.10. Room 145. Ceramics: frequency and distribution.[a,b]

Provenience	01	04	08	05	07	06	23	25	26	27	77	30	29	40	67	72	75	13A	59	64	TOTAL	%	Ceramic Period
Level 4			2																		2	1	
Level 5	3		4									2									9	2	
Level 6									1												1	T	
Layers 1-4			1				1		1			1					1				5	1	
Layer 2	1	1	2				2		1			3			1						11	3	
Layer 4									3	1			1							1	6	2	
Layer 5		1	1				2			2		5	1	2							14	4	
Layer 6			1						3			1		1		1			1		8	2	
Layer 7:																							
Levels 1-6	10	4	109	1	3		8	7	21	2	1	25	13	6				3		4	217	57	
Level 7	1		61		1	2	1		4	1		1	2	5		1	1			3	84	22	
Floor fill			14					2				4	1	2						4	27	7	
Floor 1																					0		
TOTAL	15	6	195	1	4	2	14	9	34	6	1	42	18	16	1	2	2	3	1	12	384	101	Late Mix
%	4	2	51	T	1	1	4	2	9	2	T	11	5	4	T	1	1	1	T	3		102	
Form:																							
bowl							5		9	3		6	7	10	1	1	2	3	1	8			
jar	15	6	195	1	4	2	9	8	23	3		24	10	6						4			
other								1	2		1	12	1			1							
%			58						28				9			1	1	1	T	3			
Ware			culinary						Cibola				unk			Chuska	Tus	smu	Tse redware	unk			

[a]T = trace (less than 0.5%).
[b]Carbons and redwares misplaced and unable to be identified to type.

CHCU_310_D58_VOL 4_00317

Table MF-E.11. Room 146. Ceramics: frequency and distribution.[a]

Provenience	01	03	04	09	08	05	06	07	20	22	23	24	25	26	27	77	30	29	28
Wall clear					1					1				2				2	
Layer 1	1				2						2			3		2	1	3	
Layer 2					1			1										2	
Layer 3	6		1		143	1	1			2	6	1	3	28	2	54	13	124	
Floor fill:																			
Layer 3	1				59						3			2			5	10	
Floor 1																			
Subtotal	8		1		206	1	1	1		3	11	1	3	35	2	56	19	141	
%	1		T		37	T	T	T		1	2	T	1	6	T	10	3	25	
Layer 4	2		2								2							1	
Floor 2:																			
Other Pit 1											2								
Wall chinks	2									2	7								
Layer 5	7		1		2					1	3						2	7	
Floor 3:																			
Firepit 1	62	4	24	4	5					1	17						18	9	
Heat. Pit 1	3			7													1	1	
Wall Tr. 1	24	3	3								9			2			15	7	
Layer 6	22		6		1						3						4	3	
Floor 4																			
Layer 7	2										1						2		2
Layers 7-11	2			1														2	

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00318

Table MF-E.11. (continued)[a]

Provenience	65	66B	67	69A	72	80	82	84	13A	62	TOTAL	%	Ceramic Period
Wall clear								1			7	1	
Layer 1				3							17	3	
Layer 2				7							11	2	
Layer 3			6	51			2			3	447	79	
Floor fill:													
Layer 3									2		82	15	
Floor 1											0	0	
Subtotal			6	61			2	1	2	3	564	100	Late Mix
%			1	11			T	T	T	1		99	
Layer 4											7	1	
Floor 2:													
Other Pit 1											2	T	
Wall chinks											11	2	
Layer 5											23	4	
Floor 3:													
Firepit 1		2							12		158	28	
Heat. Pit 1											12	2	
Wall Tr. 1											63	11	
Layer 6											39	7	
Floor 4											0	0	
Layer 7											7	1	
Layers 7-11											5	1	

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00319

Table MF-E.11. (continued).[a]

Provenience	01	03	04	09	08	05	06	07	20	22	23	24	25	26	27	77	30	29	28
Floor 5																			
Layer 8	17	1	1	1					2		2								
Layer 9	15	4	4								2						8	1	
Layer 10																			
Floor 6																			
Layer 11	20	1	9		1						2						6	2	
Floor 7																			
Layer 12	42	25	14	7							6						13	15	
Floor 8																			
Layer 13		1																	
Floor 9																			
Subtotal	220	39	64	20	9				2	4	56			2			69	48	2
%	40	7	12	4	2				T	1	10			T			12	9	T
TOTAL	228	39	65	20	215	1	1	1	2	7	67	1	3	37	2	56	88	189	2
%	20	3	6	2	19	T	T	T	T	1	6	T	T	3	T	5	8	17	T
Form:																			
bowl									2	7	33		2	16		1	21	26	2
jar	228	39	65	20	215	1	1	1			32	1	1	21	2	55	66	163	
other											2						1		
Ware	culinary								Cibola									unk	

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00320

Table MF-E.11. (concluded).[a]

Provenience	65	66B	67	69A	72	80	82	84	13A	62	TOTAL	%	Ceramic Period
Floor 5													
Layer 8											24	4	
Layer 9	2										36	6	
Layer 10													
Floor 6													
Layer 11					1					1	43	8	
Floor 7													
Layer 12					1	1					124	22	
Floor 8													
Layer 13											1	T	
Floor 9													
Subtotal	2	2			2	1			12	1	555	97	Red Mesa
%	T	T			T	T			2	T		99	
TOTAL	2	2	6	61	2	1	2	1	14	4	1,119		
%	T	T	1	5	T	T	T	T	1	T		97	
Form:													
bowl	1	1				1	1		14	3			
jar	1	1	6	61	2		1	1					
other										1			
Ware	Chuska					Mesa Verde			smud.	red ware			

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00321

Table MF-E.12. Room 147. Ceramics: frequency and distribution.[a]

Provenience	01	04	08	05	06	23	25	26	27	77	30	29	68	69A	72	75
Wall clear			3					4			2	4				
Layer 1		1	11	1	1			1				1				
Layer 2	8	12	503	7		7	1	60	2	7	78	68	2		5	1
Floor fill:																
Layer 2	1		52	1		1	1	19		1	30	18		4	6	
Layer 3			5					2			4	2		3	4	
Floor 1														1		
Firepit 1														1		
Heat. Pit 3			6													
Niche 4												1				
TOTAL	9	13	580	9	1	8	2	86	2	8	114	94	2	9	15	1
%	1	1	56	1	T	1	T	8	T	1	11	9	T	1	1	T
Form:																
bowl						5		20	1	1	24	31	2	9	11	1
jar	9	13	580	9	1	3	2	66	1	7	90	62			4	
other												1				
%			60					21				9		3		T
Ware			culinary					Cibola				unk		Chuska		Tusay.

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00322

Table MF-E.12. (concluded)[a]

Provenience	81	82	84	13A	56	60	57A	59	64	TOTAL	%	Ceramic period
Wall clear			1						1	15	1	
Layer 1		2			1					19	2	
Layer 2		20	14	4	1	2		2		804	78	
Floor fill:												
Layer 2	4	3		13			1			155	15	
Layer 3	2	1		1						24	2	
Floor 1	1									2	T	
Firepit 1										1	T	
Heat. Pit 3										6	1	
Niche 4										1	T	
TOTAL	7	26	15	18	2	2	1	2	1	1,027	99	Late Mix
%	1	3	1	2	T	T	T	T	T		98	
Form:												
bowl	7	19	11	18	2		1	2	1			
jar		7	4			2						
other												
%		5		2	T		1		T		101	
Ware		Mesa Verde		smud.	Wh.Mt.		--Tsegi-- redware		unk			

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00323

Table MF-E.13. Room 229. Ceramics: frequency and distribution.[a]

Provenience	01	02	04	09	08	23	24	25	26	30	29	28	68	72	75	62	64	TOTAL	%	Ceramic period
Wall clear		1			2													3	1	
Layer 1	2				7	2			2	3	1				1			18	3	
Layer 2	4				1				1	2				2		1	1	12	2	
Layer 4A	7				111	2		3	11	7	6					1		148	28	
Layer 4B	3		3		167	2	1	2	6	7	8	2	3					204	38	
Layer 5	1				25		1		4	2	1	2						36	7	
Layer 6	2		2		49	1	5	2	8	15	23	5	1					113	21	
Floor 1								1										1	T	
Subtotal	19	1	5		362	7	7	8	32	36	39	9	4	2	1	2	1	535	100	Gallup
%	4	T	1		68	1	1	1	6	7	7	2	1	T	T	T	T		99	
Layer 7	1		1		1	2		1		2	2	1		1				12	31	
Floor 2:																				
Posthole 5			1															1	3	
Layer 8	3		1	1		3			1	9	7			1				26	67	
Subtotal	4		3	1	1	5		1	1	11	9	1		2				39	101	Red Mesa/
%	10		8	3	3	13		3	3	28	23	3		5					102	Gallup
TOTAL	23	1	8	1	363	12	7	9	33	47	48	10	4	4	1	2	1	574		
%	4	T	1	T	63	2	1	2	6	8	8	2	1	1	T	T	T		99	
Form:																				
bowl						5	1	8	17	23	26	10	4	2	1	1				
jar	23	1	8	1	363	6	6	1	16	24	22			1		1	1			
other						1								1						
Ware	culinary					Cibola					unk		Chuska		Tus	SJ un redware				

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00324

Table MF-E.14. Room 233 Test Trench. Ceramics: frequency and distribution.[a]

Provenience	01	04	08	06	07	22	23	25	26	27	31	77	30	29	65	68	72	73	75	82	84	13A	52	56	62	TOTAL	%	Period
Wall clear	2	2	116	5	2	1	2	8	25	2	24	1	8	32[b]			1	1	1	1	1	2	1	1		239	69	
Layer 1			7				1	1	3				2	1	1							2			1	19	6	
Layer 2		3	38				2	1	5	1			8	6		1				1	2	3	2			73	21	
Layer 3			6						3				2	1							1		1			14	4	
TOTAL	2	5	167	5	2	1	5	10	36	3	24	1	20	40	1	1	1	1	1	2	4	7	4	1	1	345	100	Late
%	1	1	48	1	1	T	1	3	10	1	7	T	6	12	T	T	T	T	T	1	1	2	1	T	T		97	Mix
Form:																												
bowl						1	3	7	14		24	1	8	14	1	1	1	1	1	1	1	7	4	1				
jar	2	5	167	5	2		2	3	22	3			11	26						1	2				1			
other													1								1							
% Ware	52 culinary					29 Cibola								12 unk	1 Chuska			1 Tusay.		2 Mesa Verde		2 smud	1 WtMt redware		T SJ		100	

[a]T = trace (less than 0.5%).
[b]A partly restorable Reserve B/w bowl.

CHCU_310_D58_VOL 4_00325

Table MF-E.15. Room 236. Ceramics: frequency and distribution.

Provenience	01	08	24	26	30	29	13A	TOTAL	%	Ceramic period
Floor 1 (see Rm. 143)										
Floor 2						1		1	3	
Fl. 4 fill	1	2	1		3			7	20	
Floor 4	5	2		5			1	13	37	
Firepit 1				1	1			2	6	
PH 1		1						1	3	
Fl. 5 fill		1						1	3	
Floor 5	1					2	2	5	14	
Heat. Pit 1					4	1		5	14	
TOTAL	7	6	1	6	8	4	3	35	100	Gallup
%	20	17	3	17	23	11	9		100	
Form:										
bowl			1	4			3			
jar	7	6		2	8	4				
other										
%	37		43			11	9		100	
Ware	culinary		Cibola			unk	smud.			

CHCU_310_D58_VOL 4_00326

Table MF-E.16. Trash-filled Kivas 2, 8, and 9 in Plaza 1.[a]

Provenience	01	04	08	05	06	07	22A	23	24	25	26	27	77	30	29	66A	67	68	72
Kiva 2	6	8	186	3	3			13		5	23		12	17	40			4	
%	2	2	57	1	1			4		2	7		4	5	12			1	
Kiva 8	2		165		2	2	1	6	1	7	35	2	10	18	33	1	2	2	3
%	1		55		1	1	T	2	T	2	12	1	3	6	11	T	1	1	1
Kiva 9	10	3	181	1	2			2	1		27	1	10	48	44		5		3
%	3	1	52	T	1			1	T		8	T	3	14	13		1		1
TOTAL	18	11	532	4	7	2	1	21	2	12	85	3	32	83	117	1	7	6	6
% Ware	59 culinary						24 Cibola								12 unk.	2 Chuska			

[a]T = less than 0.5% (trace).

CHCU_310_D58_VOL 4_00327

Table MF-E.16. (concluded)[a]

Provenience	39	75	76	81	82	13A	52	53	56	57A	58	59	TOTAL	%	Ceramic period
Kiva 2		1	2	1	1		1		1		1		328		Late Mix
%		T	1	T	T		T		T		T			99	
Kiva 8	1	1		1	1	1	1		2	1		1	302		Late Mix
%	T	T		T	T	T	T		1	T		T		99	
Kiva 9		1	3	1		1	1	1	2			1	349		Late Mix
%		T	1	T		T	T	T	1			T		100	
TOTAL	1	3	5	3	2	1 1	3	1	5	1	1	2	979		
% Ware		1 Tusayan		1 Mesa Verde		T smudged	1 White Mt. redwares				T Tsegi			100	

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00328

Table MF-E.17. Kiva 10, Test Trench. Ceramics: frequency and distribution.[a]

Provenience	01	04	09	08	05	06	07	22	23	24	25	26	27	30	91	77	30	29	66	67	68	69	70	72
Wall clear.	1	1		42					6		3	7				5	16	23				2		1
Between wall	2			12						2		1						5						
Level 9												1				2		3						
Level 11				4								1					2	1						
Level 12		1		6								1				1		2						
Level 13				3							1							2						
Level 14				34						1	3	3				2	4	9			1	1		1
Surface 1																								
Subtotal	3	2		101					6	3	7	14				10	22	45			1	3		2
%	1	1		42					2	1	3	6				4	9	19			T	1		1
Level 15	3	2		130	3	1	2				13	3				3	13	38						
Level 16	6	2		159	1					2	6	2	1		1	8	24	54	1		1	1	1	6
Level 17	3	2		321	4	2	2			5	18	25			2	31	69	128		9	5	2	4	14
Level 18	3	2		236	4				3	12	14	16	1		1	16	59	87		12	1	6		17
Level 19	6	5		245		3	2			8	5	8	1	1	1	14	49	54		5	4	3	1	26
Level 20	2	4		174		5	1			5	2	13	1		1	17	35	45	2	34	6	3		10
Level 21	8	1		241	3	1		1		5	9	7		1		18	50	82		15	1	7		11
Surface 2																								
Level 22	1	3		194	2	1			2	2	1	18		1		34	35	42		1	4			7
Level 23	6	5		386	1		3	1		4	6	24				25	35	60		14	10			10
Level 24	7	11		433	8	3	2		3	4	14	11			10	21	36	59		8	15			12
Level 25	7	10	2	360		3	4		2	35	38	22				33	53	101		4	11	1	3	17
Level 26	2	4		468	3	3	4	2		17	31	39				41	83	111	1		5	3	2	14
Level 27	3			288	3	3	1			50	12	47	3			8	79	79	1	4	2	1		3
Subtotal	57	51	2	3635	32	25	21	4	10	149	169	235	7	3	16	269	620	940	5	106	65	27	11	147
%	1	1	T	47	T	T	T	T	T	2	2	3	T	T	T	4	8	12	T	1	1	T	T	2

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00329

Table MF-E.17. (continued)[a]

Provenience	75	76	90	80	81	82	84	13B	13D	13A	13F	52	53	56	57B	57A	61	58	59	92	62	TOTAL	%	Period
Wall clear.						9		3													2	121	51	
Between wall						1																23	10	
Level 9																						6	2	
Level 11																						8	3	
Level 12																						11	5	
Level 13																						6	2	
Level 14							5															64	27	
Surface 1																						0	0	
Subtotal						10	5	3													2	239	100	LateMix
%						4	2	1													1	98		
Level 15					8	17	11			4		4		5				1	5			266	3	
Level 16	2				3	48	9			4		6		5							1	354	5	
Level 17	8		1		9	37	45			18		10		8					5			787	10	
Level 18	4		1	2	3	31	9			3		7		4		2			3			559	7	
Level 19	2		5		2	22	9	5	9			3		5		4	5	1	1			514	6	
Level 20	2	2	1		1	29	15		43	11		2				1		1	2			470	6	
Level 21	1	1				5	23			8		11		1				1	4			516	6	
Surface 2																								
Level 22	6	4				8	13		1	16		2				2						400	5	
Level 23	2	1			3	10	19			15		3	1	4		1						649	8	
Level 24	1	2			10	41	19			14		11		1	1	3		1	3			764	9	
Level 25	3					30	63		10	12	1	5		7	1	8			5		1	852	10	
Level 26						39	41			13		7	1	9				2	6	2		953	12	
Level 27						15	17			15		13	2	7				2	8			666	8	
Subtotal	31	10	8	2	39	332	293	5	63	133	1	84	4	56	2	21	5	9	42	2	2	7,750		LateMix
%	T	T	T	T	1	4	4	T	1	2	T	1	T	1	T	T	T	T	1	T	T		100	

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00330

Table MF-E.17. (continued)[a]

Provenience	01	04	09	08	05	06	07	22	23	24	25	26	27	30	91	77	30	29	66	67	68	69	70	72
Level 28	1			123	1	1				9	5	6	1				36	41	1	28		3		2
Subtotal	1			123	1	1				9	5	6	1				36	41	1	28		3		2
%	T			46	T	T				3	2	2	T				14	15	T	11		1		1
TOTAL	61	53	2	3859	33	26	21	4	16	161	181	255	8	3	16	279	678	1026	6	134	66	33	11	151
%	1	1	T	47	T	T	T	T	T	2	2	3	T	T	T	3	8	12	T	2	1	T	T	2
Forms:																								
bowl								2	10	73	27	66	3	3	16	143	230	324	5	90	57	28	11	107
jar	61	53	2	3859	33	26	21		6	88	154	187	5			130	429	665	1	44	8	5		41
other								2				2				6	19	37			1			3
% Ware	49 culinary							19 Cibola										12 unk.	5 Chuska					

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00331

Table MF-E.17. (concluded)[a]

Provenience	75	76	90	80	81	82	84	13B	13D	13A	13F	52	53	56	57B	57A	61	58	59	92	62	TOTAL	%	Period
Level 28					1					5		1								2		267		
Subtotal					1					5		1								2		267		Gallup
%					T					2		T								1			98	
TOTAL	31	10	8	2	40	342	298	8	63	138	1	85	4	56	2	21	5	9	42	4	4	8,256		
%	T	T	T	T	1	4	4	T	1	2	T	1	T	1	T	T	T	T	1	T	T		99	
Forms:																								
bowl	31	10	8	2	34	224	178	8	63	138	1	85	4	50	2	20	5	9	30	4	3			
jar					5	118	114							6		1			12		1			
other					1		6																	
%	1			8				3				2			1					T		100		
Ware	Tusayan			Mesa Verde				smudged				White Mt.			Tsegi					SanJuan				

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00332

Table MF-E.18. Wall clearing the late kivas located along the east side of Plaza 1.[a]

Provenience	01	04	08	05	06	23	25	26	27	77	30	29	66A	67	68	72
Kiva 12	9	10	35			3	5	14	2		15	18	1		1	1
%	7	8	28			2	4	11	2		12	15	1		1	1
Kiva 14	11	5	167		8	8	14	50	18	6	41	64	1	2	1	2
%	3	1	41		2	2	3	12	4	1	10	16	T	T	T	T
P. F. 4	4	4	159	3	2	4	34	71	5		38	56		6	5	3
%	1	1	39	1	T	1	8	17	1		9	14		1	1	1
Total	24	19	361	3	10	15	53	135	25	6	94	138	2	8	7	6
Form:																
bowl						12	4	1		4	2	4	1	2	2	3
jar	24	19	361	3	10	3	10	28		2	23	21	1	6	5	3
ladle							37	105	24		66	113				
unknown							2	1	1		3					
% Ware	44 culinary					36 Cibola						17 unk.	2 Chuska			

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00333

Table MF-E.18. (concluded)[a]

Provenience	75	82	84	13A	52	53	56	60	59	TOTAL	%	Ceramic period
Kiva 12	1	2	2	1		1		1	1	123		
%	1	2	2	1		1		1	1		101	Late Mix
Kiva 14		6	2	3		1	1			411		
%		1	T	1		T	T				98	Late Mix
P. F. 4	1	1	3	8	3				1	411		
%	T	T	1	2	1				T		99	Late Mix
Total	2	9	7	12	3	2	1	1	2	945		
Form:												
bowl	2	8	5	12	3	2	1	1	2			
jar		1	2									
ladle												
unknown												
%	T	2		1		1			T		103	
Ware	Tusayan	M.V.		smudg		Wh.Mt. redwares			Tsegi			

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00334

Table MF-E.19. Kiva 13, Test Trench. Ceramics: frequency and distribution.[a]

Provenience	01	04	09	08	05	06	23	24	25	26	27	30	29	28	66B	67	68	72
Level 1	1	1	2	41		1	4		2	16	1	15	6					
Level 2	1	2		37		2	2		3	10	1	3	14			1		
Level 3	2			43	2	1	2	1	2	11	1	10	13		1	1		
Level 4		1		65		1	3		6	13		11	9	1	2	1		
Level 5	1	10	1	85		4	11		10	43		26	26			18	2	1
Level 6				49			3	1	7	23		7	12	1	1	3	1	1
Level 7																		
Level 8				2														
Level 9										2								
TOTAL	5	14	3	322	2	9	25	2	30	118	3	72	80	2	4	24	3	2
%	1	2	T	42	T	1	3	T	4	16	T	9	11	T	1	3	T	T
Forms:																		
bowl							18	1	13	23		29	19	2	1	4		
jar	5	14	3	322	2	9	6	1	17	94	3	39	58		3	20	3	2
other							1			1		4	3					
% Ware	47 culinary						33 Cibola						11 unknown		4 Chuska			

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00335

Table MF-E.19. (concluded)[a]

Provenience	75	82	13D	13A	13F	52	56	57C	59	TOTAL	%	Ceramic period
Level 1				2	2		1			95	13	
Level 2				4	2					82	11	
Level 3					11				1	102	13	
Level 4		1		3	4					121	16	
Level 5	1		1	1	1	1		1		244	32	
Level 6	1			1	4					115	15	
Level 7										0		
Level 8										2	T	
Level 9										2	T	
TOTAL	2	1	1	11	24	1	1	1	1	763	100	Gallup
%	T	T	T	1	3	T	T	T	T		97	
Forms:												
bowl	1	1	1	11	24	1		1				
jar	1						1		1			
other												
%	T	T	5			T		T			100	
Ware	Tusayan	M.V.	smudged			Wt. Mt. redware		Tsegi				

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00336

Table MF-E.20. Kiva 15. Ceramics: frequency and distribution.

Provenience	01	04	08	06	22	23	24	25	26	77	30	29	66B	67	75	76
Wall clearing			1			1										
Level 2												1				
Level 3											2					
Level 4			2						2							
Level 5									1		1					
Level 6									1							
Level 7	1		4						1			1				
Level 8			1						1							
Level 9	1								2		1					
Level 10		1	4				1					3			1	
Level 11			2						2	1	1	1				
Layer 2			1			1			1							
Layer 2/3																
Layer 3			1						2			3				
Layer 5	3		9			3			2		2	4				
Layer 6	6	7	23	1	3				14		14	16				1
Layer 6/7															1	
Layer 7	2	1	13	1	1	3		7	9	5	7	9		1	19	
Floor fill			28				1		5	1	1	1			1	
Floor 1			2						10						19	
construction			1													
Bench:																
top			2						1	1		3				
construction								1	2							

CHCU_310_D58_VOL 4_00337

Table MF-E.20. (continued)

Provenience	81	82	84	13F	13A	60	58	62	TOTAL	%	Ceramic period
Wall clearing									2	1	
Level 2									1	T	
Level 3									2	1	
Level 4									4	1	
Level 5						1			3	1	
Level 6									1	T	
Level 7									7	2	
Level 8			2						4	1	
Level 9									4	1	
Level 10									10	2	
Level 11			2						9	2	
Layer 2						1			4	1	
Layer 2/3		1							1	T	
Layer 3									6	1	
Layer 5			1						24	6	
Layer 6		7	2						94	22	
Layer 6/7									1	T	
Layer 7		11	2		1		1	1	94	22	
Floor fill		2	1					1	42	10	
Floor 1		1	1		1				34	8	
construction									1	T	
Bench:											
top									7	2	
construction					1				4	1	

CHCU_310_D58_VOL 4_00338

Table MF-E.20. (continued)[a]

Provenience	01	04	08	06	22	23	24	25	26	77	30	29	66B	67	75	76
Firepit 1: construction						1					1					
fill	3		6					1	4		3					
Firepit 2: construction									1							
Other Pit 2	1											2				
Vent fill	2		13	1		1			6		4	6			2	
Subtotal	19	9	113	3	4	10	2	9	67	8	37	50		1	43	1
%	5	2	27	1	1	2	1	2	16	2	9	12		T	10	T
N & S wall construction	9		85	1		14			20		21	19	3	1		
Subtotal	9		85	1		14			20		21	19	3	1		
%	5		47	1		8			11		12	10	2	1		
TOTAL	28	9	198	4	4	24	2	9	87	8	58	69	3	2	43	1
%	5	2	33	1	1	4	T	2	15	1	10	12	1	T	7	T
Form: bowl					2	12		7	18	3	14	21	1		43	1
jar	28	9	198	4	2	12	2	2	68	4	42	43	2	2		
other									1		2	5				
% Ware	40 culinary				32 Cibola							12 unk.	1 Chuska		7 Tusayan	

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00339

Table MF-E.20. (concluded)[a]

Provenience	81	82	84	13F	13A	60	58	62	TOTAL	%	Ceramic period
Firepit 1:											
construction									2	1	
fill									17	4	
Firepit 2:											
construction									1	T	
Other Pit 2									3	1	
Vent fill		2							37	9	
Subtotal		24	11	1	3	2	1	2	419	100	Late Mix
%		6	3	T	1	1	T	1		102	
N & S wall construction	1		2		2	1		1	181	100	
Subtotal	1		2		2	1		1	181	100	Gallup
%	1		1		1	1		1		102	
TOTAL	1	24	13	1	5	3	1	3	600		
%	T	4	2	T	1	1	T	1		103	
Form:											
bowl	1	17	5	1	5	3	1	3			
jar		7	8								
other											
%		6		1		1		T		100	
Ware		Mesa Verde		smudged		Tsegi redwares		San Juan			

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00340

Table 21. Kiva 16, test trenches.[a]

Provenience	1	3	4	8	5	6	7	21	22	23	24	25	26	27	77	30	29	67	68	72
Kiva 16																				
Layer 1:																				
General			2	32								1				5	5			
Level 1	16		17	550	1	1	10	1		11	8	15	75	10	4	88	126	1	7	9
Level 2	4		7	661	2	7	5			4	3	20	75	5	25	55	117	3	21	9
Level 3	1		1	257	3	3	8			4	3	8	41	6	5	42	86	2	1	3
Vent tunnel				1					1	1	1									
Subtotal	21		27	1,501	6	11	23	1	1	20	15	44	191	21	34	190	334	6	29	21
%	1		1	56	T	T	1	T	T	1	1	2	7	1	1	7	12	T	1	1
Layer 2	3	1	1	65	1	1	4			6		5	4	1		12	10			
%	3	1	1	56	1	1	3			5		4	3	1		10	9			
TOTAL	24	1	28	1,566	7	12	27	1	1	26	15	49	195	22	34	202	344	6	29	21
%	1	T	1	56	T	T	1	T	T	1	1	2	7	1	1	7	12	T	1	1
Form:																				
bowl								1	1	18	6	21	64	3	13	62	90	6	10	11
jar	24	1	28	1,566	7	12	27			8	9	27	131	19	21	134	245		19	10
other												1				6	9			
%	59							19									12	2		
Ware	culinary							Cibola									unk	Chuska		

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00341

Table MF-E.21. (concluded)[a]

Provenience	75	82	84	13I	13Dr	13A	13F	52	56	60	57A	59	TOTAL	%	Ceramic period
Kiva 16															
Layer 1:															
General													45	2	
Level 1	20	23	13		1	4	2	1	1		4	2	1,021	38	
Level 2	12	16	14		6	9	6	3				2	1,091	40	
Level 3	14	5	13	1		12	2				1	2	524	20	
Vent tunnel													4	T	
Subtotal	46	44	40	1	7	25	10	4	1		5	6	2,685	100	Late Mix
%	2	2	2	T	T	1	T	T	T		T	T		100	
Layer 2										1	1	1	117		Gallup
%										1	1	1		101	
TOTAL	46	44	40	1	7	25	10	4	1	1	6	7	2,802		
%	2	2	1	T	T	1	T	T	T	T	T	T		99	
Form:															
bowl	46	19	14	1	7	25	10	4	1	1	3	7			
jar		24	23								3				
other		1	3												
%	2	3		2				1							
Ware	Tusayan	M.V.		smudged				Wh.Mt. Tsegi redware							

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00342

Table MF-E.22. Kiva 17, test trenches.

Provenience	1	4	8	7	23	25	26	27	77	30	29	75	13A	TOTAL	%	Ceramic period
Kiva 17																
Level 2	3		35	1		1	6			4	7	1	2	60	32	
Level 3			16	1			1	1		1	6	5	1	32	17	
Level 4			18			3	1		1	1	2	1	1	28	15	
Level 5			26	2			3			7	3	1	1	43	23	
Level 6			10		1		1			2				14	8	
"Storage Bin"		1	3				1			2	1			8	4	
TOTAL	3	1	108	4	1	4	13	1	1	17	19	8	5	185	99	Late Gallup
%	2	1	58	2	1	2	7	1	1	9	10	4	3		101	
Form:																
bowl						1	2			6	3		5			
jar	3	1	108	4	1	2	11	1	1	10	16	8				
other						1				1						
%	63				20						10	4	3		100	
Ware	culinary				Cibola						unknown	Tusa	smud.			

CHCU_310_D58_VOL 4_00343

Table MF-E.23. Plaza 1, northeast side. Loose's test trench (in a probable kiva). Ceramics: frequency and distribution.[a]

Provenience	01	04	08	05	06	22	22	25	26	27	77	30	29	67	72	75	82	13A	13F	64	TOTAL	%	Ceramic Period
Level 1		5	187	5	1		3	17	56	8	1	37	46	3	5	5	1	2	2	1	385	78	
Level 2	1		56	2		1	1	3	20			15	8	1	1	1					110	22	
TOTAL	1	5	243	7	1	1	4	20	76	8	1	52	54	4	6	6	1	2	2	1	495	100	Late? Gallup
%	T	1	49	1	T	T	1	4	15	2	T	11	11	1	1	1	T	T	T	T		98	
Form:																							
bowl						1	2	9	19	6		16	?	3	2	1	1	2	2	1			
jar	1	5	243	7	1		2	10	57	2	1	36	?	1	4	5							
other								1															
% Ware	52 culinary					33 Cibola							1 unk	2 Chuska		1 Tus	T M.V.	1 smudged		T SnJn		100	

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00344

Table MF-E.24. Plaza Feature 1, wall clearing. Ceramics: frequency and distribution.

Provenience	01	08	05	07	06	23	24	25	26	77	30	29	67	90	60	TOTAL	%	Ceramic period
General		4	1		1							1				7	5	
Room 1																		
Wall clearing		13		2					2			2				19	13	
Room 2																		
Wall clearing		5				1			1			2				9	6	
Room 5																		
Wall clearing		24		1	1				3	1	5	4				39	26	
Test trench:																		
Layer 1		2						2	3	1	3		1			12	8	
Layer 2	1	27	1			4	1	1	1	1	6	4		1	2	50	33	
Layer 3		9	1			1		1			2					14	9	
TOTAL	1	84	3	3	2	6	1	4	10	3	16	13	1	1	2	150	100	Late Mix
%	1	56	2	2	1	4	1	3	7	2	11	9	1	1	1		102	
Form:																		
bowl						3	1	3	5	1	7	9		1	2			
jar	1	84	3	3		3		1	5	2	9	4	1					
other																		
% Ware		62 culinary						27 Cibola				9 unk.	1 Chusk	1 Littl Col.	1 Tsegi orang		101	

CHCU_310_D58_VOL 4_00345

Table MF-E.25. Plaza Feature 1, Room 3. Ceramics: frequency and distribution.

Provenience	01	03	04	09	08	05	07	06	22	23	24	25	26	27	77	30	29	14	66B	67	68	72
Layer 1					6					2			2		2	1	1					
Layer 2	1		1		56					3		2	8		2	2	10					1
Layer 3	6		11		382	5		5		27		15	34	5	16	42	52			4	3	7
Floor fill:																						
Layer 3	5		4		230			6		9	2	9	47	3	10	25	53			4		3
Layer 4	1				58			2		2		6	3			3	5			6		2
Layers 5-13																						
Floor 1					3							1					1					
Plaster	1				1					1			1			2						
Replast. 1	1				9						2	1	1				2					
Replast. 2					3				1							1						
Replast. 3	1											1										
Replast. 4					1								1				1					
Replast. 6									1													
Replast. 9	1																1					
Firepit 1:																						
Layer 2					14						1	8	10		2	5	7			2		2
Layer 3	1				18					1		2	1		1	6	3		1	1		
Floor																		2				
Firepit 2:																						
Layer 2					3								1			2						
Layer 4					8	1						3	6	1	1	2	2					
Layer 5					2							4	1				1					
Layer 6												2	1									
Layer 7												2										
Layer 9			1																			
Floor																		2				

CHCU_310_D58_VOL 4_00346

Table MF-E.25. (continued)

Provenience	75	82	84	13H	13A	53	52	56	60	64	TOTAL	%	Ceramic period
Layer 1											14	1	
Layer 2			2								88	6	
Layer 3	9	1	6	2	2			3			637	42	
Floor fill:													
Layer 3	7		12		2	4	1			1	437	29	
Layer 4	1	3					1		1		94	6	
Layer 5-13											0	0	
Floor 1	1							1			7	T	
Plaster			1								7	T	
Replast. 1											16	1	
Replast. 2											5	T	
Replast. 3					1		1				4	T	
Replast. 4											3	T	
Replast. 6											1	T	
Replast. 9											2	T	
Firepit 1:											(100)	7	
Layer 2	2		3								56		
Layer 3	4		2					1			42		
Floor											2		
Firepit 2:											(55)	4	
Layer 2			1								7		
Layer 4			2			3					29		
Layer 5											8		
Layer 6			2								5		
Layer 7			1								3		
Layer 9											1		
Floor											2		

CHCU_310_D58_VOL 4_00347

Table MF-E.25. (continued)[a]

Provenience	01	03	04	09	08	05	07	06	22	23	24	25	26	27	77	30	29	14	66B	67	68	72
Firepit 3:																						
Layer 1													1									
Layer 2			1		7			1									3					
Layer 3					3	1											1					
Layer 4													1									
Layer 5					3																	
Layer 6												2			1		1					
Layer 8					2							1										
Other Pit 1					2												2					
Other Pit 2					6		1									2	2					
Other Pit 8					1																	
Posthole 7																1						
Posthole 8					1																	
Bin 1					1							1	1									
Subtotal	18		18		820	7	1	14	2	45	5	60	120	9	35	94	148	4	1	17	3	15
%	1		1		54	T	T	1	T	3	T	4	8	1	2	6	10	T	T	1	T	1
Floor 2	2																					
Other Pit 1	2	1	1		2					2						2	4					
Layers 14-17																						
Layer 18	5		3		4					1			5			8	3					
Posthole 1													1									
Subtotal	9	1	4		6					3			6			10	7					
%	20	2	9		13					7			13			22	15					

[a]T = trace (less than 0.5%).

Table MF-E.25. (continued)[a]

Provenience	75	82	84	13H	13A	53	52	56	60	64	TOTAL	%	Ceramic period
Firepit 3:											(29)	2	
Layer 1											1		
Layer 2											12		
Layer 3											5		
Layer 4											1		
Layer 5											3		
Layer 6											4		
Layer 8											3		
Other Pit 1											4	T	
Other Pit 2	1										12	1	
Other Pit 8											1	T	
Posthole 7											1	T	
Posthole 8											1	T	
Bin 1											3	T	
Subtotal	25	4	32	2	5	7	3	5	1	1	1,521	99	Late Mix
%	2	T	2	T	T	T	T	T	T	T		98	
Floor 2											2	4	
Other Pit 1											14	30	
Layers 14-17											0	0	
Layer 18											29	63	
Posthole 1											1	2	
Subtotal											46	99	Gallup
%												101	

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00349

Table MF-E.25. (continued)[a]

Provenience	01	03	04	09	08	05	07	06	22	23	24	25	26	27	77	30	29	14	66B	67	68	72
Layer 19	8				4					1						9	4					
Layer 20	1																					
Floor 3																						
Layer 21	9		2		1					3						3	1					
Floor 4																						
Layers 22-23																						
Layer 24	18	3	7	2						5						10	2					
Layer 25																						
Layer 26										2												
	—	—	—	—	—					—						—	—					
Subtotal	36	3	9	2	5					11						22	7					
%	8	3	9	2	5					12						23	7					
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL	63	4	31	2	831	7	1	14	2	59	5	60	126	9	35	126	162	4	1	17	3	15
%	4	T	2	T	50	T	T	1	T	4	T	4	8	1	2	8	10	T	T	1	T	1
Form:																						
bowl									1	30	3	36	14	1	21	49	42	4	1	7	2	9
jar	63	4	31	2	831	7	1	14	1	28	1	24	112	8	14	77	118			10	1	6
other										1	1						2					
Ware	culinary								Cibola								unk		Chuska			

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00350

Table MF-E.25. (concluded)[a]

Provenience	75	82	84	13H	13A	53	52	56	60	64	TOTAL	%	Ceramic period
Layer 19											26	27	
Layer 20											1	1	
Floor 3											0	0	
Layer 21											19	20	
Floor 4											0	0	
Layers 22-23											0	0	
Layer 24											47	49	
Layer 25											0	0	
Layer 26											2	2	
Subtotal											95	99	Red Mesa
%												99	
TOTAL	25	4	32	2	5	7	3	5	1	1	1,662		
%	2	T	2	T	T	T	T	T	T	T		100	
Form:													
bowl	24	4	15	2	5	6	3	5	1				
jar	1		17			1							
other										1			
Ware	Tusayan	Mesa Verde		smudged		Wh.Mt. redwares		Tsegi		un			

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00351

Table MF-E.26. Plaza Feature 1, Room 4. Ceramics: frequency and distribution.

Provenience	01	03	04	09	08	05	07	06	21	22	23	24	25	26	27	77	30	29	28	66B	67	68	69	72
Wall clear					2												1							
Layer 1	1				8												3	4						
Layer 2	42		27	1	969	8	1	3	1	3	8	2	13	16	3	10	92	83		1	3	6	1	19
Layer 3	7		3		137						4			1		1	9	9			2			
Layer 4	1		2		19									1			3	4						
Surface 1					1																			
Subtotal	51		32	1	1,136	8	1	3	1	3	12	2	13	18	3	11	108	100		1	5	6	1	19
%	3		2	T	73	1	T	T	T	T	1	T	1	1	T	1	7	6		T	T	T	T	1
Layer 5	2		1		7					1	3						3	1						
Layer 6			1		14																1			
Surface 2:																								
Other Pit 1					8													1						
Other Pit 2					1													1						
Layer 7					3												1	2						
Layer 8	2				1												1	1		1				
Surface 3					3							1		2				1						1
Layer 9																								
Layer 10																								
Layer 11																								

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00352

Table MF-E.26. (continued)[a]

Provenience	75	82	84	13A	53	52	56	57A	60	57B	59	64	TOTAL	%	Ceramic Period
Wall clear													3	T	
Layer 1													16	1	
Layer 2	10	1	4	1	2	1	1	1	2	1		1	1,337	85	
Layer 3	1	2	1								3		180	12	
Layer 4													30	2	
Surface 1													1	T	
Subtotal	11	3	5	1	2	1	1	1	2	1	3	1	1,567	100	Late Mix
%	1	T	T	T	T	T	T	T	T	T	T	T		98	
Layer 5	1												19	19	
Layer 6													16	16	
Surface 2:															
Other Pit 1													9	9	
Other Pit 2													2	2	
Layer 7													6	6	
Layer 8													6	6	
Surface 3													8	8	
Layer 9													0		
Layer 10													0		
Layer 11													0		

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00353

Table MF-E.26. (continued)[a]

Provenience	01	03	04	09	08	05	07	06	21	22	23	24	25	26	27	77	30	29	28	66B	67	68	69	72
Surface 3.5																								
Layer 12	4		1		2						1						2	5						
Surface 4	2	1												1			1							
Layer 13	1		1														1	1						
Surface 5																								
Layer 14	3																2							
Layer 15																								
Layer 16	1		1														1							
Subtotal	15	1	5		39					1	4	1		3			12	13		1	1			1
%	15	1	5		40					1	4	1		3			12	13		1	1			1
TOTAL	66	1	37	1	1,175	8	1	3	1	4	16	3	13	21	3	11	120	113		2	6	6	1	20
%	4	T	2	T	71	T	T	T	T	T	1	T	1	1	T	1	7	7		T	T	T	T	1
Form:																								
bowl										--3--		7	3	3	4	2	7	40	29		1	4	3	1	15
jar	66	1	37	1	1,175	8	1	3		--2--		9		10	17	1	4	79	82		1	2	3		5
other																		1	2						
Ware	culinary								Cibola									unk		Chuska				

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00354

Table MF-E.26. (concluded)[a]

Provenience	75	82	84	13A	53	52	56	57A	60	57B	59	64	TOTAL	%	Ceramic Period
Surface 3.5													0		
Layer 12													15	15	
Surface 4													5	5	
Layer 13													4	4	
Surface 5													0		
Layer 14													5	5	
Layer 15													0		
Layer 16													3	3	
	—												—	—	
Subtotal	1												98	98	Red Mesa/
%	1													99	Gallup
	—	—	—	—	—	—	—	—	—	—	—	—	———	—	
TOTAL	12	3	5	1	2	1	1	1	2	1	3	1	1,665		
%	1	T	T	T	T	T	T	T	T	T	T	T		97	
Form:															
bowl	12	3	2	1	2	1	1	--1--		1	3	1			
jar			3					--2--							
other															
Ware	Tusayan	Mesa Verde		smu.	Wh.Mt.			Tsegi r e d w a r e s				unk.			

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00355

Table MF-E.27. Plaza 1, Grid 8. Ceramics: frequency and distribution.

Provenience	01	03	04	09	08	22	23	24	25	26	77	30	29	28	66B	67	68	69	72
Level 6					3														
Level 7					7														
Level 8					5								1						
Level 9					1		1												
Level 10												1							1
Level 11	1				2									1		1			
Level 12					6		1			2		4	7						1
Layer 1	1				11		2			4		8				2		1	
Floor 1																			
Layer 2A					2							1							
Layer 2B					4					1		2	6						
Layer 2C	4				22		1			5		21	9				3		
Floor 2					1														
Plaster					2											1			
Other Pit 1			1		12		1			2	1		3	1					
Layer 3					2								3						
Layer 4	2		2		62		1	3	1	2	6	10	6						1
Layer 5																			1
Floor 3					1														
Layer 6																			
Layer 7					6														
Subtotal	8		3		149		7	3	1	16	7	47	35	2		4	3	1	4
%	3		1		48		2	1	T	5	2	15	11	1		1	1	T	1

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00356

Table MF-E.27. (continued)[a]

Provenience	76	82	84	13A	53	52	56	60	59	62	64	TOTAL	%	Ceramic period
Level 6												3	1	
Level 7												7	2	
Level 8												6	2	
Level 9												2	1	
Level 10												2	1	
Level 11												5	2	
Level 12						1						22	7	
Layer 1				1	1							31	10	
Floor 1												0		
Layer 2A												3	1	
Layer 2B			1									14	5	
Layer 2C			1	1						3	2	72	23	
Floor 2												1	T	
Plaster							1					4	1	
Other Pit 1												21	7	
Layer 3											1	6	2	
Layer 4		2	1				1				1	101	33	
Layer 5												1	T	
Floor 3											1	2	1	
Layer 6														
Layer 7												6	2	
Subtotal		2	3	2	1	1	2			3	5	309	101	Late Mix
%		1	1	1	T	T	1			1	2		99	

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00357

Table MF-E.27. (continued)

Provenience	01	03	04	09	08	22	23	24	25	26	77	30	29	28	66B	67	68	69	72
Layer 8																			
Layer 9			1									2	1						1
Floor 4							1												
Other Pit 2	23		6		4		6					16	6		1				
Posthole 4												1							
Layer 10																			1
Floor 5																			
Layer 11	1				1														
Floor 6:																			
Other Pit 4	6		2		1		1					3	1						
Posthole 1	1																		
Posthole 3					1							1							
Posthole 7	1	1	1				1												1
Layer 13	3	1	4		10		2					3	4						1
Floor 7																			
Layer 12					1														
Layer 19	37	1	15	3	9		15					22	14	1	2				3
Floor 8	3	1					2					3							
Posthole 6	1											1							
Layer 14	53	1	24	2	5		9					37	11		1				
Layer 16/17	15	2	4		2		10					17	3						
Layer 18	70		34	1	8		13					60	44						5

CHCU_310_D58_VOL 4_00358

Table MF-E.27. (continued)

Provenience	76	82	84	13A	53	52	56	60	59	62	64	TOTAL	%	Ceramic period
Layer 8												0	0	
Layer 9												5	T	
Floor 4												1	T	
Other Pit 2				1						1		64	4	
Posthole 4												1	T	
Layer 10												1	T	
Floor 5												0	0	
Layer 11												2	T	
Floor 6:														
Other Pit 4												14	1	
Posthole 1												1	T	
Posthole 3												2	T	
Posthole 7												5	T	
Layer 13												28	2	
Floor 7												0	0	
Layer 12												1	T	
Layer 19				3				1				126	8	
Floor 8												9	1	
Posthole 6												2	T	
Layer 14				2					1			146	9	
Layer 16/17												53	3	
Layer 18				1				3		2		241	15	

CHCU_310_D58_VOL 4_00359

Table MF-E.27. (continued)[a]

Provenience	01	03	04	09	08	22	23	24	25	26	77	30	29	28	66B	67	68	69	72
Layer 15:																			
General	3		3		1		3					2	3						
Level 2	79		26	11	18	1	27					47	28		2				3
Level 3-4	55		18	5	14	3	10					58	30						4
Level 5	30		10	2	9		8					27	17		1				4
Level 6	41		13	2	5		1					22	20		3				2
Level 7	31	1	6	1		1	1					11	5						1
Level 8	11	5	5				5					7	7		1				
Level 9	15	1	1	1	2		3						1		1				
Floor 9							1												
Layer 17	30		7		1		2					10	6		2				4
Subtotal	509	14	180	28	92	5	121					350	201	1	14				30
%	31	1	11	2	6	T	7					21	12	T	1				2
TOTAL	517	14	183	28	241	5	128	3	1	16	7	397	236	3	14	4	3	1	34
%	27	1	9	1	12	T	7	T	T	1	T	20	12	T	1	T	T	T	2
Form:																			
bowl						4	82	2	1	2	4	196	124	2	6	3	3		10
jar	517	14	183	28	241		44	1		13	3	197	110	1	8	1		1	24
other							2			1		4	2						
Ware	culinary					Cibola							unknown		Chuska				

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00360

Table MF-E.27. (concluded)[a]

Provenience	76	82	84	13A	53	52	56	60	59	62	64	TOTAL	%	Ceramic period
Layer 15:														
General												15	1	
Level 2				26				4		5		277	17	
Level 3-4				25				1		4		227	14	
Level 5				1							2	111	7	
Level 6				2								111	7	
Level 7										1		59	4	
Level 8												41	2	
Level 9										1		26	2	
Floor 9												1	T	
Layer 17				7						2	1	72	4	
Subtotal				68				9	1	16	3	1,642	101	Red Mesa
%				4				1	T	1	T		100	
TOTAL		2	3	70	1	1	2	9	1	19	8	1,951		
%		T	T	4	T	T	T	1	T	1	T		99	
Form:														
bowl		2	2	70	1	1	2	9	1	11	8			
jar			1							8				
other														
Ware		Mesa Verde		smud	White Mt. redwares				Tsegi	SJ	unk.			

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00361

Table MF-E.28. Plaza Grids 26-30. Ceramics: frequency and distribution.[a]

Proveniences	02	03	04	09	08	05	06	07	22	23	25	26	27	77	30	29
GRID 26																
Surface of ground	3		1		7					2	2	3		1	3	8
GRID 27																
Surface of ground					21		1			1	4	2	1	1	5	9
Level 1					3			1								
GRID 28																
Surface of ground	36	3	17	4	5				2	11	1	1			9	28
GRID 29																
Surface of ground	4	1	2		246	1	2	2		5	5	11		1	9	15
Surface 5					3							2				2
GRID 30																
Layer 4/5												2			1	
Layer 5	1									2		1				
Subtotal	44	4	20	4	285	1	3	3	2	21	12	22	1	3	27	62
%	8	1	4	1	52	T	1	1	T	4	2	4	T	1	5	11
GRID 30																
Layer 6	56	1	33	1	24					35		2			34	30
Floor 3:																
Other Pit 1																
Level 1	65	4	35		28					31					51	
Level 2	68		38		30					24					26	33
Level 3	31		36	1	5					14					17	9
Level 4	18		12	1	3					8					12	6
Level 5	8		12	3	3					4					6	9
Level 6	6				1				1						2	2
Subtotal	252	5	166	6	94				1	116		2			148	89
%	27	1	18	1	10				T	12		T			16	10

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00362

Table MF-E.28. (continued)[a]

Proveniences	02	03	04	09	08	05	06	07	22	23	25	26	27	77	30	29
TOTAL	296	9	186	10	379	1	3	3	3	137	12	24	1	3	175	151
%	20	1	13	1	26	T	T	T	T	9	1	2	T	T	12	10
Form:																
bowl									2	58	5	5	1	1	65	51
jar	296	9	186	10	379	1	3	3	1	68	7	19		2	108	98
other										11					2	2
% Ware	60 culinary								24 Cibola							10 unknown

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00363

Table MF-E.28. (continued)[a]

Proveniences	66B	66A	67	72	39	76	82	84	13I	13A	53	56	60A	92A	TOTAL	%	Ceramic period
GRID 26																	
Surface				2							3				35	6	
GRID 27																	
Surface											1		1		47	9	
Level 1												1			5	1	
GRID 28																	
Surface				1			1			1	1		1		122	22	
GRID 29																	
Surface			2	9		3	1		1				1		321	59	
Surface 5				1											8	1	
GRID 30																	
Layer 4/5															3	1	
Layer 5															4	1	
Subtotal			2	13		3	2		1	1	5	1	3		545	100	Late Mix
%			T	2		1	T		T	T	1	T	T			99	
GRID 30																	
Layer 6		3		3				1		2				1	226	24	
Floor 3:																	
Other Pit 1																	
Level 1				4	1			1		5				3	228	24	
Level 2	1	2		3						5				6	236	25	
Level 3	1	1		1						1				1	118	13	
Level 4							1	1		1			1	1	65	7	
Level 5		1								1					47	5	
Level 6		1													13	1	
Subtotal	2	8		11	1		1	3		15			1	12	933	99	Red Mesa
%	T	1		1	T		T	T		2			T	1		100	

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00364

Table MF-E.28. (concluded)[a]

Proveniences	66B	66A	67	72	39	76	82	84	13I	13A	53	56	60A	92A	TOTAL	%	Ceramic period
TOTAL	2	8	2	24	1	3	3	3	1	16	5	1	4	12	1,478		
%	T	1	T	2	T	T	T	T	T	1	T	T	T	1		100	
Form:																	
bowl	--5--			8		3	2			16	5	1	4	12			
jar	--5--		2	16	1		1	3	1								
other																	
%	2				T		T		1		T		T	1		98	
Ware	Chuska				Tusayan		M.V.		smudged & misc.		Wh.Mt. redwares		Tsegi	SJ			

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00365

Table MF-E.29. Plaza 1, Grid 35, test trench. Ceramics: frequency and distribution.

Provenience	01	04	08	07	06	23	25	26	27	77	30	29	66A	67	68	69	72
Fill above Surface 1 (entire grid)	5	3	87	1	3	6	9	22		5	16	30	1	1	1		4
Surface 1 (entire grid)		1	6				2	2		3	6	3					1
Layer 3		1	3								1	2					
Surface 2																	
Layers 1 and 2			1									1					
Surface 3																	
Surface 4			2									1					1
Layer 1			6					3				1					
Surface 5			7														
Layer 1	12	2	26				1	4	3		1	3		1			1
Layer 2	1		3				1						1				1
Surface 6			6					1		1	2	1					
Layer 1			6					1			1						
Layer 2												2					
Surface 7																	
Surface 8			1					1									
Layers 1 and 2			3								1	1					
Surface 9			1														
Layer 3			4					5									

CHCU_310_D58_VOL 4_00366

Table MF-E.29. (continued)

	75	90	82	84	13F	13A	52	56	59	60	92	64	Total	%	Ceramic period
Fill above Surface 1 (entire grid)	4	1	4	4	2		1	1	1	2			214	41	
Surface 1 (entire grid)			1	1		1							27	5	
Layer 3													7	1	
Surface 2													0	0	
Layers 1 and 2													2	T	
Surface 3													0	0	
Surface 4													4	1	
Layer 1				1									11	2	
Surface 5													7	1	
Layer 1			1	1									56	11	
Layer 2													7	1	
Surface 6													11	2	
Layer 1													8	2	
Layer 2												1	3	1	
Surface 7													0	0	
Surface 8													2	T	
Layers 1 and 2						1							6	1	
Surface 9													1	T	
Layer 3													9	2	

CHCU_310_D58_VOL 4_00367

Table MF-E.29. (continued)[a]

Provenience	01	04	08	07	06	23	25	26	27	77	30	29	66A	67	68	69	72
Surface 10																	
Layers 1 and 2		2	5					5			5	1					
Layers 1 - 3			6				3	4			1			1			1
Layer 3	1		19				2	5	1		8	3	3				
Layers 3 - 6	1		31			1	2	4			6	9			1		1
Layer 7			3								2	6					
Subtotal	20	9	226	1	3	7	20	57	4	9	50	64	5	3	2		10
%	4	2	43	T	1	1	4	11	1	2	10	12	1	1	T		2
Layer 6	9	7	7			5		5			12	6		1			1
Wall Trench 1	35	23	13			6					18	8					3
Subtotal	44	30	20			11		5			30	14		1			4
%	27	19	12			7		3			19	9		1			2
TOTAL	64	39	246	1	3	18	20	62	4	9	80	78	5	4	2		14
%	9	6	36	T	T	3	3	8	1	1	12	12	1	1	T		2
Form:																	
bowl						9	9	10	2	5	28	16	2	2	1		8
jar	64	39	246	1	3	8	11	47	2	3	50	62	3	2	1		6
other						1		5		1	2						
Ware	culinary					Cibola						unk	Chuska				

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00368

Table MF-E.29. (concluded)[a]

	75	90	82	84	13F	13A	52	56	59	60	92	64	Total	%	Ceramic period
Surface 10													0		
Layers 1 and 2	1										1		20	4	
Layers 1 - 3													16	3	
Layer 3													42	8	
Layers 3 - 6	1			1	1								59	11	
Layer 7													11	2	
Subtotal	6	1	6	8	3	2	1	1	1	2	1	1	523	99	Late Mix
%	1	T	1	2	1	T	T	T	T	T	T	T		100	
Layer 6											1		54	33	Red Mesa/Gallup
Wall Trench 1									1		1		108	67	Red Mesa
Subtotal									1		2		162	100	
%									1		1			101	
TOTAL	6	1	6	8	3	2	1	1	2	2	3	1	685		
%	1	T	1	1	T	T	T	T	T	T	T	T		98	
Form:															
bowl	6	1	3	3	3	2	1	1	2	2	2	1			
jar			3	5							1				
other															
Ware	Tusayan		Mesa Verde		smudged		Wh.Mt. redwares		Tsegi			unk			

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00369

Table MF-E.30. Plaza 1, Grids 116-117 and 307, test trenches. Ceramics: frequency and distribution.[a]

Proveniences	01	03	04	09	08	05	06	07	22	23	24	25	26	27	77	30	29	65	66A	66B	67	68	72
Layer 1	16	1	11		409		9	4		33	1	13	56	5	9	59	108		1		5	7	11
Subtotal	16	1	11		409		9	4		33	1	13	56	5	9	59	108		1		5	7	11
%	2	T	1		51		1	1		4	T	2	7	1	1	7	13		T		1	1	1
Surfaces 1-4a																							
Layers 2-3										1			1			1							
Surface 3																							
Layer 4B-C										1			1				1						
Layer 4C					2					1						2							
Surface 4b																							
Layer 5	2		2							1													
Surface 5																							
Layer 6													1										
Surface 6					2								2			1							
Subtotal	2		2		4					4			5			4	1						
%	8		8		17					17			21			17	4						

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00370

Table MF-E.30. (continued)[a]

Proveniences	39	75	82	84	13I	13F	56	60	57A	57B	59	92A	TOTAL	%	Ceramic Period
Layer 1		7	13	3	1	11	1	3	2	1	3	1	804	100	
Subtotal		7	13	3	1	11	1	3	2	1	3	1	804	100	Late Mix
%		1	2	T	T	1	T	T	T	T	T	T		98	
Surfaces 1-4													0		
Layers 2-3				1									4	17	
Surface 3													0		
Layer 4B-C													3	13	
Layer 4C													5	21	
Surface 4b													0		
Layer 5						1							6	25	
Surface 5													0		
Layer 6													1	4	
Surface 6													5	21	
Subtotal				1		1							24	101	Gallup
%				4		4								100	

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00371

Table MF-E.30. (continued)[a]

Proveniences	01	03	04	09	08	05	06	07	22	23	24	25	26	27	77	30	29	65	66A	66B	67	68	72
Layer 7B			1		8		1			1						3	1						
Surface 7			1		1																		
Layer 8	16		7		6				5	34						19	14			2		1	1
Surface 8																							
Layer 9	88	2	22	3	32				3	81		1	1			102	66	1	2			1	7
Subtotal	104	2	31	3	47		1		8	116		1	1			124	81	1	2	2		2	8
%	19	T	6	1	8		T		1	21		T	T			22	15	T	T	T		T	1
TOTAL	122	3	44	3	460		10	4	8	153	1	14	62	5	9	187	190	1	3	2	5	9	19
%	9	T	3	T	33		1	T	1	11	T	1	4	T	1	14	14	T	T	T	T	1	1
Form:																							
bowl									3	70		5	16		6	75	62	----3----				2	2
jar	122	3	44	3	460		14	4	5	79		8	44	5	3	107	127	----3----			4	6	17
other										4	1	1	2			5	1				1	1	

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00372

Table MF-E.30. (concluded)[a]

Proveniences	39	75	82	84	13I	13F	56	60	57A	57B	59	92A	TOTAL	%	Ceramic Period
Layer 7B				1		1							17	3	
Surface 7													2	T	
Layer 8												2	107	19	
Surface 8													0		
Layer 9	1					10		3			2	3	431	77	
Subtotal	1			1		11		3			2	5	557	99	Red Mesa
%	T			T		2		1			T	1		98	
TOTAL	1	7	13	5	1	23	1	6	2	1	5	6	1,385		
%	T	1	1	T	T	2	T	T	T	T	T	T		98	
Form:															
bowl		7	5	3		23	1	5	--2--		4	5			
jar	1		8	2	1			1	--1--		1	1			
other															

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00373

Table MF-E.31. Plaza 1, Grids 301-303, test trenches. Ceramics: frequency and distribution.[a]

Proveniences	01	03	04	09	08	05	06	22	23	24	25	26	27	77	30	29	28	57A	57B	65	67	68	72
Wall clear										1							1						
Layer 1	10		6		286		2		8	2	11	65	2	12	63	57	2	2			1	3	6
Surface 1																							
Subtotal	10		6		286		2		8	3	11	65	2	12	63	57	3	2			1	3	6
%	2		1		51		T		1	1	2	11	T	2	11	10	1	T			T	1	1
Layer 2	10		2		54			1	7		1	11	3		17	11						2	
Surface 2												1											
Layer 3	1		3		18			3	1			7	2		5	11					1		
Layer 3/4A	3		3		32	1	2		4		5	18			20	24						2	
Subtotal	14		8		104	1	2	4	12		6	37	5		42	46					1	4	
%	5		3		35	T	1	1	4		2	13	2		14	16					T	1	
Surface 3/3b																							
Layer 4B					2							2			1								
Layer 4B/C					1							1			1								
Surface 4												1											
Other Pit 1					10		1				1	1			3	1		2					
Layer 5					4							5	1										
Surface 5																							
Layer 6					5				1		1	1			2	1							
Surface 6																							
Subtotal					22		1		1		2	11	1		7	2		2					
%					42		2		2		4	21	2		13	4		4					

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00374

Table MF-E.31. (continued)[a]

Proveniences	39	75	76	82	84	13I	13A	13F	52	53	56	60	59	92A	TOTAL	%	Ceramic Period
Wall clear															2	T	
Layer 1	1	1	5	2	7	1			2	1	2				565	100	
Surface 1															0		
Subtotal	1	1	5	7	7	1			2	1	2				567	100	Late Mix
%	T	T	1	1	1	T			T	T	T					98	
Layer 2			2	1			1						1	1	125	43	
Surface 2															1	T	
Layer 3															52	18	
Layer 3/4A					1										115	39	
Subtotal			2	1	1		1						1	1	293	100	Gallup
%			1	T	T		T						T	T		98	
Surface 3/3b															0		
Layer 4B												2			7	13	
Layer 4B/C															3	6	
Surface 4															1	2	
Other Pit 1							1								20	38	
Layer 5															10	19	
Surface 5															0		
Layer 6								1							12	23	
Surface 6																	
Subtotal							1	1				2			53	101	Gallup
%							2	2				4				98	

[a]T = trace (less than 0.5%).

Table MF-E.31. (continued)[a]

Proveniences	01	03	04	09	08	05	06	22	23	24	25	26	27	77	30	29	28	57A	57B	65	67	68	72
Layer 7	22		10		6				14			1			9	13			1	1			1
Surface 7																							
Layer 8	4		3	1				1	5						7	5							
Layer 8A	2				4				4						7	2		1					
Surface 8	20		4		1			4	10						6	6		1					
Ditch	11		1		2			1	7						4	4							1
Layer 8B	74		58	2	5			4	43						55	57							3
Subtotal	133		76	3	18			10	83			1			88	87		2	1	1			5
%	25		14	1	3			2	16			T			17	17		1	T	T			1
TOTAL	157		90	3	430	1	5	14	104	3	19	114	8	12	200	192	3	5	1	1	2	7	11
%	11		6	T	30	T	T	1	7	T	1	8	1	1	14	13	T	T	T	T	T	T	T	1
Form:																							
bowl								6	54	3	10	27		3	77	57	1	----3----			2		9
jar	157		90	3	430	1	5	8	49		9	83	8	9	117	132	1	----4----				7	2
other									1			4			6	3	1						
Ware	culinary							Cibola								unknown		Chuska					

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00376

Table MF-E.31. (concluded)[a]

Proveniences	39	75	76	82	84	13I	13A	13F	52	53	56	60	59	92A	TOTAL	%	Ceramic Period
Layer 7					1		4							2	85	16	
Surface 7															0		
Layer 8							1						1		28	5	
Layer 8A							1								21	4	
Surface 8															52	10	
Ditch															31	6	
Layer 8B							10								311	59	
Subtotal					1		16						1	2	528	100	Red Mesa
%					T		3						T	T		100	
TOTAL	1	1	7	8	9	1	18	1	2	1	2	2	2	3	1,440		
%	T	T	T	1	1	T	1	T	T	T	T	T	T	T		97	
Form:																	
bowl	1	1	7	7	4		18	1	2	1	2	2	2	3			
jar				1	5	1											
other																	
Ware	Tusayan			Mesa Verde		smudged			Wh.Mt. redwares		Tsegi		SanJuan				

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00377

Table MF-E.32. Clearing Plaza 1 along the East Wing around Kivas 12, 14, and Plaza Feature 4.

Provenience	01	02	03	04	09	08	06	07	23	24	25	26	27	77	30	29	66A	67	68	72
NE Area																				
Layer 3	1					28			2		1	6		6	2	8	1		1	1
Layer 4	2			6		113	4		8	2	9	27		12	29	67		.	1	9
Total	3			6		141	4		10	2	10	33		18	31	75	1		2	10
%	1			2		37	1		3	1	3	9		5	8	19	T		1	3
Central Area																				
Layer 3	6			3		82	1		4	1	13	11	2	3	18	21		4	2	1
%	3			2		44	1		2	1	7	6	1	2	10	11		2	1	1
Surface 1	5					16			3		1	6	4	2	4	7			1	
%	10					32			6		2	12	8	4	8	14			2	
under Surface 1	1			3		21					1	7				4			1	1
%	3			8		53					3	18				10			3	3
Surface 2						1					1									
%						50					50									
SE & Central Area																				
Layer 2	1	1		4		20			5		3	19		3	3	16				
%	1	1		5		26			7		4	24		4	4	21				
SE Area																				
Layer 3			3	8		126		1	2		5	33	2	1	21	44		2	4	5
%			1	3		46		T	1		2	12	1	T	8	16		1	1	2
Surface 1	3	1		3		62	1		1		5	21		3	6	43		3	2	5
%	2	1		2		36	1		1		3	12		2	4	25		2	1	3
Surface 2				5		20					1	5			1			1		
%				15		61					3	15			3			3		
Ware	culinary								Cibola							unk.	Chuska			

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00378

Table MF-E.32. (concluded)[a]

Provenience	75	74	81	82	84	13A	13F	52	56	59	92	62	Total	%	Ceramic period
NE Area															
Layer 3				3	5	1	1		1				68		
Layer 4	3			8	6	4		1	5			1	317		
Total	3			11	11	5	1	1	6			1	385		Late Mix
%	1			3	3	1	T	T	2			T		103	
Central Area															
Layer 3	1		1	4	3	2			1				184		Late Mix
%	1		1	2	2	1			1					102	
Surface 1												1	50		Late Mix
%												2		100	
under Surface 1	1												40		Gallup
%	3													104	
Surface 2													2		Gallup?
%														100	
SE & Central Area															
Layer 2	1		1		1								78		Late Mix
%	1		1		1									100	
SE Area															
Layer 3	1	1	1	3	5	5				1			274		Late Mix
%	T	T	T	1	2	2				T				99	
Surface 1	3			1	3	2					1	1	170		Late Mix
%	2			1	2	1					1	1		103	
Surface 2													33		Gallup
%														100	
Ware	Tusayan		Mesa Verde			smudged		Wh.Mt. redwares		Tsegi		SanJuan			

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00379

Table MF-E.33. Plaza 2, primarily Grids 181 and 201 (and small parts of others). Ceramics: frequency and distribution.[a]

Provenience	01	04	08	05	06	07	23	24	25	26	27	77	30	29	28	66A	67	68	68A	72
Layer 1		1	16				1		3	7			1	3						1
Layer 2:																				
Level 1	2	7	42		1		5	2	3	14	2	3	9	15		1	2	2		4
Level 2			22						1	1		1	5	6			1			1
Level 1/2			19						1	4		1	2	3						3
Surface 1	1		13			1			2	2		1		1						1
Other Pit 2	1		4									1	2	1						
Layer 2:																				
Level 2			8							1		1	2	2				1	1	
Level 2/3			8		1					5		1	9	7				2		1
Surface 2										1			1				1			
Layer 2:																				
Level 3		1	34		1		1	1	6	5	1	4	13	12			1	4		1
Surface 3			5										2							1
Layer 2:																				
Level 4			21							1			17	20						
Surface 4			10							1			4	1						
Layer 3:																				
Level 1			15										6	3				1		
Surface 5			13					2		2	1	1	2	7						2
Layer 3:																				
Level 2	1	1	42						2	12	1		9	10	2					1
Subtotal	5	10	272		3	1	7	5	18	56	5	14	84	91	2	1	5	10	1	16
%	1	2	41		T	T	1	1	3	9	1	2	13	14	T	T	1	2	T	2

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00380

Table MF-E.33. (continued)[a]

Proveniences	73	75	90	82	13A	13F	52	53	56	57	59	62	Total	%	Ceramic period
Layer 1						1				2			36	5	
Layer 2:															
Level 1		1				2		1	2	2	2	2	126	19	
Level 2													38	6	
Level 1/2				1					1				35	5	
Surface 1				1									23	3	
Other Pit 2													9	1	
Layer 2:															
Level 2				1					1				18	3	
Level 2/3		1					3	1	1	1			41	6	
Surface 2													3	T	
Layer 2:															
Level 3			3										88	13	
Surface 3				1	1				1				11	2	
Layer 2:															
Level 4													59	9	
Surface 4													16	2	
Layer 3:															
Level 1				1		1	2						29	4	
Surface 5										1	2		33	5	
Layer 3:															
Level 2	1	1			3		7						93	14	
Subtotal	1	3	3	5	4	4	12	2	6	6	4	2	658	97	Late Mix
%	T	T	T	1	1	1	2	T	1	1	1	T		101	

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00381

Table MF-E.33. (continued)[a]

	01	04	08	05	06	07	23	24	25	26	27	44	30	29	28	66A	67	68	68A	72
Surfaces 5-9:																				
Unnamed Feature 1			5											1						
Surface 6								1						4						
Layer 4:																				
Level 1			4				1			1				5						
Surface 7																				
Layer 4:																				
Level 2	1		6							1			4	5						
Rodent hole										1			1							
Surface 8										1										
Layer 5:																				
Level 1	2		9	1						5	1		1	1			1			1
Level 2			3										2	1						
Surface 9	1	1	1										1	3						
Layer 6																				
Layer 7		1	8						2	3			2	2						
Surface 10																				
Layer 8			1				1		2	3			1	2						
Surface 11																				
Layer 9																				
Surface 12			1										1							
Layer 10									1	1			1				1			
Surface 13																				
Layers 11-14																				
Surfaces 14-17																				
Layer 15																				
Surface 18										1			1							
Subtotal	4	3	38	1			2	1	5	17	1		14	24			2			1
%	3	3	32	1			2	1	4	14	1		12	20			2			1

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00382

Table MF-E.33. (continued)[a]

	73	75	90	82	13A	13F	52	53	56	57	59	62	Total	%	Ceramic period
Surfaces 5-9:													0		
Unnamed Featur													6	5	
Surface 6													5	4	
Layer 4:															
Level 1													11	9	
Surface 7							1						1	1	
Layer 4:															
Level 2													17	14	
Rodent hole													2	2	
Surface 8													1	1	
Layer 5:															
Level 1					1								23	19	
Level 2													6	5	
Surface 9													7	6	
Layer 6					1								1	1	
Layer 7					2								20	17	
Surface 10													0		
Layer 8													10	8	
Surface 11													0		
Layer 9													0		
Surface 12													2	2	
Layer 10													4	3	
Surface 13													0		
Layers 11-14													0		
Surfaces 14-17													0		
Layer 15													0		
Surface 18													2	2	
Subtotal					4		1						118	99	Gallup
%					3		1							100	

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00383

Table MF-E.33. (continued)[a]

Proveniences	01	04	08	05	06	07	23	24	25	26	27	77	30	29	28	66A	67	68	68A	72
Total	9	12	310	1	4		9	6	23	73	6	14	99	115	2	1	7	10	1	17
%	1	2	40	T	1		1	1	3	9	1	2	13	15	T	T	1	1	T	2
Form:																				
bowl							2	1	10	22	1	7	27	22			3	5		7
jar	9	12	310	1	4		6	5	13	50	5	7	71	91	2		4	5	1	10
other							1			1			1	2		1				
Ware	culinary						Cibola							unknown		Chuska				

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00384

Table MF-E.33. (concluded)[a]

Proveniences	73	75	90	82	13A	13F	52	53	56	57	59	62	Total	%	Ceramic period
Total	1	3	3	5	7	5	13	2	6	6	4	2	776		
%	T	T	T	1	1	1	2	T	1	1	1	T		101	
Form:															
bowl	1	3	3	1	7	5	--13--		6	6	4				
jar				4			---2--					2			
other															
Ware	Tusayan			Mesa Verde	smudged		redware								

[a]T = trace (less than 0.5%).

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Table MF-E.34. Plaza 2, Other Structure 5. Ceramics: frequency and distribution.

	01	04	08	05	06	22	23	24	25	26	27	77	30	29	28	40	67	68	72
Wall clear	2		35	1			1	1	1	19	1	3	21	8		2	1	5	2
Layer 1	3		25	2				1	1	7		1	11	2	1		1	1	
Subtotal	5		60	3			1	2	2	26	1	4	32	10	1	2	2	6	2
%	3		31	2			1	1	1	15	1	2	19	6	1	1	1	4	1
East Stairs fill:																			
Layer 2:																			
Misc.			17					1		1			4	2				2	
Level 1			2							1			2						
Level 2										1		1							
Level 3			1							2			3						1
Surface 1:																			
Step 2				1	1				1										
Step 2 const.			1										1						
Step 3													1						
Surface 2										1									
South Stairs fill:																			
Layer 4	3		21	1			2		2	7			17	7				1	1
Surface 2			3										1	1					
Layer 6			1																
Layer 9			1																
Surface 7																			
Layer 10													1						
Layer 11									2				1						
Surface 9			1																
Subtotal	3		48	2	1		2	1	5	13		1	31	10				3	2
%	2		37	2	1		2	1	4	10		1	24	8				2	2

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Table MF-E.34. (continued)

	73	75	81	82	13A	13F	13I	52	53	56	60	59	Total	%	Ceramic period
Wall clear	1			1				2			2		109	64	
Layer 1				2					3	1			62	36	
Subtotal	1			3				2	3	1	2		171	100	Late Mix
%	1			1				1	1	1	1			100	
East Stairs fill:															
Layer 2:															
Misc.													27	21	Gallup
Level 1													5	4	Gallup
Level 2													2	2	Gallup
Level 3													7	5	Gallup
Surface 1:															
Step 2													3	2	Gallup
Step 2 const.													2	2	Gallup
Step 3													1	1	Gallup
Surface 2													1	1	Gallup
South Stairs fill:															
Layer 4					2		1	2					67	52	Late Mix
Surface 2													5	4	Gallup?
Layer 6			1										2	2	Gallup?
Layer 9													1	1	Gallup?
Surface 7					1		1						2	2	Gallup?
Layer 10													1	1	Gallup?
Layer 11													3	2	Gallup?
Surface 9													1	1	Gallup?
Subtotal			1		3		2	2					130	103	
			1		2		2	2						103	

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Table MF-E.34. (continued)

	01	04	08	05	06	22	23	24	25	26	27	77	30	29	28	40	67	68	72
Test Trench 1: (along MW 2, above So.Stairs)																			
Level 2			8					1	3	4			5	3			1		
Level 3							1						1						
Test Trench 2: (below So. Stairs)																			
Layer 14			1					1		1									
Layer 15						1													
Test Trench 3: (inside OS 5)																			
Surface 3									1										
Layer 22													1						
Surface 9			1																
Layer 28								1		1			1				1		
Subtotal			10			1	1	3	4	6			8	3			2		
%			26			3	3	8	10	15			21	8			5		
Grid 221																			
Test Trench 1:																			
Layer 2-7	3	2	60					1	4	12	1	3	9	15				2	5
Layer 8		1	2																
Layer 10			1							2			1						
Test Trench 2:																			
Level 1			3							1									
Level 2																			
Level 4										1			2						

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Table MF-E.34. (continued)

	73	75	81	82	13A	13F	13I	52	53	56	60	59	Total	%	Ceramic period
Test Trench 1:															
(along MW 2, above So.Stairs)															
Level 2				1									26	67	Late Mix?
Level 3													2	5	Late Mix?
Test Trench 2:															
(below So. Stairs)															
Layer 14													3	8	Gallup?
Layer 15													1	3	Gallup?
Test Trench 3:															
(inside OS 5)															
Surface 3													1	3	Gallup?
Layer 22													1	3	Gallup?
Surface 9													1	3	Gallup?
Layer 28													4	10	Gallup?
Subtotal				1									39	102	
%				3										102	
Grid 221															Late Mix
Test Trench 1:															
Layer 2-7		2		1	4	1				1		1	127	89	
Layer 8													3	2	
Layer 10													4	3	
Test Trench 2:															
Level 1													4	3	
Level 2				1									1	1	
Level 4													3	2	

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Table MF-E.34. (continued)[a]

	01	04	08	05	06	22	23	24	25	26	27	77	30	29	28	40	67	68	72
Subtotal	3	3	66					1	4	16	1	3	12	15				2	5
%	2	2	46					1	3	11	1	2	8	11				1	4
TOTAL	11	3	184	5	1	1	4	7	15	61	2	8	83	38	1	2	4	11	9
%	2	1	38	1	T	T	1	1	3	13	T	2	17	8	T	T	1	2	9
Form:																			
bowl						1	2	4	4	7	2	2	24	8		2	1	5	2
jar							2	2	11	53		5	57	29	1		3	6	7
other	11	3	184	5	1			1		1		1	2	1					
Ware	culinary					Cibola								unknown			Chuska		

[a]T = trace (less than 0.5%).

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Table MF-E.34. (concluded)[a]

	73	75	81	82	13A	13F	13I	52	53	56	60	59	Total	%	Ceramic period
		—		—	—	—				—		—	—	—	
Subtotal		2		2	4	1				1		1	142	100	Late Mix
%		1		1	3	1				1		1		100	
		—	—	—	—	—	—	—	—	—	—	—	—	—	
TOTAL	1	2	1	6	7	1	2	4	3	2	2	1	482		
%	T	T	T	1	1	T	T	1	1	T	T	T		96	
Form:															
bowl	1	2	1	2	7	1	2	4	3	1	2	1			
jar				4						1					
other															
Wares	Tusayan		Mesa Verde		smudged			Wh. Mt. redwares		Tsegi					

[a]T = trace (less than 0.5%).

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Table MF-E.35. North Trench (test trench outside and north of Room 138). Ceramic: frequency and distribution.

Provenience	01	04	09	08	22	23	26	30	29	28	Tun	New	For Sm	Tu red	SJ	Total	%	Ceramic Period
Level 1	2					1	4	1	1					1		10	6	Gallup
Surface 1:																0		
Level 2	26	3		2		8		18	6	1	3		4		1	72	41	Red Mesa
Surface 2:																		
Wall Tr. 1		1						1								2	1	Red Mesa
Level 3	29	2	1	5	2	8		16	8		1	2				74	43	Red Mesa
Level 4	9			1		1		3	1				1			16	9	Red Mesa
Surface 3:																0		
TOTAL	66	6	1	8	2	18	4	39	16	1	4	2	5	1	1	174	100	
%	38	3	1	5	1	10	2	22	9	1	2	1	3	1	1		100	
Form:																		
bowl					1	7	2	10	2				5		1			
jar	66	6	1	8	1	10	2	39	14	1	4	2		1				
other						1												
% Ware	47 culinary				36 Cibola				10 unknown		3 Chuskan		3 smud.	1 redware			100	

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Table MF-E.36. Wall clearing along the Major Walls at and around Pueblo Alto.[a]

Provenience	01	04	09	08	05	06	07	23	24	25	26	27	77	30	29	66A	67	68	72
Major Wall 1																			
(Alto-East Ruin)				28	4			1		3	10		3	4	10				
%				39	6			1		4	14		4	6	14				
Blockhouse	30	17		70	1			28	3	12	50		1	25	41	1		1	2
%	10	6		24	T			10	1	4	17		T	9	14	T		T	1
Major Wall 2																			
(Alto-TM)				51	2	1		2	2	8	21	1	1	18	15			1	2
%				40	2	1		2	2	6	16	1	1	14	12			1	2
Major Wall 3[b]																			
(TM-RS 40)	3	8	1	248	10	2		9	11	16	120	8	4	66	64	1	4		6
%	1	1	T	42	2	T		2	2	3	20	1	1	11	11	T	1		1
Grids 412-413				10	1			3			5			4	4		1		
%				36	4			11			18			14	14		4		
Major Wall 4																			
(Plaza 2-East	7			10				1		1	7			5					
Ruin) %	23			32				3		3	23			16					
Major Wall 5																			
(Alto-Plaza 3)		1		35	2	2		4	1	13	18	2	1	10	14		1		2
%		1		32	2	2		4	1	12	16	2	1	9	13		1		2
Major Wall 6																			
(New Alto)				11	1	2	2	1			4	2	5	2	12		2		10
%				18	2	3	3	2			7	3	8	3	20		3		16
Ware	culinary							Cibola							unk.	Chuska			

[a]T = trace (less than 0.5%).

[b]Ceramic counts inflated by erosion of the Trash Mound (TM). Grids 412-413 were located at the entrance of Road Segment (RS) 40 into Plaza 2 at the north end of Major Wall 3.

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Table MF-E.36. (concluded)[a]

Provenience	39	75	90	81	82	13A	52	56	59	Total	%	Ceramic period
Major Wall 1 (Alto-East Ruin)		2				2		5		72		Late Mix
%		3				3		7			101	
Blockhouse	3	1		1						287		Gallup
%	1	T		T							97	
Major Wall 2 (Alto-TM)			2	1					1	129		Gallup/
%			2	1					1		104	Late Mix
Major Wall 3[a] (TM-RS 40)		2				2	1			586		Gallup/
%		T				T	T				99	Late Mix
Grids 412-413										28		Gallup/
%											101	Late Mix
Major Wall 4 (Plaza 2-East Ruin)										31		Gallup
%											100	
Major Wall 5 (Alto-Plaza 3)		2				1	1			110		Late Mix
%		2				1	1				102	
Major Wall 6 (New Alto)		1			2	1		3		61		Late Mix
%		2			3	2		5			100	
WARE:	Tusayan & Little Colo.			Mesa Verde		smud.	Wh.Mt. redware		Tsg.			

[a]T = trace (less than 0.5%).

[b]Ceramic counts inflated by erosion of the Trash Mound (TM). Grids 412-413 were located at the entrance of Road Segment (RS) 40 into Plaza 2 at the north end of Major Wall 3.

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Table MF-E.37. Wall clearing along Other Structures and Circular Structure 2 in the southern encosing arc at Pueblo Alto.[a]

Proveniences	01	04	09	08	05	06	07	07A	23	24	25	26	27	44	30	29	66A	66B	67	68	72
CS 2				57	1				1	1	6	24	2		5	13	1		2		5
				45	1				1	1	5	19	2		4	10	1		2		4
OS 3	9	4	1	58	1	1			8		12	49	1		21	39			2	2	
	4	2	T	27	T	T			4		6	23	T		10	18			1	1	
OS 4	1	5		215		6	1		12	1	34	66	11	11	41	74			9	4	5
	T	1		41		1	T		2	T	7	13	2	2	8	14			2	1	1
OS 6	26	34	5	607	5	12	1		48	7	28	148	12	48	125	183	3		7	12	9
	2	2	T	44	T	1	T		3	1	2	11	1	3	9	13	T		1	1	1
OS 7	63	31		432	7	3	1		62	3	30	103	3	22	94	139	1	1	4	11	6
	6	3		41	1	T	T		6	T	3	10	T	2	9	13	T	T	T	1	1
OS 8				18	2				1	1	1	3		5	3	16					
				34	4				2	2	2	6		10	6	30					
OS 9	1			37					3		3	13		6	12	17			3	2	
	1			34					3		3	12		5	11	16			3	2	
OS 10				44		1	2	1	1		1	2		7		13			1	1	
				59		1	3	1	1		1	3		9		18			1	1	
OS 11				43		1	1		2		8	18			8	14					2
				42		1	1		2		8	18			8	14					2
OS 12	2			48		1				1	6	9		2	5	17					
	2			51		1				1	6	9		2	5	18					
Ware	culinary								Cibola							unk.	Chuska				

T = trace (less than 0.5%).

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Table MF-E.37. (concluded)[a]

Proveniences	39	90	74	75	76	81	82	84	13A	13J	52	53	56	57A	60	59	61	62	Total	%	Ceramic period
CS 2				1		3			6										128		Gallup
				1		2			5											103	
OS 3				1			2		2		1			1					215		Late Mix
				T			1		1		T			T						98	
OS 4				4		7	4		2		2	1	2			2			520		Late Mix
				1		1	1		T		T	T	T			T				98	
OS 6		2		10		1	18	9	1	4	3	2	3		2	2	1	1	1,384		Late Mix
		T		1		T	1	1	T	T	T	T	T		T	T	T	T		98	
OS 7	3		1	10	1	8	1		6			1	6	1		2		2	1,058		Late Mix
	T		T	1	T	1	T		1			T	1	T		T		T		100	
OS 8				2													1		53		Late Mix
				4													2			102	
OS 9		1		3					7		1	1							110		Late Mix
		1		3					6		1	1								102	
OS 10				1															74		Late Mix
				1																99	
OS 11				3					1		1								102		Late Mix?
				3					1		1									101	
OS 12				2			1		1										95		Late Mix
				2			1		1											99	
Ware	Tusayan					Mesa Verde			smudged		Wh. Mt. redwares					Tsegi		SJ			

[a]T = trace (less than 0.5%).

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Table MF-E.38. Trash Mound Test Trench 1 and Test Trench 2. Ceramics: frequency and distribution.[a]

Provenience	01	03	04	09	08	05	06	22	23	24	25	26	27	77	30	29	28	66	67	68	72
Test Trench 1:																					
NW 1/2 surface	11	1	5		184	1	1	1	4	3	7	46			85	42	1	1	1	1	2
SE 1/2 surface	7		23	1	306	2			4		9	46			109	59	2	1	1		9
Profile clearing			12		110	1			2			20			57	24	1				3
Total	18	1	40	1	600	4	1	1	10	3	16	112			251	125	4	2	2	1	14
%	1	T	3	T	49	T	T	T	1	T	1	9			20	10	T	T	T	T	1
Form:																					
bowl								1	5	1	7	27			70	19	3		1		6
jar	18	1	40	1	600	4	1		3	2	7	85			176	101	1	2	1	1	8
other									2		2				5	5					
% Ware	54 culinary							32 Cibola								11 unknown		2 Chuska			
Test Trench 2:																					
Surface	1		5		129	1			1	1	9	40			28	32	1	1			3
Grid 135																					
Level 2			1		1										1						
Grid 163																					
Level 1					14	2			3		1	10	1	3	8	3			1		1
Level 2			2		6							7			7	6					
Level 3			2		2							3			4						
Grid 191																					
Level 1			1		26	1						19			4	19					
Total	1		11		178	4			4	1	10	79	1	3	52	60	1	1	1		4
%	T		3		42	1			1	T	2	19	T	1	12	14	T	T	T		1
Form:																					
bowl									3	1	3	23		1	16	14	1				3
jar	1		11		178	4			1		7	53	1	1	35	42			1		
other												3		1	1	4		1			1
% Ware	46 culinary							35 Cibola								14 unknown		1 Chuska			

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00397

Table MF-E.38. (concluded)[a]

Proveniences	76	82	84	13A	13F	56	60	59	92	62	64	TOTAL	%	Ceramic period
Test Trench 1:														
NW 1/2 surface			1						1	2	1	402	33	
SE 1/2 surface	1		3	3		1		1		4		592	48	
Profile clearing				1			1			2		234	19	
Total	1		4	4		1	1	1	1	8	1	1,228		Gallup
%	T		T	T		T	T	T	T	1	T		96	
Form:														
bowl	1		4	4		1	1	1	1	3				
jar										5	1			
other														
%	T	T		T		1							100	
Ware	Tusayan	M.V.		smudged		redware								
Test Trench 2:														
Surface		1	3	1	1	1				2		261	61	
Grid 135														
Level 2												3	1	
Grid 163														
Level 1												47	11	
Level 2			1									29	7	
Level 3				1								12	3	
Grid 191														
Level 1				3								73	17	
Total		1	4	5	1	1				2		425	100	Gallup
%		T	1	1	T	T				T			98	
Form:														
bowl				5	1									
jar		1	4			1				2				
other														
%		1		1		1							99	
Ware		M.V.		smudged		redware								

[a]T = trace (less than 0.5%).

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.e MF-E.39. Trash Mound slumps and backhoe tests Ceramics: frequency and distribution.[a]

Proveniences	01	03	04	09	08	05	06	07	20	21	22	23	24	25	26	27	44	30
Slump 1 (Grids 267, 295, 323)	9	5	65	2	1,018	29	4	4		1		7	1	58	127		2	70
Slump 2 (Grids 155, 183, 211)	81	8	138	7	2,377	48	3	2		2	6	108	17	93	518	6	1 1	744
Slump 3 (Grids 267, 295)	8		19	1	395	9			2			14	4	26	110	1	1	80
Total	98	13	222	10	3,790	86	7	6	2	3	6	129	22	177	755	7	5	894
%	1	T	3	T	53	1	T	T	T	T	T	2	T	2	11	T	T	13
Form:																		
bowl									----8----			80	14	76	158	3	4	336
jar	98	13	222	10	4,790	86	7	6	----3----			42	6	95	585	4	1	536
other												7	2	6	12			22
% Ware	60 culinary								28 Cibola									
Backhoe Trench 1 (Grids 99, 127: Level 7)	119	28	45	10	243	4						117	7		34			163
Backhoe Trench 2 (Grids 43, 71: 0-100 cm)	29	8	14		67						1	32			11			56
Backhoe Trench 3 (Grids 43, 71: 100-400 cm)	164	16	57	9	86							132		2	9			149
Total	312	52	106	19	396	4					1	281	7	2	54			368
%	16	3	6	1	20	T					T	14	T	T	3			19
Form:																		
bowl											1	144	7	2	29			168
jar	312	52	106	19	396	4						129			25			196
other												8						4
% Ware	46 culinary								36 Cibola									

[a]T = trace (less than 0.5%).

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Table MF-E.39. (continued)[a]

Proveniences	29	28	65	66A	66B	46	To	47	73	78	39	76	78A	82	83
Slump 1 (Grids 267, 295, 323)	38	2				6	7	5		1	1			2	1
Slump 2 (Grids 155, 183, 211)	433	15		3		32	24	27	7	6			1	5	
Slump 3 (Grids 267, 295)	79	1			1	2								3	
Total	550	18		3	1	40	31	32	7	7	1		1	10	1
%	8	T		T	T	1	T	T	T	T	T		T	T	T
Form:															
bowl	142	14		--1--		26	12	10	7	7	1		1	6	
jar	396	4		--3--		14	19	21						4	1
other	12							1							
% Ware	8 unknown			2 Chuska					T Tusayan					T M.	V.
Backhoe Trench 1 (Grids 99, 127: Level 7 to sterile)	108			6	1			5				1			
Backhoe Trench 2 (Grids 43, 71: 0-100 cm)	43								1						
Backhoe Trench 3 (Grids 43, 71: 100-400 cm)	150		3	2				13						1	
Total	301		3	8	1			18	1			1		1	
%	15		T	T	T			1	T			T		T	
Form:															
bowl	113		----4----					7	1			1			
jar	187		----8----					11						1	
other	1														
Ware %	15 unknown			1 Chuska					T Tusayan					T M.	V.

[a]T = trace (less

Table MF-E.39. (concluded)[a]

Proveniences	13I	13A	13D	13F	53	57A	57C	58	60	62	Total	%	Ceramic period
Slump 1 (Grids 267, 295, 323)	1	11		8			2		3	6	1,496	21	
Slump 2 (Grids 155, 183, 211)	5	63	1	2		2		1	14	25	4,825	68	
Slump 3 (Grids 267, 295)		11		5	1		1			5	779	11	
Total	6	85	1	14	1	2	3	1	17	36	7,100	100	Gallup
%	T	1		T	T	T	T	T	T	T		96	
Form:													
bowl	1	85	1	14	1	2	3	1	16	27			
jar	5								1	9			
other													
% Ware		1 smudged & misc.			WM		----Tsegi---- 1 redware			SJ		100	
Backhoe Trench 1 (Grids 99, 127: Level 7)				3					4	4	902	46	
Backhoe Trench 2 (Grids 43, 71: 0-100 cm)										5	267	14	
Backhoe Trench 3 (Grids 43, 71: 100-400 cm)				4						6	803	41	
Total				7					4	15	1,972	101	Red Mesa/ Gallup
%				T					T	1		100	
Form:													
bowl				7					4	11			
jar										4			
other													
% Ware		T smudged					1 redware		Tsegi	SJ		99	

[a]T = trace (less than 0.5%).

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Table MF-E.40. Trash Mound, Strat Column 1 (in Grid 71). Ceramics: frequency and distribution.[a]

Proveniences	01	03	04	09	08	22	23	24	26	30	29	66	67	72	92	TOTAL	%	Ceramic period
Surface	1	1	1		21			1	6	8	3		1			43	8	
Layer 1	2		1				1		5	1	1					11	2	
Layer 2	4		1	2	3		4			11	1					26	5	
Layer 3	56	10	32	9	3	1	41	2		40	25	3		3	2	227	44	
Layer 4	16	1	4		2		18			14	11			1		67	13	
Layer 8	9	2	5	1	4		8		1	9	7					46	9	
Layer 10a	1	1	1		19		3		4	9	7					45	9	
Layer 10b	6	2			2		3			1						14	3	
Layer 12									2	1	1					4	T	
Layer 18	2	2	1		6		1		7	10						29	6	
Total	97	19	46	12	60	1	79	3	25	104	56	3	1	4	2	512	99	Gallup
%	19	4	9	2	12	T	15	1	5	20	11	1	T	1	T		100	
Form:																		
bowl						1	43	2	4	39	27	2	1	1	2			
jar	97	19	46	12	60		33	1	21	64	28	1		3				
other							3			1	1							
% Ware	46 culinary					1 Cibola					11 unk.	2 Chuska			T red-ware		100	

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00402

Table MF-E.41. Trash Mound, Strat Column 2 (in Grid 127). Ceramics: frequency and distribution.[a]

Provenience	01	03	04	09	08	05	22	23	24	25	26	30	29	28	66	67	72
Surface	9		16		268		2	1	1	2	27	94	64			1	.3
Layer 3	10	1	1	1	6			5			3	3	1		1		
Layer 9	1				17	1		2	1		6	1	1		1		
ash lens 1	1																
ash lens 3			1					1			1	1	1				
Layer 10	4	2	3		8			2			3	5	5				
Layer 13	11		5		15	2		1			11	7	8	1			1
ash lens 1											1						
ash lens 2								1					1				
Layer 14					1		2										
Layer 15	1	1			6						2	2	5			1	
Layer 16	1	1			17			2			5	9	5				
Layer 17	1	5	6	2	38			1			18	18	14				
Total	38	10	32	3	376	3	2	18	2	2	77	140	105	1	2	2	4
%	5	1	4	T	45	T	T	2	T	T	9	17	13	T	T	T	T
Form:																	
bowl							2	13	2	2	27	45	25	1	1	2	1
jar	38	10	32	3	376	3		4			50	93	80		1		3
other								1				2					
% Ware	55 culinary						29 Cibola						13 unknown		1 Chuska		

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00403

Table MF-E.41. (concluded)[a]

Provenience	75	76	82	84	13A	53	56	60	62	63	Total	%	Ceramic period
Surface	2	2	1	2		1	2		1	1	500	60	
Layer 3											32	4	
Layer 9											31		
ash lens 1											1	4	
ash lens 3											5		
Layer 10											32	4	
Layer 13					3			1			66		
ash lens 1											1	8	
ash lens 2											2		
Layer 14											3	T	
Layer 15					1				1		20	2	
Layer 16					1				1		41	5	
Layer 17					1						104	12	
Total	2	2	1	2	6	1	2	1	3	1	838	99	Gallup
%	T	T	T	T	1	T	T	T	T	T		97	
Form:													
bowl	2	2	1	1	6	1	2	1	3	1			
jar				1									
other													
%	T		T		1	Wh.Mt.		Tsegi	SJ	Chu		100	
Ware	Tusayan		M.V.		smu.			1 redware					

[a]T = trace (less than 0.5%).

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Table MF-E.42. Trash Mound, Strat Column 3 (in Grid 155). Ceramics: frequency and distribution.[a]

Proveniences	01	03	04	09	08	05	21	22	23	24	25	26	27	30	29	28	66	67	68	72
Surface	8		5		103	1	1			3	2	17		33	24	4	1	2	1	5
Layer 19	15		7		127	3			1	5	6	24		50	32	1	2	1		2
ash lens 1	1					1			1	2	1	3		2	3					
ash lens 3					2															
Layer 20	2		1		13					2		3		8	4					3
Layer 22	12	1	7		105	1		1	2	2	1	13		31	18		2			
Layer 23	1		1		13							3		11	3					
Layer 24b					1							1								
Layer 24/31	5		3		77				2	1	2	12		36	10					1
ash lens 1					4							3			1					
Layer 30	4		3		27	1				1	2	13	1	11	12	1	1	1		
Layer 31	4		1		8					1	1	8		6	6					
Layer 32	2		4		50	1					4	19		15	7					
Layer 35					1							1								
Layer 35/41	3		6	3	92	4				2	1	24	3	44	24	1	2			2
Layer 43	9		19		308	5			1	3	10	57		111	69	2	2	6	3	
Layer 44	3	1	1		71				1	1	1	7		16	9					1
Total	69	2	58	3	1,002	17	1	1	8	23	31	208	4	374	222	9	10	10	4	14
%	3	T	3	T	47	1	T	T	T	1	2	10	T	18	10	T	1	1	T	1
Form:																				
bowl							1	1	4	14	19	67	2	133	59	7	7	8		5
jar	69	2	58	3	1002	17			3	9	12	141	2	228	156	2	2	1	3	9
other									1					13	7		1	1	1	
% Ware	54 culinary						30 Cibola								11 unknown		2 Chuska			

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00405

Table MF-E.42. (concluded)[a]

Proveniences	75	76	84	13A	13D	60	59	62	Total	%	Ceramic period
Surface							2		212	10	
Layer 19				2		6		3	287	13	
ash lens 1									14	1	
ash lens 3									2	T	
Layer 20								2	38	2	
Layer 22				2					198	9	
Layer 23								2	34	2	
Layer 24b									2	T	
Layer 24/31							1	1	151	7	
ash lens 1	1	1							10	T	
Layer 30				2		1			81	4	
Layer 31									35	2	
Layer 32								1	103	5	
Layer 35									2	T	
Layer 35/41				4		2			217	10	
Layer 43	1		1	22	1	3		1	633	30	
Layer 44						1		1	114	5	
Total	2	1	1	32	1	14	2	11	2,133	100	Gallup
%	T	T	T	2	T	1	T	1		102	
Form:											
bowl	2	1	1	32	1	12	2	11			
jar						2					
other											
%	T		T	2		Tsegi 1		SJ		100	
Ware	Tusayan		M.V.	smudged		redware					

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00406

Table MF-E.43. Trash Mound, Strat Column 4 (in Gr. 211). Ceramics: frequency and distribution.[a]

Proveniences	01	03	04	09	08	05	22	23	24	25	26	27	30	29	28	66	67	68	69	72
Surface	2		2		26			2		2	4		9	4					1	
Layer 34					6			1			3		1							
Layer 35	6		18	2	322	5	1	3	3	3	58		101	40	13	1	5	1		9
Layer 44	2		6		175				2	2	11	1	23	20	3	2				
Layer 45	1				106	3			3	5	14		27	14	1		1	1		
Layer 46					20						2		2	1						
Layer 47			1		36	4		1		2	4		8	5						
Layer 55	1				35				1	1	5		20				1			
Layer 56	2		5		64					2	19		25	15	1					1
Layer 57/58	4		1		36	1			1	1	5		8	8			1			1
Layer 69	1		3		27				1		1		12	10						
Layer 69b	8				79	1			4	1	6		32	15		1	1		1	
ash lens 1					2															
ash lens 2													1						1	
Layer 72	9		13		95	2		3	4		25		54	31			2	1		1
Layer 73									1						1					
Layer 76	8		9		81	1			2	2	14		26	18	1		1			
Layer 78					18						1		3	5						
Layer 104	6	1	3		133			1		5	14	1	47	25	5		2		1	
ash lens 2					1							1								
Total	50	1	61	2	1,262	17	1	11	22	26	186	3	399	211	25	4	14	3	4	12
%	2	T	3	T	54	1	T	T	1	1	8	T	17	9	1	T	1	T	T	1
Form:																				
bowl							1	9	18	12	67	1	147	45	18	2	9	1	2	5
jar	50	1	61	2	1,262	17		2	2	14	118	2	249	162	7	2	5	2	2	7
other									2		1		3	4						
% Ware	59 culinary						27 Cibola							10 unknown		2 Chuska				

[a]T = trace (less than 0.5%).

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able MF-E.43. (concluded)[a]

Proveniences	39	75	84	13A	60	59	92	62	Total	%	Ceramic period
Surface									52	2	
Layer 34									11	T	
Layer 35	3	1		6		1	5		607	26	
Layer 44				1					248	11	
Layer 45				2				2	180	8	
Layer 46								1	26	1	
Layer 47									61	3	
Layer 55								2	66	3	
Layer 56					1		2		137	6	
Layer 57/58								2	69	3	
Layer 69									55	2	
Layer 69b				1				1	151		
ash lens 1									2	7	
ash lens 2									2		
Layer 72					1				241	10	
Layer 73									2	T	
Layer 76			1					2	166	7	
Layer 78									27	1	
Layer 104		1		6				2	253	11	
ash lens 2									2		
Total	3	2	1	16	2	1	7	12	2,358	101	Gallup
%	T	T	T	1	T	T	T	1		101	
Form:											
bowl	3	2	1	16	2	1	7	10			
jar								2			
other											
%	T		T	1	Tsegi	1	San Jn			100	
Ware	Tusayan		M.V.	smud.	redware						

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00408

Table MF-E.44. Trash Mound, Strat Column 5 (in Grid 239). Ceramics: frequency and distribution.[a]

Provenience	01	04	08	05	06	23	24	25	26	27	30	29	28	67	68	72
Layer 37			13	2			1	2	3		4	1				
Layer 48			19						4		3	1		2	1	
Layer 54		1	14					1	4			1				
Layer 57			2													
Layer 58	4	15	88	3	1	6	7	2	42		33	19	1		2	2
Layer 59			9						3		3	1				
Layer 60	1	1	9						2	1	2	1		1	1	1
Layer 61	1	2	42	1			1	1	6		11	2	2		1	1
Layer 62	2	8	141	1		1	6	7	46		62	45		5	1	3
Layer 69		1	23						3		7	2	1			
Layer 71	1	4	41			3		1	5		17	6	1			1
Layer 74			6			2					3	3				
Layer 76	2	4	21						2		8	2		1		1
Layer 78	1	2	30	1				2	8		9	1				
Layer 85	1	1	20					3	10		9	5		1		
Layer 92	1		15					1	8		13	1				
Layer 95	1		15								1	3				
Layer 98	1		41	1	1		3	1			6	6	1		3	4
Layer 104	1		64	2		3	5	7	13		12	14	1	2	2	
Layer 105	3	8	75	3			3	2	12		22	34				3
Layer 122	1		39					1	12		4	5		1	1	2
Layer 123			10				1		3		4	5				1
Layer 200			18			1			4		8	3				
Total	21	47	755	14	2	16	27	31	190	1	241	161	7	13	12	19
%	1	3	45	1	T	1	2	2	13	T	14	10	T	1	1	1
Form:																
bowl						11	12	14	72		95	49	5	9	8	11
jar	21	47	755	14	2	5	12	17	118	1	137	107	2	4	4	8
other							3				9	5				
% Ware	50 culinary					30 Cibola						10 unknown		3 Chuska		

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00409

Table MF-E.44. (concluded)[a]

Provenience	75	76	84	13A	13F	13G	56	60	62	Total	%	Ceramic period
Layer 37						1				27	2	
Layer 48										30	2	
Layer 54								1		22	1	
Layer 57										2	T	
Layer 58	2			56	11	1			4	299	18	
Layer 59	2									18	1	
Layer 60		1		1					1	23	1	
Layer 61			1	1				1		74	4	
Layer 62				6				1	1	336	20	
Layer 69										37	2	
Layer 71										80	5	
Layer 74										14	1	
Layer 76				2						43	3	
Layer 78				1						55	3	
Layer 85									1	51	3	
Layer 92							1			40	2	
Layer 95										20	1	
Layer 98					1	1				70	4	
Layer 104										126	8	
Layer 105	3	3		1					3	175	10	
Layer 122	1			4						71	4	
Layer 123										24	1	
Layer 200										34	2	
Total	8	4	1	72	12	3	1	3	10	1,671	98	Gallup
%	T	T	T	4	1	T	T	T	1		101	
Form:												
bowl	8	4	1	72	12	3	1	3	9			
jar									1			
other												
%	1		T	5			WtMt	Tseg	SJ			
Ware	Tusayan		M.V.	smudged			1 redware				100	

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00410

Table MF-E.45. Trash Mound, Strat Column 6 (in Grid 295). Ceramics: frequency and distribution.[a]

Provenience	01	03	04	08	05	23	24	25	26	27	30	29	28	66	67	68	72	75	76
Surface	6		22	148	1			9	21		52	39	1	2			4		1
Layer 81	11		17	238	4	5	6	1	53		41	26	2		1		1		1
ash lens 1				2							1								
Layer 82	3		8	117	1	4	2	1	18		10	19	1		3	2			
Layer 96			3	43	1	1			2		14	13							
Layer 97	2		2	109	2	2	4	4	17		32	19			1	3		2	
Layer 103	8		12	130	3	5	10	8	14	1	40	23							
Layer 109	5		8	116	4	2	2	8	16		29	24			3	1	3		
ash lens 1				1							2								
Layer 110	1		4	56	2	3	1	1	11		24	19			1		1		
Layer 111	1		2	23		6	1		2		6	13							
Layer 113	18	1	31	303	6	7	4	1	48		117	89			6		2	1	
Total	55	1	109	1,286	24	35	30	33	202	1	367	285	4	2	14	7	11	3	2
%	2	T	4	51	1	1	1	1	8	T	14	11	T	T	1	T	T	T	T
Form:																			
bowl						28	13	9	58	1	112	53	1	2	5	6	5	3	2
jar	55	1	109	1,286	24	6	17	24	1 42		242	221	3		9		6		
other						1			2		13	11				1			
% Ware	58 culinary					26 Cibola						11 unknown		1 Chuska				T Tusayan	

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00411

Table MF-E.45. (concluded)[a]

Provenience	75	76	81	82	13I	15A	13A	13D	13F	52	56	57A	59	62	64	Total	%	Ceramic period
Surface		1		3	1		3		1			1	2			317	12	
Layer 81		1					4		3					2		416	16	
ash lens 1																3		
Layer 82																189	7	
Layer 96																77	3	
Layer 97	2			2		1	2								1	206	8	
Layer 103							3							2		259	10	
Layer 109							1	2							1	225	9	
ash lens 1														2		5		
Layer 110															1	125	5	
Layer 111				1												55	2	
Layer 113	1		4	1	1		14	4	3	1	1			3		666	26	
Total	3	2	4	7	2	1	27	6	7	1	1	1	2	9	3	2,542	98	Gallup
%	T	T	T	T	T	T	1	T	T	T	T	T	T	T	T		96	
Form:																		
bowl	3	2	4	6	---1--		27	6	7	--1--		--1--		7	1			
jar				1	---2--					--1--		--2--		2	2			
other																		
Ware %	T Tusayan		T M.V.		2 smudged and misc.					1 redware							99	

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00412

Table MF-E.46. Trash Mound, Grids 71, 99, and 127 (Test Trench 2).[a]

Provenience	01	03	04	09	08	06	23	24	25	26	30	29	28	67	72	78	13A	62	Total	%	Ceramic period
Grid 71																					
Level 6					5				1	4	6				1				17	3	
Grid 99																					
Level 3					20				1	3	7	5	1						37	7	
Level 4		1			32		4		1	12	8	9	2			1			70	13	
Level 5	5		3		3					6	4						1		22	4	
Level 6	5		1		9		6			6	6	2							35	7	
Grid 127																					
Level 2					35					12	6	1					1	1	56	11	
Level 3	1		1	1	26		1	1		4	13	5						1	54	10	
Level 4	1				29					18	13	3					2		66	13	
Level 5	1		1		19					27	13	6					1		68	13	
Level 6	3		1		17	1	2			6	10	3					1		44	8	
Level 7	1		1		4					3	4	1							14	3	
Level 8	1				3		4			1	1	1							11	2	
Level 9	1				4		2			4	5	3		1					20	4	
Level 10	1				3		2			1	1	1							9	2	
Total	20	1	8	1	209	1	21	1	3	107	97	40	3	1	1	1	6	2	523	100	Gallup
%	4	T	2	T	40	T	4	T	1	20	19	8	1	T	T	T	1	T		100	
Form:																					
bowl							14	1	1	43	43	5	2	1	1	1	6	2			
jar	20	1	8	1	209	1	7		2	64	50	35	1								
other											4										
% Ware	46 culinary						44 Cibola					8 unknown		T Chuska		T Tus.	1 smud.	T red-ware		99	

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00413

Table MF-E.47. Trash Mound, Gridd 155. Ceramics: frequency and distribution.[a]

Provenience	01	03	04	09	08	05	06	07	21	22	23	24	25	26	27	30	29	28	65	66	67	68	72
Level 1	4	2	6	1	136	7			1	2	11	4	8	58	1	76	28	2		1	1	1	2
Level 2	2		1		88	4				1		1	3	23		24	11				4		1
Level 3	8				114	4	1				3		4	35		25	16	4					2
Level 4	5		4		115						4	1	3	45		31	13	1	1		4		1
Level 5	6		16		100	4		1			6		4	31		31	12	1		3		1	1
Level 6	5		5		59	1		1			4	1		44		46	15			4	1		1
Level 7	4		6		54						5			19		26	6	1					
Level 8	3				28	1					1		2	16		15	3	1				1	1
Level 9	4		1		45						6	1		5	1	13	4						
Level 10	2		2		25						5			15		6	2			2			1
Level 11	2	2			18						5			8		6	3						
Level 12	3		1		13						2			4		9			1				1
Level 13	1		8		15						3		1	2		5	5						1
Level 14	2		1		4						1					3	1						
Level 15	6		3		11						2	1		8		5	3						1
Level 16	5		3		28	2					4			12		13	4				2		
Level 17	1		3		8	1					9			4	1	2	4						
Level 18					7						6			4		6	3						
Total	63	4	60	1	868	24	1	2	1	3	77	9	25	333	3	342	133	10	2	10	12	3	13
%	3	T	3	T	43	1	T	T	T	T	4	T	1	16	T	17	7	T	T	T	1	T	1
Form:																							
bowl									--3--		49	5	13	141		127	33	8	--3--		8	2	4
jar	63	4	60	1	868	24	1	2	--1--		22	4	12	191	3	211	98	2	--6--		2	1	9
other											6			1		4	2		--3--		2		
% Ware	50 culinary								39 Cibola								7 unknown		2 Chuska				

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00414

Table MF-E.47. (concluded)[a]

Provenience	75	76	84	13A	56	60	59	92	93	62	64	Total	%	Ceramic period
Level 1	2			2	4					2	1	363	18	
Level 2		3	1	3					1	1	1	173	8	
Level 3				2								218	11	
Level 4				1				1				230	11	
Level 5	1			1	1							220	11	
Level 6						1				1		189	9	
Level 7				2								123	6	
Level 8												72	4	
Level 9				1		1				1		83	4	
Level 10				1			1					62	3	
Level 11									1			45	2	
Level 12												34	2	
Level 13				1								42	2	
Level 14												12	1	
Level 15												40	2	
Level 16								1				74	4	
Level 17												33	2	
Level 18												26	1	
Total	3	3	1	14	5	2	1	2	2	5	2	2,039	101	Gallup
%	T	T	T	1	T	T	T	T	T	T	T		98	
Form:														
bowl	3	2	1	14	5	1	1	2	2	4	2			
jar		1				1				1				
other														
%		T	T	1	White Mt.			San Juan			unk		100	
Ware		Tusayan	M.V.	smudg			1 redware							

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00415

Table MF-E.48. Trash Mound, Grid 183. Ceramics: frequency and distribution.[a]

Provenience	01	03	04	09	08	05	06	07	21	22	23	24	25	26	27	30	29	28	66B	67	68	69	72
Level 1	1		2		44			1			2	1	1	17		17	9						1
Level 2	9		3		116				2		4		6	20		40		2	1				7
Level 3	6		6	4	113	3					7		5	35	1	35	24	1					2
Level 4	5		7	2	88	2	1				2	1	4	18		45	12	1		1	2		5
Level 5	3		11		142	3					12			26		25	11	2					2
Level 6	8	2	12		184	4	2				11		3	32	1	40	17	3			1	1	
Level 7	3		14		114	1					3	1		22		42	7			1	1		2
Level 8	4				70	1					2	2	1	36		48	11						2
Level 9	3		11		128	5				1	9			53		48	21	1	1	1			
Level 10	1		19		78	1					10		1	25		19	14	1					
Level 11	2		3		98	1					5		5	29		23	11		1		1		
Level 12	3		4	1	96	4				1	5		3	43		27	15		2				
Level 13	1		10	1	89	5					8	3	1	40		35	25	1					
Level 14			1		21								1	6		12	6						
Level 15			6		44	1					4	1	1	12		19	5						2
Level 16	4		2		37	2					3	3		11		10	9	1					
Level 17	3		1		12						1	1		3		5	4						
Level 18	1				4						1			3		1	2						
Level 19	1				3												1						
Total	58	2	112	8	1,481	33	3	1	2	2	89	13	32	431	2	491	204	13	5	3	5	1	23
%	2	T	4	T	48	1	T	T	T	T	3	T	1	14	T	16	7	T	T	T	T	T	1
Form:																							
bowl									2	2	49	11	20	176		223	65	9	3	2	3	1	11
jar	58	2	112	8	1481	33	3	1			34	2	11	253	2	257	134	4	2	1	1		11
other											6		1	2		11	5				1		1
% Ware	58 culinary								34 Cibola								7 unknown		1 Chuska				

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00416

Table MF-E.48. (concluded)[a]

Provenience	75	82	13A	13F	57C	60	57A	92	62	64	Total	%	Ceramic period
Level 1		1						1			98	3	
Level 2			2								212	7	
Level 3		1	1					1	5		250	8	
Level 4			2			1			2		201	7	
Level 5			3				1	1	2		244	8	
Level 6	1		2			6		2	2	2	336	11	
Level 7	1	1	2								215	7	
Level 8			2								179	6	
Level 9			2								284	9	
Level 10	1		2			1					173	6	
Level 11			1			1			1		182	6	
Level 12			1	1							206	7	
Level 13			2		1						222	7	
Level 14											47	2	
Level 15			1								96	3	
Level 16	1		1								84	3	
Level 17			3								33	1	
Level 18											12	T	
Level 19											5	T	
Total	4	3	27	1	1	9	1	5	12	2	3,079	101	Gallup
%	T	T	1	T	T	T	T	T	T	T		98	
Form:													
bowl	4	2	27	1	1	9	1	5	8	1			
jar		1							4				
other													
%	T	T	1		T	s	e	g	i	San J un		102	
Ware	Tusayan	M.V.	smudged					1 redware					

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00417

Table MF-E.49. Trash Mound, Grid 211. Ceramics: frequency and distribution.[a]

Provenience	01	03	04	09	08	05	06	22	23	24	25	26	27	77	30	29	28	65	66B	67	68	72
Robert's TP			5	1	64				3		2	23			10	7			1			1
Level 2	17		16		99				4	3	7	20			35	18			1	2		4
Level 3	9	4	19		143	2			13		9	34	1		66	48	2	1	3	4	2	6
Level 4	5		13		40				1	1	1	14			13	1					1	1
Level 5		3	6		138		1		6			66			63	17	2			1		1
Level 6	5		6		109	3			6			40			45	19				2		
Level 7	3		12		126				5	4	1	48			25	15			1	2	1	1
Level 8	3		7	1	98	4			4		1	24			14	9	3		1	1		
Level 9	4	1	8		99	5			8		5	44			14	11	2		1		2	2
Level 10			6	2	91	1			6	1	4	38	1		14	8	1			2		4
Level 11	3		6	1	94				6	2	3	28	1		25	14				1		2
Level 12	1		8		62	2			3		3	22			15	14			1	2		2
Level 13	4		5		86	1			2	2	1	34		1	20	10						2
Level 14	6		2		100	1	1		3		4	51	1		31	15	1					3
Level 15	1		10		109			1	6	1	5	44			33	27				2	1	1
Level 16	2	1	7	2	69	1			6		1	31			34	18						
Level 17	2		11	1	69				4		4	14			15	10	2		1			1
Level 18	1	2		2	20				2		1	5			5	3						
Level 19	1		1		3				3			2				1						
Total	2	67	11	148	10	1,619	20	2	1	91	14	52	582	4	1	477	65	13	1	10	19	7	31
%		1	T	4	T	46	1	T	T	3	T	1	16	T	T	14	8	T	T	T	1	T	1
Form:																						
bowl								1	49	10	20	206		1	196	83	7	1	8	13	5	10
jar	1	67	11	149	10	1619	20	1	32	4	29	368	4		264	76	5			5	2	20
other									10		3	8			17	6	1		2	1		1
% Ware	53 culinary							35 Cibola								8 unknown		2 Chuska				

[a]T = trace (1 ess than 0.5%).

CHCU_310_D58_VOL 4_00418

Table MF-E.49. (concluded)[a]

Provenience	75	76	82	84	13A	13F	13G	52	56	60	92	93	62	64	Total	%	Ceramic period
Robert's TP			1		3	2				2			1		126	4	
Level 2														1	227	6	
Level 3	1		1	1	1							1	1	1	373	11	
Level 4															91	3	
Level 5	1				4						1		2		312	9	
Level 6					4								3		242	7	
Level 7				1	3					1					249	7	
Level 8	1			1						1			1		174	5	
Level 9				1	2		1	1	1						212	6	
Level 10	1	1			1					1					183	5	
Level 11							1								187	5	
Level 12					2					5					142	4	
Level 13				1	1										170	5	
Level 14					2	1				2					224	6	
Level 15					2	1				1					245	7	
Level 16					4					2			3		181	5	
Level 17			1		4										139	4	
Level 18															41	1	
Level 19															11	T	
Total	4	1	3	5	33	4	2	1	1	15	1	1	11	2	3,529	100	Gallup
%	T	T	T	T	1	T	T	T	T	T	T	T	T	T		97	
Form:																	
bowl	4	1	3	5	33	4	2	1	1	15	--1--		8	2			
jar											--1--		3				
other																	
								Wh.Mt.		Tseg	San Juan			unk			
%	T		T		1			1								100	
Ware	Tusayan		M.V.		smudged			redware									

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00419

Table MF-E.50. Trash Mound, Grid 239. Ceramics: frequency and distribution.[a]

Provenience	01	04	09	08	05	06	23	24	25	26	27	77	30	29	28	66B	67	68	69	72
Level 3	3	21		58	2	1	2	1	5	24			23	17			2	1		1
Level 4	3	6		69	2				4	11			25	9			5			3
Level 5	8	23		127	4		4	8		34	1		34	25		2	2	2		4
Level 6	1	8		85			4	2	4	28	7		16		2		1			2
Level 7		6		26	3		3		4	18			4	9	2		1	1		2
Level 8	1	3		60	1		4	3	2	19			14	7			2	2		
Level 9	2	8		125			5	3	1	31			51	24		1	2	5		2
Level 10	1	3		33	2		3		5	20			4	10	4	1	1			
Level 11	3	5		80	3		4	3	5	26			26	22				1	1	6
Level 12		5		55	3			3	4	33			8	6	1	1	4	2		
Level 13	2	15		112	4	1	7	3	2	47		1	33	22			3			2
Level 14	4	8		78		1	10	2	1	51				21	3			1		1
Level 15	1	3	1	56	4		4	4		27			9	8			1		1	1
Level 16	2	8		63	4		5	1		49	1		16	12			1	1	1	
Level 17		4		61	6		1			29			25	9	1	1				2
Level 18	3	2		54	2		2		3	21			6	6	1			1		2
Level 19				4						4				1						
Total	34	128	1	1,146	40	3	58	33	40	472	9	1	294	208	14	6	25	17	3	28
%	1	5	T	43	2	T	2	1	2	18	T	T	11	8	1	T	1	1	T	1
Form:																				
bowl							37	17	16	139	3	1	91	38	12	5	15	14	3	13
jar	34	128	1	1,146	40	3	21	16	24	329	6		192	162	2	1	10	3		15
other										4			11	8						
% Ware	51 culinary						34 Cibola							8 unknown		3 Chuska				

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00420

Table MF-E.50. (concluded)[a]

Provenience	75	82	84	13A	13D	13F	13G	56	60	57A	59	92	62	Total	%	Ceramic period
Level 3				2									1	164	6	
Level 4	2	1		1										141	5	
Level 5				3								1	1	283	11	
Level 6				13	1	1							1	176	7	
Level 7				1									1	81	3	
Level 8		1				1		1	1					122	5	
Level 9			1	1					1		1		2	266	10	
Level 10				1		1			1				1	91	3	
Level 11				3						1				189	7	
Level 12				5		1			1					132	5	
Level 13	1		1	4		1			2		2		3	268	10	
Level 14				4		2	1		2				1	191	7	
Level 15		1		4					4				1	130	5	
Level 16				3					1				1	169	6	
Level 17				3										142	5	
Level 18									1					104	4	
Level 19				1										10	T	
Total	3	3	2	49	1	7	1	1	14	1	3	1	13	2,659	99	Gallup
%	T	T	T	2	T	T	T	T	1	T	T	T	T		100	
Form:																
bowl	3	1	1	49	1	7	1		10	1	3	1	7			
jar		2						1	4				6			
other																
%	T	T		2						1					99	
Ware	Tus	M.V.		smudged						redware						

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00421

Table MF-E.51. Trash Mound, Grid 267. Ceramics: frequency and distribution.[a]

Provenience	01	03	04	09	08	05	06	07	23	24	25	26	30	29	28	65	66	67	68	72
Level 4	2		6		33	1						3	11	2				2		
Level 5	1	1	10		114	3	2			2	7	25	40	24	1		1	3	1	3
Level 6	1		5		89	2				3	8	22	9	11	3					4
Level 7	3		8		55	1			1	2	5	27	13	10				1	2	3
Level 8			2		53	3			2		4	22		12		1		3		1
Level 9	3		10		86				1		11	23	25	15			1	2	1	1
Level 10	1		2		64	3	1	1	4	3	5	19	17	6					1	
Level 11	2		5		48	3			2	2	4	18	14	15			1	2		2
Level 12		1	3		55	3			6	4		23	5	9	1					
Level 13					59				1	1	5	22	11	8				1	1	
Level 14			9		85	4		1	7	5	7	49	28	19	1			2	2	3
Level 15	2		8	1	91	3	1	1	4	9	2	50	19	23	3		1	3		1
Level 16	2		10	2	78	1			5	3	5	50	30	18				1		3
Level 17			8		2	2			5			30	20	13				1	1	
Level 18	1		4		40	2			3			21	5	7						
Level 19			1		13					1		10	15	2			1			
Total	18	2	91	3	965	31	4	3	41	35	63	414	262	194	9	1	5	21	9	21
%	1	T	4	T	43	1	T	T	2	2	3	18	12	9	T	T	T	1	T	1
Form:																				
bowl									32	19	21	133	83	50	3	1	2	12	6	11
jar	18	2	91	3	965	31	4	3	4	16	42	280	170	139	6		2	8		8
other									4			1	9	5			1	1	1	2
% Ware	50 culinary								36 Cibola					9 unknown		3 Chuska				

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00422

Table MF-E.51. (concluded)[a]

Provenience	75	76	82	15B	13I	13A	13D	13F	52	56	57C	60	59	93	62	63	Total	%	Ceramic period
Level 4														1			61	3	
Level 5									2						1		241	11	
Level 6			1										1				159	7	
Level 7								1			1						133	6	
Level 8			1			1		2									107	5	
Level 9			1			2									1		183	8	
Level 10		1	1					3									132	6	
Level 11								1									119	5	
Level 12						1											111	5	
Level 13						1											110	5	
Level 14	1					3						1					227	10	
Level 15						4	1	2		1							230	10	
Level 16	2			1	1	2						1				1	216	10	
Level 17								1				1			2		86	4	
Level 18																	83	4	
Level 19																	43	2	
TOTAL	3	1	4	1	1	14	1	10	2	1	1	3	1	1	4	1	2,241	101	Gallup
%	T	T	T	T	T	1	T	T	T	T	T	T	T	T	T	T		98	
Form:																			
bowl	3	1	4				15	10	--2--		1	3	1	1	1				
jar				1	1				--1--						2	1			
other															1				
%	T		T			1						1						100	
Ware	Tusayan		MV			smudged						redware							

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00423

Table MF-E.52. Trash Mound, Grid 295. Ceramics: frequency and distribution.[a]

Provenience	01	03	04	09	08	05	06	07	20	22	23	24	25	26	27	30	29	28	66	67	68	72
Level 6	2	1	5	1	109	2		1			1	5	11	33		10	13		1	3	1	1
Level 7	1		2		55		1	1		1		3	5	25		18	18			3		
Level 8	1	2	4	1	35	3					1	3	5	18		18	3			1	2	2
Level 9	2		2		57		1					2	4	32		15	12			1		1
Level 10			4		34	3		1			1	5	4	21		7	11			3		
Level 11	3		5		96	2	1				2	3	4	18	1	15	10	1	2	1	1	2
Level 12	1		2		73	2				1	4	5	2	24		6	7	1			2	1
Level 13	2		13		100	1			1		2	2	4	20		10	18			3	1	
Level 14	2		2		59	1						3	4	25		10	10	2			2	1
Level 15			5		68	6					4	2	2	30	1	8	10	2				4
Level 16	1		13		183	4					6	1	4	55	1	9	25	2				2
Level 17			4		57	2	1				4	5	4	27		6	8		1			1
Level 18			4		51	2						1	3	24		12	4	2				
Level 19	1				41	1	1				3		6	20		11	2	4	1	1		1
Total	16	3	65	2	1,018	29	5	3	1	2	28	40	62	372	3	155	151	14	5	16	9	16
%	1	T	3	T	49	1	T	T	T	T	1	2	3	18	T	7	7	T	T	1	T	1
Form:																						
bowl									1	2	16	17	13	97		50	37	11	1	11	6	4
jar	16	3	65	2	1,018	29	5	3			12	23	49	270	3	92	112	3	4	5	2	12
other														5		13	2				1	
% Ware	55 culinary								32 Cibola								8 unknown		2 Chuska			

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00424

Table MF-E.52. (concluded)[a]

Provenience	78A	75	76	82	84	13I	13A	13F	13D	13E	52	56	60	92	62	Total	%	Ceramic period
Level 6		1			1			1							1	204	10	
Level 7		2							1			1				137	7	
Level 8								2			1	1				103	5	
Level 9		1	1				1									132	6	
Level 10		1		1			3	1				1		2		103	5	
Level 11	1				2		7	1				2				180	9	
Level 12					1	1	2	1								136	7	
Level 13				2		1	1				1			1		183	9	
Level 14				6	1		2									130	6	
Level 15						1	2									145	7	
Level 16		1	1	1			1	1								311	15	
Level 17				2		1				1		1			1	126	6	
Level 18							1							1		105	5	
Level 19												1	2	1		97	5	
Total	1	6	2	12	5	4	20	7	1	1	2	7	2	5	2	2,092	102	Gallup
%	T	T	T	1	T	T	1	T	T	T	T	T	T	T	T		97	
Form:																		
bowl	1	6	1	11	1		20	7	1	1	--7--		2	3	1			
jar			1	1	4	4					--2--			2	1			
other																		
% Ware	T Tusayan			1 M.V.		2 smudged					Wh.Mt. Tse 1 redware			San Jn			101	

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00425

Table MF-E.53. Trash Mound, Grid 323. Ceramics: frequency and distribution.[a]

Provenience	01	03	04	08	05	06	07	22	23	24	25	26	27	30	29	28	66	67	68	69	72
Level 8			3	118	2					1	4	30		13	17		1				1
Level 9	1		1	97	1	2	1		3	2	2	16		7	13	1			1		3
Level 10	7		6	105	3	1			6	5	9	20		17	11	1		4	1		1
Level 11			3	43					2		10			6	3						1
Level 12				64	1				3	2		13		5	5						1
Level 13	1		4	38	1				2	6	1	10		13	5	2					1
Level 14	3		1	39	1					6		15		12	4		1	2	1	1	
Level 15		1	2	69	7	1				5	4	18		5	6		1	5	1		2
Level 16		1	6	123	5				5	12	15	36	5	29	32			2			2
Level 17/18	3	3	9	136	3	2	1	1	5	11	17	34		18	27	4		4		1	1
Level 19	3			41	3				1	5	3	16		14	10	3			1		2
Level 20				4										1							
TOTAL	18	5	35	877	27	6	2	1	27	55	65	208	5	140	133	11	3	17	5	2	15
%	1	T	2	51	2	T	T	T	2	3	4	12	T	8	8	1	T	1	T	T	1
Form:																					
bowl								1	17	19	24	44	4	49	28	6		2	2	2	5
jar	18	5	35	877	27	6	2		9	35	41	162	1	85	101	5	3	15	3		8
other									1	1		2		6	4						2
% Ware	56 culinary							29 Cibola							8 unknown		2 Chuska				

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00426

Table MF-E.53. (concluded)[a]

Provenience	74	75	45	82	84	13A	13D	13F	15B	52	53	56	57C	60	59	62	64	Total	%	Ceramic period
Level 8		1		1		3				1								196	11	
Level 9		1	1			3												156	9	
Level 10					1	2		1					1		1			203	12	
Level 11																		68	4	
Level 12					1													95	6	
Level 13							1	2				1						88	5	
Level 14		2	1			3		1								1		94	5	
Level 15	1					6	1	1	1		1	1					1	140	8	
Level 16			1			1	1									1		277	16	
Level 17/18					1	4	2			1		1		1				290	17	
Level 19					1	1						1						105	6	
Level 20						2												7	T	
Total	1	4	3	1	4	25	5	5	1	2	1	4	1	1	1	2	1	1,719	99	Gallup
%	T	T	T	T	T	2	T	T	T	T	T	T	T	T	T	T	T		98	
Form:																				
bowl	--4--		2	--4--		25	5	5	1	2	1	3	1	1	1	2	1			
jar	--1--		1	--1--																
other												1								
%		T			T		2			White Moun.			T s e g i			SJ	unk		98	
Ware		Tusayan			Mesa V.		smudged						1 redware							

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00427

Table MF-E.54. East Ruin, wall clearing ceramics: frequency and distribution.[a]

Provenience	02	04	08	05	06	07	23	24	25	26	27	77	30	29	67	68	69	72
Kiva 1 (TT):																		
0-200cm			9						2	5	3		2	2	1			
200-250cm			6						1		1		2	1			1	
Room 2			20		1					1	1		1					
Room 3			10	1					2	3			4	2				
Room 4			1										1					
Room 5			3		1	1	1		1	1	2	1	4	2		1		1
Room 6			1							1			2					
Room 7			4		1					1			1					
Room 8																		
Room 9			1					1										
Room 10								1	1									
Room 11			4							4			4	3	1			
Room 12	1		24	1	1					2	2	1	2	3				
Room 13		2	4							1								
Total	1	2	88	2	4	1	1	2	7	19	9	2	23	13	2	1	1	1
%	1	1	45	1	2	1	1	1	4	10	5	1	12	7	1	1	1	1
Form:																		
bowl							1		2	4	1	1	3	4			1	
jar	1	2	88	2	4	1		2	2	14	8	1	16	9	2			1
other									3	1			4			1		
% Ware	50 culinary						32 Cibola							7 unk	3 Chuska			

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00428

Table MF-E.54. (concluded)[a]

Provenience	81	82	13A	13F	57B	59	Total	%	Ceramic period
Kiva 1 (TT):									
0-200cm	1	1					26	13	
200-250cm							12	6	
Room 2					1		25	13	
Room 3				2		1	25	13	
Room 4							2	1	
Room 5	1						20	10	
Room 6							4	2	
Room 7						1	8	4	
Room 8							0		
Room 9							2	1	
Room 10							2	1	
Room 11				4			20	10	
Room 12	1		1	1		1	41	21	
Room 13							7	4	
Total	3	1	1	7	1	3	194	99	Late Gallup
%	2	1	1	4	1	2		107	
Form:									
bowl	3		1	7		2			
jar					1	1			
other		1							
% Ware	2 Mesa Verde		4 smudged		2 redware			100	

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00429

Table MF-E.55. East Ruin, Room 6 (kiva). Ceramics: frequency and distribution.[a]

Provenience	01	04	08	05	06	23	24	25	26	27	77	30	29	65A	67	68A	72
Room 6, TT 6:																	
Level 1			3						1				2				
Level 2			1						2			1					
Level 3	1		5			1			2			1	4				
Level 4	2			1		2		1	2								
Subtotal	3		9	1		3		1	7			2	6				
%	8		25	3		8		1	19			6	17				
Room 6 (kiva):																	
Surface		1	2					1					1				1
Level 1		1	3						1			2	6				
Level 2			33						13			4	16	1			
Level 3			11					1	9	6	1	8	11		1	1	
Level 4		1	3						1				1				
Level 6			3				1	1	2			1					
Layer 1	2	2	26			2			3		1	1	8				
Layer 2			13		1	1			9			1	5		1		
Layer 3			3			1	13			1		2	4				
Floor 1			2				1										
Firepit 1									1								
Other Pit 4			3														
Vent.1 fill									1								
Bench const.							1										
Floor 2 fill			2														
Subtotal	2	5	104		1	4	16	3	40	7	2	19	52	1	2	1	1
%	1	2	37		T	1	6	1	14	3	1	7	19	T	1	T	T
Total	5	5	113	1	1	7	16	4	47	7	2	21	58	1	2	1	1
%	2	2	36	T	T	2	5	1	15	2	1	7	18	T	1	T	T
Form:																	
bowl						4		3	9	1	1	4	21			1	1
jar	5	5	113	1	1	3	16	1	38	6	1	17	36	1	2		
other													1				
%			40						33				18			2	
Ware			culinary						Cibola				unk			Chuska	

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00430

Table MF-E.55. (concluded)[a]

Provenience	75	81	84	13F	52	56	62	Total	%	Ceramic period
Room 6, TT 6:										
Level 1			1			1		8	22	
Level 2				1	1			6	17	
Level 3								14	39	
Level 4								8	22	
Subtotal			1	1	1	1		36	100	Late Mix?
%			3	3	3	3			101	
Room 6 (kiva):										
Surface								6	2	
Level 1								13	5	
Level 2								67	24	
Level 3								49	18	
Level 4								6	2	
Level 6								8	3	
Layer 1		1					1	47	17	
Layer 2	1							32	11	
Layer 3		1	1	1				27	10	
Floor 1								3	1	
Firepit 1								1	T	
Other Pit 4		12						15	5	
Vent.1 fill								1	T	
Bench const.								1	T	
Floor 2 fill		1						3	1	
Subtotal	1	15	1	1			1	279	99	Late Mix
%	T	5	T	T			T		98	
Total	1	15	2	2	1	1	1	315		
%	T	5	1	1	T	T	T		99	
Form:										
bowl	1	15	1	2	1	1	1			
jar			1							
other										
%					Wh.	Mt.	SJ			
Ware	T Tusayan	5 Mesa Verde		1 smud.		T redware				

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00431

Table MF-E.56. Parking Lot Ruin, wall clearing and tests. Ceramics: frequency and distribution.[a]

Provenience	01	04	08	22	23	24	25	26	27	44	30	29	18A	13A	92	Total	%	Ceramic period
General fill	2		5	1	1		1	6				5				21	20	
Wall clear.			4					2			3	2			1	12	11	
Room 1:																		
Wall clear	1										3					4	4	
Level 1	9	4	15		1			3			6	9	1			48	46	
Level 3							1				1					2	2	
Room 4:																		
Surface		1	5							1		4		1		12	11	
Level 1											2	2				4	4	
Level 2			1								1					2	2	
Total	12	5	30	1	2		2	11		1	16	22	1	1	1	105	100	Gallup
%	11	5	29	1	2		2	10		1	15	21	1	1	1		100	
Form:																		
bowl					2		1	3			6	9		1				
jar	12	5	30	1			1	8		1	10	13	1		1			
other																		
%		45						31				21	1	1	1		100	
Ware		culinary						Cibola				unk.	Chusk	smudg	SJ			

[a]T = trace (less than 0.5%).

CHCU_310_D58_VOL 4_00432

Investigations at the Pueblo Alto Complex

Chaco Canyon

New Mexico

1975-1979

Microfiche

for

Volume III: Artifactual and Biological Analyses

Edited by
Frances Joan Mathien
and
Thomas C. Windes

CHCU_310_D58_VOL 4_00433

Microfiche for Chapter 1

The Ceramography of Pueblo Alto

H. Wolcott Toll and Peter J. McKenna

Tables MF-1.1 - MF-1.46
Appendix MF-1.A. Sherd Matches

CHCU_310_D58_VOL 4_00434

Table MF-1.1. Pueblo Alto Red Mesa Black-on-white description.

A. SURFACE TREATMENT

1. Designs	Motif Number 1	2	3	N	%
parallel lines	24	12	3	39	8.1
cribbed parallel lines	4	1		5	1.0
pendant parallel lines	12	7		19	4.0
framers with unticked solids	9			9	1.9
framers with ticked solids	7	2		9	1.9
ticking		1		1	0.2
corner triangles	1	4	2	7	1.5
scrolls	7	21	2	30	6.3
dots	3	1		4	0.8
dotted lines	9	9	4	22	4.6
thick wavy lines	1	1		2	0.4
parallelograms	1			1	0.2
checkerboard	9	2		11	2.3
eyed solids	2	1		3	0.6
sawteeth	9	13		22	4.6
barbs	1	4		5	1.0
elongated scalloped triangle	2	3		5	1.0
wide Sosi style		1		1	0.2
narrow Sosi style	16	7		23	4.8
heavy curvilinear lines		1		1	0.2
solid band design	91	8	2	101	21.1
hatched band design	2			2	0.4
general solids	14	7	1	22	4.6
hatchure A-1	24	3		27	5.6
hatchure A-2	1	2		3	0.6
hatchure A-3	1	1		2	0.4
hatchure B/C	1			1	0.2
hatchure B-1		1		1	0.2
hatchure B-2	1			1	0.2
hatched checkerboard	1			1	0.2
heavy Gallup squiggle	1			1	0.2
squiggle lines	10	2	2	14	2.9
solid ticked triangles	37	18	1	56	11.7
motif on bowl exterior		4	2	6	1.2
jar neck motif	1			1	0.2
narrow curvilinear line		1		1	0.2
interlocked ticking	10	3		13	2.7
other solids		1		1	0.2
other hatchure	2	2	1	5	1.0
2-5-mm corrugated			1	1	0.2
Totals	314	144	21	479	
n w/ 1,2,3 designs	170	123	21	314	
% w/ 1,2,3 designs	54.1	39.2	6.7		

Type Design Diversity H' = 2.901 s = 40 J = .786
Design Distribution Diversity H' = .775 s = 3 J = .706

CHCU_310_D58_VOL 4_00435

Table MF-1.1. (continued)

2. Paint	n	%
mineral: red	5	1.6
brown	67	21.3
black	239	76.1
glaze	3	1.0
Total	314	

Rim Decoration	n	&
unpainted	20	7.4
solid line	227	83.8
eroded, solid	7	2.6
use-ground	17	6.3
unknown	43	
Total Known	271	

3. Polish	Bowl		Ladle		Closed		Total	
	n	%	n	%	n	%	n	%
unknown	2	0.8			2	6.3	4	1.3
none	8	3.3					8	2.6
one side								
streaky	2	0.8	1	2.8	1	3.1	4	1.6
moderate	10	4.1	3	8.3	4	12.5	17	5.4
total	129	52.9	12	33.3	25	78.1	166	53.2
both sides								
moderate	4	1.6	3	8.3			7	2.2
total	50	20.5	14	38.9			64	
differential	39	16.0	3	8.3			42	13.5
Totals	244		36		32		312	

H' = 1.344 s = 8 J = .572

4. Slip	Bowl		Ladle		Closed		Total	
	n	%	n	%	n	%	n	%
absent	6	2.5			1	3.1	7	2.2
interior	79	32.4	9	25.0			88	28.2
exterior					27	84.4	28	9.0
slip-slop	17	7.0	5	13.9	4	12.5	26	8.3
both sides	139	57.0	21	58.3			160	51.3
unknown	3	1.2	1	2.8			3	1.0
Totals	244		36		32		312	

H' = 1.016 s = 5 J = .632

CHCU_310_D58_VOL 4_00436

Table MF-1.1. (continued)

5. Forms and Metrics

Form			Orifice Diameter (mm)				
	n	%	n	range	$\bar{x}$	s.d.	cv
bowl	244	77.7	199	35-350	189.8	61.575	34.3
ladle	36	11.5	17	50-140	102.9	23.983	23.3
pitcher	5	1.6	3	70-100	86.7	15.275	17.6
seed jar	1	0.3	1	40			
olla	1	0.3					
jar	25	8.0	7	60-100	73.6	15.469	21.0
duckpot	1	0.3	1	35			
unknown	1	0.3					
Total	314						

Diversity of Forms H' = .766 s = 7 J = .394

6. Handles

	n	%
strap	3	10.7
tubular	1	3.6
trough	21	75.0
strap lug	1	3.6
multi-coil strap	1	3.6
effigy	1	3.6
Total	28	

Handles:items = 1:46 (excluding ladles from forms and handles)

CHCU_310_D58_VOL 4_00437

Table MF-1.1. (continued)

B. DESIGNS BY VESSEL FORM

Designs	Bowl	Ladle	Pitcher	Seed Jar	Olla	Jar	Duckpot	Total
parallel lines	35					4		39
cribbed parallel lines	2				1	2		5
pendant parallel lines	14	5						19
framers with unticked solids	6	1	1			1		9
framers with ticked solids	7					2		9
ticking	1							1
corner triangles	5	2						7
scrolls	23	4			1	1		29
dots	2					1	1	4
dotted lines	16	3	1			2		22
thick wavy lines	2							2
parallelograms						1		1
checkerboard	10			1				11
eyed solids	2					1		3
sawteeth	17	4				1		22
barbs	3	2						5
elongated scalloped triangle	3	2						5
wide Sosi style	1							1
narrow Sosi style	20	1				2		23
heavy curvilinear lines	1							1
solid band design	74	17				8	1	100
hatched band motifs	2							2
general solids	20	1				1		22
hatchure A-1	21	2	2			2		27
hatchure A-2	2	1						3
hatchure A-3	2							2
hatchure B/C		1						1
hatchure B-1	1							1
hatchure B-2		1						1
Total designs	374	54	7	1	2	38	1	477
% of designs	78.4	11.3	1.5	0.2	0.4	8.0	0.2	

CHCU_310_D58_VOL 4_00438

Table MF-1.1. (concluded)

Designs	Bowl	Ladle	Pitcher	Seed Jar	Olla	Jar	Duckpot	Total
hatched checkerboard	1							1
heavy Gallup squiggle	1							1
squiggle lines	13	1						14
solid ticked triangles	43	4	1			7		56
motif on bowl exterior	5	1						6
jar neck motif						1		1
narrow curvilinear line	1							1
interlocked ticking	12					1		13
other solids		1						1
other hatchure	4		1					5
2-5-mm corrugated	1							1
Total designs	374	54	7	1	2	38	1	477
% of designs	78.4	11.3	1.5	0.2	0.4	8.0	0.2	
Vessel count	244	36	5	1	1	25	1	313
% of vessels	78.0	11.5	1.6	0.3	0.3	8.0	0.3	

CHCU_310_D58_VOL 4_00439

Table MF-1.2. Pueblo Alto Red Mesa Black-on-white paste description.

Temper Composition

Temper	n	% of Total	% of Observed
Undifferentiated sandstone>sherd	61	26.9	27.4
More sherd temper than SS	121	53.3	54.3
Pink chalcedonic sandstone	5	2.2	2.2
White chalcedonic sandstone	10	4.4	4.5
Trachyte only	2	0.9	0.9
with sandstone	7	3.1	3.1
with sandstone dominant	15	6.6	6.7
San Juan igneous with hornblende with sandstone dominant	1	0.4	0.4
Unidentified igneous with SS	1	0.4	0.4
Not observable	4	1.8	
Total	227		

Texture Attributes

Grain Size	n	%
Fine	59	26.6
Medium	149	67.1
Coarse	14	6.3
Totals	222	
[No observ.	5	]

Density(%)	n	%
1-2	1	0.4
5	24	10.8
10	79	35.4
20	86	38.6
30	30	13.5
40+	3	1.3
	223	

Sherd Temper(%)	n	%
none	13	5.8
0-50	72	32.3
50-95	129	57.8
ca.100	9	4.0
Total	223	
no obs.	4	

Undifferentiated sandstone

Grain Size	n	%
Fine	52	28.6
Medium	120	65.9
Coarse	10	5.5
V. Coarse	0	
Total	182	

Texture index	n	%
Very fine (0-2)	55	24.7
Fine (2.1-4)	104	46.6
F-Medium (4.1-7)	43	19.3
Medium (7.1-10)	13	5.8
M-Coarse (10.1-13)	6	2.7
Coarse (13.1-16)	1	0.4
Very Coarse (16.1+)	1	0.4
Total	223	

Clay Attributes

Clay-temper types	n	%
Black clay, white sherd	16	10.1
Gray clay, black sherd	8	5.1
Black and white sherd	36	22.8
Gray clay, white sherd	70	44.3
Tan paste	5	3.2
Black paste	2	1.3
White paste	20	12.7
Chuska gray, homogeneous	1	0.6
Totals (with type)	158	
No type assigned	[65	29.1]

Vitrification	n	%
Absent	37	16.6
Present	141	63.2
Marked	45	20.2
	223	
Not observable	4	

CHCU_310_D58_VOL 4_00440

Table MF-1.3. Comparison of provenience percentages of ceramics for bulk sherd counts and detailed analysis sample, Pueblo Alto.

PROVENIENCES	WARE GROUPS: Early Grayware	Late Grayware	Early Mineral/w	Late Mineral/w	Exotic Mineral	Early Carbon/w	Late Carbon/w	Whiteware	Polished Smudged	Redware	Total
Rooms											
Detailed n	13	120	44	197	16	7	38	8	17	14	474
W/in prov. %[a]	2.7	25.3	9.3	41.6	3.4	1.5	8.0	1.7	3.6	3.0	
% of ware[b]	7.2	6.9	13.1	9.2	11.6	23.3	8.7	6.7	13.1	10.5	8.8
Bulk n	2,059	6,863	710	3,148	58	60	885	1,616	240	278	15,917
W/in prov. %	12.9	43.1	4.5	19.8	0.4	0.4	5.6	10.2	1.5	1.7	
% of ware	25.7	17.2	22.9	14.4	18.0	20.8	19.6	17.0	18.2	22.6	17.7
Kivas											
Detailed n	0	233	11	203	37	2	252	29	37	57	861
W/in prov. %		27.1	1.3	23.6	4.3	0.2	29.3	3.4	4.3	6.6	
% of ware		13.4	3.3	9.5	26.8	6.7	57.4	24.4	28.5	42.9	16.0
Bulk n	314	7,252	142	2,714	72	20	1,749	1,791	317	295	14,666
W/in prov. %	2.1	49.4	1.0	18.5	0.5	0.1	11.9	12.2	2.2	2.0	
% of ware	4.0	18.1	4.6	12.4	22.3	6.9	38.7	18.8	24.0	24.0	16.3
Plaza Grid 8											
Detailed n	14	17	53	26	0	5	3	3	9	3	133
W/in prov. %	10.5	12.8	39.8	19.5		3.8	2.3	2.3	6.8	2.3	
% of ware	7.8	1.0	15.7	1.2		16.7	0.7	2.5	6.9	2.3	2.5
Bulk n	738	197	133	403	3	14	45	232	70	37	1,872
W/in prov. %	39.4	10.5	7.1	21.5	0.2	0.7	2.4	12.4	3.7	2.0	
% of ware	9.2	0.5	4.3	1.8	0.9	4.8	1.0	2.4	5.3	3.0	2.1

[a]w/in prov. %--within provenience percentage, calculated by dividing the ware frequency by the total number in a sample group in a provenience.

[b]% of ware--calculated by dividing the number of items in a ware group from a provenience by the total quantity of that ware in the sample.

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Table MF-1.3. (continued)

	WARE GROUPS										
	Early Grayware	Late Grayware	Early Mineral/w	Late Mineral/w	Exotic Mineral	Early Carbon/w	Late Carbon/w	White-ware	Polished Smudged	Redware	Total
PROVENIENCES											
Trash Mound Test Trench											
Detailed n	73	735	174	977	36	10	87	69	45	36	2,242
W/in prov. %[a]	3.3	32.8	7.8	43.6	1.6	0.4	3.9	3.1	2.0	1.6	
% of ware[b]	40.6	42.3	51.6	45.8	26.1	33.3	19.8	58.0	34.6	27.1	41.7
Bulk n	1,865	12,926	875	8,584	109	85	542	2,378	321	286	27,971
W/in prov. %	6.7	46.2	3.1	30.7	0.4	0.3	1.9	8.5	1.1	1.0	
% of ware	23.3	32.3	28.3	39.3	33.7	29.4	12.0	25.0	24.3	23.3	31.0
Trash Mound Booths											
Detailed n	80	632	55	727	49	6	58	10	22	22	1,661
W/in prov. %	4.8	38.0	3.3	43.8	3.0	0.4	3.5	0.6	1.3	1.3	
% of ware	44.4	36.4	16.3	34.1	35.5	20.0	13.2	8.4	16.9	16.5	30.0
Bulk n	733	4,835	173	2,739	50	24	177	1,044	186	96	10,057
W/in prov. %	7.3	48.1	1.7	27.2	0.5	0.2	1.8	10.4	1.8	1.0	
% of ware	9.1	12.1	5.6	12.5	15.5	8.3	3.9	11.0	14.1	7.8	11.2

[a]w/in prov. %--within provenience percentage, calculated by dividing the ware frequency by the total number in a sample group in a provenience.

[b]% of ware--calculated by dividing the number of items in a ware group from a provenience by the total quantity of that ware in the sample.

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Table MF-1.3. (concluded)

	WARE GROUPS										
	Early Grayware	Late Grayware	Early Mineral/w	Late Mineral/w	Exotic Mineral	Early Carbon/w	Late Carbon/w	White-ware	Polished Smudged	Redware	Total
PROVENIENCES											
All Other Proveniences											
Detailed n	0	0	0	1	0	0	1	0	0	1	3
% of ware[b]				0.05			0.2			0.8	0.1
Bulk n	2,303	7,896	1,063	4,277	31	86	1,116	2,446	185	237	19,640
W/in prov. %[a]	11.7	40.2	5.4	21.8	0.2	0.4	5.7	12.5	0.9	1.2	
% of ware	28.7	19.8	34.3	19.6	9.6	29.8	24.7	25.7	14.0	19.3	21.8
Total Collections											
Detailed n	180	1,737	337	2,131	138	30	439	119	130	133	5,374
W/in prov. %	3.3	32.3	6.3	39.7	2.6	0.6	8.2	2.2	2.4	2.5	
Bulk n	8,012	39,969	3,096	21,865	323	289	4,514	9,507	1,319	1,229	90,123
W/in prov. %	8.9	44.3	3.4	24.3	0.4	0.3	5.0	10.5	1.5	1.4	

[a]w/in prov. %--within provenience percentage, calculated by dividing the ware frequency by the total number in a sample group in a provenience.

[b]% of ware--calculated by dividing the number of items in a ware group from a provenience by the total quantity of that ware in the sample.

CHCU_310_D58_VOL 4_00443

Table MF-1.4. Pueblo Alto Pueblo II-III Carbon-on-white type paste description.

Temper Composition

Temper	n	% of total
Undifferentiated sandstone	14	14.9
Sherd temper > sandstone	32	34.0
Trachybasalt only	4	4.3
with sandstone	17	18.1
with sandstone dominant	11	11.7
San Juan igneous with hornblende	1	1.1
with sandstone	2	2.1
San Juan igneous w/o hornblende	2	2.1
with sandstone	2	2.1
Unidentified igneous with SS	2	2.1
with sandstone dominant	7	7.4
Total	94	

Texture Attributes

Grain Size	n	%
Fine	40	42.6
Medium	45	47.9
Coarse	9	9.6
Totals	94	

Density(%)	n	%
5	18	19.1
10	39	41.5
20	31	33.0
30	5	5.3
40+	1	1.1
	94	

Sherd Temper(%)	n	%
none	15	16.0
0-50	30	31.9
50-95	45	47.9
ca.100	4	3.3
	94	

Undifferentiated Sandstone

Grain Size	n	%
Fine	19	41.3
Medium	21	45.7
Coarse	6	13.0
Total	46	

Texture index	n	%
Very fine (0-2)	39	41.5
Fine (2.1-4)	22	23.4
F-Medium (4.1-7)	20	21.3
Medium (7.1-10)	8	8.5
Med-Coarse	4	4.3
Coarse	1	1.1
Total	94	

Clay Attributes

Clay-temper types	n	%
Black clay, white sherd	7	12.5
Gray clay, black sherd	2	3.6
Black and white sherd	2	3.6
Gray clay, white sherd	32	57.1
Little Colorado	1	1.8
Tan paste	4	7.1
Black paste	3	5.4
White paste	5	8.9
Totals (with type)	56	
No type assigned	38	40.4

Vitrification	n	%
Absent	17	18.1
Present	72	76.6
Marked	5	5.3
	94	

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Table MF-1.5. Pueblo Alto Escavada Black-on-white description.

A. SURFACE TREATMENT

1. Designs	Motif Number 1	2	3	n	%
hooks, flags		1		1	0.5
unnested isolates			1	1	0.5
parallel lines	10	2		12	5.5
cribbed parallel lines	1			1	0.5
pendant parallel lines	9	2		11	5.0
irregular wide lines	3	1		4	1.8
ticking		1	2	3	1.4
corner triangles	1	2		3	1.4
scrolls	3	8	2	13	6.0
dots	1			1	0.5
linear dots	1			1	0.5
dotted lines	2	4		6	2.8
thick wavy lines		1		1	0.5
parallelograms	2			2	0.9
checkerboard	15			15	6.9
eyed solids	1	1	2	4	1.8
sawteeth	10	3		13	6.0
barbs	9	4		13	6.0
elongated scalloped triangle	1	2		3	1.4
wide Sosi style	17	3	1	21	9.6
narrow Sosi style	6		1	7	3.2
heavy dotted lines		1		1	0.5
heavy curvilinear lines	9	1		10	4.6
solid band design	14	4		18	8.3
hatched band design	2	1		3	1.4
isolated triangles	1			1	0.5
general solids	12	8		20	9.2
hatchure A-3	3			3	1.4
hatchure B-1	1	1		2	0.9
hatchure B-2	2			2	0.9
hatchure B-3		1		1	0.5
hatchure B-6	2			2	0.9
interlocked frets		1	1	2	0.9
zoomorphs		1		1	0.5
solid ticked triangles	2	3	1	6	2.8
jar neck motif		1		1	0.5
white exterior design			1	1	0.5
narrow curvilinear line	1			1	0.5
other solids		2		2	0.9
other hatchure	1	2		3	1.4
2-5-mm corrugated			1	1	0.5
5 mm+ corrugated		1		1	0.5
Totals	142	63	13	218	
n w/ 1,2,3 designs	79	50	13	142	
% w/ 1,2,3 designs	55.6	35.2	9.2		

Type Design Diversity H' = 3.228 s = 42 J = .864
Design Distribution Diversity H' = .806 s = 3 J = .734

CHCU_310_D58_VOL 4_00445

Table MF-1.5. (continued)

2. Paint	n	%
mineral: red	2	2.3
brown	24	27.3
black	59	67.0
green	1	1.1
glaze	2	2.3
Total	88	

Rim Decoration	n	%
unpainted	25	21.0
solid line	80	67.2
dotted	2	1.7
eroded solid	7	5.9
use-ground	5	4.2
unknown	23	
Total Known	119	

3. Polish	Bowl		Ladle		Closed		Total	
	n	%	n	%	n	%	n	%
unknown	4	3.8	1	8.3	2	8.3	7	4.9
none	49	46.2	5	41.7	11	45.8	65	45.8
one side								
streaky	16	15.1			3	12.5	19	13.4
moderate	18	17.0	2	16.7	4	16.7	24	16.9
total	15	14.2	3	25.0	4	16.7	22	15.5
both sides								
streaky	1	.9					1	0.7
differential	3	2.8	1	8.3			4	2.8
Total	106	74.6	12	8.4	24		142	

s = 7 H' = 1.488 J = .765

4. Slip	Bowl		Ladle		Closed		Total	
	n	%	n	%	n	%	n	%
absent	23	21.7	2	16.7	6	25.0	31	21.8
interior	43	40.6	4	33.3			47	33.1
exterior			1	8.3	10	41.7	11	7.8
slip-slop	27	25.5	1	8.3	7	29.2	35	24.6
both sides	10	9.4	3	25.0			13	9.2
unknown	3	2.8	1	8.3	1	4.2	5	3.5
Total	106	74.6	12	8.4	24	16.9	142	

s = 5 H' = 1.370 J = .851

CHCU_310_D58_VOL 4_00446

Table MF-1.5. (continued)

5. Forms and Metrics

Form			Orifice Diameter (mm)				
	n	%	n	range	$\bar{x}$	s.d.	cv
bowl	106	74.6	88	60-350	208.4	70.798	34.0
ladle	12	8.4	7	90-145	112.1	20.587	18.4
pitcher	8	5.6	8	60-95	83.1	12.518	15.1
seed jar	4	2.8	4	50-130	95.0	36.968	38.9
tecomate	1	0.7					
olla	1	0.7					
jar	10	7.0	1	60			
Total	142						

Diversity of Forms H' = .946 s = 7 J = .486

6. Handles

	n	%
tubular	3	23.1
trough	5	38.5
tit	1	7.7
strap lug	3	23.1
sagging tits	1	7.7
Total	13	

Handles:items = 1:26 (excluding ladles from forms and handles)

CHCU_310_D58_VOL 4_00447

Table MF-1.5. (continued)

B. DESIGNS BY VESSEL FORM

Designs	Bowl	Ladle	Pitcher	Seed Jar	Olla	Tecomate	Jar	Total
hooks, flags							1	1
unnested isolates							1	1
parallel lines	8	1	1	1			1	12
cribbed parallel lines	1							1
pendant parallel lines	7	2					2	11
irregular wide lines	2		1	1				4
ticking	2	1						3
corner triangles	2	1						3
scrolls	7	2	3				1	13
dots		1						1
linear dots		1						1
dotted lines	5	1						6
thick wavy lines	1							1
parallelograms	2							2
checkerboard	13	1		1				15
eyed solids	3						1	4
sawteeth	5	1	3	2			2	13
barbs	10		1		1		1	13
elongated scalloped triangle	2		1					3
wide Sosi style	16	1	1				3	21
narrow Sosi style	5		2					7
heavy dotted lines	1							1
heavy curvilinear line	8					1	1	10
solid band design	10	4	2				2	18
hatched band design	3							3
isolated triangles	1							1
general solids	18	—	1	—	—	—	1	20
Total designs	158	17	17	5	1	1	19	218
% of design	72.5	7.8	7.8	2.3	0.5	0.5	8.7	

CHCU_310_D58_VOL 4_00448

Table MF-1.5. (concluded)

Designs	Bowl	Ladle	Pitcher	Seed Jar	Olla	Tecomate	Jar	Total
hatchure A-3	3							3
hatchure B-1	2							2
hatchure B-2	2							2
hatchure B-3	1							1
hatchure B-6	2							2
interlocked frets	1						1	2
zoomorphs	1							1
solid ticked triangles	6							6
jar neck motif							1	1
white exterior design	1							1
narrow curvilinear line			1					1
other solids	2							2
other hatchure	3							3
2-5-mm corrugated	1							1
5-mm+ corrugated	1	—	—	—	—	—	—	1
Total designs	158	17	17	5	1	1	19	218
% of design	72.5	7.8	7.8	2.3	0.5	0.5	8.7	
Vessel count	106	12	8	4	1	1	10	142
% of vessels	74.6	8.5	5.6	2.8	0.7	0.7	7.0	

CHCU_310_D58_VOL 4_00449

Table MF-1.6. Pueblo Alto Escavada Black-on-white paste description.

Temper Composition

Temper	n	% of total
Undifferentiated sandstone	16	18.2
More sherd than sandstone	61	69.3
Pink chalcedonic sandstone	2	2.3
White chalcedonic sandstone	3	3.4
Trachybasalt only	0	
with sandstone	1	1.1
with sandstone dominant	3	3.4
San Juan igneous with hornblende		
with sandstone dominant	1	1.1
Unidentified igneous with SS	1	1.1
Total	88	

Texture Attributes

Grain Size	n	%
Fine	5	5.7
Medium	34	38.6
Coarse	47	53.4
Very coarse	2	2.3
Totals	88	

Density(%)	n	%
1-2	6	6.8
5	21	23.9
10	49	55.7
20	10	11.4
30	9	4.3
	88	

Sherd Temper(%)	n	%
none	10	11.4
0-50	11	12.5
50-95	58	65.9
ca.100	9	10.2
	88	

Undifferentiated sandstone

Grain Size	n	%
Fine	4	5.2
Medium	29	37.7
Coarse	42	54.5
V. Coarse	2	
Total	77	

Texure index	n	%
Very fine (0-2)	12	13.6
Fine (2.1-4)	37	42.0
F-Medium (4.1-7)	31	35.2
Medium (7.1-10)	1	1.1
M-Coarse (10.1-13)	1	1.1
Coarse (13.1-16)	5	5.7
Very Coarse (16.1+)	1	1.1
Total	88	

Clay Attributes

Clay-temper types	n	%
Black clay, white sherd	4	6.3
Gray clay, black sherd	4	6.3
Black and white sherd	17	27.0
Gray clay,white sherd	24	38.1
Tan paste	5	7.9
Black paste	1	1.6
White paste	8	12.7
Totals (with type)	63	
No type assigned	25	28.4

Vitrification	n	%
Absent	14	15.9
Present	57	64.8
Marked	17	19.3
	88	

CHCU_310_D58_VOL 4_00450

Table MF-1.7. Pueblo Alto Puerco Black-on-white description.

A. SURFACE TREATMENT

	Motif number				
1. Designs	1	2	3	N	%
unnested isolates			1	1	0.2
nonoverlapping steps			1	1	0.2
parallel lines	6	6		12	2.8
cribbed parallel lines	1	2		3	0.7
banded framers	2	1		3	0.7
pendant parallel lines	3	4		7	1.6
ticking		2	2	4	0.9
corner triangles	1	1	1	3	0.7
scrolls	7	9	1	17	4.0
framing dots		1		1	0.2
dotted lines	1	5	2	8	1.9
parallelograms	5	1		6	1.4
checkerboard	31	1		32	7.9
eyed solids	2	2		4	0.9
sawteeth	15	7		22	5.2
barbs	29	8	3	40	9.4
elongated scalloped triangle	12	2	1	15	3.5
wide Sosi style	35	11	1	47	11.1
narrow Sosi style	9	3		12	2.8
heavy curvilinear lines	11	1	2	14	3.3
solid band design	44	8		52	12.2
hatched band motifs	1		1	2	0.5
isolated triangles	3	3		6	1.4
general solids	29	11		40	9.4
hatchure A-3	1			1	0.2
hatchure B-7		1		1	0.2
hatched checkerboard	1	1	1	3	0.7
hatched pendants	1			1	0.2
interlocked frets			1	1	0.2
zoomorphs	2			2	0.5
solid ticked triangles	27	5	1	33	7.8
motif on bowl exterior		7	3	10	2.4
jar neck motif	3	2	1	6	1.4
white exterior design		2		2	0.5
narrow curvilinear line	1			1	0.2
interlocked ticking		5		5	1.2
other hatchure		3	1	4	0.9
2-5-mm corrugated			1	1	0.2
5-mm+ corrugated			1	1	0.2
oblique indented corrugated	1			1	0.2
Totals	284	115	26	425	
n w/ 1,2,3 designs	169	89	26	284	
% w/ 1,2,3 designs	59.5	31.3	9.2		

Type Design Diversity H' = 3.024 s = 40 J = .820
Design Distribution Diversity H' = .892 s = 3 J = .812

CHCU_310_D58_VOL 4_00451

Table MF-1.7. (continued)

2. Paint

	n	%
mineral: brown	76	26.9
black	195	68.9
green	2	0.7
glaze	9	3.2
unknown	1	0.4
Total Known	282	

Rim Decoration

	n	%
unpainted	22	11.2
solid line	145	73.6
dotted	2	1.0
eroded solid	6	3.0
use-ground	22	11.2
unknown	87	
Total Known	197	

3. Polish

	Bowl		Ladle		Closed		Total	
	n	%	n	%	n	%	n	%
unknown	2	1.1					2	0.7
none	17	9.6	2	6.1	3	4.1	22	7.8
one side								
streaky	5	2.8	2	6.1			7	2.5
moderate	21	11.9	3	9.1	14	19.2	38	13.4
total	109	61.6	15	45.5	56	76.7	180	63.6
both sides								
moderate			5	15.2			5	1.8
total	7	4.0	2	6.1			9	3.2
differential	16	12.1	4	12.1			20	7.1
Total	177		33		73		283	

s = 7 H' = 1.273 J = .654

4. Slip

	Bowl		Ladle		Closed		Total	
	n	%	n	%	n	%	n	%
absent	10	5.6	3	9.1	3	4.1	16	5.6
interior	84	47.5	6	18.2			90	31.7
exterior					58	79.5	58	20.4
slip-slop	45	25.4	4	12.1	10	13.7	59	20.8
both sides	35	19.8	16	48.5			51	18.0
unknown	3	1.7	4		2	2.7	9	3.2
Total	177	62.7	33	11.6	73	25.7	284	

s = 5 H' = 1.237 J = .768

CHCU_310_D58_VOL 4_00452

Table MF-1.7. (continued)

5. Forms and Metrics

Form			Orifice Diameter (mm)				
	n	%	n	range	x	s.d.	cv
bowl	178	62.7	136	60-350	193.6	64.028	33.1
ladle	33	11.6	17	65-220	106.8	37.372	35.0
canteen	3	1.0	3	20-30	26.7	5.774	21.6
pitcher	9	3.1	8	50-100	78.8	15.059	19.1
tecomate	2	0.7	2	35-70	52.5		
olla	10	3.5	5	70-90	78.0	18.367	10.7
jar	49	17.2	4	70-100	82.5	13.229	16.0
unknown	1	0.4					
Total	285						

Diversity of Forms H' = 1.156 s = 7 J = .594

6. Handles

	n	%
trough	18	72.0
strap lug	3	12.0
tabular lug	1	4.0
perforated tit	1	4.0
effigy	1	4.0
unknown	1	4.0
Total	25	

Handles:items = 1:36 (excluding ladles from forms and handles)

CHCU_310_D58_VOL 4_00453

Table MF-1.7. (continued)

B. DESIGNS BY VESSEL FORM

Designs	Bowl	Ladle	Pitcher	Canteen	Olla	Tecomate	Jar	Total
unnested isolated				1				1
nonoverlapping steps	1							1
parallel lines	7	1					4	12
cribbed parallel lines		1					1	3
banded framers	2						1	3
pendant parallel lines	6			1				7
ticking	4							4
corner triangles	2						1	3
scrolls	8	1	1				7	17
framing dots	1							1
dotted lines	6						1	8
parallelograms	4					1	1	6
checkerboard	22			1	1		2	32
eyed solids	3						1	4
sawteeth	12	3		1			5	22
barbs	18	4	1	1	5		11	40
elongated scalloped triangle	12		1		1		1	15
wide Sosi style	25		3		6		13	47
narrow Sosi style	11						1	12
heavy curvilinear lines	10	1	1				2	14
solid band design	39	9		1	3		3	52
hatched band motifs	2							2
isolated triangles	5						1	6
general solids	26	3	1		1		9	40
hatchure A-3	1							1
hatchure B-7		1						1
hatched checkerboard	2	—	—	—	—	—	1	3
Total	270	36	13	8	19	2	76	424
% of designs	63.7	8.5	3.1	1.9	4.5	.5	17.9	

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Table MF-1.7. (concluded)

Designs	Bowl	Ladle	Pitcher	Canteen	Olla	Tecomate	Jar	Total
hatched pendants		1						1
interlocked frets							1	1
zoomorphs	1						1	2
solid ticked triangles	20	4	2			1	6	33
motif on bowl exterior	9	1						10
jar neck motif			1				1	6
white exterior design	2							2
narrow curvilinear line			1					1
interlocked ticking	4		1					5
other hatchure	4							4
2-5-mm corrugated	1							1
5-mm+ corrugated	1							1
oblique indented corrugated	1	—	—	—	—	—	—	1
Total	270	36	13	8	19	2	76	424
% of designs	63.7	8.5	3.1	1.9	4.5	0.5	17.9	
Vessel count	177	33	9	3	10	2	49	283
% of vessels	62.9	11.7	3.2	1.1	3.5	0.7	17.3	

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Table MF-1.8. Pueblo Alto Puerco Black-on-white paste description.

Temper Composition

Temper	n	% of total	% of observed
Undifferentiated sandstone	36	16.8	17.1
More sherd than sandstone	134	62.6	63.5
Pink chalcedonic sandstone	3	1.4	1.4
White chalcedonic sandstone	1	0.5	0.5
Shale	1	0.5	0.5
Trachybasalt only	3	1.4	1.4
with sandstone	3	1.4	1.4
with sandstone dominant	20	9.3	9.5
San Juan igneous with hornblende			
with sandstone	1	0.5	0.5
San Juan igneous w/o hornblende	2	0.9	1.0
with sandstone dominant	1	0.5	0.5
Unidentified igneous	1	0.5	0.5
with sandstone dominant	5	2.3	2.4
Unobservable	3	1.4	
Total	214		[211]

Texture Attributes

Grain Size	n	%
Fine	38	17.8
Medium	132	62.0
Coarse	40	18.8
Very coarse	1	0.5
Totals	211	
[No obs	2]	

Density(%)	n	%
1-2	6	2.8
5	46	21.8
10	91	43.1
20	57	27.0
30	9	4.3
40+	2	0.9
	211	

Sherd Temper(%)	n	%
none	12	5.7
0-50	50	23.7
50-95	134	63.5
ca.100	15	7.1
	211	
[No obs	2]	

Undifferentiated sandstone

Grain Size	n	%
Fine	25	14.7
Medium	110	64.7
Coarse	34	20.0
V. Coarse	1	0.6
Total	170	

Texture index	n	%
Very fine (0-2)	57	27.0
Fine (2.1-4)	88	41.7
F-Medium (4.1-7)	54	25.6
Medium (7.1-10)	7	3.3
M-Coarse (10.1-13)	2	0.9
Coarse (13.1-16)	2	0.9
Very Coarse (16.1+)	1	0.5
Total	211	

Clay Attributes

Clay-temper types	n	%
Black clay, white sherd	13	8.3
Gray clay, black sherd	9	5.8
Black and white sherd	40	25.6
Gray clay, white sherd	65	41.7
Tan paste	3	1.9
Black paste	1	0.6
White paste	23	14.7
Homogeneous Chuska gray	2	1.3
Totals	156	
[No type assigned	50	23.7]

Vitrification	n	%
Absent	39	18.5
Present	142	67.3
Marked	30	14.2
	211	
[No obs	2]	

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Table MF-1.9. Pueblo Alto Gallup Black-on-white description.

A. SURFACE TREATMENT

1. Designs	Motif Number 1	2	3	N	%
unnested isolates		1		1	0.1
parallel lines		2		2	0.1
pendant parallel lines	1			1	0.1
ticking			1	1	0.1
corner triangles		45	8	53	4.0
scrolls		4		4	0.3
dots		1		1	0.1
dotted lines		3	1	4	0.3
parallelograms	1			1	0.1
checkerboards		1		1	0.1
eyed solids	1	3	1	5	0.4
sawteeth		2	1	3	0.2
barbs	1	4		5	0.4
elongated scalloped triangle	2	4		6	0.4
wide Sosi style	3	7	1	11	0.8
narrow Sosi style	1			2	0.1
heavy curvilinear lines	1	11	2	14	1.0
hatched band motif	19	13	1	33	2.5
isolated triangles	1	2		3	0.2
general solids	5	30	1	36	2.7
bold bisecting lines		2		2	0.1
hatchure A-1	2			2	0.1
hatchure A-2	4	1		5	0.4
hatchure A-3	21	1		22	1.6
hatchure B-1	173	18		191	14.3
hatchure B-2	6	1		7	0.5
hatchure B-3	121	3		124	9.3
hatchure B-4	297	14	1	312	23.4
hatchure B-5	1			1	0.1
hatchure B-6	68	11		79	5.9
hatchure B-7	5	3		8	0.6
hatchure B/C	95	7		102	7.6
hatchure C	37			37	2.8
counterchange	11	1		12	0.9
hatched checkerboard	39	11	1	51	3.8
heavy Gallup squiggle	26			26	1.9
hatched pendants	5	5		10	0.7
anthro and zoomorphs		1		1	0.7
solid ticked triangles		12	1	13	1.0
ext. bowl motif		13	3	16	1.2
jar neck motif	2	9		11	0.8
exterior white design		2	3	5	0.4
narrow curvilinear line		1		1	0.1
other solid	4	5		9	0.7
other hatched	88	6		94	7.0
narrow clapboard (2-5mm)		2		2	0.1
2-5-mm corrugated		1	1	2	0.1
5-mm+ corrugated		2	1	3	0.2
undifferentiated corrugated		1		1	0.1
Totals	1,041	267	28	1,336	
n with 1,2,3 designs	774	239	28		
% with 1,2,3 designs	74.2	23.0	2.7		

Type Design Diversity H' = 2.766 s = 49 J = 0.711
Design Distribution Diversity H' = .597 s = 3 J = .544

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Table MF-1.9. (continued)

2. Paint		n	%
mineral:	red	25	2.4
	brown	257	24.7
	black	705	67.7
	green	14	1.3
glaze		37	3.6
unknown		3	.3
Total		1,041	

Rim Decoration	n	%
unpainted	56	8.6
solid line	539	83.1
dotted	3	.5
eroded solid	13	2.0
use-ground	38	5.9
Total Known	649	
[unknown	393	]

3. Polish	Bowl		Ladle		Closed		Total	
	n	%	n	%	n	%	n	%
unknown	20	3.4	1	2.1	17	4.3	38	3.7
none	45	7.6	4	8.3	28	7.1	77	7.4
one side								
streaky	18	3.0	1	2.1	13	3.5	32	3.1
moderate	61	10.3	3	6.3	30	7.6	94	9.1
total	367	62.1	24	50.0	309	77.8	700	67.6
both sides								
streaky	3	0.5					3	0.3
moderate	1	0.2	1	2.1			2	0.2
total	36	6.1	6	12.5			42	4.1
differential	40	6.8	8	16.7			48	4.6
Totals	591	57.0	48	4.6	397	38.3	1,036	

s = 9 H' = 1.338 J = .609

4. Slip	Bowl		Ladle		Closed		Total	
	n	%	n	%	n	%	n	%
absent	50	8.5	2	4.2	21	5.3	73	7.0
interior	283	47.9	17	35.4			300	29.0
exterior					317	79.8	317	30.6
slip-slop	122	20.6	8	16.7	45	11.3	174	16.8
both sides	108	18.3	18	37.5	1	.3	127	12.3
unknown	28	4.8	3	6.3	13	3.3	44	4.2
Totals	591	57.0	48	4.6	397	38.3	1,036	

s = 5 H' = 1.342 J = .834
(closed excludes duckpots and miniatures)

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Table MF-1.9. (continued)

5. Forms and Metrics

Form			Orifice Diameter (mm)				
	n	%	n	range	x	s.d.	cv
bowl	591	56.8	435	55-360	213.9	65.279	30.5
ladle	48	4.6	35	80-240	130.0	35.583	27.4
canteen	2	0.2					
pitcher	83	8.0	64	50-180	92.9	24.621	26.5
seed jar	13	1.3	7	70-190	130.7	38.990	29.8
tecomate	9	0.9	7	40-130	84.3	30.609	36.3
olla	23	2.2	15	60-110	81.7	14.351	17.6
cylinder	1	0.1	1	140			
jar	266	25.6	9	50-100	76.1	16.729	22.0
duckpot	1	0.1					
miniature	3	0.3	2	25-30	27.5		
Total	1,040						

Diversity of Forms H' = 1.236 s = 11 J = .515

6. Handles

	n	%
coil	2	3.4
multiple coil	1	1.7
strap	22	37.9
tubular	9	15.5
perforated tube	1	1.7
trough	11	19.0
cupped	2	3.4
strap lug	6	10.3
perforated tit	1	1.7
mult. coil strap	3	5.2
Total	58	

Handles:items = 1:28 (excluding ladles from forms and handles)

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Table MF-1.9. (continued)

B. DESIGNS BY VESSEL FORM

Designs	Bowl	Ladle	Pitcher	Canteen	Seed Jar	Olla	Tecomate	Jar	Other[a]	Total
unnested isolates	1									1
parallel lines	1	1								2
pendant parallel lines								1		1
ticking	1									1
corner triangles	31	2	3				1	14	2	53
scrolls	4									4
dots									1	1
dotted lines	3							1		4
parallelograms			1							1
checkerboards	1									1
eyed solids	2		2					1		5
sawteeth	1							2		3
barbs	4							1		5
elongated scall. triangles	1		1					4		6
wide Sosi style	5		1			1		4		11
narrow Sosi style	1	1								2
heavy curvilinear lines	8	1	1					4		14
hatched band motif	16	2	2		3		1	9		33
isolated triangles	3									3
general solids	27	1			2	1		5		36
bold bisecting lines	2									2
hatchure A-1	2									2
hatchure A-2	2		1					2		5
hatchure A-3	14	1						7		22
hatchure B/C	58	7	6		2		1	28		102
Total designs	762	59	103	2	19	36	11	333	9	1,334
% of designs	57.1	4.4	7.7	0.1	1.4	2.7	0.8	25.0	0.6	

[a]Other includes cylinder jar (1), duckpot (1), and miniatures (3).

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Table MF-1.9. (concluded)

Designs	Bowl	Ladle	Pitcher	Canteen	Seed Jar	Olla	Tecomate	Jar	Other[a]	Total
hatchure B-1	109	6	11			3	1	59	2	191
hatchure B-2	7									7
hatchure B-3	70	5	4	1	3	5	1	34		123
hatchure B-4	157	11	30	1	4	9	4	94	1	311
hatchure B-5								1		1
hatchure B-6	43	6	9		1	1	1	17	1	79
hatchure B-7	5	1	2							8
hatchure C	23	1	5		1	2		5		37
counterchange	9		1					2		12
hatched checkerboard	33	6	3			1		6	2	51
heavy Gallup squiggle	11	2	3		1	1		8		26
hatched pendants	6	1						3		10
anthro and zoomorphs								1		1
solid ticked triangles	4		3					6		13
ext. bowl motif	14	2								16
jar neck motif						11				11
exterior white design	5									5
narrow curvilinear line								1		1
other solid	5		4							9
other hatched	65	2	10		2	1	1	13		94
narrow clapboard (2-5 mm)	2									2
2-5-mm corrugated	2									2
5-mm+ corrugated	3									3
undifferentiated corr.	1									1
Total designs	762	59	103	2	19	36	11	333	9	1,334
% of designs	57.1	4.4	7.7	0.1	1.4	2.7	0.8	25.0	0.6	
Vessel count	591	49	83	2	13	23	9	266	5	1,039
% of vessels	56.9	4.7	8.0	0.2	1.3	2.2	0.9	25.6	0.5	

[a]Other includes cylinder jar (1), duckpot (1), and miniatures (3).

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Table MF-1.10. Pueblo Alto Gallup Black-on-white paste description.

Temper Composition

Temper	n	% of total	% of observed
Undifferentiated sandstone	122	16.6	16.6
Sherd temper > sandstone	325	44.2	44.3
Pink chalcedonic sandstone	6	0.8	0.8
White chalcedonic sandstone	6	0.8	0.8
Magnetitic sandstone	1	0.1	0.1
Trachybasalt only	32	4.4	4.4
with sandstone	104	14.1	14.2
with sandstone dominant	126	17.1	17.2
San Juan igneous with hornblende with sandstone dominant	1	0.1	0.1
San Juan igneous w/o hornblende with sandstone dominant	2	0.3	0.3
Unidentified igneous	1	0.1	0.1
with sandstone dominant	8	1.1	1.1
Unobservable	1	0.1	0.1
Total	735		

Texture Attributes

Grain Size	n	%
Fine	251	34.2
Medium	369	50.3
Coarse	107	14.6
Very coarse	6	0.8
Totals	733	
[No obs.	2]	

Density(%)	n	%
1-2	10	1.4
5	104	14.2
10	296	40.3
20	242	33.0
30	76	10.4
40+	6	0.8
	734	

Sherd Temper(%)	n	%
none	54	7.3
0-50	225	30.7
50-90	421	57.2
ca.100	34	4.6
	735	
[No obs.	1	0.1]

Undifferentiated sandstone

Grain Size	n	%
Fine	93	20.8
Medium	260	58.2
Coarse	91	20.4
V. Coarse	3	0.7
Totals	447	

Texture index	n	%
Very fine (0-2)	231	31.5
Fine (2.1-4)	295	40.2
F-Medium (4.1-7)	165	22.5
Medium (7.1-10)	27	3.7
M-Coarse (10.1-13)	12	1.6
Coarse (13.1-16)	4	0.5
Total	735	

Clay Attributes

Clay-temper types	n	%
Black clay, white sherd	54	9.8
Gray clay, black sherd	24	4.4
Black and white sherd	103	18.7
Gray clay, white sherd	258	46.8
Tan paste	24	4.4
Black paste	9	1.6
White paste	54	9.8
Homogeneous Chuska gray	25	4.5
Totals (with type)	551	
No type assigned	[183	24.9]

Vitrification	n	%
Absent	107	14.6
Present	487	66.3
Marked	140	19.1
	734	
[No observation	1]	

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Table MF-1.11. Pueblo Alto Puerco-Escavada-Gallup lumped description.

SURFACE TREATMENT

1. Designs	Motif Number 1	2	3	n	%
hooks, flags		1		1	0.05
unnested isolates		1	2	3	0.2
nonoverlapping steps			1	1	0.05
parallel lines	16	10		26	1.3
cribbed parallel lines	2	2		4	0.2
banded framers	2	1		3	0.2
pendant parallel lines	13	6		19	1.0
irregular wide lines	3	1		4	0.2
ticking		3	5	8	0.4
corner triangles	2	48	9	59	3.0
scrolls	10	21	3	34	1.7
dots	1	1		2	0.1
framing dots		1		1	0.05
linear dots	1			1	0.05
dotted lines	3	12	3	18	0.9
thick wavy lines		1		1	0.05
parallelograms	8	1		9	0.4
checkerboard	46	2		48	2.4
eyed solids	3	6	3	12	0.6
sawteeth	25	12	1	38	1.9
barbs	39	16	3	58	2.9
elongated scalloped triangle	15	8	1	24	1.2
wide Sosi style	55	21	3	79	4.0
narrow Sosi style	16	4	1	21	1.1
heavy dotted lines		1		1	0.05
heavy curvilinear lines	21	13	4	38	1.9
solid band design	58	12		70	3.5
hatched band design	22	14	2	38	1.9
isolated triangles	5	5		10	0.5
general solids	46	49	1	96	4.8
bold bisecting lines		2		2	0.1
hatchure A-1	2			2	0.1
hatchure A-2	4	1		5	0.2
hatchure A-3	25	1		26	1.3
hatchure B-1	174	19		193	9.8
hatchure B-2	8	1		9	0.4
hatchure B-3	121	4		125	6.3
hatchure B-4	297	14	1	312	15.8
hatchure B/C	95	7		102	5.2
hatchure C (Chaco)	37			37	1.9
hatchure B-5	1			1	0.05
hatchure B-6	70	11		81	4.1
hatchure B-7	5	4		9	0.4

Type Design Diversity H' = 3.308 s = 62 J = .802
Design Distribution Diversity H' = .672 s = 3 J = .612

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Table MF-1.11. (continued)

SURFACE TREATMENT

1. Designs	Motif Number 1	2	3	n	%
counterchange	11	1		12	0.6
hatched checkerboard	40	12	2	54	2.7
heavy Gallup squiggle	26			26	1.3
hatched pendants	6	5		11	0.6
interlocked frets		1	2	3	0.1
zoomorphs	2	2		4	0.2
solid ticked triangles	29	20	3	52	2.6
ext. bowl motif		20	6	26	1.3
jar neck motif	5	12	1	18	0.9
white exterior design		4	4	8	0.4
narrow curvilinear lines	2	1		3	0.1
interlocked ticking		5		5	0.2
others, solid	4	7		11	0.6
others, hatched	89	11	1	101	5.1
narrow clapboard (2-5mm)		2		2	0.1
2-5-mm indented corrugated		1	3	4	0.2
5-mm+ corrugated		3	2	5	0.2
undifferentiated corrugated		1		1	0.05
oblique corrugated	1			1	0.05
Totals	1,467	445	67	1,979	
n w/ 1,2,3 designs	1,022	378	67	1,467	
% w/ 1,2,3 designs	69.7	25.8	4.6		

Type Design Diversity H' = 3.308 s = 62 J = .802
Design Distribution Diversity H' = .672 s = 3 J = .612

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Table MF-1.11. (continued)

2. Paint		n	%
mineral:	red	27	1.8
	brown	372	25.4
	black	997	68.0
	green	17	1.2
glaze		49	3.3
unknown		4	0.3
Total		1,466	

Rim Decoration	n	%
unpainted	103	10.7
solid line	764	79.2
dotted	7	.7
eroded solid	26	2.7
use-ground	65	6.7
Total Known	965	
[unknown	503]	

3. Polish	Bowl		Ladle		Closed		Total	
	n	%	n	%	n	%	n	%
unknown	26	3.0	2	2.2	19	3.8	47	3.2
none	111	12.7	11	11.8	42	8.5	164	11.2
both sides								
streaky	39	4.5	3	3.2	16	3.2	58	4.0
moderate	100	11.4	8	8.6	48	9.7	156	10.7
total	491	56.2	42	45.2	371	74.9	904	61.8
both sides								
streaky	4	0.5					4	0.3
moderate	1	0.1	6	6.4			7	0.5
total	43	4.9	8	8.6			51	3.5
differential	59	6.8	13	14.0			72	4.9
Totals	874	59.7	93	6.4	496	33.9	1,463	

s = 5 H' = 1.365 J = .655

4. Slip	Bowl		Ladle		Closed		Total	
	n	%	n	%	n	%	n	%
absent	83	9.5	7	7.5	30	6.1	120	8.2
interior	410	46.9	27	29.0			437	29.9
exterior			1	1.1	385	77.9	394	27.0
slip-slop	194	22.2	13	14.0	62	12.6	269	18.4
both sides	153	17.5	37	39.8	1	0.2	191	13.1
unknown	34	3.9	8	8.6	16	3.2	58	4.0
Totals	874	59.8	93	6.4	494	33.8	1,461	

s = 5 H' = 1.365 J = .835
(Closed excludes duckpots and miniatures.)

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Table MF-1.11. (concluded)

5. Forms and Metrics

Form	n	%	Orifice Diameter (mm) n	range	x	s.d.	cv
bowl	875	59.7	659	55-360	209.0	66.179	31.7
ladle	93	6.3	59	65-240	121.2	35.904	29.6
canteen	5	0.3	3	20-30	23.3	5.774	21.6
pitcher	100	6.8	80	50-180	90.5	23.271	25.7
seed jar	17	1.2	11	50-190	117.7	40.581	34.5
tecomate	12	0.8	9	35-130	77.2	31.236	40.4
olla	34	2.3	20	60-110	80.8	13.006	16.1
cylinder	1	0.1	1	140			
jar	325	22.2	14	50-100	76.8	15.641	20.4
duckpot	1	0.1					
miniature	3	0.2	2	25-30	27.5		
unknown	1	0.1					
	1,467						

Diversity of Forms H' = 1.220 s = 11 J = .509

6. Handles

	n	%
coil	2	2.0
multiple coil	1	1.0
strap	22	22.2
tubular	12	12.1
perforated tube	1	1.0
trough	34	34.3
tit	1	1.0
cupped	2	2.0
strap lug	12	12.1
tabular lug	1	1.0
perforated tit	2	2.0
mult. coil strap	3	3.0
effigy	1	1.0
unknown form	5	5.1
Total	99	

Handles:items = 1:28 (excluding ladles from forms and handles)

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Table MF-1.12. Pueblo Alto Puerco-Escavada-Gallup Type paste description.

Temper Composition

Temper	n	% of total	% of observed
Undifferentiated sandstone	174	16.8	16.8
Sherd temper > sandstone	520	50.2	50.3
Pink chalcedonic sandstone	11	1.1	1.1
White chalcedonic sandstone	10	1.0	1.0
Shale	1	0.1	0.1
Magnetitic sandstone	1	0.1	0.1
Trachybasalt only	35	3.4	3.4
with sandstone	108	10.4	10.4
with sandstone dominant	149	14.4	14.4
San Juan igneous with hornblende			
with sandstone	1	0.1	0.1
with sandstone dominant	1	0.1	0.1
San Juan igneous w/o hornblende	2	0.2	0.2
with sandstone	1	0.1	0.1
with sandstone dominant	3	0.3	0.3
Unidentified igneous	2	0.2	0.2
with sandstone dominant	14	1.4	1.4
Unobservable	3	0.3	
Total	1,036		

Texture Attributes

Grain Size	n	%
Fine	293	28.4
Medium	535	51.8
Coarse	194	18.8
Very coarse	10	1.0
Totals	1,032	
(no obs	3)	

Density(%)	n	%
1-2	22	2.1
5	171	16.6
10	436	42.2
20	308	29.8
30	87	8.4
40+	8	0.8
	1,032	

Sherd Temper(%)	n	%
none	76	7.4
0-50	285	27.6
50-95	613	59.4
ca.100	58	5.6
	1,032	
(no obs	3)	

Undifferentiated sandstone

Grain Size	n	%
Fine	122	17.6
Medium	399	57.5
Coarse	167	24.1
V. Coarse	6	0.9
Total	694	

Texture index	n	%
Very fine (0-2)	300	29.0
Fine (2.1-4)	420	40.7
F-Medium (4.1-7)	250	24.2
Medium (7.1-10)	35	3.4
M-Coarse (10.1-13)	15	1.5
Coarse (13.1-16)	11	1.1
Very Coarse	2	0.2
Total	1,033	

Clay Attributes

Clay-temper types	n	%
Black clay, white sherd	71	9.2
Gray clay, black sherd	37	4.8
Black and white sherd	160	20.7
Gray clay, white sherd	346	44.7
Tan paste	37	4.8
Black paste	11	1.4
White paste	85	11.0
Homogeneous Chuska gray	27	3.5
Totals (with type)	774	
No type assigned	258	25.0

Vitrification	n	%
Absent	160	15.5
Present	685	66.3
Marked	187	18.1
[no obs	3]	
	1,033	

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Table MF-1.13. Pueblo Alto Chaco McElmo Black-on-white description.

A. SURFACE TREATMENT

1. Designs	Motif Number 1	2	3	n	%
parallel lines	12	1	2	15	14.9
banded framers	2			2	1.9
pendant parallel lines	1			1	1.0
ticking		1		1	1.0
corner triangles		1		1	1.0
scrolls	2	2	1	5	4.8
dots		2		2	1.9
linear dots		1		1	1.0
dotted lines	2			2	1.9
dotted checkerboard	4	1		5	4.8
checkerboard	1	1		2	1.9
eyed solids	1			1	1.0
barbs	11	3		14	13.5
wide Sosi style	18	3		21	20.2
narrow Sosi style	6	1		7	6.7
heavy dotted lines	1			1	1.0
heavy curvilinear line	1			1	1.0
solid band design	4	2		6	5.8
general solids	8	2		10	9.6
interlocked frets	2	1	1	4	3.8
jar neck motif			1	1	1.0
2-5-mm band corrugated	1	—	—	1	1.0
Totals	77	22	5	104	
n w/ 1,2,3 designs	55	17	5	77	
% w/ 1,2,3 design	71.4	22.1	6.5		

Type Design Diversity H' = 2.567 s = 22 J = .830
Design Distribution Diversity H' = .697 s = 3 J = .634

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Table MF-1.13. (continued)

2. Paint

77 (100%) carbon

Rim Decoration

	n	%
unpainted	35	51.5
solid line	4	5.9
dotted	26	38.2
use-ground	3	4.4
[unknown	9]	
total known	68	

3. Polish	Bowl		Ladle		Closed		Total	
	n	%	n	%	n	%	n	%
none	1	1.9					1	1.3
one side								
streaky	1	1.9					1	1.3
moderate	1	1.9					1	1.3
total	15	28.3	1		20	100	36	47.4
both sides								
moderate								
total	30	56.6					30	39.5
differential	5	9.4	2				7	9.2
Totals	53	69.7	3	3.9	20	26.3	76	

s = 6 H' = 1.127 J = .629

4. Slip	Bowl		Ladle		Closed		Total	
	n	%	n	%	n	%	n	%
absent								
interior	5	9.4	1				6	7.8
exterior					10	47.6	10	13.0
slip-slop	39	73.6	2		10	47.6	51	66.2
both sides	9	17.0					9	13.0
unknown					1	4.8	1	1.3
Total	53	68.8	3	3.9	21	27.3	77	

s = 3 H' = .750 J = .682

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Table MF-1.13. (continued)

5. Forms and Metrics

Form			Orifice Diameter (mm)				
	n	%	n	range	x	s.d.	cv
bowl	53	68.8	40	95-350	197.8	55.492	28.1
ladle	3	3.9	2	70			
canteen	1	1.3	1	30			
pitcher	14	18.2	11	40-85	66.4	15.181	22.9
olla	2	2.6	1	70			
jar	4	5.2	1	230			
Total	77						

Diversity of Forms H' = .998 s = 6 J = .557

6. Handles

	n
strap	1
tubular	2
strap lug	2
perforated tit	1
Total	6

Handles:items = 1:18 (excluding ladles from forms and handles)

CHCU_310_D58_VOL 4_00470

Table MF-1.13. (concluded)

B. DESIGNS BY VESSEL FORM

1. Designs	Bowl	Ladle	Pitcher	Canteen	Olla	Jar	Total
parallel lines	7	1	6	1			15
banded framers	2						2
pendant parallel lines			1				1
ticking		1					1
corner triangles	1						1
scrolls	2		1		1	1	5
dots	2						2
linear dots			1				1
dotted lines	1					1	2
dotted checkerboard	3		1			1	5
checkerboard	2						2
eyed solids			1				1
barbs	10		3			1	14
wide Sosi style	14		3		2	2	21
narrow Sosi style	4	1	1	1			7
heavy dotted lines	1						1
heavy curvilinear line	1						1
solid band design	5	1					6
general solids	9		1				10
interlocked frets	3			1			4
jar neck motif					1		1
2-5-mm band corrugated	1	—	—	—	—	—	1
Total designs	68	4	19	3	4	6	104
% of designs	65.4	3.8	18.3	2.9	3.8	5.8	
Vessel count	53	3	14	1	2	4	77
% of vessels	68.8	1.3	18.2	1.3	2.6	5.2	

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Table MF-1.14. Pueblo Alto Chaco McElmo Black-on-white paste description.

Temper Composition

Temper	n	% of total	% of observed
Undifferentiated sandstone	15	19.7	20.3
Sherd temper > sandstone	14	18.4	18.9
Trachybasalt only	2	2.6	2.7
with sandstone	19	25.0	25.7
with sandstone dominant	19	25.0	25.7
San Juan igneous w/o hornblende			
with sandstone dominant	1	1.3	1.4
Unidentified igneous	3	3.9	4.1
with sandstone	1	1.3	1.4
Unobservable	2	2.6	
Total	76		

Texture Attributes

Grain Size	n	%
Fine	57	77.0
Medium	14	18.9
Coarse	3	4.1
Totals known	74	
[No obs.	2]	

Density(%)	n	%
1-2	2	2.7
5	10	13.5
10	40	54.1
20	19	25.7
30%	3	4.1
	74	

Sherd Temper	n	%
none	5	6.8
0-50	38	51.4
50-95	28	37.8
ca.100	3	4.1
	74	
[No obs.	2]	

Undifferentiated sandstone

Grain Size	n	%
Fine	22	75.9
Medium	6	20.7
Coarse	1	3.4
Total	29	

Texture index	n	%
Very fine (0-2)	53	71.6
Fine (2.1-4)	12	16.2
F-Medium (4.1-7)	6	8.1
Medium (7.1-10)	3	4.0
Total	74	

Clay Attributes

Clay-temper types	n	%
Black clay, white sherd	1	2.6
Gray clay, black sherd	1	2.6
Black and white sherd	1	2.6
Gray clay, white sherd	21	55.3
Little Colorado paste	1	2.6
Tan paste	5	13.2
White paste	7	18.4
Homogeneous Chuska gray	1	2.6
Totals (with type)	38	
No type assigned	(36	48.6)

Vitrification	n	%
Absent	18	24.3
Present	50	67.6
Marked	6	8.1
	76	
[No observation	2]	

CHCU_310_D58_VOL 4_00472

Table MF-1.15. Pueblo Alto Pueblo II-III Carbon-on-white description.

A. SURFACE TREATMENT

1. Designs	Motif Number 1	2	3	N	%
stars, suns	1			1	0.8
parallel lines	11	2		13	10.6
cribbed parallel lines	1			1	0.8
banded framers	2			2	1.6
pendant parallel lines	3	3		6	4.9
irregular wide lines		1		1	0.8
ticking	1			1	0.8
scrolls	2	3		5	4.1
dots	1	1		2	1.6
linear dots	1			1	0.8
dotted lines	3	1		4	3.2
dots in parallelograms	1			1	0.8
dotted checkerboard		1		1	0.8
checkerboard	2	1		3	2.4
eyed solids	1			1	0.8
sawteeth	2	2	2	6	4.9
barbs	1	2		3	2.4
wide Sosi style	14	1		15	12.2
narrow Sosi style	5	1		6	4.9
heavy curvilinear line	3	1	1	5	4.1
solid band design	13	1	1	15	12.2
general solids	19			19	15.4
hatchure A-3	3		1	4	3.2
squiggle lines	1			1	0.8
solid ticked triangles		1		1	0.8
jar neck motif	2			2	1.6
narrow curvilinear line	1			1	0.8
other hatchure	2			2	1.6
Totals	96	22	5	123	
n w/ 1,2,3 designs	74	17	5	96	
% with 1,2,3 designs	77.1	17.7	5.2		

Type Design Diversity H' = 2.844 s = 8 J = .853
Design Distribution Diversity H' = .631 s = 3 J = .575

CHCU_310_D58_VOL 4_00473

Table MF-1.15. (continued)

2. Paint

94 (100%) carbon

Rim Decoration

	n	%
unpainted	44	52.4
solid line	9	10.7
dotted	23	27.4
eroded, solid	1	1.2
use-ground	7	8.3
Total Known	84	
[unknown	14]	

3. Polish

	Bowl		Ladle		Closed		Total	
	n	%	n	% [a]	n	%	n	%
unknown	5	7.0	2		1	5.6	8	8.2
none	3	4.2	1				4	4.1
one side								
streaky	1	1.4					1	1.0
moderate	1	1.4	1				2	2.1
total	15	21.1			17	94.4	32	33.0
both sides								
moderate	1	1.4					1	1.0
total	33	46.5	4				37	38.1
differential	12	16.9	—	—	—	—	12	12.4
Totals	71	73.2	8	8.2	18	18.6	97	

s = 8 H' = 1.486 J = .714

4. Slip

	Bowl		Ladle		Closed		Total	
	n	%	n	% [a]	n	%	n	%
absent	6	8.4	1				7	7.2
interior	15	21.1	1				16	16.5
exterior			1		15	83.3	16	16.5
slip-slop	6	8.4			2	11.1	8	8.2
both sides	42	59.2	5				47	48.5
unknown	2	2.8	—	—	1	5.6	3	3.1
Total	71	73.2	8	8.2	18	18.6	97	

s = 5 H' = 1.157 J = .719
(excludes miniature)

[a]Samples numbering less than 10 were not calculated for percentage.

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Table MF-1.15. (continued)

5. Forms and Metrics

Form			Orifice Diameter (mm)				
	n	%	n	range	x	s.d.	cv
bowl	71	72.4	62	60-350	199.8	59.664	29.9
ladle	8	8.2	6	40-160	106.7	41.793	39.2
canteen	1	1.0					
pitcher	3	3.1	1	40			
olla	5	5.1	4	60-90	73.8	12.500	16.9
jar	9	9.2	3	20-70	53.3	28.868	51.1
miniature	1	1.0	1	40			
Total	98						

Diversity of Forms H' = 1.010 s = 7 J = .519

6. Handles

	n
strap	1
tubular	2
strap lug	2
perforated tit	1
Total	6

Handles:items = 1:18 (excluding ladles from forms and handles)

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Table MF-1.15. (concluded)

B. DESIGNS BY VESSEL FORM

1. Designs	Bowl	Ladle	Pitcher	Canteen	Olla	Jar	Mini.	Total
stars, suns					1			1
parallel lines	10	1	1		1			13
cribbed parallel lines	1							1
banded framers	1					1		2
pendant parallel lines	4	1			1			6
irregular wide lines	1							1
ticking						1		1
scrolls	4	1						5
dots	1					1		2
linear dots							1	1
dotted lines	3		1					4
dots in parallelograms						1		1
dotted checkerboard	1							1
checkerboard	2			1				3
eyed solids	1							1
sawteeth	5					1		6
barbs	1				1	1		3
wide Sosi style	12	1	1			1		15
narrow Sosi style	5					1		6
heavy curvilinear line	3	1				1		5
solid band design	14				1			15
general solids	17	1				1		19
hatchure A-3	1				1	2		4
squiggle lines		1						1
solid ticked triangles		1						1
jar neck motif					2			2
narrow curvilinear line		1						1
other hatchure	1	—	1	—	—	—	—	2
Total designs	88	9	4	1	8	12	1	123
% of designs	71.5	7.3	3.3	0.8	6.5	9.8	0.8	
Vessel count	69	8	3	1	5	9	1	96
% of vessels	71.9	8.3	3.1	1.0	5.2	9.4	1.0	

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Table MF-1.16. Motif co-occurrence in Red Mesa, Puerco, Escavada, Chaco McElmo, PII-III carbon and Gallup at Pueblo Alto; painted motifs only.

A. Numbers of types sharing motifs, and percents of motifs, and percents of total motifs.

	TYPES IN COMMON					
Types (n of motifs/codes)	5	4	3	2	1	none
Red Mesa B/w (39/479)	13	8	4	5	7	2
% of Red Mesa motifs[a]	33.3	20.5	10.3	12.8	17.9	5.1
% accounted for[b]	36.9	41.3	2.6	2.0	12.6	3.8
Escavada B/w (40/218)	13	8	4	9	5	1
% of Escavada motifs	32.5	20.0	10.0	22.5	12.5	2.5
% accounted for	62.5	22.3	4.2	6.1	4.2	0.5
Puerco B/w (37/425)	13	7	4	8	3	2
% of Puerco motifs	35.1	18.9	10.9	21.6	8.1	5.4
% accounted for	56.9	27.2	6.2	6.6	1.6	0.4
Gallup B/w (45/1336)	13	7	3	9	8	5
% of Gallup motifs	29.9	15.6	6.7	20.0	17.8	11.1
% accounted for	7.2	14.0	3.0	18.1	26.5	31.1
Chaco McElmo B/w (21/104)	13	3	0	3	2	0
% of Chaco McElmo motif	61.9	14.3		14.3	9.5	
% accounted for	78.5	8.7		6.7	5.8	
PII-III Carbon/w (28/123)	13	7	1	2	3	2
% of carbon motifs	46.4	25.0	3.6	7.1	10.7	7.1
% accounted for	68.2	25.1	.8	2.4	2.4	1.6

[a]% of motifs refers to numbers of design codes, e.g., in Red Mesa 13 motifs shared with 5 other types of 39 motifs in Red Mesa = 33.3%.

[b]"% accounted for" refers to the frequency of the shared motif relative to all motifs in the type, e.g., in Red Mesa 177 of 479 total codes (36.9%) are motifs occurring in 5 other types.

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Table MF-1.16. (continued)

B. Percents in terms of total design occurrence in each type

	NUMBER OF SHARED MOTIFS					
Types (motifs)	Red Mesa	Escavada	Puerco	Gallup	Chaco McElmo	PII-III Carbon/w
Red Mesa (39)		29	27	32	16	22
% of column type		72.5	73.0	71.1	76.2	78.6
% of Red Mesa		74.4	69.2	82.2	41.0	56.4
Jaccard's		0.580	0.551	0.615	0.364	0.489
Escavada (40)	29		29	32	19	23
% of column type	74.4		78.4	71.1	90.5	82.1
% Escavada	72.5		72.5	80.0	47.5	57.5
Jaccard's	0.580		0.604	0.605	0.452	0.511
Puerco (37)	27	29		30	17	21
% of column type	69.2	72.5		66.7	81.0	75.0
% Puerco	73.0	78.4		81.1	45.9	56.8
Jaccard's	0.551	0.604		0.577	0.415	0.477
Gallup (45)	32	32	30		15	19
% of column type	82.1	80.0	81.1		71.4	67.9
% Gallup motifs	71.1	71.1	66.7		33.3	42.2
Jaccard's	0.615	0.604	0.577		0.294	0.352
Chaco McElmo (21)	16	19	17	15		18
% of column type	41.0	47.5	45.9	33.3		64.3
% Chaco McElmo	76.2	90.5	81.0	71.4		85.7
Jaccard's	0.364	0.452	0.415	0.294		0.581
PII-III Carbon/w (28)	22	23	21	19	18	
% of column type	56.4	57.5	56.8	42.2	85.7	
% PII-III C/w	78.6	82.1	75.0	67.9	64.3	
Jaccard's	0.489	0.511	0.477	0.352	0.581	

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Table MF-1.16. (concluded)

C. Jaccard's coefficient of similarity for type pairs and maximum possible coefficient values.

	NUMBER OF SHARED MOTIFS					
Types (motifs)	Red Mesa	Escavada	Puerco	Gallup	Chaco McElmo	PII-III Carbon/w
Red Mesa (39)		29	27	32	16	22
Jaccard's		0.580	0.551	0.615	0.364	0.489
Maximum Jaccard's		0.975	0.949	0.867	0.467	0.622
Escavada (40)	29		29	32	19	23
Jaccard's	0.580		0.604	0.604	0.452	0.511
Maximum Jaccard's	0.975		0.675	0.889	0.525	0.700
Puerco (37)	27	29		30	17	21
Jaccard's	0.551	0.604		0.577	0.415	0.477
Maximum Jaccard's	0.949	0.675		0.822	0.568	0.757
Gallup (45)	32	32	30		15	19
Jaccard's	0.615	0.604	0.577		0.294	0.352
Maximum Jaccard's	0.867	0.889	0.822		0.333	0.422
Chaco McElmo (21)	16	19	17	15		18
Jaccard's	0.364	0.452	0.415	0.294		0.581
Maximum Jaccard's	0.467	0.525	0.568	0.333		0.622
PII-III Carbon/w (28)	22	23	21	19	18	
Jaccard's	0.489	0.511	0.477	0.352	0.581	
Maximum Jaccard's	0.622	0.700	0.757	0.422	0.622	

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Table MF-1.17. Pueblo Alto Chi-square test results for between-type comparisons of forms and paste attributes.

Test Entries[a]	n	Controlling Group	Table Dimensions	X^2	d.f.	p	C	Small Expected
VESSEL FORM								
Testing bowls,ladles, pitchers, closed								
Red Mesa vs. Escavada	455	69% Red Mesa 77% bowls	2 x 4	7.116	3	0.068	.124	1 cell <5
Red Mesa vs. Puerco	597	71% bowls	2 x 4	24.331	3	0.000	.198	--
Red Mesa vs. Gallup	1,350	77% Gallup 62% bowls	2 x 4	93.934	3	0.000	.255	--
Red Mesa vs. Chaco McElmo	390	80% Red Mesa 76% bowls	2 x 4	39.140	3	0.000	.302	--
PII-III Carbon/white	410	76% Red Mesa 77% bowls	2 x 4	4.798	3	0.187	.108	1 cell <5
Red Mesa vs. "Puesga"	1,776	82% Puesga 63% bowls	2 x 4	70.120	3	0.000	.195	--
Escavada vs. Puerco	426	67% Puerco 67% bowls	2 x 4	10.776	3	0.013	.157	--
Escavada vs. Gallup	1,179	88% Gallup	2 x 4	27.324	3	0.000	.150	--
Escavada vs. Chaco McElmo	219	65% Escavada	2 x 4	9.795	3	0.020	.207	--
Escavada vs. PII-III C/w	239		2 x 4	1.610	3	0.657	.082	1 cell <5
Puerco vs. Gallup	1,321	78% Gallup 58% bowls	2 x 4	31.268	3	0.000	.152	--
Puerco vs. Chaco McElmo	361	79% Puerco	2 x 4	30.978	3	0.000	.281	1 cell <5

[a]See Tables MF-1.1 to MF-1.16 and MF-1.21 to MF-1.24 for attributes abbreviated here.

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Table . 1.17. (continued)

Test Entries[a]	n	Controlling Group	Table Dimensions	X^2	d.f.	p	C	Small Expected
VESSEL FORM, continued Testing bowls,ladles, pitchers, closed								
Puerco vs. PII-III C/w	381	75% Puerco	2 x 4	3.733	3	0.292	.099	1 cell <5
Gallup vs. Chaco McElmo	1,114	93% Gallup 68% bowls	2 x 4	21.584	3	0.000	.138	1 cell <5
Gallup vs. PII-III C/w	1,134	91% Gallup 58% bowls	2 x 4	15.941	3	0.001	.118	1 cell <5
Chaco McElmo vs PII-III C/w	174	71% bowls	2 x 4	12.782	3	0.005	.262	1 cell <5
Puesga vs. Chaco McElmo	1,543	95% Puesga	2 x 4	23.590	3	0.000	.122	1 cell <5
Puesga vs. PII-III C/w	1,563	93% Puesga	2 x 4	9.874	3	0.020	.079	--
PASTE								
SS, Sh SS, Tr., SS + Tr., by all 6 primary types	1,339	53% Gallup 51% ShSS	4 x 6	157.071	15	0.000	.324	--
SS, Sh SS, Tr., SS + Tr., Ch SS, by Red Mesa, Puerco, Escavada	507	62% ShSS	3 x 5	19.419	8	0.013	.192	2 cells<5
SS, ShSS, Tr, SS + Tr by Gallup, Ch.McE, P2-3 C/w	856	83% Gallup	3 x 4	19.783	6	0.003	.152	--
Texture, mineral-on-white by VF,F,FM,M, lumped C	1,256	58% Gallup	4 x 5	33.709	12	0.001	.162	2 cells <5
Texture, Red Mesa, Puerco Gallup by textures above	1,168	63% Gallup	3 x 5	10.480	8	0.233	.094	--
Undiff. sand grain size (F,M,C+VC) by 6 primary types	951	57% medium 47% Gallup	6 x 3	156.786	10	0.014	.124	--

[a]See Tables MF-1.1 to MF-1.16 and MF-1.21 to MF-1.24 for attributes abbreviated here.

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Table 1.17. (continued)

Test Entries[a]	n	Controlling Group	Table Dimensions	X^2	d.f.	p	C	Small Expected
PASTE, continued								
Sherd temper by all 6 primary types	1,424	52% Gallup 57% 50-95%	4 x 6	52.015	15	0.000	.188	3 cells <5
Sherd temper presence by Red Mesa, Puesga	1,255	82% Puesga	2 x 4	2.952	3	0.399	.048	--
Sherd temper presence by Ch McE, P2-3 C/w, >50% + all	168		2 x 3	6.72	2	[<0.05]	.196	--
Sherd temper presence by Puerco, Escavada	299	71% Puerco	2 x 4	7.344	3	0.062	.154	--
Clay types, all mineral/ w by bl w/ wt, gr w/bl, b + w sh, gr w/wt, white	850	58% Gallup	4 x 5	9.806	12	0.063	.107	1 cell <5
Vitrification, all 6 types	1,424	52% Gallup 67% present	3 x 6	22.294	10	0.014	.124	--
DESIGNS (by form, within type)								
Red Mesa: parallel lines, scrolls, band design, A-1, ticked tri. by bowl, ladle, closed	250	78% bowls	3 x 5	11.662	8	0.167	.211	6 cells <5
Puerco:chkbd, barbs, wide Sosi, band design, tcked tri. by bowl, ladle, closed	204	59% bowls	3 x 5	27.475	8	0.001	.344	3 cells <5
Gallup:corner tri., B/C, B-1, B-3, B-4, B-6, hatch chkbd, other hatch by bowl pitcher, closed, ladle	999	57% bowls	4 x 8	39.839	21	0.008	.196	7 cells <5
Gallup designs as above by bowl + ladle, all closed	999	61% open	2 x 8	16.876	7	1.018	.129	--

[a]See Tables MF-1.1 to MF-1.16 and MF-1.21 to MF-1.24 for attributes abbreviated here.

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Table 1.17. (continued)

Test Entries[a]	n	Controlling Group	Table Dimensions	X^2	d.f.	p	C	Small Expected
SURFACE FINISH								
Bowls, all types by four slip states	1,203	42% interior	4 x 6	310.643	15	0.000	.453	1 cell <5
Red Mesa, Puesga, PII-III C/w by four slip states	1,150	49% Puesga	3 x 4	187.127	6	0.000	.374	--
Red Mesa, PII-III C/w by slips	310	78% Red Mesa 58% both sides	2 x 4	7.782	3	0.051	.156	1 cell <5
Bowls, all types by sides with polish	1,209	67% one side 47% Gallup	3 x 6	383.753	10	0.000	.491	--
Closed forms by presence-absence of polish	542	92% present 70% Gallup	2 x 6	61.996	5	0.000	.320	4 cells <5
Red Mesa, Puesga, PII-III C/w bowls by sides with pol.	1,158	73% Puesga 69% one side	3 x 3	181.085	4	0.000	.368	--
Red Mesa, PII-III C/w bowls by sides with polish	308	79% Red Mesa	2 x 3	22.139	2	0.000	.259	1 cell <5
Bowls, all types by degrees of polish	1,209	67% total polish 47% Gallup	4 x 6	292.813	15	0.000	.440	1 cell <5
Red Mesa, Puesga, PII-III C/w bowls by degrees of pol.	1,158	73% Puesga 66% total polish	3 x 4	64.443	6	0.000	.230	--
GRAYWARES								
nar. corr., wide corr., patterned nar. corr. by Tr., SS, Ch. SS temper, PII	183	54% Trachyte 80% narrow corr.	3 x 3	10.582	4	0.032	.234	3 cells <5 1 cell <2
narrow corr., patt. nar. corr. by Tr., SS temper, PII	171	55% trachyte	2 x 3	7.194	2	0.027	.201	1 cell <5
nar. clapbd., nar. corr., wide corr., patt. nar. corr. by SS, Tr. temper in PII corr.	180	76% narrow corr. 58% trachyte	2 x 4	8.537	3	0.036	.213	2 cells <5

[a]See Tables MF-1.1 to MF-1.16 and MF-1.21 to MF-1.24 for attributes abbreviated here.

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Table MF-1.17. (concluded)

Test Entries[a]	n	Controlling Group	Table Dimensions	X^2	d.f.	p	C	Small Expected
GRAYWARES, continued								
nar.corr.,wide corr.,patt. nar.corr.by Tr., SS in PII-III	71	80% narrow corr. 68% trachyte	2 x 3	4.160	2	0.125	.235	3 cells <5
nar.corr., wide corr. by Tr.,SS in PII-III	65	66% trachyte	2 x 2	2.045	1	0.153		1 cell <5
nar.clapbd.,nar.corr.,wide corr.,oblq.corr.,patt.corr. by PII, PII-III	459	78% PII 74% narrow corr.	2 x 5	3.087	4	0.543	.082	2 cells <5
PII, PII-III by SS, Tr., Ch.SS	312	70% PII 59% trachyte	2 x 3	4.721	2	0.094	.122	1 cell <5
PII, PII-III by F-M, C, VC sand grain size	122	70% PII	2 x 3	7.401	2	0.025	.239	1 cell <5
PII, PII-III by VF-FM, M, MC, C. VC texture	328	70% PII	2 x 5	4.599	4	0.331	.118	--
PII, PII-III by Chuska, tan, black, white clay	157	73% PII 52% Chuska	2 x 4	3.323	3	0.344	.144	1 cell <5
627, Alto PII corr. by SS, Tr., Ch. SS	612	63% from 627	2 x 3	20.563	2	0.000	.180	--
627, Alto PII corr. by F-M, C, VC sand grain	307	72% from 627	2 x 3	3.715	2	0.156	.109	--
627, Alto PII corr. by nar.clapbd.,nar.corr., wide corr., flattened corr., obl. corr., patterned corr.	745		2 x 6	35.717	5	0.000	.214	--

[a]See Tables MF-1.1 to MF-1.16 and MF-1.21 to MF-1.24 for attributes abbreviated here.

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Table MF-1.18. Between-type t-tests of vessel diameters, Pueblo Alto.

Type/form	n	mean	s.d.	t	d.f.[a]	p> |t|
Red Mesa bowls vs.	199	189.8	67.575			
Escavada bowls	88	208.4	70.798	-2.250	285	0.025
Puerco bowls	137	193.8	63.832	-0.567	334	0.571
Gallup bowls	436	214.1	65.174	-4.426	633	0.000
Chaco McElmo b.	40	197.8	55.492	-0.755	237	0.451
PII-III C/w bowls	62	199.8	69.644	-1.126	259	0.261
Red Mesa ladles vs.	17	102.9	23.983			
Escavada ladles	7	112.1	20.587	-0.887	22	0.385
Puerco ladles	16	99.7	24.116	0.389	31	0.700
Gallup ladles	33	123.9	26.004	-2.275	48	0.008
Chaco McElmo 1.	2	70.0	-	-	-	-
PII-III C/w 1.	6	106.7	41.800	-0.268	21	0.791
Escavada vs. Puerco bowls				1.573	223	0.109
Gallup bowls				-0.734	522	0.463
Chaco McElmo bowls				0.841	126	0.402
PII-III C/w bowls				0.778	148	0.438
Escavada vs. Puerco ladles				1.187	21	0.249
Gallup ladles				-1.124	38	0.268
PII-III C/w ladles				0.307	11	0.764
Puerco vs. Gallup bowls				-3.199	571	0.002
Chaco McElmo bowls				-0.358	175	0.721
PII-III C/w bowls				-0.635	197	0.526
Puerco vs. Gallup ladles				-3.132	47	0.003
PII-III C/w ladles				-0.494	20	0.627
Gallup vs. Chaco McElmo bowls				1.534	474	0.126
PII-III C/w bowls				1.626	496	0.104
Gallup vs. PII-III C/w ladles				1.358	37	0.183
Chaco McElmo vs. PII-III C/w bowls				0.177	100	0.860

[a]F test shows all variances to be equal; degrees of freedom calculated accordingly.

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Table MF-1.19. Summary of surface treatment attributes for types and forms selected for detailed description, Pueblo Alto.

TYPE	MOTIFS s[a] / n	MOTIFS Inventory diversity / evenness	MOTIFS Distribution diversity / evenness[b]	FORMS s / n	FORMS diversity / evenness	BOWL POLISH s / n	BOWL POLISH diversity / evenness	BOWL SLIP s / n	BOWL SLIP diversity / evenness
Red Mesa B/w	40	2.901	0.775	7	0.766	8	1.344	5	1.016
	479	0.786	0.706	313	0.394	244	0.646	244	0.632
Escavada B/w	42	3.228	0.806	7	0.946	7	1.488	5	1.370
	218	0.864	0.734	142	0.486	106	0.765	106	0.851
Puerco B/w	40	3.024	0.892	7	1.156	7	1.273	5	1.237
	425	0.820	0.812	285	0.594	177	0.654	177	0.768
Gallup B/w	49	2.766	0.597	11	1.236	9	1.338	5	1.342
	1,336	0.711	0.544	1040	0.515	591	0.609	591	0.834
Puerco-Gallup-Escavada lump	62	3.308	0.672	11	1.220	9	1.440	5	1.344
	1,979	0.802	0.612	1466	0.509	874	0.655	874	0.835
Chaco McElmo	22	2.567	0.697	6	0.998	6	1.127	3	0.750
	104	0.830	0.634	77	0.557	53	0.629	53	0.682
PII-III C/w	28	2.844	0.631	7	1.010	8	1.486	5	1.157
	123	0.853	0.575	98	0.519	71	0.714	71	0.719
PII Corrugated	14	1.391							
	411	0.527							
PII-III Corrugated	12	1.533							
	124	0.617							

[a]Number of categories.
[b]Distribution of sherds with 1, 2, and 3 motifs present--s = 3 for all decorated types.
Polish distributions include unknowns, form and slip distributions do not.

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Table MF-1.20. Summary of paste attributes for types selected for detailed description, Pueblo Alto.

TYPE	TEMPER s[a] n	TEMPER diversity evenness[b]	TEMPER diversity evenness[c]	SAND GRAIN s n	SAND GRAIN diversity evenness	TEXTURE s n	TEXTURE diversity evenness	CLAY s n	CLAY diversity evenness
Red Mesa B/w	9	1.292	0.771	3	0.792	7	1.330	8	1.539
	223	0.588	0.371	182	0.721	223	0.683	158	0.740
Escavada B/w	8	1.033	0.586	4	0.947	7	1.319	7	1.600
	88	0.497	0.301	77	0.683	88	0.678	63	0.822
Puerco B/w	13	1.254	0.838	4	0.916	7	1.294	8	1.532
	211	0.489	0.337	170	0.661	211	0.665	156	0.737
Gallup B/w	12	1.546	1.189	4	0.999	6	1.283	8	1.605
	734	0.622	0.496	447	0.721	734	0.716	551	0.772
Puerco-Gallup-	16	1.504	1.126	4	1.008	7	1.305	8	1.615
Escavada lump	1,033	0.542	0.416	694	0.727	1033	0.671	774	0.776
Chaco McElmo	8	1.681	1.409	3	0.652	4	0.868	8	1.385
	74	0.808	0.724	29	0.593	74	0.626	38	0.666
PII-III C/w	11	1.915	1.614	3	0.989	6	1.426	8	1.451
	94	0.798	0.701	46	0.900	94	0.796	56	0.698
PII Corrugated	9	1.331	1.225	4	0.903	7	1.669	6	1.354
	230	0.606	0.589	86	0.651	230	0.858	123	0.756
PII-III	7	1.131	1.053	4	1.151	6	1.643	5	1.293
Corrugated	98	0.581	0.588	36	0.830	98	0.917	44	0.804

[a]Number of categories.
[b]Temper dividing undifferentiated sandstone and more sherd than sandstone.
[c]Temper without the sherd temper division (as at 627 and 629)--n is the same, s minus 1.

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Table MF-1.21. Pueblo Alto Pueblo II Corrugated description.

SURFACE ATTRIBUTES

1. Designs	Motif Number 1	2	n	%
undifferentiated neckbanding	11		11	2.7
narrow neckbanding 2-5 mm	1		1	0.2
narrow clapboard 2-5 mm	15		15	3.6
narrow corrugated 2-5 mm	267		267	65.0
wide corrugated >5 mm	25		25	6.1
flattened corrugations	1	3	4	1.0
undifferentiated corrugated	22		22	5.4
corrugated, festoon	2		2	0.5
corrugated, oblique	2	13	15	3.6
patterned, narrow	37		37	9.0
patterned, wide	2		2	0.5
incisions crossing coils		4	4	1.0
Mummy Lake style	3		3	0.7
fingernail punctate		3	3	0.7
Total	388	23	411	
n w/ 1,2 designs	365	23	388	
% w/ 1,2 designs	94.4	5.6		

Type Design Diversity H' = 1.391 s = 14 J = .527

2. Sooting

	n	%
sooted	226	57.7
unsooted	166	42.3
Total	392	

3. Handles

	n	%
coil	2	16.7
strap	2	16.7
tit lug	6	50.0
dual tit lug	1	8.3
tabular lug	1	8.3
Total	12	

handles:items = 1:33

4. Form and Metrics

	n	%
jars	391	99.7
pitcher	1	0.3
Total	393	

	n	range	$\bar{x}$	s.d.	cv
jars					
orifice dia(mm)	374	80-350	217.1	56.700	26.1
rim fillet(mm)	383	8-45	21.4	5.748	26.8
rim flare	258	6-39°	23.0	6.073	26.4
pitcher					
orifice dia(mm)	1	100			
rim fillet(mm)	1	13			
rim flare	1	28°			

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Table MF-1.22. Pueblo Alto Pueblo II Corrugated Type paste description.

Temper Composition

Temper	n	% of total
Undifferentiated sandstone	79	34.3
More sherd than sandstone	7	3.0
Pink chalcedonic sandstone	10	4.4
White chalcedonic sandstone	5	2.2
Magnetitic sandstone	1	.4
Trachybasalt only	109	47.4
Trachybasalt with sandstone	15	6.5
San Juan igneous w/o hornblende	2	.9
San Juan igneous with hornblende	2	.9
Total	230	

Texture Attributes

Grain Size	n	%
Fine	4	1.7
Medium	37	16.1
Coarse	106	46.1
V. coarse	83	36.1
Totals	230	

Density(%)	n	%
1-2	22	9.6
5	58	25.2
10	109	47.4
20	34	14.8
30	7	3.0
	230	

Sherd Temper	n	%
none	208	90.4
<half	14	6.1
>half	7	3.0
all	1	0.4
	230	

Undifferentiated sandstone

Grain Size	n	%
Fine	1	1.2
Medium	4	4.7
Coarse	39	45.3
V. Coarse	42	48.8
Total	86	

Texture index	n	%
Very fine (0-2)	1	0.4
Fine (2.1-4)	4	1.7
Fine-medium (4.1-7)	34	14.8
Medium (7.1-10)	38	16.5
M-Coarse (10.1-13)	49	21.3
Coarse (13.1-16)	61	26.5
Very Coarse (16.1+)	43	18.7
Total	230	

Clay Attributes

Clay-temper types	n	%
Black with white sherd	1	0.8
Chuska gray homogeneous	62	50.4
Gray with white sherd	7	5.7
Tan to brown clay	23	18.7
Black clay	21	17.1
White clay	9	7.3
[Total (with type)	123	
No type assigned	107	46.5]

Vitrification	n	%
Absent	29	12.6
Present	190	82.6
Marked	11	4.8
Total	230	

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Table MF-1.23. Pueblo Alto Pueblo II-III Corrugated description.

SURFACE ATTRIBUTES

1. Decoration

Designs	Motif Number 1	2	n	%
narrow neckbanding 2-5 mm	2		2	1.6
narrow clapboard 2-5 mm	7		7	5.6
narrow corrugated 2-5 mm	74		74	59.7
wide corrugated >5 mm	7	1	8	6.5
flattened corrugations	1	3	4	3.2
undifferentiated corrugated	12		12	9.7
corrugated, oblique	2	3	5	4.0
patterned, narrow	6		6	4.8
patterned, wide	1		1	0.8
Mummy Lake style	3		3	2.4
incisions across coils		1	1	0.8
fingernail punctate		1	1	0.8
Totals	115	9	124	
n w/ 1,2 designs	106	9	115	
% w/ 1,2 designs	92.2	7.8		

Type Design Diversity H' = 1.533 s = 12 J = .617

2. Sooting

	n	%
sooted	74	64.3
unsooted	41	35.7
Total	115	

3. Handles

	n	%
tit lug	2	100.0

handles:items = 1:58

4. Form and Metrics

	n	%
jars	115	100

	n	range	$\bar{x}$	s.d.	cv
diameter(mm)	112	70-350	213.0	57.947	27.2
rim fillet(mm)	113	6-50	22.3	7.321	32.9
rim flare	76	23-51°	33.8	5.992	17.7

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Table MF-1.24. Pueblo Alto Pueblo II-III Corrugated type paste description.

Temper	Temper Composition n	% of total
Undifferentiated sandstone	34	34.7
More sherd than sandstone	2	2.0
Pink chalcedonic sandstone	1	1.0
Trachybasalt only	51	52.0
Trachybasalt with sandstone	8	8.2
Dominant SS with trachybasalt	1	1.0
San Juan igneous w/o hornblende	1	1.0
Total	98	

Texture Attributes

Grain Size	n	%
Fine	3	3.1
Medium	35	35.7
Coarse	43	43.9
V. coarse	17	17.3
Totals	98	

Density(%)	n	%
1-2	1	1.0
5	23	23.5
10	39	39.8
20	29	29.6
30	6	6.1
	98	

Sherd Temper	n	%
none	85	86.7
<half	11	11.2
>half	2	2.0
	98	

Undifferentiated sandstone

Grain Size	n	%
Fine	1	2.8
Medium	7	19.4
Coarse	15	41.7
V. Coarse	13	36.1
Total	36	

Texture index	n	%
Fine (2.1-4)	4	4.1
Fine-medium (4.1-7)	9	9.2
Medium (7.1-10)	20	20.4
M-Coarse (10.1-13)	29	29.6
Coarse (13.1-16)	23	23.5
Very Coarse (16.1+)	13	13.3
Total	98	

Clay Attributes

Clay-temper types	n	%
Chuska gray homogeneous	20	45.5
Gray with white sherd	2	4.5
Tan to brown clay	14	31.8
[Black clay	5	11.4
White clay	3	6.8
Total (with type)	44	
No type assigned	54	55.1]

Vitrification	n	%
Absent	11	11.2
Present	83	84.7
Marked	4	4.1
Total	98	

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Table MF-1.25. Pueblo Alto Chi-square test results for between-type temper-surface/paint groups.

Table	Test Entries	n	Controlling Group	Table Dimensions	X^2	d.f.	p	C	Small Expected
VESSEL FORM									
1.17	Grps. G-N (Gallup) by bowl, closed	600	41% grp I	2 x 8	7.116	7	0.417	.108	--
1.17	Grps. G,I,J,L,N (Gal>60) by bowl, pitcher, closed, jar	522	47% grp I 51% bowls	4 x 5	11.345	12	0.500	.146	7 cells <5
1.16	Grps. D,E,F (Puerco) by bowl, closed	145	57% grp E 65% bowls	2 x 3	7.086	2	0.029	.216	--
1.16	Grps. A,B (Red Mesa) by bowl, ladle, closed	173	83% grp B 80% bowls	2 x 3	3.137	2	0.208	.133	2 cells <5
1.18	Grps. O,P (PII-III C/w) by bowl, closed	60		2 x 2	1.487_c	1	0.223		
1.18	Grps. Q,R (Chaco McElmo) by bowl, pitcher, closed	65	69% bowls	2 x 3	3.336	2	0.189	.221	2 cells <5
SHERD TEMPER									
MF-1.26	Grps. A,B (Red Mesa) by > half, <half sherd	175	67% > half 83% grp B	2 x 2	1.556_c	1	0.212		
MF-1.26	Grps. D,E,F (Puerco) by > half, < half sherd	161	57% grp E 79% > half	2 x 3	1.464	2	0.481	.095	1 cell <5
MF-1.26	Grps. G,H,I,J (SS Gallup) by > half, < half sherd	415	62% grp I 73% > half	2 x 4	3.157	3	0.368	.087	--
MF-1.26	Grps. K,L,M,N (Tr Gallup) by > half, < half sherd	212	54% < half	2 x 4	9.481	3	0.023	.207	--

$_c$Indicates Chi-square corrected.

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Table MF-1.25. (concluded)

Test Entries	n	Controlling	Table Dimensions	X^2	d.f.	p	C	Small Expected
SHERD TEMPER, continued								
MF-1.26 Grps. O,P (PII-III C/w) by > half, < half sherd	74	62% grp.O	2 x 2	6.805_c	1	0.009		
MF-1.26 Grps. Q,R (Chaco McElmo) by > half, < half sherd	67		2 x 2	0.476_c	1	0.490		
DESIGN								
1.16 Grps. A,B (Red Mesa) by parallel lines, scrolls, band desn, hatchure A-1	135	81% grp. B 44% band design	2 x 5	2.581	4	0.630	.137	4 cells <5
1.16 Grps. C-F (Puerco/Escavada) by band desn, wide+narrow Sosi, checkerbd, barbs (desn>20)	139		4 x 4	6.623	9	0.676	.213	3 cells <5
1.17 Grps. G-N (Gallup) by hatchures B/C,B-1,B-3, B-4, B-6 (desn>40 less oth hatch)	504	42% grp. I 41% hatch. B-4	5 x 8	146.352	28	0.000	.474	11 cells <5
1.17 Grps. G,I,J,L,N by same hatchures	433	49% grp. I 44% hatch. B-4	5 x 5	82.177	16	0.000	.399	3 cells <5
1.18 Grps. O,P (C/w) by parallel lns, nar+wide Sosi, band desn	37	70% grp. O	2 x 3	0.302	2	0.860	.090	3 cells <5
1.18 Grps. Q,R (Chaco McE) parallel lns, nar+wide Sosi, barbs	52	46% Sosi	2 x 3	0.601	2	0.740	.107	--

$_c$Indicates Chi-square corrected.

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Table MF-1.26. Sherd temper estimates for all whiteware groups, Pueblo Alto.

TYPE:	Red Mesa				Escavada		Puerco					
TEMPER/GRAIN SIZE:	SS		SS		SS		SS		SS/fine		SS/coarse	
PAINT COLOR:	brown		black		black		brown		black		black	
LETTER CODE:	A		B		C		D		E		F	
	n	%	n	%	n	%	n	%	n	%	n	%
SHERD TEMPER												
None			5	3.4	5	9.4	3	6.2	3	3.3	1	4.8
Less than half	13	44.8	40	27.4	6	11.3	10	20.8	14	15.2	3	14.3
More than half	14	48.3	95	65.1	35	66.0	29	60.4	69	75.0	16	76.2
All	2	6.9	6	4.1	7	13.2	6	12.5	6	6.5	1	4.8
Totals	29		146		53		48		92		21	

TYPE:	Gallup															
TEMPER/GRAIN SIZE:	SS/fine		SS/coarse		SS/fine		SS/coarse		SS/tr		SS/tr		Tr+SS		Tr+SS	
PAINT COLOR:	brown		brown		black		black		brown		black		brown		black	
LETTER CODE:	G		H		I		J		K		L		M		N	
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
SHERD TEMPER																
None	6	8.7	1	4.0	12	4.7	3	4.7	3	8.1	2	2.4	1	4.2	7	10.3
Less than half	17	24.6	3	12.0	54	21.0	14	21.9	14	37.8	36	43.4	12	50.0	40	58.8
More than half	39	56.5	19	76.0	175	68.1	41	64.1	20	54.0	45	54.2	11	45.8	21	30.9
All	7	10.1	2	8.0	16	6.2	6	9.4								
Totals	69		25		257		64		37		83		24		68	

TYPE:	PII-III Carbon				Chaco McElmo			
TEMPER/GRAIN SIZE:	SS/all		Tr-SS mix		SS/all black		Tr-SS mix	
GROUP:	O		P		Q		R	
	n	%	n	%	n	%	n	%
SHERD TEMPER								
None	8	17.4	3	10.7	2	6.9	2	5.3
Less than half	6	13.0	15	53.6	13	44.8	22	57.9
More than half	28	60.9	10	35.7	12	41.4	13	34.2
All	4	8.7			2	6.9	1	2.6
Totals	46		28		29		38	

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Table MF-1.27. Vessel form contents of time-space groups, A.D. 1020-1220 portions segments of 100 years or less, Pueblo Alto.

	TIME :	A.D. 1020-1120					A.D. 1020-40	A.D. 1120-1220		16
	SPACE:	Fill	Floors	Trash	Pit fill	Midden	Midden	Fill	Trash	Group
Vessel Form	GROUP:	E	F	G	H	I	J	K	L	Total
White bowl		28	60	26	7	1,164	145	10	315	1,993
Red bowl			4	1	2	47	1	1	50	119
Smudged bowl		4	10	5	1	61	3	1	30	127
Ladle		7	5	3	1	162	14	2	40	270
Pitcher		1	2	1		112	3		39	173
Seed jar		2	1			19	1		7	31
Canteen				1		14	1		3	23
Tecomate		1	1			16			4	23
Olla		5	2	6	4	95	7	1	23	154
Mug			1							1
Duckpot									1	2
Cylinder jar										1
Whiteware jar		27	31	3	3	298	29	8	40	506
Redware jar			2						1	5
Grayware jar		27	52	24	7	1,310	88	17	203	1,915
Grayware pitcher						3				4
Miniature			1	1		4			6	13
Gourd jar						1				1
Totals		102	172	71	25	3,306	292	40	762	5,361

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Table MF-1.28. Pueblo Alto Chi-square test results from tests of various time-space group combinations.

Table	Test Entries	n	Controlling Group	Table Dimensions	X^2	d.f.	p	C	Small Expected
VESSEL FORM									
Across space within time:									
1.23	TS Grp A-D by bowl, whiteware closed, gray jar	226	58% bowls	3 x 4	26.500	6	0.000	.324	1 cell <5
1.23	TS Grp A-D by bowl, ladle whiteware closed, gr. jar	236	56% bowls	4 x 4	27.742	9	0.001	.324	5 cells <5
MF-1.27	TS Grp E-I by same	3663	90% Grp I	4 x 5	37.128	12	0.000	.100	4 cells <5
MF-1.27	TS Grp E-H by same	365	46% Grp F 41% bowls	4 x 4	13.660	9	0.135	.190	3 cells <5
MF-1.27	TS Grps G,I by same	3368	98% Grp I	2 x 4	1.518	3	0.678	.021	1 cell <5
MF-1.27	TS Grp K-L by same	794	95% Grp L 51% bowls	2 x 4	8.829	3	0.041	.102	1 cell <5
1.23	TS Grp X-Z by same	345	62% Grp Y	3 x 4	17.689	6	0.007	.221	1 cell <5
1.23	TS Grps J, A-D by bowl, ladle, special[a], jar/olla, gray jar	528	53% bowls	2 x 5	1.546	4	0.818	.054	1 cell <5
MF-1.27	TS Grps J, E-I by same	3,955	93% Grp E-I	2 x 5	20.921	4	0.000	.072	--
1.23,MF-1.27	TS Grps X-Z, E-I by same	4,008	91% Grp E-I	2 x 5	7.130	4	0.129	.042	--
1.23,MF-1.27	TS Grps X-Z, K-L by same	1,139	70% Grp K-L 47% bowls	2 x 5	26.659	4	0.000	.151	--
Across time within space:									
1.23,MF-1.27	TS Grps B,G,L by bowl, ladle, ww closed, gr. jar	902	84% Grp L 53% bowls	3 x 4	8.190	6	0.224	.095	2 cells <5

[a]"Special" indicates a lump of canteen, seed jar, pitcher, tecomate; "same" indicates the use of the last listed attribute states.

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Table M 28. (continued)

Table	Test Entries	n	Controlling Group	Table Dimensions	X^2	d.f.	p	C	Small Expected
VESSEL FORM, continued									
1.23,MF-1.27	TS Grps D,I,J by bowl, ladle, ww closed, gr jar	3,666	90% Grp I	3 x 4	18.653	6	0.005	.071	1 cell <5
1.23,MF-1.27	TS Grps A,E,K,X by same	268		4 x 4	17.272	9	0.045	.246	2 cells <5
1.23,MF-1.27	TS Grps I, D by bowl, ladle special[a], jar/olla, gr jar	3,374	98% Grp I	2 x 5	2.689	4	0.611	.028	2 cells <5
1.23,MF-1.27	TS Grps D,J by same	368	79% Grp J, 49% bowls	2 x 5	1.601	4	0.659	.066	1 cell <5
1.23,MF-1.27	TS Grps I,Y by same	3,516	94% Grp I	2 x 5	2.784	4	0.595	.028	--
Across time:									
1.23,MF-1.27	All time lumps by same	5,330	69% Grp I	5 x 5	106.134	16	0.000	.140	--
1.23,MF-1.27	TS Grps A-D, E-I by same	3,889	94% Grps E-I	2 x 5	28.641	4	0.000	.085	--
1.23,MF-1.27	TS Grps E-I, K-L by all 7 forms	4,457	82% Grps E-I 41% bowls	2 x 7	63.229	6	0.000	.118	--
1.23,MF-1.27	TS Grps A-D, J, K-L, X-Y by bowl,ladle,spec[a],jar/olla,gr.	1,667	48% Grps K-L 49% bowls	4 x 5	45.602	12	0.000	.163	--
TYPES									
Across space within time:									
1.25	TS Grps E,F,G,I by gray, m/w, c/w, red & smudged	2,922	90% Grp I 48% gray, 43% m/w	4 x 4	35.282	9	0.000	.109	4 cells <5
1.25	TS Grps G,I by same	2,691	98% Grp I	2 x 4	7.125	3	0.068	.051	2 cells <5
1.25	TS Grps A-D by gray, mineral, red & smudged	184	58% mineral	3 x 4	12.099	6	0.060	.248	3 cells <5
1.25	TS Grps K,L by gray, m/w, carbon/w, red & smudged	614	94% Grp L	2 x 4	7.482	3	0.058	.110	--

[a]"Special" indicates a lump of canteen, seed jar, pitcher, tecomate; "same" indicates the use of the last listed attribute states.

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Table MF-1.28. (continued)

Table	Test Entries	n	Controlling Group	Table Dimensions	X^2	d.f.	p	C	Small Expected
	TYPES, continued								
	Overlapping time assignments:								
1.24,1.25	TS Grps K-L, X-Z by gray, m/w, c/w, red & smudged	889	69% Grps K-L	2 x 4	89.702	3	0.000	.303	--
1.24,1.25	TS Grps A-D, J by same	421	56% Grp J, 56% m/w	2 x 4	12.095	3	0.007	.167	--
1.24,1.25	TS Grps A-D, J by early gr, late gr, e. m/w, l. m/w	385	42% late gray	2 x 4	62.869	3	0.000	.375	--
1.25	TS Grps E-I, J by same	2,924	92% Grps E-I 47% late gray	2 x 4	309.149	3	0.000	.309	--
1.24,1.25	TS Grps E-I, X-Z by gray m/w, c/w, red & smudged	3,203	91% Grps E-I	2 x 4	21.450	3	0.000	.082	--
	TEMPER								
	Across space within time:								
1.28	TS Grps A-D by SS, Sh>SS,Tr.	201	43% sherd> sandstone	3 x 4	2.402	6	0.879	.109	--
1.28	TS Grps E,F,G,I by SS, Sh>SS,ChSS,Tr,SS>Tr	2,177	85% Grp I	4 x 6	13.505	15	0.563	.078	5 cells <5
1.28	TS Grps G,I by same	1,861	96% Grp I	2 x 5	3.012	4	0.556	,040	1 cell <5
1.28	TS Grps K,L by SS,Sh>SS Tr., SS>Tr.	736	95% Grp L	2 x 4	3.777	3	0.287	.071	1 cell <5
1.28	TS Grps X-Z by same	217	49% Grp Y	3 x 4	8.058	6	0.234	.189	1 cell <5
	Across time								
1.28	TS Grps E-I, K-L by SS,Sh, ChSS,SJ, Tr,SS>SS	2,964	74% Grps E-I	2 x 6	17.043	5	0.004	.076	--
1.28	TS Grps J, A-D by SS,Sh, ChSS, Tr, SS>Tr	486	54% Grp J 36% Sherd>SS	2 x 5	9.307	4	0.054	.137	--

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Table MF-1.28. (concluded)

Table	Test Entries	n	Controlling Group	Table Dimensions	X^2	d.f.	p	C	Small Expected
TEMPER, continued									
	TS Grps A-D,E-I,K-L by SS,Sh>SS,ChSS,Tr,SS>Tr	3,194	69% Grps E-I	3 x 6	57.745	10	0.000	.133	--
Across time within space:									
1.28	TS Grps I,L by SS,Sh>SS ChSS, SJ, Tr, SS>Tr	2,570	72% Grp I	2 x 6	16.238	5	0.006	.079	--
1.28	TS Grps D,J by SS,Sh>SS ChSS,Tr,SS>Tr	337	78% Grp J	2 x 5	3.328	4	0.504	.099	1 cell <5
1.28	TS Grps I,Y by same	1,903	94% Grp I	2 x 5	0.989	4	0.911	.023	1 cell <5
1.28	TS Grps B,G,L by same	853	83% Grp L	3 x 5	42.759	8	0.000	.218	2 cells <5
1.28	TS Grps E,X by SS,Sh>SS, SJ, Tr., SS>Tr.	181		2 x 5	2.769	4	0.597	.123	--
1.28	TS Grps I,J by SS,Sh>SS, ChSS,FeSS,SJ,Tr,SS>Tr	2,124	87% Grp I	2 x 7	28.447	6	0.000	.115	1 cell <5

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Table MF-1.29. Trash Mound booth and seasonality Chi-square test results, Pueblo Alto.

Table	Test Entries	n	Controlling Group	Table Dimensions	X^2	d.f.	p	C	Small
TRASH MOUND BOOTHS									
1.29	Gray,Red Mesa/Escavada/ Puerco,Gallup/Chaco,late C/w, red & smudged by Bths 1-6.	1,452	49% grayware	5 x 6	85.624	20	0.000	.236	4 cells <5
1.29	L.gray,Puerc/Escav,Gall/ Chaco,L.C/w,red & smudged by booths 3-6	1,267	47% grayware	4 x 6	23.186	15	0.080	.134	--
1.39	Bowl, ladle, whiteware closed, gray jar by booths 1-6	1,590	43% gray jar	4 x 6	22.272	15	0.101	.115	2 cells <5
1.30	Booths 3-6 by same	1,431	45% gray jar	4 x 4	20.663	9	0.014	.119	--
1.32	SS,ChSS,SJ,Tr,Tr>SS,SS>Tr by booths 1-6	1,605	53% Sandstone	6 x 6	40.963	25	0.023	.158	5 cells <5
1.32	Booths 3-6 by same tempers	1,432	52% sandstone	4 x 6	19.743	15	0.182	.117	--
1.30	Gray pres/abs soot by 1-6	723		2 x 6	17.726	5	0.003	.155	--
1.30	Gray pres/abs soot by 3-6	642		2 x 4	13.394	3	0.004	.143	--
1.29	Booths 3-6 by PII, Unid. corrugated	594	84% unid. corr.	2 x 4	5.731	3	0.125	.098	--
1.29	Booths 3-6 by PII, unident. corr., whiteware	1,397	57% whiteware	3 x 4	14.107	6	0.028	.100	--
1.31	Booths 3-6 by hatchure B-1, B-3, B-4, B-6, and B/C	327	44% hatchure B-4	4 x 5	7.197	12	0.844	.147	--

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Table MF 29. (concluded)

Table	Test Entries	n	Controlling Group	Table Dimensions	X^2	d.f.	p	C	Small
SEASONAL LAYER GROUPS									
MF-1.30	E.gray,L.gray,Pco/Escav, Gal/Chaco,L.C/w,red/smdg by winter, other	1,336	74% other 45% late gray	2 x 7	14.393	6	0.025	.103	--
MF-1.30	Same less E.gray by fall, winter, spring, other	1,283	46% late gray	4 x 6	19.999	15	0.172	.124	--
MF-1.31	Bowl,ladle,special[a],jar/ olla,gray jar by winter, other	1,457	45% gray jar 74% other	2 x 5	11.354	4	0.023	.088	1 cell <5
MF-1.31	Bowl,ladle,whiteware closed, gray jar by fall,wint.,spr.	957	45% gray jar 40% winter	3 x 4	14.180	6	0.023	.121	--
MF-1.31	Same forms by fall,winter, spring,other,construction	1,618	44% gray jar 31% other	4 x 5	19.237	12	0.083	.108	--
MF-1.31	SS,ChSS,SJ,Tr,Tr>SS,SS>Tr by winter, other	1,457	52% sandstone 74% other	2 x 6	7.588	5	0.180	.072	--
MF-1.31	Same temper by fall,winter, spring	938	51% sandstone 40% winter	3 x 6	6.549	10	0.767	.083	--
MF-1.31	Same temper by f,w,s,other, construction	1,605	53% sandstone 31% other	5 x 6	30.222	20	0.066	.136	--
MF-1.31	Grayware soot p/a by winter, other less construction	651	71% other	2 x 2	0.196[b]$_c$	1	0.658		
MF-1.31	Grayware soot by f,w,s	430	44% winter	2 x 3	6.825	2	0.033	.125	--
MF-1.31	Grayware soot by f,w,s,o,c	713	31% other	2 x 5	7.507	4	0.111	.102	--
MF-1.30	PII corr., unid corr. by fall, winter, spring	399	86% unident.	2 x 3	1.321	2	0.516	.057	--
MF-1.30	PII corr., unid corr., whiteware	920	57% whiteware	3 x 3	11.939	4	0.018	.113	--

[a]Whiteware pitcher, seed jar, canteen, tecomate.
[b]$_c$ indicates Chi-square corrected.

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Continued
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Table MF-1.30. Type contents of Trash Mound layers with faunal seasonal assignments, Pueblo Alto.

	Fall	Winter	Spring	Constr.	Other	Total
Plain Gray	3	4	1	10	10	28
Wide Neckbanded	1		1	3		5
Narrow Neckbanded	6	4	6	6	16	38
Neck Corrugated	1			8		9
PII Corrugated	19	22	16	6	37	100
PII-III Corr.		1	2		1	4
Unid. Corrug.	93	158	91	29	157	528
TOTAL GRAY	123	189	117	62	221	712
Early Red Mesa			1	2	2	5
Red Mesa B/w	3	3	6	31	7	50
Escavada	3	2	6	1	13	25
Puerco	21	29	30	7	32	119
Gallup	69	103	87	22	145	426
Chaco B/w	3	2	9	1	11	26
Exotic M/w	4	12	12	4	17	49
PII-III M/w	26	24	20	16	44	130
TOTAL M/w	129	175	171	84	271	830
Chuska B/w	3	4	7		10	24
Chuska Whiteware	3	9	6	1	6	25
Red Mesa desn Chuska	3			2	1	6
Tusayan Whiteware	2	1	3	1	3	10
TOTAL C/w	11	14	16	4	20	65
Unid. Whiteware	2	1	2		5	10
TOTAL WHITEWARE	142	190	189	89	296	905
Redware	5	3	8	1	7	22
Polished Smudged	3	4	7		8	22
Brownware			1			1
GRAND TOTALS	273	386	320	151	532	1,662

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Table MF-1.31. Vessel form, temper, and grayware sooting in Trash Mound layers with seasonal assignments, Pueblo Alto.

	Fall	Winter	Spring	Constr.	Other	Total
VESSEL FORM						
White bowl	70	107	97	46	133	453
Red bowl	5	3	6	1	6	21
Smudged bowl	3	4	6		8	21
Ladle	9	12	8	8	20	57
Pitcher	3	8	8		30	49
Seed jar			1		5	6
Canteen	1	1	1	1	4	8
Tecomate	1		1	1	2	5
Olla	5	5	5	1	10	26
Whiteware jar	53	55	68	31	91	298
Grayware jar	123	189	118	62	221	713
Miniature			1		2	3
Totals	273	384	320	151	532	1,660
TEMPER						
Undifferentiated SS	135	174	166	102	280	857
Chalcedonic Sandstone	9	19	11	5	14	58
Iron-bearing sandstone	2	5		2	3	11
Tusayan sandstone	2	1	3	1	3	10
San Juan igneous	4	4	3	2	10	23
with sandstone	1	3	1	1	1	7
sandstone dominant	2	2	2		2	8
Trachyte	72	105	72	26	116	391
with sandstone	21	36	25	6	53	141
sandstone dominant	17	28	26	6	43	120
Unidentified igneous	7	9	11		7[a]	34
Totals	272	386	320	151	532	1,661
GRAYWARE SOOTING						
Sooted	67	98	46	31	116	358
Unsooted	56	91	72	31	105	355
Totals	123	189	118	62	221	713

[a]Includes one sherd with sandstone-Socorro temper mix.

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Table MF-1.32. Bulk counts of Pueblo Alto carbon-on-white types by provenience.[a]

a. Chuska[b]

	Tunicha	Newcomb	Burnham	Newcomb-Burnham	Chuska B/w	Toadlena	Nava	Crumbled House	Untyped	Total
Rooms 50-51			2						3	5
Pl.Gr.8 bel.Fl.4				14					30	44
TM Booth 1				3	1				4	8
TM Booth 2				2	2				4	8
TM Booth 3				10	10	4			14	38
TM Booth 4				4	14	3	4		12	37
TM Booth 5					13	12			19	44
TM Booth 6				2	14	7			11	34
Trash Mnd gen.	10	13	2	47	157	87	6		216	538
Kiva 13				4	24	3			2	33
Kiva 16					6	29			21	56
Kiva 10 L27-8				2	32	2	4		5	45
Kiva 10 L9-26				4	102	64	29	11	146	356
Kiva 15		3			2					5
Room 103				7	22	4			7	40
Room 109			1		3	4			4	12
Room 110				11	19	4			46	80
Room 112	1		1				5		3	10
Room 229						4			4	8
Room 233	1					1			1	3
North Block	4	1	2	20	17	24	9[c]		62	139
Plaza Feature		1		2	24	9	1		35	72
Plaza 1	2	21	5		21	21	1		78	149
Plaza 2		1			11	21	1		26	60
North Trench	4	2								6
E Ruin, Pk. Lot	1				4		2		3[d]	10
Totals	23	42	13	132	498	303	62	11	756	1,840

[a]These are bulk counts taken from Windes' tables.
[b]These types are described in Windes 1977.
[c]Listed as "Nava/Crumbled House".
[d]Includes 1 Theodore B/w.

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Table MF-1.32. (continued)

b. Arizona[a,b]

	Kana'a	Black Mesa	B. Mesa/ Sosi	Sosi Sosi	Dogoszhi	Shato	Untyped Tusayan	Total Tusayan	Holbrook
Rooms 50-51	2							2	
TM Booth 2			2				2	4	
TM Booth 3			2				1	3	
TM Booth 4	3		2					5	
TM Booth 5			8				4	12	
TM Booth 6			6				2	8	
Trash Mound gen.	1	8	34	1	1	2	12	59	
Kiva 13			2					2	
Kiva 16			46					46	
Kiva 10 Lev. 9-26			31	10				41	8
Kiva 15			43				1	44	
Kiva 17			8					8	
Room 103			4		1			5	
Room 109			4					4	
Room 110	1		2					3	
Room 112	3		5					8	
Room 229			1					1	
Room 233		1	1					2	
North Room block	7	5	20				4	36	
Plaza Feature			37					37	1
Plaza 1	3		20				10	33	1
Plaza 2		2	5					7	3
E. Ruin, Pk. Lot			1					1	
Totals	20	16	284	11	2	2	36	371	13

[a]These are bulk counts taken from Windes' tables.
[b]Absent from: Plaza Grid 8 pit, TM Booth 1, Kiva 10 levels 27-28, North Trench.

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Table MF-1.32. (concluded)

c. Mesa Verde Whiteware series and non-Cibola whiteware

	McElmo	McElmo/ Mesa Verde	Untyped MVC/w[a]	Total MV C/w	Cortez	Mancos	Total MVWW[a]	Non-Cibola Mineral/w
Room 50-51								
Plaza Gr.8 b.Fl.4								1
TM Booth 1								
TM Booth 2	1		2	3			3	1
TM Booth 3			1	1			1	9
TM Booth 4			1	1			1	25
TM Booth 5			1	1			1	7
TM Booth 6	3			3		4	7	4
Trash Mnd. gen.	38	26	64	128			128	110
Kiva 13	1			1			1	2
Kiva 16	44		40	84			84	
Kiva 10 Lev. 27-8	15		17	32		1	33	
Kiva 10 Lev. 9-26	327		281	608	2	39	649	
Kiva 15	24		13	37			37	1
Kiva 17								
Room 103	32		10	42			42	1
Room 109	3		3	6			6	
Room 110								18
Room 112			2	2	1		3	
Room 229								
Room 233	2		4	6			6	
North Room Block	104	88	37	229	3	7	239	
Plaza Feature	7		37	44			44	
Plaza 1	33		28	61			61	5
Plaza 2	11			11		1	12	3
E. Ruin+P. Lot			1	1		16	17	
Total	645	114	542	1,301	6	68	1,375	187

[a]Mesa Verde Carbon-on-white and Mesa Verde Whiteware were used as generic terms without regard to slip or temper.

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ble MF-1.33. Bulk occurrences of redwares by se , in Alto proveniences.[a]

a. Ware Group Counts

Provenience	San Juan	SERIES Deadmans[b]	Tsegi	White Mtn.	Chuska	Total
Rooms 50-51	1					1
Plaza Gr.8 bel. Fl 4	16	9	1			26
TM Booth 1	2					2
TM Booth 2	4	1		3		8
TM Booth 3	11	14	2			27
TM Booth 4	19	2	1			22
TM Booth 5	13			1		14
TM Booth 6	9		3	2		14
General Trash Mnd.	131	68	18[c]	30	1	248
Kiva 13			2	2		4
Kiva 16		1	13	5		19
Kiva 10, Lev.27-8	2		10[c]	23		35
Kiva 10, Lev.9-26	6		69[c]	122		197
Kiva 15	3	3	1			7
Room 103	5	10	121	7		143
Room 109	2	1		1		4
Room 110	15	1	6			22
Room 112	4			11		15
Room 229	2					2
Room 233	1			5		6
North Block rooms	16	11	6	7		40
Plaza Feature		5	5	19		29
Plaza 1	27	15	11	18		71
Plaza 2	2	2	11	23		38
North Trench	1		1			2
East Ruin, P.Lot	2		3	2		7
Totals	294	143	284	281	1	1,003
% of redware	29.3	14.3	28.3	28.0	0.1	

[a]These are bulk counts taken from Windes' tables.
[b]As discussed in the text, Deadmans is regarded as part of the San Juan Redware series; it is tabled separately here because of possibility of source information and placement confusion.
[c]Includes 15 polychromes: 2 from Lower Kiva 10, 12 from upper Kiva 10, 1 from general Trash Mound.

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ble MF-1.33. (continued)

b. Specific types within the San Juan and White Mountain redware series, Pueblo Alto.[a]

	SERIES					
	SAN JUAN			WHITE MOUNTAIN		
	Bluff	La Plata	Untyped	Puerco	Wingate	Untyped
Breternitz 1974	A.D. 750-1000	A.D. 800-1000				
Carlson 1971				A.D. 1000-1200	A.D. 1050-1200	
Provenience						
Rooms 50-51			1			
Plaza Gr.8 bel. Fl 4			16			
TM Booth 1		2				
TM Booth 2		1	3		1	2
TM Booth 3			11			
TM Booth 4		7	12			
TM Booth 5		3	10			1
TM Booth 6			9	1		1
General Trash Mnd.	4	15	112	7	2	21
Kiva 13				1		1
Kiva 16				4		1
Kiva 10, Lev.27-8		2		14	2	7
Kiva 10, Lev.9-26		2	4	71	2	49
Kiva 15			3			
Room 103			5	3	2	2
Room 109			2	1		
Room 110		7	8			
Room 112		2	2			11
Room 229			2			
Room 233			1	4		1
North Block rooms			16	2	2	3
Plaza Feature				4	9	6
Plaza 1		15	12	4	7	7
Plaza 2			2	10	5	8
North Trench			1			
East Ruin, P.Lot		1	1	1		1
Totals	4	57	233	127	32	122
Series %	1.4	19.4	79.3	45.2	11.4	43.4

[a]These are bulk counts and keep Deadmans Black-on-red separate from the San Juan series.

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Table MF-1.33. (concluded)

c. Specific types within the Tsegi Orange wares, with Deadmans for comparison, Pueblo Alto.[a]

		TSEGI ORANGE WARE				
	Deadmans B/r	Medicine B/r	Tusayan B/r	Cameron Poly.	Tusayan Poly.	Middleton B/r	Untyped
Breternitz 1966	A.D.775-1066	A.D.910-1160	A.D.1050-1200	A.D.1075-1175	A.D.1100-1200		
Colton 1956	A.D.750-1050	A.D.1050-1100	A.D.1050-1150	A.D.1050-1100	A.D.1150-1300	A.D.1050-1130	
Proveniences							
Plaza Gr.8 bel. Fl 4	9						1
TM Booth 3	14						2
TM Booth 4	2						1
TM Booth 6			1				2
General Trash Mnd.	68		3		1	6	8
Kiva 13						1	1
Kiva 16	1		6				7
Kiva 10, Lev.27-8					2		8
Kiva 10, Lev.9-26		2	21	5	7		34
Kiva 15	3		1				
Room 103	10		119				2
Room 110	1						6
North Block rooms	11		1				5
Plaza Feature	5	1	1				3
Plaza 1	15	1	2				8
Plaza 2	2		6				5
North Trench							1
East Ruin							3
Totals	141[b]	4	161	5	10	7	97
Series %		1.4	56.7	1.8	3.5	2.5	34.2

[a]These are bulk counts; the series placement of Middleton Black-on-red is debatable.
[b]1 sherd each from Trash Mound Booth 2 and Room 109 not shown.

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Table MF-1.34. Detailed temper information by provenience for redwares included in the final analysis, Pueblo Alto.

	Sandstone Dominant	Sherd> SS	All Sherd	San Juan w/hornbl.	San Juan w/o Hb.	SJ Hb+ SS	SJ no Hb+SS	Unident. igneous	Total
Plaza Grid 8				1	2				3
Booth 1							1		1
Booth 2					1	1			2
Booth 3				5		1		1	7
Booth 4				5					5
Booth 5				3		1			4
Booth 6		1	1					1	3
Trash Mound TT	1			2	1		2		6
Kiva 13	1								1
Kiva 16		4	1		2				7
Kiva 10	6	25	13					1	45
K10 polychrome		4							4
Room 103		1	3	1		1			6
Room 109			1						1
Room 110	1			4		1	1		7
Other Structure 7	1								1
Totals	10	35	19	21	6	5	4	3	103

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Table MF-1.35. Form and sooting frequencies found in the Kiva 10 levels and layers, and Kiva 16, Pueblo Alto.

	Layer 1	Level 17	Layer 2	Levels 20-22	Layer 3	Levels 25-26	Layer 4	Total	kiva 16
VESSEL FORM									
White bowl	22	34	44	39	35	49	21	244	81
Red bowl	4	7	5	1	7	14	9	47	5
Smudged bowl		2		6	7	3	2	20	11
Ladle	3	5	3	8	6	4	2	31	11
Pitcher	2	5	3	5	3	5	1	24	15
Seed jar	3	1		1	1			6	1
Canteen					1			1	2
Tecomate		2						2	2
Olla	1	4	1	1	1	2	6	16	11
Whiteware jar	1	2	5	2	2	7	4	23	20
Redware jar									1
Grayware jar	12	23	14	12	25	28	22	136	74
Miniature		1	1		1		1	4	2
Duckpot					1			1	
Totals	48	84	78	75	90	112	68	555	236
GRAYWARE SOOTING									
Sooted	5	15	10	11	15	23	16	95	27
Unsooted	7	8	4	1	10	5	6	41	46
Totals	12	23	14	12	25	28	22	136	73
CORRUGATED RIM FLARE									
Mean	30.7	36.3	39.7	33.7	35.5	40.0	35.4		31.6
standard deviation	12.660	6.055	5.468	4.131	8.206	6.222	7.925		7.749
number	6	6	7	6	16	19	5		29

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Table MF-1.36. A. Temper of polished-smudged from the Pueblo Alto final-analysis sample by provenience.

	Sand	Sherd> Sand	All Sherd	Sand+ Igneous	Total
Plaza Gr. 8	4	3	1	1	9
TM Booth 2		2			2
TM Booth 3	2			1	3
TM Booth 4	1	1			2
TM Booth 5	2	5		3	10
TM Booth 6		4		1	5
Trash Mound Gen.	4	6	1	5	16
Kiva 13	1	4			5
Kiva 16	2	7		1	10
Kiva 10	6	13	2		21
Room 103		1	2	2	5
Room 110	5	6	—	1	12
Totals	25	54	6	15	100

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Table MF-1.36. B. Pueblo Alto polished-smudged types by provenience, bulk counts from Windes' tables.

Provenience	Forest-dale Smudged	Forest-dale Corrug.	Forest-dale Red	Forest-dale-Reserve	Forest-dale-Woodruff	Reserve Smudged	Showlow Smudged	Winona Smudged	Untyped Smudged	Total
Plaza Gr.8 bel F14	68									68
Rooms 50-51	2				1					3?
TM Booth 2	6									6
TM Booth 3	32	1								33
TM Booth 4	16									16
TM Booth 5	72						12	3		87
TM Booth 6	27	6	2				7			42
TM General	282	8	11			1	51	3		356
Kiva 13	11	1					24			36
Kiva 16	25	7	1				10			43
Kiva 10 Layer 4	20									20
Kiva 10 above L4	118	63		8			1			190
Kiva 15	5						1			6
Kiva 17	5									5
Room 103	32									32
Room 110	77						1		3	81
Room 112	14									14
Room 233	7									7
Room 236	3									3
North Room Block	81									81
Plaza Feature 1	6				2					8
Plaza 1	63		3				6			72
Plaza 2	15		2				5			22
North Trench	5									5
Parking Lot Ruin	1									1
East Ruin							8			8
Total	993	86	19	8	3	1	126	6	3	1,245
Percentage	79.8	6.9	1.5	0.6	0.2	0.1	10.1	0.5	0.2	

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Table MF-1.37. Chi-square results from tests of technological attribute co-occurrence, Pueblo Alto.

Table	Test Entries	n	Controlling Group	Table Dimensions	X^2	d.f.	p	C	Small Expected
1.36	White bowl, ladle, special closed, jar/olla by SS, Sh>SS, San Juan, trach, SS>Tr	2,129	59% bowls 45% sherd > SS	4 x 5	23.889	12	0.021	.105	2 cells <5
MF-1.38	WW bowl, ladle, closed, jar/olla in 1020-1120 by blk, brn, grn, glaze mineral	1,814	61% bowls 69% black	4 x 4	28.553	9	0.001	.124	--
MF-1.38	Five time segments by black and brown mineral paint	2,432	72% A.D.1020-1120 72% black	2 x 5	22.574	4	0.000	.096	--
MF-1.38	A.D.920-1020 bowl, closed by brown, black mineral	131	83% black 81% bowl	2 x 2	0.173_c[a]	1	0.678		1 cell <5
MF-1.38	A.D.1020-1040 bowl, closed by brown, black mineral	183	78% black 75% bowl	2 x 2	$.804_c$[a]	1	0.370		--
MF-1.38	A.D.1020-1220 bowl, ladle, closed by brown, black min.	166	73% black 56% bowl	2 x 3	7.391	2	0.025	.206	1 cell <5
MF-1.38	A.D.1120-1220 bowl, ladle, closed by brown, black min.	175	57% black 59% bowl	2 x 3	2.541	2	0.281	.120	--
MF-1.39	Bowl, ladle, special closed, olla, jar by fine, medium, coarse/very coarse.	2,276	60% bowl 52% medium	3 x 5	17.930	8	0.022	.088	--
MF-1.39	5 time segments by F,M, C/VC in whitewares	2,275	56% A.D.1020-1120 52% medium	3 x 5	58.716	8	0.000	.159	--
MF-1.39	5 time segments by F/M, C, VC in graywares	1,350	66% A.D.1020-1120	3 x 5	52.296	8	0.000	.193	--

[a] $_c$ means Chi-square corrected.

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Table MF 7 (continued)

Table	Test Entries	n	Controlling Group	Table Dimensions	X^2	d.f.	p	C	Small Expected
MF-1.38	A.D.1020-1120 brn., blk., carb. by bowl, ladle, ww closed	1,909	62% bowls 66% black paint	3 x 3	25.029	4	0.000	.114	--
MF-1.38	A.D.1120-1220 brn., blk,. carb. by bowl, ladle, ww closed	428	68% bowls 57% carbon paint	3 x 4	29.226	6	0.000	.253	--
1.36	SS, Sh, Tr, SS>Tr by slip absent, interior, slip-slop, interior-exterior--BOWLS	1,411		4 x 4	66.216	9	0.000	.234	--
1.36	SS, Sh, Tr by slip interior int.-exterior--LADLES	100	74% interior-ext.	2 x 3	4.917	2	0.086	.216	--
1.36	SS, Sh, Tr, SS>Tr by slip absent, ext., slip-slop CLOSED WHITEWARE	694	78% exterior 47% sherd temper	3 x 4	14.161	6	0.028	.141	--
1.37	SS, Sh, Tr, SS>Tr by polish absent, streaky/moderate, interior, int-ext, total int/streaky ext.--BOWLS	1,129	49% interior 46% sherd temper	4 x 5	125.112	12	0.000	.316	--
1.37	SS, Sh, Tr by polish int., total int.-ext.--LADLES	81	47% trachyte	2 x 3	7.212	2	0.027	.286	--
1.37	SS, Sh, Tr, SS>Tr by polish absent, streaky/moderate, total exterior--CLOSED WW	663	78% total exterio	3 x 4	36.826	6	0.000	.229	--
1.39	SS, ChSS, Tr, SS>Tr by brn., blk, glaze mineral-- A.D.1020-1120	908	80% sandstone 71% black	3 x 4	6.610	6	0.358	.085	3 cells <5 1 cell <1
1.39	Tr, Tr+SS, SS>Tr by brn., blk., carbon--A.D.1020-1120	375	53% black	3 x 3	100.218	4	0.000	.459	--
1.39	Tr, Tr+SS, SS>Tr by mineral, carbon--A.D.1120-1220	199	75% carbon	2 x 3	16.318	2	0.000	.275	--

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Table MF-1.37. (concluded)

Table	Test Entries	n	Controlling Group	Table Dimensions	X^2	d.f.	p	C	Small Expected
1.40	SS-tempered grayware p/a of sherd temper by 4 time segments (excl. A.D.1020-1220)	490	85% absent 69% A.D.1020-1120	2 x 4	5.039	3	0.169	.101	1 cell <5
1.40	Grayware--5 time segments by p/a sherd temper	1,350	91% absent 66% A.D.1020-1120	2 x 5	7.703	4	0.103	.075	--
1.40	SS-tempered whiteware 5 time segements by no, <half, >half, nearly all sherd temp.	1,364	64% more than half 57% A.D.1020-1120	4 x 5	24.381	12	0.018	.132	--
1.40	Whiteware A.D.1020-1120 SS, SJ, Tr., SS>Tr. by no, <half, >half, sherd temper	1,205	59% more than half 64% sandstone	3 x 4	243.822	6	0.000	.410	1 cell <5
MF-1.40	Grayware tan, white, black clay by SS, ChSS, Tr	331	58% tan	3 x 3	141.438	4	0.000	.547	1 cell <5
MF-1.40	Whiteware bl.w/wht shd, b&w shd, gr.w/wht shd,tan, wht. by SS, Sh, Tr, SS>Tr	1,291	59% sherd temper 51% gray w/ white shd.	4 x 5	278.227	12	0.000	.421	--
MF-1.40	Grayware p/a vitrification by SS, Sh, ChSS, Tr	1,305	89% present 54% trachyte	2 x 4	9.232	3	0.026	.084	1 cell <5
MF-1.40	Whiteware absent, present, marked vitrification by SS, Sh, ChSS, SJ, Tr, SS>Tr	2,188	68% present	3 x 6	60.202	10	0.000	.164	--

CHCU_310_D58_VOL 4_00517

Table MF-1.38. Pueblo Alto paint types occurring on whiteware vessel forms through time.[a]

Time/Form	NONE	MINERAL					CARBON	TOTAL
		Red	Brown	Black	Green	Glaze		
A.D. 920-1020/								
Bowl		3	19	87		1	6	116
Ladle	1		2	6			1	10
Pitcher			1	3				4
Canteen				1				1
Seed jar				1				1
Olla				2			1	3
White jar			2	15			5	22
Miniature			1					1
Totals	1	3	25	115		1	13	158
A.D. 1020-1040/								
Bowl	4	1	28	109	2	2	6	152
Ladle			2	10			2	14
Pitcher				3				3
Canteen				1				1
Seed jar				1				1
Olla				8				8
White jar		1	13	18			1	33
Totals	4	2	43	150	2	2	9	212
A.D. 1020-1120/								
White bowl	17	26	278	790	15	22	114	1,262
Ladle	4	9	44	82	6	3	25	173
Pitcher			31	72	1	6	2	112
Canteen	1		2	11				14
Seed jar			8	11	1	1		21
Gourd jar			1					1
Tecomate	2	2	3	7		1	2	17
Olla	7		29	59	3	5	8	111
White jar	5	2	87	223	2	18	20	357
Mug			1					1
Miniature	1		1	4				6
Totals	37	39	485	1,259	28	56	171	2,075

[a]"Unknown" paint items omitted.

CHCU_310_D58_VOL 4_00518

Table MF-1.38. (concluded)[a]

Time/Form	NONE	MINERAL					CARBON	TOTAL
		Red	Brown	Black	Green	Glaze		
A.D. 1120-1220/								
White bowl	8	6	39	65	8	7	187	320
Ladle	1	1	7	6		3	20	38
Pitcher	3		6	8	1	1	20	39
Canteen			3					3
Seed jar	1		2	1				4
Tecomate			1	3				4
Olla	4		4	8	1		7	24
White jar	5		12	18	2		11	48
Duckpot				1				1
Miniature	—	—	—	4	1	—	1	6
Total	22	7	74	114	13	11	246	487
A.D. 1020-1220/								
Bowl	2	1	17	76	2	3	19	120
Ladle	4		7	11		1	3	26
Pitcher	1		2	8				11
Canteen				1			2	3
Tecomate			1					1
Cylinder jar			1					1
Olla			4	1			3	8
White jar	1		12	25	1		6	45
Duckpot	—	—	—	1	—	—	—	1
Totals	8	1	44	123	3	4	33	216

[a]"Unknown" paint items omitted.

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Table MF-1.39. Pueblo Alto identifiable vessel forms by temper grain size and grain size by time segment.

	TEMPER GRAIN SIZE				
Vessel Form	Fine	Medium	Coarse	Very	Total
White bowl	446	721	185	8	1,360
Ladle	52	82	32		166
Pitcher	63	44	11		18
Canteen	7	7	2		16
Seed jar	5	13	4		22
Tecomate	3	11	1		15
Olla	28	61	16	1	106
Whiteware jar	152	252	64	5	475
Mug		1			1
Duck pot	1	1			2
Miniature	8	3			11
Redware bowl	19	66	8		93
Smudged bowl	52	42	3		97
Redware jar		4	1		5
Grayware jar	28	278	626	419	1,351
Grayware pitcher			1		1
Totals	864	1,589	955	433	3,839
Time Segment (A.D.)					
Grayware					
920-1020		11	30	23	64
1020-1040		5	51	32	88
1020-1120	19	166	415	296	896
1020-1220	1	18	42	22	83
1120-1220	7	77	89	46	219
Total grayware	27	277	627	419	1,350
Whiteware					
920-1020	40	100	15		155
1020-1040	54	130	14		198
1020-1120	392	677	196	11	1276
1020-1220	56	69	28		153
1120-1220	215	216	59	3	493
Total whiteware	757	1,152	312	14	2,275

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Table .40. Pueblo Alto temper types tabulated by past /pes and visible vitrification in white and gray es; only items with observable temper included.

Paste Type	Undiff. Sandstone	Sherd> SS	Chalcedon SS	Iron SS	Tusayan SS	San Juan igneous	Socorro	Trachyte	SS> Trachyte	Unident. igneous	Total
Grayware											
No type	317	8	62	13		9		300	4	2	715
Black w/ white shd	3	5						1			9
Gray w/ black shd		2									2
Black & white shd		3									3
Gray w/ white shd	8	13	4					2			27
Tan clay	48	4	3	4		3		141			203
Black clay	93	2	5	1				13		1	115
White clay	15	1	7	2		1		6			32
Chuska gray	2					2		239	1		244
Total grayware	486	38	81	20		15		702	5	3	1,350
Whiteware											
No type	170	149	19		15	18	1	156	85	24	637
Black w/ wht shd	20	87	1					16	7	4	135
Gray w/ black shd	9	53		1				3			66
Black & white shd	6	226	6			3		14	18	2	275
Gray w/ white shd	76	381	13		1	10	2	89	112	19	147
Little Colorado		2									2
Tan clay	32[a]	17	3	1	2	2		27	13	5	103
Black clay	14	6	2		5	1		2	3	1	34
White clay	68	49	9		3	11	2	13	20	6	181
Chuska gray	1	2				1		131	11	1	147
Total whiteware	397[a]	972	53	2	26	46	5	451	269	62	2,283
Vitrification											
Grayware											
Absent	39	8	8	3		1		84	1		144
Present	416	29	72	17		12		580	4	3	1,133
Marked	31	1	1			2		36			71
Grayware totals	486	38	81	20		15		700	5	3	1,348
Whiteware											
Absent	101	111	13		4	16	1	68	46	14	374
Present	230[a]	700	35	1	19	24	3	318	180	41	1,551
Marked	66	161	5	1	3	6	1	65	43	7	358
Whiteware totals	397[a]	972	53	2	26	46	5	451	269	62	2,283

[a]Shale

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Tab. F-1.41. Provenience, context, orifice diameter, and volume of whole or restored or restorable vessels from Pueblo Alto.

Provenience	Floor	Context	Vessel	Temper	Volume (ml)	Orifice (mm)	Figure
ROOMS							
with floor features:							
Room 103	1	floor fill	Coolidge corrugated	Coarse SS		185	6-4a
Room 103	1	floor fill	Hunter corrugated jar	Coarse trachyte		195	6-4b
Room 103	1	fill	McElmo canteen	San Juan igneous no hornblende, >half sherd		30	6-3b
Room 103	1	fill	Tusayan (?) B/r jar	Coarse sand mostly sherd	1290	85	6-3b
Room 103	1	fill	PII-III Carbon/w ladle (mini.?)	Coarse SS, >half sherd	15[a]	40	none
Room 110, firepit	1	contact	PII-III corrugated jar	Coarse trachyte		255	6-1b
Room 110, Posthole 45	1	construction	Puerco bowl	Unknown	710	150	6-1a
Room 110, Posthole 45	1	construction	Gallup miniature pitcher	Unknown	50	30	6-1a
Room 110, Other Pit 37	1	construction	Toadlena ladle	Fine trachyte	230	110	6-1a
without floor features:							
Room 229	1	contact	Puerco bowl	Unknown	1640	215	6-2a,b
Room 221	1	wall clearing	Chaco McElmo olla	Coarse SS >half sherd	17,210	20	6-10a
Room 233	1	wall clearing	Reserve B/w bowl	Coarse sand	4900[a]	270	6-10c
Room 145	1	floor fill	Red Mesa duck pot w/ effigy head	Medium SS >half sherd	50	44x35 1xw	6-5a
Room 145	1	floor fill	PII-III corrugated jar	Coarse sand-stone	5210[b]	165	6-5b
Room 146, 147, Kiva 10	1	fill, roof fall	Nava/Crumbled House B/w	trachyte + SS, <half sherd	13,000[a]	90	6-6b
Room 146, Layer 3	1	fill	Chaco McElmo canteen	Fine SS, >half sherd		30	6-6a
Room 147	1	contact	Mancos bowl	San Juan w/o hornblende+SS	1740	190	6-5c

[a]Volume calculated from dimensions.
[b]Volume obtained with partial reconstruction.

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Tabl '-1.41. (continued)

Provenience	Floor	Context	Vessel	Temper	Volume (ml)	Orifice (mm)	Figure
ROOMS (cont.)							
With floor features:							
Plaza Feature Room 3, Firepit 1	1	feature construction	Mudware miniature bowl	Fine sand	<10	50	6-12
Plaza Feature Room 3, Firepit 1	1	feature construction	Mudware miniature bowl	Fine sand	<10	50	6-12
Plaza Feature Room 3, Firepit 2	1	feature construction	Mudware miniature bowl	Fine sand	<5	35	6-12
Plaza Feature Room 3, Firepit 2	1	feature construction	Mudware miniature bowl	Fine sand	<5	35	6-12
KIVAS							
Kiva 13, Level 6	1	fill	Gallup pitcher	Medium sandstone <half sherd	--	--	6-7a
Kiva 15	1	contact	McElmo bowl	San Juan igneous no hornblende	3825[a]	250	6-7b
Kiva 15	1	fill+contact	Black Mesa B/w bowl	Fine SS	4770[a]	200	6-7c
PLAZA 1							
Plaza 1 Test Trench 2	-	fill	Gallup bowl	Medium sandstone	1510[a]	180	6-11a
Plaza 1 Grid 302	1	wall clearing	Mancos olla (small)	San Juan w/ hornblende + SS, >half sherd		30	6-10b
Other Structure 7	1	wall clearing	Puerco B/r bowl	Medium sand <half sherd	2075[a]	215	6-11b
TRASH MOUND							
Booth 5, Layer 58	-	fill	Gallup bowl	Fine SS, >half sherd + trachyte[c]	360	125	6-8b
Booth 5, Layer 58	-	fill	Forestdale smudged bowl f[d]	Medium SS	890	145	6-13a
Booth 5, Layer 58	-	fill	Late Red Mesa bowl	Coarse SS, >half sherd	2200	220	6-8b
Booth 5, Layer 58	-	fill	Red Mesa bowl	Unident. igneous +SS, >half sherd	460[a]	130	6-8b
Booth 6, Layer 97	-	fill	Gallup bowl	Fine SS >half sherd	8870	362	6-8a

[a]Volume calculated from dimensions.
[c]WSU thin-section found trace trachyte.
[d]Heavily fragmented.

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Table MF-1.41. (concluded)

Provenience	Floor	Context	Vessel	Temper	Volume (ml)	Orifice (mm)	Figure
TRASH MOUND (cont.)							
Test Trench 1 Grid 183 Level 10	-	fill	Gallup bowl	Medium SS, <half sherd	1820c	230	6-9
Test Trench 1 Grid 183 Level 10	-	fill	Gallup bowl f[d]	Medium SS, >half sherd		240	6-9
Test Trench 1 Grid 183 Level 10	-	fill	Gallup bowl f[d]	SS> trachyte >half sherd		260	6-9
Test Trench 1 Grid 183 Level 10	-	fill	Gallup bowl f[d]	Coarse SS, <half sherd		260	6-9
Test Trench 1 Grid 183 Level 10	-	fill	Gallup bowl f[d]	Coarse SS, >half sherd		290	6-9
Test Trench 1 Grid 239 Level 18	-	fill	Forestdale smudged bowl f[d]	Fine sand, <half sherd	4690[a]	270	6-13b
Test trench 2, Grid 191	-	fill	Blue Shale corr. miniature pitcher	Coarse trachyte	150[b]		6-11a

[a]Volume calculated from dimensions.
[b]Volume obtained with partial reconstruction.
[d]Heavily fragmented.

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Table MF-1.42. Oxidation colors by type, showing color group and Munsell color, Pueblo Alto.

A. Buff

Grayware	Color Group 1				Color Group 2			Color Group 3			Total Buff
	10YR7/4	10YR8/1-8/2	10YR8/3	10YR8/4	7.5YR 7/4	7.5YR 8/2-8/3	7.5YR 8/4	5YR7/4	5YR8/4	7.5YR 8/6	
Plain Gray			1							2	3
Wide neckbanded		1	1								2
Narrow neckbnded.		1	1	1						2	5
Neck corrugated			2				2				4
PII corrugated		1	1				1			6	9
Unidentified corr.		2	3	2			3			2	12
Total grayware		5	9	3			6			12	35
Whiteware											
Red Mesa	1					1					2
Escavada		1									1
Gallup	1	2	6	1	2	1	3		1	3	20
Chaco B/w									1		1
Exotic M/w		1	1								2
Chuska B/w									1		1
Chuskan C/w							1				1
Chaco McElmo		2	4	3		1	8	1	1	6	26
PII-III C/w		1	4	2			3			2	12
"Mesa Verde"			1								1
Total whiteware	2	7	16	6	2	3	15	1	4	11	67
COLOR TOTALS	2	12	25	9	2	3	21	1	4	23	102
GROUP TOTALS			48			26			28		

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Table MF-1.42. (concluded)

B.Reddish

Grayware	Color Group 4	Color Group 5		Color Group 6			Color Group 7	Gray	Totals		
	7.5YR 7/6-7/8	5YR 6/6-6/8	5YR 7/6-7/8	10YR 6/8	2.5YR 5/6-5/8	2.5YR 6/6-6/8	10R6/8	5/2,6/2,4/1	Reddish	Buff	Grand Total
Plain Gray		1	1					2	2	3	7
Wide neckbanded										2	2
Narrow neckbanded			1			1		1	2	5	8
Neck corrugated										4	4
PII corrugated	1	1	2	1	1	3	1	3	10	9	22
PII-III corrugated						1			1		1
Unidentified corr.	2	3	6	—	1	5	—	—	17	12	29
Total grayware	3	5	10	1	2	10	1	6	32	35	73
Whiteware											
Red Mesa										2	2
Escavada										1	1
Puerco		1							1		1
Gallup	2		1			1		1	4	20	25
Chaco B/w										1	1
Exotic M/w										2	2
Chuska B/w		2				1			3	1	4
Chuskan C/w	1	2	1		1	5			10	1	11
Tusayan C/w			1						1		1
Chaco McElmo	1		1					1	2	26	29
PII-III C/w		2	2						4	12	16
"Mesa Verde"	—	1	—		—	1		—	2	1	3
Total whiteware	4	8	6		1	8		2	27	67	96
COLOR TOTALS	7	13	16	1	3	18	1	8	59	102	169
GROUP TOTALS	7	29			22		1				

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Table MF-1.43. Oxidation colors of Pueblo Alto graywares refired by McKenna (1980).[a]

TYPE	WINDES' COLOR GROUP							
	Buff						Red	
	1	2	3	4	5	6	7	Total
TRACHYTE-TEMPERED GRAYWARE								
Plain gray	3		8	3	7	1		22
Narrow neckbanded	8	1	4		2	1		16
Neck corrugated	1	2		1	2			6
PII corrugated			2		6	5	1	14
PII-III corrugated	1		5	1	21	13		41
PIII corrugated						1		1
Totals	13	3	19	5	38	21	1	100

[a]The 73 of these sherds in the final analysis appear in the other refiring tables; the others do not.

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Table MF-1.44. Refiring colors and unoxidized paste groups and vitrification, gray and white wares, Pueblo Alto.

	COLOR GROUP								
	Buff						Red		
	1	2	3	4	5	6	7	Gray	Total
Grayware Pastes									
No type	[11	6	12		9	7		2	47]
Gray with white shd							1		1
Tan clay					2	2			4
Black clay	2			1	1			3	7
White clay	2								2
Chuska gray	2	—	—	2	3	4	—	1	12
Total typed	6			3	6	6	1	4	26
Grayware Vitrification									
Absent	2	1	1			2			6
Present	14	5	11	3	14	10	1	3	61
Marked	—	—	—	—	1	1	—	3	5
Total	16	6	12	3	14	13	1	6	72
Whiteware Pastes									
No type	[9	6	10	2	4	2		1	34]
Black w/ white shd		1	2		2	1			6
Gray w/ black shd	1	1			2				4
Black & white shd	4	2							6
Gray w/ white shd	12	8	3	1	2	1		1	28
Tan clay	1				1	1			3
Black clay						1			1
White clay	4								4
Chuska gray	—	2	1	1	3	3		—	10
Total typed	22	14	6	2	10	7		1	62
Whiteware Vitrification									
Absent	5	1	1	1					8
Present	24	16	12	3	9	5			69
Marked	2	3	3	—	5	4		2	19
Total	31	20	16	4	14	9		2	96

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Table MF-1.45. Diversity and evenness indices for confidently identifiable imports.[a]

PERIOD/SITE	Total n	Diversity H'	Evenness J	Imports s
Pre-A.D. 920/				
29SJ 629	314	1.165	0.724	5
29SJ 1360	385	1.415	0.790	6
29SJ 627	557	1.013	0.922	3
A.D. 920-1020/				
29SJ 629	827	1.071	0.598	6
29SJ 1360	1044	1.119	0.695	5
29SJ 627	3439	1.109	0.619	6
29SJ 389	434	1.156	0.594	7[b]
A.D. 1020-1120/				
29SJ 627	2084	1.011	0.564	6
29SJ 389	2633	0.842	0.433	7[b]
A.D. 1120-1220/				
29SJ 389	614	1.399	0.719	7[b]

[a]Only complete site-time groups are included.
[b]Includes Socorro.

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Table MF-1.46. Trash Mound component volumes.

TEST TRENCH 1

Grid	Grid-Level Units				
	Red Mesa	RM-G Trans.	Gallup	Alluvial	Total
43	8.25				8.25
71	10.25				10.25
99	10	3			13
127	7	3	6		16
155		1	17		18
183		3	16		19
211		1	16		17
239		1	15.75		16.75
267			12	3	15
295			6.25	7	13.25
323		1	3	8	12
Total for trench	35.5	14	92	18	159.5
m^3 (unit x 0.3)	10.7	4.2	27.6	5.4	47.9
% of trench	22.3	8.8	57.6	11.3	

BOOTHS	Volume in m^3				
	Red Mesa	RM-G Trans.	Gallup	Alluvial	Total
1	1.5	1.0			2.5
2		1.5	0.8		2.3
3			1.8		1.8
4			2.2		2.2
5			2.4		2.4
6			0.7	1.6	2.3
Total for booths	1.5	2.5	7.9	1.6	13.5
Combined volumes	12.2	6.7	35.5	7.0	61.4
Projected mound volume	624	246	1613	316	2,799

Note: In time-space matrix coding, all Red Mesa and Red Mesa-Gallup transitional from Test Trench 1 is coded in the A.D. 1020-1040 segment. Only the part of the Booth 1 deposit shown is coded for A.D. 920-1020. Gallup units are coded to the A.D. 1020-1120 group and alluvial to A.D. 1020-1220

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SHERD MATCHES

Peter J. McKenna

The following pages present the graphic, locational, and frequency results of sherd matching at Pueblo Alto. The physical and subjective matching of sherds into a single analytical vessel was undertaken for each site in the Chaco ceramic analysis to identify possible interrelated deposits and reduce potential duplication in the analysis sample. The majority of matches are actual physical unions along fracture lines of individual sherds, but subjective matches involving evaluation of design, surface finish, and paste are also admitted for some cases where confidence is high. Actual matches are indicated in the following pages by linking brackets between the FS numbers involved.

Sherd matches range from single 'distinct' sherds representing one vessel, such as the Chaco-McElmo frog-effigy pitcher in Kiva 10, to the 360 sherds from a PII-III indented corrugated jar in Kiva 15. The average number of sherds in each analytical vessel is about 12, but of the 450 such 'vessels' over three-quarters (79 percent) have sherds from three proveniences or less. In fact, fully 23 percent of these 'vessels' are multi-sherd, single provenience matches. The modal group (36 percent) is composed of two provenience contributors in which single-item matches from each provenience are the main subgroup (53 percent). Vessel contributions from over seven proveniences are rare, making up about 6 percent of the collection, with the Nava/Crumbled House Black-on-white jar from Room 146 the highest with sherds from 40 proveniences. In other words, the matching program at Alto was selectively extensive and moderately intensive. The 5,366 matched sherds represent about 6 percent of the entire Alto collection and 8 percent of the detailed analysis as analytical vessels, but this low percentage is proxy for a sherd count exceeding the entire detailed analysis (on Table 1.4).

Because the overall object was to identify interrelated deposits, decorated ceramics, as the most easily recognized pieces, account for the bulk of the matches (Mineral-on-white = 188, Carbon-on-white = 148, Whiteware = 8, Redware/Polychromes = 23, Smudged = 9, Culinary = 74). Kiva 10 sherds, as the subject of a comparative analysis of another report (Toll et al. 1981), was expressly scrutinized for decorated ware matches while the

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culinary was ignored. Matching in Kiva 10 alone is responsible for many of the analytically matched vessels (30 percent) herein, and, as the latest deposit at Pueblo Alto, also accounts for the majority of matched carbon-on-white ceramics (51 percent) and smudged/redware (43 percent). Although the Trash Mound is the source of the majority of the Pueblo Alto sherd collection, it was not subjected to internal matching because, 1) the main trench was dug completely in arbitrary levels where expected matches are not really meaningful, 2) no matches were noted between layers in the stratigraphic columns, and 3) the sheer bulk of the collection prohibited timely inspections between each Trash Mound and architectural provenience. Those rare items that surfaced as possible matches between the Trash Mound and the structure did not prove out on further inspection. Localized restorable vessels and the intentionally crushed vessels found in the Trash Mound, several smudged red and Gallup Black-on-white bowls, are treated in the analysis as single items and not accounted for in this Appendix as matches (see Plates 1.9 and 1.6).

The distribution of matches between major proveniences indicates some contemporaneity of deposits in neighboring structural units, but very few interprovenience relationships across noncontinguous areas could be established at Pueblo Alto. Notable as across-site matches are the Gallup Black-on-white and Cameron Polychrome bowls between Kiva 16 and Room 142 in the plaza and central roomblock respectively, and between Room 147 and Kiva 10, both in the central roomblock. The overall counts of matched sherds, number of analytical vessels, and major interprovenience matches in terms of vessel counts can be summarized as follows:

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Table MF-1.A.[a]

Provenience	N	Vessel N	Major Interprovenience Matches
Central Roomblock			
Room 139	30	11	Internal
Room 142	409	19	Rooms 146-4, 147-4, 143-1, Kiva 16-1, Kiva 10-2
Room 143	20	2	Grid 8, Room 142-1, Room 146-1, Room 147-1, Kiva 10-4
Room 145	116	3	Internal
Room 146	256	6	Room 147-3, Room 142-4, Room 143-1, Kiva 10-2
Room 147	299	11	Rooms 146-3, 142-4, 143-1, Kiva 10-3
Kiva 10	1,101	132	Room 143-4, Room 147-3, Room 142-2, Room 146-2, Grids 8, 35, 95
West Wing			
Room 103	656	68	Internal
Room 109	155	13	Room 110-5, Kiva 15-3
Room 110	1,391	76	Room 109-5, Kiva 15-1
Room 233	13	4	Internal
Kiva 15	446	12	Rooms 110-1, 109-3
Plaza 1			
Misc. grids	91	23	general plaza grids
Kiva 12	10	3	Grids 35, 195, 277, PF-1, PF-4 OS-6
Kiva 13	67	5	Internal
Kiva 14	15	5	Grids 75, 195, PF-1, PF-4, OS-6
Kiva 16	36	5	Grids 116, 195, 307, Room 142
Kiva 17	8	3	Grids 195, 302-303, general plaza
O.S. 6	18	6	Grids 55, 117, 195, PF-1, general plaza, Kiva 12, Kiva 14
Plaza Feature 1	130	27	Grids 204, 307, 30, 117, 75, 35, OS-6, Kiva 12, Kiva 14
Plaza Feature 4	9	2	Grids 115, 277, Kiva 12, Kiva 14
Trash Mound	2	1	Internal
Plaza 2			
Misc. grids	56	10	Internal
East Ruin			
Room 6, Kiva	32	3	Internal
Totals	5,366	450	

[a]Provenience number is followed by vessel count except for Plaza Grids. Vessels are associated with the provenience containing the most sherds for analytical control.

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Sherd Matches

Central Roomblock

ROOM 139
(above Floor 1 in fill)

Gallup Black-on-white bowl
< 2461(2)-Room 139, Layer 4, Test Trench 2
< 2497(2)-Room 139, Floor 1 fill, Grid 23

Red Mesa Black-on-white jar
< 2459(2)-Room 139, Layer 5, Level 2, Test Trench 8
< 2474(1)-Room 139, Floor 1 fill, Grid 2

Puerco Black-on-white bowl
2417(1)-Room 139, Layer 6, Level 2, Test Trench 3
2418(1)-Room 139, Layer 6, Level 3, Test Trench 3

Indented corrugated jar
< 2418(2)-Room 139, Layer 6, Level 3, Test Trench 3
< 2425(1)-Room 139, Layer 6, Level 3, Test Trench 4

Red Mesa Black-on-white jar
< 2575(1)-Room 139, Floor 2 fill, Grid 14
< 2583(1)-Room 139, Floor 2 fill, Grid 24

Early Red Mesa Black-on-white bowl
< 2576(1)-Room 139, Floor 2 fill, Grid 15
< 2581(1)-Room 139, Floor 2 contact, Grid 22

Polished Smudged bowl
2581(2)-Room 139, Floor 2 contact, Grid 22
2588(2)-Room 139, Floor 2 contact, Grid 33

Red Mesa Black-on-white jar (prob.)
2584(1)-Room 139, Floor 2 contact, Grid 25
2590(1)-Room 139, Floor 2 contact, Grid 35
2647(1)-Room 139, Floor 2, Wall Trench 4

Red Mesa Black-on-white bowl (prob.)
2514(1)-Room 139, Floor 1, Posthole 1
2540(1)-Room 139, Floor 2, Layer 9,
Level 1, Test Trench 4
2557(1)-Room 139, Floor 2 fill, Layer 9,
Level 4, Test Trench 7

< = sherds fit together.
( ) = number of sherds from provenience.

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Sherd Matches

Central Roomblock

Room 139 (concluded)

Red Mesa Black-on-white bowl

< 2588(1)-Room 139, Floor 2 contact, Grid 33
< 2652(1)-Room 139, Floor 2, chinking in south wall

plain gray jar body sherd

2533(1)-Room 139, Floor 2 fill,
Level 16, Test Trench 2
2550(1)-Room 139, Floor 2 fill,
Layer 9, Level 2, Test Trench 6

< = sherds fit together.
( ) = number of sherds from provenience.

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Sherd Matches

Central Roomblock

ROOM 142

Chaco-McElmo Black-on-white bowl

2714(1)?-Room 142, Layer 5, Level 10, Test Trench 1
2715(10)-Room 142, Layer 6, Level 11, Test Trench 1
2716(14)-Room 142, Layer 6, Level 12, Test Trench 1
2724(1)- Room 142, Layer 6, Level 2, Test Trench 3
2726(7)- Room 142, Layer 6, Level 4, Test Trench 3
2733(1)- Room 142, Layer 6, Level 4, Test Trench 7
2734(1)- Room 142, Layer 6, Level 5, Test Trench 7
2735(1)?-Room 142, Layer 4, Test Trench 4
2738(1)- Room 142, Layer 6, Level 2, Test Trench 4
2740(23)-Room 142, Layer 6, Level 4, Test Trench 4
2746(3)- Room 142, Layer 6, Level 5, Test Trench 8
2758(1)- Room 142, Layer 6, Level 6, Grid 6*
2764(1)- Room 142, Layer 6, Level 6, Grid 10*
2765(1)- Room 142, Layer 6, Level 6, Grid 11*
2773(1)- Room 142, Layer 6, Level 6, Grid 16*
2803(1)- Room 142, Layer 6, Level 5, Test Trench 1
2804(3)- Room 142, Layer 6, Level 5, Test Trench 3
2805(21)-Room 142, Layer 6, Level 5, Test Trench 4

McElmo Black-on-white seed jar

2715(2)- Room 142, Layer 6, Level 11, Test Trench 1
2716(12)-Room 142, Layer 6, Level 12, Test Trench 1
2726(5)- Room 142, Layer 6, Level 4, Test Trench 3
2733(1)- Room 142, Layer 6, Level 4, Test Trench 7
2734(1)- Room 142, Layer 6, Level 5, Test Trench 7
2740(2)- Room 142, Layer 6, Level 4, Test Trench 4
2746(1)- Room 142, Layer 6, Level 5, Test Trench 8
2753(1)- Room 142, Layer 6, Level 6, Grid 3*
2758(1)- Room 142, Layer 6, Level 6, Grid 6*
2768(2)- Room 142, Layer 6, Level 6, Grid 13*
2770(1)- Room 142, Layer 6, Level 6, Grid 14*
2788(1)- Room 142, Layer 6, Level 6, Grid 26*
2803(3)- Room 142, Layer 6, Level 5, Test Trench 1
2804(2)- Room 142, Layer 6, Level 5, Test Trench 3
2805(11)-Room 142, Layer 6, Level 5, Test Trench 4

< = sherds fit together.
( ) = number of sherds from provenience.
* = Floor 1 fill.

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Sherd Matches

Central Roomblock

ROOM 142 (continued)

Chaco?-McElmo Black-on-white miniature pitcher

2724(2)-Room 142, Layer 6, Level 2, Test Trench 3
<2725(1)-Room 142, Layer 6, Level 3, Test Trench 3
<2726(1)-Room 142, Layer 6, Level 4, Test Trench 3
<2736(1)-Room 142, Layer 5, Test Trench 4
<2746(1)-Room 142, Layer 6, Level 5, Test Trench 8
<2750(1)-Room 142, Layer 6, Level 6, Grid 15*
<2765(1)-Room 142, Layer 6, Level 6, Grid 11*
2770(1)-Room 142, Layer 6, Level 6, Grid 14*
2791(1)-Room 142, Layer 6, Level 6, Grid 28*
2805(1)-Room 142, Layer 6, Level 5, Test Trench 4

Chaco-McElmo Black-on-white canteen rim

2721(2)-Room 142, Layer 4, Test Trench 3
<2746(1)-Room 142, Layer 6, Level 5, Test Trench 8

Chaco-McElmo Black-on-white canteen top

2716(1)-Room 142, Layer 6, Level 12, Test Trench 1
<2734(2)-Room 142, Layer 6, Level 5, Test Trench 7
<2746(1)-Room 142, Layer 6, Level 5, Test Trench 8
<2770(1)-Room 142, Layer 6, Level 6, Grid 14*
<2803(1)-Room 142, Layer 6, Level 5, Test Trench 1

Mummy Lake-like gray (single rim fillet)
fitting not attempted

2710(6)- Room 142, Layer 1, Level 6, Test Trench 1
2711(11)-Room 142, Layer 4, Level 7, Test Trench 1
2712(13)-Room 142, Layer 4, Level 8, Test Trench 1
2713(18)-Room 142, Layer 4, Level 9, Test Trench 1
2714(8)- Room 142, Layer 5, Level 10, Test Trench 1
2715(6)- Room 142, Layer 6, Level 11, Test Trench 1
2719(1)?-Room 142, Layer 6, Level 5, Test Trench 5
2721(1)- Room 142, Layer 4, Test Trench 3
2723(29)-Room 142, Layer 6, Level 1, Test Trench 3
2724(8)- Room 142, Layer 6, Level 2, Test Trench 3
2725(4)- Room 142, Layer 6, Level 3, Test Trench 3
2726(2)- Room 142, Layer 6, Level 4, Test Trench 3
2728(3)- Room 142, Layer 4, Level 1, Test Trench 7
2729(17)-Room 142, Layer 4, Level 2, Test Trench 7
2730(5)- Room 142, Layer 4, Level 3, Test Trench 7

< = sherds fit together.
( ) = number of sherds from provenience.
* = Floor 1 fill.

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Sherd Matches

Central Roomblock

ROOM 142 (continued)

Mummy Lake-like gray (continued)
2732(10)-Room 142, Layer 5, Test Trench 7
2735(1) -Room 142, Layer 4, Test Trench 4
2738(1) -Room 142, Layer 6, Level 2, Test Trench 4
2739(2) -Room 142, Layer 6, Level 3, Test Trench 4
2740(1) -Room 142, Layer 6, Level 4, Test Trench 4
2744(2) -Room 142, Layer 4, Level 2, Test Trench 8
2804(1) -Room 142, Layer 6, Level 5, Test Trench 3

Chuskan indented corrugated jar
2712(1) -Room 142, Layer 4, Level 8, Test Trench 1
2713(2) -Room 142, Layer 4, Level 9, Test Trench 1
2714(13)-Room 142, Layer 5, Level 10, Test Trench 1
2715(4) -Room 142, Layer 6, Level 11, Test Trench 1
2723(22)-Room 142, Layer 6, Level 1, Test Trench 3
2724(7) -Room 142, Layer 6, Level 2, Test Trench 3
2725(5) -Room 142, Layer 6, Level 3, Test Trench 3
2726(1) -Room 142, Layer 6, Level 4, Test Trench 3
2738(1) -Room 142, Layer 6, Level 2, Test Trench 4
2739(1) -Room 142, Layer 6, Level 3, Test Trench 4
2740(1) -Room 142, Layer 6, Level 4, Test Trench 4

Mesa Verde Black-on-white jar
2719(2)-Room 142, Layer 6, Level 5, Test Trench 5
2746(1)-Room 142, Layer 6, Level 5, Test Trench 8
2747(3)-Room 142, Layer 2, Test Trench 6
2774(1)-Room 142, Layer 6, Level 6, Grid 17*
2779(1)-Room 142, Layer 6, Level 6, Grid 20*

Mesa Verde Black-on-white jar
(same as above?)
2708(1)-Room 142, Layer 6, Level 13, Test Trench 2
2734(1)-Room 142, Layer 6, Level 5, Test Trench 7

Kana'a/Black Mesa Black-on-white bowl with exterior banding
2868(1)-Room 142, Floor 3, Layer 7, Level 1, Test Trench 7
2883(2)-Room 142, Floor 3 fill, Layer 8, Grid 22
2909(1)-Room 142, Floor 3, Other Pit 1

< = sherds fit together.
( ) = number of sherds from provenience.
* = Floor 1 fill.

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Sherd Matches

Central Roomblock

ROOM 142 (concluded)

Tusayan red ware bowl
2710(1)-Room 142, Layer 1, Level 6, Test Trench 1
< 2730(1)-Room 142, Layer 4, Level 3, Test Trench 7

Mancos Black-on-white bowl
2753(1)-Room 142, Layer 6, Level 6, Grid 3*
2773(1)-Room 142, Layer 6, Level 6, Grid 16*

Escavada Black-on-white ladle bowl
2762(1)-Room 142, Layer 6, Level 6, Grid 9*
< 2764(1)-Room 142, Layer 6, Level 6, Grid 10*

White ware bowl (well polished)
2733(1)-Room 142, Layer 6, Level 4, Test Trench 7
< 2771(1)-Room 142, Layer 6, Level 6, Grid 15*

Gallup Black-on-white jar
2707(1)-Room 142, Layer 6, Level 12, Test Trench 2
2717(1)-Room 142, Layer 3, Test Trench 5
< 2718(3)-Room 142, Layer 6, Level 4, Test Trench 5

Red Mesa Black-on-white jar
2707(1)-Room 142, Layer 6, Level 12, Test Trench 2
2708(1)-Room 142, Layer 6, Level 13, Test Trench 2
2718(1)-Room 142, Layer 6, Level 4, Test Trench 5
2749(1)-Room 142, Layer 6, Level 5, Test Trench 6

Chuskan indented corrugated base
2740(2)-Room 142, Layer 6, Level 4, Test Trench 4
2805(1)-Room 142, Layer 6, Level 5, Test Trench 4

Red Mesa/Escavada Black-on-white jar
2717(1)-Room 142, Layer 3, Test Trench 5
2718(4)-Room 142, Layer 6, Level 4, Test Trench 5
< 2747(1)-Room 142, Layer 2, Test Trench 6

Gallup Black-on-white bowl
2753(2)-Room 142, Layer 6, Level 6, Grid 3*
< 4201(1)-Kiva 16, Layer 1, Level 2, Grid 116.

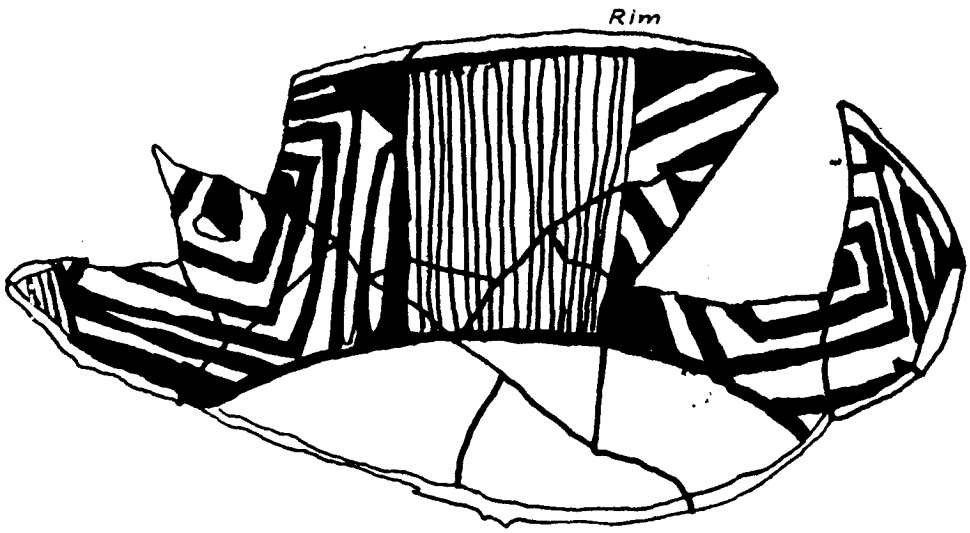
< = sherds fit together.
( ) = number of sherds from provenience.
* = Floor 1 fill.

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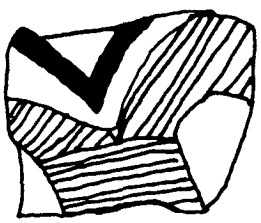
Sherd Matches

Central Roomblock

ROOM 143



Escavada Black-on-white bowl
6766(12[b])-Room 143, Layer 1, Test Trench 6
6766(1) -Room 143, Layer 1, Test Trench 6
6701(1) -Plaza 1, Floor 5, Grid 8, Quad 5



Mancos Black-on-white bowl
brownish-green mineral paint
<6501(2)-Kiva 10, Level 16
<6504(1)-Kiva 10, Level 19
<6754(1)-Room 143, Layer 1, Level 7, Test Trench 1
<6753(1)-Room 143, Layer 1, Level 8, Test Trench 1
6752(1)-Room 143, Layer 1, Level 9, Test Trench 1

< = sherds fit together.
( ) = number of sherds from provenience.

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Sherd Matches

Central Roomblock

ROOM 145

Indented corrugated jar bottom
2097(4)-Room 145, Level 13, Test Trench 1
2108(3)-Room 145, SE Quad, Layers 1-4, rubble
2193(2)-Room 145, SE Quad, Layer 7, Level 2
2196(1)-Room 145, SE Quad, Layer 7, Level 5
2198(6)-Room 145, SE Quad, Layer 7, Level 7
2199(1)-Room 145, NE Quad, Layer 7, floor fill

PII-III Mineral-on-white Duck Pot with animal head (Plate 1.1A)
2097(2)-Room 145, Level 13, Test Trench 1
2198(9)-Room 145, SE Quad, Layer 7, Level 7
2199(5)-Room 145, NE Quad, Layer 7, floor fill

PIII indented corrugated jar
2097(27)-Room 145, Level 13, Test Trench 1
2198(53)-Room 145, SE Quad, Layer 7, Level 7
2199(3) -Room 145, NE Quad, Layer 7, floor fill

< = sherds fit together.
( ) = number of sherds from provenience.

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Sherd Matches

Central Roomblock

ROOM 146

White ware rim
6011(1)-Room 146, Layer 3, Level 3, Test Pit 2
6012(1)-Room 146, Layer 3, Level 4, Test Pit 2

Indented corrugated, sand tempered
6006(1)-Room 146, Layer 3, Level 5, Test Pit 1
6007(4)-Room 146, Layer 3, Level 6, Test Pit 1
6008(2)-Room 146, Layer 3, Level 7, Test Pit 1
6014(2)-Room 146, Layer 3, Level 6, Test Pit 2
6022(2)-Room 146, Layer 3, Level 5, Test Pit 3
6028(1)-Room 146, Layer 3, Level 3, Test Pit 4
6030(1)-Room 146, Layer 3, Level 5, Test Pit 4
<6031(5)-Room 146, Layer 3, Level 6, Test Pit 4
<6051(3)-Room 146, Layer 3, Level 7, Test Pit 4

Gallup Black-on-white bowl (cross hatch)
<2715(1)-Room 142, Layer 6, Level 11, Test Trench 1
<6012(1)-Room 146, Layer 3, Level 4, Test Trench 2

Chuskan Black-on-white jar
2710(1)-Room 142, Layer 1, Level 6, Test Trench 1
<2723(1)-Room 142, Layer 6, Level 1, Test Trench 3
><2732(2)-Room 142, Layer 5, Level 1, Test Trench 7
><2764(1)-Room 142, Layer 6, Level 6, Grid 10*
<6011(1)-Room 146, Layer 3, Level 3, Test Trench 2
><6024(1)-Room 146, Layer 3, Level 7, Test Trench 3
><6026(1)-Room 146, Layer 3, Level 1, Test Trench 4
<6030(1)-Room 146, Layer 3, Level 5, Test Trench 4
<6031(2)-Room 146, Layer 3, Level 6, Test Trench 4

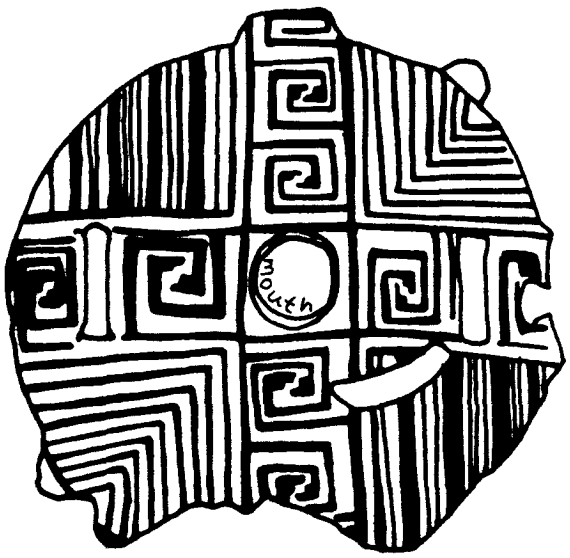
< = sherds fit together.
( ) = number of sherds from provenience.
*Floor 1 fill.

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Sherd Matches

Central Roomblock

ROOM 146 (continued)



Chaco-McElmo Black-on-white canteen

2727(1)- Room 142, Layer 3, Test Trench 7
2739(1)- Room 142, Layer 6, Level 3, Test Trench 4
2740(1)- Room 142, Layer 6, Level 4, Test Trench 4
6002(3)- Room 146, Layer 3, Level 1, Test Trench 1
6003(4)- Room 146, Layer 3, Level 2, Test Trench 1
6004(1)- Room 146, Layer 3, Level 3, Test Trench 1
6005(4)- Room 146, Layer 3, Level 4, Test Trench 1
6006(2)- Room 146, Layer 3, Level 5, Test Trench 1
6007(10)-Room 146, Layer 3, Level 6, Test Trench 1
6009(2)- Room 146, Layer 1 and 2, Test Trench 2
6010(4)- Room 146, Layer 3, Level 2, Test Trench 2
6011(1)-Room 146, Layer 3, Level 3, Test Trench 2
6012(6)-Room 146, Layer 3, Level 4, Test Trench 2
6013(3)-Room 146, Layer 3, Level 5, Test Trench 2
6014(3)-Room 146, Layer 3, Level 6, Test Trench 2
6015(2)-Room 146, Layer 3, Level 7, Test Trench 2
6019(1)-Room 146, Layer 3, Level 3, Test Trench 3
6021(2)-Room 146, Layer 2, Test Trench 3
6026(1)-Room 146, Layer 3, Level 1, Test Trench 4
6027(1)-Room 146, Layer 3, Level 2, Test Trench 4
6051(1)-Room 146, Layer 3, Level 7, Test Trench 4
6511(2)-Kiva 10, Level 9, Test Trench 1
6250(2)-Room 147, Layer 2, Level 1, Test Trench 1

< = sherds fit together.
( ) = number of sherds from provenience.

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Sherd Matches

Central Roomblock

ROOM 146 (concluded)

Nava/Crumbled House Black-on-white olla

2715(1) -Room 142, Layer 6, Level 11, Test Trench 1
2740(3) -Room 142, Layer 6, Level 4, Test Trench 4
2747(1) -Room 142, Layer 2, Test Trench 6
2764(1) -Room 142, Layer 6, Level 6, Grid 10*
2804(1) -Room 142, Layer 6, Level 5, Test Trench 3
2805(4) -Room 142, Layer 6, Level 5, Test Trench 4
6002(6) -Room 146, Layer 3, Level 1, Test Trench 1
6003(5) -Room 146, Layer 3, Level 2, Test Trench 1
6005(2) -Room 146, Layer 3, Level 4, Test Trench 1
6006(4) -Room 146, Layer 3, Level 5, Test Trench 1
6007(8) -Room 146, Layer 3, Level 6, Test Trench 1
6008(1) -Room 146, Layer 3, Level 7, Test Trench 1
6009(4) -Room 146, Layer 1 and 2, Test Trench 2
6010(10)-Room 146, Layer 3, Level 2, Test Trench 2
6011(9) -Room 146, Layer 3, Level 3, Test Trench 2
6012(13)-Room 146, Layer 3, Level 4, Test Trench 2
6013(7) -Room 146, Layer 3, Level 5, Test Trench 2
6014(6) -Room 146, Layer 3, Level 6, Test Trench 2
6015(2) -Room 146, Layer 3, Level 7, Test Trench 2
6018(5) -Room 146, Layer 3, Level 2, Test Trench 3
6019(3) -Room 146, Layer 3, Level 3, Test Trench 3
6020(3) -Room 146, Layer 3, Level 4, Test Trench 3
6021(8) -Room 146, Layer 2, Test Trench 3
6022(7) -Room 146, Layer 3, Level 5, Test Trench 3
6023(2) -Room 146, Layer 3, Level 6, Test Trench 3
6026(22)-Room 146, Layer 3, Level 1, Test Trench 4
6027(4) -Room 146, Layer 3, Level 2, Test Trench 4
6028(2) -Room 146, Layer 3, Level 3, Test Trench 4
6029(1) -Room 146, Layer 3, Level 4, Test Trench 4
6051(3) -Room 146, Layer 3, Level 7, Test Trench 4
6511(3) -Kiva 10, Level 9, Test Trench 1
6250(1) -Room 147, Layer 2, Level 1, Test Trench 1, ties 6028
6251(1) -Room 147, Layer 2, Level 2, Test Trench 1, ties 6010, 6011, 6014, 6020, 6003
6253(4) -Room 147, Layer 2, Level 4, Test Trench 1, ties 6002, 6012, 6020, 6027, 6019, 2747
6254(2) -Room 147, Layer 1, Test Trench 2
6258(1) -Room 147, Layer 2, Level 3&4, Test Trench 2, ties 6051
6261(1) -Room 147, Layer 2, Level 2, Test Trench 3
6262(1) -Room 147, Layer 2, Level 3, Test Trench 3, ties 6254, 6021, 6022
6271(1) -Room 147, Layer 2, Level 5, floor fill, Grid 4
6766(1) -Room 143, Layer 1, Test Trench 6

< = sherds fit together.
( ) = number of sherds from provenience.
* = Floor 1 fill.

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Sherd Matches

Central Roomblock

ROOM 147

McElmo Black-on-white jar
6253(1)-Room 147, Layer 2, Level 4, Test Trench 1
6260(1)-Room 147, Layer 2, Level 1, Test Trench 3

Nava Black-on-white bowl
6274(23)-Room 147, Layer 2, Level 5, Floor 1 floor fill, Grid 10
6290(1) -Room 147, Layer 3, Floor 1 floor fill, Grid 6
6291(1) -Room 147, Layer 3, Floor 1 floor fill, Grid 7
6292(1) -Room 147, Layer 3, Floor 1 floor fill, Grid 10
6293(1) -Room 147, Layer 3, Floor 1 floor fill, Grid 11
6313(1) -Room 147, Floor 1, Firepit 1

Nava Black-on-white bowl
6273(1)-Room 147, Layer 2, Level 5, Floor 1 floor fill, Grid 7
6291(3)-Room 147, Layer 3, Floor 1 floor fill, Grid 7
6292(8)-Room 147, Layer 3, Floor 1 floor fill, Grid 10
6297(3)-Room 147, Floor 1, Floor Artifact 2

Chaco Black-on-white bowl burned
6265(1)-Room 147, Layer 2, Level 1, Test Trench 4
6266(6)-Room 147, Layer 2, Level 2, Test Trench 4

Gallup Black-on-white water jar
6253(1)-Room 147, Layer 2, Level 4, Test Trench 1
6260(1)-Room 147, Layer 2, Level 1, Test Trench 3
6262(1)-Room 147, Layer 2, Level 3, Test Trench 3
6265(5)-Room 147, Layer 2, Level 1, Test Trench 2
6266(1)-Room 147, Layer 2, Level 2, Test Trench 4
6267(2)-Room 147, Layer 2, Level 3, Test Trench 4
6268(7)-Room 147, Layer 2, Level 4, Test Trench 4
6272(3)-Room 147, Layer 2, Level 5, Floor 1 floor fill, Grid 5
6274(2)-Room 147, Layer 2, Level 5, Floor 1 floor fill, Grid 10
6275(4)-Room 147, Layer 2, Level 5, Floor 1 floor fill, Grid 11
6276(7)-Room 147, Layer 2, Level 5, Floor 1 floor fill, Grid 12
6278(2)-Room 147, Layer 2, Level 5, Floor 1 floor fill, Grid 14
6280(2)-Room 147, Layer 2, Level 5, Floor 1 floor fill, Grid 16
6293(2)-Room 147, Layer 3, Level 5, Floor 1 floor fill, Grid 11

Indented Corrugated jar bottom
6254(1)-Room 147, Layer 2, Test Trench 2
6273(1)-Room 147, Layer 2, Level 5, Floor 1 floor fill, Grid 7

< = sherds fit together.
( ) = number of sherds from provenience.

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Sherd Matches

Central Roomblock

ROOM 147 (continued)

Gallup Black-on-white jar
6260(11)-Room 147, Layer 2, Level 1, Test Trench 3
6274(1) -Room 147, Layer 2, Level 5, Floor 1 floor fill, Grid 10
6261(2) -Room 147, Layer 2, Level 2, Test Trench 3
6262(1) -Room 147, Layer 2, Level 3, Test Trench 3

Indented corrugated jar bottom
6254(3)-Room 147, Layer 1, Test Trench 2
6260(1)-Room 147, Layer 2, Level 1, Test Trench 3
6265(1)-Room 147, Layer 2, Level 1, Test Trench 4
6267(1)-Room 147, Layer 2, Level 3, Test Trench 4
6273(1)-Room 147, Layer 2, Level 5, Floor 1 floor fill, Grid 7
6279(1)-Room 147, Layer 2, Level 5, Floor 1 floor fill, Grid 15

Indented corrugated jar, sand temper, sooted
6008(1)-Room 146, Layer 3, Level 7, Test Trench 1
6014(2)-Room 146, Layer 3, Level 6, Test Trench 2
6027(1)-Room 146, Layer 3, Level 2, Test Trench 4
6028(1)-Room 146, Layer 3, Level 3, Test Trench 4
6030(1)-Room 146, Layer 3, Level 5, Test Trench 4
6031(7)-Room 146, Layer 3, Level 6, Test Trench 4
6051(1)-Room 146, Layer 3, Level 7, Test Trench 4
6033(1)-Room 146, Layer 3, Floor 1 floor fill, Grid 2
6250(1)-Room 147, Layer 2, Level 1, Test Trench 1
6254(8)-Room 147, Layer 1, Test Trench 2
6255(10)-Room 147, Layer 2, Level 1, Test Trench 2
6256(32)-Room 147, Layer 2, Level 2, Test Trench 2
6257(8)-Room 147, Layer 2, Level 3, Test Trench 2
6258(12)-Room 147, Layer 2, Level 3 & 4, Test Trench 2
6260(2)-Room 147, Layer 2, Level 1, Test Trench 3
6279(1)-Room 147, Layer 2, Level 5, Floor 1 floor fill, Grid 15

Mancos Black-on-white bowl
6274(1) -Room 147, Layer 2, Level 5, Floor 1 floor fill, Grid 10
6278(6) -Room 147, Floor 1 floor fill, Grid 14
6279(36)-Room 147, Layer 2, Level 5, Floor 1 floor fill, Grid 15
6280(1) -Room 147, Layer 2, Level 5, Floor 1 floor fill, Grid 16
6293(4) -Room 147, Layer 3, Floor 1 floor fill, Grid 11
6295(8) -Room 147, Layer 3, Floor 1 floor fill, Grid 14/15
6298(11)-Room 147, Floor 1, Floor Artifact 3

< = sherds fit together.
( ) = number of sherds from provenience.

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Sherd Matches

Central Roomblock

ROOM 147 (concluded)

McElmo Black-on-white bowl

2702(1) -Room 142, Level 7, Test Trench 2
2703(1) -Room 142, Level 8, Test Trench 2
2704(1) -Room 142, Level 9, Test Trench 2
2747(1) -Room 142, Layer 2, Test Trench 6
6265(2) -Room 147, Layer 2, Level 1, Test Trench 4
6266(10)-Room 147, Layer 2, Level 2, Test Trench 4
6267(4) -Room 147, Layer 2, Level 3, Test Trench 4
6268(2) -Room 147, Layer 2, Level 4, Test Trench 4
6276(2) -Room 147, Layer 2, Level 5, floor fill, Grid 12
6279(1) -Room 147, Layer 2, Level 5, floor fill, Grid 15
6294(1) -Room 147, Layer 3, Floor 1 floor fill, Grid 12

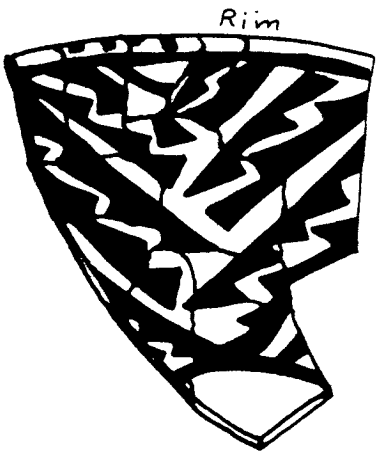
< = sherds fit together.
( ) = number of sherds from provenience.

CHCU_310_D58_VOL 4_00547

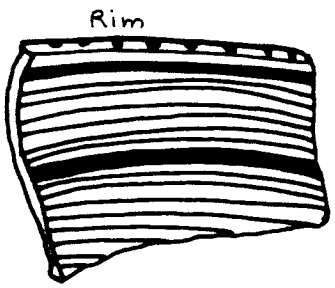
Sherd Matches

Central Roomblock

KIVA 10



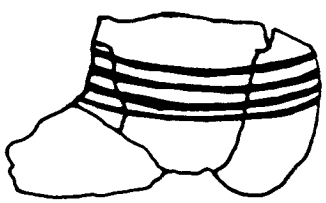
McElmo Black-on-white bowl
black carbon paint, "negative" effect
6517(4)-Kiva 10, Level 25
< 6509(7)-Kiva 10, Level 24
< 6506(1)-Kiva 10, Level 21



Mesa Verde/McElmo Black-on-white bowl
dark smoky gray carbon paint
< 6503(2)-Kiva 10, Level 18
< 6502(1)-Kiva 10, Level 17
6503(1)-Kiva 10, Level 18
6501(1)-Kiva 10, Level 16



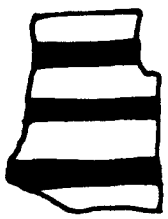
Toadlena Black-on-white bowl
6504(8)-Kiva 10, Level 19
6505(3)-Kiva 10, Level 20



Chaco-McElmo Black-on-white pitcher
black carbon
< 6500(1)-Kiva 10, Level 15
< 6501(3)-Kiva 10, Level 16

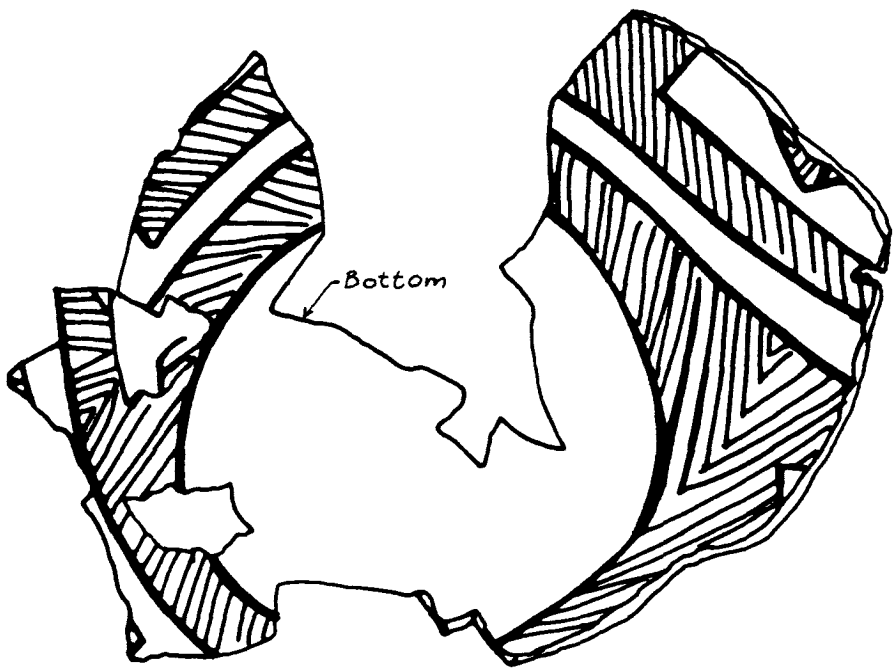
< = sherds fit together.
( ) = number of sherds from provenience.

CHCU_310_D58_VOL 4_00548

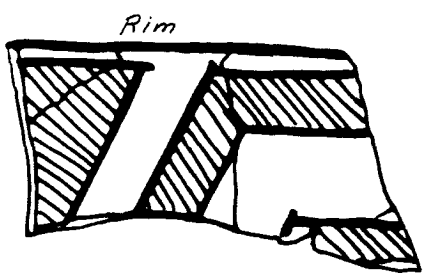


Escavada Black-on-white bowl
reddish brown mineral paint
6517(4)-Kiva 10, Level 25
6509(1)-Kiva 10, Level 24

B



A



Chuska Black-on-white bowl
black carbon paint

A
6506(1) -Kiva 10, Level 21
6505(2) -Kiva 10, Level 20
6504(1) -Kiva 10, Level 19

B
6506(11)-Kiva 10, Level 21
6505(19)-Kiva 10, Level 20
6507(3) -Kiva 10, Level 22

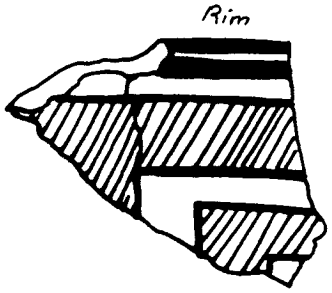
6505(2) -Kiva 10, Level 20
6506(1) -Kiva 10, Level 21
6505(9) -Kiva 10, Level 20
6506(1) -Kiva 10, Level 21
6517(1) -Kiva 10, Level 25

< = sherds fit together.
( ) = number of sherds from provenience.

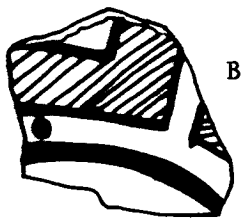
CHCU_310_D58_VOL 4_00549

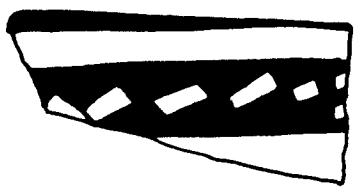


Toadlena/Nava Black-on-white ladle bowl
black carbon paint
6509(2[b])-Kiva 10, Level 24

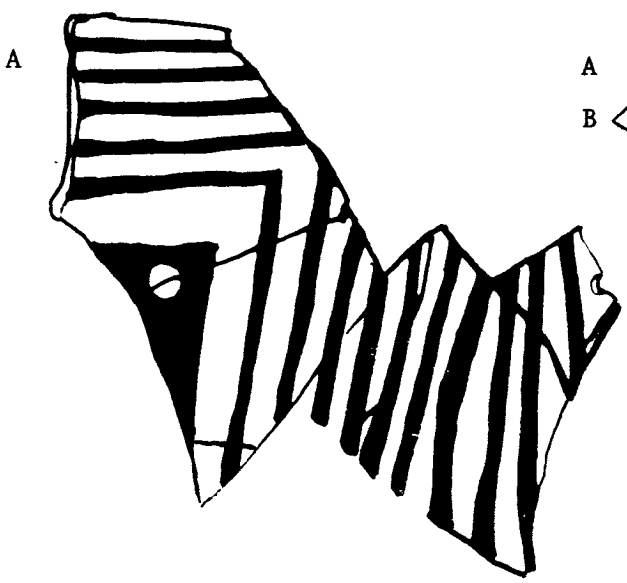


Gallup Black-on-white bowl
black mineral paint
A 6509(2[b])-Kiva 10, Level 24
B 6508(3[b])-Kiva 10, Level 23





Nava Black-on-white bowl
black carbon paint
6519(1)-Kiva 10, Level 27
6510(2)-Kiva 10, Level 28

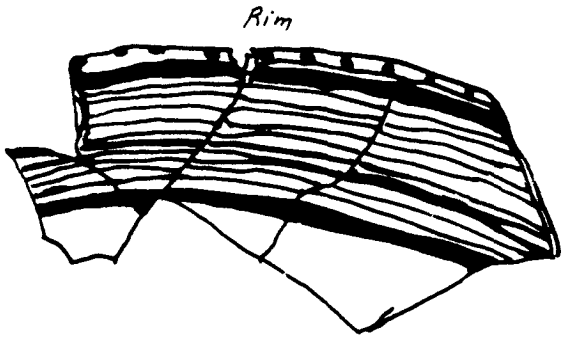


Escavada Black-on-white bowl
eroded black mineral paint
A 6517(6[b])-Kiva 10, Level 25
B <6517(3) -Kiva 10, Level 25
<6519(1) -Kiva 10, Level 27
6517(11[b])-Kiva 10, Level 25
6518(4[b])-Kiva 10, Level 26

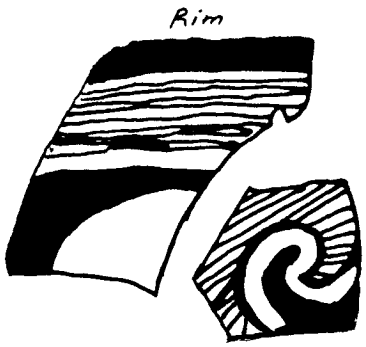


< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

CHCU_310_D58_VOL 4_00550



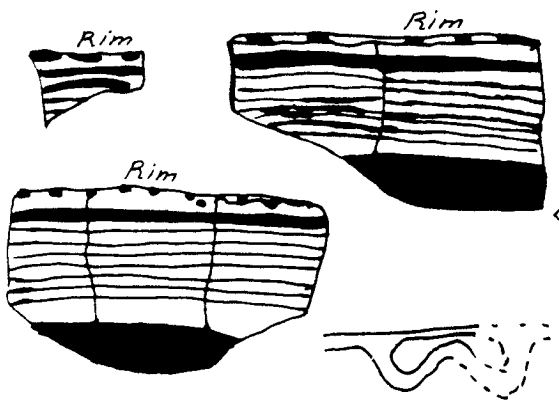
Chaco-McElmo Black-on-white bowl
black carbon paint
6509(3)-Kiva 10, Level 24
6517(2)-Kiva 10, Level 25



Socorro Black-on-white bowl
black mineral paint
6509(10, 4[b])-Kiva 10, Level 24



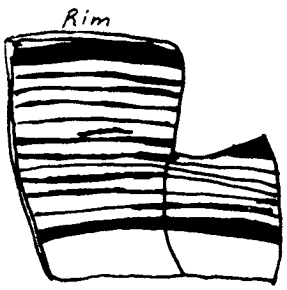
Chaco-McElmo Black-on-white pitcher
black carbon paint
6506(4, 2[b])-Kiva 10, Level 21



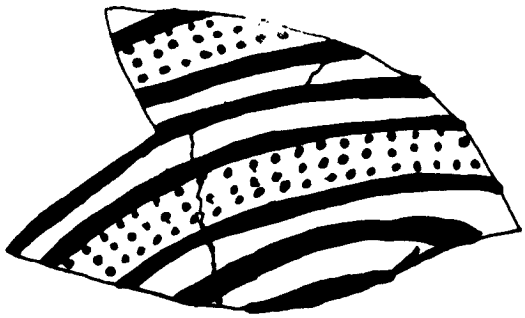
Chaco-McElmo Black-on-white bowl
black carbon paint with strap handle
6506(2)-Kiva 10, Level 21
6507(2)-Kiva 10, Level 22
6505(5, 2[b], 2[b])-Kiva 10, Level 20

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

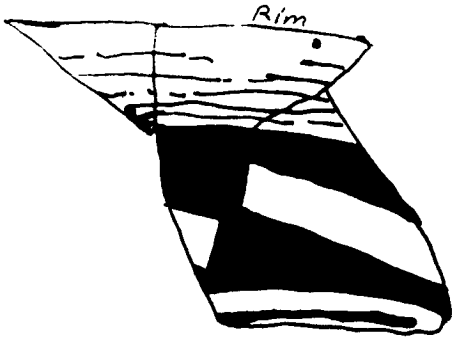
CHCU_310_D58_VOL 4_00551



McElmo Black-on-white bowl
black carbon paint
7608(2[b])-Kiva 10



McElmo Black-on-white jar
black carbon paint
6510(3[b])-Kiva 10, Level 28
6510(3) -Kiva 10, Level 28
6519(1) -Kiva 10, Level 27
6508(2) -Kiva 10, Level 23



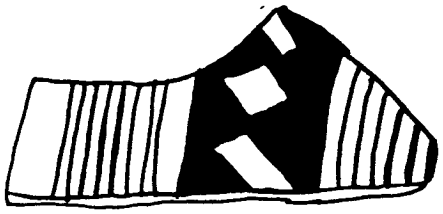
Crumbled House Black-on-white bowl
black carbon paint
<6517(2) -Kiva 10, Level 25
<6518(1) -Kiva 10, Level 26
6518(5[b])-Kiva 10, Level 26
6517(1) -Kiva 10, Level 25



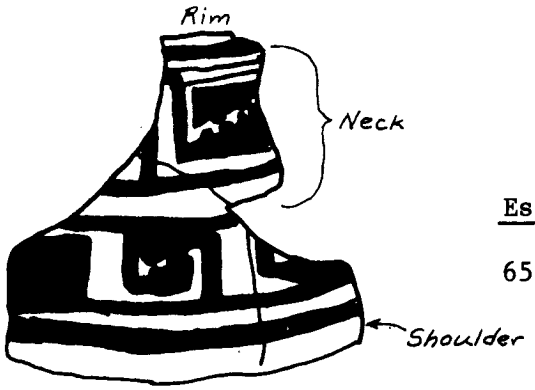
Toadlena/Nava Black-on-white bowl
gray/greenish carbon paint
<6508(1)-Kiva 10, Level 23
<6507(2)-Kiva 10, Level 22

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

CHCU_310_D58_VOL 4_00552



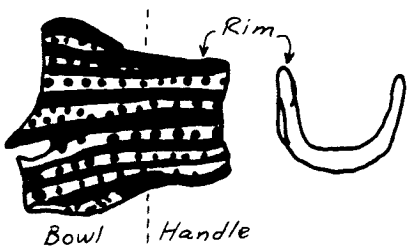
Nava Black-on-white bowl
6501(1)-Kiva 10, Level 16
6504(1)-Kiva 10, Level 19
6503(1)-Kiva 10, Level 18
4251(1)-Plaza 1, Layer 3, Grid 95, SW 1/4



Escavada Black-on-white bowl
brown mineral paint
6519(3[b])-Kiva 10, Level 27



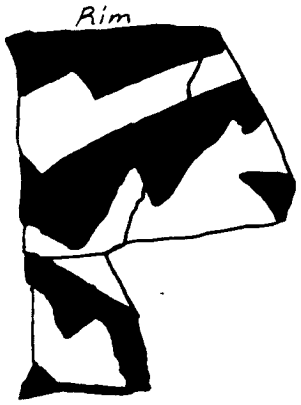
Escavada Black-on-white bowl
dark brown mineral paint
<6518(1)-Kiva 10, Level 26
<6517(1)-Kiva 10, Level 25



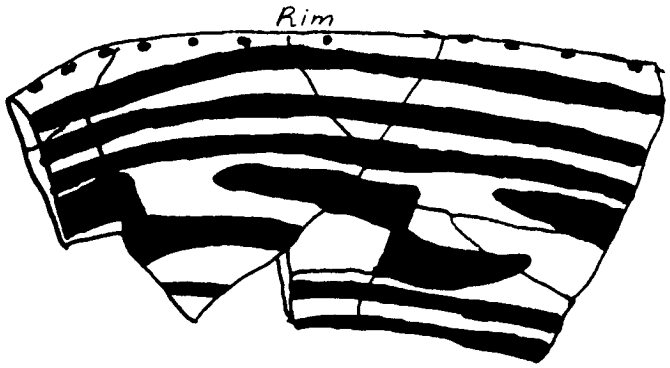
Escavada Black-on-white gourd ladle
'glazed' mineral paint, black
<6508(1)-Kiva 10, Level 23
<6506(1)-Kiva 10, Level 21

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

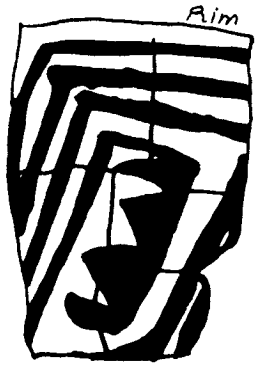
CHCU_310_D58_VOL 4_00553



Escavada Black-on-white bowl
black mineral paint
6518(3[b])-Kiva 10, Level 26
6518(2) -Kiva 10, Level 26
6509(2) -Kiva 10, Level 24



McElmo Black-on-white bowl
greenish carbon paint
6505(5)-Kiva 10, Level 20
6504(4)-Kiva 10, Level 19
6503(1)-Kiva 10, Level 18



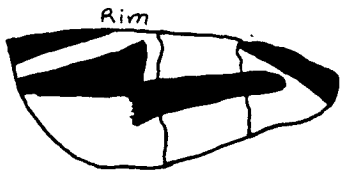
McElmo Black-on-white bowl
black carbon paint
6505(6) -Kiva 10, Level 20
6505(6[b])-Kiva 10, Level 20



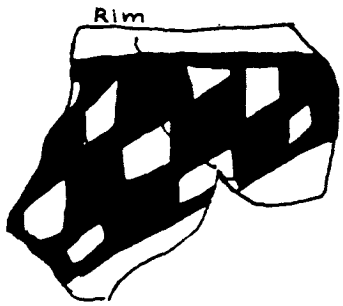
Chaco-McElmo Black-on-white bowl
black carbon paint
6509(1)-Kiva 10, Level 24

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

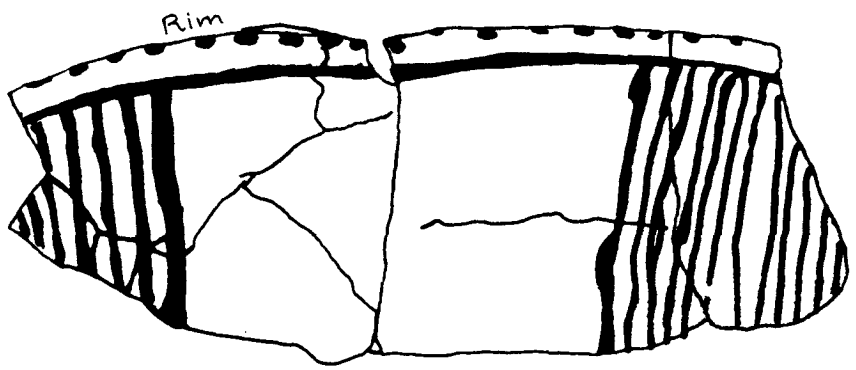
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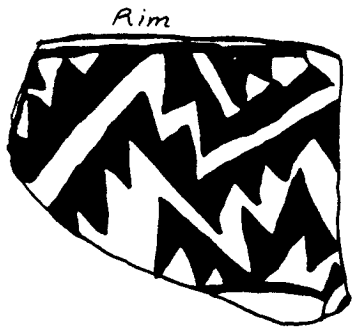
Nava/Toadlena ladle bowl
black carbon paint
6505(3[b])-Kiva 10, Level 20



McElmo Black-on-white bowl
black carbon paint
6518(2[b])-Kiva 10, Level 26



Toadlena Black-on-white bowl
black carbon paint
<6501(2) -Kiva 10, Level 16
6508(7) -Kiva 10, Level 23
6506(2) -Kiva 10, Level 21
6508(2[b])-Kiva 10, Level 23



Chaco-McElmo Black-on-white bowl
black carbon paint
6518(1)-Kiva 10, Level 26

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

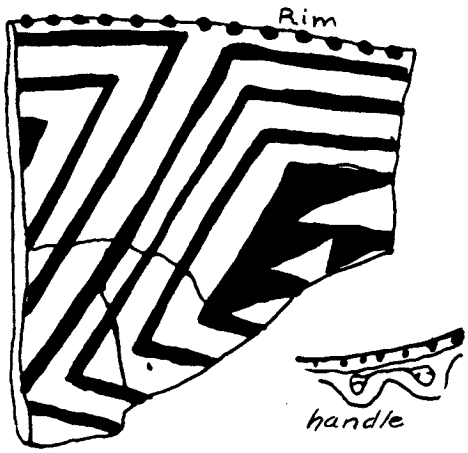
B



A



Mancos Black-on-white bowl
green mineral paint
A 6509(6[b])-Kiva 10, Level 24
B 6509(5[b])-Kiva 10, Level 24
6508(1) -Kiva 10, Level 23
6509(11, 7[b])-Kiva 10, Level 24



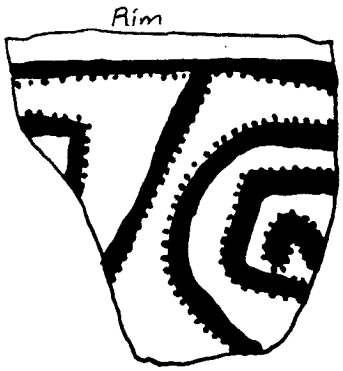
Chaco-McElmo Black-on-white bowl
brownish black carbon paint
6503(3[b])-Kiva 10, Level 18



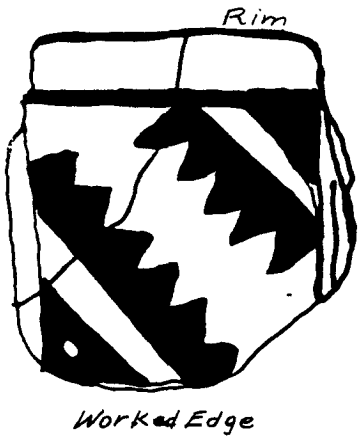
Chaco-McElmo Black-on-white bowl
lustrous slip, gun metal blue-black paint, carbon
6507(5[b])-Kiva 10 Level 22

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

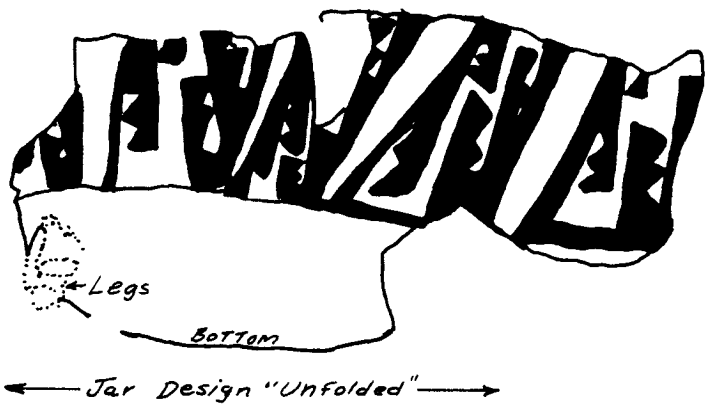
CHCU_310_D58_VOL 4_00556



Black Mesa Black-on-white bowl ?
black carbon? paint
6508(1)-Kiva 10, Level 23



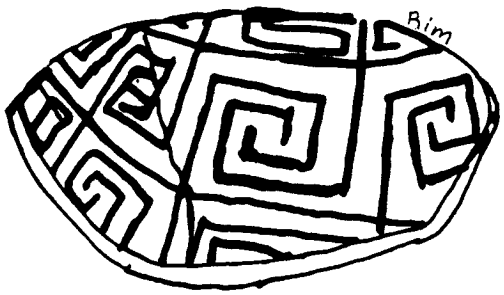
Escavada Black-on-white bowl
brown carbon paint with strap handle and solid rim
6510(2[b])-Kiva 10, Level 28



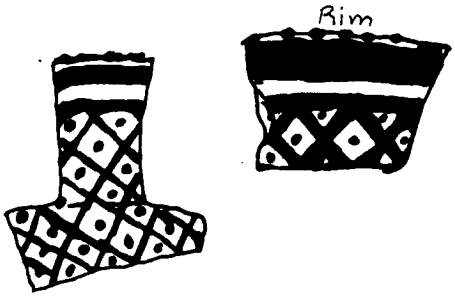
Escavada/Puerco Black-on-white legged effigy jar
brown mineral paint
6517(11[b])-Kiva 10, Level 25

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

CHCU_310_D58_VOL 4_00557



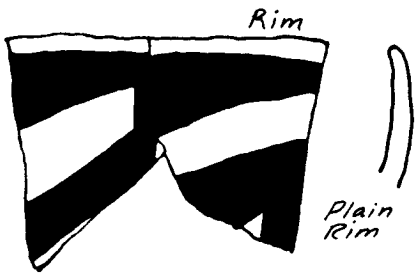
Chaco-McElmo Black-on-white ladle bowl
black carbon paint
6508(2[b])-Kiva 10, Level 23



Chaco-McElmo Black-on-white bowl
black carbon paint
<6508(1)-Kiva 10, Level 23
<6509(1)-Kiva 10, Level 24
6508(2)-Kiva 10, Level 23
6507(13, 5[b])-Kiva 10, Level 20
6518(1)-Kiva 10, Level 26



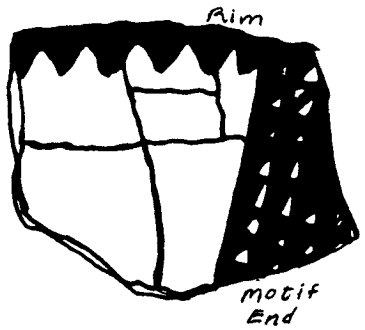
Puerco/Escavada Black-on-white
canteen brown mineral paint
6509(7)-Kiva 10, Level 24
6508(5)-Kiva 10, Level 23
6508(1)-Kiva 10, Level 23



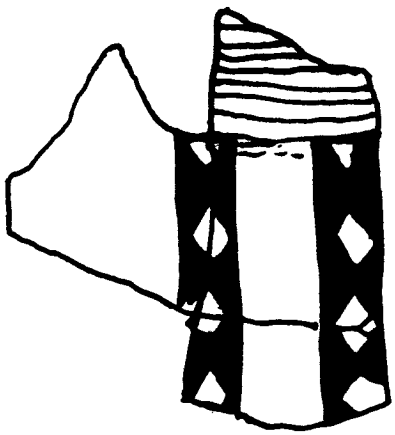
McElmo Black-on-white bowl ?
black carbon paint ?
6507(1)-Kiva 10, Level 22
6506(1)-Kiva 10, Level 21

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

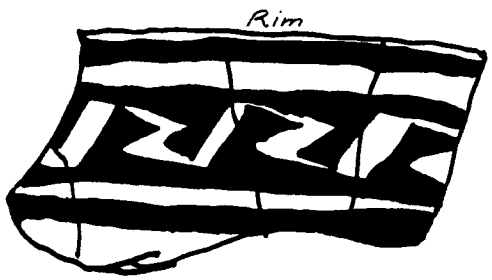
CHCU_310_D58_VOL 4_00558



Escavada Black-on-white bowl
brown mineral paint
6519(6[b])-Kiva 10, Level 27
6518(1) -Kiva 10, Level 26
6519(2[b])-Kiva 10, Level 27



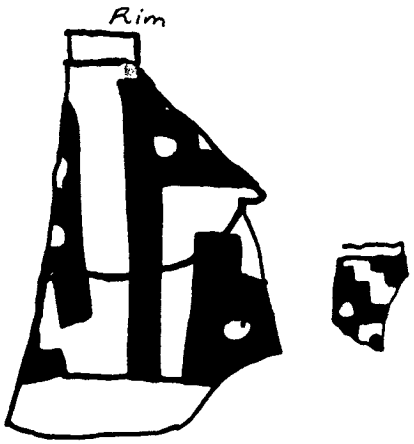
Escavada Black-on-white jar
brown mineral paint
<6519(2)-Kiva 10, Level 27
<6518(1)-Kiva 10, Level 26



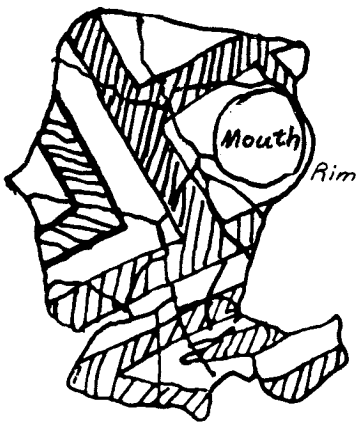
McElmo Black-on-white bowl
watery black carbon paint
<6504(1) -Kiva 10, Level 19
<6503(1) -Kiva 10, Level 18
<6507(2) -Kiva 10, Level 22
6507(3) -Kiva 10, Level 22
6502(3[b])-Kiva 10, Level 17
6503(1) -Kiva 10, Level 18
6504(1) -Kiva 10, Level 19
6766(1) -Room 143, Layer 1, Test Trench 6

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

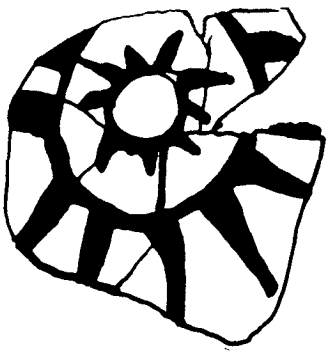
CHCU_310_D58_VOL 4_00559



Escavada/Puerco Black-on-white bowl
black mineral paint
6506(2[b])-Kiva 10, Level 21
6504(1) -Kiva 10, Level 19



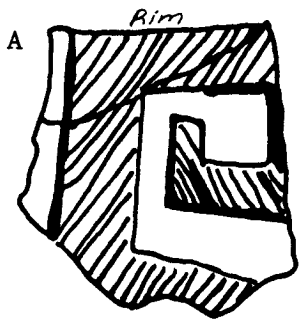
Chuska Black-on-white jar
black carbon paint
6510(24[b])-Kiva 10, Level 28
<6510(1)-Kiva 10, Level 28
<6519(1)-Kiva 10, Level 27
6510(1)-Kiva 10, Level 28
6510(3, 2[b])-Kiva 10, Level 28



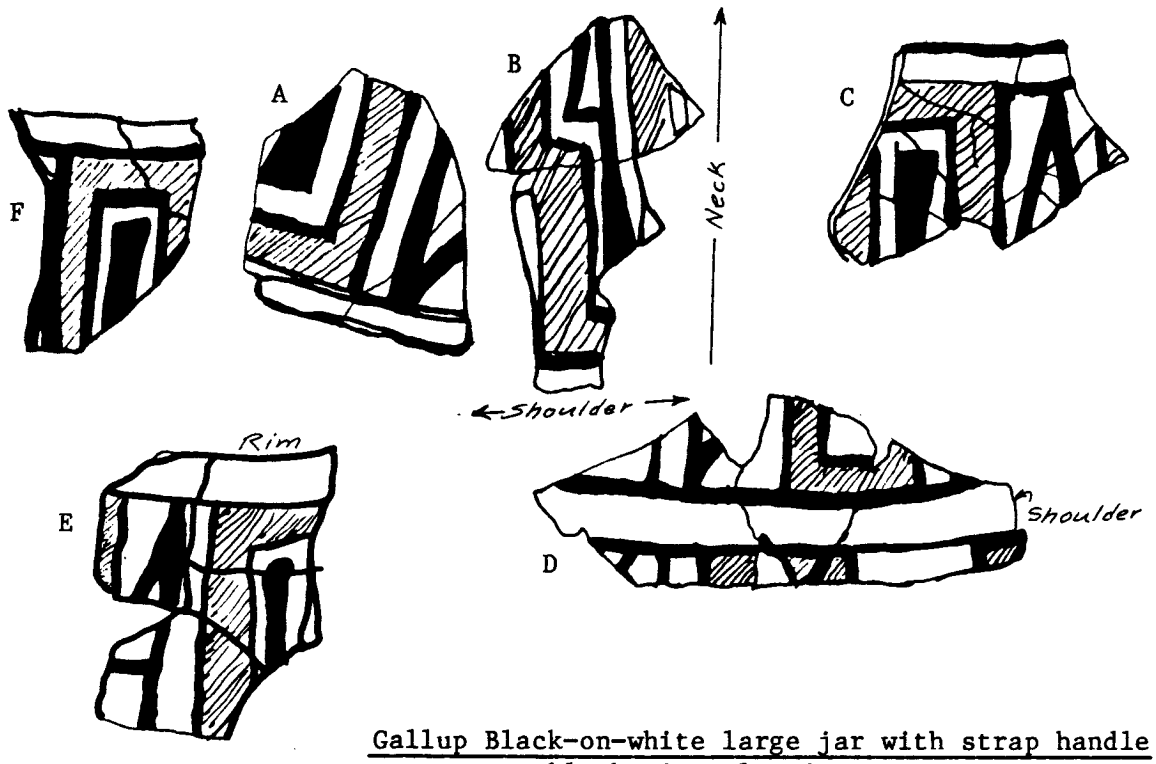
McElmo Black-on-white jar
black carbon paint design isolates
<6509(4)-Kiva 10, Level 24
<6517(1)-Kiva 10, Level 25
6509(11, 2[b])-Kiva 10, Level 24
6508(3)-Kiva 10, Level 23
6517(2)-Kiva 10, Level 25

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

CHCU_310_D58_VOL 4_00560



Gallup Black-on-white bowl
brown mineral paint
A 6519(3, 2[b])-Kiva 10, Level 27
6517(3, 2[b])-Kiva 10, Level 25



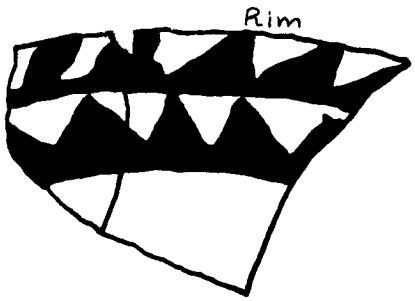
Gallup Black-on-white large jar with strap handle
black mineral paint
A 6510(2[b])-Kiva 10, Level 28
B 6519(2) -Kiva 10, Level 27
6518(1) -Kiva 10, Level 26
C 6519(11[b])-Kiva 10, Level 27
D 6518(3[b])-Kiva 10, Level 26
E 6519(2) -Kiva 10, Level 27
6518(2) -Kiva 10, Level 26
F 6519(2[b])-Kiva 10, Level 27
6519(4) -Kiva 10, Level 27
6518(1) -Kiva 10, Level 26
6519(4) -Kiva 10, Level 27
6518(3) -Kiva 10, Level 26
6517(1) -Kiva 10, Level 25

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

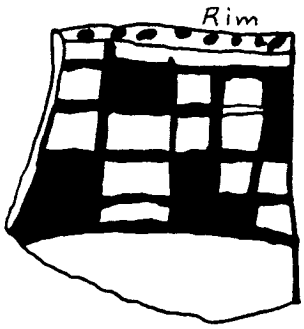
CHCU_310_D58_VOL 4_00561

Forestdale Corrugated Smudged
clearly defined corrugations
<6505(10)-Kiva 10, Level 20
<6504(2) -Kiva 10, Level 19
6505(3[b])-Kiva 10, Level 20
6505(6[b])-Kiva 10, Level 20
<6505(4) -Kiva 10, Level 20
<6504(1) -Kiva 10, Level 19
6505(12, 4[b])-Kiva 10, Level 20
6504(1) -Kiva 10, Level 19
<6505(10)-Kiva 10, Level 20
<6504(2) -Kiva 10, Level 19

Forestdale Corrugated Smudged
obliterated, smeared corrugations
6517(6[b])-Kiva 10, Level 25
6517(3[b])-Kiva 10, Level 25
6517(2) -Kiva 10, Level 25



Toadlena Black-on-white bowl
black carbon paint
<6518(1) -Kiva 10, Level 26
<6517(1) -Kiva 10, Level 25
6518(4, 2[b])-Kiva 10, Level 26
6517(2[b])-Kiva 10, Level 25



Chaco-McElmo Black-on-white bowl
black carbon paint
<6518(1)-Kiva 10, Level 26
<6519(1)-Kiva 10, Level 27
6517(2)-Kiva 10, Level 25
6518(3)-Kiva 10, Level 26

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

CHCU_310_D58_VOL 4_00562

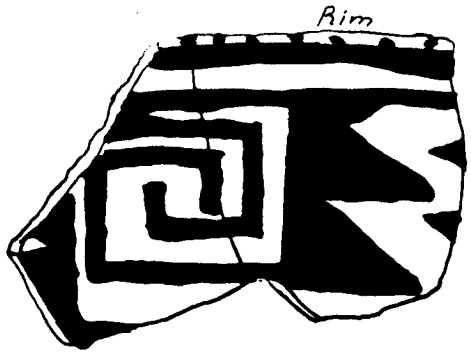


Chaco-McElmo Black-on-white pitcher
purplish carbon paint

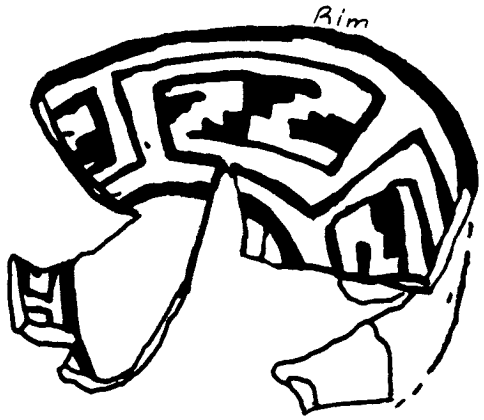
<6517(2)-Kiva 10, Level 25
6518(7)-Kiva 10, Level 25
<6518(2)-Kiva 10, Level 26
6517(2)-Kiva 10, Level 25
<6517(1)-Kiva 10, Level 25
6518(3)-Kiva 10, Level 26
<6518(1)-Kiva 10, Level 26
6517(1)-Kiva 10, Level 25
<6518(1)-Kiva 10, Level 26
6517(1)-Kiva 10, Level 25
6518(3)-Kiva 10, Level 26

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

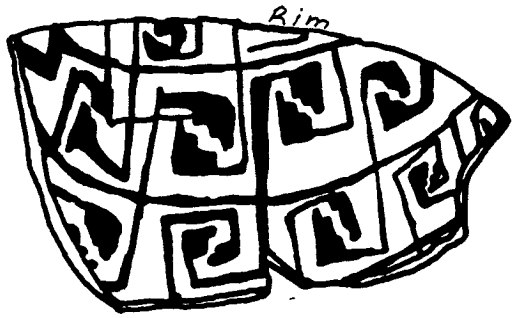
CHCU_310_D58_VOL 4_00563



McElmo Black-on-white bowl
black carbon paint
6502(8, 6[b])-Kiva 10, Level 17
6503(1)-Kiva 10, Level 18



Nava Black-on-white ladle bowl
black carbon paint, very silty,
yellowish white slip
6517(1)-Kiva 10, Level 25
6518(4)-Kiva 10, Level 26
6518(1)-Kiva 10, Level 26

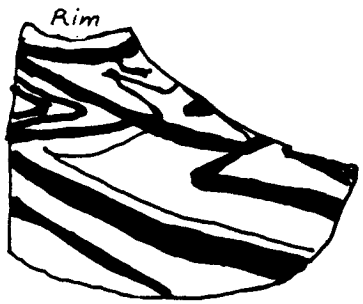


McElmo Black-on-white bowl
black carbon paint
6517(3)-Kiva 10, Level 25
6518(1)-Kiva 10, Level 26
6517(3)-Kiva 10, Level 25

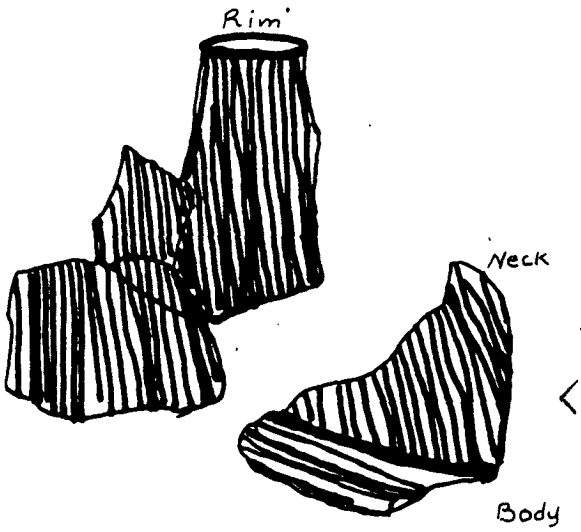
Forestdale Smudged
two worked sherd edges included
6517(1)-Kiva 10, Level 25
6510(1)-Kiva 10, Level 28
6519(4)-Kiva 10, Level 27

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

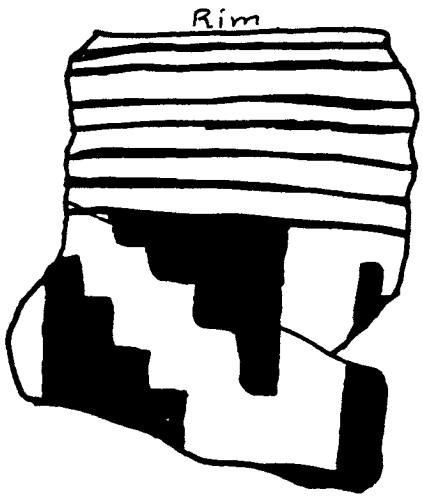
CHCU_310_D58_VOL 4_00564



Escavada Black-on-white seed jar
brown mineral paint
< 6509(2[b])-Kiva 10, Level 24
< 6508(1) -Kiva 10, Level 23
6507(1) -Kiva 10, Level 22



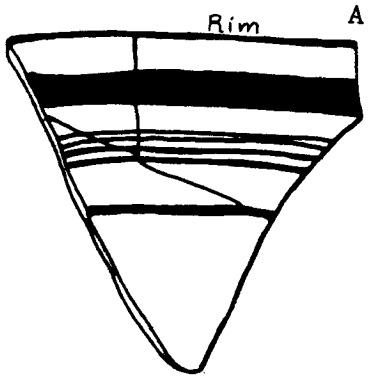
Chaco-McElmo Black-on-white pitcher
purplish black carbon paint
< 6505(2)-Kiva 10, Level 20
< 6504(7)-Kiva 10, Level 19
6504(2)-Kiva 10, Level 19



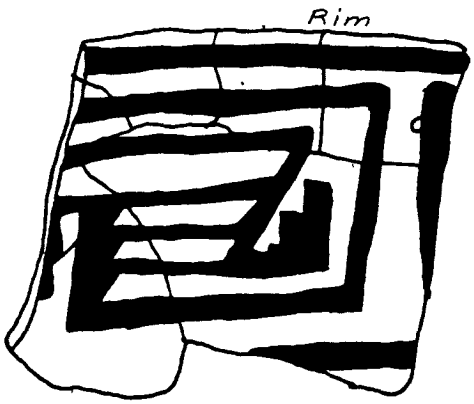
McElmo Black-on-white bowl
lusterous purplish black
6502(1)-Kiva 10, Level 17
6506(1)-Kiva 10, Level 21
6504(1)-Kiva 10, Level 19

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

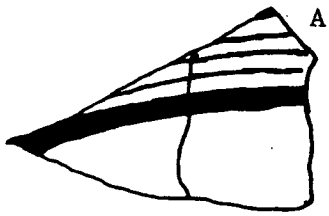
CHCU_310_D58_VOL 4_00565



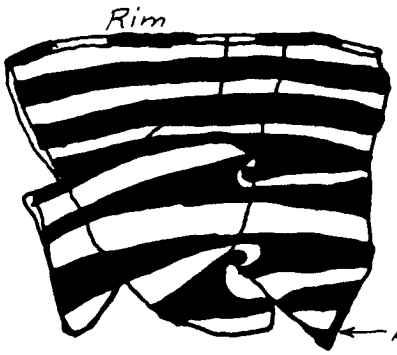
Socorro Black-on-white bowl
'glaze' black mineral paint
A <6504(1)-Kiva 10, Level 19
<6503(2)-Kiva 10, Level 18
<6501(2)-Kiva 10, Level 16
<6502(2)-Kiva 10, Level 17



Toadlena Black-on-white bowl
black carbon paint
6509(9[b])-Kiva 10, Level 24
6509(3) -Kiva 10, Level 24
6517(1) -Kiva 10, Level 25



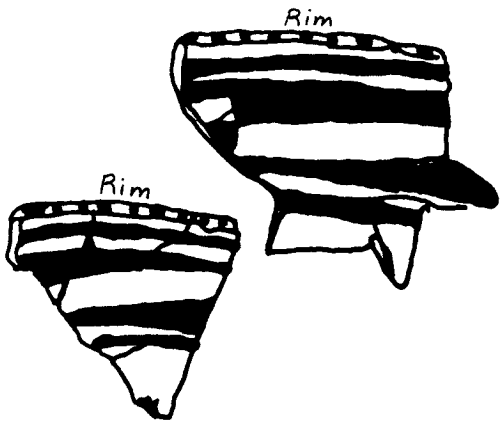
McElmo Black-on-white bowl bottom
lustrous black carbon paint
A <6507(1) -Kiva 10, Level 22
<6508(1) -Kiva 10, Level 23
6508(2[b])-Kiva 10, Level 23



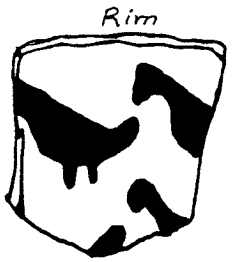
McElmo Black-on-white bowl
gray-green carbon paint
6509(5[b])-Kiva 10, Level 24
6517(2) -Kiva 10, Level 25

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

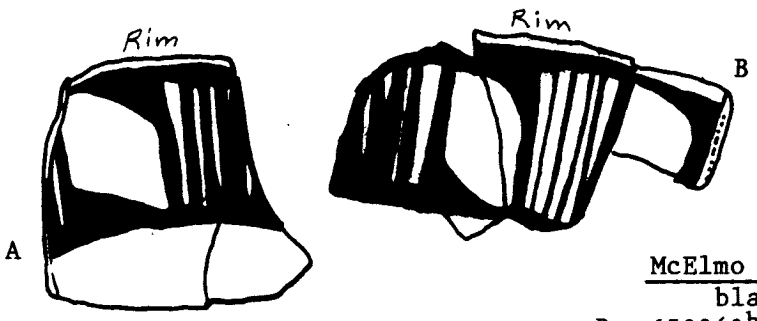
CHCU_310_D58_VOL 4_00566



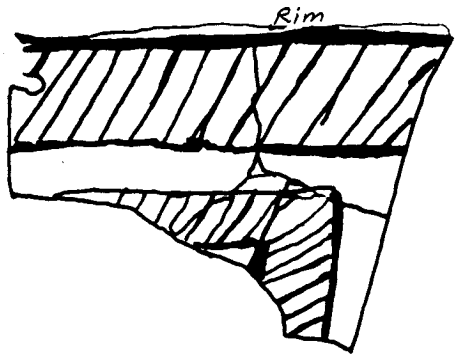
McElmo Black-on-white bowl
gray-green carbon paint
6506(1) -Kiva 10, Level 21
6505(3) -Kiva 10, Level 20
6505(3[b])-Kiva 10, Level 20



Toadlena Black-on-white bowl
black carbon paint
6501(2)-Kiva 10, Level 16
6504(1)-Kiva 10, Level 19
4297(1)-Plaza 1, Layer 3, Grid 35, NE 1/4



McElmo Black-on-white bowl ladle
black carbon paint
B 6503(3[b])-Kiva 10, Level 18
A < 6504(1) -Kiva 10, Level 19
< 6503(1) -Kiva 10, Level 18



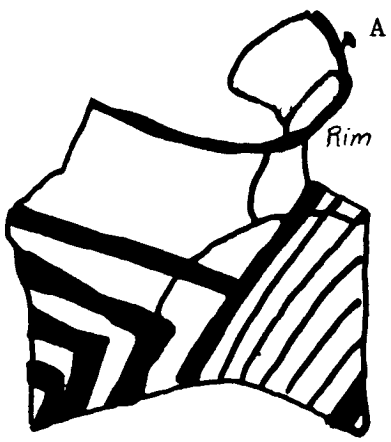
McElmo Black-on-white bowl
black carbon paint
hornblend/white rock/sandstone
6517(4[b])-Kiva 10, Level 25

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

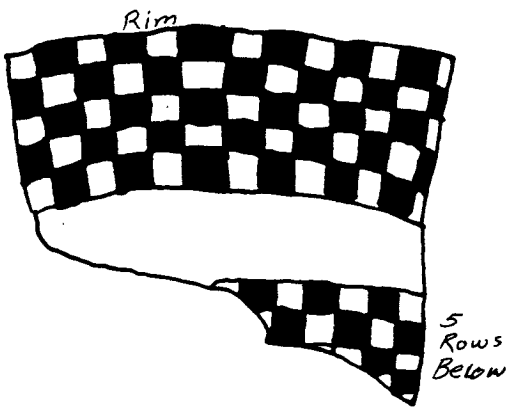
CHCU_310_D58_VOL 4_00567



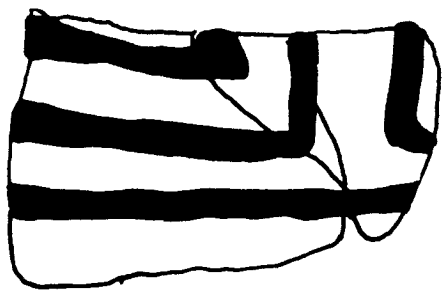
Chaco-McElmo Black-on-white bowl
black carbon paint
6502(1)-Kiva 10, Level 17
6503(1)-Kiva 10, Level 18
4309(3)-Plaza 1, Layer 4, Grid 55



Toadlena Black-on-white jar
blue black paint, carbon
gray body with thin slip
A 〈6503(3)-Kiva 10, Layer 18
〈6505(2)-Kiva 10, Layer 20
6503(15, 2[b])-Kiva 10, Layer 18
6504(5)-Kiva 10, Layer 19
6505(1)-Kiva 10, Layer 20



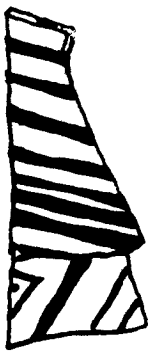
Escavada Black-on-white bowl
eroded black mineral paint
6517(2)-Kiva 10, Level 25



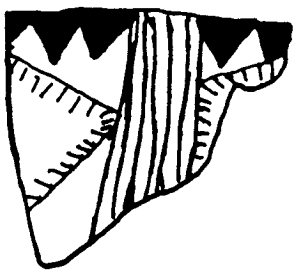
Sosi Black-on-white bowl
black carbon paint
6508(3[b])-Kiva 10, Level 23

〈 = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

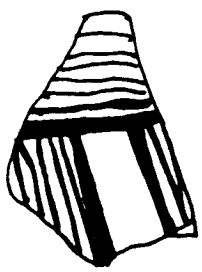
CHCU_310_D58_VOL 4_00568



Chaco-McElmo Black-on-white bowl
black carbon paint
6508(2[b])-Kiva 10, Level 23



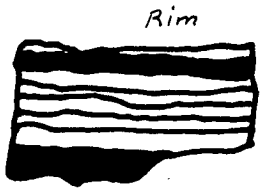
Mancos Black-on-white bowl
gray mineral paint
6501(3, 2[b])-Kiva 10, Level 16

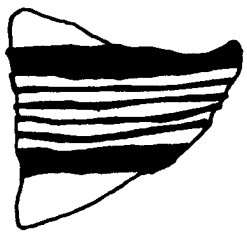


McElmo Black-on-white bowl
black carbon paint
6503(7, 2[b])-Kiva 10, Level 18
6504(3)-Kiva 10, Level 19
< 6504(1)-Kiva 10, Level 19
6503(1)-Kiva 10, Level 18

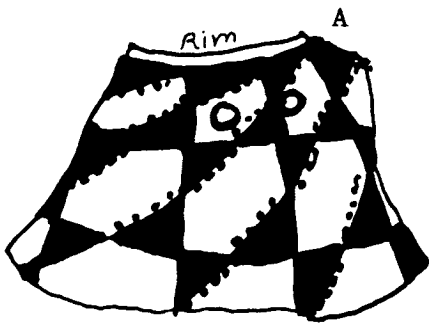
< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

CHCU_310_D58_VOL 4_00569

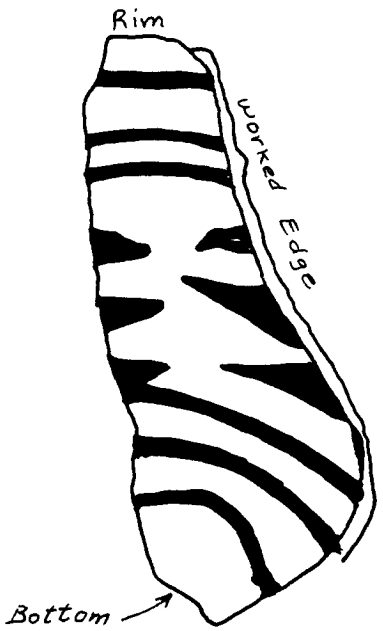




Crumbled House Black-on-white bowl
black carbon paint, exceptional slip and polish
6502(4)-Kiva 10, Level 17
6501(1)-Kiva 10, Level 16
6504(1)-Kiva 10, Level 19
6766(3)-Room 143, Layer 1, Test Trench 6



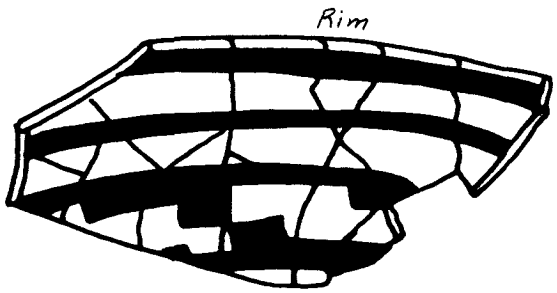
Puerco Black-on-white seed jar
dark brown mineral paint, with hanging holes not repair holes
A 6504(7)-Kiva 10, Level 19
6503(1)-Kiva 10, Level 18
6505(1)-Kiva 10, Level 20



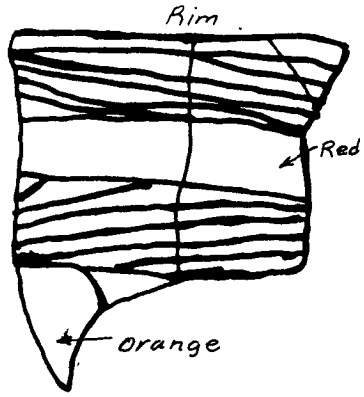
Puerco Black-on-red bowl
worked sherd - scoop?
6510(1)-Kiva 10, Level 28
< 6519(6)-Kiva 10, Level 27
6517(1)-Kiva 10, Level 25

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

CHCU_310_D58_VOL 4_00570



Puerco Black-on-red bowl
< 6506(2) -Kiva 10, Level 21
< 6505(11)-Kiva 10, Level 20



Cameron Polychrome bowl
black paint, red slip interior/exterior
orange interior bottom
< 6271(2)-Room 147, Layer 2, Level 5, Floor 1 fill, Grid 4
< 6504(2)-Kiva 10, Level 19

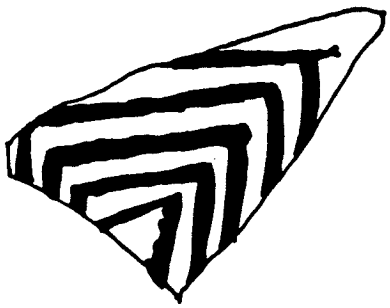


Puerco Black-on-red bowl
6519(3[b])-Kiva 10, Level 27
6518(2) -Kiva 10, Level 26

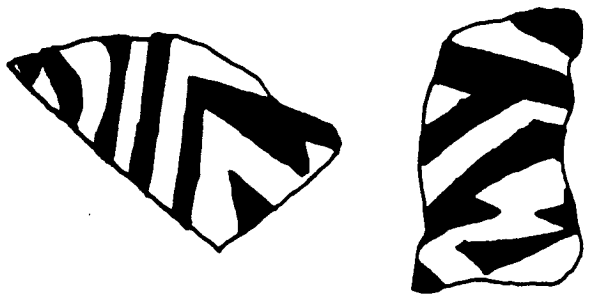
Forestdale Smudged bowl
< 6507(1)-Kiva 10, Level 22
< 6502(4)-Kiva 10, Level 17
6502(2)-Kiva 10, Level 17
6506(2)-Kiva 10, Level 21
6507(3)-Kiva 10, Level 22
6508(1)-Kiva 10, Level 23

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

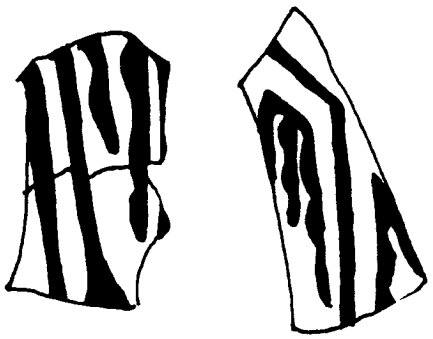
CHCU_310_D58_VOL 4_00571



Puerco Black-on-white jar
dark brown mineral paint
6517(17, 4[b])-Kiva 10, Level 25



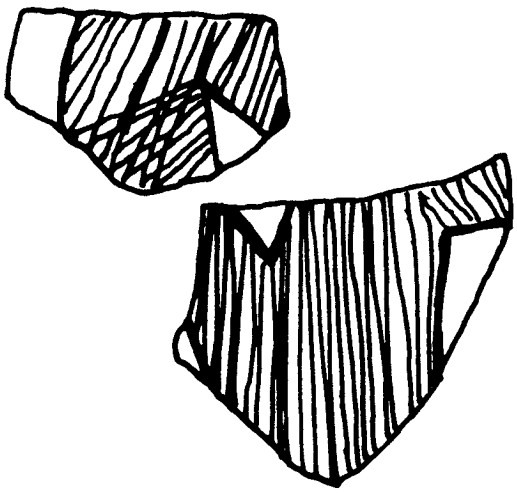
Puerco Black-on-white jar
black mineral paint
6502(3)-Kiva 10, Level 17
6503(9)-Kiva 10, Level 18
6504(2)-Kiva 10, Level 19



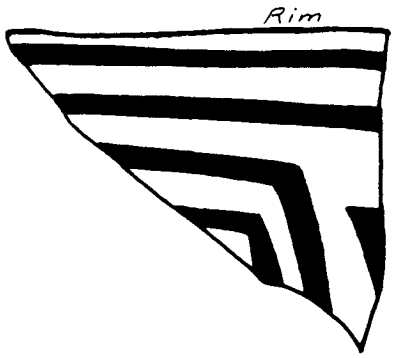
Puerco Black-on-white jar
dark brown to gray/green mineral paint
6519(30, 4[b])-Kiva 10, Level 27
6510(5)-Kiva 10, Level 28

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

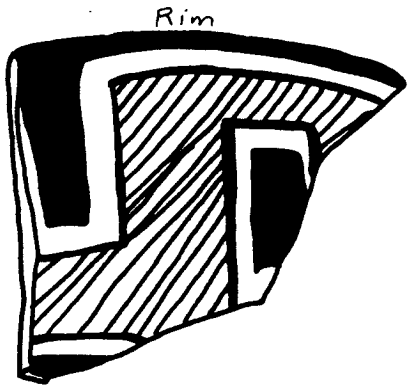
CHCU_310_D58_VOL 4_00572



Gallup Black-on-white jar(s?)
fretted paste black mineral paint
thin white washy slip,
gray under body evident
6503(2) -Kiva 10, Level 18
6505(1) -Kiva 10, Level 20
6506(1) -Kiva 10, Level 21
6507(8) -Kiva 10, Level 22
6508(13)-Kiva 10, Level 23
6509(1) -Kiva 10, Level 24
6518(6, 4[b])-Kiva 10, Level 26
6517(1) -Kiva 10, Level 25
6519(4, 2[b])-Kiva 10, Level 27



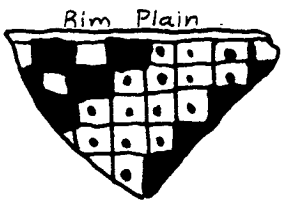
Sosi Black-on-white bowl
black carbon paint
6505(1)-Kiva 10, Level 20



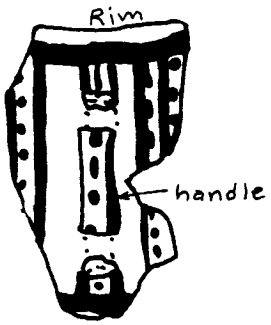
Mancos Black-on-white
gray-green mineral paint
6505(1)-Kiva 10, Level 20

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

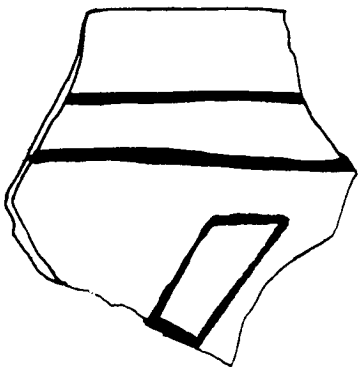
CHCU_310_D58_VOL 4_00573



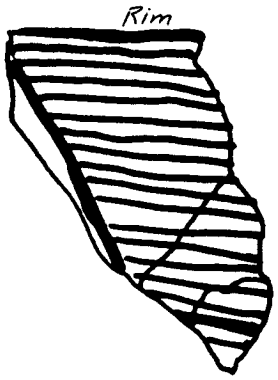
Chaco-McElmo bowl
black carbon paint
6504(2)-Kiva 10, Level 19



McElmo Black-on-white miniature pitcher
purple-black carbon paint
6519(7[b])-Kiva 10, Level 27



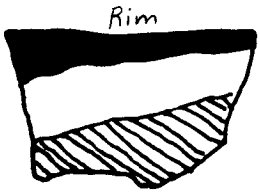
Citadel Polychrome
6500(1)-Kiva 10, Level 15



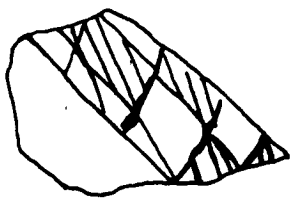
Tusayan Polychrome
6517(3[b])-Kiva 10, Level 25

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

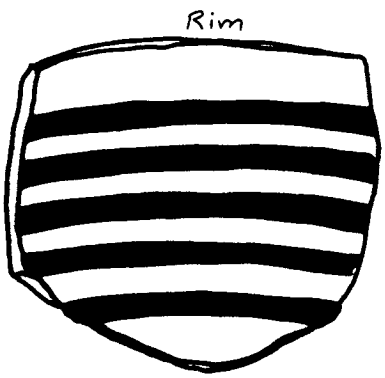
CHCU_310_D58_VOL 4_00574



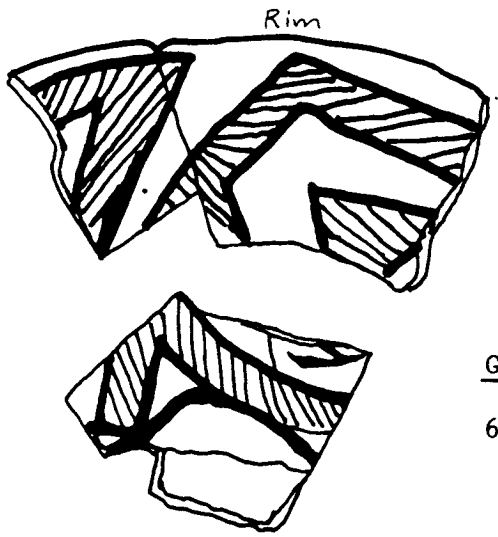
Socorro/Mancos Black-on-white bowl
matte black mineral paint, gray body
6503(4)-Kiva 10, Level 18
6502(2)-Kiva 10, Level 17



Mancos Black-on-white bowl
black mineral paint
6500(1) -Kiva 10, Level 15
6502(2[b])-Kiva 10, Level 17



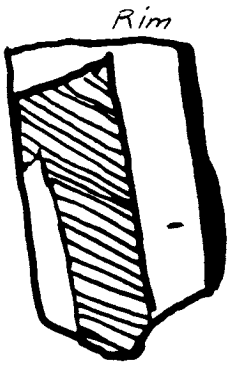
Escavada Black-on-white bowl
black mineral paint
6518(2[b])-Kiva 10, Level 26



Gallup Black-on-white ladle bowl
black mineral paint
6518(6[b])-Kiva 10, Level 26

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

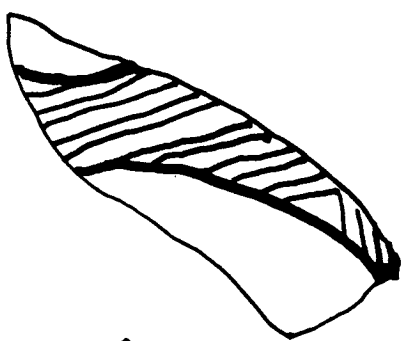
CHCU_310_D58_VOL 4_00575



Gallup Black-on-white bowl
black mineral paint
6517(5, 2[b])-Kiva 10, Level 25
6518(1)-Kiva 10, Level 26



Puerco Black-on-white jar
black bubbly glazed paint
6518(6, 4[b])-Kiva 10, Level 26



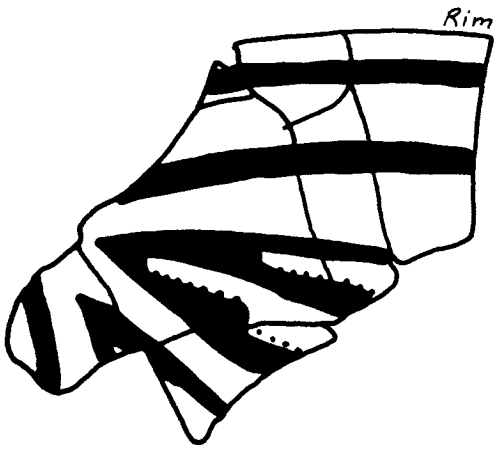
Gallup Black-on-white jar
red mineral paint, highly evenly polished gray body
6503(14)-Kiva 10, Level 18



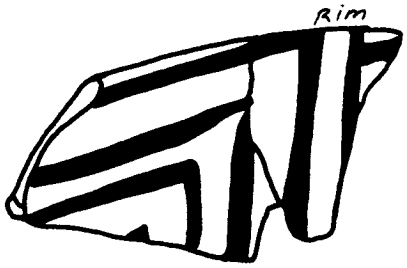
Toadlena Black-on-white jar (Nava?)
black carbon paint
6503(1)-Kiva 10, Level 18
6505(1)-Kiva 10, Level 20
6506(1)-Kiva 10, Level 21

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

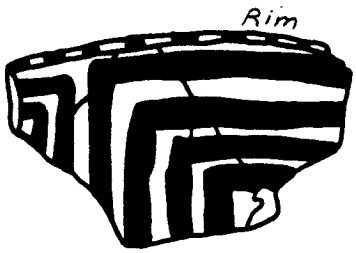
CHCU_310_D58_VOL 4_00576



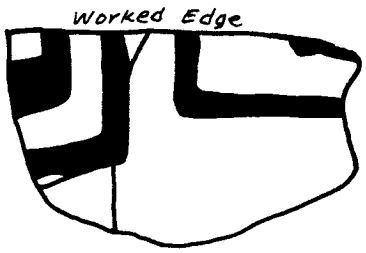
Black Mesa/Sosi Black-on-white bowl
black carbon paint
6503(7[b])-Kiva 10, Level 18
6502(4) -Kiva 10, Level 17
6503(6) -Kiva 10, Level 18
6504(2) -Kiva 10, Level 19
6505(1) -Kiva 10, Level 20



Toadlena Black-on-white bowl
black carbon paint
<6504(1)-Kiva 10, Level 19
<6505(1)-Kiva 10, Level 20



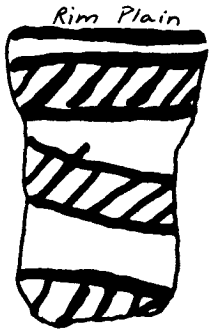
Chaco-McElmo Black-on-white bowl
black carbon paint
<6518(2) -Kiva 10, Level 26
<6517(2) -Kiva 10, Level 25
6517(2[b])-Kiva 10, Level 25
6518(1) -Kiva 10, Level 26



PII-III mineral jar/worked sherd
brown mineral paint
<6503(4)-Kiva 10, Level 18
<6504(2)-Kiva 10, Level 19

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

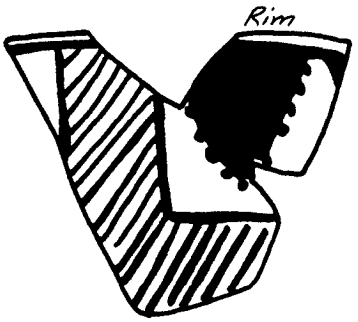
CHCU_310_D58_VOL 4_00577



McElmo Black-on-white bowl
brownish black carbon paint
6503(2)-Kiva 10, Level 18
6504(2)-Kiva 10, Level 19
6505(1)-Kiva 10, Level 20



Chaco-McElmo Black-on-white jar
black carbon paint
6518(16, 5[b])-Kiva 10, Level 26



Chuska Black-on-white bowl
black carbon paint
6509(3, 2[b])-Kiva 10, Level 24
6507(1)-Kiva 10, Level 22
6508(1)-Kiva 10, Level 23



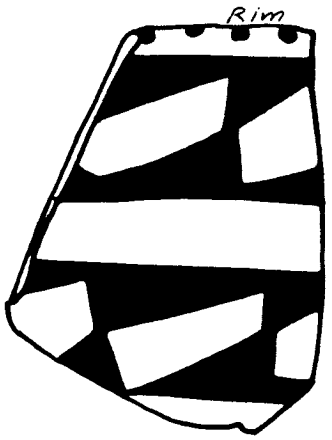
Chaco-McElmo Black-on-white bowl
purplish-black carbon paint,
'negative' effect
6503(3, 2[b])-Kiva 10, Level 18
6504(3[b])-Kiva 10, Level 19

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

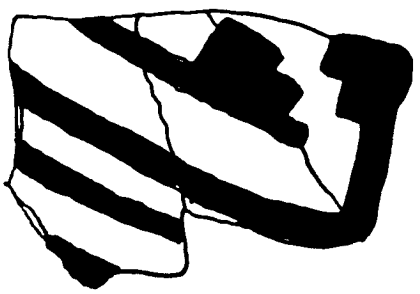
CHCU_310_D58_VOL 4_00578



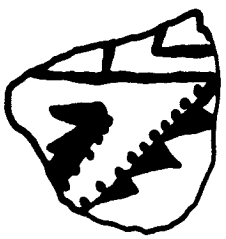
Toadlena Black-on-white bowl
black carbon paint
<6517(1)-Kiva 10, Level 25
<6509(1)-Kiva 10, Level 24
6517(2)-Kiva 10, Level 25



McElmo Black-on-white bowl
watery uneven black carbon paint
6509(6, 2[b])-Kiva 10, Level 24



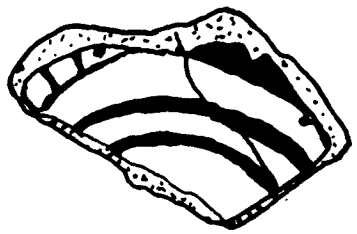
Escavada Black-on-white jar
brown mineral paint
6517(10, 3[b])-Kiva 10, Level 25



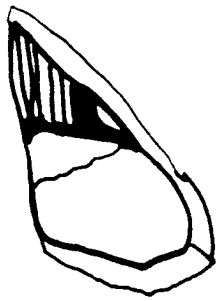
McElmo Black-on-white jar
black carbon paint
6517(1)-Kiva 10, Level 25
6518(1)-Kiva 10, Level 26
6519(1)-Kiva 10, Level 27

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

CHCU_310_D58_VOL 4_00579



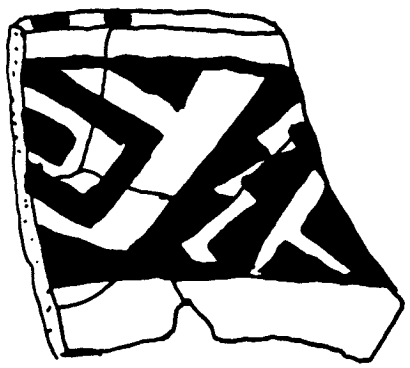
unidentified Chuskan bowl
gray-black carbon paint
6518(2[b])-Kiva 10, Level 26
6517(1) -Kiva 10, Level 25



Toadlena/Nava Black-on-white ladle bowl
black carbon paint
6506(2[b])-Kiva 10, Level 21



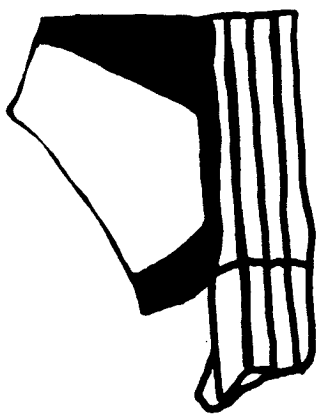
Toadlena Black-on-white bowl
black carbon paint
6506(2[b])-Kiva 10, Level 21



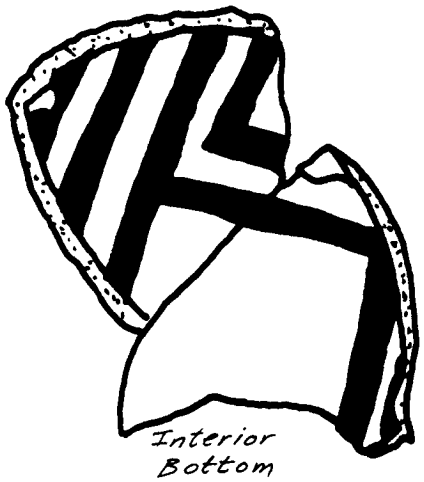
Chaco-McElmo Black-on-white bowl
black bubbly glazed carbon paint
6519(3)-Kiva 10, Level 27
6517(2)-Kiva 10, Level 25

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

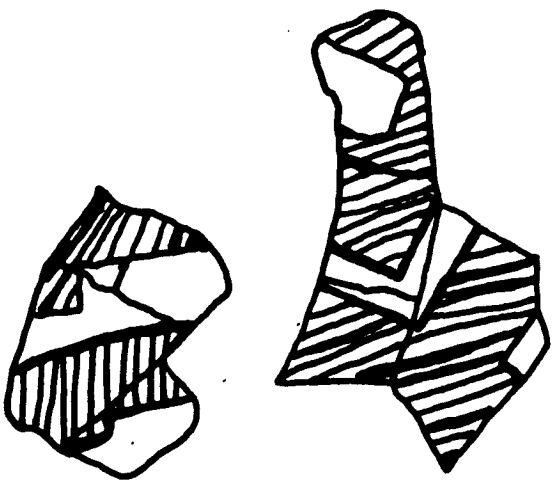
CHCU_310_D58_VOL 4_00580



PII-III mineral unidentified
reddish brown mineral paint
6518(7, 3[b])-Kiva 10, Level 26



Toadlena/Nava Black-on-white bowl
black carbon paint
6502(1)-Kiva 10, Level 17
< 6508(1)-Kiva 10, Level 23
< 6507(1)-Kiva 10, Level 22
6507(3, 2[b])-Kiva 10, Level 22
6508(1)-Kiva 10, Level 23
6502(2)-Kiva 10, Level 17



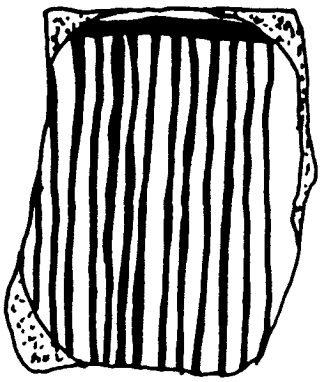
Chuska Black-on-white bowl
black carbon paint
< 6508(2)-Kiva 10, Level 23
< 6509(2)-Kiva 10, Level 24
6508(7, 4[b])-Kiva 10, Level 23

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

CHCU_310_D58_VOL 4_00581



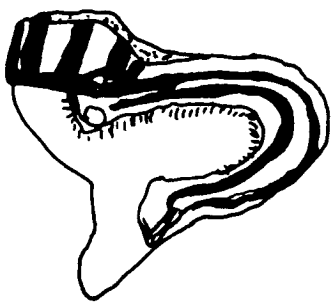
Medicine Black-on-red bowl
black paint
<6509(2)-Kiva 10, Level 24
6517(1)-Kiva 10, Level 25



Puerco Black-on-red bowl - worked sherd
black paint
6509(5[b])-Kiva 10, Level 24

Tusayan? redware seed jar
6501(2)-Kiva 10, Level 16
6502(3, 2[b])-Kiva 10, Level 17
6506(5[b])-Kiva 10, Level 21

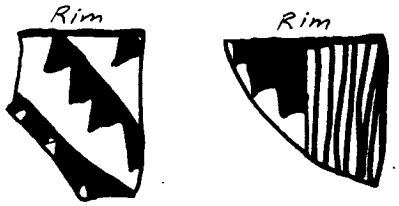
Tusayan? redware seed jar
6500(2)-Kiva 10,Level 15
6501(3, 2[b])-Kiva 10, Level 16
6502(2)-Kiva 10, Level 17
6504(1)-Kiva 10, Level 19



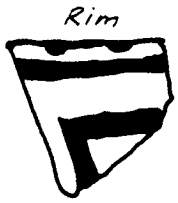
Chaco-McElmo Black-on-white effigy pitcher
black carbon paint
6518(3)-Kiva 10, Level 26
6517(2)-Kiva 10, Level 25

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

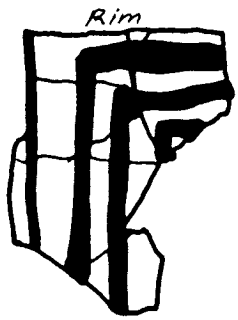
CHCU_310_D58_VOL 4_00582



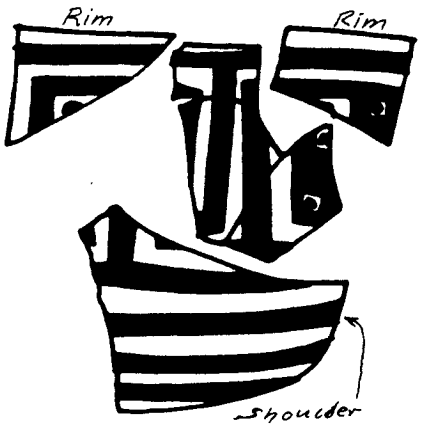
Nava Black-on-white bowl
black carbon paint
6502(1)-Kiva 10, Level 17



Holbrook Black-on-white bowl
grayish carbon paint
6503(7)-Kiva 10, Level 18



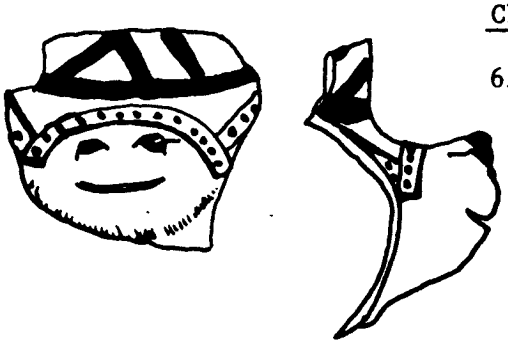
McElmo Black-on-white bowl
gray-black carbon paint
6518(6[b])-Kiva 10, Level 26
6517(1) -Kiva 10, Level 25
6517(3) -Kiva 10, Level 25



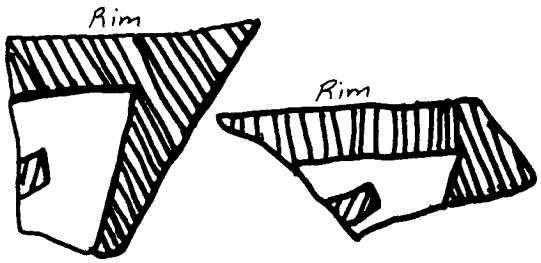
Chaco-McElmo Black-on-white pitcher
black carbon paint
6517(3[b])-Kiva 10, Level 25
6517(3) -Kiva 10, Level 25
6518(1) -Kiva 10, Level 26

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

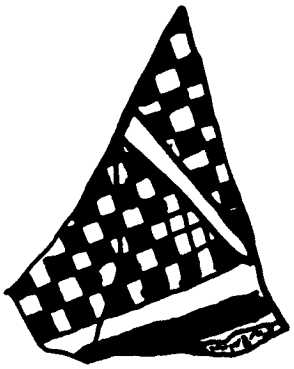
CHCU_310_D58_VOL 4_00583



Chaco-McELmo Black-on-white effigy pitcher
gray-black carbon paint
6505(1)-Kiva 10, Level 20



Chuska Black-on-white bowl
black carbon paint
6503(3)-Kiva 10, Level 18



Chaco-McElmo Black-on-white pitcher
black carbon paint
no FS#(2[b])-surface
6501(1)-Kiva 10, Level 16



Escavada Black-on-white bowl
brown paint, mineral
<6510(1)-Kiva 10, Level 28
6519(1)-Kiva 10, Level 27

< = sherds fit together.
( ) = number of sherds from provenience.
[b]These sherds fit together.

CHCU_310_D58_VOL 4_00584

Sherd Matches

West Wing

ROOM 103

Gallup Black-on-white jar
1144(1)-Room 103, Floor 1, Floor Artifact 26
<1300(2)-Room 103, Floor 3, Mealing Bin 3 fill
<1347(1)-Room 103, Floor 4, floor fill, Layer 5, Grid 20
1351(1)-Room 103, Floor 4, floor fill, Layer 5, Grid 23

Gallup Black-on-white jar (prob)
1161(1)-Room 103, Floor 1, Other Pit 7 fill
1273(2)-Room 103, Floor 3, floor fill, Layer 4, Grid 16
1288(1)-Room 103, Floor 3, below patch, Grid 23

Narrow neckbanded jar
<1221(1)-Room 103, Floor 2, floor fill, Layer 3, Grid 12
1222(1)-Room 103, Floor 2, floor fill, Layer 3, Grid 12

Gallup Black-on-white jar
<1229(1)-Room 103, Floor 2, floor fill, Layer 3, Grid 17
1344(1)-Room 103, Floor 4, floor fill, Layer 5, Grid 18

Captain Tom/Blue Shale Indented Corrugated
1030(3)-Room 103, Floor 1, floor fill, Layer 2, Level 5, Test Pit 2
1387(1)-Room 103, Floor 4, Other Pit 6 fill

Chaco Black-on-white bowl
<1261(1)-Room 103, Floor 3, floor fill, Layer 4, Grid 5
<1264(1)-Room 103, Floor 3, floor fill, Layer 4, Grid 8
1270(2)-Room 103, Floor 3, floor fill, Layer 4, Grid 15

Gallup Black-on-white jar
<1280(5)-Room 103, Floor 3, floor fill, Layer 4, Grid 20
1281(5)-Room 103, Floor 3, Grid 20

Gallup/Chaco Black-on-white jar
1273(1)-Room 103, Floor 3, floor fill, Layer 4, Grid 16
1315(1)-Room 103, Floor 3, Posthole 5 fill

Gallup Black-on-white jar
<1283(1)-Room 103, Floor 3, Grid 21
1350(3)-Room 103, Floor 4, floor fill, Layer 5, Grid 22

< = sherds fit together.
( ) = number of sherds from provenience.

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Sherd Matches

West Wing

ROOM 103 (continued)

Gallup Black-on-white jar
1260(1)-Room 103, Floor 3, Grid 4
1330(1)-Room 103, Floor 4, floor fill, Layer 5, Grid 5
<1332(3)-Room 103, Floor 4, floor fill, Layer 5, Grid 7
<1333(3)-Room 103, Floor 4, floor fill, Layer 5, Grid 8

Tusayan red ware bowl
<1287(1)-Room 103, Floor 3, floor fill, Layer 4, Grid 23
<1347(1)-Room 103, Floor 4, floor fill, Layer 5, Grid 20

Gallup Black-on-white jar
1338(1)-Room 103, Floor 4, floor fill, Layer 5, Grid 13
1351(1)-Room 103, Floor 4, floor fill, Layer 5, Grid 23

Gallup Black-on-white jar
<1347(1)-Room 103, Floor 4, floor fill, Layer 5, Grid 20
<1351(1)-Room 103, Floor 4, floor fill, Layer 5, Grid 23

early Red Mesa Black-on-white bowl
1350(1)-Room 103, Floor 4, floor fill, Layer 5, Grid 22
1365(1)-Room 103, Floor 4, Posthole 12 fill

indented corrugated jar
<1348(1)-Room 103, Floor 4 fill, Layer 5, Grid 21
<1372(1)-Room 103, Floor 4, Posthole 20 fill

unknown
1417(1)-Room 103, Floor 5, Grid 8
1419(1)-Room 103, Floor 5, Grid 10

Chuska Black-on-white jar
1352(4)-Room 103, Floor 4, floor fill, Layer 5, Grid 24

Tusayan Black-on-red jar[b]
1066(9) -Room 103, Layer 2, Level 2, Test Pit 1
1079(10)-Room 103, Layer 2, Level 3, Test Pit 1
1080(14)-Room 103, Layer 2, Level 4, Test Pit 1
1091(8) -Room 103, Layer 2, Level 5, Test Pit 1
1123(1) -Room 103, Layer 2, Level 1, Test Pit 3
1125(2) -Room 103, Layer 2, Level 3, Test Pit 3



< = sherds fit together.
( ) = number of sherds from provenience.
[b]Measureable restored vessel.

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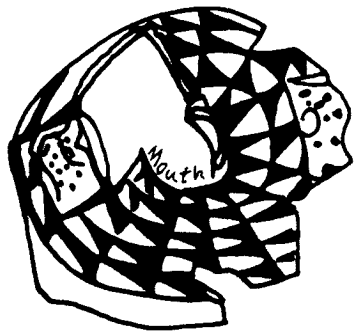
Sherd Matches

West Wing

ROOM 103 (continued)

Tusayan Black-on-red jar[b] (continued)
1134(1) -Room 103, Layer 1, Test Pit 6
1135(4) -Room 103, Layer 2, Levels 1-3, Test Pit 6
1140(3) -Room 103, Layer 2, Level 6, Test Pit 1
1141(42)-Room 103, Layer 2, Level 6, floor contact, Test Pit 3
1143(5) -Room 103, Layer 2, Level 6, Test Pit 8
1149(1) -Room 103, Layer 2, Levels 1-4, Test Pit 3
1152(5) -Room 103, Layer 2, Level 4, Test Pit 7
1155(12)-Room 103, Layer 2, Level 4, Test Pit 8
1185(1) -Room 103, Wall Niche 7

McElmo Black-on-white canteen[b]
1091(4)-Room 103, Layer 2, Level 5, Test Pit 1
1126(2)-Room 103, Layer 2, Level 4, Test Pit 3
1129(2)-Room 103, Layer 2, Level 5, Test Pit 3
1135(1)-Room 103, Layer 2, Levels 1-3, Test Pit 6
1136(2)-Room 103, Layer 2, Level 4, Test Pit 6
1152(1)-Room 103, Layer 2, Level 4, Test Pit 7
1155(2)-Room 103, Layer 2, Level 4, Test Pit 8
1156(4)-Room 103, Layer 2, Level 4, Test Pit 5



San Juan ladle[b]
1030(2)-Room 103, Layer 2, Level 5 floor fill, Test Pit 2
1037(1)-Room 103, Layer 2, Level 5 floor fill, Test Pit 2
1138(4)-Room 103, Layer 2, Level 5 floor fill, Test Pit 5

Narrow patterned indented corrugated jar[b]
1125(1) -Room 103, Layer 2, Level 3, Test Pit 3
1126(5) -Room 103, Layer 2, Level 4, Test Pit 3
1129(14)-Room 103, Layer 2, Level 5, Test Pit 3
1130(1) -Room 103, Layer 2, Test Pit 3
1141(22)-Room 103, Layer 2, Level 6 floor contact, Test Pit 3
1161(3) -Room 103, Floor 1, Layer 1, Other Pit 7
1180(1) -Room 103, Floor 2 fill, Layer 1

Indented corrugated jar (sand and shard temper)
1079(1)-Room 103, Layer 2, Level 3, Test Pit 1
1126(1)-Room 103, Layer 2, Level 4, Test Pit 3
1130(1)-Room 103, Layer 2, Test Pit 3
1133(4)-Room 103, Layer 2, Levels 1-3, Test Pit 5

< = sherds fit together.
( ) = number of sherds from provenience.
[b]Measureable restored vessel.

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Sherd Matches

West Wing

ROOM 103 (continued)

Indented corrugated jar (continued)
1134(5) -Room 103, Layer 1, Test Pit 6
1135(18)-Room 103, Layer 2, Levels 1-3, Test Pit 6
1154(1) -Room 103, Layer 2, Levels 1-3, Test Pit 8

Chuskan indented corrugated jar
1124(1) -Room 103, Layer 2, Level 2, Test Pit 3
1125(3) -Room 103, Layer 2, Level 3, Test Pit 3
1135(1) -Room 103, Layer 2, Levels 1-3, Test Pit 6
1136(4) -Room 103, Layer 2, Level 4, Test Pit 6
1137(81)-Room 103, Layer 2, Level 5 floor fill, Test Pit 6
1138(22)-Room 103, Layer 2, Level 5 floor fill, Test Pit 5
1139(2) -Room 103, Layer 2, Level 5 floor fill, Test Pit 4
1140(1) -Room 103, Layer 2, Level 6 floor fill, Test Pit 1
1141(3) -Room 103, Layer 2, Level 6 floor contact, Test Pit 3
1156(1) -Room 103, Layer 2, Level 4, Test Pit 5

Chuskan indented corrugated jar - body and neck parts
1066(3) -Room 103, Layer 2, Level 2, Test Pit 1
1079(1) -Room 103, Layer 2, Level 3, Test Pit 1
1123(2) -Room 103, Layer 2, Level 1, Test Pit 3
1124(13)-Room 103, Layer 2, Level 2, Test Pit 3
1125(9) -Room 103, Layer 2, Level 3, Test Pit 3
1136(1) -Room 103, Layer 2, Level 4, Test Pit 6
1138(23)-Room 103, Layer 2, Level 5 floor fill, Test Pit 5
1149(1) -Room 103, Layer 2, Levels 1-4, Test Pit 3
1151(1) -Room 103, Layer 2, Levels 1-3, Test Pit 7
1152(1) -Room 103, Layer 2, Level 4, Test Pit 7
1154(1) -Room 103, Layer 2, Levels 1-3, Test Pit 8

Puerco Black-on-red bowl
1136(1)-Room 103, Layer 2, Level 4, Test Pit 6
1138(1)-Room 103, Layer 2, Level 5 floor fill, Test Pit 5

Deadmans Black-on-red jar
1135(4)-Room 103, Layer 2, Levels 1-3, Test Pit 6

Deadmans Black-on-red bowl
1135(3)-Room 103, Layer 2, Levels 1-3, Test Pit 6

< = sherds fit together.
( ) = number of sherds from provenience.
[b]Measureable restored vessel.

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Sherd Matches

West Wing

ROOM 103 (continued)

Puerco Black-on-red bowl
1141(1)-Room 103, Layer 2, Level 6 floor contact, Test Pit 3
< 1130(1)-Room 103, Layer 2, Test Pit 3

Chuska Black-on-white bowl
1137(3)-Room 103, Layer 2, Level 5 floor fill, Test Pit 6

McElmo Black-on-white (?) bowl (possible match)
1137(6)-Room 103, Layer 2, Level 5 floor fill, Test Pit 6

Chuska Black-on-white bowl
1133(2)-Room 103, Layer 2, Levels 1-3, Test Pit 5
< 1080(1)-Room 103, Layer 2, Level 4, Test Pit 1

Toadlena Black-on-white bowl
1126(1)-Room 103, Layer 2, Level 4, Test Pit 3
< 1152(1)-Room 103, Layer 2, Level 4, Test Pit 7

Gallup Black-on-white jar
1113(5)-Room 103, Layer 2, Level 2, Test Pit 4

Gallup Black-on-white jar
1133(1)-Room 103, Layer 2, Levels 1-3, Test Pit 5
< 1135(1)-Room 103, Layer 2, Levels 1-3, Test Pit 6
1136(1)-Room 103, Layer 2, Level 4, Test Pit 6

Gallup Black-on-white jar
1112(2)-Room 103, Layer 1, Test Pit 4

Gallup Black-on-white jar
1134(9)-Room 103, Layer 1, Test Pit 6

Gallup Black-on-white jar
1137(4)-Room 103, Layer 2, Level 5 floor fill, Test Pit 6

Gallup Black-on-white jar
1141(2)-Room 103, Layer 2, Level 6 floor contact, Test Pit 3

< = sherds fit together.
( ) = number of sherds from provenience.

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Sherd Matches

West Wing

ROOM 103 (continued)

Gallup Black-on-white jar "fresh break"
1161(3)-Room 103, Floor 1, Other Pit 7
< 1141(1)-Room 103, Layer 2, Level 6 floor contact, Test Pit 3
1125(1)-Room 103, Layer 2, Level 3, Test Pit 3

Gallup Black-on-white jar
1135(2)-Room 103, Layer 2, Levels 1-3, Test Pit 6

Gallup Black-on-white jar
1156(2)-Room 103, Layer 2, Level 4, Test Pit 5

Puerco Black-on-white jar
1133(3)-Room 103, Layer 2, Levels 1-3, Test Pit 5
< 1156(2)-Room 103, Layer 2, Level 4, Test Pit 5

Puerco Black-on-white jar
1065(1)-Room 103, Layer 2, Level 1, Test Pit 1
< 1066(1)-Room 103, Layer 2, Level 2, Test Pit 1
1079(1)-Room 103, Layer 2, Level 3, Test Pit 1

Red Mesa Black-on-white jar
1156(7)-Room 103, Layer 2, Level 4, Test Pit 5

Unidentified Black-on-white bowl
1135(2)-Room 103, Layer 2, Levels 1-3, Test Pit 6

PII-III Mineral-on-white vessel
1133(2)-Room 103, Layer 2, Levels 1-3, Test Pit 5
< 1135(1)-Room 103, Layer 2, Levels 1-3, Test Pit 6
1156(1)-Room 103, Layer 2, Level 4, Test Pit 5

Gallup Black-on-white bowl
1133(2)-Room 103, Layer 2, Levels 1-3, Test Pit 5

Gallup Black-on-white bowl
1126(2)-Room 103, Layer 2, Level 4, Test Pit 3

Escavada Black-on-white bowl
1135(3)-Room 103, Layer 2, Levels 1-3, Test Pit 6

< = sherds fit together.
( ) = number of sherds from provenience.

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Sherd Matches

West Wing

ROOM 103 (continued)

Puerco Black-on-white bowl
1113(2)-Room 103, Layer 2, Level 2, Test Pit 4

Exotic (Mancos?) Black-on-white bowl[b]
1125(2)-Room 103, Layer 2, Level 3, Test Pit 3
1126(2)-Room 103, Layer 2, Level 4, Test Pit 3
1135(3)-Room 103, Layer 2, Levels 1-3, Test Pit 6
1149(1)-Room 103, Layer 2, Levels 1-4, Test Pit 3

Indented corrugated PII-III rim
1137(1)-Room 103, Layer 2, Level 5 floor fill, Test Pit 6
1126(1)-Room 103, Layer 2, Level 4, Test Pit 3

Indented corrugated PII rim
1141(3)-Room 103, Layer 2, Level 6 floor contact, Test Pit 3

Indented corrugated PII jar R[b]
1136(2)-Room 103, Layer 2, Level 4, Test Pit 6
1134(2)-Room 103, Layer 1, Test Pit 6

Indented corrugated PII rim
1125(1)-Room 103, Layer 2, Level 3, Test Pit 3
1136(1)-Room 103, Layer 2, Level 4, Test Pit 6

Indented corrugated with oblique, wide corrugations
(rock or sand temper)
1129(3) -Room 103, Layer 2, Level 5, Test Pit 3
1141(12)-Room 103, Layer 2, Level 6 floor contact, Test Pit 3
1126(1) -Room 103, Layer 2, Level 4, Test Pit 3

Indented corrugated body
1133(1)-Room 103, Layer 2, Levels 1-3, Test Pit 5
1135(3)-Room 103, Layer 2, Levels 1-3, Test Pit 6
1136(1)-Room 103, Layer 2, Level 4, Test Pit 6
1156(1)-Room 103, Layer 2, Level 4, Test Pit 5

Indented corrugated jar
1134(2)-Room 103, Layer 1, Test Pit 6

< = sherds fit together.
( ) = number of sherds from provenience.
[b]Measureable restored vessel.

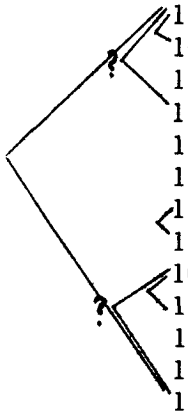
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Sherd Matches

West Wing

ROOM 103 (continued)

Indented corrugated probables (may be part of sand and sherd jar listed for 3rd page of Room 103)



1124(1)-Room 103, Layer 2, Level 2, Test Pit 3
1080(1)-Room 103, Layer 2, Level 4, Test Pit 1
1134(3)-Room 103, Layer 1, Test Pit 6
1135(9)-Room 103, Layer 2, Levels 1-3, Test Pit 6
1135(2)-Room 103, Layer 2, Levels 1-3, Test Pit 6
1134(1)-Room 103, Layer 1, Test Pit 6
1133(3)-Room 103, Layer 2, Levels 1-3, Test Pit 5
1154(1)-Room 103, Layer 2, Levels 1-3, Test Pit 8
1080(1)-Room 103, Layer 2, Level 4, Test Pit 1
1149(1)-Room 103, Layer 2, Levels 1-4, Test Pit 3
1080(1)-Room 103, Layer 2, Level 4, Test Pit 1
1134(1)-Room 103, Layer 1, Test Pit 6
1135(3)-Room 103, Layer 2, Levels 1-3, Test Pit 6

Indented corrugated jar

1123(1)-Room 103, Layer 2, Level 1, Test Pit 3
1126(1)-Room 103, Layer 2, Level 4, Test Pit 3
1149(1)-Room 103, Layer 2, Levels 1-4, Test Pit 3

Narrow neckbanded

1030(1)-Room 103, Layer 2, Level 5 floor fill, Test Pit 2
1139(1)-Room 103, Layer 2, Level 5 floor fill, Test Pit 4

Narrow patterned indented corrugated

1030(3)-Room 103, Layer 2, Level 5 floor fill, Test Pit 2
1139(1)-Room 103, Layer 2, Level 5 floor fill, Test Pit 4

Narrow banded (patterned?) bottom

1136(2)-Room 103, Layer 2, Level 4, Test Pit 6
1137(4)-Room 103, Layer 2, Level 5 floor fill, Test Pit 6
1138(1)-Room 103, Layer 2, Level 5 floor fill, Test Pit 5

Indented corrugated jar

? 1138(2)-Room 103, Layer 2, Level 5 floor fill, Test Pit 5
1137(4)-Room 103, Layer 2, Level 5 floor fill, Test Pit 6

< = sherds fit together.
( ) = number of sherds from provenience.

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Sherd Matches

West Wing

ROOM 103 (concluded)

Indented corrugated jar
?< 1137(1)-Room 103, Layer 2, Level 5 floor fill, Test Pit 6
1139(1)-Room 103, Layer 2, Level 5 floor fill, Test Pit 4

Indented corrugated jar
1141(15)-Room 103, Layer 2, Level 6 floor contact, Test Pit 3

Narrow neckbanded
< 1030(1)-Room 103, Layer 2, Level 5 floor fill, Test Pit 2
1139(1)-Room 103, Layer 2, Level 5 floor fill, Test Pit 4

PII-III indented corrugated rim
< 1137(1)-Room 103, Layer 2, Level 5 floor fill, Test Pit 6
1126(1)-Room 103, Layer 2, Level 4 floor fill, Test Pit 3

< = sherds fit together.
( ) = number of sherds from provenience.

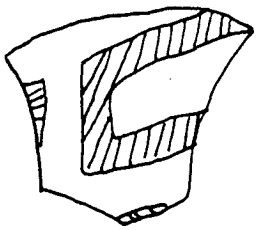
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Sherd Matches

West Wing

Room 109

Gallup Black-on-white jar
5310(1)-Room 109, Layer 1, Test Pit 2
<5311(1)-Room 109, Layer 2, Test Pit 2



Gallup Black-on-white jar
5307(1)-Room 109, Layer 2, Level 6, Test Pit 1
<5311(4)-Room 109, Layer 2, Test Pit 2
<5312(2)-Room 109, Layer 3, Test Pit 2

Gallup Black-on-white jar
5305(3) -Room 109, Layer 2, Level 4, Test Pit 1
5306(9) -Room 109, Layer 2, Level 5, Test Pit 1
<5307(26)-Room 109, Layer 2, Level 6, Test Pit 1
<5308(12)-Room 109, Layer 2, Level 7, Test Pit 1
<5309(1) -Room 109, Layer 3, Level 8, Test Pit 1
<5310(1) -Room 109, Layer 1, Test Pit 2
5311(27)-Room 109, Layer 2, Test Pit 2
<5312(9) -Room 109, Layer 3, Test Pit 2
<5316(5) -Room 109, Layer 3, Level 2, Floor 1 floor fill, Test Pit 2
5318(1) -Room 109, Layer 4, Floor 1 floor fill, Test Pit 1
5399(1) -Room 110, Floor 1 floor fill

Puerco Black-on-white bowl
5306(1)-Room 109, Layer 2, Level 5, Test Pit 1
<5307(1)-Room 109, Layer 2, Level 6, Test Pit 1

Burnham Black-on-white bowl
5308(1)-Room 109, Layer 2, Level 7, Test Pit 1
<5311(1)-Room 109, Layer 2, Test Pit 2

Toadlena Black-on-white bowl
5308(1)-Room 109, Layer 2, Level 7, Test Pit 1
5317(1)-Room 109, Layer 3, Level 2, Floor 1 floor fill, Test Pit 3

Gallup Black-on-white jar
5317(4)-Room 109, Layer 3, Level 2, Floor 1 floor fill, Test Pit 3
<5318(2)-Room 109, Layer 4, Floor 1 floor fill, Test Pit 1
<5436(4)-Room 110, Floor 1, Mealing Bin 1 fill

< = sherds fit together.
( ) = number of sherds from provenience.

CHCU_310_D58_VOL 4_00594

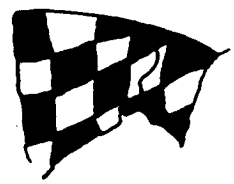
Matches

West Wing

Room 109 (concluded)

Puerco Black-on-white canteen
<5306(8)-Room 109, Layer 2, Level 5, Test Pit 1
<5307(2)-Room 109, Layer 2, Level 6, Test Pit 1
<5304(1)-Room 109, Layer 2, Level 3, Test Pit 1
<5305(1)-Room 109, Layer 2, Level 4, Test Pit 1

Nava Black-on-white bowl
<5308(1)-Room 109, Layer 2, Level 7, Test Pit 1
<5317(1)-Room 109, Layer 3, Level 2, Floor 1 floor fill, Test Pit 3



Puerco Black-on-white olla
5316(4)-Room 109, Layer 3, Level 2, Floor 1 floor fill, Test Pit 2



Puerco Black-on-white bowl
5309(4)-Room 109, Layer 3, Level 8, Test Pit 1

unidentified indented corrugated jar
<5316(4)-Room 109, Layer 3, Level 2, Floor 1 floor fill, Test Pit 2
<5320(1)-Room 109, Floor 1, Heating Pit flotation sample

unidentified indented corrugated jar
5312(8)-Room 109, Layer 3, Test Pit 2

< = sherds fit together.
( ) = number of sherds from provenience.

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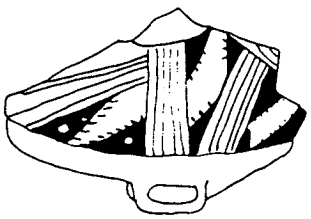
Sherd Matches

West Wing



Room 110

Puerco Black-on-white olla
5475(25)-Room 110, Floor 1 fill, Layer 2, Grid 3
5473(1) -Room 110, Floor 1 fill, Layer 2, Grid 1

Naschitti Black-on-white canteen

5480(2)-Room 110, Floor 1, floor fill, Layer 2, Grid 8
5483(2)-Room 110, Floor 1, floor fill, Layer 2, Grid 11
5479(1)-Room 110, Floor 1, floor fill, Layer 2, Grid 7
54??(9)-Room 110
5477(2)-Room 110, Floor 1, floor fill, Layer 2, Grid 5
5486(1)-Room 110, Floor 1, floor fill, Layer 2, Grid 14
5509(1)-Room 110, Floor 1/floor contact, Grid 5

Gallup Black-on-white bowl
5409(4)-Room 110, Floor 1 floor contact, Test Pit 1

Unidentified indented corrugated jar
5399(1)-Room 110, general Layer 1
5434(7)-Room 110, Floor 1, Mealing Bin 2 fill
5436(5)-Room 110, Floor 1, Mealing Bin 3 fill

PII indented corrugated jar
5432(6)-Room 110, Floor 1, Mealing Bin 1 fill
5436(1)-Room 110, Floor 1, Mealing Bin 3 fill

Gallup Black-on-white bowl
5316(1)-Room 109, Layer 3, Level 2, Floor 1 floor fill, Test Pit 2
5317(1)-Room 109, Layer 3, Level 2, Floor 1 floor fill, Test Pit 3
5432(4)-Room 110, Floor 1, Mealing Bin 1 fill
5434(1)-Room 110, Floor 1, Mealing Bin 2 fill
5438(7)-Room 110, Floor 1, Mealing Bin 4 fill
5453(1)-Kiva 15, south wall and bench construction and interior fill

Chuskan indented corrugated jar
5320(1)-Room 109, Floor 1, heating pit flotation sample
5399(1)-Room 110, general Layer 1
5432(4)-Room 110, Floor 1, Mealing Bin 1 fill
5434(7)-Room 110, Floor 1, Mealing Bin 2 fill
5436(6)-Room 110, Floor 1, Mealing Bin 3 fill

< = sherds fit together.
( ) = number of sherds from provenience.

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Sherd Matches

West Wing

ROOM 110 (continued)

Unidentified indented corrugated jar
1534(5)-Room 110, Floor 1, Surface 9, Trash Deposit 1

Red Mesa Black-on-white bowl
1614(4)-Room 110, Layer 12, Subfloor 3, Grid 1

Red Mesa Black-on-white bowl
1615(2)-Room 110, Layer 12, Subfloor 3, Grid 3

Red Mesa Black-on-white jar
1615(2)-Room 110, Layer 12, Subfloor 3, Grid 3



Smudged red bowl
1545(1)-Room 110, Floor 2 floor fill, Layer 10, Grid 2
5755(1)-Room 110, Floor 1, Surface 9, Other Pit 72

Gallup Black-on-white jar (worked sherd)
1539(6)-Room 110, Floor 1, Surface 8-9, south half of floor



Mancos Black-on-white bowl
< 1637(5)-Room 110, Wall Niche 9 collar construction
< 1639(5)-Room 110, Wall Niche 9 collar construction
1571(1)-Room 110, Floor 2 floor fill, Grid 21



PII narrow banded jar
1534(3)-Room 110, Floor 1, Surface 9, Trash Deposit 1

PII narrow banded jar
1539(5)-Room 110, Floor 1, Surface 8-9, south half of room

PII-III Mineral-on-white bowl
5721(2)-Room 110, Floor 1, Surface 8, Other Pit 54



PII indented corrugated jar
5733(2)-Room 110, Floor 1, Surface 8, Other Pit 60

unidentified indented corrugated jar
< 5715(1)-Room 110, Floor 1, Surface 9, Other Pit 51
< 5725(1)-Room 110, Floor 1, Surface 8, Other Pit 56

< = sherds fit together.
( ) = number of sherds from provenience.

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Sherd Matches

West Wing

ROOM 110 (continued)

Puerco Black-on-white bowl
5739(2)-Room 110, Floor 1, Surface 9, Other Pit 63
<1539(1)-Room 110, Floor 1, Surface 8-9, south half of room



Narrow neckbanded jar
<5744(4)-Room 110, Floor 1, Surface 9, Other Pit 66
5725(1)-Room 110, Floor 1, Surface 8, Other Pit 56



Gallup Black-on-white bowl
5754(5)-Room 110, Floor 1, Surface 9, Other Pit 71

Gallup Black-on-white bowl
5754(3)-Room 110, Floor 1, Surface 9, Other Pit 71



PII indented corrugated jar
<5557(2)-Room 110, Floor 1, Surface 4-7 mix, Grid 3
<5536(7)-Room 110, Floor 1, Surface 7, Grid 4
<5535(4)-Room 110, Floor 1, Surface 7, Grid 3
<5544(2)-Room 110, Floor 1, Surface 7, Grid 11



Gallup Black-on-white bowl
5739(17)-Room 110, Floor 1, Surface 9, Other Pit 63
5754(5) -Room 110, Floor 1, Surface 9, Other Pit 71

PII-III Mineral-on-white bowl
5695(5)-Room 110, Floor 1, Surface 8, Other Pit 39



Gallup Black-on-white jar
<5519(3)-Room 110, Floor 1 floor contact, Grid 18
<5518(1)-Room 110, Floor 1 floor contact, Grid 17



Gallup Black-on-white bowl
<5536(2)-Room 110, Floor 1, Surface 7, Grid 4
<5542(1)-Room 110, Floor 1, Surface 7, Grids 9-10



Gallup Black-on-white bowl
5529(4)-Room 110, Floor 1, Surface 5



Gallup Black-on-white ladle
<5559(2)-Room 110, Floor 1, Surface 8, Grid 2
<5560(1)-Room 110, Floor 1, Surface 8, Grid 3



< = sherds fit together.
( ) = number of sherds from provenience.

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Sherd Matches

West Wing

Room 110 (continued)

Puerco Black-on-white bowl
5536(2)-Room 110, Floor 1, Surface 7, Grid 4



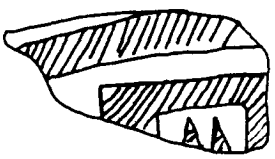
Toadlena Black-on-white jar
5557(3)-Room 110, Floor 1, Surface 4-7 mixed, Grid 3



Chuska Black-on-white bowl
5525(5)-Room 110, Floor 1, Surface 4, Grids 22, 24



Gallup Black-on-white jar
5519(11)-Room 110, Floor 1 floor contact, Grid 18



Gallup Black-on-white jar
5531(2)-Room 110, Floor 1, Surface 6, Grids 22-24

PII indented corrugated jar
5533(1)-Room 110, Floor 1, Surface 7, Grid 1 <
5536(1)-Room 110, Floor 1, Surface 7, Grid 4

Gallup Black-on-white bowl
5538(1)-Room 110, Floor 1, Surface 7, Grid 6 <
5541(3)-Room 110, Floor 1, Surface 7, Grid 9

Gallup Black-on-white bowl
5535(4)-Room 110, Floor 1, Surface 7, Grid 3 <
5540(1)-Room 110, Floor 1, Surface 7, Grid 8

Red Mesa Black-on-white ladle
5541(1)-Room 110, Floor 1, Surface 7, Grid 9 <
5538(2)-Room 110, Floor 1, Surface 7, Grid 6



Gallup Black-on-white jar
5536(2)-Room 110, Floor 1, Surface 7, Grid 4



PII-III Mineral-on-white bowl
5557(2)-Room 110, Floor 1, Surface 4-7 mixed, Grid 3 <
5564(1)-Room 110, Floor 1, Surface 8, Grid 15



"Kiatuthlanna" Black-on-white bowl
5657(1)-Room 110, Floor 1, Heating Pit 3 fill <
5551(2)-Room 110, Floor 1, Surface 7, Grid 18 <
5547(1)-Room 110, Floor 1, Surface 7, Grid 14



< = sherds fit together.
( ) = number of sherds from provenience.

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Sherd Matches

West Wing

Room 110 (continued)

Gallup Black-on-white jar
5690(2)-Room 110, Floor 1, Surface 8, Other Pit 36

Neckbanded/incised corrugated jar
5715(4)-Room 110, Floor 1, Surface 9, Other Pit 51

Gallup Black-on-white bowl
5596(2)-Room 110, Floor 1, Other Pit 22 fill



Gallup Black-on-white seed jar
5596(3)-Room 110, Floor 1, Other Pit 22 fill

Gallup Black-on-white bowl (burned)
<5555(8)-Room 110, Floor 1, Surface 7, Grids 23, 24
<5557(2)-Room 110, Floor 1, Surface 4-7 mix, Grid 3
<5679(1)-Room 110, Floor 1, Mealing Bin 1 construction
<5659(1)-Room 110, Floor 1, Surface 7, Heating Pit 4 fill
<5554(1)-Room 110, Floor 1, Surface 7, Grid 22

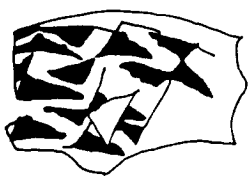
Gallup Black-on-white jar
5675(2)-Room 110, Floor 1, Surface 8, Other Pit 16



Gallup Black-on-white bowl
<5596(4)-Room 110, Floor 1, Surface 7, Other Pit 22 fill
<5616(2)-Room 110, Floor 1, Surface 7, Other Pit 35 fill
<5721(1)-Room 110, Floor 1, Surface 8, Other Pit 54
<5739(1)-Room 110, Floor 1, Surface 9, Other Pit 63
<5701(1)-Room 110, Floor 1, Surface 9, Other Pit 42
<5712(1)-Room 110, Floor 1, Surface 8, Other Pit 49

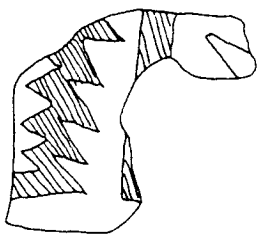


Red Mesa Black-on-white bowl
<5541(2) -Room 110, Floor 1, Surface 7, Grid 9
<5546(16)-Room 110, Floor 1, Surface 7, Grid 13
<5560(1) -Room 110, Floor 1, Surface 8, Grid 3



Wide neckbanded patterned corrugated jar
<5535(5)-Room 110, Floor 1, Surface 7, Grid 3
<5536(1)-Room 110, Floor 1, Surface 7, Grid 4

Gallup Black-on-white olla
5541(11)-Room 110, Floor 1, Surface 7, Grid 9



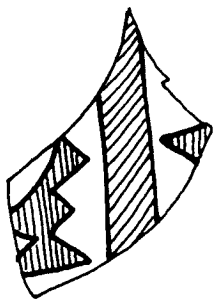
< = sherds fit together.
( ) = number of sherds from provenience.

CHCU_310_D58_VOL 4_00600

Sherd Matches

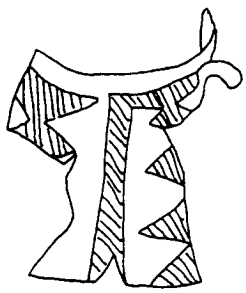
West Wing

Room 110 (continued)



Gallup Black-on-white olla
5721(6)-Room 110, Floor 1, Surface 8, Other Pit 54

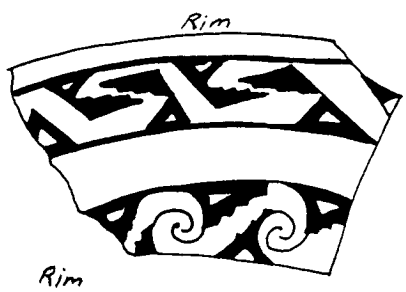
Whiteware jar
5612(1)-Room 110, Floor 1, Surface 7, Other Pit 33
5721(1)-Room 110, Floor 1, Surface 8, Other Pit 54
5723(2)-Room 110, Floor 1, Surface 8, Other Pit 55



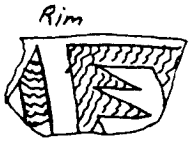
Gallup Black-on-white pitcher
5711(2)-Room 110, Floor 1, Surface 8, Other Pit 49
5723(5)-Room 110, Floor 1, Surface 8, Other Pit 55
5716(1)-Room 110, Floor 1, Surface 9, Other Pit 51
5701(2)-Room 110, Floor 1, Surface 9, Other Pit 42
5712(2)-Room 110, Floor 1, Surface 8, Other Pit 49

PII indented corrugated jar
5705(16)-Room 110, Floor 1, Surface 8, Other Pit 46
5711(18)-Room 110, Floor 1, Surface 8, Other Pit 49
5723(24)-Room 110, Floor 1, Surface 8, Other Pit 55
5701(1) -Room 110, Floor 1, Surface 9, Other Pit 42

PII indented corrugated jar
5537(20)-Room 110, Floor 1, Surface 7, Grid 5
5538(7) -Room 110, Floor 1, Surface 7, Grid 6
5536(8) -Room 110, Floor 1, Surface 7, Grid 4
5541(20)-Room 110, Floor 1, Surface 7, Grid 9
5539(2) -Room 110, Floor 1, Surface 7, Grid 7
5551(1) -Room 110, Floor 1, Surface 7, Grid 18
5546(2) -Room 110, Floor 1, Surface 7, Grid 13
5535(2) -Room 110, Floor 1, Surface 7, Grid 3
5557(10)-Room 110, Floor 1, Surface 4-7, Grid 3
5544(1) -Room 110, Floor 1, Surface 7, Grid 11
5553(1) -Room 110, Floor 1, Surface 7, Grid 21
5533(1) -Room 110, Floor 1, Surface 7, Grid 1
5534(1) -Room 110, Floor 1, Surface 7, Grid 2
5558(1) -Room 110, Floor 1, Surface 8, Grid 1



Puerco Black-on-white bowl
5596(5)-Room 110, Floor 1, Surface 7, Other Pit 22



Gallup Black-on-white jar
5721(9)-Room 110, Floor 1, Surface 8, Other Pit 54

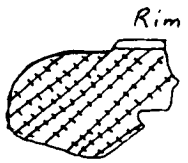
< = sherds fit together.
( ) = number of sherds from provenience.

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Sherd Matches

West Wing

Room 110 (continued)



PII-III Mineral-on-white bowl
5715(4)-Room 110, Floor 1, Surface 9, Other Pit 51

PII indented corrugated jar
5551(3)-Room 110, Floor 1, Surface 7, Grid 18

Unidentified indented corrugated jar
5517(7)-Room 110, Floor 1 floor contact, Grid 16

Whiteware jar
5507(9)-Room 110, Floor 1 floor contact, Grid 3

Gallup Black-on-white-olla
5517(6)-Room 110, Floor 1 floor contact, Grid 16

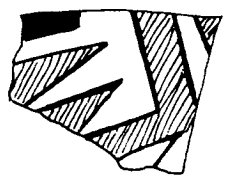
Unidentified indented corrugated jar
5593(4)-Room 110, Floor 1, Other Pit 20

Neckbanded corrugated jar
1650(13)- Room 110, Vent 1 plug

Unidentified indented corrugated jar
5565(4)-Room 110, Floor 1, Surface 3, Firepit 1
5566(1)-Room 110, Floor 1, Surface 3, Firepit 1
5578(1)-Room 110, Floor 1, Other Pit 6

PII indented corrugated jar
5578(2)-Room 110, Floor 1, Other Pit 6
5565-66(100)-Room 110, Floor 1, Surface 3, Firepit 1

Gallup Black-on-white bowl
5695(28)-Room 110, Floor 1, Surface 8, Other Pit 39



PII indented corrugated jar
5565(30)-Room 110, Floor 1, Surface 3, Firepit 1
5482(2) -Room 110, Floor 1 floor fill, Grid 10
5480(7) -Room 110, Floor 1 floor fill, Grid 8
5481(1) -Room 110, Floor 1 floor fill, Grid 9

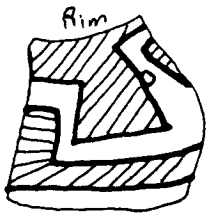
PII indented corrugated jar
5695(47)-Room 110, Floor 1, Surface 8, Other Pit 39

< = sherds fit together.
( ) = number of sherds from provenience.

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Sherd Matches

West Wing



Room 110 (concluded)

Chuska Black-on-white seed jar
<5565(51)-Room 110, Floor 1, Surface 3, Firepit 1
<5567(1) -Room 110, Floor 1, Surface 3, Firepit 1

Gallup Black-on-white jar w/ochre
<5721(4)-Room 110, Floor 1, Surface 8, Other Pit 54
<1590(2)-Room 110, Floor 2 floor fill, Layer 10, Trash Deposit 1, Grid 12

PII wide-patterned corrugated jar
<5733(28)-Room 110, Floor 1, Surface 8, Other Pit 60
<5780(10)-Room 110, Floor 1, Surface 9, Other Pit 45

PII indented corrugated jar
<5754(56)-Room 110, Floor 1, Surface 9, Other Pit 71
<5755(1) -Room 110, Floor 1, Surface 9, Other Pit 72
<5746(236)-Room 110, Floor 1, Surface 9, Other Pit 67
<5737(2) -Room 110, Floor 1, Surface 9, Other Pit 62

PII indented corrugated jar
<5565-66(219)-Room 110, Floor 1, Surface 3, Firepit 1
<5578(2)-Room 110, Floor 1, Other Pit 6

< = sherds fit together.
( ) = number of sherds from provenience.

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Sherd Matches

West Wing

ROOM 233

unknown
<1481(1)-Room 233, Layer 1, Level 1, Test Trench 1
<1483(1)-Room 233, Layer 2, Level 2, Test Trench 1

Puerco Black-on-red bowl
<1483(1)-Room 233, Layer 2, Level 2, Test Trench 1
<1486(1)-Room 233, Layer 3, Level 2, Test Trench 1
<1488(1)-wall clearing inside south wall

Puerco Black-on-white bowl
<1488(2)-wall clearing inside south wall, burned sherd
<1490(2)-wall clearing between Rooms 233 and 230, unburned sherd

Gallup Black-on-white bowl
1488(2)-wall clearing inside south wall
1490(2)-wall clearing between Room 233 and 230

< = sherds fit together.
( ) = number of sherds from provenience.

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Sherd Matches

West Wing

KIVA 15

PII-III Carbon-on-white jar
<5307(1)-Room 109, Layer 2, Level 6, Test Pit 1
<5347(1)-Kiva 15, Layer 7, Test Pit 2
<5450(1)-Kiva 15, vent shaft fill

PII-III Carbon-on-white jar
<5344(1)-Kiva 15, Layer 6, Test Pit 3
<5347(1)-Kiva 15, Layer 7, Test Pit 2

McElmo Black-on-white bowl (San Juan)
<5306(1)-Room 109, Layer 2, Level 5, Test Pit 1
<5328(1)-Kiva 15, Layer 6, Level 8, Test Pit 1
<5331(1)-Kiva 15, Layer 7, Level 11, Test Pit 1
<5343(6)-Kiva 15, Layer 6, Test Pit 2
<5347(9)-Kiva 15, Layer 7, Test Pit 2

Gallup Black-on-white bowl
<5324(2)-Kiva 15, Layer 2-3, Level 4, Test Pit 1
<5326(1)-Kiva 15, Layer 5, Level 6, Test Pit 1

Puerco Black-on-white bowl
<5341(1)-Kiva 15, Layer 5, Test Pit 4
<5344(1)-Kiva 15, Layer 6, Test Pit 3
<5347(1)-Kiva 15, Layer 7, Test Pit 2

Whiteware ladle handle
<5327(1)-Kiva 15, Layer 5, Level 7, Test Pit 1
<5330(2)-Kiva 15, Layer 7, Level 10, Test Pit 1
<5331(1)-Kiva 15, Layer 7, Level 11, Test Pit 1

PII-III indented corrugated jar
5343(118)-Kiva 15, Layer 6, Test Pit 2
5347(240)-Kiva 15, Layer 7, Test Pit 2
5348(2) -Kiva 15, Layer 7, Test Pit 3

Gallup Black-on-white jar
<5344(3)-Kiva 15, Layer 6, Test Pit 3
<5395(1)-Kiva 15, Firepit 2 construction

< = sherds fit together.
( ) = number of sherds from provenience.

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Sherd Matches

West Wing

KIVA 15 (concluded)

Puerco Black-on-white bowl
<5325(1)-Kiva 15, Layer 3, Level 5, Test Pit 1
<5453(1)-Kiva 15, south wall and bench construction and interior fill

Gallup Black-on-white bowl, possible
5329(1)-Kiva 15, Layer 6, Level 9, Test Pit 1
5453(1)-Kiva 15, south wall and bench construction and interior fill

Gallup Black-on-white jar
<5348(3)-Kiva 15, Layer 7, Test Pit 3
<5364(1)-Kiva 15, Floor 1, Grid 9
<5366(1)-Kiva 15, Floor 1, Grid 10
<5371(2)-Kiva 15, Floor 1, Grid 13
<5373(1)-Kiva 15, Floor 1, Grid 14
<5374(1)-Kiva 15, Floor 1, Grid 15
5448(1)-Kiva 15, Floor 1, south bench top

Black Mesa Black-on-white bowl
<5347(12)-Kiva 15, Layer 7, Test Pit 2
<5348(4) -Kiva 15, Layer 7, Test Pit 3
<5349(1) -Kiva 15, Layer 7, Test Pit 4
<5353(2) -Kiva 15, Floor 1, Grid 2
<5370(10)-Kiva 15, Floor 1, Grid 12
5372(5) -Kiva 15, Floor 1, Grid 13
5450(1) -Kiva 15, vent shaft fill

< = sherds fit together.
( ) = number of sherds from provenience.

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Sherd Matches

Plaza 1

Miscellaneous Grids

McElmo Black-on-white jar
5073(2)-Plaza 1, Grid 116, Layer 1, Level 1
5076(1)-Plaza 1, Grid 116, Layer 1, Level 2

Chaco-McElmo Black-on-white ladle handle
4236(1)-Plaza 1, Grid 279 (NW 1/4), Layer 3
4301(1)-Plaza 1, Grid 35 (SW 1/4), Layer 3

Chaco-McElmo Black-on-white bowl
4266(1)-Plaza 1, Grid 175 (SW 1/4), Floor 1
4273(1)-Plaza 1, Grid 175 (SW 1/4), Layer 3
4288(1)-Plaza 1, West of Rooms 183, 188, 189, 192, Layer 2
4309(1)-Plaza 1, Grid 55 (NE 1/4), Layers 3-4

Chaco-McElmo Black-on-white bowl
4297(1)-Plaza 1, Grid 35 (NE 1/4), Layer 3
4309(3)-Plaza 1, Grid 55 (NE 1/4), Layers 3-4
4311(1)-Plaza 1, Grid 55 (SE 1/4), Layer 4

Chuska Black-on-white jar
4235(1)-Plaza 1, Grid 279 (SW 1/4), Floor 1
5076(1)-Plaza 1, Grid 116, Layer 1, Level 2

McElmo Black-on-white bowl
4218(1)-Plaza 1, Grid 29, surface strip Level 1
4257(1)-Plaza 1, Grid 115 (NW 1/4), Layer 3
4291(1)-Plaza 1, Layer 2, North of rooms 198 & 200

McElmo Black-on-white jar
5068(1)-Plaza 1, Grid 307, Test Trench 3, Layer 6, Level 3
5069(1)-Plaza 1, Grid 307, Test Trench 3, Layer 6, Level 3

Escavada Black-on-white bowl
5000(1) -Plaza 1, Grids 302 and 303, Layer 1, Level 1
5044(1)?-Plaza 1, Grid 301, Other Pit 1 fill
5103(1) -Plaza 1, wall clearing south of Grid 302,
"storage bin" (kiva vent?)

Puerco/Escavada Black-on-white bowl
<4245(1)-Plaza 1, Grid 195 (NW 1/4), Layer 3
4259(1)-Plaza 1, Grid 195 (NW 1/4), Layer 3

< = sherds fit together.
( ) = number of sherds from provenience.

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Sherd Matches

Plaza 1

Miscellaneous Grids (continued)

Red Mesa Black-on-white bowl with hematite
4346(1)-Plaza 1, Grid 30, Layer 6, Level 2
5071(1)-Plaza 1, Grid 307, Layer 6, Level 2

Gallup Black-on-white pitcher
4235(1)-Plaza 1, Grid 279 (SW 1/4), Floor 1
4288(1)-Plaza 1, Layer 2, west of Rooms 183, 188, 189, 192

Escavada/Puerco Black-on-white seed jar
4210(1)-Plaza 1, Grid 160, NW corner backhoe pit
5074(1)-Plaza 1, Grid 117, Layer 1, Level 1

Unidentified indented corrugated rim
4311(1)-Plaza 1, Grid 55 (SE 1/4), Layer 4
<5058(1)-Plaza 1, Grid 307, Test Trench 3, Layer 1, Level 2
<5059(1)-Plaza 1, Grid 307, Test Trench 3, Layer 1, Level 3

Narrow neckbanded rim
4349(1)-Plaza 1, Grid 30, Other Pit 1, Level 2
4352(1)-Plaza 1, Grid 30, Other Pit 1, Level 3

Gallup Black-on-white bowl
<4311(1)-Plaza 1, Grid 55 (SE 1/4), Layer 4
<4318(1)-Plaza 1, Grid 272 (SW 1/4), Floor 1

Wingate Black-on-red bowl
4214(1)-Plaza 1, Grid 26, Level 1, surface stripping
4216(1)-Plaza 1, Grid 28, Level 1, surface stripping
5073(1)-Plaza 1, Grid 116, Layer 1, Level 1, Test Trench 3

Gallup Black-on-white jar
4345(1)-Plaza 1, Grid 30 (N 1/4), Test Trench 3, Layer 5
4346(1)-Plaza 1, Grid 30 (N 1/4), Test Trench 3, Layer 6

Red Mesa Black-on-white bowl
4346(2)-Plaza 1, Layer 6, Grid 30, Level 3
4348(1)-Plaza 1, Grid 30, Level 4 of Other Pit 1
4349(1)-Plaza 1, Grid 30, Level 5 of Other Pit 1

< = sherds fit together.
( ) = number of sherds from provenience.

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Sherd Matches

Plaza 1

Miscellaneous Grids (concluded)

Neck indented corrugated
4352(27)-Plaza 1, Grid 30, Level 4 of Other Pit 1
4354(1) -Plaza 1, Grid 30, Level 4 of Other Pit 1
4355(2) -Plaza 1, Grid 30, Level 5 of Other Pit 1

Gallup Black-on-white jar
<5014(1)-Plaza 1, Grid 302, Layer 4, Level 1
<5017(1)-Plaza 1, Grid 302, Surface 4 contact

Kiatuthlanna Black-on-white seed jar
<5030(1)-Plaza 1, Grid 302, Layer 8, Level 1
<5031(1)-Plaza 1, Grid 302, Layer 8, Level 2
<5032(1)-Plaza 1, Grid 302/303, Layer 8, Level 2

Smudged red bowl
<4367(1)-Plaza 1, Grid 35, Test Trench 3, cleaning strat. balk
<4396(1)-Plaza 1, Grid 35, Test Trench 3, Subfloor 10, Layers 3-6

Smudged Red bowl
<4259(3)-Plaza 1, Grid 195 (NW 1/4), Layer 3
<4273(1)-Plaza 1, Grid 175 (SE 1/4), Layer 3

Kiva 12

McElmo Black-on-white bowl
921(1)-Plaza Feature 1, Room 3, Layer 3, Test Pit 4
<4283(2)-Other Structure 6 & Room 193, West wall clearing
<4231(1)-Kiva 12, wall clearing
<4379(1)-Plaza 1, Grid 35, Test Trench 3, Subfloor 5, Layer 2

Mancos/Puerco Black-on-white ladle
4231(1)-Kiva 12, wall clearing
4232(1)-Plaza Feature 4 (kiva), wall clearing
4332(1)-Plaza 1, Grid 277 (NW 1/4), Layer 3

Red Mesa Black-on-white bowl
4231(1)-Kiva 12, wall clearing
4245(1)-Plaza 1, Grid 195 (NE 1/4), Layer 3

< = sherds fit together.
( ) = number of sherds from provenience.

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Sherd Matches

Plaza 1

Kiva 13

Gallup Black-on-white pitcher - restorable
<4225(2) -Kiva 13, Level 3
<4226(3) -Kiva 13, Level 4
<4227(29)-Kiva 13, Level 5
<4228(4) -Kiva 13, Level 6

Mancos Black-on-white bowl
<4226(1)-Kiva 13, Level 4
4228(1)-Kiva 13, Level 6

Chuska Black-on-white bowl
<4226(1)-Kiva 13, Level 4
4228(1)-Kiva 13, Level 6

Red Mesa Black-on-white bowl
<4226(1)-Kiva 13, Level 4
4227(4)-Kiva 13, Level 5

Red Mesa Black-on-white seed jar
<4227(19)-Kiva 13, Level 5
4228(1) -Kiva 13, Level 6

Kiva 14

Chaco-McElmo Black-on-white pitcher
946(1)-Plaza Feature 1, Room 3, Layer 4 floor fill, Grid 17
<4279(1)-Kiva 14, wall clearing
4315(2)-Plaza 1, Grid 75 (NE & SE 1/4), Layer 4

McElmo Black-on-white bowl
<4232(1)-Plaza Feature 4 (kiva), wall clearing
4279(1)-Kiva 14, wall clearing

Chaco-McElmo Black-on-white bowl
<4279(2)-Kiva 14 wall clearing
<4287(1)-Plaza 1, Layer 2, West of Rooms 177, 183, and Kiva 6
4315(2)-Plaza 1, Grid 75 (NE & SE 1/4), Layer 4

Escavada Black-on-white bowl
4279(1)-Kiva 14, wall clearing
4280(1)-Other Structure 6, North wall clearing

PII-III indented corrugated
<4245(1)-Plaza 1, Grid 195 (NE 1/4), Layer 3
4279(1)-Kiva 14, wall clearing

< = sherds fit together.
( ) = number of sherds from provenience.

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Sherd Matches

Plaza 1

Kiva 16

Chaco-McElmo Black-on-white bowl
4196(1)-Kiva 16, Layer 1, Level 2
4201(2)-Kiva 16, Layer 1, Level 2
5058(1)-Plaza 1, Grid 307, Test Trench 3, Layer 1, Level 2
<5073(1)-Plaza 1, Grid 116, Layer 1, Level 1
<5076(1)-Plaza 1, Grid 116, Layer 1, Level 2

Chuska Black-on-white bowl
4196(1)-Kiva 16, Layer 1, Level 2
4197(2)-Kiva 16, Layer 1, Level 2

McElmo Black-on-white ladle
<4196(2)-Kiva 16, Layer 1, Level 2
<4201(2)-Kiva 16, Layer 2, Level 2

Toadlena Black-on-white jar
4195(1)-Kiva 16, Layer 1, Level 1
4196(2)-Kiva 16, Layer 1, Level 2
4200(5)-Kiva 16, Layer 1, Level 1
4201(8)-Kiva 16, Layer 1, Level 2
4260(1)-Plaza 1, Grid 195 (NW 1/4), Floor 1
5057(1)-Plaza 1, Grid 307, Test Trench 3, Layer 1, Level 1
5058(1)-Plaza 1, Grid 307, Test Trench 3, Layer 1, Level 2
5076(2)-Plaza 1, Grid 116, Layer 1, Level 1

Unidentified indented corrugated incised rim
4197(1)-Kiva 16, Grid 96, Layer 1, Level 3
4201(1)-Kiva 16, Grid 116, Layer 1, Level 2

Kiva 17

Escavada Black-on-white bowl (exterior corrugated)
5032(1)-Plaza 1, Grids 302 and 303, Layer 8, Level 2
<5089(1)-Kiva 17, Test Trench 1, Level 2
<5092(1)-Kiva 17, Test Trench 1, Level 3

Chaco Black-on-white jar
4259(1)-Plaza 1, Grid 195 (NW 1/4), Layer 3
5090(1)-Kiva 17, Level 3

Smudged Red bowl
<5024(1)-Plaza 1, Grids 302-303, Layer 6, Level 1
<5089(1)-Kiva 17, Level 2, Test Trench 1
<5092(1)-Kiva 17, Level 5, Test Trench 1

< = sherds fit together.
( ) = number of sherds from provenience.

CHCU_310_D58_VOL 4_00611

Sherd Matches

Plaza 1

Other Structure 6

Toadlena Black-on-white bowl
<4260(2)-Plaza 1, Grid 195 (NW 1/4), Floor 1
<4280(1)-Other Structure 6, North wall, wall clearing

Toadlena Black-on-white bowl
921(1)-Plaza Feature 1, Room 3, Layer 3, Test Pit 4
<4280(2)-Other Structure 6, North wall clearing
<4283(1)-Other Structure 6 & Room 193, West wall clearing
5074(1)-Plaza 1, Grid 117, Layer 1, Level 1

Chaco-McElmo Black-on-white jar
<4283(1)-Other Structure 6 & Room 193, West wall clearing
<4288(1)-Plaza 1, West of Rooms 183, 188, 189, 192, Layer 2

Chaco-McElmo Black-on-white pitcher
4283(1)-Other Structure 6 & Room 193, West wall clearing
<4310(1)-Plaza 1, Grid 55 (NE 1/4), Floor 1
<4362(1)-Plaza 1, Grid 55 (NW 1/4), Subfloor 3, Layer 1

Chaco-McElmo Black-on-white bowl
4259(1)-Plaza 1, Grid 195 (NW 1/4), Layer 3
4283(1)-Other Structure 6 & Room 193, West wall clearing

Gallup Black-on-white bowl
<4283(2)-Other Structure 6 & Room 193, West wall clearing
<4294(1)-Plaza 1, north of Room 197, Layer 2

< = sherds fit together.
( ) = number of sherds from provenience.

CHCU_310_D58_VOL 4_00612

Sherd Matches

Plaza 1

Plaza Feature 1

Chaco-McElmo Black-on-white jar
915(2)-Room 3, Layer 3, Test Pit 2 <
921(1)-Room 3, Layer 3, Test Pit 4

Chaco-McElmo Black-on-white bowl
912(1)-Room 3, Layer 3, Test Pit 1
921(1)-Room 3, Layer 3, Test Pit 4

Puerco Black-on-white bowl
915(2)-Room 3, Layer 3, Test Pit 2
947(1)-Room 3, Layer 4, Grid 18 <
954(2)-Room 3, Layer 4, Grid 24

Indented corrugated rim
922(2)-Room 3, Layer 2, Test Pit 5 <
954(1)-Room 3, Layer 4, Grid 24

Chuska Black-on-white bowl
921(1)-Room 3, Layer 3, Test Pit 4 <
947(1)-Room 3, Layer 3, Grid 17

Indented corrugated jar
922(1)-Room 3, Layer 2, Test Pit 5 <
934(1)-Room 3, Layer 3, Grid 6 <
947(2)-Room 3, Layer 4, Grid 18 <
954(1)-Room 3, Layer 4, Grid 24

Red Mesa Black-on-white bowl
848(1)-Room 3, Grid 18, ramp replasters 1-4
915(4)-Room 3, Layer 3, Test Pit 2
954(1)-Room 3, Layer 4, Grid 24

Chuska Black-on-white bowl
915(1)-Room 3, Layer 3, Test Pit 2 <
928(1)-Room 3, Layer 3, Grid 1 <
951(1)-Room 3, Layer 3, Grid 21

Chaco-McElmo Black-on-white jar (same?)
945(1)-Room 3, Layer 3, Grid 16 <
946(1)-Room 3, Layer 3, Grid 17
941(1)-Room 3, Layer 3, Grid 12 <
918(1)-Room 3, Layer 3, Test Pit 3

< = sherds fit together.
( ) = number of sherds from provenience.

CHCU_310_D58_VOL 4_00613

Sherd Matches

Plaza 1

Plaza Feature 1 (continued)

Whiteware bowl
915(1)→Room 3, Layer 3, Test Pit 2
921(1)→Room 3, Layer 3, Test Pit 4
928(1)→Room 3, Layer 3, Grid 1
943(2)→Room 3, Layer 3, Grid 14
947(1)→Room 3, Layer 4, Grid 18
948(1)→Room 3, Layer 3, Grid 19
949(1)→Room 3, Layer 3, Grid 20

Gallup Black-on-white jar (possible)
837(1)→Room 3, between floor replasterings 2 and 3, Grid 11
838(1)→Room 3, between floor replasterings 1-4, Grid 12

PII-III Carbon-on-white
915(1)→Room 3, Layer 3, Test Pit 2
928(1)→Room 3, Layer 3, Grid 1
986(1)→Room 3, Layer 3, Firepit 1

Chuska Black-on-white jar
946(1)→Room 3, Layer 3, Grid 17
953(2)→Room 3, Layer 4, Grid 23
954(2)→Room 3, Layer 4, Grid 24
985(1)→Room 3, Layer 2, Firepit 1
986(1)→Room 3, Layer 3, Firepit 1

Black Mesa Black-on-white bowl
915(4)→Room 3, Layer 3, Test Pit 2
921(1)→Room 3, Layer 3, Test Pit 4
928(2)→Room 3, Layer 3, Grid 1
930(1)→Room 3, Layer 3, Grid 3
938(2)→Room 3, Layer 3, Grid 9
944(1)→Room 3, Layer 3, Grid 15
967(1)→Room 3, Floor 1, Grid 6
985(1)→Room 3, Layer 2 of Firepit 1
986(2)→Room 3, Layer 3 of Firepit 1

Whiteware rim jar
985(1)→Room 3, Layer 2 of Firepit 1
986(1)→Room 3, Layer 3 of Firepit 1

< = sherds fit together.
( ) = number of sherds from provenience.

CHCU_310_D58_VOL 4_00614

Sherd Matches

Plaza 1

Plaza Feature 1 (continued)

Sosi Black-on-white(?) bowl
915(2)-Room 3, Layer 3, Test Pit 2 <
928(1)-Room 3, Layer 3, Grid 1 <
935(2)-Room 3, Layer 3, Grid 7
943(1)-Room 3, Layer 3, Grid 14
985(2)-Room 3, Layer 2 of Firepit 1 <
996(2)-Room 3, Layer 4 of Firepit 2 <
998(1)-Room 3, Layer 6 of Firepit 2

Puerco Black-on-white bowl
953(1)-Room 3, Layer 4, Grid 23
985(1)-Room 3, Layer 2 of Firepit 1
998(1)-Room 3, Layer 6 of Firepit 2
967(1)-Room 3, Floor, Grid 6
985(1)-Room 3, Layer 2 of Firepit 1

Gallup Black-on-white semi-glaze jar
915(1)-Room 3, Layer 3, Test Pit 2
929(1)-Room 3, Layer 3, Grid 2
937(1)-Room 3, Layer 3, Grid 8
943(1)-Room 3, Layer 3, Grid 14 ?
948(1)-Room 3, Layer 3, Grid 19 ?
949(1)-Room 3, Layer 3, Grid 20 ?
981(1)-Room 3, Other Pit 2 fill ?
985(1)-Room 3, Layer 2 of Firepit 1
994(1)-Room 3, Layer 2 of Firepit 2

Chaco-McElmo Black-on-white bowl
947(1)-Room 3, Layer 3, Grid 17
986(1)-Room 3, Layer 3 of Firepit 1 <
996(1)-Room 3, Layer 4 of Firepit 2 <

St. Johns Black-on-red bowl
941(1)-Room 3, Layer 3, Grid 12
996(1)-Room 3, Layer 4 of Firepit 2

McElmo Black-on-white jar
837(1)-Room 3, Layer 3, Grid 8 <
994(1)-Room 3, Layer 2 of Firepit 2 <

< = sherds fit together.
( ) = number of sherds from provenience.

CHCU_310_D58_VOL 4_00615

Sherd Matches

Plaza 1

Plaza Feature 1 (concluded)

Indented corrugated rim
<947(1)-Room 3, Layer 4, Grid 18
<997(1)-Room 3, Layer 5 of Firepit 2

Puerco Black-on-white bowl
<942(1)-Room 3, Layer 3, Grid 13
<946(3)-Room 3, Layer 4, Grid 17
<947(3)-Room 3, Layer 4, Grid 18
<952(1)-Room 3, Layer 4, Grid 22
<996(2)-Room 3, Layer 4 of Firepit 2
<997(3)-Room 3, Layer 5 of Firepit 2
<998(2)-Room 3, Layer 6 of Firepit 2
<999(2)-Room 3, Layer 7 of Firepit 2

Indented corrugated rim
<808(1)-Room 3, Layer 2 of Firepit 3
<809(1)-Room 3, Layer 3 of Firepit 3

Puerco Black-on-white bowl
812(1)-Room 3, Layer 6 of Firepit 3
814(1)-Room 3, Layer 8 of Firepit 3

Newcomb Black-on-white bowl
986(1)-Room 3, Layer 3, Firepit 1
4212(1)-Plaza 1, Grid 204, SW corner screening backhoe trench
4356(1)-Plaza 1, Grid 30, Other Pit 1, Level 6

Unidentified indented corrugated rim
<915(1)-Room 3, Layer 3, Test Pit 2
<5065(1)-Plaza 1, Grid 307, Layer 5, Level 1

< = sherds fit together.
( ) = number of sherds from provenience.

CHCU_310_D58_VOL 4_00616

Sherd Matches

Plaza 1

Plaza Feature 4

Toadlena Black-on-white jar

4232(4)-Plaza Feature 4 (kiva), wall clearing
<4253(1)-Plaza 1, Grid 276 (SW 1/4), Layer 1
<4257(1)-Plaza 1, Grid 115 (NW 1/4), Layer 3
<4261(1)-Plaza 1, Grid 115 (NE 1/4), Layer 3

Puerco Black-on-white ladle

<4232(1)-Plaza Feature 4 (kiva), wall clearing
<4254(1)-Plaza 1, Grid 276 (SW 1/4), Floor 2

< = sherds fit together.
( ) = number of sherds from provenience.

CHCU_310_D58_VOL 4_00617

Sherd Matches

Trash Mound

Exotic Black-on-white bowl (mineral paint)
4597(1)-Trash Mound, Test Trench 1, Grid 239, Level 10
4588(1)-Trash Mound, Test Trench 1, Grid 267, Level 15

< = sherds fit together.
( ) = number of sherds from provenience.

CHCU_310_D58_VOL 4_00618

Sherd Matches

Plaza 2

Miscellaneous Grids

Escavada Black-on-white jar
3430(1)-Plaza 2, Grid 181 (NE 1/4), Layer 1, Level 1
3431(1)-Plaza 2, Grid 181 (NW 1/4), Layer 1, Level 1
3445(2)-Plaza 2, Grid 161 (SW 1/4), Layer 2, Level 1

McElmo Black-on-white jar
3402(1)-Plaza 2, Grid 221 (N 1/4), Layer 27, Level 2
3404(1)-Plaza 2, Grid 221 (N 1/4), Layer 27, Level 3
3405(1)-Plaza 2, Grid 221 (N 1/4), Layer 27, Level 4
3430(1)-Plaza 2, Grid 181 (NE 1/4), Layer 1, Level 1

Unidentified indented corrugated jar
3445(2) -Plaza 2, Grid 161 (SW 1/4), Layer 2, Level 1
3447(1) -Plaza 2, Grid 161 (SW 1/4), Layer 2, Level 2
3450(21)-Plaza 2, Grid 161 (SW 1/4), Layer 2, Level 2

Puerco Black-on-red bowl
<3410(1)-Plaza 2, Grid 201 (SE 1/4), Layers 2 and 3
<3417(1)-Plaza 2, Grid 201 (SW 1/4), Layer 2, Level 1
<3422(1)-Plaza 2, Grid 201 (NE 1/4), Layer 2, Level 1
<3427(1)-Plaza 2, Grid 181 (SW 1/4), Layer 2, Levels 1 and 2

Tusayan Black-on-red bowl
<3400(2)-Plaza 2, Grids 181, 201, 221, rubble clearing
<3410(1)-Plaza 2, Grid 201 (SE 1/4), Layers 2 and 3
<3417(2)-Plaza 2, Grid 201 (SW 1/4), Layer 2, Level 1

Unidentified PII-III Carbon-on-white bowl
3405(1)-Plaza 2, Grid 221 (N 1/4), Layers 2-7, Level 4
3422(1)-Plaza 2, Grid 201 (NE 1/4), Layer 2, Level 1
3423(1)-Plaza 2, Grid 201 (NW 1/4), Layer 2, Level 1

Puerco Black-on-white jar, checkerboard design
3430(1)-Plaza 2, Grid 181 (NE 1/4), Layer 2, Level 1
3431(1)-Plaza 2, Grid 181 (NW 1/4), Layer 2, Level 1
3445(1)-Plaza 2, Grid 161 (SW 1/4), Layer 2, Level 1

Chuskan PII-III Carbon-on-white jar
3402(1)-Plaza 2, Grid 221 (N 1/4), Layers 2-7, Level 2
3404(1)-Plaza 2, Grid 221 (N 1/4), Layers 2-7, Level 3
3405(1)-Plaza 2, Grid 221 (N 1/4), Layers 2-7, Level 4

< = sherds fit together.
( ) = number of sherds from provenience.

CHCU_310_D58_VOL 4_00619

Sherd Matches

Plaza 2

Miscellaneous Grids (concluded)

Chuskan PII-III Carbon-on-white jar
3405(1)-Plaza 2, Grid 221 (N 1/4), Layers 2-7, Level 4
3430(1)-Plaza 2, Grid 181 (NE 1/4), Layer 2, Level 1 to Surface 1

Chaco-McElmo Black-on-white bowl
3405(2)-Plaza 2, Grid 221 (N 1/4), Layers 2-7, Level 4
3422(1)-Plaza 2, Grid 201 (NE 1/4), Layer 2, Level 1 to Surface 1
3423(1)-Plaza 2, Grid 201 (NW 1/4), Layer 2, Level 1 to Surface 1

< = sherds fit together.
( ) = number of sherds from provenience.

CHCU_310_D58_VOL 4_00620

Sherd Matches

East Ruin

ROOM 6 KIVA

Mancos Black-on-white bowl
3135(1) -Room 6 Kiva, Floor 1, NW Quad
3160(12)-Room 6 Kiva, Floor 1, Other Pit 4 fill
3165(1) -Room 6 Kiva, Floor 2, SE Quad

Puerco? Black-on-white canteen
<3135(11)-Room 6 Kiva, Floor 1, NW Quad
<3139(2) -Room 6 Kiva, Floor 1, NE Quad
<3142(1) -Room 6 Kiva, Floor 1, SE Quad
<3147(1) -Room 6 Kiva, Floor 1, bench fill

Chuska Black-on-white jar
<3106(1)-Room 11, wall clearing
<3111(1)-Court kiva, Level 1
3116(1)-Room 6 Kiva, Level 3, Test Trench 1

< = sherds fit together.
( ) = number of sherds from provenience.

CHCU_310_D58_VOL 4_00621

Microfiche for Chapter 2

Chipped Stone from Pueblo Alto

Catherine M. Cameron

Tables MF-2.1 - MF-2.34

CHCU_310_D58_VOL 4_00622

Table MF '. Red Mesa phase: construction debris.

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	1977 Util/Ret Flakes	1978 Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation					1			1	0.61
					100.00				
					2.78				
Yellow-brown Spotted Chert									
Washington Pass Chert				3	3	5		11	6.67
				27.27	27.27	45.45			
				27.27	8.33	4.35			
Zuni Silicified Wood						2		2	1.21
						100.00			
						1.74			
Obsidian	1				1	1		3	1.82
	100.00				33.33	33.33			
	33.33				2.77	0.86			
High Surface Chert					2	27		29	17.58
					6.90	93.10			
					5.55	23.48			
Cherty Silicified Wood				3	10	26		39	23.64
				7.69	25.64	66.67			
				27.27	27.77	22.61			
Splintery Silicified Wood				1		4		5	3.03
				20.00		80.00			
				9.09		3.48			
Chalcedonic Silicified Wood				1	8	23	1	33	20.00
				3.03	24.24	69.70	3.03		
				9.09	22.22	20.00	100.00		
Quartzite			1	3	3	10		17	10.30
			5.88	17.64	17.64	58.82			
			100.00	27.27	8.33	8.70			
Other Material				1	7	17		25	15.15
				4.00	28.00	68.00			
				9.09	19.44	14.78			
Total	1		1	11	36	115	1	165	
%	0.61		0.61	6.66	21.82	69.70	0.61		100.00

CHCU_310_D58_VOL 4_00623

Table MF .. Red Mesa phase: household debris.

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	1977 Util/Ret Flakes	1978 Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation					2	1		3	0.54
					66.67	33.33			
					3.85	0.21			
Yellow-brown Spotted Chert									
Washington Pass Chert	1			9	3	26		39	7.00
	2.56			23.07	7.69	66.67			
	33.33			45.00	5.76	5.41			
Zuni Silicified Wood						2		2	0.36
						100.00			
						0.42			
Obsidian	1				1	1		3	0.54
	33.33				33.33	33.33			
	3.33				1.92	0.21			
High Surface Chert				1		25		26	4.67
				3.85		96.15			
				5.00		5.20			
Cherty Silicified Wood				3	13	95	1	112	20.11
				2.67	11.61	84.82	0.89		
				15.00	25.00	19.75	100.00		
Splintery Silicified Wood						16		16	2.87
						100.00			
						3.33			
Chalcedonic Silicified Wood				5	22	259		286	51.35
				1.75	7.69	90.56			
				25.00	42.31	53.85			
Quartzite				1	2	24		27	4.85
				3.70	7.41	88.89			
				5.00	3.45	4.99			
Other Material	1			1	9	32		43	7.72
	2.33			2.32	20.93	74.42			
	33.33			5.00	17.31	6.65			
Total	3			20	52	481	1	557	
%	0.54			3.59	9.34	86.36	0.18		100.00

CHCU_310_D58_VOL 4_00624

Tab. F-2.3. Red Mesa phase: Trash Mound (edge).

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation					3		3	2.10
					100.00			
					2.36			
Yellow-brown Spotted Chert								
Washington Pass Chert				2	5		7	4.90
				28.57	71.43			
				18.18	3.94			
Zuni Silicified Wood					1		1	0.70
					100.00			
					0.79			
Obsidian								
High Surface Chert	1				5		6	4.20
	16.67				83.33			
	100.00				3.94			
Cherty Silicified Wood				4	40	1	45	31.47
				8.89	88.89	2.22		
				36.36	31.50	25.00		
Splintery Silicified					14		14	9.79
					100.00			
					11.02			
Chalcedonic Silicified Wood				1	16	1	18	12.59
				5.56	88.89	5.56		
				9.09	12.60	25.00		
Quartzite					15	1	16	11.19
					93.75	6.25		
					11.81	25.00		
Other Material				4	28	1	33	23.08
				12.12	84.85	3.03		
				36.36	22.05	25.0		
Total	1			11	127	4	143	
%	0.70			7.69	88.81	2.80		100.00

CHCU_310_D58_VOL 4_00625

Tab IF-2.4. Red Mesa phase: Trash Mound (interior).

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation				2	7		9	4.97
				22.22	77.78			
				12.50	4.40			
Yellow-brown Spotted Chert								
Washington Pass Chert				6	39		45	24.86
				13.33	86.67			
				37.50	24.53			
Zuni Silicified Wood				1	1		2	1.10
				50.00	50.00			
				6.25	0.63			
Obsidian								
High Surface Chert	2			1	12		15	8.29
	13.33			6.67	80.00			
	66.67			6.25	7.55			
Cherty Silicified Wood				2	32	2	36	19.89
				5.56	88.89	5.56		
				12.50	20.13	66.67		
Splintery Silicified Wood					9		9	4.97
					100.00			
					5.66			
Chalcedonic Silicified Wood				1	17		18	9.94
				5.56	94.44			
				6.25	10.69			
Quartzite				2	18		20	11.05
				10.00	90.00			
				12.50	11.32			
Other Material	1			1	24	1	27	14.92
	3.70			3.70	88.89	3.70		
Total	3			16	159	3	181	
%	1.66			8.84	87.85	1.66		100.00

CHCU_310_D58_VOL 4_00626

Table MF). Red Mesa phase: intentional fill.

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	1977 Util/Ret Flakes	1978 Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation						2		2	0.68
						100.00			
						0.77			
Yellow-brown Spotted Chert									
Washington Pass Chert	1				2	3		6	2.03
	16.67				33.33	50.00			
	33.33				6.45	1.15			
Zuni Silicified Wood						1		1	0.34
						100.00			
						0.38			
Obsidian	1				1			2	0.68
	50.00				50.00				
	33.33				3.23				
High Surface Chert					2	36		38	12.84
					5.26	94.74			
					6.45	13.85			
Cherty Silicified Wood					10	35	1	46	15.54
					21.74	76.09	2.17		
					32.26	13.46	50.00		
Splintery Silicified Wood					1	12		13	4.39
					7.69	92.31			
					3.23	4.62			
Chalcedonic Silicified Wood					9	30		39	13.18
					23.08	76.92			
					29.03	11.54			
Quartzite					3	6		9	3.04
					33.33	66.67			
					9.68	2.31			
Other Material	1				3	135	1	140	47.30
	0.71				2.14	96.43	0.71		
	33.33				9.68	51.92	50.00		
Total	3				31	260	2	296	
%	1.01				10.47	87.84	0.68		100.00

CHCU_310_D58_VOL 4_00627

Table MF . Red Mesa phase: miscellaneous proveniences.

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	1977 Util/Ret Flakes	1978 Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation					1	1		2	0.90
					50.00	50.00			
					3.85	0.56			
Yellow-brown Spotted Chert									
Washington Pass Chert	1			2	4	27		34	15.38
	2.94			5.88	11.76	79.41			
	33.33			16.66	15.38	15.08			
Zuni Silicified Wood				1		2		3	1.36
				33.33		66.67			
				8.33		1.12			
Obsidian	2							2	0.90
	100.00								
	66.67								
High Surface Chert					5	14		19	8.60
					26.32	73.68			
					19.23	7.82			
Cherty Silicified Wood				4	4	43	1	52	23.53
				7.69	7.69	82.69	1.92		
				33.33	15.38	24.02	100.00		
Splintery Silicified Wood						4		4	1.81
						100.00			
						2.23			
Chalcedonic Silicified Wood				1	7	53		61	27.60
				1.64	11.48	86.89			
				8.33	26.92	29.61			
Quartzite					1	7		8	3.62
					12.50	87.50			
					3.85	3.91			
Other Material				4	4	28		36	16.29
				11.11	11.11	77.78			
				33.33	15.38	15.64			
Total	3			12	26	179	1	221	
%	1.36			5.43	11.76	81.00	0.45		100.00

CHCU_310_D58_VOL 4_00628

Tab. MF-2.7. Gallup phase: Room 103, Floor 2.

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation					5		5	7.25
					100.00			
					9.26			
Yellow-Brown Spotted Chert								
Washington Pass Chert				4	5		9	13.04
				44.44	55.56			
Zuni Silicified Wood				3	2	1	6	8.70
				50.00	33.30	16.67		
				23.08	3.70	100.0		
Obsidian								
High Surface Chert					4		4	5.80
					100.00			
					7.41			
Cherty Silicified					1		1	1.45
					100.00			
					1.85			
Splintery Silicified				2	19		21	30.43
				9.52	90.48			
				15.38	35.19			
Chalcedonic Silicified				2	7		9	13.04
				22.20	77.78			
				15.38	12.96			
Quartzite				1	2		3	4.35
				33.30	66.67			
				7.69	3.70			
Other Material			1	1	9		11	15.94
			9.09	9.09	81.82			
			100.00	7.69	16.67			
Total			1	13	54	1	69	
%			1.45	18.84	78.26	1.45		100.00

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Tab. F-2.8. Gallup phase: Room 103, Floor 3.

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation								
Yellow-brown Spotted Chert								
Washington Pass Chert								
Zuni Silicified Wood					1 100.00 2.86		1	2.56
Obsidian			1 100.00 100.00				1	2.56
High Surface Chert								
Cherty Silicified Wood				3 33.30 100.00	6 66.67 17.14		9	23.08
Splintery Silicified Wood					10 100.00 28.57		10	25.64
Chalcedonic Silicified Wood					2 100.00 5.71		2	5.13
Quartzite								
Other Material					16 100.00 45.71		16	41.03
Total			1	3	35		39	
%			2.56	7.69	89.74			100.00

CHCU_310_D58_VOL 4_00630

Tab MF-2.9. Gallup phase: Room 103, Floor 4.

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation					6		6	10.91
					100.00			
					12.00			
Yellow-brown Spotted Chert								
Washington Pass Chert				1	14		15	27.27
				6.67	93.33			
				20.00	28.00			
Zuni Silicified Wood					1		1	1.82
					100.00			
					2.00			
Obsidian								
High Surface Chert					1		1	1.82
					100.00			
					2.00			
Cherty Silicified Wood				1	14		15	27.27
				6.67	93.33			
				20.00	28.00			
Splintery Silicified Wood					3		3	5.45
					100.00			
					6.00			
Chalcedonic Silicified Wood				1	4		5	9.09
				20.00	80.00			
				20.00	8.00			
Quartzite				1	4		5	9.09
				20.00	80.00			
				20.00	8.00			
Other Material				1	3		4	7.27
				25.00	75.00			
				20.00	6.00			
Total				5	50		55	
%				9.09	90.91			100.00

CHCU_310_D58_VOL 4_00631

Tab F-2.10. Gallup phase: Room 110, Layers 1, 2.

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation	1 100.00 100.00						1	2.08
Yellow-brown Spotted Chert				1 100.00 10.00			1	2.08
Washington Pass Chert				1 14.29 10.00	5 71.43 13.89	1 14.29 100.00	7	14.58
Zuni Silicified Wood					1 100.00 2.78		1	2.08
Obsidian								
High Surface Chert				1 25.00 10.00	3 75.00 8.33		4	8.33
Cherty Silicified Wood					4 100.00 11.11		4	8.33
Splintery Silicified Wood				2 16.67 20.00	10 83.33 27.78		12	25.00
Chalcedonic Silicified Wood				2 22.22 20.00	7 77.78 19.44		9	18.75
Quartzite				1 50.00 10.00	1 50.00 2.78		2	4.17
Other Material				2 28.57	5 71.43		7	14.58
Total	1			10	36	1	48	
%	2.08			20.83	75.00	2.08		100.00

CHCU_310_D58_VOL 4_00632

Tab. F-2.11. Gallup phase: Room 110, Floor 1, Surfa 1-3

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation								
Yellow-brown Spotted Chert								
Washington Pass Chert				3 21.42 30.00	10 71.43 38.46	1 7.14 50.00	14	36.84
Zuni Silicified Wood				1 33.33 10.00	1 33.33 3.85	1 33.33 50.00	3	7.89
Obsidian								
High Surface Chert					3 100.00 11.54		3	7.89
Cherty Silicified Wood					1 100.00 3.85		1	2.63
Splintery Silicified Wood				1 20.00 10.00	4 80.00 15.38		5	13.16
Chalcedonic Silicified Wood				1 100.00 10.00			1	2.63
Quartzite				1 25.00 10.00	3 75.00 11.54		4	10.52
Other Material				3 42.86 30.00	4 57.14 15.38		7	18.42
Total				10	26	2	38	
%				26.32	68.42	5.26		100.00

CHCU_310_D58_VOL 4_00633

Tab. F-2.12. Gallup phase: Room 110, Floor 1, Surfa 5-6.

Column number = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation				1 50.00 6.67	1 50.00 2.63		2	3.77
Yellow-brown Spotted Chert								
Washington Pass Chert				11 57.89 73.33	8 42.11 21.05		19	35.85
Zuni Silicified Wood								
Obsidian								
High Surface Chert					5 100.00 13.16		5	9.43
Cherty Silicified Wood				1 100.00 6.67			1	1.89
Splintery Silicified Wood					14 100.00 36.84		14	26.42
Chalcedonic Silicified Wood					1 100.00 2.63		1	1.89
Quartzite					2 100.00		2	3.77
Other Material				2 22.22 13.33	7 77.78 18.42		9	16.98
Total				15	38		53	
%				28.30	71.70			100.00

CHCU_310_D58_VOL 4_00634

Tab IF-2.13. Gallup phase: Room 110, Floor 1, Surfa 7-9.

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation				1	4		5	1.37
				20.00	80.00			
Yellow-brown Spotted Chert								
Washington Pass Chert				32	57	4	93	25.48
				34.41	61.29	4.30		
				37.65	20.73	80.00		
Zuni Silicified Wood				4	101		105	28.77
				3.81	96.19			
				4.71	36.73			
Obsidian								
High Surface Chert					3		3	0.82
					100.00			
					1.09			
Cherty Silicified Wood					3	1	4	1.10
					75.00	25.00		
					1.09	20.00		
Splintery Silicified Wood				9	45		54	14.79
				16.67	83.33			
				10.59	16.36			
Chalcedonic Silicified Wood				2	4		6	1.64
				33.33	66.67			
				2.35	1.45			
Quartzite				18	28		46	12.60
				39.13	60.87			
				21.18	10.18			
Other Material				19	30		49	13.42
				38.78	61.22			
				22.35	10.91			
Total				85	275	5	365	
%				23.29	75.34	1.37		100.00

CHCU_310_D58_VOL 4_00635

Table MI 14. Gallup phase: early Trash Mound.

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	1977 Util/Ret Flakes	1978 Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation				5	1	13		19	5.31
				26.32	5.26	68.42			
				10.63	16.66	4.29			
Yellow-brown Spotted Chert						1		1	0.28
						100.00			
						0.33			
Washington Pass Chert				20	4	119		143	39.94
				13.98	2.79	83.27			
				42.55	66.66	39.27			
Zuni Silicified Wood				1		3		4	1.12
				25.00		75.00			
				2.12		0.99			
Obsidian				1				1	0.28
				100.00					
				2.12					
High Surface Chert						16		16	4.47
						100.00			
						5.28			
Cherty Silicified Wood				6		38	1	45	12.56
				13.33		84.44	2.22		
				12.77		12.54	100.00		
Splintery Silicified Wood				1		24		25	6.98
				4.00		96.00			
				2.12		7.92			
Chalcedonic Silicified Wood				4		25		29	8.10
				13.79		86.21			
				8.51		8.25			
Quartzite				4		34		38	10.61
				10.53		89.47			
				8.51		11.22			
Other Material	1			5	1	30		37	10.34
	2.70			13.51	2.70	81.08			
	100.00			10.63	16.66	9.90			
Total	1			47	6	303	1	358	
%	0.28			13.13	1.68	84.64	0.28		100.00

CHCU_310_D58_VOL 4_00636

Table MF .5. Gallup phase: middle Trash Mound.

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	1977 Util/Ret Flakes	1978 Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation				3	7	43	1	54	4.88
				5.55	12.96	79.63	1.85		
				3.37	7.36	4.74	10.00		
Yellow-brown Spotted Chert						4		4	0.36
						100.00			
						0.44			
Washington Pass Chert				21	34	335	5	395	35.71
				5.32	8.61	84.81	1.27		
				23.59	35.78	36.93	50.00		
Zuni Silicified Wood				1	2	8		11	0.99
				9.09	18.18	72.73			
				1.12	2.11	0.88			
Obsidian									
High Surface Chert	2			2	3	40		47	4.25
	4.26			4.26	6.38	85.11			
	50.00			2.24	3.16	4.41			
Cherty Silicified Wood				8	6	81	1	96	8.86
				8.33	6.25	84.38	1.04		
				8.98	6.32	8.93	10.00		
Splintery Silicified Wood			1	19	17	148		185	16.73
			0.54	10.27	9.19	80.00			
			100.00	21.35	17.89	16.32			
Chalcedonic Silicified Wood				2	7	56	1	66	5.97
				3.03	10.61	84.85	1.52		
				2.25	7.37	6.17	10.00		
Quartzite				21	16	83	2	122	11.04
				17.21	13.11	68.03	1.64		
				23.59	16.84	9.15	20.00		
Other Material	2			12	3	109		126	11.39
	1.59			9.52	2.38	86.51			
	50.00			13.48	3.16	12.02			
Total	4		1	89	95	907	10	1,106	
%	0.36		0.09	8.05	8.59	82.01	0.90		100.00

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Table MF 6. Gallup phase: late Trash Mound.

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	1977 Util/Ret Flakes	1978 Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation	3			13	5	109	3	133	5.64
	2.26			9.77	3.76	81.95	2.26		
	27.27			4.10	7.46	5.66	11.11		
Yellow-brown Spotted Chert						15		15	0.64
						100.00			
						0.78			
Washington Pass Chert		2		47	21	398	5	473	20.08
		0.42		9.94	4.44	84.14	1.06		
		28.57		14.83	31.34	20.65	18.52		
Zuni Silicified Wood				11	2	43	2	58	2.46
				18.97	3.45	74.14	3.45		
				3.47	2.99	2.23	7.41		
Obsidian						4		4	0.17
						100.00			
						0.21			
High Surface Chert	4			9	2	87		102	4.33
	3.92			8.82	1.96	85.29			
	36.36			2.84	2.99	4.51			
Cherty Silicified Wood	1	2		42	5	192	4	246	10.44
	0.41	0.81		17.07	2.03	78.05	1.63		
	9.09	28.57		13.25	7.46	9.96	14.81		
Splintery Silicified Wood				115	16	602		733	31.11
				15.69	2.18	82.13			
				36.28	23.88	31.24			
Chalcedonic Silicified Wood		2		17	2	187	2	210	8.91
		0.95		8.10	0.95	89.05	0.95		
		28.57		5.36	2.99	9.70	7.41		
Quartzite				26	5	113	4	148	6.28
				17.57	3.38	76.35	2.70		
				8.20	7.46	5.86	14.81		
Other Material	3	1		37	9	177	7	234	9.93
	1.28	0.43		15.81	3.85	75.64	2.99		
	27.27	14.29		11.67	13.43	9.19	25.93		
Total	11	7		317	67	1,927	27	2,356	
%	0.47	0.30		13.46	2.84	81.79	1.15		100.00

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Tab IF-2.17. Gallup phase: Kiva 13.

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation				4	9		13	11.50
				30.77	69.23			
				15.38	10.71			
Yellow-brown Spotted Chert								
Washington Pass Chert				2	18		20	17.70
				10.00	90.00			
				7.69	21.43			
Zuni Silicified Wood					1		1	0.88
					100.00			
					1.19			
Obsidian								
High Surface Chert				1	1		2	1.77
				50.00	50.00			
				3.85	1.19			
Cherty Silicified Wood				2	11	1	14	12.39
				14.29	78.57	7.14		
				7.69	13.10	100.00		
Splintery Silicified Wood				2	28		30	26.55
				6.67	93.33			
				7.69	3.33			
Chalcedonic Silicified Wood				2	11		13	11.50
				15.38	84.62			
				7.69	13.10			
Quartzite				7			7	6.19
				100.00				
				26.92				
Other Material	1		1	6	5		13	11.50
	7.69		7.69	46.15	38.46			
	100.00		100.00	23.08	5.95			
Total	1		1	26	84	1	113	
%	0.88		0.88	23.01	74.34	0.88		100.00

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Table MF 18. Gallup phase: Plaza 2.

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	1977 Util/Ret Flakes	1978 Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation	2 66.67 66.67					1 33.33 1.02		3	2.46
Yellow-brown Spotted Chert						2 100.00 2.04		2	1.64
Washington Pass Chert	1 5.26 33.33				4 21.05 26.67	13 68.42 13.27	1 5.26 50.00	19	15.57
Zuni Silicified Wood			1 33.33 100.00			2 66.67 2.04		3	2.46
Obsidian				1 12.50 33.33	2 25.00 13.33	5 62.50 5.10		8	6.56
High Surface Chert					1 14.29 6.67	5 71.43 5.10	1 14.29 50.00	7	5.74
Cherty Silicified Wood				1 4.76 33.33	4 19.04 26.67	16 76.19 16.33		21	17.21
Splintery Silicified Wood						4 100.00 4.08		4	3.28
Chalcedonic Silicified Wood					3 11.54 20.00	23 88.46 23.47		26	21.31
Quartzite				1 16.67 33.33		5 83.33 5.10		6	4.92
Other Material					1 4.35 6.66	22 95.65 22.45		23	18.85
Total	3		1	3	15	98	2	122	
%	2.46		0.82	2.46	12.30	80.33	1.64		100.00

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Table MF 9. Gallup phase: miscellaneous proveniences.

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	1977 Util/Ret Flakes	1978 Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation	1				8	5		14	4.81
	7.14				57.14	35.71			
	16.67				18.60	2.36			
Yellow-brown Spotted Chert					3	2		5	1.72
					60.00	40.00			
					6.98	0.94			
Washington Pass Chert				4	11	34		48	16.49
				8.33	22.92	70.83			
				13.79	25.58	16.04			
Zuni Silicified Wood						8		8	2.75
						100.00			
						3.77			
Obsidian				2		4		6	2.06
				33.33		66.67			
				6.90		1.89			
High Surface Chert	3				3	16		22	7.56
	13.64				13.64	72.73			
	50.00				6.98	7.55			
Cherty Silicified Wood	1			7	5	32		45	15.46
	2.22			15.55	11.11	71.11			
	16.67			24.14	11.63	15.09			
Splintery Silicified Wood				1		14		15	5.15
				6.67		93.33			
				3.45		6.60			
Chalcedonic Silicified Wood	1			5	4	25	1	36	12.37
	2.78			13.89	11.11	69.44	2.78		
	16.67			17.24	9.30	11.79	50.00		
Quartzite				4	5	35		44	15.12
				9.09	11.36	79.55			
				13.79	11.63	16.51			
Other Material				6	4	37	1	48	16.49
				12.50	8.33	77.08	2.08		
				20.69	9.30	17.45	50.00		
Total	6			29	43	212	2	291	
%	2.06			9.97	14.78	72.85	0.69		100.00

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Tab .F-2.20. Late Mix phase: West Roomblock wall fa

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation					1		1	1.61
					100.00			
					2.33			
Yellow-brown Spotted Chert								
Washington Pass Chert				2	14		16	25.81
				12.50	87.50			
				11.11	32.56			
Zuni Silicified Wood					1		1	1.61
					100.00			
					2.33			
Obsidian				3	3		6	9.68
				50.00	50.00			
				16.67	6.98			
High Surface Chert				4			4	6.45
				100.00				
				22.22				
Cherty Silicified Wood				3	13		16	25.81
				18.75	81.25			
				16.67	30.23			
Splintery Silicified Wood								
Chalcedonic Silicified Wood	1			1	7		9	14.52
	11.11			11.11	77.78			
	100.00			5.56	16.28			
Quartzite				1			1	1.61
				100.00				
				5.56				
Other Material				4	4		8	12.90
				50.00	50.00			
				22.22	9.30			
Totals	1			18	43		62	
%	1.61			29.03	69.35			100.00

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Table MF 21. Late Mix phase: West Roomblock roof fall.

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	1977 Util/Ret Flakes	1978 Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation				1	4	7		12	6.00
				8.30	33.33	58.33			
				8.33	8.88	5.11			
Yellow-brown Spotted Chert					2	4		6	3.00
					33.33	66.67			
					4.44	2.92			
Washington Pass Chert				1	13	32	1	47	23.50
				2.13	27.66	68.09	2.13		
				8.33	28.89	23.36	25.00		
Zuni Silicified Wood				3				3	1.50
				100.00					
				25.00					
Obsidian				3	3	2		8	4.00
				37.50	37.50	25.00			
				25.00	6.67	1.46			
High Surface Chert	2			1	3	10	1	17	8.50
	11.76			5.88	17.65	58.82	5.88		
	100.00			8.33	6.67	7.30	25.00		
Cherty Silicified Wood				1	5	24	2	32	16.00
				3.13	15.63	75.00	6.25		
				8.33	11.11	17.52	50.00		
Splintery Silicified Wood						6		6	3.00
						100.00			
						4.38			
Chalcedonic Silicified Wood					10	12		22	11.00
					45.45	54.55			
					22.22	8.76			
Quartzite				1	2	15		18	9.00
				5.56	11.11	83.33			
				8.33	4.44	10.95			
Other Material				1	3	25		29	14.50
				3.45	10.34	86.21			
				8.33	6.67	18.25			
Totals	2			12	45	137	4	200	
%	1.00			6.00	22.50	68.50	2.00		100.00

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Table MF 12. Late Mix phase: West Roomblock room fill.

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	1977 Util/Ret Flakes	1978 Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation				3	3	9		15	8.88
				20.00	20.00	60.00			
						7.56			
Yellow-brown Spotted Chert					1	2		3	1.78
					33.33	66.67			
					3.45	1.68			
Washington Pass Chert				2	11	13		26	15.38
				7.69	42.31	50.00			
				11.11	37.93	10.92			
Zuni Silicified Wood				2	1	5		8	4.73
				25.00	12.50	62.50			
				11.11	3.45	4.20			
Obsidian					2	8		10	5.92
					20.00	80.00			
					6.90	6.72			
High Surface Chert	2				1	9		12	7.10
	16.67				8.33	75.00			
	66.67				3.45	7.56			
Cherty Silicified Wood				6	6	22		34	20.12
				17.65	17.65	64.71			
				33.33	20.69	18.49			
Splintery Silicified Wood						13		13	7.69
						100.00			
						10.92			
Chalcedonic Silicified Wood				1		12		13	7.69
				7.69		92.31			
				5.56		10.08			
Quartzite						10		10	5.92
						100.00			
						8.40			
Other Material	1			4	4	16		25	14.79
	4.00			16.00	16.00	64.00			
	33.33			22.22	13.79	13.45			
Total	3			18	29	119		169	
%	1.78			10.65	17.16	70.41			100.00

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Table MF 3. Late Mix phase: North Roomblock roof fall.

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	1977 Util/Ret Flakes	1978 Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation					4	7		11	2.39
					36.36	63.64			
					7.69	2.44			
Yellow-brown Spotted Chert						3		3	0.80
						100.00			
						1.05			
Washington Pass Chert				6	18	34		58	15.47
				10.34	31.03	58.62			
				27.27	34.62	11.85			
Zuni Silicified Wood					2	2		4	1.07
					50.00	50.00			
					3.85	0.70			
Obsidian				4	8	18		30	8.00
				13.33	26.67	60.00			
				18.18	15.38	6.27			
High Surface Chert	2			2	4	34		42	11.20
	4.76			4.76	9.52	80.95			
	15.38			9.09	7.69	11.85			
Cherty Silicified Wood	2				4	19		25	6.67
	8.00				16.00	76.00			
	15.38				7.69	6.62			
Splintery Silicified Wood					3	22		25	6.67
					12.00	88.00			
					5.77	7.67			
Chalcedonic Silicified Wood	1			2	6	19	1	29	7.73
	3.45			6.90	20.69	65.52	3.45		
	7.69			9.09	11.54	6.62	100.00		
Quartzite						25		25	6.67
						100.00			
						8.71			
Other Material	8			8	3	104		123	32.80
	6.50			6.50	2.43	84.55			
	61.54			36.36	5.77	36.24			
Totals	13			22	52	287	1	375	
%	3.47			5.87	13.87	76.53	0.27		100.00

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Tab. F-2.24. Late Mix phase: West Plaza kivas (Kiva .

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation				3	2		5	1.00
				60.00	40.00			
				5.45	0.46			
Yellow-brown Spotted Chert					10		10	2.00
					100.00			
					2.28			
Washington Pass Chert				1	55		56	11.20
				1.79	98.21			
				1.82	12.56			
Zuni Silicified Wood				1	10		11	2.20
				9.09	90.91			
				1.82	2.28			
Obsidian				1	5		6	1.20
				16.67	83.33			
				1.82	1.14			
High Surface Chert	1		1	4	34	2	42	8.40
	2.38		2.38	9.52	80.95	4.76		
	33.33		100.00	7.27	7.76	66.67		
Cherty Silicified Wood				14	143	1	158	31.60
				8.86	90.51	0.63		
				25.45	32.65	33.33		
Splintery Silicified Wood								
Chalcedonic Silicified Wood				15	107		122	24.40
				12.30	87.70			
				27.27	24.43			
Quartzite				1	8		9	1.80
				11.11	88.89			
				1.82	1.83			
Other Material	2			15	64		81	16.20
	2.47			18.52	79.01			
	66.67			27.27	14.61			
Totals	3		1	55	438	3	500	
%	0.60		0.20	11.00	87.60	0.60		100.00

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Tab F-2.25. Late Mix phase: North Plaza kivas (Kiv).

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation	6			12	13	1	32	2.57
	18.75			37.50	40.63	3.13		
	27.27			2.71	1.69	14.29		
Yellow-brown Spotted Chert				18	33	1	52	4.17
				34.62	63.46	1.92		
				4.06	4.28	14.29		
Washington Pass Chert	2			107	190	1	300	24.08
	0.67			35.67	63.33	0.33		
	9.09			24.15	24.64	14.29		
Zuni Silicified Wood				3	6		9	0.72
				33.33	66.67			
				0.68	0.78			
Obsidian	1			94	33		128	10.27
	0.78			73.44	25.78			
	4.55			21.22	4.28			
High Surface Chert	5	1		31	102		139	11.16
	3.60	0.72		22.30	73.38			
	22.73	33.33		7.00	13.23			
Cherty Silicified Wood		2		27	57	1	87	6.98
		2.30		31.03	65.52	1.15		
		66.67		6.09	7.39	14.29		
Splintery Silicified Wood				20	73		93	7.46
				21.51	78.49			
				4.51	9.47			
Chalcedonic Silicified Wood	2			48	127		177	14.21
	1.13			27.12	71.75			
	9.09			10.84	16.47			
Quartzite				22	28		50	4.01
				44.00	56.00			
				4.97	3.63			
Other Material	6			61	109	3	179	14.37
	3.35			34.08	60.89	1.68		
	27.27			13.77	14.14	42.86		
Totals	22	3		443	771	7	1,246	
%	1.77	0.24		35.55	61.88	0.56		100.00

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Tab] F-2.26. Late Mix phase: East Plaza kivas.

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation					1		1	1.00
					100.0			
					1.27			
Yellow-brown Spotted Chert								
Washington Pass Chert				5	11		16	16.00
				31.25	68.75			
				26.32	13.92			
Zuni Silicified Wood					1		1	1.00
					100.00			
					1.27			
Obsidian					4		4	4.00
					100.00			
					5.06			
High Surface Chert				2	5		7	7.00
				28.57	71.43			
				10.53	6.33			
Cherty Silicified Wood				3	11	1	15	15.00
				20.00	73.33	6.67		
				15.79	13.92	100.00		
Splintery Silicified Wood				2	16		18	18.00
				11.11	88.89			
				10.53	20.25			
Chalcedonic Silicified Wood				1	9		10	10.00
				10.00	90.00			
				5.26	11.39			
Quartzite				1	7		8	8.00
				12.50	87.50			
				5.26	8.86			
Other Material	1			5	14		20	20.00
	5.00			25.00	70.00			
	100.00			26.32	17.72			
Total	1			19	79	1	100	
%	1.00			19.00	79.00	1.00		100.00

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Table MF 7. Late Mix phase: West Plaza.

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	1977 Util/Ret Flakes	1978 Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation				1	1	1		3	2.08
				33.33	33.33	33.33			
				3.70	6.25	1.01			
Yellow-brown Spotted Chert				1		1		2	1.39
				50.00		50.00			
				3.70		1.01			
Washington Pass Chert				4	1	6		11	7.64
				36.36	9.09	54.55			
				14.81	6.25	6.06			
Zuni Silicified Wood				1		1		2	1.39
				50.00		50.00			
				3.70		1.01			
Obsidian				2	2	3		7	4.86
				28.57	28.57	42.86			
				7.41	12.50	3.03			
High Surface Chert				1	1	15	1	18	12.50
				5.56	5.56	83.33	5.56		
				3.70	6.25	15.15	50.00		
Cherty Silicified Wood				7	6	16	1	30	20.83
				23.33	20.00	53.33	3.33		
				25.93	37.50	16.16	50.00		
Splintery Silicified Wood				3	3	12		18	12.50
				16.66	16.66	66.67			
				11.11	18.75	12.12			
Chalcedonic Silicified Wood				3	1	19		23	15.97
				13.04	4.35	82.61			
				11.11	6.25	19.19			
Quartzite				3		5		8	5.56
				37.50		62.50			
				11.11		5.05			
Other Material				1	1	20		22	15.28
				4.55	4.55	90.91			
				3.70	6.25				
Total				27	16	99	2	144	
%				18.75	11.11	68.75	1.39		100.00

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Table F-2.28. Late Mix phase: East Plaza.

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation								
Yellow-brown Spotted Chert					1 100.00 0.47		1	0.40
Washington Pass Chert				2 18.18 5.13	9 81.82 4.25		11	4.37
Zuni Silicified Wood					2 100.00 0.94		2	0.79
Obsidian				3 10.71 7.69	25 89.29 11.79		28	11.11
High Surface Chert				1 10.00 2.56	9 90.00 4.25		10	3.97
Cherty Silicified Wood				9 20.93 23.08	34 79.07 16.04		43	17.06
Splintery Silicified Wood				21 17.80 53.85	97 82.20 45.75		118	46.83
Chalcedonic Silicified Wood				1 4.55 2.56	21 95.45 9.91		22	8.73
Quartzite					5 100.00 2.36		5	1.98
Other Material	1 8.33 100.00			2 16.67 5.13	9 75.00 4.25		12	4.76
Totals	1			39	212		252	
%	0.40			15.48	84.13			100.00

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Table MF 29. Late Mix phase: Plaza 2.

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	1977 Util/Ret Flakes	1978 Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation	2					1		3	0.66
	66.67					33.33			
	28.57					0.25			
Yellow-brown Spotted Chert	1				2	3	1	7	1.54
	14.29				28.57	42.86	14.29		
	14.29				6.45	0.75	3.33		
Washington Pass Chert					7	23	1	31	6.83
					22.58	74.19	3.23		
					22.58	5.76	33.33		
Zuni Silicified Wood					1	1		2	0.44
					50.00	50.00			
					2.22	0.25			
Obsidian	1			5	2	16		24	5.29
	4.17			20.83	8.33	66.67			
	14.29			35.71	6.45	4.01			
High Surface Chert	1				1	15		17	3.74
	5.88				5.88	88.24			
	14.29				3.23	3.76			
Cherty Silicified Wood				4	3	31		38	8.37
				10.53	7.89	81.58			
				28.57	9.68	7.77			
Splintery Silicified Wood					4	189		193	42.51
					2.07	97.93			
					12.90	47.37			
Chalcedonic Silicified Wood				1	2	40		43	9.47
				2.33	4.65	93.02			
				7.14	6.45	10.03			
Quartzite					2	5		7	1.54
					28.57	71.43			
					6.45	1.25			
Other Material	2			4	7	75	1	89	19.60
	2.25			4.49	7.86	84.27	1.12		
	28.57			28.57	22.58	18.80	33.33		
Totals	7			14	31	399	3	454	
%	1.54			3.08	6.83	87.89	0.66		100.00

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Table MF- 0. Late Mix phase: Plaza Feature 1.

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	1977 Util/Ret Flakes	1978 Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation					2	3		5	3.57
					40.00	60.00			
					5.71	3.33			
Yellow-brown Spotted Chert						3		3	2.14
						100.00			
						3.33			
Washington Pass Chert				2	7	14		23	16.43
				8.70	30.43	60.87			
				18.18	20.00	15.56			
Zuni Silicified Wood					2	1		3	2.14
					66.67	33.33			
					5.71	1.11			
Obsidian				2	4	1		7	5.00
				28.57	57.14	14.29			
				18.18	11.43	1.11			
High Surface Chert	1			1	1	12		15	10.71
	6.67			6.67	6.67	80.00			
	33.33			9.09	2.86	13.33			
Cherty Silicified Wood	1			1	2	11		15	10.71
	6.67			6.67	13.33	73.77			
	33.33			9.09	5.71	12.22			
Splintery Silicified Wood						3		3	2.14
						100.00			
						3.33			
Chalcedonic Silicified Wood		1		1	3	13		18	12.86
		5.56		5.56	16.67	72.22			
		100.00		9.09	8.57	14.44			
Quartzite				1	2	8		11	7.86
				9.09	18.18	72.73			
				9.09	5.71	8.89			
Other Material	1			3	12	21		37	26.43
	2.70			8.11	32.43	56.76			
	33.33			27.27	34.29	23.33			
Totals	3	1		11	35	90		140	
%	2.14	0.71		7.86	25.00	64.29			100.00

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Table MF 1. Late Mix phase: Other Structures 4 and 6.

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	1977 Util/Ret Flakes	1978 Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation						2		2	1.18
						100.00			
						1.46			
Yellow-brown Spotted Chert				1	1	2		4	2.35
				25.00	25.00	50.00			
				4.17	16.66	1.46			
Washington Pass Chert				2	2	15		19	11.18
				10.53	10.53	78.95			
				8.33	33.33	10.95			
Zuni Silicified Wood				2	1	1		4	2.35
				50.00	25.00	25.00			
				8.33	16.66	0.73			
Obsidian	1					5	1	7	4.12
	14.29					71.43	14.29		
	100.00					3.65	50.00		
High Surface Chert						16		16	9.41
						100.00			
						11.68			
Cherty Silicified Wood				2		21	1	24	14.12
				8.33		87.50	4.17		
				8.33		15.33	50.00		
Splintery Silicified Wood				8		30		38	22.35
				21.05		78.95			
				33.33		21.90			
Chalcedonic Silicified Wood				2	1	17		20	11.76
				10.00	5.00	85.00			
				8.33	16.66	12.41			
Quartzite				3		8		11	6.47
				27.27		72.73			
				12.50		5.84			
Other Material				4	1	20		25	14.71
				16.00	4.00	80.00			
				16.66	16.66	14.60			
Totals	1			24	6	137	2	170	
%	0.59			14.12	3.53	80.59	1.18		100.00

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Table MF 2. Late Mix phase: miscellaneous proveniences.

Column numbers = Frequency
Row %
Column %

Material Type	Points	Drills	Misc. Tools	1977 Util/Ret Flakes	1978 Util/Ret Flakes	Debitage	Cores	Total n	Total %
Morrison Formation				1	3	7	1	12	3.47
				8.33	25.00	58.33	8.33		
				3.03	3.61	3.27			
Yellow-brown Spotted Chert					3	2		5	1.45
					60.00	40.00			
					3.61	0.93			
Washington Pass Chert				6	16	30	3	55	15.90
				10.91	29.09	54.55	5.45		
				18.18	19.28	14.02	27.27		
Zuni Silicified Wood						4		4	1.16
						100.00			
						1.87			
Obsidian				3	13	5		21	6.07
				14.29	61.90	23.81			
				9.09	15.66	2.34			
High Surface Chert	1			2	6	31	1	41	11.85
	2.44			4.88	14.63	75.61	2.44		
	25.00			6.06	7.23	14.49	9.09		
Cherty Silicified Wood	2	1		5	9	35	3	55	15.90
	3.64	1.82		9.09	16.36	63.64	5.45		
	50.00	100.00		15.15	10.84	16.36	27.27		
Splintery Silicified Wood				3	3	21		27	7.80
				11.11	11.11	77.78			
				9.09	3.61	9.81			
Chalcedonic Silicified Wood				4	14	19	2	39	11.27
				10.26	35.89	48.72	5.13		
				12.12	16.87	8.88	18.18		
Quartzite				4	6	11		21	6.07
				19.05	28.57	52.38			
				12.12	7.23	5.14			
Other Material	1			5	10	49	1	66	19.08
	1.52			7.58	15.15	74.24	1.52		
	25.00			15.15	12.05	22.90	9.09		
Totals	4	1		33	83	214	11	346	
%	1.16	0.29		9.54	23.98	61.85	3.18		100.00

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Table M .33. Field Specimen Numbers Included in Provenie s

Provenience No.	Name	Time-period	Field Specimen No.
1	Wall Clearing	N/A	406 thru 430, 437 thru 460, 554,87,102,549,1265,143,66, 225,198,253,300,580,4287,4288,653,396,4284,4294,4291,555, 539,557,562,563,575,140,166,666,560,662,576,577
2	Rm 50-51	Red Mesa	3028 thru 3032, 3014,2899,2903,2997,6210,3003,6211
3	Rm 103 Wall Fall	Late Mixed	1112,1121,1132,1134
4	Rm 103 Roof Fall	Late Mixed	1133,1135,1151,1154,1069,1016,1124,1072,1126,1156,1136, 1152,1090,1129
5	Rm 103 Fl. 2 Fill	Gallup	1178 thru 1226
6	Rm 103 Fl. 6 Fill	Red Mesa	1428,1429
7	Rm 103 Fl. 1 Fill-Roof&Trash	Late Mixed	1137 thru 1143,1031
8	Rm 103 Fl. 3 Fill	Gallup	1273 thru 1290,1263,1264
9	Rm 103 Fl. 4 Fill	Gallup	1330 thru 1351
10	Rm 103 Fl. 5 Fill	Gallup/Red Mesa	1443,1450,1415
11	Rm 103 Fl. 1	Gallup	1161 thru 1174,1144,1145,1236
12	Rm 103 Fl. 2	Gallup	1237 thru 1253,1227,1231
13	Rm 103 Fl. 3	Gallup	1297 thru 1316,1260,1262
14	Rm 103 Fl. 5	Red Mesa	1451
15	Rm 103 Fl. 4	Gallup	1358 thru 1400
16	Rm 109 Miscellaneous	Late Mixed	5304 thru 5311
17	Rm 109 Roof Fall	Late Mixed	5312
18	Rm 109 Fl. 1	Late Mixed	5316-5318
19	Rm 110 Fl. 1	Gallup	5574-5798,1534-1542,1626,1666,1500,1506,1511,5436,1577, 1581
20	Rm 110 Fill above Fl. 1, Layer 1	Gallup	5465-5471,5399,5400
21	Rm 110 Under Fl. 3	Red Mesa	1614-1621
22	Rm 110 Layer 2	Gallup	5473-5493
23	Rm 110 Fl. 1, Surface 3	Gallup	5524
24	Rm 110 Fl. 1, Surface 6	Gallup	5528-5532
25	Rm 110 Fl. 1, Surf. 7-9	Gallup	5533-5564
26	Rm 110, Fl. 2-3	Gallup	1547-1573,1591,1604
27	Rm 110, Fl. 1	Gallup	5496-5521
28	Rm 112 Wall Fall	Late Mixed	7010, 7002, 7011, 7004
29	Rm 112 Roof Fall	Late Mixed	7018-7054,7058-7086,7006,7008
30	Rm 112	Red Mesa	7180-7221,7129-7256
31	Rm 112	Gallup/RM	7134-7151
32	Rm 112 Fl. 1, Fl. 2	Gallup	7174-7179,7057,7229,7092
33	Rm 138, Roof Fall	Late Mixed	7600-7610,7581,7582,7593,7596,7594,7587,7595,7588
34	Rm 138, Fl. 2 Fill	Red Mesa	7583-7585,7590-7592,7597-7599,7622-7639
35	Rm 139, Wall Fall	Late Mixed	2402,2430,2446,2414,2419,2453,2407,2487
36	Rm 139, Roof Fall	Late Mixed	2422-2427,2432-2436,2447-2449,2455-2486,2489-2504,2410, 2401,2403,2405,2406,2411,2415,2417

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Table MF 13 (continued)

Provenience No.	Provenience Name	Time-period	Field Specimen No.
37	Rm 139, Fill	Unknown	2510
38	Rm 139, Fl. 2	Red Mesa	2613-2647,2593,2596
39	Rm 142, Under Fl. 8	Red Mesa	3092-3097,7500,7511,2862,2863
40	Rm 142, Roof Fall	Late Mixed	2707-2713,2715-2721,2723-2730,2733,2805,2702
41	Rm 142, Wall Fall		2705,2706,2714,2722,2732
42	Rm 142, Fill above Fl. 3	Red Mesa	2864-2869,2877-2889
43	Rm 142, Fill above Fl. 4	Red Mesa	2977-2985,3036,3037,3044,3043,7567
44	Rm 142, Layer 12 abv Fl. 6	Red Mesa	3035,3039,3046,3047
45	Rm 142, Layer 14, Fl. 7 Fill	Red Mesa	3055-3080,7512-7526,7536-7566,3040
46	Rm 142, Fl. 1	Late	2815,2816
47	Rm 142, Fl. 2	Unknown	2912,2851
48	Rm 142, Wall trench, Fl. 2	Gallup	2914
49	Rm 142, Wall trench, debris	Red Mesa	2920-2939,2871-2873
50	Rm 142, Fl. 3	Red Mesa	2907,2908
51	Rm 142, Fl. Features	Red Mesa	2987-2993,3050,7527,3090
52	Rm 143, Wall Fall	Late Mixed	6750-6768,284
53	Rm 143	Gallup	6911-6919,6948,6949,6950,6888,6976,6903,6858
54	Rm 143	Red Mesa	6983-6992,6956,6941,6942,6963,6357,6860,6863,6957
55	Rm 143, Roof Fall	Very Late Mixed	6772-6782
56	Rm 143	Gallup, RM	6928-6933,6875,6878
57	Rm 145, OP 1	Gallup	6892
58	Rm 145, Wall Fall	N/A	2061
59	Rm 145, Roof Fall	Late Mixed	2065-2198
60	Rm 139, Fill bc/Fl. 1 & 2	Red Mesa	2527-2533,2535-2563,2308,2309
61	Rm 139, Layer 10, Fl. 2 Fill	Red Mesa	2464-2590,2655-2659,2534,2310
62	Rm 145, Roof fall, Fill abv Fl. 1	-	2199
63	Rm 139, Fl. 2	Red Mesa	2311-2341
64	Rm 146, Roof Fall	Very Late Mixed	6006-6051
65	Rm 146	Red Mesa	6063-6124,6128-6147
66	Rm 147, Roof Fall	Very Late Mixed	6250-6279,633,6332
67	Rm 147, Trash on Fl.	Late?	6292-6294
68	Rm 147, Fl. 1	Late (Unk)	6296-6313,6341
69	Rm 229, Wall Fall	Gallup	5803-5816,544,5844,5848
70	Rm 229, Fill abv Fl. 1, Roof Fall	Gallup	5819-5835
71	Rm 229	Red Mesa	5878-5902
72	Rm 233, Wall Clearing, Wall Fall	Late Mixed	1480-1490
73	Rm 236	Gallup	6830,6838
74	Rm 236	Red Mesa	6845-6842

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Table MF 13 (continued)

Provenience No.	Name	Time-period	Field Specimen No.
75	Kiva 2, Wall Clearing	Late (Mix?)	179-195,581,467,399,314
76	Kiva 7, Wall Clearing	Gallup/Late	468-470
77	Kiva 8, Wall Clearing	Late	564,566
78	Kiva 9, Wall Clearing	Late	569,568
79	Kiva 10, Top	Mixed	6511-6516,6735,586,588,6737
80	Kiva 10B, Middle Trash	Late Mixed	6500-6509,6517-6519
81	Kiva 10C, Bottom Kiva	Gallup	6510
82	Kiva 12, Wall Clearing	Late Mixed	4231
83	Kiva 14	Late Mixed	4279
84	Kiva 15, Wall Fall	Late (Mix?)	5323,5324
85	Kiva 15, Roof fall	Late (Mix?)	5327-5331,5343-5371,5341
86	Kiva 15, Fl. Features	Late (Mix?)	5449-5462,5391-5397,1683
87	Kiva 16	Late (Carbons)	4195-4201,5096-5100
88	Kiva 17	Late	5088-5093
89	Circular 1 & 2 Structures Wall Clearing	Late Mixed	119,431,4285
90	Plaza 1, Loose's TT Trashed Kiva	Gallup/Late	33,37
91	Plaza 1, Misc. & Wall Clear	Other	4000-4005,69,160,400
92	Plaza Grid 8, Fill abv Fl. 9	Red Mesa	6605-6611,6727
93	Plaza Grid 8, Wall Fall	Mixed	6576-6584,6622-6675,6731
94	Plaza Grid 8, Layer 15	Red Mesa	6613-6621
95	Plaza Grid 8, Fill abv Fl. 8	Red Mesa	6612
96	Plaza Grid 8, OP 2 abv Fl. 6	Red Mesa	6704-6711,6697,6601
97	Mixed Plaza Grids	-	6732-6734,4214-4218,4221,4018
98	Plaza Grid 30 Overlies OP 1 Bird Pit	Red Mesa	4345,4346,5020
99	Plaza Grid 30 OP 1 Bird Pit	Red Mesa	4348-4356
100	Plaza Grid 35	Gallup/RM	4295-4304,4375-4401,4169
101	Plaza Grids	Mixed	4309-4315,4205,4206,4219,4220,4293,4365,4359,4251,4227, 4252,4197,4218,4292,4175,4176,4270,4031
102	Plaza Grid 115	Obsidian conc. Late	4261,4257,4174,4258
103	Plaza Grid 116-117,301, 303,307, Layer 1	Late Mixed	5000-5003,5033-5036,5057-5059,5073-5077,4200,5051,5101
104	Plaza Grid 116-117,301,303 307, Layer 2-4	Gallup/LM	5006-5018,5078,5038,5043,5060
105	Plaza Grid 116-118,301,303, 307, Layer 9	Red Mesa	5070-5072,5086

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Table MF- 53 (continued)

Provenience No.	Name	Time-period	Field Specimen No.
106	Plaza Grid 155, Kiva 13	Gallup trash	4222-4229
107	Plaza Grid 175	Late Mixed	4265-4269,4273,4241,4274
108	Plaza Grid 195	Late Mixed	4245-4247,4181,4180,4259
109	Plaza 1, P.G. 202,203	Red Mesa trash	4034-4041
110	Plaza, Misc. w/Lots wood	Later Gallup?	4317-4345,4234-4239,4043-4051,4212,4275,4253,4263,4248, 4249
111	Plaza Grid 301-303, Layer 5	Gallup	5054
112	Plaza Grid 301-303, Layer 7	Red Mesa	5048,5049,5065
113	Plaza Grid 301-303, OP 7	Red Mesa	5053
114	Plaza Grid 301-303, OP 1	Gallup	5044
115	Plaza Grid 301-303, Layer 8	Red Mesa	5030-5032,5067-5069
116	Plaza Grid 301-303,307	Red Mesa	5054
117	Major Wall 1, Wall clearing	Late Mixed	17-23,476
118	Major Wall 2	-	477-479
119	Major Wall 3	-	494
120	Major Wall 4	-	495,496
121	Major Wall 5	-	616-601
122	Major Wall 6	-	608-612
123	Trash Mound, Surf. Misc. Misc. Grids	Gallup	4730,4516,4643,4500
124	Trash Mound, Test Trench #2	Gallup/RM	4509-4511,4501,4513,4514,4515
125	Trash Mound, Slump 2 Grids 155,183,211	Gallup	4642
126	Trash Mound, Slump 3 Grids 267,295	Gallup	4644
127	Trash Md., Strat. Col. 1	Red Mesa	4630-4640
128	Trash Md., Roberts TT#1 Backdirt 300-364 BDS	-	4657
129	Trash Mound, Slump 1 Grid 990	Gallup	4624
130	Trash Mound	Gallup B/W	4503-4508,4521-4527,4533-4563,4565-4605,4607-4625, 4654-4656,4512,4519,4518,4529,4648,4651
131	Trash Mound	Late Mixed, Gallup (Carbons, McElmo)	4502,4528
132	Trash Mound	Gallup/RD	4530-4532,4645-4647,4517,4520,4649,4650,4652,4653,4659, 4606,4564

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Table MF 33 (concluded)

Provenience No.	Name	Time-period	Field Specimen No.
133	Trash Mound, Backhoe Mound	Red Mesa	4629
134	Trash Mound, Backhoe Trench	Red Mesa	4627
135	Backhoe Trench	Red Mesa	4628
136	Trash Mound, Strat. Col. 2	-	4661-4669,4811,4809,4724
137	Trash Mound, Strat. Col. 3	Gallup	4733-4748,4720,4727,4721
138	Trash Mound, Strat. Col. 4	Gallup	4752-4776
139	Trash Mound, Strat. Col. 5	-	4778-4803
140	Trash Mound, Strat. Col. 6	-	4670-4680,4817,4825
141	Roasting Pit	-	4286
142	Plaza Kiva Feature 4 Wall Clearing	Late Mixed Trash	367,4232,4189
143	Other Structure 4 Wall Clearing	Late Mixed	645-658,169,461
144	Other Structure 4 Wall Clearing	Late	432
145	Other Structure 5 Wall Clearing	-	472,471
146	Other Structure 6 Wall Clearing	Late Mixed	4280-4283,434,591,435
147	Other Structure 7 Wall Clearing	Late Mixed	462,464,532,533
148	Misc. Other Struc. Wall Clearing	Late Mixed	534-539,465,561,562,592
149	Plaza Feature 1, Rm. 3	Late Mixed	912-923,902,3100,908
150	Plaza Feature 1, Rm. 3	Red Mesa	792-794
151	Plaza Feature 1, Rm. 3	Late Mixed	932-974,758,764,796
152	Plaza Feature 1, Rm. 3	Gallup/Late	822-862,976-981,976,980,981
153	Plaza Feature 1, Rm. 3	-	985-996
154	Plaza Feature 1, Rm. 4	Late Mixed	873-887,891-896
155	Plaza Feature 1, Rm. 4	Gallup	712-742,898,888,897
156	Plaza Feature 1, Rm. 5	Gallup	906-9011,797
157	East Ruin, Wall Clearing	Late Mixed	3112,3111,3101,3103
158	East Ruin, Room 6	Gallup	3131,3132,3174,3175
159	East Ruin, Wall Clearing	Late Mix/Gallup	3105-3109,3113
160	East Ruin, Wall Fall	-	3115-3128,3135-3147
161	East Ruin, Wall Fall	-	3149-3162
162	Plaza 2	Late Mix	3400-3651,627,628
163	Parking Lot Ruin	Gallup	630-642
164	No. Trench	Gallup	6550
165	No. Trench	Red Mesa	6551-6553
166	Plaza 2	Gallup	3405-3409,3411-3414,3592-3600,3626-3646,3676-3699,3608, 3493,3623,3796

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Table MF-2.34. Field Specimen Numbers for Reordered Proveniences.

Room 110, Floor 1

Surfaces 1-3: 1577,1626,1637,1646,1662,1666,5436,5447,5577,5581,
5620,5622,5679,5681,5524

Surfaces 4-6: 1581,5528,5529,5530,5531,5532,5574,5592,5599,5644

Surfaces 7-9:
1500,1506,1511,1534,1591,5533,5534,5535,5538,5539,5541,5550,5553,
5554,5555,5557,5558,5559,5560,5562,5563,5564,5596,5608,5609,5610,
5614,5648,5657,5671,5690,5692,5693,5695,5698,5701,5705,5711,5713,
5715,5717,5721,5723,5725,5729,5733,5735,5737,5739,5740,5744,5746,
5748,5754,5755,5756,5757,5766,5780,5786,5788,5792,5794,5798

Trash Mound Strat Columns

Early Trash Mound:
1977: 4512,4518,4505-4507,4521,4522,4529,4533-4537,
4607,4622-4625,4651-4653,4659,4654-4656,4661
1978: 4809,4746-4748

Middle Trash Mound:
1977: 4528,4502-4504,4508,4523,4524,4526,
4538-4541,4617-4620,4612,4545,4608-4611,4613-4616,4602-4606
1978: 4733,4734,4736,4737,4740-4745,4767,
4769-4773,4775,4776,4795-4801,4803

Late Trash Mound:
1977: 4525,4527,4542,4543,4544,4546,4547,4548,4552,
4593,4594,4595,4596,4549,4550,4579-4587,4565-4578,4553,4564,
4670-4680
1978: 4817-4825,4778,4780-4785,4787,4789-4794,
4752-4753,4756,4757,4760,4762,4764

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Microfiche for Chapter 5

The Abraders of Pueblo Alto

Nancy J. Akins

Table MF-5.1

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Table MF-5.1. Pueblo Alto Abraders.

Types:	Active Abraders											Passive Abraders								
Subtypes:	10s	10h	11	12	13	14	15	16	17	18	19	20	21	22	24	25	26	27	28	29
Site general/wall clearing		2																		
Room 51, Struct'l fl. 3		1																		
Room 102, wall clearing												1								
Room 103: Fill		1																		
Layer 1					1						1	8								
Layer 2		13			1						3	15		1					1	
Layer 2, floor fill	1	8	1								1	5								1
Floor 1 association	2	3										5	2							
Layer 3, floor fill		2										1								
Floor 2 association		1																		
Layer 4, floor fill												1								
Floor 3 association		2			1			1				2							1	
Layer 5, floor fill	1	1																		
Floor 4 association																			1	
Layer 6, floor fill																				
Room total	4	31	1		3			1			5	37	2	1					3	1
Room 104 wall clearing																				
Room 107 wall clearing		1										1								
Room 109:																				
Layer 1		2										1	1							
Layers 2 and 3					1															
Layer 3		1																		
Lyrs. 3 and 4 fl. fill	1	1																		
Room total	1	4			1							1	1							
Room 110:																				
Layer 1		1																		
Layer 1, floor fill	1										1	1								
Layer 2, floor fill		1																		
Floor 1 contact		3			1						1	2	1							
Floor 1 association	2	12										2							2	
Layer 5 (Surface 4)		1																		
Layer 7 (Surface 6)		1																		
Layer 10, floor fill		1																		
Room total	3	20			1						2	5	1						2	

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Table MF-5.1. (continued)

Types:	Grooved Abraders				Polishing Stones					Anvils		Sub-	
Subtypes:	30	31	32	33	40	41	42	43	44	50	52	Total	TOTAL
Site general/wall clearing													2
Room 51, Struct'l fl. 3													1
Room 102, wall clearing													1
Room 103: Fill												1	
Layer 1										3		13	
Layer 2	1				1					8		44	
Layer 2, floor fill											1	18	
Floor 1 association										1		13	
Layer 3, floor fill												3	
Floor 2 association												1	
Layer 4, floor fill												1	
Floor 3 association										1		8	
Layer 5, floor fill										1		3	
Floor 4 association												1	
Layer 6, floor fill										1		1	
Room total	1				1					15	1		107
Room 104 wall clearing										1			1
Room 107 wall clearing													2
Room 109:													
Layer 1												4	
Layers 2 and 3											1	2	
Layer 3												1	
Lyrs. 3 and 4 fl. fill												2	
Room total											1		9
Room 110:													
Layer 1										1		2	
Layer 1, floor fill												3	
Layer 2, floor fill												1	
Floor 1 contact							1			4		13	
Floor 1 association										2		20	
Layer 5 (Surface 4)												1	
Layer 7 (Surface 6)												1	
Layer 10, floor fill												1	
Room total							1			7			42

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Table MF-5.1. (continued)

Types:	Active Abraders											Passive Abraders								
Subtypes:	10s	10h	11	12	13	14	15	16	17	18	19	20	21	22	24	25	26	27	28	29
Room 112:																				
Layer 2		1			1															
Layer 3												2								
Layer 3, floor fill		2	1																	
Floor 1 association		1																		
Layer 5			1																	
Layer 5, floor fill		1										1								
Layer 7	1																		1	
Room total	1	5	2		1							3							1	
Room 119 wall clearing					1															
Room 127 wall clearing															1					
Room 135 wall clearing					1															
Room 137 wall clearing												1								
Room 138 wall clearing			1																	
Room 139:																				
Layer 1								1				1								
Layer 3				1				1				1								
Layer 4																	1			
Layer 6																			1	
Layer 6, floor fill												1								
Layer 10, floor fill												1								
Floor 2 association													1							
Room total				1				2				4	1				1		1	
Room 142:																				
Layer 3	1	1										1	1						1	
Layer 4		1			1															
Layer 5				1								1								
Layer 6		1	1									1							1	
Layer 6, floor fill		1										1								
Floor 2 association												1								
Room total	1	4	1	1	1							5	1						2	
Room 143:																				
Layer 1		1			1						2	1								
Layer 2, floor fill		1										1								
Floor 1 association		1									1									
Layer 8, floor fill		1																		
Floor 2 association		1																		
Room total		5			1						3	2								

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Table MF-5.1. (continued)

Types:	Grooved Abraders				Polishing Stones					Anvils			
Subtypes:	30	31	32	33	40	41	42	43	44	50	52	Sub	TOTAL
Room 112:													
Layer 2												2	
Layer 3												2	
Layer 3, floor fill												3	
Floor 1 association												1	
Layer 5												1	
Layer 5, floor fill										1		3	
Layer 7												2	
Room total										1			14
Room 119 wall clearing												1	1
Room 127 wall clearing												1	1
Room 135 wall clearing												1	1
Room 137 wall clearing					1							2	2
Room 138 wall clearing												1	1
Room 139:													
Layer 1												2	
Layer 3										1		4	
Layer 4												1	
Layer 6	1											2	
Layer 6, floor fill	1											2	
Layer 10, floor fill												1	
Floor 2 association												1	
Room total	2									1			13
Room 142:													
Layer 3												5	
Layer 4												2	
Layer 5												2	
Layer 6												4	
Layer 6, floor fill												2	
Floor 2 association												1	
Room total													16
Room 143:													
Layer 1												5	
Layer 2, floor fill										1		3	
Floor 1 association												2	
Layer 8, floor fill												1	
Floor 2 association												1	
Room total										1			12

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Table MF-5.1. (continued)

Types:	Active Abraders											Passive Abraders								
Subtypes:	10s	10h	11	12	13	14	15	16	17	18	19	20	21	22	24	25	26	27	28	29
Room 145:																				
Layer 7, floor fill											1	2								
Floor 1 association																				
Layer 10, floor fill		1																		
Room total		1									1	2								
Room 146:																				
Wall clearing																				
Layer 2											1	1								
Layer 3												1								
Layer 5			1																	
Floor 3 association	1	1																		
Room total	1	1	1								1	2								
Room 147:																				
Wall clearing		2																		
Layer 2		2										1	1							
Layer 2, floor fill		1																		
Layer 5, floor fill																		1		
Room total		5										1	1					1		
Room 150 wall clearing					1															
Room 152 wall clearing		1																		
Room 153 wall clearing											1									
Room 166 wall clearing												1								
Room 173 wall clearing												1								
Room 177 wall clearing		3	1									1								
Room 178 wall clearing		1																		
Room 181 wall clearing												1								
Room 183 wall clearing		3										1								
Room 186 wall clearing								1								1				
Room 188 wall clearing					1															
Room 193 wall clearing												1								
Room 197 wall clearing		2			1															
Room 198 wall clearing		1			1															
Room 200 wall clearing		1			1							2			1					
Room 201 wall clearing																				
Room 207 wall clearing					1			2												
Room 208 wall clearing	1	1			1															
Room 210 wall clearing		1						1				2								

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Table MF-5.1. (continued)

Types:	Grooved Abraders				Polishing Stones					Anvils			
Subtypes:	30	31	32	33	40	41	42	43	44	50	52	Sub	TOTAL
Room 145:													
Layer 7, floor fill												3	
Floor 1 association										1		1	
Layer 10, floor fill												1	
Room total										1			5
Room 146:													
Wall clearing		1										1	
Layer 2												2	
Layer 3												1	
Layer 5												1	
Floor 3 association												2	
Room total		1											7
Room 147:													
Wall clearing												2	
Layer 2												4	
Layer 2, floor fill												1	
Layer 5, floor fill												1	
Room total													8
Room 150 wall clearing													1
Room 152 wall clearing													1
Room 153 wall clearing													1
Room 166 wall clearing													1
Room 173 wall clearing													1
Room 177 wall clearing													5
Room 178 wall clearing													1
Room 181 wall clearing													1
Room 183 wall clearing										1			5
Room 186 wall clearing													2
Room 188 wall clearing	1	1											3
Room 193 wall clearing													1
Room 197 wall clearing													3
Room 198 wall clearing													2
Room 200 wall clearing													5
Room 201 wall clearing										1			1
Room 207 wall clearing													3
Room 208 wall clearing													3
Room 210 wall clearing													4

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Tabl F-5.1. (continued)

Types:	Active Abraders											Passive Abraders								
Subtypes:	10s	10h	11	12	13	14	15	16	17	18	19	20	21	22	24	25	26	27	28	29
Room 212 wall clearing					1							1								
Room 213 wall clearing	3	1										1								
Room 215 wall clearing		1						1			2	1								
Room 216 wall clearing		1									1	1								
Room 218 wall clearing		2			1															
Room 219 wall clearing		1									1									
Room 220 wall clearing		1			1															
Room 221 wall clearing		1										1								
Room 222 wall clearig		2										2								
Room 229:																				
Layer 1		1			1															
Layer 4	1																			
Room total	1	1			1															
Room 230 wall clearing	1																			
Room 232 wall clearing		1																		
Room 233 wall clearing		1			1															
Room 236:																				
Floor 3 association		1																		
Floor 4 association		1																	1	
Room total		2																	1	
Kiva 2 wall clearing		1										5								
Kiva 5 wall clearing												1								
Kiva 6 wall clearing		1																		
Kiva 7 wall clearing																	1			
Kiva 8 wall clearing		2			1							1								
Kiva 9 wall clearing												1								
Kiva 10:																				
Level 14		1																		
Level 16		1										1								
Level 17				1		1														
Level 18		4			1			1				2								
Level 19		1		1								2								
Level 20			1		1							1								
Level 21																				
Level 22		4										1								
Level 23														1						
Level 24	1	2					2													
Level 25		2				1						1					1			
Level 26		4												1					1	
Level 27		2										1								
Room total	1	21	1	2	2	2	2	1				9		2			1		1	

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Table MF-5.1. (continued)

Types:	Grooved Abraders				Polishing Stones					Anvils		Sub	TOTAL
Subtypes:	30	31	32	33	40	41	42	43	44	50	52		
Room 212 wall clearing													2
Room 213 wall clearing			1							1			7
Room 215 wall clearing													5
Room 216 wall clearing													3
Room 218 wall clearing													3
Room 219 wall clearing													2
Room 220 wall clearing													2
Room 221 wall clearing													2
Room 222 wall clearig													4
Room 229:													
Layer 1												2	
Layer 4												1	
Room total													3
Room 230 wall clearing					1								2
Room 232 wall clearing													1
Room 233 wall clearing					1						1		4
Room 236:													
Floor 3 association												1	
Floor 4 association												2	
Room total													3
Kiva 2 wall clearing										1			7
Kiva 5 wall clearing													1
Kiva 6 wall clearing													1
Kiva 7 wall clearing										1			2
Kiva 8 wall clearing	2												6
Kiva 9 wall clearing													1
Kiva 10:													
Level 14												1	
Level 16												2	
Level 17											1	3	
Level 18												8	
Level 19												4	
Level 20												3	
Level 21										1		1	
Level 22	1											6	
Level 23	1											2	
Level 24												5	
Level 25												5	
Level 26										1		7	
Level 27										1		4	
Room total	2									3	1		51

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Table MF-5.1. (continued)

Types:	Active Abraders											Passive Abraders								
Subtypes:	10s	10h	11	12	13	14	15	16	17	18	19	20	21	22	24	25	26	27	28	29
Kiva 12 wall clearing		1																		
Kiva 13:																				
Level 3		1																		
Level 5	1																			
Level 6					1															
Room total	1	1			1															
Kiva 14 wall clearing		2																		
Kiva 15:																				
Layer 1		1										1								
Layer 3			1																	
Layer 4																				
Layer 6												2								
Layer 7		4									2									
Layer 7, floor fill		1																		
Wall construction		5		1	1							6	1							
Room total		11	1	1	1						2	9	1							
Kiva 16:		1				1						3								
Level 1												1								
Level 2	2	1										3								
Level 3																				
Room total	2	2				1						7								
Kiva 17, level 1		1																		
Circ. Struc. 1, wall cl.		1									1									
Circ. Struc. 2, wall cl.					1							1								
Plaza 1, general	1	1		1								1								
Plaza Grid 8:																				
Layer 1													1							
Layer 2																1				
Surface 2 association		1																		
Surf. 4 fill (1y.9)		1																		
Layer 15		5		1							1	1							1	
Grid total		7		1							1	1	1			1			1	
Plaza Grid 9, layer 4		1																		
Plaza Grid 25, layer 1												1								
Plaza Grid 29, layer 1		1																		
Pl. Gr. 30, s. 3, o.p.1	2	1					1													

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Table MF-5.1. (continued)

Types:	Grooved Abraders				Polishing Stones					Anvils			
Subtypes:	30	31	32	33	40	41	42	43	44	50	52	Sub	TOTAL
Kiva 12 wall clearing													1
Kiva 13:													
Level 3												1	
Level 5												1	
Level 6												1	
Room total													3
Kiva 14 wall clearing										1			3
Kiva 15:													
Layer 1										1	1	4	
Layer 3												1	
Layer 4										1		1	
Layer 6												2	
Layer 7	1											7	
Layer 7, floor fill												1	
Wall construction										5		19	
Room total	1									7	1		35
Kiva 16:	1											6	
Level 1												1	
Level 2											1	7	
Level 3													
Room total	1										1		14
Kiva 17, level 1													1
Circ. Struc. 1, wall cl.	1												3
Circ. Struc. 2, wall cl.													2
Plaza 1, general													4
Plaza Grid 8:													
Layer 1										1		2	
Layer 2										1		2	
Surface 2 association												1	
Surf. 4 fill (1y.9)												1	
Layer 15												9	
Grid total										2			15
Plaza Grid 9, layer 4										1			2
Plaza Grid 25, layer 1													1
Plaza Grid 29, layer 1													1
Pl. Gr. 30, s. 3, o.p.1													4

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Table MF-5.1. (continued)

Types:	Active Abraders											Passive Abraders								
Subtypes:	10s	10h	11	12	13	14	15	16	17	18	19	20	21	22	24	25	26	27	28	29
Plaza Grid 35:																				
Layer 1		2										2								
Layer 2																				
Layer 3		1		1								2								
Layer 4																				
Surf. 4 association											2	1	1							
Surf. 8 association																				
Grid total		3		1							2	5	1							
Plaza Grid 38:																				
Layer 1												1								
Layer 2												1								
Plaza Grid 51, layer 1		1										1								
Plaza Grid 55:																				
Layer 4		1																		
Surface 1	1																			
Plaza Grid 75:																				
Layer 3												1								
Surface 1							1							1						
Plaza Grid 95, surface 1												1								
Plaza Grid 115: layer 2					1			1												
Plaza Grid 116:																				
Layer 1		2																		
Layer 8		1																		
Plaza Grid 117: layer 1												1								
Plaza Grid 135: layer 2	1																			
Plaza Grid 175:																				
Layer 3, floor fill																				
Layer 4													1							
Plaza Grid 195:																				
Layer 2																				
Surface 1																				
Plaza Grid 202: layer 4																				
Plaza Grid 204: layer 1												1								
Plaza Grid 273:																				
Layer 3												1								
Layer 4		1																		
Surface 1		1																		

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ble MF-5.1. (continued)

Types:	Grooved Abraders				Polishing Stones					Anvils			
Subtypes:	30	31	32	33	40	41	42	43	44	50	52	Sub	TOTAL
Plaza Grid 35:													
Layer 1												4	
Layer 2										1		1	
Layer 3										1		5	
Layer 4	1											1	
Surf. 4 association												4	
Surf. 8 association					1							1	
Grid total	1				1					2			16
Plaza Grid 38:													
Layer 1													1
Layer 2													1
Plaza Grid 51, layer 1													2
Plaza Grid 55:													
Layer 4													1
Surface 1													1
Plaza Grid 75:													
Layer 3													1
Surface 1													2
Plaza Grid 95, surface 1													1
Plaza Grid 115: layer 2													2
Plaza Grid 116:													
Layer 1													2
Layer 8													1
Plaza Grid 117: layer 1													1
Plaza Grid 135: layer 2										1			2
Plaza Grid 175:													
Layer 3, floor fill										1			1
Layer 4													1
Plaza Grid 195:													
Layer 2					1								1
Surface 1										1			1
Plaza Grid 202: layer 4					1								1
Plaza Grid 204: layer 1													1
Plaza Grid 273:													
Layer 3													1
Layer 4										1			2
Surface 1													1

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Table MF-5.1. (continued)

Types:	Active Abraders											Passive Abraders								
Subtypes:	10s	10h	11	12	13	14	15	16	17	18	19	20	21	22	24	25	26	27	28	29
Plaza Grid 274: layer 3																				
Plaza Grid 275: layer 3																				
Plaza Grid 280:																				
Layer 3, floor fill																				
Plaza Grid 301:																				
Layer 6		2																		
Surface 6												1								
Plaza Grid 302:																				
Layer 1		2																		
Layer 2, floor fill					1															
Layer 3												1								
Layer 6, floor fill		1																		
Layer 8		1																		
Grid Total		4			1							1								
Plaza Grid 307:																				
Layer 1	1																			
Layer 5	1																			
Layer 6		1																		
Layer 7																				
Grid Total	2	1																		
Major wall 1, wall clearing																				
Major wall 2, wall clearing		1																		
Major wall 3, wall clearing		2																		
Major wall 4, wall clearing	1											1								
Major wall 6, wall clearing																				
Plaza feature 4, w. c.	1											1								
O. S. 3, wall clearing		2																		
O. S. 3, layer 1																				
O. S. 4, wall clearing		2			1							3					1			
O. S. 5, wall clearing		1																		
O. S. 6, wall clearing		10			7			1			1	11								
O. S. 7, wall clearing	1	2										3	1		1					
O. S. 8, wall clearing		3																		
O. S. 9, wall clearing		1										2								
O. S. 11, wall clearing		1									1	2								
O. S. 12, wall clearing		1			3							2								
Plaza Feature 1, O T. T. 1, layer 2												2								

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T. MF-5.1. (continued)

Types:	Grooved Abraders				Polishing Stones					Anvils			
Subtypes:	30	31	32	33	40	41	42	43	44	50	52	Sub	TOTAL
Plaza Grid 274: layer 3										1			1
Plaza Grid 275: layer 3										1			1
Plaza Grid 280:													
Layer 3, floor fill										1			1
Plaza Grid 301:													
Layer 6													2
Surface 6													1
Plaza Grid 302:													
Layer 1												2	
Layer 2, floor fill												1	
Layer 3												1	
Layer 6, floor fill												1	
Layer 8												1	
Grid Total													6
Plaza Grid 307:													
Layer 1												1	
Layer 5												1	
Layer 6												1	
Layer 7					1							1	
Grid Total					1								4
Major wall 1, wall clearing	1												1
Major wall 2, wall clearing													1
Major wall 3, wall clearing		1											3
Major wall 4, wall clearing													2
Major wall 6, wall clearing										1			1
Plaza feature 4, w. c.													2
O. S. 3, wall clearing													2
O. S. 3, layer 1										1			1
O. S. 4, wall clearing										2			9
O. S. 5, wall clearing													1
O. S. 6, wall clearing										3			33
O. S. 7, wall clearing	1												9
O. S. 8, wall clearing		1								1			5
O. S. 9, wall clearing													3
O. S. 11, wall clearing													4
O. S. 12, wall clearing				1						1			8
Plaza Feature 1, 0 T. T. 1, layer 2										1			3

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Table F-5.1. (continued)

Types:	Active Abraders											Passive Abraders								
Subtypes:	10s	10h	11	12	13	14	15	16	17	18	19	20	21	22	24	25	26	27	28	29
Room 3:																				
Layer 2		1																		
Layer 3	1	5										1								
Layer 3, floor fill																				
Layer 4, floor fill					1			1												
Floor 1 association					1															
Replasters 2-4								1												
Room Total	1	6			2			2				1								
Room 4:																				
Layer 2		4											1							
Layer 6				1																
Layer 12, floor fill		1																		
Room Total		5		1									1							
Room 5, layer 1	1																			
East Ruin, Room 14:																				
Layer 1			1																	
Layer 2					1															
Layer 2, floor fill		2	1																	
Floor 1 association													1							
Room Total		2	2		1								1							
Plaza 2:																				
Grid 5, layer 4																				
Grid 161, layer 2, floor fill		1																		
Grid 181, layer 2, floor fill		1																		
Grid 181, surface 1												1								
Grid 182, layer 2												1								
Grid 182, layer 2, floor fill																				
Grid 201, layer 4												1								
Grid 201, layer 8	1																			
Grid 201, surface 1																	1			
Grid 221, layer 2		1																		
Grid 221, surface 2	1																			
Plaza 2 Total	2	3										3					1			
Parking Lot Ruin:																				
Room 1, layer 1		1																		
Room 4, wall clearing																				

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Table MF-5.1. (continued)

Types:	Grooved Abraders				Polishing Stones					Anvils			
Subtypes:	30	31	32	33	40	41	42	43	44	50	52	Sub	TOTAL
Room 3:													
Layer 2												1	
Layer 3					2					1		10	
Layer 3, floor fill										1		1	
Layer 4, floor fill	1											3	
Floor 1 association											1	2	
Replasters 2-4												1	
Room Total	1				2					2	1		18
Room 4:													
Layer 2										1		6	
Layer 6												1	
Layer 12, floor fill												1	
Room Total										1			8
Room 5, layer 1													1
East Ruin, Room 14:													
Layer 1												1	
Layer 2					1							2	
Layer 2, floor fill					1					1		5	
Floor 1 association					1							2	
Room Total					3					1			10
Plaza 2:													
Grid 5, layer 4										1		1	
Grid 161, layer 2, floor fill												1	
Grid 181, layer 2, floor fill	1											2	
Grid 181, surface 1												1	
Grid 182, layer 2												1	
Grid 182, layer 2, floor fill	1											1	
Grid 201, layer 4												1	
Grid 201, layer 8												1	
Grid 201, surface 1												1	
Grid 221, layer 2												1	
Grid 221, surface 2												1	
Plaza 2 Total	2									1			12
Parking Lot Ruin:													
Room 1, layer 1													1
Room 4, wall clearing										1			1

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Table MF-5.1. (continued)

Types:	Active Abraders										Passive Abraders								
Subtypes:	10s	10h	11	12	13	14	15	16	17	18	19	20	21	22	24	25	26	27	28	29
Trash Mound, grid 52:																				
Surface												1								
Fill	1																		1	
Grid Total	1											1							1	
Trash Mound, grid 53																				
Layer 3		1	1									3								
Layer 4	1																		1	
Layer 6		1																		
Layer 10												1								
Layer 16	1																			
Grid Total	2	2	1									4							1	
Trash Mound, grid 54																				
Layer 2	1																			
Layer 9	1																			
Layer 15	1	1																		
Layer 16		1						1												
Layer 17	2	2										1								
Grid Total	5	4						1				1								
Trash Mound, grid 55:																				
Layer 3	1	1																		
Layer 5		3																		
Layer 6	1																			
Layer 17												1								
Layer 19					1															
Layer 21					1									1						
Grid Total	2	4			2							1		1						
Trash Mound, grid 56:																				
Layer 96																				
Layer 103		1																		
Layer 113	1	1																		
Grid Total	1	2																		
Trash Mound, grid 70:																				
Level 2			2									1								
Level 4												1								
Level 10																				
Grid Total			2									2								
Trash Mound, grid 127, Layer 5												1								

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Table MF-5.1. (continued)

Types:	Grooved Abraders				Polishing Stones					Anvils			
Subtypes:	30	31	32	33	40	41	42	43	44	50	52	Sub	TOTAL
Trash Mound, grid 52:													
Surface												1	
Fill												2	
Grid Total													3
Trash Mound, grid 53													
Layer 3												5	
Layer 4										1		3	
Layer 6												1	
Layer 10												1	
Layer 16												1	
Grid Total										1			11
Trash Mound, grid 54													
Layer 2												1	
Layer 9												1	
Layer 15												2	
Layer 16												2	
Layer 17												5	
Grid Total													11
Trash Mound, grid 55:													
Layer 3												2	
Layer 5												3	
Layer 6												1	
Layer 17												1	
Layer 19												1	
Layer 21												2	
Grid Total													10
Trash Mound, grid 56:													
Layer 96	1											1	
Layer 103												1	
Layer 113												2	
Grid Total	1												4
Trash Mound, grid 70:													
Level 2												3	
Level 4										1		2	
Level 10										1		1	
Grid Total										2			6
Trash Mound, grid 127, Layer 5													1

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Tabl F-5.1. (continued)

Types:	Active Abraders											Passive Abraders								
Subtypes:	10s	10h	11	12	13	14	15	16	17	18	19	20	21	22	24	25	26	27	28	29
Trash Mound, grid 155																				
Level 1	1																			
Level 6											1									
Level 9																				
Level 16		1																		
Grid Total	1	1									1									
TM, grid 163, level 2		1																		
Trash Mound, grid 183																				
Level 2		1																		
Level 3												1								
Level 4		1																		
Level 7		1										1								
Level 8		1																		
Level 9		1																		
Level 11		1																		
Level 13	1																			
Level 16		1																		
Grid Total	1	7										2								
Trash Mound, grid 211:																				
Level 3												1								
Level 4		1																		
Level 6		1																		
Level 9												1								
Level 12					1															
Level 16				1																
Level 17			1																	
Grid Total		2	1	1	1							2								
Trash Mound, grid 239																				
Level 3		1																		
Level 5		2																		
Level 7	1			1																
Level 8												1								
Level 10		1										1								
Level 11		1										1								
Level 13	1	1																		
Level 16												1								
Level 17												1								
Level 19		1																		
Grid Total	2	7										5								

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Table MF-5.1. (continued)

Types:	Grooved Abraders				Polishing Stones					Anvils			
Subtypes:	30	31	32	33	40	41	42	43	44	50	52	Sub	TOTAL
Trash Mound, grid 155													
Level 1												1	
Level 6												1	
Level 9											1	1	
Level 16												1	
Grid Total											1		4
TM, grid 163, level 2													1
Trash Mound, grid 183													
Level 2												1	
Level 3	1											1	
Level 4	1											2	
Level 7												2	
Level 8												1	
Level 9												1	
Level 11												1	
Level 13												1	
Level 16												1	
Grid Total	2												12
Trash Mound, grid 211:													
Level 3												1	
Level 4												1	
Level 6										1		2	
Level 9												1	
Level 12												1	
Level 16												1	
Level 17												1	
Grid Total										1			8
Trash Mound, grid 239													
Level 3												1	
Level 5												2	
Level 7												2	
Level 8												1	
Level 10												2	
Level 11												2	
Level 13												2	
Level 16												1	
Level 17												1	
Level 19												1	
Grid Total													15

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Table MF-5.1. (continued)

Types:	Active Abraders											Passive Abraders								
Subtypes:	10s	10h	11	12	13	14	15	16	17	18	19	20	21	22	24	25	26	27	28	29
Trash Mound, grid 267:																				
Level 6												2								
Level 8		1																		
Level 14					1															
Level 15	1																			
Level 17	1											1								
Level 18																				
Grid Total	2	1			1							3								
Trash Mound, grid 295																				
Level 6					1															
Level 8																				
Level 10			1																1	
Level 12	1																			
Level 13		1	1																	
Level 16																				
Level 17	1																			
Grid Total	2	1	2		1														1	
Trash Mound, grid 323:																				
Level 8												1								
Level 12																				
Level 14		1																		
Level 16		1																		
Level 18		1																		
Grid Total		3										1								
TM, grid 328, level 14			1																	
Backhoe grids 99-127		3					2					1								
Backhoe grids 43 and 71	1	6										2	1							
Backhoe grids 267, 295, and 325			1									1							1	
Slump no. 2	3	3		1	5							2								
TOTAL	58	271	19	12	54	3	6	14			26	194	15	5	3	2	6		16	1

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Table MF-5.1. (concluded)

Types:	Grooved Abraders				Polishing Stones					Anvils			
Subtypes:	30	31	32	33	40	41	42	43	44	50	52	Sub	TOTAL
Trash Mound, grid 267:													
Level 6												2	
Level 8												1	
Level 14												1	
Level 15												1	
Level 17												2	
Level 18											1	1	
Grid Total											1		8
Trash Mound, grid 295													
Level 6												1	
Level 8							1					1	
Level 10												2	
Level 12												1	
Level 13												2	
Level 16											1	1	
Level 17												1	
Grid Total							1				1		9
Trash Mound, grid 323:													
Level 8												1	
Level 12											1	1	
Level 14												1	
Level 16												1	
Level 18										1		2	
Grid Total										1	1		6
TM, grid 328, level 14													1
Backhoe grids 99-127													6
Backhoe grids 43 and 71										3	1		14
Backhoe grids 267, 295, and 325													3
Slump no. 2					2								16
TOTAL	18	4	1	1	17		2			79	12		839

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Microfiche for Chapter 6

Ornaments and Minerals from Pueblo Alto

Frances Joan Mathien

Tables MF-6.1 - MF-6.7

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Table MF-6.1. Artifacts by provenience, 29SJ 389 (Pueblo Alto).

Provenience	FS No.	No.	Material	No.	Type	Dating (A.D.)
Room 50, Subfloor 1, Rodent hole, Ly 2	3014	1	Glycymeris	1	Brac fr.	920-1020
Room 50, fill above Floor 2, Ly 2	3053	1	Selenite	1	Unm.	920-1020
Room 50, Subfl. 1, test	6363	1	Glycymeris	1	Bead	920-1020
Room 51, Floor 3, Ly 3	3006	1	Galena	1	Unm.	920-1020
Room 51, Floor 3, HP 2	3020	1	F. shell impression	1	-	920-1020
		1	Shale	1	Bead	920-1020
Room 51, Floor 3, OP 5&6	3026	1	Shale	1	Bead	920-1020
Room 51, Floor 3, OP 7	3029	2	Selenite	2	Unm.	920-1020
Room 101, N. wall clear.	65	1	Azurite	1	Unm.	920-1220
Room 102, Outside TT, wall clear.	547	1	Selenite	1	Unm.	920-1220
Room 103, backdirt	5457	1	Turquoise	1	Bead	920-1220
Room 103, TP 1, Ly 2, Lv 2	1071	2	Limonite	1	Mod.	920-1220
				1	Unm.	920-1220
		2	Mica-Mus.[a]	2	Unm.	920-1220
		1	Hematite	1	Mod.	920-1220
Room 103, TP 1, Ly 2, Lv 3	1072	3	Mica-Mus.	3	Unm.	920-1220
		1	Selenite	1	Unm.	920-1220
Room 103, TP 1, Ly 2, Lv 4	1083	1+	Mineral[b]	1+	Unk.	920-1220
Room 103, TP 1, Ly 2, Lv 6	1140	1	Hematite	1	Mod.	920-1220
		1	Azurite	1	Mod.	920-1220
Room 103, TP 2, Ly 2, Lv 5	1039	1	Selenite	1	Unm.	920-1220
Room 103, TP 3, Ly 2, Lv 1	1123	1+	Mineral[b]	1+	Unk.	920-1220
Room 103, TP 3, Ly 2, Lv 2	1124	4	Mica-Mus.	4	Unm.	920-1220
Room 103, TP 3, Ly 2, Lv 3	1125	3	Mica-Mus.	3	Unm.	920-1220
Room 103, TP 3, Ly 2, Lv 4	1126	3	Mica-Mus.	3	Unm.	920-1220
		1	Selenite	1	Unm.	920-1220
Room 103, TP 3, Ly 2, Lv 5	1129	1	Calcite	1	Bead	920-1220
Room 103, TP 3, Ly 2, Lv 1-4	1149	1	Limonite	1	Unm.	920-1220
		2	Mica-Mus.	2	Unm.	920-1220
Room 103, TP 5, Ly 1	1132	1	Selenite	1	Unm.	920-1220
		1	Copper	1	Bell	920-1220
Room 103, TP 5, Ly 2	1133	2	Selenite	1	Zoom.	920-1220
				1	Unm.	920-1220
Room 103, TP 5, Ly 2, Lv 5	1138	1	Mica-Mus.	1	Unm.	920-1220
Room 103, TP 5, Ly 2, Lv 4	1156	1	Malachite	1	Mod.	920-1220
		3	Mica-Mus.	2	Unm.	920-1220
				1	Mod.	
Room 103, TP 6, Ly 2, Lv 6	1137	5	Mica-Mus.	5	Unm.	920-1220

[a] Muscovite.
[b] Artifact unavailable for analysis.

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Table MF-6.1. (continued)

Provenience	FS No.	No.	Material	No.	Type	Dating (A.D.)
Room 103, TP 7, Ly 1, Lv 5	1150	1	Glycymeris	1	Brac.fr.	920-1220
Room 103, TP 7, Ly 2, Lv 1-3, Fl. 1	1151	15	Selenite	15	Unm.	920-1220
		2	Mica-mus.[a]	2	Unm.	920-1220
Room 103, TP 7, Ly 2, Lv 4	1152	1	Selenite	1	Mod.	920-1220
Room 103, TP 7, Ly 2, Lv 6	1141	3	Selenite	3	Unm.	920-1220
Room 103, TP 7, Ly 2, Lv 6	1142	1	Haliotus cr.	1	Other	920-1220
Room 103, TP 8, Ly 2, Lv 1-3	1154	4	Mica-mus.	1	Unm.	920-1220
		1	Hematite	1	Mod.	920-1220
		3	Selenite	3	Unm.	920-1220
Room 103, TP 8, Ly 2, Lv 4	1155	1	Limonite	1	Mod.	920-1220
		2	Selenite	2	Unm.	920-1220
		1	Mica-Mus.	1	Unm.	920-1220
Room 103, TP 8, Ly 2, Lv 6, Feature above Fl. 1	1143	1	Haliotus cr.	1	Other	920-1220
		2	Azurite	2	Mod.	920-1220
		1	Selenite	1	Unm.	920-1220
Room 103, Grid 11, TP 6 Ly 2, Lv 4	1136	1	Limonite	1	Other	920-1220
Room 103, Fl. 1, OP 4	1173	1	Selenite	1	Zoom.	1020-1120
Room 103, Fl. 1, contact	1144	1	Turquoise	1	Inlay	1020-1120
		1	Shale ?	1	Ring	1020-1120
		5	Calcite	5	Beads	1020-1120
		2	Azurite	2	Unm.	1020-1120
Room 103, Fl. 1, HP 3	1147	1	Calcite	1	Bead	1020-1120
Room 103, Fl. 1, OP 1	1236	1	Azurite	1	Unm.	1020-1120
Room 103, Fl. 1, HP 1	1145	2	Mica-Mus.	2	Unm.	1020-1120
Room 103, Fl. 1, OP 7	1161	3	Selenite	3	Unm.	1020-1120
Room 103, Fl. 2 fill, below OP 3	1179	1	Selenite	1	Unm.	1020-1120
Room 103, Fl. 2, Ly 3	1206	1	Turquoise	1	Pend.	1020-1120
Room 103, Fl. 2, Ly 3	1207	2	Turquoise	2	Beads	1020-1120
Room 103, Fl. 2, Ly 3	1214	1	Azurite	1	Unm.	1020-1120
Room 103, Fl. 2, Ly 3	1217	1	Azurite	1	Unm.	1020-1120
Room 103, Fl. 2, Ly 3	1219	3	Selenite	3	Unm.	1020-1120
		1	Azurite	1	Unm.	1020-1120
Room 103, Fl. 2, Ly 3	1224	1	Limonite	1	Mod.	1020-1120
Room 103, Fl. 2, Ly 3	1225	1	Azurite	1	Unm.	1020-1120
Room 103, Fl. 2, contact	1233	1	Shale, black	1	Bead	1020-1120
Room 103, Fl. 2, contact	1235	1	Turquoise	1	Bead	1020-1120
Room 103, Fl. 2, OP 2, fill	1251	2	Calcite	2	Beads	1020-1120
Room 103, Fl. 3. Ly 4	1276	2	Selenite	2	Unm.	1020-1120
Room 103, Fl. 3, Ly 4	1280	1	Selenite	1	Unm.	1020-1120
Room 103, Fl. 3, Ly 4	1287	1+	Mineral[b]	1+	Unk.	1020-1120

[a] Muscovite.
[b] Artifact unavailable for analysis.

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Table MF-6.1. (continued)

Provenience	FS No.	No.	Material	No.	Type	Dating (A.D.)
Room 103, Fl. 3, Ly 4	1290	3	Selenite	3	Unm.	1020-1120
		1	Argillite	1	Bead	1020-1120
Room 103, Fl. 3, contact	1291	1	Turquoise	1	Bead	1020-1120
Room 103, Fl. 3, St.assn.	1292	1	Bone	1	Gaming piece	1020-1120
Room 103, Fl. 4, Ly 5	1352	4	Shale, black	4	Beads	1020-1120
Room 103, Fl. 4, Ly 5	1331	1	F shell imp.			1020-1120
Room 103, Fl. 4, contact	1329	1	Calcite	1	Bead	1020-1120
Room 103, Fl. 4, contact	1339	4	Shale	4	Beads	1020-1120
Room 103, Fl. 4, contact	1403	1	Shale	1	Bead	1020-1120
Room 103, Fl. 5, Ly 6	1447	2	Shale, black	2	Beads	1020-1120
Room 104, Fl. 2, Surface	357	1	Shale	1	Bead	Not dated
Room 109, TP 1, Lv 1	5302	1	Other fossil	1	Unk.	920-1220
Room 109, TP 2, Ly 2	5311	1	Gypsite	1	Unm.	920-1220
Room 109, TP 2, Ly 3	5312	1	Azurite	1	Unm.	920-1220
Room 110, Wall clearing	605	1	Turquoise	1	Unm.	Not dated
Room 110, Ly 1	5467	1	Selenite	1	Pend.	1020-1120
Room 110, Ly 2	5476	1	Gypsite	1	Unm.	1020-1120
Room 110, Ly 5	5525	2	Calcite	2	Beads	1020-1120
Room 110, Ly 6	5529	1	Olivella dama	1	Bead	1020-1120
Room 110, Ly 7	5531	1	Azurite	1	Mod.	1020-1120
Room 110, Ly 9	5562	1	Calcite	1	Bead	1020-1120
Room 110, Fl. 1, contact	5495	1	Turquoise	1	Inlay	1020-1120
Room 110, Fl. 1, constr.	5510	1	Selenite	1	Unm.	1020-1120
Room 110, Fl. 1, constr.	5521	1	Selenite	1	Unm.	1020-1120
Room 110, Fl. 1, contact	5506	1	Selenite	1	Unm.	1020-1120
Room 110, Fl. 1, contact	1536	1	Calcite	1	Bead	1020-1120
Room 110, Fl. 1, contact	1539	2	Selenite	1	Mod.	1020-1120
				1	Unm.	1020-1120
Room 110, Fl. 1, Meal.bin	1521	1	Olivella dama	1	Bead	1020-1120
Room 110, Fl. 1, OP 1, Ly 1	5741	1	Limonite	1	Unm.	1020-1120
Room 110, Fl. 1, OP 1	5577	1	Gypsite	1	Unm.	1020-1120
Room 110, Fl. 1, OP 9	5581	1	Hematite	1	Unm.	1020-1120
Room 110, Fl. 1, OP 24	5599	1	Calcite	1	Bead	1020-1120
Room 110, Fl. 1, OP 42	5701	2	Gypsite	2	Unm.	1020-1120
Room 110, Fl. 1, OP 59	5731	1	Gypsite	1	Unm.	1020-1120
Room 110, Fl. 1, OP 70	5752	1	Calcite	1	Bead	1020-1120
Room 110, Fl. 1, HP 14	5671	1	Shale, black	1	Bead	1020-1120
Room 110, Fl. 1, HP 15	5673	1+	Mineral[b]	1+	Unk.	1020-1120
Room 110, Fl. 1, PH 15	5638	1	Hematite	1	Mod.	1020-1120
Room 110, Fl. 1, WN 4, Ly 3	1626	1	Olivella dama	1	Bead	1020-1120
Room 110, Fl. 1, WN 4, Ly 6	1629	1	Selenite	1	Unm.	1020-1120

[b] Artifact unavailable for analysis.

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Table MF-6.1. (continued)

Provenience	FS No.	No.	Material	No.	Type	Dating (A.D.)
Room 110, Fl. 1, WN 10, Ly 2	1643	1	Chama ech.	1	Pend.	1020-1120
Room 110, Fl. 1, WN 15	1646	1	Hematite	1	Mod.	1020-1120
Room 112, TT 2, Ly 3, Lv 2	7017	1	Hematite	1	Mod.	920-1220
Room 112, TT 4, Ly 3	7025	1	Bone	1	Ring	920-1220
Room 112, TT 5, Ly 3	7028	1	F. shell imp.	1	-	920-1220
Room 112, TT 5, Ly 3A	7029	1	Selenite	1	Unm.	920-1220
Room 112, TT 5, Ly 4	7030	1	Glycymeris	1	Brac fr.	920-1220
Room 112, Ly 3, Lv 2	7063	1	Azurite	1	Mod.	920-1220
Room 112, Ly 3	7078	1	Calcite	1	Bead	920-1220
Room 112, Ly 7	7205	1	Glycymeris	1	Brac.fr.	920-1020
Room 112, Ly 8, Lv 1	7221	1	Glycymeris	1	Brac.fr.	920-1020
Room 112, Ly 8, Lv 1, rodent hole	7245	4	Glycymeris	4	Brac.fr.	920-1020
Room 112, Ly 8, Lv 1	7246	1	Glycymeris	1	Brac.fr.	920-1020
		1	Selenite	1	Zoom.	920-1020
Room 112, WN 2, Ly 2	7092	1	Turquoise	1	Pend.	1020-1120
Room 112, Gr. 10, below Fl. 1	7112	1	Turquoise	1	Inlay	1020-1120
Room 112, Gr. 16, below Fl. 1	7123	1	Turquoise	1	Unm.	1020-1120
Room 112, Gr. 24, Fl 2, Ly 6	7170	1	Limonite	1	Unm.	1020-1120
Room 112, Fl. 2, fill	7174	1	Argillite	1	Mod.	1020-1120
Room 112, Surface 3, rodent hole	7253	1	Azurite	1	Unm.	920-1020
Room 114, E. wall clear.	127	2	Aragonite	2	Unm.	920-1220
Room 138, Ly 2, Lv 4	7603	2	Azurite	2	Unm.	920-1220
		3	Mica-Mus.[a]	3	Unm.	920-1220
		1	Turquoise	1	Mod.	920-1220
Room 138, Ly 2, Lv 4	7606	1	Azurite	1	Unm.	920-1220
Room 138, Ly 2, Lv 4	7610	1	Limonite	1	Unm.	920-1220
Room 138, wall trench, Fl. 1, feature	7615	1	Selenite	1	Unm.	1020-1120
Room 138, wall trench 2, Fl. 2	7648	1	Turquoise	1	Mod.	920-1020
Room 139, Lv 7	2405	1	Hematite	1	Unm.	920-1220
		1	Gypsite	1	Unm.	920-1220
Room 139, Lv 10	2408	1	Hematite	1	Unm.	920-1220
Room 139, Lv 12	2410	1	Limonite	1	Unm.	920-1220
Room 139, Ly 6, Lv 3	2418	1	Calcite	1	Mod.	920-1220
Room 139, Ly 6, Lv 3	2425	1	Calcite	1	Mod.	920-1220
Room 139, Ly 9, Lv 1	2304	3	Sharks' teeth	3	Unm.	920-1220
Room 139, Ly 9, Lv 2	2536	1	Shark's tooth	1	Unm.	920-1220

[a] Muscovite.

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Table MF-6.1. (continued)

Provenience	FS No.	No.	Material	No.	Type	Dating (A.D.)
Room 139, Ly 9, Lv 2	2537	1	Shark's tooth	1	Unm.	920-1020
Room 139, Ly 9, Lv 2	2550	3	Sharks' teeth	3	Unm.	920-1020
Room 139, Ly 9, Lv 2	2555	1	Limonite	1	Mod.	920-1020
Room 139, Fl. 2, Ly 10	2569	1	Selenite	1	Unm.	920-1020
		1	Turquoise	1	Mod.	920-1020
Room 139, Fl. 2, Ly 10	2574	1	Turquoise	1	Bead	920-1020
Room 139, Fl. 2, Ly 10	2578	1	Gypsite	1	Unm.	920-1020
Room 139, Fl. 2, Ly 10	2580	1	Glycymeris	1	Brac.fr.	920-1020
Room 139, Fl. 2, Ly 10	2586	1	Galena	1	Mod.	920-1020
Room 139, Fl. 2, Ly 10	2587	1	Bone	1	Gm.pc.	920-1020
Room 139, Fl. 2, Ly 10	2590	1	Selenite	1	Unm.	920-1020
Room 139, Fl. 2, Ly 10	2310	1	Turquoise	1	Mod.	920-1020
		1	Hematite	1	Mod.	920-1020
Room 139, Fl. 2	2311	1	Shark's tooth	1	Unm.	920-1020
Room 139, Fl. 2	2341	3	Calcite	3	Unm.	920-1020
Room 139, Fl. 2, FP 2	2315	3	Selenite	3	Unm.	920-1020
Room 139, Fl. 2, OP 1	2319	7	Lignite	7	Unm.	920-1020
		1	Limonite	1	Mod.	920-1020
Room 139, Fl. 2, PH 1	2635	1+	Lignite[b]	1+	Unk.	920-1020
Room 142, Ly 4, Lv 1	2728	1+	Jet[b]	1+	Unk.	920-1220
Room 142, Ly 4, Lv 2	2729	1	Calcite	1	Mod.	920-1220
Room 142, Ly 4, Lv 7	2711	1	Calcite	1	Mod.	920-1220
Room 142, Ly 4, Lv 8	2712	1	Calcite	1	Mod.	920-1220
Room 142, Ly 5, Lv 4	2732	1	Turquoise	1	Inlay	920-1220
		1	Chama ech.	1	Inlay	920-1220
Room 142, Ly 5, Lv 10	2714	99	Turquoise	90	Inlay	920-1220
				6	Deb.	920-1220
				3	Zoom In.	920-1220
		26	Lignite	6	Inlay	920-1220
				20	Unm.	920-1220
		11	Argillite	11	Inlay	920-1220
		8	Chama ech.	8	Inlay	920-1220
Room 142, Ly 5, Lv 11	2715	12	Turquoise	12	Inlay	920-1220
		1	Olivella dama	1	Pend.bl.	920-1220
		3	Chama ech.	3	Inlay	920-1220
		2	Argillite	2	Inlay	920-1220
Room 142, Ly 6, Lv 1	2723	10	Turquoise	10	Inlay	920-1220
		2	Argillite	2	Inlay	920-1220
		1	Calcite	1	Inlay	920-1220
		1	Lignite	1	Unid.	920-1220
Room 142, Ly 6, Lv 4	2733	1	Shark's tooth	1	Unm.	920-1220
Room 142, Ly 6, Lv 4	2748	1	Turquoise	1	Inlay	920-1220
Room 142, Ly 6, Lv 5	2734	1	Turquoise	1	Pend.bl.	920-1220
Room 142, Ly 6, Lv 5	2805	1	Selenite	1	Unm.	920-1220
Room 142, Ly 6, Lv 6	2756	1	Serpentine	1	Ring	920-1220

[b] Artifact unavailable for analysis.

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Table MF-6.1. (continued)

Provenience	FS No.	No.	Material	No.	Type	Dating (A.D.)
Room 142, Ly 6, Lv 6	2767	1	Mica-Mus.[a]	1	Unm.	920-1220
Room 142, Ly 6, Lv 6	2780	3	Hematite	3	Unm.	920-1220
Room 142, Ly 6, Lv 6	2789	1	Mica-Mus.	1	Unm.	920-1220
Room 142, Ly 6, Lv 6	2799	1	Calcite	1	Mod.	920-1220
Room 142, Fl. 1, contact	2815	1	Limonite	1	Unm.	920-1220
		2	Argillite	2	Unm.	920-1220
Room 142, Fl. 1, contact	2816	1	Limonite	1	Unm.	920-1220
Room 142, Tr. 1, below Fl. 2	2920	1	Shale	1	Bead	920-1020
Room 142, Tr. 2, below Fl. 2	2914	18	Shale	18	Beads	920-1020
Room 142, Fl. 3, Ly 7	2864	1	Shark's tooth	1	Unm.	920-1020
Room 142, Fl. 3, Ly 8	2881	1	Selenite	1	Unm.	920-1020
Room 142, Fl. 3, Ly 8	2889	1	Argillite	1	Pend.bl.	920-1020
		1	Turquoise	1	Deb.	920-1020
Room 142, Fl. 3, HP 1	2907	1	Shale	1	Bead	920-1020
Room 142, Fl. 4, HP 2, Ly 3	2993	1	Limonite	1	Mod.	920-1020
		1	Argillite	1	Unm.	920-1020
		1	Turquoise	1	Unm.	920-1220
Room 142, Fl. 5, Ly 11	3037	1	Selenite	1	Mod.	920-1020
Room 142, Fl. 6, Ly 13	3043	1	Argillite	1	Inlay	920-1020
Room 142, Fl. 6, Ly 12	3048	1	Selenite	1	Mod.	920-1020
Room 143, Gr. 13, Door 13, Step	6350	1	Turquoise	1	Deb.	1020-1120
Room 143, TT 6, Ly 1, Lv 2	6768	1	Selenite	1	Mod.	920-1220
Room 143, TT 1, Ly 1, Lv 6	6751	1	Calcite	1	Mod.	920-1220
Room 143, TT 1, Ly 1, Lv 6	6752	1	Calcite	1	Inlay	920-1220
Room 143, TT 3, Ly 1, Lv 8	6762	3	Selenite	3	Unm.	920-1220
Room 143, Gr. 8, Fl. 1, Ly 2	6779	1	Azurite	1	Ball	920-1220
Room 143, Gr. 8, Fl. 1	6781	1	Spond. p. u.	1	Other	920-1220
		1	Turquoise	1	Unm.	920-1220
Room 143, Gr. 13, Fl. 1, Ly 2	6782	1	Glycymeris	1	Brac.fr.	920-1220
Room 143, Fl. 1, Ly 2	6776	1	Azurite	1	Unm.	920-1220
Room 143, Fl. 1, Ly 2	6780	1	Gypsite	1	Mod.	920-1220
		1	Calcite	1	Mod.	920-1220
Room 143, Fl. 1	6797	1	Turquoise	1	Mod.	1020-1120
Room 143, Fl. 1, W.Tr.	6880	8	Gypsite	8	Unm.	1020-1120
Room 143, Fl. 2, contact	6977	2	Turquoie	2	Deb.	1020-1120
Room 143, Fl. 2, OP 1	6892	2	Gypsite	2	Unm.	1020-1120
Room 143, Fl. 4, fill	6858	1	Turquoise	1	Unm.	1020-1120
Room 143, Fl. 5, Ly 9	6921	7	Selenite	7	Unm.	1020-1120
Room 143, Fl. 6, Ly 7	6918	1	Selenite	1	Unm.	1020-1120

[a] Muscovite.

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Table MF-6.1. (continued)

Provenience	FS No.	No.	Material	No.	Type	Dating (A.D.)
Room 143, Fl. 6, Ly 8	6927	1	Lignite	1	Unm.	1020-1120
		2	Selenite	2	Unm.	1020-1120
Room 143, Fl. 6, Ly 10	6873	3	Gypsite	3	Unm.	1020-1120
Room 143, Fl. 6, Ly 10	6875	2	Selenite	2	Unm.	1020-1120
Room 143, Fl. 7, Ly 11	6940	5	Gypsite	5	Unm.	920-1020
		1	Shale	1	Bead	920-1020
Room 143, Fl. 8, Ly 12	6956	2	Selenite	2	Unm.	920-1020
Room 143, Fl. 8, Ly 12	6959	1	Limonite	1	Unm.	920-1020
Room 143, Fl. 9, Ly 14	6990	1	Selenite	1	Unm.	920-1020
Room 143, Fl. 9, Ly 14	6991	2	Selenite	1	Unm.	920-1020
				1	Mod.	920-1020
Room 143, wall clear.	6964	1	Turquoise	1	BB	920-1220
Room 145, Ly 2	2113	1	Selenite	1	Unm.	920-1220
Room 145, Ly 5	2101	2	Other fossil	2	Unm.	920-1220
Room 145, TT 1, Ly 6	2061	1	Selenite	1	Unm.	920-1220
Room 145, TT 1, Lv 1	2064	1	Opal	1	Zoom.	920-1220
Room 145, Ly 7 Lv 1	2068	5	Selenite	5	Unm.	920-1220
Room 145, Lv 8 and 9	2074	2	Selenite	2	Unm.	920-1220
Room 145, Ly 7, Lv 2	2076	1	Calcite	1	Mod.	920-1220
Room 145, Ly 7, Lv 2	2093	4	Calcite	4	Mod.	920-1220
Room 145, TT 1, Ly 7, Lv 5	2196	5	Selenite	1	Mod.	920-1220
				4	Unm.	920-1220
Room 145, Lv 5	2197	3	Selenite	3	Unm.	920-1220
Room 145, Ly 7, Lv 7	2198	1	Olivella dama	1	Bead	920-1220
		1	Shale	1	Bead	920-1220
		2	Mica-Mus.[a]	2	Unm.	920-1220
		3	Hematite	1	Unm.	920-1220
				2	Mod.	920-1220
		1	Selenite	1	Unm.	920-1220
		13	Calcite	13	Mod.	920-1220
Room 145, Ly 7, Lv 7	2199	1	Olivella dama	1	Bead	920-1220
		1	Shale	1	Pend.	920-1220
		1	F. shell impression	1	Unm.	920-1220
		3	Calcite	3	Mod.	920-1220
		1	Mica-Mus.	1	Unm.	920-1220
Room 146, Ly 3, Lv 3	6011	1	Selenite	1	Unm.	920-1220
Room 146, Ly 3, Lv 3	6019	1	Selenite	1	Unm.	920-1220
		1	Chama ech.	1	Brac.fr.	920-1220
Room 146, Ly 3, Lv 5	6013	4	Selenite	4	Unm.	920-1220
Room 146, Ly 3, Lv 6	6007	1	Turquoise	1	Pend	920-1220
		1	Calcite	1	Mod.	920-1220
		1	Malachite	1	Mod.	920-1220
Room 146, Ly 3, Lv 6	6014	2	Selenite	2	Unm.	920-1220
Room 146, Ly 3, Lv 7	6008	1	Selenite	1	Unm.	920-1220

[a] Muscovite.

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Table MF-6.1. (continued)

Provenience	FS No.	No.	Material	No.	Type	Dating (A.D.)
Room 146, Ly 3, Lv 8	6039	1	Azurite	1	Unm.	920-1220
Room 146, Fl. 2, OP 1	6073	1	Chama ech.	1	Pend.	920-1020
Room 146, Fl. 3, FP 1	6084	1	Gypsite	1	Unm.	920-1020
Room 146, Fl. 5, Ly 7	6198	1	Glycymeris	1	Brac.fr.	920-1020
Room 147, WN 4, post-oc. trash	6343	1	Hematite	1	Mod.	1120-1220
Room 147, TT 1, Ly 2, Lv 1	6250	1	Calcite	1	Mod.	920-1220
		1	Azurite	1	Unm.	920-1220
		1	Limonite	1	Unm.	920-1220
		2	Selenite	2	Unm.	920-1220
Room 147, TT 1, Ly 2, Lv 2	6251	1	Lignite	1	Unm.	920-1220
		3	Selenite	3	Unm.	920-1220
Room 147, TT 1, Ly 2, Lv 4	6252	2	Selenite	2	Unm.	920-1220
Room 147, TT 2, Ly 2, Lv 2	6256	1	Turquoise	1	Inlay	920-1220
Room 147, TT 2, Ly 2, Lv 3	6257	1	Limonite	1	Mod.	920-1220
Room 147, TT 2, Ly 2, Lv 3	6258	2	Selenite	2	Unm.	920-1220
Room 147, TT 2, Ly 2, Lv 4	6259	1	Glycymeris	1	Brac.fr.	920-1220
Room 147, TT 2, Ly 2, Lv 5	6269	1	Malachite	1	Unm.	920-1220
Room 147, TT 2, Ly 2, Lv 5	6270	1	Turquoise	1	Pend Bl.	920-1220
Room 147, TT 2, Ly 2, Lv 5	6271	1	Glycymeris	1	Pend	920-1220
Room 147, TT 2, Ly 2, Lv 5	6272	1	Lignite	1	Mod.	920-1220
		2	Selenite	2	Unm.	920-1220
Room 147, TT 2, Ly 2, Lv 5	6273	1	Turquoise	1	Mod.	920-1220
Room 147, TT 2, Ly 2, Lv 5	6274	2	Selenite	2	Unm.	920-1220
Room 147, TT 2, Ly 2, Lv 5	6291	1	Calcite	1	Other	920-1220
Room 147, Ly 2, Lv 5	6332	1	Turquoise	1	Bead bl.	920-1220
Room 147, TT 3, Ly 2, Lv 1	6260	1	Limonite	1	Unm.	920-1220
		4	Selenite	1	Mod.	920-1220
				3	Unm.	920-1220
Room 147, TT 3, Ly 2, Lv 2	6261	1	Calcite	1	Unm.	920-1220
		2	Selenite	2	Unm.	920-1220
Room 147, TT 3, Ly 2, Lv 2	6262		Selenite[b]		Unk.	920-1220
Room 147, TT 3, Ly 2, Lv 4	6263	1	Selenite	1	Unm.	920-1220
Room 147, TT 3, Ly 2, Lv 4	6266	1	Selenite	1	Unm.	920-1220
Room 147, TT 4, Ly 2, Lv 4	6265	1	Selenite	1	Unm.	920-1220
Room 147, TT 4, Ly 2, Lv 4	6268	2	Selenite	2	Unm.	920-1220
Room 192, wall clear.	5459	1	Calcite	1	Bead	920-1220
Room 194, wall clear.	436	1	Limonite	1	Unm.	920-1220
Room 195, wall clear.	437	1	Selenite	1	Unm.	920-1220
Room 199, wall clear.	652	1	Selenite	1	Unm.	920-1220
Room 202, wall clear.	450	1	Bone	1	Whistle	920-1220
Room 203, wall clear.	444	1	Selenite	1	Unm.	920-1220
Room 208, wall clear.	453	1	Calcite	1	Bead	920-1220
Room 213, wall clear.	458	1	Turquoise	1	Mod.	920-1220
Room 220, wall clear.	557	5	Gypsum	5	Unm.	920-1220

[b] Artifact unavailable for analysis.

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Table MF-6.1. (continued)

Provenience	FS No.	No.	Material	No.	Type	Dating (A.D.)
Room 228, wall clear.	543	1	Shale	1	Bead	920-1220
Room 229, wall clear.	544	1	Olivella dama	1	Bead	920-1220
Room 229, TP 5, Ly 1	5811	2	Gypsite	2	Unm.	920-1220
Room 229, TP 5, Ly 2	5816	2	Gypsite	2	Unm.	920-1220
Room 229, TP 3, Ly 4, Lv 1	5820	5	Gypsite	5	Unm.	920-1220
Room 229, TP 4, Ly 4, Lv 1	5821	1	F. shell impression	1	Unm.	920-1220
Room 229, TP 5, Ly 4, Lv 1	5822	2	Gypsite	2	Unm.	920-1220
Room 229, Ly 4, Lv 2	5827	1	Calcite	1	Bead	920-1220
Room 229, Ly 4, Lv 2	5831	1	Argillite	1	Disk	920-1220
Room 236, Fl. 4, OP 2	6836	1	Shale	1	Bead	1020-1120
Kiva 2, wall clear.	581	1	Turquoise	1	Unm.	920-1220
Kiva 3, wall clear., prob. pilaster base	585	49	Turquoise	20	Mod.	920-1020
				22	Unm.	920-1020
				7	Deb.	920-1020
		5	Gypsite	2	Beads	920-1020
				3	Pend.	920-1020
Kiva 4, wall clear.	241	1	Turquoise	1	Bead	920-1220
Kiva 7, Surface 8, wall clear.	470	2	Lignite	2	Unm.	1020-1220
Kiva 7, wall niche clear.	469	1	Hematite	1	Unm.	1020-1220
Kiva 8, wall clear.	566	3	Selenite	3	Unm.	1120-1220
Kiva 9, Inside inner wall, wall clear.	569	1	Glycymeris	1	Bead	1120-1220
Kiva 10, wall clear.	6735	1	Calcite	1	Mod.	920-1220
		1	Sandstone	1	Other	920-1220
		1	Mica-mus.[a]	1	Unm.	920-1220
Kiva 10, Lv 11	6513	1	Haliotus	1	Other	1020-1220
Kiva 10, TT 1, Lv 15	6500	1	Shale	1	Pend.	1020-1220
		1	Lignite	1	Mod.	1020-1220
		4	Calcite	4	Mod.	1020-1220
Kiva 10, TT 1, Lv 16	6501	1	Turquoise	1	Pend.	1020-1220
		1	Bone	1	Pend.	1020-1220
		2	Limonite	2	Mod.	1020-1220
		2	Shale	1	Mod.	1020-1220
				1	Unm.	1020-1220
		1	Calcite	1	Mod.	1020-1220
		1	Azurite	1	Mod.	1020-1220
Kiva 10, TT 1, Lv 17	6502	1	Calcite	1	Gaming piece	1020-1220
		1	Glycymeris	1	Brac.fr.	1020-1220
		1	Hematite	1	Mod.	1020-1220
		1	Selenite	1	Unm.	1020-1220
		1	Azurite	1	Unm.	1020-1220
		2	Lignite	2	Unm.	1020-1220

[a] Muscovite.

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Table MF-6.1. (continued)

Provenience	FS No.	No.	Material	No.	Type	Dating (A.D.)
Kiva 10, TT 1, Lv 18	6503	2	Argillite	1	Inlay	1020-1220
				1	Mod.	1020-1220
		4	Selenite	2	Mod.	1020-1220
				2	Unm.	1020-1220
		1	Lignite	1	Unm.	1020-1220
Kiva 10, TT 1, Lv 19	6504	1	Chama ech.	1	Pend.	1020-1220
		1	Calcite	1	Pend.bl.	1020-1220
		1	Argillite	1	Mod.	1020-1220
Kiva 10, TT 1, Lv 19	6505	3	Argillite	3	Flakes	1020-1220
Kiva 10, TT 1, Lv 21	6506	1	Olivella	1	Bead	1020-1220
Kiva 10, TT 1, Lv 22	6507	1	Turquoise	1	Unm.	1020-1220
		4	Selenite	1	Mod.	1020-1220
				3	Unm.	1020-1220
		1	Hematite	1	Unm.	1020-1220
		3	Gypsite	3	Mod.	1020-1220
		1	Argillite	1	Mod.	1020-1220
		1	Malachite	1	Unm.	1020-1220
		1	Lignite	1	Mod.	1020-1220
Kiva 10, TT 1, Lv 23	6508	2	Hematite	2	Mod.	1020-1220
		2	Selenite	2	Unm.	1020-1220
		1	Bone	1	Bead	1020-1220
Kiva 10, TT 1, Lv 24	6509	3	Selenite	1	Pend.	1020-1220
				1	Unm.	1020-1220
				1	Pend.bl?	1020-1220
		1	Limonite	1	Mod.	1020-1220
		1	Argillite	1	Mod.	1020-1220
		1	Bone	1	Bead	1020-1220
Kiva 10, TT 1, Lv 25	6517	1	Turquoise	1	Inlay	1020-1220
		2	Bone	2	Beads	1020-1220
		1	Hematite	1	Mod.	1020-1220
		2	Aragonite	2	Unm.	1020-1220
		1	Selenite	1	Mod.	1020-1220
		1	Mica-mus.[a]	1	Unm.	1020-1220
Kiva 10, TT 1, Lv 26	6510	1	Argillite	1	Bead	1020-1220
Kiva 10, TT 1, Lv 26	6518	1	Bone	1	Orn.	1020-1220
		13	Selenite	12	Mod.	1020-1220
				1	Unm.	1020-1220
		1	Aragonite	1	Unm.	1020-1220
Kiva 10, TT 1, Lv 27	6519	3	Gypsite	2	Unm.	1020-1120
				1	Mod.	1020-1120
		6	Selenite	1	Mod.	1020-1120
				5	Unm.	1020-1120
Kiva 12, wall clear.	4231	1	Calcite	1	Bead	920-1220
Kiva 13, Pl. Gr. 159, Lv 2	4223	31	Selenite	31	Unm.	1020-1120
Kiva 13, Pl. Gr. 159, Lv 3	4225	18	Selenite	18	Unm.	1020-1120

[a] Muscovite.

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Table MF-6.1. (continued)

Provenience	FS No.	No.	Material	No.	Type	Dating (A.D.)
Kiva 13, Pl. Gr. 159, Lv 4	4226	32	Selenite	32	Unm.	1020-1120
Kiva 13, Pl. Gr. 159, Lv 5	4227	14	Selenite	14	Unm.	1020-1120
Kiva 13, Pl. Gr. 159, Lv 6	4228	6	Selenite	6	Unm.	1020-1120
Kiva 14, wall clear.	4279	1	Turquoise	1	Pend.bl.	920-1220
		2	Calcite	1	Pend.bl.	920-1220
				1	Mod.	920-1220
Kiva 15, TP 1, Lv 1	5321	1	Limonite	1	Mod.	920-1220
Kiva 15, TP 2, Ly 6	5343	1	Selenite	1	Unm.	920-1220
Kiva 15, TP 2, Ly 7	5347	1	Turquoise	1	Mod.	920-1220
Kiva 15, TP 3, Ly 7	5348	1	Chama ech.	1	Bead	920-1220
Kiva 15, Gr. 9, Ly 7, Fl. 1, fill	5363	1	Azurite	1	Unm.	920-1220
Kiva 15, Fl. 1, contact	5377	1	Hematite	1	Mod.	1120-1220
Kiva 15, fill, bench-wall	5396	1	Calcite	1	Mod.	920-1220
Kiva 15, S. wall and bench construct and int. fill	5453	1	Glycymeris	1	Brac.fr.	920-1220
Kiva 16/Pl. Gr. 116, Ly 1, Lv 1	4200	1	Limonite	1	Unm.	1120-1220
Kiva 16, Lv 3	4202	1	Malachite	1	Mod.	1120-1220
Kiva 16, Lv 1	5073	1	Coal/Lignite	1	Unm.	1120-1220
Kiva 16, TT 3, Ly 9, Lv 1	5087	1	Glycymeris	1	Brac.fr.	1120-1220
Pl., Cir. Str. 1, wall clear.	117	3	Calcite	3	Mod.	1120-1220
Pl., Cir. Str. 2, wall clear.	431	2	Selenite	2	Unm.	1120-1220
Pl. 1, Grid 8:						
TT 1, Ly 1, Lv 12	6581	5	Selenite	5	Unm.	920-1220
TT 1, Ly 1, Lv 12	6584	1	Turquoise	1	Mod.	920-1220
Quad. 8, Ly 2, Lv 1, Fl. 2	6626	1	Selenite	1	Unm.	1020-1220
Quad. 8, Ly 2, Lv 2, Fl. 2	6633	1	Selenite	1	Unm.	1020-1220
		1	Calcite	1	Inlay	1020-1220
Quad. 10, Ly 2, Lv 2, Fl. 2	6635	2	Selenite	2	Unm.	1020-1220
Quad. 15, Ly 2, Lv 2, Fl. 2	6636	6	Selenite	6	Unm.	1020-1220
Quad. 16, Ly 2, Lv 1, Fl. 2	6628	1	Selenite	1	Unm.	1020-1220
Quad. 20, Ly 2, Lv 2., Fl. 2	6639	1	Calcite	1	Bead	1020-1220
Quad. 33, Ly 2, Lv 2, Fl. 2	6641	1	Selenite	1	Unm.	1020-1220
Fl. 2, OP 1, post-oc.	6648	1	Azurite	1	Unm.	1020-1220
		3	Calcite	3	Beads	1020-1220
Fl. 2, OP 2, const.	6649	2	Selenite	2	Unm.	1020-1220
Fl. 4, Ly 7	6676	5	Selenite	5	Unm.	920-1020
Fl. 4, Ly 9, Lv 3	6680	2	Selenite	1	Mod.	920-1020
				1	Unm.	920-1020
Fl. 4, Ly, 9, Lv 3	6682	6	Lignite	6	Unm.	920-1020
Fl. 4, OP 2	6697	1	Gypsite	1	Unm.	920-1020

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Table MF-6.1. (continued)

Provenience	FS No.	No.	Material	No.	Type	Dating (A.D.)
Pl. 1, Grid 8:						
Fl. 4.3	6693	1	Turquoise	1	Mod.	920-1020
Fl. 6, OP 4	6712	1	Gypsite	1	Unm.	920-1020
Ly 13, Lv 4	6716	1	Calcite	1	Bead	920-1020
		2	Selenite	2	Unm.	920-1020
Ly 13, Fl. 6	6603	1	Selenite	1	Unm.	920-1020
Ly 13, Fl. 8	6720	1	Hematite	1	Unm.	920-1020
Ly 14, Fl. 8 contact	6605	1	Turquoise	1	Mod.	920-1020
		1	Glycymeris	1	Bead	920-1020
Ly 14, Fl. 8, contact	6606	3	Selenite[b]	3	Unk.	920-1020
		1	Hematite[b]	1	Unk.	920-1020
		2	Glycymeris	2	Beads	920-1020
		1	Turquoise	1	Mod.	920-1020
Ly 15, Lv 1	6613	2	Selenite[b]	2	Unk.	920-1020
		1	Calcite	1	Bead	920-1020
		3	Shale	3	Beads	920-1020
Ly 15, Lv 1	6614	1	Selenite[b]	1	Unk.	920-1020
		1	Limonite	1	Mod.	920-1020
Ly 15, Lv 2	6615	2	Turquoise	1	Mod.	920-1020
				1	Unm.	920-1020
		22	Calcite	22	Beads	920-1020
		3	Glycymeris	3	Brac.fr.	920-1020
		1	Bone	1	Bead	920-1020
		47	Shale	47	Beads	920-1020
		1	Chama ech.	1	Bead	920-1020
		3	Hematite	3	Unm.	920-1020
		25	Limonite	3	Mod.	920-1020
				22	Unm.	920-1020
		9	Quartzite	9	Unm.	920-1020
		2	Selenite	2	Unm.	920-1020
		12	Gypsite	12	Unm.	920-1020
Ly 15, Lv 3-4	6616	4	Turquoise	1	Bead	920-1020
				3	Unm.	920-1020
		2	Selenite	1	Mod.	920-1020
				1	Unm.	920-1020
		1	Glycymeris	1	Brac.fr.	920-1020
		4	Shale	4	Beads	920-1020
Ly 15, Lv 5	6617	11	Turquoise	1	Bead	920-1020
				4	Mod.	920-1020
				6	Deb.	920-1020
		5	Shale	4	Beads	920-1020
				1	Unm.	920-1020
		1	Limonite	1	Mod.	920-1020

[b] Artifact unavailable for analysis.

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Table MF-6.1. (continued)

Provenience	FS No.	No.	Material	No.	Type	Dating (A.D.)
Plaza 1, Grid 8:						
Ly 15, Lv 6	6618	5	Turquoise	1	Mod.	920-1020
				1	Unm.	920-1020
				3	Deb.	920-1020
		1	Glycymeris	1	Brac.fr.	920-1020
		2	Shale	2	Beads	920-1020
		1	Selenite[b]	1	Unk.	920-1020
Ly 15, Lv 7	6619	3	Shale	2	Beads	920-1020
				1	Inlay	920-1020
		1	Selenite[b]	1	Unk.	920-1020
Ly 15, Lv 8	6620	2	Turquoise	2	Mod.	920-1020
		19	Gypsite	19	Unm.	920-1020
Ly 15, Lv 9	6621	2	Selenite	1	Mod.	920-1020
				1	Unm.	920-1020
		6	Limonite	5	Unm.	920-1020
				1	Mod.	920-1020
		3	Gypsite	3	Unm.	920-1020
Ly 15/16, Fl. 9, fill	6608	1	Chama ech.	1	Bead	920-1020
Ly 16/17, Fl. 9, fill	6609	1	Glycymeris	1	Brac.fr.	920-1020
		1	Fw. Clam, Rh.	1	Mod.	920-1020
		1	Hematite	1	Mod.	920-1020
Ly 17	6610	2	Turquoise	1	Unm.	920-1020
				1	Mod.	920-1020
		1	Shale	1	Bead	920-1020
		1	Glycymeris	1	Brac.fr.	920-1020
		1	Calcite	1	Bead	920-1020
		1	Argo. circ.	1	Unm.	920-1020
		1	Hematite	1	Unm.	920-1020
Ly 18, Fl. 9	6611	1	Shale	1	Bead	920-1020
Ly 19, Fl. 9	6612	1	Turquoise	1	Mod.	920-1020
Pl. 1, Gr. 9, Ly 4	6733	1	Azurite	1	Unm.	1020-1220
		1	Olivella dama	1	Bead	1020-1220
Pl. 1, Gr. 21, Surf.	4011	1	Argillite	1	Zoom.	920-1220
Pl. 1, Gr. 29, Surf. strip	4218	1	Glycymeris	1	Brac.	920-1220
Pl. 1, Gr. 30, TT 3, Ly 6, Lv 3	4347	1	Quartz cry.	1	Pend	920-1020
Pl. 1, Gr. 30, TT 3, Lv 4, OP 1	4354	1	Argillite	1	Bead	920-1020
		1	Calcite	1	Bead	920-1020
Pl. 1, Gr. 30, TT 3, Lv 5, OP 1	4355	1	Spond. cal.	1	Bead	920-1020
		1	Ceramic[b]	1	Pend.	920-1020
Pl. 1, Gr. 30, TT 3, Lv 6	4356	2	Gypsite	2	Unm.	920-1020
		1	Limonite	1	Unm.	920-1020
Pl. 1, Gr. 35, Ly 1 & 2, Fl. 1	4168	1	Azurite	1	Unm.	1020-1120
Pl. 1, Gr. 35, Ly 3	4295	1	Selenite	1	Mod.	1020-1120

[b] Artifact unavailable for analysis.

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Table MF-6.1. (continued)

Provenience	FS No.	No.	Material	No.	Type	Dating (A.D.)
Pl. 1, Gr. 35, Ly 3	4297	1	Calcite	1	Mod.	1020-1120
		1	Gypsite	1	Unm.	1020-1120
Pl. 1, Gr. 35, Ly 3	4304	1+	Selenite[b]	1+	Unk..	1020-1120
Pl. 1, Gr. 35, Ly 4	4309	1	Selenite	1	Mod.	1020-1120
Pl. 1, Gr. 35, Fl. 5	4375	1	Calcite	1	Mod.	1020-1120
Pl. 1, Gr. 55, Ly 3	4171	2	Mica-Mus.[a]	2	Unm.	Unknown
Pl. 1, Gr. 55, Ly 4	4311	1	Calcite	1	Pend.bl.	Unknown
Pl. 1, Gr. 55, subfl. 3	4362	1	Gypsum	1	Unm.	Unknown
Pl. 1, Gr. 95, Ly 3	4251	1	Calcite	1	Mod.	Unknown
		1	Chert, gr.	1	Unm.	Unknown
Pl. 1, Gr. 115, Ly 3	4257	1	Calcite	1	Mod.	1120-1220
Pl. 1, Gr. 115, Ly 3	4261	1	Calcite	1	Pend.bl.	1120-1220
Pl. 1, Gr. 117, Ly 1, Lv 2	5076	1	Malachite	1	Mod.	920-1220
		4	Selenite	4	Unm.	920-1220
Pl. 1, Gr. 151, Surf. cl.	4293	1	Azurite	1	Unm.	Unknown
Pl. 2, Gr. 161, Ly 2, Lv 2, Fl. 1, fill	3447	1	F. shell impression	1	-	920-1220
Pl. 1, Gr. 164, Surface	3469	1	Hematite	1	Unm.	920-1220
Pl. 1, Gr. 175, Ly 1	4241	1	Limonite	1	Unm.	920-1220
Pl. 1, Gr. 175, Ly 2	4240	1	Lymnaea bul. Lea	1	Unm.	920-1220
Pl. 1, Gr. 175, Ly 3	4273	1	Calcite	1	Mod.	920-1220
		1	Malachite	1	Mod.	920-1220
Pl. 2, Gr. 181, Ly 2	3427	1	Limonite	1	Mod.	920-1220
		1	Hematite	1	Mod.	920-1220
Pl. 2, Gr. 181, Ly 2	3249	1	Hematite	1	Unm.	920-1220
Pl. 2, Gr. 181, Ly 2, Lv 2	3497	1	Calcite	1	Mod.	920-1220
Pl. 2, Gr. 181, Ly 3	3547	1	Turquoise	1	Mod.	920-1220
Pl. 2, Gr. 181, Ly 7	3646	2	Turquoise	2	Deb.	Unknown
Pl. 1, Gr. 185, Ly 1 & 2	4180	1	Calcite	1	Mo/Gm pc	920-1220
Pl. 1, Gr. 195, Ly 3	4245	1	Turquoise	1	Pend.	920-1220
		1	Glycymeris	1	Brac.fr.	920-1220
Pl. 2, Gr. 201, Ly 2, Lv 1	3417	1	Calcite	1	Mod.	920-1220
Pl. 2, Gr. 201, Ly 2, Lv 1, Fl. 1	3419	1	Shale	1	Bead	920-1220
Pl. 2, Gr. 201, Ly 2, Lv 1	3423	3	Selenite	3	Unm.	920-1220
Pl. 2, Gr. 201, Ly 2, Lv 1, OP 1	3421	1	Selenite	1	Unm.	920-1220
Pl. 2, Gr. 201, Fl. 1, OP 2	3422	1	Other fossil	1	-	920-1220
Pl. 2, Gr. 201, Fl. 1, OP 2	3455	1	Shale	1	Bead	920-1220
Pl. 2, Gr. 201, Fl. 1, OP 2	3457	4	Selenite	4	Unm.	920-1220
		1	Hematite	1	Unm.	920-1220
Pl. 2, Gr. 201, Fl. 1, OP 2	3461	3	Selenite	3	Unm.	920-1220

[a] Muscovite.
[b] Artifact unavailable for analysis.

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Table MF-6.1. (continued)

Provenience	FS No.	No.	Material	No.	Type	Dating (A.D.)
Pl. 2, Gr. 201, Ly 2, Lv 4	3527	2	Hematite	2	Unm.	920-1220
Pl. 2, Gr. 201, Ly 4, Lv 2	3621	1	Calcite	1	Bead	920-1220
Pl. 2, Gr. 201, Ly 7,	3761	3	Argillite	3	Unm.	1020-1120
Fl. 10		1	Sandstone	1	Unm.	1020-1120
		3	Turquoise	3	Deb.	1020-1120
Pl. 2, Gr. 201, Ly 8,	3767	134	Malachite	134	Deb.	1020-1120
Fl. 11						
Pl. 2, Gr. 201, Ly 9	3776	32	Hematite	1	Unm.	1020-1120
				31	Deb.	1020-1120
Pl. 1, Gr. 202, Fl. 2	4035	1	Glycymeris	1	Brac.fr.	920-1020
Pl. 1, Gr. 203, TT to						
bedrock	4042	1	Glycymeris	1	Brac.fr.	920-1020
Pl. 2, Gr. 221, Ly 27	3401	1	Turquoise	1	Deb.	1020-1220
Pl. 2, Gr. 221, Ly 27	3404	1	Hematite	1	Unm.	1020-1220
Pl. 2, Gr. 222, Surface	3484	1	Turquoise	1	Bead	920-1220
Pl. 1, Gr. 241, Ly 1	3660	1	Glycymeris	1	Brac.fr.	920-1220
Pl. 1, Gr. 273, Fl. 1	4324	1	Lignite	1	Pend.bl.	1020-1220
Pl. 1, Gr. 273, Ly 4	4323	1	Galena	1	Mod.	1020-1220
Pl. 1, Gr. 273, Ly 4	4326	2	Calcite	2	Mod.	1020-1220
Pl. 1, Gr. 276, Ly 3	4255	1	Calcite	1	Mod.	1020-1220
Pl. 1, Gr. 278, Ly 3	4248	5	Limonite	5	Unm.	1020-1220
Pl. 1, Gr. 279, Fl. 1	4236	1	Glycymeris	1	Brac.fr.	1020-1220
Pl. 1, Gr. 279, Fl. 1	4235	1	Turquoise	1	Unm.	1020-1220
Pl. 1, Gr. 301, Ly 3-6	5043	1	Lignite	1	Mod.	1020-1120
Pl. 1, Gr. 302, TT 3, Ly 2	5006	12	Selenite	12	Unm.	1020-1220
Pl. 1, Gr. 307, TT 3,						
Ly 7, Lv 3	5072	1	Azurite	1	Unm.	920-1020
Plaza Feature 1:						
Room 2, Anthill surf.	907	2	Turquoise	1	Mod.	920-1220
				1	Unm.	920-1220
		1	Other fossil	1	-	920-1220
Room 3, Lv 19	781	1	Selenite	1	Unm.	920-1220
Room 3, TP 4, Ly 3	921	1	Azurite	1	Unm.	920-1220
Room 3, wall clear.	924	1	Shale	1	Bead	920-1220
Room 3, Ly 3	912	2	Shale	2	Beads	920-1220
Room 3, Ly 3	923	1	Bone	1	Bead	920-1220
Room 3, Ly 3	931	1	Selenite	1	Unm.	920-1220
Room 3, Ly 3	938	2	Selenite	2	Unm.	920-1220
Room 3, Ly 3	942	4	Selenite	4	Unm.	920-1220
Room 3, Ly 3	943	32	Azurite	32	Unm.	920-1220
Room 3, Ly 3	948	3	Azurite	3	Unm.	920-1220
Room 3, Gr. 7, stripping	832	1	Selenite	1	Unm.	1020-1220
Room 3, Lv 4	848	3	Argillite	3	Unm.	1020-1220
		1	Selenite	1	Unm.	1020-1220
Room 3, Fl. 2, OP 1, fill	771	2	Selenite	2	Unm.	920-1120
Room 3, OP 2, post-oc. fill	981	1	Olivella dama	1	Bead	1020-1220
Room 3, FP 2, Ly 2, plug	994	1	Glycymeris	1	Bead	1020-1220
Room 3, PH 2, plugged	976	5	Azurite	5	Unm.	1020-1220

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Table MF-6.1. (continued)

Provenience	FS No.	No.	Material	No.	Type	Dating (A.D.)
Plaza Feature 1:						
Room 3, vent complex	859	1	Selenite	1	Unm.	1020-1220
Room 4, TT 1, Ly 2	874	6	Selenite	6	Unm.	920-1220
Room 4, TT 2, Ly 1	877	1	F. shell impression	1	-	920-1220
Room 4, TT 2, Ly 2	882	1	Argillite	1	Unm.	920-1220
Room 4, TT 4, cache	887	16	Glycymeris	16	Brac fr.	920-1220
Room 4, TT 4, Ly 8	889	1	Calcite	1	Bead	920-1220
Room 4, TT 6, Ly 2	895	1	Selenite	1	Unm.	920-1220
Room 4, TT 6, Ly 3	896	1	F. shell impression	1	-	920-1220
Room 4, TT 6, Ly 5	898	1	Limonite	1	Mod.	920-1220
Room 4, Fl. 3, fill	711	1	Selenite	1	Unm.	1020-1120
Room 4, Fl. 3, fill	712	1	Selenite	1	Unm.	1020-1120
Room 4, Fl. 3, fill	713	2	Selenite	2	Unm.	1020-1120
Room 4, Fl. 4, fill	724	1	Selenite	1	Unm.	1020-1120
Pl. Feature 4, Kiva wall clear.	4232	1	Calcite	1	Gm. pc.	920-1220
		1	Selenite	1	Unm.	920-1220
Pl. 1, Loose's TT, Lv 1	35	1	Copper	1	Bell	1020-1120
Pl. 1, Loose's TT, Lv 1	32	1	Azurite	1	Unm.	1020-1220
Pl. 1, Loose's TT, Lv 1	33	1	Argillite	1	Flake	1020-1220
Pl. 1, Surface 1	667	1	Malachite	1	Unk.	920-1220
Pl. 1, wall clear.	73	1	Hematite	1	Mod.	920-1220
Pl. 1, SW wall clear.	163	9	Malachite	9	Mod.	920-1220
Pl. 1, wall clear.	4000	1	Shale	1	Bead	920-1220
Pl. 1, W of Rm. 177, etc.	4287	1	Glycymeris	1	Bead	920-1220
Pl. 1, W of Rm. 183, etc.	4288	1	Calcite	1	Bead	920-1220
Pl. 1, N of Rm. 200, etc.	4291	1	Limonite	1	Mod.	920-1220
Maj. Wall 1, "blockhouse"	3	1	Calcite	1	Bead	Undated
Maj. Wall 1, "blockhouse"	4	1+	Argillite[b]	1+	Unk.	Undated
Maj. Wall 1, wall clear.	16	1	Argillite	1	Flake	1020-1220
Maj. Wall 3, wall clear.	494	1	Shale	1	Bead	1020-1220
Maj. Wall 4, wall clear.	495	1	Malachite	1	Unm.	1020-1220
North trench 1, Lv 1 outside Rm. 138	6550	1	Selenite	1	Bead	1020-1120
Other Str. 4, wall clear.	432	1	Shale	1	Mod.	1120-1220
		1	Selenite	1	Mod.	1120-1220
Other Str. 5, wall clear.	471	1	Shale	1	Bead	1020-1220
Other Str. 5, wall clear.	3486	1	Glycymeris	1	Brac.fr.	1020-1220
Other Str. 5, TT 1, Lv 3	3675	1	Selenite	1	Unm.	1020-1220
Other Str. 5, Test, S stairs, Ly 4	3676	1	Turquoise	1	Unm.	1020-1220
		1	Olivella dama	1	Bead	1020-1220
Other Str. 5, Ly 9, stair, surface	3692	1	Calcite	1	Bead	1020-1220

[b] Artifact unavailable for analysis.

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Table MF-6.1. (continued)

Provenience	FS No.	No.	Material	No.	Type	Dating (A.D.)
Other Str. 6/Rm. 193, wall Clear.	4283	13	Gypsite	13	Unm.	920-1220
		1	Selenite	1	Unm.	920-1220
Other Str. 6, wall clear.	4280	1	Calcite	1	Pend.bl.	920-1220
		1	Glycymeris	1	Brac.fr.	920-1220
Other Str. 7, wall clear., N of Kiva 7	464	4	Selenite	4	Unm.	920-1220
		1	Limonite	1	Unm.	920-1220
Other Str. 7, between Rm. 216 and 219	538	1	Selenite	1	Unm.	920-1220
Other Str. 7, wall clear.	606	1	Lignite	1	Pend Bl.	920-1220
Other Str. 9, wall clear.	562	1	Malachite	1	Unm.	920-1220
Other Str. 12, wall clear.	592	1	Hematite	1	Unm.	920-1220
Other Str. 13, fill	672	1	Unid. shell	1	Bead	920-1220
TM, Surface	4731	1	Glycymeris	1	Brac.fr.	1020-1120
TM, TT 1, surface	4719	1	Glycymeris	1	Brac.fr.	1020-1120
		2	Calcite	2	Beads	1020-1120
TM, Surface	4732	1	Turquoise	1	Bead	1020-1120
		7	Calcite	7	Beads	1020-1120
		13	Shale	13	Beads	1020-1120
		1	Gypsite	1	Bead	1020-1120
TM, TT 1, Profile clear.	4643	3	Olivella dama	2	Beads	1020-1120
				1	Unid.	1020-1120
TM 70, Surface, antbed	4729	1	Turquoise	1	Mod.	Undated
		3	Shale[b]	3	Beads	Undated
TM 70, SC 1, Ly 3	4633	1	Gypsite	1	Bead	920-1020
TM 70, SC 1, Ly 8	4635	1	Gypsite	1	Unm.	920-1020
		6	Selenite	6	Unm.	920-1020
		1	Hematite	1	Unm.	920-1020
TM 70, SC 1, Ly 10A	4636	1	Gypsite	1	Unm.	920-1020
TM 70, SC 1, Ly 10	4637	1	Limonite	1	Mod.	920-1020
TM 70, SC 1, Ly 11	4638	2	Shale	2	Beads	920-1020
TM 71,43,15, TT 1	4627	2	Selenite	2	Unm.	920-1020
TM 71,43,15, TT 1	4628	6	Selenite	6	Unm.	920-1020
		2	Limonite	1	Unm.	920-1020
				1	Mod.	920-1020
TM 99, Lv 3	4512	1	Limonite	1	Unm.	1020-1120
TM 99, Lv 4	4518	1	Hematite	1	Unm.	1020-1120
TM 99, Lv 5	4519	1	Selenite	1	Unm.	1020-1120
		1	Limonite	1	Mod.	1020-1120
TM 99/127, TT 1, Lv 7	4629	1	Calcite	1	Bead	1020-1120
		1	Shale	1	Bead	1020-1120
		15	Selenite	15	Unm.	1020-1120
		1	Limonite	1	Mod.	1020-1120
TM 126, Ly 9	4724	2	Shale	2	Beads	920-1020

[b] Artifact unavailable for analysis.

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Table MF-6.1. (continued)

Provenience	FS No.	No.	Material	No.	Type	Dating (A.D.)
TM 126, Ly 10	4667	2	Gypsite	2	Unm.	920-1020
TM 126, Ly 10	4812	36	Gypsite	36	Unm.	920-1020
		10	Selenite	10	Unm.	920-1020
		1	Argillite	1	Unm.	920-1020
TM 126, Ly 13	4666	1	Limonite	1	Unm.	920-1020
		1	Fw. clam Rh.	1	Unid.	920-1020
TM 126, Ly 13	4811	1	Selenite	1	Unm.	920-1020
TM 126, Ly 15	4810	1	Gypsite	1	Unm.	920-1020
TM 126, Ly 16	4663	2	Gypsite	2	Unm.	920-1020
TM 126, Ly 16	4809	1	Gypsite	1	Unm.	920-1020
TM 127, Lv 4	4507	1	Gypsite	1	Unm.	1020-1120
		1	Selenite	1	Unm.	1020-1120
TM 127, Lv 5	4521	1	Shale	1	Other	1020-1120
TM 127, Lv 6	4522	5	Gypsite	5	Unm.	1020-1120
		1	Limonite	1	Unm.	1020-1120
TM 127, Lv 8	4530	1	Hematite	1	Unm.	1020-1120
TM 135, TT 2, fill	4511	1	Hematite	1	Mod.	920-1120
TM 154, Ly 19	4747	71	Gypsite	71	Unm.	1020-1120
		1	Hematite	1	Unm.	1020-1120
		2	Limonite	2	Unm.	1020-1120
		2	Shale	2	Beads	1020-1120
TM 154, Ly 20	4746	10	Gypsite	10	Unm.	1020-1120
TM 154, Ly 22	4745	89	Gypsite	89	Unm.	1020-1120
		1	Shark's tooth	1	-	1020-1120
TM 154, Ly 23	4744	3	Gypsite	3	Unm.	1020-1120
TM 154, Ly 30	4742	29	Gypsite	29	Unm.	1020-1120
TM 154, Ly 32	4743	20	Gypsite	20	Unm.	1020-1120
TM 154, Ly 24-41	4737	1	Glycymeris	1	Brac.fr.	1020-1120
		4	Selenite	1	Mod.	1020-1120
				3	Unm.	1020-1120
		27	Gypsite	27	Unm.	1020-1120
TM 154, Ly 24-31	4738	1	Shale	1	Bead	1020-1120
TM 154, Ly 41-35	4734	1	Olivella dama	1	Bead	1020-1120
		2	Hematite	2	Mod.	1020-1120
		107	Gypsite	107	Unm.	1020-1120
		7	Selenite	6	Unm.	1020-1120
				1	Mod.	1020-1120
TM 154, Ly 43	4733	2	Turquoise	1	Pend.	1020-1120
				1	Mod.	1020-1120
		1	Shale	1	Bead	1020-1120
		2	Limonite	2	Mod.	1020-1120
		2	Azurite	2	Unm.	1020-1120
		49	Gypsite	49	Unm.	1020-1120
		5	Selenite	2	Mod.	1020-1120
				3	Unm.	1020-1120
TM 155, Lv 1	4502	1	Hematite	1	Unm.	1020-1120
TM 155, Lv 2	4503	1	Limonite	1	Mod.	1020-1120
TM 155, Lv 3	4504	4	Gypsite	4	Unm.	1020-1120

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Table MF-6.1. (continued)

Provenience	FS No.	No.	Material	No.	Type	Dating (A.D.)
TM 155, Lv 4	4508	5	Gypsite	5	Unm.	1020-1120
		3	Selenite	3	Unm.	1020-1120
TM 155, Lv 6	4524	2	Selenite	2	Unm.	1020-1120
TM 155, Lv 7	4528	1	F. shell imp.	1	-	1020-1120
TM 155, Lv 7	4533	1	Gypsite	1	Unm.	1020-1120
TM 155, Lv 10	4536	1	Gypsite	1	Unm.	1020-1120
		1	Azurite	1	Unm.	1020-1120
TM 155, Lv 11	4537	1	Limonite	1	Unm.	1020-1120
TM 155, Lv 12	4607	3	Selenite	3	Unm.	1020-1120
TM 155, Lv 13	4645	1	Selenite	1	Unm.	920-1020
TM 155,183,211, Slump 2	4642	2	Turquoise	1	Bead	1020-1120
				1	Mod.	1020-1120
		2	Olivella dama	2	Beads	1020-1120
		1	Shale	1	Bead	1020-1120
		27	Gypsite	27	Unm.	1020-1120
		20	Selenite	20	Unm.	1020-1120
		3	Limonite	1	Unm.	1020-1120
				2	Mod.	1020-1120
TM 163, TT 2	4510	1	Limonite	1	Unm.	920-1120
TM 183, Lv 3	4538	1	Glycymeris	1	Brac.fr.	1020-1120
TM 183, Lv 4	4539	2	Gypsite	2	Unm.	1020-1120
TM 183, Lv 6	4540	2	Mineral[b]	2	Unk.	1020-1120
TM 183, Lv 7	4541	16	Gypsite	16	Unm.	1020-1120
TM 183, Lv 8	4617	2	Gypsite	2	Unm.	1020-1120
		1	Limonite	1	Unm.	1020-1120
TM 183, Lv 8	4618	1	Olivella dama	1	Bead	1020-1120
		1	Calcite	1	Bead	1020-1120
		4	Gypsite	4	Unm.	1020-1120
TM 183, Lv 9	4619	9	Gypsite	9	Unm.	1020-1120
TM 183, Lv 10	4555	1	Limonite	1	Mod.	1020-1120
		2	Hematite	2	Unm.	1020-1120
TM 183, Lv 10	4620	1	Gypsite	1	Unm.	1020-1120
TM 183, Lv 11	4621	1	Shale	1	Bead	1020-1120
		14	Gypsite	14	Unm.	1020-1120
		1	Selenite	1	Unm.	1020-1120
		1	Hematite	1	Unm.	1020-1120
TM 183, Lv 12	4622	11	Gypsite	11	Unm.	1020-1120
TM 183, Lv 13	4623	127	Gypsite	123	Unm.	1020-1120
				4	Unk.	1020-1120
TM 183, Lv 15	4624	1	Gypsite	1	Unm.	1020-1120
TM 183, Lv 15	4625	3	Gypsite	3	Unm.	1020-1120
TM 191, TT 2	4515	1	Selenite	1	Unm.	920-1120
TM 210, Ly 35	4776	1	Choro. pall.	1	Unm.	1020-1120
		6	Limonite	2	Mod.	1020-1120
				4	Unm.	1020-1120
		47	Gypsite	47	Unm.	1020-1120

[b] Artifact unavailable for analysis.

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Table MF-6.1. (continued)

Provenience	FS No.	No.	Material	No.	Type	Dating (A.D.)
TM 210, Ly 44	4775	3	Selenite	3	Unm.	1020-1120
TM 210, Ly 45, Fea. 1	4774	77	Gypsite	77	Unm.	1020-1120
TM 210, Ly 45	4773	1	Turquoise	1	Pend.bl.	1020-1120
		13	Gypsite	13	Unm.	1020-1120
TM 210, Ly 46	4772	5	Gypsite	5	Unm.	1020-1120
TM 210, Ly 47	4771	2	Limonite	1	Mod.	1020-1120
				1	Unm.	1020-1120
		8	Gypsite	8	Unm.	1020-1120
		2	Selenite	2	Unm.	1020-1120
		1	Ceramic	1	Ball	1020-1120
TM 210, Ly 55	4770	6	Gypsite	6	Unm.	1020-1120
TM 210, Ly 56	4769	1	Limonite	1	Gm. pc.	1020-1120
		10	Gypsite	10	Unm.	1020-1120
TM 210, Ly 57/58	4767	4	Gypsite	4	Unm.	1020-1120
		2	Limonite	1	Mod.	1020-1120
				1	Unm.	1020-1120
TM 210, Ly 69	4762	7	Gypsite	7	Unm.	1020-1120
		4	Hematite	3	Unm.	1020-1120
				1	Mod.	1020-1120
TM 210, Ly 72	4757	2	Selenite	1	Mod.	1020-1120
				1	Unm.	1020-1120
		1	Limonite	1	Mod.	1020-1120
		17	Gypsite	17	Unm.	1020-1120
TM 210, Ly 76	4760	2	Gypsite	2	Unm.	1020-1120
		1	Limonite	1	Unm.	1020-1120
TM 210, Ly 78	4756	2	Gypsite	2	Unm.	1020-1120
TM 210, Ly 104	4753	2	Hematite	2	Unm.	1020-1120
		4	Limonite	4	Unm.	1020-1120
		3	Selenite	2	Unm.	1020-1120
				1	Mod.	1020-1120
		4	Gypsite	4	Unm.	1020-1120
		1	Bone	1	Gm.pc.	1020-1120
TM 211, Lv 3	4542	1	Argillite	1	Other	1020-1120
		1	Gypsite	1	Unm.	1020-1120
TM 211, Lv 5	4544	11	Gypsite	11	Unm.	1020-1120
TM 211, Lv 6	4545	2	Selenite	1	Pend.	1020-1120
				1	Mod.	1020-1120
		8	Gypsite	8	Unm.	1020-1120
TM 211, Lv 8	4609	14	Gypsite	14	Unm.	1020-1120
TM 211, Lv 9	4610	6	Gypsite	6	Unm.	1020-1120
TM 211, Lv 10	4611	9	Gypsite	9	Unm.	1020-1120
		2	Selenite	2	Unm.	1020-1120
TM 211, Lv 11	4612	1	Bone	1	Gm. pc.	1020-1120
TM 211, Lv 11	4613	2	Gypsite	2	Unm.	1020-1120
TM 211, Lv 13	4614	22	Gypsite	22	Unm.	1020-1120
		1	Azurite	1	Mod.	1020-1120
TM 211, Lv 14	4615	1	Gypsite	1	Unm.	1020-1120
TM 211, Lv 15	4616	15	Gypsite	15	Unm.	1020-1120
TM 211, Robert's backdirt	4657	1	Azurite	1	Unm.	1020-1120

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Table MF-6.1. (continued)

Provenience	FS No.	No.	Material	No.	Type	Dating (A.D.)
TM 211, Ly 10, constr.	4658	2	Turquoise	1	Mod.	1020-1120
				1	Inlay	1020-1120
TM 225, Lv 12	4571	1	Bone	1	Bead	1020-1120
TM 238, Ly 37	4803	2	Gypsite	2	Unm.	1020-1120
TM 238, Ly 48	4802	4	Gypsite	4	Unm.	1020-1120
TM 238, Ly 54	4800	1	Limonite	1	Unm.	1020-1120
		1	Selenite	1	Mod.	1020-1120
		4	Lignite	4	Unm.	1020-1120
TM 238, Ly 57	4801	1	Hematite	1	Unm.	1020-1120
TM 238, Ly 58	4799	9	Gypsite	9	Unm.	1020-1120
TM 238, Ly 60	4797	3	Gypsite	3	Unm.	1020-1120
TM 238, Ly 61	4796	9	Gypsite	9	Unm.	1020-1120
		1	Limonite	1	Unm.	1020-1120
		1	Selenite	1	Unm.	1020-1120
TM 238, Ly 62	4795	46	Gypsite	46	Unm.	1020-1120
TM 238, Ly 69	4794	12	Gypsite	12	Unm.	1020-1120
TM 238, Ly 74	4791	1	Limonite	1	Unm.	1020-1120
		1	Selenite	1	Unm.	1020-1120
TM 238, Ly 76	4790	2	Selenite	2	Unm.	1020-1120
		1	Turquoise	1	Pend.bl.	1020-1120
TM 238, Ly 78	4789	2	Selenite	2	Unm.	1020-1120
TM 238, Ly 92	4785	5	Hematite	5	Unm.	1020-1120
TM 238, Ly 95	4784	1	Gypsite	1	Unm.	1020-1120
TM 238, Ly 98	4782	1	Limonite	1	Unm.	1020-1120
TM 238, Ly 104	4781	1	Goethite	1	Zoom.	1020-1120
		2	Selenite	2	Unm.	1020-1120
		1	Hematite	1	Unm.	1020-1120
TM 238, Ly 105	4780	2	Gypsite	2	Unm.	1020-1120
		2	Limonite	1	Mod.	1020-1120
				1	Unm.	1020-1120
		2	Hematite	2	Unm.	1020-1120
		1	Azurite	1	Unm.	1020-1120
TM 238, Ly 122	4783	1	Limonite	1	Unm.	1020-1120
		1	Calcite	1	Bead	1020-1120
TM 238, Ly 123	4792	1	Selenite	1	Mod.	1020-1120
TM 239, Lv 3	4546	1	Turquoise	1	Mod.	1020-1120
TM 239, Lv 5	4548	1	Gypsite	1	Unm.	1020-1120
TM 239, Lv 6	4593	19	Gypsite	19	Unm.	1020-1120
		1	Bone	1	Gm.pc.	1020-1120
		2	Azurite	2	Unm.	1020-1120
		2	Limonite	2	Unm.	1020-1120
TM 239, Lv 7	4594	1	Bone	1	Fl/B.bl.	1020-1120
		1	Malachite	1	Unm.	1020-1120
TM 239, Lv 8	4595	5	Gypsite	5	Unm.	1020-1120
		1	Azurite	1	Unm.	1020-1120
TM 239, Lv 9	4596	15	Gypsite	15	Unm.	1020-1120
TM 239, Lv 10	4597	3	Gypsite	3	Unm.	1020-1120
		1	Azurite	1	Unm.	1020-1120
		1	Limonite	1	Unm.	1020-1120

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Table MF-6.1. (continued)

Provenience	FS No.	No.	Material	No.	Type	Dating (A.D.)
TM 239, Lv 11	4598	8	Gypsite	8	Unm.	1020-1120
TM 239, Lv 12	4599	10	Gypsite	10	Unm.	1020-1120
		1	Malachite	1	Unm.	1020-1120
		3	Selenite	3	Unm.	1020-1120
		1	Limonite	1	Unm.	1020-1120
TM 239, Lv 13	4600	1	Turquoise	1	Pend.bl.	1020-1120
		2	Gypsite	2	Unm.	1020-1120
		1	Limonite	1	Unm.	1020-1120
TM 239, Lv 15	4602	2	Gypsite	2	Unm.	1020-1120
TM 239, Lv 16	4603	22	Gypsite	22	Unm.	1020-1120
TM 239, Lv 17	4604	2	Gypsite	2	Unm.	1020-1120
		1	Selenite	1	Unm.	1020-1120
TM 239, Lv 18	4605	1	Gypsite	1	Unm.	1020-1120
		2	Selenite	2	Unm.	1020-1120
TM 267, Lv 6	4579	2	Gypsite	2	Unm.	1020-1120
		1	Limonite	1	Unm.	1020-1120
TM 267, Lv 7	4580	2	Gypsite	2	Unm.	1020-1120
TM 267, Lv 8	4581	1	Selenite	1	Unm.	1020-1120
		1	Hematite	1	Unm.	1020-1120
TM 267, Lv 9	4582	1	Gypsite	1	Unm.	1020-1120
TM 267, Lv 10	4583	2	Gypsite	2	Unm.	1020-1120
		4	Limonite	4	Unm.	1020-1120
		2	Turquoise	2	Mod.	1020-1120
		1	Hematite	1	Unm.	1020-1120
TM 267, Lv 11	4584	1	Calcite	1	Bead	1020-1120
		1	Gypsite	1	Unm.	1020-1120
TM 267, Lv 12	4585	2	Gypsite	2	Unm.	1020-1120
		4	Selenite	4	Unm.	1020-1120
		4	Limonite	4	Unm.	1020-1120
TM 267, Lv 13	4586	1	Olivella dama	1	Bead	1020-1120
		1	Selenite	1	Unm.	1020-1120
TM 267, Lv 14	4587	1	Turquoise	1	Mod.	1020-1120
		3	Gypsite	3	Unm.	1020-1120
		1	Hematite	1	Unm.	1020-1120
TM 267, Lv 15	4588	5	Gypsite	5	Unm.	1020-1120
TM 267, Lv 16	4589	5	Gypsite	5	Unm.	1020-1120
		1	Selenite	1	Unm.	1020-1120
TM 267, Lv 17	4590	5	Gypsite	5	Unm.	1020-1120
TM 267, Lv 18	4591	5	Gypsite	5	Unm.	1020-1120
TM 267, Lv 19	4592	6	Gypsite	6	Unm.	1020-1120
TM 267,295, Slump 3	4644	1	Lignite	1	Zoom.	1020-1120
		1	Limonite	1	Unm.	1020-1120
TM 267,295,323	4626	4	Selenite	4	Unm.	1020-1120
TM 294, Ly 81, SC 6	4825	1	Azurite	1	Unm.	1020-1120
		7	Gypsite	7	Unm.	1020-1120
TM 294, Ly 82, SC 6	4824	4	Minerals[b]	4	Unk.	1020-1120

[b] Artifact unavailable for analysis.

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Table MF-6.1. (continued)

Provenience	FS No.	No.	Material	No.	Type	Dating (A.D.)
TM 294, Ly 97, SC 6	4822	1	Lignite	1	Zoom.	1020-1120
		2	Argillite	2	Unm.	1020-1120
		3	Gypsite	3	Unm.	1020-1120
		1	Selenite	1	Unm.	1020-1120
TM 294, Ly 110, SC 6	4673	1	Selenite	1	Unm.	1020-1120
TM 294, Ly 111, SC 6	4818	1	Selenite	1	Unm.	1020-1120
TM 294, Ly 113, SC 6	4671	1	Turquoise	1	Mod.	1020-1120
		1	Hematite	1	Unm.	1020-1120
TM 294, Ly 113, SC 6	4817	13	Selenite	13	Unm.	1020-1120
TM 295, Lv 6	4565	1	Calcite	1	Bead	1020-1120
TM 295, Lv 7	4566	2	Limonite	1	Unm.	1020-1120
				1	Mod.	1020-1120
TM 295, Lv 9	4568	5	Gypsite	5	Unm.	1020-1120
		4	Limonite	1	Unm.	1020-1120
				3	Mod.	1020-1120
		1	Hematite	1	Unm.	1020-1120
TM 295, Lv 10	4569	5	Gypsite	5	Unm.	1020-1120
		19	Azurite	16	Unm.	1020-1120
				3	Mod.	1020-1120
		2	Hematite	2	Unm.	1020-1120
TM 295, Lv 11	4570	2	Gypsite	2	Unm.	1020-1120
		1	Selenite	1	Unm.	1020-1120
TM 295, Lv 12	4571	4	Gypsite	4	Unm.	1020-1120
		1	Hematite	1	Unm.	1020-1120
TM 295, Lv 13	4572	3	Selenite	3	Unm.	1020-1120
		1	Azurite	1	Unm.	1020-1120
		1	Limonite	1	Unm.	1020-1120
		1	Hematite	1	Unm.	1020-1120
		1	Glycymeris	1	Brac.fr.	1020-1120
TM 295, Lv 14	4573	4	Gypsite	4	Unm.	1020-1120
		2	Hematite	2	Unm.	1020-1120
TM 295, Lv 15	4574	2	Gypsite	2	Unm.	1020-1120
TM 295, Lv 16	4575	1	Glycymeris	1	Brac.fr.	1020-1120
		6	Gypsite	6	Unm.	1020-1120
		1	Selenite	1	Unm.	1020-1120
TM 295, Lv 17	4576	2	Gypsite	2	Unm.	1020-1120
		1	Limonite	1	Unm.	1020-1120
TM 295, Lv 18	4577	3	Selenite	3	Unm.	1020-1120
TM 295, Lv 19	4578	2	Gypsite	2	Unm.	1020-1120
TM 323, Lv 8	4553	1	Gypsite	1	Unm.	1020-1120
TM 323, Lv 9	4554	6	Selenite	6	Unm.	1020-1120
TM 323, Lv 10	4555	9	Selenite	9	Unm.	1020-1120
		1	Limonite	1	Mod.	1020-1120
		2	Hematite	2	Unm.	1020-1120
TM 323, Lv 11	4556	2	Selenite	2	Unm.	1020-1120
TM 323, Lv 12	4557	1	Calcite	1	Bead	1020-1120
		3	Selenite	3	Unm.	1020-1120
TM 323, Lv 13	4558	1	Olivella dama	1	Bead	1020-1120
		5	Hematite	5	Unm.	1020-1120

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Table MF-6.1. (concluded)

Provenience	FS No.	No.	Material	No.	Type	Dating (A.D.)
TM 323, Lv 14	4559	1	Turquoise	1	Pend.	1020-1120
		3	Gypsite	3	Unm.	1020-1120
		1	Azurite	1	Unm.	1020-1120
		3	Limonite	3	Unm.	1020-1120
		6	Hematite	6	Unm.	1020-1120
TM 323, Lv 15	4560	1	Glycymeris	1	Brac/Pen	1020-1120
		1	Gypsite	1	Unm.	1020-1120
		7	Hematite	7	Unm.	1020-1120
TM 323, Lv 16	4561	1	Turquoise	1	Mod.	1020-1120
		4	Gypsite	4	Unm.	1020-1120
		1	Selenite	1	Unm.	1020-1120
TM 323, Lv 18	4562	3	Gypsite	3	Unm.	1020-1120
		1	Selenite	1	Unm.	1020-1120
East Ruin						
Room 6, TT 6, Lv 3	3174	1	Calcite	1	Bead	1020-1120
Room 7, wall clear.	3105	1	Malachite	1	Unm.	920-1220
Room 14, TT 2, Lv 5	3154	1	Turquoise	1	Bead bl.	920-1220
Unknown, surface	664	1	Olivella dama	1	Bead	920-1220
		1	Oliva incr.	1	Zoom.	920-1220
		1	Glycymeris	1	Bead	920-1220
		1	Shale	1	Bead	920-1220
Unknown, surface	665	1	Glycymeris	1	Bead	920-1220
		1	Turquoise	1	Bead	920-1220
Other occupational surface lunch area trail	5458	4	Shale	4	Beads	920-1120
Total		3,377				

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Table MF-6.2. Calcite beads, 29SJ 389 (Pueblo Alto).

Time Period (A.D.)	FS No.	Provenience	MEASUREMENTS (cm) Diam. 1	Diam. 2	Thick.	Perf.	Comments
920-1020	6610	Pl. 1, Gr. 8, Ly 17	0.37	0.38	0.12	0.19	Ground all sides, edges. Drilled 2 sides.
	6613	Pl. 1, Gr. 8, Ly 15	0.33	0.31	0.16	0.15	Ground all sides, edges. Drilled 2 sides.
	6615	Pl. 1, Gr. 8, Ly 15	0.33	0.33	0.12	0.15	Ground all sides, edges. Drilled 1 side.
			0.35	0.36	0.15	0.20	Ground all sides, edges. Drilled 1 side.
			0.36	0.36	0.11	0.20	Ground all sides, edges. Drilled 2 sides.
			0.34	0.34	0.14	0.16	Ground all sides, edges. Drilled 1 side.
			0.34	0.34	0.14	0.14	Ground all sides, edges. Drilled 2 sides.
			0.33	0.33	0.12	0.17	Ground all sides, edges. Drilled 2 sides.
			0.37	0.36	0.12	0.21	Ground all sides, edges. Drilled 2 sides.
			0.34	0.34	0.15	0.18	Ground all sides, edges. Drilled 2 sides.
			0.36	0.36	0.13	0.19	Ground all sides, edges. Drilled 1 side.
			0.36	0.35	0.16	0.20	Ground all sides, edges. Drilled 1 side. Polished.
			0.34	0.33	0.13	0.19	Ground all sides, edges. Drilled 2 sides.
			0.36	0.36	0.10	0.20	Ground all sides, edges. Drilled 1 side.
			0.37	0.37	0.13	0.18	Ground all sides, edges. Drilled 1 side.
			0.36	0.35	0.11	0.20	Ground all sides, edges. Drilled 1 side.
			0.36	0.35	0.19	0.16	Ground all sides, edges. Drilled 1 side.
			0.37	0.37	0.13	0.17	Ground all sides, edges. Drilled 1 side.
			0.36	0.36	0.18	0.20	Ground all sides, edges. Drilled 2 sides.
			0.38	0.38	0.18	0.18	Ground all sides, edges. Drilled 1 side.
			0.37	0.37	0.10	0.15	Ground all sides, edges. Drilled 1 side.
			0.38	0.38	0.20	0.21	Ground all sides, edges. Drilled 2 sides.
			0.32	0.32	0.14	0.16	Ground all sides, edges. Drilled 1 side.
			0.33	0.33	0.15	0.20	Ground all sides, edges. Drilled 2 sides.
	6716	Pl. 1, Gr. 8, Fl. 8, Lv 4	0.43	0.43	0.14	0.20	Ground all sides, edges. Drilled 2 sides.
	4354	Pl. 1, Gr. 30, OP 1	0.39	0.38	0.11	0.20	Ground all sides, edges. Drilled 2 sides.
920-1220	1129	Rm. 103, Ly 2, Lv 5	0.56	0.55	0.31	0.27	Ground all sides, edges. Drilled 2 sides.
	7078	Rm. 112, Ly 3	0.50	0.49	0.21	0.22	Ground all sides, edges. Drilled 2 sides.
	5459	Rm. 192, wall clearing	0.54	0.53	0.19	0.23	Ground all sides, edges. Drilled 2 sides.
	453	Rm. 208, wall clearing	0.62	0.61	0.22	0.21	Ground all sides, edges. Drilled 2 sides.
	5827	Rm. 229, Ly 4, Lv 2	0.49	0.49	0.25	0.23	Ground all sides, edges. Drilled 2 sides.

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Table MF-6.2. (continued)

Time Period (A.D.)	FS No.	Provenience	MEASUREMENTS (cm) Diam. 1	Diam. 2	Thick.	Perf.	Comments
920-1220	4231	Kiva 12, wall clearing	0.62	0.69	0.68	0.35	Ground all sides, edges. Drilled 2 sides. Striations.
	4288	Pl. 1, west of Rm. 183,188	0.54	0.54	0.28	0.23	Ground all sides, edges. Drilled 1 side. Striations, offside perforation.
	3621	Pl. 2, Gr. 201, Fl. 8, Lv 44	0.50	0.49	0.17	0.19	Ground all sides, edges. Drilled 2 sides.
	889	Pl. Feat. 1, Rm. 4, Ly 8	0.63	0.63	0.28	0.21	Ground all sides, edges. Drilled 2 sides.
	3	Major Wall 1, "Blockhouse"	0.69	0.36	0.28	0.23	Ground all sides, edges. Drilled 2 sides. Odd shape.
	3692	OS 5, Ly 9, stairs	0.48	0.48	0.16	0.20	Ground all sides, edges. Drilled 1 side.
	664	Unknown, tourists	0.49	0.49	0.19	0.20	Ground all sides, edges. Drilled 2 sides.
1020-1120	1144	Rm. 103, Fl. 1, contact	0.36	0.35	0.12	0.20	Ground all sides, edges. Drilled 2 sides.
			0.43	0.43	0.18	0.23	Ground all sides, edges. Drilled 2 sides.
			0.41	0.40	0.16	0.18	Ground all sides, edges. Drilled 2 sides.
			0.41	0.40	0.15	0.18	Ground all sides, edges. Drilled 2 sides.
			0.40	0.40	0.09	0.20	Ground all sides, edges. Drilled 2 sides.
	1147	Rm. 103, Fl. 1, HP 3	0.39	0.39	0.15	0.16	Ground all sides, edges. Drilled 2 sides.
	1251	Rm. 103, Fl. 2, OP 2	0.41	0.40	0.22	0.23	Ground all sides, edges. Drilled 2 sides.
	1329	Rm. 103, Fl. 4, contact	0.58	0.58	0.42	0.24	Ground all sides, edges. Drilled 2 sides.
	5525	Rm. 110, Ly 5, fill	0.43	0.42	0.19	0.18	Ground all sides, edges. Drilled 2 sides.
			Not measued.				Broken, 1/4 remains.
	5562	Rm. 110, Ly 9, fill	0.50	0.50	0.19	0.23	Ground all sides, edges. Drilled 2 sides.
	1536	Rm. 110, Fl. 1, contact	0.52	0.52	0.19	0.18	Ground all sides, edges. Drilled 2 sides. Striations.
	5599	Rm. 110, Fl. 1, OP 24	0.42	0.41	0.19	0.22	Ground all sides, edges. Drilled 2 sides.
	5752	Rm. 110, Fl. 1, OP 70	0.52	0.51	0.23	0.19	Ground all sides, edges. Drilled 1 side. Polished.
	4719	TM, surface	0.49	0.48	0.27	0.22	Ground all sides, edges. Drilled 2 sides.
			0.46	0.46	0.31	0.22	Ground all sides, edges. Drilled 2 sides.
			0.53	0.52	0.22	0.24	Ground all sides, edges. Drilled 2 sides.
	4732	TM, surface	0.44	0.32	0.20	0.17	Ground all sides, edges. Drilled 2 sides.
			0.52	0.52	0.35	0.28	Ground all sides, edges. Drilled 2 sides. Striations.

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Table MF-6.2. (concluded)

Time Period (A.D.)	FS No.	Provenience	MEASUREMENTS (cm) Diam. 1	Diam. 2	Thick.	Perf.	Comments
1020-1120	4732	TM, surface	0.51	0.51	0.18	0.19	Ground all sides, edges. Drilled 2 sides.
			0.42	0.41	0.21	0.22	Ground all sides, edges. Drilled 2 sides.
			0.47	0.47	0.18	0.23	Ground all sides, edges. Drilled 2 sides.
			0.42	0.42	0.22	0.22	Ground all sides, edges. Drilled 2 sides.
			0.43	0.43	0.16	0.23	Ground all sides, edges. Drilled 2 sides.
	4629	TM 99/127, Lv 7	0.48	0.47	0.20	0.22	Ground all sides, edges. Drilled 2 sides.
	4618	TM 183, Lv 8	0.58	0.57	0.31	0.19	Ground all sides, edges. Drilled 2 sides.
	4783	TM 238, Ly 120	0.44	0.44	0.15	0.22	Ground all sides, edges. Drilled 2 sides.
	4584	TM 267, Lv 11	0.48	0.48	0.27	0.24	Ground all sides, edges. Drilled 2 sides.
	4565	TM 295, Lv 6	0.44	0.44	0.28	0.19	Ground all sides, edges. Drilled 2 sides.
	4557	TM 323, Lv 12	0.42	0.41	0.32	0.19	Ground all sides, edges. Drilled 2 sides.
	3714	East Ruin, Rm. 6, Lv 3	0.53	0.52	0.23	0.19	Ground all sides, edges. Drilled 2 sides. Striations.
1020-1220	6639	Pl. 1, Gr. 20, Fl. 2, Lv 2	0.50	0.50	0.16	0.21	Ground all sides, edges. Drilled 2 sides.
	6648	Pl. 1, Gr. 20, Fl. 2, Lv 3	0.55	0.55	0.27	0.25	Ground all sides, edges. Drilled 2 sides.
			0.40	0.20	0.21	0.22	Ground all sides, edges. Drilled 2 sides. Broken 1/2.
			0.35	0.15	0.22	0.19	Ground all sides, edges. Drilled 2 sides. Broken 1/2.

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Table MF-6.3. Shale beads, 29SJ 389 (Pueblo Alto).[a]

Time Period (A.D.)	FS No.	Provenience	MEASUREMENTS (cm) Diam. 1	Diam. 2	Thick.	Perf.	Comments
920-1020	3020	Rm. 51, Fea. 3, HP 2	0.31	0.31	0.05	0.14	Ground all sides, edges. Drilled 1 side.
	3026	Rm. 51, Fea. 3, OP 5&6	Not measured				12 pieces.
	2914 bl	Rm. 142, Fl. 2, WT 2	0.43	0.43	0.17	0.19	Ground all sides, edges. Drilled 2, polished.
	bl		0.40	0.39	0.17	0.19	Ground all sides, edges. Drilled 2, polished.
	bl		0.39	0.39	0.10	0.20	Ground all sides, edges. Drilled 1, polished.
	bl		0.42	0.42	0.13	0.19	Ground all sides, edges. Drilled 2, polished.
	bl		0.39	0.39	0.15	0.20	Ground all sides, edges. Drilled 2, polished.
	bl		0.38	0.39	0.05	0.20	Ground all sides, edges. Drilled 1, polished.
	gr		0.48	0.48	0.20	0.16	Ground all sides, edges. Drilled 2, polished.
	gr		0.42	0.42	0.16	0.16	Ground all sides, edges. Drilled 2, polished.
	gr		0.41	0.41	0.16	0.16	Ground all sides, edges. Drilled 2, polished.
	gr		0.42	0.41	0.17	0.12	Ground all sides, edges. Drilled 2, polished.
	gr		0.42	0.42	0.17	0.16	Ground all sides, edges. Drilled 2, polished.
	gr		0.43	0.43	0.16	0.16	Ground all sides, edges. Drilled 2, polished.
	gr		0.41	0.41	0.15	0.18	Ground all sides, edges. Drilled 2, polished.
	gr		0.39	0.39	0.17	0.17	Ground all sides, edges. Drilled 2, polished.
	gr		0.39	0.39	0.14	0.16	Ground all sides, edges. Drilled 2, polished.
	gr		0.41	0.41	0.11	0.17	Ground all sides, edges. Drilled 2, polished.
	gr		0.41	0.41	0.12	0.15	Ground all sides, edges. Drilled 2, polished.
	gr		0.40	0.38	0.12	0.17	Ground all sides, edges. Drilled 2, polished.
	2920 gr	Rm. 142, Fl. 2	0.60	0.60	0.21	0.23	Ground all sides, edges. Drilled 2, polished.
	2907 bl	Rm. 142, Fl. 3, HP 1	0.29	0.15	0.09	0.14	Ground all sides, edges. Drilled 2, polished.
	6940 gr	Rm. 143, Fl. 7, Ly 11	0.46	0.46	0.15	0.20	Ground all sides, edges. Drilled 2, polished.
	6613 bl	Pl. 1, Gr. 8, Ly 15	0.27	0.27	0.10	0.12	Ground all sides, edges. Drilled 1.
	bl		0.27	0.27	0.11	0.12	Ground all sides, edges. Drilled 1.
	bl		0.28	0.28	0.09	0.10	Ground all sides, edges. Drilled 1.
	6615 bl	Pl. 1, Gr. 8, Ly 15	0.28	0.28	0.13	0.13	Ground all sides, edges. Drilled 2.
	bl		0.28	0.28	0.11	0.11	Ground all sides, edges. Drilled 2.
	bl		0.22	0.22	0.06	0.13	Ground all sides, edges. Drilled 1.
	bl		0.30	0.18	0.07	0.09	Ground all sides, edges. Drilled 1, polished, broken.
	bl		0.28	0.12	0.07	0.10	Ground all sides, edges. Drilled 1, polished, broken.
	bl		0.27	0.27	0.11	0.12	Ground all sides, edges. Drilled 1, polished.
	bl		0.27	0.27	0.12	0.11	Ground all sides, edges. Drilled 1, polished.

[a]bl = black, gr = gray.

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Table MF-6.3. (continued)

Time Period (A.D.)	FS No.	Provenience	MEASUREMENTS (cm) Diam. 1	Diam. 2	Thick.	Perf.	Comments
920-1020	6615 bl	Pl. 1, Gr. 8, Ly 15	0.26	0.27	0.09	0.11	Ground all sides, edges. Drilled 1, polished.
	bl		0.27	0.27	0.10	0.12	Ground all sides, edges. Drilled 1, polished.
	bl		0.27	0.26	0.09	0.10	Ground all sides, edges. Drilled 1, polished.
	bl		0.27	0.27	0.11	0.13	Ground all sides, edges. Drilled 1, polished.
	bl		0.27	0.27	0.11	0.12	Ground all sides, edges. Drilled 1, polished.
	bl		0.27	0.28	0.09	0.11	Ground all sides, edges. Drilled 1, polished.
	bl		0.27	0.27	0.09	0.11	Ground all sides, edges. Drilled 1, polished.
	bl		0.27	0.27	0.10	0.12	Ground all sides, edges. Drilled 2, polished.
	bl		0.28	0.27	0.11	0.11	Ground all sides, edges. Drilled 1, polished.
	bl		0.28	0.28	0.14	0.11	Ground all sides, edges. Drilled 1, polished.
	bl		0.27	0.27	0.10	0.12	Ground all sides, edges. Drilled 1, polished.
	bl		0.31	0.31	0.08	0.13	Ground all sides, edges. Drilled 1, polished, broken.
	bl		0.30	0.31	0.08	0.12	Ground all sides, edges. Drilled 1, polished.
	bl		0.31	0.31	0.07	0.14	Ground all sides, edges. Drilled 1, polished.
	bl		0.31	0.31	0.11	0.15	Ground all sides, edges. Drilled 2, polished, broken.
	bl		0.30	0.30	0.10	0.12	Ground all sides, edges. Drilled 2, polished, broken.
	bl		0.29	0.29	0.10	0.15	Ground all sides, edges. Drilled 2, polished, broken.
	bl		0.31	0.31	0.12	0.15	Ground all sides, edges. Drilled 1, polished.
	bl		0.30	0.31	0.07	0.14	Ground all sides, edges. Drilled 1, polished.
	bl		0.31	0.31	0.08	0.13	Ground all sides, edges. Drilled 1, polished.
	bl		0.31	0.31	0.11	0.12	Ground all sides, edges. Drilled 1, polished.
	bl		0.30	0.30	0.10	0.13	Ground all sides, edges. Drilled 1, polished.
	bl		0.31	0.31	0.09	0.12	Ground all sides, edges. Drilled 1, polished.
	bl		0.30	0.30	0.07	0.13	Ground all sides, edges. Drilled 1, polished.
	bl		0.27	0.27	0.10	0.10	Ground all sides, edges. Drilled 2, polished.
	bl		0.27	0.27	0.07	0.07	Ground all sides, edges. Drilled 1, polished.
	bl		0.27	0.27	0.11	0.11	Ground all sides, edges. Drilled 1, polished.
	bl		0.27	0.27	0.08	0.11	Ground all sides, edges. Drilled 1, polished.
	bl		0.27	0.27	0.12	0.12	Ground all sides, edges. Drilled 2, polished.
	bl		0.27	0.27	0.09	0.09	Ground all sides, edges. Drilled 1, polished.
	bl		0.27	0.27	0.11	0.09	Ground all sides, edges. Drilled 1, polished.
	bl		0.28	0.28	0.11	0.10	Ground all sides, edges. Drilled 2, polished.
	bl		0.27	0.27	0.10	0.10	Ground all sides, edges. Drilled 2, polished.
	bl		0.26	0.26	0.05	0.12	Ground all sides, edges. Drilled 1, polished.

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Table MF-6.3. (continued)

Time Period (A.D.)	FS No.	Provenience	MEASUREMENTS (cm) Diam. 1	Diam. 2	Thick.	Perf.	Comments
920-1020	6615 bl	Pl. 1, Gr. 8, Ly 15	0.26	0.26	0.12	0.14	Ground all sides, edges. Drilled 1, polished.
	bl		0.27	0.27	0.13	0.13	Ground all sides, edges. Drilled 1, polished.
	bl		0.26	0.26	0.10	0.12	Ground all sides, edges. Drilled 1, polished.
	bl		0.27	0.27	0.07	0.11	Ground all sides, edges. Drilled 1, polished.
	bl		0.26	0.26	0.13	0.09	Ground all sides, edges. Drilled 2, polished.
	6616 bl	Pl. 1, Gr. 8, Ly 16	0.35	0.35	0.12	0.18	Ground all sides, edges. Drilled 1, polished.
	bl		0.32	0.31	0.10	0.13	Ground all sides, edges. Drilled 2, polished.
	bl		0.29	0.29	0.10	0.13	Ground all sides, edges. Drilled 2, polished.
	bl		0.22	0.22	0.08	0.13	Ground all sides, edges. Drilled 2, polished.
	6617 bl	Pl. 1, Gr. 8, Ly 15	0.35	0.35	0.09	0.13	Ground all sides, edges. Drilled 1, polished.
	bl		0.32	0.31	0.10	0.14	Ground all sides, edges. Drilled 2, polished.
	bl		0.29	0.29	0.08	0.12	Ground all sides, edges. Drilled 2, polished.
	bl		0.27	0.27	0.06	0.10	Ground all sides, edges. Drilled 1, polished.
	6618 bl	Pl. 1, Gr. 8, Ly 15	0.29	0.29	0.14	0.14	Ground all sides, edges. Drilled 2, polished.
	bl		0.28	0.28	0.12	0.13	Ground all sides, edges. Drilled 1, polished.
	6619 bl	Pl. 1, Gr. 8, Ly 15	0.33	0.15	0.05	-	Ground all sides, edges. Four pieces.
	bl		0.66	0.64	0.20	0.12	Ground all sides, edges. Drilled 2, rectangular piece.
	6610 bl	Pl. 1, Gr. 8, Ly 17	0.34	0.18	0.12	0.15	Ground all sides, edges. Drilled 2, polished, broken.
	6611 bl	Pl. 1, Gr. 8, Ly 18	0.47	0.47	0.20	0.17	Ground all sides, edges. Drilled 2, polished.
	4724 bl	TM 70, Ly 9	0.57	0.55	0.26	0.18	Ground all sides, edges. Drilled 2.
	bl		0.38	0.38	0.10	0.18	Ground all sides, edges. Drilled 1, polished.
	4638 bl	TM 70, Ly 11	0.49	0.49	0.19	0.17	Ground all sides, edges. Drilled 1, polished.
	gr		0.50	0.28	0.16	0.15	Ground all sides, edges. Drilled 2, broken.
920-1120	5458 gr	Other occupational surface	0.50	0.49	0.27	0.25	Ground all sides, edges. Drilled 2.
	gr		0.53	0.53	0.24	0.21	Ground all sides, edges. Drilled 2.
	bl		0.46	0.46	0.19	0.24	Ground all sides, edges. Drilled 2.
	bl		0.45	0.45	0.20	0.19	Ground all sides, edges. Drilled 2.
920-1220	2198 bl	Rm. 145, Ly 7	0.29	0.29	0.17	0.12	Ground all sides, edges. Drilled 1, polished.
	543 gr	Rm. 228, WC	0.51	0.51	0.20	0.20	Ground all sides, edges. Drilled 1.
	5453 gr	Kiva 15, S wall, bench	0.52	0.52	0.16	0.13	Ground all sides, edges. Drilled 2.
	3419 gr	Pl. 2, Gr. 201, Fl. 1, Ly 2	0.37	0.37	0.15	0.14	Ground all sides, edges. Drilled 2, polished.

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Table MF-6.3. (continued)

Time Period (A.D.)	FS No.	Provenience	MEASUREMENTS (cm) Diam. 1	Diam. 2	Thick.	Perf.	Comments
920-1220	3455 gr	Pl. 2, Gr. 201, OP 2	0.33	0.32	0.18	0.16	Ground all sides, edges. Drilled 2.
	924 gr	Pl. 1, Fea. 3, WC	0.50	0.49	0.48	0.22	Ground all sides, edges. Drilled 2, polished.
	912 bl	Pl. 1, Fea. 3, Ly 3	0.43	0.43	0.19	0.17	Ground all sides, edges. Drilled 2, polished.
	bl		0.38	0.38	0.24	0.17	Ground all sides, edges. Drilled 2, polished.
	4000 gr	Pl. 1, WC	0.55	0.54	0.13	0.17	Ground all sides, edges. Drilled 1, polished.
	664 bl	Unknown, tourists	0.56	0.56	0.19	0.21	Ground all sides, edges. Drilled 1, polished.
1020-1120	1233 bl	Rm. 103, Fl. 2, contact	0.19	0.19	0.11	0.10	Ground all sides, edges. Drilled 2, polished.
	1339 gr	Rm. 103, Fl. 4, contact	0.42	0.42	0.16	0.21	Ground all sides, edges. Drilled 1, polished.
	gr		0.42	0.42	0.16	0.17	Ground all sides, edges. Drilled 1, polished.
	gr		0.46	0.44	0.16	0.26	Ground all sides, edges. Drilled 2, polished.
	gr		0.43	0.43	0.20	0.19	Ground all sides, edges. Drilled 1, polished.
	1352 bl	Rm. 103, Fl. 4, contact	0.47	0.46	0.27	0.23	Ground all sides, edges. Drilled 2, polished.
	bl		0.40	0.40	0.23	0.23	Ground all sides, edges. Drilled 2, polished.
	bl		0.40	0.40	0.20	0.20	Ground all sides, edges. Drilled 2, polished.
	bl		0.40	0.40	0.20	0.20	Ground all sides, edges. Drilled 2, polished.
	1403 bl	Rm. 103, Fl. 4, contact	0.41	0.40	0.18	0.19	Ground all sides, edges. Drilled 1, polished.
	1447 bl	Rm. 103, Fl. 5	0.63	0.63	0.31	0.24	Ground all sides, edges. Drilled 2, polished.
	bl		0.66	0.66	0.25	0.21	Ground all sides, edges. Drilled 2, polished.
	5671 bl	Rm. 110, Fl. 1, HP 4	0.73	0.73	0.30	0.18	Ground all sides, edges. Drilled 2.
	6836 bl	Rm. 236, Fl. 4	0.36	0.36	0.11	0.17	Ground all sides, edges. Drilled 1, polished.
	4732 gr	TM, surface	0.42	0.42	0.21	0.18	Ground all sides, edges. Drilled 2, polished.
	bl		0.43	0.43	0.15	0.23	Ground all sides, edges. Drilled 1.
	gr		0.50	0.50	0.17	0.17	Ground all sides, edges. Drilled 1.
	gr		0.46	0.46	0.15	0.13	Ground all sides, edges. Drilled 1.
	gr		0.46	0.46	0.15	0.17	Ground all sides, edges. Drilled 1.
	gr		0.42	0.42	0.18	0.20	Ground all sides, edges. Drilled 1.
	gr		0.44	0.44	0.18	0.17	Ground all sides, edges. Drilled 1, polished.
	gr		0.45	0.45	0.20	0.17	Ground all sides, edges. Drilled 1.
	gr		0.40	0.40	0.13	0.18	Ground all sides, edges. Drilled 2, polished.
	gr		0.38	0.38	0.17	0.13	Ground all sides, edges. Drilled 2, polished.
	gr		0.34	0.34	0.13	0.14	Ground all sides, edges. Drilled 1, polished.
	gr		0.30	0.30	0.12	0.14	Ground all sides, edges. Drilled 1, polished.
	bl		0.24	0.24	0.13	0.11	Ground all sides, edges. Drilled 1, polished.

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Table MF-6.3. (concluded)

Time Period (A.D.)	FS No.	Provenience	MEASUREMENTS (cm) Diam. 1	Diam. 2	Thick.	Perf.	Comments
1020-1120	4629 gr	TM 99, TT 1, Lv 7	0.44	0.43	0.13	0.20	Ground all sides, edges. Drilled 1, polished.
	4747	TM 154, Ly 19	0.66	0.66	0.26	0.19	Ground all sides, edges. Drilled 1, polished, striations.
			0.65	0.65	0.29	0.21	Ground all sides, edges. Drilled 1, polished.
	4733 bl	TM 154, Ly 43	0.36	0.36	0.19	0.16	Ground all sides, edges. Drilled 2, polished.
	4738 bl	TM 154, Ly 24-31	0.36	0.36	0.20	0.17	Ground all sides, edges. Drilled 1, polished.
	4642 bl	TM 155/183/211	0.70	0.70	0.20	0.19	Ground all sides, edges. Drilled 2, polished.
	4621 bl	TM 183, Lv 11	0.59	0.59	0.31	0.19	Ground all sides, edges. Drilled 2, polished.
1020-1220	495 gr	Maj. Wall 3, WC	0.24	0.24	0.11	0.08	Ground all sides, edges. Drilled 2, polished.
	471 bl	OS 5, WC	0.62	0.61	0.33	0.23	Ground all sides, edges. Drilled 2, polished.
Undated	357 gr	Rm. 102, Fl. 4, surface	0.36	0.36	0.23	0.20	Ground all sides, edges. Drilled 2, polished.
	4729 gr	TM 70, Ly 11, anthill surf.	0.37	0.37	0.19	0.16	Ground all sides, edges. Drilled 2, polished.
	gr		0.31	0.30	0.20	0.14	Ground all sides, edges. Drilled 2, polished.
	wh		0.28	0.27	0.13	0.11	Ground all sides, edges. Drilled 2.

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Table MF-6.4. Turquoise beads, 29SJ 389 (Pueblo Alto).

Time Period (A.D.)	FS No.	Provenience	MEASUREMENTS (cm) Diam. 1	Diam. 2	Thick.	Perf.	Comments
920-1020	2574	Rm. 139, Fl. 2	0.25	0.19	0.06	0.08	7.5 BG 7/8.[a] Oval dish. Ground 2 sides, 1 edge, drilled 1.
	6616	Pl. 1, Gr. 8, Fl. 9, Ly 15	0.31	0.29	0.10	0.10	7.5 BG 6/8. Ground 2 sides, drilled 2, polished.
	6617	Pl. 1, Gr. 8, Fl. 9, Ly 15	0.27	0.13	0.11	0.09	2.5 BG 7/4. Ground all sides, edges. Drilled 2, broken 1/2.
920-1220	5457	Rm. 103, backdirt	1.00	0.91	0.14	0.15	1.5 BG 7/6. Ground 2 sides, 2 edges. Biconical perforation.
	241	Kiva 4, WC	0.64	0.64	0.25	0.16	10 BG 8/4. Ground 2 sides, 1 edge. Drilled 2.
	3484	Pl. 2, Gr. 222, surface	0.32	0.32	0.14	0.08	10 BG 6/8. Ground all sides, edges. Drilled 2.
	665	Unknown, tourists	0.38	0.36	0.12	0.07	10 BG 7/4. Ground all sides, edges. Drilled 2.
1020-1120	1207	Rm. 103, Fl. 2, contact	0.58	0.58	0.22	0.18	10 BG 6/8. Ground all sides, edges. Drilled 2, striations.
			0.44	0.44	0.23	0.19	7.5 BG 7/8 Ground all sides, edges. Drilled 2, polished.
	1235[b]	Rm. 103, Fl. 2, contact	0.50	0.50	0.20	0.10	Ground 2 sides, drilled 2 sides, polished.
	1291[b]	Rm. 103, Fl. 3, contact	0.50	0.50	0.10	0.10	Ground 2 sides, drilled 2 sides, polished.
	4642	TM 155/183/211	0.62	0.62	0.25	0.16	2.5 BG 9/2. Ground 2 sides, 1 edge. Drilled 1.
	4732	TM 1, surface, tourists	0.53	0.44	0.10	0.10	7.5 BG 6/6. Ground all sides, edges. Drilled 1.

[a] Munsell color chart code used to determine turquoise color.
[b] Specimen sent to Brookhaven for neutron activation analysis.

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Table MF-6.5. Bracelet fragments/pendants, 29SJ 389 (Pueblo Alto).

Time Period (A.D.)	FS No.	Provenience	MEASUREMENTS (cm) Length	Width	Thick.	Comments
Chama echinata						
920-1220	6019	Rm. 146, Ly 3, Lv 3	3.75	0.60	0.32	Ground and polished 4 sides. Cut on 1 side, striations on 2.
Glycymeris gigantea						
920-1020	3014	Rm. 50, Subfl. 1, rodent hole	2.08	0.39	0.35	Ground 4 sides, polished 2, beveled 2, striations 2.
	7205	Rm. 112, Fl. 3, Ly 7, fill	5.37	0.40	0.28	Ground 4 sides, polished 1, beveled 3.
	7221	Rm. 112, Fl. 4, Ly 8	1.12	0.40	0.31	Ground 4 sides, polished 1, striations 1.
	7245	Rm. 112, Fl. 4, Ly 8, rodent hole	4.50	0.39	0.32	Ground 4 sides, polished 1, beveled 2, striations 2.
			4.49	0.31	0.21	Ground 4 sides, polished 1, beveled 3.
			3.74	0.42	0.41	Ground 4 sides, polished 2, beveled 1, striations 2.
			4.60	0.38	0.30	Ground 4 sides, polished 1, beveled 1, striations 1.
	7246	Rm. 112, Fl. 4, Ly 8, rodent hole	3.31	0.39	0.23	Ground 4 sides, polished 1, beveled 1, striations 1.
	2580	Rm. 139, Fl. 2, contact	4.59	0.32	0.32	Ground 4 sides, beveled 1, striations 3.
	6198	Rm. 146, Fl. 5, Ly 5, fill	2.95	0.69	0.38	Ground 4 sides, beveled 1. Perforation drilled 1 side, 0.22 cm diam.
	6615	Pl. 1, Gr. 8, Fl. 9, Ly 15	3.81	0.38	0.37	Ground 4 sides, ends, beveled 1, striations 1.
			2.14	0.39	0.36	Ground 4 sides, ends, beveled 1.
			0.77	0.37	0.20	Ground 4 sides, ends, striations 1.
	6616	Pl. 1, Gr. 8, Fl. 9, Ly 15	4.50	0.41	0.31	Ground 4 sides, ends, polished 1, beveled 1, striations 3.
	6618	Pl. 1, Gr. 8, Fl. 9, Ly 15	1.97	0.36	0.36	Ground 4 sides, ends, beveled 1, striations 3.
	6609	Pl. 1, Gr. 8, Fl. 9, Ly 16/17	2.36	0.39	0.28	Ground 4 sides, striations 1.
	6610	Pl. 1, Gr. 8, Fl. 9, Ly 17	3.64	0.51	0.40	Ground 4 sides, beveled 1, striations 3.
	4035	Pl. 1, Gr. 202, Fl. 2	3.33	0.91	0.37	Ground 3 sides, striations 1.
	4042	Pl. 1, Gr. 202, test to bed.	3.77	0.41	0.18	Ground 4 sides, beveled 1.
920-1220	1150	Rm. 103, Ly 1, Lv 5, TP 7	3.23	1.01	0.54	Ground all sides, edges, polished, striations.
	7030	Rm. 112, Ly 4, TT 5	1.75	0.46	0.24	Ground 2 sides, 3 edges, polished 2, striations 1.

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Table MF-6.5. (continued)

Time Period (A.D.)	FS No.	Provenience	MEASUREMENTS (cm) Length	Width	Thick.	Comments
Glycymeris gigantea						
920-1220	6782	Rm. 143, Fl. 1, Gr. 13	2.77	0.45	0.39	Ground 4 sides, beveled 1, striations 2.
	6259	Rm. 147, Ly 2, Lv 4, TT 2	4.14	0.38	0.28	Ground 4 sides, beveled 2.
	5453	Kiva 15, Ly 9, Lv 1, TT 3	2.90	0.47	0.33	Ground 4, beveled 1.
	4218	Pl. 1, Gr. 29, surface	4.30	0.34	0.34	Ground 4 sides.
	4245	Pl. 1, Gr. 195, Ly 3	2.15	0.55	0.42	Ground 2 sides, polished 1, striations 2.
	3660	Pl. 1, Gr. 241, Ly 1	2.92	0.53	0.45	Ground 4 sides, 3 edges.
	887	Pl. Fea. 1, Rm. 4, TT 4, cache	3.91	0.40	0.39	Ground 4 sides, striations 4.
			2.52	0.53	0.23	Ground 2 sides, beveled 1, striations 2.
			2.58	0.79	0.36	Ground 2 sides, beveled 2, striations 2.
			2.75	0.61	0.40	Ground 4 sides, striations 4.
			2.78	0.89	0.46	Ground 3 sides, striations 1. Perforation drilled from 1 side, incomplete.
			4.52	0.58	0.30	Ground 4 sides, beveled 1, striations 4.
			3.28	0.44	0.39	Ground 4 sides, striations 2.
			2.96	0.56	0.28	Ground 3 sides, beveled 1, striations 1.
			3.86	0.77	0.41	Ground 3 sides, perforation drilled from 1 side, 0.23 cm.
			3.95	0.62	0.30	Ground 3 sides, striations 1.
			3.65	0.70	0.52	Ground 4 sides, carved 1, striations 3.
			3.90	0.42	0.40	Ground 4 sides, striations 4.
			4.52	0.61	0.32	Ground 4 sides, carved 1, striations 3.
			3.72	0.48	0.31	Ground 3 sides, carved 1, striations 2.
			4.26	0.42	0.35	Ground 4 sides, striations 3.
			3.37	0.38	0.35	Ground 4 sides, striations 1.
	4280	OS 6, WC	3.87	0.36	0.37	Ground 4 sides, polished 1, beveled 1.
1020-1120	3486	OS 5, WC	4.33	0.44	0.42	Ground all sides, edges. Polished 1, beveled 1.
	4731	TM, tourists	2.83	0.52	0.35	Ground 4 sides, striations 2, notch 1.
	4719	TM, tourists	3.73	0.46	0.43	Ground 2 sides, 3 edges, polished 1. Partially drilled perforation.
	4737	TM 154, Ly 24-42	1.50	0.62	0.41	Ground 3 sides, striations 1. Incomplete perforation, 0.12 cm.

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Table MF-6.5. (concluded)

Time Period (A.D.)	FS No.	Provenience	MEASUREMENTS (cm) Length	Width	Thick.	Comments
Glycymeris gigantea						
10-10-1120	4538	TM 183, Lv 3	3.42	0.50	0.35	Ground 4 sides, polished 1.
	4572	TM 295, Lv 13	2.69	0.48	0.32	Ground 4 sides, polished 1.
	4575	TM 295, Lv 16	2.40	0.50	0.54	Ground 4 sides.
	4560	TM 323, Lv 15	3.98	0.63	0.33	Ground all sides, edges, polished 2 sides and edges. Drilled, 0.18 cm.
1020-1220	4236	Pl. 1, Gr. 279, Fl. 1, fill	2.80	1.05	0.41	Ground 4 sides.
1120-1220	6502	Kiva 10, Lv 17	3.22	0.46	0.40	Ground all sides, edges, polished 1, beveled 1, striations 1.
	5087	Kiva 16, Ly 9, Lv 1	2.83	0.32	0.25	Ground 4 sides.

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Table MF-6.6. Inlay, 29SJ 389 (Pueblo Alto).

Time Period (A.D.)	FS No.	Provenience	MEASUREMENTS (cm) Length	Width	Thick.	Comments
Argillite						
920-1020	3043	Rm. 142, Fl. 6, Ly 13	0.66	0.57	0.15	Trapezoidal.
920-1220	2714	Rm. 142, Lv 10	0.61	0.62	0.18	Rectangular, ground 2 sides, 4 edges.
			0.60	0.58	0.20	Rectangular, ground 2 sides, 4 edges.
			0.65	0.62	0.19	Rectangular, ground 2 sides, 4 edges.
			0.63	0.61	0.18	Rectangular, ground 2 sides, 4 edges.
			0.65	0.62	0.19	Rectangular, ground 2 sides, 4 edges.
			0.62	0.58	0.17	Rectangular, ground 2 sides, 4 edges.
			0.55	0.53	0.18	Rectangular, ground 2 sides, 4 edges.
			0.54	0.53	0.20	Rectangular, ground 2 sides, 4 edges.
			0.54	0.53	0.20	Rectangular, ground 2 sides, 4 edges.
			0.57	0.57	0.13	Rectangular, ground 2 sides, 4 edges.
			0.53	0.53	0.16	Rectangular, ground 2 sides, 4 edges.
	2715	Rm. 142, Lv 11	0.65	0.60	0.17	Rectangular, ground 2 sides, 4 edges.
			0.55	0.54	0.20	Rectangular, ground 2 sides, 4 edges.
	2723	Rm. 142, Ly 6, Lv 1	0.64	0.64	0.20	Rectangular, ground 2 sides, 4 edges.
			0.61	0.59	0.19	Rectangular, ground 2 sides, 4 edges.
1120-1220	6503	Kiva 10, Lv 18	1.12	0.85	0.15	Rectangular, ground 2 sides, 4 edges.
Calcite						
920-1220	2713	Rm. 142, Ly 6, Lv 1	0.74	0.73	0.29	Rectangular, ground 2 sides, 4 edges. Striations 2 sides.
	6572	Rm. 143, Ly 1, Lv 6	0.61	0.61	0.22	Rectangular, ground 2 sides, 3 edges. Striations 2 sides, 3 edges.
1020-1120	6633	Pl. 1, Gr. 8, Fl. 2, Ly 2, Lv 2	0.71	0.67	0.24	Rectangular, ground 2 sides, 4 edges. Striations 2 sides.
Lignite						
920-1220	2714	Rm. 142, Lv 10	0.83	0.42	0.16	Trapezoidal, ground 2 sides, 4 edges.
			0.81	0.45	0.17	Trapezoidal, ground 2 sides, 4 edges.
			0.79	0.39	0.14	Trapezoidal, ground 2 sides, 4 edges.

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Table MF-6.6. (continued)

Time Period (A.D.)	FS No.	Provenience	MEASUREMENTS (cm) Length	Width	Thick.	Comments
920-1220	2714	Rm. 142, Lv 10	0.57	0.39	0.14	Trapezoidal, ground 2 sides, broken 1/4.
			0.86	0.38	0.16	Trapezoidal, ground 2 sides, 4 edges.
			0.89	0.71	0.14	Trapezoidal, ground 3 edges.
Shale						
920-1020	6619	Pl. 1, Gr. 8, Fl. 9, Ly 15	0.49	0.21	0.09	Rectangular.
hell						
Chama echinata						
920-1220	2714	Rm. 142, Lv 10	0.87	0.16	0.11	Crescent, ground 2 sides, 2 edges, polished. 2.
			0.85	0.16	0.12	Rectangular, ground 2 sides, 4 edges, polished 1.
			0.79	0.19	0.12	Crescent, ground 2 sides, 2 edges.
			0.71	0.28	0.10	Trapezoidal, ground 2 sides, 4 edges, polished 1.
			0.59	0.17	0.11	Rectangular, ground 2 sides, 4 edges, striations 1.
			0.56	0.20	0.09	Rectangular, ground 2 sides, 4 edges, polished 1.
			0.62	0.17	0.10	Crescent, ground 2 sides, 2 edges, polished 1.
			0.50	0.15	0.13	Rectangular, ground 2 sides, 4 edges.
	2715	Rm. 142, Lv 11	0.85	0.30	0.12	Rectangular, ground 2 sides, 4 edges.
			0.49	0.16	0.11	Rectangular, ground 2 sides, 4 edges.
			0.84	0.18	0.12	Crescent, ground 2 sides, 2 edges, polished 1, drilled 1, incomplete perforation.
	2732	Rm. 142, Ly 5, Lv 4	0.68	0.18	0.14	Crescent, ground 2 sides, 2 edges, polished 1, beveled 1.
Turquoise						
920-1220	2714	Rm. 142, Lv 10	0.62	0.51	0.17	Irregular, ground 2 sides, all edges, beveled 1. 5 BG 7/4[a]
			0.71	0.61	0.49	Irregular, ground 2 sides, 4 edges, polish 1, notch 1 10 BG 7/8
			0.95	0.39	0.14	Bird form, ground 2 sides, 4 edges, polish 1, notch 1, notch 1, carved 1. 5 B 7/6
			0.87	0.38	0.14	Bird form, ground 2 sides, 4 edges, polish 1, notch 1, carved 1. 10 BG 7/8
			0.70	0.47	0.15	Rectangular, ground 2 sides, 4 edges, beveled 1, complete perforation. 2.5 BG 7/6
			0.59	0.29	0.16	Bird form, ground 2 sides, 4 edges. 7.5 BG 6/8
			0.44	0.41	0.17	Irregular, ground 2 sides, 3 edges, notch 1. 10 BG 7/8

[a]Munsell color chart code used to determine turquoise color.

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Table MF-6.6. (continued)

Time Period (A.D.)	FS No.	Provenience	MEASUREMENTS (cm) Length	Width	Thick.	Comments	
Turquoise							
920-1220	2714	Rm. 142, Lv 10	0.59	0.46	0.13	Trapezoidal, ground 2 sides, 4 edges.	10 BG 7/8[a]
			0.45	0.40	0.13	Trapezoidal, ground 2 sides, 4 edges.	10 BG 6/8
			0.65	0.32	0.12	Rectangular, ground 2 sides, 4 edges, polished 1.	7.5 BG 6/8
			0.57	0.42	0.10	Rectangular, ground 2 sides, 4 edges, polished 1.	10 BG 7/8
			0.51	0.25	0.12	Triangular, ground 2 sides, 3 edges, polished 2.	10 BG 6/8
			0.51	0.28	0.10	Triangular, ground 2 sides, 3 edges.	7.5 BG 6/8
			0.49	0.28	0.12	Triangular, ground 2 sides, 3 edges, polished 1.	10 BG 6/8
			0.47	0.28	0.10	Triangular, ground 2 sides, 3 edges, polished 1.	10 BG 6/8
			0.48	0.28	0.09	Triangular, ground 2 sides, 3 edges, polished 2.	10 BG 6/8
			0.50	0.28	0.13	Triangular, ground 2 sides, 3 edges, polished 1.	10 BG 7/8
			0.50	0.26	0.12	Triangular, ground 2 sides, 3 edges, polished 1.	7.5 BG 6/8
			0.55	0.24	0.15	Triangular, ground 2 sides, 3 edges.	7.5 BG 7/8
			0.50	0.29	0.13	Triangular, ground 2 sides, 3 edges, polished 2.	10 BG 6/8
			0.43	0.24	0.14	Triangular, ground 2 sides, 2 edges.	10 BG 5/6
			0.43	0.26	0.13	Triangular, ground 2 sides, 3 edges.	10 BG 7/8
			0.90	0.44	0.16	Rectangular, ground 2 sides, 4 edges, polished 1, beveled 1.	2.5 BG 8/4
			0.89	0.43	0.15	Rectangular, ground 2 sides, 4 edges.	2.5 BG 7/6
			0.96	0.38	0.11	Rectangular, ground 2 sides, 4 edges.	5 G 6/6
			0.87	0.27	0.17	Rectangular, ground 2 sides, 4 edges.	2.5 BG 7/6
			0.72	0.28	0.08	Rectangular, ground 2 sides, 4 edges.	7.5 BG 7/8
			0.69	0.24	0.16	Rectangular, ground 2 sides, 4 edges, polished 1.	10 BG 6/8
			0.85	0.22	0.15	Rectangular, ground 2 sides, 4 edges, polished 1.	10 BG 7/8
			0.70	0.25	0.09	Rectangular, ground 2 sides, 4 edges, polished 1.	7.5 BG 7/8
			0.76	0.17	0.10	Rectangular, ground 2 sides, 4 edges, polished 1.	10 BG 6/8
			0.77	0.20	0.15	Rectangular, ground 2 sides, 4 edges, polished 1.	5 BG 8/2
			0.72	0.20	0.20	Rectangular, ground 2 sides, 4 edges.	7.5 BG 6/8
			0.62	0.20	0.12	Rectangular, ground 2 sides, 4 edges.	10 BG 7/6
			0.63	0.22	0.16	Rectangular, ground 2 sides, 4 edges, polished 1.	7.5 BG 7/8
			0.62	0.20	0.20	Rectangular, ground 2 sides, 4 edges, polished 1.	10 BG 6/8
			0.63	0.20	0.16	Rectangular, ground 2 sides, 4 edges, polished 2.	10 BG 6/8
			0.66	0.20	0.14	Rectangular, ground 2 sides, 4 edges, polished 1.	10 BG 7/8
			0.63	0.18	0.12	Rectangular, ground 2 sides, 3 edges, polished 1.	10 BG 7/8

[a]Munsell color chart code used to determine turquoise color.

CHCU_310_D58_VOL 4_00723

Table MF-6.6. (continued)

Time Period (A.D.)	FS No.	Provenience	MEASUREMENTS (cm) Length	Width	Thick.	Comments	
Turquoise							
920-1220	2714	Rm. 142, Lv 10	0.55	0.22	0.14	Rectangular, ground 2 sides, 4 edges, polished 1.	10 BG 6/8[a]
			0.57	0.25	0.15	Rectangular, ground 2 sides, 4 edges.	5 BG 7/8
			0.63	0.22	0.14	Rectangular, ground 2 sides, 4 edges, polished 1, beveled 1.	10 BG 7/8
			0.61	0.21	0.10	Rectangular, ground 2 sides, 4 edges.	7.5 BG 7/8
			0.50	0.21	0.16	Rectangular, ground 2 sides, 4 edges.	5 B 6/6
			0.50	0.17	0.13	Rectangular, ground 2 sides, 4 edges, polished 1.	10 BG 7/8
			0.59	0.30	0.14	Rectangular, ground 2 sides, 4 edges.	7.5 BG 7/8
			0.58	0.28	0.17	Rectangular, ground 2 sides, 4 edges, polished 1.	7.5 BG 7/6
			0.58	0.30	0.15	Rectangular, ground 2 sides, 4 edges, polished 1.	10 BG 7/8
			0.66	0.30	0.15	Rectangular, ground 2 sides, 4 edges.	7.5 BG 7/6
			0.59	0.27	0.16	Rectangular, ground 2 sides, 4 edges, polished 1.	10 BG 7/8
			0.55	0.16	0.16	Rectangular, ground 2 sides, 4 edges.	7.5 BG 7/8
			0.50	0.29	0.15	Rectangular, ground 2 sides, 4 edges, polished 1.	7.5 BG 6/8
			0.58	0.25	0.08	Rectangular, ground 2 sides, 4 edges, polished 1.	10 BG 7/8
			0.45	0.25	0.15	Rectangular, ground 2 sides, 4 edges, polished 1.	2.5 BG 4/6
			0.51	0.28	0.14	Rectangular, ground 2 sides, 4 edges.	7.5 BG 7/6
			0.46	0.27	0.14	Rectangular, ground 2 sides, 4 edges, polished 1.	7.5 BG 6/8
			0.55	0.24	0.12	Rectangular, ground 2 sides, 4 edges.	7.5 BG 6/8
			0.49	0.27	0.16	Rectangular, ground 2 sides, 4 edges, polished 1.	10 BG 6/8
			0.49	0.28	0.17	Rectangular, ground 2 sides, 4 edges, polished 1.	5 BG 7/6
			0.44	0.25	0.14	Rectangular, ground 2 sides, 4 edges.	10 BG 7/8
			0.43	0.23	0.15	Rectangular, ground 2 sides, 4 edges, polished 1.	10 BG 7/8
			0.48	0.32	0.09	Rectangular, ground 2 sides, 4 edges, polished 1.	10 BG 7/6
			0.53	0.28	0.12	Rectangular, ground 2 sides, 4 edges.	10 BG 6/8
			0.42	0.27	0.15	Rectangular, ground 2 sides, 4 edges, polished 1.	7.5 BG 6/8
			0.46	0.34	0.11	Rectangular, ground 2 sides, 4 edges.	10 BG 7/8
			0.49	0.40	0.15	Rectangular, ground 2 sides, 4 edges.	7.5 BG 7/6
			0.46	0.44	0.16	Rectangular, ground 2 sides, 4 edges.	10 BG 7/8
			0.45	0.21	0.15	Rectangular, ground 2 sides, 4 edges, polished 1.	7.5 BG 7/6
			0.47	0.25	0.10	Rectangular, ground 2 sides, 4 edges.	10 BG 7/8
			0.46	0.18	0.18	Rectangular, ground 2 sides, 4 edges, polished 2.	10 BG 6/8
			0.37	0.19	0.13	Rectangular, ground 2 sides, 4 edges, polished 1.	10 BG 6/8

[a]Munsell color chart code used to determine turquoise color.

CHCU_310_D58_VOL 4_00724

Table MF-6.6. (continued)

Time Period (A.D.)	FS No.	Provenience	MEASUREMENTS (cm) Length	Width	Thick.	Comments	
Turquoise							
920-1220	2714	Rm. 142, Lv 10	0.36	0.16	0.16	Rectangular, ground 2 sides, 4 edges, beveled 1.	10 BG 6/6[a]
			0.42	0.20	0.19	Rectangular, ground 2 sides, 3 edges, polished 1.	10 BG 6/8
			0.47	0.20	0.12	Rectangular, ground 2 sides, 4 edges.	10 BG 7/8
			0.42	0.21	0.09	Rectangular, ground 2 sides, 4 edges, polished 1.	10 BG 6/8
			0.38	0.19	0.15	Rectangular, ground 2 sides, 4 edges, polished 1.	10 BG 6/8
			0.41	0.24	0.17	Rectangular, ground 2 sides, 4 edges, polished 1.	7.5 BG 6/8
			0.42	0.19	0.15	Rectangular, ground 2 sides, 4 edges.	7.5 BG 7/6
			0.37	0.20	0.15	Rectangular, ground 2 sides, 4 edges, polished 1.	10 BG 6/8
			0.38	0.20	0.15	Rectangular, ground 2 sides, 4 edges, polished 1.	10 BG 7/8
			0.32	0.21	0.16	Rectangular, ground 2 sides, 4 edges.	7.5 BG 5/8
			0.36	0.17	0.11	Rectangular, ground 2 sides, 4 edges, polished 2.	10 BG 7/8
			0.33	0.21	0.11	Rectangular, ground 2 sides, 4 edges, polished 1.	7.5 BG 7/8
			0.27	0.17	0.10	Rectangular, ground 2 sides, 4 edges, polished 2.	10 BG 7/8
			0.30	0.19	0.12	Rectangular, ground 2 sides, 4 edges, polished 2.	10 BG 7/8
			0.29	0.16	0.15	Rectangular, ground 2 sides, 4 edges.	5 BG 7/6
			0.33	0.16	0.12	Rectangular, ground 2 sides, 4 edges, polished 1.	2.5 BG 7/6
			0.36	0.25	0.09	Rectangular, ground 2 sides, 4 edges, polished 1.	10 BG 7/8
			0.31	0.28	0.17	Rectangular, ground 2 sides, 4 edges, polished 1.	10 BG 7/8
			0.28	0.25	0.11	Rectangular, ground 2 sides, 4 edges.	10 BG 6/8
			0.23	0.22	0.12	Rectangular, ground 2 sides, 4 edges.	10 BG 6/8
			0.31	0.34	0.14	Rectangular, ground 2 sides, 4 edges, polished 1.	7.5 BG 7/6
			0.55	0.30	0.10	Rectangular, ground 2 sides, 4 edges.	7.5 BG 6/8
	2715	Rm. 142, Lv 11	0.75	0.47	0.15	Triangular, ground 2 sides, 3 edges.	10 BG 7/8
			0.67	0.21	0.13	Rectangular, ground 2 sides, 4 edges.	7.5 BG 7/8
			0.49	0.21	0.14	Rectangular, ground 2 sides, 4 edges, polished 1.	7.5 BG 7/8
			0.33	0.21	0.11	Rectangular, ground 2 sides, 4 edges.	7.5 BG 6/8
			0.46	0.28	0.14	Rectangular, ground 2 sides, 4 edges, beveled 1.	5 BG 7/6
			0.28	0.17	0.07	Rectangular, ground 2 sides, 4 edges, beveled 1.	7.5 BG 6/8
			0.35	0.15	0.13	Rectangular, ground 2 sides, 4 edges.	7.5 BG 7/8
			0.43	0.23	0.10	Irregular, ground 2 sides, 4 edges, polished 1.	10 BG 6/8
			0.35	0.21	0.10	Rectangular, ground 2 sides, 4 edges.	10 BG 6/8
			0.40	0.33	0.12	Trapezoidal, ground 2 sides, 4 edges, beveled 1.	7.5 BG 7/8

[a]Munsell color chart code used to determine turquoise color.

CHCU_310_D58_VOL 4_00725

Table MF-6.6. (concluded)

Time Period (A.D.)	FS No.	Provenience	MEASUREMENTS (cm) Length	Width	Thick.	Comments	
Turquoise							
920-1220	2715	Rm. 142, Lv 11	0.28	0.16	0.13	Rectangular, ground 2 sides, 4 edges.	10 BG 7/8[a]
			0.41	0.19	0.08	Rectangular, ground 2 sides, 4 edges.	10 BG 7/8
	2732	Rm. 142, Ly 5, Lv 4	0.70	0.25	0.17	Rectangular, ground 2 sides, 4 edges.	7.5 BG 7/8
	2723	Rm. 142, Ly 6, Lv 1	0.80	0.26	0.15	Rectangular, ground 2 sides, 4 edges.	7.5 BG 7/4
			0.56	0.27	0.16	Rectangular, ground 2 sides, 4 edges.	7.5 BG 7/8
			0.55	0.15	0.13	Rectangular, ground 2 sides, 4 edges.	10 BG 7/8
			0.66	0.22	0.16	Rectangular, ground 2 sides, 4 edges.	10 BG 7/8
			0.49	0.26	0.12	Triangular, ground 2 sides, 3 edges.	10 BG 6/8
			0.43	0.26	0.14	Triangular, ground 2 sides, 3 edges, polished 1.	10 BG 6/8
			0.43	0.29	0.11	Triangular, ground 2 sides, 3 edges, beveled 1.	10 BG 7/6
			0.29	0.19	0.14	Rectangular, ground 2 sides, 3 edges.	10 BG 7/8
			0.21	0.16	0.09	Rectangular, ground 2 sides, 4 edges.	10 BG 7/8
			0.20	0.14	0.13	Rectangular, ground 2 sides, 4 edges.	10 BG 7/8
	2748	Rm. 142, Ly 6, Lv 4	0.61	0.52	0.15	Rectangular, ground 2 sides, 4 edges.	10 BG 7/8
	6256	Rm. 147, Ly 2, Lv 2	0.39	0.28	0.10	Rectangular, ground 2 sides, 4 edges, beveled 1.	2.5 BG 8/4
1020-1120	1144	Rm. 103, Fl. 1, contact	0.63	0.33	0.15	Rectangular, ground 2 sides, 4 edges.	5 BG 8/4
	5495	Rm. 110, Fl. 1, contact	1.14	0.41	0.29	Triangular, ground 2 sides, 3 edges, polished 2.	7.5 BG 6/8
	7112	Rm. 112, below Fl. 1	0.63	0.48	0.15	Triangular, ground 2 sides, 3 edges, polished 1, beveled 1.	7.5 BG 6/8
	4658	TM 211, Ly 10	0.45	0.30	0.10	Rectangular, ground 2 sides, 4 edges, beveled 4.	7.5 BG 7/6
1120-1220	6517	Kiva 10, Lv 25	1.10	0.51	0.18	Rectangular, ground 2 sides, 4 edges, polished 2.	5 BG 7/6

[a]Munsell color chart code used to determine turquoise color.

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Table MF-6.7. Ornaments, other or unidentified, 29SJ 389 (Pueblo Alto).

Time Period (A.D.)	FS No.	Provenience	MEASUREMENTS (cm) Length	Width	Thick.	Material	Comments
1120-1220	6518	Kiva 10, TT 1, Lv 26	2.94	1.67	0.70	Bone	Perf. 0.81 cm; notched, carved.
1020-1120	4542	TM 211, Lv 3	1.25	0.98	0.40	Argillite	Irreg. shape. Ground 2 sides, 3 edges, carved, drilled 2 sides with 0.17 cm perf. Notch.
920-1220	6291	Rm. 147, TT 2, Ly 3	1.74	0.71	0.26	Calcite	Rectangular. Ground 2 sides, 3 edges. Striations.
920-1220	1136	Rm. 103, TP 6, Ly 2, Lv 4	3.00	2.03	1.89	Limonite	Tubular. Polished 1 side.
920-1220	6735	Kiva 10, WC	3.97	2.70	0.79	Sandstone	Key shaped. Ground 2 sides, edges.
920-1220	1143	Rm. 103, TP 5, above Fl. 1	0.74	0.41	0.09	Haliotus	Irregular. Ground 4 sides.
	1142	Rm. 103, TP 7, Ly 2, Lv 6	0.96	0.93	0.11	Haliotus	Trapezoidal. Ground 4 sides.
1020-1220	6513	Kiva 10, Lv 11	1.95	1.29	0.14	Haliotus	Rectangular. Ground 2 sides.
920-1220	6781	Rm. 143, Fl. 1, fill	1.98	0.79	0.27	Spondylus	Triangular. Ground 2 sides, 1 edge, polished 2 sides, striations 2 sides.
1020-1120	4643	TM, TT 1, clearing profile	0.85	0.63	0.58	Olivella	Irregular, broken.
920-1020	4666	TM 126, Ly 13	2.85	0.98	0.44	FW clam	Irregular, broken.
1020-1120	4521	TM 127, Lv 5	6.52	3.84	0.81	Shale	Tcamahia frag. Irregular, broken. Ground.

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Microfiche for Chapter 8

Faunal Remains from Pueblo Alto

Nancy J. Akins

Tables MF-8.1 - MF-8.20
Appendix MF-8.A. Faunal Analysis Format
Appendix MF-8.B. Examples of MNI Program Output
Appendix MF-8.C. Principal Components Analysis
Appendix MF-8.D. Discriminant Analysis of Temporal Classification

CHCU_310_D58_VOL 4_00728

Table MF-8.1. Room 103 provenience information and bone counts.

Provenience	Number of Elements	Ceramic Association
Floor 1 fill	1,504	Late Mix
Floor 1 contact	32	Gallup?
Other Pit 3 (postoccupational)	21	
Other Pit 4 (plugged)	1	
Other Pit 5 (postoccupational & occupational)	5	
Other Pit 7 (postoccupational & occupational)	76	
Wall Niches 6,7,8,11 (postoccupational)	15	Late Mix
Heating Pit 1 (occupational)	28	Gallup
Heating Pit 3 (plugged)	1	
Floor 2 fill	122	
Cist 1 (postoccupational)	1	
Cist 2 (plugged)	32	
Posthole 2 (occupational)	81	
Posthole 3 (postoccupational)	2	
Posthole 4 (postoccupational)	1	
Heating Pit 6 (plugged)	1	
Heating Pit 8 (plugged)	3	
Mealing bin 2 (postoccupational)	14	
Floor 3 fill	86	
Floor 3 contact	4	
Structural Floor 3	2	
Firepit 1 (occupational)	6	
Other Pit 5 (postoccupational)	1	
Other Pit 8 (plugged)	7	
Posthole 5 (postoccupational)	2	
Posthole 6 (postoccupational)	1	
Heating Pit 5 (plugged)	1	
Mealing Bins 1-3 (postoccupational)	8	
Floor 4 fill	470	
Other Pit 1 (postoccupational)	6	
Other Pit 11 (occupational)	39	
Other Pit 16 (postoccupational)	4	
Other Pit 17 (postoccupational)	1	
Other Pit 19 (postoccupational)	11	
Other Pit 20 (postoccupational)	1	
Posthole 6 (postoccupational)	3	
Posthole 11 (postoccupational)	3	
Posthole 14 (postoccupational)	4	
Posthole 20 (postoccupational)	9	
Postholes 23,25,26 (postoccupational)	3	
Heating Pit 1 (occupational)	5	
Floor 5 fill	47	Red Mesa
Subfloor	7	
Total	2,671	

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Table MF-8.2 Room 109 provenience information and bone counts.

Provenience	Number of Elements	Ceramic association
Floor 1 fill	124	Late Mix
Floor 1 contact	1	Late Mix
Total	125	

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Table MF-8.3. Room 110 provenience information and bone counts.

Provenience	Replaster	Number of Elements	Ceramic Association
Floor 1 fill		799	Gallup
Floor 1 contact		5	
Structural floor	9	57	
Firepit 1 (occupational)	1	5	
Firepit 2 (plugged)	5	30	
Other Pit 1 (postoccup.)	2	6	
Other Pit 5 (postoccup.)	4	27	
Other Pit 6 (plugged)	3	6	
Other Pit 7 (plugged)	4	14	
Other Pit 9 (plugged)	2	22	
Other Pit 11 (plugged)	2	2	
Other Pit 14 (plugged)	2	3	
Other Pit 15 (plugged)	2	16	
Other Pit 17 (plugged)	5	4	
Other Pit 21 (plugged)	6	1	
Other Pit 22 (plugged)	7	15	
Other Pit 24 (plugged)	6	2	
Other Pit 25 (plugged)	6	2	
Other Pit 26 (plugged)	8	9	
Other Pit 33 (plugged)	7	5	
Other Pit 35 (plugged)	7	9	
Other Pit 36 (plugged)	8	6	
Other Pit 37 (plugged)	8	4	
Other Pit 38 (plugged)	8	17	
Other Pit 39 (plugged)	8	8	
Other Pit 40 (plugged)	9	3	
Other Pit 42 (plugged)	9	6	
Other Pit 46 (plugged)	8	5	
Other Pit 47 (plugged)	8	1	
Other Pit 48 (plugged)	8	52	
Other Pit 49 (plugged)	8	10	
Other Pit 51 (plugged)	9	21	
Other Pit 52 (plugged)	9	9	
Other Pit 55 (plugged)	8	5	
Other Pit 56 (plugged)	8	10	
Other Pit 60 (plugged)	9	21	
Other Pit 62 (plugged)	9	14	
Other Pit 63 (plugged)	9	6	
Other Pit 64 (plugged)	9	57	
Other Pit 66 (plugged)	9	27	
Other Pit 67 (plugged)	9	1	
Other Pit 68 (plugged)	9	2	
Other Pit 69 (plugged)	9	1	
Other Pit 70 (plugged)	9	15	
Other Pit 72 (plugged)	9	4	
Other Pit 73 (plugged)	9	24	
Other Pit 74 (plugged)	9	13	

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Table MF-8.3. (concluded)

Provenience	Replaster	Number of Elements	Ceramic Association
Posthole 3 (post-occup.)	4	1	Gallup
Posthole 4 (post-occup.)	1	1	
Posthole 6 (plugged)	4	2	
Posthole 8 (plugged)	5	3	
Posthole 9 (plugged)	5	2	
Posthole 11 (plugged)	5	2	
Posthole 16 (plugged)	5	2	
Posthole 17 (plugged)	5	3	
Vent Opening 2 (plugged)		10	Gallup/Late Mix
Vent Opening 3 (plugged)		23	
Vent Opening 4 (plugged)		1	
Vent Opening 5 (plugged)		2	
Floor 2 fill		59	Red Mesa/Gallup
Floor 2 contact		1	
Trash Deposit 2		1	
Firepit 1 (occupational)		32	
Firepit 2 (occupational)		14	
Other Pit 1 (postoccup.)		22	
Door 5 (structural)		9	?
Floor 3 fill		6	Red Mesa

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Table MF-8.4. Room 112 provenience information and bone counts.

Provenience	Number of Elements	Ceramic Association
Surface 1 fill	981	Gallup/Late Mix
Floor 1 association	42	Gallup
Other Pit 3 (postoccup.)	58	
Wall Niche 3 (postoccup.)	125	
Wall Niche 6 (postoccup.)	59	
Floor 2 fill	179	
Floor 2 contact	9	
Other Pit 1 (postoccup.)	1	
Other Pit 2 (postoccup.)	337	
Other Pit 3 (postoccup.)	3	
Posthole 1 (postoccup.)	1	
Rodent Burrow 3 (postoccup.)	20	
Floor 3 fill	71	Red Mesa
Rodent Burrow 1 (postoccup.)	38	
Rodent Burrow 2 (postoccup.)	22	
Rodent Burrow 3 (postoccup.)	6	
Subfloor fill	322	
Room total	2,274	

Table MF-8.5. Room 229 provenience information and bone counts.

Provenience	Number of Elements	Ceramic Association
Floor 1 fill	123	Gallup
Floor 1 contact	3	Gallup
Subfloor	1	Red Mesa/Gallup
Total	127	

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Table MF-8.6. Kiva 15 provenience information and bone counts.

Provenience	Number of Elements	Ceramic Association
Floor 1 fill	474	Late Mix
Firepit 1 (postoccup.)	39	
Firepit 2 (postoccup.)	4	
Other Pit 2 (postoccup.)	7	
Wall Niche 1 (struct.)	1	Gallup
Vent 1 (postoccup.)	58	Late Mix
Bench (struct. & postoccup.)	15	
Wall construction	39	Gallup
Total	637	

Table MF-8.7. Room 138 provenience information and bone counts.

Provenience	Number of Elements	Ceramic Association
Floor 1 fill	18	Late Mix
Floor 2 fill	6	Red Mesa
Wall trench	5	Red Mesa
Total	29	

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Table MF-8.8. Rooms 139 and 145 provenience information and bone counts.

Provenience	Number of Elements	Ceramic Association
Room 139:		
Floor 1		
Fill	51	Late Mix
Roof fall	93	
Floor 1 Contact	3	Late Mix ?
Room 145:		
Floor 1		
Fill	18	Late Mix
Roof fall	512	
Rooms 139/145:		
Floor 2		
Fill	99	Red Mesa
Floor 2 Contact	1	
Other Pit 2 (occup.)	1	
Other Pit 13 (occup.)	3	
Other Pit 14 (postoccup.)	1	
Posthole 8 (plugged)	3	
Heating Pit 1 (occup.)	8	
Heating Pit 3 (occup.)	10	
Heating Pit 6 (occup.)	10	
Heating Pit 7 (occup.)	7	
Heating Pit 9 (occup.)	5	
Heating Pit 10 (occup.)	1	
Heating pit 12 (occup.)	10	
Wall Trenchs 1, 2 and 4	5	
Total	841	

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Table MF-8.9. Room 142 provenience information and bone counts.

Provenience	Number of Elements	Ceramic Association
Floor 1 fill	115	Late Mix
roof fall	375	
Posthole 2 (occupational)	1	
Floor 2 contact	1	
Other Pit 4 (postocc.)	3	
Total	495	

Table MF-8.10. Rooms 143 and 236 provenience information and bone counts.

Provenience	Number of Element	Ceramic Association
Floor 1 fill	326	Late Mix
Wall Niche 10 (plugged)	1	
Door 13	2	
Unnamed feature	13	
Wall trench	2	
Floor 2 fill	5	Gallup ?
Other Pit 1 (occup.)	6	Gallup
Rm 236 Floor 4 fill	1	
Rm 236 Floor 4 contact	8	
Floor 3 fill	11	
Other Pit 3 (occupational)	9	
Rm 236 Floor 5 contact	22	
Rm 236 Heating Pit 1 (occup.)	4	
Floor 4 fill	46	
Wall trench	2	
Floor 5 fill	10	
Floor 6 fill	11	
Total	479	

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Table MF-8.11. Room 146 provenience information and bone counts.

Provenience	Number of Elements	Ceramic Association
Floor 1 fill	8	Late Mix
Floor 1 roof fall	95	Late Mix
Total	103	

Table MF-8.12. Room 147 provenience information and bone counts.

Provenience	Number of Elements	Ceramic Association
Floor 1 fill	284	Late Mix
Wall Niche 4 (postocc.)	23	
Firepit 1 (plugged)	27	
Total	334	

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Table MF-8.13. Number of elements and MNIs for Pre-Alto.

	Unit 1								Unit 2									
	Pl. Gr. 8 Sur. 4		Rm. 51 Fl. 1		Rm. 143 Fl. 7		Pl. Gr. 8 Sur. 6		Rm. 51 Fl. 2		Rm. 142 assoc.		Fl. 3 O. P. 3		Rm. 143 Fl. 8		Pl. Gr. 8 Sur. 8	
	n	MNI	n	MNI	n	MNI	n	MNI	n	MNI	n	MNI	n	MNI	n	MNI	n	MNI
Sylvilagus sp.	5	2					2	1	8	1	18	1	7	1	3	1	45	2
L. californicus	4	1	1	1			5	1	4	1	25	1	3	1	1	1	37	1
A. leucurus																		
C. gunnisoni	2	1					1	1			6	1					8	1
T. bottae													2	1				
D. ordii			2	1													1	1
Peromyscus sp.																		
N. cinerea																		
Canis sp.																		
C. latrans													1	1				
C. lupus									1	1								
F. rufus																		
O. hemionus																		
A. americana											3	1						
O. canadensis																		
Accipitridae																	4	1
B. jamaicensis																		
A. chrysaetos											1	1	1	1				
M. gallopavo																		
O. asio																		
E. alpestris																		
Corvidae																	1	1
P. pica																		
C. corax																		
G. cyanocephalus																		
Fringillidae																		
No. unknown	20		5		1		12		16		73		26		2		123	
% unknown	64.5		62.5		100.0		60.0		55.1		57.9		65.0		33.3		56.2	
Totals	31	4	8	2	1		20	3	29	3	126	5	40	5	6	2	219	7

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Table MF-8.13. (continued)

	Units 3 and 4														Unit 5					
	Rm. 50 Fl. 1		Rm. 51 Fl. 3		Rm. 142 assoc.		Fl. 4 H.P. 2		Rm. 143 Fl. 9		Rm 146 Fl. 3		Pl. Gr. 8 Sur. 9		Rm. 50 Fl. 2		Rm. 142 Fl. 5		Rm. 146 Fl. 4	
	n	MNI	n	MNI	n	MNI	n	MNI	n	MNI	n	MNI	n	MNI	n	MNI	n	MNI	n	MNI
Sylvilagus sp.	3	1			22	1	10	1	21	2	44	4	182	6	14	1	4	1	3	1
L. californicus					14	1	2	1	18	1	55	2	134	4	4	1	7	2	9	1
A. leucurus													3	1						
C. gunnisoni					2	1			3	1	1	1	18	2					1	1
T. bottae					1	1							2	1	1	1				
D. ordii													2	1						
Peromyscus sp.											1	1	2	1			1	1		
N. cinerea													1	1						
Canis sp.					2		4								1	1				
C. latrans					6	1														
C. lupus																				
F. rufus			1	1									1	1						
O. hemionus													4	1						
A. americana					3	2			1	1			3	1			1	1		
O. canadensis									1	1										
Accipitridae													6							
B. jamaicensis											7	1	2	1						
A. chrysaetos									2	1	4	1	4	1						
M. gallopavo															1	1				
O. asio									1	1										
E. alpestris			1	1			1	1					2	1						
Corvidae																				
P. pica					1	1														
C. corax											3	1	1	1						
G. cyanocephalus											5	1	1	1						
Fringillidae													1	1						
No. unknown	5		6		76		31		40		53		787		9		13		5	
% unknown	62.5		75.0		59.8		64.5		46.0		30.6		68.1		31.0		50.0		27.8	
Totals	8	1	8	2	127	8	48	3	87	8	173	12	1,156	26	30	5	26	5	18	3

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Table MF-8.13. (concluded)

	Unit 6				Unit 7				Unit 8						Totals	
	Rm. 142 Fl. 6		Rm. 146 Fl. 5		Rm. 142 Fl. 7		Rm. 146 Fl. 5		Rm. 142 Fl. 8		Rm. 142 Fl. 9		Rm. 146 Fl. 8			
	n	MNI	n	MNI	n	MNI	n	MNI	n	MNI	n	MNI	n	MNI	n	MNI
Sylvilagus sp.	21	2			15	1	1	1	3	1					431	32
L. californicus	15	1			8	1	1	1	8	1	1	1	8	1	364	27
A. leucurus															3	1
C. gunnisoni	8	1			4	2			7	1			3	1	64	15
T. bottae															6	4
D. ordii															5	3
Peromyscus sp.	5	1													9	4
N. cinerea															1	1
Canis sp.					2										9	1
C. latrans					2	1									9	3
C. lupus															1	1
F. rufus															2	2
O. hemionus			1												5	1
A. americana			antler										29	2	40	8
O. canadensis					1	1									2	2
Accipitridae															10	1
B. jamaicensis															9	2
A. chrysaetos	1	1													13	6
M. gallopavo															1	1
O. asio															1	1
E. alpestris															4	3
Corvidae															1	1
P. pica															1	1
C. corax															4	2
G. cyanocephalus															6	2
Fringillidae															1	1
No. unknown	53				43		6		8		1		5		1,419	
% unknown	51.4				57.3		75.0		30.7		50.0		11.1		58.5	
Totals	103	6	1		75	6	8	2	26	3	2	1	45	4	2,421	126

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Table MF-8.14. Plaza Feature 1 provenience information and bone counts.

Provenience	Number of Elements	Ceramic Association
Room 1		
Test Trench 1 fill	3	Late Mix
Room 2		
Wall clearing	4	Late Mix
Room 3		
Floor 1 fill	115	Late Mix
Floor 1 contact	16	|
Floor 1 features	22	|
Floor 2 fill	27	Gallup?
Floor 2 features (Plaza)	3	|
Floor 3 fill	6	Red Mesa
Floor 4 fill	2	|
Subfloor test	33	|
Subtotal	224	
Room 4		
Floor 1 fill	64	Late Mix
Floor 2 fill	4	Gallup/Red Mesa
Floor 3 fill (Plaza)	10	|
Floor 3 features	2	|
Floor 4 fill	19	|
Floor 4 contact	3	|
Subtotal	112	
Kiva 13		
Test	519	Gallup
Totals	862	

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Table MF-8.15. East Ruin provenience information and bone counts.

Provenience	Number of Elements	Ceramic Association
Kiva 1 (backhoe)	19	Gallup
Room 2	9	
Room 4	1	
Room 5	1	
Room 6		
Level 3	24	Gallup/Late Mix
Level 4	12	
Room 7	1	Gallup
Room 11	4	
Room 12	7	
Room 14 (kiva)		
Fill	31	Gallup/Late Mix
Firepit 1 (occupational)	6	
Other Pit 4 (occupational)	28	
Total Room 14	65	
Total	142	

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T MF-8.16. Proveniences contributing to the wall bearing divisions.

West		North		East		Southeast		Southcentral		Southwest		Major Wall 3	
Rooms	n	Rooms	n	Rooms	n	Rooms	n	Rooms	n	Rooms	n		
100	19	138	3	170	2	193	4	198	2	212	12		
101	1	143	6	177	5	197	19	200	15	213	15		
102	9	144	2	182	2			201	11	215	6		
104	5	147	1	183	30			203	8	216	16		
105	8	148	2	185	1			204	1	218	6		
106	14	150	2	186	5			207	1	219	35		
108	46	151	1	188	7			209	2	220	2		
113	3	153	1	191	21					221	88		
117	7	154	8	192	20					222	2		
118	2	155	1							230	4		
225	2	156	1							231	1		
229	14	157	2										
		158	2										
		159	31										
		162	6										
		164	14										
		166	8										
		223	2										
Kivas	n	Kivas	n	Kivas	n			Kivas	n	Kivas	n		
1	5	2	13	6	1			7	6	8	15		
		4	2							9	11		
		5	1										
		10	1										
Other Structures		OS	n			OS	n	OS	n	OS	n		
		2	2			4	23	3	3	8	39		
						12	3	7	70	9	13		
										10	3		
										11	23		
Major Walls				MW	n	MW	n	MW	n			MW	n
				1	72	2	4	5	7			3	21
Circular Structures						CS	n						
						2	6						
Totals	135		112		166		59		126		291		21
Mean	10.4		4.8		9.4[a]		9.8		5.9[b]		17.1		

[a] Without Major Wall 1.
[b] Without Other Structure 7.

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Table MF-8.17. North Plaza provenience information and bone counts.

Provenience	Number of Elements	Ceramic Association
Plaza Grid 8:		
Surface 1 fill	25	Late Mix
Surface 2 fill	9	
Surface 2 contact	11	
OP 1 (postoccupational)	43	
Surface 3 fill	1	
Plaza Grid 9		
Kiva 10 upper fill (S.4)	66	
Plaza Grid 22		
Surface 1 fill	5	
Plaza 26		
Surface 1 fill	5	
Plaza 27		
Surface 5 contact	1	Red Mesa
Surface 6 fill	6	
Plaza 28		
Surface 5 fill	40	
Surface 5 contact	1	
Plaza 29		
Surface 5 fill	11	Gallup/Red Mesa
Plaza 38		
Surface 1 fill	3	Late Mix
Plaza 48		
Surface 1 fill	1	
Plaza 51		
Surface 1 fill	1	
Misc. grid unknown	6	
Totals	235	

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Table MF-8.18. East Plaza provenience information and bone counts.

Provenience			Number of Elements	Ceramic Association
Unit 1				
	Plaza Grid 35	Surface 1 fill	182	Late Mix
		Surface 1 contact	2	
		Surface 3 fill	17	
		Surface 4 contact	1	
		Surface 5 contact	6	
		Surface 6 fill	15	
		Surface 7 fill	11	
		Surface 9 contact	2	
		Surfaces 10 and 11 fill	75	Gallup?
		Surface 10 contact	7	
		Wall Foundation Trench	9	Red Mesa
		Cleaning profile	7	?
	Plaza Grid 272	Surface 1 fill	7	Late Mix
Unit 2				
	Plaza Grid 55	Surface 1 fill	125	Late Mix
		Surface 2 fill	3	
	Plaza Grid 75	Surface 1 fill	24	
	Plaza Grid 273	Surface 1 fill	72	
		Surface 1 contact	8	
	Plaza Grid 274	Surface 1 fill	30	
Unit 3				
	Plaza Grid 93	Surface 1	2	Late Mix
	Plaza Grid 95	Surface 1 fill	63	
		Surface 1 contact	3	
	Plaza Grid 275	Surface 1 fill	15	
Unit 4				
	Plaza Grid 115	Surface 1 fill	59	Late Mix
		Surface 1 contact	1	
	Plaza Grid 134	Surface 1 fill	1	
	Plaza Grid 135	Surface 1 fill	3	
		Surface 2 fill	1	
	Plaza Grid 276	Surface 1 fill	2	
		Surface 2 contact	3	
	Plaza Grid 277	Surface 1 fill	2	
		Surface 2 fill	3	
Unit 5				
	Plaza Grid 175	Surface 1 fill	4	Late Mix
		Surface 1 contact	3	
		Surface 2 fill	2	
	Plaza Grid 195	Surface 1 fill	4	
		Surface 1 contact	2	
		Surface 2 fill	10	
	Plaza Grid 278	Surface 1 fill	2	
	Plaza Grid 279	Surface 1 fill	1	
		Surface 1 contact	2	
	Plaza Grid 280	Surface 1 fill	4	
		Surface 1 contact	12	
Misc.	East Plaza	Provenience unknown	1	?

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Table MF-8.19. South Plaza provenience information and bone counts.

Provenience	Number of Elements	Ceramic Association
Other Structure 6	243	Late Mix
Surface 1		
Plaza Grid: 200	1	Late Mix
203	1	
222	1	
249	1	
265	7	
269	7	
283	7	
Total	19	
Surface 2		
Plaza Grid: 201	10	Red Mesa
202	47	
203	41	
266	5	
Total	103	

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Table MF-8.20. Plaza 2 provenience information and bone counts.

Provenience	Number of Elements	Ceramic Association
Other Structure 5		
Surface 1 fill	40	Late Mix
Surface 1 contact	1	
Surface 2 fill	3	
Surface 3 fill	8	
Surface 4 fill	3	
Surface 5 fill	2	
Surface 6 fill	8	
Surface 7 fill	6	Gallup/Late Mix
Surface 8 fill	10	
Surface 9 fill	16	
Surface 10 fill	4	
Surface 11 fill	9	
Subtotal	110	
Grid 161		
Surface 1 fill	44	Late Mix
Other Pit 3 (occupational)	60	
Subtotal	104	
Grid 181		
Surface 1 fill	117	Late Mix
Surface 2 fill	4	
Surface 3 fill	13	
Surface 4 fill	10	
Surface 4 contact	14	
Surface 5 fill	14	
Surface 5 contact	12	
Surface 6 fill	2	
Surface 7 fill	2	Gallup
Surface 8 fill	2	
Surface 9 fill	4	
Unknown feature	3	Gallup ?
Subtotal	197	
Grid 182		
Surface 1 fill	4	Late Mix
Other Pit 5 (unknown)	1	
Subtotal	5	

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Table MF-8.20. (concluded)

Provenience	Number of Elements	Ceramic Association
Grid 201		
Surface 1 fill	58	Late Mix
Other Pit 2 (occupational)	100	
Surface 2 fill	57	
Surface 3 fill	23	
Surface 3 contact	1	
Surface 4 fill	25	
Surface 5 fill	15	
Surface 6 fill	9	
Surface 7 fill	3	Gallup
Surface 8 fill	12	
Posthole 1 (postoccup.)	8	
Surface 9 fill	10	Gallup
Surface 9 contact	12	
Surface 10 fill	10	
Surface 11 fill	7	
Surface 13 fill	9	
Surface 14 fill	1	
Surface 15 fill	1	
Surface 16 fill	1	
Surface 16 contact	1	
Unnamed Feature	2	
Subtotal	365	
Grid 221		
Surface 1 fill	39	Late Mix
Surface 2 fill	39	
Surface 3 fill	5	Gallup
Surface 10 fill	3	
Surface 10 contact	2	
Deep test	2	
Subtotal	81	
Grid 241		
Surface 1 fill	2	Late Mix
TOTAL	864	

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APPENDIX MF-8.A

FAUNAL ASSEMBLAGE FORMAT

V1 Site (1 column)
- 1 Pueblo Alto

V2 Time (2 columns)
- 11 early Basketmaker
- 12 late Basketmaker
- 21 PI
- 31 early Red Mesa
- 32 late Red Mesa
- 41 early Gallup
- 42 middle Gallup
- 43 late Gallup
- 51 early Late Mix
- 52 late Late Mix
- 60 Mesa Verde reoccupation

V3 Provenience type (1 column)
- 1 unit fill
- 2 occupational fill
- 3 roof fall
- 4 domestic refuse
- 5 open space
- 6 cache
- 7 kiva

V4 Season (1 column)
- 1 spring
- 2 fall
- 3 winter
- 4 mixed

Taxon	Standardized score
Sylvilagus sp.	col 1
L. californicus	col 2
C. gunnisoni	col 3
Econ. rodents	col 4
Small-med. mammal	col 5
Carnivores	col 6
O. hemionus	col 7
A. americana	col 8
O. canadensis	col 9
Artio. & large mam.	col 10
M. gallopavo	col 11
Ided. Aves	col 12
Unidentified Aves	col 13

V38 control number (4 columns)

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APPENDIX MF-8.B

EXAMPLES OF MNI PROGRAM OUTPUT

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Appendix MF-8.B. Minimum Number of Individuals of Species: Lepus californicus.

	Fetal			Immature				Young adult				Adult			
Element	Left	Right	Axial	?	Left	Right	Axial	?	Left	Right	Axial	?	Left	Right	Axial
1XX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
2XX	0	0	0	0	0	0	0	0	0	0	0	0	34	27	0
16XX	0	0	0	0	0	0	0	0	2	0	0	0	30	34	0
25PR	0	0	0	0	0	0	0	0	3	2	0	0	17	18	0
25SH	0	0	0	0	1	0	0	0	1	2	0	0	5	13	0
25DI	0	0	0	0	4	1	0	0	1	1	0	0	57	63	0
26PR	0	0	0	0	3	1	0	0	4	5	0	0	31	25	0
26SH	0	0	0	0	3	1	0	0	5	5	0	1	14	15	0
26DI	0	0	0	0	3	1	0	0	2	3	0	0	47	37	0
27PR	0	0	0	0	0	0	0	0	4	2	0	0	36	43	0
27SH	0	0	0	0	1	0	0	0	3	3	0	0	6	4	0
27DI	0	0	0	0	0	0	0	0	6	7	0	0	15	11	0
35PR	0	0	0	0	0	1	0	0	2	0	0	0	20	37	0
35SH	0	0	0	0	0	1	0	0	2	0	0	0	20	33	0
35DI	0	0	0	0	0	1	0	0	2	0	0	0	20	33	0
36PR	0	0	0	0	1	1	0	0	1	0	0	0	39	28	0
36SH	0	0	0	0	1	1	0	0	0	0	0	0	36	25	0
36DI	0	0	0	0	1	1	0	0	0	0	0	0	36	25	0
37PR	0	0	0	0	1	0	0	0	1	0	0	0	24	29	0
37SH	0	0	0	0	1	0	0	0	1	0	0	0	22	25	0
37DI	0	0	0	0	1	0	0	0	1	0	0	0	22	26	0
38PR	0	0	0	0	0	0	0	0	0	0	0	0	14	11	0
38SH	0	0	0	0	0	0	0	0	0	0	0	0	14	11	0
38DI	0	0	0	0	0	0	0	0	0	0	0	0	14	11	0
40PR	0	0	0	0	0	0	0	0	0	0	0	0	5	10	0
40SH	0	0	0	0	0	0	0	0	0	0	0	0	5	10	0
40DI	0	0	0	0	0	0	0	0	0	0	0	0	5	10	0
41PR	0	0	0	0	1	0	0	0	0	1	0	0	19	18	0
41SH	0	0	0	0	1	0	0	0	0	1	0	0	9	9	0
41DI	0	0	0	0	1	0	0	0	0	1	0	0	9	9	0

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Appendix MF-8.B. Minimum No. of Individuals of Species: Lepus californicus (concluded).

Element	Fetal			Immature				Young adult				Adult			
	Left	Right	Axial	?	Left	Right	Axial	?	Left	Right	Axial	?	Left	Right	Axial
42PR	0	0	0	0	1	0	0	0	1	2	0	0	27	22	0
42SH	0	0	0	0	1	0	0	0	1	2	0	0	10	9	0
42DI	0	0	0	0	1	0	0	0	1	2	0	0	9	9	0
43PR	0	0	0	0	1	0	0	0	2	0	0	0	23	17	0
43SH	0	0	0	0	1	0	0	0	2	0	0	0	13	10	0
43DI	0	0	0	0	2	0	0	0	2	0	0	0	13	10	0
44PR	0	0	0	0	1	0	0	0	1	1	0	0	22	15	0
44SH	0	0	0	0	1	0	0	0	1	1	0	0	17	9	0
44DI	0	0	0	0	1	0	0	0	1	1	0	0	17	8	0
45XX	0	0	0	0	1	0	0	0	0	0	0	0	15	19	0
47XX	0	0	0	0	1	0	0	0	0	0	0	0	22	19	0
48SH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48DI	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
55XX	0	0	0	0	0	0	0	0	0	2	0	0	3	2	0
55IL	0	0	0	0	2	2	0	0	4	5	0	0	28	36	0
55AC	0	0	0	0	2	1	0	0	4	4	0	0	27	43	0
60PR	0	0	0	0	0	2	0	0	2	1	0	0	17	30	0
60SH	0	0	0	0	1	2	0	0	0	0	0	0	6	5	0
60DI	0	0	0	0	0	1	0	0	5	5	0	0	29	30	0
61PR	0	0	0	0	1	3	0	0	1	3	0	0	22	13	0
61SH	0	0	0	0	1	2	0	0	0	3	0	0	3	5	0
61DI	0	0	0	0	1	0	0	0	3	9	0	0	25	23	0
62PR	0	0	0	0	0	0	0	0	2	6	0	0	4	3	0
62SH	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
90XX	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0

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Appendix MF-8.B. Minimum Number of Individuals of Species: Meleagris gallopavo.

	Fetal			Immature				Young adult				Adult			
Element	Left	Right	Axial	?	Left	Right	Axial	?	Left	Right	Axial	?	Left	Right	Axial
1XX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2XX	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
16XX	0	0	0	0	0	0	0	0	0	0	0	0	4	6	0
25PR	1	0	0	0	0	0	0	0	0	0	0	0	10	6	0
25SH	1	0	0	0	0	0	0	0	0	0	0	0	6	3	0
25DI	1	0	0	0	0	0	0	0	0	0	0	0	9	5	0
26PR	1	1	0	0	0	0	0	0	0	0	0	0	8	6	0
26SH	1	1	0	0	0	0	0	1	0	0	0	0	4	4	0
26DI	1	1	0	0	0	0	0	0	0	0	0	0	5	4	0
27PR	0	0	0	0	0	0	0	0	0	0	0	0	6	7	0
27SH	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0
27DI	0	0	0	0	0	0	0	0	0	0	0	0	10	8	0
40PR	1	1	0	0	0	0	0	3	0	0	0	0	11	5	0
40SH	1	1	0	0	0	0	0	3	0	0	0	0	10	5	0
40DI	1	1	0	0	0	0	0	3	0	0	0	0	11	6	0
48PR	1	1	0	0	0	0	0	0	0	0	0	0	1	5	0
48SH	1	2	0	0	0	0	0	0	0	0	0	0	1	2	0
48DI	1	1	0	0	2	0	0	0	1	0	0	0	3	3	0
55XX	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0
55IL	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0
55AC	0	0	0	0	0	0	0	0	0	0	0	0	6	7	0
60PR	2	2	0	0	0	1	0	0	0	0	0	0	7	7	0
60SH	2	2	0	0	0	0	0	0	0	0	0	0	6	5	0
60DI	2	2	0	0	1	0	0	0	0	0	0	0	6	10	0
61PR	1	1	0	0	0	0	0	0	0	0	0	0	6	8	0
61SH	2	1	0	0	0	0	0	0	0	0	0	0	4	4	0
61DI	1	1	0	0	0	1	0	0	1	0	0	0	8	6	0
62PR	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0
62SH	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0

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APPENDIX MF-8.C

PRINCIPAL COMPONENTS ANALYSIS

CHCU_310_D58_VOL 4_00754

Appendix MF-8.C. Correlation Matrix: Principal Components Analysis

Principal Components Analysis

Means and Std Deviations

	Cottontail Col. 1	Jack rabbit Col. 2	Pr. dog Col. 3	Econ. rodent Col. 4	Small mam. Col. 5	Carnivore Col. 6	Deer Col. 7
Mean	-0.17	-0.11	0.34	0.01	0.41	0.05	-0.37
Std. Dev.	4.71	4.85	6.67	2.03	7.00	1.99	2.81

	Pronghorn Col. 8	Mt. sheep Col. 9	Artio/lrg. mam. Col. 10	Turkey Col. 11	Wild bird Col. 12	Unk. bird Col. 13
Mean	-0.09	-0.22	-0.35	-0.02	0.07	-0.00
Std. Dev.	1.98	1.93	6.28	7.81	10.45	3.74

Number of observations = 47

Correlation Matrix

	Cottontail Col. 1	Jack rabbit Col. 2	Pr. dog Col. 3	econ. rodent Col. 4	small mam. Col. 5	Carnivore Col. 6	Deer Col. 7
Cottontail	1.00	-0.04	-0.29	-0.31	-0.23	-0.01	0.15
Jack rabbit	-0.04	1.00	0.26	-0.07	-0.34	0.43	-0.03
Prairie dog	-0.29	0.26	1.00	0.35	-0.31	0.20	-0.09
Econ. rodent	-0.31	-0.07	0.35	1.00	0.07	0.12	-0.01
Small mam.	-0.23	-0.34	-0.31	0.07	1.00	-0.24	-0.19
Carnivore	-0.01	0.43	0.20	0.12	-0.24	1.00	-0.19
Deer	0.15	-0.03	-0.09	-0.01	-0.19	-0.19	1.00
Pronghorn	-0.03	0.08	-0.08	-0.05	-0.20	0.16	0.28
Mt. sheep	-0.03	-0.19	-0.18	0.01	-0.04	-0.02	0.22
Artio./lg. mam.	-0.09	-0.21	-0.34	-0.10	0.14	-0.17	0.16
Turkey	-0.30	-0.27	0.04	0.13	-0.26	-0.14	-0.12
Wild bird	0.24	-0.17	-0.26	-0.16	-0.20	-0.01	-0.08
Uniden. bird	-0.31	-0.18	-0.02	-0.10	-0.25	-0.17	-0.23

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Appendix MF-8.C. (continued)

	Pronghorn Col. 8	Mt. sheep Col. 9	Artio/lrg. mam. Col. 10	Turkey Col. 11	Wild bird Col. 12	Unk. bird Col. 13
Cottontail	-0.03	-0.03	-0.09	-0.30	0.24	-0.31
Jack rabbit	0.08	-0.19	-0.21	-0.27	-0.17	-0.18
Prairie dog	-0.08	-0.18	-0.34	0.04	-0.26	-0.02
Econ. rodent	-0.05	0.01	-0.10	0.13	-0.16	-0.10
Small mam.	-0.20	-0.04	0.14	-0.26	-0.20	-0.25
Carnivore	0.16	-0.02	-0.17	-0.14	-0.01	-0.17
Deer	0.28	0.22	0.16	-0.12	-0.08	-0.23
Pronghorn	1.00	0.29	0.10	0.14	-0.05	-0.02
Mt. sheep	0.29	1.00	0.37	0.02	0.01	0.09
Artio./lg. mam.	0.10	0.37	1.00	-0.14	-0.16	-0.11
Turkey	0.14	0.02	-0.14	1.00	-0.11	0.65
Wild bird	-0.05	0.01	-0.16	-0.11	1.00	0.18
Uniden. bird	-0.02	0.09	-0.11	0.65	0.18	1.00

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Appendix MF-8.C. (continued)

Means and Std Deviations

	Cottontail Col. 1	Jack rabbit Col. 2	Pr. dog Col. 2	Econ. rodent Col. 3
Mean	-0.17	-0.11	0.34	0.01
Std. Dev.	4.71	4.85	6.67	2.03

Number of observations = 47

Correlation Matrix

		Cottontail Col. 1	Jack Rabbit Col. 2	Pr. dog Col. 3	Econ. rodent Col. 4
Cottontail	Col. 1	1.00	-0.04	-0.29	-0.31
Jack rabbit	Col. 2	-0.04	1.00	0.26	-0.07
Prairie dog	Col. 3	-0.29	0.26	1.00	0.35
Econ. rodent	Col. 4	-0.31	-0.07	0.35	1.00

Principal Components Analysis

Scoring Coefficient Matrix

		Factor 1	Factor 2	Factor 3
Cottontail	Col. 1	-0.41	0.21	0.97
Jack rabbit	Col. 2	0.17	0.82	-0.10
Prairie dog	Col. 3	0.47	0.24	0.38
Econ. rodent	Col. 4	0.42	-0.38	0.56

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Appendix MF-8.C. (continued)

Scoring Coefficient Matrix

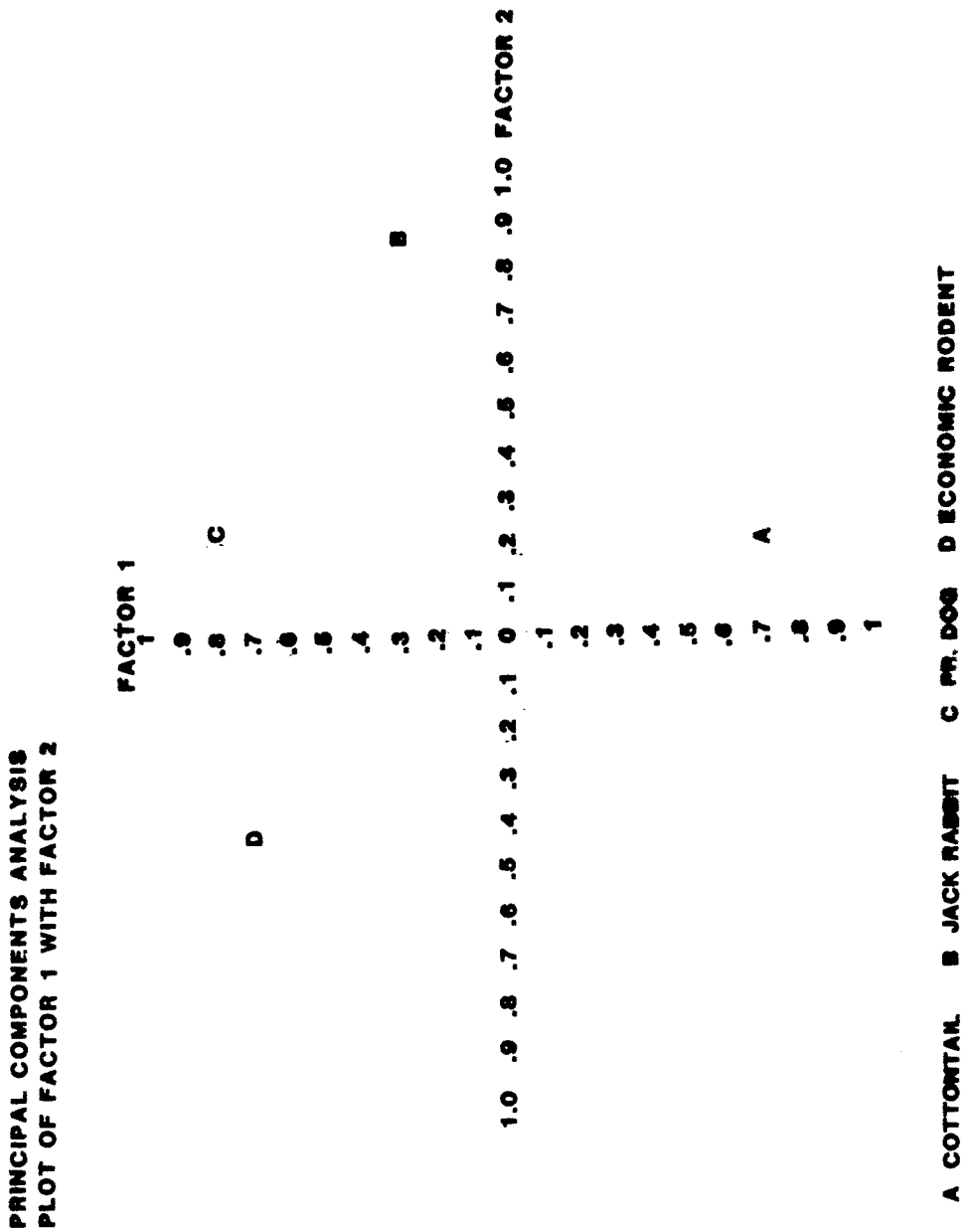
		Factor 1	Factor 2	Factor 3
Cottontail	Col. 1	-0.35	-0.26	-0.05
Jackrabbit	Col. 2	0.10	-0.29	0.52
Prairie dog	Col. 3	0.39	-0.04	0.32
Econ. rodent	Col. 4	0.33	0.22	0.11
Deer	Col. 7	-0.25	0.19	0.38
Pronghorn	Col. 8	-0.16	0.34	0.37
Mt. sheep	Col. 9	-0.21	0.38	0.11
Turkey	Col. 11	0.17	0.37	-0.30

Principal Components Analysis

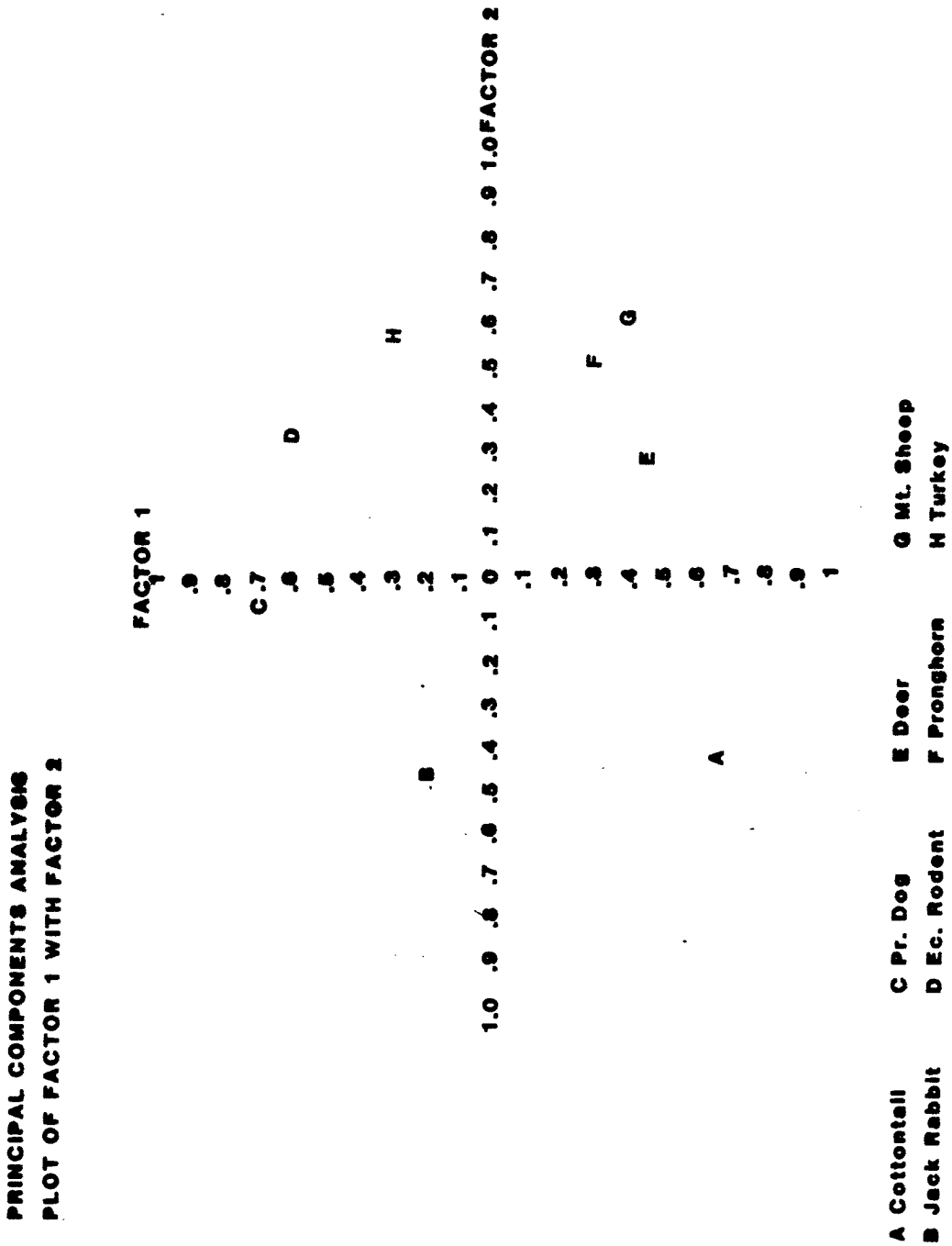
Scoring Coefficient Matrix

	Factor 1	Factor 2	Factor 3
Col. 1	-0.14	-0.24	0.22
Col. 2	0.25	-0.24	0.10
Col. 3	0.33	-0.01	-0.07
Col. 4	0.16	0.07	-0.23
Col. 5	-0.17	0.01	-0.45
Col. 6	0.23	-0.18	0.10
Col. 7	-0.14	-0.11	0.16
Col. 8	-0.04	-0.01	0.27
Col. 9	-0.18	0.07	0.14
Col. 10	-0.26	0.01	-0.07
Col. 11	0.09	0.39	0.14
Col. 12	-0.08	0.01	0.25
Col. 13	0.06	0.39	0.19

CHCU_310_D58_VOL 4_00758

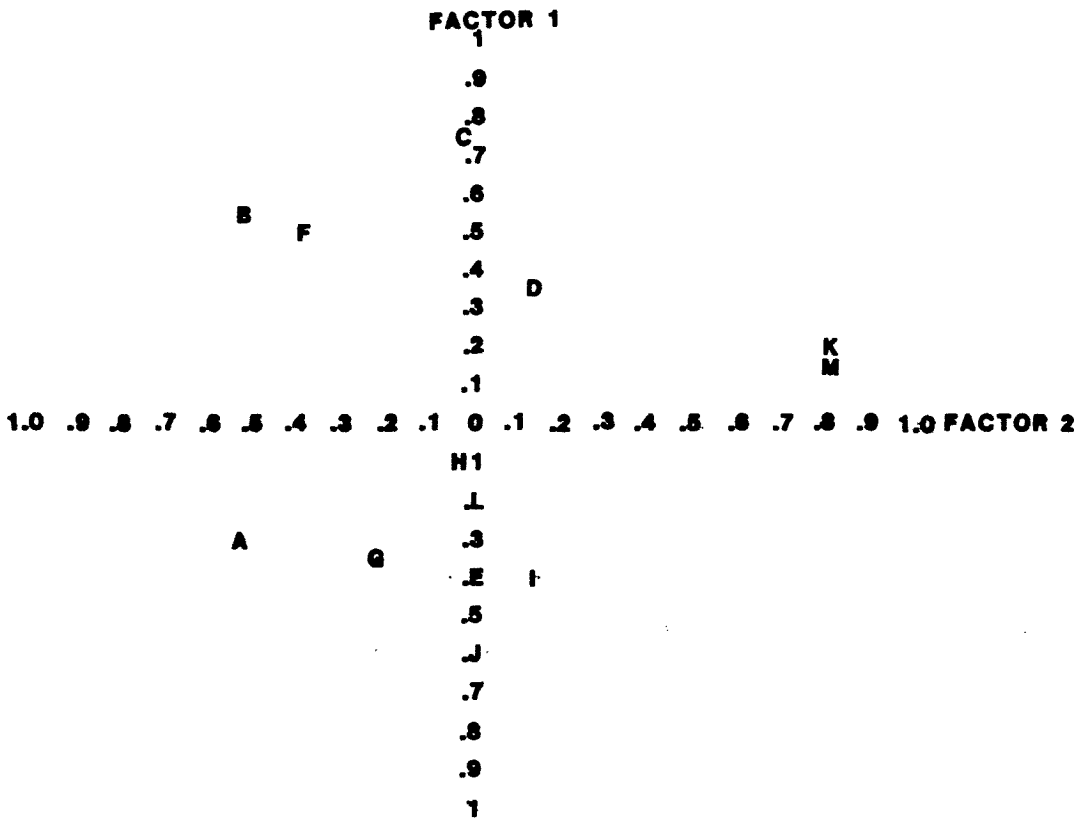


CHCU_310_D58_VOL 4_00759



CHCU_310_D58_VOL 4_00760

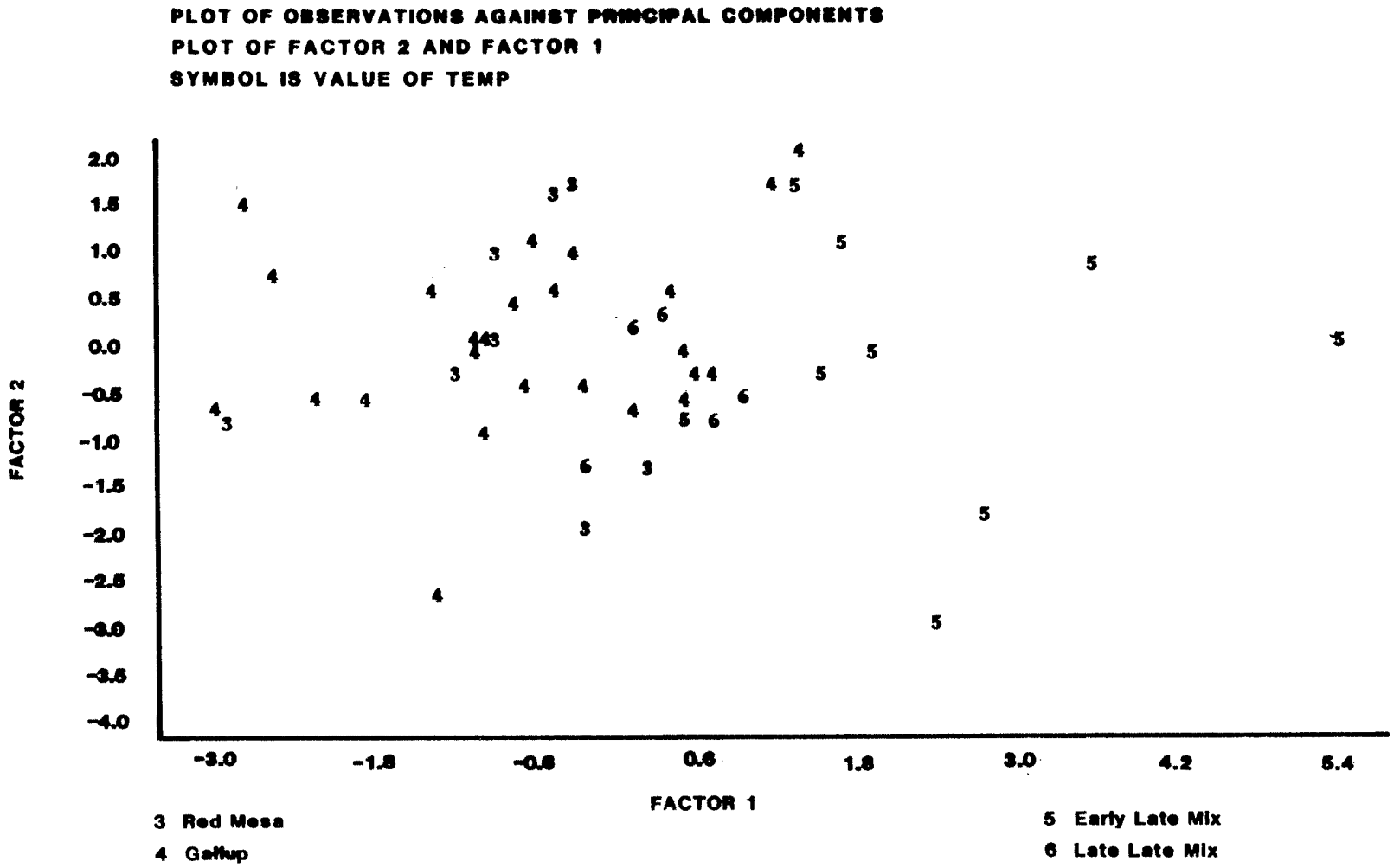
PRINCIPAL COMPONENTS ANALYSIS
PLOT OF FACTOR 1 WITH FACTOR 2



A Cottontail
B Jack Rabbit
C Prairie Dog
D Economic Rodent
E Small to medium mammal
F Carnivore
G Deer
H Pronghorn
I Mountain Sheep
J Artiodactyl/large mammal
K Turkey
L Wild Bird
M Unidentified Bird

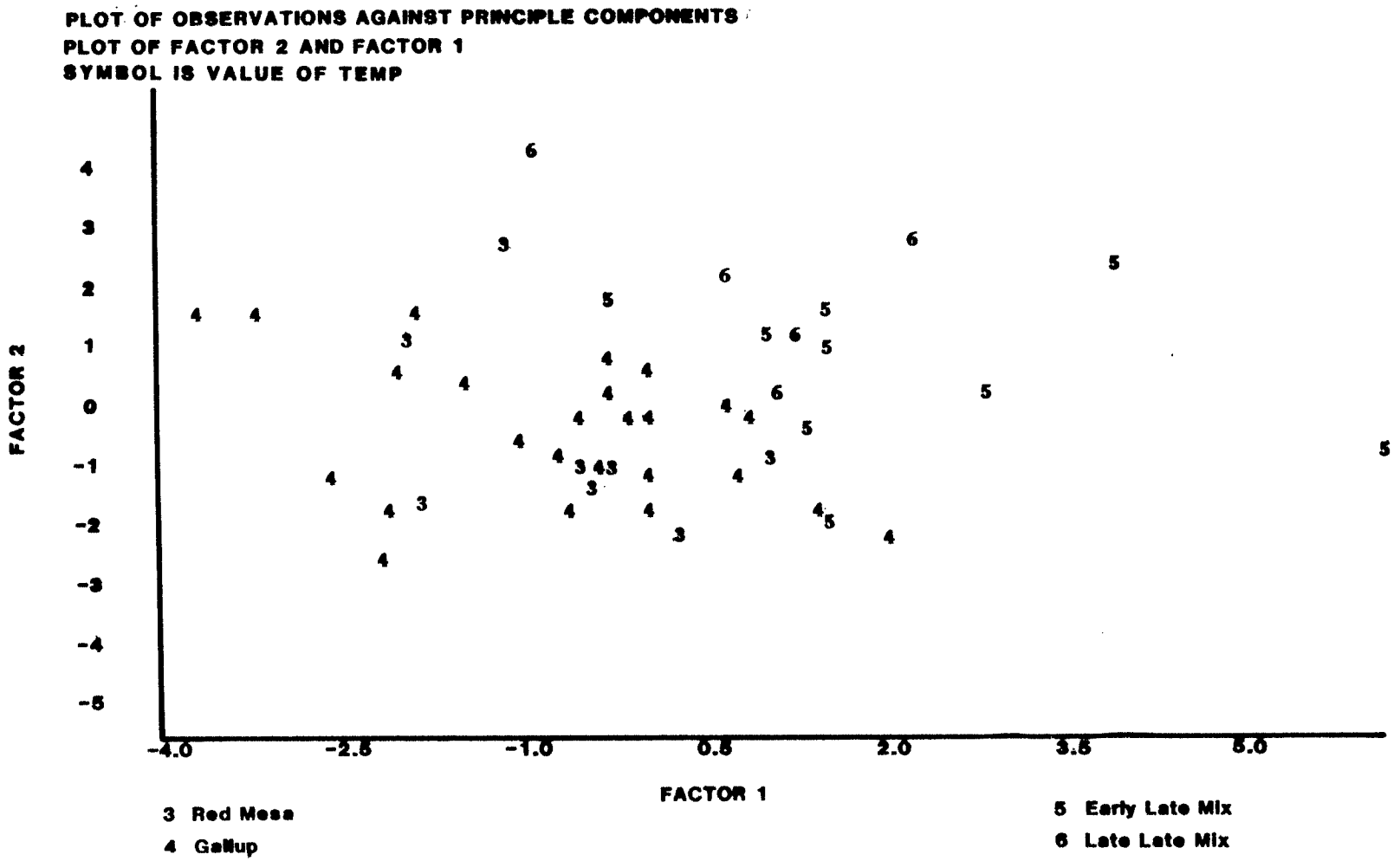
CHCU_310_D58_VOL 4_00761

Plots of cases with ceramic associations indicated.

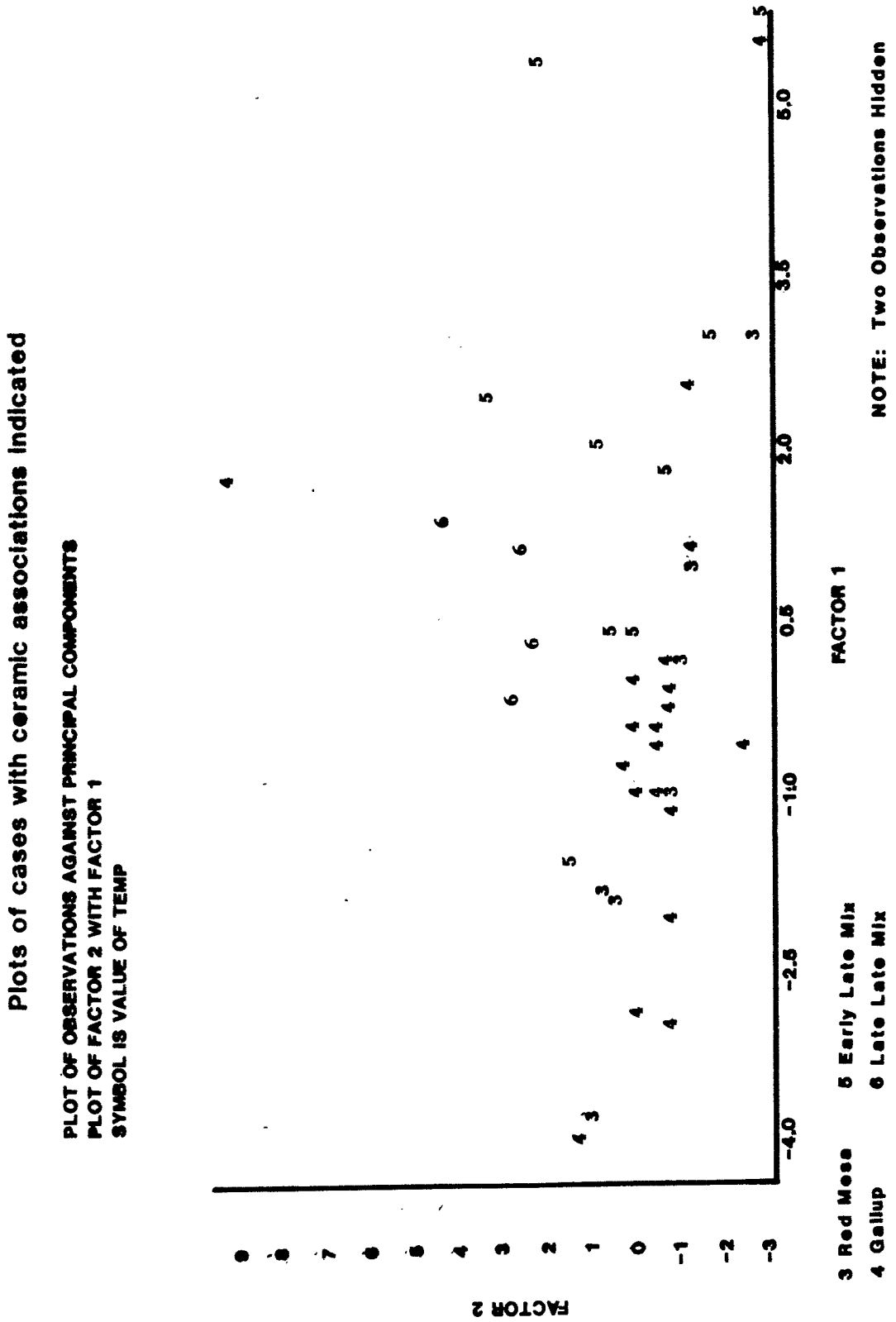


CHCU_310_D58_VOL 4_00762

PLOTS OF CASES WITH CERAMIC ASSOCIATIONS INDICATED.



CHCU_310_D58_VOL 4_00763



CHCU_310_D58_VOL 4_00764

APPENDIX MF-8.D

DISCRIMINANT ANALYSIS OF TEMPORAL CLASSIFICATION

CHCU_310_D58_VOL 4_00765

Appendix MF-8.D. Discriminant Analysis of Temporal Classification.

Standardized Canonical Discriminant Function Coefficients

	Function 1	Function 2	Function 3
Cottontail	-0.13	0.99	0.02
Jackrabbit	-0.06	0.22	0.07
Prairie dog	0.73	0.14	0.67
Econ. rodent	0.71	0.31	-0.65

Canonical Discriminant Functions Evaluated at Group Means (Group Centroids)

Group	Function 1	Function 2	Function 3
Red Mesa	-0.67	0.30	-0.17
Gallup	-0.64	0.08	0.06
Early Late Mix	2.41	0.12	0.01
Late Late Mix	-0.05	-1.06	-0.05

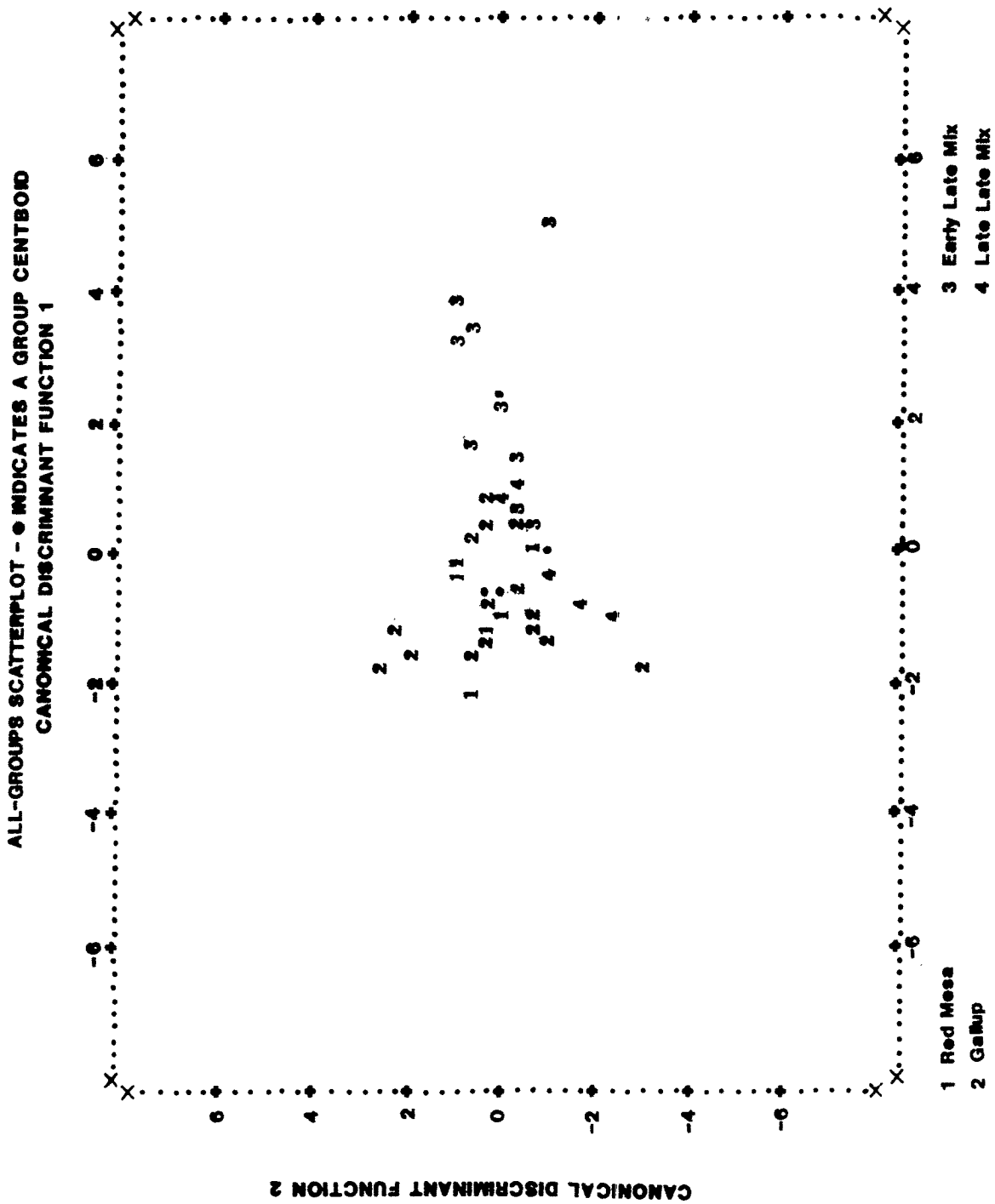
Standardized Canonical Discriminant Function Coefficients

	Function 1	Function 2	Function 3
Cottontail	-0.25	0.03	0.34
Jackrabbit	0.24	-0.21	0.08
Prairie dog	0.37	0.66	-0.01
Econ. rodent	0.26	0.67	0.28
Deer	-0.05	0.20	-0.95
Pronghorn	0.19	0.03	-0.01
Mt. sheep	0.23	-0.20	0.70
Turkey	0.90	-0.49	-0.09

Canonical Discriminant Functions Evaluated at Group Means (Group Centroids)

Group	Function 1	Function 2	Function 3
Red Mesa	-0.87	0.48	1.10
Gallup	-0.87	-0.20	-0.37
Early Late Mix	1.33	2.07	0.08
Late Late Mix	3.36	-1.94	-0.08

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Appendix MF-8.D. (continued)

Classification Results

Actual Group	No. of cases	Predicted Group Membership			
		Red Mesa	Gallup	E. Late Mix	L. Late Mix
Red Mesa	8	0	8	0	0
		0.0%	100.0%	0.0%	0.0%
Gallup	25	0	24	0	1
		0.0%	96.0%	0.0%	4.0%
Early Late Mix	9	0	2	7	0
		0.0%	22.2%	77.8%	0.0%
Late Late Mix	5	0	4	0	1
		0.0%	80.0%	0.0%	20.0%

Percent of "Grouped" Cases Correctly Classified: 68.09%
Classification Process Summary
47 cases were processed.
0 cases had at least one missing discriminating variable.
47 cases were used for printed output.

Classification Results

Actual Group	No. of cases	Predicted Group Membership			
		Red Mesa	Gallup	E. Late Mix	L. Late Mix
Red Mesa	8	2	6	0	0
		25.0%	75.0%	0.0%	0.0%
Gallup	25	1	24	0	0
		4.0%	96.0%	0.0%	0.0%
Early Late Mix	9	1	1	7	0
		11.1%	11.1%	77.8%	0.0%
Late Late Mix	5	0	0	1	4
		0.0%	0.0%	20.0%	80.0%

Percent of "Grouped" Cases Correctly Classified: 78.72%
Classification Process Summary
47 cases were processed.
0 cases had at least one missing discriminating variable.
47 cases were used for printed output.

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Appendix MF-8.D. (continued)

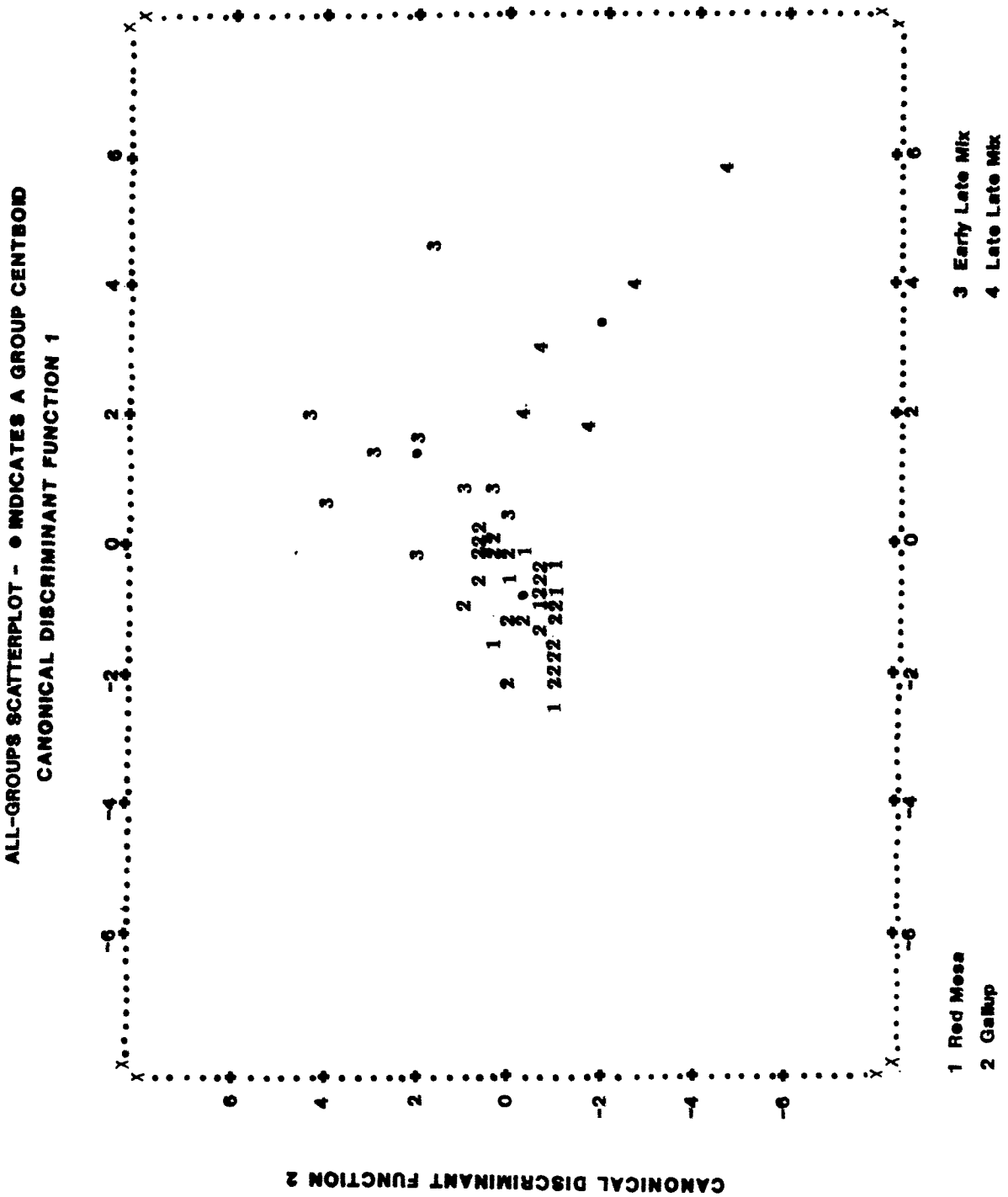
Standardized Canonical Discriminant Function Coefficients

	Function 1	Function 2	Function 3
Cottontail	0.20	-0.15	0.48
Jackrabbit	0.67	-0.15	0.42
Prairie dog	0.52	0.69	0.34
Econ. rodent	0.34	0.70	0.21
Small mam.	0.67	-0.22	0.68
Carnivore	0.01	-0.19	0.25
Deer	0.05	0.08	-0.47
Pronghorn	0.35	0.05	-0.06
Mt. sheep	0.32	-0.15	0.60
Artio/large mam.	0.09	0.05	0.15
Turkey	0.90	-0.26	0.09
Wild bird	0.30	0.09	0.98
Unid. bird	0.73	-0.21	0.05

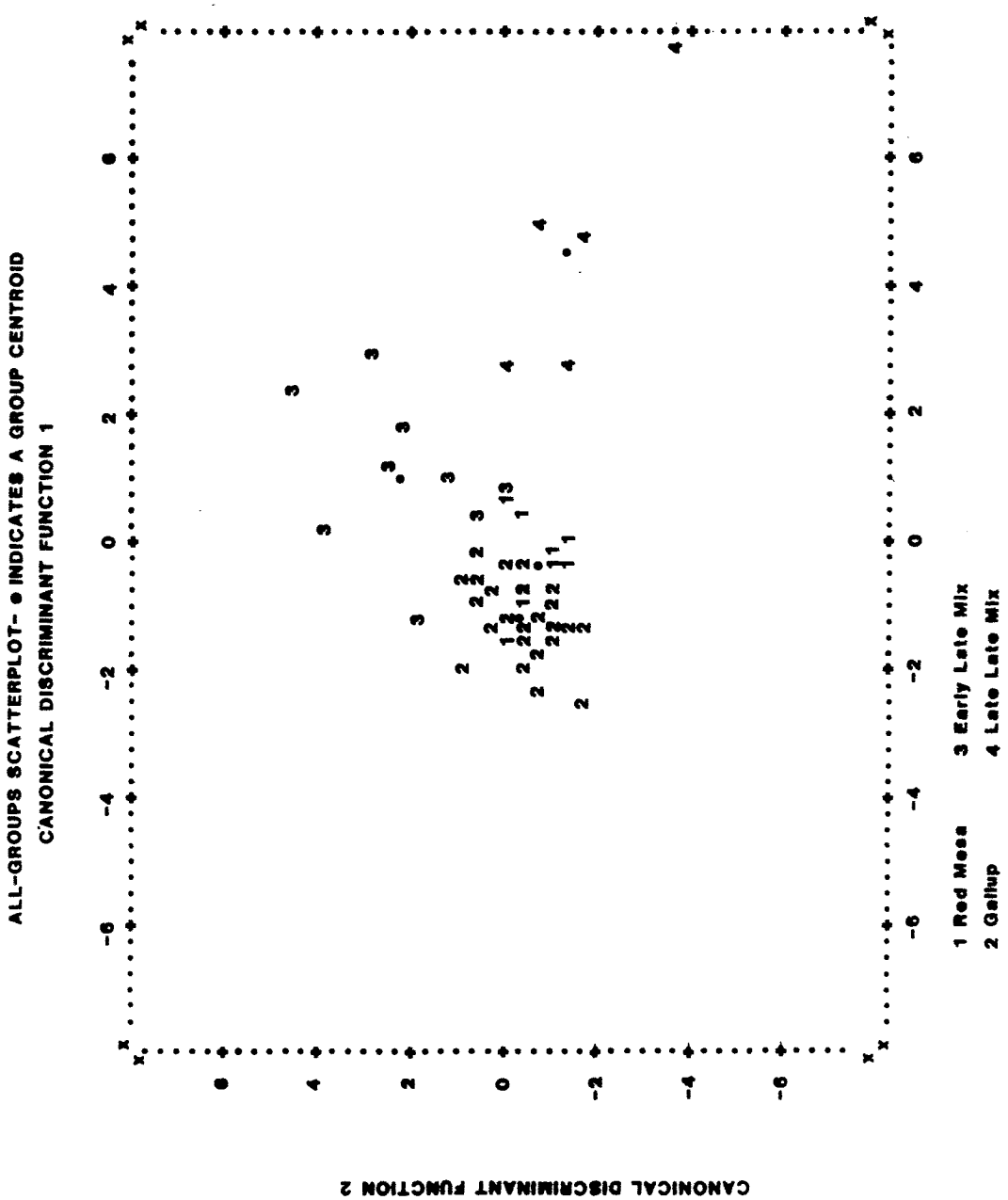
Canonical Discriminant Functions Evaluated at Group Means
(Group Centroids)

Group	Function 1	Function 2	Function 3
Red Mesa	-0.35	0.65	1.75
Gallup	-1.19	-0.34	-0.49
Early Late Mix	1.04	2.33	0.07
Late Late Mix	4.65	-1.45	-0.45

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CHCU_310_D58_VOL 4_00770



CHCU_310_D58_VOL 4_00771

Classification Results

Actual Group	No. of cases	Predicted Group Membership			
		Red Mesa	Gallup	E. Late Mix	L. Late Mix
Red Mesa	8	4	4	0	0
		50.0%	50.0%	0.0%	0.0%
Gallup	25	0	25	0	0
		0.0%	100.0%	0.0%	0.0%
Early Late Mix	9	1	2	6	0
		11.1%	22.2%	66.7%	0.0%
Late Late Mix	5	0	0	0	5
		0.0%	0.0%	0.0%	100.0%

Percent of "Grouped" Cases Correctly Classified: 85.11%

Classification Process Summary

47 cases were processed.
0 cases had at least one missing discriminating variable.
47 cases were used for printed output.

CHCU_310_D58_VOL 4_00772

Microfiche for Chapter 10

The Use of Turkeys at Pueblo Alto Based on the Eggshell and Faunal Remains

Thomas C. Windes

Table MF-10.1

CHCU_310_D58_VOL 4_00773

Table MF-10.1. Eggshell from Pueblo Alto.

FS No.	Provenience	No. of shells	Weight (gm)	Ceramic[a] Period
1033	Rm 103, Layer 2, Level 5 (Fl.1 fill)	1	0.025	LM
1013	Rm 103, Layer 2, Level 2	2	0.04	LM
1135	Rm 103, Layer 2, Level 3	8	0.43	LM
1137	Rm 103, Layer 2, Level 5 (Fl.1 fill)	6	0.155	LM
1140	Rm 103, Layer 2, Level 6 (Fl.1 fill)	53	1.86	LM
1142	Rm 103, Layer 2, Level 6 (Fl.1 fill)	13	0.09	LM
1143	Rm 103, Layer 2, Level 5 (Fl.1 fill)	121	2.52	LM
1147	Rm 103, Fl.2, HP 3 (Layer 2)	9	0.17	G
1210	Rm 103, Layer 3, (Fl.2 fill), Grid 6	2	0.07	G
1245	Rm 103, Fl. 2, HP 6	1	0.02	G
1338	Rm 103, Layer 5 (Fl.4 fill), Grid 13	1	0.01	G
1344	Rm 103, Layer 5 (Fl.4 fill), Grid 18	1	0.01	G
1643	Rm 110, Niche 10, Layer 2	1	0.01	G
1646	Rm 110, Niche 15, Layer 2	1	0.03	G
5400	Rm 110, Layer 1 (Fl.1 fill)	1	0.03	G
5481	Rm 110, Layer 2 (Fl.1 fill), Grid 9	1	0.06	G
5489	Rm 110, Layer 2 (Fl.1 fill), Grid 17	1	0.01	G
5517	Rm 110, Fl. 1 (top surface), Grid 16	4	0.07	G
5540	Rm 110, Surface 7 (Fl.1 fill), Grid 8	1	0.035	G
7092	Rm 112, Niche 2, Layer 2	2	0.02	G
7133	Rm 112, Fl.1, OP 3	2	0.02	G
7135	Rm 112, Layer 6, Level 1 (Fl.2 fill), Grid 3	1	0.01	G G
7178	Rm 112, Fl.2, OP 2	6	0.12	G
7250	Rm 112, Fl.2, Grid 30, Rodent Hole #2	1	0.02	G
3047	Rm 142, Layer 12 (Fl.6 fill), Grid 35	1	0.01	RM
3048	Rm 142, Layer 12 (Fl.6 fill), Grid 36	1	0.02	RM
3078	Rm 142, Layer 14 (Fl.7 fill), Gird 34	1	0.01	RM
3079	Rm 142, Layer 14 (Fl.7 fill), Grid 35	2	0.04	RM
2909	Rm 142, Fl.3, OP 1 (Layer 2)	1	0.00	RM
6358	Rm 143, Layer 13, Grid 5	1	0.02	RM
6859	Rm 143, Grid 3 (Fl.4 fill) under Floor 4 plaster	19	0.30	G
6910	Rm 143, Fl.3, OP 3	2	0.05	G
6911	Rm 143, Layer 5, Grid 8 (Fl.4 fill)	2	0.11	G
6967	Rm 143, Fl.1 north wall between 1st and 2nd plaster coats	1	0.01	G
6251	Rm 147, Layer 2, Level 2	20	?	LM
440	Rm 198, wall clearing	4	0.27	LM
560	Rm 230, wall clearing	11	?	LM
578	Rm 232, wall clearing	174	9.31	LM
6831	Rm 236, Grid 1, (Fl.4 fill)	4	0.055	G
Subtotal		484	16.04	

[a]Period = RM (Red Mesa): A.D.1000-1050; G (Gallup): A.D. 1050-1100; LM (Late Mix): A.D. 1100-1140.

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Table MF-10.1 (continued)

FS No.	Provenience	No. of shells	Weight (gm)	Ceramic[a] Period
6832	Rm 236, Grids 1-2 (Fl. 4 fill) (assoc. with OP 1, Fl. 1)	200	6.14	G
6836	Rm 236, Fl. 4, Grid 2 (assoc. with OP 2, Fl.3)	15	0.13	G
6837	Rm 236, Fl. 4, Grid 3	3	0.04	G
5006	Plaza 1, Grid 302, Layer 2, Level 1 above Fl. 2	9	0.37	LM
6615	Plaza 1, Grid 8, Layer 15, Level 2 (Fl.9 fill)	3	0.07	RM
6618	Plaza 1, Grid 8, Layer 15, Level 6 (Fl.9 fill)	3	0.02	RM
6619	Plaza 1, Grid 8, Layer 15, Level 7 (Fl.9 fill)	8	0.04	RM
6631	Plaza 1, Grid 8, Layer 15, Quad. 5 (Fl.2 fill)	1	0.06	RM
6648	Plaza 1, Fl.2 (replaster 3), Grid 8, OP 1, (Layer 2), Quad. 8/10	2	0.01	LM
6717	Plaza 1, Layer 13, Grid 8 Quad (Fl.8 fill)	2	0.02	RM
3424	Plaza 2, Grid 201, Layer 2, Level 2 (Fl.1 fill)	3	0.07	LM
3427	Plaza 2, Grid 181, Layer 2, Level 1-2 (Fl.1 fill)	1	0.02	LM
3455	Plaza 2, Grid 201, Fl.1, OP 2 (Layer 2)	1	0.03	LM
3467	Plaza 2, Grid 181, Fl.1, OP 1 (Layer 2, Level 2)	1	0.02	LM
3479	Plaza 2, Grid 221, Layer 10	2	0.07	G
3504	Plaza 2, Grid 181, Layer 2, Level 3 Surface 3A & E	3	0.03	LM
3526	Plaza 2, Grid 201, Layer 2, Level 4	3	0.04	LM
3547	Plaza 2, Grid 181, Layer 3	2	0.01	LM
3550	Plaza 2, Grid 201, Layer 3	1	0.01	LM
3579	Plaza 2, Grid 201, Layer 3, Level 3	1	0.00	LM
3593	Plaza 2, Grid 201, Layer 4, Level 1	1	0.02	G
3661	Plaza 2, OS 5, Layer 2 (East Stairs)	1	0.04	LM
3679	Plaza 2, OS 5, Layer 5 (South Stairs)	1	0.02	LM
3681	Plaza 2, OS 5, Layer 6 (South Stairs)	1	0.01	LM
3707	Plaza 2, OS 5, TT 2, Layer 15	14	0.59	G
3723	Plaza 2, OS 5, TT 3, Layer 22	1	0.09	G
3675	Plaza 2, OS 5, TT 1, Grid 241, Level 3	1	0.05	LM
3676	Plaza 2, OS 5, Layer 4, Stair 2	2	0.14	LM
4728	TM 70, Layer 1, Strat Column 1	1	?	G
4526	TM 183, Level 2	1	0.09	
Subtotals		288	8.25	

[a]Period = RM (Red Mesa): A.D. 1000-1050; G (Gallup): A.D. 1050-1100; LM (Late Mix): A.D. 1100-1140.

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Table MF-10.1 (continued)

FS No.	Provenience[b]	No. of shells	Weight (gm)	Ceramic[a] Period
4538	TM 183, Level 3	2	0.13	G
4539	TM 183, Level 4	8	0.31	G
4540	TM 183, Level 5	5	0.20	G
4617	TM 183, Level 7	6	0.15	G
4618	TM 183, Level 8	3	0.19	G
4620	TM 183, Level 10	3	0.16	G
4621	TM 183, Level 11	3	0.23	G
4622	TM 183, Level 12	1	0.07	G
4625	TM 183, Level 15	2	0.025	G
4527	TM 211, Level 2	52	2.64	G
4542	TM 211, Level 3	14	1.01	G
4544	TM 211, Level 5	2	0.06	G
4609	TM 211, Level 8	1	0.05	G
4610	TM 211, Level 9	1	0.05	G
4612	TM 211, Level 11	1	0.05	G
4614	TM 211, Level 13	6	0.03	G
4616	TM 211, Level 15	2	0.05	G
4657	TM 211, SC 7 Roberts' booth, 300-364 cm depth	2	0.10	G
4546	TM 239, Level 3	2	0.09	G
4547	TM 239, Level 4	1	0.13	G
4548	TM 239, Level 5	25	1.21	G
4593	TM 239, Level 6	5	0.24	G
4594	TM 239, Level 7	1	0.02	G
4595	TM 239, Level 8	4	0.13	G
4596	TM 239, Level 9	14	0.54	G
4599	TM 239, Level 12	6	0.22	G
4600	TM 239, Level 13	3	0.14	G
4602	TM 239, Level 15	7	0.40	G
4604	TM 239, Level 17	1	0.05	G
4605	TM 239, Level 18	1	0.03	G
4550	TM 267, Level 5	2	0.10	G
4579	TM 267, Level 6	1	0.04	G
4580	TM 267, Level 7	3	0.17	G
4581	TM 267, Level 8	4	0.19	G
4583	TM 267, Level 10	4	0.14	G
4585	TM 267, Level 12	31	1.22	G
4586	TM 267, Level 13	12	0.50	G
4588	TM 267, Level 15	7	0.25	G
4589	TM 267, Level 16	2	0.09	G
4590	TM 267, Level 17	1	0.035	G
Subtotals		251	11.44	

[a]Period = RM (Red Mesa): A.D. 1000-1050; G (Gallup): A.D. 1050-1100; LM (Late Mix): A.D. 1100-1140.
[b]TM = Trash Mound grid.

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Table MF-10.1 (continued)

FS No.	Provenience[b]	No. of shells	Weight (gm)	Ceramic[a] Period
4591	TM 267, Level 18	2	0.08	G
4592	TM 267, Level 19	4	0.15	G
4565	TM 295, Level 6	1	0.01	G
4568	TM 295, Level 9	5	0.33	G
4569	TM 295, Level 10	6	0.34	G
4570	TM 295, Level 11	3	0.12	G
4571	TM 295, Level 12	1	0.02	G
4574	TM 295, Level 15	1	0.08	G
4575	TM 295, Level 16	8	0.26	G
4576	TM 295, Level 17	2	0.11	G
4577	TM 295, Level 18	2	0.07	G
4578	TM 295, Level 19	13	0.46	G
4553	TM 323, Level 8	1	0.05	G
4554	TM 323, Level 9	1	0.06	G
4555	TM 323, Level 10	2	0.09	G
4556	TM 323, Level 11	3	0.05	G
4557	TM 323, Level 12	2	0.03	G
4558	TM 323, Level 13	1	0.01	G
4559	TM 323, Level 14	2	0.05	G
4561	TM 323, Level 16	1	0.025	G
4562	TM 323, Level 18	1	0.05	G
4733	SC 3, Layer 43	2	0.09	G
4742	SC 3, Layer 30	2	0.05	G
4745	SC 3, Layer 22	8	0.36	G
4752	SC 4, Surface	4	0.18	G
4753	SC 4, Layer 104	91	1.24	G
4756	SC 4, Layer 78	32	0.59	G
4775	SC 4, Layer 44	1	0.04	G
4776	SC 4, Layer 35	127	0.815	G
4780	SC 5, Layer 105	4	0.19	G
4781	SC 5, Layer 104	6	0.28	G
4785	SC 5, Layer 85	1	0.06	G
4789	SC 5, Layer 78 (1 egg)	90	7.095	G
4793	SC 5, Layer 71 (1 shell burned)	350	13.16	G
4794	SC 5, Layer 69	14	0.48	G
4799	SC 5, Layer 58	3	0.17	G
4671	SC 6, Layer 113	2	0.11	G
4680	SC 6, Layer 81	2	0.12	G
4642	Slump 2	21	1.19	G
4643	Slump 3 (Grids 267-295)	6	0.20	G
4643	Profile clearing (S. side of TT 1)	2	0.085	G
Subtotals		830	28.95	

[a]Period = RM (Red Mesa): A.D. 1000-1050; G (Gallup): A.D. 1050-1100; LM (Late Mix): A.D. 1100-1140.

[b]TM = Trash Mound grid. SC = Trash Mound, Strat Column.

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Table MF-10.1 (concluded)

FS No.	Provenience	No. of shells	Weight (gm)	Ceramic[a] Period
6501	Kiva 10, Level 16	2	0.05	LM
6505	Kiva 10, Level 20	1	0.05	LM
6509	Kiva 10, Level 24	2	0.09	LM
6517	Kiva 10, Level 25	1	?	LM
4227	Kiva 13, Level 5	13	0.24	G
4228	Kiva 13, Level 6	9	0.11	G
4251	Plaza 1, Grid 95, Layer 3 (Fl.1 fill)	1	0.04	LM
4254	Plaza 1, Grid 276, Floors 2 and 3	36	0.16	LM
4322	Plaza 1, Grid 273, Layer 3 (FL.1 fill)	1	0.01	LM
4356	Plaza 1, Grid 30, OP 1 (Level 6)	2	?	RM
5331	Kiva 15, Level 11	1	0.05	LM
5357	Kiva 15, Layer 7, Level 2 (Fl.1 fill)	2	0.06	LM
5394	Kiva 15, Fl. 1, FP 2	2	0.10	LM
5100	Kiva 16, Vent tunnel fill	1	0.14	LM
5089	Kiva 17, Level 2	2	0.145	LM
5090	Kiva 17, Level 3	1	0.04	LM
827	PF 1, Rm 3, Fl.1 between replasters 3 and 4, Grid 2	1	0.01	LM
859	PF 1, Rm 3, Fl.1 Vent complex between replasters 4 and 7	1	0.01	LM
895	PF 1, Rm 4, Layer 2	1	0.02	LM
947	PF 1, Rm 4, Layer 4 (Fl.1 fill), Grid 18	1	0.03	LM
953	PF 1, Rm 4, Layer 4 (Fl.1 fill), Grid 23	1	0.05	LM
986	PF 1, Rm 4, Fl. 1, FP 1 (Layer 3)	1	0.02	LM
888	PF 1, Rm 4, Layers 3 & 4	2	0.06	LM
874	PF 1, Rm 4, Layers 2	1	0.05	LM
637	Pk Lot Ruin, Rm 4, Level 2, TT 1	3	0.07	G
Subtotals		89	1.605	
Site Totals		1,942	66.475	

[a]Period = RM (Red Mesa): A.D. 1000-1050; G (Gallup): A.D. 1050-1100; LM (Late Mix): A.D. 1100-1140.

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Microfiche for Chapter 11

Plant Utilization at Pueblo Alto: Flotation and Macrobotanical Analysis

Mollie S. Toll

Tables MF-11.1 - MF-11.22

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Table MF-11.1. Flotation results: Room 103, Floor 4 and 5.[a]

	Floor 4		Floor 5						Total Seeds/ Liter	% Seeds	Total Samples (n = 6)	% Samples
	OP1 1379	OP11 1379	Gr 1 1410	Gr 5 1414	Gr 9 1418	Gr 13 1422	Gr 17 1425	Gr 21 1443				
Cupressaceae Juniperus												
Pinaceae Pinus edulis								1/1	1.0	3	1	17
Gramineae Oryzopsis												
Gramineae Sporobolus					1/1.1		1/1.1	2/2	2.2	6	2	33
Amaranthaceae Amaranthus												
Cactaceae Opuntia												
Chenopodiaceae Atriplex												
Chenopodiaceae Chenopodium			1/1	3/3.4		1/1.1			5.5	14	3	50
Cheno-ams							1/1.1		1.1	3	1	17
Chenopodiaceae Corispermum												
Chenopodiaceae Cycloloma				1/1.1					1.1	3	1	17
Compositae Helianthus												
Cruciferae Descurainia			3/3	1/1.1					4.1	11	2	33
Euphorbiaceae Euphorbia				1/1.1				1/1	2.1	6	2	33
Loasaceae Mentzelia												
Malvaceae Sphaeralcea					1/1.1				1.1	3	1	17
Portulacaceae Portulaca			4/4	2/2.3		4/4.2			10.5	27	3	50
Solanaceae Physalis												
Zea mays (c=cob, cupule)				C[b]	C[b]						2	33
Others				1/1.1[c]					1.1	3	1	17
Unknowns/unidentifiables		1/1	3/3	1/1.1	2/2.3		1/1.1	1/1	9.5	22	5	83
No. taxa	0	1	4	8	4	2	3	3				
No. taxa burnt	0	0	0	1	1	0	0	0				
Total seeds												
Actual count	0	1	11	10	4	5	3	3				
Seeds/liter	0	1.0	11.0	11.2	4.5	5.3	3.3	3.0	39.3			

[a]Number above slash = actual number of seeds recovered; number below slash = seeds/liter.
[b]Indicates that some or all items were charred.
[c]Scirpus.

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Table MF-11.2. Flotation results: Room 103, Floor 3.[a]

	Gr 5 1262	Gr 9 1266	Gr 13 1269	Gr 15 1271	Gr 21 1283	Total Seeds/ Liter	% Seeds	Total Samples (n = 5)	% Samples
Cupressaceae Juniperus									
Pinaceae Pinus edulis		1/0.9	1/1	1/1.1	1/1.1	4.1	+[c]	4	80
Gramineae Oryzopsis									
Gramineae Sporobolus				1/1.1		1.1	+[c]	1	20
Amaranthaceae Amaranthus		1/0.9	3/3			3.9		2	40
Cactaceae Opuntia									
Chenopodiaceae Atriplex									
Chenopodiaceae Chenopodium	38/40.4	137/124.5	13/13	83/91.2	51/54.2	323.3	34	5	100
Cheno-ams			5/5[b]			5.0	53	1	20
Chenopodiaceae Corispermum									
Chenopodiaceae Cycloloma		2/1.8		20/22		23.8	3	2	40
Compositae Helianthus					1/1.1	1.1	+[c]	1	20
Cruciferae Descurainia	107/120.2			23/25.3		145.5	15	2	40
Euphorbiaceae Euphorbia									
Loasaceae Mentzelia	2/2.2		6/6			8.2	1	2	40
Malvaceae Sphaeralcea	1/1.1		1/1			2.1	+[c]	2	40
Portulacaceae Portulaca	1/1.1[b]		1/1	43/47.3[b]	2/2.1	51.5	5	4	80
Solanaceae Physalis				1/1.1	2/2.1	3.2	+[c]	2	40
Zea mays (c=cob, cupule)	C[b]		C[b]	2/2.2[b]		2.2	+[c]	3	60
Others	241/270.8[d]	2/1.8[e]	1/1[e]	2/2.3[f]	1/1.1[g]	276.9	29	5	100
Unknowns/unidentifiables	4/4.5[b]	43/39.1	13/13	33/36.3[b]	7/7.4	100.3	11	5	100
No. taxa	9	6	10	10	7				
No. taxa burnt	3	0	2	3	0				
Total seeds									
Actual count	394	186	44	209	65				
Seeds/liter	440.3	169.0	44.0	229.8	69.1	952.2			

[a]Number above slash = actual number of seeds recovered; number below slash = seeds/liter.
[b]Indicates that some or all items are charred.
[c]Less than 0.5%.
[d]Cryptantha = 12/13.5; Cleome = 229/257.3.
[e]Cleome.
[f]Corispermum.
[g]Yucca.

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Table MF-...2 (concluded)[a]

	HP2 1305	HP4 1307	HP5 1308	MB3 1301	Total Seeds/ Liter	% Seeds	Total Samples (n = 4)	% Samples
Cupressaceae Juniperus	+[c]	+[c]	+[c]		0	0	3	75
Pinaceae Pinus edulis	1/2[b]				2	1	1	25
Gramineae Oryzopsis								
Gramineae Sporobolus								
Amaranthaceae Amaranthus	3/11.7[b]				11.7	37	1	25
Cactaceae Opuntia								
Chenopodiaceae Atriplex	2/3.9[b]		2/3.1[b]		7	2	2	50
Chenopodiaceae Chenopodium	6/21.6[b]	1/1[b]	3/6.3[b]	13/3	41.8	11	4	100
Cheno-ams				3/3	3	17	1	25
Chenopodiaceae Corispermum								
Chenopodiaceae Cycloloma			1/2.1[b]	4/4	6.1	2	2	50
Compositae Helianthus				2/2	20	1	1	25
Cruciferae Descurainia		18/18[b]	4/8.2[b]	3/3	29.3	7	3	75
Euphorbiaceae Euphorbia								
Loasaceae Mentzelia				1/1	1	+[c]	1	25
Malvaceae Sphaeralcea	12/37.3	62/62[b]	12/24.7[b]	1/1	1	+[c]	1	25
Portulacaceae Portulaca				8/8	132	34	4	100
Solanaceae Physalis								
Zea mays (c=cob, cupule)	16/31.4C	3/3C[b]	10/10.3C[b]		44.7	11	3	75
Others	2/4[bh]	4/4[bi]			8	2	2	50
Unknowns/unidentifiables	12/33.3[b]	34/34[b]	18/37.1[b]		104.4	27	3	75
No. taxa	10	8	8	8				
No. taxa burnt	10	8	8	0				
Total seeds								
Actual count	54	122	50	35				
Seeds/liter	145.2	122.0	91.7	35.0	393.9			

[a]Number above slash = actual number of seeds recovered; number below slash = seeds/liter.
[b]Indicates that some or all items are charred.
[c]Less than 0.5%.
[h]Echinocereus = 1/2[b]; Plantago = 1/2[b].
[i]Yucca = 1/1[b]; Unknown No. 9904 = 3/3[b].

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Table MF-...3. Flotation results: Room 103, Floor 1.[a]

	Grid C	Grid D	Grid E	Grid D-F	Total Seeds/ Liter	% Seeds	Total Samples (n = 4)	% Samples
Cupressaceae Juniperus								
Pinaceae Pinus edulis								
Gramineae Oryzopsis		1/1.4			1.4	1	1	25
Gramineae Sporobolus								
Amaranthaceae Amaranthus								
Cactaceae Opuntia								
Chenopodiaceae Atriplex								
Chenopodiaceae Chenopodium	9/9	8/11.4[b]	2/3.2	5/7.1	30.7	29	4	100
Cheno-ams		5/7.1	3/4.8		11.9	11	2	50
Chenopodiaceae Corispermum								
Chenopodiaceae Cycloloma	3/3	1/1.4	1/1.6[b]		6	6	3	75
Compositae Helianthus		1/1.4			1.4	1	1	25
Cruciferae Descurainia		15/21.4		5/7.1	28.5	27	2	50
Euphorbiaceae Euphorbia								
Loasaceae Mentzelia								
Malvaceae Sphaeralcea								
Portulacaceae Portulaca	1/1	2/2.9			3.9	4	2	50
Solanaceae Physalis	1/1				1	1	1	25
Zea mays (c=cob, cupule)			1/1.6		1.6	2	1	25
Others		2/2.9[c]			2.9	3	1	25
Unknowns/unidentifiables	14/14			1/1.4	15.4	15	2	50
No. taxa	5	8	4	3				
No. taxa burnt	0	1	2	0				
Total seeds								
Actual count	28	35	7	11				
Seeds/liter	28.0	49.9	11.2	15.6	104.7			

[a]Number above slash = actual number of seeds recovered; number below slash = seeds/liter.
[b]Indicates that some or all items were charred.
[c]Cryptantha.

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Table MF-11.4. Flotation results: Room 110, Floor 3.[a]

	Gr 1 1593	Gr 1 1596	Gr 9 1598	Gr 13 1602	Gr 17 1605	Gr 21 1611	Total Seeds/ Liter	% Seeds	Total Samples (n = 6)	% Samples
Cupressaceae Juniperus										
Pinaceae Pinus edulis										
Gramineae Oryzopsis										
Gramineae Sporobolus						1/1.6	1.6	4	1	17
Amaranthaceae Amaranthus		2/3.3	2/2.5	2/2.9[b]			8.7	21	3	50
Cactaceae Opuntia										
Chenopodiaceae Atriplex										
Chenopodiaceae Chenopodium	4/5.8	3/5	2/2.5	1/1.4		3/4.8	19.5	47	5	83
Cheno-ams										
Chenopodiaceae Corispermum						1/1.6	1.6	4	1	17
Chenopodiaceae Cycloloma										
Compositae Helianthus										
Cruciferae Descurainia	1/1.4					2/3.2	4.6	11	2	33
Euphorbiaceae Euphorbia										
Loasaceae Mentzelia										
Malvaceae Sphaeralcea	1/1.4						1.4	3	1	17
Portulacaceae Portulaca	1/1.4						1.4	3	1	17
Solanaceae Physalis										
Zea mays (c=cob, cupule)			c[b]						1	17
Others										
Unknowns/unidentifiables			1/1.3		1/1.7		3	7	1	17
No. taxa	4	2	4	2	1	4				
No. taxa burnt	0	0	1	1	0	0				
Total seeds										
Actual count	7	5	5	3	1	7				
Seeds/liter	10.0	8.3	6.3	4.3	1.7	11.2	41.8			

[a]Number above slash = actual number of seed recovered; number below slash = seeds/liter.
[b]Indicates that some or all items were charred.

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Table MF-11.5. Flotation results: Room 110, Floor 2.[a]

	Gr 1 1544	Gr 5 1548	Gr 9 1554	Gr 13 1560	Gr 17 1566	Gr 21 1572	Total Seeds/ Liter	% Seeds	Total Samples (n = 6)	% Samples	FP1 1578
Cupressaceae Juniperus											
Pinaceae Pinus edulis											
Gramineae Oryzopsis											
Gramineae Sporobolus											
Amaranthaceae Amaranthus	1/1.1					1/1	2.1	14	2	33	
Cactaceae Opuntia											
Chenopodiaceae Atriplex											
Chenopodiaceae Chenopodium	2/2.1						2.1	14	1	17	
Cheno-ams		6/6					6	39	1	17	
Chenopodiaceae Corispermum		1/1				1/1	2	13	2	33	
Chenopodiaceae Cycloloma											
Compositae Helianthus											
Cruciferae Descurainia											
Euphorbiaceae Euphorbia											
Loasaceae Mentzelia											
Malvaceae Sphaeralcea											
Portulacaceae Portulaca	1/1.1						1.1	7	1	17	
Solanaceae Physalis											
Zea mays (c=cob, cupule)											2/2[b]
Others											
Unknowns/unidentifiables				2/2			2	13	1	17	
No. taxa	3	2	0	1	0	2					1
No. taxa burnt	0	0	0	0	0	0					1
Total seeds											
Actual count	4	7	0	2	0	2					2
Seeds/liter	4.3	7.0	0	2.0	0	2.0	15.3				2.0

[a]Number above slash = actual number of seeds recovered; number below slash = seeds/liter.
[b]Indicates that some or all items were charred.

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Table MF-11.6. Flotation results: Room 110, Floor 1, floor grids.[a]

	Gr 1 5506	Gr 5 5509	Gr 7 5511	Gr 9 5512	Gr 11 5513	Gr 13 5515	Gr 15 5516	Gr 17 5518	Total Seeds/ Liter	% Seeds	Total Samples (n = 8)	% Samples
Cupressaceae Juniperus						1/1			1	1	1	13
Pinaceae Pinus edulis												
Gramineae Oryzopsis												
Gramineae Sporobolus												
Amaranthaceae Amaranthus		1/1							1	1	1	13
Cactaceae Opuntia												
Chenopodiaceae Atriplex												
Chenopodiaceae Chenopodium	5/5	5/5	2/2	4/4	5/5	3/3		3/3	32	41	7	88
Cheno-ams							1/1	4/4	5	6	2	25
Chenopodiaceae Corispermum												
Chenopodiaceae Cycloloma		2/2	1/1						3	4	2	25
Compositae Helianthus												
Cruciferae Descurainia	3/3	1/1	3/3			1/1			8	10	4	50
Euphorbiaceae Euphorbia												
Loasaceae Mentzelia												
Malvaceae Sphaeralcea						1/1			1	1	1	13
Portulacaceae Portulaca	3/3	2/2	1/1			2/2			8	10	4	50
Solanaceae Physalis		1/1							1	1	1	13
Zea mays (c=cob, cupule)		c[b]				c[b]		c[b]	0	0	3	38
Others			1/1[c]			10/10[d]			11	14	2	25
Unknowns/unidentifiables		1/1	1/1			6/6			8	10	3	38
No. taxa	3	3	6	1	1	3	1	3				
No. taxa burnt	0	1	0	0	0	1	0	1				
Total seeds												
Actual count	11	13	9	4	5	24	1	12				
Seeds/liter	11.0	13.0	9.0	4.0	5.0	24.0	1.0	12.0	79.0			

[a]Number above the slash = actual number of seeds recovered; number below slash = seeds/liter.
[b]Indicates that some or all items were charred.
[c]Chrysothamnus.
[d]Monolepsis.

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Table MF-11.7. Flotation results: Room 110, Floor 1, features.[a]

	FP 1 5571	FP 2 5574	HP 3 5658	HP 6 5663	HP 7 5665	HP 14 5672	HP 15 5674	HP 16 5676	HP 17 5678
Cupressaceae Juniperus	+bc	+bc	5/8.9bc	+bc	+bc	+bc		+bc	
Pinaceae Pinus edulis		1/1.4		1/1.1b		1/1b			+bc
Gramineae Oryzopsis									1/1b
Gramineae Sporobolus						1/1b			1/1b
Amaranthaceae Amaranthus		1/1.4b			1/2.5	3/3b			4/4
Cactaceae Opuntia									
Chenopodiaceae Atriplex	2/2b		+c						
Chenopodiaceae Chenopodium	11/22b			3/4.6b	55/131.3b	7/7b	1/1		
Cheno-ams	8/16b						5/5	112/123.1b	2/2
Chenopodiaceae Corispermum		63/87.5b							
Chenopodiaceae Cycloloma						1/1b			
Compositae Helianthus									
Cruciferae Descurainia		35/48.6b				1/1b	4/4		
Euphorbiaceae Euphorbia									
Loasaceae Mentzelia		1/1.4							
Malvaceae Sphaeralcea				1/2.3b		1/1b			
Portulacaceae Portulaca	1/2b	14/19.4b		5/9.2b	1/3.8	1/1b	2/2		
Solanaceae Physalis	2/2b								22/22
Zea mays (c=cob, cupule)	3/3Cb	3/4.2Cb		1/1.1Cb		1/1Cb	Cb	2/2.2Cb	6/6Cb
Others	6/9bd	1/1.4be		2/3.4f		1/1bg			
Unknowns/unidentifiables	5/8b	4/9.4b	1/1.8b	4/6.9b	4/6.3b	3/3			
No. taxa	10	10	4	10	5	12	5	3	7
No. taxa burnt	10	9	2	10	3	10	1	3	4
Total seeds									
Actual count	38	133	6	18	62	21	12	114	36
Seeds/liter	64.0	184.7	10.7	29.7	143.9	21.0	12.0	125.3	36.0

[a]Number above slash = actual number of seeds recovered; number below slash = seeds/liter.
[b]Indicates that some or all items were charred.
[c]Less than 0.5%.
[d]Echinocereus = 3/3b; Chrysothamnus = 3/6b.
[e]Echinocereus.
[f]Cucurbita = 1/1.1b; Plantago = 1/2.3b.
[g]Cleome.

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Table MF-11.7. (concluded)[a]

	OP 22 5597	OP 35 5617	OP 60 5734	OP 67 5747	MB 1 5433	MB 3 5437	Total Seeds/ Liter	% Seeds	Total Samples (n = 15)	% Samples
Cupressaceae Juniperus		1/1.1[b]	1/1[b]				8.9	1	6	40
Pinaceae Pinus edulis							5.6	1	7	47
Gramineae Oryzopsis							1.0	+[c]	1	7
Gramineae Sporobolus							1.0	+[c]	1	7
Amaranthaceae Amaranthus		4/4.2[b]	17/17				30.2	4	7	47
Cactaceae Opuntia	1/1	3/3.2[b]					8.2	1	3	20
Chenopodiaceae Atriplex							2.0	+[c]	2	13
Chenopodiaceae Chenopodium			1/1	4/20			186.9	26	7	47
Cheno-ams	1/1						147.1	21	5	33
Chenopodiaceae Corispermum							87.5	12	1	7
Chenopodiaceae Cycloloma							1.0	+[c]	1	7
Compositae Helianthus							0	0	0	0
Cruciferae Descurainia							53.6	8	3	20
Euphorbiaceae Euphorbia							0	0	0	0
Loasaceae Mentzelia							1.4	+[c]	1	7
Malvaceae Sphaeralcea							3.3	1	2	13
Portulacaceae Portulaca	1/1			3/15			53.4	7	8	53
Solanaceae Physalis							24.0	3	2	13
Zea mays (C=cob, cupule)	2/2C[b]	5/5.3[b]	C[b]	C[b]			24.8	4	12	80
Others		+[ch]					14.8	2	7	47
Unknowns/unidentifiables	1/1	3/3.2[b]	9/9	1/5			63.6	9	10	67
No. taxa	5	6	5	4	0	0				
No. taxa burnt	1	5	2	1	0	0				
Total seeds										
Actual count	6	16	28	8	0	0				
Seeds/liter	6.0	17.0	28.0	40.0	0	0	718.3			

[a]Number above slash = actual number of seeds recovered; number below slash = seeds/liter.
[b]Indicates that some or all items were charred.
[c]Less than 0.5%.
[h]Yucca.

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Table MF-11.8. Fuel use in Room 110, Floor 1, Firepits and Heating Pits.

	Juniperus	Atriplex/Sarcobatus
Charcoal identification[a] (n/% pieces)		
Firepits (n = 34)	18/53	10/29
Heating pits (n = 50)	9/18	31/62
(n/% samples found in)		
Firepits (n = 2)	2/100	2/100
Heating pits (n = 9)	4/44	6/67
Flotation		
(n/% samples found in)	(twigs)	(fruits)
Firepits (n = 2)	2/100	1/50
Heating pits (n = 7)	4/57	1/14

[a]Data from Welsh (1979).

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Table MF-11.9. Flotation results: Kiva 15.[a]

	Gr 1 5351	Gr 5 5358	Gr 9 5364	Gr 13 5372	Total Seeds/ Liter	% Seeds	Total Samples (n = 4)	% Samples	FP 1 5384
Cupressaceae Juniperus			+[bc]		0	0	1	25	
Pinaceae Pinus edulis									1/1.4[b]
Gramineae Oryzopsis									
Gramineae Sporobolus									
Amaranthaceae Amaranthus		1/1.1			1.1	+[c]	1	25	4/5.7[b]
Cactaceae Opuntia									
Chenopodiaceae Atriplex									
Chenopodiaceae Chenopodium	19/25.3	5/5.5	16/18.7	5/5.6	55.1	22	4	100	1/1.4
Cheno-ams									4/5.7
Chenopodiaceae Corispermum				3/3.4	3.4	1	1	25	
Chenopodiaceae Cycloloma									2/2.9[b]
Compositae Helianthus									
Cruciferae Descurainia			1/1.2[b]	2/2.2[b]	3.4	1	2	50	
Euphorbiaceae Euphorbia			1/1.2		1.2	1	1	25	2/2.9
Loasaceae Mentzelia	2/2.7		1/1.2	1/1.1	5.0	2	3	75	5/7.1
Malvaceae Sphaeralcea	1/1.3[b]				1.3	1	1	25	
Portulacaceae Portulaca	1/1.3	1/1.1	42/48.8[b]	25/28.1	79.3	32	4	100	1/1.4
Solanaceae Physalis									
Zea mays (C=cob, cupule)	C[b]	C[b]	C[b]	C[b]	0	0	4	100	2/2.9[bd]
Others									
Unknowns/unidentifiables	17/22.7	6/6.7	33/38.4	25/28.1	95.9	39	4	100	
No. taxa	6	5	8	7					9
No. taxa burnt	2	1	4	2					4
Total seeds									
Actual count	40	13	94	61					22
Seeds/liter	53.3	14.4	109.5	68.5	245.7				31.4

[a]Number above slash = actual number of seeds recovered; number below slash = seeds/liter.

[b]Indictes that some or all items were charred.

[c]Less than 0.5%.

[d]Cob fragments.

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Table MF-11.10. Flotation scan results: Floor 1 in Rooms 112 and 229.[a]

	Room 112									Room 229									
	Gr 1 7106	Gr 3 7063	Gr 9 7069	Gr 11 7071	Gr 17 7079	Gr 19 7127	Gr 25 7088	Gr 27 7087	Total Samples	Gr 1 5849	Gr 4 5853	Gr 5 5855	Gr 7 5858	Gr 9 5861	Gr 11 5864	Gr 13 5867	Gr 15 5870	Gr 16 5845	Total Samples
Cupressaceae Juniperus					B	B			2					B					1
Pinaceae Pinus edulis																			
Gramineae Oryzopsis																			
Gramineae Sporobolus																			
Amaranthaceae Amaranthus							+		1									+	1
Cactaceae Opuntia											+								1
Chenopodiaceae Atriplex																			
Chenopodiaceae Chenopodium							+	+	2			+		+		+			3
Cheno-ams	+					+			2										
Chenopodiaceae Corispermum						B			1										
Chenopodiaceae Cycloloma		+							1										
Compositae Helianthus																			
Cruciferae Descurainia																		+	1
Euphorbiaceae Euphorbia																			
Loasaceae Mentzelia																			
Malvaceae Sphaeralcea				+					1										
Portulacaceae Portulaca						B	+		2							+		+	2
Solanaceae Physalis																			
Zea mays (c=cob, cupule)					B			B	2										
Others																			
Unknowns/unidentifiables																+		+	2
No. taxa	1	1	0	1	2	4	3	2	14	0	1	1	0	2	0	3	0	4	11
No. taxa burnt	0	0	0	0	2	3	0	1	6	0	0	0	0	1	0	0	0	0	1

[a] B indicates some or all items were charred; + indicates none of the seeds (or other plant parts) were charred.

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Table MF-11.11. Flotation scan results: Floor 1 in Rooms 138 and 142.[a]

	Room 138							Room 142									
	Gr 1	Gr 3	Gr 5	Gr 7	Gr 9	Gr 11	Total	Gr 1	Gr 5	Gr 9	Gr 13	Gr 17	Gr 21	Gr 25	Gr 29	Gr 33	Total
	7106	7063	7069	7071	7079	7127	7088	5849	5853	5855	5858	5861	5864	5867	5870	5845	Samples
Cupressaceae Juniperus																	
Pinaceae Pinus edulis																	
Gramineae Oryzopsis																	
Gramineae Sporobolus		+					1			+		B		B	+		4
Amaranthaceae Amaranthus				+	+	+	3	+			+				+		3
Cactaceae Opuntia																	
Chenopodiaceae Atriplex																	
Chenopodiaceae Chenopodium		+		+	+		3	+	+			+			+	+	5
Cheno-ams			+			+	2			+	+						2
Chenopodiaceae Corispermum															+		1
Chenopodiaceae Cycloloma										+						+	2
Compositae Helianthus																	
Cruciferae Descurainia																	
Euphorbiaceae Euphorbia											+						1
Loasaceae Mentzelia						+	1				+			+		+	3
Malvaceae Sphaeralcea															+		1
Portulacaceae Portulaca	+	+	+	+	+	+	6	+		+					+	+	4
Solanaceae Physalis			+			+	2	+		+		+					3
Zea mays (c=cob, cupule)												B		B			2
Others												B[b]				+[c]	2
Unknowns/unidentifiables									+	+	+	B	+	+	+	+	8
No. taxa	1	3	3	3	3	5	18	4	2	6	5	6	1	4	7	6	41
No. taxa burnt	0	0	0	0	0	0	0	0	0	0	0	4	0	2	0	0	6

[a] B indicates some or all items were charred; + indicates none of the seeds (or other plant parts) were charred.

[b] Gramineae.

[c] Phacelia.

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Table MF-11.12. Flotation results: Room 139, Floor 2.[a]

	Floor								
	Gr 1 2566	Gr 5 2569	Gr 11 2572	Gr 13 2574	Gr 17 2578	Gr 21 2580	Gr 25 2584	Gr 29 2585	Gr 33 2588
Cupressaceae Juniperus			+[c]			+[bc]			
Pinaceae Pinus edulis		1/1.2	1/1	1/1	1/1		+[c]	1/1	1/1
Gramineae Oryzopsis	1/1								
Gramineae Sporobolus		1/1.2		1/1					
Amaranthaceae Amaranthus		19/23.5		6/6.3	13/13	4/5	2/3		8/8
Cactaceae Opuntia			2/2			3/3.8	2/2	1/1	4/4
Chenopodiaceae Atriplex								1/1	
Chenopodiaceae Chenopodium	5/5	8/9.9	320/658	37/38.9	1/1	62/77.5[b]	16/28	48/188.2	43/43
Cheno-ams			9/26		6/6				
Chenopodiaceae Corispermum		3/3.7		10/10.5	2/2	1/1.3	3/3		3/3
Chenopodiaceae Cycloloma			31/32				2/2	8/7.8	
Compositae Helianthus			4/6	1/1.1		1/1.3	1/1	2/2	
Cruciferae Descurainia		8/9.9	86/326	64/67.4	2/2	11/13.8	16/32	76/262.7	4/4
Euphorbiaceae Euphorbia		1/1.2	1/4	2/2.1	1/1	2/2.5			1/1
Loasaceae Mentzelia		1/1.2	10/20	3/3.2		6/7.5		1/3.9	4/4
Malvaceae Sphaeralcea			2/2[b]					1/1	
Portulacaceae Portulaca	13/13	40/60.5	2/4	30/31.6	37/37	20/25	6/11	5/19.6	22/22
Solanaceae Physalis			3/4	5/5.3		1/1.3	3/3	8/10.8	5/5
Zea mays (C=cob, cupule)			1/1[b]	C[b]		1/1.3[b]		C[b]	C[b]
Others	1/1[d]	1/1.2[d]	7/13[e]	1/1.1[f]			1/2[g]	2/7.8[f]	1/1[h]
Unknowns/unidentifiables	5/5	8/9.9	17/28	11/11.6		9/11.3	4/7	4/12.7	3/3
No. taxa	5	11	17	14	8	13	12	14	13
No. taxa burnt	0	0	3	1	0	3	0	1	2
Total seeds									
Actual count	25	100	496	172	63	121	56	158	99
Seeds/liter	25	123.4	1,127	181.3	63	151.6	94	519.5	99

[a]Number above slash = actual number of seeds recovered; number below slash = seeds/liter.
[b]Indicates that some or all items were charred.
[c]Less than 0.5%.
[d]Cryptantha.
[e]Nicotiana = 6/12; Cucurbita = 1/1.
[f]Nicotiana.
[g]Echinocereus.
[h]Cleome.

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Table MF 12. (continued)[a]

	Floor				Total Seeds/ Liter	% Seeds	Total Samples (n = 13)	% Samples
	Gr A 2239	Gr C 2241	Gr E 2243	Gr G 2245				
Cupressaceae Juniperus					0	0	2	15
Pinaceae Pinus edulis	1/1.3	1/1	1/1	1/1	10.6	+[c]	11	85
Gramineae Oryzopsis	1/1.3				2.3	+[c]	2	15
Gramineae Sporobolus					2.3	+[c]	2	15
Amaranthaceae Amaranthus			2/2	4/4	64.8	2	8	62
Cactaceae Opuntia					12.8	+[c]	5	38
Chenopodiaceae Atriplex			2/2	+[bc]	3.0	+[c]	3	23
Chenopodiaceae Chenopodium	119/148.8	57/57[b]	52/52	52/52	1359.3	47	13	100
Cheno-ams					32.0	1	2	15
Chenopodiaceae Corispermum	2/2.5	3/3	5/5	3/3	37.0	1	10	77
Chenopodiaceae Cycloloma	1/1.3			18/18	61.1	2	5	38
Compositae Helianthus		1/1	2/2[b]	3/3	17.4	1	8	62
Cruciferae Descurainia	8/10	18/18	21/21	26/26	792.8	27	12	92
Euphorbiaceae Euphorbia			1/1	2/2	14.8	1	8	62
Loasaceae Mentzelia	1/1.3			6/6	48.1	2	9	69
Malvaceae Sphaeralcea				1/1	4.0	+	3	23
Portulacaceae Portulaca	2/2.5	15/15	3/3		244.2	8	12	92
Solanaceae Physalis		1/1	1/1	1/1	32.4	1	9	69
Zea mays (C=cob, cupule)	C[b]				2.3	+	6	46
Others	1/1.3[bi]		2/2[bj]	9/9[k]	39.4	1	13	100
Unknowns/unidentifiables	7/8.8	7/7	7/7	6/6	117.3	4	12	92
No. taxa	11	8	14	16				
No. taxa burnt	2	1	2	1				
Total seeds								
Actual count	143	103	100	132				
Seeds/liter	179.1	103	100	132	2897.9			

[a]Number above slash = actual number of seeds recovered; number below slash = seeds/liter.
[b]Indicates that some or all items were charred.
[c]Less than 0.5%.
[i]Suaeda.
[j]Echinocereus = 1/1[b]; Solanum = 1/1[b].
[k]Suaeda = 1/1; Nicotiana = 7/7; Solanum = 1/1.

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Table MF- 12. (concluded)[a]

	Features				Total Seeds/ Liter	% Seeds	Total Samples (n = 4)	% Samples
	HP 1 2613	HP 3 2616	HP 4 2618	HP 12 2276				
Cupressaceae Juniperus	+bc		+bc	+bc	0	0	4	100
Pinaceae Pinus edulis		1/1[b]			1.0	+[c]	1	25
Gramineae Oryzopsis	+bc	12/13[b]	1/3[b]		16.1	1	3	75
Gramineae Sporobolus	+bc				2.0	+[c]	2	50
Amaranthaceae Amaranthus				2/4[b]	4.0	+[c]	1	25
Cactaceae Opuntia	13/13[b]	2/2[b]			15.0	1	2	50
Chenopodiaceae Atriplex				+[c]	0	0	1	25
Chenopodiaceae Chenopodium		5/6.1[b]	6/18.2[b]	87/173[b]	197.3	11	3	75
Cheno-ams	21/21		7/21.1[b]		42.2	2	2	50
Chenopodiaceae Corispermum	2/2				2.0	+[c]	1	25
Chenopodiaceae Cycloloma			1/3	1/1	4.0	+[c]	2	50
Compositae Helianthus					0	0	0	0
Cruciferae Descurainia	2/2[c]	1/2	4/12.1		16.1	1	3	75
Euphorbiaceae Euphorbia				1/1	1.0	+[c]	1	25
Loasaceae Mentzelia		1/2			2.0	+[c]	1	25
Malvaceae Sphaeralcea			4/12.1		12.1	1	1	25
Portulacaceae Portulaca	28/28[b]	2/4	3/9.1[b]	1/2	43.1	2	4	100
Solanaceae Physalis		10/11.1[b]		1/1	12.1	1	2	50
Zea mays (c=cob, cupule)	2/2[b]	2/2[b]	1/3C[b]	3/3C[b]	10.0	1	4	100
Others	1,399/1,399[b1]		1/3[bm]	3/5[bn]	1407.0	76	3	25
Unknowns/unidentifiables	60/60[b]	3/4[b]	1/3[b]	4/8[b]	75.0	4	4	100
No. taxa	15	12	11	12				
No. taxa burnt	9	7	8	7				
Total seeds								
Actual count	1,527	40	29	103				
Seeds/liter	1,527	49.3	87.7	198	1862			

[a]Number above slash = actual number of seeds recovered; number below slash = seeds/liter.
[b]Indicates that some or all items were charred.
[c]Less than 0.5%.
[1]Unid. Gramineae = 1,391/1,391[b]; Echinocereus = 1/1; Solanum = 2/2b; No. 9004 = 3/3b; No. 9008 = 2/2.
[m]No. 9004.
[n]Cucurbita = 1/1; Plantago = 2/4b.

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Table MF-11.13. Flotation results: Room 139, Floor 1.[a]

	Gr 1 1473	Gr 5 2477	Gr 9 2481	Gr 13 2487	Gr 17 2491	Gr 21 2495	Gr 25 2499	Gr 29 2503	Gr 33 2507	Total Seeds/ Liter	% Seeds	Total Samples (n = 9)	% Samples
Cupressaceae Juniperus		+[c]										1	11
Pinaceae Pinus edulis			+[c]				+[bc]			0	0	2	22
Gramineae Oryzopsis			2/2				1/1[b]			3.0	+[c]	2	22
Gramineae Sporobolus							146/152[b]			152.0	20	1	11
Amaranthaceae Amaranthus	1/1.2	4/4	3/3	2/2.4			12/12			22.6	3	5	56
Cactaceae Opuntia													
Chenopodiaceae Atriplex													
Chenopodiaceae Chenopodium		3/3	9/9	1/1.2				1/1		14.2	2	4	44
Cheno-ams									1/1	1.0	+[c]	1	11
Chenopodiaceae Corispermum		1/1	2/2							3.0	+[c]	2	22
Chenopodiaceae Cycloloma			5/5							5.0	1	1	11
Compositae Helianthus													
Cruciferae Descurainia		7/7	3/3				1/2			12.0	2	3	33
Euphorbiaceae Euphorbia													
Loasaceae Mentzelia		34/34	40/40	94/111.9				1/1		189.9	25	4	44
Malvaceae Sphaeralcea							96/97[b]			97.0	13	1	11
Portulacaceae Portulaca		3/3	2/2	7/8.3		1/1[b]	130/134[b]	2/2[b]	3/3[b]	153.3	20	7	78
Solanaceae Physalis			1/1							1.0	+[c]	1	11
Zea mays (c=cob, cupule)			1/1[b]	2/2.4[b]			6/6[b]			9.4	1	3	33
Others	2/2.3[bd]	8/8[bd]	11/11[bd]	9/10.7[bd]			48/52[bd]			84	11	5	56
Unknowns/unidentifiables			2/2		1/1		9/10[b]			13.0	2	3	33
No. taxa	2	8	13	6	1	1	10	3	2				
No. taxa burnt	1	1	3	3	0	1	8	1	1				
Total seeds													
Actual count	3	60	81	115	1	1	449	4	4				
Seeds/liter	3.5	60.0	81.0	136.9	1.0	1.0	446.0	4.0	4.0	757.4			

[a]Number above slash = actual number of seeds recovered; number below slash = seeds/liter.
[b]Indicates that some or all items were charred.
[c]Less than 0.5%.
[d]Unid. Gramineae.

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Table MF-11.14. Flotation results: Room 145, Floor 1.[a]

	Gr A 2160	Gr B 2164	Gr C 2168	Gr D 2172	Gr E 2176	Gr F 2180	Gr G 2184	Gr H 2188	Total Seeds/ Liter	% Seeds	Total Samples (n = 8)	Total Samples
Cupressaceae Juniperus			T[b]				T[b]		0	0	2	25
Pinaceae Pinus edulis			1/1.1				1/1.1		2.2	5	2	25
Gramineae Oryzopsis												
Gramineae Sporobolus												
Amaranthaceae Amaranthus		2/2.3		1/1.5	2/2.4				6.2	14	3	38
Cactaceae Opuntia												
Chenopodiaceae Atriplex												
Chenopodiaceae Chenopodium	1/1	1/1.2	1/1.1	1/1.5			6/6.7	2/2.6	14.1	33	6	75
Cheno-ams												
Chenopodiaceae Corispermum				1/1.5	1/1.2				2.7	6	2	25
Chenopodiaceae Cycloloma					1/1.2				1.2	3	1	13
Compositae Helianthus												
Cruciferae Descurainia												
Euphorbiaceae Euphorbia												
Loasaceae Mentzelia												
Malvaceae Sphaeralcea			1/1.1		1/1.2				2.3	5	2	25
Portulacaceae Portulaca		2/2.3		1/1.5	5/6		1/1.1	1/1.3	12.2	28	5	63
Solanaceae Physalis												
Zea mays (c=cob, cupule)												
Others		1/1.2[c]			1/1.2[d]				2.4	6	2	25
Unknowns/unidentifiables												
No. taxa	1	4	4	4	6	0	4	2				
No. taxa burnt	0	0	0	0	0	0	0	0				
Total seeds												
Actual count	1	6	3	4	11	0	8	3				
Seeds/liter	1.0	7.0	3.3	6.0	13.2	0.0	8.9	3.9	43.3			

[a]Number above the slash = actual number of seeds recovered; number below slash = seeds/liter.
[b]Less than 0.5%.
[c]Gramineae.
[d]Phacelia.

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Table MF-11.15. Flotation results: Room 142, Floors 3, 8, 9/10, Room 146, Floor 3, and Room 147, Features.[a]

	Room 142							
	Floor 3			Floor 8	Floor 9/10	Room 146	Room 147	
	HP 1 2959	HP 2 2960	OP 1 2961	HP 1 7527	HP 1 7527	FPI 6311	FP 1 6311	HP 2 6304
Cupressaceae Juniperus		T[bc]					T[bc]	T[bc]
Pinaceae Pinus edulis	1/1[b]	1/1[b]		T[c]		1/1[b]		
Gramineae Oryzopsis		5/5[b]		2/2[b]			1/2[b]	7/7[b]
Gramineae Sporobolus				3/5			24/48[b]	42/122[b]
Amaranthaceae Amaranthus		6/12[b]	2/2	14/24	1/1		1/2	1/2
Cactaceae Opuntia	1/1[b]	3/3[b]	1/1					
Chenopodiaceae Atriplex	1/1[b]			T[bc]				
Chenopodiaceae Chenopodium	4/8[b]	13/26[b]	48/48	2/4	1/1			5/10[b]
Cheno-ams				2/4			1/2[b]	7/14[b]
Chenopodiaceae Corispermum		1/1		24/28[b]				
Chenopodiaceae Cycloloma							1/2[b]	23/25[b]
Compositae Helianthus		1/1						
Cruciferae Descurainia								
Euphorbiaceae Euphorbia		2/4[b]						
Loasaceae Mentzelia	40/80	3/6					2/4[b]	4/8[b]
Malvaceae Sphaeralcea								1/2[b]
Portulacaceae Portulaca				1/2			1/2[b]	
Solanaceae Physalis		3/4[b]						
Zea mays (C=cob, cupule)	4/4C[b]	1/1C[b]		2/2C[b]	C[b]	C[b]		3/3C[b]
Others		2/3[bd]	2/2[e]	2/2[bf]				1/1[bg]
Unknowns/unidentifiables		10/20[b]	49/49		8/8		1/2	5/6[b]
No. taxa	6	17	6	12	4	2	9	12
No. taxa burnt	5	14	0	5	1	2	7	11
Total seeds								
Actual count	51	51	102	52	10	1	32	99
Seeds/liter	95	87	102	73	10	1	64	200

[a]Number above slash = actual number of seeds recovered; number below slash = seeds/liter.
[b]Indicates that some or all items were charred.
[c]Less than 0.5%.
[d]Rhus = 1/1[b]; Echinocereus = 1/2[b]; Cucurbita = +[bc].
[e]Yucca = 1/1; Echinocereus = 1/1.
[f]Rhus = 1/1[b]; Rumex = 1/1.
[g]Cleome.

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Table MF-11.16. Flotation scan results: Rooms 146 and 147, Floor 1.[a]

	Room 146					Room 147							
	Gr 1 6032	Gr 3 6034	Gr 5 6036	Gr 7 6038	Total Samples	Gr 1 6281	Gr 5 6283	Gr 7 6315	Gr 9 6285	Gr 11 6317	Gr 13 6287	Gr 15 6289	Total Samples
Cupressaceae Juniperus										+			1
Pinaceae Pinus edulis		+			1								
Gramineae Oryzopsis				B	1		B	B			B		3
Gramineae Sporobolus												B	1
Amaranthaceae Amaranthus	+	+	+		3	+			+	+	+		4
Cactaceae Opuntia							+						1
Chenopodiaceae Atriplex													
Chenopodiaceae Chenopodium	+	+			2	+	+		+	+	+	+	6
Cheno-ams						+							1
Chenopodiaceae Corispermum													
Chenopodiaceae Cycloloma							+	B		+			3
Compositae Helianthus	+	+			2								
Cruciferae Descurainia													
Euphorbiaceae Euphorbia													
Loasaceae Mentzelia							+		+	+	+	+	5
Malvaceae Sphaeralcea								B	+		+		3
Portulacaceae Portulaca		+			1	+				+			2
Solanaceae Physalis													
Zea mays (c=cob, cupule)								B		B		+	3
Others			+[b]	B[c]	2	B[c]	B[c]			B[c]	B[c]		4
Unknowns/unidentifiables			+		1	+	+		+	+	B	B	6
No. taxa	3	5	3	2	13	6	7	4	5	9	7	5	43
No. taxa burnt	0	0	0	2		1	2	4	0	2	3	2	

[a] B indicates that some or all items were charred; + indicates that none of the seeds (or other plant parts) were charred.

[b] Cleome.

[c] Gramineae.

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Table MF-11.17. Flotation results: Room 143, Floor . Room 236, Floor 4.[a]

	Room 143			Room 236	
	HP 1 6896	HP 2 6898	OP 1 6893	FP 1 6840	HP 1 6851
Cupressaceae Juniperus				T[bc]	T[bc]
Pinaceae Pinus edulis	1/1.4	1/1	T[c]	1/1	1/2.7[b]
Gramineae Oryzopsis			1/1		1/2.7[b]
Gramineae Sporobolus					
Amaranthaceae Amaranthus	13/18.6	12/12	3/3	14/14	1/2.7[b]
Cactaceae Opuntia					
Chenopodiaceae Atriplex					1/2.7[b]
Chenopodiaceae Chenopodium		30/30	106/106	8/8	7/18.9[b]
Cheno-ams					
Chenopodiaceae Corispermum					
Chenopodiaceae Cycloloma					
Compositae Helianthus					
Cruciferae Descurainia			10/10	1/1	
Euphorbiaceae Euphorbia					
Loasaceae Mentzelia		1/1		1/1	
Malvaceae Sphaeralcea		1/1		1/1[b]	2/5.4[b]
Portulacaceae Portulaca			3/3	2/2	
Solanaceae Physalis			1/1	2/2	
Zea mays (c=cob, cupule)		c[b]	c[b]	1/1c[b]	5/13.5[b]
Others			2/2[d]		
Unknowns/unidentifiables	3/4.3	12/12	9/9		4/10.8[b]
No. taxa	3	7	11	10	9
No. taxa burnt	0	1	1	4	9
Total seeds					
Actual count	17	57	135	31	22
Seeds/liter	24.3	57.0	135.0	31.0	59.4

[a]Number above slash = actual number of seeds recovered; number below slash = seeds/liter.
[b]Indicates that some or all items were charred.
[c]Less than 0.5%.
[d]Cleome = 1/1; Monolepis = 1/1.

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Tab' F-11.18. Flotation scan results: Room 143/236, ors 1 and 4.[a]

	Floor 1								Floor 4 (Rm. 236)			
	Gr 1 6783	Gr 3 6784	Gr 5 6785	Gr 7 6786	Gr 9 6787	Gr 11 6788	Gr 13 6789	Number Samples	Gr 1 6834	Gr 3 6837	Gr 7 6839	Number Samples
Cupressaceae Juniperus				B	B			2			+	1
Pinaceae Pinus edulis									+	+	+	3
Gramineae Oryzopsis					B			1				
Gramineae Sporobolus					B			1				
Amaranthaceae Amaranthus									+	+		2
Cactaceae Opuntia					B			1				
Chenopodiaceae Atriplex			B					1			B	1
Chenopodiaceae Chenopodium									+	+		2
Cheno-ams											+	1
Chenopodiaceae Corispermum					B			1			+	1
Chenopodiaceae Cycloloma				B	B			2		+		1
Compositae Helianthus												
Cruciferae Descurainia												
Euphorbiaceae Euphorbia												
Loasaceae Mentzelia					B			1				
Malvaceae Sphaeralcea												
Portulacaceae Portulaca									+	+		2
Solanaceae Physalis					+			1				
Zea mays (c=cob, cupule)							B	1				
Others				+[b]	B[b]			2			+[c]	1
Unknowns/unidentifiables	+	+	+	+	+	+	+	7	+	+	+	3
No. taxa	1	1	2	4	10	1	2		5	6	7	
No. taxa burnt	0	0	1	2	8	0	1		0	0	1	

[a]B indicates that some or all items were charred; + indicates that none of the items were charred.

[b]Cleome.

[c]Cryptantha or Lappula.

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T · MF-11.19. Flotation scan results: Plaza Feat 1, Room 3, Floor 1.[a]

	Gr 1 955	Gr 3 956	Gr 12 959	Gr 13 960	Gr 22 963	Gr 24 964	Number Samples
Cupressaceae Juniperus							
Pinaceae Pinus edulis							
Gramineae Oryzopsis	+		+	+			3
Gramineae Sporobolus							
Amaranthaceae Amaranthus	B			+			2
Cactaceae Opuntia							
Chenopodiaceae Atriplex							
Chenopodiaceae Chenopodium	+	+	+		+		4
Cheno-ams		+	+	+	B	B	5
Chenopodiaceae Corispermum			+				1
Chenopodiaceae Cycloloma			+	+	+		3
Compositae Helianthus							
Cruciferae Descurainia							
Euphorbiaceae Euphorbia		+				+	2
Loasaceae Mentzelia	B				B		2
Malvaceae Sphaeralcea						B	1
Portulacaceae Portulaca					B	B	2
Solanaceae Physalis			+		+	B	3
Zea mays (c=cob, cupule)	B					B	2
Others	+[b]				+[c]		2
Unknowns/unidentifiables					B	B	2
No. taxa	7	3	6	4	8	7	
No. taxa burnt	3	0	0	0	4	6	

[a]B indicates that some or all items were charred; + indicates that none of the items were charred.
[b]Gramineae.
[c]Phacelia.

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T : MF-11.20. Flotation results: Plaza Feature 1 Plaza Grids 1 and 8.[a]

	Plaza Feature 1		Plaza Grid 1		Plaza Grid 8	
	Room 3, Floor 1		Surface 6	Surface 7	Layer 15	
	FP 1 985	FP 2 801	5025	5046	6616	6618
Cupressaceae Juniperus		T[bc]			T[bc]	T[bc]
Pinaceae Pinus edulis	1/1[b]				1/1[b]	1/1[b]
Gramineae Oryzopsis					1/1	1/1
Gramineae Sporobolus		2/4			1/19	
Amaranthaceae Amaranthus		1/1[b]				
Cactaceae Opuntia					2/2	
Chenopodiaceae Atriplex						
Chenopodiaceae Chenopodium		458/461	90/105.9	4/4.4	341/348[b]	7/7
Cheno-ams						
Chenopodiaceae Corispermum						
Chenopodiaceae Cycloloma						
Compositae Helianthus						
Cruciferae Descurainia		165/231	15/17.6	4/4.4	3/6	
Euphorbiaceae Euphorbia		404/424			16/16	
Loasaceae Mentzelia					6/6	2/2
Malvaceae Sphaeralcea	1/1[b]					
Portulacaceae Portulaca	1/1[b]	12/13[b]	3/3.5		2/3	1/1[b]
Solanaceae Physalis		1/1[b]				2/2
Zea mays (c=cob, cupule)	1/1[b]				C[b]	1/1C[b]
Others			2/2.4[d]		1/1[d]	
Unknowns/unidentifiables	2/2[b]	7/8[b]		1/1.1	3/4[b]	
No. taxa	5	9	4	3	13	8
No. taxa burnt	5	5	0	0	5	4
Total seeds	6	1.050	110	9	387	15
Actual count	6.0	1,143.0	129.4	9.9	407.0	15.0
Seeds/liter						

[a]Number above slash = actual number of seeds recovered; number below slash = seeds/liter.
[b]Indicates that some or all items were charred.
[c]Less than 0.5%.
[c]Phacelia.
[d]Phaseolus.

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Tab F-11.21. Flotation results: Trash Mound.[a]

	Layer 72 4757	Layer 69 4762	Layer 56 4769	Layer 45 4774	Layer 44 4775	Total Seeds/ Liter	% Seeds	Total Samples (n = 5)	% Samples
Cupressaceae Juniperus		T[bc]			T[bc]	0	0	2	40
Pinaceae Pinus edulis		1/1[b]			T[bc]	1	2	2	40
Gramineae Oryzopsis									
Gramineae Sporobolus									
Amaranthaceae Amaranthus				1/1		1	2	1	20
Cactaceae Opuntia					1/1[b]	1	2	1	20
Chenopodiaceae Atriplex			1/1[b]		1/1[b]	2	4	2	40
Chenopodiaceae Chenopodium			2/2[b]			2	4	1	20
Cheno-ams	1/1[b]			2/2[b]	3/3[b]	6	11	3	60
Chenopodiaceae Corispermum									
Chenopodiaceae Cycloloma									
Compositae Helianthus									
Cruciferae Descurainia		3/3[b]			1/1[b]	4	7	2	40
Euphorbiaceae Euphorbia									
Loasaceae Mentzelia			2/2			2	4	1	20
Malvaceae Sphaeralcea					1/1[b]	1	2	1	20
Portulacaceae Portulaca	2/2[b]				1/1[b]	3	5	2	40
Solanaceae Physalis					1/1	1	2	1	20
Zea mays (c=cob, cupule)	1/1c[b]	1/1c[b]	2/2c[b]	1/2c[b]	5/5c[b]	10	18	5	100
Others			1/1[d]		1/1[e]	2	4	2	40
Unknowns/unidentifiables	16/16	1/1	3/3[b]			20	36	3	60
No. taxa	4	5	6	3	11				
No. taxa burnt	4	4	4	2	10				
Total seeds									
Actual count	20	6	11	4	15				
Seeds/liter	20	6	11	4	15	56			

[a]Number above slash = actual number of seeds recovered; number below slash = seeds/liter.
[b]Indicates that some or all items were charred.
[c]Less than 0.5%.
[d]Phacelia.
[e]Phaseolus.

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T MF-11.22. Flotation results: Kiva 10.[a]

	Layer 16 6522	Layer 20 6525	Layer 23 6527	Layer 25 6529	Total Seeds/ Liter	% Seeds	Total Samples (n = 4)	% Samples
Cupressaceae Juniperus	T[bc]	T[bc]	T[bc]	T[bc]	0	0	4	100
Pinaceae Pinus edulis								
Gramineae Oryzopsis								
Gramineae Sporobolus		1/1		5/5	6	5	2	50
Amaranthaceae Amaranthus		1/1	1/1[b]	7/7	9	8	3	75
Cactaceae Opuntia								
Chenopodiaceae Atriplex	8/8[b]				8	7	1	25
Chenopodiaceae Chenopodium								
Cheno-ams								
Chenopodiaceae Corispermum								
Chenopodiaceae Cycloloma			2/2[b]		2	2	1	25
Compositae Helianthus								
Cruciferae Descurainia								
Euphorbiaceae Euphorbia								
Loasaceae Mentzelia	1/1				1	1	1	25
Malvaceae Sphaeralcea								
Portulacaceae Portulaca				1/1[b]	1	1	1	25
Solanaceae Physalis								
Zea mays (c=cob, cupule)	4/4c[b]	3/3c[b]	c[b]	c[b]	7	6	4	100
Others								
Unknowns/unidentifiables		7/7	14/14	62/62[b]	83	71	3	75
No. taxa	4	5	5	6				
No. taxa burnt	3	2	4	4				
Total seeds								
Actual count	13	12	17	75				
Seeds/liter	13	12	17	75	117			

[a]Number above slash = actual number of seeds recovered; number below slash = seeds/liter.
[b]Indicates that some or all items were charred.
[c]Less than 0.5%.

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OLD ALTO
AFTER STRIPPING OF WALLS

SCALE: 1:1000