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Preliminary Report on Excavations at Marshview Hamlet (Site 5MT2235)

In House Report

by

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Under the supervision of
David A. Breternitz, Senior Principal Investigator

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DOLORES ARCHAEOLOGICAL PROGRAM FIELDWORK OPERATIONS - 1978

Preliminary Report on Excavations at ~~Site 5MI2235,~~ Marshview Hamlet (Site 5MI 2235)

Chapter 9, Volume I

IN HOUSE REPORT
FINAL

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ABSTRACT

Site 5MT2235, a small Anasazi habitation located northwest of Dolores, Colorado, was excavated during the 1978 field season as part of the Dolores Project Cultural Mitigation Program. Field operations were conducted from 24 July through 2 November. During this period, University of Colorado crew members, along with personnel of the Water and Power Resources Service Youth Conservation Corps and Young Adult Conservation Corps programs, excavated and recorded a small pitstructure and associated surface features representing a small unit hamlet. Dendrochronological dates and artifacts associated with the site indicate it was occupied during the last half of the eleventh century AD (Sundial Phase).

Materials and artifacts collected from this Sundial Phase site suggest the occupants were a family of horticulturalists subsisting on crops grown in fields near the site. Faunal remains indicate that in addition to gardening the occupants augmented their diet by hunting small game. Further analysis of environmental and vegetal samples may indicate the exploitation of additional resources available in the vicinity of the hamlet.

INTRODUCTION

Site 5MT2235 (Marshview Hamlet) was one of seven sites intensively investigated as a part of the Dolores Archaeological Program during the 1978 field season. The site was excavated as a portion of mitigative work undertaken by the University of Colorado to alleviate impacts on cultural resources necessitated by construction and operation of the U.S. Water and Power Resources Service. An extensive examination of the site in the period 24 July to 2 November was undertaken by University of Colorado personnel. During the period of investigations at the site, operations were directed by Martin E. Bussard with the assistance of Vickie L. Clay.

Initially, investigations were carried out by Youth Conservation Corps personnel. At the close of the Youth Conservation Corps summer program (11 August 1978), a University of Colorado field crew undertook the operations, working through to conclusion of investigations at the site. In the latter part of the field season the field crew was augmented by one Young Adult Conservation Corps crew member.

Approximately 367 man days were expended during the field investigation of Site 5MT2235. A breakdown by organizational affiliation is listed below:

University of Colorado	247
Youth Conservation Corps	91
Young Adult Conservation Corps	29
	367 Total

The investigations at Site 5MT2235 formed an integral part of the Dolores Archaeological Program's overall research design for the 1978

field season wherein the site was chosen specifically for excavation to elucidate the latest permanent habitative period (Sundial Phase) in the Sagehen Flats Locality.

Site 5MT2235 is located in the Southeast Quarter of the Northwest Quarter of the Northeast Quarter of Section 36, Township 38 North, Range 16 West. The Universal Transverse Mercator grid coordinates for the site are 0715290 m east and 4154340 m north, Zone 12.

ENVIRONMENTAL SETTING

The Sagehen Flats Locality is a broad valley extending longitudinally east and west. The locality is characterized by gentle slopes to the north and an abrupt ridge representing the House Creek Fault to the south. Numerous small intermittant drainages converge on the valley floor and flow toward the Dolores River which forms the locality's eastern boundary.

Site 5MT2235 occupies a low promontory north of the lowest portion of the valley (the Sagehen Flats Marsh, see Figure 1). The gentle slopes of the site are covered with a relatively dense but low growth of sagebrush (Artemisia tridentata) and rabbitbrush (Chrysothamnus nauseosus); see Figure 2. Isolated pinyon (Pinus edulis) and juniper (Juniperus osteosperma) are found nearby. Approximately 200 m to the southeast of the site, a large head-cutting arroyo has deposited a wide alluvial fan which dams the valley lowlands forming an extensive marsh (Fig. 3). Flow emanating from the numerous nearby arroyos during the wet periods, surface percolation of ground water, and water derived from a nearby irrigation canal sustain the marsh and its lush growths of cattail (Typha latifolia), American Bulrush (Scirpus americanus), and three-square (Sedulus americanus). The littoral community of Red Willow (Salix spp.), thistle (Cirsium spp.) and numerous grasses make the area ideal as haven for small game and birds; in addition, the marsh serves as a seasonal stop for migratory waterfowl.

Endemic fauna observed at or near the site include cottontail rabbit (Sylvilagus spp.), Mule Deer (Odocoileus hemionus), elk (Cervus

Figure 1: Marshview Hamlet, topographic plan of site.

5MT2235

TOPOGRAPHIC VIEW OF SITE

50 cm CONTOUR INTERVALS

0 16 32 meters

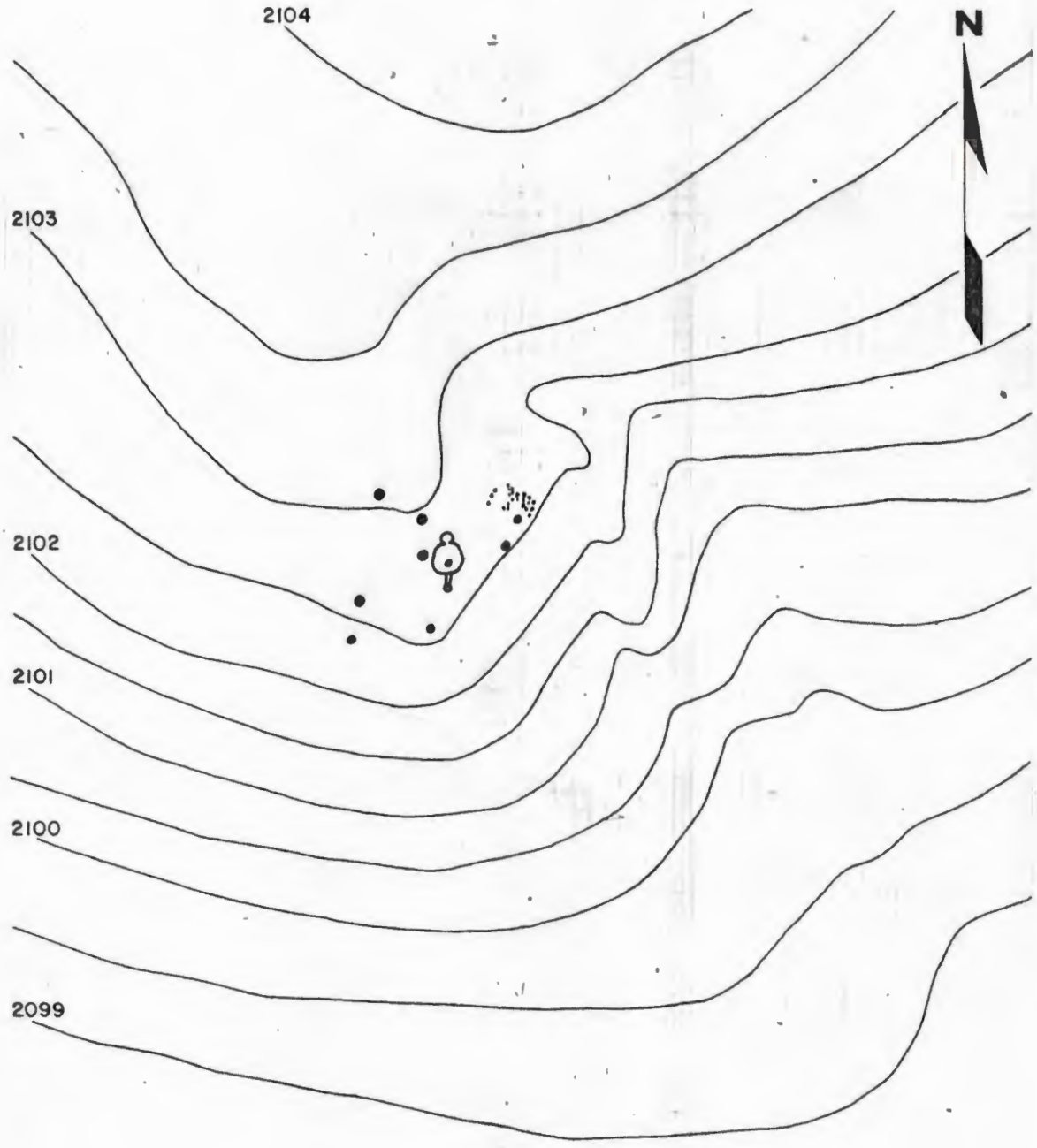


Figure 2: Marshview Hamlet (5MT2235), view to the north; note rubble mound in foreground.

Figure 3: Marshview Hamlet (5MT2235) during excavation, view to southeast. Note Sagehen Flats Marsh in the background.

canadensis), coyote (Canis latrans), Rock Squirrel (Citellus variegatus), prairie dog (Cynomys spp.), Bushy-tailed Woodrat (Neotoma cinerea), and other unidentified small rodents. Rattlesnakes (Crotalus spp.) and small lizards, including the horned lizard, make-up the reptilian population. Avifauna commonly observed near the site in the Sagehen Flats Locality are: Turkey Vulture (Cathartes aura), Common Raven (Corvus corax), Black-billed Magpie (Pica pica), Pinyon Jay (Gymnorhinus cyanocephala), and several types of raptors as well as numerous passerines. Due to the proximity of the site to the marsh, waterfowl were commonly seen and heard. These include: sora (Porzana carolina), coot (Fulica americana), mallard (Anas spp.) and other species of duck.

Site 5MT2235 lies at an altitude of 2103 m above mean sea level in an area where beans (Phaseolus spp.), wheat (Triticum spp.), corn (Zea mays), and garden produce are presently cultivated. Though some crop lands are irrigated, the technique of dry farming produces adequate yields during years of average precipitation.

With the exception of the shallow soil to the immediate south of the site, all land at and near the hamlet would have been suitable for farming or intensive horticulture utilizing dry farming techniques. The large alluvial fan 200 m southeast, and some of the better drained valley lowlands would probably have been suitable for sub-irrigation farming methods similar to the Hopi "akchen" technique. The soil of the site proper is a red-brown clay-loam derived from an aeolian loess. One hundred meters to the south of the site and forming the boundary of the valley lowlands is an outcropping of marine sandstone. This uppermost

member of the Dakota formation is the source of most of the building stone found during investigations at the site.

The area surrounding Site 5MT2235 is presently used as winter pasture for horses and cattle. In the 1940s the land was disc-plowed ("one-wayed"), cleared of brush with the trees left standing, and sown with grass seed (F. Cline, personal communication).

SOCIAL SETTING

Though Site 5MT2235 is thought to represent the last period of Anasazi occupation within the Sagehen Flats Locality, it is within 2 km of three small hamlets of the same temporal affiliation (Sundial Phase). A larger habitation or village is located 5.5 km to the southeast; this site may have been a contemporary center for trade and social interaction. In addition to communicating with the people of the habitations mentioned above, the inhabitants of Site 5MT2235 may have utilized certain limited activity sites in and near the Sagehen Flats Locality. The following is a listing of sites with possible communicative ties with the inhabitants of Site 5MT2235 with a brief description of observed features and artifacts indicating their chronological placement.

Reservoir Ruin (Site 5MT4450)

This site is located on the rim of the Dolores River canyon 5.5 km (map distance) southeast of Site 5MT2235. It consists of a large group of ruins including a D-shaped pueblo, and several kiva depressions, one of which is possibly a great kiva. To the east of the main ruin is a tri-wall structure. Ceramics found at the site include Mancos Black-on-white, McElmo Black-on-white, Mancos corrugated, and Abajo Red-on-orange, indicating an occupation span of AD 700 - AD 1150.

Site 5MT2199

This site lies 1.25 km west of 5MT2235 on the top and south slope of a hillock. Consisting of a scatter of lithics and ceramics, the site

probably represents a small limited activity site with multiple component occupations. Ceramics from this site include Mancos Black-on-white and some unidentified gray ware indicating that a possible Sundial Phase element is present.

Site 5MT2243

Consisting of a scatter of sherds and lithics, this limited activity site lies 1.25 km south of Site 5MT2235. Ceramics observed at this site include Mancos Black-on-white and Mancos Corrugated ware, again indicating a potential Sundial Phase occupation.

Site 5MT2851

This small rockshelter and associated trash midden lies 1.2 km northeast of Site 5MT2235. Ceramics include Mancos Black-on-white, Mancos Corrugated, and sherds of an indeterminant plain gray ware. The site may have functioned as a seasonal camp for collection and preliminary processing of wild foods by family groups living in permanent habitations further to the south. The ceramic collection suggests this use pattern may have extended into the Sundial Phase.

Site 5MT2737

The site is a pueblo habitation consisting of a partially excavated ring of rubble, perhaps representing a tower, and a linear mound probably indicating a roomblock. To the south is a slight depression which may indicate a kiva.

Ceramic types recovered from the site include Mancos Corrugated, Mancos Black-on-white, and McElmo Black-on-white; the assemblage suggests contemporaneity with the Sundial Phase occupation at Marsh View Hamlet.

Site 5MT2230

The site appears to be a small tower structure 2.7 - 3.2 m in diameter. Survey reports do not indicate the presence of a roomblock but suggest it is related to a nearby hamlet (Site 5MT2233). Ceramics from this site include Mancos Corrugated and Mancos Black-on-white ware.

Site 5MT2233

This site is a small unit hamlet approximately 30 m north of Site 5MT2230. Visible architectural remains consist of a small masonry roomblock; the site appears to be without an associated pitstructure. The ceramic collection recovered during survey operations includes the types Mancos Corrugated and Mancos Black-on-white, which suggest a Sundial Phase occupation. This site and Site 5MT2230 are 1.1 km northeast of Site 5MT2235.

Marshview Hamlet appears to have been occupied for a relatively short time (based on observations made during the excavations), probably less than 30 years. During this short time the occupants probably communicated with relatives and neighbors (either in or outside the locality), traded for locally unavailable items (abalone shell was found inside the pitstructure and pottery of extra-sector manufacture was collected from the site), gathered foods unavailable in the immediate neighborhood but present in other areas within the locality, and possibly took part in rituals or ceremonies of a communal nature at a nearby large

village or center. Marshview Hamlet inhabitants may have benefited by the system of towers in and near the locality whose yet unexplained function may have been necessary for their well-being. The Sundial Phase towers of the Sagehen Flats locality appear to represent either a concerted effort to reoccupy the area, or the remnant of a small residual population. Site 5MT4450 (Reservoir Ruins) is a possible source of manpower and settlers during this period. The ceramic assemblage collected from the site during the archaeogical survey bears a striking resemblance to that collected from Site 5MT2235. Site 5MT2737, a tower/habitation located between Sites 5MT4450 and 5MT2235, also possesses a similar ceramic assemblage, indicating not only close temporal affiliation, but interesting demographical implications as well. As more Sundial Phase sites are investigated within the sector, additional data will be made available which will enable a more thorough interpretation of the local social milieu for the inhabitants of Marshview Hamlet.

EXCAVATION METHODS

Data recovery operations commenced at Marshview Hamlet with the removal of brush. For gridding purposes the site was defined as an area displaying a contiguous artifact scatter and architectural features. A four-meter grid, 32 m x 32 m, was established to encompass the site area and provide a control for surface collection and mapping.

Surface Collection

Each 4 x 4 meter square was collected and artifacts were bagged according to material types. Bags were dated, marked with the coordinates of the square, material type, given a surface designation, and assigned a field sample (F.S.) number.

A stratified random sampling method was then used to select the area for initial excavation. The sampling design was predicated on the typical Anasazi unit hamlet layout which commonly consists of three subareas. These are, from north to south, the surface structure, pitstructure, and midden area. A mass (or mound) of sandstone blocks and metate fragments, possibly the remnant of a surface structure, served to key one sub-area or stratum. Another stratum was chosen that encompassed a low elongate rise along the western limit of the site; this was thought possibly to represent an additional structure. The third stratum encompassed the trash area and the remainder of the site not included in the first two strata. Squares were numbered sequentially in each stratum and numbers were drawn from a random number table. Twenty percent of the squares (2 x 2 m) in each stratum were designated to be excavated.

Squares in or near the postulated architectural features were chosen for initial excavation (Fig. 4).

After the selection process, the 2 x 2 m units were excavated by arbitrary 15-cm levels in the absence of discrete cultural strata. When cultural features such as domestic architecture, hearths, cists, etc., were encountered special attention was given them, the excavation then proceeding by natural or cultural strata, for example in the excavation of Pithouse 1 (Fig. 5).

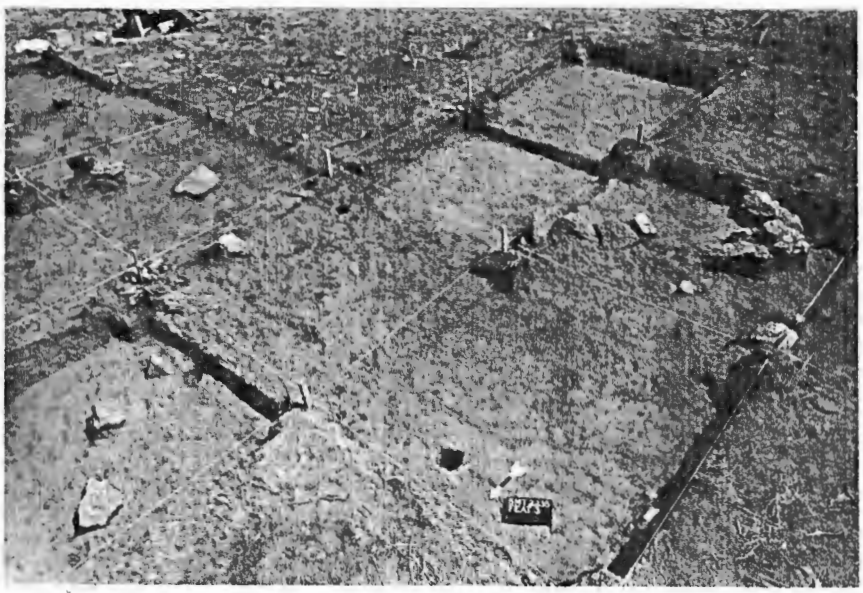
Several types of environmental and dating samples were collected during the excavation. Pollen and bulk soil samples were taken from each level, stratum, floor, cist and architectural feature. Samples of wood, mortar, plaster, ash and charcoal were collected whenever possible. Dating samples collected included radiocarbon, archaeomagnetic, and dendrochronological specimens which were, like the material samples, collected whenever it was appropriate to do so. All samples were collected according to procedures specified in the program field manual.

Artifacts recovered from each level, feature etc., were segregated according to material type, bagged and marked with the appropriate provenience information. Artifacts found on floors, and features associated with floors, were carefully mapped and assigned point location numbers before removal. All human remains and pollen samples taken from floors, features, and burials were treated in a like manner. Artifacts such as pottery and metates suspected of containing cultural pollen were bagged as soon as possible in an attempt to prevent contamination by modern pollen rain and submitted to the laboratory for pollen wash.

One-quarter-inch and one-eighth-inch screens were used to sift the fill of features found on the surface, and one-eighth-inch screens were

Figure 4: Marshview Hamlet (5MT2235) after brush clearing and during initial excavation; view is to southwest.

Figure 5: Marshview Hamlet, Pithouse 1, before excavation. Pithouse defined by stain above north arrow and sign board.



used to recover small items from cultural levels within the pithouse. This small screen size enables excavators to collect numerous small chips of lithic debris and fragments of bone and teeth which would have been lost through the coarser screening. Excavation of the pithouse differed in method from that used in the other areas of the site in other respects. These differences consist primarily in the detail with which they were executed and the complexity of the multiple burial on the kiva floor. Detailed mapping of small areas of the burial were necessitated by the large amounts of ceramic fragments and other artifacts interbedded with human bone fragments which prevented the exposure of large portions of the burial area. After the fragments were mapped they were identified as to particular vessel, if possible, and given a cluster number which was indicated on the map. After packaging according to cluster, the sherds were tagged with provenience information and sent to the laboratory.

Bone specimens were handled in a similar manner, that is they were mapped in situ, photographed where possible, identified where possible, assigned a field inventory number which was indicated on the map, then carefully wrapped in cotton bandaging, bagged, tagged with the appropriate information and sent into the laboratory. This method enabled the accurate recording of the placement in the kiva of even the most fragmentary, and at the time unidentifiable, pieces of bone.

Numerous bulk soil and pollen samples were taken from the fill of the burial as well as from the features of the kiva floor and from the floor itself. The analyses of these samples are as yet incomplete. It is hoped that data from them will enable a more concise explanation of the circumstances resulting in the placement of the burials within the

kiva. By the techniques of comparison and contrast of data from the various pollen and bulk soil analysis, it is hoped that it will be possible to demonstrate different use areas within the kiva thereby refining concepts of prehistoric religious and secular use of the kiva.

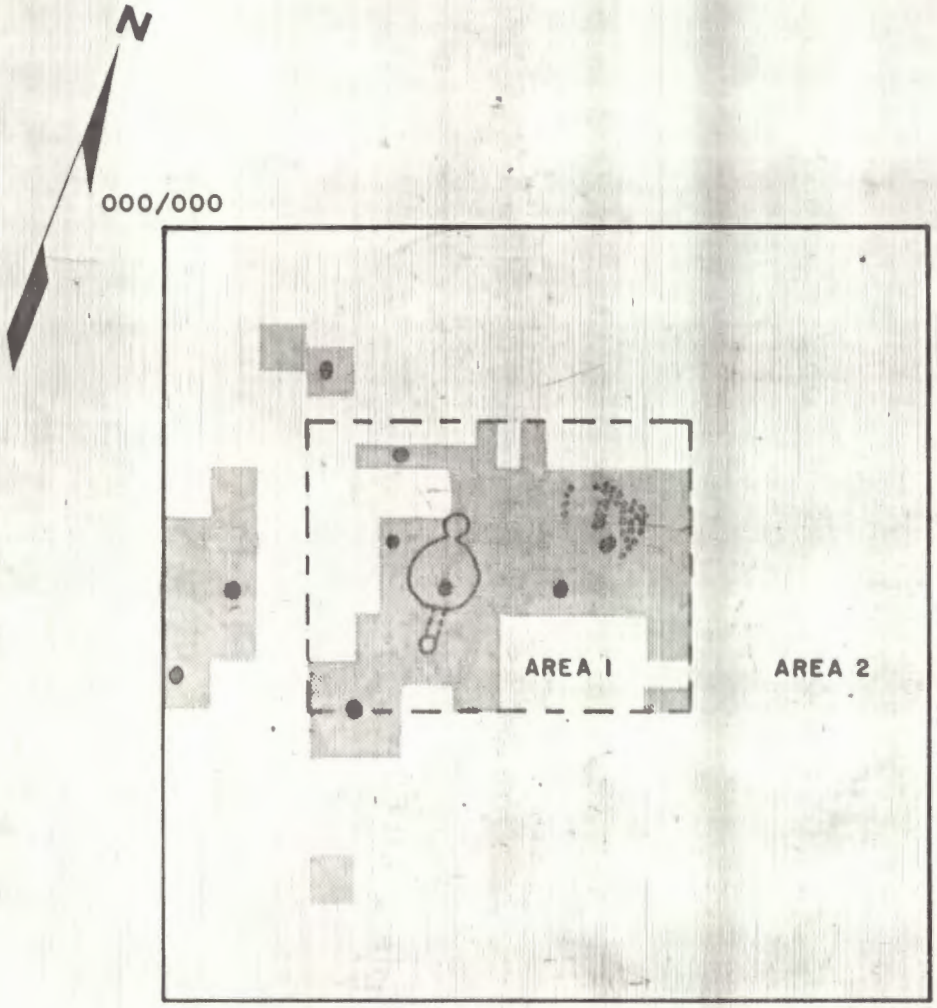
Supplementary Testing

Site 5MT2235 has been subject to significant natural erosion and to serious disturbance during recent agricultural clearing activities. In an attempt to recover additional data and as an experiment in the application of mechanized equipment in site excavation, a vigorous testing procedure was developed. This entailed the random selection of 1 x 4-m grid units (Fig. 6). The result was essentially a 25 percent stratified random sample which was excavated with a small skid-steer frontloader. The testing procedure was carried out by staking the 1 x 4-m trenches and carefully removing the upper 10 - 15 cm of top soil. A ground observer was stationed where he was able to see clearly any features which might be exposed but not be clearly visible to the operator of the front-loader. The observer was equipped with a square tipped shovel, trowel, broom, and whisk-broom in order to quickly delineate any feature exposed. Features thus discovered were excavated in the usual manner. Trenches exhibiting no features were excavated to sterile soil (20 - 30 cm below modern ground surface).

Figure 6: Marshview Hamlet, site sampling plan.

5MT2235

SITE SAMPLING PLAN



0 2 4 8 meters

EXPLANATION

EXCAVATED GRID

UNEXCAVATED GRID

AREA BOUNDARY

SITE BOUNDARY

ARCHITECTURE

Prehistoric architecture investigated at Marshview Hamlet during intensive operations included a small pitstructure (designated Pithouse 1), a rubble mound thought to indicate a former roomblock and several ancillary features which are believed to be the remnants of outdoor activity or use areas. While three elements representing two major cultures (The Four Corners Desert Tradition and the Anasazi Tradition) have been identified at the site, most architecture has been assigned to the most use-intensive occupation or Element 2 (Early Sundial Phase, AD 1075 - AD 1125). A detailed description of each architectural entity is presented below; the spatial relationship of the features is depicted in Figure 7.

Pithouse 1

Dimensions:

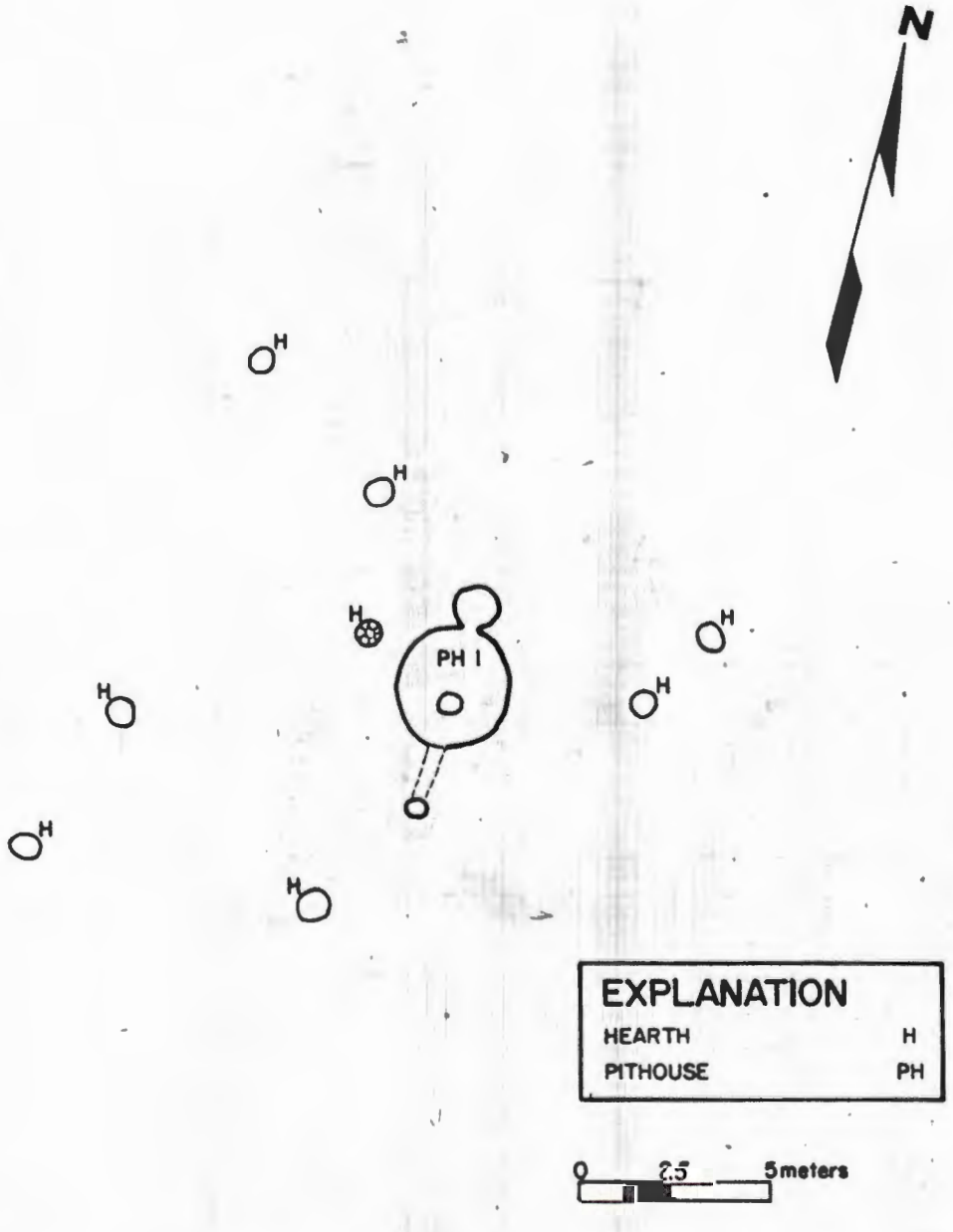
North-south diameter:	3.11 m
East-west diameter:	3.14 m
Floor area:	7.29 sq m
Floor area (including bell-shaped pit):	9.05 sq m
Total roofed area (excluding pit):	7.29 sq m
Depth of structure (Floor 1 to modern ground surface):	1.80 m
Reconstructed roof height (from floor):	1.9 m

Pithouse 1 is a very small, nearly circular pitstructure with earthen walls; a large bell-shaped pit adjoins the north side of the structure. The pithouse is thought to represent the center for domestic activities at the site.

Figure 7: Marshview Hamlet, relationship of major cultural units.

5MT2235

SPATIAL RELATIONSHIPS OF MAJOR CULTURAL UNITS



Period and Span of Occupation

The most intensive occupation at Marshview Hamlet, as indicated by dendrochronological data and seriation of the ceramic inventory, occurred during the Sundial Phase.

Ceramic types from the sheet trash located to the south of the pithouse are represented primarily by sherds of Mancos Black-on-white and Mancos Corrugated, and some early McElmo Black-on-white. Gray ware types from the floor of the pitstructure are Mancos Corrugated. In the post-occupational fill above the surfaces of the pithouse, ceramic types associated with a later, less intensive occupation are McElmo Black-on-white and Mesa Verde Corrugated; the latter is represented by a large jar with characteristic rim eversion.

Dendrochronological dates are available from two specimens of juniper received from archaeological contents within the site. Specimen 5 was taken from floor fill and the upper level of the ashpit associated with the upper floor of Pithouse 1. The specimen was partially burned and probably represents use of the pitstructure just prior to abandonment. When exposed, this specimen was found to be just below a large sherd and a human humerus associated with the mass burial. Dendrochronological Specimen 5 has been assigned dates from AD 0909fp to AD 0988+vv, indicating that it could not have been cut before AD 988, and probably somewhat later than this date, perhaps AD 1025±25 years.

Specimen 1 was recovered from a hearth representing a later temporary occupation in the upper fill of the pithouse. This specimen yielded an outer ring date of AD 1102vv, indicating it was used as firewood sometime after that date, perhaps AD 1125±15 years.

The dendrochronological dates when viewed in the context of their ceramic associations, while considering their missing outer rings, are not incompatible with the assignation of the most intensive occupation of Site 5MT2235 (Element 2) to the last half of the eleventh century AD, with a temporary use of the pitstructure depression occurring in the twelfth century AD (Element 3).

Due to the paucity of architectural features and the incomplete analysis of archaeomegnetic samples, concise information on the span of occupation is unavailable. Ceramic analysis and the lack of any major architectural remodeling suggests that the primary occupation of the site (Element 2) was limited to less than 50 years (W. Lucius, personal communication).

Shape

The structure is nearly circular in outline with no unconformities. The walls are nearly vertical, but are slightly undercut near the floor surfaces.

Orientation

The main (north-south) axis of the pithouse (a line passing through the center of the ventilator shaft, the ashpit, the deflector, the hearth and the masonry patch in the north wall) is oriented 1 degree west of magnetic north.

Walls

Pithouse 1 lacked pilasters, a southern recess, banquettes and a northern niche, features common to contemporaneous pitstructures (kivas) in the Mesa Verde Region. Two small masonry patches (Fig. 8) set flush with the walls were used by the builders to stabilize the loose fill of animal burrows encountered when the structure was originally dug. These

Figure 8: View of eastern wall, Pithouse 1 showing masonry patch.


5MT2235
KIVA I
E WALL

masonry patches were constructed of unshaped sandstone blocks mortared with red clay. With the exception of the masonry patches, wall treatment consisted of gray adobe plastered directly over the hard packed clay-loam into which the pit had been cut. In areas where preservation was good, two layers of plaster were discerned (Fig. 9).

Ventilator

The ventilator tunnel is sub-rectangular in cross-section with a slightly arched ceiling. It measures at the mouth 35 cm high by 52 cm wide (Fig. 9), and extends 2.2 m to the southwest of the kiva. The ventilator shaft is 1.85 m deep and 57 cm in diameter with a circular cross-section (Fig. 10). It intersects the tunnel north and slightly west of the tunnel terminus indicating that it was constructed after the tunnel (Fig. 11). Both tunnel and shaft exhibited unlined walls except for the surface opening which was flanked by large stones. Devoid of mortar when excavated, the stones may have been part of a masonry collar to prevent the entrance of surface water during periods of run off.

Floor 1

There were two floor layers in the pitstructure, the remodeling of which probably coincided with the replastering of the walls. Floor 1, the lowermost floor, was plastered directly over a caliche horizon which also formed the lower 10 - 14 cm of the walls of the pitstructure. This surface was plastered with gray adobe and sloped gently from the coping at the base of the wall to the firepit; Figures 12, 13 and 14 are a plan and two profile views of Pithouse 1, Floor 1; Figure 15 is a photograph of Floor 1.

Figure 9: View of wall, Pithouse 1, showing adhering plaster (above arrow).


5MT 2235
PIT STR 1

Figure 10: Pithouse 1, interior opening of ventilator tunnel.


5MT 2235
PIT STR 1
FEAT 16

Figure 11: Pithouse 1, exterior (surface) opening of ventilator shaft; intrusive excavation in lower portion of photo is rodent burrow.


5MT 2235
PIT STR 1
FEAT 16

Figure 12: Plan view of Floor 1, Pithouse 1, Marshview Hamlet.

5MT2235

KIVA 1, FLOOR 1, PLAN VIEW

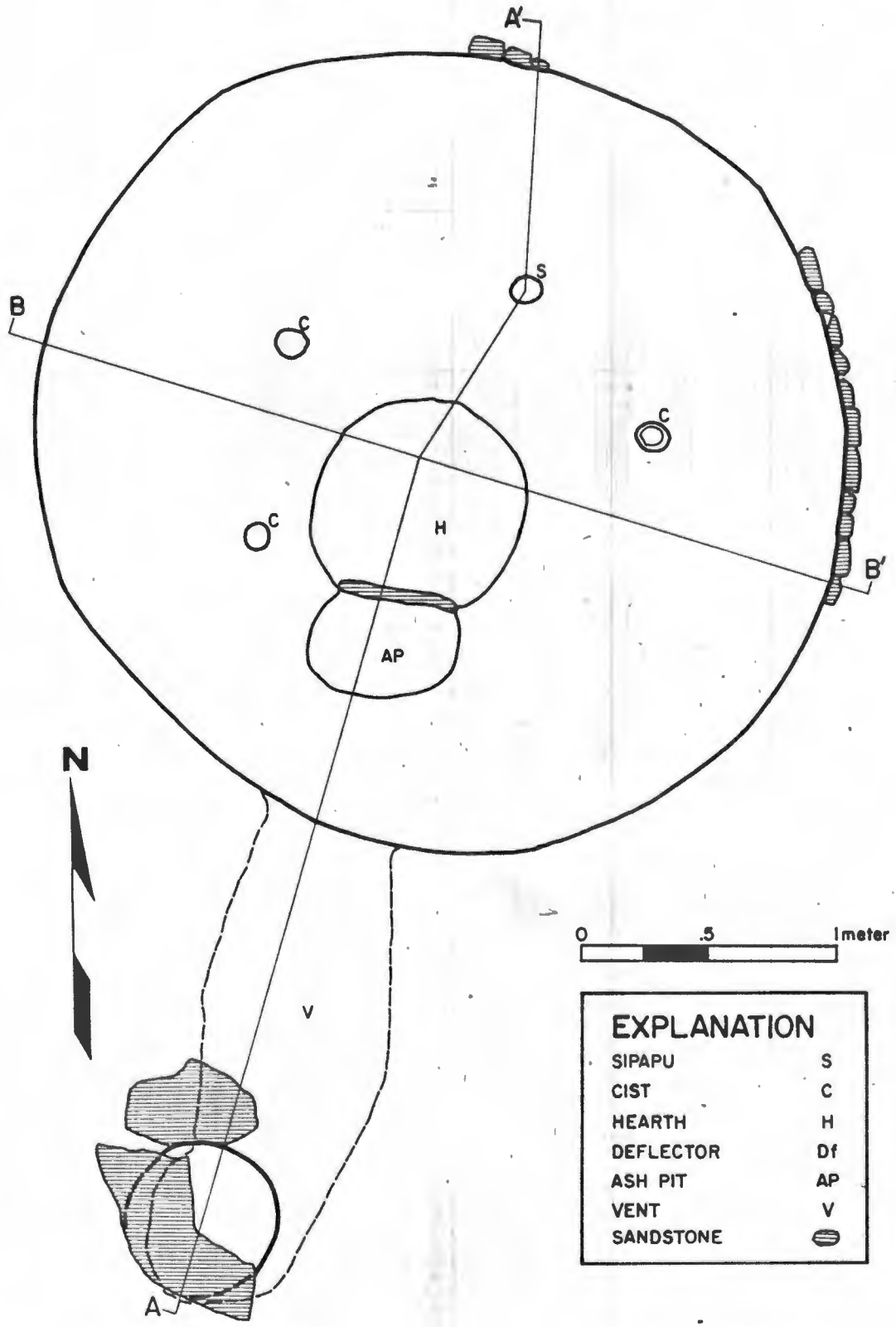


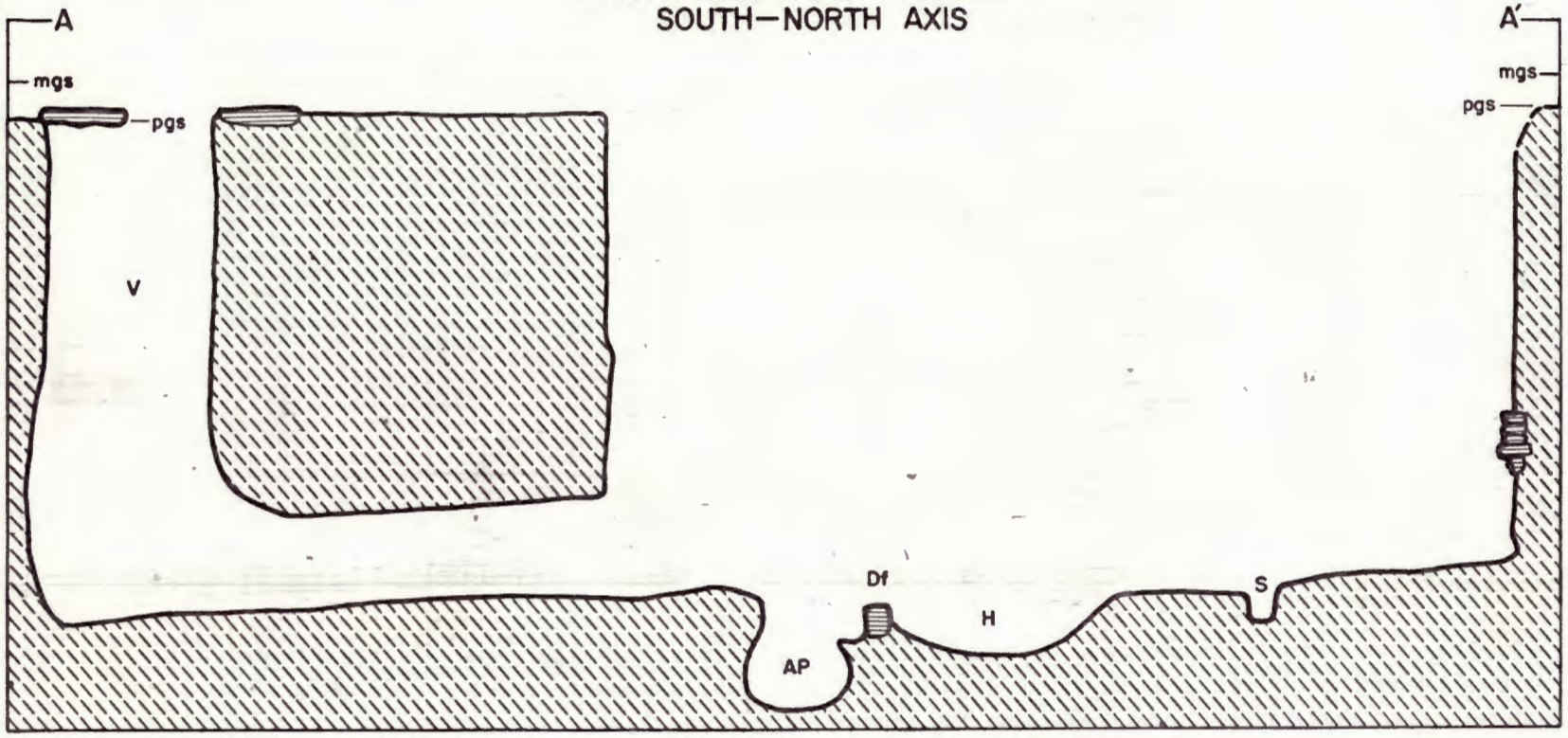
Figure 13: North-south architectural profile of Floor 1, Pithouse 1, Marshview Hamlet.

5MT2235

KIVA 1, FLOOR 1

ARCHITECTURAL PROFILE

SOUTH–NORTH AXIS



0 .5 1meter

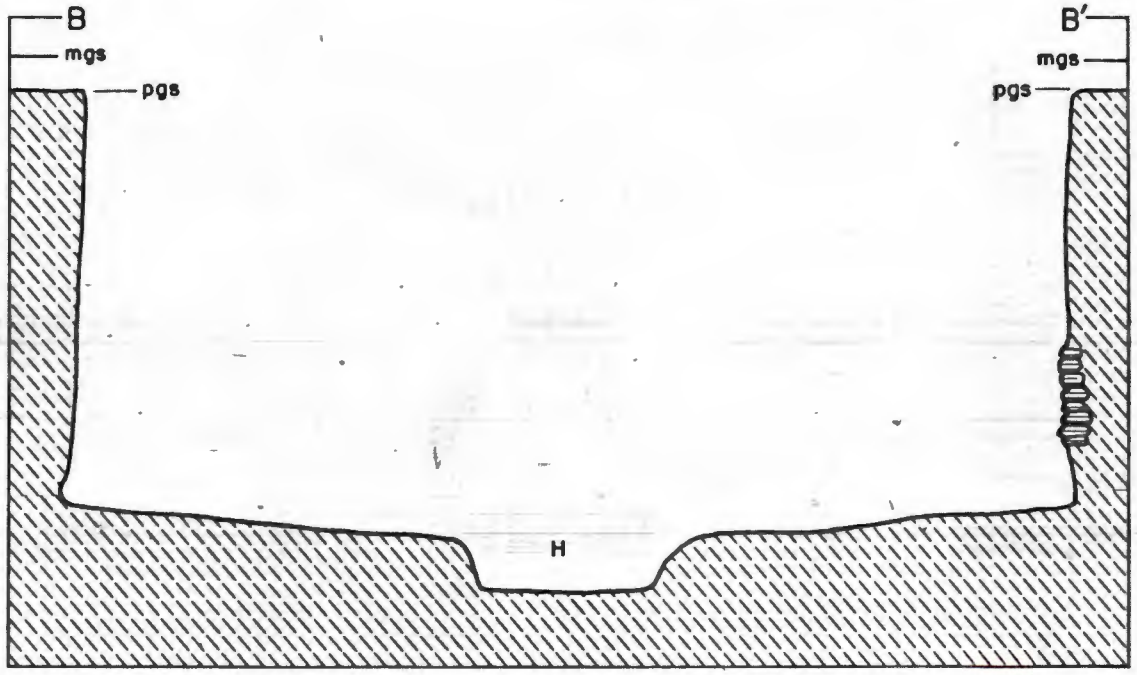
EXPLANATION

VENT	V	NATURAL DEPOSITS	
ASH PIT	AP	SANDSTONE	
DEFLECTOR	Df	HEARTH	H

Figure 14: South-west architectural profile of Floor 1, Pithouse 1, Marshview Hamlet.

5MT2235

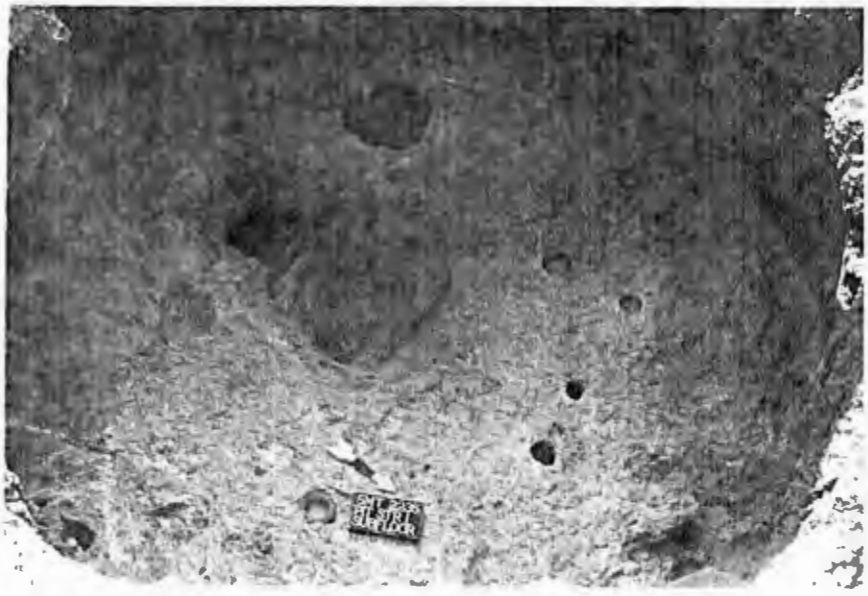
KIVA 1, FLOOR 1
ARCHITECTURAL PROFILE
WEST–EAST AXIS



EXPLANATION

HEARTH	H
SANDSTONE	
NATURAL DEPOSITS	

Figure 15: View of Floor 1, Pithouse 1, at Marshview Hamlet, looking west. Note dual sipapu-like holes to right of central hearth, adobe-lined cist with sherd bottom to left of photo board, and two shallow cists above possible sipapu.



Floor Features (Floor 1)

Features associated with Floor 1 were exposed when Floor 2 (representing a later occupation) was removed. These features include two small circular pits or cists on the west side of the structure, and an adobe-lined cist which incorporates a black-on-white sherd as a base on the east side of the pitstructure, as well as the central hearth and ashpit.

Dimensions:

Central Hearth:	
Diameter north-south:	76 cm
Diameter east-west:	82 cm
Depth:	20 cm
Ashpit:	
Diameter north-south:	25 cm
Diameter east-west:	35 cm
Depth:	35 cm

The two small pits in the west half of the pitstructure are remarkable in their similarity and orientation. The cists are 6-7 cm in diameter and 3-4 cm deep with cupped bottoms. They are 80 cm apart and are oriented approximately north and south (Fig. 15).

The third small cist (Fig. 16), seems to be somewhat uncommon. It is 23 x 14 x 6 cm and irregular in shape. Contained within this depression is an annular construction of adobe whose inner dimensions are 10 cm in diameter and 5 cm deep and whose outside diameter is 14 cm. The base of this ring is formed by a black-on-white bowl sherd, the painted side facing up. The function of this feature is unknown though it is possibly related to spinning. Ethnographic and archaeological accounts (DiPeso 1979, Bankes 1977) report the use of sherds and stone bowls as

Figure 16: Detail of adobe-lined cist with sherd bottom, Floor 1, Pithouse 1, Marshview Hamlet.


5MT 2235
PIT STR I
FEAT 21

rests and low-friction surfaces which serve also to contain the movements of a rotating spindle. The cist in the eastern portion of Floor 1 would serve admirably in this regard. Set firmly in the floor of the kiva it would not tip, move about or become lost, the sherd base providing a low-friction surface while the spindle tip would be prevented from wandering by the adobe annulus. The contents of this feature were sampled for pollen as was the floor plaster covering it. The painted sherd has been submitted for a pollen wash and will be available for further study as soon as that has been completed. In addition to pollen sampling, the fill of floor cists and the plaster of both floors were sampled for flotation (bulk soil samples).

The ashpit was apparently constructed and used contemporaneously with Floor 1. It is oval in cross-section and bell-shaped in profile; the bottom is flat. On the western and southern walls digging stick marks were clearly visible. When the floor was remodeled the ashpit was sealed across with clean adobe plaster at approximately 28 cm below floor level. When excavated, the ashpit contained ash above and below the adobe stratum. Also contained in the lower ashy fill were six sherds, one of which was McElmo Black-on-white, and four non-human bones, one of which appeared to be burned.

The central hearth of the pithouse, like the ashpit, was dug into the natural deposits under the floor. Unlike the ashpit, it was lined with adobe which was well oxidized. The plaster lining was sampled for archaeomagnetic dating.

Summary (Floor 1)

There are five features associated with Floor 1. These are three cists, one with a sherd bottom, a firepit or hearth, and an ashpit

divided by the stub of a sandstone slab deflector. With the exception of the artifacts in the lower portion of the ashpit fill and the sherd cist bottom no floor artifacts or point locations were recovered. It is believed that the surface was probably cleared by the inhabitants of the site prior to the construction of Floor 2. The floor itself consisted of a 0.5-1-cm layer of adobe, plastered directly over the calcium carbonate horizon into which it was dug.

Floor 2

Floor 2, the uppermost floor associated with the principle occupation of the pithouse, shared certain features such as the ashpit, hearth, deflector and sipapu with Floor 1. The sipapu is 13 cm deep and has a diameter of 9 cm.

However, Floor 2 possessed features spatially and apparently functionally different from those of Floor 1. A plan map and profile of Floor 2 is presented in Figures 17 and 18; Figure 19 is a view of Floor 2 looking south; Table 1 lists floor artifacts recovered from the surface.

Floor Features (Floor 2)

The hearth and ashpit, though spatially congruent with those of Floor 2, were altered. In the central hearth this alteration consisted of the insertion of an atypical deflector or slab of sandstone, on the north side, and replastering, possibly contemporaneous to the floor replastering. When excavated it became evident that adobe had been spread over the ashy fill of the hearth that probably represented deposition during the use of Floor 1. Though the plaster coating was intact on the margin of the hearth, the central area had broken up, mixing the upper and lower levels of the hearth fill.

Figure 17: Floor 2, Pithouse 1, Marshview Hamlet, showing location of floor artifacts and features.

Figure 18: North-south architectural profile of Floor 2, Pithouse 1, Marshview Hamlet.

Table 1.
Point Locations for Site 5MT2235, Kiva, Floor 2.

Number	Artifact
1	Utilized Flake
2	Bone Awl
3	Bone Awl
4	Flake
5	Flake
6	Long Bone
7	Bone Fragment
8	Bone Fragment
9	Bone Fragment Cluster
10	Piece of Chalcopyrite
11	Denticulate Tool
12	Sherd Cluster-grayware
13	Core
14	Bone Fragment
15	Chert Flake
16	Flake
17	Mano Fragment
18	Mano Fragment
19	Flake
20	Mano Fragment
21	Mano Fragment (Boat-shaped)
22	Tabular Sandstone (Worked)
23	Flake
24	Flake
25	Flakes
26	Core
27	Notched Biface Fragment
28	2 Flakes
29	Mano
30	Flake
31	Flake
32	Sherd Disc

Table 6.
Identified plant remains from Marshview Hamlet, Site 5MT2235.

PROVENIENCE	SAGEBRUSH OR RABBIT-BRUSH	MAIZE		UNIDENTIFIED WOOD OR BARK FRAGMENTS
		KERNELS	COBS	
Fill of hearth southwest of pithouse	N*	3	1	1
Rubble mound representing collapsed roomblock	N*			N
Upper fill of Pithouse 1	N*			N

* Tentative identification
N Numerous specimens

PRELIMINARY INTERPRETATIONS

Because the analyses of the artifact collection and environmental samples recovered from Marshview Hamlet were not completed in time for consideration in this report, no comprehensive interpretive statements are possible. Preliminary synthetic statements have been made in three areas: chronology, economic and social activities, and demography; these are presented below. A more thorough treatment will be possible when complete analytical results become available.

Chronology

A subjective interpretation of the artifact assemblages and inferences from the analysis of dating samples suggest that the prehistoric occupation sequence at Marshview Hamlet can be characterized as three elements representing two components: human groups representing both the Four Corners Desert Tradition and the Anasazi Tradition inhabited the site. A presentation of the evidence for and the characteristics of each element identified at Marshview Hamlet follows:

Element 1 (?500 BC - AD 500?)

A preliminary review of the artifactual assemblages suggests an element representing a late Four Corners Desert Tradition component might be the earliest occupation at the site. Evidence for this early occupation is thus tenuous at best; no samples representing Element 1 suitable for application of absolute dating techniques (dendrochronology, archaeomagnetism or C-14) used by program analysts were collected. The assignment of Element 1 was based on a subjective evaluation of the artifact collection, surface indications, and an extrapolation of the

settlement pattern in the vicinity during the Archaic (Four Corners Desert Tradition) Period.

Several artifacts recovered from Marshview Hamlet do suggest a pre-Anasazi origin. The best examples are several projectile points (refer to Figure 33, upper left and lower right specimens) which are similar to En Medio Phase points (AD 0 - AD 500) collected by an Eastern New Mexico University project in northwestern New Mexico (Irwin-Willams 1973). The "mano" illustrated in Figure 29 (upper right) is a "biscuit" type that is a common item in Archaic tool assemblages. Interpretation of the internal site proveniences from which these artifacts were recovered suggests that they may have been used by individuals of the Element 2 or Intensive Anasazi, McPhee Phase occupation. If so, the tools and their site context are probably the end result of an "A-S process" (Schiffer 1976:34); that is, the tools were scavenged for use from de facto refuse deposits abandoned hundreds or thousands of years earlier by Archaic peoples. The scavenged deposits may have been from Marshview Hamlet itself or other sites in the vicinity.

The natural setting of Marshview Hamlet (topography, vegetation, distances to resources, etc) is similar to other sites within a kilometer radius that also exhibit potential Archaic assemblages. Therefore, assuming that the Archaic peoples were favoring this set of locational characteristics for site placement, Marshview Hamlet was probably a locus of activities during this period. An in-the-field assessment of the lithic assemblages collected from the site surface is that it is similar in tool types and materials represented, in technology, and in size of specimens, to other sites assigned a Four Corners Desert Tradition

discovered in the fill of the central hearth of the pithouse was analyzed by the Laboratory of Tree-Ring Research and yielded an outside ring date of AD 988 (refer to Table 7 for more complete data). The analytical impression of this specimen is that the present outside ring is rather far removed from the tree outside ring representing a cutting date. This later date, therefore, may be 50 or more years later than the 988 date or perhaps AD 1050±30. The prehistoric use context of the specimen is unknown; it may represent a fragment of a construction timber or a piece of firewood. A second major item of chronological evidence is an archaeomagnetic date obtained from the central hearth in Pithouse 1 and analyzed by the Laboratory of Public Archaeology, Colorado State University; the last intensive firing epicycle in the hearth is dated to AD 1135±30 (Table 7).

Temporal analysis of the ceramic assemblage recovered during excavation supports a late Pueblo II - Early Pueblo III (Sundial Phase) assignation. Vessels associated with the multiple secondary burial (Figures 37, 39, 42, 43, 44, 45, 46, 47, 51, and 52) are typical representives of McElmo Black-on-white, and one is typed as Mesa Verde Corrugated (Fig. 38). Two Mancos Corrugated jars were also recovered from the roomblock area. According to Breternitz, Rohn and Morris (1974:42), McElmo Black-on-white pottery was manufactured in the Mesa Verde Region during the span AD 1075 - AD 1275; Mancos Corrugated was made in the period AD 900 - AD 1200 (Breternitz, Rohn and Morris 1974:19). Manufacturing dates mesh very well with the tree ring and archaeomagnetic dates.

Another potential source of temporal information, diagnostic architectural styles, did not prove to be useful. For the time period

Table 7.
Dendrochronological and archaeomagnetic dates
from Marshview Hamlet, Site 5MT2235.

DENDROCHRONOLOGICAL DATES

PROVENIENCE	SAMPLE NUMBER	SAMPLE SPECIES	INSIDE DATE	OUTSIDE DATE
Fill of central hearth, Pithouse 1	DAR-59	Juniper	0909fp	0988+vv
Fill of hearth, pithouse fill	DAR-60	Juniper	0192fp	1102vv

ARCHAEOMAGNETIC DATES

PROVENIENCE	SAMPLE NUMBER	SAMPLE MEDIUM	ALPHA 95	DATE
Hearth, west periphery of site	2235-1	earth from bottom of feature	3.55	*
Hearth, in fill of Pithouse 1	2235-3	earth from bottom of feature	4.18	AD1220 ±30
Central hearth, Pithouse 1	2235-4	earth from bottom of feature	2.67	AD1220 ±30

*Although the sample yielded an Alpha 95 that indicated the sample was suitable for dating, the plot fell off the known curve; this may indicate that hearth-use dates before AD 600 or after AD 1500.

in question, one would expect a habitation site to consist of a kiva with a bench, six pilasters and masonry walls, as well as an associated masonry roomblock; however, as Marshview Hamlet is believed to be either a pioneering effort or a seasonal site, it is assumed that typical architectural patterns would not necessarily be followed.

It thus appears that this occupation of the site dates to the approximate period AD 1075 - AD 1125. No major remodeling episodes, which would perhaps indicate a relatively short occupational span, were recognized during excavations. The pitstructure (Pithouse 1) did exhibit some minor remodeling (a sealed-off northern ventilator and two floor levels) which suggests a more than minimum period of occupancy. A subjective estimate of the time span of Element 2 is therefore 15 - 30 years.

Architectural remains assigned to Element 2 include Pithouse 1 and the northern and southern ventilator systems, the roomblock area to the northeast of the pitstructure, and several small ancillary features including Hearth 2 (just east of the pithouse), and Hearth 3 (north of the pithouse).

In summary, the most intensive use of the site has been designated Element 2 and is assigned to the Sundial Phase of the Anasazi Tradition. The temporal placement of this occupation is well documented and can be accurately assigned to the period AD 1075 - AD 1125. Major architectural edifices including a pithouse and roomblock are assigned to the occupation; thus it appears that the occupation was of an intensive nature, and that the site probably at this time functioned as a permanent or seasonal habitation. As such the hamlet was the hub for many

activities, including ones that could be characterized as domestic maintenance and subsistence.

Element 3

The hamlet was abandoned in the first half of the twelfth century AD and the pithouse and roomblock were allowed to fall into disrepair. Some time later, the site was again re-occupied by an Anasazi group. The new occupants used a hearth and living surface in the depression representing the former pitstructure and may have constructed and used other ancillary features. Element 3 is well substantiated by absolute dates: a wood fragment recovered from the hearth was submitted to the Laboratory of Tree-Ring Research and yielded an outside date of AD 1102vv (Table 7). An archaeomagnetic sample was also removed from the hearth and was dated by the Laboratory of Public Archaeology at AD 1220 $\pm$ 30 (Table 7). While these dates are somewhat far apart, they are not irreconcilable. The 1102 date represents a ring, in the opinion of the Tree-Ring Laboratory, which is relatively far removed from the true outside. Hence as many as 25-50 rings could be missing and the tree cutting dated may be toward the middle of the twelfth century. If the wood fragment is firewood, a logical conclusion considering its original context, then it might have been dead or downed for many years before being collected.

With these considerations in mind, an occupation in the late twelfth century (AD 1150 - AD 1200) is suggested. Unfortunately, because of the lack of associated material, no corroborative artifactual evidence for these dates was obtained.

Because of the lack of substantial architecture assigned to the element, it is believed that the site functioned as a temporary camp or

limited activity locus during the last half of the twelfth century. A conjecture is that the site occupants were seasonally exploiting the resources of the adjacent wet lands to the south while living permanently in pueblo villages further to the south.

The site was permanently abandoned by the Anasazi by AD 1200 or soon afterward. The site was again the scene of man's activities during modern times when the Sagehen Flats area was used as a pasturage (F. Cline, personal communication). Site modifying activities included discing in the 1940s and the use of the former roomblock area as a dump for rocks that impeded agricultural practices.

Economic and Social Activities

Activities performed by the occupants of the site are necessarily inferred from the data derived from excavations, on-site observations and laboratory analysis. Because analyses are presently incomplete, inferences regarding site-centered activities should be viewed in similar regard. Activities performed during Element 1 have already been addressed in the discussion on chronology; no more detailed presentation will be attempted at this time.

The occupants of Marshview Hamlet during Element 2 were probably performing a wide range of domestic, subsistence and other activities. Horticulture is indicated by the presence of maize from the trashpit south of the pithouse (Table 6). Hunting activities can be inferred from the presence of non-human bone (the preliminary analysis of non-human bone is presently incomplete), and the presence of projectile points near the site. The processing and cooking of foods is amply indicated by the numerous tools used in such activities, i.e., manos, metates, corrugated

vessels for cooking, and bowls for serving. The manufacture and maintenance of tools are indicated by the presence of tools for the making of tools, and lithic debitage. Tools for the manufacture of tools include a grooved abrader and a denticulate knife. Clothing manufacture is inferred from the bone awls and possible spindle base found within the pithouse. If the functional interpretation of the spindle base is correct, hamlet activities included the spinning of fine thread, for such thread necessitates the use of that implement (Bankes, 1977).

The manufacture of ceramic vessels is indicated by the presence of a large sherd disk (Fig. 55) among the burial goods. A large deposit of clay was discovered less than 700 m to the southeast which would facilitate the making of pottery at the site. Though no firing area was located at the site, it is possible that one was located in an unexcavated area, or was destroyed by erosion or historic disturbance.

The presence of trade goods (the Chacoan pitcher and abalone shell pendant) demonstrates that the occupants of the site had contact of some sort with other regions. Additionally, the proximity of contemporaneous pueblos suggests periodic contact of a local nature.

Activities at the temporary camp located in the upper kiva fill (Element 3) consist of cooking, as indicated by the presence of the hearth. Another activitiy at or near the camp is game processing, indicated by the presence of a large biface and a bone flesher. Lithic debitage on the associated living surface suggest that tool kit maintenance was also performed. Eating and sleeping may also have taken place within the shelter of the depression representing the abandoned pithouse.

PALEODEMOGRAPHY

Though a thorough analysis of the skeletal materials recovered from Site 5MT2235 is unavailable at this time, preliminary analysis indicates the occupants of the site (if they were in fact the occupants), exhibit traits common to the Anasazi of the period to which they are attributed (Bennett 1975). Lambdoidal deformation is present on the two crania which are complete enough for analysis. Data on nutrition, sex, age, and stature, as well as any discrete morphological traits observed is forthcoming if the condition of the materials permit such analyses.

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LIST OF TABLES

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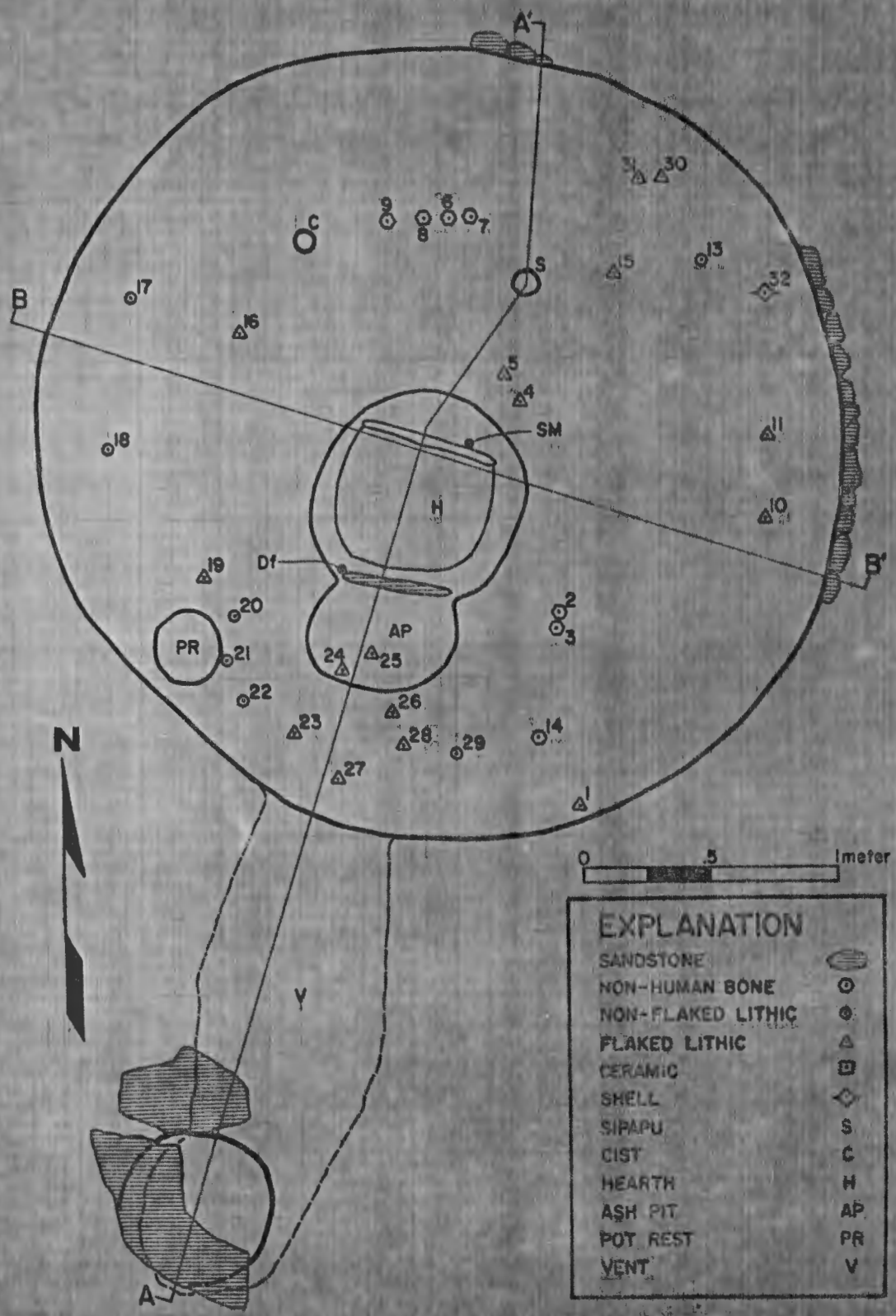
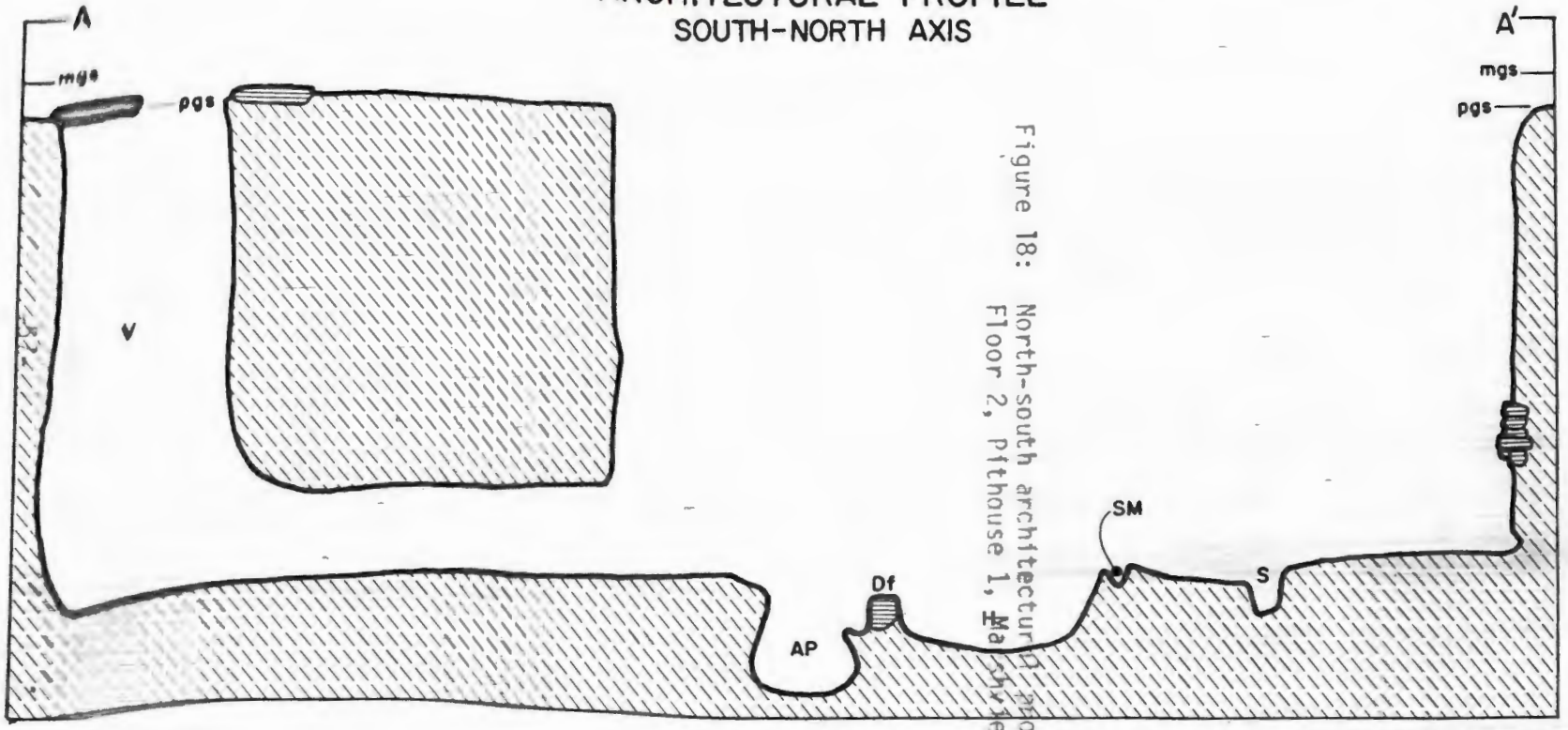
KIVA 1, FLOOR 2, PLAN VIEW



5MT2235

KIVA 1, FLOOR 2

ARCHITECTURAL PROFILE
SOUTH-NORTH AXIS



EXPLANATION			
VENT	V	SIPAPU	S
ASH PIT	AP	SLAB MOLD	SM
DEFLECTOR	Df	SANDSTONE	
HEARTH	H	NATURAL DEPOSITS	

Figure 18: North-south architectural profile of Floor 2, Pithouse 1, Mallow Ridge Hamlet.

Figure 19: View of Floor 2, Pithouse 1 from north. Note remodeled firepit incorporating slab mold and interior opening of ventilator tunnel near top of photo.

The ashpit had been sealed with adobe apparently at the same time. This layer of adobe, approximately 28 cm below floor level, lay over a stratum of ash containing sherds of McElmo Black-on-white pottery.

A shallow depression to the west of the ashpit is thought to be a pot rest. The dimensions of this feature are: 23 cm north-south by 25 cm east-west and 3 cm deep.

An elongate feature in the northern margin of the hearth appears to be the mold of a sandstone slab. Its dimensions are: 5-6 cm north-south by 55 cm east-west and 7-8 cm deep. When excavated, this feature was filled with ash, indicating the slab had been removed sometime before the hearth fell into disuse. The function of the feature is as yet undetermined.

The remaining feature of Floor 2 is a small cist, function unknown, which measures 14 cm in diameter by 6 cm in depth. The bottom of this cylindrical feature was quite flat but no clue was provided as to its utility.

Floor Artifacts

A total of 149 point locations were mapped on Floor 2 of Kiva 1 (Fig. 17). Of these, all but 32 (Table 1) were related to a multiple burial consisting of the fragmentary and incomplete remains of four individuals, and the grave goods associated with them. The burials and accompanying artifacts will be dealt with in a following section, entitled "Burials."

Floor artifacts felt to be representative of occupation of the kiva are: two bone awls, located to the southeast of the hearth; one non-human long bone, midway between the hearth and the north wall; two bone fragments and a cluster of minute bone splinters near the long bone;

a non-human bone fragment, southeast of the ashpit; one abalone shell pendant found at the base of the east wall; twelve waste flakes, two near the northeast margin of the hearth, three more near the wall in the northeast quadrant, one northwest of the hearth, one near the pot rest, one south of the ashpit, three in the upper fill of the ashpit, and two southeast of the ashpit; one utilized flake located at the base of the southeast wall; one denticulate found near the base of the eastern portion of the wall; a fragment of a notched biface mapped near the mouth of the ventilator; two cores, one from near the wall in the northeast quadrant, and the other from the southeast margin of the ashpit; a small lump of chalcopyrite ore, from near the base of the east portion of the wall; four mano fragments, two from the western half of the floor, two from near the pot rest; one mano from a point halfway between the ashpit and the southeast portion of the wall; a fragment of worked tabular sandstone from near the pot rest; and a cluster of Pueblo II - Pueblo III grayware sherds located between the hearth and the eastern wall.

Pithouse Fill

The fill in Pithouse 1 consisted of seven indentified strata; the deposits represent the actions of both human groups and natural forces (Fig. 20). These are described below.

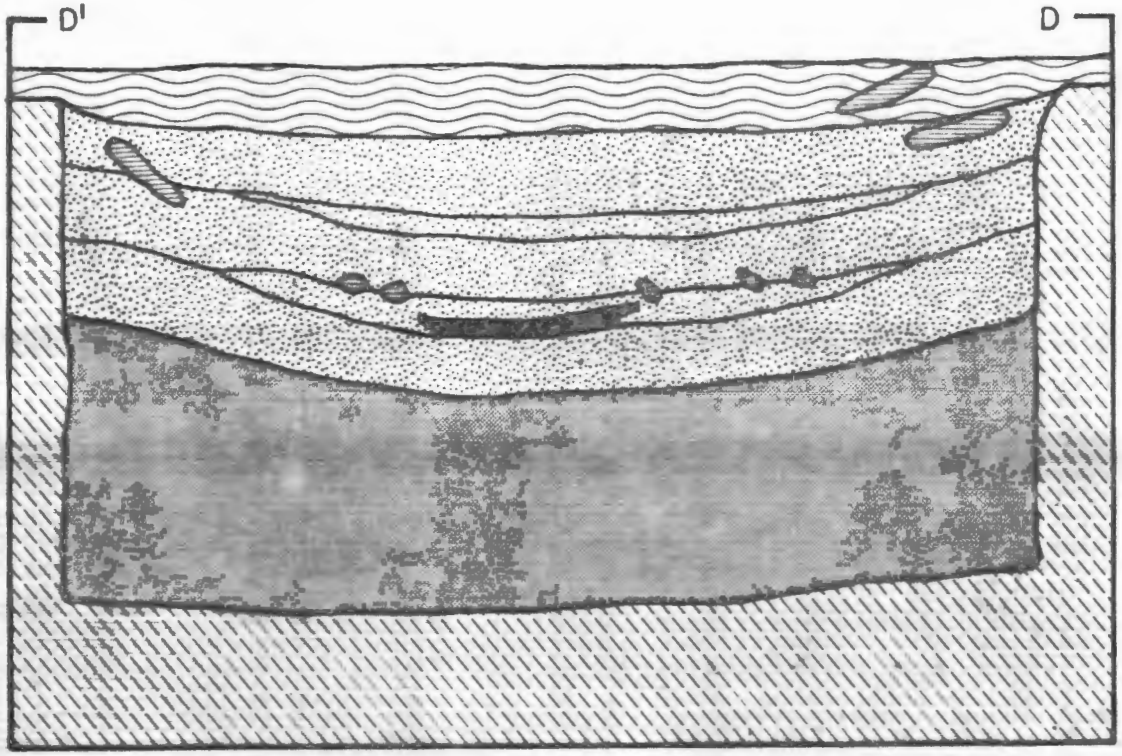
Stratum 1 (from 0-30 cm below modern ground surface) consisted of an organic silt-loam. This stratum had been cleared of brush and plowed ("one-wayed") to a depth of 10 cm in the 1940s (F. Cline, personal communication). This stratum contained sherds and lithics in its upper levels probably derived from the general sheet trash of the site.

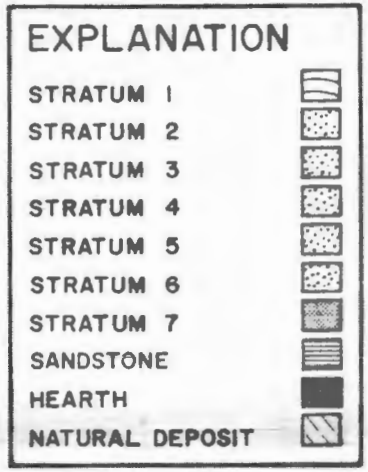
Stratum 2 (30-55 cm below the modern ground surface is a sub-angular blocky brown clay. It too contained artifacts which are probably

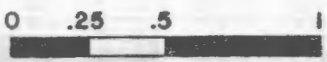
Figure 20: Pithouse 1, depositional profile.

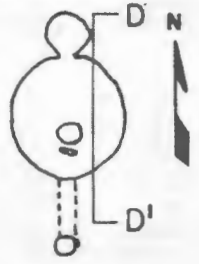
5MT2235

STRATIGRAPHIC PROFILE OF PITHOUSE I









LOCATION OF PROFILE

probably derived from erosional transport of materials from the margins of the pitstructure as well as the disturbance of burrowing animals.

Stratum 3 (55-59 cm below modern ground surface) is a dark brown silty clay becoming dark gray to black in some areas. It is a dsicontinuous basin-shaped stratum in the south central area of the kiva fill. This stratum represents an ill-defined cultural level and contained a hearth.

Stratum 4 (59-81 cm below modern ground surface) is a brown to dark brown silty clay which represents a period of disuse between two periods of post-abandonment occupation.

Stratum 5 (77-88 cm below modern ground surface) is a very dark gray brown silty-clay. It is saucer shaped in section and located in the south central fill of the kiva. This stratum contained numerous sherds

derived from erosional transport of materials from the margins of the pitstructure as well as from the disturbance of burrowing animals.

Stratum 3 (55-59 cm below modern ground surface) is a dark brown silty clay becoming dark gray to black in some areas. It is a discontinuous basin-shaped stratum in the south central area of the kiva fill. This stratum represents an ill-defined cultural level and contained a hearth.

Stratum 4 (59-81 cm below modern ground surface) is a brown to dark brown silty clay which represents a period of disuse between two periods of post-abandonment occupation.

Stratum 5 (77-88 cm below modern ground surface) is a very dark gray brown silty-clay. It is saucer-shaped in section and located in the south central fill of the kiva. This stratum contained numerous sherds representing fragmented corrugated, black-on-white, and grayware vessels. These represent portions of a large corrugated jar (Vessel 2), a large black-on-white bowl (Vessel 18), and a black-on-white pitcher (Vessel 1). Lithics are represented by 25 waste flakes, 1 core, a quartzite biface, 2 polishing stones, and 1 polishing-pecking stone. At 81-84 cm below modern ground surface a hearth underlying a large piece of partially burned wood was located with the stratum. Dendrochronological, radiocarbon and vegetal samples were taken from the hearth, as well as a bulk soil sample. Archaeomagnetic specimens were taken from the fire-reddened clay which formed the base of the hearth. At this time the radiocarbon and archaeomagnetic specimens have not been analyzed; however, the Tree-Ring Laboratory has returned a date from the burned wood in this stratum. Dendrochronological Specimen 1, a piece of juniper, yielded a date of AD 0912fp - AD 1102vv. This dates correlates

with the ceramics from this level which generally date from the latter part of the eleventh century to the early part of the twelfth century AD.

Stratum 6 (84-104 cm below modern ground surface) is a brown silty clay. This stratum was considered part of the upper fill of the pitstructure and is the result of natural processes. It varies in thickness from north to south, being thicker in the northern portion where it sweeps up.

Stratum 7 (104-158 cm below modern ground surface) is a brown silty clay. This stratum overlies small areas of thin laminar silts which appear to be water lain. These laminar deposits were present in the southwest quadrant of the pitstructure.

The pithouse was unburned though minute flecks of charcoal were present in all strata. Small fragments of burnt adobe were also present in the fill indicating the possible presence of a surface structure that had burned nearby, or which was possibly roof material. Extensive excavation to the north of the kiva yielded no information on the postulated structure other than similar bits of charcoal and burned adobe.

Roof

In addition to the previously mentioned cultural material (burned adobe and charcoal), the fill contained several irregular blocks of marine sandstone. Many of these blocks dipped toward the center of the kiva, suggesting that they may originally have been part of some sort of construction related to the support of the roof structure.

The relative paucity of sandstone within the fill, the lack of pilasters and the absence of postmolds in the floor indicates the kiva

was roofed by laying poles directly across the pit. These primary beams were probably supported by sandstone blocks on the margin of the pit. Secondary beams were probably rested on the primaries with their opposite ends being supported by blocks of stone similar to the manner in which the primaries were supported. Though none of the beams were preserved in the fill of the kiva, a number of gray stains were detected during excavation and were mapped and photographed. While these stained areas appeared to exhibit no particular orientation it is thought they represented the remains of the roof beams.

Roomblock

The stone mound mentioned earlier was initally thought to represent the ruin of a surface structure. Intensive excavation of this feature revealed it to be a pile of irregular massive sandstone blocks exhibiting no definable orientations (Fig. 21). Measuring approximately 2 m east-west, 1.5 m north-south, and 60 cm high, the stones of the heap were partially imbedded in the silty clay-loam of the site. Underlying this mass was a layer of charcoal, derived largely from sagebrush, below which lay the general sheet trash of the site. In the northwest portion of the stone mound a depression was visible, where the stones of the mound had slumped into a large rodent warren. Interspersed with the stones of the mound were several metate fragments. It is thought that much of the rubble associated with this feature is the result of land-clearing activities of the 1940s and represents stones gathered from the surface of the site and piled in a central location. Thus, much of the mound is the result of historic activity; however, the lowest portion of the

Figure 21: Roomblock area, detail of rubble mound during excavation, looking north.

feature probably represent collapsed prehistoric surface structures associated with Pithouse 1.

Ancillary Features

Trash Pit

This feature is located 4 m southwest of the kiva. It consists of a basin-shaped pit, 61 cm deep and 1 m in diameter. The pit contained a gray fill, easily differentiated from the red-brown clay of the site. The unstratified fill contained in its lower levels several Mancos/McElmo Black-on-white sherds, several corrugated sherds, numerous waste flakes, several bird and rodent bones both burned and unburned, two corn kernels, and several charcoal and wood fragments. The pit, excavated to sterile soil, may have served initially as a source of adobe. Later it was used as a receptacle for domestic refuse.

Hearth 1

This small unlined hearth was exposed during the phase of supplementary testing. It is located in Test Trench 6 approximately 12 m to the southwest of the pithouse. After stripping the top 15-20 cm of overburden with the frontloader, the feature was delineated. It measured 35 cm east-west and 40 cm north-south. Sectioning revealed it to be basin-shaped with a maximum depth of 10 cm. The fill consisted of a light red-brown clay containing numerous flecks of charcoal. No artifacts were discerned in or around this feature. Four bags of fill (4-6 L) were collected from this hearth for further analysis. The hearth was also sampled for archaeomagnetic dating; the result of this analysis is not yet available. It is hoped that dating of this feature will prove that it is contemporaneous with the most intensive occupation of the

site (Element 2). The lack of artifacts associated with this feature prevents explanation of its role in the lives of its prehistoric users.

Hearth 2

Hearth 2 is a small unlined firepit located in the west half of grid square 016-014, 1.5 m east of the kiva. The hearth was located under the lower level of the general sheet trash that covered much of the site. Though direct association is not demonstrable, artifacts overlying the hearth appear to be contemporaneous with the kiva, indicating the hearth may have been utilized during its occupation. The hearth measured 39 cm east-west and 43 cm north-south, and 12 cm in depth. Bulk soil and archaeomagnetic specimens were collected from it.

Hearth 3

This feature was found during supplementary testing to the north of the pithouse in an attempt to locate surface structures. It was encountered at a depth of 10 cm, just below the plow zone. Measuring 90 cm north-south and 75 cm east-west, the subrectangular hearth has a depth of 20 cm. The fill consisted of what appeared to be sagebrush charcoal and also contained chalcedony waste flakes. The base of the hearth did not appear to be fire-hardened and was thus unsuitable for archaeomagnetic dating purposes. A radiocarbon sample was taken from the charcoal fill, however, as were approximately two liters of fill for flotation and other analytical procedures. The hearth is located approximately 10 m northwest of the pithouse; it may represent an outdoor use area to the north of the subsurface dwelling.

Charcoal Concentration

This feature was exposed during supplementary testing. During the excavation of Test Trench 5 a charcoal stain was detected in the western half (grid square 002-015). Located at a depth of 13 cm below the modern ground surface, the stain, red-gray in color, extended north into an area previously unexcavated. Stripping off the upper level delineated the stain but revealed no additional features. After stripping, the area was carefully excavated and radiocarbon and bulk soil samples were collected. The fill, in addition to containing numerous small pieces of charcoal, contained pieces of oxidized, fire-hardened adobe.

When fully excavated the feature was an elongate basin, 80 cm east-west and 35 cm north-south, with an irregular border; it was 30 cm at its maximum depth. The base and sides of the pit did not appear to be burned or fire-hardened and no artifacts were found in the fill of the feature. The function and origin of the concentration, which lies 8 m west of the pitstructure is unexplained. The burned adobe and charcoal within the feature fill may represent the remains of a surface structure within the kiva.

MULTIPLE BURIALS

During initial trenching of Pithouse 1 a cranium was exposed at floor level. Subsequent investigation revealed numerous bones, bone fragments, another cranium and additional skull fragments apparently representing the multiple burial of at least two individuals. Post-excavation skeletal analysis indicates that the burials in Pithouse 1 are composed of the remains of four individuals (Figs. 22, 23, 24 and 25, Table 2).

The condition of the bones is generally good, most being dense and non-friable. However, the high proportion of fragmented, splintered long bone (note condition in Figures 24 and 25) is indicative of as yet unexplained rough treatment or disturbance. The burial is thought to be secondary in nature as evidenced by the under-representation or total lack of some bone groups, i.e., the inominates, the costae, the sacra and the vertebral columns.

Associated with the skeletal materials were a number of ceramic vessels which, like the bones, were in a fragmentary and in some instances incomplete state. The pottery consisted of a variety of vessel forms. One other ceramic item was associated with the burials; this was an effigy head, broken at the neck but ground smooth, of a canine or other carnivore. Non-ceramic associations consist of two tubular bone beads (species as yet undetermined) and an abalone shell pendant.

The burial materials were located on or near the floor in the southwestern quadrant of the pitstructure. This area was also the nexus of several animal burrows and unfortunately was disturbed to a high degree. Skeletal materials were recovered from rodent burrows at

Figure 22: Plan of multiple burial in Pithouse 1 including associated artifacts.

5MT2235

MULTIPLE BURIAL AND ASSOCIATIONS

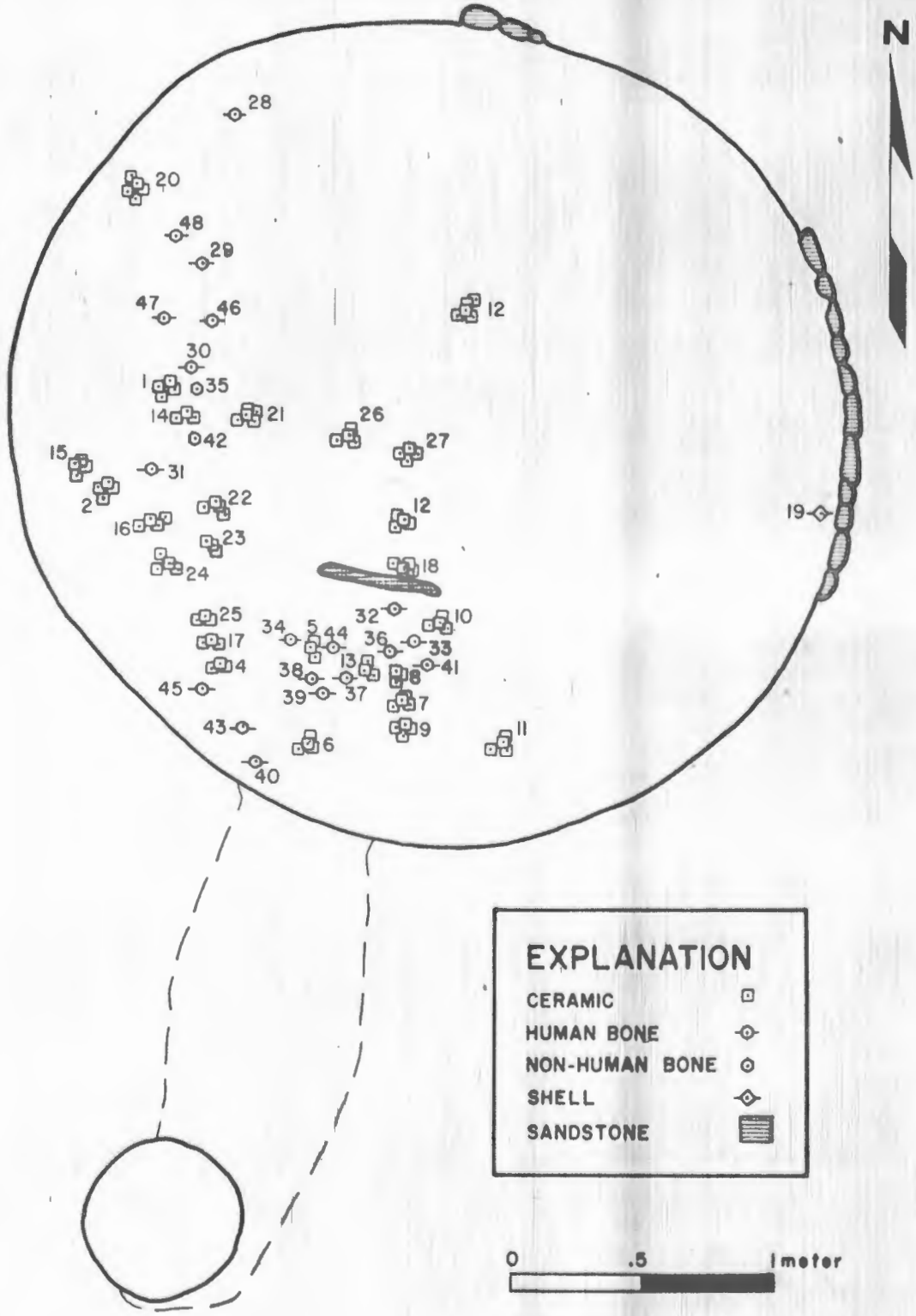


Figure 23: View of multiple burial in Pithouse 1; note crania above photo board, fragmented bones to left of sign board and north arrow.


SMT2235
BURIALS
1&2

Figure 24: Close-up view of multiple burial in Pithouse 1, centered on area containing crania; note fragments of ceramic bowl to left of lower skull.


5MT2235
BURIALS
1&2

Table 2.
Burial Associations and Human Skeletal Remains, Site 5MT2235.

P.L. #	
1	Sherd cluster - fragments of Vessel 8
2	Sherd cluster - fragments of Vessel 9
3	Sherd cluster - indeterminate white ware sherds
4	Sherd cluster - fragments of Vessels 8, 9, 11, 16, and 21
5	Sherd cluster - fragments of Vessels 16 and 21
6	Sherd cluster - fragments of Vessel 3
7	Sherd cluster - fragments of Vessel 10
8	Sherd cluster - fragments of Vessels 16 and/or 21
9	Sherd cluster - fragments of Vessels 16, 21, and unidentified Black-on-white vessel
10	Sherd cluster - vessel indeterminate
11	Sherd cluster - fragments of Vessels 16, 21, and 10
12	Sherd cluster - fragments of Vessel 12
13	Sherd cluster - vessel indeterminate
14	Sherd cluster - fragments of Vessel 8
15	Sherd cluster - fragments of Vessels 8 and 9
16	Sherd cluster - fragments of Vessels 3 and 9
17	Sherd cluster - fragments of Vessels 3 and 9
18	Sherd cluster - vessel indeterminate
19	Abalone shell pendant
20	Sherd cluster - fragments of Vessel 14
21	Sherd cluster - fragments of Vessel 8
22	Sherd cluster - vessel indeterminate
23	Sherd cluster - fragment of Vessel 8 and indeterminate vessel
24	Sherd cluster - vessel indeterminate
25	Sherd cluster - fragment of Vessel 8
26	Sherd cluster - vessel indeterminate
27	Sherd cluster - vessel indeterminate
28	Metapodial - human
29	Metapodial
30	Cranium 1 - right temporal and left parietals missing (adult)
31	Cranium 2 - left zygomatic and maxillae missing (adult)
32	Incisor (adult)
33	Mandible and teeth (adult) charred
34	Distal phalange (adult)
35	Bone bead, tubular
36	Parietal fragment (adult)
37	Four unidentified long bone fragments, 1 phalange (adult)
38	Incisor (adult)
39	Right petrous temporal fragment (adult) charred
40	Scapula (juvenile)
41	Parietal fragments (juvenile)
42	Bone bead, tubular
43	Clavicle
44	Clavicle
45	Orbit fragments (juvenile)
46	Proximal radial fragment (adult)
47	Scapula, glenoid fragment (adult)
48	Atlas vertebra, transverse process (adult)

Figure 25: Close-up view of fragment bones, multiple burial in Pithouse 1. Note numerous sherds of ceramic vessels interspersed with bone.


5MT2235
BURIALS
1&2

distances of over 2 m from the focus of deposition. It is probable that rodent transport of materials to areas outside the pithouse could account for the under-representation of some small bones and the incomplete state of some of the ceramic vessels. However, it is doubtful that this disturbance could account for the absence of entire bone groups, especially large bones such as the pelves, sacra, etc.

Due to the fragmentary and disarticulated nature of the skeletal remains, the non-representation of certain bone groups, and the presence of large vessel types, it is probable that the bones were gathered from their original location, along with their original burial accompaniments, carried to and placed or dumped into the pitstructure. Similar treatment of human skeletal remains has been recorded at the Grinnel Site in southwestern Colorado where the fragmented, charred and incomplete remains of seven individuals were recovered from the southern recess of a kiva where they had been placed in a large corrugated jar (Nickens 1979: 3-9). Dr. Nickens attributes the condition of the Grinnel burials to violence and/or cannibalism. This suggests a possible explanation for the condition of the skeletal materials of Site 5MT2235, though preliminary osteological analysis indicates that, unlike the Grinnel burials, those from the pithouse at Marshview Hamlet do not display cutmarks. A tabulation of the individual elements represented in the collection of skeletal materials recovered from the pithouse is presented in Table 3 and the collection is depicted schematically in Figures 26, 27, and 28. The results of the laboratory analysis performed on the remains are summarized by Flander (Appendix 1).

Table 3.
Tabulation of Human Skeletal Materials from Site 5MT2235.

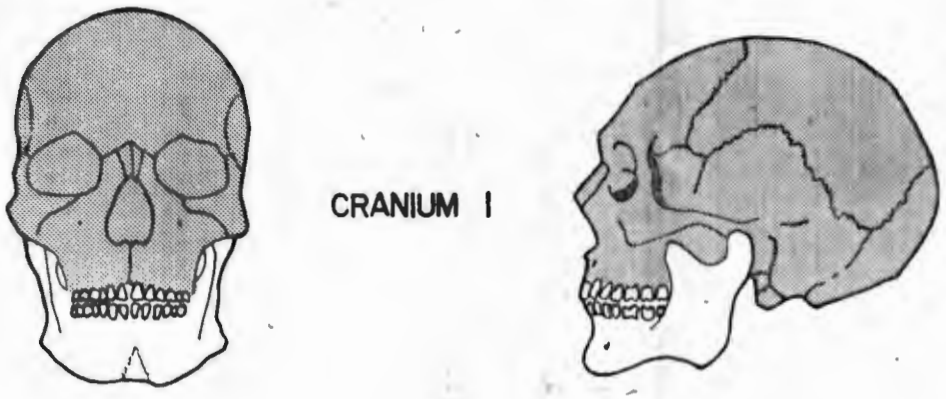
ELEMENT	ADULT WHOLE	ADULT FRAG-MENT	ADULT CHARRED	JUVENILE WHOLE	JUVENILE FRAG-MENT	JUVENILE CHARRED	TOTAL
CRANIAL							
Crania		2					2
Frontals							0
Temporals		4	1				4
Parietals		6*			2*		8
Occipitals		1					1
Maxillae		2					2
Zygomae		4					4
Mandibles		1	1		2		3
Loose Teeth	8	2+	2	5			15
POST-CRANIAL							
Vertebrae	1	1					2
Clavicles		4					4
Sterna							0
Scapulae		2		1			3
Humeri		3		1			4
Radii		2					2
Ulnae		1					1
Costae							0
Sacra							0
Pelves							0
Femora							0
Patellae		1					1
Tibiae							0
Fibulae							0
Phalanges Hand	5	3					8
Phalanges Foot							
Metapodials Hand							
Metapodials Foot		1					1
TOTALS**	14	33	4	7	4	0	63

* no. approximate
** excludes unidentified fragments

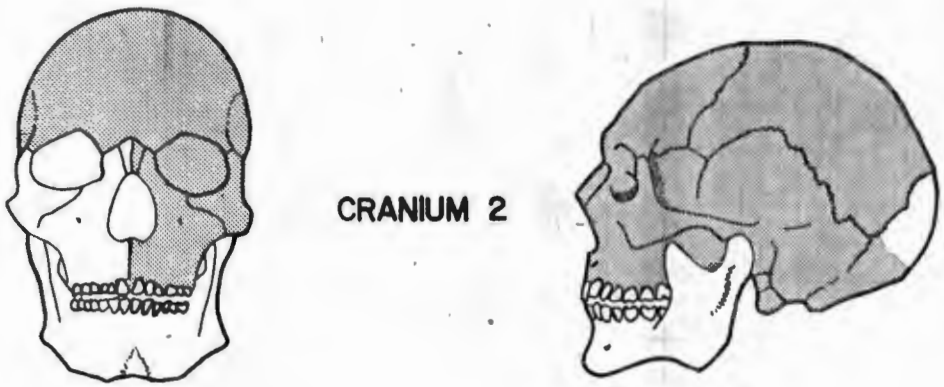
Figure 26: Graphic representations of cranial elements collected from multiple burial in Pithouse 1; a) from Individual 1; b) from Individual 2.

5MT2235

GRAPHIC INVENTORY OF SKELETAL MATERIALS (CRANIUM)



CRANIUM 1



CRANIUM 2

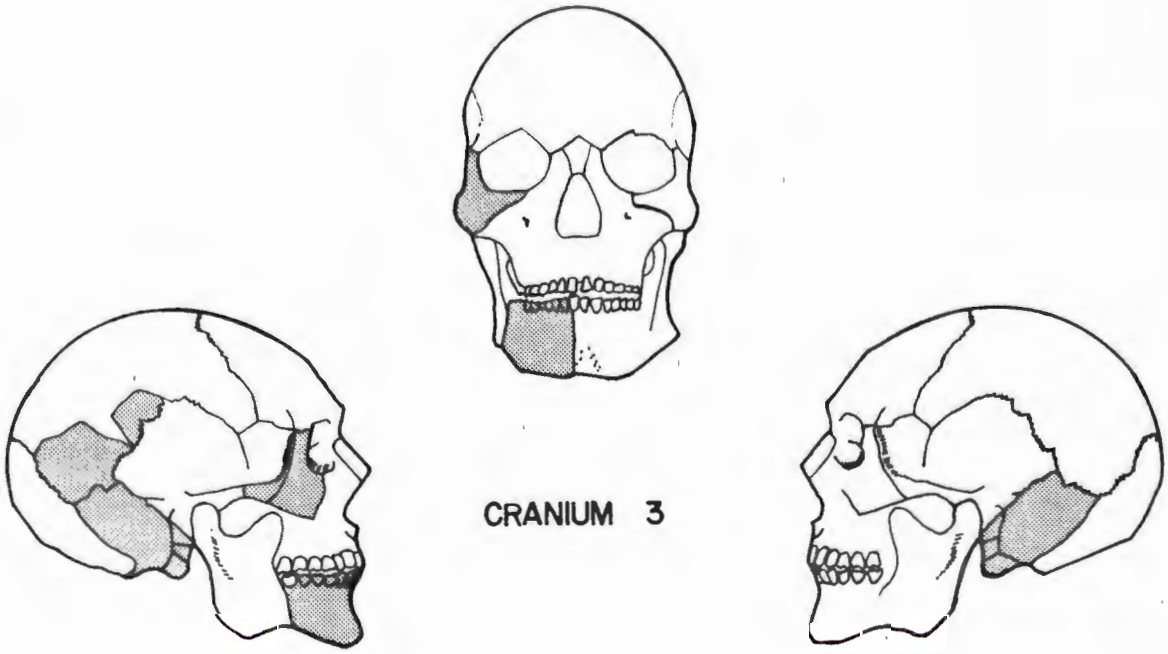
EXPLANATION

MATERIAL PRESENT

Figure 27: Graphic representation of cranial elements present from multiple burial, Pithouse 1. Third individual is represented.

5MT2235

GRAPHIC INVENTORY OF SKELETAL MATERIALS (CRANIUM)



CRANIUM 3

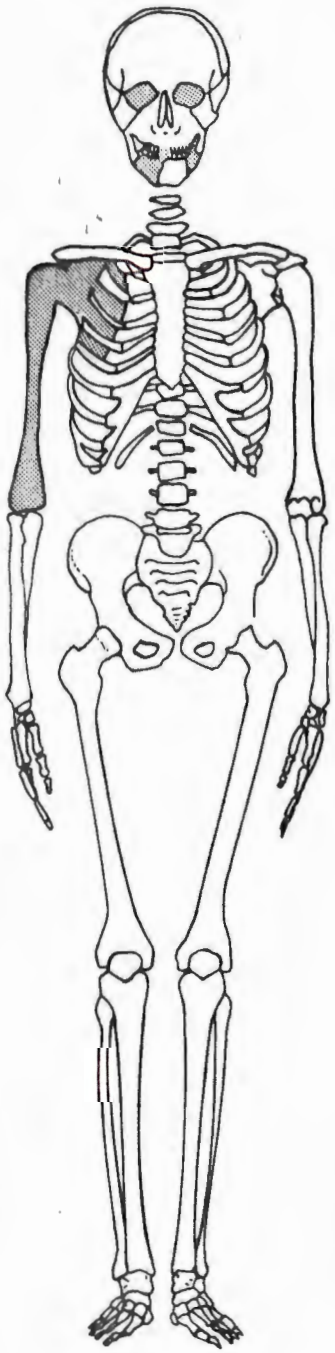
EXPLANATION

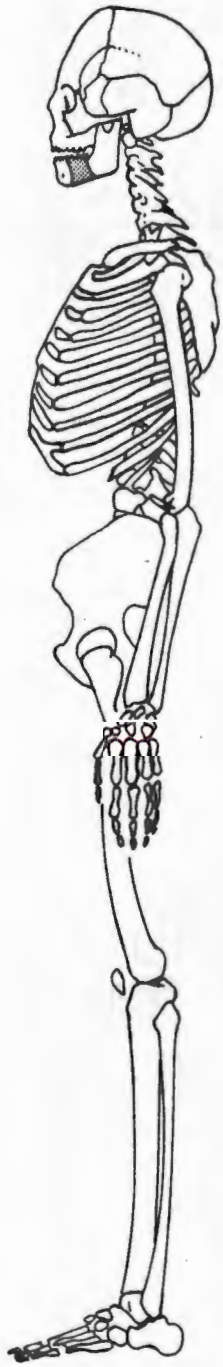
MATERIAL PRESENT

Figure 28: Graphic representation of composite post-cranial materials from multiple burial (Individuals 1-3).

5MT2235

GRAPHIC INVENTORY OF SKELETAL MATERIALS





EXPLANATION

MATERIAL PRESENT

Another divergence from standard Anasazi mortuary practices is that the artifacts associated with the skeletal remains exhibit characteristics of a high status burial. This is indicated by the relatively large number of ceramic vessels and effigies, as well as the ornaments (two bone beads and a shell pendant) associated with the skeletal material. The vessels, which have been partially reconstructed, consist of several forms, all of late Pueblo II or early Pueblo III derivation. The vessels include: three large McElmo Black-on-white bowls, three medium McElmo Black-on-white bowls, one small McElmo Black-on-white bowl with corrugated exterior, one McElmo Black-on-white ladle, one McElmo Black-on-white pitcher, one large McElmo Black-on-white pitcher, one large McElmo Black-on-white olla, two Mesa Verde Corrugated jars, and a McElmo Black-on-white effigy vessel.

MATERIAL CULTURE

Only very preliminary results of the laboratory analysis performed on the artifacts recovered during excavations at Marshview Hamlet were available in time for inclusion in this report. A rudimentary summary of the flaked and non-flaked assemblage is presented in Tables 4 and 5; preliminary identifications of plant materials are also available and are summarized in Table 6. No interpretation of this material has been attempted pending more detailed results.

Photographs illustrating the types of artifacts recovered and the variability within the assemblages are available. These are included as the following: Figures 29-31, non-flaked stone artifacts; Figures 32-36, flaked stone artifacts; Figures 37-55, ceramic artifacts; Figure 56, bone artifacts.

Table 4.
Tabulation of flaked and non-flaked lithic artifacts according to provenience units, Site 5MT2235.

PROVENIENCE	FLAKED STONE ARTIFACTS	NON-FLAKED STONE ARTIFACTS
Pithouse 1, upper fill, above intrusive post-abandonment hearth.	27 Utilized flakes 1 Used core 1 Denticulate 1 Thin uniface 3 Thin bifaces 1 Corner notch point 1 Point fragment 1 Tool fragment	2 Metate fragments 1 Hammerstone 1 Polishing stone 1 Composite polishing/pecking stones 3 Indeterminant tools
	36 Total tools and 311 waste flakes (debitage)	8 Total tools
Hearth in pithouse fill.	3 Utilized flakes 1 Used core 1 Thin biface	2 Polishing stones 1 Composite polishing/pecking stone 4 Indeterminant tools
	5 Total tools and 27 waste flakes	7 Total tools
Pithouse 1, lower fill, below intrusive hearth, above floor space.	10 Utilized flakes 3 Used cores 1 Unused core 3 Thick bifaces 1 Thin biface 1 Unworked uniface 1 Thin unworked uniface 1 Denticulate	6 Shaped manos 2 Unshaped manos 3 Unspecialized metates 1 Metate shaped slab 1 Shaped slab 1 Unworked hammerstone 1 Polishing stone 2 Composite Polishing/pecking stone 8 Indeterminant forms
	21 Total tools and 145 waste flakes	25 Total tools

Table 4, cont.

Lower fill, below intrusive hearth, above floor space.	10 Utilized flakes 3 Used cores 1 Unused core 3 Thick bifaces 1 Thin biface 1 Unworked uniface 1 Thin unworked uniface 1 Denticulate	6 Shaped manos 2 Unshaped manos 3 Unspecialized metates 1 Metate shaped slab 1 Shaped slab 1 Unworked hammerstone 1 Polishing stone 2 Composite Polishing/pecking stone 8 Indeterminant forms
	21 Total tools and 145 waste flakes	25 Total tools
Association with Floor 2.	2 Utilized flakes 1 Core 1 Denticulate 1 Notched form 1 Thick sideworked flake	1 Indeterminant form
	6 Total tools and 20 waste flakes	
Fill of central hearth and ashpit.	1 Utilized flake 14 Waste flakes	
Ventilator system.	10 Utilized flakes 2 Cores 2 Thick unifaces 2 Thin sideworked unifaces 1 Thin biface	1 Composite polishing/pecking stone 1 Shaped stone slab 2 Unshaped mano 1 Shaped mano 1 Indeterminant form
	18 Total tools and 46 waste flakes	6 Total tools
Hearth or borrow pit southwest of pithouse	1 Utilized flake 1 Thick biface	1 Unworked hammerstone 1 Undifferentiated form
	2 Total tools and 40 waste flakes	2 Total tools

Table 5.
Summary of total flaked lithic assemblage,
Marshview Hamlet, Site 5MT2235.

ARTIFACT TYPES EXCLUDING DEBITAGE	NUMBER		PERCENT
Utilized flakes	54		62.0
Thick bifaces	3		3.4
Thin bifaces	6		6.9
Thin unworked uniface	2		2.3
Thin worked unifaces	3		3.4
Thick unworked unifaces	2		2.3
Thick sideworked unifaces	1		1.1
Unused cores	4		4.6
Used cores	5		5.7
Corner-notched points	2		2.3
Point fragment	1		1.1
Notched form	1		1.1
Denticulates	3		3.4
TOTAL	87		100.0
Total waste flakes	605		
Total flaked lithic assemblage	692	Waste flakes are	87.4%

Table 6.
Identified plant remains from Marshview Hamlet, Site 5MT2235.

PROVENIENCE	SAGEBRUSH OR RABBIT-BRUSH	MAIZE		UNIDENTIFIED WOOD OR BARK FRAGMENTS
		KERNELS	COBS	
Fill of hearth southwest of pithouse	N*	3	1	1
Rubble mound representing collapsed roomblock	N*			N
Upper fill of Pithouse 1	N*			N

* Tentative identification
N Numerous specimens

Figure 29: Non-flaked stone implements from Marshview Hamlet: manos. Upper left and upper right, specimens from ventilator shaft, Pithouse 1; lower specimen was incorporated into masonry patch on east wall of pithouse.

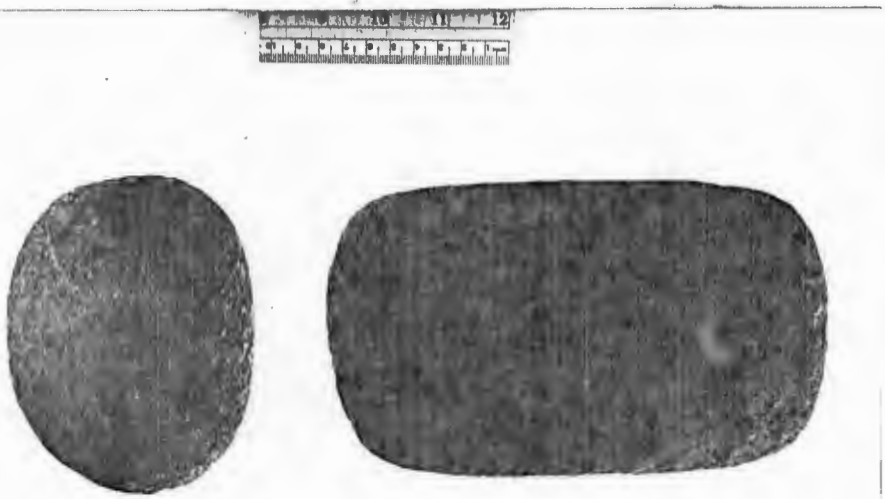


Figure 30: Non-flaked stone artifacts from Marshview Hamlet: sandstone cist cover. Specimen recovered from fill of disused northern ventilator system.

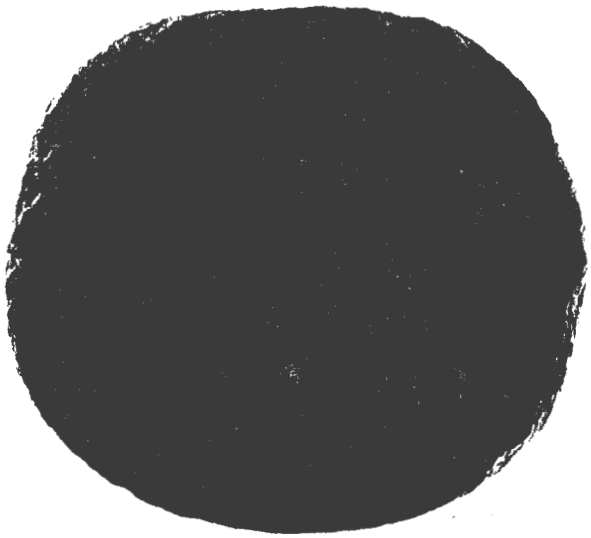


Figure 31: Non-flaked stone artifact from Marshview Hamlet: sandstone metate fragment. Specimen recovered from rubble mound covering roomblock area.

Figure 32: Flaked stone artifact from Marshview Hamlet: quartzite biface. Specimen recovered from lower fill of Pithouse 1.


METRIC 1 cm 2 3 4 5

Figure 33: Flaked stone artifacts from Marshview Hamlet: projectile points. Upper left specimen from roomblock area. Upper right specimen from lower fill, Pithouse 1. Lower left specimen from sheet refuse deposits south of pithouse. Lower center specimen from roomblock area. Lower right specimen from upper fill, Pithouse 1.


METRIC 1 cm 2 3 4 5

Figure 34: Flaked stone artifacts from Marshview Hamlet: gravers. Left specimen from non-structural area north of pithouse. Right specimen from sheet refuse area south of pithouse.


METRIC 1 cm 2 3 4 5

Figure 35: Flaked stone artifacts from Marshview Hamlet: drills. Upper left and upper center specimens from sheet trash area south of pithouse. Upper right specimen from roomblock area. Lower left specimen from sheet trash area southwest of pithouse. Lower right specimen from non-structural area northwest of pithouse.

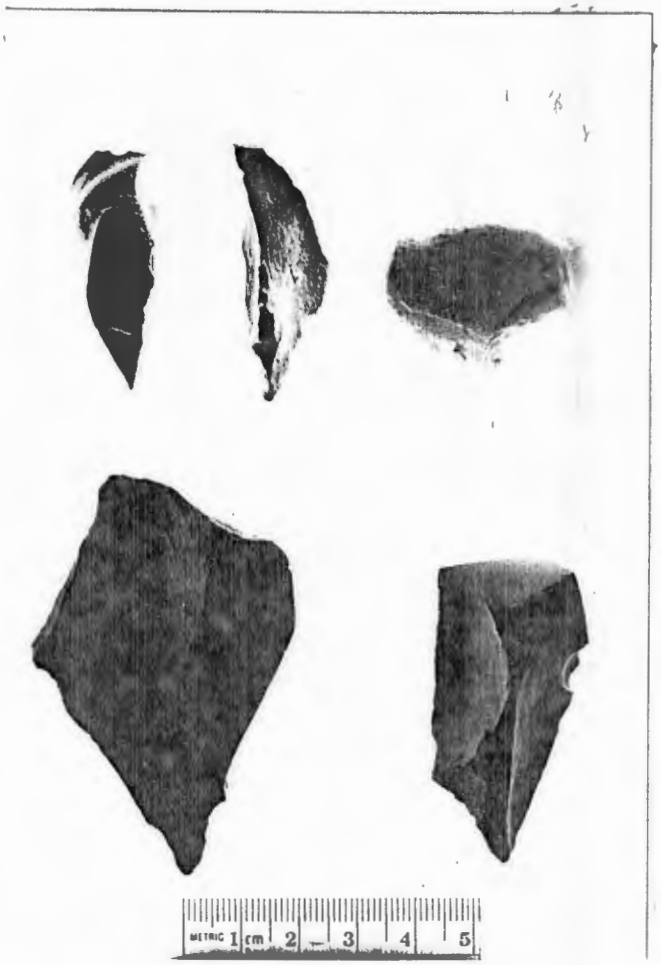

METRIC 1 cm 2 3 4 5

Figure 36: Flaked stone artifacts from Marshview Hamlet: quartzite core. Specimen from east portion of floor, Pithouse 1.

Figure 37: Ceramic artifact from Marshview Hamlet. Vessel 1, McElmo Black-on-white pitcher associated with multiple burial.

Figure 38: Ceramic artifact from Marshview Hamlet. Vessel 2, Mesa Verde Corrugated jar (Pueblo II - Pueblo III) associated with multiple burial.

Figure 39: Ceramic artifact from Marshview Hamlet. Vessel 3, McElmo Black-on-white bowl associated with multiple burial.

Figure 40: Ceramic artifact from Marshview Hamlet. Vessel 6, McElmo Black-on-white bowl recovered from fill of Pithouse 1.

Figure 41: Ceramic artifact from Marshview Hamlet. Vessel 7, McElmo Black-on-white corrugated bowl recovered from fill of Pithouse 1.

Figure 42: Ceramic artifact from Marshview Hamlet. Vessel 8, McElmo Black-on-white bowl associated with multiple burial.

Figure 43: Ceramic artifact from Marshview Hamlet. Vessel 9, McElmo Black-on-white bowl associated with multiple burial.

Figure 44: Ceramic artifact from Marshview Hamlet. Vessel 10, McElmo Black-on-white bowl associated with multiple burial.

Figure 45: Ceramic artifact from Marshview Hamlet. Vessel 11, McElmo Black-on-white pitcher associated with multiple burial.

Figure 46: Ceramic artifact from Marshview Hamlet. Vessel 12, McElmo Black-on-white bowl associated with multiple burial.

Figure 47: Ceramic artifact from Marshview Hamlet. Vessel 13, McElmo Black-on-white ladle associated with multiple burial.

Figure 48: Ceramic artifact from Marshview Hamlet. Vessel 14, bird effigy vessel associated with multiple burial.

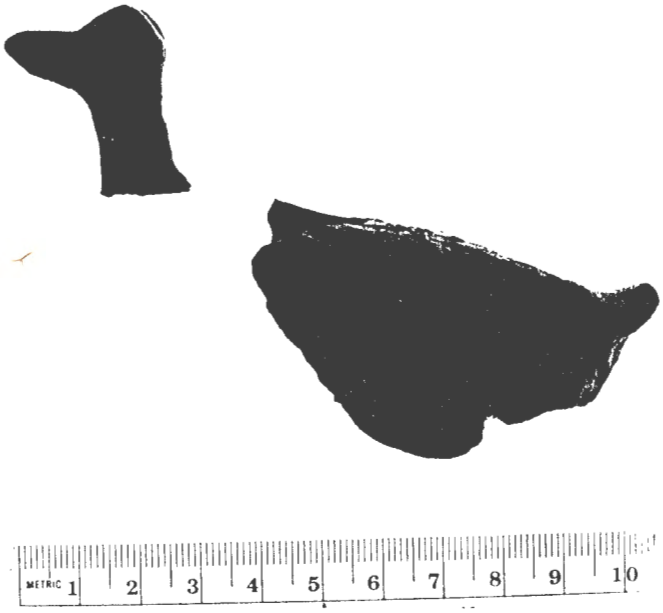

METRIC 1 2 3 4 5 6 7 8 9 10

Figure 49: Ceramic artifact from Marshview Hamlet. Vessel 16, corrugated jar recovered from roomblock area.

Figure 50: Ceramic artifact from Marshview Hamlet. Vessel 18, McElmo Black-on-white jar from Stratum 5, fill of Pithouse 1.

Figure 51: Ceramic artifact from Marshview Hamlet. Vessel 19, McElmo Black-on-white olla associated with multiple burial.

Figure 52: Ceramic artifact from Marshview Hamlet. Vessel 20, McElmo Black-on-white bowl associated with multiple burial.

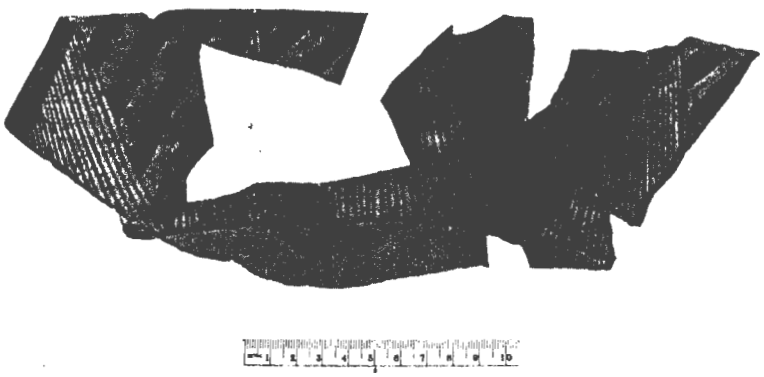


Figure 53: Ceramic artifact from Marshview Hamlet. Vessel 21, Mesa Verde Corrugated jar from roomblock area

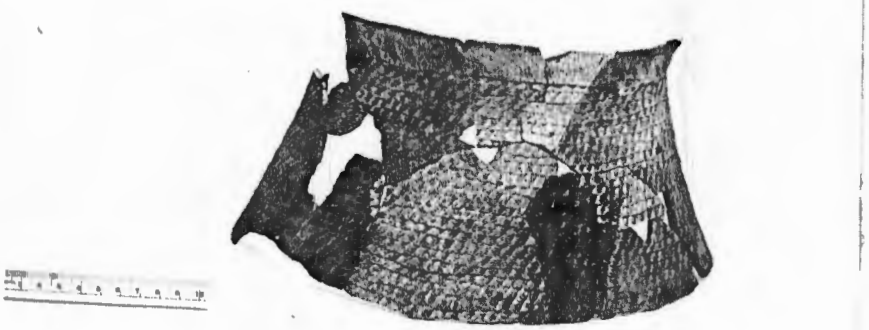


Figure 54: Ceramic artifact from Marshview Hamlet. Canine (?) effigy head associated with multiple burial.

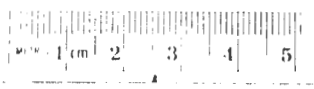

1cm
2
3
4
5

Figure 55: Ceramic artifact from Marshview Hamlet. Sherd disk from west portion of Floor 2, Pithouse 1.

Figure 56: Bone artifacts from Marshview Hamlet: bone beads. Both were associated with the multiple burial in Pithouse 1.


CM


CM

PRELIMINARY INTERPRETATIONS

Because the analyses of the artifact collection and environmental samples recovered from Marshview Hamlet were not completed in time for consideration in this report, no comprehensive interpretive statements are possible. Preliminary synthetic statements have been made in three areas: chronology, economic and social activities, and demography; these are presented below. A more thorough treatment will be possible when complete analytical results become available.

Chronology

A subjective interpretation of the artifact assemblages and inferences from the analysis of dating samples suggest that the prehistoric occupation sequence at Marshview Hamlet can be characterized as three elements representing two components: human groups representing both the Four Corners Desert Tradition and the Anasazi Tradition inhabited the site. A presentation of the evidence for and the characteristics of each element identified at Marshview Hamlet follows:

Element 1 (?500 BC - AD 500?)

A preliminary review of the artifactual assemblages suggests an element representing a late Four Corners Desert Tradition component might be the earliest occupation at the site. Evidence for this early occupation is thus tenuous at best; no samples representing Element 1 suitable for application of absolute dating techniques (dendrochronology, archaeomagnetism or C-14) used by program analysts were collected. The assignment of Element 1 was based on a subjective evaluation of the artifact collection, surface indications, and an extrapolation of the

settlement pattern in the vicinity during the Archaic (Four Corners Desert Tradition) Period.

Several artifacts recovered from Marshview Hamlet do suggest a pre-Anasazi origin. The best examples are several projectile points (refer to Figure 33, upper left and lower right specimens) which are similar to En Medio Phase points (AD 0 - AD 500) collected by an Eastern New Mexico University project in northwestern New Mexico (Irwin-Willams 1973). The "mano" illustrated in Figure 29 (upper right) is a "biscuit" type that is a common item in Archaic tool assemblages. Interpretation of the internal site proveniences from which these artifacts were recovered suggests that they may have been used by individuals of the Element 2 or Intensive Anasazi, McPhee Phase occupation. If so, the tools and their site context are probably the end result of an "A-S process" (Schiffer 1976:34); that is, the tools were scavenged for use from de facto refuse deposits abandoned hundreds or thousands of years earlier by Archaic peoples. The scavenged deposits may have been from Marshview Hamlet itself or other sites in the vicinity.

The natural setting of Marshview Hamlet (topography, vegetation, distances to resources, etc) is similar to other sites within a kilometer radius that also exhibit potential Archaic assemblages. Therefore, assuming that the Archaic peoples were favoring this set of locational characteristics for site placement, Marshview Hamlet was probably a locus of activities during this period. An in-the-field assessment of the lithic assemblages collected from the site surface is that it is similar in tool types and materials represented, in technology, and in size of specimens, to other sites assigned a Four Corners Desert Tradition

component. More concrete data regarding this particular question will be available upon completion of the intensive flake analysis, now scheduled for implementation during the spring of 1980.

No features or structures discovered during excavation of the site are assigned to Element 1; all were apparently used in their present form during Elements 2 and 3, as the Anasazi component. Any features or facilities used by the Archaic peoples were either located in unexamined peripheral areas of the site or were destroyed or modified by the later Anasazi inhabitants.

In summary, the probable presence of a Four Corners Desert Tradition element at Marshview Hamlet was inferred from the presence of Archaic diagnostics in the artifact collection. The element has not been well-defined temporally because of the non-applicability of absolute dating methods; a best-guess estimate is that the element dates to the last part of the Desert Tradition period (?500 BC - AD 500?). No features or facilities at the site could be assigned to the element and hence no indigenous activities were inferred. It is suggested that this site and other sites assigned Archaic elements in the vicinity (Sites 5MT2202, 5MT2242, 5MT4513 and 5MT4682) were used for hunting and foraging activities during the middle to late Archaic period.

Element 2

After an occupational hiatus Anasazi horticulturalists resettled the Sagehen Flats area and by approximately AD 1050 had constructed a pithouse and ancillary surface facilities at Marshview Hamlet. This intensive use period is designated Element 2 and is the earlier of two occupations representing the Sundial Phase component. Element 2 is well documented by absolute dating techniques; a juniper log fragment

discovered in the fill of the central hearth of the pithouse was analyzed by the Laboratory of Tree-Ring Research and yielded an outside ring date of AD 988 (refer to Table 7 for more complete data). The analytical impression of this specimen is that the present outside ring is rather far removed from the tree outside ring representing a cutting date. This later date, therefore, may be 50 or more years later than the 988 date or perhaps AD 1050±30. The prehistoric use context of the specimen is unknown; it may represent a fragment of a construction timber or a piece of firewood. A second major item of chronological evidence is an archaeomagnetic date obtained from the central hearth in Pithouse 1 and analyzed by the Laboratory of Public Archaeology, Colorado State University; the last intensive firing epicycle in the hearth is dated to AD 1135±30 (Table 7).

Temporal analysis of the ceramic assemblage recovered during excavation supports a late Pueblo II - Early Pueblo III (Sundial Phase) assignation. Vessels associated with the multiple secondary burial (Figures 37, 39, 42, 43, 44, 45, 46, 47, 51, and 52) are typical representives of McElmo Black-on-white, and one is typed as Mesa Verde Corrugated (Fig. 38). Two Mancos Corrugated jars were also recovered from the roomblock area. According to Breternitz, Rohn and Morris (1974:42), McElmo Black-on-white pottery was manufactured in the Mesa Verde Region during the span AD 1075 - AD 1275; Mancos Corrugated was made in the period AD 900 - AD 1200 (Breternitz, Rohn and Morris 1974:19). Manufacturing dates mesh very well with the tree ring and archaeomagnetic dates.

Another potential source of temporal information, diagnostic architectural styles, did not prove to be useful. For the time period

Table 7.
Dendrochronological and archaeomagnetic dates
from Marshview Hamlet, Site 5MT2235.

DENDROCHRONOLOGICAL DATES

PROVENIENCE	SAMPLE NUMBER	SAMPLE SPECIES	INSIDE DATE	OUTSIDE DATE
Fill of central hearth, Pithouse 1	DAR-59	Juniper	0909fp	0988+vv
Fill of hearth, pithouse fill	DAR-60	Juniper	0192fp	1102vv

ARCHAEOMAGNETIC DATES

PROVENIENCE	SAMPLE NUMBER	SAMPLE MEDIUM	ALPHA 95	DATE
Hearth, west periphery of site	2235-1	earth from bottom of feature	3.55	*
Hearth, in fill of Pithouse 1	2235-3	earth from bottom of feature	4.18	AD1220 ±30
Central hearth, Pithouse 1	2235-4	earth from bottom of feature	2.67	AD1220 ±30

*Although the sample yielded an Alpha 95 that indicated the sample was suitable for dating, the plot fell off the known curve; this may indicate that hearth-use dates before AD 600 or after AD 1500.

in question, one would expect a habitation site to consist of a kiva with a bench, six pilasters and masonry walls, as well as an associated masonry roomblock; however, as Marshview Hamlet is believed to be either a pioneering effort or a seasonal site, it is assumed that typical architectural patterns would not necessarily be followed.

It thus appears that this occupation of the site dates to the approximate period AD 1075 - AD 1125. No major remodeling episodes, which would perhaps indicate a relatively short occupational span, were recognized during excavations. The pitstructure (Pithouse 1) did exhibit some minor remodeling (a sealed-off northern ventilator and two floor levels) which suggests a more than minimum period of occupancy. A subjective estimate of the time span of Element 2 is therefore 15 - 30 years.

Architectural remains assigned to Element 2 include Pithouse 1 and the northern and southern ventilator systems, the roomblock area to the northeast of the pitstructure, and several small ancillary features including Hearth 2 (just east of the pithouse), and Hearth 3 (north of the pithouse).

In summary, the most intensive use of the site has been designated Element 2 and is assigned to the Sundial Phase of the Anasazi Tradition. The temporal placement of this occupation is well documented and can be accurately assigned to the period AD 1075 - AD 1125. Major architectural edifices including a pithouse and roomblock are assigned to the occupation; thus it appears that the occupation was of an intensive nature, and that the site probably at this time functioned as a permanent or seasonal habitation. As such the hamlet was the hub for many

activities, including ones that could be characterized as domestic maintenance and subsistence.

Element 3

The hamlet was abandoned in the first half of the twelfth century AD and the pithouse and roomblock were allowed to fall into disrepair. Some time later, the site was again re-occupied by an Anasazi group. The new occupants used a hearth and living surface in the depression representing the former pitstructure and may have constructed and used other ancillary features. Element 3 is well substantiated by absolute dates: a wood fragment recovered from the hearth was submitted to the Laboratory of Tree-Ring Research and yielded an outside date of AD 1102vv (Table 7). An archaeomagnetic sample was also removed from the hearth and was dated by the Laboratory of Public Archaeology at AD 1220 $\pm$ 30 (Table 7). While these dates are somewhat far apart, they are not irreconcilable. The 1102 date represents a ring, in the opinion of the Tree-Ring Laboratory, which is relatively far removed from the true outside. Hence as many as 25-50 rings could be missing and the tree cutting dated may be toward the middle of the twelfth century. If the wood fragment is firewood, a logical conclusion considering its original context, then it might have been dead or downed for many years before being collected.

With these considerations in mind, an occupation in the late twelfth century (AD 1150 - AD 1200) is suggested. Unfortunately, because of the lack of associated material, no corroborative artifactual evidence for these dates was obtained.

Because of the lack of substantial architecture assigned to the element, it is believed that the site functioned as a temporary camp or

limited activity locus during the last half of the twelfth century. A conjecture is that the site occupants were seasonally exploiting the resources of the adjacent wet lands to the south while living permanently in pueblo villages further to the south.

The site was permanently abandoned by the Anasazi by AD 1200 or soon afterward. The site was again the scene of man's activities during modern times when the Sagehen Flats area was used as a pasturage (F. Cline, personal communication). Site modifying activities included discing in the 1940s and the use of the former roomblock area as a dump for rocks that impeded agricultural practices.

Economic and Social Activities

Activities performed by the occupants of the site are necessarily inferred from the data derived from excavations, on-site observations and laboratory analysis. Because analyses are presently incomplete, inferences regarding site-centered activities should be viewed in similar regard. Activities performed during Element 1 have already been addressed in the discussion on chronology; no more detailed presentation will be attempted at this time.

The occupants of Marshview Hamlet during Element 2 were probably performing a wide range of domestic, subsistence and other activities. Horticulture is indicated by the presence of maize from the trashpit south of the pithouse (Table 6). Hunting activities can be inferred from the presence of non-human bone (the preliminary analysis of non-human bone is presently incomplete), and the presence of projectile points near the site. The processing and cooking of foods is amply indicated by the numerous tools used in such activities, i.e., manos, metates, corrugated

vessels for cooking, and bowls for serving. The manufacture and maintenance of tools are indicated by the presence of tools for the making of tools, and lithic debitage. Tools for the manufacture of tools include a grooved abrader and a denticulate knife. Clothing manufacture is inferred from the bone awls and possible spindle base found within the pithouse. If the functional interpretation of the spindle base is correct, hamlet activities included the spinning of fine thread, for such thread necessitates the use of that implement (Bankes, 1977).

The manufacture of ceramic vessels is indicated by the presence of a large sherd disk (Fig. 55) among the burial goods. A large deposit of clay was discovered less than 700 m to the southeast which would facilitate the making of pottery at the site. Though no firing area was located at the site, it is possible that one was located in an unexcavated area, or was destroyed by erosion or historic disturbance.

The presence of trade goods (the Chacoan pitcher and abalone shell pendant) demonstrates that the occupants of the site had contact of some sort with other regions. Additionally, the proximity of contemporaneous pueblos suggests periodic contact of a local nature.

Activities at the temporary camp located in the upper kiva fill (Element 3) consist of cooking, as indicated by the presence of the hearth. Another activitiy at or near the camp is game processing, indicated by the presence of a large biface and a bone flesher. Lithic debitage on the associated living surface suggest that tool kit maintenance was also performed. Eating and sleeping may also have taken place within the shelter of the depression representing the abandoned pithouse.

PALEODEMOGRAPHY

Though a thorough analysis of the skeletal materials recovered from Site 5MT2235 is unavailable at this time, preliminary analysis indicates the occupants of the site (if they were in fact the occupants), exhibit traits common to the Anasazi of the period to which they are attributed (Bennett 1975). Lambdoidal deformation is present on the two crania which are complete enough for analysis. Data on nutrition, sex, age, and stature, as well as any discrete morphological traits observed is forthcoming if the condition of the materials permit such analyses.

APPENDIX 1.

Human Remains at Site 5MT2235

Human Remains at Site 5MT2235.

The remains of at least four individuals, three adults and one juvenile, were uncovered at this site in late September, 1978. The fragmentary nature of the remains and their dispersal over the site led the field team to suspect human violence at the site.

Preliminary analysis of these remains reveals the presence of non-human bone, including rabbit, beaver, mustelid, and rat or mouse. Most of these were identified by Allen Kihm of the University of Colorado Museum, Geology Section. In addition, two bone beads and a wood point (?) were identified.

Many of the remains are either not identifiable, or not identifiable specifically as human. These are long bone splinters and fragments which lack identifying foramina or articular facets. Many of these fragments show evidence of fracture immediately post-mortem. Some fragments are crushed.

The human remains are listed in a separate inventory. It is not possible to gauge the sex of these remains. The number of individuals was based on the number of complete crania and cranial fragments, i.e., three petrous temporal fragments, as well as one each of adult and juvenile mandibles. It is not possible at this time to determine the cause of the post-mortem destruction of these remains.

Recommendations for Further Analysis

1) Stereoscopic study of human fragments for fracture patterns, and for marks of crushing or gnawing.

2) Evaluation of bone splinters and fragments for possible animal origin.

3) Re-evaluation of evidence used to infer cannibalism in the Southwest. In the absence of clear evidence of human destruction of these remains, e.g., a butchering mark on a human bone, the presence of long bone splinters of a particular type and the absence of many body parts may not be conclusive alone.

4) Determination of charring for evidence of burning or charcoal staining.

Inventory of Human Remains
Site 5MT2235

CRANIAL

Cranium 1	FS 184	orbit fragments and rt maxilla, zygomatic, found in soil matrix filling vault; NHB splinter in same matrix; rt temporal and lt parietals missing.
	FS 186	lt squamous temporal, zygomatic, maxilla
	FS 208	rt petrous temporal
Cranium 2	FS 184	lt zygomatic, maxillae missing; lt external auditory meatus and malleus removed in cleaning
Calvaria	FS 177	parietal fragments, adult
	FS 184	B-23 [PL 50] parietal fragment, adult
	FS 184	B-25 [PL 52] parietal fragment, adult
	FS 184	parietal fragments, adult
	FS 184	PS 1 parietal fragments, juvenile
	FS 184	B-12 [PL 39] rt petrous temporal fragment, charred
	FS 190	lt petrous temporal fragment, adult
	FS 212	basi-occipital, adult (possible part Cranium 2)
Facial skeleton	FS 184	fragment rt zygomatic, maxilla, adult
	FS 184	B-4 [PL 31] orbit fragments, juvenile
	FS 184	zygomatic fragment
	FS 184	B-39 [PL 66] zygomatic fragment (?)
Mandible	FS 184	2 juvenile fragments
	FS 184	B-22 [PL 49] adult, charred fragment
Teeth	FS 184	B-12 [PL 40] adult incisor
	FS 184	B-26 [PL 53] adult incisor
	FS 184	deciduous incisors (2), molar; adult incisor, premolar, molar
	FS 184	charred root, adult
	FS 186	charred canine, adult
	FS 187	charred fragments
	FS 190	deciduous incisors (2), adult incisor

POST-CRANIAL

Humerus	FS 184	rt juvenile
	FS 208	distal fragment with septal aperture, rt
	FS 210	distal fragment with septal aperture, rt
	FS 190	distal fragment
Radius	FS 208	rt shaft and proximal head
	FS 184	B-57 [PL 84] proximal fragment

Ulna	FS 208	rt shaft and proximal head
Patella	FS 210	fragment
Foot	FS 210	calcaneus fragment
Clavicle	FS 184	B-5 [PL 32]
	FS 184	B-40 [PL 67]
	FS 177	
	FS 208	
Scapula	FS 184	B-9 [PL 36] juvenile rt
	FS 184	B-55 [PL 82] adult lt glenoid fragment
	FS 190	rt adult glenoid fragment
Vertebrae	FS 184	B-59 [PL 86] transverse process atlas
	FS 177	axis
Phalanges	FS 184	B-14 [PL 41] distal hand
	FS 184	B-58 [PL 85] fragment
	FS 184	distal hand
	FS 184	distal hand
	FS 184	fragments (2)
	FS 184	middle
	FS 210	middle