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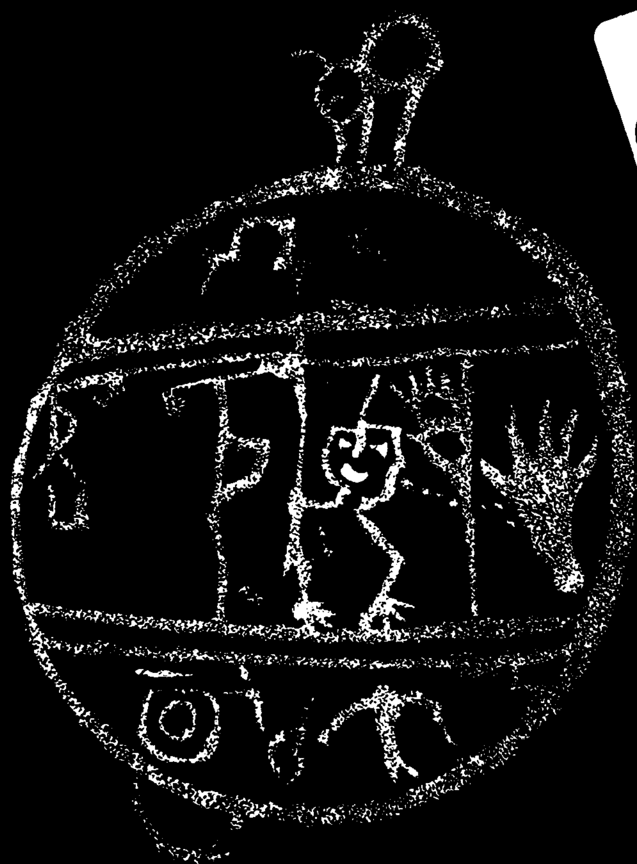
ARCHEOLOGICAL INVESTIGATIONS IN COCHITI RESERVOIR, NEW MEXICO

Edited by
Jan V. Biella



VOLUME 3:
1976-1977 FIELD SEASONS

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VOLUME 3: 1976–1977 FIELD SEASONS

Edited by
Jan V. Biella

Submitted by

Frank J. Broilo
Principal Investigator

to

National Park Service
Southwest Division
Santa Fe

for

U.S. Army Corps of Engineers
Albuquerque District

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(UNM Proposal No. 101-127B)

Office of Contract Archeology
Department of Anthropology
University of New Mexico
Albuquerque

1979

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The internal administrative staff included Frank J. Broilo, who served as Principal Investigator; John B. Broster, who served as Project Director and Field Supervisor during the first half of the project (July 1967—August 1977); and Research Associates Richard C. Chapman, Rosalind Hunter-Anderson and myself. I assumed directorship duties of the project from September 1977 to project completion.

In addition to the administrative staff, a basic field and laboratory research team included Supervisory Archeologists Jeanne Schutt and James Enloe (Ms. Schutt also served as Laboratory Supervisor), and Assistant Archeologists Emily Abbink, Lynne Arany, Carlos Caraveo, Jon Frizell, Patricia Prince, Caroline Pearrson-Reeves, and Sara Stech.

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The specific analyses themselves, of course, served only as the initial data collection and description phases of the project. Data interpretation and ordering, as reflected in the site reports and appendices to this volume, were the result of a joint effort on the part of many individuals. Drafts of the reports were prepared by James Enloe (LA 5011, LA 10114, LA 13076, LA 13086), Jeanne Schutt (LA 13049, LA 13050, LA 13054, LA 13084, LA 13291), Caroline Pearrson-Reeves (LA 13352, LA 13353), David Eck (LA 13351), and Rosalind Hunter-Anderson (LA 13326-13330, LA 13350). Drafts of the ceramic sections of the reports were prepared by Helene Warren; the botanical sections were prepared by Beth O'Leary, and the fauna and bone artifact sections by Martha Binford. These drafts were collated and/or modified into final form by the sole or senior author credited in this volume.

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Jan V. Biella
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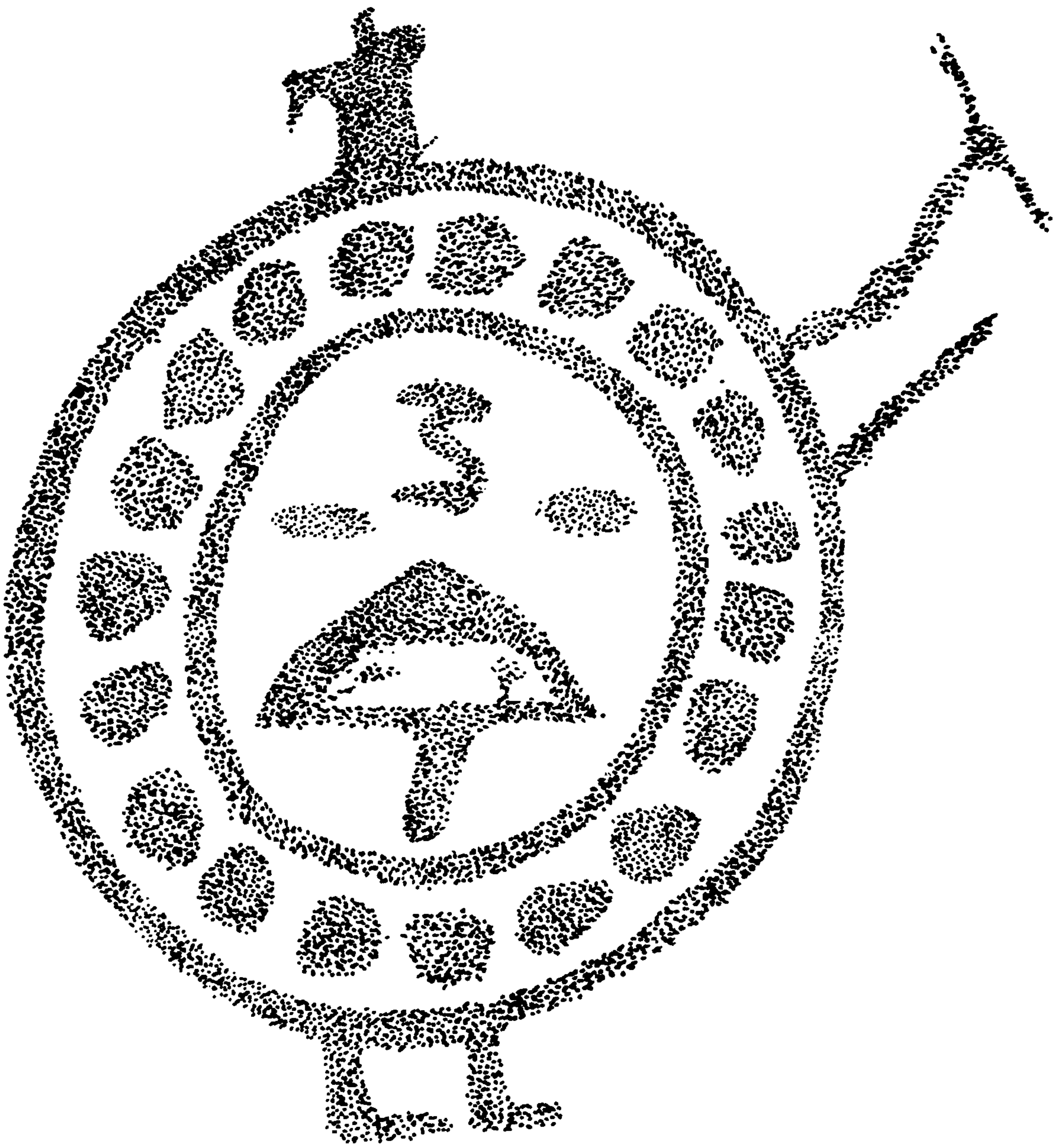


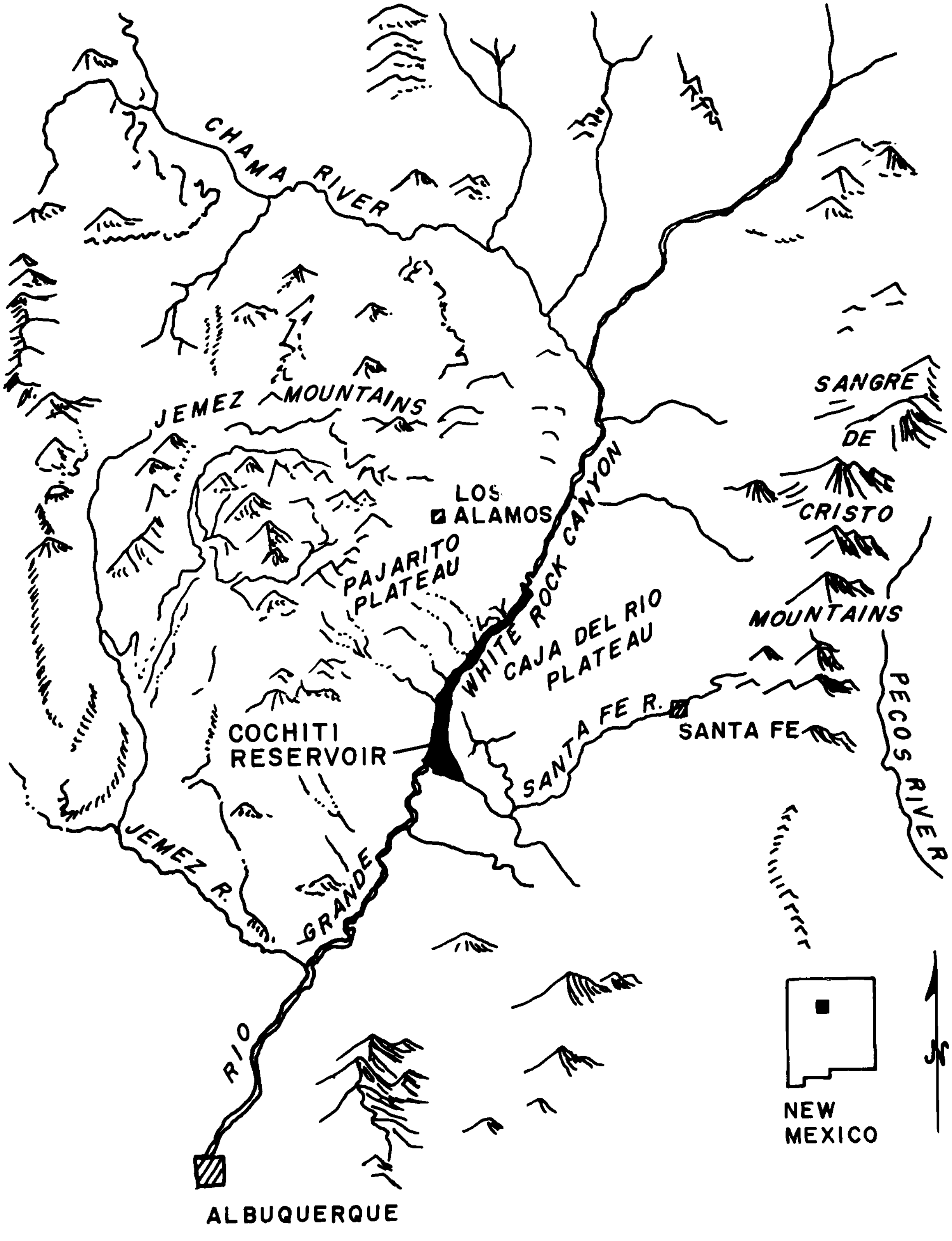


FIG. 1.1 Location of the project area in north-central New Mexico.

Chapter 1

A PROGRAM FOR MITIGATION OF ARCHEOLOGICAL RESOURCES IN THE FLOOD POOL OF COCHITI RESERVOIR

Jan V. Biella and Richard C. Chapman

INTRODUCTION

This report represents the third in a publication series which summarizes the results of a multiphase cultural resource management program in Cochiti Reservoir, New Mexico. The present phase of the research concerns a program for mitigation for those archeological sites which will be directly impacted by the floodwaters between 5322 and 5400 foot elevations retained in Cochiti Reservoir. During the course of the mitigation program, twenty sites that span late Archaic (En Medio phase), Anasazi (Pueblo III, Pueblo IV), and Historic (Spanish Colonial, Territorial) periods have been investigated. The site reports and appendices to this volume provide descriptive summaries of the results of the mitigation program at the intrasite level of analysis.

The current phase of the research program was conducted by the Office of Contract Archeology, Department of Anthropology, University of New Mexico in Albuquerque. This research was funded by the U.S. Army Corps of Engineers, Albuquerque District, and was administered by the National Park Service, Southwest Division, in Santa Fe.

Location and Description of Project Area

Cochiti Reservoir is located in the Rio Grande Basin of north-central New Mexico. It lies at the base of the eastern flank of the Jemez Mountains in a deep, basalt-rimmed gorge, White Rock Canyon, which opens into the wide alluvial Northern Rio Grande Valley. The general area is characterized by hills, digitated mesas, and narrow canyons. Prominent features include the erosional canyons of the Pajarito Plateau, to the west of White Rock Canyon, and the basalt mesas of the Caja del Rio Plateau, to the east of the canyon.

Within Cochiti Reservoir, two distinct study areas have been defined by the character of cultural resource management needs: the permanent pool or reservoir itself; and the floodwater pool or projected flood control area (see Fig. 1.1).

Permanent Pool

The permanent pool lies almost completely in White Rock Canyon and is defined by the 5322 foot contour upstream from Cochiti Dam. The main portion of the permanent pool is approximately 2.4 kilometers long and 0.8 kilometers wide. The pool, however, extends northward into White Rock Canyon to the mouth of Alamo Canyon, 12.9 kilometers above the dam. The permanent pool encompasses approximately 1240 surface-acres with a shoreline of 34 kilometers. The 102 archeological sites directly impacted by the permanent pool are expected ultimately to be inundated with silt deposited during the life history of the dam. The time frame estimated for this process is in excess of 100 years (U.S. Army Corps of Engineers 1974: I-4, VI-1).

Flood Control Pool

One of the major intents of Cochiti Dam is to arrest damaging floodwaters in the heavily populated Middle Rio Grande Valley. Maximum projections indicate that the flood control pool would encompass 9060 surface-acres and it would extend from the Santa Fe River, in the south, northward into White Rock Canyon for a distance of approximately 32 kilometers upstream from the dam site. The flood pool would have a shoreline of nearly 152 kilometers at the maximum projected 5460.5 foot elevation (U.S. Army Corps of Engineers 1974:I-3). Two hundred twenty-five archeological sites located between 5322 and 5460.5 foot elevations may be directly impacted by the flood pool. It is estimated that sites located below 5400 foot elevations exhibit the highest probability of periodic inundation and hence adverse impact (U.S. Army Corps of Engineers 1973: Plate H).

Although cultural resource management needs have necessitated that these two locales be differentiated, the implementation of the archeological research program undertaken during the course of the Cochiti Reservoir Project has integrated the archeological remains located in both the permanent and flood control pools as a single data set whenever possible.

Previous Contract Research in Cochiti Reservoir

Archeological investigations in the vicinity of Cochiti Reservoir were initiated in the early 1960s by the Museum of New Mexico for the National Park Service. These early investigations were directly associated with the construction of Cochiti Dam itself and attendant facilities, although they also resulted in a partial survey and mitigation of cultural resources located within the boundaries of the proposed impoundment reservoir (Lange 1968; Snow 1971, 1973a, 1973b, 1973c). When the Final Environmental Impact Statement was issued in February of 1974, however, a comprehensive and intensive survey which inventoried surficial cultural resources in the permanent and flood control pools of the reservoir had not been completed and only an estimated 3% of the sites to be adversely affected by the reservoir had been mitigated (Snow 1972:1). A recognition of need for additional research in the reservoir resulted in the present multiphase research program conducted by the Office of Contract Archeology.

The first phase (U.S. Department of Interior Contract No. CX700050323, University of New Mexico Proposal

No. 101-82) was funded and administered by the National Park Service, Southwest Division, and had a dual purpose. The first objective was to develop a research program which would ascertain the potential significance of cultural resources located in Cochiti Reservoir. This information was provided in the form of an archeological assessment which was based upon an intensive review of the published and unpublished literature for sites in the vicinity of the reservoir. This information is presented in Biella and Chapman (1975). The second objective was to conduct an intensive inventory survey of the permanent pool of Cochiti Reservoir in order to identify and describe those resources which would be directly inundated by the filling of the reservoir. Some 102 sites spanning Archaic, Anasazi and Historic periods were documented. This information is summarized in Biella and Chapman (1975:150-209, Appendix II; 1977a:201-195).

In February, 1975, a second phase of the Cochiti Reservoir Archeological Project, funded by the U.S. Army Corps of Engineers, Albuquerque District, and administered by the National Park Service, Southwest Division, was initiated under U.S. Department of Interior Contract No. CX700050431 (UNM Proposal No. 101-108A/B). This phase of the research program included: (1) an intensive inventory survey of the flood control pool with an evaluation of the scientific significance of the inventoried cultural resources. Two hundred twenty-five sites were documented (Biella and Chapman 1977b:295-316); and (2) the development and implementation of a research program which mitigated, to the greatest possible extent, the adverse impact of those cultural resources directly inundated by the permanent pool of Cochiti Reservoir. Thirty-three sites were investigated during this phase and the results of this mitigation program are presented in Chapman and Biella (1977a).

Due to the magnitude of research required to evaluate and mitigate the impacted cultural resources in the permanent pool of the reservoir, personnel from the Cultural Resources Management Division of New Mexico State University in Las Cruces (Stanley D. Bussey, Principal Investigator) were requested by the Office of Contract Archeology to participate in the first two phases of the research program.

In June, 1976, the third and present phase of the research, which was funded by the U.S. Army Corps of Engineers, Albuquerque District, and which was administered by the National Park Service, Southwest Division, Santa Fe, was initiated under U.S. Department of Interior Contract No. CX702960151 (UNM Proposal No. 101-127B). This phase concerned the development of a program for mitigation for those cultural resources adversely impacted by the potential floodwaters (up to 5400 foot elevation) retained by Cochiti Dam. The descriptive results of this mitigation program at the individual site level of analysis, in partial fulfillment of the contract proposal, are presented in this volume. A fourth interpretive report, which summarizes the research at the intersite and regional levels of analysis will complete the contractual obligations (see Biella and Chapman 1979).

PROGRAM FOR MITIGATION

Legislative Background

The present research program has been implemented under the auspices of Federal legislation which establishes a policy of preservation and conservation of cultural resources. This legislation recognizes that cultural resources constitute a limited and nonrenewable phenomenon, requiring protection to insure their long-term productivity and benefit to the American public through proper management. Pertinent legislation includes Section 106 of the National Historic Preservation Act of 1966 (80 Stat. 915); Section 102(c) of the National Environmental Policy Act of 1969 (91 Stat. 852); Section 2(b) of Executive Order 11593 (36 F.R. 8921, 16 U.S.C. 470); and the Archeological and Historic Preservation Act of 1974 (93 Stat. 291). These statutes and executive order delineate a policy of protection and management of cultural resources for the public domain. In cases such as Cochiti Reservoir, where conditions dictate the destruction of cultural resources, a mitigation program must be developed which assures the recovery of information to maximize the contribution of those resources to current and future archaeological research.

In accordance with these objectives, the Office of Contract Archeology, under the authority and provisions of Federal Antiquities Permits granted to the Maxwell Museum of Anthropology, Department of Anthropology, University of New Mexico, and under the auspices of the National Park Service and U.S. Forest Service permits, developed and implemented a program for scientific mitigation.

Factors Affecting the Mitigation Program

The structure and content of any mitigation program is predicated upon two major concerns: (1) the significance of the affected cultural resources; and (2) the nature of the projected impacts upon those resources. Both of these concerns as they affected the Cochiti Reservoir Flood Control Pool Mitigation Program, will be given consideration below.

Projected Adverse Impacts

In Cochiti Reservoir, two major categories of adverse impact may be identified; inundation and vandalism. At the time of the writing of this report, all of the sites in the permanent pool have been inundated and are functionally lost as an accessible data base for archeologists, minimally, for the life of the dam, at least 100 years (U.S. Army Corps of Engineers 1974:I-4). The specific character of impact upon the cultural resources located within the boundaries of the flood control pool is less certain although it may be anticipated as periodic inundation and vandalism. Each will be discussed below.

Inundation

Although studies of the effects of inundation on archeological resources are on-going (see Lenihan et al. 1977), There is no consensus at this time as to the exact nature of destruction which may be caused through permanent and/or periodic inundation. For purposes of the present mitigation program, it was presumed that all site locations within the boundaries of the permanent pool of Cochiti Reservoir would be destroyed, whether through the effects of permanent inundation, shorline wave action, silt deposition, or subsurface current flow. Site locations situated within the flood pool (5322 to 5460.5 foot elevations) were presumed to be subjected to less certain destruction because of the periodic rather than continual inundation. It was, however, assumed that those site locations situated in closer proximity to the reservoir shoreline (lower elevations) would exhibit a higher probability of disturbance or destruction in that they would be flooded more frequently than those situated at higher elevations. Based upon projections made by the U.S. Army Corps of Engineers (1973: Plate H), it appeared that sites situated below 5400 feet would exhibit the highest probability of periodic inundation. The particular effects potentially endangering the flood pool sites include wave action and percolation (S. Rayl, personal communication).

Two sites situated adjacent to the present lake shore, LA 5014 and LA 13086, respectively situated at 5325 and 5340 feet in elevation, are currently being monitored by the National Reservoir Inundation Study conducted by the National Park Service to assess such adverse effects. Although the results of this study did not directly affect the character of the mitigation program, the reliability of assuming that all resources must be considered destroyed (with higher probabilities of destruction at lower elevations) may soon be examined.

Vandalism

Another probable adverse impact upon cultural resources which may be anticipated as a consequence of filling the reservoir is the vandalism of archeological sites. With the exception of the Cochiti-Frijoles trail, which was constructed by the Middle Rio Grande Conservancy District in 1929 (Lange 1968), along the west side of the Rio Grande in White Rock Canyon, sites located within the project area were relatively undisturbed prior to the filling of the permanent pool of the reservoir. Previous access to site locations was restricted to foot-travel or rafts.

Formal documentation of variability in the character of direct adverse impacts upon archeological site locations due to their general accessibility has not been explicitly studied in the White Rock Canyon locale. Informal observations made during the survey of the permanent and flood control pools serve, however, to suggest that such effects are in no way insignificant.

Survey crews noted that ceramic fragments were, in general, larger at site locations along the east side of the canyon, and the frequency of projectile points observed was greater along the east side of the canyon, in contrast to the sites located on the west side, near the trail. This artifact differential could be attributed to differences in access.

These observations, although not rigorously quantified, might inform upon the long-term effects of accessibility with respect to the nature of deterioration or destruction of the material record of past human behavior within that locale. In this regard, White Rock Canyon was, prior to the filling of Cochiti Reservoir, one of the more inaccessible places in New Mexico. If observable differences in collection of artifactual remains have occurred due to construction of a trail, the magnitude of casual collection and more deleterious forms of vandalism such as excavation can be expected as a direct consequence of reservoir filling and greater accessibility by boat.

Archeological Significance

Archeological sites are not inherently significant for they only exhibit significance when assessed against a specific referent or set of referents. Archeological significance is thus a dynamic process through which cultural resources acquire significance with respect to specific research problems. These problem areas or orientations then delineate potential information realms of scientific importance. The definition of specific archeological research problems which may be employed to assess significance is largely contigent upon the cumulative knowledge derived through previous research in a given region and the contemporary state of anthropological theory and method. For this reason, rarely can a particular set of research problems be universally employed to assign significance; they, rather, must be designed with respect to the needs of a particular data base.

Cochiti Reservoir is situated in a relatively research rich area, one in which archeologists and anthropologists have worked for nearly 100 years. Eminent researchers including Adolph Bandelier, Charles Lummis, Edgar L. Hewitt, H. P. Mera, Nels C. Nelson, and Leslie A. White, have provided a descriptive structure and a detailed chronology upon which modern anthropological research may build. It is through the results of these early studies combined with specific cultural evolutionary and ecological research interests, that a series of problem realms (against which the significance of the cultural resources were assessed) were identified for the Cochiti Reservoir Project. Basically, these research interests focused upon explicating the changes in human adaptation within the general Cochiti area as reflected in different subsistence and logistical strategies. The present research approach has been discussed in Chapman and Biella (1977b:7-12) and Biella and Chapman (1977b:295-316), and it is treated in greatest detail in the fourth volume of the Cochiti Reservoir publication series (Biella and Chapman 1979). Aspects of the research program as they guided the current mitigation program will be treated below.

RESEARCH PROBLEMS AND APPROACH

The overall research approach which has served to guide the structure of the Cochiti Reservoir flood control pool mitigation program has been based upon an analytical strategy in which differences in the character of human behavior are viewed in cultural evolutionary and ecological terms. From this standpoint, cultural behavior is seen as an extrasomatic means of adaptation by a human population to a social and physical environment, behavior which is the result of a selective evolutionary process or set of processes.

Anthropological approaches to understanding processes which underlie the manner in which human behavior is selectively organized into cultural systems (that is, changes from one organization to another) have been various. Some anthropologists have seen the evolution of the structure and organization of cultural systems and changes from one system state to another as essentially *culturalogical*. They have proposed that the evolution of different cultural systems is a result of the internal interactions among the components of the cultural system itself. That is, changes in one internal behavioral realm (for example, the subsistence base) determines change in others. Key internal variables precipitating change might concern the manner in which social or economic networks serve to integrate the cultural system (cf. Service 1962) or changes might result from differences in the technological effectiveness of a cultural system in harnessing energy from the environment (White 1959).

Other anthropologists have taken a more environmentally deterministic approach. They propose that cultural changes are the product of specific historical events within a particular environmental frame (Steward 1938, 1955). Characteristics in the organization of human behavior are thus seen as partially or wholly accounted for as adaptive responses to specific environmental conditions such as climate, soils, predictability of food resources, and the like.

During the Cochiti Reservoir Project, we evolved an analytical strategy which was an outgrowth of both a *culuralogical* and *cultural ecological* approach, although with a greater emphasis upon the latter. Our basic interest was in attempting to understand *how cultural systems come to be as they are*. In particular, we wished to evaluate the nature of interaction(s) between different cultural organizational systems in essentially the same environmental setting.

In order to investigate these kinds of problems, we identified three conceptual levels of analysis. First, we needed to develop a strategy for segmenting cultural and environmental variability into structural units or components suitable for analysis of cultural evolutionary and ecological relationships. Second, we needed to develop a model or models which specified organizational relationships between the components. Third, we needed to propose processes underlying changes in the structure and organization of the cultural and ecological components.

In the present report, we have emphasized the first of these conceptual levels — that of developing a taxonomy of cultural and ecological components and then presenting archeological data derived during the flood pool mitigation program in those terms such that they could be informative about the organizational and processual levels of analysis.

Defining Behavioral Components

Basically, there are two problems which must be addressed in developing a typology or stratification of cultural behavior into components. One concerns the overall theoretical model(s) which outlines relevant variables to be accounted for in the typology. The second is to develop a typology with archeological visibility. Since the archeological record is largely constituted by material by-products of subsistence-related behavior, we developed an analysis which emphasized (1) a delineation of the kinds of activities which leave archeological evidence, and (2) a segmentation of environmental data into subsistence-related components at a microenvironmental level (site specific) and a macroenvironmental level (adaptive system-regional specific scale).

As a result of this kind of strategy, two levels of analysis may be distinguished: the *intrasite level* in which we attempt to document the range and character of activities performed at specific site locations; and the *intersite* or *regional level* in which we examine similarities and/or differences in activity performance among contemporaneous sites that share an environmental setting and between sites in different environmental settings. With this latter level of analysis, we are especially interested in attempting to identify redundancies or patterns in the behavior represented at site locations such that we may begin to understand or evaluate the processes which underlie their organization and ultimately changes from one organizational state to another.

Activity Classes

In the Cochiti Reservoir Project, we proposed that behavioral components of a cultural system with archeological visibility may be defined as a set of subsistence-related activities through which a human population extracts energy from a variety of food resource species. Such subsistence activities could be stratified into classes which pertain to the procurement or production of resources; activities involved in the processing of resources; consumption related activities; storage activities; and maintenance activities. As used during the Cochiti Project, two major kinds of resources were identified: food resources, or all species which constitute the biological or physical sources of energy consumed by a human population; and technological resources, or all materials from which tools and facilities are manufactured by a human population. Although these two kinds of resources were distinguished for convenience in classification, it is clear that they are not mutually exclusive. For example, some food resource species also provide technological resources in the form of hides for clothing and bone for tools.

Logistical Strategies

Delineating the range and character of activities represented at a site location provides only one kind of information about the behavior of the human population(s) responsible for its deposition. It may be suggested that the articulation of these activities into a system of adaptive behavior is another. During the Cochiti Project, we proposed that this articulation is achieved through a set of logistical strategies involving human population movement across the landscape (including the transportation and storage of food resources), as well as a definable social and economic set of relationships which pertain between members of a human population. In particular, logistical strategies are those through which subsistence-related activities are scheduled temporally and spatially within the environment to cope with variability in the distribution, periodicity, or productivity of food and technological resources. Included in this logistical organization are the social mechanisms governing the redistribution of resources to individual members of the population.

Logistical strategies thus provide a conceptual link between the subsistence-related activity classes which may be documented for individual site locations and attributes of the environment which affect the character of adaptation of the human populations responsible for the deposition of the site locations. For example, one may anticipate that the logistical strategies characterizing human populations with a hunting and gathering subsistence base might differ, predictably, from those populations with an agriculturally based economy, from those populations articulated into industrial states. It is through recognizing these different logistical strategies and specifying critical or *effective* environmental variables that we gain insight into the organization of cultural system states and changes between states.

Thus by using the concepts of activity classes and logistical strategies, we hoped to provide a conceptual structure for ordering archeological data such that cultural evolutionary and cultural ecological problems could be addressed. We felt that such an analytical strategy served as a basic set of building blocks whereby differences in the organization of cultural systems might be measured and ultimately understood.

CULTURE HISTORY FOR THE NORTHERN RIO GRANDE AND A SUMMARY OF SURVEYED SITES IN COCHITI RESERVOIR

In the preceding section, we discussed classes of subsistence-related activities (procurement, consumption, etc.) and logistical strategies through which activities might be organized into systems of adaptive behavior. Using these two information realms in concert, we may begin to identify behavioral characteristics of the human populations who occupied the Cochiti Reservoir area. We may discuss the numbers of families or commensal units; the kinds and differentiation of task groups; the size and articulation of groups or families into bands or tribes; the size of hunting and foraging territories; and the like. In this manner, we can begin to examine cultural organizational (and ultimately evolutionary) differences between the foraging Archaic populations, the agriculturally-based Anasazi populations, and the pastoral/wage-based Historic populations who once inhabited Cochiti Reservoir.

In terms of these research interests, it is helpful to review our knowledge of the cultural historical sequence for the general upper Middle Rio Grande area in addition to a summary of the archeological site variability documented during the course of the two surveys of Cochiti Reservoir. The reader is referred to the first and fourth volumes of the Cochiti Reservoir publication series (Biella and Chapman 1977c and 1979, respectively) for a more comprehensive discussion of the different adaptive systems represented in Cochiti Reservoir and environs.

Four major periods of adaptation have been proposed for the Northern Rio Grande Valley region of northern New Mexico — PaleoIndian, Archaic, Anasazi (including Basketmaker), and Historic. These different prehistoric and historic occupations basically reflect changes in subsistence base and corresponding changes in activity performance and logistical organization.

The PaleoIndian period seems to have been characterized by a focal hunting economy which centered upon late Pleistocene megafauna, including *Bison antiquus.* The Archaic period reflects a transition to a mixed hunting and gathering economy, apparently in response to major climatic changes. During the late Archaic period, domesticated plants (maize, beans, and squash) were introduced into the Southwest as a whole and were incorporated into the Archaic subsistence base as an additional resource.

Ultimately, agricultural products became the focus of an economic strategy; the point at which this change took place marked the beginning of the Anasazi (including Basketmaker III) period. Associated with the economic change was the introduction of pottery, substantial habitation structures, and storage facilities. During the course of the 1000 year Anasazi period numerous changes in architectural styles, material culture and settlement occurred.

The Historic period begins with the Spanish exploration of New Mexico, ca. A.D. 1540. During the 450 year Historic period, Spanish, Mexican, and United States political jurisdictions were introduced, reflecting both a complex administrative and cultural history, as well as a diversity of subsistence strategies including agricultural, pastoral, and wage economies.

Although these major periods of adaptation may be documented for the general Northern Rio Grande Valley region as a whole, not all are reflected in the archeological record of Cochiti Reservoir. Within the reservoir and immediate environs, only late Archaic Armijo-En Medio phases (ca. 1800 B.C. to A.D. 400), Anasazi Pueblo III and Pueblo IV phases (A.D. 1175 to 1500?), and Historic Spanish Colonial, Territorial, and Statehood phases (ca. 1650 to present, but intermittent) are well represented.

Archaic Period Sites in Cochiti Reservoir

Prior to the various Cochiti Reservoir projects (Snow 1973c; Biella and Chapman 1975, 1977c; Chapman and Biella 1977a; Traylor, et al. 1977; Chapman 1979a, 1979b), little is known about the Archaic period of adaptation in the general Cochiti Reservoir area. Previous models for Archaic adaptation in the area were derived from ethnographic studies of desertic hunters and gatherers (Steward 1938; Lee 1968; Gould 1969) and from archeological data collected from other regions in the Southwest. The most comprehensive archeological studies were those conducted by Irwin-Williams (1973). She proposed a basic chronology for the Archaic period, distinguishing five different adaptive phases: Jay (ca. 5500 to 4800 B.C.); Bajada (4800 to 3300 B.C.); San Jose (3300 to 1800 B.C.); Armijo (1800 to 800 B.C.); and En Medio (800 B.C. to A.D. 400). Although she outlined differences in settlement, subsistence base, and population size and density through time, each basically reflected a mixed foraging subsistence base.

Within Cochiti Reservoir, only late Archaic occupations

(Armijo and En Medio phases) have been documented. This documentation is based largely upon diagnostic projectile points, and thus only provides relative dates. One exception to this is an Archaic shelter, LA 12566, which has been excavated during the National Park Service's Cochiti Lake Project. Four radiocarbon dates recovered from the shelter include: 3100 ± 70 B.P., 2640 ± 145, 2540 ± 75, and 1390 ± 95 (1750 B.C., 670 B.C., 590 B.C., and A.D. 560, respectively) (Traylor et al. 1977). Obsidian hydration samples recovered during the second phase of the University of New Mexico's Cochiti Reservoir Project have also provided indications of late Archaic dates, although the obsidian has been recovered in surficial contexts and thus any dates based upon this material must be considered provisional (Haecker 1977).

Sites which are summarized here as *probable Archaic* were based, for a few sites, upon the surficial obsidian hydration readings. Most, however, fall into a category of *lithic unknown* or *nonstructural lithic scatters*. In general, these sites were characterized by the presence of lithic artifacts (rarely including diagnostic projectile points) and an absence of ceramic, glass, metal or plastic materials. Specifically, the nonstructural lithic category included not only sites characterized solely by lithic artifacts and/or hearth features, but also included those exhibiting fewer than five sherds (Biella and Chapman 1977a). Although we recognized that these lithic sites could be of greater (Paleo-Indian) or lesser (Anasazi) antiquity, we were encouraged that preliminary obsidian readings from a sample of excavated sites with greater numbers of sherds were lower than those with few or no sherds (see LA 12486 vs. LA 12494 in Haecker 1977).

During the permanent and flood pool surveys of Cochiti Reservoir, 82 nonstructural lithic unknown sites were documented. Sixty-three percent were characterized by hearth activities, either in the form of formal hearth features (34 sites) or scatters of firecracked rock (18 sites). Although one site was characterized by an estimated 8 to 10 separate hearth features, most only exhibited one or two hearths. Sites ranged in size from 16 to 12,500 square meters in area. Densities of artifactual debris ranged from 0.01 to 179.0 artifacts per square meter although most exhibited between 0.1 and 5.0 items per square meter. Milling implements (manos and metates) were uncommon, but when documented frequently were associated with hearth features. Considerable amounts of chipped stone debris were recorded on all of the sites with recurrent evidence of tool manufacturing activities (cores, hammerstones, flake debitage, and angular debris). Most of the sites had some evidence of utilized debitage, but formally shaped tools such as projectile points were extremely rare.

These lithic sites thus represented a range in processing and consumption activities from apparent single episode campsites to recurrently occupied locales. Tool manufacturing was clearly the most commonly represented activity class. Excavated examples of the range of lithic sites included the low density, intermittent use sites (such as LA 13350, 13351, 13352, and 13353, this volume), and higher density use sites (such as LA 12494 and 12456, see Chapman et al. 1977).

Pueblo Period Sites in Cochiti Reservoir

Early Developmental or Basketmaker III/Pueblo I

The term *Basketmaker* was proposed in the original Pecos Classification of 1927 (McGregor 1965) and served to distinguish a transitional phase between the earlier Archaic and later Pueblo periods. This transition occurred at some time between A.D. 500 and 700 for populations in the Northern Rio Grande (Wendorf 1954; Cordell n.d.) and reflects a shift in adaptation from a mixed hunting-gathering economy to a more focal agricultural subsistence base. Early manifestations of this change have been termed Basketmaker III (BM-III) and are characterized by the first substantial appearance of ceramic vessels, pithouses, and surface storage structures. In the immediate Cochiti Reservoir area this transition occurred a little later in time, ca. A.D. 750-850 (Peckham and Wells 1967). Pueblo I (P-I) sites in this region generally reflect a continuity in structure and settlement with pithouse features and surface storage structures. In the Cochiti area, P-I sites date between A.D. 850-950.

Although Basketmaker and early Pueblo sites occur infrequently in the Cochiti area, they have been documented both in the Pajarito Plateau and Santa Fe River areas. One P-I site, LA 272, which consisted of three pithouses, a minimum of two noncontiguous roomblocks (9 and 2 rooms each), a storage pit and a diversion wall (Snow 1971:1), was excavated during the Cochiti Dam Salvage Project. LA 272 is typical of BM-III/P-I sites in the region, although large villages have been reported (Biella 1977:120). No new sites which dated to BM-III or P-I were recorded during the surveys of Cohiti Reservoir.

Late Developmental or Pueblo II

Late Developmental (A.D. 900-1200, Wendorf and Reed 1955) or Pueblo II (P-II) (A.D. 950-1175, Peckham and Wells 1967) sites reflect an extension of the BM-III/P-I phases in the Cochiti area. Documented P-II sites remain few in number for the general Cochiti area (ca. 30, Biella 1977). They are distributed along the southern mesa tops of the Pajarito Plateau and in the Northern Rio Grande Valley. In the southern Pajarito Plateau and Rio Grande Valley area, P-II sites continue to be characterized by a few pithouse structures with and without associated surface structures. LA 6462, which was excavated during the Cochiti Dam Project (Bussey 1968), is a typical example of the P-II continuity from the earlier phases. LA 6462 consisted of a series of residential complexes or units characterized by isolated pithouses. Eleven pithouses in all, spanning middle to late Kwahe'e phases, were recorded. Although surface roomblocks were proposed, none were documented. In the northern Pajarito Plateau, P-II sites are consistently larger in size and are typically composed of roomblocks of 10 to 20 rooms, some associated with pit depressions or kivas. Most of these larger sites are multicomponent P-II/P-III phase sites. Some range from 70 to 100 rooms or more. This latter architectural complex is characteristic of the later P-III phase in the immediate Cochiti area.

No P-II sites were documented during the Cochiti Reservoir surveys although two sites with P-II components were noted during the Cochiti Dam Project; they were situated below the mouth of White Rock Canyon.

Coalition or Pueblo III

The Pueblo III (P-III) phase of the Anasazi period represents the first substantial occupation of the Pajarito Plateau-Cochiti Reservoir region. Beginning as early as ca. A.D. 1175 and extending into the 1300s (Peckham and Wells 1967), small residential site locations are documented throughout the area. These range from isolated rooms (see LA 13086, Provenience 3, this volume, for an excavated example), to sites characterized by a pithouse depression and a few surface structures (LA 12522, Laumbach et al. 1977), to residential complexes of several pithouse or kiva structures and associated rows of surface rooms (LA 5014, Laumbach et al. 1977). The range of documented P-III sites is thus varied in the Cochiti area.

Although the general P-III occupation of the Pajarito Plateau and upper Middle Rio Grande Valley area, totaling some 363 sites, is intensive, the occupation within the reservoir itself remains ephemeral. Only 10 single component P-III sites and an additional 15 multicomponent P-III/P-IV sites have been documented. They reflect, however, the full range of residential or architectural sites as recorded for the region as a whole. The only exception is large pueblos of 50 to 200 rooms. These latter have been noted in the northern Pajarito Plateau and suggest earlier and larger aggregations of people in the north, an indication which is marked in the earlier P-II phase as well.

Classic or Pueblo IV

By the end of the P-III phase (as documented by the presence of Santa Fe B/W ceramics) or by the beginning of the Pueblo IV (P-IV) phase (with the introduction of Rio Grande glaze wares), aggregated village centers and isolated one to three room structural sites became the dominant form of settlement throughout the Cochiti region. Within the reservoir, only one large aggregated pueblo of an estimated 200 to 400 rooms (LA 12579) was documented. The vast majority of P-IV sites were small structural locales, commonly referred to in the literature as field houses. Site variability in the reservoir included four single component P-IV sites; eight lithic and ceramic scatters; 38 sites characterized by freestanding or isolated one-room structures; 14 sites with two contiguous rooms; three sites with three contiguous rooms; one site with four contiguous rooms; two sites characterized by rubble and an indeterminant number of rooms; one rockshelter with a single chamber; one pueblo of 200 to 400 rooms; one prehistoric trail; and 14 sites with agricultural facilties (systems of terraces or grids and check dams).

It can thus be seen that in the reservoir, P-IV sites were generally small locales exhibiting a range in activities. From excavated data (see Chapman et al. 1977 and various authors in this volume), the P-IV occupation of the reservoir reflects ephemeral, short-term occupations, perhaps representing a seasonal (summer?) residential component of the P-IV settlement system.

Historic Period Sites in Cochiti Reservoir

The Historic period of adaptation within the Cochiti region, as in the state of New Mexico as a whole, represents a complex set of adaptive strategies undertaken by several different cultural groups including Indian, Spanish, and Anglo. During the course of the Cochiti Reservoir Project, we proposed segmenting the Historic period into seven temporal phases, which reflect major historic events and changes in adaptation: Spanish Exploration; Spanish Colonization; Pueblo Revolt and Reconquest; Spanish Colonial; Mexican; United States Territorial; and New Mexican Statehood phases. These have been discussed in detail in Abbink and Stein (1977:151-171). Within the reservoir, only Spanish Colonial, U.S. Territorial, and Statehood phases are well represented, although a few sites from the other phases have been documented as well.

Spanish Exploration (A.D. 1540-1598)

This phase was characterized by series of four expeditions into the New Mexico area which were undertaken principally as entrepreneurial explorations to gather information about settlement potential, mineral wealth, and indigenous labor. Within the Cochiti area (and much of the state as a whole), the impact of the Spanish explorations was limited. No sites which date to this phase were documented in Cochiti Reservoir.

Spanish Colonization (A.D. 1598-1680) and Pueblo Revolt (A.D. 1680-1692)

The first major impact of the Spanish in New Mexico began with the Onate expedition of 1598, which marked the first permanent Spanish occupation of New Mexico. The impact of Spanish administrative policies on native populations was profound, including disruption of trade relations between Pueblo and Apachean groups, impoundment of Indian labor to support a Spanish administrative system, and the introduction of livestock and new agricultural products. The impact of the Spanish Colonization phase ultimately lead to an organized rebellion by the indigenous Indian populations and resulted in the expulsion of Spanish colonizing populations for a 12 year period (the Pueblo Revolt of 1680-1692).

Archeological sites dating to this phase in Cochiti Reservoir are few in number. Two (LA 34 and 591) were excavated during the Cochiti Dam Project (Snow 1971, 1973a); four others were recorded during the surveys of Cochiti Reservoir, one of which was excavated (LA 5013, Laumbach et al. 1977).

Spanish Colonial (A.D. 1692-1821)

De Vargas' expedition in A.D. 1692 initiated the reconquest of New Mexico by Spain. The recolonization effort was characterized by a more extensive settlement and administrative policy which included the immigration of individuals and families for purposes of homesteading New Mexico. A system of land grants was introduced for both the Spanish and Indian populations, as was a system of presidios. Fourteen sites which date to this phase were documented during the surveys of Cochiti Reservoir, ranging from artifactural scatters to residential sites of three or four rooms. Seven were excavated during the two mitigative phases (LA 9138, 9139, 10110, 10111, 12161, 12438, 12507 in Chapman et al. 1977, and LA 13291 in this volume). Two other sites, also dating to this phase, were excavated during the Cochiti Dam Project. One may have represented a presidio (LA 6178, Snow 1973b), and the other an historic occupation of a pueblo village by Indian and Spanish individuals (LA 70, Snow 1976).

Mexican (A.D. 1821-1846)

The Mexican phase began when Mexico gained its independence from Spain. Historic documentation for this phase suggests that one major impact of the Mexican revolt was a drastic reduction in effective administrative and ecclesiastical ties between the New Mexican colony and Mexico itself. At the same time avenues of trade were opened between New Mexico and the eastern United States via the Santa Fe Trail, established in 1820, and via the *Comanchero* trade network (Abbink and Stein 1977: 160-162).

It is extremely difficult to ascertain whether any sites in Cochiti Reservoir were occupied during the Mexican phase since datable materials, principally ceramics, reflect a continuity of style from the Spanish Colonial phase. Consequently, we were unable to distinguish between *late* Spanish Colonial and Mexican phase sites. It should be emphasized, however, that single component early 19th century sites were not documented during the Cochiti Reservoir surveys. At least one excavated site (LA 10114, this volume) may reflect an occupation spanning the late 18th to early 19th centuries.

U.S. Territorial (A.D. 1846-1912)

In 1846, the United States acquired the New Mexican colony from Mexico. Extensive trade networks including the Santa Fe Trail (begun in the 1820s) and the railroads (post 1880) resulted in the introduction of massive amounts of trade goods from the eastern, industrial United States. During this phase a wage economy was functionally introduced to augment homesteading herding and agricultural economies. Within the reservoir, only the herding economy was well documented by the presence of 24 early Territorial phase sites (in addition to a number of corral and pen sites which could not be dated). Of these, four were tested including LA 10114 (see above), LA 13291 (this volume, LA 12449 and LA 12465 (Chapman et al. 1977). Mining and timbering activities have also been documented in the immediate area (cf. the towns of Bland and Boom, Abbink and Stein 1977).

Statehood (A.D. 1912 – present)

The Statehood phase is defined by the change in political status of New Mexico, although factors such as a wage economy and industrial goods continue to be of increasing importance. Within the reservoir, sites dating to the 1920s and 1930s seem to reflect a continuity in herding activities (small habitation units and corrals). After World War II, there appears to have been a major change in the use of the reservoir, from herding to recreational activities. Although a few habitation units have been recorded on survey, most sites reflect short-term campsites. For example, 12 of 18 late 20th century sites are characterized by isolated hearth features and low densities of glass, metal, or plastic debris. The construction and filling of Cochiti Reservoir reflects an extension of the recreational use of the area.

SELECTION OF SITES FOR MITIGATION: SAMPLING CONCERNS

For purposes of the present mitigation program, all sites were assumed to exhibit some probability of destruction as a direct consequence of the project. Two classes of direct impact, inundation and vandalism, were identified and discussed above. Although the selection of *classes* of sites for excavation or testing as part of the mitigation program was based stictly upon the research needs outlined in the preceding section, the probability of adverse impact upon individual site locations was given consideration. In recognition of the fact that excavation itself is controlled destruction, and in recognition of the fact that sites situated at lower elevation exhibited a higher probability of destruction (through either inundation or vandalism), whenever possible, sites closest to the shoreline and at lower elevations were selected for excavation.

This program of site selection thus *conserved* resources with uncertain (although presumed) probabilities for future destruction as much as possible. It must be emphasized, however, that the research needs as outlined above dictated the *classes* of sites which warranted further investigation through excavation or testing, and hence mitigation.

In terms of our research interests, we have proposed gathering information at two different scales of reference: the site specific or intrasite activity performance level; and the intersite, regional level. Thus, the mitigation program for archeological sites in Cochiti Reservoir required that we develop a sampling program that: (1) selected sites from within each temporal/cultural period which reflected the range of activities performed for that period of adaptation (to provide information about variability within a single adaptive strategy and ultimately differences between adaptive strategies); and (2) selected a sample of sites situated in different micro and macroenvironmental situations within the reservoir (such that we can evaluate the effect of different environmental variables—physiographic situation, soil substrate, etc.—as they might condition the selection of the location of a particular site for activity performance).

In each of the following sections we will outline and discuss different factors as they affected the sample of sites investigated during the flood control pool mitigation program.

Sampling by Site Class

Sites were initially stratified into different temporal/ cultural periods: probable Archaic (lithic unknown); Anasazi (Pueblo III, Pueblo IV, Pueblo III/IV, Pueblo IV/V); Historic (Pueblo V, Spanish Colonial, Territorial, Statehood); and three *unknown* temporal periods (probable Anasazi, phase unknown; probable Historic, phase unknown; and Unknown). Within each of these temporal units, sites were then segmented into *classes.* The presence or absence of features, the number of features and/or structures, and the character of the artifactual assemblages for each site location, *based upon survey documentation,* were employed as data to create site classes.

It was hoped that the stratification of the various archeological sites into different classes would reflect differences in the kinds, structure, and organization of activities performed within the boundaries of the reservoir for each temporal period. For example, probable Archaic period sites were intially segmented into two populations: those sites exhibiting hearths or firecracked rock scatters; and those sites characterized solely by artifactual debris. We felt that such a stratification would distinguish possible residential campsites (those with hearths and consumption activities) from specialized task locales (artifactual scatters only). Similarly, for the Anasazi period, sites were primarily stratified by the numbers of rooms present. A site characterized by an isolated masonry room would presumably have served a different function than one characterized by a number of subsurface pit depressions and a series of surface roomblocks. For Historic period sites, again the number and kinds of structures (both habitation and corral features) were felt to be the most sensitive measures of activity differences.

Tables 1.1 through 1.12 provide summaries of site variability by temporal/cultural period and by site class for both the permanent and flood control pool surveys. As can be seen by the tables, different attributes were selected for the various temporal periods although, in general, the kinds and numbers of features were the principal data used to create site classes, regardless of period. Also included in each table is the sampling fraction, by site class, undertaken during both the permanent and flood control pool mitigation programs. Commonly, sampling fractions by temporal/cultural period were higher for those sites which could be more firmly dated. Sampling fractions for these sites ranged from 18% to 43%. The 33% to 43% samples reflect small numbers of sites in those categories. The nonstructural lithic and Pueblo IV categories with larger samples, 82 components each, were sampled at 18% and 21%, respectively.

The less securely datable categories (Tables 1.10 to 1.12) were sampled at lower fractions between 8% and 13%. Twentieth century sites (Tables 1.8, 1.9) were also less intensively sampled. These sites were well documented in the historic literature or as in the case of the recent late 20th century sites, well documented during survey. These latter sites principally consisted of modern campsites, hearths with glass and/or metal debris. They were generally surficial and were mapped and described in detail on survey. Hence it was felt that little additional information could be derived through excavation.

Sampling within temporal/cultural periods by site class provides two basic kinds of information pertinent to our research approach. First, it insures a sample of a range of activities as represented for a temporal/cultural period, that is, differences in intrasite activity performance. Secondly, differences between temporal/cultural periods may be examined which permits us to discuss possible evolutionary changes in the organization of human behavior within the reservoir.

The cultural ecological part of the research approach, however, requires sampling not only of individual sites, but also the *placement* of sites in a micro and/or macroenvironmental context. Thus, for each temporal/cultural period we needed to sample sites which were situated in a range of environmental settings as was reflected in the reservoir.

Table 1.1

SUMMARY OF SITE VARIABILITY BY TEMPORAL/CULTURAL AFFILIATION

Temporal/Cultural Affiliation	Components: Permanent Pool	Components: Flood Pool	Components: Total	Sample
Nonstructural lithic unknown	31 (11)	50 (2)	82 (13)	18%
Pueblo III	3 (1)	7 (1)	10 (2)	20%
Pueblo III/IV	4 (3)	11 (2)	15 (5)	33%
Pueblo IV	15 (8)	67 (9)	82 (17)	21%
Pueblo IV/V	3 (2)	4 (1)	8 (3)	43%
Pueblo V and Spanish Colonial	9 (5)	7 (1)	16 (6)	38%
Territorial	11 (2)	13 (0)	24 (2)	8%
Statehood	13 (0)	5 (0)	18 (0)	0%
Anasazi, phase unknown	8 (0)	93 (8)	101 (8)	8%
Historic, phase unknown	17 (3)	15 (1)	32 (4)	13%
Unknown temporal/cultural period	15 (2)	24 (1)	39 (3)	8%
TOTAL*	127 (36)	296 (25)	423 (61)	14%

* Since this table actually summarizes the different components represented at each site and only a few multicomponent categories are included, the total should NOT be confused with the number of sites. That is, only 33 of 102 permanent pool sites and 20 of 225 flood pool sites were sampled during the mitigation phases, reflecting 32% and 9% samples, or 16% overall.

Table 1.2

PROBABLE ARCHAIC (NONSTRUCTURAL LITHIC) SITES IN COCHITI RESERVOIR

Site Classes	Components: Permanent Pool	Components: Flood Pool	Total	Sample
(1) artifact scatter only	11 (2)+	19 (2)	30 (4)	13%
(2) firecracked rock and artifact scatter	12 (7)	6 (0)	18 (7)	39%
(3) 1-2 hearths and artifact scatter	7 (1)	18 (2)	25 (3)	12%
(4) 3-4 hearths and artifact scatter	1 (1)	4 (0)	5 (1)	25%
(5) > 5 hearths and artifact scatter	1 (0)	3 (0)	4 (0)	0%
TOTAL	32 (11)	50 (4)	82 (15)	18%

Sites included in the above table by Laboratory of Anthropology (LA) number:

Class 1: 10111, 11591, 12163, 12442*, 12450, 12454, 12468*, 12478, 12479, 12490, 12491, 12517, 13010, 13016, 13036, 13037, 13041, 13043, 13048, 13052, 13056, 13061, 13066, 13349, 13350*, 13351*, 13358, 13394, 13395, 13408.

Class 2: 12436, 12447*, 12448*, 12455, 12459, 12463*, 12486**, 12494*, 12495*, 12496*, 12502, 12521, 13063, 13300, 13321, 13343, 13383, 13400.

Class 3: 11592, 12445, 12446, 12456*, 12460, 12481, 12499, 12503, 13017, 13023, 13028, 13031, 13035, 13040, 13053, 13065, 13308, 13342, 13344, 13345, 13352*, 13353*, 13354, 13362, 13393.

Class 4: 12444*, 13019, 13027, 13029, 13348.

Class 5: 12439, 12893, 13038, 13359.

+ Numbers in parentheses reflect total of sampled components per site.
* Excavated or tested component by site.
** After excavation, LA 12486 was dated to the Anasazi P-IV phase.

Table 1.3

PUEBLO III SITES IN COCHITI RESERVOIR

Site Classes	Components: Permanent Pool	Components: Flood Pool	Total	Sample
(1) freestanding room(s)	1 (0)+	4 (0)	5 (0)	0%
(2) two contiguous rooms	0 (0)	2 (1)	2 (1)	50%
(3) three contiguous rooms	1 (0)	0 (0)	1 (0)	0%
(4) 12-17 room pueblo	1 (1)	0 (0)	1 (1)	100%
(5) pit depression	0 (0)	1 (0)	1 (0)	0%
TOTAL	3 (1)	7 (1)	10 (2)	20%

Sites included in the above table by LA number:

Class 1: 5015, 12158, 13058, 13355, 13409.

Class 2: 13086*, 13375.

Class 3: 5012.

Class 4: 5014*.

Class 5: 13307.

+ Numbers in parenthe_ reflect total of sampled components per site.
* Excavated or tested sit...

Table 1.4
PUEBLO III/PUEBLO IV SITES IN COCHITI RESERVOIR

Site Classes	Components: Permanent Pool	Flood Pool	Total	Sample
(1) artifact scatter only	0 (0)+	1 (0)	1 (0)	0%
(2) freestanding room(s)	0 (0)	4 (1)	4 (1)	25%
(3) two contiguous rooms	1 (0)	2 (0)	3 (0)	0%
(4) three contiguous rooms	2 (1)	1 (1)	3 (3)	100%
(5) 4-6 contiguous rooms	0 (0)	1 (0)	1 (0)	0%
(6) pit depressions with surface structures	1 (1)	1 (0)	2 (1)	50%
(7) terraces, check dams	0 (0)	1 (0)	1 (0)	0%
TOTAL	4 (3)	11 (2)	15 (5)	33%

Sites included in the above table by LA number (note that a site may appear in more than one class):

Class 1: 13338.
Class 2: 13049*, 13058, 13340, 13365.
Class 3: 12440, 13374, 13410.
Class 4: 5011*, 12511*, 13086*.
Class 5: 13356.
Class 6: 12522*, 13324.
Class 7: 13410.

+ Numbers in parentheses reflect total of sampled components per site.
* Excavated or tested sites.

Table 1.5
PUEBLO IV SITES IN COCHITI RESERVOIR

Site Classes	Components: Permanent Pool	Flood Pool	Total	Sample
(1) artifact scatter only	2 (1)+	5 (0)	7 (1)	14%
(2) freestanding room(s)	11 (7)	28 (3)	39 (10)	26%
(3) two contiguous rooms	1 (0)	12 (4)	13 (4)	31%
(4) three contiguous rooms	0 (0)	3 (0)	3 (0)	0%
(5) four contiguous rooms	0 (0)	1 (0)	1 (0)	0%
(6) rubble (no. of rooms indeterminate)	1 (0)	1 (0)	2 (0)	0%
(7) rockshelter	0 (0)	1 (0)	1 (0)	0%
(8) 200-400 room pueblo	0 (0)	1 (0)	1 (0)	0%
(9) trail	0 (0)	1 (0)	1 (0)	0%
(10) terraces, check dams	0 (0)	14 (2)	14 (2)	14%
TOTAL	15 (8)	67 (9)	82 (17)	21%

Sites included in the above table by LA number (note that a site may appear in more than one class):

Class 1: 12163, 12482, 12483*, 13012, 13039, 13396, 13401.
Class 2: 5013*, 10114*, 12172, 12438*, 12443*, 12447*, 12452, 12470, 12512*, 12513, 12514, 12517*, 12519*, 13014, 13021, 13030, 13057, 13064, 13068, 13074, 13076*, 13077, 13078, 13082, 13084*, 13294, 13296, 13319, 13323, 13328, 13347, 13376, 13379, 13390, 13392, 13403, 13406, 13408, 13455.
Class 3: 12514, 13018, 13024, 13050*, 13054*, 13070, 13072, 13076*, 13078, 13084*, 13390, 13398, 13454.
Class 4: 13015, 13318, 13368.
Class 5: 13047.
Class 6: 12461, 13404.
Class 7: 13316.
Class 8: 12579.
Class 9: 13067.
Class 10: 13068, 13070, 13072, 13077, 13078, 13079, 13080, 13084, 13291, 13292*, 13293*, 13294, 13296, 13404.

+ Numbers in parentheses reflect total of sampled components per site.
* Excavated or tested sites.

Table 1.6
PUEBLO IV/PUEBLO V SITES IN COCHITI RESERVOIR

Site Classes	Components Permanent Pool	Flood Pool	Total	Sample
(1) artifact scatter only	1 (0)+	0 (0)	1 (0)	0%
(2) freestanding room(s)	2 (1)	3 (1)	5 (2)	40%
(3) two contiguous rooms	1 (1)	0 (0)	1 (1)	100%
(4) terraces	0 (0)	1 (0)	1 (0)	0%
TOTAL	3 (2)	4 (1)	8 (3)	43%

Sites included in the above table by LA number (note that a site may appear in more than one class):

Class 1: 12454.

Class 2: 12161*, 12162, 12469, 13055, 13291*.

Class 3: 12454*.

Class 4: 13055.

+ Numbers in parentheses reflect total of sampled components per site.
* Excavated or tested sites.

Table 1.7
PUEBLO V and/or SPANISH COLONIAL (17th/18th CENTURY) SITES IN COCHITI RESERVOIR

Site Classes	Components Permanent Pool	Flood Pool	Total	Sample
(1) artifact scatter only	1 (0)	1 (0)	2 (0)	0%
(2) freestanding room(s)	4 (2)	3 (1)	7 (3)	43%
(3) two contiguous rooms	3 (3)	2 (0)	5 (3)	60%
(4) 1-4 contiguous rooms	1 (0)	0 (0)	1 (0)	0%
(5) terraces	0 (0)	1 (0)	1 (0)	0%
TOTAL	9 (5)	7 (1)	16 (6)	38%

Sites included in the above table by LA number (note that a site may appear in more than one class):

Class 1: 12472, 13300.

Class 2: 5017, 9138*, 12160, 12466, 12507*, 13291*, 13391.

Class 3: 9138*, 9139*, 10110*, 13381, 13391.

Class 4: 12452.

Class 5: 13290.

+ Numbers in parentheses reflect the total of sampled components per site.
* Excavated or tested sites.

Table 1.8
TERRITORIAL SITES IN COCHITI RESERVOIR
(Late 19th and Early 20th Centuries)

Site Classes	Components: Permanent Pool	Components: Flood Pool	Total	Sample
(1) artifact scatter only	4 (0)+	2 (0)	6 (0)	0%
(2) 1-2 habitation units	5 (1)	3 (0)	8 (1)	13%
(3) habitation units and corrals	1 (1)	2 (0)	3 (1)	33%
(4) corrals only	1 (0)	5 (0)	6 (0)	0%
(5) trail, cairns	0 (0)	1 (0)	1 (0)	0%
TOTAL	11 (2)	13 (0)	24 (2)	8%

Sites included in the above table by LA number:

Class 1: 12434, 12458, 12[illegible]7[illegible], 12500, 13011, 13377.
Class 2: 10111*, 12453, 12[illegible]4, 12488, 12489, 13306, 13309, 13369.
Class 3: 12449*, 13367, 13451.
Class 4: 12485, 13046, 13304, 13320, 13357, 13360.
Class 5: 13289.

+ Numbers in parentheses reflect total of sampled components per site.
* Excavated or tested sites.

Table 1.9
STATEHOOD SITES IN COCHITI RESERVOIR
(20th Century)

Site Classes	Components: Permanent Pool	Components: Flood Pool	Total	Sample
(1) artifact scatter only	0 (0)+	1 (0)	1 (0)	0%
(2) hearths	11 (0)	1 (0)	12 (0)	0%
(3) corral(s) only	0 (0)	1 (0)	1 (0)	0%
(4) habitation unit and corral(s)	0 (0)	1 (0)	1 (0)	0%
(5) lean-to	1 (0)	0 (0)	1 (0)	0%
(6) cave with dividing wall	0 (0)	1 (0)	1 (0)	0%
(7) habitation unit	1 (0)	0 (0)	1 (0)	0%
TOTAL	13 (0)	5 (0)	18 (0)	0%

Sites included in the above table by LA number:

Class 1: 13366.
Class 2: 10110, 12435, 12472, 12473, 12475, 12476, 12477, 12484, 12487, 12493, 12500, 13359.
Class 3: 13458.
Class 4: 13451.
Class 5: 12437.
Class 6: 13059.
Class 7: 12477.

+ Numbers in parentheses reflect total of sampled components per site.

Table 1.10
POSSIBLE ANASAZI (?) SITES IN COCHITI RESERVOIR

Site Classes	Components: Permanent Pool	Flood Pool	Total	Sample
(1) freestanding room or wall (s)	4 (0)+	45 (2)	49 (2)	4%
(2) two contiguous rooms	2 (0)	4 (0)	6 (0)	0%
(3) rubble (no. of rooms indeterminant)	0 (0)	3 (0)	3 (0)	0%
(4) pit depression with surface structures	0 (0)	3 (1)	3 (1)	33%
(5) pit depression without surface structures	0 (0)	9 (4)	9 (4)	44%
(6) terraces, check dams	1 (0)	21 (1)	22 (1)	5%
(7) trail	0 (0)	1 (0)	1 (0)	0%
(8) shelter	1 (0)	5 (0)	6 (0)	0%
(9) petroglyphs	0 (0)	1 (0)	1 (0)	0%
TOTAL	8 (0)	93 (8)	101 (8)	8%

Sites included in above table by LA number (note that a site may appear in more than one class):
Class 1: 12163, 12462, 12509, 12517, 12518, 13030, 13042, 13044, 13050, 13060, 13064, 13066, 13070, 13071, 13073, 13075, 13084*, 13085, 13086*, 13087, 13297, 13298, 13299, 13300, 13302, 13310, 13312, 13319, 13323, 13346, 13364, 13371, 13372, 13373, 13380, 13382, 13383, 13385, 13386, 13388, 13389, 13392, 13400, 13402, 13446, 13449, 13450, 13455, 13457.
Class 2: 12163, 12451, 12480, 12510, 13081, 13365.
Class 3: 13313, 13319, 13387.
Class 4: 13326, 13329*, 13388.
Class 5: 13330*, 13331*, 13332*, 13333*, 13334, 13335, 13336, 13378, 13397.
Class 6: 12461, 13042, 13050, 13051, 13052, 13055, 13064, 13086**, 13295, 13330, 13303, 13311, 13322, 13327, 13370, 13371, 13378, 13383, 13384, 13405, 13409, 13453.
Class 7: 13064.
Class 8: 12517, 13050, 13052, 13310, 13312, 13372.
Class 9: 13452.

\+ Numbers in parentheses reflect total sample of components per site.
* Excavated or tested sites.
** Four core soil samples were analyzed from this site (see Fosberg and Husler 1979).

Table 1.11
POSSIBLE HISTORIC (?) SITES IN COCHITI RESERVOIR

Site Classes	Components: Permanent Pool	Flood Pool	Total	Sample
(1) freestanding room	5 (2)+	8 (1)	13 (3)	23%
(2) two contiguous rooms	3 (0)	1 (0)	4 (0)	0%
(3) corrals	2 (0)	3 (0)	5 (0)	0%
(4) isolated walls	4 (1)	3 (0)	7 (1)	14%
(5) rubble (no. of rooms indeterminant)	1 (0)	0 (0)	1 (0)	0%
(6) petroglyphs	2 (0)	0 (0)	2 (0)	0%
TOTAL	17 (3)	15 (1)	32 (4)	13%

Sites included in the above table by LA number (note that a site may appear in more than one class):

Class 1: 12465*, 12466, 12505, 12523, 12524*, 13033, 13034, 13045, 13083, 13291*, 13357, 13448, 13453.
Class 2: 12465, 12471, 12525, 13453.
Class 3: 12459, 12465, 13309, 13363, 13448.
Class 4: 10110, 10114*, 12467, 12506, 12525, 13045, 13069.
Class 5: 12466.
Class 6: 12465, 12489.

\+ Numbers in parentheses reflect total of sampled components per site.
* Excavated or tested sites.

Table 1.12

SITES OF UNKNOWN TEMPORAL OR CULTURAL AFFILIATION IN COCHITI RESERVOIR

Site Classes	Components Permanent Pool	Flood Pool	Total	Sample
(1) artifact scatter	1 (0)+	0 (0)	1 (0)	0%
(2) freestanding room(s)	7 (1)	10 (0)	17 (1)	6%
(3) rockshelter	1 (0)	1 (0)	2 (0)	0%
(4) isolated pit depressions	1 (1)	0 (0)	1 (1)	100%
(5) rubble	0 (0)	3 (0)	3 (0)	0%
(6) isolated wall(s)	0 (0)	5 (1)	5 (1)	20%
(7) corral(s)/pen(s) ?	0 (0)	2 (0)	2 (0)	0%
(8) hearths	0 (0)	2 (0)	2 (0)	0%
(9) petroglyphs	5 (0)	1 (0)	6 (0)	0%
TOTAL	15 (2)	24 (1)	39 (3)	8%

Sites included in the above table by LA number (note that a site may appear in more than one class):

Class 1: 12509.
Class 2: 9138*, 12464, 12492, 12497, 12498, 12501, 12516, 13032, 13049, 13055, 13301, 13305, 13314, 13315, 13339, 13347, 13370.
Class 3: 12457, 13317.
Class 4: 12515*.
Class 5: 13407, 13456, 13457.
Class 6: 13038, 13084*, 13301, 13337, 13370.
Class 7: 13361, 13368.
Class 8: 13341, 13383.
Class 9: 10111, 12457, 12472, 12485, 12491, 13457.

+ Numbers in parentheses reflect total of sampled components per site.
* Excavated or tested sites.

Sampling Different Environmental Situations

Cochiti Reservoir is situated at the interface of a diverse and complex set of environmental provinces. To the west lie the Jemez Mountain and Pajarito Plateau canyon systems. This area is characterized by a variety of physiographic situations and a high diversity of floral and faunal species. Elevations rise to over 11,200 feet at the peaks of the Jemez Mountains. Precipitation ranges from 12 to 16 inches annually. Twelve vegetative communities within three major life zones are represented (Upper Sonoran, Transition, and Canadian). To the east of the reservoir rises the Caja del Rio Plateau. It is a far less complex physiographic unit and is situated entirely within the Upper Sonoran life zone. The Caja is more subdued in topographic relief and rises to a maximum 7,200 foot elevation. Precipitation averages approximately 10 inches annually.

The reservoir itself is situated predominantly within White Rock Canyon. The canyon consists of a variety of patchy vegetative associations within the Upper Sonoran life zone, supporting both riparian and arid (i.e. cacti) communities. Elevational relief within the canyon ranges from 300 to 400 feet. Annual rainfall averages 8 to 10 inches. The Rio Grande, the major perennial river and source of daily water, flows through White Rock Canyon.

The southern portion of the flood pool of the reservoir extends into the Santo Domingo Basin of the upper Middle Rio Grande Valley. This is a lowland area situated entirely within the Upper Sonoran life zone. Rolling hills and a broad alluvial valley characterize the area. Average rainfall ranges from 8 to 10 inches annually.

To take advantage of the placement of Cochiti Reservoir, and to help understand human adaptation in the reservoir from a larger regional frame of reference, the reservoir was divided into two macroenvironmental sampling frames: White Rock Canyon itself, including both sides of the river; and the Rio Grande Valley area, in particular, the Canada de Cochiti (Tetilla Canyon) and Santa Fe River tributaries. An intensive examination of sites located within the canyon area could be expected to provide information about adaptations to patchy environments common to White Rock Canyon and to the Pajarito Plateau to the west. The southern valley area could be seen as contrastive to the complex canyon setting, and by including a major tributary such as the Santa Fe River, we could begin to evaluate an adaptation to a comparatively homogenous grassland setting.

Thus, we attempted to sample a range of sites in different microenvironmental situations within White Rock Canyon and the upper Middle Rio Grande Valley. For

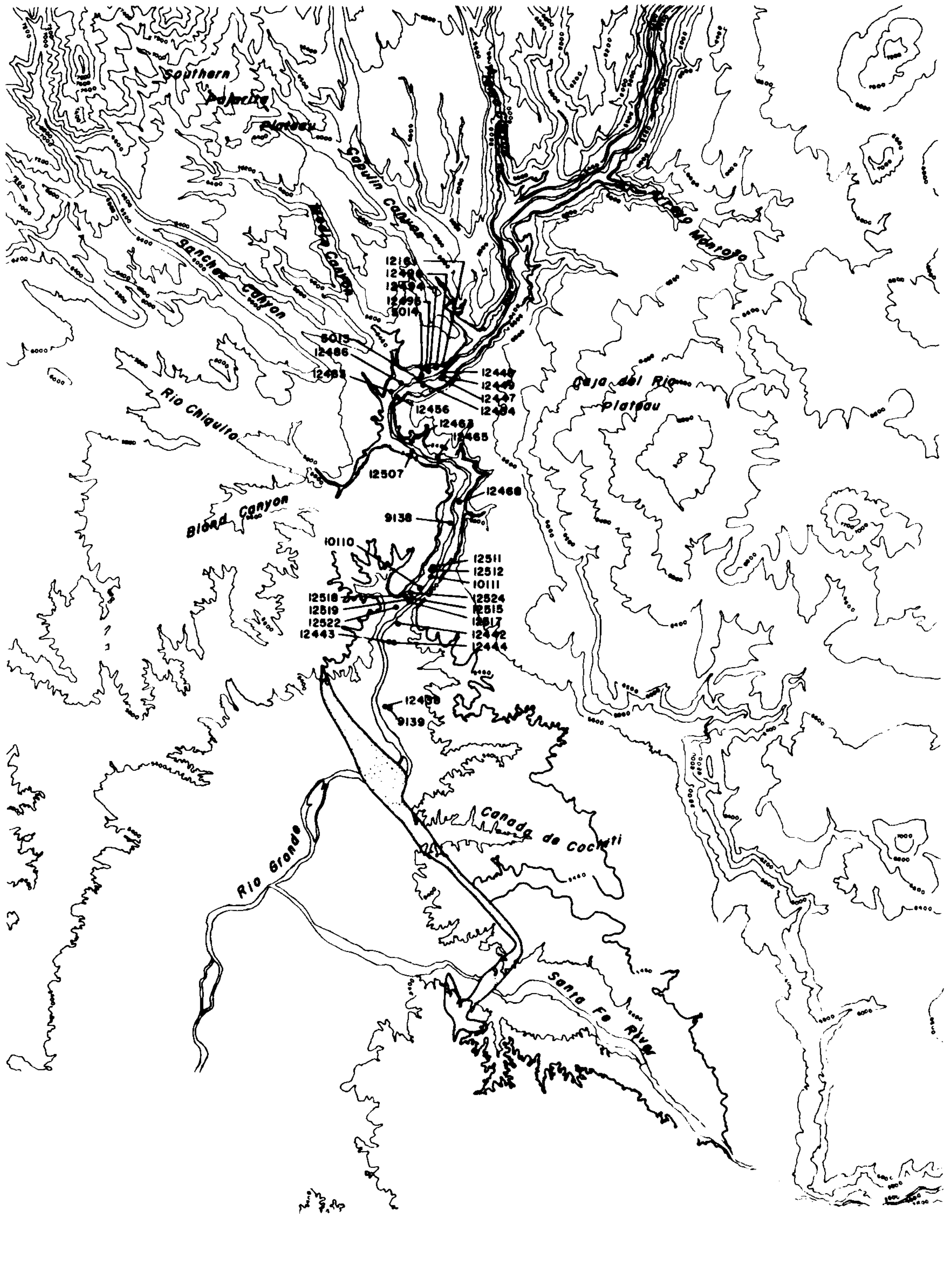


FIG. 1.2 Location of sites mitigated during the 1975 permanent pool excavation season.

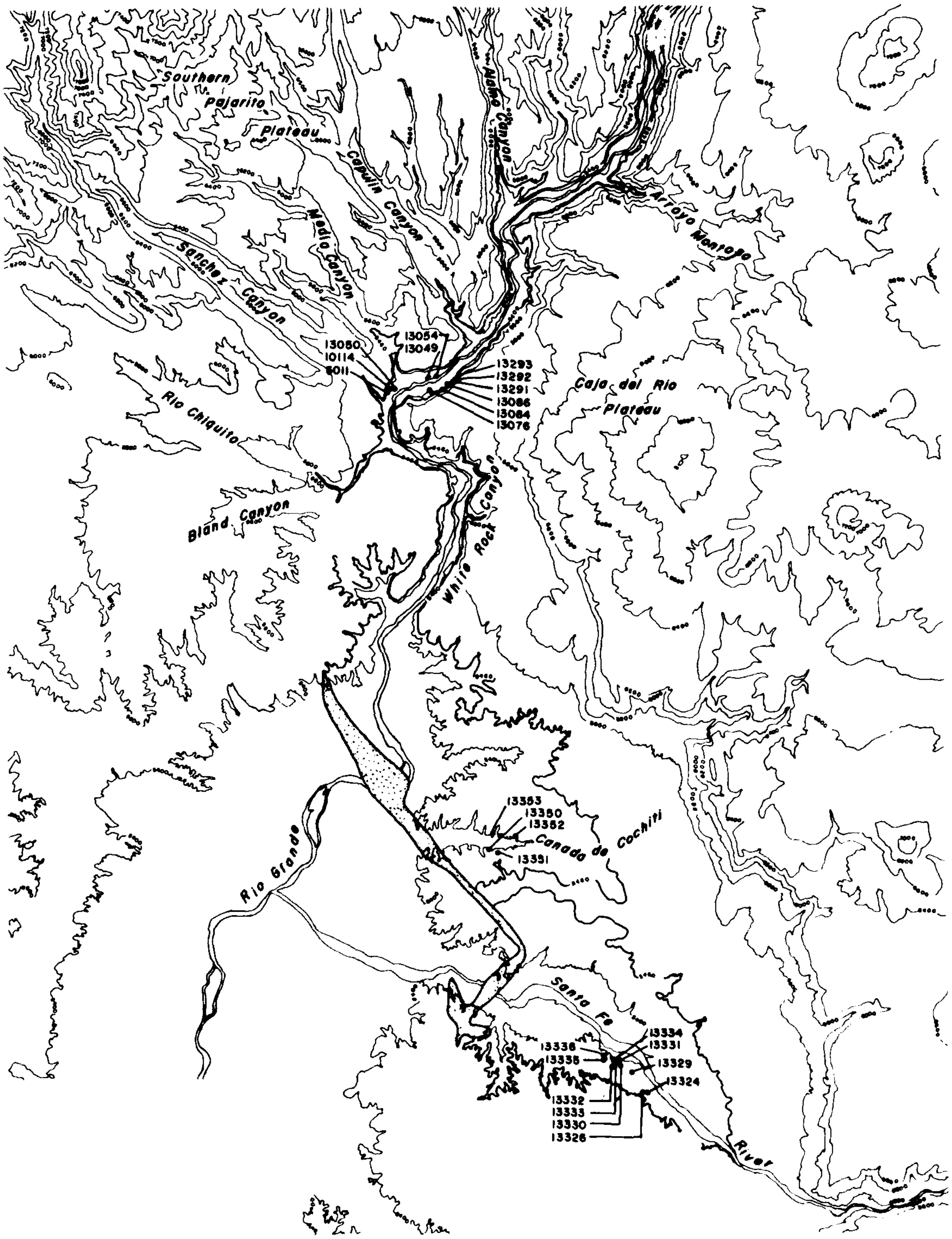


FIG. 1.3 Location of sites mitigated during the 1976-1977 flood control pool excavation seasons.

purposes of the selection of sites within these two zones, previous mitigative work was taken into consideration. Within White Rock Canyon, the preceding mitigation of sites located within the permanent pool of Cochiti Reservoir provided a large sample of sites situated in the canyon context (Chapman and Biella 1977a). During that phase, sites were selected on both sides of the river, at the mouth of the canyon, and at varying distances up the length of the canyon. The selection of sites within different microenvironmental situations within the canyon reflected, more or less, the distribution of sites as they occurred. That is, a larger frequency of sites were excavated from situations at the mouths of Sanchez and Medio Canyons, for example. This area exhibited the highest density of sites within the canyon. Although the time frame did not permit a formal sampling procedure for the permanent pool mitigation program, sites in the canyon were selected from different temporal/cultural periods in a variety of physiographic situations (see Fig. 1.2). Thirty-two percent of all sites located within the permanent pool were either tested or excavated during that phase of the Cochiti Reservoir Project. In addition, during the Cochiti Dam Project, seven sites situated at the mouth of White Rock Canyon were excavated (Lange 1968; Snow 1973a, 1973b, 1973c, 1976).

For purposes of the current mitigation program, we developed a slightly different sampling procedure. First, it was necessary to select sites situated in the valley environmental province. The only previous excavation sample in the valley was a result of the Cochiti Dam Project. Three sites (P-I, P-IV, 17th century) were investigated (Snow 1971). In order to increase the sample, sites situated along two eastern tributaries, the Canada de Cochiti and the Santa Fe River, were selected. The second sample from the flood pool was selected from sites located within White Rock Canyon. The exact nature of this sample was based upon a series of factors and will be discussed below.

As indicated in the introduction to this chapter, we attempted to select sites for mitigation first in terms of research needs and then, whenever possible, sites with the highest probability of adverse impact. Sites with the highest probabilities of destruction through inundation were those at the lowest elevations and in closest proximity to the permanent pool of the reservoir. Sites with highest accessibility (and hence probabilities of vandalism) within the flood pool were those located below the mouth of Capulin Canyon. Above this area, large amounts of silt were being deposited and access by boat, other than canoe, was extremely difficult, if not impossible (personal observation).

Thus an area between the mouth of White Rock Canyon and Capulin Canyon was considered for purposes of sampling during the current mitigation phase. Since the permanent pool sample examined sites in more or less equivalent proportions in distribution for the length of the reservoir, we developed a different sampling strategy for the flood pool sites in the canyon. One of the primary research problems for the present phase was an evaluation of differences in human adaptation within the reservoir from a regional frame of reference; or to what extent do sites in similar situations reflect similar adaptive strategies?

In order to help us evaluate this problem, we selected sites within a small microregional frame to augment the permanent pool sample. Essentially, we placed a *transect* across White Rock Canyon between roughly the mouths of Sanchez and Medio Canyons, extending across both sides of the river. Within this transect we excavated as many sites as time and funds permitted; 34% of all sites in this area were investigated. Fig. 1.3 illustrates the distribution of sites sampled within the valley and canyon contexts for the flood pool mitigation program.

Sampling at the Site-specific Level

Once sites had been selected for further investigation, one other major factor — excavation approach — was taken into consideration. Since our research approach emphasized defining or isolating activity structure as well as performance at individual sites, we attempted to sample as large a horizontal portion of site area as time permitted. Most of the sites were largely, if not entirely surficial, and thus the excavation approach dictated the collection of surface materials in as tight a spatial frame as was fiscally feasible. In this case collection units of 1 x 1 meter control were selected. While piece-polotting would have been preferable, time and density of materials did not permit such a collection strategy. Of course, surface materials may be subject to post-depositional movements, but we felt that since the sites were surficial, the 1 x 1 meter control would permit isolation of possible, if slightly distorted, horizontal activity areas. (Detailed discussions of techniques employed to display artifactual debris are presented in Spear 1979 and Camilli 1979.)

In general, subsurface excavation was limited to trenches to establish the occupational history of the site and to determine the extent to which specific sites were surficial. In a few cases (notably LA 5011, LA 13050, and LA 13086), the sites exhibited substantial subsurface materials. For LA 5011 and LA 13086, tracts of contiguous horizontal grids were stripped and investigated. At LA-13050, the depth of the subsurface materials was too great to spend time beyond establishing the history of the occupation of the site.

Sampling: Summary

During the course of the mitigation program in the flood pool of Cochiti Reservoir, some twenty sites were investigated. Each major temporal/cultural period represented in the reservoir was sampled. Previous excavations within the dam site and reservoir areas were taken into consideration when selecting sites for excavation during the current phase. Sites from two major environmental settings within the reservoir were examined: White Rock Canyon; and the upper Middle Rio Grande Valley. Because a vast majority of sites located in Cochiti Reservoir were located in White Rock Canyon, more sites were selected from the canyon setting. The previous mitigation work in the canyon had sampled sites in a variety of physiographic situations, more or less, in equal proportions as they occurred in the canyon. Thus more sites were excavated in high density areas and fewer in low density areas. Sites spanning all temporal periods were investigated. During the present mitigation phase, a different selection strategy was employed. In order to examine adaptation within White Rock Canyon in detail, a transect across one high density area (mouths of Sanchez and Medio Canyons) was intensively investigated. From both sampling programs 53 sites, or 16% of all sites located in Cochiti Reservoir were examined. Sampling at the site-specific level emphasized horizontal control in 1 x 1 meter units in order to delimit intrasite activity areas (see below).

INTRODUCTION TO THE SITE REPORTS

The site reports in this volume represent the results of one stage of analysis directed toward understanding variation through time in the character of human adaptation in the Cochiti Reservoir Project area. They provide analytically defined summaries of the occupational history of each site and of variation in activity performance which occurred at each site.

Although we have chosen to present these analytical results in a descriptive style, the reports represent a considerable time investment into preliminary analysis of field records, computerization of artifactual materials, and examination of a great number of distribution maps, illustrating variation in density among different classes of artifactual debris (some of which are reproduced in this report).

This section will outline, in brief fashion, the general kinds of analyses conducted during the project which resulted in the published site reports.

The basic objectives in developing the site reports were (1) to isolate the occupational history of site usage; (2) to identify the kinds of activities which characterized each temporal occupation of a given site; and (3) to identify the organization of activity performance characterizing each temporal occupation at a site.

Analysis of Occupational History

The first stage of analysis involved a careful review of all data derived through excavation concerning the gross stratigraphic and spatial relationships pertaining between architectural facilities, features, soil lenses, and artifactual distributions comprising the configuration of the site location as a whole. Objectives of this analysis were to ascertain whether the site represented evidence of occupation during a single temporal period or whether it represented a discontinuous history of occupation, abandonment, and reoccupation. Particular attention was paid to evidence of construction and remodeling sequences indicated by architectural remains (such as wall abutments, remodeled floors and entryways, and the relationship of wall foundations to exterior fill levels); and to any evidence of stratification in the sequence of artifact deposition for the site. Datable artifacts (such as ceramic fragments) were employed wherever possible in defining the structure of occupation and artifact deposition of each site.

Through these procedures the broad outlines of occupational and depositional history for each site were defined. This analysis was directed, as well, toward attempting to isolate whether the site location represented a relatively short *single event* occupation; a more episodic occupation on a repeated, perhaps, seasonal basis; or whether the site exhibited a discontinuous history of occupation, long-term abandonment, and reoccupation through time. In some cases this latter objective entailed a series of more finite analytical procedures involving comparative examination of artifact kinds and distribution, which were undertaken in conjunction with the second and third stages of analysis described below.

Kinds of Activities: Analysis

A paramount concern underlying the kinds of information we wished to gain through excavation of site locations within the reservoir boundaries was that of isolating the range in kinds of subsistence-related activities which were performed at each site. We proposed that such activities could be profitably defined as a set of activity classes which reflected stages in the cycling of food and technological resources by individuals comprising a human population: procurement activities, processing (or in the case of technological resources, manufacturing) activities, consumption (or usage) activities; and two basically logistical strategies which serve to articulate procurement, processing, and consumption of resources — transportation and storage.

At the site-specific level of analysis (as reflected in these site reports), we wished to identify what kinds of food and technological resources had been procured by the site occupants; how they had been processed; which of those resources had been consumed or used at the site; any information which might be gained concerning distances over which resources had been transported to the site; and any information concerning their short or long-term storage at the site location.

These conceptually defined information needs do not have a single, isomorphic material referent in the archeological record — they are instead potentially retrievable through analysis of a variety of material clues which may be found at any given site location. For example, direct evidence that maize was processed and consumed at a site location might be lacking entirely if no kernels were accidentally charred, if all cobs were completely burned as fuel, and if no maize pollen was preserved. Indirect evidence might be found, however, as specialized milling implements, architectural facilties (which exhibited no indications of use as habitation structures and thus may have served as bulk storage facilities), or fragments of stone griddles (*piki* stones) used for cooking flour or meal batter. None of these kinds of data when taken singly necessarily demonstrate the fact that maize processing and consumption occurred; but if examination of several site locations reveal that they consistently co-occur at sites characterized by habitation structures and are absent at contemporaneous sites which do not exhibit habitation structures, inferential statements can be offered concerning the kind of food processing and consumption they may represent.

In a similar sense, isolating whether or not tool manufacturing activities have been undertaken at a site location is a cumulative and often comparative analytical process through which assemblages of manufacturing by-products such as cores, flakes, and angular debris of similar materials must be examined for evidence indicating the stage of manufacture they represent, and their relative proportions of occurrence in given assemblages.

Since any given kind of artifactual remains might be used as *potential* information bearing upon a *variety* of activity classes, we have chosen to organize the presentation of such data on a site-by-site basis according to more conventional and familiar archeological content categories (such as architectural facilities, ceramics, stone artifacts, bone artifacts, etc.), rather than by our underlying conceptual taxonomy of activity classes.

In terms of information bearing upon the range in kinds of activity classes undertaken at different site locations, then, the site reports essentially serve as *data packages*. Emphasis has been placed upon documenting similar attribute data for each category of architectural and artifactual remains described, and the major analytical investment into using those data as information bearing upon kinds of activities performed is really reflected in the choice of attributes of the different kinds of remains which are documented.

Specific discussion of activity classes in the site reports themselves has been limited in general to artifactual assemblages (ceramics and stone tools) and has focused upon relatively broad activity realms such as procurement, manufacture and usage as reflected by those artifacts.

A major importance of the site reports resides in their description of architectural facilities and features and in their analytical definition of what are felt to be relevant artifact assemblages. Descriptions of architectural facilities and features constitute a *final* documentation in this regard (aside from field data sheets, photographs, etc. on permanent file); whereas descriptions of artifactual assemblages in actuality constitute discussion of analytically defined units of observation. These assemblages have been assigned numbers for each site location and the reader is referred to the data appendices for more complete documentation of artifact variability within each assemblage.

Intrasite Space-use Organization

A third emphasis of the site reports was to document the results of analysis directed toward isolating the manner in which site space was utilized by site occupants. This analysis focused primarily upon distributions of artifactual materials. In most cases, analysis of stratigraphy and artifact distributional variation among site locations within Cochiti Reservoir clearly indicated that occupancy of the site locales was characterized by a relatively short period — either single occupancy event episodes, or a relatively short-term set of episodic, quite possibly seasonal occupational events over a few number of years. In cases such as this, analysis of site-space utilization behavior was directed toward trying to isolate whether different portions of the site area had served as loci, or epicenters, of different kinds of activities; or if the basic structure of site space usage could be defined in terms of essentially similar activity pursuits.

Analysis in this regard took the form of developing a series of artifact distributional plots. Relative densities of ceramic artifacts (when appropriate), density values of lithic artifacts by generic material type, stage of reduction, and utilization were defined through computerization and plotted so as to display the structure of artifact distribution across each site location. These distribution maps were then used as primary data to assess and isolate significant variations in artifact composition throughout the site location. Much of this analysis took the form of initial overlay inspection of different distributional plots and subsequent statistical manipulation of assemblage variation to assess whether, and to what degree, distributional differences in artifact densities covaried with populations of measurement taken upon the artifacts themselves (cortical attributes, dimensions, etc.).

Given the results of previous intrasite distributional analysis among site locations in the project area, our major interest was in positing whether high density concentrations of artifactual debris represented generalized discard or *trash* localities, or whether they represented detritus generated from activity-specific in situ specialized use areas.

In cases where sites were characterized by architectural facilities such as rooms, two sets of such distributional maps were developed. The first set essentially *ignored* room walls and treated the entire site space as 1 x 1 meter grids as the universe of artifact provenience. The second set of maps segregated artifacts recovered from within rooms by grid from those outside the rooms and then density plots were generated. Through comparison of both map series, assessment of the site-space utilization behavior could be examined as both dependent and independent of structural facilities.

The results of this general analytical procedure for *single component* sites are documented in the site reports as s set of *assemblages* numbered from 1 to n for each site location.

Definition of intrasite space-use behavior for site locations characterized by a more complex occupational and depositional history was a more difficult undertaking, dependent upon the degree of stratigraphic superpositioning of depositional events. In some cases analysis of architectural construction sequences and fill deposits permitted occupational episodes to be isolated such that variation in artifact distributions could be examined for each temporal component of occupation. In other cases, however, stratigraphy was not as clearly defined with the result that variation in the kind, distribution, and density of artifacts could not be unambiguously posited to reflect a given temporal component of occupation. In these cases, analysis was directed toward evaluating differences and similarities in attribute content of the assemblages as a secondary means of defining which temporal occupation of the overall site area might have resulted in their deposition. The results of analysis such as this are presented in the site reports where applicable.

ORGANIZATION OF THE SITE REPORTS

A primary concern in developing the organization for presentation of data in the site reports was that of making information easily retrievable for others with research interests in the data. Each site report is thus organized in similar fashion such that information concerning different kinds of architectural or artifactual remains can be found at the same sequential location. The organizational structure for site reports is basically self-evident as headings for each category of data. The following section will discuss briefly what kinds of data are included in each major category.

Site Introduction

Information presented in the introduction to each site report encapsulates the location, physiographic situation, general and immediate vegetative setting and substrate characteristics of the site.

Excavation Approach

This section presents a brief description of the manner in which the site was excavated or tested. Particular attention is directed toward specifying the nature of collection units, the technique of collection, and the character of specific variables which conditioned the collection/excavation strategy (such as substrate, vegetation, or physiographic features).

Architecture and Feature Description

Discussion of the architectural facilities (such as rooms or freestanding walls) or features (such as hearths, cists, bins) is descriptive with an emphasis upon stratigraphic and horizontal position within the site as a whole. Details of construction, dimensions, and stratigraphic history are presented such that they could be used as information to reconstruct the occupational history (contemporaneity of different features) for the site.

Artifactual Assemblages

Artifactual remains are discussed by general categories (ceramics, lithics, bone tools, etc.). At the beginning each category, a definition of each assemblage is given, including the number of the assemblage and the spatial location within the site where artifacts comprising it occur. Variation in assemblage content is discussed in the site report, but the reader is referred to the data appendices which document assemblage variation for different kinds of artifacts. These appendices are in order numerically by site number (LA) and constitute basic data from which discussions in the site reports are derived.

Ceramic Artifacts

Description of the ceramic artifacts was directed toward four primary information needs: dating; vessel assemblage variability; worked sherds; and regional exchange networks.

1. Dating

Ceramics were employed to date the general occupation of the site and were used to isolate multiple temporal occupations within the sites when appropriate. In this fashion, the distribution of ceramic fragments were used in conjunction with stratigraphic data in order to reconstruct the occupational history of the site. The manner in which ceramics were used for dating purposes has been presented by Warren (1977a, Chapter 2 in this volume).

2. Vessel Assemblage Variability

A major emphasis of the ceramic analysis was that of developing a procedure for estimating the minimum number of vessels represented at each site (see Warren, Chapter 2 for a detailed discussion of this procedure). Analysis was thus directed toward documenting variability in the kinds of vessels represented at each site (e.g. different ceramic wares present, the number of jars, ollas, bowls). We were interested in ascertaining the degree to which differences in the number and kinds of vessels might reflect patterns of activity redundancy or diversity, and the degree to which relative frequencies of vessel breakage rates might reflect duration of site occupation.

The nature of the distribution of vessel fragments was also felt to offer potential information concerning the character of space use behavior. In particular, spatial analysis of ceramic artifacts was directed toward isolating the contexts of vessel breakage and subsequent deposition of fragments (sherds). Of interest in this regard was an attempt to identify trash areas and areas where ceramic breakage might reflect an isolated event.

Detailed description of the vessel assemblage for each site is presented in Appendix I to this report.

3. Worked Sherds

Each fragment was examined for evidence of modification or utilization subsequent to vessel breakage. Discussion of specific attribute criteria employed in these functional or usage analyses is presented in Chapter 2.

4. Regional Context of Ceramic Manufacture and Exchange

A more general information realm focused upon documentation of variability in locations of ceramic vessel manufacture. Previous research in the Northern Rio Grande Valley has indicated the possibility of systems of ceramic vessel exchange (Warren 1974, 1977b, 1979a). At present only broad outlines of the temporal and spatial character of intraregional and/or interregional vessel exchange systems have been suggested through research. It is not known, for example, whether the vessels were being circulated within and between population centers as exchange commodities themselves, as containers of exchange commodities, or if they were circulated as utilitarian household items and reflected a high degree of individual residential relocation rather than exchange.

Although a series of attributes have been used to discuss manufacturing and trade centers, tempering materials appear to be an especially sensitive attribute. For this reason, variability in temper was rigorously documented using a 6-digit code system (see Warren, Chapter 2).

Lithic Artifacts

Three general realms of activity behavior conditioned the analysis of lithic artifacts: raw material; technique of manufacture; and tool utilization.

1. Material Selection

The environmental setting of Cochiti Reservoir is characterized by an extremely diverse compliment of raw materials suitable for manufacture and utilization of artifacts. These materials are, in general, abundantly available in a wide variety of source-specific locales such that any given site location within the reservoir is in close proximity to many kinds of material available within the region as a whole (Warren 1977c, 1979b). Materials found at many different loci within the reservoir include basalts, chalcedonies, cherts, quartzites, and obsidians.

Because of the general availability of a variety of raw materials, we felt that each site had the potential to be a sensitive measure of material selection behavior for specific tool use activities. Stone artifacts were consequently described using a 4-digit code developed by A.H. Warren (1977c) to facilitate analysis of material selection behavior against known source locales.

2. Manufacture

The character of stone tool manufacturing (or reduction) activities within particular site locations is defined with respect to three referents: taxonomic variability of raw materials; the stage and technique of reduction behavior; and the spatial distribution of manufacturing by-products.

The manufacture of tools from essentially cryptocrystalline or silicious materials is a subtractive process through which pieces of debitage (flakes or small angular debris) are detached from raw material masses (cores). As such, the particular technique of manufacture and stages in that process are recognizable through analysis of the reductive by-products of manufacturing events. A detailed discussion of criteria through which this manufacturing process might be recognized (and definitions of terms) are presented in Chapman and Schutt (1977:84-85).

The descriptive structure employed in the site reports identified three different stages of manufacturing behavior: primary, secondary, and tertiary. Primary stages of reduction refer to the detachment of flakes or small angular debris from the original raw material such that the detached pieces exhibit cortical surfaces. Secondary stages are those involving subsequent detachment of noncortical flakes or angular debris from previously decorticated cores. Tertiary stages refer to final stages of flake or preform modification in which previously retouched artifacts are further modified through detachment of small flakes exhibiting platforms indicative of retouched edge perimeters.

A variety of specific measures were used in conjunction to arrive at the general characterization of reduction stage described in the site reports. These include frequency and relative frequencies of debitage exhibiting cortical surfaces, estimates of total cortical versus noncortical surface areas of flakes, and the relative proportion of cortical, noncortical, and faceted platforms characterizing each material specific assemblage. These data are presented in Appendix III to this report.

The descriptive results of the manufacturing activities as presented in the site reports also reflect differences in the spatial distribution of by-products of manufacturing activities; these have been termed *assemblages.* Density plots by material type (basalt, obsidian, etc.) were used to isolate activity areas (see the preceding section).

3. Tool Utilization

All lithic artifacts were examined microscopically for evidence of wear patterns. Specific wear pattern variability for each category of lithic artifacts (debitage, cores, large angular debris, unifaces, bifaces, and ground stone) is documented in the relevant appendices to this report (Appendices IV-IX). Description of utilization in the site reports focused upon kinds of artifacts and materials which were used as tools, and upon the spatial distribution of such tools within the site as a whole. A primary objective of the documentation was to isolate variability in the spatial occurrence of utilized tools within each site to provide information about activity specific task performance at the intrasite level of analysis.

Bone Artifacts

Bone artifacts are described according to technique of manufacture, form, dimensions, and evidence of usage (wear patterns), following a format developed during the permanent pool mitigation program (Schutt 1977:101-109).

Fauna

Assemblages of faunal remains offer potential information concerning the nature of site-specific subsistence behavior and the potential of informing upon intersite economic exchange. Faunal assemblages were described according to species, part, side, portion, sex, age, and condition. Each specimen was examined for evidence of butchering cut marks, gnawing marks, and burning. Analysis presented in the site reports and appendices (X, XI) included a statement of minimum numbers of individuals represented by each species or taxon as well as a description of carcass representation by low and high muscle meat mass. Evidence of marrow cracking was also monitored.

Flotation Analysis

Analysis of both heavy and light flotation materials is presented in the various site reports. Most materials which were recovered are summarized by frequency counts. One exception for the light flotation materials was a percentage estimate for insect, cocoon, and fecal parts for each light flotation sample.

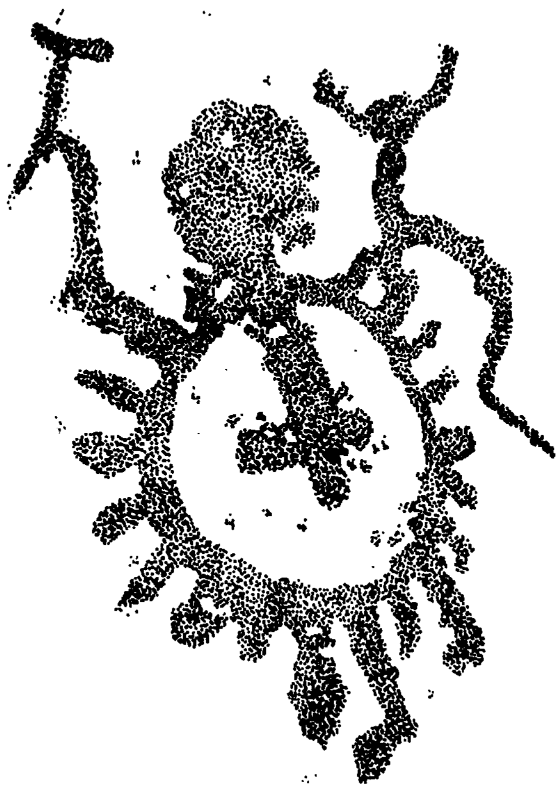
Miscellaneous Artifacts

Artifacts occurring in low frequencies such as fragments of metal, glass or wood, are described individually in each site report. Potential information such artifacts offer for purposes of dating or ascertaining the character of activities performed within the site is discussed where appropriate.

SUMMARY

The basic organization of this report has been dictated by a set of research problems concerning cultural evolutionary and ecological principles. The long-term utility of the data presented in this volume may not reside, however, in their application to the research interests espoused during the Cochiti Reservoir Project; rather, they may be dependent upon future researchers. Consequently, the format for each site report is the same to permit easy retrieval of information. Further, an attempt has been made to define attribute variability in such a manner that other researchers are able to identify key variables which are (or may be) comparable to those used in their own research.

As a final note, it should be emphasized that all artifact data are available in computerized format on tape and cards in a permanent file housed at the Office of Contract Archeology, University of New Mexico in Albuquerque. This permanent record has been designed to maximize flexibility in its future use and as such reflects minimum units of recovery employed in the excavation program (1 x 1 meter control by natural or arbitrary stratigraphic unit). For purposes of this publication such data have been summarized by analytically defined assemblages deemed relevant to the site report discussion. The *raw* data set, however, reflects the basic structure of artifact distribution as recovered from the field.



Chapter 2

CERAMIC STUDIES IN COCHITI RESERVOIR, 1976–1977

A. H. Warren

INTRODUCTION

At the time the analysis of pottery was being planned for sites in the Flood Control Pool of Cochiti Reservoir, it was decided to develop a procedure to estimate the minimum number of vessels present at each site and to computerize pertinent attributes of each sherd and vessel to facilitate the analysis of the ceramic assemblages. During the previous ceramic studies in the area, sherds had been tabulated by pottery type, temper type, and form, and summarized by frequency and percent. Information relating to place of manufacture, secondary utilization of sherds, and other special aspects were also recorded. These resulting data were in a format that proved cumbersome to use for archeological interpretations, so it was hoped the computerization of data would allow easier retrieval and application of information to various research questions.

A simplified procedure of analyzing sherds with a stereomicroscope, combined with the earlier methods of ceramic study, enabled the separation of sherds into groups, each representing a minimum of one vessel. The system proved to be an efficient way to determine the minimum number of vessels present in ceramic assemblages of less than 2,000 sherds. Information relating to locally produced pottery, imported wares, and probable cultural affinities was also obtained.

Description of the methods used and the reasons for selecting various parameters will be discussed in the following pages. An evaluation of the procedures and suggested guidelines for interpretation of data is included.

THE ROLE OF CERAMIC RESEARCH IN ARCHEOLOGY

The importance of ceramic studies in archeological investigations has long been recognized. Many diverse techniques and methods have been devised in hopes of allowing the researcher to gain greater insight from analysis of potsherds found at a site. Traditional methods for the study of ceramics in the American Southwest have centered around the classification of pots and potsherds into pottery types on the basis of visual attributes, and the establishment of chronological frameworks for the types through measured dates (dendrochronology, archeomagnetic, etc.) or by seriation.

A history and review of pottery typology in the Southwest has recently been published by Frisbie (1976) and has sparked renewed interest in the many facets of classifications and associated problems that have plagued pottery typology since its beginning. A.V. Kidder published a chronological study of four pottery styles of the Pajarito Plateau in 1915, and the following year, N.C. Nelson (1916) provided the first classification and description of the Rio Grande glazes, based upon seriation of sherds from a 10 foot excavation in a stratified trash mound. Nelson used frequency curves of various pottery classes within ten strata of the mound to establish the relative chronology. Since then, over 2,000 pottery types have been named for the Southwest (Frisbie 1976).

Gifford (1960) writes that pottery is a product of a certain cultural configuration with temporal and areal significance and therefore holds the potential for becoming a tool in cultural interpretations of former societies. If the analyst believes this to be true, it becomes important to determine what cultural concepts and phenomena the potsherd, or the pottery type, represents. At times, it may seem important to know if the pottery present at a site is made locally or is a tradeware. At other times, the archeologist may wish to determine the function of the vessel at the site and may be more concerned with its form or its physical properties, than how old it is or where it was made. In any case, the more information that can be gleaned from a potsherd, the more will be known about the prehistoric circumstances or events that surround it.

Recognizing and defining a type is never an end in itself. As a tool it can be used in the investigation of culturally related problems, and in time it becomes a word, or a term, by which the analyst may communicate certain concepts or ideas to listeners or readers. For this purpose, accurate definitions of a pottery type are essential. As Krieger (1949) has pointed out, it is also important to describe temporal or areal variations, although unnecessary synonyms should be avoided.

Treated in this manner, pottery typology can become a reference point for related comparative analyses of ceramics. This technique has been applied successfully in past years in technological studies relating to manufacturing sources and trade centers of Southwestern ceramics (Shepard 1965; Warren 1977d). There is no implication that a typology must be static, only that it be clearly defined. The approach is consistent with Brew's belief that *a flexible, nonprecise technique is more useful and more 'scientific' for the kind of evidence we have of the kind of phenomena with which we deal than is the pseudo-precision which . . . is the only alternative* (Brew 1946:64). The concept is also in accord with the use of classifications based upon attribute clusters (Spaulding 1960), and their interrelations.

The limitations of ceramic analysis depend upon the material and the analytical techniques available and the methods of interpretation of the results. At present, very little is known about the cultural affinities of the ceramic types in the Southwest and associated material artifacts, partly because extensive trade of pottery has tended to create a mask of uniformity among contemporary sites.

QUANTIFYING CERAMIC DATA

Traditional methods used to report quantities of potsherds recovered from an archeological excavation in the Southwest have been based upon the sherd as the unit of analysis (Lekson 1977). This procedure has been criticized by numerous workers in that it may not provide frequency of types or vessels present. The number of vessels has been proposed as the only meaningful way of presenting ceramic data from a site, combined with descriptive data regarding vessel size, form, etc. (Egloff 1973). Several different methods for achieving this goal are briefly reviewed here.

During the 1910's, when N. C. Nelson, of the American Museum of Natural History, excavated nearly 1600 rooms at 24 sites in the Rio Grande Valley, he recorded the potsherds recovered by volume (Nelson, Museum of New Mexico archives; Nelson 1916). This method of measuring the quantity of potsherds was soon replaced by the practice of counting sherds. In time, other systems for the statistical handling of potsherds were proposed.

Gifford (1951) not only counted, but weighed the pottery from his excavation in Fiji. The average number of sherds per ounce for three major pottery types were calculated, and in subsequent analyses, Gifford used weight as a measuring device exclusively (Gifford and Shutler 1956).

In 1959, Baumhoff and Heizer suggested that the system of weighing potsherds be utilized to estimate the total number of vessels represented at a site. The formula they devised is based in part upon weighing complete vessels of various sizes. Using surface area as well as weight, they suggest that the total number of vessels and their size can be obtained. Lekson (1977) has also utilized the weight of sherds to compute the total number of vessels in a ceramic assemblage, but concluded that the use of a sherd to vessel correction factor would be more practical for the time being.

In order to determine the quantity of pottery in an accurate way, Hulthen (1974) suggested a simple method of measuring the surface area of sherds by measuring weight, thickness, and density, since surface area is more representative of vessel size than weight. Egloff (1973) described a means of measuring the percentage of the vessel's rim represented by each sherd. The number of vessels present at a site could then be obtained by adding the percentage factors in each category. The device could also be used to measure the radius of the vessel.

Rohn (1971:191) questioned the wisdom of basing interpretations on sherd counts, as they gave "a distorted view of the relative importance of various kinds of pottery at Mug House". Rohn estimated the number of vessels present at Mug House by counting and averaging the number of sherds per vessel for 12 different vessel forms, and dividing the averages into the total sherds for each type. His average sherds per vessel ranged from 18 for McElmo-Mesa Verde dippers to 176 for large corrugated jars.

Perhaps the most comprehensive estimation of minimum vessels at a site was made by Krieger (1949) during the study of some 96,000 sherds from the George C. Davis site in Texas. By sorting and matching sherds by visual attributes, he was able to estimate that the site contained 5,920 vessels, averaging between 9 to 11 sherds per vessel. The procedure was long and tedious and was carried out over a period of years.

The problem implicit in most of the methods cited is the assumption that the sherd population at a site is intact and represents entire broken vessels. Stanislawski (1975) reviews at least eight different ways that potsherds are recycled among the modern Hopi, thus depleting the trash factor at a village. To attrition rates of potsherds caused by inhabitants can be added erosion factors and subsequent depletion by persons gathering sherds from a site for reuse or simple curiosity.

The consensus among writers on the subject of quantifying pottery from archeological sites seems to be that estimating the minimum number of vessels will provide a more realistic view of the ceramic data. Information relating to vessel size, form, and function is also desirable. Under some circumstances it may not be practical, or even advantageous to attempt to estimate minimum vessels, and sherd counts will continue to be useful in giving quick information concerning the chronology and cultural affinities of a site.

Research techniques or methods are in a constant state of flux, and will undoubtedly continue so. The present paper deals with one aspect of an overall technological approach to the study of Southwestern ceramics.

CONSTITUENT ANALYSIS OF POTTERY

Analytical methods of studying ceramics and their constituents and properties have been thoroughly reviewed by Matson (1951, 1960) and Shepard (1970). Both have expressed the opinion that microscopic analysis is probably the most useful laboratory technique for ceramic studies. Ideally, both stereo and petrographic microscopes should be used, particularly in establishing temper classes for determining source areas. Once temper types are identified and described petrographically, the temper classes may be accurately identified with a stereomicroscope.

Petrographic studies of the glaze decorated wares of the Cochiti area and the upper Middle Rio Grande were made by the author between 1965 and 1973 (Warren 1968, 1974), in conjunction with archeological excavations in the Cochiti Dam area by the Museum of New Mexico. This work resulted in the identification of major ceramic centers in the upper Middle Rio Grande during the 400 or so years that glaze wares were produced there. Patterns of distribution of tradewares through time were established, and many of the major prehistoric and historic events in the Cochiti area were traced. The resultant data have been drawn on during the current studies in Cochiti Reservoir.

In the past, the combined techniques of temper identification and pottery classification have proved to be effective and economical for interpretive analyses of ceramics. Shepard's work with the pottery of Pecos resulted in "a drastic rearrangement of ideas concerning the status of the ceramic industry, not only at Pecos, but throughout the Southwest" (Kidder 1936). The combined methods not only provide data bases for new interpretations relating to the cultures and the peoples that produced and used pottery, but information relating to many existing assumptions.

Throughout the archeological history of the Southwest, pottery has been equated culturally with the site where it was found. Constituent analyses of pottery has led to the recognition of extensive pottery trade throughout the Southwest and to the realization that many groups did not produce their own pottery, or perhaps only some of it (Shepard 1942, 1953:193; Wendorf 1953:125; Warren 1970, 1977d). This development points to the need for a reassessment of prehistoric cultures, not only to determine who made what pottery and when, but to redefine and redescribe entire archeological material assemblages or *cultures*. This task has barely begun. Until pottery can be related to its maker, and to other aspects of his culture, reconstruction of prehistoric social organizations cannot be considered, at least on the basis of ceramics.

POTTERY OF COCHITI RESERVOIR

Unlike many other areas of the American Southwest, the pottery assemblages of Cochiti Reservoir are relatively simple. Santa Fe B/W pottery and associated utility wares, all apparently indigenous to the area, predominated during the late 12th and the 13th centuries. Although Socorro B/W, Tularosa B/W, and Kwahe'e B/W have been found on contemporary sites on the Pajarito Plateau, none of these were noted at the sites under study.

Before the end of the 13th century, Galisteo B/W and Wiyo B/G appeared in the reservoir area, but were not noted among the ceramics of the present study (Laumbach, et al. 1977:56). West of Cochiti, redwares including imported and local copies of Heshotauthla Polychrome occur on sites that contain Galisteo B/W and Santa Fe B/W (Warren 1977d).

Rio Grande glaze wares, produced by Pueblo potters, predominated in the pottery assemblages from around the middle of the 14th century to well into the 16th century. Except for an occasional Biscuitware vessel from the Upper Rio Grande of the northern Pajarito Plateau, and one vessel of Jemez B/W, no other decorated wares were found at prehistoric sites. The reservoir area was generally unoccupied during the 17th century, except perhaps for some travelers, and no pottery of this period was found.

After reoccupation by Spanish colonists in the early 18th century, Tewa wares and Puname Polychrome and associated plainwares and utility vessels made up the ceramic assemblages along with some unnamed wares of the historic period.

Chronology of the Historic Pottery Types

Although tree-ring dates have provided a firm chronology for the prehistoric pottery types of the Cochiti Reservoir area, the period of production or use of the historic pottery of the area is not that well known. Noncutting dates obtained at Pueblo del Encierro (LA 70), near Cochiti Pueblo, ranged between A.D. 1766 and 1786 (Robinson et al. 1972) for the historic occupation. Associated pottery included local and Tewa-made carbon painted polychromes, Casitas Red-on-buff, mica-slipped utility, Puname Polychrome, fiber tempered polished plainware (*bisque* ware), carbon painted black-on-red and polychrome, Kapo Black, and Carnue Plain (Warren 1974). At present, no other measured dates for post 1700 ceramics are known in the reservoir area.

Because of the marked diversity of pottery from one historic site to another and the general lack of dates in the 18th and 19th centuries, surface collections of pottery from several historic sites in the Canada de Cochiti Grant along the Rio Chiquito were studied in hopes of establishing relative chronologies through seriation. Parameters tabulated included pottery type and temper classes. Initial ordering began with the presence of late Glaze F, a post 1700 Kotyiti Glaze-polychrome ware, while the youngest sites dating to the late 19th century were identified by the presence of porcelain or china.

Two ceramic traditions were apparently present throughout most of the 17th and 18th centuries in White Rock Canyon and the Canada Grant, one in which carbon painted pottery predominated and the other in which mineral painted pottery was more common. In both types of assemblages, it was noted that there was an increase in the frequency of presumed locally made carbon painted wares, from a low of 3% in an early 18th century site with a relatively high incidence of late Glaze F, to a high of 100% in a post 1880 site, dated by the presence of china. The 16 sites represented were ordered accordingly from low to high percent of locally made carbon painted sherds, mainly Ogapoge Polychrome. No apparent inconsistencies in the ceramic assemblages within the ordering were noted.

Although the seriation of the sites can only be considered tentative, it does provide a viable framework for studying the historic pottery of the Cochiti Reservoir area. Details of the study of historic pottery are covered in another report (Warren 1979c).

METHODS AND PROCEDURES FOR CERAMIC ANALYSIS

Questions asked during the analysis of pottery from the Cochiti Reservoir sites were oriented toward origin, function, and cultural affinity. Perhaps the latter is the most difficult to determine, particularly at small, structural sites that were excavated during the 1976-1977 season. Direct evidence of pottery-making was not found at any of the sites, and it might be surmised that vessels had been brought to the individual sites from elsewhere.

We cannot always assume that only one cultural group existed in an area at any particular time. We know historically that the Cochiti Pueblos and the Spanish residents of Canada, each with their own language(s) and material culture, lived in the Reservoir area during the 18th and 19th centuries. According to historic records, Navajos visited the area in the latter part of the 18th century (Brugge 1968), but no definite archeological evidence of their presence is known (Chapman et al. 1977:359). Based upon technological innovations in the historic pottery, it has been suggested that the Spanish residents of Canada were producing pottery between A.D. 1700 and 1900

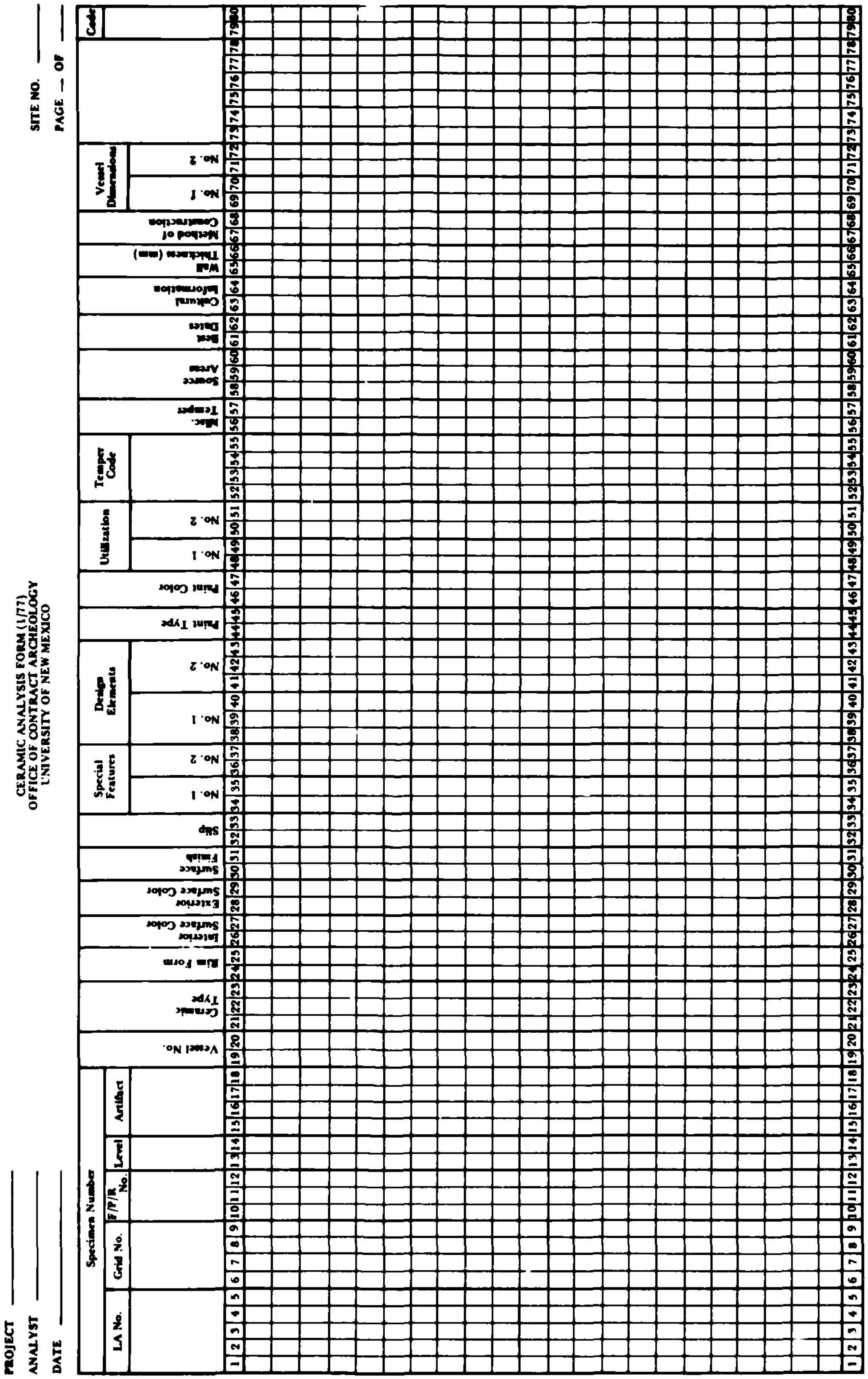


FIG. 2.1 Cochiti Reservoir Ceramic Data Form (1977)

(Warren 1974). The possibility of more than one cultural or linguistic group being present during prehistoric time must also be kept in mind.

The origin or production center of vessels can be determined by examining the type of temper and clay present, although specific sites of manufacture are not always known. Function can be inferred by the type of vessel and other archeological evidence.

Prior to the study of the pottery from the sites excavated during 1976-1977, two major modifications were made in the procedures of analysis of the 1975 ceramic materials (Warren 1977b:97-101). One change involved computerization of the data in order to facilitate interpretation of the results and application to functional activities at each site. The other change provided for identification of *minimum vessels* at each site in order to provide a more realistic view of the ceramic assemblage. Classification by pottery type and source area was approximately the same for both studies.

Establishing a Code

Prior to beginning the analyses, a code for recording data was prepared. Since many of the attributes of the sherds were already built into the existing pottery type definitions, there was no attempt to monitor each attribute present although a code number was available. Since all contingencies could not be anticipated in the beginning, the code was designed to be expandable as new attribute or data classes were needed. Major code groups included pottery type, temper type, vessel form, design, surface color and finish, rim form and diameter, paint type, wall thickness, utilization such as abraded edges or charring, and special features. Code groupings with a brief description of each are presented in Table 2.4.

Distinguishing attributes varied from one type or ware to another and efforts were made to monitor these attributes within each type or ware, although exceptions occurred. Vessel diameters were recorded only when rim sherds were large enough to measure, for example. An attribute would be recorded only if it served to distinguish one vessel from another within a type. For instance, the presence of a micaceous red slip might be the only feature distinguishing one Glaze A vessel from another, even though slip type was usually not recorded for this ware.

There was a continuous need to add new attribute code numbers as analysis proceeded, but few problems were encountered. Although the code was basically established for the Cochiti Reservoir area, it is comprehensive enough to be used in almost any area of the Southwest with minor additions.

Coding Pottery Types

The numbers used for pottery codes were grouped by major Southwestern ceramic series, such as *mineral painted wares* (200 series) or *textured utility wares* (100 series). Wherever extant, pottery type names were used. If a sherd was from a vessel of unknown typology, or no type had been defined, code numbers for descriptive terms were assigned, such as *plain utility*, *micaceous slip*, or *redware, polished (glaze body sherd)*. If sherds were identifiable by ware, but not by type, an appropriate designation was used, such as *carbon-painted whiteware*, and a code number in the same number series as carbon painted types was assigned.

Although familiar pottery type names were used when applicable during analyses of the Cochiti Reservoir potsherds, if minor differences from the original definitions appeared, these were noted as well as any areal or temporal variations. Most of the unidentified or unnamed *types* were represented by so few sherds or vessels, that new type names and definitions were not warranted at this time. The majority of unidentified body sherds could be classified by ware or group, however.

Mera's (1935) classifications for the Rio Grande glazes were used with minor modification, and historic pottery types established by Mera (1939) and Dick (1968) served to classify most of the historic pottery. The types and definitions used during the study are included in Tables 2.1 and 2.2.

Analysis of Tempering Materials

The temper classes of the pottery from the Cochiti Reservoir were identified by examination with a stereomicroscope and tentatively identified by rock type or other aplastic inclusion (Table 2.4). Although many of the temper classes were identified and defined in earlier studies (Warren 1968, 1974) employing petrographic slides, many of the temper classes used during the 1976-1977 studies were established using the stereoscope only. However, rock specimens have been collected from numerous outcrops in White Rock Canyon, on the Pajarito Plateau, and from Mesa Negra, and have been correlated with the rock temper types (Table 2.3). The volcanic rocks and sandstones used for temper in the different pottery vessels are distinctive enough that they can be readily identified with a stereomicroscope, even though the petrographic description is lacking.

It was usually possible to identify locally made and intrusive wares, and, from previous work, the sources of manufacture. Temper analysis also made it possible to classify sherds, which were otherwise unidentifiable, by type or ware or chronologically, as different temper materials were preferred by different potters through time. In some cases, the ceramic assemblage could be related to specific pueblos by matching ceramic and temper distribution patterns (Warren 1974, 1977d).

In addition to the earlier studies of the Rio Grande glaze in the Cochiti area (Warren 1968, 1974), during the current study sherd lots from three Rio Grande glaze sites and 16 historic sites were analyzed. Pottery from Ha'atse (LA 370) on the Pajarito Plateau, and the Caja del Rio Pueblo (LA 5137) and LA 12579, on Mesa Negra, was analyzed for temper distribution patterns. Caja del Rio is the closest large ruin to the nine prehistoric sites excavated in White Rock Canyon. The high percentages of scoria (basalt) temper in the Glaze A red and Glaze A yellow sherds of the Caja del Rio Pueblo suggest local production at that site. Percentages of scoria are much lower in the Glaze B through D sherds. A reddish brown variety of basalt in sherds from Ha'atse and vesicular basalt at LA 12579, may be local temper materials used at these two sites. However, there remain several other pueblos in the area that have not been studied.

Four digit code numbers were assigned to the major temper classes, while two digit numbers were used to indicate a variety within a class. The four digit numbers, when referring to a rock or mineral, are taken from the Museum of New Mexico Lithic Code. A variety may designate the specific temper type from a particular site or area; or it may represent a suspected, but unlocated, temper class.

Determination of a "Minimum Vessel"

In the current study of Cochiti Reservoir ceramics, a minimum vessel represents at least one vessel, but may at times include two or more vessels. A complete or restorable vessel would be considered a *minimum vessel*, but even one sherd could be considered a minimum vessel if it is unique and distinguishable from other minimum vessels at a site.

The separation of sherds into groups that represent at least one vessel did not require any major changes in previous analytical procedures. Sherds were first grouped by pottery type, or by a descriptive class if type identification was not possible, then by vessel form. Each of these groups was examined for class and variety of tempering material using a stereomicroscope, generally with 20 power magnification. In previous studies, the resulting division by pottery and temper type and form was used as the basis for estimating minimum vessel (Warren 1977b). During the current analyses additional division of each group was obtained by observation of other distinguishing attributes, such as design, rim form, or surface treatment.

For instance, sherds of Cieneguilla G/Y might have white, cream, or pink slips, indicating at least three different vessels. At times, rim form differences, vessel wall thickness, or surface finish might serve to distinguish separate vessels. When no additional separations could be made, a vessel number was assigned to each sherd group and data concerning the minimum vessel were coded.

A minimum vessel might on occasion include two or more of the descriptive pottery type codes, such as *Agua Fria Glaze-on-red*, *glaze-on-red*, and *redware (glaze body)*, all probably sherds of one vessel. In this way, a minimum vessel might possibly represent more than one pot, but one pot would not be tabulated as two or more vessels.

The data for each sherd were entered on the *Ceramic Analysis Form* (Figure 2.1) under its minimum vessel number. Prior to analysis, each sherd had been numbered with its site number and a consecutive sherd number, beginning with one, for each site. Provenience information was entered in a separate log as well as on the code sheets. On an average, about 20 sherds could be analyzed and coded per hour.

Since the sherd assemblages from the sites were generally small, no sampling was done with the exception of LA 13086 where nearly 2,000 sherds were recovered during excavation. All the decorated sherds were examined and analyzed, but of the remaining 1,381 utility vessel sherds, only 400 were analyzed. All sherds were examined for possible attributes that might distinguish additional minimum vessels; 23 minimum utility vessels were isolated mainly on the basis of temper differences, but when it became apparent that no additional minimum vessels were likely as no new temper varieties were found, no additional examination for temper type was made. The 23 vessels averaged 17 sherds per vessel, but extrapolated to include the untabulated sherds, average sherd number increased to around 60.

TABLE 2.1

Prehistoric Pottery Types in Cochiti Reservoir

	MINERAL PAINTED WARES	
Kwahe'e B/W	950–1225	Polished interior + slip; grayish brown clay, indurated; sherd temper; Sosi, Dogozshi, other design styles.
	CARBON PAINTED WARES	
Santa Fe B/W	A.D. 1175–1300	Fine textured, compact clay body; usually hard, brittle, gray. Fine grained temper, mostly glass shards and silt; may be slipped.
Galisteo B/W	?1250–1350	Polished, often crackled surfaces, both sides; tapered to squared rims; Sosi, Dogozshi design styles; pendant dots; checkerboards; sherd or local Rio Grande rock temper.
Wiyo B/W	1300–1400	Clay tan, gray, olive, soft, biscuity; polished, slipped inside (bowls only); designs solid black, bold. Vitric tuff temper usually.
Abiquiu B/G (Biscuit A)	1350–1450	Polished interior; unpolished, unslipped exterior; pumice shard temper; fine to broad line, pendant dots, triangles, interior only; rims may be ticked; may be slipped; gray clay.

TABLE 2.1 (Continued)

	CARBON PAINTED WARES (Continued)	
Bandelier B/G (Biscuit B)	1425–1550	Polished both sides of bowl, may be slipped; pumice temper; designs as above, but on both sides of bowls; gray clay.
Jemez B/W	1350–1750	Slipped and polished interior and exterior; carbon paint has tendency to turn brown or red; crystal pumice temper in dark gray clay.
	RIO GRANDE GLAZES *(Modified after Mera 1933 and others)*	
Agua Fria G/R	1315–1425	Surfaces polished; red inside and out; designs in glaze paint, simple geometric, encircling bands; direct parallel rim.
San Clemente G-P	1315–1425	Red surface on one side of bowls; white or yellow on other; direct rim; glaze paint; may have red matte in designs; surfaces polished.
Cieneguilla G/Y, G-P	1325–1425	Yellow, white, or pink surfaces; direct parallel rim; glaze paint + red matte.
Largo G/Y, G-P	1400–1450	Yellow, white, pink surfaces; glaze + red matte paint; thickened, expanding lip or rim.
Espinoso G-P	1425–1490	Yellow, white, pink, red surfaces; may have two surface colors; glaze and red matte paint; short everted rims.
San Lazaro G-P	1490–1515	Surfaces as in Group C; everted rims usually longer than Espinoso G-P; glaze and red matte paint designs.
Puaray G-P (early)	1515–1600	Orange, red, white polished surfaces; may be mixed; rims long and thickened, may be beveled to outside, overall good workmanship; glaze and red matte paint designs.
Puaray G-P (late)	1600–1650	As above, but with runny glazes, streaky slips; may have exterior carina.
Kotyiti G/Y, G/R, G-P	1650–1700+	Duochromes more common than polychromes; long, parallel sided rims with exterior carina; ollas with sharply everted rims; shouldered bowls; soup plate forms, pitchers; glaze paint runny; slips streaky.
	CORRUGATED WARES	
Corrugated		Coiled, not indented; clapboard-like overlap; may be smoothed slightly; narrow to wide coils; interiors smoothed, not polished.
Corrugated indented		Coiled, pinched, crimped or tooled; coil width varies; unpolished, smoothed interiors.
Corrugated indented patterned		Alternating patterns of indented and unindented coils.
Corrugated indented smeared		Corrugated indented coils partly obliterated by smoothing with finger or tools.
Prieta Smeared Indented		Diagonal patterns of corrugated indented partially obliterated by smoothing.
Blind Indented Corrugated		Corrugations nearly obliterated by smearing with finger.

TABLE 2.2

Historic Pottery Types in Cochiti Reservoir

Tewa Polychrome	1675—1720	Fine line designs on polished white slip; red underbody; carinated bowls; vitric tuff temper; also crystal pumice.
Posuge Red	?1675—?	No designs; well polished; vitric tuff temper; also sandstone.
"Tewa" B/R	1680—?	Black carbon paint on red or pink surfaces; forms like associated historic vessels; temper varied.
Kapo Black	?1650—?	Polished gray or black surfaces; vitric tuff; sandstone temper; (red slipped, then smudged).
Potsui'i Incised	?1450—1550	Geometric fine line incised designs, on smoothed tan surfaces; may have mica slip; vitric tuff temper.
Ogapoge Polychrome	1720—1800+	Carinated bowls, ollas; carbon ± red matte designs; vitric tuff, crystal pumice temper.
Powhoge Polychrome	1760—1900?	No carinas; red rims early, black rims late; vitric tuff, crystal pumice temper.
Puname Polychrome	1680—1780+	Carinated bowls; jars; red, black paint; basalt, crystal pumice temper. Post 1780, rounded forms.
Casitas R/B	1740—1900	Broad red line designs on polished buff surfaces; temper crystal pumice, sandstone, coarse grained.
Red on Tan, Misc.	?1750—?	Red line designs on buff surfaces, chevrons, slashes, narrower lines than above.

TABLE 2.3

Ceramic Data from 14 Sites in White Rock Canyon

(including number of sherds analyzed, number of minimum vessels, pottery type-temper groups, mean number of sherds per vessel by ceramic ware and by site)

Site No.	No. of Sherds	Min. No. of Vessels	Type-Temper Groups	Mean Number of Sherds per Vessel by Ware: 0-99	100	300	Santa Fe	500	600	700	Mean Sherds per vessel per Site	No Vessels <10 Sherds	>10 Sherds
LA 5011	132	21	24	1.0	8.0	2.0	1.0	7.1			6.28	19	2
LA 10114	379	38	33	23.0	5.0	1.8	1.7	1.7	2.0	9.1	9.97	30	8
LA 13049	76	14	20			1.3	1.5	7.7			5.43	13	1
LA 13050	240	25	31	2.0		5.5		7.9			9.6	20	5
LA 13054	199	19	17			5.0	5.0	6.8			10.5	15	4
LA 13076	126	15	14			12.0		8.3			8.4	12	3
LA 13084	49	8	13			6.0		6.2			6.12	6	2
LA 13086	964	87	75		17.3	4.3	4.3	10.3			11.08	63	24
LA 13291	195	43	34	4.0				1.6	9.0	9.8	4.53	37	6
LA 13292	8	4	6					2.0			2.0	6	0
LA 13293	14	7	7					1.9			2.0	7	0
LA 13331	11	3	4					17.0			3.7	3	0
LA 13332	3	1	2					3.6			3.0	1	0
LA 13329	17	1	3					3.0			17.0	1	0
TOTALS	2,413	286	283										
Average Sherds per Vessel				10.7	12.4	3.8	3.2	6.7	5.5	9.5			
Total Sherds				321	757	88	44	965	33	133			

TABLE 2.4

Pottery Analysis Codes (1977–1978)

POTTERY TYPE/DESCRIPTION

Plainwares

001 plain, unpolished (undifferentiated)
010 plain, unpolished exterior, polished interior
011 Carnue Plain
012 Carnue Plain "brickware"
020 plain, polished (undifferentiated)
021 plain, polished white ware (undifferentiated)
022 plain, polished white ware slipped (undifferentiated)
040 plainware, polished, smudged (undifferentiated)
049 Kapo Black
061 plain, unpolished, incised
063 Potsui'i Incised
079 Red polished, unslipped undifferentiated
080 Redware, polished, slipped, undifferentiated
088 Salinas Red
089 Posuge Red
090 plain, unpolished, micaceous, undifferentiated
091 plain buff tan/brown, polished, undifferentiated
092 plain buff/tan/brown, polished, bisque
095 plain, polished, micaceous
096 plain unpolished, mica slipped

Utility Wares

101 neckbanded, undifferentiated
102 neckbanded, (2-5 mm)
103 neckbanded, (5 mm+)
115 Washboard corrugated, undifferentiated
120 corrugated, undifferentiated
121 corrugated (clapboard) (2-5 mm)
122 corrugated (clapboard) (5 mm+)
140 corrugated, indented, undifferentiated
141 corrugated, indented (2-5 mm) (Tusayan style)
142 corrugated, indented (5 mm+) (Tusayan style)
155 corrugated, indented, oblique, misc.
160 corrugated, patterned (undifferentiated)
170 corrugated, smeared indented
171 corrugated smeared indented, micaceous
175 corrugated, blind indented
176 corrugated, blind indented, micaceous

Mineral White Wares

201 mineral/white (undifferentiated)
202 mineral/white, unslipped
203 mineral/white, slipped
— Kwahe'e B/W

Carbon White Wares

301 carbon/white (undifferentiated)
302 carbon/white, unslipped
303 carbon/white, slipped
330 Santa Fe B/W
335 Galisteo B/W
340 Wiyo B/W
341 Abiquiu B/G
342 Bandelier B/G
344 biscuitware (undifferentiated)
350 Jemez B/W

Glaze Wares

501 glaze redware (undifferentiated)
502 (glaze) red, body sherd
503 (glaze) red and white sherd
505 white, body sherd (glaze)
506 yellow body sherd (glaze)
507 pink body sherd (glaze)
509 glaze polychrome (undifferentiated)
510 G/R body sherd
511 G/R and white body sherd
512 G-P, red and yellow surfaces
513 G-P red and pink surfaces
515 G/W body sherd
516 G/Y body sherd
517 G/Pink body sherd
520 G/R and red matte
521 G/R and white + red matte
525 G/W + red matte
526 G/Y + red matte
527 G/Pink + red matte
528 G/Orange + red matte
529 G/Tan + red matte
530 Heshota polychrome
531 St. John's G-P
551 Agua Fria G/R
552 Los Padillas G/P
553 Arenal G-P
554 "Agua Fria" G-P
555 San Clemente G-P
556 Pottery Mound G-P
560 Cieneguilla G/Y
561 Cieneguilla G-P
565 Largo G/Y
566 Largo G-P
570 Espinoso G-P
571 San Lazaro G-P
572 Puaray G-P
573 Puaray G-P
580 Kotyiti G/Y
581 Kotyiti G/R
582 Kotyiti G-P (light slip)
583 Kotyiti G-P (red slip)

Historic Mineral White or Red Wares

601 mineral/white (historic) undifferentiated
602 mineral/red (historic) undifferentiated
603 mineral/white & red matte (historic) undiffemtiated
604 red/brown (historic)
610 Puname Polychrome
620 Casitas Red/brown

Historic Carbon White or Red Wares

701 carbon/white (historic) undifferentiated
702 carbon/red (historic) undifferentiated
703 carbon/white and red matte (historic)
704 carbon-on-red/brown (historic)
705 carbon-on-white/red (historic)
706 carbon/cream (historic)

TABLE 2.4 (Continued)

POTTERY TYPE/DESCRIPTION (Continued)

Historic Carbon White or Red Wares (Continued)

707 redware (historic) undifferentiated
708 buff or brownware (historic) undifferentiated
709 whiteware (historic) undifferentiated
710 Tewa Polychrome
715 Ogapoge Polychrome
716 Ogapoge Polychrome and red matte
720 Powhoge Polychrome
730 black/brown (historic) undifferentiated
801 china (undifferentiated)

Vessel Form

01 undifferentiated
02 bowl, undifferentiated
03 bowl, hemispherical
05 bowl, carinated
06 bowl, flanged
07 bowl, "soup plate"
08 bowl, shouldered
09 bowl, ring based
20 closed form, undifferentiated
21 jar or olla
22 jar carinated
25 tecomate
26 seed jar
30 pitcher
35 ladle
40 canteen, undifferentiated
41 canteen, stirrup
45 cylinder, undifferentiated
46 vase
50 cup
60 effigy, undifferentiated
61 duck pot
65 ceramic pipe
66 comale
70 miniature, undifferentiated

TEMPER I CODES

Sherd and Undifferentiated Tempers

0001-00 undetermined
0003-00 igneous, undetermined
0037-00 volcanic, undifferentiated
0100-00 sherd, undifferentiated
0101-00 sherd, angular, fine-grained
0102-00 sherd, angular, medium-grained
0103-00 sherd, angular, coarse-grained

Sandstone

2000-00 sandstone, undifferentiated
2015-00 sandstone, very fine grained (<0.125 mm), undiff.
2040-00 sandstone, fine grained, subangular grains, undiff.
2041-00 sandstone, fine grained, subangular & rounded grains undifferentiated
2042-00 sandstone, fine grained, subangular, some colored grains, undifferentiated
2043-00 sandstone, fine grained, subangular to rounded, plus colored grains, undifferentiated
2053-00 sandstone, medium grained, clear and colored subangular to rounded, (0.25 -- 0.5 mm)
2085-00 sandstone coarse grained, feldspathic, undiff. (< 15% feldspar)

Sedimentary

2140-00 Mesaverde sandstone, undiff., fine-medium grain (0.5)
2470-00 Volcanic sandstone, undifferentiated
2471-00 Volcanic sandstone plus high quartz, may have pumice, colored, polished chalcedony)
2472-00 Volcanic sandstone, as 2471-00 plus mica
2475-00 Volcanic sandstone

Granite

3025-00 Intermediate igneous, finely crystalline, undiff.
3110-00 Aplite, undifferentiated

Intermediate Igneous

3240-00 Diorite, undifferentiated
3260-00 Augite latite (red inclusions), Espinaso Volcanics (San Marcos Pueblo temper)

Intermediate Igneous

3263-00 Augite latite, fine matrix with minute red, black inclusions, Espinaso Volcanics (Gipuy temper)
3266-00 Hornblende latite, undifferentiated
3270-00 Hornblende latite, Espinaso Volcanics (Tonque Pueblo temper)

Basalt

3400-00 Basalt, finely crystalline, undifferentiated
3505-00 Basalt, finely crystalline, amber colored; olvivine (San Felipe Pueblo, Cochiti Pueblo? temper)
3406-00 Basalt, finely crystalline, flaky fragments, red to near black (silver mica slip)
3430-00 Basalt, scoriaceous, red, gray, undifferentiated
3430-10 Basalt, scoriaceous, reddish gray, low density, Cochiti area
3431-10 Basalt, scoriaceous, glassy red, vesicular, Cochiti area

Crystal Pumice

3655-00 Pumice, crystal, Jemez Mountains, coarse subhedral to euhedral high quartz; silky frothy white to pink cellular pumice
3655-10 Variety A: White & black shards, high quartz and clear feldspar; White Rock Canyon, Santo Domingo Valley
3655-11 Variety B: Pumice fragments, fine vesicles; frothy with sparse coarse grained high quartz, clear vitreous feldspar; Southern Pajarito, etc.
3655-12 Variety C: As above, but fine to medium grained fragments

Volcanic Rocks Welded Tuffs

3710-00 Andesite vitrophyre, undifferentiated; Jemez Mountains (7E) gray to black with phenocrysts; hypersthene present. S. Pajarito, Cochiti area
3811-00 Rhyolite tuff, undifferentiated; welded (devitrified). Jemez Mountains, Bandelier tuff
3811-00 Variety A (3F): Rhyolite tuff, light gray, with vitreous quartz and/or feldspar

TABLE 2.4 (Continued)

TEMPER I CODES (Continued)

Volcanic Rocks Welded Tuffs (Continued)

3816-00	Welded tuff, white soft matrix (possible Mogollon temper type); undifferentiated
3821-00	Andesite tuff, undifferentiated, Jemez Mountain source
3852-00	Lithic tuff, undifferentiated
3852-10	Lithic tuff, high quartz

Vitric Tuffs

3860-00	Vitric tuff, undifferentiated
3862-00	Vitric tuff, white, undifferentiated, Jemez Mountains
3862-10	Variety A: Vitric tuff, white, with medium grained, subrounded quartz, colored; Espanola Valley, etc.
3862-11	Vitric tuff (white) very fine dense gray clay, Jemez Mountains
3863-00	Vitric tuff, black shards, undifferentiated; Pajarito Plateau, Jemez Mountains
3863-10	Variety A: Vitric tuff, black shards, sparse medium grained quartz + gold mica
3863-11	Variety B: Vitric tuff, with fine to coarse rounded grains of colored quartz; Upper Rio Grande Valley
3864-00	Vitric tuff, white + mica, fine grained sand, colored; (Nambe-Tesuque) area

Metamorphic

4560-00	Schist, quartzite, muscovite, Upper Rio Grande
4560-10	Schist, quartzite, very fine granular, clear quartzite Picuris

TEMPER CODE II

01	Sherd, undifferentiated
99	Sherd, undifferentiated
02	Sherd, fine to medium grained (0.—0.5 mm)
03	Sherd, coarse (0.5—1.0 mm)
04	Sherd, coarse to very coarse (0.5—2.0 mm)
09	undifferentiated
10	Variety A (see Temper Code I)
11	Variety B (see Temper Code I)
12	Variety C (see Temper Code I)
13	Variety D (see Temper Code I)
14	Variety E (see Temper Code I)
15	Variety F (see Temper Code I)

Grain Sizes

51	very fine (less than 0.2 mm)
52	fine to medium (0.2—0.5 mm)
53	coarse (0.5—1.0 mm)
54	coarse to very coarse (0.5—2.0 mm)
61	very fine (0.2 mm)
62	fine-medium (0.2—0.5 mm)
63	coarse (0.5—1.0 mm)
64	coarse to very coarse (0.5—2.0 mm)
65	sandstone fragment
70	clay plates, coarse-flat
75	silvery mica, altered

POTTERY CODE

Rim/Neck

01	undetermined
02	vertical, und.
03	vertical, direct, rounded
04	vertical, direct squared
05	vertical, direct, tapered
06	vertical, direct, beveled in
07	vertical, direct, beveled out
09	inverted
10	recurved
11	direct, expanded
15	direct, vertical (jar)
20	everted, undifferentiated
21	everted, flared (bowl)
22	everted, flared (jar)
23	vertical everted (jar)
24	everted, flared (jar) + with rolled rim
25	everted, glaze C

Surface Color

01	undetermined
02	white
03	light gray
04	dark gray
05	tan
06	brown
07	pink
08	orange
09	red
10	red-brown
11	black
12	cream
13	yellow
20	white and red
21	pink and red
22	cream and red
23	buff and red
25	red mica (silver)
26	black mica

Surface Finish

01	Undifferentiated
99	Undifferentiated
02	Unpolished interior, polished exterior
03	Unpolished exterior, polished interior
04	Unpolished interior and exterior
05	Polished both sides, or jar exterior
07	Unpolished interior
08	Unpolished exterior
09	Polished interior (bowls), scored exterior
10	Polished exterior (jars), scored interior
12	Polished, smudged interior
13	Polished, smudged both sides
20	Burnished interior, bowls (high polish)
21	Burnished all surfaces
30	Polished, smudged interior, mica slip exterior
40	Stone stroked parallel to rim
41	Stone stroked interior bowls, parallel
42	Stone stroked exterior closed forms parallel
43	Stone stroked both sides, parallel to rim

TABLE 2.4 (Continued)

POTTERY CODE (Continued)

Slip

01	undetermined
02	unslipped
03	slipped interior
04	slipped/interior and exterior below rim
05	slipped/interior and exterior
06	slipped exterior (jars)
07	slipped exterior and interior neck (jars)

Paint Type

01	undetermined
02	mineral red
03	mineral brown
04	mineral black
05	mineral green
06	glaze, undifferentiated
07	glaze, black
08	glaze, green
09	glaze, framing red matte
10	glaze, framing white matte
11	glaze, brown
15	white matte
20	red matte
21	red matte, framed black
22	red and black mineral
23	red, black and brown mineral
29	fugitive red exterior
30	carbon, black

Designs

001	undetermined
002	hooks, flags
005	open geometric
006	stepped angles
010	dots
011	dots, framed
012	dots, framing
015	pendent dots
016	pendent ticking
017	ticked triangle
020	z's, w's
021	framed Z's
025	framed slashed
026	framed elements
027	framed lines by solids
030	scrolls, circles
031	starred circles
040	lines, parallel (less than 2 mm)
041	lines pendent from rim
045	lines, medium (2-4 mm)
050	broad lines (4-10 mm)(sosi style, geometric)
055	steps, frets
060	solid elements
061	sawteeth
062	checkerboards
063	acute triangles
065	lines framing solids
066	lines framing triangles
070	hatchures, misc.
071	squiggles
072	framed squiggles
073	hatching straight line
074	heavy framing + hatching lines
075	narrow line hatching
079	fine cross hatch
080	opposed hatching and solids
090	interlocking elements
100	parallel framing bands
101	parallel lines encircling rim

OBSERVATIONS AND EVALUATION OF THE ANALYTICAL PROCEDURES

The methods used to estimate the minimum vessels present at sites in the Cochiti Reservoir area appear to provide more diverse and comprehensive information than any other technique devised to date. The procedure is probably best suited for small ceramic assemblages, for time spent in analysis increases rapidly when more than 1,000 sherds are present. The probability that more than one vessel will be included in a *minimum vessel* also increases. The latter situation appeared to be present at LA 13086, with nearly 1,400 plain utility sherds. The high average of 60 sherds per minimum utility vessel suggests that two or more vessels may be represented in each minimum vessel. Separation of sherds by minimum vessel may facilitate restoration of broken pots. The system can be used without computerizing the data, although interpretation would be more time consuming.

The sherds analyzed during this study came from small structural sites that yielded from three to 1,948 sherds per site. A total of 2,413 sherds were analyzed and tabulated for key punching. The average sherds per minimum vessel is 8.4, with 80% of the 286 identified vessels having 10 or less sherds per vessel. These figures are very close to the average of 9 to 11 sherds per vessel estimated at the Davis site, which had a sherd population of about 100,000 (Krieger 1949:78), but are considerably divergent from the average sherds per restorable vessel reported by Rohn (1971) at Mug House.

Decorated wares averaged less than 10 sherds per minimum vessel, ranging from 3.2 for Santa Fe B/W, the earliest ware at the sites, to 9.5 sherds per vessel of historic carbon painted wares (Table 2.3). In some cases, the rarity of vessels within a type classification precluded meaningful estimates of average sherds. For instance, a single *minimum vessel* of Jemez B/W (33 sherds) was present among the sherd assemblages.

The average sherds per minimum vessel among the more common pottery types present are not definitive but do give some promise that additional studies will confirm or refine the present estimates. If average sherds per vessel of a particular type and form could be established with some consistency, such estimates might then be used to estimate minimum vessels within larger sherd populations.

The apparent high attrition rate of sherds from vessels at the Cochiti Reservoir sites merits comment. The decrease of average sherds with increased age of the pottery type may be a reflection of postoccupation depletion of sherds at a site. However, the low averages of earlier vessels at sites might indicate that sherds, not vessels, were carried in by later occupants of the sites. This situation can be noted at LA 10114 where Santa Fe B/W and glaze paint vessels average 1.7 sherds compared to 9.1 for carbon paint historic vessels.

None of the pottery types from the Cochiti Reservoir sites were consistently tempered with crushed sherd. In areas where sherds are used for tempering material, attrition rates might be even higher than at the Cochiti Reservoir sites; one might expect a higher proportion of imported sherds of earlier date, as well. Since pottery was not always produced at an archeological site, and probably at none of the sites in the current study, this variable will not always apply.

The unexpected absence of rim sherds in more than half of the minimum vessels isolated for the Reservoir sites emphasizes the attrition factor. Only 42% of 274 minimum vessels from 10 of the 14 sites included one or more rims. This absence of rim sherds might be kept in mind by those interested in using rims to estimate number of vessels at a site, using rims as a basis for sampling, or in limiting sherd counts to rims only. Rio Grande glaze paint wares are classified by rim form, and published reports often based sherd counts on rims only. The use of temper classes to identify glaze body sherds by type or general chronology has overcome to some extent this problem in pottery classification.

Final tabulation of the number of minimum vessels among the ceramic assemblages shows a very close correlation between the minimum number of vessels determined by methods used in the current study and the number of pottery type-temper class-vessel form groups, which were used in earlier studies. Although individual sites showed a wider range between the two separate counts, minimum vessels at all sites numbered 286, while the pottery type-temper class groups numbered 283. The establishment of the minimum vessels is more time consuming than classing sherds by pottery and temper type, so the latter method might be used for estimating the number of vessels at a site when time is limited.

During the progress of the present study, it became apparent that errors in initial tabulation and subsequent keypunching and programming were inevitable. This required additional time for correcting records, but not necessarily more than would be needed during tabulations by hand.

Since this was the first time that the method had been used, more time was involved in establishing code systems than might be expected during future studies. The code format is flexible, and even as exists now, could be used for similar studies in almost any area of the Southwest. A major problem in applying this procedure to other areas would be in setting up classifications for temper-clay groups and establishing their chronologies and cultural affinities, if this had not already been done. More limiting, however, is the current lack of ceramic researchers trained in petrographic studies.

Guidelines for interpretation are difficult to establish on the basis of one pilot study. There is no quick or easy way, for instance, to decide whether a *minimum vessel* represents a complete vessel that was used at the site, or if it represents a potsherd or fragment of a vessel, brought to the site to be used as a tool, temper material, or for some other purpose. Low average sherds per minimum vessel of pottery types not common at the site, such as glaze decorated sherds at an historic site, might well be construed to be an indication of potsherd importation. Other archeological data from a site may assist in solving some of the questions that develop during a study of this nature.

Ethnographic data may also give some clues to the problems that arise. In attempting to assess the ceramic population at a site, it may be necessary to determine the history of a vessel. Ethnographic data indicate that different vessels have quite different breakage rates, depending upon how they are used (Foster 1960). Any efforts to estimate populations at a site, such as proposed by Cook (1972), will involve consideration of all problems of interpretation of a site. The use of sherds from trash areas to estimate past populations will be additionally complicated by possible breaks in occupation.

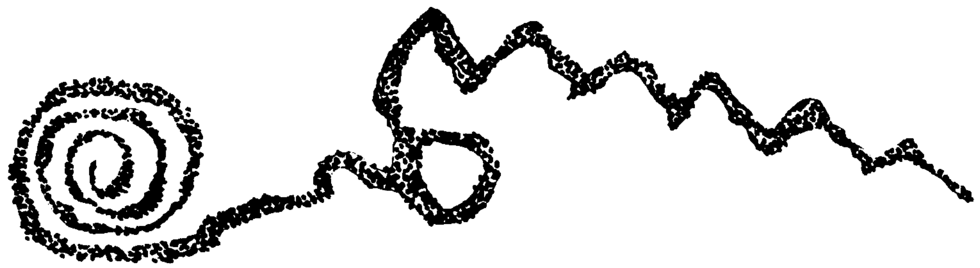
Differing resource materials or methods of manufacture may influence the type of ceramic assemblage present at a site. Erosional or depositional factors must also be considered.

SUMMARY

The procedures used during the analysis of the Cochiti Reservoir pottery from 1976-1977 excavations provide an effective and efficient way to determine the minimum number of vessels at an archeological site with sherd counts up to 2,000. Attribute analysis includes temper identification by source area, resulting in a more realistic and useful data base for site interpretations. Computerization of the data allows easy retrieval of the data for broad spectra of culturally and functionally related problems. The ceramic data can be obtained in chart or graph form, and distribution of sherds or vessels can quickly be plotted on site maps. Determining sherd typology through temper analysis is possible when other attributes are inadequate for accurate classification. Source area determinations may permit inferences concerning cultural or economic affinity with other sites.

The resultant data provide evaluation of various quantitative methods in ceramic studies. The low number of sherds per minimum vessel obtained during the study is in agreement with information obtained by Krieger (1949) at the Davis site in Texas, where 9 to 11 sherds per vessel were estimated. The Cochiti Reservoir data suggests that the average number of sherds per minimum vessel may decrease with increasing age of the pottery type, however. Only 42% of the minimum vessels identified include rim sherds, suggesting caution in the use of rims to estimate number of vessels present or in sampling procedures. Guidelines for interpretation, as well as cautions, emphasize the attrition factor of sherds at an archeological site. Problems inherent in interpretation of pottery assemblages will vary from site to site and will involve such factors as materials used to make pottery, the age of the pottery, subsequent utilization, site occupations, and erosion and weathering.

PART TWO: SITE REPORTS



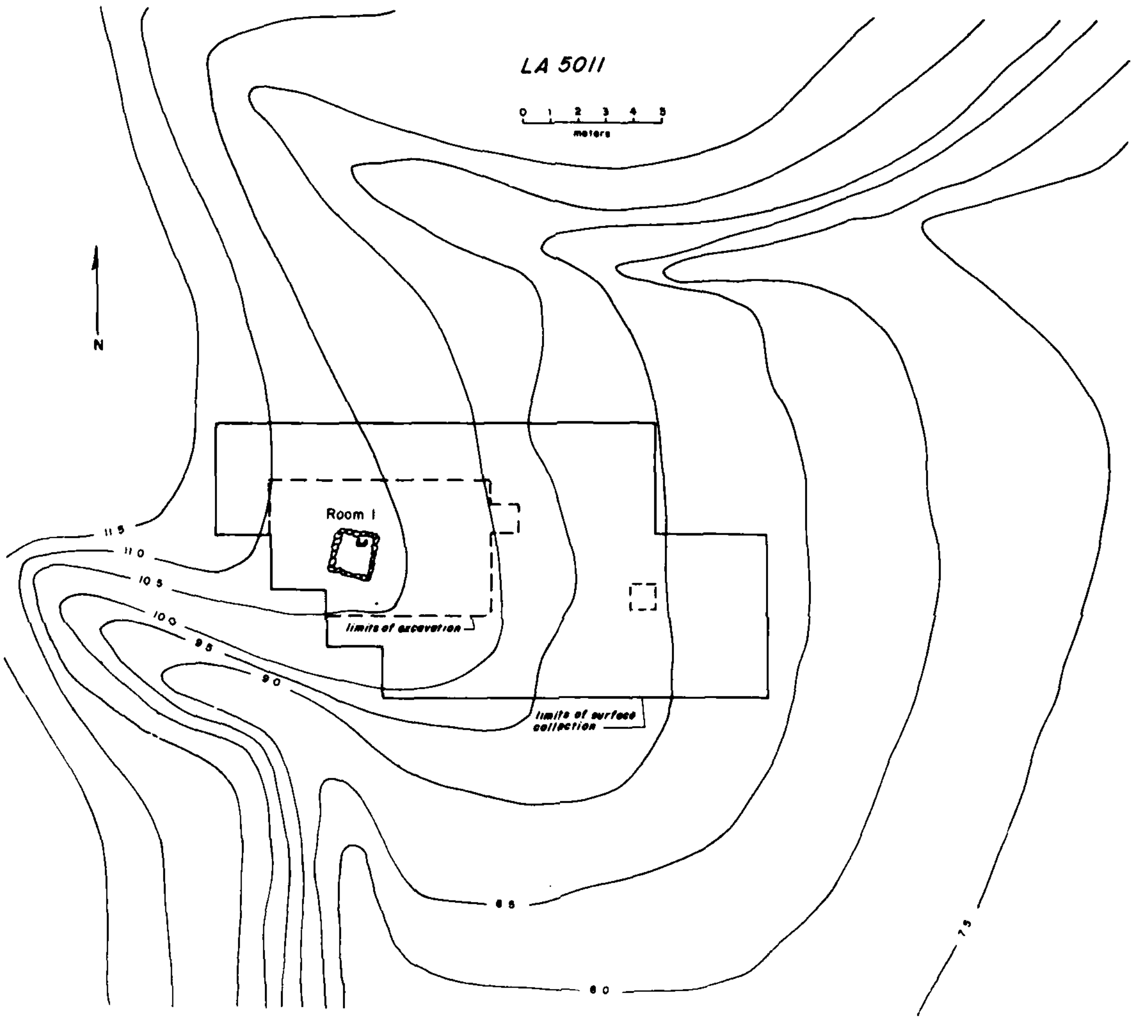


FIG. 3.1 LA 5011 site map, illustrating local topographic relief, site boundaries, and excavation units.

Chapter 3
LA 5011

Jan V. Biella, James G. Enloe and David C. Eck

INTRODUCTION

LA 5011 is an Anasazi Period site which dates to the late Pueblo III (P-III) to early Pueblo IV (P-IV) time periods, between ca. A.D. 1175–1490. The site consists of a freestanding masonry room with an interior hearth and an associated lithic and ceramic scatter.

The site is situated on the west side of the Rio Grande in White Rock Canyon approximately 300 meters north of the mouth of Sanchez Canyon at an elevation of 5330 feet. LA 5011 is located on dune-covered talus, approximately 70 meters above the river. The dune is situated at the base of the canyon wall talus 125 meters from the Rio Grande. The dune is bounded on the north and south by east-running arroyos, respectively two and twelve meters from the room.

LA 5011 is located in the Upper Sonoran Juniper vegetative community (Drager and Loose 1977: Fig. II.2.1). Clumps of juniper trees provide the dominant vegetative cover with infrequent small pinyon trees interspersed. Snakeweed and various grasses occur beneath the clumps of juniper, while the rabbitbrush and prickly pear cactus dominate areas between the trees.

EXCAVATION APPROACH

A grid system, measuring 20 x 10 meters in maximum extent and consisting of 1 x 1 meter grid units, was laid out over the site. The southwest and northeast corners of the grid system were truncated by arroyos, leaving a total of 160 undisturbed grid units. This entire undisturbed area was surface collected by grid unit.

Survey data indicated the presence of a rubble mound covering an area of 11 x 3 meters. Two to three contiguous rooms were postulated from the extent of the rubble with one rectangular room being defined by standing walls. In order to determine the number and relationship of the features in the rubble mound, a series of subsurface tests were placed immediately inside and outside of the structure defined by standing walls. Only one freestanding surface structure (Room 1) was ultimately defined; the additional alignments of rocks noted on survey lacked depth and stacking and apparently were fortuitous natural placement of talus elements.

Additional tests were placed on the slope below the rubble mound (see Fig. 3.1). While additional features were not defined, all of the tested areas, including the tests in the rubble mound, indicated the presence of a single homogeneous stratum of tan sand overlying a talus substrate. Forty contiguous grid squares or 25% of the surface collected area was tested.

Excavated material from all exterior subsurface tests was processed through ¼ inch wire mesh with that recovered from the interior of the room being processed through ¼ and 1/8 inch mesh.

ARCHITECTURE

ROOM 1

Shape: Subrectangular surface structure (see Fig. 3.2).

Orientation: The long axis of the structure was oriented 133° east of true north.

Condition: Although the walls of the structure were partially reduced prior to excavation, they did not appear to have been vandalized.

Interior Room Dimensions:

	Length	Width	Height
North Wall	1.63m	0.35–0.40m	0.46m
South Wall	1.72m	0.30–0.40m	0.53m
East Wall	1.50m	0.35–0.50m	0.41m
West Wall	1.70m	0.35–0.50m	0.56m

Interior Floor Space: ca. 2.9 square meters.

Walls: All four walls were of similar construction and are described together below.

Type of Elements: The walls were constructed from angular basalt clasts which were available in the talus immediately to the west of the structure.

Size of Elements: Elements ranged in size from 20 cm x 20 cm x 10 cm to 50 cm x 50 cm x 20 cm with a mode of 30 cm x 30 cm x 20 cm.

Placement and Construction of Elements: Elements were placed at irregular angles with respect to the horizontal and vertical axes of the wall(s). The stacked elements were overlapping with no differentiation between basal, middle, or upper elements. The wall was one element thick.

Shaping of Elements: The elements were unmodified.

Wall Facing: The wall surfaces were not evenly faced.

Chinking: No evidence of chinking was recovered.

Mortar: There was no evidence of mortar.

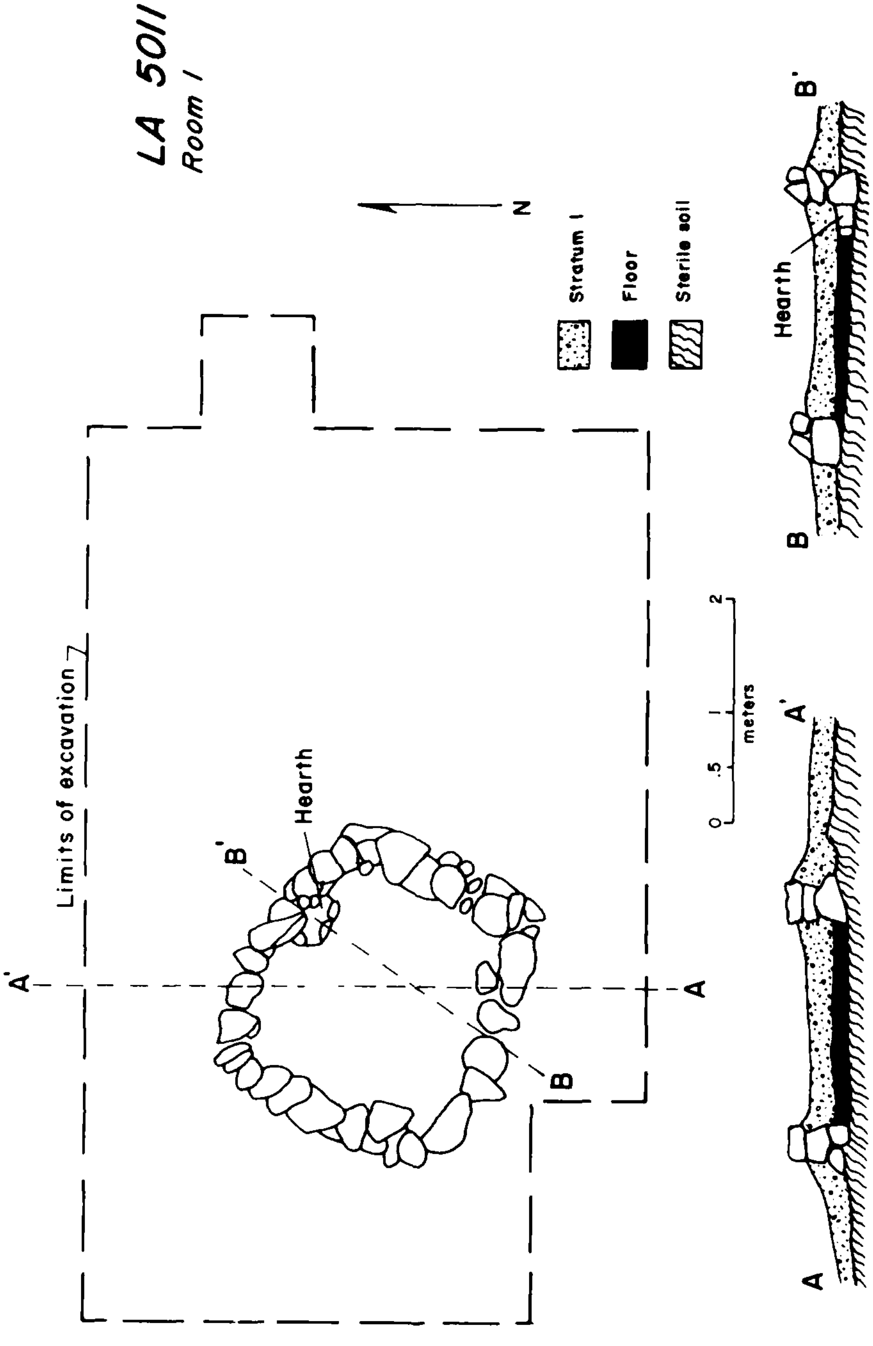


FIG. 3.2 LA 5011 — Room 1, plan view and cross section

Corners: The corners were rounded and interlocking.

Plaster: No plaster was evident.

Entrances: No entrances were apparent.

Floors: Discontinuous patches of a hardpacked, adobe-like material were recorded above the substrate at the base of the walls. This surface or floor was noted at differing levels and was extensively disturbed by rodent burrows, particularly in the center of the room. The floor varied in thickness from ca. 8 cm to 15 cm and appeared to have been superimposed upon the original ground surface after the construction of the walls.

Roofing: No evidence of roofing material was recovered.

Interior Features:

Hearth: A subfloor hearth, measuring 38 x 24 cm (10 to 13 cm deep), was located against the north wall. It was lined with tabular basalt clasts along three sides, with a portion of the north wall forming the fourth side. Patches of floor were recorded on the upper portions of the lining elements. The feature was filled with ash and charcoal, and the interior faces of the elements were burned. A low phosphorous content measure suggests that the hearth was probably used for heating rather than cooking purposes.

Room Fill: The room fill consisted of one homogeneous tan sand stratum which was approximately 30 cm in depth. The sand was intermixed with wall rubble. The fill was extensively disturbed by rodent tunnels, especially at a depth of 20 cm to 30 cm. Some of the tunnels were intact, while others were filled with sand, cultural material and/or flecks of charcoal. Root and insect disturbances were also present. This undifferentiated fill was designated as Stratum 1. There was no evidence of a reoccupation or reuse of the structure.

Rubble: A total of 2.3 square meters of rubble was monitored; 1.8 square meters were recovered from the exterior of the room, and 0.5 square meters were recovered from the interior of the room.

Exterior Features: No exterior features were located.

PLATE 3.1 Details of Room 1 (LA 5011), looking east. Note extent of rubble.

ARTIFACTUAL ASSEMBLAGES

Unlike most other sites in Cochiti Reservoir, nearly 99% of the LA 5011 artifactual materials were recovered from subsurface proveniences. Consequently, we felt that it might be possible to isolate in situ activity areas through analysis of the horizontal distribution of different classes of artifactual debris. To facilitate an examination of intrasite activity differences or similarities, artifactual materials recovered from LA 5011 were separated into two analytical assemblages: materials recovered from the fill inside the room (Assemblage 1); and materials recovered from the exterior grids (Assemblage 2). Results of these analyses, both at the inter- and intra-assemblage level, are presented below.

CERAMIC ARTIFACTS

Minimum No. of vessels: 21
Total No. of sherds: 130
Average No. of decorated sherds per vessel: 5.92
Average No. of utility sherds per vessel: 7.43
Average No. of plainware sherds per vessel: 1.00

Components	Painted Wares			Plain/Utility		
	Bowls	Jars	Other	Bowls	Jars	Other
P-III	1	1	—	—	4	—
P-IV (Group A)	2	4	—	—	—	—
P-IV (Group C)	3	1	1	—	—	—
P-IV (undiff.)	—	—	—	—	3	—
Nondated	—	—	—	—	—	1

As many as three temporally distinct ceramic assemblages, representing late P-III through early P-IV occupations, ca. A.D. 1175-1490, may be distinguished. The P-III assemblage is represented by as many as six vessels (48 sherds) including a Santa Fe B/W jar, an undifferentiated carbon-on-white bowl, two Smeared Indented Corrugated jars, an indented corrugated-oblique jar, and a patterned corrugated jar. From tempering materials represented (pumice, rhyolite tuff, undifferentiated tuff, and sandstone), all of the vessels appear to have been manufactured locally, in the Pajarito Plateau-Cochiti area.

The P-IV ceramics recovered belong to the Rio Grande Glaze Groups A and C, and may represent two distinct assemblages. The Glaze A vessels include a Cieneguilla Glaze Polychrome (G-P bowl, a Cieneguilla G-P olla, three

TABLE 3.1

LA 5011 – Ceramic Assemblage Summary

Ceramic Type	Vessel No.	Vessel Form	Temper	Room 1 Surface	Room 1 Strat. 1	Exterior Grid Surface	Exterior Grid Strat. 1	Total
P-III Assemblage								
Santa Fe B/W	13	closed	2015	—	—	—	1	1
Undiff. carbon/white	10	bowl	3655-12	—	1	—	—	1
Smeared indented corrugated	14	closed	3655	—	2	—	7	9
Smeared indented corrugated	19	closed	3852-10	—	2	—	22	24
Corrugated indented oblique	16	closed	3811	—	—	—	5	5
Corrugated patterned	18	closed	3431	—	—	—	8	8
P-IV (Group A) Assemblage								
Cieneguilla G-P	4	bowl	3431	—	1	—	2	3
Cieneguilla G-P	12	jar/olla	3431	—	5	1	43	49
Undiff. glaze/red	6	closed	3710	—	1	—	—	1
Undiff. glaze/red	7	closed	3405	—	1	—	—	1
Undiff. glaze/red	9	closed	3431	—	—	—	2	2
Undiff. glaze/white	5	bowl	3863	—	—	—	1	1
P-IV (Group C) Assemblage								
Espinoso G-P	2	bowl	3270	—	3	—	1	4
Undiff. glaze-polychrome	1	bowl	3270	—	—	—	1	1
Undiff. glaze-polychrome	3	bowl	3270-11	—	1	—	5	6
Undiff. glaze-polychrome	8	closed	3270	—	—	—	1	1
Undiff. glaze-polychrome	11	stirrup canteen	3270	—	—	—	6	6
P-IV, Undifferentiated Assemblage								
Blind indented corrugated	15	closed	3811	—	—	1	—	1
Blind indented corrugated	17	closed	3811	—	1	—	2	3
Blind indented corrugated	20	closed	3852	—	2	—	—	2
Nondated Assemblage								
Plain, polished	21	pipe	3864	—	—	—	1	1
TOTAL				0	19	2	109	130

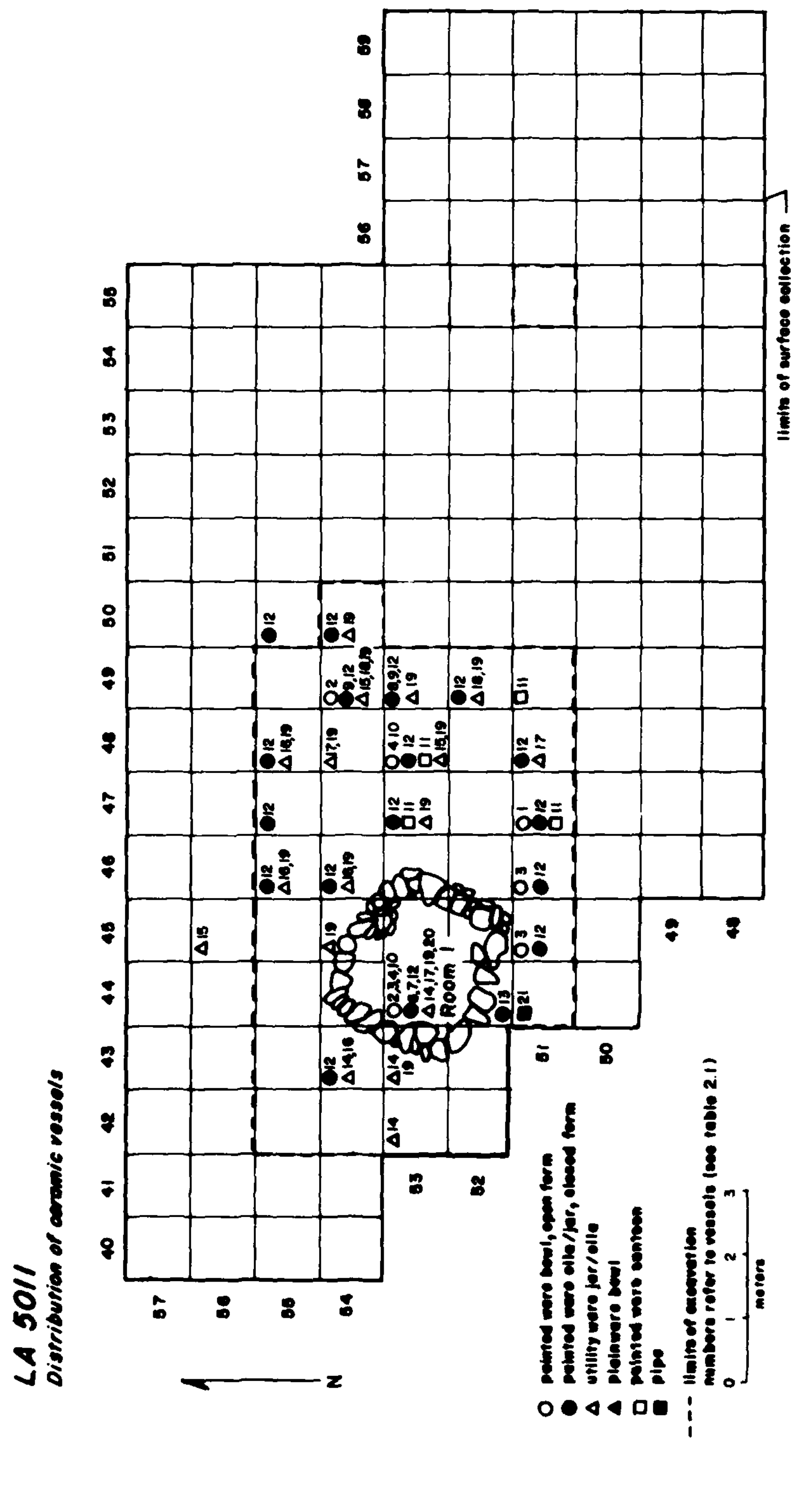


FIG. 3.3 LA 5011, distribution of ceramic assemblages by vessel
(numbers next to symbols refer to the vessel number as used in the ceramic summary table)

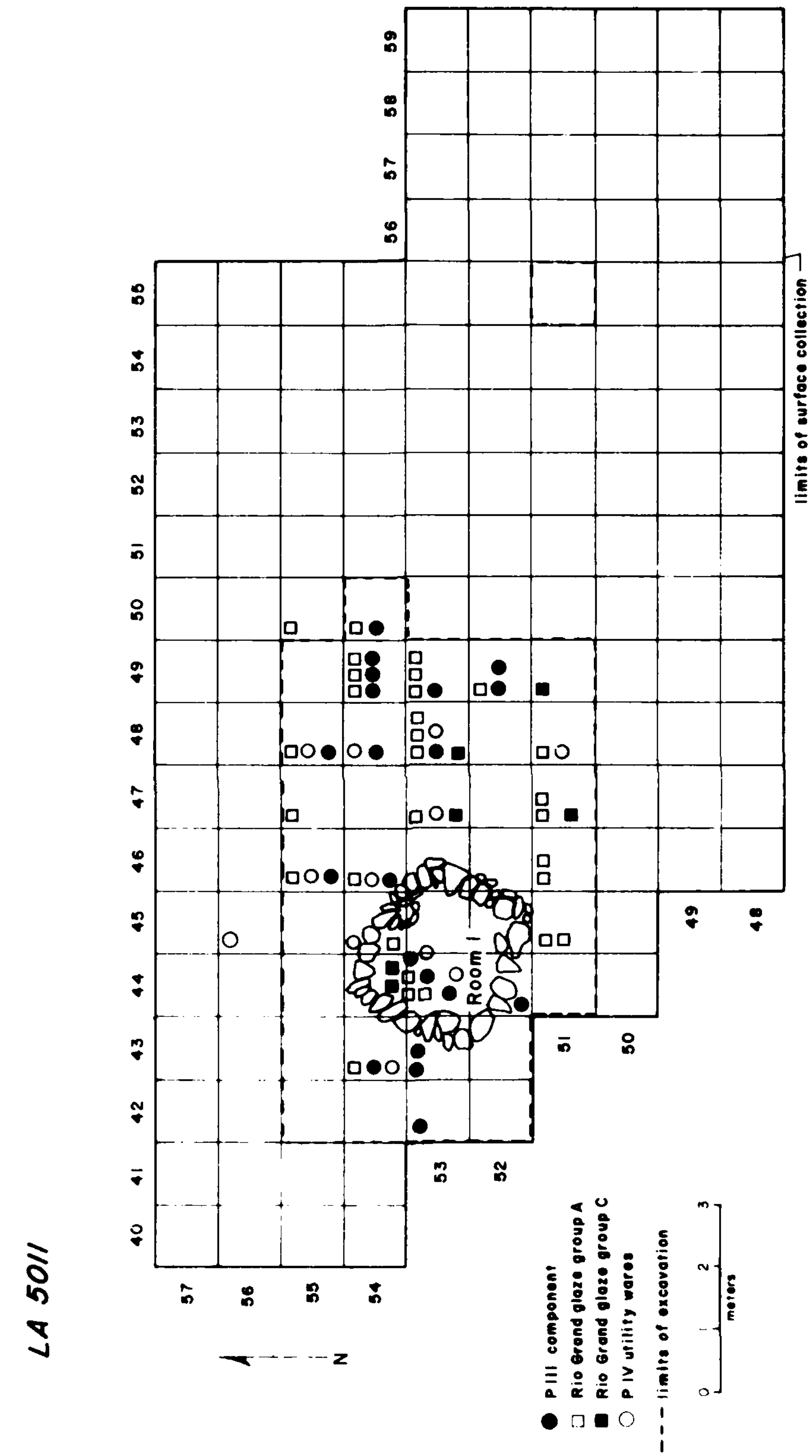


FIG. 3.4 LA 5011, distribution of P-III and P-IV ceramics

undifferentiated glaze-on-red jars/ollas, and one undifferentiated glaze-on-white bowl. Since the majority of the sherds are Glaze A yellow polychromes, it is probable that they represent an occupation dating between A.D. 1350 and 1425. Tempering materials include types of basalt scoria, andesite vitrophyre, and vitric tuff, which are locally available in the southern Pajarito Plateau.

One Espinoso G-P bowl with hornblende latite temper constitutes the only clearly defined Rio Grande Glaze Group C vessel. It is probable that this vessel was manufactured at Tonque Pueblo (LA 240) during the late 14th to early 15th centuries (Warren 1977:356). Four undifferentiated glaze polychrome vessels (2 bowls, 1 jar, 1 stirrup canteen), were also tempered with hornblende latite. Although these polychromes may have been contemporaneous with the Glaze A vessels, a late 14th century date would be more consistent with the known distribution patterns of hornblende latite tempered pottery in the Middle Rio Grande Valley (Warren 1979).

Additional P-IV vessels included three Blind Indented Corrugated jars, a type of utility ware which is contemporaneous with Rio Grande Glaze Groups A and C. Tempering materials suggest local manufacture in the southern Pajarito Plateau-Cochiti area.

A sherd from a plainware ceramic pipe, containing fine-grained vitric tuff with mica temper, completes the assemblage. This vessel could be contemporary with either P-III or P-IV assemblages, and appears to be of nonlocal manufacture (in the Northern Rio Grande Valley, perhaps near Nambe).

While as many as three different temporal assemblages may be defined, there is no apparent difference in the distribution of the assemblages, either horizontally or vertically. Portions of eleven different vessels were recovered from the fill in Room 1; all three temporal assemblages were represented. Similar intermixing was evident in a majority of the exterior grids (see Fig. 3.4).

Thus, spatially discrete temporal occupations, based upon ceramics, could not be isolated at LA 5011. This is in contrast to many other multicomponent P-III/P-IV sites in the Cochiti Reservoir area. In general, the P-III and P-IV occupations on these sites are spatially and stratigraphically discrete. Commonly new structures are constructed in lieu of reoccupying an existing structure (see LA 12522 in Laumbach et al. 1977, for example). It appears that these sites reflect a reuse or reselection of the general site locale rather than a reuse of an existing site. Thus, LA 5011 seems to represent a multicomponent Anasazi period site with evidence of a continuity of occupation between the two phases which is commonly lacking in other multicomponent P-III/P-IV sites.

LITHIC ARTIFACTS

A total of 225 lithic artifacts was recovered from LA 5011. Of these, 220 are pieces of freehand flake debitage and small angular debris. The remaining items include two cores, one piece of large angular debris, one uniface, and a projectile point. The frequency of lithic artifacts is thus 1.4 per square meter for all grids, and 5.6 artifacts per square meter for those grids containing material. These materials were recovered from ¼ inch mesh screening and constitute the basic lithic assemblage summarized in the following discussion and in the appendices to this report. An additional 44 lithic artifacts were recovered from 1/8 inch screening in the room. These are summarized in Table 3.2 and are included in the following discussion, where appropriate.

Material Selection

Twenty-eight different material taxa were recovered from LA 5011. These materials are all available locally. The basalts and obsidians may be derived in White Rock Canyon itself, or the Jemez Mountains to the west, or Cerros del Rio Plateau to the east; and the cherts and chalcedonies are available in the gravels of the Totavi Lentil in the canyon. Basalts make up 39% of the total assemblage, followed by obsidian (28%), Pedernal chert/chalcedony (18%) and non-Pedernal chert (9%). The remaining 6% of the assemblage is comprised of non-Pedernal chalcedonies, silicified woods, quartzite, jasperoids, and metarhyolites.

With the exception of the basalts and obsidians, all the materials are represented in similar percentages in the fill of the room and in the exterior fill. Obsidian occurs in much higher frequency in the room than in the exterior grids, while basalt occurs more frequently in the grids than in the room. The highest density of material occurs either in the room or in grids immediately adjacent to the room. The obsidian and chert/chalcedony artifacts are distributed in clusters while the basalt artifacts are more widely dispersed.

Manufacture

There is limited evidence to suggest primary, secondary, and tertiary reduction activities were performed at LA 5011. Slight differences were observed in the assemblages recovered from the room and the exterior grids. These differences are noted below when appropriate. Although 28 different material taxa were identified, only a few materials, one obsidian taxon (3520), two basalt taxa (3701, 3050), one Pedernal chalcedony taxon (1215), and one non-Pedernal chert taxon (1600), are represented by sufficient frequencies of debitage to suggest systematic production of lithic artifacts.

For the obsidian artifacts, primarily 3520, which accounts for 54 of the 64 obsidian items, there is evidence for all stages of reduction. Primary reduction activities are suggested by the presence of cortex on 45% of the obsidian flake debitage and small angular debris, and by the presence of an exhausted core (3520). Flake scars on this core originated at cortical striking platforms and a similar pattern is reflected by the occurrence of unprepared cortical platforms for 47% of the 3520 flakes with platforms. This suggests a reduction strategy in which cores were not routinely prepared prior to the detachment of flakes. Additional by-products of primary reduction activities, principally large angular debris and other cores, however, were absent. Secondary (and possibly tertiary) reduction activities are suggested by the relatively low percentage of estimated dorsal cortical surface area on debitage (6% in

TABLE 3.2

Lithics Recovered from 1/8 Inch Screen

Grid/Feature	Level	No. of Artifacts	Material	Platforms S.F.	Platforms Ctx.	Platforms Ret.	Platforms None	Wear Patterns
			Obsidian					
52/44 Room 1	1	8	3520	6	2	–	–	1
52/45 Room 1	1	2	3520	2	–	–	–	–
53/44 Room 1	1	7	3520	–	–	–	7	–
		1	3523	–	–	–	1	–
		1	3530	–	–	–	1	1
53/45 Room 1	1	2	3520	–	1	–	1	–
		4	3523	2	–	–	2	–
54/45 Room 1	1	3	3523	1	–	–	2	–
TOTAL		28		11	3	0	13	2
			Basalt					
53/44 Room 1	1	8	3701	–	–	–	8	–
53/45 Room 1	1	2	3050	–	1	–	1	–
54/45 Room 1	1	2	3050	–	–	–	2	–
TOTAL		12		0	1	0	11	0
			Pedernal Chert/Chalcedony					
52/44 Room 1	1	1	1215	1	–	–	–	–
53/44 Room 1	1	1	1091	1	–	–	–	–
53/45 Room 1	1	1	1052	–	–	–	1	–
		1	1091	–	–	–	1	–
TOTAL		4		2	0	0	2	0

S.F. = single facet
Ctx. = cortex
Ret. = retouching

the room and 20% in the exterior grids) and the consistently small flake size: 92% of the obsidian flakes ranged in length from 11-30 mm. One resharpening flake (3520) was also recovered which could be indicative of tertiary stages of reduction.

Several factors indicate that the obsidian materials may have been partially reduced in the exterior grids adjacent to the room and then further reduced within the room itself. These include a higher percentage of cortical material in the grids (15 items or 58% of all obsidian debitage) than in the room (13 items or 36%). Average flake size is also slightly larger in the material from the exterior grids than from the room. Additionally, 28 obsidian flakes were recovered within the room from a 1/8 inch screen sample; only three of these flakes exhibited cortex (see Table 3.2). These data may indicate that later stages of reduction (secondary and tertiary) occurred in the room.

With the exception of material from one taxon of basalt (3050) with 32 items and one taxon of chert (1600) with 14 items, the remaining taxa with sufficient amounts of debitage to suggest systematic reduction activities (3701 basalt, 45 items; 1215 chalcedony, 19 items) reflect similar patterns of primary reduction as those outlined for the obsidian. Although exact percentages vary (see Appendix III), the 3701 and 1215 assemblages reflect the use of both unprepared cortical platforms and prepared noncortical (single facet) platforms. This is in contrast to the 3050 and 1600 assemblages in which platforms were routinely prepared (83% and 90% single-faceted platforms, respectively). Total estimated dorsal surface area covered by cortex varied from 22% to 28% for the four material taxa overall, percentages which suggest secondary as well as primary stages of reduction. Within the room, however, these figures increased sharply for the basalt taxa (3701 – 59%; 3050 – 42%) and decreased for the chert (0%) and chalcedony (17%) taxa. With the exception of one piece of 1215 large angular debris and one 3400 basalt core (only two pieces of 3400 debitage were recovered), these larger items indicative of primary reduction activities were absent. Tertiary reduction is indicated by the presence of two retouch flakes (3701, 1215) and 16 basalt, chert, and chalcedony flakes recovered from the 1/8 inch screen sample in the room.

In summary, primary reduction activities, as measured

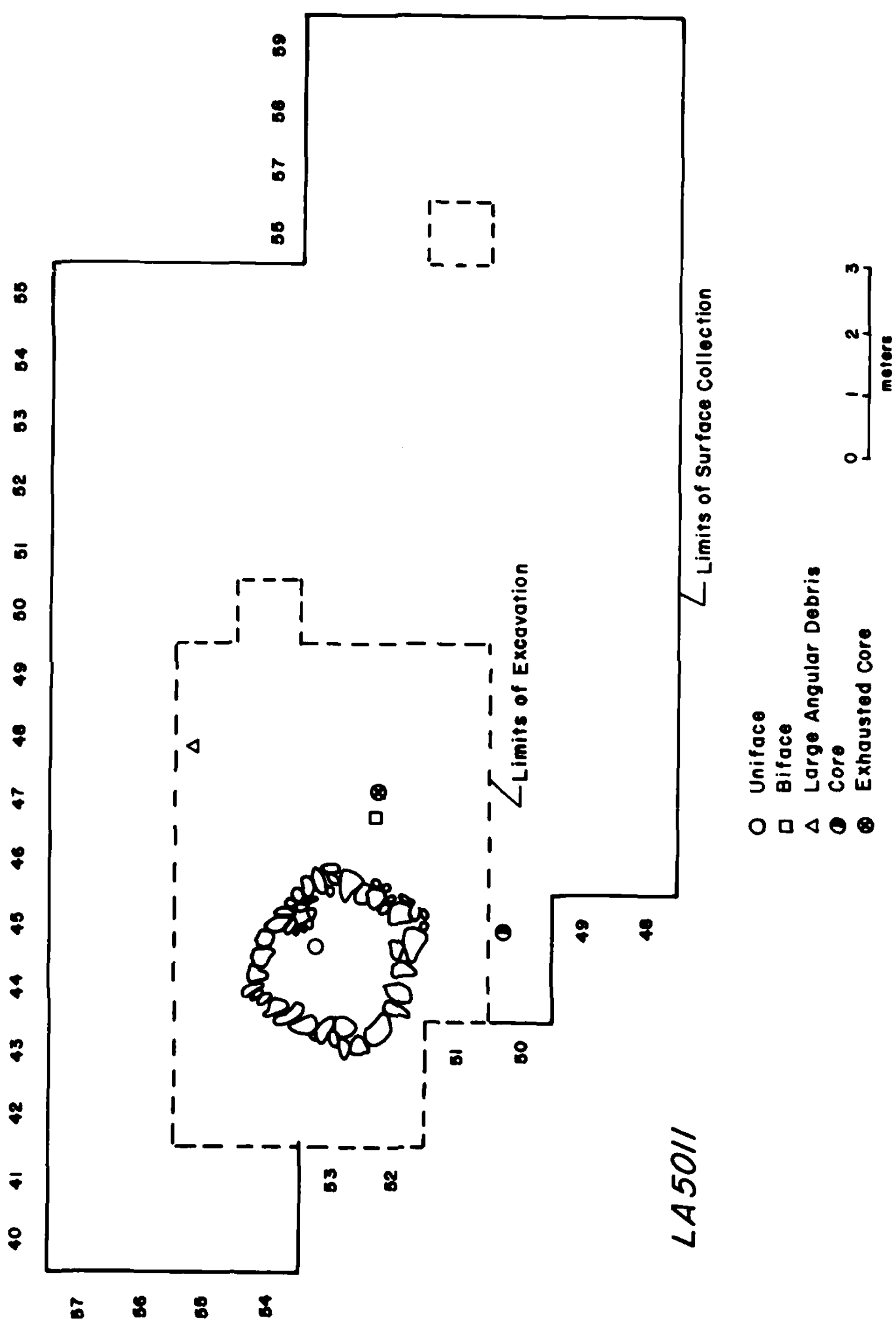


FIG. 3.5 LA 5011, distribution of cores, large angular debris, and lithic tools (each symbol represents an artifact)

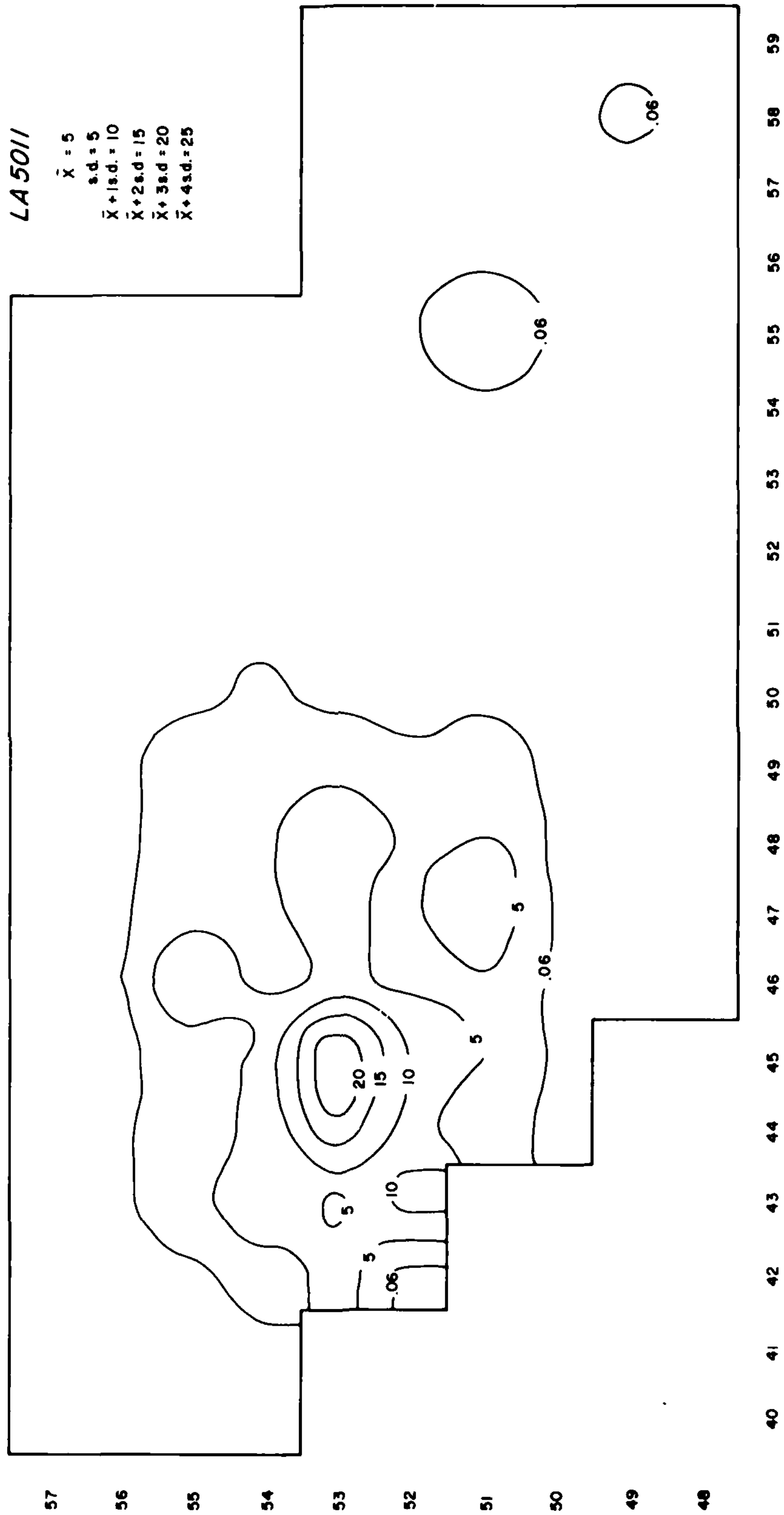


FIG. 3.6 LA 5011, distribution of debitage (isopleths)

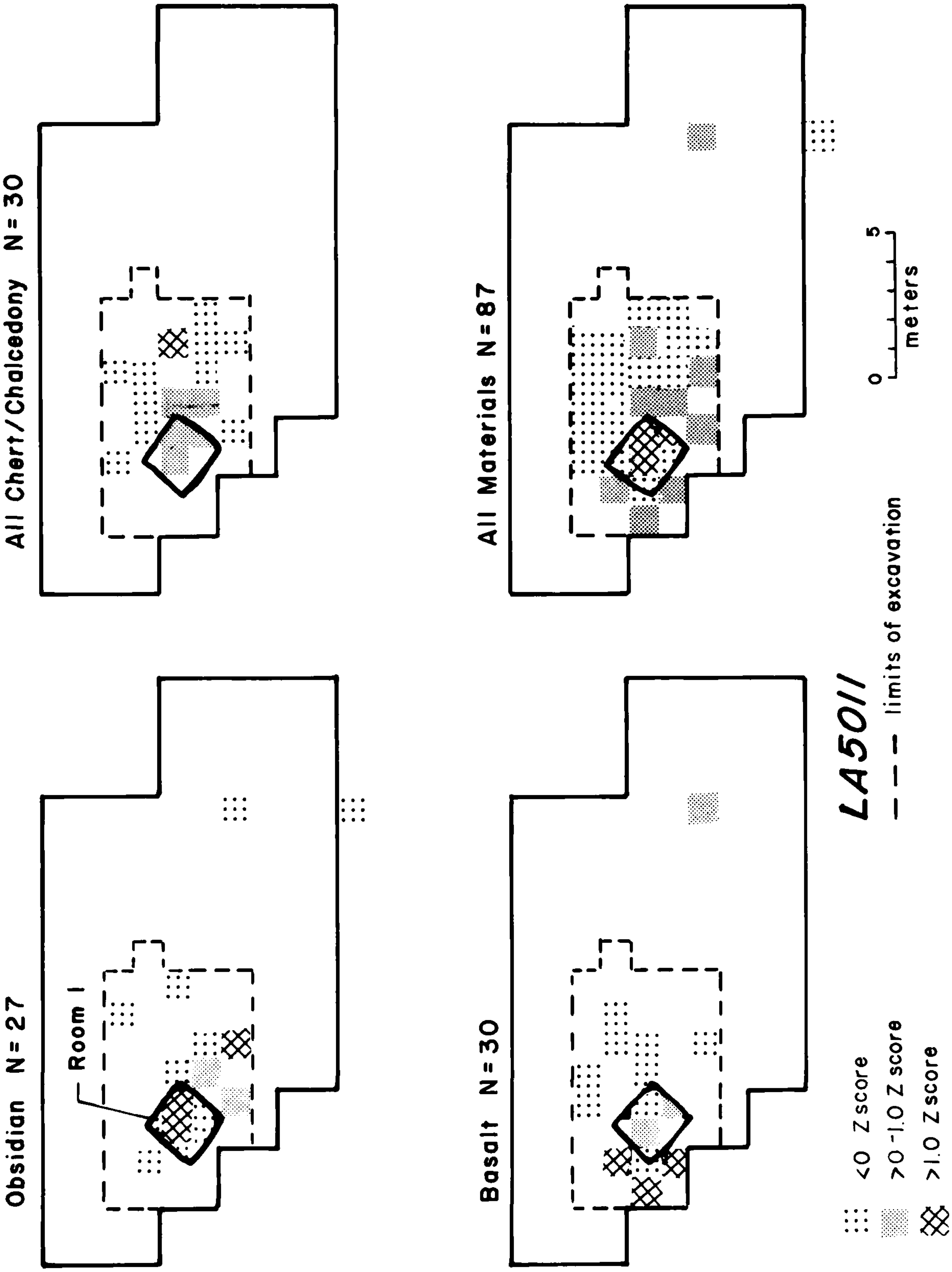


FIG. 3.7 LA 5011, distribution of debitage (choropleths)

by the frequency of items with cortex, are concentrated in the exterior grids; with the basalt concentrated in three grids to the west of the room; with chert and chalcedony in one grid to the east of the room; and with obsidian in one grid to the southeast of the room. Thus different loci of primary reduction (in the exterior grids) are indicated for each material type. Within the room only the basalt taxa seem to reflect an emphasis on primary reduction. In contrast, the obsidian, chert, and chalcedony artifacts suggest more secondary stages of reduction in the room. This is indicated most apparently in the extremely low percentages of estimated dorsal cortical area figures (see above). Limited evidence for tertiary stages of reduction are most evident in the material recovered from the room (1/8 inch mesh and one resharpening flake), although two retouch flakes were recovered from the grids.

Tool Use

Only 6% of the lithic artifacts were used as tools. These included two facially retouched artifacts (a uniface and a projectile point) and 12 pieces of debitage. Milling implements (manos and metates), hammerstones and utilized cores or large angular debris were absent.

The uniface was manufactured from obsidian (3523) with cortex on its dorsal surface. A proximal fragment from a projectile point which was manufactured from silicified wood (1110), was triangular in shape with side notches and a flared stem. The point exhibited lateral bidirectional rounding on both side edges. Retouch flakes, one each from obsidian (3520), basalt (3701), and chalcedony (1215) indicated the presence and possible use of additional facially retouched artifacts which were not recovered from the site.

Five percent of the debitage in the assemblage exhibited use as tools. Although obsidian made up only 28% of the total lithic assemblage, 11 of the 12 pieces of utilized debitage (92%) were obsidian. Flakes ranging in size from 21 mm to 40 mm were specifically selected for use although more numerous small flakes (less than 20 mm) were available in the assemblage. A single piece of felsophyre (3035), an intermediate igneous rock, also exhibited use. It was one of the largest flakes in the assemblage, 70 mm in length, although other larger pieces of chalcedony and basalt were present.

A single locus of tool use activity could not be defined; rather, the tools were distributed in roughly equal proportions in the fill of the room and in the exterior fill to the south of the room. Obsidian, however, was clearly the preferred material for utilization, both in terms of utilized debitage and facially retouched artifacts.

BONE ARTIFACTS

No bone artifacts were recovered from LA 5011.

FAUNA

Sixteen bones were recovered from LA 5011; all but three were found in the fill of the room. A minimum of four different individuals were represented, including an adult woodrat (2 fragments), an immature Neotoma-sized mammal (1 fragment), a medium-sized mammal (1 fragment) and a large mammal (10 fragments). The remaining bones, one each from an undifferentiated mammal and a medium-to-large mammal, do not affect the minimum number of individuals represented. In view of the few number of bones and the amount of disturbance in the fill of the room, it is difficult to interpret procurement or consumptive subsistence strategies from this sample.

FLOTATION ANALYSIS

A 500 ml sample from the first stratum of Room 1 revealed a single burned hackberry seed (*Celtis* sp.) in the light flotation residue and a single plant root (corn?) fragment in the heavy flotation residue.

SUMMARY

LA 5011 is one of a series of small structural Anasazi sites located in Cochiti Reservoir. It consists of a single masonry room with an interior hearth and a low density lithic and ceramic scatter. Unlike most other sites in White Rock Canyon, LA 5011 is principally a subsurface manifestation; only a few flakes and sherds were recovered from the surface. As many as three separate temporal occupations, spanning a 300 year period from ca. A.D. 1175-1490 (late P-III to early P-IV) are indicated from the types of ceramic vessels recovered. The P-III assemblage consisted of as many as six vessels (a decorated bowl, a decorated jar, four utility jars); the P-IV assemblages contained five decorated jars and three utility jars. The Glaze A occupation was the most extensive. Discrete spatial occupations which corresponded to the temporal occupations could not be defined. In fact, the different temporal materials were intermixed throughout the fill of the site (see Fig. 3.4).

Direct evidence of procurement activities is restricted to one burned hackberry seed and a few bone fragments from a minimum of four animals (an undifferentiated large mammal, a medium mammal, and two woodrats). Since extensive burrowing was noted during the excavation of the room, it is possible that the woodrats are intrusive. Although a hearth was located in the room, a phosphorous content test suggested that it was unlikely to have been used for cooking purposes. Milling implements and other indirect measures of consumptive and/or procurement activities were absent as well.

Limited evidence for primary, secondary, and tertiary stages of reduction of lithic materials was recovered. Slight differences in the distribution of cortical debris by material category (obsidian, basalt, etc.) suggest separate reduction episodes. Obsidian materials were preferred for utilization.

Although a relatively long temporal period of occupation is suggested from the ceramics, it seems apparent from the low density of trash that these occupations were ephemeral and intermittent.

Chapter 4

LA 10114

Rosalind Hunter-Anderson, James G. Enloe and Martha R. Binford

INTRODUCTION

LA 10114 consists of a single habitation structure, two small storage structures, a series of isolated wall fragments, and numerous petroglyphs. Ceramic artifacts suggest a substantial early 19th century (or possibly late 18th century) Historic period occupation and a possible prehistoric Anasazi Pueblo III/Pueblo IV (P-III/P-IV) occupation.

LA 10114 was located in White Rock Canyon, on the west side of the Rio Grande between the mouths of Medio and Sanchez Canyons. It was situated at the base of a large boulder talus, at the top of a sandy alluvial fan. Several large boulders were lying detached from the talus, on top of the fan. The alluvial fan sloped gently, 10^0 to the southeast and to the Rio Grande, ca. 200 meters away. Elevation was 5360 feet above sea level, 24 meters above river level.

This site was located in the Upper Sonoran Juniper community (Drager and Loose 1977: Fig. II.2.1). A wide variety of plants were present, including juniper, snakeweed, cholla, prickly pear, gooseberry, Apache plume and sand sage.

At the base of the slope, several very large angular basalt boulders were lying detached from the slope, on the sandy alluvium, 10 to 25 meters from the base of the talus. These boulders ranged in size from 3 to 6 meters in maximum dimensions, standing up to 5 meters high. Among and against several of these were built walls and enclosures of smaller (30 cm to 50 cm) basalt clasts. One was a single rectilinear structure (Room 1) with a boulder forming the south wall. On the south side of that boulder, a short wall linked that boulder to another. Portions of walls linked several large boulders to the south of the room, forming an enclosure between the boulders and the base of the talus.

On these boulders and others at the base of the talus and upslope were a wide variety of petroglyphs. These ranged from square heads, masks, anthropomorphs to feathered serpents, a naturalistically drawn eagle, a man riding a horse, and stock brands.

Little ceramic or lithic debris was seen on the surface; most was concentrated in small arroyos below the structures. Schaafsma (1975) reported a single sherd of San Pablo G/P. This site was in close proximity to a modern trail, which may have contributed to the scarcity of surface materials. Also, it was easily approachable after the filling of the Cochiti Reservoir permanent pool, attracting sightseers with its spectacular petroglyph panels. The latter people reported to the excavation crew of previous sherd collection activities.

EXCAVATION APPROACH

A system of 1 x 1 meter grids was laid out, extending 26 x 19 meters in maximum extent, for collection of surface debris. Vegetation was stripped from the gridded area. Approximately 105 m^2 were occupied by basalt boulders or juniper trees, where no collection was possible. The area collected included the enclosure between the talus base and the detached boulders, and the broad slope below the structures (see Fig. 4.1).

Testing was begun on the west side of Wall 1, in the area enclosed between the talus and the walls among the boulders. A 1 x 1 meter test pit was excavated in 10 cm arbitrary levels to a depth of 1.3 meters below surface. At this depth, the rounded gravels of the underlying Totavi Lentil were encountered. Fill was a uniform, homogeneous, tan sand, with sherds, flakes and flecks of charcoal distributed thinly, but continuously through the deposit. The entire depth was designated as Stratum 1 and the test (Trench 1) was extended eight meters west to the talus and ca. 30 cm east to the wall. On the other (east) side of Wall 1, a second test (Test 2) was excavated. The ground surface east of the wall was 83 cm lower than that of the west side. It was apparent that Wall 1 had acted as a dam, retaining the alluvial sand within the supposed enclosure. Fill on the east side of the wall was much shallower than on the west. This test was dug in arbitrary 10 cm levels to determine if the depositional sequence was similar to that on the west side of Wall 1, or if the presence of the wall had significantly altered or conditioned the deposition. The test revealed the existence of a hardpacked surface at the level of the base of Wall 1, ca. 22 cm below ground surface. In Grid 36/53, associated with this hardpacked surface, was a burned area of red stained sand, charcoal and ash (Feature A), and many small bones and bone fragments, both burned and unburned, around the periphery of the feature. No such corresponding surface was located through testing of the west side of the wall. Excavation was expanded horizontally to recover materials in association with Feature A, including 6 m^2 in addition to areas adjacent to Wall 1, within designated Stratum 1 on the east side. Testing below Stratum 1 yielded some sparse cultural debris, possibly due to rodent disturbance, but no other occupation levels.

Inside Room 1, a 1 x 1 meter unit was excavated in arbitrary 10 cm levels to determine internal stratigraphy. Four strata were discerned and designated as the units of vertical control for further excavation inside Room 1. The fill was removed by grid from the whole room one stratum at a time, to preserve any in situ horizontal artifactual distributions.

Outside Room 1, two stratigraphic units (designated Strata 1 and 2) were used to strip 27 grid units around

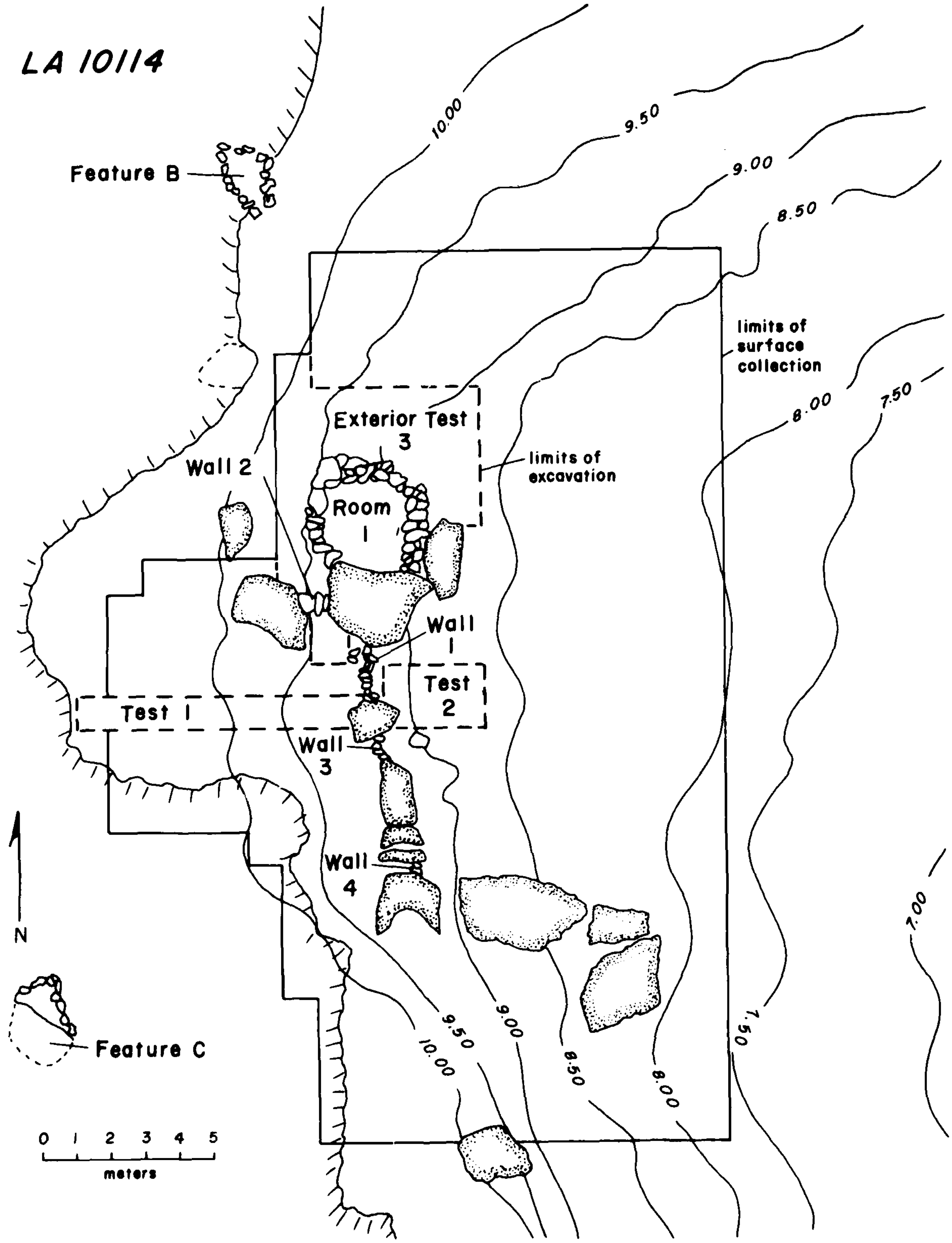


FIG. 4.1 LA 10114 site map, illustrating local topographic relief, site boundaries and excavation units

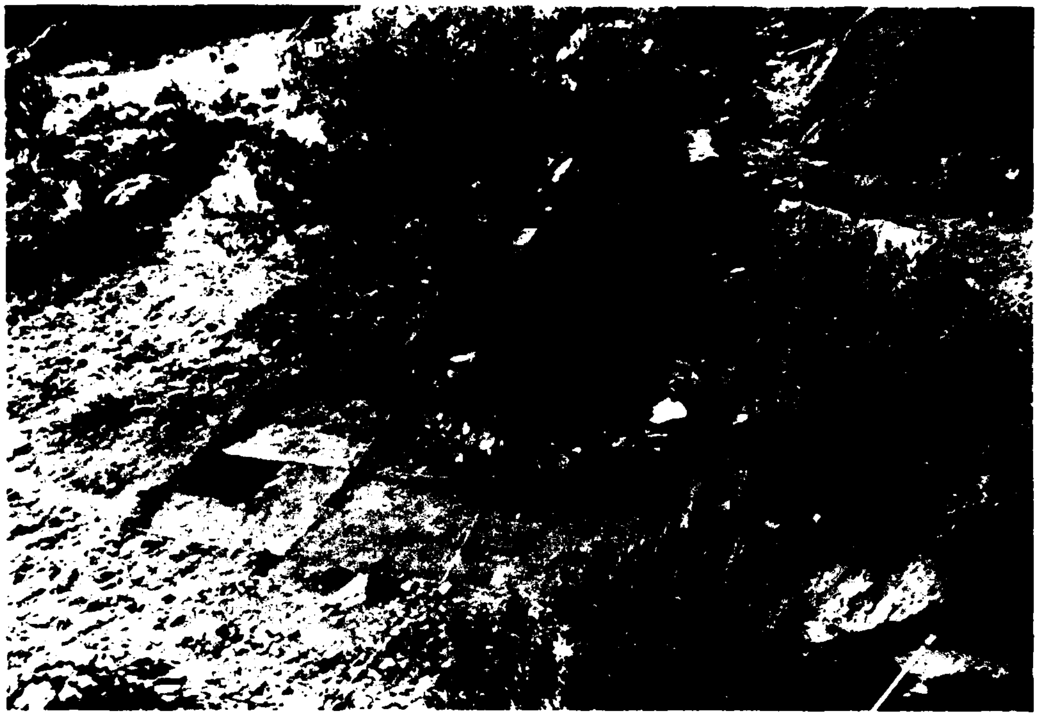


PLATE 4.1 Overview of Site LA 10114, looking south

PLATE 4.2 Overview of Site LA 10114, looking southwest

the exterior of the room, primarily to the northeast and east. Two other cavities in the talus, Features B and C, were also collected and tested.

ARCHITECTURE

ROOM 1

Shape: Subrectangular surface structure (see Fig. 4.2).

Orientation: The long axis of the structure was oriented 40^0 east of true north.

Condition: The masonry walls were partially collapsed, probably standing at half of their original height. No vandalism or serious erosion was apparent.

Interior Room Dimensions:

	Length	Width	Height
North Wall	2.30 m	0.59 m	0.68 m
South Wall	1.80 m	boulder	boulder
East Wall	2.40 m	0.50 m	0.50 m
West Wall	2.10 m	0.48 m	0.40 m

Interior Floor Space: 4.6 m^2

Walls: Three of the walls were of similar construction and are described together below. The fourth wall was formed by a vertical planar surface of a large basalt boulder.

Type of Elements: The walls were constructed from subangular basalt clasts which were immediately available in the surrounding talus.

Size of Elements: Elements ranged in size from 20 cm x 20 cm x 5 cm to 150 cm x 50 cm x 50 cm, with a modal size of 20 cm x 30 cm x 40 cm.

Placement and Construction of Elements: Elements were placed horizontally, with long axes at varying angles to the long axes of the walls. The longer elements, however, were usually parallel to the long axes of the walls and tended to serve as basal elements. Smaller elements did not seem to have been differentiated for placement as basal, middle, or upper elements. Clasts were stacked rather than coursed, overlapping according to the size of the adjacent elements. Variation in element size seemed to determine whether the wall was one or more elements thick; two elements in width was the most common arrangement.

Shaping of Elements: Subangular. None of the elements had been shaped.

Wall Facing: The wall interior surfaces were not evenly faced.

Chinking: No evidence of chinking was noted.

Mortar: No evidence of mortar was recovered.

Corners: The two northern corners were rounded and interlocking; the two southern corners abutted the boulder.

Plaster: Plaster was not in evidence.

Entrances: Neither gaps nor openings in the walls of the room were observed. The west wall, however, only stood between one and two elements high and thus any opening may not have been apparent. Both the north and east walls were still standing several elements high, so that it is unlikely that doors existed in either.

Floors: The floor in Room 1 was a hardpacked surface rather than a prepared or manufactured floor, approximately 15 cm thick. It appeared to be situated on top of alluvial sand, probably at or very near original ground surface, at the base of the walls. It was slightly higher at the walls than in the center. The floor also sloped slightly from west to east. Extensive rodent disturbance destroyed much of the floor. On the west wall the floor is at the lowest wall element; on the east side, there are two elements below the surface of the floor.

Roofing: No roof was present on Room 1, although the presence of a large quantity of ash and small (2 cm to 8 cm) chunks of charcoal inside and around the exterior of the room would seem to suggest that a roof was made from small brush, rather than large beams or vigas.

Interior Features:

Hearth: One interior feature was present in Room 1. This was a subfloor pit against the east wall. Considerable root and rodent disturbance made it difficult to determine the exact shape and size of the feature, but it appeared to be a simple pit dug below the floor. It was basin-shaped, ca. 54 cm x 34 cm at the top, 48 cm x 34 cm at the bottom, and 10 cm deep. It lacked containing or lining elements. The pit was filled with ash and charcoal, suggesting its use as a hearth. Results from a phosphorus content test suggested that the hearth had been used as a cooking facility involving the processing of animal products. It is likely that bone calcium produced the outstanding value.

Room Fill: Excavation of a test pit inside Room 1 revealed the presence of four distinct stratigraphic units, Strata 1-4 (see Fig. 4.2).

Stratum 1: This top unit, which extended from ground surface to a maximum depth of 13 cm, was composed of humus and vegetative detritus, primarily from a large juniper growing immediately outside Room 1. This stratum was loosely packed and varied in thickness according to the contour of the top of Stratum 2. The interface between the two strata was discontinuously hardpacked. Artifactual debris in the top stratum was sparse, and no features were associated with this stratigraphic unit.

Stratum 2: The second stratum consisted of soft, friable, tan sand, with wall fall rubble occurring particularly near the walls. Rodent burrows existed throughout this thickest layer, bringing up quantities of artifactual debris and charcoal from the occupation level. The rubble occurred mostly at the base of this stratum and was apparently covered by subsequent alluvial sand deposition. Stratum 2 varied from 12 to

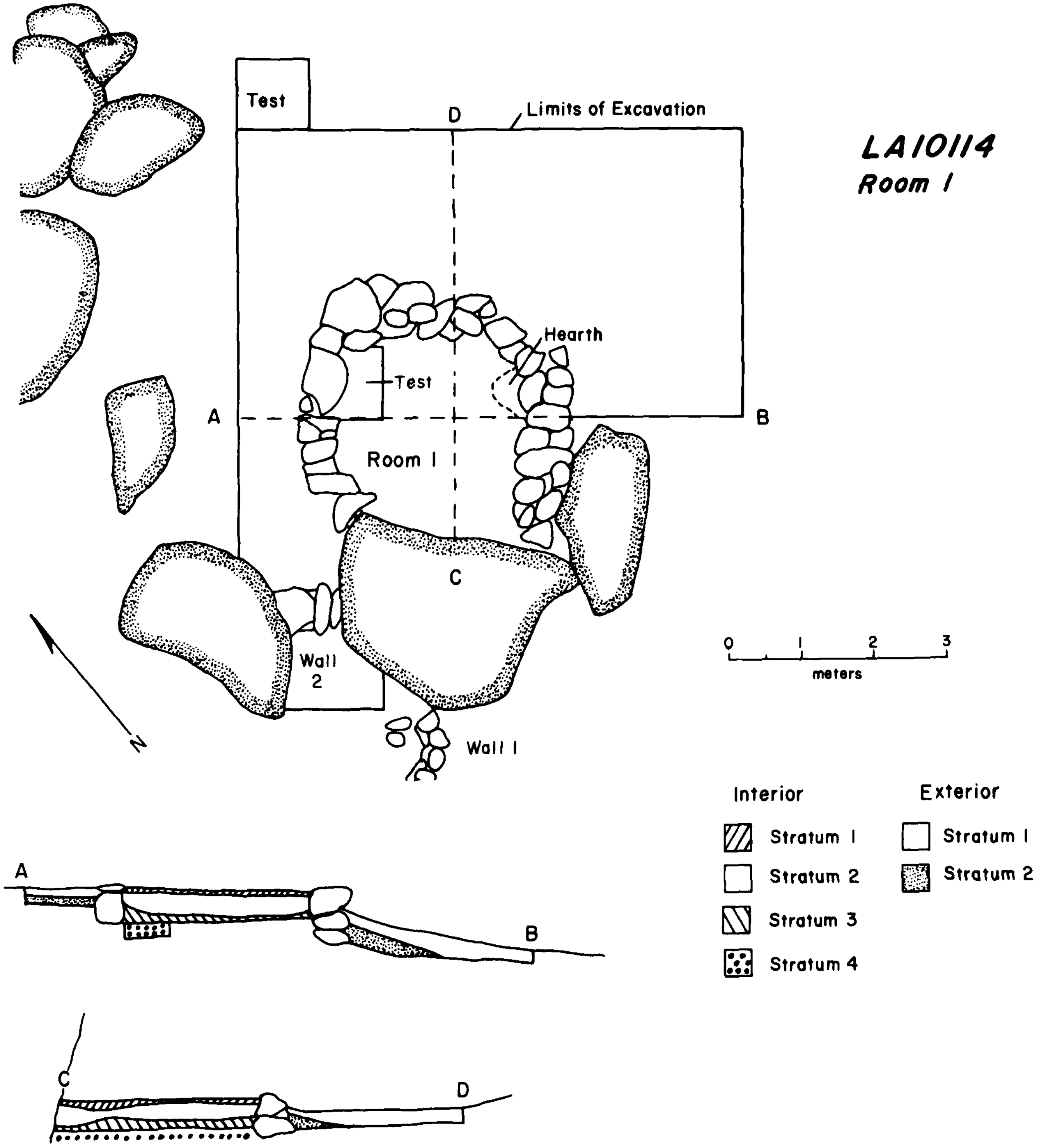


FIG. 4.2 LA 10114, Room 1 plan view and cross sections

30 cm in thickness. The density of cultural material increased near the base of Stratum 2.

Stratum 3: This stratum consists of a light grey, ashy deposit, containing charcoal, firespalled basalt, and high densities of artifactual debris. This appeared to be the zone of occupational debris, subjected to substantial burning before much postoccupational deposition could take place in Room 1. The base of this stratum was occasionally hardpacked into a floor, but considerable root and rodent disturbance had destroyed much of that surface. The stratum could be vertically correlated with the base of the walls and with the top of the subfloor features. Analogous ash and charcoal laden strata could be defined outside the room evidencing the intensive burning of the structure. This layer ranged from 10 cm to 15 cm in thickness, though root and rodent action made measurement of this difficult. A great amount of charcoal was removed from Stratum 3, principally in small (less than 1 cm) chunks. This may be an indicator of either the completeness of combustion, supported by the presence of many firespalled fragments in this stratum, or the size of material selected for roofing construction.

Stratum 4: This stratum consisted of tan, homogeneous, loose sand, and formed the basal unit of deposition below the floor. This was apparently the substrate upon which the roof was constructed. Caliche-laden small gravels were encountered in this stratum. Cultural materials were absent, except for a few which could be attributed to rodent deposition. This stratum was ca. 20 cm thick.

In summary, a relatively simple depositional history of Room 1 could be reconstructed with some rodent and root disturbance redistributing cultural debris through the entire deposition. The room was constructed on top of the alluvial sand and occupied long enough to hardpack portions of the floor. Occupation was terminated or followed by an episode of intense burning with an accumulation of ash and charcoal directly on top of the hardpacked floor. The deposition of the burned materials was followed by a partial collapse of the walls resulting in the placement of basalt clasts on top of ash, during a period of accumulation of alluvial sand deposit. This deposition of rocks and sand was the thickest layer, probably indicating relative length of depositional period. On top of the alluvial sand fill in the room was a thin surface layer of humus, attributable to a living juniper which now overhangs the room. Cultural material was in densest concentration of the floor, in the ash of Stratum 3. This probably represented the deposition for which the human occupation was responsible. No subsequent occupations were evident.

Rubble: Rubble from the interior of the room was removed and stacked, totaling 0.42 cubic meters. Exterior rubble totaled 0.86 cubic meters. The total amount of rubble was 1.28 cubic meters, indicating that walls did not stand higher than one story.

Exterior Fill: Tests of several areas outside the room revealed the presence of a complex depositional history for the site. The nature of stratified deposit was different on opposite sides of the immediate room exterior, and each of those was different from other external tests. Each test was assigned Strata 1 to n; these strata are *not* equivalent to those in other tests. However, some correlations were possible. A brief discussion of each stratum follows.

The test on the exterior of the north wall of Room 1 (part of Test 3) revealed two stratigraphic units. The upper unit, Stratum 1, consisted of rubble in a matrix of alluvial sand. This was presumed to be postoccupational fill. Below that stratum was a layer of grey ash and charcoal, designated Stratum 2. This lay atop a substrate of alluvial sand, at the same elevation as the base of the walls.

On the west side of the room in an area confined by the room walls and nearby boulders, Stratum 1 was very similar to that on the north, but Stratum 2 was significantly different. Instead of a thick layer of ash and charcoal against the base of the wall, there was a thick layer of manure, including several large intact coprolites in sheltered positions. This stratum lay on top of the same sand substrate as did the ash on the north side, and the distributions of artifactual debris through each were similar. These were apparently analogous in their relationship to the room in that they were deposited on the same original ground surface upon which the room was built; they contained high densities of artifactual debris. Both of these depositions occurred only adjacent to the walls of Room 1, extending only as far as 1.5 meters. Beyond that, Stratum 1, the alluvial sand containing artifactual debris, lay directly on top of the sterile substrate.

Test Trench 1 revealed the presence of alluvial sand fill down to (20 cm) and below the base of Wall 1. No occupation surfaces were discovered, and everything within this unit was designated Stratum 1. On the east side of Wall 1 (Area 2) at a substantially lower ground surface, an occupation surface was encountered at a depth of 22 cm. A hearth feature was present at this depth, excavated into the surface. The overlying fill was designated Stratum 1, the fill of the hearth was designated Stratum 2. If a single occupation of this site was postulated on the basis of the room stratigraphy, then this surface may have been utilized at the same time as the room.

The correlation of these various strata can be confusing because the numerical designation of the strata depended upon the number of units uncovered in each stratigraphic test. Thus, equivalent strata could acquire several different numbers. Table 4.1 summarizes the presumed correlation of the various tested areas.

TABLE 4.1

Correlation of Strata from Test Areas

	Interior of Room 1	Exterior Fill (Test Area 3)	Test Area 1	Test Area 2
Humus	1	–	–	–
Postoccupation alluvial fill	2	1	1	1
Occupation	3	2	–	2
Substrate	4	3	2	3

Exterior Features: Three exterior features were defined during the course of excavation. Of these, Feature A was a hearth, and Features B and C were storage units among the talus boulders.

Hearth (Feature A): This feature was a hearth excavated into an occupational surface on the east side of Wall 1. It was circular in plan, ca. 65 cm in diameter, and shaped like a shallow basin, 10 cm deep. The fill consisted of orange sand, with a small lens of ash on top of the center of the orange deposit. No lining or enclosing elements were present. It appears that the feature was excavated ca. 10 cm into the occupation surface. The occupation surface around the feature was littered with many burned bone fragments. No artifactual debris was located within the fill of this feature.

Storage Units (Features B and C): Features B and C were masonry facilities which were constructed under overhanging boulders of the talus immediately west of Room 1. They were too small to be used for human habitation or shelter; they may have served as storage units although cultural material was lacking in both.

Feature B was located some 10 meters north of Room 1, at the base of the talus. It was constructed of small, tabular unshaped basalt clasts from the talus. They were dry laid under a large basalt slab, enclosing a space ca. 190 cm x 98 cm, ca. 60 cm high at its tallest point. No artifactual debris was located within this feature.

Feature C was a similar facility located higher on the talus, ca. 15 meters southwest of Room 1. It was also constructed of unshaped local clasts, dry laid under an overhanging boulder. Interior dimensions were ca. 2 m x 1.5 m, and it was ca. 0.75 m tall. A small test pit indicated the presence of four distinct stratigraphic units within the fill. The basal unit was the alluvial sand, covered by a more compacted, fine-grained tan sand. This was covered by a thin 3 cm thick layer of silt, then 14 cm of the compact tan sand. No artifactual debris was located in this test. Sherds and flakes were collected from the surface of the talus immediately adjacent to this feature, but none from inside it. This feature may have been associated with the occupation of Room 1, but such association would be difficult to demonstrate.

Feature D: This feature is located outside and west of Room 1, approximately 0.5 meters west of the west wall of the room, in Grid 41/49. The area consisted of a reddish-stained soil (result of fecal remains) mixed with sand. The feature consisted of an area of packed ash extending ca. 40 cm x 40 cm, with the southern portion of the feature consisting of approximately 7 cm of mottled ash and sand. Depth of the hard-packed ash ranged from 7 cm to 10 cm with approximately 5 cm of sand and ash beneath. The feature abutted a large rock; it appears that the feature was a result of a fire built against the rock. Sherds were found in this feature. Fecal and other organic material (bone and seeds) were found nearby in grids outside the room.

ARTIFACTUAL ASSEMBLAGES

CERAMIC ARTIFACTS

A total of 377 sherds representing a minimum of 39 vessels was recovered from LA 10114 (see Table 4.2). The majority (27 vessels, 342 sherds) date to the late 18th/early 19th century; seven vessels (26 sherds) date to P-IV, and four vessels (9 sherds) to P-III. It is possible that the prehistoric sherds were brought to the site by historic occupants, although none of the prehistoric sherds exhibited worked edges, nor was sherd temper used in the Historic wares.

Prehistoric Ceramic Artifacts

Minimum no. of vessels: 12
Total no. of sherds: 35
Average no. of decorated sherds per vessel: 1.88
Average no. of utility sherds per vessel: 5.00

	Painted Wares			Plain/Utility		
Components	Bowls	Jars	Other	Bowls	Jars	Other
P-III	3	1	—	—	1	—
P-IV	2	2	—	—	3	—

Three vessels of Santa Fe B/W were represented at the site. One of these contained very fine-grained sand temper; the others were tempered with vitric tuff. An unidentified carbon paint decorated sherd contained crystal pumice temper and may have been from a local Galisteo B/W vessel. The utility vessel sherds were similarly tempered and are characteristic of P-III vessels on the Pajarito Plateau.

The eight glaze sherds from a minimum of four vessels could not be identified by type, but were tempered with materials known to be used by Rio Grande glaze potters between A.D. 1325 and 1600. Associated utility sherds (3 vessels) appear to be locally produced.

Historic Ceramic Artifacts

Minimum no. of vessels: 26
Total no. of sherds: 342
Average no. of decorated sherds per vessel: 7.50
Average no. of redware sherds per vessel: 5.00
Average no. of plainware sherds per vessel: 18.07

	Painted Wares			Redware		Plain		
Components	Bowls	Jars	Other	Bowls	Jars	Bowls	Jars	Other
Historic	4	—	—	1	1	2	9	3

A high percentage of crystal pumice temper in the historic carbon painted wares is suggestive of an early 19th century date by inference from a projected trend of increase in use of this temper type through time (see Warren 1979). A hemispherical bowl with a black rim, the absence of comales, bisqueware, late Glaze F, and spindle whorls, also point to a post 1800 date. The placement of the historic occupation in the early 19th century must be considered arbitrary, however. The occupation period could be earlier, but probably not later.

TABLE 4.2

LA 10114 – Ceramic Assemblage Summary

Ceramic Type	Vessel No.	Form	Temper	No. Sherds
		Prehistoric Assemblages		
P-III (A.D. 1175–1300)				
Santa Fe B/W	27	bowl, undiff.	2015-00	2
Santa Fe B/W	28	hemis. bowl	3863-00	2
Santa Fe B/W	29	bowl, undiff.	3863-00	1
Undiff. carbon/white	30	closed form, undiff.	3655-12	2
Indented corrugated	32	jar/olla	3655-11	2
P-IV (A.D. 1325–1490)				
Undiff. glaze/red	34	closed form, undiff.	3431-00	2
Undiff. glaze/yellow	35	closed form, undiff.	3431-00	2
Undiff. glaze/yellow	38	bowl, undiff.	3655-09	1
Undiff. glaze-polychrome	37	bowl, undiff.	3266-09	3
Blind Indented Corrugated	25	jar/olla	3816-00	4
Blind Indented Corrugated	26	jar/olla	3821-00	1
Blind Indented Corrugated	33	jar/olla	3655-11	13
		Historic Assemblage		
Spanish Colonial (post 1800)				
Puname Polychrome	2	jar/olla	3400-00	1
Puname Polychrome	3	jar/olla	3400-00	2
Puname Polychrome	4	jar/olla	3400-00	2
Ogapoge Polychrome	5	bowl, undiff.	3655-00	25
Ogapoge Polychrome	6	hemis. bowl	3655-00	25
Ogapoge Polychrome	8	jar/olla	3655-00	1
Ogapoge Polychrome	9	closed form, undiff.	3655-00	4
Ogapoge Polychrome	15	"soup plate"	3862-00	1
Undiff. black/cream	7	bowl, undiff.	3655-00	8
Undiff. black/cream + plain polished	10	jar/olla	3655-00	6
Redware, polished and slipped	1	jar/olla	3400-00	5
Plain polished, red/brown	36	bowl, undiff.	3655-12	10
Carnue Plain	18	jar/olla	2041-00	3
Carnue Plain	19	jar/olla	2041-00	91
Carnue Plain	20	jar/olla	2471-00	47
Carnue Plain	21	jar/olla	2472-00	25
Carnue Plain	22	jar/olla	2085-10	54
Carnue Plain	23	jar/olla	2085-10	6
Carnue Plain	24	jar/olla	3816-00	1
Plain unpolished micaceous	13	undiff.	3655-00	1
Plain polished, undiff.	14	undiff.	3862-00	1
Plain unpolished micaceous	16	jar/olla	2470-00	1
Plain unpolished micaceous	17	jar/olla	4560-00	16
Plain polished undiff.	31	undiff.	3655-12	1
Kapo Black	11	bowl, undiff.	3655-00	1
Kapo Black	12	bowl, undiff.	3655-00	4

Of a total of three Ogapoge Polychrome bowls and two jars, all but one *soup plate* form were produced locally and contained crystal pumice (3655) temper. The soup plate form contained fragments of white vitric tuff (3862) with some gold mica flecks, and was probably imported from a Tewa village. Three Puname Polychrome jars may have been locally made, but could have been imported from the Zia area, also. Both of the Kapo Black bowls were locally made with crystal pumice temper (3655) and tend to be more grey than black. An undifferentiated red-on-tan or brown (Casitas red/tan?) bowl, which in part resembles the 18th century bisquewares of White Rock Canyon, is also a local product.

Worked sherds include a pear-shaped Puname Polychrome sherd, a Puname sherd with a curved edge, and one Ogapoge Polychrome jar sherd with an abraded curved edge.

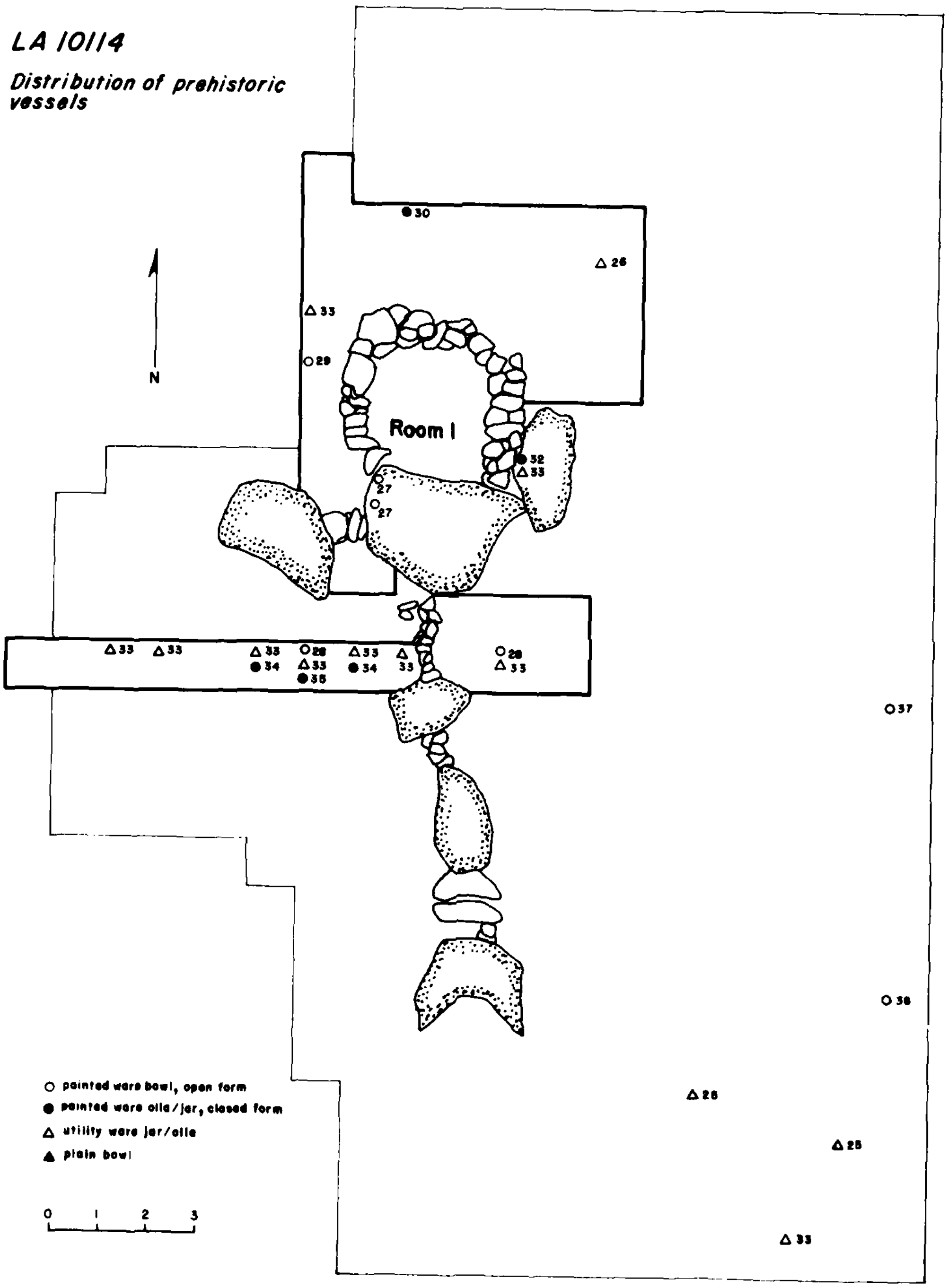


FIG. 4.3 LA 10114, distribution of prehistoric vessels
(numbers next to symbols refer to the vessel number as used in the ceramic summary table)

TABLE 4.3

Distribution of Ceramic Vessels by Provenience

	PREHISTORIC CERAMICS												HISTORIC CERAMICS							
	P-III Assemblage					P-IV Assemblage							Puname Poly.			Ogapoge Polychrome				
Provenience	27	28	29	30	32	34	35	38	37	25	26	33	2	3	4	5	6	8	9	15
Room 1																				
Stratum 1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	—	—	—
Stratum 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17	—	—	—	—
Stratum 3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	1	—	—	—
Stratum 4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Feature 1A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Feature C	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—
Feature D	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Test Area 1																				
Stratum 1	—	1	—	—	—	2	2	—	—	—	—	9	—	—	—	—	—	—	—	—
Straum 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Test Area 2																				
Stratum 1	—	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
Stratum 2	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Test Area 3																				
Stratum 1	—	—	1	2	2	—	—	—	—	—	1	2	—	1	2	—	7	1	2	—
Stratum 2	1	—	—	—	—	—	—	—	—	—	—	1	1	1	—	—	17	—	2	—
Surface Grids	—	—	—	—	—	—	—	1	2	4	—	—	—	—	—	—	—	—	—	—
TOTALS	2	2	1	2	2	2	2	1	3	4	1	13	1	2	2	25	25	1	4	1

Seven Carnue Plain and three micaceous utility vessels could be assigned to the Historic period. All but one of micaceous vessels were probably produced in the White Rock Canyon area. The latter resembles Ocate Micaceous, a utility ware described by Gunnerson (1969). Presumably made by the Jicarilla Apache, this micaceous paddle and anvil pottery was produced during the 17th and 18th centuries in northern New Mexico. The presence of this vessel seems to be an anomaly at the site, but may indicate production of this type into the 19th century. Sites which include similar ceramic assemblages in Canada de Cochiti Grant (Rio Chiquito) include LA 9880 and the historic occupation at LA 3444 (Kuapa).

If the estimated dates for LA 10114 and other sites in the area are correct for a late 19th century period, it appears that pottery was being made locally in Spanish settlements at least until the turn of the century.

Distribution of Ceramics

The majority of ceramics was concentrated inside and to the immediate north of Room 1. Only one sherd of prehistoric ware was recovered from inside the room; the largest concentration of prehistoric sherds was found in the test trench (see Fig. 4.3) to the south of Room 1 and west of Wall 1. Most of the prehistoric sherds were located within

HISTORIC CERAMICS (Continued)																	
Black/cream		Redwares		Carnue Plain							Kapo Black		Plainwares				PROV.
7	10	1	36	18	19	20	21	22	23	24	11	12	13	14	16	17	TOTALS
—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	1	6
—	1	—	1	1	7	5	1	—	—	—	1	—	—	—	—	—	34
—	—	—	—	1	30	8	15	—	—	—	—	—	—	—	—	—	60
—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1
—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	1
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
—	—	—	—	—	1	—	—	—	—	—	—	—	1	—	—	—	16
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
2	4	5	1	1	39	24	5	19	5	—	—	3	—	1	—	7	137
6	1	—	8	—	12	9	4	34	1	—	—	1	—	—	1	7	107
—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	9
8	6	5	10	3	91	47	25	54	6	1	1	4	1	1	1	16	376

the first levels excavated, while in a few cases prehistoric sherds were found at lower levels adjacent to walls, where they could have migrated downward. From these observations, the suggestion made above that the prehistoric sherds may have been brought to the site by Historic occupants is still plausible. An alternative interpretation of the presence of prehistoric sherds at the site is that there was a prehistoric occupational episode most abundantly represented in the southern portion of the site. This occupation may have been nonstructural as the test trench revealed much charcoal and organic debris in this area. At all levels within Room 1 only Historic sherds were encountered (see Fig. 4.4).

Sherds inside the room represented different vessels from those to the west of the room, except for vessel No. 20, which has a wide distribution in the site. There was close correlation between parts of particular vessels in the fill to the north of the room, and parts of the same vessels inside the room, however. Bowl and jar forms occurred both inside and outside the room, with jar forms much more frequent than bowl forms.

Within the room, all sherds were found on the west side, near the wall. No ceramics were found in the hearth against the east wall in Room 1, and none was found in association with the exterior hearth on the east side of Wall 1. Three Historic sherds were located in grids 41/49 and 42/49, in the vicinity of Feature D. In this area, jar forms predominated three to one.

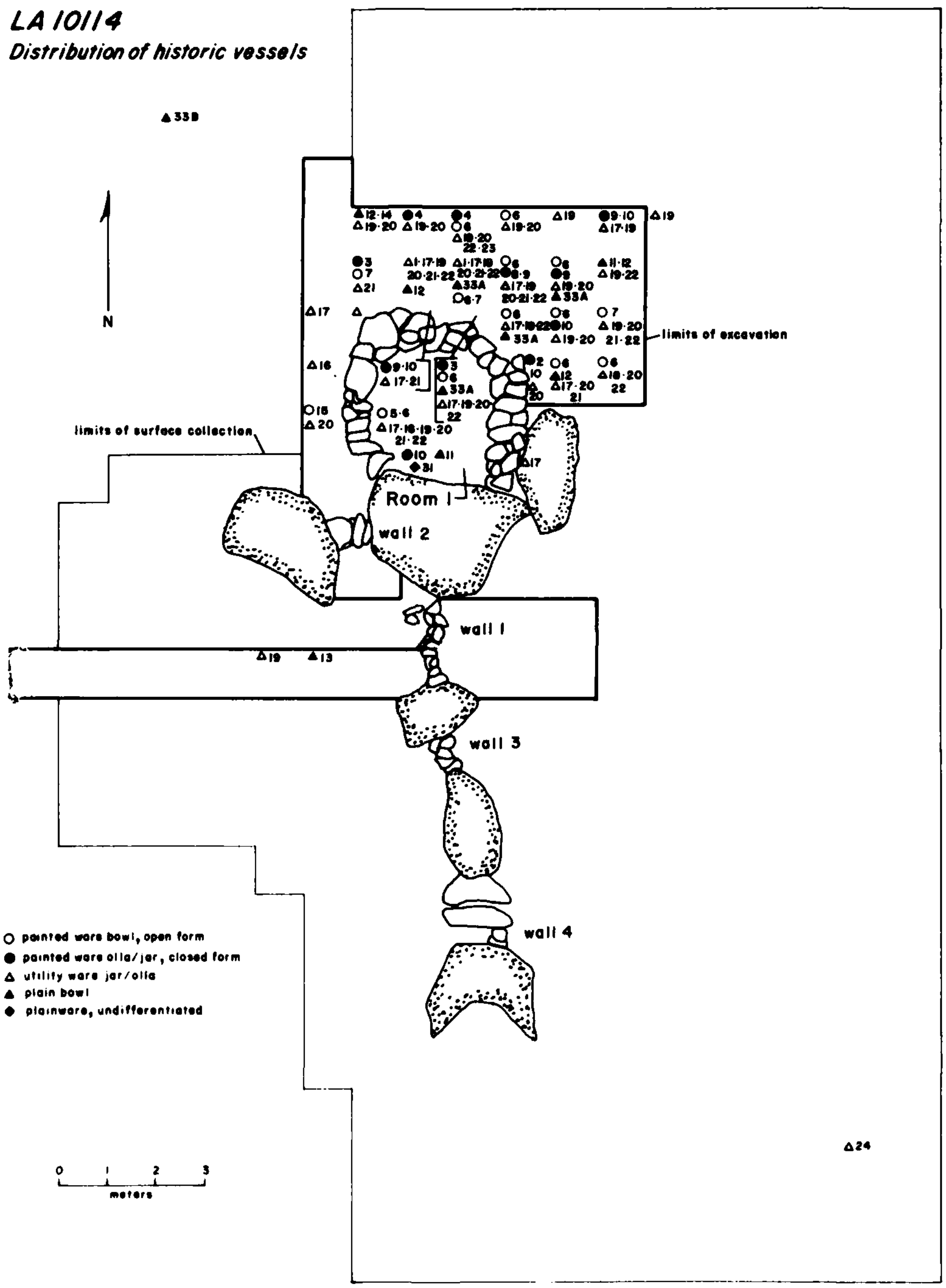


FIG. 4.4 LA 10114, distribution of historic vessels
(numbers next to symbols refer to the vessel number used in the ceramic summary table)

LITHIC ARTIFACTS

A total of 386 items of debitage was recovered from the site. Two incomplete bifaces and two complete unifaces, five cores, 11 pieces of large angular debris, a mano, and a milling slab were also collected. The greatest concentration of lithics occurred in the area immediately north of the room. Another area of relatively high artifact density was in some of the grids in the Test Trench 1, southwest of the room. None of the larger artifacts, such as cores, large angular debris, bifaces or unifaces, occurred inside the room. Most of these items were located to the north of the structure, along with the high densities of debitage.

Material Selection

Of the 386 items of debitage, 56% was Pedernal chert/chalcedony. Obsidian was the next most frequent material type (13%). Twelve percent of the debitage was basalt, and 8% was non-Pedernal chert. Lower count material types represented were silicified wood (5%), quartzite (4%), non-Pedernal chalcedony (1%), and jasperoid (1%). Among the large angular debris, three items were of quartzite, three were of fine-grained "trap" basalt (taxon 3050), four were of Pedernal chert/chalcedony, and one was non-Pedernal chert. Among the cores, two were of glassy basalt (taxon 3701), one was of Pedernal chalcedony; one was non-Pedernal chalcedony; and one was of quartzite. One uniface and one biface were of obsidian, and the other uniface was a spotted slate (taxon 4375); the other biface was 3701 basalt.

All of these materials are locally available. The basalt was probably procured from the beaches of the river (93% of the basalt had waterworn cortex). With the exception of the obsidian (with only 42% waterworn cortex), a majority of the remaining materials were probably procured from the Totavi Lentil.

Manufacture

Manufacture of basalt, Pedernal chert/chalcedony and quartzite artifacts may be inferred from the presence of cores of these materials. One hammerstone of basalt and four of quartzite were also observed. Large quantities of Pedernal chert/chalcedony (216 items) debitage were present, as well as moderate amounts of basalt (46 items), and obsidian (49 items) debitage.

Tool Utilization

Overall, only 8% of the flake debitage and small angular debris was utilized. A relatively high proportion of obsidian debitage, however, was utilized (26%). Although prevalent on the site, Pedernal chert/chalcedony debitage was largely unutilized (5%). Other silicious stone tools included two bifaces, two unifaces, and a utilized piece of large angular debris (4001). One basalt biface had bidirectional rounding on several high points on both lateral sides of the bifaces. Also one obsidian uniface exhibited unidirectional feathered scars, perpendicular to the edge margin.

One milling slab of fine-grained "trap" basalt (3050) was found at this site as well as one unshaped mano of scoriaceous basalt (3430). The mano was whole, irregular in outline shape and wedge-shaped in cross section. It exhibited two possible grinding surfaces. The milling slab was rectangular in shape and also was a wedge in cross section. Only one possible grinding surface was located. The milling slab was recovered in Room 1 and the mano from an exterior grid.

Discussion of Assemblages

Seven lithic assemblages were defined to examine intrasite differences and/or similarities. These assemblages were defined as follows: Assemblage 1, Room 1 Stratum 3 (occupation level); Assemblage 2, Test Area 3 (postoccupation exterior fill north of room); Assemblage 3, Test Area 3 (occupation surface north of room); Assemblage 4, Room 1 postoccupational fill (surface, Strata 1, 2); Assemblage 5, Test Trench 1 (west of Wall 1 all strata); Assemblage 6, Test Area 2 (east side of Wall 1 all strata); Assemblage 7, all other surface grids.

Assemblages 1 and 3
(Room and exterior occupation surfaces)

It was found that the occupation surface in Room 1 (Assemblage 1) contained 36 items of debitage in six material types (obsidian, Pedernal chert/chalcedony, chert, chalcedony, quartzite and jasperoid). Assemblage 3 had 73 items of debitage in eight material types (basalt and silicified wood, in addition to those material types in Assemblage 1). In each assemblage, approximately 72% of the debitage was Pedernal chert/chalcedony. Assemblage 3 had a somewhat higher percentage of cortical flakes, 45%; Assemblage 1 had 39%. In Assemblage 1, 6% had cortical platforms, 28% were single-faceted, and 3% were resharpened. In Assemblage 3, similar percentages of cortical platforms (6%) and single-faceted platforms (25%) occurred. Assemblage 3 was nearly half small angular debris and Assemblage 1 was one-third small angular debris. These are relatively large amounts of small angular debris compared with most lithic assemblages encountered during excavations.

Another difference between Assemblages 1 and 3 is that artifact density is comparatively higher in the assemblage from outside the room and may indicate that it was a dump area, when the character of the fill (grey ash and charcoal) is also considered.

It will be remembered that the larger artifacts, such as large angular debris, bifaces and unifaces were all found outside the room; all but one core were located outside as well. This would seem to indicate that differential use of space in the northern portion of the site occurred, at least with respect to primary reduction stages such that areas outside the structure were preferred for the initial stages of tool manufacture.

Utilization occurred only on Pedernal chert/chalcedony debitage in Assemblage 1 with 14% of the 36 items exhibiting wear patterns. Although obsidian was present (one item), it showed no utilization. In

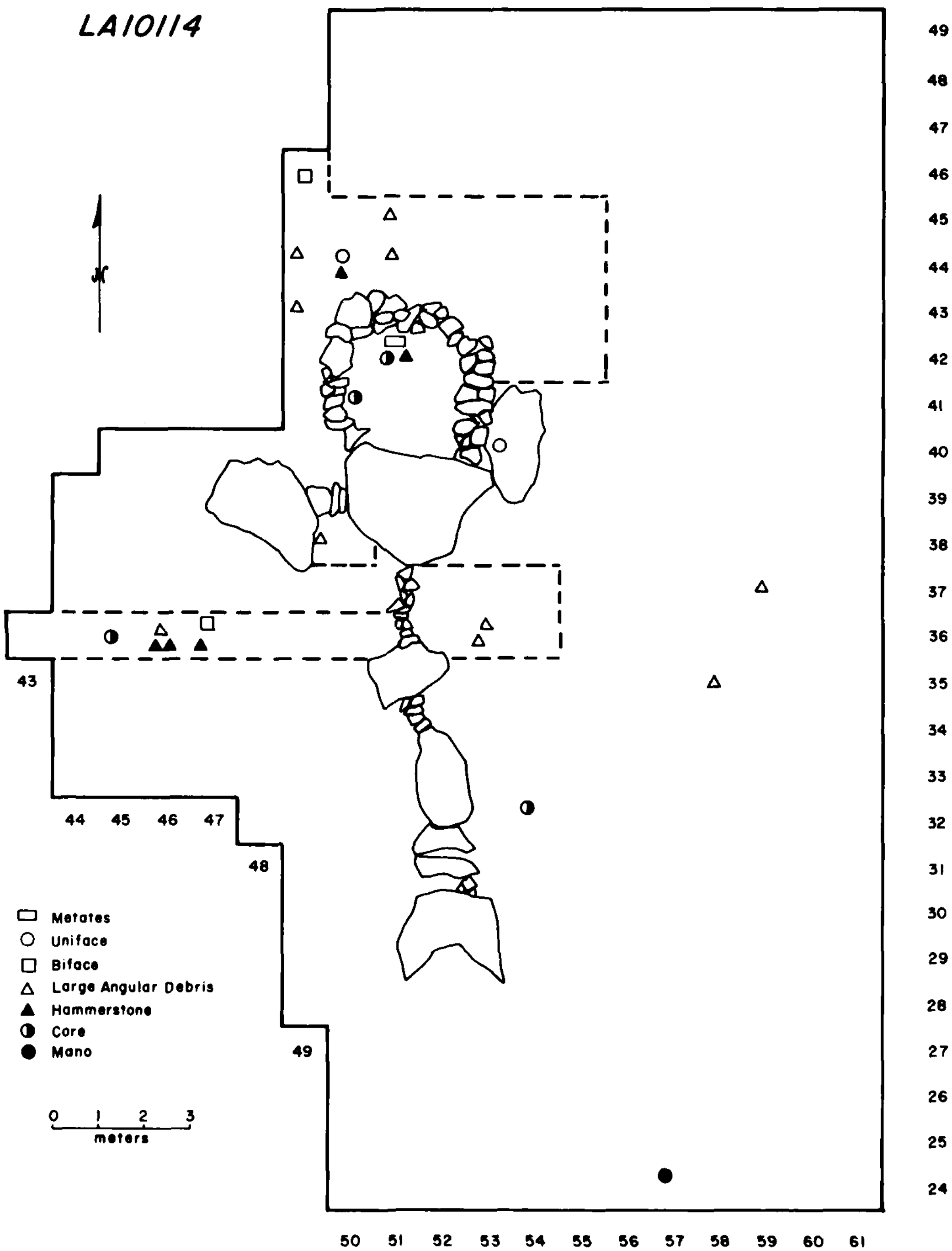


FIG. 4.5 LA 10114, distribution of cores, large angular debris, and lithic tools
(each symbol represents an artifact)

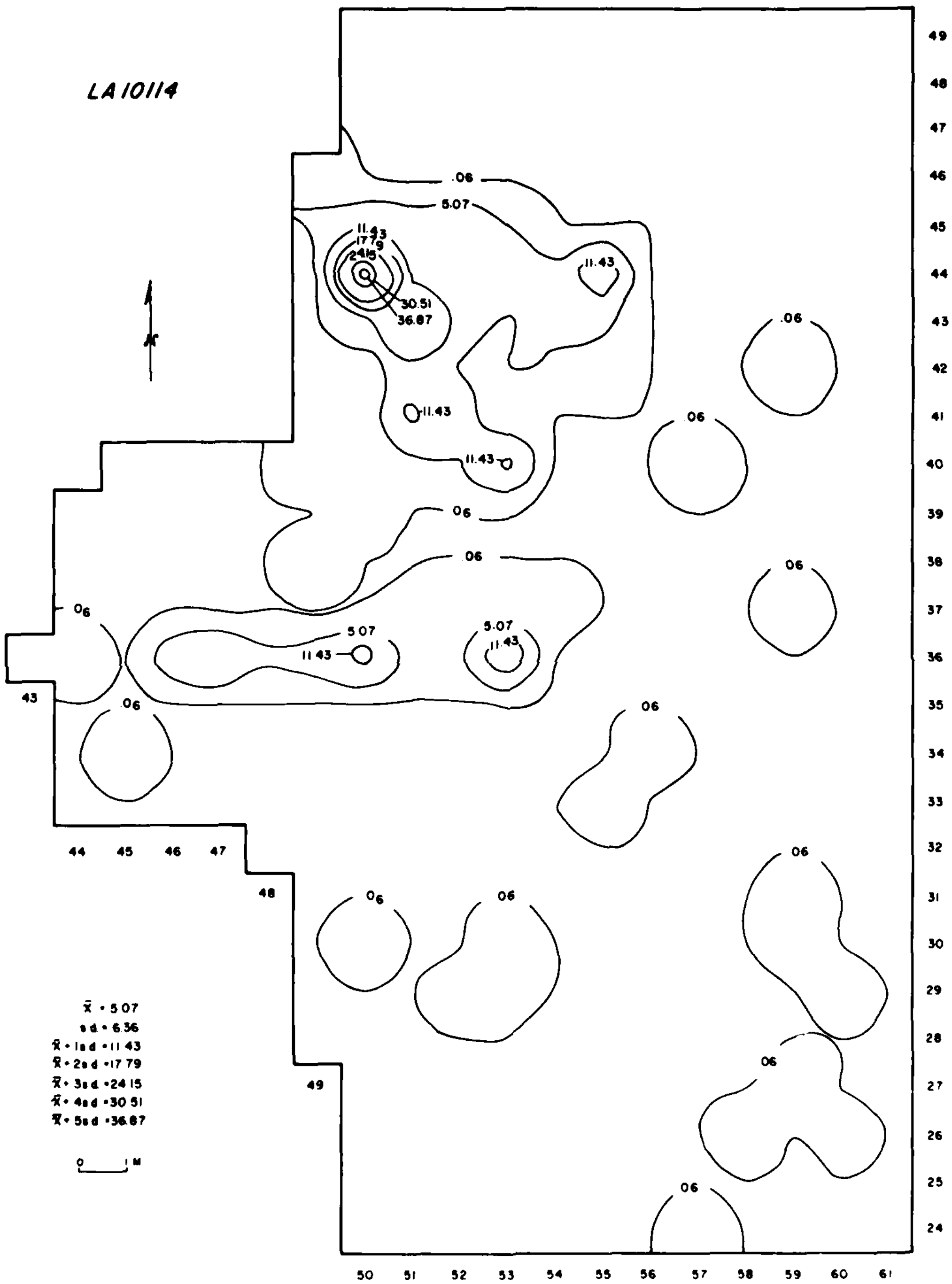


FIG. 4.6 LA 10114, distribution of debitage

Assemblage 3, utilization occurred on only one item (out of 73) of Pedernal chert/chalcedony. The utilization ratio for this assemblage was thus 1%. Again, obsidian was present (6 items) but was not utilized.

Assemblages 2 and 4 (Postoccupational fill, Room 1 and exterior grids)

Assemblage 2 (exterior fill north of Room 1) yielded 133 items of debitage and Assemblage 4 (interior Room 1 postoccupational fill) contained 34. Eight material types were present in Assemblage 2, while only four were present in Assemblage 4. On the basis of material type variety, Assemblage 2 is more like Assemblages 1 and 3, while Assemblage 4 resembles Assemblages 6 and 7, also low-count assemblages which are discussed below.

Pedernal chert/chalcedony constituted around 60% in Assemblages 2 and 4. Basalt tended to be infrequent, 2% and 12%, respectively, as in Assemblages 1 and 3. This contrasts with assemblages from the southern part of the site, as will be shown later.

In Assemblage 2, 40% of the debitage was cortical; 44% was cortical in Assemblage 4, making it resemble the occupation surface north of Room 1 (Assemblage 3). In the prevalent Pedernal chert/chalcedony material type, percentages of cortical debitage flakes were close to 43%, much like Assemblage 3 as a whole.

Both Assemblages 2 and 4 reflected freehand percussion techniques of debitage manufacture. A single flake of 3525 obsidian from Assemblage 2 exhibited evidence of having been manufactured through bipolar percussion. The occurrence of small angular debris in Assemblages 2 and 4 (38% and 21%), respectively) was comparable to Assemblage 1, but lower than the extremely high percentage of small angular debris in Assemblage 3 (49%).

In Assemblage 2, one-third of the debitage had platforms, proportions of cortical platforms, and single-faceted platforms similar to Assemblages 1 and 3. In Assemblage 4, 41% of the debitage had platforms and a somewhat higher percentage of them were cortical.

Utilization occurred among five material types in Assemblage 2. In general, small size flakes showed utilization, while the larger ones did not, with 6% of the total assemblage exhibiting use. In contrast, in Assemblage 4, 15% were utilized. Utilized debitage occurred in Pedernal chert/chalcedony and in silicified wood material types. No obsidian was present. Flake size was generally smaller than in Assemblage 2 and utilization occurred on all sizes except the smallest category, under 10 mm.

Assemblages 5, 6 and 7

The test trench on the west side of Wall 1, south of the room was designated Assemblage 5, and contained 52 items of debitage. Five material types were represented (obsidian, basalt, Pedernal chert/chalcedony, chert and quartzite). In contrast with the assemblages from the north end of the site, Pedernal chert/chalcedony was not predominant; rather, a more balanced occurrence of material types was observed. Obsidian made up 17% of the debitage, basalt was 35%, Pedernal chert/chalcedony was 29%; and chert and quartzite were each 10%.

Although Assemblage 6 was smaller (29 items of debitage) and contained fewer material types (obsidian, basalt and Pedernal chert/chalcedony), its proportions of material types were also more evenly distributed. Obsidian was a relatively high 45% of the debitage, basalt was 34%, and Pedernal chert/chalcedony was 21%.

Assemblage 7 was also small (29 items of debitage) and contained the same material types as Assemblage 6. Taken together, Assemblages 6 and 7 encompass the surface grids collected south of the room and grids excavated east of Wall 1. They contrast in quantity and in material type variety from the assemblages associated with the room. A hearth (Feature A) was found on the east side of Wall 1, along with many burned bone fragments. It was suggested earlier that the southern area of the site may include a prehistoric occupational episode. The spatial structure of this occupation may have been similar to that observed in the northern portion of the site, with a living area and hearth on the east side of Wall 1 and a dump area on the west side of the wall. This would account for the prevalence of dispersed charcoal in the excavated grids west of Wall 1 and the higher density of lithic material there, as opposed to the hearth area on the east side of the wall.

Assemblage 5 had 54% cortical debitage, while on the east side of the wall (Assemblage 6) debitage was one-third cortical, as was the surface assemblage (7). This would seem to corroborate the interpretation of the southern portion of the site as spatially differentiated into two kinds of uses. Another attribute related to this interpretation is the amount of cortical small angular debris present in Assemblage 5, 25%. The other two assemblages have 3% (Assemblage 6). None occurs in Assemblage 7. Just comparing the two assemblages from either side of the wall, it seems that Assemblage 5 (west side) may also contain a primary reduction component as well as a trash deposit.

Assemblage 5 exhibited a rather low percentage (6%) of utilized to total debitage, compared with the assemblage (21%) on the other side of Wall 1 (Assemblage 6), even though the same material exhibited utilization. Obsidian was utilized (on two medium-sized flakes in Assemblage 5 and in four small to medium-sized flakes in Assemblage 6); basalt was the other material which was utilized in these two assemblages, also on medium and medium to large flakes, respectively. While present in moderate quantities, Pedernal chert/chalcedony was not utilized, unlike the assemblages associated with Room 1, particularly the occupation surface inside.

Assemblage 7 exhibited again a relatively high amount of utilization (14%). All utilized flakes (4) were obsidian, although basalt and Pedernal chert/ chalcedony flakes were present.

To summarize, the high utilization ratios were observed in assemblages from the occupation surface inside Room 1, the hearth area on the east side of Wall 1, the first two levels inside the room and the surface collected grids south of the structure. Low utilization ratios occurred in subsurface grids north of Room 1 and in the trench on the west side of Wall 1. These two areas were suggested to have functioned as dump areas. When present, obsidian tended to be utilized in the southern portion of the site and unutilized in the northern portion of the site (except in Room 1, postoccupational fill, Assemblage 4). This may indicate a differential treatment of obsidian or Pedernal chert/chalcedony from the prehistoric to the Historic occupations.

MISCELLANEOUS MATERIALS

Wood

Several pieces of wood, none modified as tools, were recovered from LA 10114: Room 1, Stratum 2 (1 piece); Room 1, Stratum 3 (2 pieces); Feature R1A (hearth) in Room 1, Stratum 3 (1 piece, burned); exterior grids 43/52, Stratum 1 (1 piece, burned); 43/53, Stratum 1 (1 piece), and 41/53, Stratum 2 (1 piece).

Mica

One piece of mica was recovered from grid 42/50 in Room 1, Stratum 3.

Shell

A circular shell button was recovered from grid 45/51, Stratum 1. The button measured 9 mm in diameter and was 1 mm thick. It weighed 1 gram. Near the center of the button, four holes had been drilled. On the upper face of the button, along the edge, were decorative lines, 17 in all, spaced approximately 1 mm apart.

Catlinite

A catlinite pendant was recovered from grid 36/47, Stratum 1. It was irregular in shape and had fractured horizontally. Its present measurements were 17 mm x 9 mm x 10 mm (L x W x T). The fractured edge had been heat-treated and ground. Striations were present on one side which exhibited polish.

Metal

Three brass tacks, measuring roughly 10 mm in diameter and 8 mm in length were recovered from Room 1, Stratum 2, and exterior grids 45/50, Stratum 1 and 44/52, Stratum 2. The head of each tack was round with a square shank. In each case the tip of the tack had been broken. Two pieces of iron were recovered. One, found in grid 44/52, Stratum 2, appeared to be the midsection of a nail or iron peg. It was heavily oxidized and measured 34 mm x 7 mm x 7 mm (L x W x T). The second iron object was recovered from grid 44/53, Stratum 2, and was shaped into a projectile point. It measured 41 mm x 21 mm x 3 mm and weighed 6 grams. It was roughly triangular in shape although the basal edges were rounded rather than pointed. The base of the point had been broken off.

FAUNA

The faunal assemblage at LA 10114 consisted of 629 bones. Room 1 contained 298 bones and 37 exterior grids contained the remaining 331 bones. The total assemblage is summarized in Appendices X and XI.

Room 1

The postoccupational fill of Room 1 contained 130 bones; Stratum 1 (17), Stratum 2 (106), and Stratum 9 (pedestal cleanup; 7). Strata 1 and 2 were disturbed by rodent and root action. It should be noted, however, that most of the Stratum 2 material was recovered from the lower portion of the stratum.

The occupation level (Stratum 3 and associated hearth R1A) contained 56% of all Room 1 fauna. Only two of the 168 bones were recovered from the hearth.

Exterior Grids

The majority (86%, 286 bones) of fauna from exterior grids was recovered from 25 grids, north and west of Room 1. The remaining 46 bones were recovered from Test Trench 1 (10), Test Area 2 (34), and the surface of two exterior grids (2).

When compared to the rest of the site, these tests showed a marked difference in lithic and ceramic assemblages. The prehistoric ceramics recovered suggest that there may have been earlier occupation in the test trench areas. The faunal remains support this. Of the 44 bones recovered from this area, only one sheep/goat bone was recovered. This domestic bone was recovered from the upper stratum and could be easily associated with the Historic occupation of Room 1, allowing for the possibility of a prehistoric occupation in this area.

Minimum Number of Individuals

The total faunal assemblage at LA 10114 represents a minimum of 11 individuals. Three domestic animals (sheep/goat: 1 very young, 1 bone; 1 immature young, 7 bones; and 1 adult, 8 bones) and eight nondomestic animals are represented, including a deer (7 bones), jackrabbit (1), cottontail rabbit (1), canine (2), mouse (1), gopher (2), raven (2), and mourning dove (1).

The remaining 571 bones do not affect the minimum number of individuals. They are from the following categories: Artiodactyla (31), medium Artiodactyla (8), small Artiodactyla (13), large mammal (47), medium-large mammal (341), medium mammal (67), small-medium mammal (21), other/miscellaneous (13).

Butchering Strategy

The faunal remains at LA 10114 suggest that butchering and consumption occurred at the site for sheep/goat as well as several other larger body sized mammal categories. In the sheep/goat category, all parts (vertebra, pelvis, skull, upper leg, lower leg, ribs) are represented with the exception of scapulae. Recognizable sheep/goat scapulae were not recovered from the site. However, the presence of all other parts, including lower utility parts such as lower legs and skulls, suggests that butchering occurred at the site. Although sheep/goat ribs are under-represented at the site, this is probably a result of the difficulty in distinguishing sheep/goat rib fragments from rib fragments of other large mammals. In overlapping categories such as Artiodactyla, small Artiodactyla, large mammal and medium-large mammal ribs are over-represented. Pelves and scapulae make up less than 1% of the faunal assemblage and are thus under-represented.

Cut Marks

Thirty-four bones exhibited cuts and/or cut marks at LA 10114. Metal cut marks were found on 18 of the 34 cuts. Other excavated sites in the Cochiti area lack such a substantial percentage of cut bone.

Nine long bone fragments exhibited small cut marks which crosscut the bone. L. R. Binford (personal communication) has observed similar cut marks on long bones resulting from the stripping of meat from bones. Small transverse cut marks are produced when cutting tendons to free the meat from bone. Stripping meat from the bone is necessary when preparing bones for marrow extraction and when rendering bone grease.

Food Processing

LA 10114 has a very high percentage of both long bone fragments (34%) and unidentified fragments (31%) suggesting extensive processing of faunal remains. The large number of unidentified fragments suggests that more than simple marrow cracking occurred at LA 10114. Large numbers of small unidentifiable fragments are produced when rendering bone grease or making soup. The association of the unidentified fragments and the long bone fragments is evidenced by their clustering within Room 1 and just outside the north wall of Room 1. Also associated in this area are small impact chips which are produced from cracking long bones. The presence of these small bone chips may well indicate an activity area where long bones were cracked.

Stripping meat from bones is evidenced by the cut marks on long bone fragments mentioned above, and is a necessary activity when marrow cracking and rendering bone grease for soup. The presence of high percentages of unidentified fragments and long bone fragments, small impact chips and evidence of meat stripping suggest that fauna were being heavily processed, and that marrow cracking, soup making and/or grease rendering occurred at the site. When comparing faunal assemblages from LA 10114 with the three other major historic sites in the study area (LA 9138, LA 12161, LA 13291) it is evident that the inhabitants of LA 10114 were extensively processing the faunal resources available.

The faunal assemblage at LA 10114 suggests that the sites' inhabitants were relying largely on domestic sheep/goat and supplementing those with some additional large and small mammals. Domestic sheep/goat were probably butchered and consumed at the site. It is apparent that extensive faunal food processing activities were carried out at the site.

Bone Tools

The faunal assemblage at LA 10114 includes 13 utilized bones. They are summarized in Table 4.4. Schutt (1977:101-3) suggests that: Class 1a tools were used on soft pliable material; Class 1b tools were used as needles; Class 2a tools were used in the skinning process; and Class 3 tools may have been used in hide preparation. Activities suggested by these tools are sewing, skinning and hide preparation.

FLOTATION ANALYSIS

Light flotation materials derived from a 1000 ml sample from Room 1, Stratum 3, and from a 500 ml sample from grid 43/52, Stratum 2 were examined. Both represented occupation strata. The sample from the room yielded some 63 seeds from six different types of plants, including *Portulaca* (24 seeds), *Juniperus* sp. (a branch), *Datura meteloides* (6 seeds), *Solanum* sp. (4 seeds), *Chenopodium* sp. (10 seeds), *Amaranthus graecizans* (2 seeds), and 17 seeds of unknown plants. Also noted in this sample as estimates rather than counts were insect bodies and parts (10-25%), cocoons/larvae/eggs (1-10%), and feces (25+%). The sample from grid 43/52 yielded seeds and parts from six different types of plants as follows: *Sporobolus cryptandrus* (1 caryopsis); *Datura meteloides* (2 seeds); *Portulaca* sp. (2 seeds); *Cheno-Am* (1 seed); *Solanum* sp. (1 seed), and *Juniperus* sp. (2 seeds + scale leaves, tungs).

The heavy flotation residue from four samples was analyzed. A 200 ml sample from Room 1, Feature A yielded 40 burned bone fragments. A 500 ml sample from grid 53/52, Stratum 2 (occupation level) yielded four bone fragments (two burned) and one unidentified seed fragment. Grid 40/49, Stratum 2 (700 ml sample) yielded seven 3701 basalt flakes and one unidentified seed fragment; and a 400-500 ml sample from grid 36/53, Stratum 2, yielded six seed fragments.

SUMMARY

LA 10114 consisted of a single structure (Room 1) incorporating in situ basalt boulders of the talus substrate, a number of small walls connecting other boulders in the vicinity of the structure, two exterior hearths, two storage cavities built into the cliff face to the west of the site (Features B and C) and numerous petroglyphs, particularly on large boulders in the talus.

Ceramics indicate a definite historic component, to which Room 1 is referable, and a less definite prehistoric component (possibly Pueblo III and Pueblo IV). Lithic artifacts were recorded from inside the room, adjacent to the room, and in the trenches to the south of the room. Due to specific differences and similarities among these assemblages, some support was obtained for the interpretation of a prehistoric occupation in the southern portion of the site.

Faunal remains occurred throughout the fill of Room 1 and in several exterior grids; over half of the bone items came from the occupation level of the room. Species represented at the site included domestic sheep/goat, various nondomestic animals such as Artiodactyla and small-to-large mammals. Domestic sheep/goat as well as other large mammals were probably butchered and consumed at the site. Marrow extraction and processing of bone for soup making are also indicated, to a greater extent than at other major Historic sites in the study area. The distribution of domestic versus nondomestic faunal remains gives additional support to the interpretation of a prehistoric component at LA 10114.

TABLE 4.4

LA 10114 – Utilized Bone

Class	Provenience	Specimen Number	Species	Element	Notes
1a	Room 1 Stratum 2	128	medium mammal	long bone fragment	Rounding and polish on blunt tip of a projection
1b	Room 1 Stratum 2	471	medium-large mammal	long bone fragment	Rounding and polish on the tip with polish and striations extending down the shaft
2a	Test Trench 1 36/50 Strat. 1	9	medium-large mammal	long bone fragment	Unidirectionally retouched on concave edge
3	Room 1 Stratum 3	55	large mammal	long bone shaft frag.	Rounding and polish on a straight to slightly convex edge with striations running perpendicular to the edge margin
3	36/48 Strat. 1	4	medium-large mammal	rib frag.	Same as above
4	43/50 Strat. 1	448	medium-large mammal	long bone fragment	Polished interior and exterior surfaces – possibly a fragment of a larger implement
5	43/54 Strat. 2	584	deer	antler tip	Polish and rounding on tip with polish and bidirectional striations extending down shaft. Grooved and snapped
6a	Room 1 Stratum 1	358	medium-large mammal	articular process of vertebra	Narrow groove which cross cuts bone
6b	Room 1 Stratum 2	367	medium-large mammal	long bone fragment	Deep longitudinal groove with polish along edges of groove
7	43/52 Strat. 2	548	Artiodactyla	rib frag.	Polished shaft
Isolated Finds	Room 1 Stratum 3	156	medium mammal	rib frag.	Polish and rounding on concave section of broken end
Isolated Finds	43/51 Strat. 1	483	medium mammal	rib shaft	High localized polish and rounding on proximal end with slight polish extending down shaft
Isolated Finds	43/51 Strat. 3	294	sheep/goat	rib	Localized area with slight polish and unidirectional striations

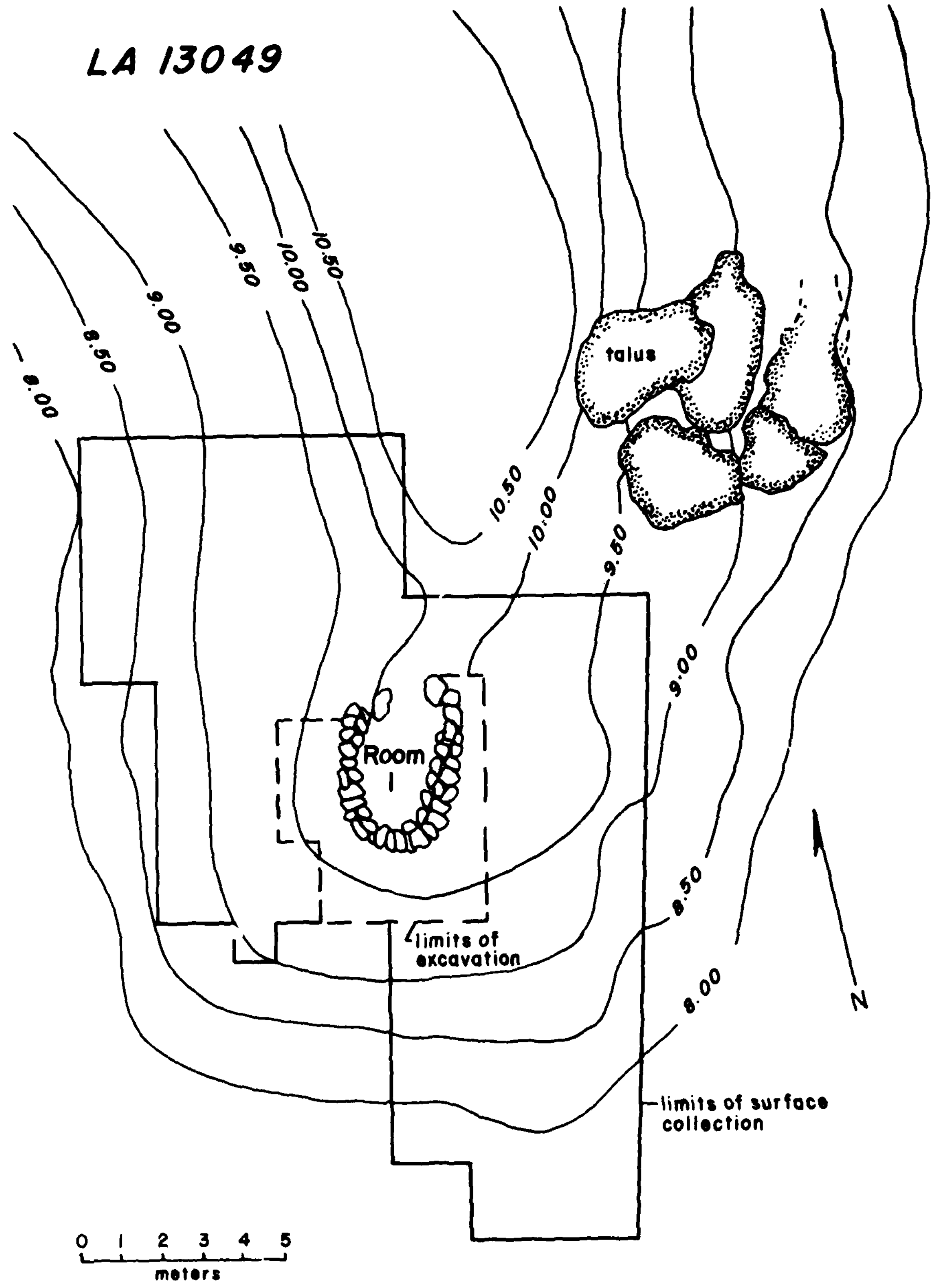


FIG. 5.1 LA 13049 Site Map, illustrating local topographic relief, site boundaries and excavation units.

Chapter 5

LA 13049

Rosalind Hunter-Anderson

INTRODUCTION

LA 13049 consisted of a single oval masonry structure and an associated lithic and ceramic scatter. Although sherds from a few P-III vessels were recovered, LA 13049 was principally occupied during the early P-IV Anasazi period, ca. A.D. 1350-1425.

The site was situated north of Medio Canyon on the west side of the Rio Grande in White Rock Canyon at an elevation of 5380 feet. It was located on a small flat portion of a ridge some 75 meters from the river. The ridge was covered with large basalt boulders and axial river cobbles. LA 13049 was located in the Upper Sonoran Juniper vegetative community (Drager and Loose 1977: Fig. II.2.1). The site area and environs were heavily populated with junipers. Ground cover included some cholla and prickly pear cactus, snakeweed, and various grasses including *Bouteloua* sp. and *Sitanion hystrix*.

EXCAVATION APPROACH

A system of 1 x 1 meter grids, totaling 189 m^2, was laid over the site. All grids were surface collected. The excavated portion of LA 13049 was restricted to the interior of the masonry room and a 15 m^2 area contiguous to the room (see Fig. 5.1). Interior and exterior areas were excavated by grid with the interior fill of the room being removed in two arbitrary 10 cm levels. The exterior grids were excavated in one natural stratum.

ARCHITECTURE

ROOM 1

Shape: Oval surface structure (see Fig. 5.2).

Orientation: The long axis of the structure was oriented 13^0 east of true north.

Condition: The room was badly eroded. The north wall was not present, and a large juniper grew in the northwest corner.

Interior Room Dimensions:

	Length	Width	Height
North Wall	2.00 m	N/A	N/A
South Wall	1.90 m	.70 m	.24-.46 m
East Wall	2.75 m	.40 m	.35-.46 m
West Wall	2.80 m	.45 m	.20-.38 m

Interior Floor Space: ca. 5.4 m^2

Walls: The south, east and west walls were of similar construction and are described below. The north wall had eroded away.

Type of Elements: Local basalt clasts.

Size of Elements: Elements ranged in size from 73 cm x 40 cm x 16 cm to 16 cm x 11 cm x 8 cm, but the majority of elements were angular clasts measuring 40 cm x 35 cm x 15 cm.

Placement and Construction of Elements: There was no difference in construction noted between basal, middle, and upper wall elements. Wall elements were generally one element wide and clasts were laid horizontally and overlapping. The long axes of the elements were placed at varying angles to the long axes of the walls. Wall elements were probably wet laid.

Shape of Elements: Unmodified.

Wall Facing: There was no evidence of intentional wall facing.

Chinking: No chinking was evident.

Mortar: No evidence of mortar was recovered.

Corners: The east wall abutted a boulder in the northeast corner of the room. The southeast and southwest corners were rounded and interlocking. The construction of the northwest corner was obscured by a large juniper.

Plaster: No evidence of plaster was found on the walls.

Entrances: Although the north wall of Room 1 was not present, two boulders formed a possible doorway at floor level. The east wall abutted one boulder in the northeast corner that measured 80 cm x 65 cm x 63 cm. The west portion of the entrance measured 90 cm x 68 cm x 63 cm and appeared to have fallen into the room. The entrance was approximately 65 cm wide x 50 cm deep and 65 cm high.

Floors: Room 1 did not have a formally prepared floor, although a hardpacked occupation surface was defined at a depth of 20 cm. This surface directly overlay the talus substrate.

Roofing: No evidence of roofing was found.

Interior Features:

Burned Area: An oval burned area, sterile of cultural material, was located in Room 1. The center of the feature was 60 cm from the west wall. The feature measured 40 cm north/south and 30 cm east/west. The burned area appeared 10 cm below ground surface and measured from 3-4 cm in thickness.

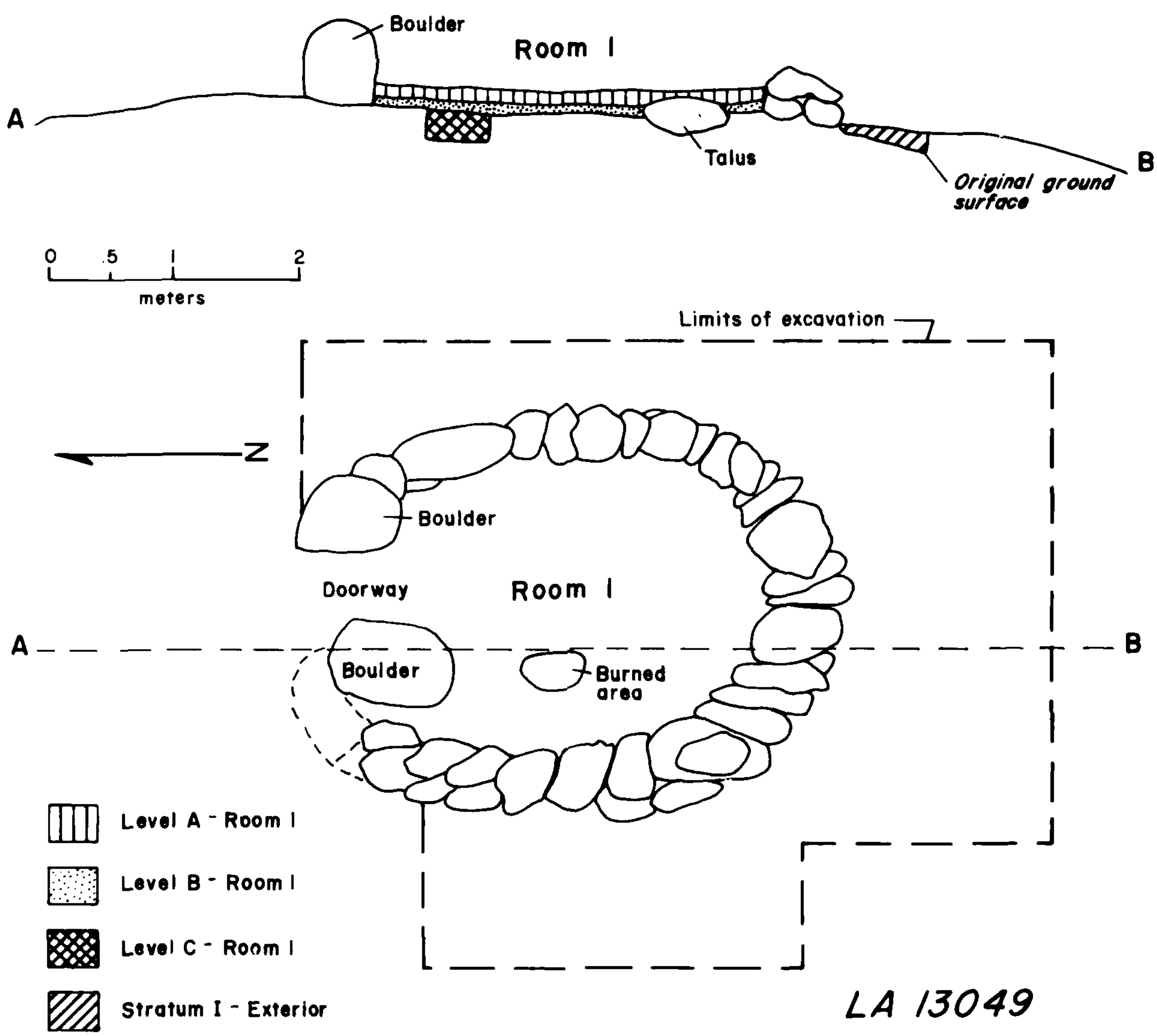


FIG. 5.2 LA 13049 Room 1, plan view and cross section

Room Fill: Room 1 was excavated in two arbitrary 10 cm levels (A and B). Both levels were composed of a dark brown clayey soil. Level A contained the majority of cultural material. Artifacts became much more sparse in level B. This dark brown soil rested on a hardpacked surface (occupation surface) which was superimposed on an orange clay soil intermixed with large quantities of talus (substratum). This stratum proved sterile.

Rubble: A total of 0.935 m^3 of interior rubble and 3.78 m^3 of exterior rubble was recovered in and near Room 1.

Exterior Features: No exterior features were encountered.

ARTIFACTUAL ASSEMBLAGES

Artifactual materials were recovered from the interior fill of the room, the subsurface tests, and the surface collections. Variability in the content and distribution of the collected assemblages will be described below.

CERAMIC ARTIFACTS

Minimum no. of vessels: 15
Total no. of sherds: 76
Average no. of decorated sherds per vessel: 5.56
Average no. of utility sherds per vessel: 4.33

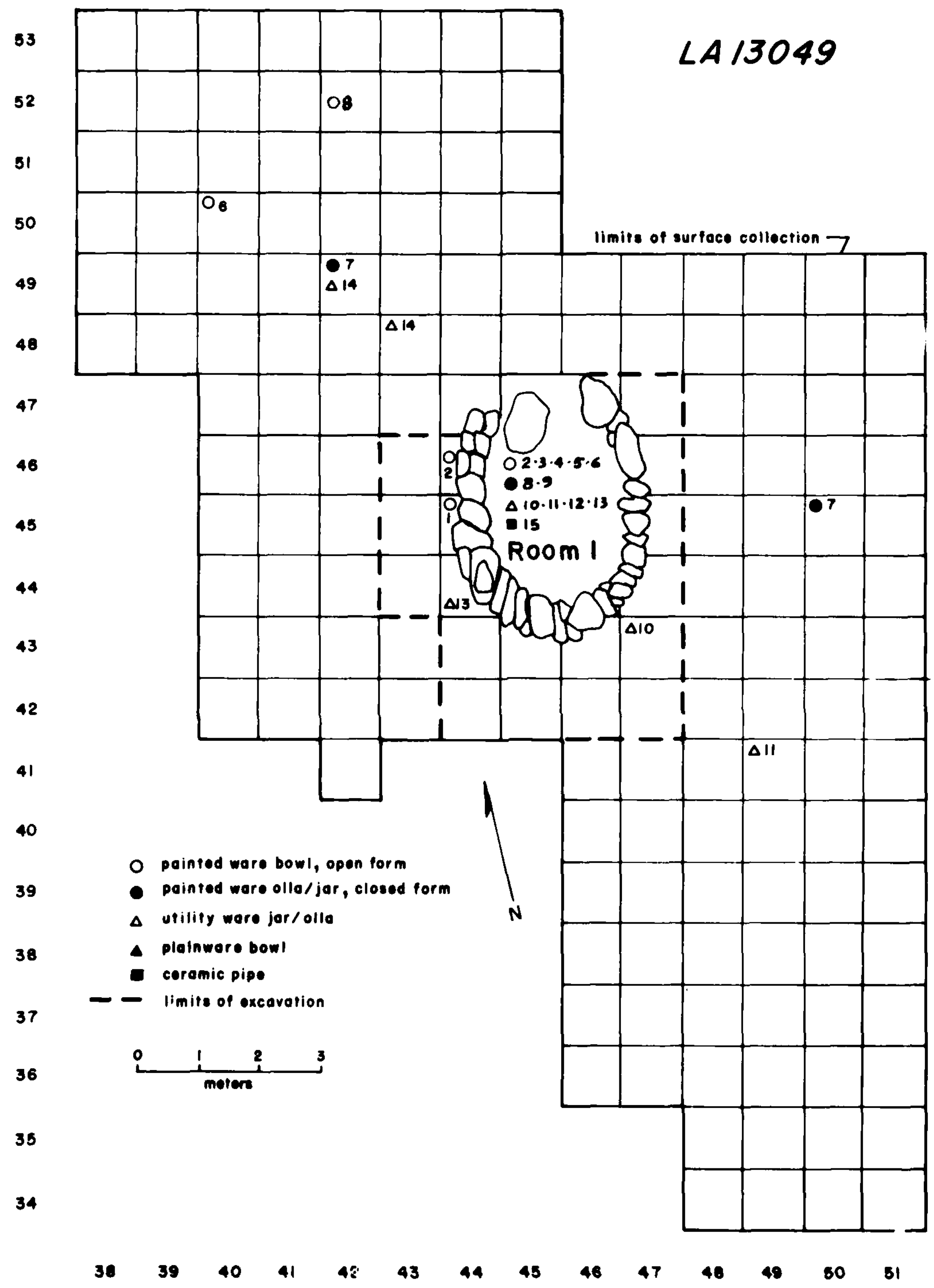


FIG. 5.3 LA 13049 distribution of ceramic vessels

Components	Painted Wares Bowls	Painted Wares Jars	Painted Wares Other	Utility Bowls	Utility Jars
P-III	2	—	1 (pipe)	—	1
P-IV	3	3	—	1	4

A total of 76 sherds representing a minimum of 15 vessels was recovered. Included in this count is one complete ceramic pipe found under a large element of wall fall. Eight sherds from a minimum of four vessels dated to the P-III phase and 68 sherds from a minimum of 11 vessels dated to the P-IV phase. This may indicate two occupations of the site. The earlier sherds, however, were found on or near the surface, whereas some of the later sherds were found deeper in the fill. Temper analysis indicates that all painted vessels represented were of local manufacture, although two contained crushed rock temper of unknown provenience. Four corrugated vessels were represented, dating to P-IV, one containing quartz mica schist which could be intrusive to White Rock Canyon. Two vessels represented in the P-IV assemblage had abraded edges. In general, the ceramic assemblage indicates affiliation with 14th century Rio Grande glaze sites on Mesa Negra, Caja del Rio (LA 5137) and/or the Pajarito Plateau.

Most of the sherds were located inside Room 1. The bowl-to-jar ratio inside and outside the room is 5:6 and 3:6, respectively. The P-IV painted ware sherds were concentrated in the room, but a few occurred to the northwest (5 sherds representing a minimum of 3 vessels, all bowls) of the structure. The P-III painted ware sherds were located near the entrance of the structure (3 sherds) and to the northwest of the room (1 sherd). The P-III utility ware sherds (4 belonging to the same vessel) were located inside the room (2 sherds) and to the southeast of the structure. The clay pipe was located inside the room, approximately 10 cm below the surface, at the south end. Fig. 5.3 presents a summary of the horizontal distribution of ceramics by vessel.

TABLE 5.1

LA 13049 – Ceramic Assemblage Summary

Ceramic Type	Vessel No.	Vessel Form	Temper	Room 1 Level A	Room 1 Level B	Exterior Grids Surf.	Exterior Grids Subsurf.	Total
P-III Assemblage (A.D. 1175–1300)								
Santa Fe B/W	3	bowl	3862-11	1	1	—	—	2
Santa Fe B/W	5	bowl	3655-12	1	—	—	—	1
Plain polished, whiteware	15	pipe	3852-53	—	1	—	—	1
Corrugated Smeared indented	11	jar/olla	2475-54	2	—	2	—	4
P-IV Assemblage (A.D. 1325–1425)								
San Clemente G-P	7	jar/olla	3406-52	—	—	4	2	6
Cieneguilla G/Y	9	jar/olla	3025-52	1	1	—	—	2
Undiff. glaze/red	6	bowl	3405-51	2	—	1	1	4
Undiff. glaze/red	8	jar/olla	3430-52	22	—	5	—	27
Undiff. glaze-polychrome	1	bowl	3430-62	—	—	—	2	2
Undiff. glaze-polychrome	2	bowl	3431-52	3	1	—	1	5
Undiff. unslipped	4	bowl	3655-11	1	—	-	—	1
Corrugated blind indented	10	jar/olla	3811-10	5	1	4	—	10
Corrugated blind indented	12	jar/olla	3240-65	1	—	—	—	1
Corrugated blind indented	13	jar/olla	3821-53	4	2	—	2	8
Blind indent. corr. micaceous	14	jar/olla	4560-54	—	--	2	—	2
TOTALS				43	7	18	8	76

LITHIC ARTIFACTS

A total of 1052 lithic artifacts was recovered from the site; 743 of the items were flakes, followed by 261 pieces of small angular debris, 15 cores, 15 pieces of large angular debris, seven hammerstones, two mano fragments, three milling slabs, five facially retouched artifacts and one abrader. A majority (459) were collected from the surface, making a density of 2.3 artifacts per m^2 of surface area.

Two areas of relatively high artifact density were observed; one in and adjacent to Room 1, and the other outside the structure some two meters to the northwest (see Figs. 5.4 and 5.5). Five different assemblages were defined: Assemblage 1, the surface materials from Room 1; Assemblage 2, the subsurface materials from Room 1; Assemblage 3, the subsurface materials outside and adjacent to the room; Assemblage 4, a high density area northwest of Room 1; and Assemblage 5, all other surface materials. In terms of overall size, Assemblage 2 was the largest with 444 items. Assemblages 1, 3, 4, and 5 had 73, 149, 162, and 224 items, respectively.

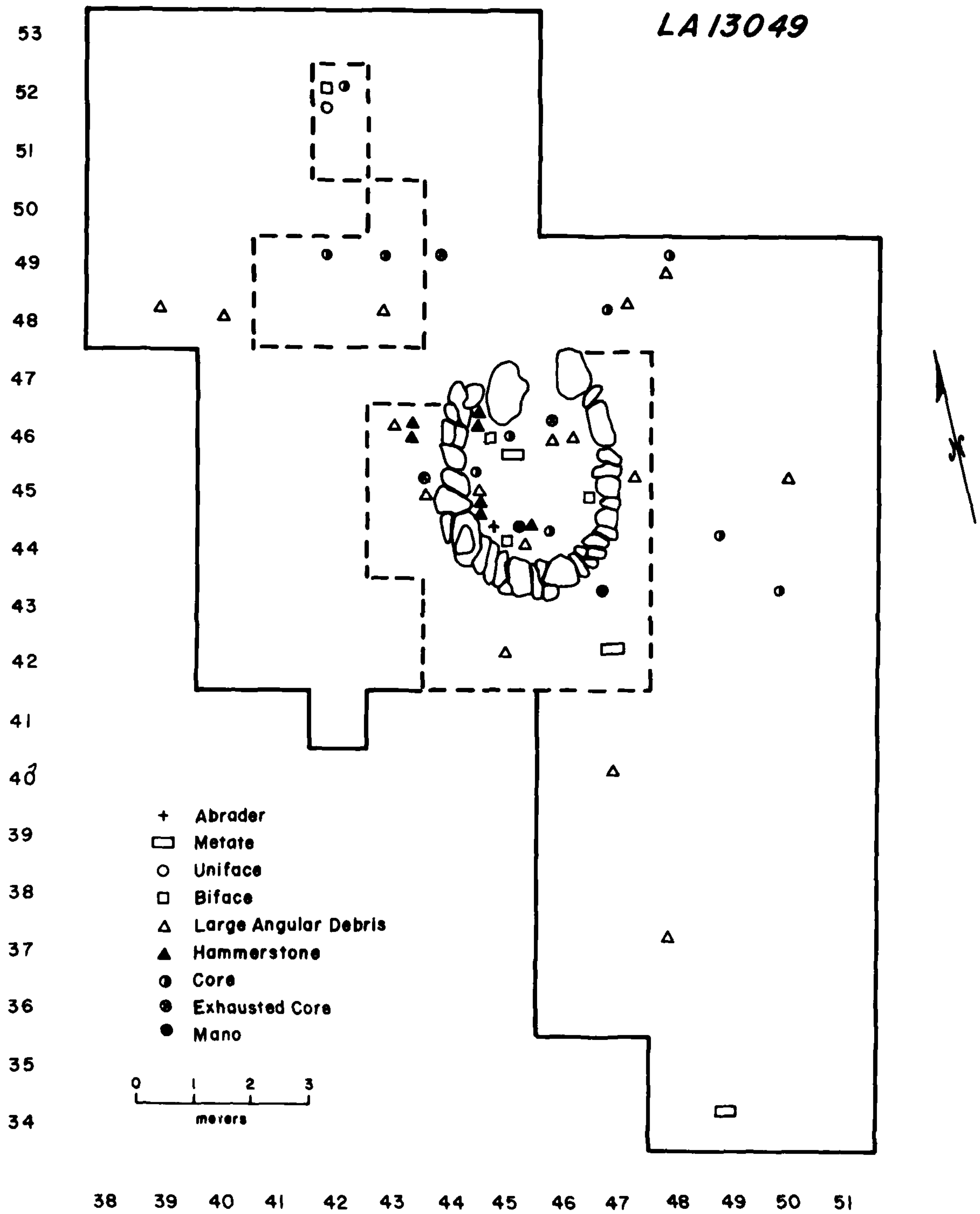


FIG. 5.4 LA 13049, distribution of cores, large angular debris, and lithic tools (each symbol represents an artifact)

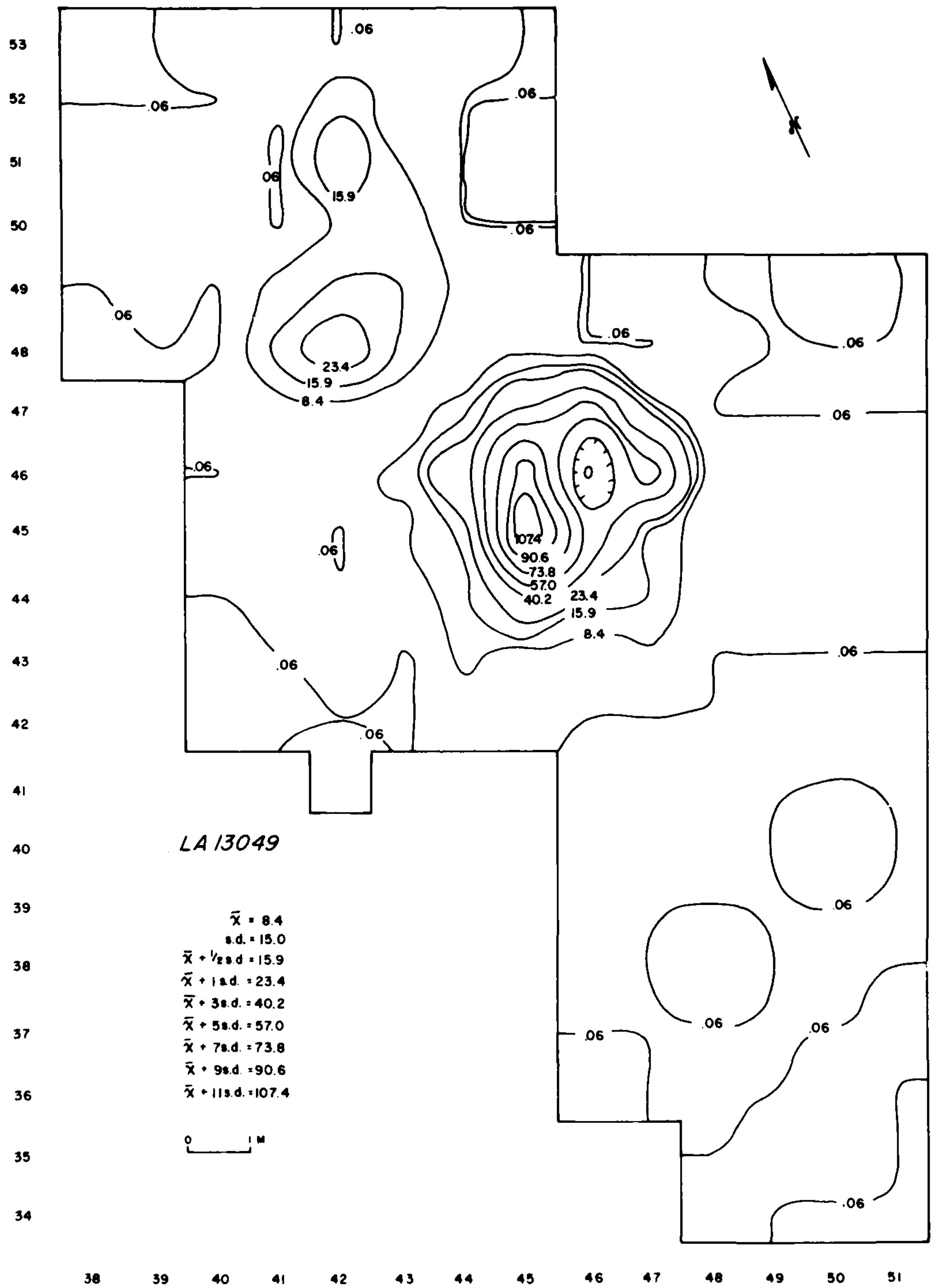


FIG. 5.5 LA 13049, distribution of debitage

Material Selection

Table 5.2 shows the frequencies and percentages of major material types in each of the assemblages (Assemblages 1-5) designated. As can be seen, proportions are similar throughout these assemblages. Assemblage 1 has a relatively high percentage of obsidian artifacts and a higher proportion of Pedernal cherts and chalcedonies (and the lowest percentage of non-Pedernal cherts and chalcedonies) than the other four assemblages. When all cherts and chalcedonies are combined, the difference between Assemblage 1 and the others decreases.

Low count artifacts, such as cores, hammerstones, large angular debris, unifaces and bifaces were mainly manufactured from basalts and Pedernal cherts and chalcedonies, although three items of obsidian (2 bifaces, 1 uniface) were recovered as well.

With the exception of a single piece of 3510 obsidian (from the Grants region of New Mexico), all materials are locally available within the general Cochiti area. Roughly half (55%) of the basalt items with cortex had waterworn cortex, suggesting that basalt was procured from river deposits. Among obsidian items, 47% of the cortex was waterworn, which may indicate procurement of obsidian nodules from the Totaví Lentil deposits within White Rock Canyon.

Manufacture

Considerable evidence was recovered which suggested that primary and secondary manufacturing activities were performed at LA 13049 (with more limited evidence for tertiary reduction). With the exception of an obsidian exhausted core, all of the larger by-products of primary reduction activities were recovered from the surface assemblages (Assemblages 1, 4 and 5). Included are four basalt cores, five Pedernal chalcedony cores, one non-Pedernal chert core, five quartzite core. Large angular debris reflected a similar material breakdown with five basalt items, five Pedernal chalcedony items, and two quartzite items. There appeared to be a slight spatial correlation between the distribution of cores and large angular debris with the high density cortical debitage and small angular debris (see Fig. 5.4). Seven hammerstones were also recovered, but these items were not as widely distributed as the cores or large angular debris.

Three attributes of Assemblage 1 which may relate to a differentiation between primary and secondary reduction are: (1) the amount of small angular debris present in the assemblage; (2) the percentage of the assemblage which exhibits cortex on striking platforms; and (3) the proportion of the assemblage that exhibits single-faceted platforms. Table 5.3 presents these data for all five assemblages (with Assemblages 2 and 3 being combined).

As can be seen in Table 5.3, Assemblage 1 has much less small angular debris, the lowest percentage of cortex present on platforms and the highest percentage of single-faceted platforms. These figures may indicate that several stages of reduction took place elsewhere, with lithic materials being brought to Assemblage 1 and further reduced there. As noted above (Table 5.2), for Assemblage 1 there is a slight increase in obsidian and in Pedernal cherts and chalcedonies versus the other assemblages. This would be understandable if mainly later reduction stages were represented, indicating an earlier reduction episode had taken place at different locales.

More limited evidence exists for tertiary stages of reduction in the form of eight retouch/resharpening flakes. Five were manufactured from obsidian and three were manufactured from basalt. With the exception of an obsidian retouch flake located in the fill of the room, and a 3730 basalt flake in the exterior grid subsurface, the remaining flakes were recovered from the surface (Assemblage 1, 4 and 5).

Another factor contributing to the distinctiveness of Assemblage 1 may have been temporal. That is, Assemblage 1 may have been deposited sometime later than the material in the other surface assemblages and most probably later than the subsurface assemblages (inside and adjacent to Room 1). The behavioral context for this later deposition may have contrasted with the earlier one(s) represented by subsurface remains.

Tool Use

Roughly 14% of the lithic assemblage from LA 13049 had been used as tools, including 118 pieces of debitage, eight pieces of large angular debris, four bifacially retouched artifacts, one unifacially retouched artifact, two mano fragments, three milling slabs, an abrader, and seven hammerstones.

Utilized debitage constituted the largest proportion of the tools used at the site. Overall, 11% of the debitage (flakes and small angular debris combined) exhibited wear patterns. The subsurface assemblages (2 and 3) exhibited the lowest percentages of utilized debitage with 9% each. The other three assemblages (1, 4 and 5) exhibited 16%, 15% and 17%, respectively. It may be suspected that the higher utilization percentages in the surface assemblages may have been due to natural weathering to which the subsurface assemblages were not subjected, at least not to the same extent. A test of this idea consisted of comparing Assemblage 2 with 3. The reasoning was that if different utilization percentages were due to human activity differences, then a physical barrier such as the structure wall would tend to separate certain activities from others, all other things being equal. On the other hand, if utilization was due to natural processes, no difference should be observed between the assemblage from inside the room (No. 2) and that from outside the room (No. 3) since both assemblages were recovered in subsurface contexts. Tables 5.4 and 5.5 present comparisons between the two assemblages.

The results were so similar that the idea that natural processes were responsible for the different utilization ratios between the surface assemblages and the subsurface assemblages cannot be rejected. An alternative interpretation of the similarity in utilization ratios between the interior and the exterior subsurface materials is that there were no activity differences between the inside and the outside of the structure which affected the percentage of

TABLE 5.2
Major Material Variability in Debitage by Assemblage

	Obsidian No. %	Basalt No. %	Pedernal Chert/Chal. No. %	Other Chert No. %	Quartz. No. %	Other No. %
Assemblage 1 (Room, surface)	15 (21%)	21 (28%)	33 (48%)	1 (1%)	1 (1%)	0 (0%)
Assemblage 2 (Room, subsurface)	67 (25%)	146 (34%)	161 (37%)	43 (10%)	12 (3%)	5 (1%)
Assemblage 3 (Exterior subsurface)	19 (13%)	47 (32%)	62 (43%)	11 (8%)	2 (1%)	4 (3%)
Assemablage 4 (high density)	21 (14%)	61 (39%)	52 (34%)	16 (10%)	2 (1%)	3 (2%)
Assemblage 5 (Other surface)	30 (15%)	66 (33%)	78 (39%)	21 (10%)	5 (3%)	1 (0.5%)

TABLE 5.3
Platform Characteristics and Small Angular Debris by Assemblage

	Assemblage 1 No. %	Assemblages 2 & 3 No. %	Assemblage 4 No. %	Assemblage 5 No. %
Platforms with cortex	1 (3.8%)	54 (23.2%)	10 (18.5%)	22 (26.2%)
Single-faceted Platforms	24 (92.3%)	176 (75.5%)	42 (77.8%)	60 (71.4%)
Retouch/Resharp. Platforms	1 (3.8%)	3 (1.3%)	2 (3.7%)	2 (2.4%)
Cortical Small Angular Debris	4 (5.8%)*	70 (12.1%)*	11 (7.1%)*	26 (12.9%)*

* % of total debitage

utilization. Had the structure been unroofed, the wall could have served as a seat and material discarded on either side in a random fashion, resulting in even utilization ratios for areas inside and outside the room. If there were no differences in the use of the area inside and outside the structure, then other attributes of the two artifact groupings should not differ markedly. This idea was investigated by examining the proportion of debitage material taxa and whole flake size. The results were that the interior Room 1 assemblage contained slightly more obsidian and slightly less Pedernal chert and chalcedony debitage. A greater difference was in whole flake length, which may in part be a function of raw material differences, but which was consistent throughout all material categories. The room assemblage contained over twice the proportion of flakes in the smallest size category, 1 cm or less in length, than the exterior assemblage. When the various material categories were analyzed, obsidian was most prevalent in the lowest size category in the interior assemblage (34% versus 9% in the exterior assemblage). All other material categories showed that the interior assemblage had roughly twice the amount of flakes in the smallest size category as the exterior assemblage. The overall tendency for the interior assemblage to exhibit smaller debitage flakes in all material categories supports the view that these assemblages were indeed different.

The remaining tools recovered from LA 13049 included facially retouched artifacts, manos, milling slabs, large angular debris, an abrader and hammerstones. Each will be discussed below.

Of the facially retouched artifacts recovered from the site, only one exhibited clear evidence of wear patterns.

TABLE 5.4
Utilized Debitage by Material Class

	Obsidian No. %	Basalt No. %	Pedernal Chert/Chal. No. %	Other No. %	Total No. %
Assemblage 1 (Room 1, surface)	8 (53.3%)	0 (0.0%)	3 (9.1%)	0 (0.0%)	11 (15.9%)
Assemblage 2 (Room 1, subsurface)	18 (26.9%)	8 (5.5%)	9 (5.6%)	2 (3.3%)	37 (8.5%)
Assemblage 3 (Exterior subsurface)	5 (26.3%)	2 (4.3%)	6 (9.7%)	0 (0.0%)	13 (9.0%)
Assemblage 4 (high density)	11 (52.4%)	8 (13.1%)	2 (3.8%)	2 (9.5%)	23 (14.8%)
Assemblage 5 (Other surface)	10 (33.3%)	9 (13.6%)	11 (14.1%)	4 (14.8%)	34 (16.9%)

TABLE 5.5
Ratios of Utilized Debitage to Total Debitage

	Total No. Debitage	No. Utilized Debitage	Ratio Utilized: Total Debitage
Assemblage 1	69	11	.16:1
Assemblage 2	434	37	.09:1
Assemblage 3	145	13	.09:1
Assemblage 4	155	13	.15:1
Assemblage 5	201	34	.17:1

It was a midsection from a bifacially retouched artifact with bidirectional rounding on two edges. Of the large angular debris exhibiting utilization, eight pieces (53%) had been used as tools with both battering and nonbattering wear represented. None of the 15 cores exhibited use.

Two manos and three milling slabs were recovered from the site. One mano was lenticular to ovoid in shape and exhibited two possible grinding surfaces. The other fragment was manufactured from a Cerros del Rio basalt taxon (3430) and was of indeterminant shape. It exhibited one possible grinding surface. The three milling slabs were plano-concave in cross section. In two cases boulders had been selected which exhibited circular basins which were subsequently used as milling surfaces. Approximately 50% of the available surface area was utilized. One complete 3430 basalt abrader was also discovered. It was elongate-oval in shape and irregular in cross section. It exhibited four possible areas of utilization which were characterized by smooth surfaces.

Seven hammerstones were found in the grids adjacent to the west wall of the room. With the exception of one granite hammerstone, all were of quartzite. On four, the shape of the battered surface was a ridge and on three it was convex.

FAUNA

Only two pieces of bone, one long bone shaft fragment from an undifferentiated Artiodactyla and an innominate fragment from a small mammal, were recovered from LA 13049.

Bone Tools

A single bone artifact was recovered from the fill in Room 1. The tip of a long bone shaft fragment was rounded with polish and striations extending down the shaft of the bone. Presumably, this bone had been used as an awl.

FLOTATION ANALYSIS

Both heavy and light flotation materials were examined from LA 13049. Light flotation residue recovered from grid 41/52 in Room 1 yielded four seeds of *Physalis* sp. and twig fragments from *Juniperus* sp. Heavy flotation residue from Room 1, Stratum 1, yielded eight bone fragments (1 burned), six charcoal fragments, two unidentified seed fragments, one 3701 glassy basalt flake, and a quartz crystal. Other heavy flotation samples which were examined included a 500 ml sample from Level A in Room 1, yielding two items: a small 3520 obsidian flake and an unidentified seed fragment. Another 750 ml sample from Level B in Room 1 contained four flakes (two 1050 chert, two 3701 basalt) and one piece of charcoal.

MISCELLANEOUS MATERIALS

Several pieces of ochre were found within the fill of the room and hematite was found in a few exterior surface grids.

SUMMARY

The occupation of LA 13049 can be tentatively assigned to the P-IV Anasazi Period, ca. A.D. 1350-1425 on the basis of the preponderance of Rio Grande glazeware vessels. A small number of P-III sherds (principally Santa Fe B/W) were found, but in no stratigraphic order and without horizontal spatial differences in distribution of the later sherds.

The only architectural feature at the site was an oval-shaped masonry (probably wet laid) structure measuring some two meters long. No definite floor was encountered and there was no evidence that the walls had been plastered. No evidence of roofing was found and no hearths were encountered, although an oval burned area some 40 cm x 30 cm x 3-4 cm occurred 10 cm below the surface, near the entrance of the structure. This burned feature contained no cultural materials.

Two areas of artifact concentration were observed after excavation: (1) in and adjacent to the structure; and (2) in an area some two meters to the northwest of the structure. In general, the surface material from inside the structure contrasted with other areas of the site. It may be suggested that the assemblage from the room surface may have been deposited later than the majority of artifacts from elsewhere on the site and that this later deposit may have resulted from somewhat different activities. Activity differences may relate to stages of tool manufacture. There is evidence that earlier stages of reduction were not undertaken within the room.

A comparison of utilization percentages among the lithic assemblages (see above) revealed that the combined subsurface materials contained a much lower percentage of utilization than the surface materials. It was suggested that part of the variability might be due to weathering effects on surface materials.

The nature of the artifactual assemblages and the lack of substantial labor investment in the structure suggest that LA 13049 was an impermanent location, possibly used repeatedly throughout the later Anasazi Periods for activities such as tool making and repair.

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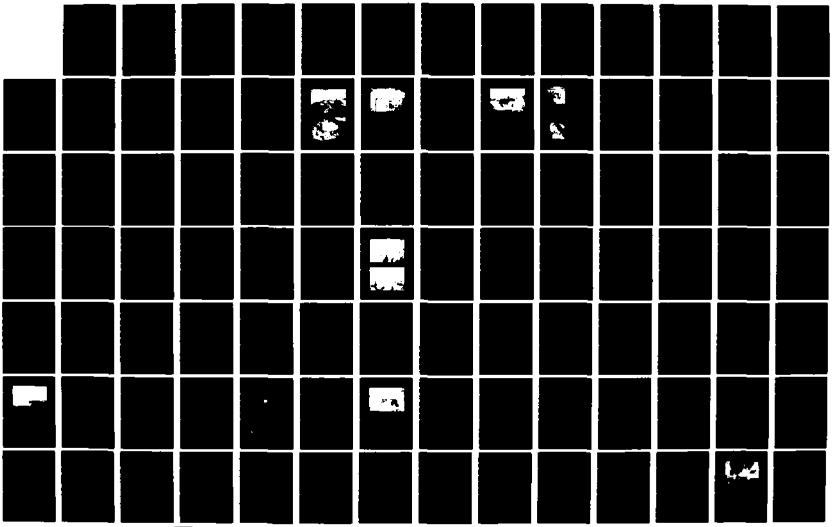

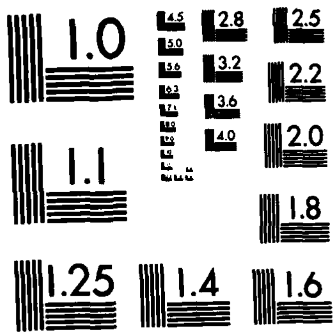
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Chapter 6
LA 13050

Jeanne A. Schutt

INTRODUCTION

LA 13050 consisted of two contiguous circular Anasazi P-IV masonry structures (Rooms 1 and 2) and a horseshoe-shaped structure (Feature A), which was superimposed on the southern wall of Room 2. Although an unambiguous date could not be assigned to Feature A, it probably was constructed during the historic period. Artifactual debris was scattered in and around the rooms. Two masonry check dams were situated some 23 meters north of the structures.

The site was located just south of the mouth of Medio Canyon on the west side of the Rio Grande in White Rock Canyon. The site was situated on a sandy bench which was cut by a shallow arroyo draining north toward Medio Canyon. LA 13050 was situated at an elevation of 5430 feet in the Upper Sonoran Juniper vegetative community (Drager and Loose 1977: Fig. II.2.1). Dominant ground cover included yellow rabbitbrush, snakeweed, black grama grass, cholla and star cactus. Juniper was abundant, especially to the east of the site, with a few pinyon pine trees sparsely intermixed.

EXCAVATION APPROACH

The excavated portion of LA 13050 included the removal of fill from Rooms 1 and 2, the excavation of exterior grids contiguous to the rooms, and the excavation of two trenches (A and B) (see Fig. 6.1). A grid pattern of 1 x 1 meter squares, totaling 301 m^2, was laid over the site and all grids were surface collected. The interior of Rooms 1 and 2 were excavated by grid in 10 cm arbitrary levels; these levels were later grouped into two natural strata. Exterior grids were also excavated by grid in arbitrary levels until natural strata could be defined.

ARCHITECTURE

Orientation of Structure: The long axis of the two-room structure was 21^0 east of true north.

Pre-excavation Dimensions of Rubble: 5.5 m x 3.0 m

Interior Post Excavation Dimensions: 4.5 m x 2.0 m

ROOM 1

Shape: Circular surface structure (see Fig. 6.2).

Orientation: Not possible to define due to shape.

Condition: The north wall appears to have collapsed to the north. Some elements were probably reused in the construction of the "horseshoe-shaped" structure (Feature A).

Interior Room Dimensions: The room diameter was approximately 2 meters.

	Length	Width	Height
North Wall	N/A	0.50 m	0.18–0.65 m
South Wall	N/A	0.55 m	0.52–0.70 m
East Wall	N/A	0.50 m	0.52–0.60 m
West Wall	N/A	0.60 m	0.20–0.62 m

Interior Floor Space: 3.1 m^2

Walls: All walls were of similar construction and are described together below.

Type of Elements: Local basalt clasts.

Size of Elements: Elements ranged in size from 50 cm x 34 cm x 10 cm to 20 cm x 18 cm x 8 cm.

Placement and Construction of Elements: The wall elements were overlapping and horizontally laid with their long axes parallel to the long axes of the walls. All elements were dry laid.

Shaping of Elements: Unmodified.

Wall Facing: Elements were placed with their flat surfaces toward the interior of the room.

Courses: The walls were generally one element wide and a single course high.

Chinking: Chinking consisted of tabular basalt ranging in size from 10 cm x 8 cm x 2 cm to 18 cm x 11 cm x 3 cm.

Mortar: No evidence of mortar was recovered.

Corners: No corners were present.

Plaster: No evidence of plaster was found on the walls.

Entrances: No evidence for an entrance could be found.

Floor: The floor in Room 1 was represented by a hard-packed surface which was situated on the rock-laden original ground surface. The southern portion of this room was partially excavated into this ground surface. The floor sloped approximately 8 cm from south to north.

Roofing: No evidence of roofing was found.

Interior Features: Interior features were not found.

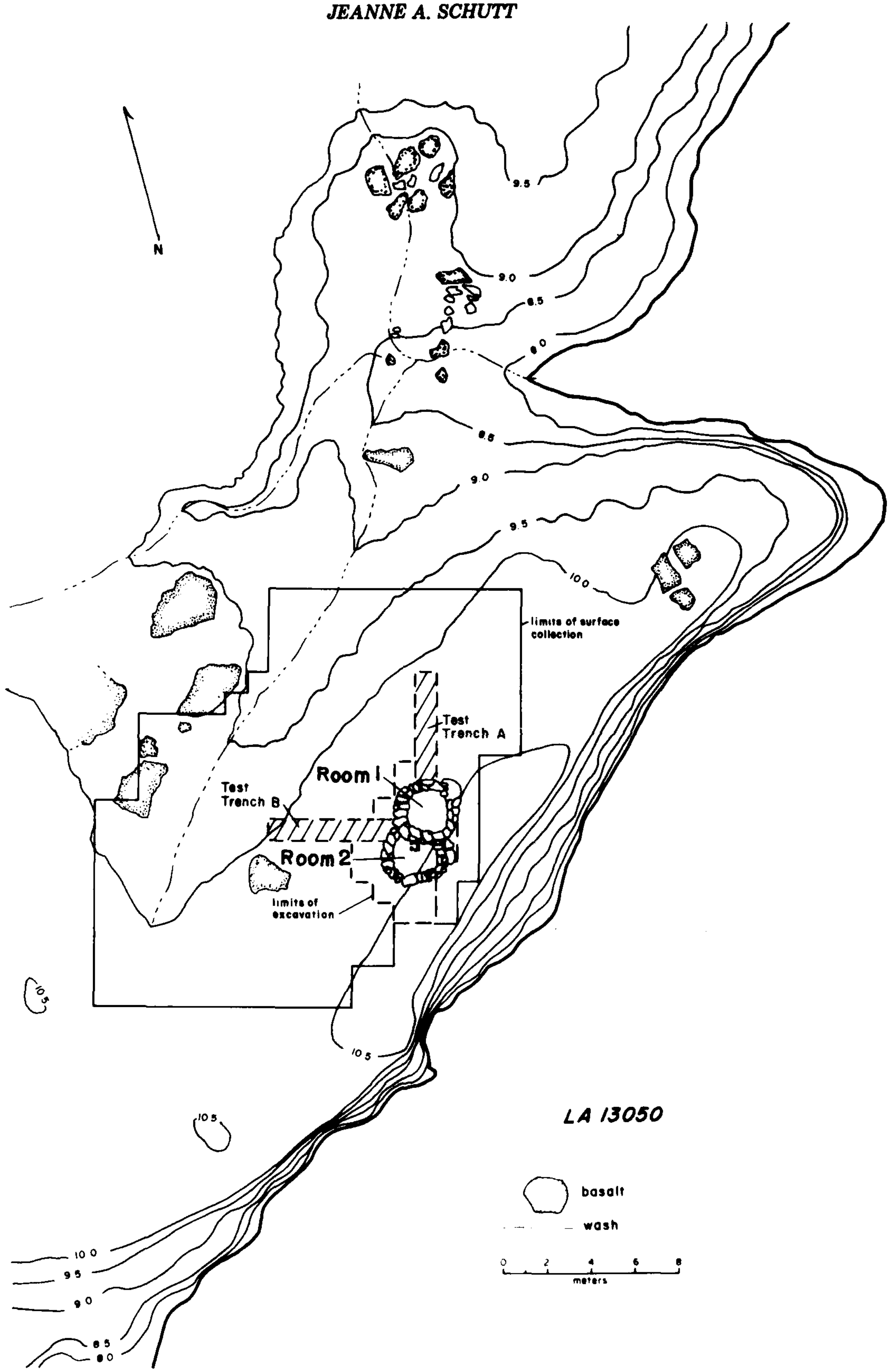

FIG. 6.1 LA 13050 Site map illustrating local topographic relief, site boundaries and excavation units

Room Fill: Room 1 was excavated in seven arbitrary 10 cm levels. The first four levels were composed of a homogeneous clean sand (Stratum 1). Cultural materials were sparsely intermixed througout this stratum. Soils in the lower three levels were made up of a hard clay mixed with many large rocks (Stratum 2). Although sparse cultural material was recovered from this stratum, it appears to be a result of post-depositional wash action.

Rubble: A total of 2.64 m^3 of interior and exterior rubble was recovered from Rooms 1 and 2.

ROOM 2

Shape: Circular surface structure (see Fig. 6.2).

Orientation: Not possible to define due to shape.

Condition: The west wall was badly collapsed toward the west. Some room elements were probably reused in the construction of the "horseshoe-shaped" structure (Feature A).

Interior Room Dimensions: The diameter of the room is approximately 2.10 m.

	Length	Width	Height
North Wall	N/A	0.55 m	0.60–0.76 m
South Wall	N/A	0.50 m	0.36–0.86 m
East Wall	N/A	0.40 m	0.48–0.60 m
West Wall	N/A	0.50 m	0.36–0.68 m

Interior Floor Space: 3.4 m^2

Walls: All walls were of similar construction and are described below.

Type of Elements: Local basalt clasts and slabs.

Size of Elements: Elements ranged in size from 50 cm x 30 cm x 16 cm to 16 cm x 15 cm x 15 cm.

Placement and Construction of Elements: There was no difference noted in wall construction between basal, middle, and upper elements. Elements were dry laid, overlapping and horizontally laid. The long axes of the elements were laid parallel to the long axes of the wall. The wall footings began between 18-20 cm above the floor. Wall elements were placed on the original ground surface.

Shaping of Elements: Unmodified.

Wall Facing: Wall elements were placed with their flat surfaces toward the interior of the room.

Courses: All walls were generally one element wide and a single course high.

Chinking: Tabular basalt ranging in size from 9 cm x 5 cm x 1 cm to 10 cm x 9 cm x 2 cm was used for chinking.

Mortar: No evidence of mortar was recovered.

Corners: The northeast, northwest, and southeast corners were round and interlocking; the west wall abutted the south wall forming the southwest corner.

Plaster: No plaster was evident.

Entrances: One possible entrance was defined in the north wall. It was represented by a probable door sill (of basalt slab) measuring 70 cm x 30 cm x 16 cm. The long axis of the sill was parallel to the long axis of the wall. On both interior and exterior occupation surfaces next to the sill a smooth worn surface was found. The exterior occupation surface and the interior floor are probably associated with the same temporal occupation. The bottom of the sill was 18 cm above the interior floor and 6 cm above the exterior occupation surface. The west wall abuts the sill forming the southwest corner of the room.

Floors

First Occupation Floor: This floor was located underneath 45 cm of room fill. It was a hardpacked surface which was worn down in front of the door sill. Charcoal flecks were found on top of this surface. The floor was between 18 and 20 cm below the wall foundations and the original ground surface. The room appears to have been excavated into the original ground surface. This surface sloped up to the walls, forming a dish-shaped occupation surface.

Second Occupation Surface: Although a formal floor could not be defined, a reoccupation of Room 2 was indicated by the presence of a hearth. This hearth was located at the bottom of 20 cm of fill. The fill both above and below the hearth was similar and consisted of a fine sand. The occupational surface was thus only defined by arbitrary level excavations and its association to the hearth (see below).

Roofing: There was no evidence of roofing present.

Interior Features

Hearth: The hearth was centrally located against the north wall. It was represented by four basalt containing elements and shallow ash fill 12 cm deep. Two elements were placed in an upright position while two others were lying flat, forming a circle, and may have fallen in. The top of the feature was located at the base of 20 cm of room fill or 25 cm above the first occupation floor. The hearth's top interior dimensions measured 47 cm x 40 cm. The bottom of the feature was 20 cm x 20 cm. Fill consisted of a homogeneous ashy sand matrix with small pieces of charcoal appearing on the south edge of the hearth. The volume of actual hearth fill was 8.2 liters. A washed ash stain extended 1 meter north from the hearth. It measured between 2-4 cm in thickness, was located at the top level of the hearth, and appeared to have washed downslope from the hearth. According to the phosphorus analysis, this feature does not qualify as a cooking hearth since the phosphorus content is very low. Also the occupation surface had a very low value, which is rare. It was suggested that the area might have been disturbed (see Appendix XIII).

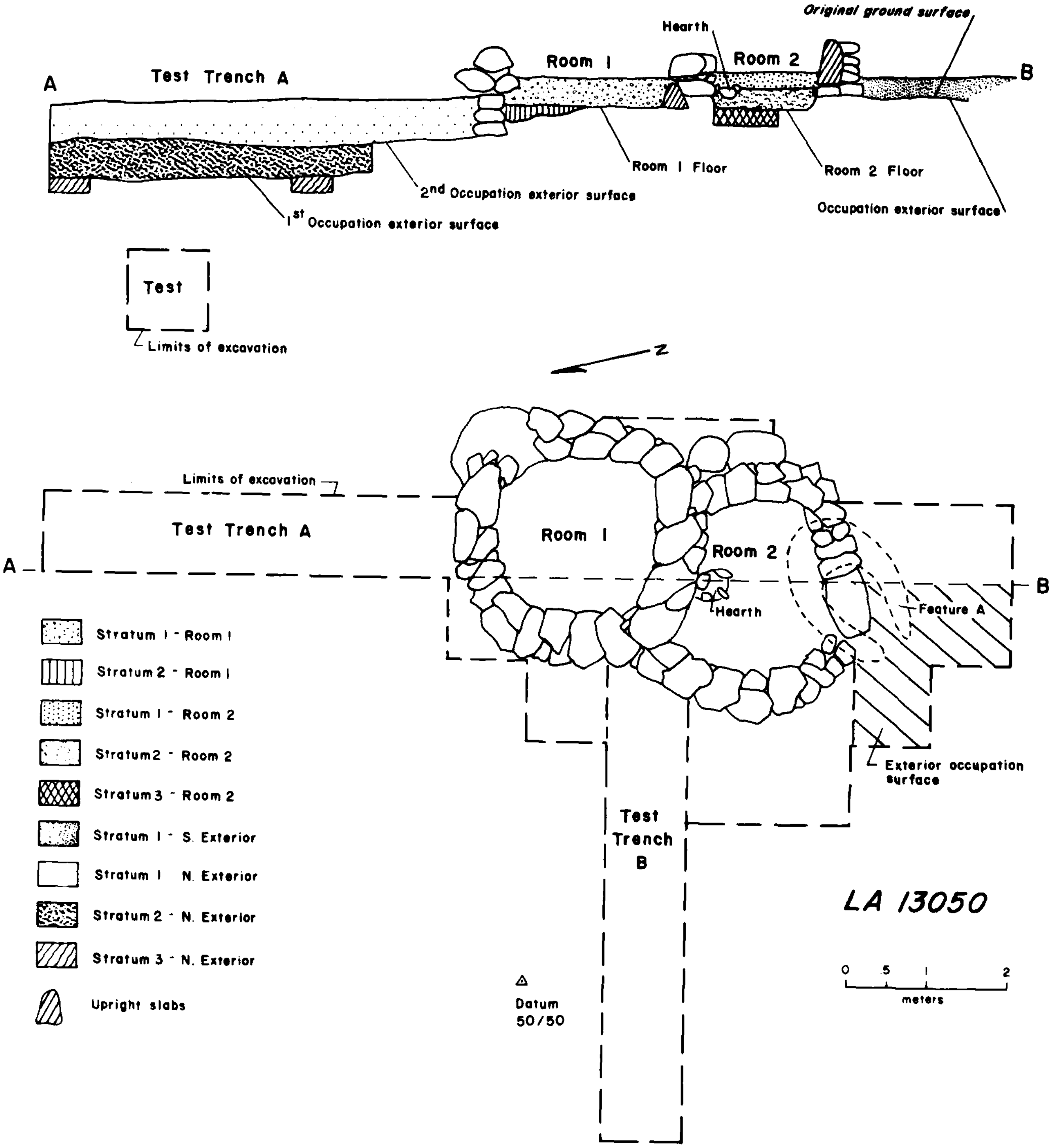

FIG. 6.2 LA 13050 Rooms 1 and 2, plan view and cross section

Room Fill: The room fill was excavated in arbitrary 10 and 20 cm levels until strata were defined. The fill was composed of a homogeneous clean tan sand fill 45 cm deep, to the first occupation floor level. Although the hearth in Room 2 represents a reoccupation of the structure, no floor or soil change supports this. Cultural materials were divided into Stratum 1 (associated with the hearth, 0-20 cm) and Stratum 2 (associated with the first occupation of Room 2, 20-49 cm). A subfloor test, 20 cm in depth, was made through the first occupation floor of Room 2. This excavation identified a sterile compact orange clay soil intermixed with large quantities of rocks.

Rubble: Both the interior and exterior rubble from Rooms 1 and 2 were consolidated together and measured 2.64 m^3.

Exterior Features (Feature A)

Indeterminant Masonry Structure: A masonry structure was found superimposed, in part, on the south wall of Room 1, on the present ground surface, and was thus located partially inside and outside of the room. It was "horseshoe-shaped" with its opening facing southwest. It was constructed of unshaped basalt clasts which were probably removed from the walls of Rooms 1 and 2, indicating a later reoccupation of the site. Elements were dry laid, overlapping and generally laid horizontally. The walls were approximately 60 cm high. Wall elements ranged in size from 30 cm x 13 cm x 8 cm to 50 cm x 35 cm x 20 cm. The interior dimensions of the top of the feature measured 80 cm long by 75 cm wide; the bottom, 70 cm long by 75 cm wide. The bottom of the feature was lying on top of the south wall of Room 2. The fill was a homogeneous orange sand 20 cm deep. There was no evidence of charcoal or burning of any kind. This feature probably represents a third occupation of LA 13050 (see Fig. 6.3).

Exterior Fill: *In order to identify the nature of the exterior* stratigraphy, areas to the north, south, and west of the rooms were tested. Each test revealed a different stratigraphic sequence and thus each will be discussed separately below.

Southern Occupation Surface: An exterior occupation surface was defined south of Room 2, directly outside the doorway. It extended out from the doorway approximately 1 meter and was represented by a hard-packed, worn surface tempered with small pebbles which had dried to a white chalky color. This surface was covered with 22-25 cm of homogeneous tan sandy soil (Stratum 1). The surface was probably used during the first occupation of Room 2.

Test Trench A: A test trench, 5 x 1 meters in extent, was excavated to the north of Room 1 (see Fig. 6.1). Within this test, two occupation surfaces were defined. Neither could be correlated with the occupations in the rooms. One occupation surface was located 80 cm below the present ground level. It was extremely hard and was tempered with small pebbles. It was approximately 3 cm in thickness and was chalky white in color. Good evidence of this surface appeared to wash out to the north (in grid 55/55). The fill (Stratum 1) above this occupation consisted of loose damp tan sandy soil. A second, earlier occupation surface was defined roughly 20 cm below the upper occupation, at a depth of 1.0 meter below the present ground surface. This surface was less distinct than the upper surface, but cultural materials were found on it, suggesting that it represents another occupation. The fill between the occupation surfaces (Stratum 2) was 20 cm in depth and was a compact soil with higher clay content than Stratum 1. Tests were made in several quadrants of the trench 20 cm below the lower occupation surface. This soil (Stratum 3) was mixed with rocks. No cultural material was recovered from Stratum 3.

Test Trench B: A trench was excavated, beginning at the rooms and extending 6 meters to the west. Three different strata were defined. Stratum 1 consisted of loose clean tan sand and ranged in thickness from 20 cm (on the west) to 122 cm (on the east, near the room wall). Stratum 2 was composed of a darker, more compact soil with a higher clay content than the upper stratum. This lower stratum reached a maximum thickness of 38 cm and disappeared near the rooms. Stratum 3 consisted of a 20 cm test below Stratum 2. It was sterile of cultural materials and was composed of dark, hard clay. The contact between Strata 2 and 3 was extremely convoluted. No occupation surfaces were defined in this test.

ARTIFACTUAL ASSEMBLAGES

CERAMIC ARTIFACTS

Minimum no. of vessels: 25
Total no. of sherds: 241
Average no. of decorated sherds per vessel: 7.35
Average no. of utility sherds per vessel: 16.29
Average no. of plainware sherds per vessel: 2.00

	Painted Wares		Utility	
Components	Bowls	Jars	Bowls	Jars
early P-IV	9	4	unknown	unknown
middle P-IV	3	1	unknown	unknown
P-IV, undiff.	–	–	–	7
Nondated	–	–	–	1

A total of 241 sherds, representing a minimum of 25 vessels were recovered from LA 13050. With the exception of one vessel, all dated to the 14th or 15th centuries. Although two different P-IV occupations are indicated by the types of vessels present (see Table 6.1), the occupations could not be correlated with specific stratigraphic units; sherds from both occupations were mixed vertically and horizontally (see Table 6.2 and Fig. 6.4). Nonetheless, each potential temporally distinct assemblage will be discussed separately below.

Thirteen of the glaze decorated vessels represent an early P-IV occupation, ca. A.D. 1325-1400. Included are one Agua Fria G/R bowl, two Cieneguilla G/Y bowls and a Cienguilla G-P bowl. The remaining early P-IV vessels are

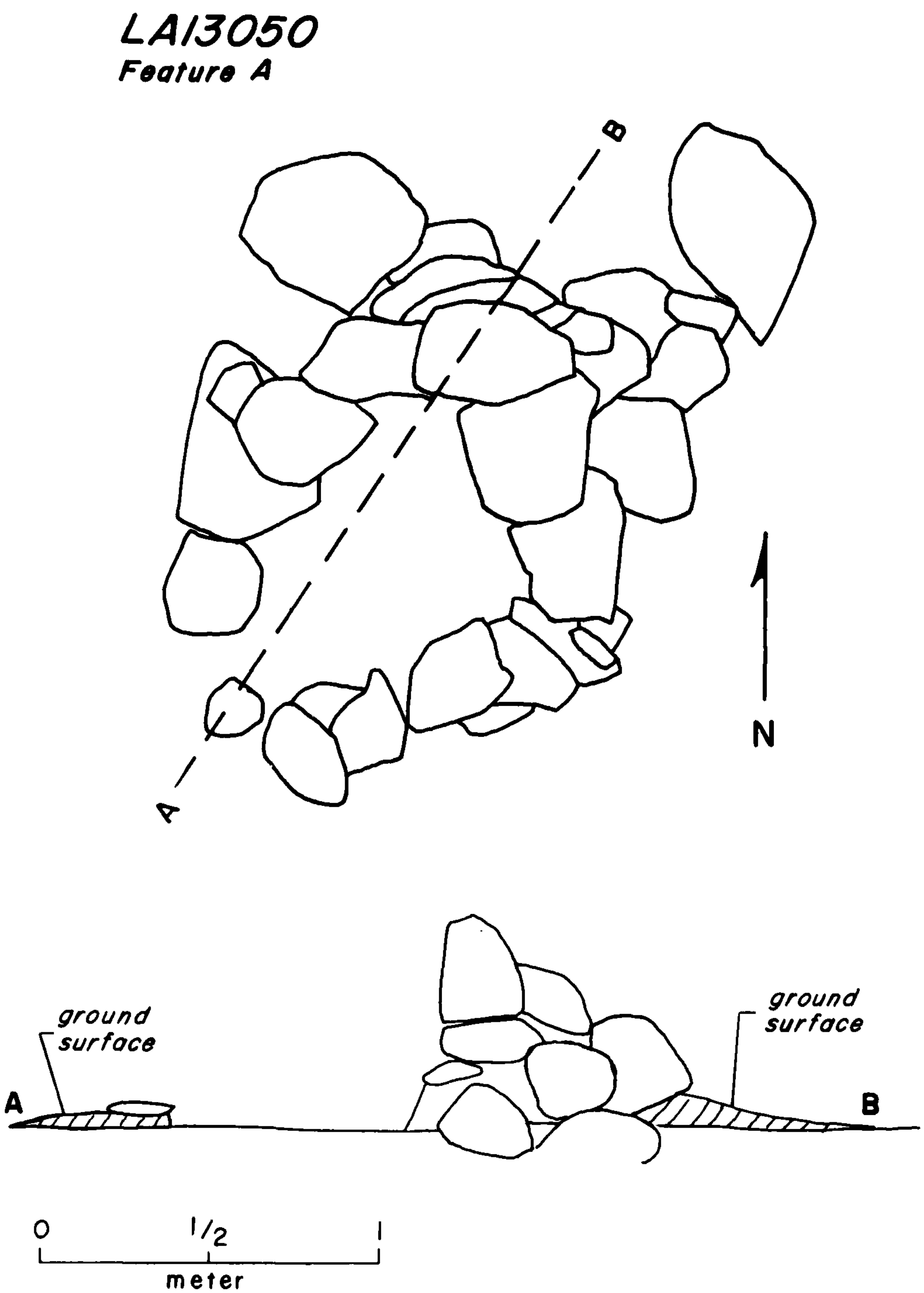

FIG. 6.3 LA 13050 Feature A, plan view and cross section

TABLE 6.1
LA 13050 – Ceramic Assemblage Summary

Ceramic Type	Vessel No.	Vessel Form	Temper	No. Sherds
Early P-IV (A.D. 1350-1400)				
Agua Fria G/R	13	bowl	3266-52	2
Cieneguilla G/Y	14	bowl	3406-52	1
Cieneguilla G/Y	19	bowl	3025-02	16
Cieneguilla G-P	24	bowl	3431-53	4
Undifferentiated glaze/red	6	bowl	3431-02	9
Undifferentiated glaze/red	8	bowl	2140-52	1
Undifferentiated glaze/red	11	jar/olla	3431-53	7
Undifferentiated glaze/red	18	jar/olla	3431-52	6
Undifferentiated glaze/red	23	bowl	3431-53	1
Undifferentiated glaze/red	25	bowl	3025-09	1
Undifferentiated glaze/red and white	7	jar/olla	3431-53	5
Undifferentiated G-P (yellow, red)	20	jar/olla	3431-02	4
Undifferentiated carbon/white	16	bowl	3864-52	7
Middle P-IV (A.D. 1490-1515)				
San Lazaro G-P	9	bowl	3270-51	54
Undifferentiated glaze/red and white	5	bowl	3266-52	4
Undifferentiated G-P (red, pink)	10	jar/olla	3266-51	2
Bandelier B/G	12	bowl	3862-52	4
P-IV, Undifferentiated				
Blind Indented Corrugated	1	jar/olla	2475-54	29
Blind Indented Corrugated	2	jar/olla	2475-54	34
Blind Indented Corrugated	3	jar/olla	3655-10	36
Blind Indented Corrugated	4	jar/olla	3655-10	1
Blind Indented Corrugated	17	jar/olla	3710-54	7
Blind Indented Corrugated	21	jar/olla	3655-54	1
Blind Indented Corrugated	22	jar/olla	2475-03	6
Nondated				
Plain, polished	15	jar/olla	2475-54	2
			TOTAL NO. OF SHERDS	241

represented by undifferentiated glaze/red sherds (4 bowls, 2 jar/ollas); undifferentiated glaze-on-red with white sherds (1 jar/olla); undifferentiated glaze-polychrome sherds (1 jar/olla); and an undifferentiated carbon-on-white sherd (1 bowl). The majority of the early component vessels contain crushed scoria temper (3431) and were manufactured locally (in the Pajarito Plateau-Cochiti area). One glaze-on-red bowl with exterior coils was tempered with a fine-grained sandstone of the Mesaverde Group (Cretaceous). No local source is known.

Four vessels indicate a second, later P-IV occupation, dating between A.D. 1490-1515. The vessels include a San Lazaro G-P bowl, an undifferentiated glaze/red bowl, and an undifferentiated glaze-polychrome jar or olla. One Bandelier B/G bowl, which dates between A.D. 1400-1500, may be associated with the second occupation period. Vessels representing the second occupation contained crushed latite temper from the Espinaso Volcanics and were probably manufactured at Tonque Pueblo (LA 240) (Warren 1979).

Seven P-IV utility jars were represented by 114 sherds. These vessels were tempered with crushed volcanic sandstone, crystal pumice or andesite tuff, all local rocks. A single vessel (no. 15), a utility ware, was friable and soft and resembled utility wares found in the Mogollon area.

Two worked sherds were recovered from the ceramic assemblage. One ground edge was from a San Lazaro G-P sherd and a straight worked or ground edge was from an undifferentiated carbon-on-white bowl.

Although three occupations are indicated by architectural and other features at LA 13050 and two P-IV occupations are indicated by the ceramics recovered, horizontal and vertical distribution of ceramics cannot be isolated into separate stratigraphic associations. Although separate occupations of Room 2 are indicated by the presence of a hearth

TABLE 6.2

LA 13050 – Distribution of Vessels by Provenience

	Early P-IV													Middle P-IV				Undiff. P-IV							No Date	
Provenience	6	7	8	11	13	14	16	18	19	20	23	24	25	5	9	10	12	1	2	3	4	17	21	22	15	Total
Room 1																										
Strat. 1	1	1	1	—	—	—	—	—	3	1	—	—	—	—	4	1	1	15	9	4	—	1	—	—	—	42
Strat. 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	—	—	—	—	—	—	—	—	—	3
Room 2																										
Strat. 1	—	—	—	1	1	—	—	—	—	—	—	—	—	—	7	—	—	—	1	1	—	—	—	—	—	11
Strat. 2	—	1	—	—	—	—	7	1	1	—	—	—	—	2	28	—	3	—	6	3	—	1	—	1	1	55
Test Trench A																										
Strats. 1 and 2	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	2
Strat. 1	1	1	—	—	—	—	—	4	1	1	1	3	—	—	2	—	—	3	1	7	—	—	—	5	—	30
Strat. 2	—	1	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	2	—	3	—	—	—	—	—	8
Test Trench B																										
Strat. 1	2	1	—	3	—	1	—	—	3	—	—	—	—	—	6	—	—	3	—	7	1	—	1	—	—	28
Strat. 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	2
Feature A																										
Strat. 1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	1	—	—	—	—	—	3
Exterior Occupation (south of Room 2)	1	—	—	—	—	—	—	—	2	1	—	—	—	—	—	—	—	—	3	—	—	2	—	—	—	9
Other Exterior																										
Strat. 1	3	—	—	2	1	—	—	—	5	1	—	—	1	—	3	1	—	5	11	8	—	—	—	—	1	42
Strat. 2	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—	—	1	—	—	—	1	—	—	—	4
Surface	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	2
TOTAL	9	5	1	6	2	1	7	6	16	4	1	4	1	2	54	2	4	29	34	36	1	7	1	6	2	241

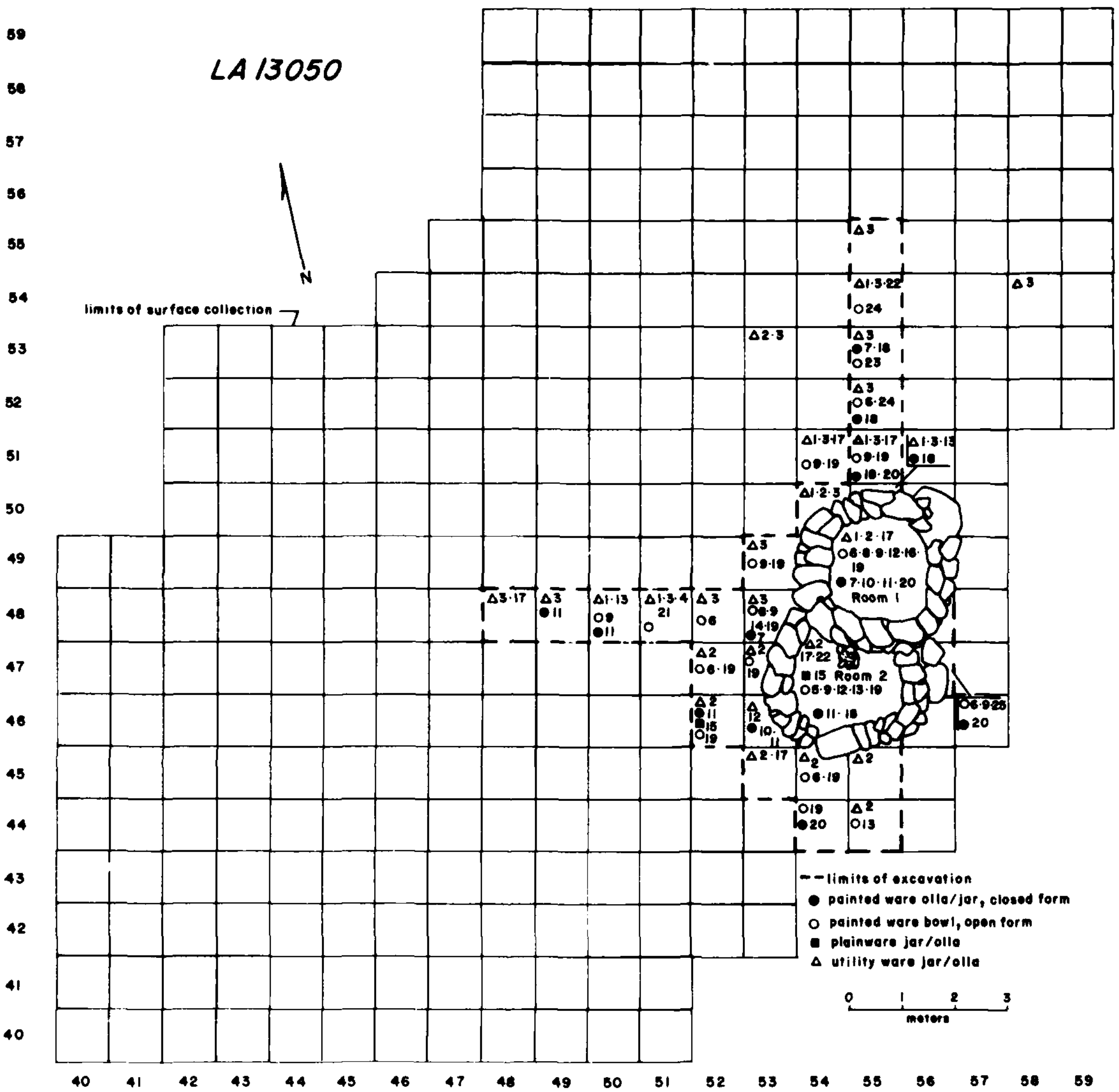

FIG. 6.4 LA 13050, distribution of ceramic vessels
(number next to the symbols refers to the vessel number used in the ceramic summary table)

at the base of Stratum 1, middle P-IV ceramics were found in *both* Stratum 1 (8 sherds) and Stratum 2 (32 sherds). The presence of ceramics representing both early and middle P-IV periods in Stratum 2 of Room 2 suggest that at least two occupations occurred before the hearth was constructed and that the occupation associated with the hearth is later and of an unknown time period.

Although two strata were identified in Room 1, the low frequency of ceramics in Stratum 2 supports the impression that Stratum 2 is wash from Stratum 1. Lithic counts were also extremely low in this second stratum. Ceramic types identified and recovered suggest that Strata 1 and 2 in Room 1 and Stratum 2 in Room 2 represent two P-IV occupations which may be contemporaneous. Although 11 sherds (1 early P-IV, 8 late P-IV and 2 P-IV utility sherds) were recovered from Stratum 1 of Room 2, the hearth constructed at the bottom of Stratum 1 indicates a second occupation at the site. Stratigraphically, a single occupation is indicated in Room 1 (Strata 1, 2). A minimum of two occupations are indicated in Room 2. The upper occupation includes the fill associated with the hearth at the base of Stratum 1; and the lower, the fill above the floor (Stratum 2). It seems probable that the occupation of Room 1 and the lower occupation of Room 2 are contemporaneous (early to middle P-IV). Feature A, the "horseshoe-shaped" structure, indicates the final reoccupation of LA 13050; the time of this reoccupation is also unknown.

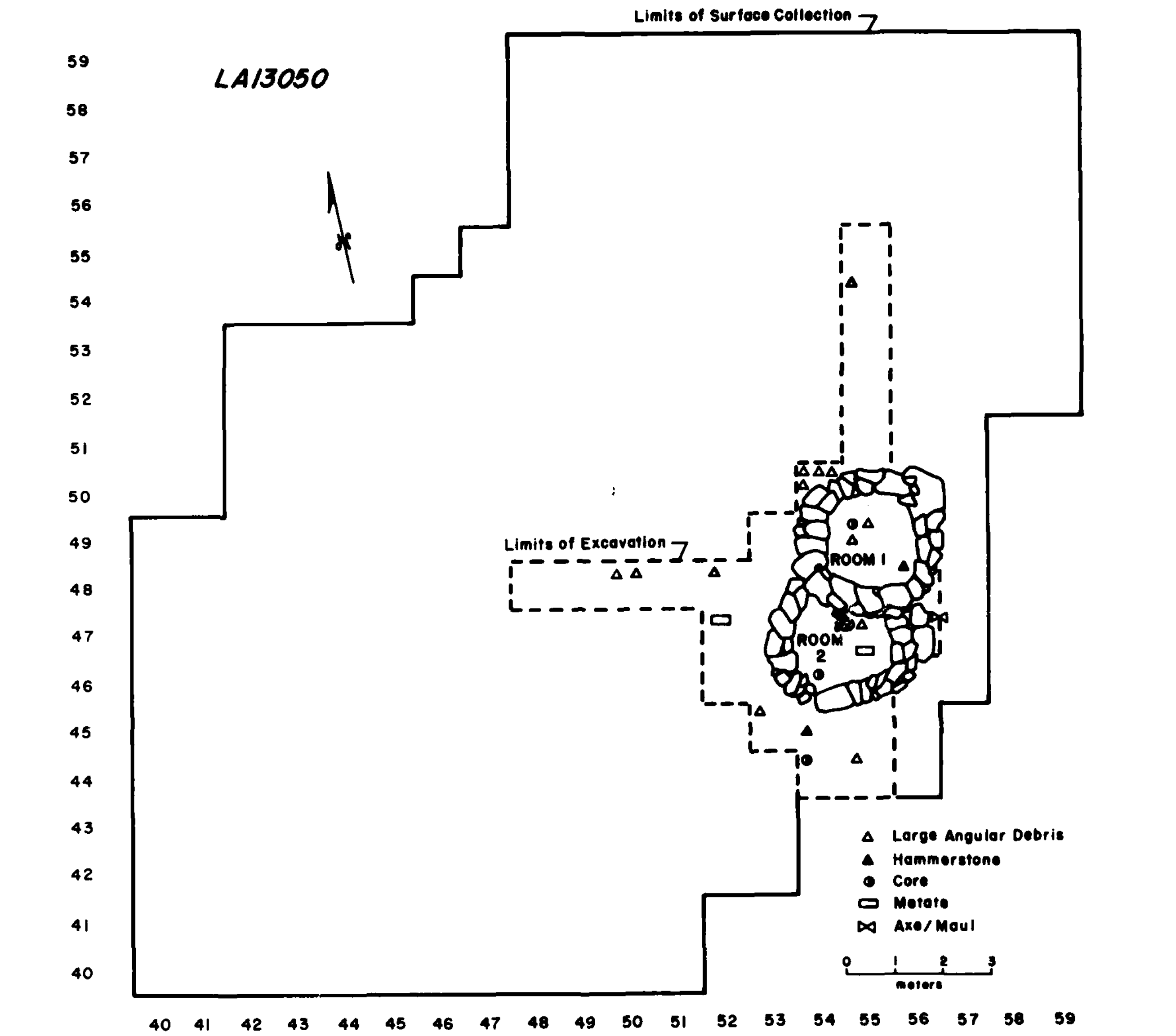

FIG. 6.5 LA 13050, distribution of cores, large angular debris, and lithic tools
(each symbol represents an artifact)

LITHIC ARTIFACTS

A total of 531 lithic artifacts was recovered from LA 13050. These artifacts included 510 pieces of debitage (flakes and small angular debris), three cores, 13 pieces of large angular debris, and two hammerstones, two milling slabs, and one axe/maul. Lithic artifact frequencies for all grids is .59 per m^2. The highest frequencies of lithic artifacts occurred in subsurface areas excavated in and around Rooms and 2 (see Figs. 6.5 and 6.6).

The lithic materials recovered from LA 13050 were analyzed as 11 different assemblages: Assemblage 1 included the materials recovered from Room 1, Strata 1, 2 (first occupation); Assemblage 2 included Room 2, Stratum 1 materials (second occupation); Assemblage 3 included Room 2, Stratum 2 materials (first occupation); Assemblage 4 included materials from Feature A; Assemblage 5 included materials from the exterior occupation surface south of Room 2; Assemblage 6 included subsurface materials, excluding the occupation surface and excluding Test Trenches A and B; Assemblage 7 included Test Trench A, Stratum 1; Assemblage 8 included Test Trench A, Stratum 2; Assemblage 9 included Test Trench B, Stratum 1; Assemblage 10 included Test Trench B, Stratum 2; and Assemblage 11 included all other surface materials.

It is difficult to assign most of the lithic assemblages

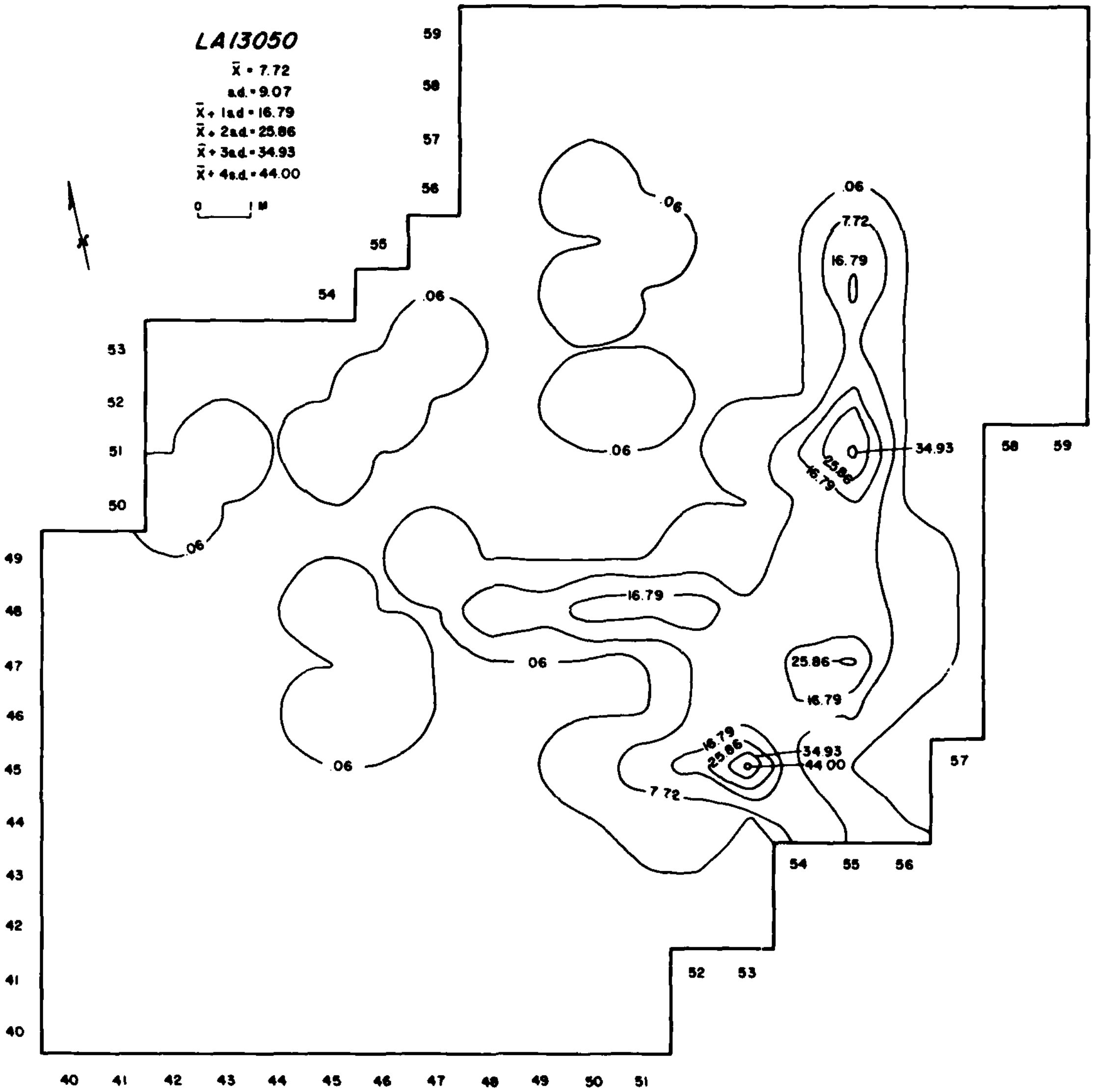

FIG. 6.6 LA 13050, distribution of debitage

to the specific occupations mentioned earlier, though it is presumed that the assemblages reflect the occupation sequence discussed above. Each assemblage from the rooms in addition to the lithic assemblages recovered from the test trenches will be discussed separately below.

Material Selection

Lithic artifacts were predominantly manufactured from basalt (41%, 6 taxa), Pedernal chert/chalcedony (32%, 8 taxa), obsidian (18%, 7 taxa), quartzite (5%, 1 taxon) and chert (3%, 7 taxa). Other materials that were present included silicified wood, siltstone, and andesite.

Seven artifacts were manufactured from Polvadera Peak obsidian, indicating time investment or the acquisition of this nonlocal material. All other lithic materials are locally available in the study area.

Manufacture

Room 1 (Assemblage 1)

Although Room 1 was excavated in two natural strata, Stratum 2 appears to represent wash from Stratum 1 (Assemblage 1). The low density of artifacts (2 lithics and 3 sherds) further supports this determination.

Forty flakes and pieces of small angular debris, one basalt core (3050), two pieces of large angular debris (1215, 4000), and a quartzite sandstone hammerstone were recovered from the first stratum in Room 1.

Flake and small angular debris frequencies were as follows: Pedernal chert/chalcedony (16), basalt (15), and obsidian (9). The interior surface of Room 1 encloses approximately 4 m^2. This represents a density of 10 pieces of debitage per m^2.

Of the Pedernal assemblage, 31% had cortex (with 80% waterworn cortex). Platforms were present on 55% of the assemblage and 83% of these were single-faceted, suggesting a time investment into core preparation. Pedernal flake and small angular debris lengths were much more evenly distributed across size categories in Room 1 than they were in Room 2. Artifact size range included: 0-10 mm, 1 piece; 11-20 mm, 4 pieces; 21-30 mm, 7 pieces; 31-40 mm, 3 pieces; and 41-50 mm, 1 piece. Although flake size is markedly larger in Room 1, the amount of cortical flakes and pieces of small angular debris is low, only 31%. This may reflect differences in initial nodule size and still indicate primary and secondary stages of reduction. Evidence of tertiary stages of reduction is lacking. The basalt assemblage represents a similar reduction strategy. The obsidian assemblage was too small for speculation.

Room 2 (Assemblages 2 and 3)

At least two occupations were identified in Room 2. The uppermost occupation was defined by the presence of a hearth, located at the bottom of Stratum 1 (Assemblage 2); the second occupation by the fill above the floor (Stratum 2, Assemblage 3). The ceramic assemblage suggests still another occupation of Room 2 (see ceramic discussion). Although the presence of a hearth indicates a later reoccupation of Room 2, the low density of artifacts in Stratum 1 suggests a limited short-term occupation. Of the 69 lithic artifacts recovered from Room 2, 11 were found in Stratum 1, and 58 in Stratum 2. Ceramic distributions were similar. The small number of artifacts recovered from Stratum 1 in Room 2 prohibits isolation of the reduction strategy employed. A single Pedernal core was recovered from this stratum. Five of the 10 flakes belonged to the group of Pedernal chert/chalcedony. The low number of lithic artifacts suggests that reduction or tool manufacture did not occur in Room 2 during this later occupation.

Stratum 2 of Room 2 contained 57 pieces of flake debitage and small angular debris produced by freehand percussion technique. No cores, large angular debris, or hammerstones were found in this stratum. The interior of Room 2 is approximately 4 m^2, and thus the artifact density is 14.25 per m^2 in Stratum 2.

The largest number of flakes and small angular debris (24) belong to the Pedernal/chert category. Four pieces of large angular debris found on the site also belong to this category, three of which were recovered from Stratum 1 in Room 1 and Test Trench B and the fourth from the surface of grid 47/55. Although 38% of the Pedernal cherts and chalcedonies exhibited cortex, only an average 0.1% of the total dorsal surface area of those flakes were cortical. A total of 56% of the cortex was not waterworn. A little over half the flakes had platforms and 64% were single-faceted suggesting some investment into core preparation. The majority of Pedernal flakes and small angular debris were between 11-20 mm in length. This and the small amount of dorsal cortex may suggest an emphasis on secondary stages of reduction, although evidence of primary stages are present. The lack of flakes with retouched platforms and the absence of facially retouched tools indicate that tertiary stages of reduction did not occur in Room 2. Similar reduction strategies can be seen for basalt (17 flakes and small angular debris). The quartzite assemblage exhibits a typically high percent of cortex. Eight of 10 pieces exhibited cortex, possibly indicating the primary reduction of a single nodule.

Feature A (Assemblage 4)

Two pieces of debitage (3050 basalt) were recovered from this feature.

Exterior Subsurface Assemblages 5 and 6

Assemblage 5 consisted of all materials recovered from an exterior occupation surface which was identified in three grids (45/53, 45/54, 44/54) immediately south of Room 2. Assemblage 6 was made up of all subsurface materials excluding the exterior occupation surface and the test trenches.

A total of 44 pieces of debitage (flakes and small angular debris) were recovered from the exterior occupation surface (no. 5) and 130 pieces of debitage were recovered from Assemblage 6.

Although a greater density of material (14.67 per m^2) was recovered from the exterior occupation surface than for the other subsurface grids, both assemblages appear to represent similar stages of reduction. Both primary and secondary stages are indicated by the ratio of cortical to noncortical flakes. Similar flake length distributions are also present. There are slightly fewer cortical flakes representing the Pedernal chert/chalcedony category in the assemblage from the exterior occupation surface (20%) than there are from the rest of the subsurface areas around the rooms (33%).

With the exception of the obsidian recovered from the exterior occupation surface, between 63-100% of the platforms were single-faceted, which suggests time investment into core preparation.

An obsidian core (3526), a piece of large angular debris (3701), and a quartzite hammerstone were recovered from the exterior occupation surface. The lack of 3526 obsidian materials and the general low frequency of obsidian flake debitage and small angular debris (7) suggest that core reduction occurred in another area. Frequencies of 3701 basalt were also low (7).

Six pieces of large angular debris were recovered in the subsurface areas around Rooms 1 and 2. Three were quartzite (4000) and were recovered from grid 50/54; two were basalt — one (3730) was found in grid 44/55 and the other (3050) was located in grid 50/54; and one Pedernal chalcedony (1215) was found in grid 48/50. The only material taxa containing enough debitage to suggest core reduction were 3701 and 3050 basalts. Characteristics of the debitage indicate that both primary and secondary stages of reduction occurred. The majority of flakes and small angular debris fall into the size category of 11-20 mm. The majority of artifacts of all material taxa also fall into this same size category.

Test Trench A (Assemblages 7 and 8)

Test Trench A extended a little over 5 m north of Room 1. Stratum 1 included as much as 80 cm of fill which was deposited on a packed occupation surface. Stratum 2 included as much as 20 cm of fill and was deposited on another occupation surface. Artifact densities were highest in Stratum 1. A total of 66 pieces of debitage was recovered from Stratum 1 (Assemblage 7); Stratum 2 had only 32 artifacts (Assemblage 8). A single piece of 3523 obsidian large angular debris was also found in Stratum 1.

Basalt flakes and small angular debris had the highest frequencies in both strata and represented 50% of the total lithic assemblage in Test Trench A. Both primary and secondary stages of reduction were represented in these assemblages. Between 61-82% of the platforms present were single-faceted, suggesting an emphasis on core preparation.

Test Trench A had the highest density of obsidian artifacts on the site. Twenty-one obsidian lithic artifacts were recovered from Stratum 1, and seven from Stratum 2. The obsidian flakes and small angular debris recovered from this area suggests a different reduction emphasis in this area. Only 7% of the obsidian exhibited cortex. The size distribution of flakes and small angular debris was concentrated between 1-22 mm. The frequency of small flakes and low ratio of cortical flakes indicates that, unlike other areas of the site, primary stages of decortification did not occur in this area. The assemblage suggests emphasis on secondary stages of reduction. The lack of flakes with retouched platforms may indicate that tool manufacture occurred in another area.

The Pedernal chert/chalcedony assemblage in Test Trench A was also different from other assemblages of that material category across the site. Although this assemblage is represented by only 15 pieces of debitage, the high percentage of cortical artifacts (60%) suggests a heavy emphasis on decortication or primary stages of reduction. The frequency of cortical flakes and pieces of small angular debris is almost twice that found in Pedernal assemblages across the site.

Test Trench B (Assemblages 9 and 10)

Test Trench B extended approximately 6 m west of Rooms 1 and 2. Stratum 1 ranged in depth from 20 cm in the west to 1.22 m at the room walls (Assemblage 9). Stratum 2 ranged from 0-38 cm in thickness and was not present east of grid 48/51 (Assemblage 10).

A total of 78 pieces of flake debitage and small angular debris was recovered from Stratum 1, where Stratum 2 had only 19. Twenty-eight of 30 sherds recovered from Test Trench B were also located in Stratum 1.

The basalt assemblage indicates both primary and secondary stages of reduction. Cortical flakes and small angular debris make up 34% of the assemblage. Again, a high percentage of flakes with platforms were single-faceted (78%), suggesting time investment into core preparation. Evidence of tertiary stages of manufacture is lacking. An additional piece of basalt large angular debris (3730) was recovered from Stratum 1. The presence of only a single flake of this material taxon suggests that core reduction occurred elsewhere.

The obsidian assemblage in Test Trench B is similar to that found in Test Trench A. As in Test Trench A, densities of obsidian flakes and small angular debris in Test Trench B are high. Similarly, the frequency of cortical to noncortical artifacts is low (11% cortical). As in Test Trench A, the size distribution of flakes and small angular debris is concentrated in the 1-20 mm size category. The obsidian assemblage suggests an emphasis on secondary stages of reduction. Evidence of primary reduction is minimal, and tertiary stages are lacking.

Pedernal chert/chalcedonies represented 18% of the total lithic assemblage in Test Trench B. The majority of this debitage was recovered from Stratum 1 (Assemblage 9) and indicated both primary and secondary stages of reduction. Twenty-nine percent of the assemblage exhibits cortex; 80% of this cortex was waterworn. Core preparation is indicated by the high percentage of single-faceted platforms (89%). Additional lithics recovered from Test Trench B included two pieces of large angular debris (1214, 1215). Both artifacts were found in Stratum 1 and belong to the Pedernal chert/chalcedony material classification. These may represent residual cores of flake reduction at this location.

Surface (Assemblage 11)

Thirty-two pieces of debitage were recovered from the surface of LA 13050 (Assemblage 11). Material categories represented included Pedernal chert/chalcedony (15), obsidian (10), basalt (5), quartzite (1) and andesite (1). The Pedernal chert/chalcedony assemblage suggests emphasis was placed on primary reduction yet evidence of secondary reduction was also present. Fifty-three percent of the flakes and small angular debris exhibited cortex. Although the obsidian assemblage was small, primary and secondary stages of reduction are indicated. The number of flakes and small angular debris belonging to other material categories was too small for further speculation on reduction strategies.

Tool Use

Two milling slabs and one axe/maul were recovered from LA 13050. All items were manufactured from a Cerros del Rio basalt taxon (3430). Both of the milling slabs were concave in cross section and one was rectangular while the other was irregular in shape. The rectangular slab exhibited two possible grinding surfaces, while the irregular one had one grinding surface. All of the milled areas covered considerably less than 50% of the available surface area. The axe/maul recovered from this site was an elongate-oval waterworn cobble which was natural plano-convex in cross section. It was rounded on the proximal end and pointed on the distal end. Approximately in the middle of the long axis, two opposed notches occurred which appear to be manmade. The distal end exhibited some battering.

One milling slab occurred within Room 2, while the other occurred in an exterior subsurface grid in the vicinity of Rooms 1 and 2. The axe/maul occurred just outside Room 2.

Twenty of the 510 pieces of debitage (flakes and small angular debris) showed evidence of previous use which represents 4% of the assemblage. These tools were manufactured from three material categories: obsidian (13), basalt (5), and Pedernal chert/chalcedony (2). The obsidian flakes and pieces of small angular debris ranged in lengths from 11-50 mm; utilized basalt ranged from 21-50 mm in length; and all utilized Pedernal chert/chalcedonies fell in the 21-30 mm category. The majority of utilized flakes came from excavated portions of the site. All utilized flakes found in Rooms 1 and 2 appear to be associated with one of the two P-IV components. In Room 1, two utilized pieces of debitage were found in Stratum 1. None were recovered in Stratum 2 of Room 1. In Room 2, all four utilized pieces of debitage were recovered from Stratum 2.

No facially retouched tools were recovered from LA 13050. Other artifacts that showed evidence of use where two hammerstones. The hammerstones were battered at a single convex location. There was no evidence of wear on the large angular debris recovered from the site.

Microlithics

An 1/8 inch screen test was undertaken in grid 55/55 of Test Trench A. A single Pedernal chalcedony (1215) flake with no platform was recovered from Stratum 1.

FAUNA

Fourteen bones were recovered from LA 13050, representing a minimum of seven individuals. These include a woodrat (1 bone), a gopher (1 bone), a grasshopper mouse (2 bones), a landsnail (1 shell fragment), a turtle (3 scute), a turkey (1 bone), and a large undifferentiated mammal (1 bone). The remaining four bones from an undifferentiated small mammal do not affect the minimum number of individuals. Two of the individuals (the turkey, turtle, and large mammal) were probably consumed at the site. The four remaining animals (woodrat, gopher, landsnail and mouse) may have been intrusive. The types of individuals represented and the small amount of faunal remains suggest that meat consumption and processing were not major activities at LA 13050.

BONE TOOLS

One bone awl made from a turkey (*Meleagris gallopavo*) tarsometartarsus was recovered from Room 2, Stratum 1.

MISCELLANEOUS MATERIALS

Ochre: Two pieces of ochre were recovered from LA 13050. One was found in Room 1, Stratum 1 (grid 49/54) and the other in grid 54/58, Stratum 1.

Clay: A single lump of clay was recovered from grid 44/55, Stratum 1.

Hematite: A piece of hematite was recovered from grid 55/55, Stratum 1.

Miscellaneous: A piece of aluminum foil was recovered from grid 55/55, Stratum 1. A pencil was found in grid 46/53, Stratum 1. It was in two pieces.

FLOTATION ANALYSIS

Heavy flotation residue from Feature A, the horseshoe-shaped feature, was examined. This 750 ml sample yielded two small 3701 flakes, three quartz crystals, and 14 seed fragments (including one grass seed).

SUMMARY

LA 13050 is a multicomponent site consisting of two contiguous P-IV rooms and a probable historic (?) horseshoe-shaped structure. Four distinct occupations are indicated by evidence drawn from architectural construction, location of features, and ceramics recovered. Ceramics indicate that the occupation associated with Room 1 and the occupation associated with the lower fill of Room 2, can be correlated. Two occupations (early P-IV, A.D. 1325-1400, and middle P-IV, A.D. 1490-1515) are represented within these same stratigraphic units; however, distinct occupation levels could not be isolated. The upper fill in Room 2 represents a third occupation of that room and is of an unknown time period. The low density of lithic and ceramic artifacts may indicate a short-term occupation. The final occupation of the site is represented by the horseshoe-shaped structure constructed on the south wall of Room 2.

Vessels recovered from both the early and late P-IV periods indicate that a ceramic trade network may have existed. One glaze-on-red bowl, dating to the early P-IV period, was tempered with fine-grained sandstone resembling that found in the Kirtland Formation (Mesaverde Group) sandstone. Five vessels indicating the later P-IV occupation contained crushed latite temper from the Espinosa Volcanics. These vessels were probably manufactured at the Tonque Pueblo (Warren 1979). Both tempering materials are not available locally.

Direct evidence of food resources procured and consumed at the site was limited to faunal remains. Although seven individuals were represented on the site, four of these may not have been consumed (gopher, woodrat, mouse and landsnail). The presence of these animals may be explained by their burrowing and wandering behavior. Two of the remaining three individuals are associated with the first two occupations of the site and the third occupation of Room 2. The turkey bone associated with the third occupation of the site was also used as an awl, possibly indicating that the bone may have been brought to the site in the form of a tool. A single large mammal bone was associated with the P-IV occupations of Room 1. If these low counts of fauna are representative of other unexcavated portions of the site, it is evident that meat consumption and processing was not a major subsistence activity at LA 13050. Although flotation samples produced no evidence of plant use, the presence of milling implements suggests that plant foods were processed at the site.

All but seven lithic artifacts were manufactured from locally available materials. The seven artifacts manufactured from Polvadera Peak obsidian suggest that time was expended for the acquisition of this particular material or that it was traded into the area.

Most of the lithic assemblages recovered from LA 13050 indicate primary and secondary stages of reduction. The low frequency of lithic artifacts associated with the third occupation of Room 2, indicate that reduction or tool manufacture did not occur in Room 2 at the time of that occupation. The assemblages that indicate a different emphasis in reduction included the Pedernal chert/chalcedony and basalt assemblages from the lower fill in Room 2 (secondary emphasis), the Pedernal assemblage (primary emphasis) and obsidian assemblage (secondary emphasis) recovered from the upper fill in Test Trench A and the obsidian assemblage from the upper fill in Test Trench B (secondary emphasis). Although ceramic artifacts correlate Room 1 fill with the lower fill in Room 2, two slightly different reduction strategies are indicated. The secondary reduction of obsidian occurred in the upper fill of both Test Trench A and Test Trench B. The largest number of obsidian debitage and small angular debris found on the site was recovered from Test Trench A. Primary and tertiary stages of reduction and manufacture are lacking in both of these areas. This evidence and the low counts of obsidian in other areas of the site may indicate that these stages did not occur at the site. Finally, the Pedernal assemblage recovered from the upper fill in Test Trench A suggests emphasis on primary reduction. It may be possible that secondary reduction of these materials was carried out in Room 2 during one of the first two occupations although correlations between these strata are uncertain.

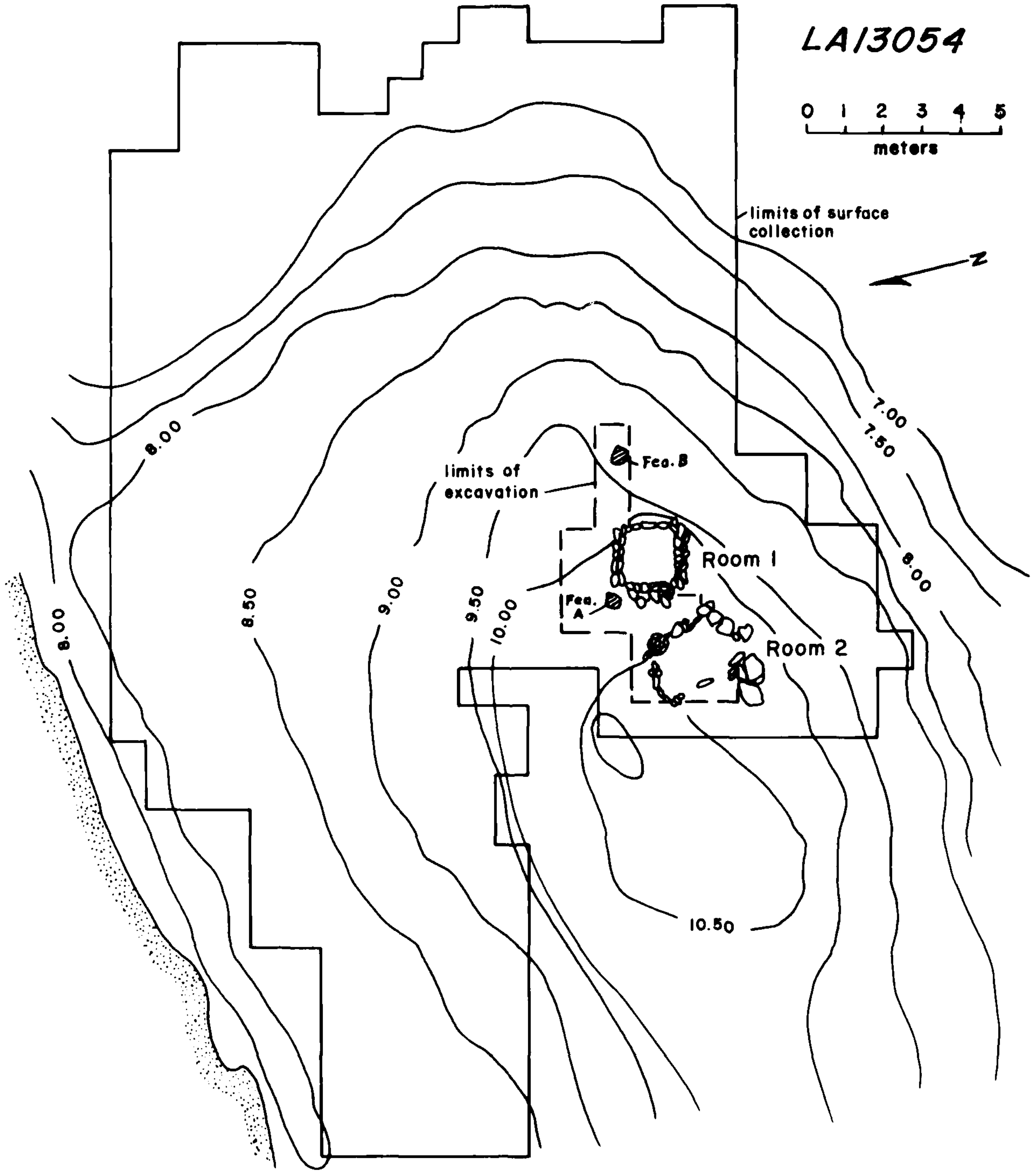

FIG. 7.1 LA 13054 site map illustrating local topographic relief and boundaries of surface collection and excavation units.

Chapter 7

LA 13054

Jeanne A. Schutt

INTRODUCTION

LA 13054 is a single component Anasazi P-IV site which was occupied between ca. A.D. 1350-1400. It is composed of two noncontiguous rooms, one surface structure and one semisubterranean structure, and an associated lithic and ceramic scatter.

The site is situated on a gravel ridge in White Rock Canyon on the west side of the Rio Grande, upstream from Sanchez Canyon. A bench separates the ridge from the talus to the north; a terrace extends to the northeast and southwest. LA 13054 lies at an elevation of 5340 feet.

The site is located in the Upper Sonoran Arid vegetative community (Drager and Loose 1977: Fig. II.2.1). The bench and flood plain are sparsely covered with grama grasses, snakeweed, and rabbitbrush. Juniper trees and prickly pear cactus are abundant on the ridge, bench and flood plain.

EXCAVATION APPROACH

A 1 x 1 meter grid system was superimposed over the site. It extended 34 x 18 meters. Within this area a total of 464 m^2 were surface collected and 21 m^2 in and contiguous to Rooms 1 and 2 were excavated to the original occupation surface (see Fig. 7.1). Although the fill of the rooms was initially excavated in 10 cm arbitrary levels, the levels could be correlated with natural strata. The exterior fill was excavated in natural units. All materials were processed through ¼ inch wire mesh.

ARCHITECTURE

ROOM 1

Shape: Rectangular, semisubterranean structure (see Fig. 7.2).

Orientation: The long axis of the room was oriented 24° east of true north.

Condition: The subsurface portion of the walls was intact, although the majority of above ground wall elements had slumped toward the exterior of the room.

Interior Room Dimensions:

	Length	Width	Height
North Wall	1.35 m	0.42 m	1.28 m
South Wall	1.35 m	0.24 m	0.69 m
East Wall	1.50 m	0.26 m	0.99 m
West Wall	1.20 m	0.61 m	1.40 m

Interior Floor Space: 1.76 m^2

Walls: All walls are of similar construction and are described below.

Type of Elements: Local basalt slabs.

Size of Elements: The larger upright basal elements ranged in size from 47 cm x 33 cm x 4 cm to 55 cm x 42 cm x 3 cm. Middle and upper wall elements ranged from 52 cm x 30 cm x 6 cm to 15 cm x 13 cm x 4 cm. The average size of the middle and upper elements was 27 cm x 19 cm x 4 cm.

Placement and Construction of Elements: Basal elements were placed side by side, in vertical positions, forming the foundation of the room walls. These upright slabs were secured in a trench which extended 10 cm deeper than the room floor. Spaces between the uprights were filled with smaller slabs which were laid horizontally and overlapping. Middle and upper wall elements were also laid horizontally and overlapping with the long axes of the elements parallel to the long axis of each wall. The walls were generally one element wide and dry laid.

Shape of Elements: Unmodified.

Wall Facing: Wall elements were placed so that flat surfaces faced the interior of the room.

Chinking: Wall chinking consisted of quartzite cobbles ranging in size from 14 cm x 10 cm to 6 cm x 5 cm.

Mortar: No evidence of mortar was recovered.

Corners: All corners were rounded and interlocking, indicating that the walls were constructed at the same time.

Plaster: There was no evidence of plaster on any of the walls.

Entrances: Evidence indicating the presence of a doorway could not be found.

Floors: Although a prepared floor was not found, it appeared that an occupation surface could be defined at a depth of 1.14 m below the original ground surface. It consisted of coarse gravels from the Totavi Lentil. A slab-lined hearth was located at this depth as well.

Roofing: No evidence of roofing material was recovered.

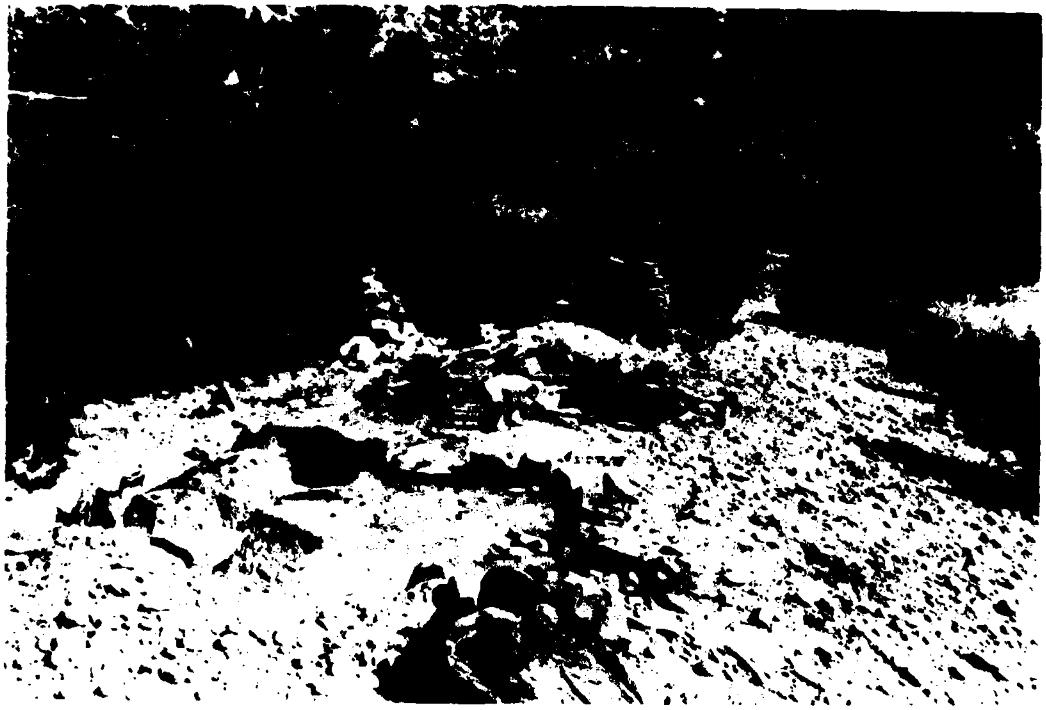

PLATE 7.1 Overview of Site LA 13054, looking northeast. Room 2 is in the foreground.

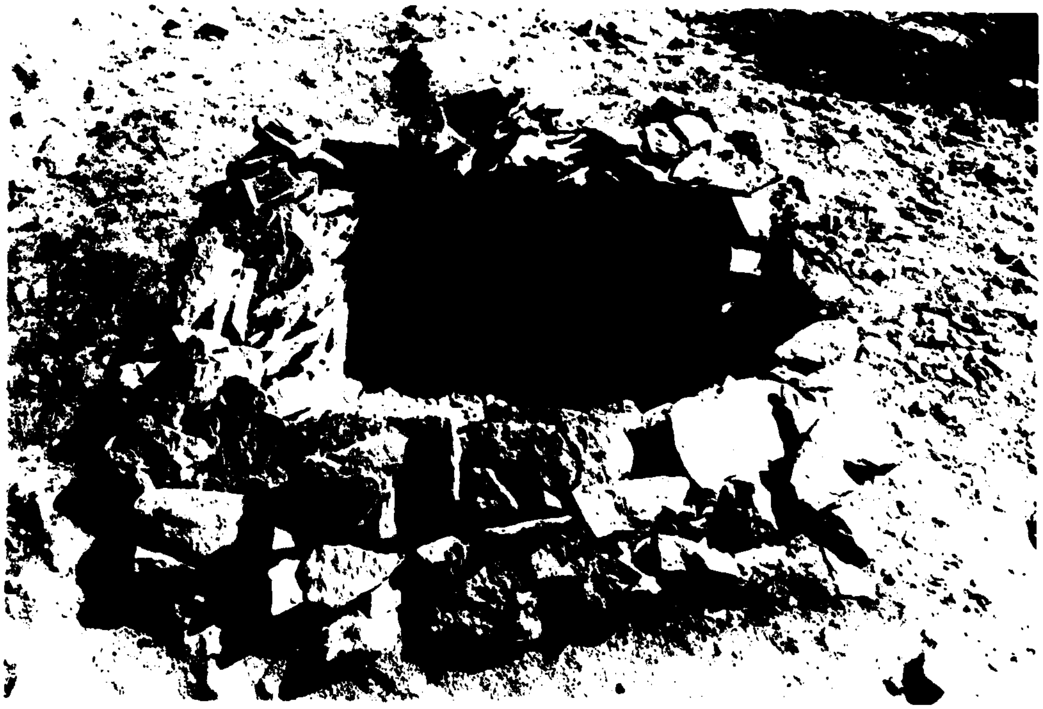

PLATE 7.2 Detail of Room 1 (LA 13054), looking west

PLATE 7.3 Detail of wall construction, west wall of Room 1 (LA 13054)

Interior Features

Hearth: A slab-lined hearth was found in the southeast corner of Room 1. The hearth's longest dimension was against the south wall and measured 53 cm. It was 28 cm wide and 17 cm deep. The hearth was excavated into the occupation surface of the room. Wall elements lined the southern and eastern sides of the hearth. A basalt slab 31 cm x 13 cm x 5 cm lined the hearth on the north. The west side of the hearth was not lined. The feature was filled with gray, ash-stained soil and a few small bits of charcoal. No cultural materials were recovered.

Room Fill: Room fill was excavated in seven 10 cm arbitrary levels (A-G). Levels A-C (Stratum 1) were composed of a fine sand and humus with gravel intermixed. Levels D-G (Stratum 2) consisted of a grey sand with gravel. The occupation surface occurred at the base of level G. Cultural materials recovered from levels A-G include bone, lithics and ceramics. A subfloor test, 20 cm below the floor (Stratum 3), proved to be sterile of cultural material.

Rubble: Wall rubble recovered from the exterior of Rooms 1 and 2 measured 2.82 m^3. A minimal amount (0.49 m^3) of Room 1 interior rubble was recovered.

Exterior Fill: Exterior fill consisted of a light sand and humus which ranged in depth from 2-18 cm (Stratum 1). An apparent exterior occupation surface was located at the base of the first natural stratum and was comprised of the coarse gravels of the Totavi Lentil. Cultural material included lithics and ceramics. An additional 20 cm deep test into the Totavi gravels proved to be sterile of cultural materials.

Exterior Features

Burned Areas: Two exterior burned areas were found near Room 1.

Feature A was located one meter northwest of Room 1. The feature measured 61 cm long by 51 cm wide. The fill consisted of 13.7 liters of dark stained sand with charcoal intermixed. The maximum depth of fill was 10 cm. One flake was recovered from the fill.

Feature B was similar to Feature A but was located 2 m east of Room 1. This feature was circular in shape and measured 40 cm x 57 cm and extended to a depth of 7 cm. The fill consisted of 3.3 liters of dark stained sand with charcoal intermixed. No cultural materials were recovered from Feature B.

ROOM 2

Shape: Rectangular surface structure (see Fig. 7.2).

Orientation: The long axis of Room 2 was 24° west of true north.

Condition: Room 2 was badly eroded. Very few basal elements were in place; many had fallen into the room.

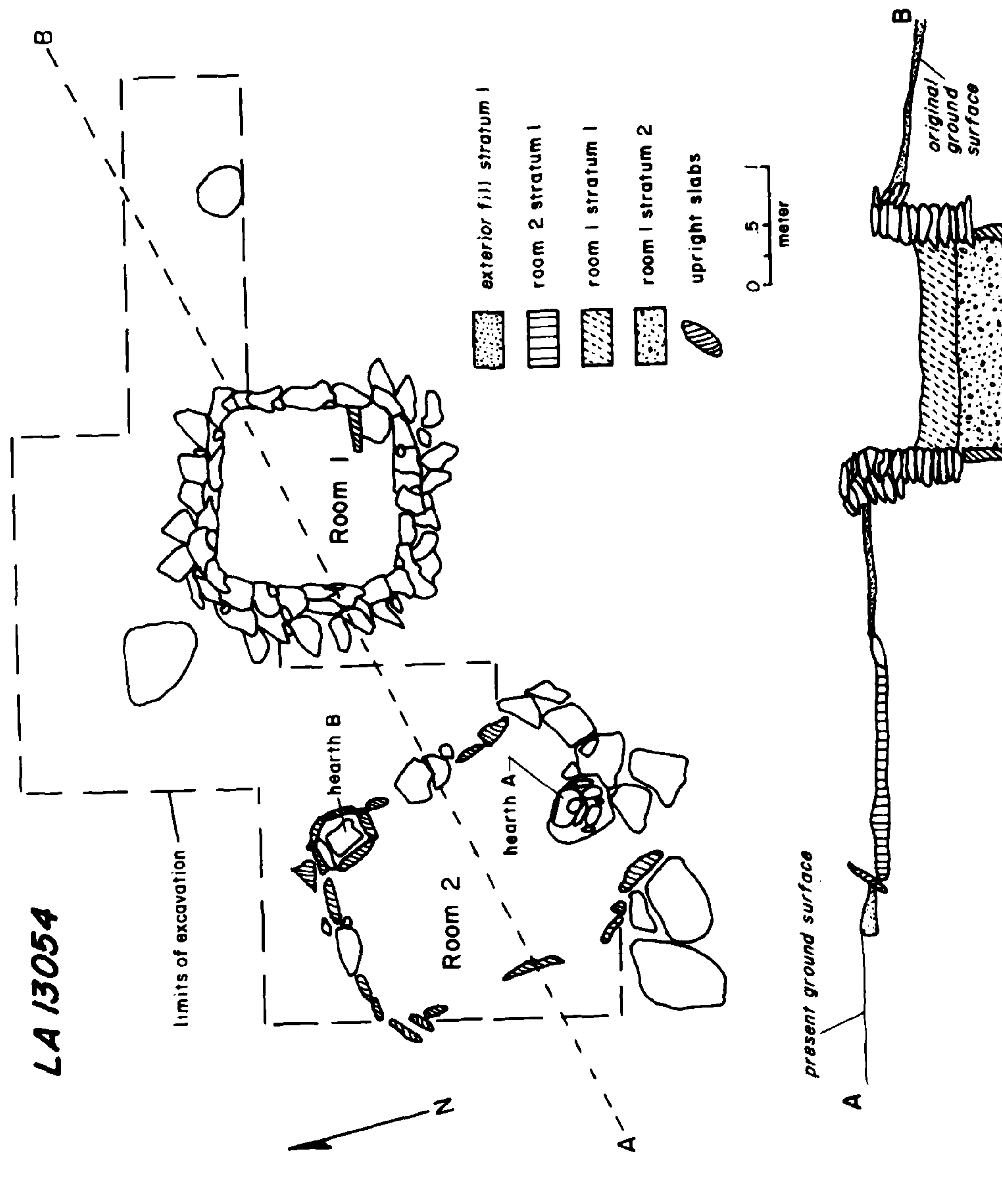

FIG. 7.2 LA 13054, Rooms 1 and 2 plan view and cross section.

PLATE 7.4 Detail of Room 2 (LA 13054), looking south

Interior Room Dimensions

	Length	Width	Height
North Wall	1.65 m	0.04 m	0.23 m
South Wall	1.90 m	0.04 m	0.16 m
East Wall	2.16 m	0.05 m	0.13 m
West Wall	2.08 m	0.03 m	0.33 m

Interior Floor Surface: 3.76 m^2

Walls: The walls were of similar construction, and are described together below.

Type of Elements: Local basalt slabs.

Size of Elements: Wall elements ranged in size from 15 cm x 18 cm x 5 cm to 42 cm x 28 cm x 10 cm.

Placement and Construction of Elements: Due to the highly eroded condition of the room, only basal elements remained. These elements were placed side by side in a vertical position. Upper wall construction could not be determined.

Shape of Elements: Unmodified.

Wall Facing: The flat portion of the basalt slabs forming Room 2 faced the interior and exterior of the room.

Chinking: No chinking materials were found.

Mortar: No evidence of mortar was recovered.

Corners: Upright slabs placed side by side formed the corners of the room. These slabs did not abut at right angles. All corners were rounded.

Plaster: No evidence of wall plaster was recovered.

Entrances: Good evidence for an entrance could not be found.

Floors: There was no evidence indicating a prepared floor. An occupation surface probably occurred at the same level as Features A and B, or at the bottom of Stratum 1. Portions of the occupation surface contiguous to Feature B, a slab-lined hearth, appeared to be more hardpacked.

Roofing: No evidence of roofing materials was found.

Interior Features

Hearths: Two hearths were located in Room 2: Feature A, an oval dark stain; and Feature B, a slab-lined hearth.

Feature R2A: This hearth was represented by a shallow oval depression extending below the occupation surface. It measured 60 cm x 40 cm and had a depth of 5 cm. The feature was located in the center of the south wall of Room 2. The hearth fill consisted of dark gray soil mixed with gravel and small pieces of charcoal. A cluster

PLATE 7.5 Detail of Feature A in Room 2 (LA 13054)

of eight quartzite cobbles weighing 6.75 kg lay in the depression. It was not possible to ascertain whether the cobbles inside the feature were lining the hearth or were possibly used as heat retainers. None of the rocks were firecracked.

Seven smaller quartzite and basalt rocks were clustered above the hearth. These rocks were separated from the hearth by 3-4 cm of room fill (light brown fine sand). Four of the rocks above the hearth were pieces of basalt weighing 14.5 kg. Two other quartzite cobbles weighed 5.5 kg. Association of this group of rocks with the hearth is questionable. Evidence of firecracking was not present.

PLATE 7.6 Detail of Feature B in Room 2 (LA 13054)

Feature R2B: This feature was a slab-lined rectangular hearth extending 30-40 cm below the room's occupation surface. The hearth was located in the northeast corner of the room, against the east wall, and measured 41 cm x 28 cm. The east wall formed the back of the hearth. Four other slabs lined the feature. The north slab measured 20 cm x 20 cm x 8 cm; the south slab 18 cm x 20 cm x 5 cm; the west slab 39 cm x 21 cm x 5 cm; and the bottom slab 28 cm x 19 cm x 5 cm. The bottom of the hearth was filled with 20 cm of grey ash. Between 10 cm and 20 cm of dark brown vegetative soil was deposited on the ash. Two artifacts, a sherd and a flake, were recovered from the feature. The total volume of fill was 35 cm^3. When subjected to phosphorous analysis, the fill value of the hearth was very high signifying it was used in food processing (cooking) activities.

Room Fill: The fill in Room 1 consisted of 10 cm of light brown fine sand mixed with gravel and large cobbles (Stratum 1). Below this were the coarse gravels of the Totavi Lentil (Stratum 2). Lithics and ceramics were recovered from Stratum 1. Stratum 2 was sterile of cultural materials. Stratum 1 represents the single occupation of Room 2.

Rubble: A total of 0.05 m^3 of rubble was recovered from the interior of Room 2. Exterior rubble in Rooms 1 and 2 totaled 2.82 m^3.

Exterior Fill: The exterior fill contiguous to Room 2 was the same as described for the exterior of Room 1, a light sand (Stratum 1). This stratum ranged in depth from 2 cm to 18 cm and cultural materials recovered included ceramics and lithics.

Exterior Features: No exterior features were noted.

ARTIFACTUAL ASSEMBLAGES

The artifactual materials recovered from LA 13054 will be discussed as four separate assemblages: (1) Room 1 (although this room was excavated in seven arbitrary levels and the fill was composed of two natural strata, the ceramics suggest a single occupation); (2) Room 2, a single 10 cm stratum; (3) exterior subsurface adjacent to Rooms 1 and 2, a single 18 cm stratum; (4) surface (although an area of high lithic densities will be discussed separately). The artifactual assemblages indicated that Rooms 1 and 2 were occupied simultaneously during early P-IV times (A.D. 1350-1400).

CERAMIC ARTIFACTS

Minimum no. of vessels: 18
Total no. of sherds: 200
Average no. of decorated sherds per vessel: 6.5
Average no. of utility sherds per vessel: 24.3
Average no. of plainware sherds per vessel: 21.0

	Painted Wares			Utility/Plain		
Components	Bowls	Jars	Other	Bowls	Jars	Other
P-III	—	1	—	—	1	—
P-IV	4	6	2	—	4	—

The site represents a P-IV, early glaze occupation (Group A), ca. A.D. 1350-1400 and may be contemporary with the main occupation of LA 13050. Only five sherds from a Santa Fe B/W jar (No. 7) and a Corrugated Indented utility vessel (No. 12) represent earlier (P-III) ceramics. Two of the Santa Fe B/W sherds had been modified, exhibiting worked edges, indicating that they may have been imported to the site during the P-IV occupation. Three other sherds also exhibited curved or abraded edges; all were selected from a red-surfaced glazeware jar (No. 4).

Of the 16 P-IV vessels represented on the site, portions of 13 were found in Room 1. Although two distinct strata were defined, sherds from six of the vessels crosscut this natural soil change (see Table 7.2). Four vessels appear to be Agua Fria G/R (Nos. 1, 14, 15, 17) although rim sherds were only found from two of the vessels. Glaze/red body sherds representing four other Group A vessels were also recovered. Two untyped glazeware jars (Cieneguilla G/Y?) and a miniature glaze/white pot were found. A single Abiquiu B/G bowl (5 sherds) was also recovered.

Another vessel in the assemblage (No. 9) looked very similar to a utility ware from the Mogollon area. It has a soft friable clay body, dark brown to black in color, and temper which contained rounded rock and matrix fragments. Two Blind Indented Corrugated jars (Nos. 10, 13) and one plainware jar (No. 11) complete the assemblage.

Four additional vessels were represented by sherds found outside Rooms 1 and 2. None of these vessels indicate an occupation other than early P-IV. These four other vessels (Nos. 1, 4, 5 and 16) were represented by ten red and glaze-on-red body sherds and are probably also Agua Fria G/R. Three vessels were either jars or ollas and the form of one vessel could not be determined. Three sherds from a Cieneguilla G/Y jar or olla (No. 2) were also found outside the rooms.

Most vessels were tempered with local volcanic rock; crushed red scoria was predominant. An Agua Fria G/R bowl and a Glaze A (?) red jar contained Espinosa Volcanics (augite latite and hornblende latite), respectively; which suggests manufacture in the Galisteo Basin. The temper of an Abiquiu B/G bowl indicates that it was probably manufactured on the Pajarito Plateau. Fragments of a miniature glaze-on-white bowl were also found. This vessel was tempered with 3025 (finely crystalline igneous rock) and may have been manufactured on the Pajarito Plateau.

TABLE 7.1

LA 13054 – Ceramic Assemblage

	Vessel	Vessel Form	Temper	No. Sherds
P-III				
Santa Fe B/W	7	jar/olla	3862-11	5
Corrugated Indented	12	jar/olla	2475-09	1
P-IV (A.D. 1350-1400)				
Agua Fria G/R	14	Bowl, hemis.	3406-09	6
Agua Fria G/R	17	Bowl, hemis.	3263-09	5
Undiff. glaze/red	15	Bowl, hemis.	3430-02	1
Undiff. glaze/red	1	Closed form/jar	3431-00	4
Undiff. glaze/red and white	2	Closed form/jar	3431-00	6
Undiff. glaze/red	4	Closed form/jar	3406-00	5
Undiff. glaze/red	5	Closed form/jar	3270-00	2
Undiff. glaze/red	16	Undifferentiated	3430-09	1
Undiff. glaze-polychrome	3	jar (carinated)	3431-00	40
Undiff. glaze/white	6	Closed form/jar	3431-00	3
Undiff. glaze/white	18	Miniature, undiff.	3025-09	2
Abiquiu B/G	8	Bowl	3862-12	5
Corrugated Blind Indented	10	jar/olla	3821-10	59
Corrugated Blind Indented (micaceous)	13	jar/olla	4560-11	13
Plain, unpolished out, polished in	9	jar/olla	2471-09	32
Plain, unpolished undiff.	11	jar/olla	3821-10	10
			TOTAL	200

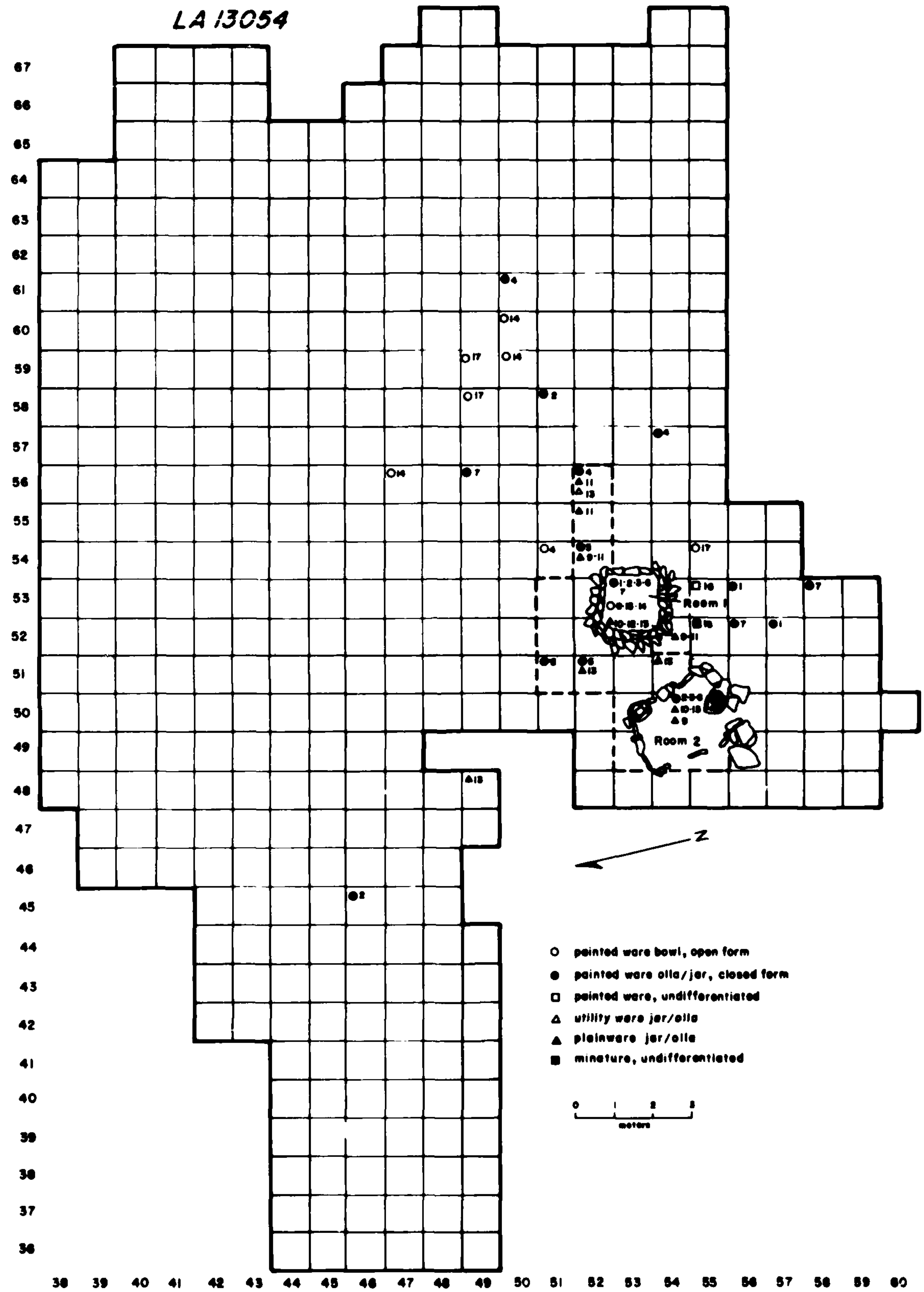

FIG. 7.3 LA 13054, distribution of ceramic vessels
(numbers next to symbols refer to vessel numbers used in the ceramic summary table)

TABLE 7.2

LA 13054 -- Distribution of Vessels by Feature and Level

	Vessel																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Totals
ROOM 1																			
Level																			
A (0-10 cm)	1	1	3	—	—	1	—	—	1	—	—	—	1	2	—	—	—	—	10
B (10-20 cm)	—	—	6	—	—	1	—	—	2	9	—	1	2	—	1	—	—	—	22
C (20-30 cm)	—	—	15	—	—	—	1	—	2	20	3	—	2	—	—	—	—	—	43
D (30-40 cm)	1	—	2	—	—	—	1	—	11	5	1	—	1	—	—	—	—	—	22
E (40-50 cm)	—	—	2	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	4
F (50-60 cm)	—	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	2
G (60-70 cm)	—	—	—	—	—	—	—	3	—	—	—	—	—	—	—	—	—	—	3
TOTALS	2	1	29	—	—	2	2	4	17	34	5	1	6	2	1	—	—	—	106
ROOM 2																			
Stratum																			
1	—	2	10	—	—	1	—	—	14	25	—	—	2	—	—	—	—	—	54
EXTERIOR OF ROOM 1 and ROOM 2																			
Level																			
0	2	3	—	3	1	—	3	—	—	—	1	—	1	4	—	1	5	—	24
1	—	—	1	2	1	—	—	—	1	—	4	—	4	—	—	—	—	2	15
Unknown Provenience	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	1
TOTALS	2	3	1	5	2	—	3	1	1	—	5	—	5	4	—	1	5	2	40

LITHIC ARTIFACTS

A total of 1299 lithic artifacts was recovered from LA 13054; 848 were flakes and 346 were pieces of small angular debris. Other artifacts included 79 pieces of large angular debris, 11 cores, four hammerstones, five facially retouched tools, three manos, two milling slabs, and one abrader. The lithic artifacts recovered were divided into five separate assemblages for purposes of discussion: (1) materials recovered from Room 1; (2) Room 2; (3) subsurface extensions of Rooms 1 and 2; (4) a 64 m^2 high density surface concentration (see Figs. 7.4 and 7.5); and (5) all other surface areas.

The concentration of lithics (Assemblage 4) was located directly north and east of Rooms 1 and 2. Within this area 445 pieces of debitage (flakes and small angular debris) were recovered, representing an artifact density of 6.45 per m^2. The density of flake debitage and small angular debris within all other surface grids was much lower. A total of 417 pieces of debitage were recovered from 397 grids. This represents an artifact density of 1.05 per m^2. A large portion of the flakes and pieces of small angular debris recovered from the lithic concentration were Pedernal cherts and chalcedonies (330 pieces). This represents an artifact density of 4.78 per m^2. The density of Pedernal cherts and chalcedonies on other grid surfaces was much less (0.61 per m^2). Quartzite in the lithic concentration was represented by 0.93 flakes and pieces of small angular debris per m^2. This density value went down to 0.09 per m^2 on all other surface areas.

Material Selection

The majority of lithic artifacts (776) were manufactured from nine taxa of Pedernal cherts and chalcedonies. Of 176 basalt artifacts, 118 were taxon 3701. The remaining 347 artifacts represented seven material taxa: 142 quartzite artifacts were manufactured from two taxa, 122 obsidian artifacts from seven taxa, and 56 non-Pedernal chert artifacts from 13 material taxa. Other categories represented by less than 10 artifacts include chalcedony (2 taxa), granite/andesite (3 taxa), siltstone (1 taxon), jasperoid (2 taxa), metarhyolite (3 taxa) and other (1 taxon).

With the exception of two pieces of 3530 obsidian from Polvadera Peak, all other material taxa are locally available in the study area.

Manufacture, Rooms 1 and 2 (Assemblages 1 and 2)

Obsidian

Greatest quantities of obsidian occur in subsurface levels in and around Rooms 1 and 2. Although greater quantities occurred in Room 1 (42 flakes and small angular debris), similar reduction strategies are indicated. In Room 1, 49% of obsidian flakes had platforms and of these, 63% were single-faceted. In Room 2, 50% of obsidian flakes had platforms, and of these 60% were single-faceted. The high percentage of single-faceted platforms indicate time investment into core preparation. In both Rooms 1 and 2 the percentage of cortex indicates that both primary and secondary stages of reduction were carried out. In Room 2 there is slightly higher percentages of cortical obsidian flakes (50%). In Room 1, 38% of the flakes and small angular debris exhibited cortex. The major difference between the obsidian assemblages in Rooms 1 and 2 was cortex type. A total of 81% of the obsidian cortex in Room 1 was not waterworn, where 88% of the obsidian cortex in Room 2 was waterworn. Obsidian cores and large angular debris were lacking in both Rooms 1 and 2, but two obsidian cores were found on the surface of grids close to the rooms (grids 52/55 and 56/52).

Basalt

A total of 31 pieces of basalt were found in Room 1. Of these, 27 were manufactured from the most common basalt material type in White Rock Canyon (3701). A total of 37% of the 3701 assemblage had cortex and 70% was waterworn. Platforms were present on a large number of 3701 flakes (17 or 68%). The majority of these platforms (65%) were single-faceted platforms suggesting time investment in core preparation. The remaining flakes had cortical platforms. The ratio of cortical to noncortical flakes indicates both primary and secondary stages of reduction. A single piece of 3701 large angular debris was recovered from the surface inside Room 1, supporting other evidence of core reduction. Three basalt hammerstones were also found on the surface inside Room 1. The lack of retouch platforms suggests that tertiary stages of tool manufacture did not occur in Room 1.

Twenty-one pieces of basalt debitage were found in Room 2. Of these, 18 were 3701 basalt and 17% of 3701 basalt had cortical surfaces. The low frequency of cortex indicates that decortication occurred outside Room 2. All cortex was waterworn. There were no basalt cores or pieces of large angular debris recovered from Room 2. The high frequency of flakes and small angular debris without cortex, yet lack of flakes with retouch platforms, suggests emphasis on secondary stages of reduction in Room 2.

Pedernal Chert/Chalcedony

The largest amount of debitage occurring in Room 1 belonged to the category of Pedernal chert and chalcedony; 94 flakes and small angular debris are included in this group. A total of 55% of this population had cortex, 60% of which was waterworn. Platforms were present on 51% of the flakes. The majority of these flakes were single-faceted (64%). The remaining platforms (14) were cortical. Again, the high frequency of single-faceted platforms indicates investment into core preparation. Slightly more than half of the assemblage had cortex, indicating that both primary and secondary stages of reduction occurred. The lack of retouch platforms suggest that final tertiary stages of tool manufacture did not occur in Room 1. A single piece of large angular debris belonging to this material category was recovered from the surface of Room 1.

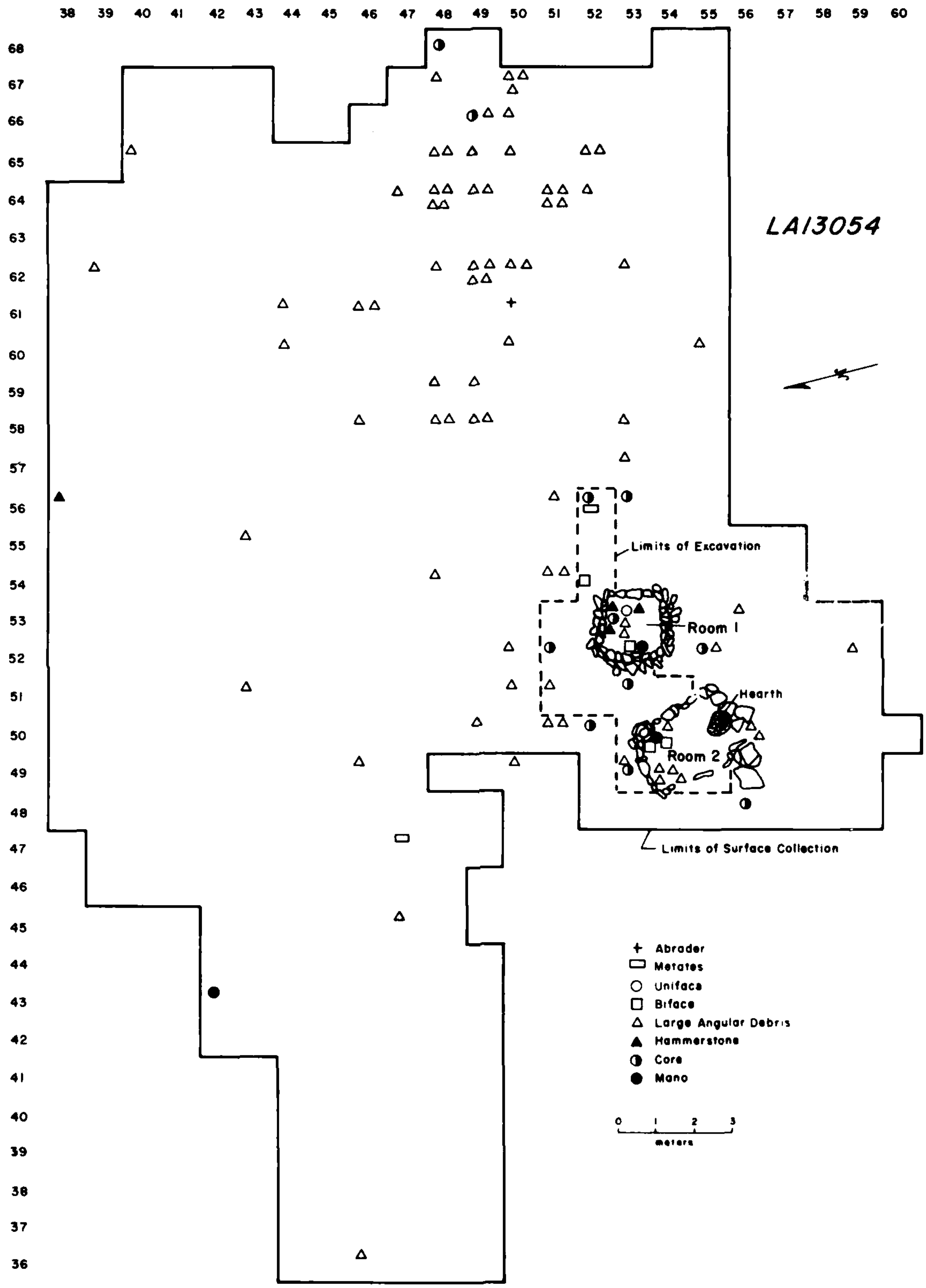

FIG. 7.4 LA 13054, distribution of cores, large angular debris, and lithic tools (each symbol represents an artifact)

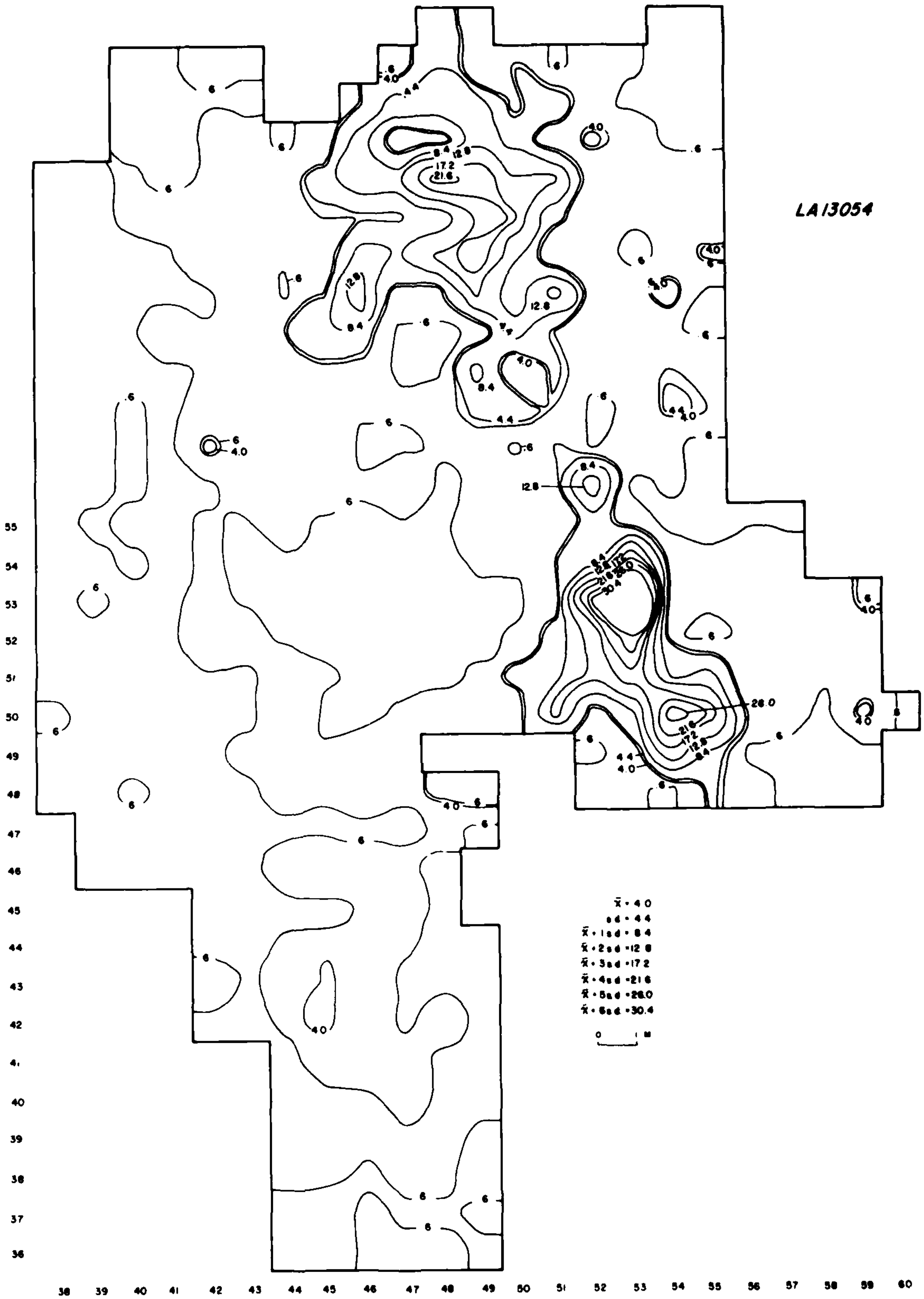

FIG. 7.5 LA 13054, distribution of debitage

A total of 46 pieces of Pedernal chert/chalcedony were recovered from Room 2. Eighteen flakes and small angular debris exhibited cortex (39%). The majority of this cortex was waterworn. Although only 11 of 46 flakes had platforms, eight of these were single-faceted. The ratio of cortical to noncortical debitage and small angular debris suggests that both primary and secondary stages of reduction occurred in Room 2. Evidence for tertiary stages of manufacture were lacking.

Quartzite

Although very little quartztie debitage was recovered from Room 2, three pieces of quartzite large angular debris were found in Stratum 1 of that room. Core reduction of this material did not occur in Room 2.

Subsurface Exteriors of Room 1 and 2 (Assemblage 3)

Obsidian

Only five obsidian flakes were recovered from excavated grids contiguous to Rooms 1 and 2. Platforms did not indicate tertiary stages of manufacture.

Basalt

Fifteen basalt flakes and pieces of small angular debris were recovered in subsurface areas around Rooms 1 and 2. Of these, 12 were 3701. Cortex was present on 25% of this assemblage. This suggests a greater emphasis on secondary reduction of basalt outside Rooms 1 and 2. All cortex was waterworn. Eight flakes exhibited platforms and all were single-faceted. Retouch platforms which would indicate tertiary stages of manufacture were absent.

Two basalt cores (3701 and 3731) and a piece of large angular debris (3050) were recovered in Stratum 1 outside Rooms 1 and 2. The low frequency of debitage belonging to these material taxa suggest that core reduction did not occur in the exterior subsurface areas contiguous to Rooms 1 and 2. The small amount of debitage on the entire site representing the 3731 taxon suggests that this core was reduced at some other location.

Pedernal Chert/Chalcedony

Twenty-five pieces of debitage (flakes and small angular debris), belonging to this material category were recovered from subsurface grids outside Rooms 1 and 2. Cortex was found on 60% of this assemblage. Unlike that found in Rooms 1 and 2, the majority of cortex represented on Pedernal artifacts found outside the rooms was not waterworn (53%). A total of 50% of the flakes found had platforms. Of these, 63% were cortical and only 38% were single-faceted. A single Pedernal (1215) core was recovered from Stratum 1. The large amount of cortex found on flakes and small angular debris and the high percentage of flakes with cortical platforms indicate that a greater emphasis was placed on primary reduction of Pedernal cherts and chalcedonies outside of Rooms 1 and 2 than occurred inside Rooms 1 and 2. Secondary stages of reduction were represented, but not to the degree found in Rooms 1 and 2. The lack of flakes with retouch platforms suggests that final stages of tool manufacture did not occur in this area.

Quartzite

Three pieces of quartzite large angular debris were recovered from Stratum 1 outside Rooms 1 and 2. The small amount of quartzite debitage in this area indicated that reduction occurred elsewhere.

Surface (Assemblages 4 and 5)

Obsidian

The low density of obsidian (6 artifacts) in the lithic concentration (Assemblage 4) makes speculation of reduction strategy difficult. There were no obsidian cores or pieces of large angular debris present in this area. Obsidian recovered from all other surface grids (49) indicate that both primary and secondary stages of reduction occurred. Thirty-two percent of the assemblage had cortex and of this 67% was waterworn. Of 42 flakes, 25 had platforms. Time investment in core preparation is indicated by the high percentage of single-faceted platforms (92%). Two obsidian cores (3525, 3528) were recovered from the surface area outside of the lithic concentration. The low frequency of 3528 obsidian debitage (2 flakes) may indicate that reduction occurred elsewhere. However, reduction of the 3525 obsidian core appears to have occurred on the site. A total of 47 pieces of debitage (3525) were recovered from the site and 20 of these were found on the surface area not included in the lithic concentration. The cores were located near Rooms 1 and 2.

Basalt

Where only 20 pieces of basalt were recovered from the lithic concentration, 61 pieces were recovered from other surface grids. Basalt in both areas indicates primary and secondary reduction occurred, but basalt flakes and small angular debris in the lithic concentration suggests a greater emphasis on primary reduction. Fifty percent of the basalt found in the lithic concentration had cortex. Only 33% of the basalt found in other surface areas exhibited cortex. Evidence of tertiary stages of reduction is lacking.

Of seven pieces of basalt, large angular debris recovered from the lithic concentration, three were 3701 basalt, two were 3730 basalt, one was 3050 basalt, and one was 3731 basalt. Debitage from all these material taxa was present in the lithic concentration, but occurred in low frequencies. It is doubtful that reduction of these materials occurred in the lithic concentration; however, the probability of the reduction of 3701 basalt on other surface areas of the site is good. A total of 46 flakes and small angular debris of this material taxon were recovered from other surface grids and a total of 118 pieces of 3701 basalt were recovered from the entire site. Five additional pieces of basalt large angular debris were recovered from the surface area outside of the lithic concentration. Again, core reduction of 3701 basalt is likely but reduction of other basalts is questionable.

Pedernal Chert/Chalcedony

The lithic concentration was primarily composed of Pedernal cherts and chalcedonies. Although there were high frequencies of flakes and small angular debris in this area, the assemblage looked very similar to that found on other surface areas of the site. Both assemblages indicate primary, secondary and tertiary stages of manufacture.

A total of 32 pieces of large angular debris belong to the Pedernal chert/chalcedony material category and were recovered from the surface of LA 13054. Eighteen of these were found in the lithic concentration and 14 in other surface grids. The large amount of debitage of this material category, both in the lithic concentration (330) and in other surface grids (244), suggests that core reduction of this material category occurred at the site.

Chert

Largest frequencies of cherts were recovered from the surface of LA 13054. A total of 15 chert flakes and pieces of small angular debris made from seven material taxa were recovered from the lithic concentration. Two-thirds of these had cortex, suggesting an emphasis on primary reduction, although secondary reduction did occur. Twenty-two pieces of chert represented by eight material taxa were recovered from other surface grids. Cortex was present on 55% of this assemblage. This percentage also suggests an emphasis on primary reduction, but secondary reduction was also represented. Evidence of tertiary stages of manufacture of chert was lacking.

Four chert pieces of large angular debris were recovered from the surface of LA 13054. They were manufactured from the following taxa: (1070), two pieces; (1600), one piece; and (1055), one piece. If debitage and small angular debris counts of each material taxon are considered separately, reduction of these materials is unlikely, but if flakes and small angular debris from all chert taxons are considered together, reduction may have occurred at the site.

Quartzite

Unlike other areas of the site, the density of quartzite flakes and small angular debris found in the lithic concentration was high (lithic concentration 0.93 per m^2, other surface 0.09 per m^2). Of 64 pieces of quartzite in the lithic concentration, 47 pieces had cortex (73%). A total of 96% of this cortex was waterworn. This large percent of cortex appears to be typical of quartzite and suggests emphasis on primary reduction.

A total of 15 quartzite pieces of large angular debris and three cores were recovered from the surface of LA 13054. This is an extremely large amount of large angular debris. Of these, 11 were found in the lithic concentration. The high density of quartzite flakes and small angular debris and large amount of quartzite large angular debris suggest that primary reduction of this material occurred in the lithic concentration. Reduction of quartzite also occurred on other surface areas of the site.

Biface Manufacture (Assemblages 1-5)

Room 1 contained four bifacially retouched obsidian (3520) artifacts. Forty 3520 obsidian flakes and small angular debris were recovered from the entire site. Eight of these were found in Room 1 and five in Room 2. The majority (18) were scattered over the surface of the site. Despite the low frequency (38), both primary and secondary stages of reduction are indicated. The small amount of debitage and the lack of flakes with retouch platforms suggest that the facially retouched tools were manufactured at a location other than LA 13054.

A single 1050 uniface and 56 pieces of debitage (flakes and small angular debris) were recovered from the site. The majority of this material (40 pieces) was found in the lithic concentration north and east of Rooms 1 and 2. Only five of these flakes exhibited cortex. There were no flakes of this material taxon with reoutch platforms. Although 1050 cherts indicate an emphasis on secondary reduction, the largest group of all Pedernal cherts and chalcedonies indicate that primary, secondary and tertiary stages of manufacture occurred at the site. Of 330 Pedernal chert and chalcedony flakes and pieces of small angular debris, 193 had cortex and a single 1215 flake had a retouch platform. This single retouch platform indicates the manufacture or use of a Pedernal facially retouched tool at the site.

Two facially retouched obsidian artifacts (3524, 3523) were recovered from Room 2. Only two 3524 flakes were recovered from the site indicating that the biface was manufactured at another location. For 3523, a total of 24 flakes and pieces of small angular debris was found in Room 2, 13 in Room 1. The rest were scattered over the surface of the site. A total of 54% of these flakes exhibited cortex. The low percentage of secondary flakes and small angular debris and lack of flakes with retouch platforms may indicate that the 3523 biface was not manufactured at the site.

Tool Utilization (Assemblages 1-5)

Lithic artifacts recovered from LA 13054 that exhibited utilization included three manos, two milling slabs, one abrader, four hammerstones, 100 flakes, seven pieces of small angular debris, one core and three pieces of large angular debris.

Of the three unshaped manos recovered, two were complete and one was a midsection fragment. One complete 3430 basalt mano was elongate in shape and plano-convex in cross section. The other complete mano was manufactured from felsophyre (3030) and was rectangular in shape and lenticularovoid in cross section. Both complete manos exhibited one possible grinding surface. There was also one midsection fragment of a mano made from 3430 basalt. This artifact was of indeterminant shape and exhibited two possible grinding surfaces. Two whole milling slabs were also found. One was irregular in shape and the other rectangular. The former was a basalt 3401 boulder and the latter was manufactured from a piece of tuff (3821). Each exhibited one possible grinding surface. A whole basalt (3430) abrader was also found. It was triangular in shape and exhibited surface irregularities. There were two areas of intense smoothness.

One of the manos was found inside Room 1, while another was found in Room 2. The other pieces of ground stone were found in exterior surface grids, except the abrader which was located within the lithic concentration at the site.

Four hammerstones were also recovered from the site. One exhibited three battered loci (1 ridge and 2 convex faces); one exhibited a single battered ridge; and the other two exhibited two battered convex surfaces.

Five facially retouched artifacts were recovered from the site. None of these artifacts were diagnostic. Four were manufactured from obsidian. One obsidian biface was manufactured from 3520 and was complete, ovate in shape and exhibited no wear. A second 3520 obsidian biface was a base fragment of a triangular, side-notched point with a flared stem. There was no evidence of use. A 1050 chert uniface was complete and did not exhibit wear patterns. These three artifacts were recovered from the fill in Room 1.

Two facially retouched obsidian artifacts were recovered from the fill in Room 2. Both were incomplete proximal fragments; one was round, the other was ovate in shape. Neither appeared to have been used.

From the site as a whole, 107 pieces of debitage (both flakes and small angular debris) exhibited wear patterns. The obsidian material category included the greatest number of utilized flakes and small angular debris. Seventy-three percent of the obsidian debitage was utilized. The majority of these tools belonged to the 3520 and 3526 material taxa. Other materials that were utilized included; basalt (9%), quartzite (1%), chert (11%), and Pedernal chert/chalcedony (6%).

Room 1 had more utilized debitage than Room 2. Twenty-one utilized pieces were recovered from the fill in Room 1 and more than 50% of these were obsidian. A single piece of utilized obsidian small angular debris was found in Room 2. Only two utilized pieces of debitage were recovered from the subsurface grids outside Rooms 1 and 2. Both belonged to the obsidian material category.

Of 445 pieces of debitage recovered from the lithic concentration, 24 items were utilized. The Pedernal chert/chalcedony material category exhibited the largest number of utilized artifacts. Sixteen of 30 pieces or 5% of the assemblage exhibited wear patterns. Other debitage that was utilized belonged to the following material categories: obsidian (5), chert (2), and basalt (1). Although very little obsidian was recovered from this area (6), 83% of it was utilized. The total utilized flakes and small angular debris recovered from the lithic concentration represents 5% of the assemblage. The amount of utilized debitage and small angular debris in other surface areas of the site was much greater. Fifty-four of 417 pieces were utilized. This represents 13% of this assemblage. Again, the Pedernal chert/chalcedony material category had the largest number of utilized debitage, yet this represented only 6% of that assemblage. Sixty-two percent of the obsidian assemblage (29 items) was utilized. Other material categories with utilized debitage included basalt (7 items, 11%), chert (2 items, 9%), and quartzite (1 item, 3%).

Other utilized lithic materials included a core and three pieces of large angular debris. The obsidian core had a single battered edge. Three pieces of large angular debris exhibited three use locations: the chert artifact had a single edge with nonbattering wear; one basalt artifact had a ridge with nonbattering wear and a second basalt artifact had a battered ridge.

FAUNA

The faunal assemblage recovered from LA 13054 consisted of 23 bones; all but five were recovered from the fill in Room 1. A minimum of six individuals are represented in the total assemblage including one gopher (1 bone), one rock squirrel (1 bone), one Abert's squirrel (2 bones), one turkey (1 bone), one undifferentiated large mammal (11 bones), and one undifferentiated medium mammal (1 bone). The turkey bone was recovered from Room 1, level E; the large mammal from Room 1, levels A and B; the gopher, rock squirrel, medium mammal and one bone of the Abert's squirrel were recovered from grid 53/51, Stratum 1. The other Abert's squirrel bone was recovered from Room 1, level F.

Marrow Cracking

Ten long bone shaft fragments belonging to a large mammal were recovered from Room 1. The small number of long bone shaft fragments suggests that although some marrow cracking occurred in Room 1, the extensive processing of fauna, as reflected by marrow cracking, was not a major subsistence strategy at LA 13054.

Gnawing

One long bone shaft fragment had been gnawed by a canine. It is impossible, however, to determine if this was a result of domestic dog or a nondomestic canine.

BONE TOOLS

Three long bone shaft fragments were utilized at LA 13054. One Class 1a tool (Room 1, level E) and two Class 1b tools (Room 1, level A) were recovered. Class 1a tools are characterized by a blunt tip exhibiting wear in the form of rounding and polish on the tip alone. Schutt (1977) suggests that this type of tool may have been used to cut or punch holes in a soft, pliable material. Class 1b tools are characterized by projections with rounding on the tip, and with polish and striations extending down the shaft of the implement. Class 1b tools may have been used as needles (Schutt 1977).

FLOTATION ANALYSIS

The light flotation residue from four samples was examined. Two samples derived from Hearth A in Room 2 produced miscellaneous insect parts (1-10%), cocoons/larvae/eggs (1-10%), feces (25+%), one bone fragment, and one white snail fragment. A sample from Hearth B in Room 2 yielded miscellaneous fecal material. A sample of exterior feature A (ash area) taken from 4-5 cm below the surface, produced one *Sporobolus cryptandrus* seed. Miscellaneous insect parts were also noted as being present, although not counted.

The residue from four heavy flotation samples were also examined. From Room 1, level C, three items were recovered. Two were flakes (one 1660 chert and one 3701 basalt) and one was a fragment of burned bone. From Room 2, Hearth A, 11 pieces of charcoal, a piece of burned bone, one flake and one fragment of an animal's jaw were recovered. Hearth B in Room 2 yielded seven pieces of charcoal. The exterior ash feature (A) yielded one possible fish vertebra and an unburned hackberry (*Celtis* sp.) seed.

MISCELLANEOUS MATERIALS

A lump of clay was recovered from the hearth in Room 2.

SUMMARY

LA 13054 is a P-IV phase site consisting of two noncontiguous rooms and a high density lithic concentration. Room 1 was a rectangular semisubterranean structure containing a slab-lined hearth and Room 2, located approximately one meter to the southwest, was a rectangular surface structure which contained one slab-lined hearth and a second hearth feature. The architectural construction of these rooms is similar to many P-IV sites found in the Cochiti Reservoir area.

The ceramic assemblage recovered from the site indicates single contemporaneous occupation of Rooms 1 and 2 between A.D. 1350-1400. Although a few P-III ceramics were recovered from the site, an earlier occupation seems unlikely.

Direct evidence of food resources used and consumed at the site was limited to faunal remains. Although the bones recovered from the site indicate a minimum of six individuals, the number of bones per animal is extremely low. The faunal remains suggest that meat consumption and processing occurred but that it may have played a limited roll in the subsistence activities at the site. Indirect evidence of food processing included the presence of milling implements, three interior hearth facilities, two exterior burned areas, and a variety of ceramic vessels used for cooking, serving, and storage purposes. The presence of three bone tools (needles and punch) may indicate that animal skins were worked with on the site.

Lithic materials recovered from the site indicated various stages of reduction and manufacture. Primary and secondary reduction of obsidian, basalt and Pedernal chert/chalcedony occurred in and around Rooms 1 and 2. The lithic assemblage recovered from excavated grids outside Rooms 1 and 2 showed that emphasis was placed on the primary reduction of Pedernal chert/chalcedony. Secondary stages of reduction were represented but not to the degree found inside the rooms. Tertiary stages of manufacture were not indicated in this area. Although four obsidian facially retouched tools were recovered from Rooms 1 and 2, the lack of evidence for tertiary stages of reduction and the low frequency of obsidian debitage and small angular debris across the site, may indicate that these tools were manufactured at another site location.

The surface lithic assemblages, both in the lithic concentration and the other surface grids, indicate that primary, secondary and tertiary stages of reduction and manufacture of Pedernal chert/chalcedony materials were carried out at the site. The high density of Pedernal debitage and core material in the lithic concentration suggest that this area was used for reduction and manufacture of Pedernal cherts and chalcedonies. The assemblage recovered from the lithic concentration indicated that the Pedernal chert biface recovered from Room 1 was probably manufactured at the site. The lithic concentration also had high densities of cortical quartzite flakes and core type material, implying that this area was used for primary reduction or decortification of quartzite.

Chapter 8

LA 13076

Beth L. O'Leary

INTRODUCTION

LA 13076 is a single component site consisting of three noncontiguous structures which date to the early P-IV phase or ca. A.D. 1350-1450. The site is located in White Rock Canyon on the east side of the Rio Grande, on a steep basalt talus slope approximately 500 meters upstream from the mouth of Medio Canyon. LA 13076 is situated at an elevation of 5320 feet in the Upper Sonoran Juniper vegetative community (Drager and Loose 1977: Fig. II.2.1). Dominant vegetation in the vicinity of the site include juniper, snakeweed and rabbitbrush. Much of the surface area in the vicinity of the site is comprised of basalt boulders, and vegetation is restricted to pockets of soil among those boulders.

EXCAVATION APPROACH

As defined on survey, LA 13076 consisted of three spatially discrete proveniences. At the top of the slope was Provenience 1, a two-room masonry structure. Twelve meters north of this area was Provenience 2. It consisted of a small room built under an overhanging boulder. Provenience 3 was reported as a two-room masonry structure at the base of the talus. Unfortunately, it was flooded by the permanent pool of Cochiti Reservoir prior to the 1976 field season.

Since LA 13076 was one of several sites located along the talus slope with artifactual debris distributed among the sites, surface collection was restricted to the very immediate area of Proveniences 1 and 2, so as to provide the most reliable association of artifacts with the structures. Two hundred 1 x 1 meter grid units were collected (see Fig. 8.1). Subsurface excavation was restricted to each of the features with test pits being excavated by grid in arbitrary 10 cm levels until natural strata could be discerned. The natural strata were then used to excavate the remainder of the interiors of the features. All excavated materials were processed through ¼ inch wire mesh.

ARCHITECTURE

ROOM 1

In Provenience 1, survey data had indicated the presence of two contiguous masonry rooms, designated as Room 1 and Room 2. Testing, however, revealed that only one of these, Room 2, was a room. The other feature was a midden and is discussed below as an exterior feature to Room 2.

ROOM 2

Shape: Quadrangular surface structure.

Orientation: The long axis of the structure was oriented due north.

Condition: Although the walls of the structure were partially reduced prior to excavation, they did not appear to have been vandalized.

Interior Room Dimensions

	Length	Width	Height
North Wall	1.60 m	0.45 m	0.57 m
South Wall	1.40 m	N/A	0.90 m
East Wall	1.60 m	0.34 m	0.38 m
West Wall	1.35 m	0.50 m	0.68 m

Interior Floor Space: 2.2 m^2

North, South and West Walls: Three walls were of similar construction and are described together below.

Type of Elements: The walls were constructed from angular basalt clasts.

Size of Elements: Elements averaged 20 cm x 40 cm x 50 cm in size.

Placement and Construction of Elements: Elements were placed at irregular angles with respect to the horizontal and vertical axes of the wall(s). The stacked elements were overlapping, with the upper elements being smaller tabular basalt slabs. The middle and upper elements were coursed.

Shape of Elements: The elements were unmodified.

Wall Facing: There was no selective placement of elements to form a flat surface on the interior.

Chinking: Some chinking with small basalt chips was intermittently present.

Mortar: No evidence of mortar was recovered.

Corners: The corners were slightly rounded and interlocking except where the coursed portions of the south wall abutted the boulder of the east wall.

Plaster: No plaster was evident.

East Wall: The east wall was similar in construction to the other walls with the exception of incorporating two boulders (ca. one meter high) at the southern end of the wall.

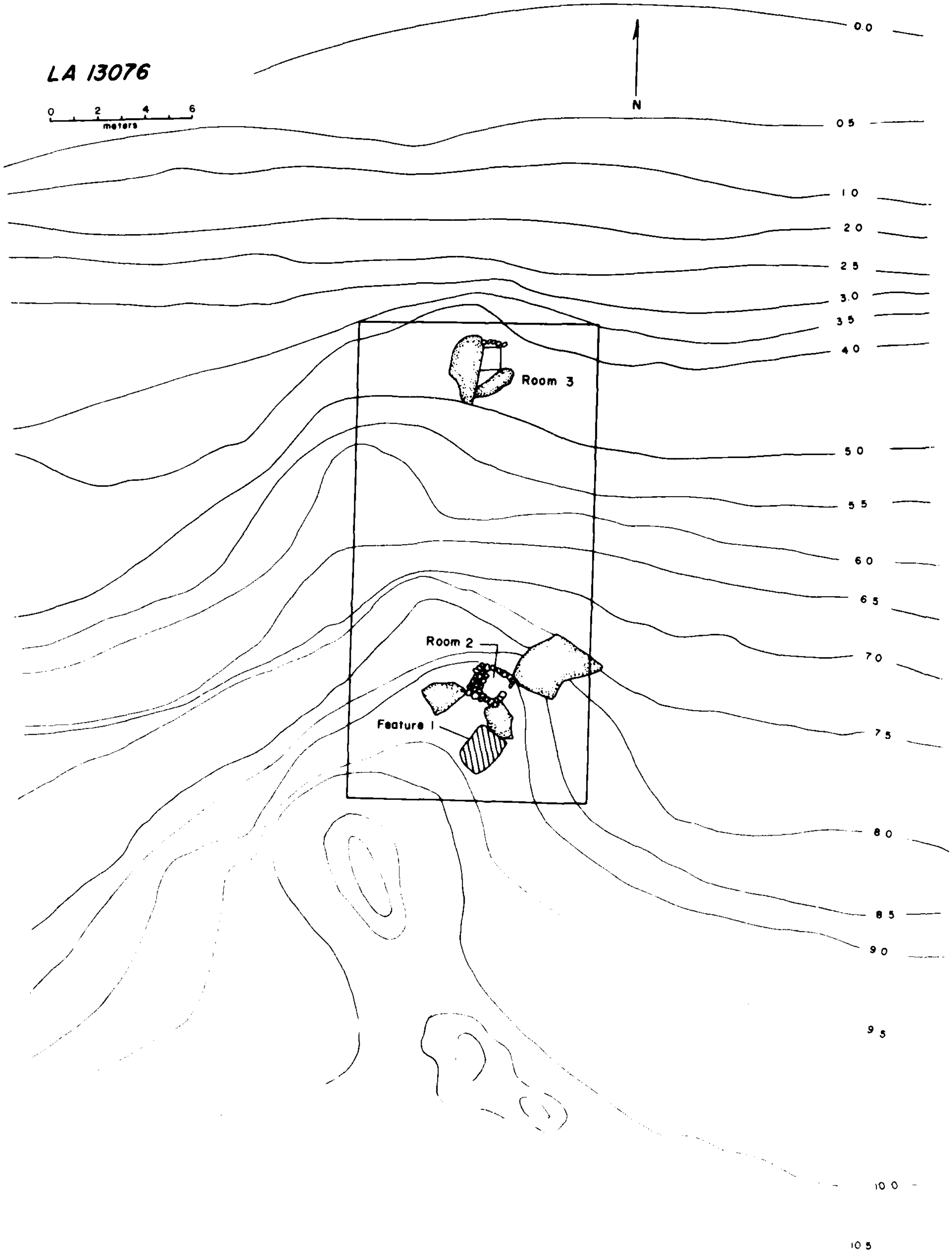

FIG. 8.1 LA 13076 site map, illustrating local topographic relief, site boundaries and excavation units

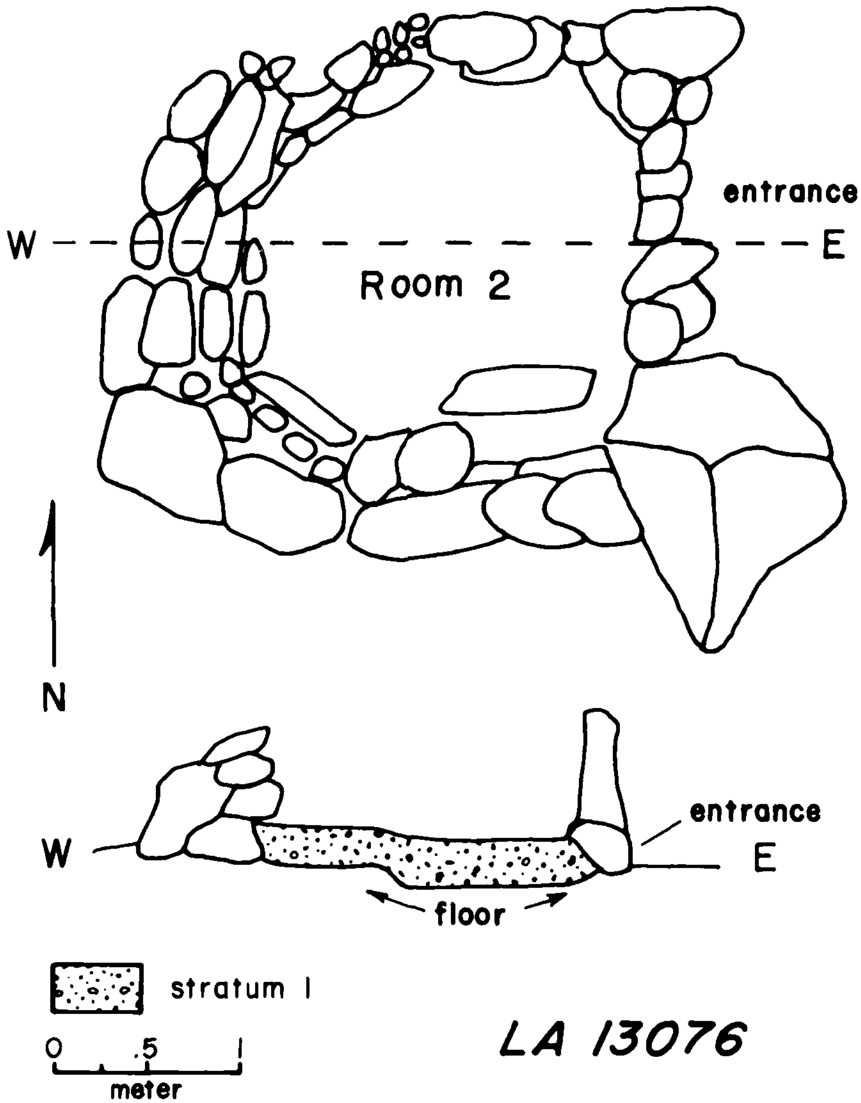

FIG. 8.2 LA 13076 Room 2, plan view and cross section

Type of Elements: The wall was constructed of shaped basalt slabs and unshaped angular basalt clasts in addition to the large in situ boulders.

Size of Elements. Elements ranged in size from 20 to 40 cm in length.

Placement and Construction of Elements: The elements were placed at irregular angles and were overlapping. Three flat slabs were laid horizontally, parallel to the wall and at least three courses were built up 35 cm on either side of them. The slabs were lying on the floor level and were ca. 5 to 8 cm thick. A doorway was present in the middle of the wall.

Shaping of Elements: None of the elements were modified.

Wall Facing: There was no selective placement of elements to form a flat surface on the interior.

Chinking: Some chinking with small basalt chips was intermittently present.

Mortar: There was no evidence of mortar.

Corners: The corners were slightly rounded and interlocking except where the coursed portions of the south wall abutted the east wall boulder.

Plaster: No plaster was evident.

Entrances: An entrance was present in the middle of the east wall. It was 88 cm wide and 33 cm deep. Three flat slabs were laid horizontally, parallel with the wall, and at least three courses were built up 35 cm on either side of them. The slabs were lying on floor level and were ca. 5-8 cm thick, resulting in a very slight step up from the floor to the threshold.

Floors: A prepared floor was not apparent, though a compact, reddish tan soil occurred at a level corresponding to the wall bases. It was uneven and lumpy. The soil varied from 10 to 20 cm in thickness. Large rocks stuck up through the soil, suggesting that it was superimposed upon the original ground surface after construction of the walls.

Roofing: No evidence of roofing material was present.

Room Fill: The room fill consisted of one homogeneous stratum of loose, moist, dark friable soil mixed with large coarse sand grains and small cobbles. It was intermixed with a considerable quantity of wall rubble. There were some intermittent patches of lighter sand and some ash and flecks of charcoal were present, but not in any concentrations. This uniform fill was designated as Stratum 1. There was no evidence of a reoccupation or reuse of the structure.

Rubble: A total of 0.561 m^3 of interior rubble was measured. Exterior rubble was not measured.

Exterior Features: On the south side of the boulders, incorporated into the southeast corner of Room 2, was an area ca. 1.70 by 1.55 meters among rocks and boulders that served as a catchment for soil and artifacts. This was designated Feature 1, or the midden. A large number of sherds and flakes were found on the surface and in subsurface levels in this area. A test pit revealed the presence of a very dark black, greasy soil under the top of 2-3 cm of aeolian sand. This fill contained a lot of cultural material. Total volume of the soil was ca. 0.5 m^3. At the base of the midden was a layer of uneven lumpy clay, indicating the lack of a prepared or hardpacked surface. These two levels were collapsed for purposes of analysis and designated as Stratum 1. According to the phosphorous content analysis, the value of this area was not indicative of a good midden area. Since only one sample was taken for the entire site, the analysis should not be regarded as conclusive (see Appendix XIII).

ROOM 3

Shape: Room 3 is a small triangular shaped shelter, formed by two large basalt boulders, one of which forms an overhang, and a man-made wall (see Fig. 8.3).

Orientation: The long axis of Room 3 ran north to south.

Condition: The room was largely intact, as the man-made wall stood nearly 1.0 m high, close to the original height as estimated from the lack of wall rubble.

Interior Room Dimensions

	Length	Width	Height
North Wall	1.60 m	0.60 m	0.95 m
South Wall	1.80 m	N/A	1.50 m
East Wall	N/A	N/A	N/A
West Wall	2.15 m	N/A	2.00 m

Interior Floor Space: ca. 1.8 m^2

East and West Walls: Two walls were of similar construction and are described together below.

Type of Elements: Large boulders made up the east and west walls.

Size of Elements: The boulders averaged 3.5-4.0 m in length and were approximately 1.5 m wide.

Placements and Construction of Elements: The large boulders were laid at 45^0 angles to one another. The western boulder was partially laid on top of the other and created an overhang.

Shape of Elements: The elements were unmodified boulders.

Wall Facing: There was no selective placement of elements to form a flat surface on the interior.

Chinking: There was no evidence of chinking.

Mortar: No evidence of mortar was recovered.

Corners: One corner was where the west end of the

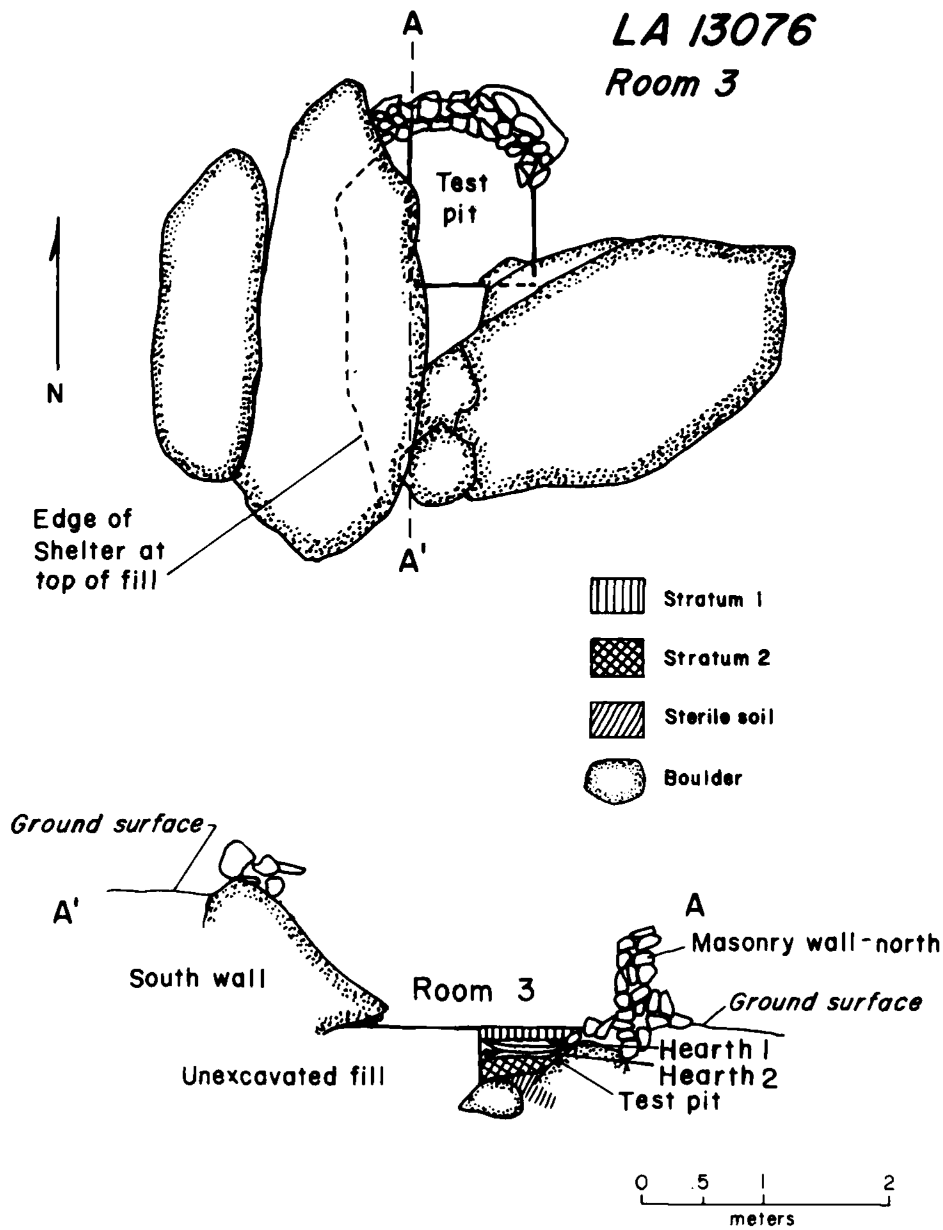

FIG. 8.3 LA 13076 Room 3, plan view and cross section

north wall abutted the boulder forming the west wall. The wall was slightly curved, presenting a convex surface to the exterior. The south corner of the room consisted of the abutment of the two large boulders and was covered by the overhang of the west boulder.

Plaster: No plaster was evident.

North Wall: The curved, dry laid wall abutted only the west boulder and was open to the east.

Type of Elements: This wall was constructed of dry laid, uncoursed masonry of basalt in clasts of variable sizes.

Size of Elements: Elements ranged in size from 15 cm x 8 cm to 45 cm x 50 cm.

Placement and Construction of Elements: The elements were horizontally stacked at varying angles to the wall axis. The wall was 1-3 elements thick. The elements were stacked rather than laid in even courses, and the height of the wall ranged from 4-7 elements high.

Shape of Elements: The wall elements were unshaped local basalt clasts.

Wall Facing: No evidence of facing.

Chinking: No evidence of chinking.

Mortar: No evidence of mortar.

Corners: The only corner was where the west end of the north wall abutted the boulder forming the west wall.

Plaster: No evidence of plaster.

Entrances: There was a gap between the east end of the north masonry wall and the boulder forming the southeast wall. This doorway faced the east. No closing element was present.

Floors: No floors, prepared or otherwise, were evident. Occupation appears to have been intermittent and infrequent, utilizing the alluvial surface as it filled.

Roofing: The overhanging boulder formed the roof for this small shelter. There was no evidence of any further roof construction.

Interior Features: Inside the shelter of Room 3 were two hearth-like features. They did not occur at the same level, and were probably not contemporaneous. Neither was formally constructed, with enclosing elements, but were instead only dark stained lenses within the fill.

Hearth 1: The higher hearth, in the second stratum (20 cm from the surface) was against the west boulder, opposite the entrance. It was 30 cm in diameter and varied from 3-10 cm in thickness. It contained ashy sand and a few small chunks of charcoal. Within this level, a glazeware sherd was found.

Hearth 2: Approximately 10 cm below the first ash lens, 20-30 cm from surface, another dark stain was discovered. This deposit was ashy, but contained no charcoal. It was irregularly shaped, ca. 15 cm x 50 cm, but was placed just inside or across the entrance. Its location may have been due to alluvial or rodent disturbance, which was apparent at the lowest level of fill. Below the base of the lowest dark lens was an abrupt color change. A test into this yielded no cultural material.

Room Fill: Room 3 was located on a steep slope, and there was an opening at the back, upper end of the shelter. The shelter was also open at the front or lower end, through the entrance on the east side. It is apparent that much alluvial fill has washed through, depositing at least 30 cm of brown sand with pumice granules. This fill was divided into two strata on the basis of the presence of the upper hearth at the top of the second 10 cm level. Stratum 1 was the first 10 cm and contained lithics primarily. Stratum 2 contained both hearth features, as well as sherds and flakes. Below that was the sterile orange sand.

Rubble: Rubble had not fallen into the room and, thus, was not measured.

Exterior Features: No exterior features were present.

ARTIFACTUAL ASSEMBLAGES

CERAMIC ARTIFACTS

Minimum no. of vessels: 15
Total no. of sherds: 126
Average no. of decorated sherds per vessel: 8.3
Average no. of utility sherds per vessel: 8.25
Average no. of plainware sherds per vessel: 1.5

	Painted Wares			Utility/Plain		
Components	Bowls	Jars	Other	Bowls	Jars	Other
P-IV	5	3	1*		5	—
Other	—	—	—	1**	—	—

*stirrup canteen
**could possibly be historic

A total of 126 sherds representing a minimum of 15 different vessels was recovered from LA 13076 (see Table 8.1). With the possible exception of one vessel, all were of types which were produced during the 14th century, probably after A.D. 1350. Except for one Bandelier B/G bowl and a possible historic vessel, all could be classed as Group A glazewares or associated utility wares. One vessel (No. 7) may be a test or pinch pot and could possibly be historic.

The majority of sherds (90%) were located within Room 2 and the trash midden (Feature 1), and in the exterior surface grids surrounding the area. It is fairly certain that the midden is contemporary with Room 2 and may represent the trash from the room. This is based on the fact that sherds from six common vessels are found in both the midden and Room 2, including a Bandelier B/G bowl, a red glaze stirrup canteen and jar, an undifferentiated glaze-polychrome jar, and two Blind Indented Corrugated jars. Also found in Room 2, and the midden and exterior surface grids, were other vessels which include a Cieneguilla G/Y bowl, a white glaze bowl, a Corrugated Blind Indented jar and a plain polished undifferentiated jar. Of the tempering materials, crystal pumice, scoriaceous basalt and rhyolite tuff are found in the southern Pajarito Plateau-Cochiti area. Only the augite latite tempering is intrusive from San Marcos Pueblo.

There also seems to be a definite division between Room 2 with its associated midden and Room 3 which is located 10 m north of Room 2. This is suggested by the fact that only a single vessel is shared in common between the two areas. One sherd from vessel 13, a Blind Indented Corrugated jar, was ·nd in Room 3. The rest of vessel 13 (24 sherds) is within Room 2, its midden and exterior grids. Room 3 contained sherds from three vessels which are not present elsewhere on the site. These vessels include a glaze-on-white jar and bowl, and a plain unpolished undifferentiated ware. This last vessel was thought to be a test pot and could possibly be historic. Only five sherds from two other vessels, an Agua Fria bowl and a red glazeware stirrup canteen, are located in grids outside Room 3 as well as in Room 2 and midden area. Also, there is a definite spatial break between the two areas where there are no ceramics (see Fig. 8.4). The patterning in

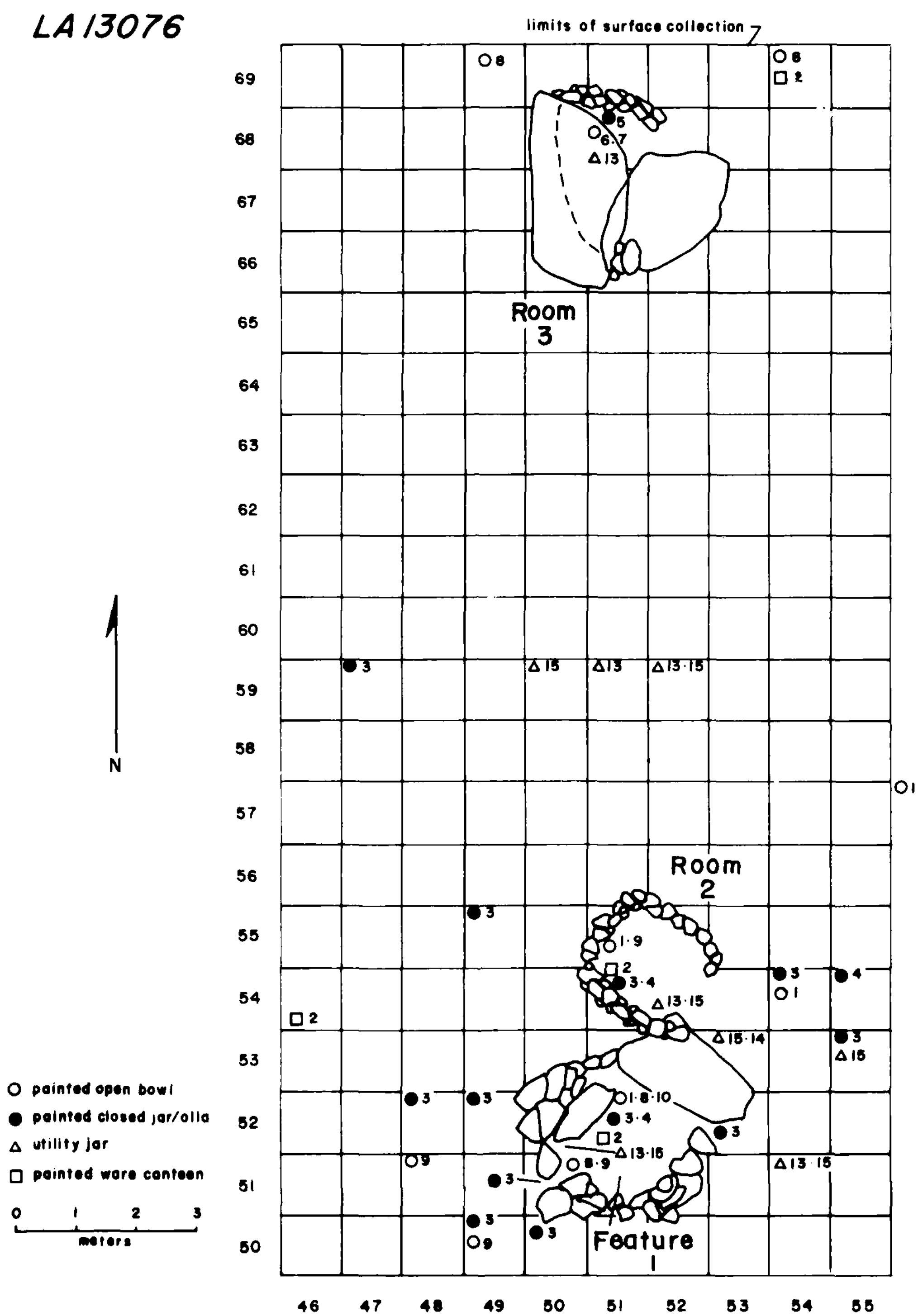

FIG. 8.4 Distribution of ceramic vessels

TABLE 8.1

LA 13076 – Ceramic Assemblage Summary

Ceramic Type	Vessel No.	Vessel Form	Temper	Provenience Room Surf.	Room Str. 1	Midden Surf.	(Fea. A) Subsurf.	Grids Surf.	Total
Ceramics in the Vicinity of Room 2									
Bandelier B/G	1	hemis. bowl	3655-11	—	1	3	1	5	10
Agua Fria G/R	8	bowl	3431-09	—	—	—	—	2	2
Undiff. glaze/red	4	jar/olla	3431-09	—	5	—	2	2	9
Cieneguilla G/Y	9	bowl	3260-09	—	1	—	—	3	4
Undiff. glaze-polychrome	3	jar/olla	3260-09	1	10	1	7	19	38
Undiff. glaze/red & white	2	stirrup canteen	3431-09	—	1	—	2	1	4
Undiff. glaze/white	10	bowl	3270-09	—	—	—	—	1	1
Plain, polished	12	jar/olla	3811-54	—	—	1	—	—	1
Blind indented corrugated	11	jar/olla	3811-54	—	—	1	—	—	1
Blind indented corrugated	13	jar/olla	3811-54	—	4	12	—	8	24
Blind indented corrugated	14	jar/olla	4610-03	—	—	—	—	1	1
Blind indented corrugated	15	jar/olla	3710-09	2	1	—	6	9	18
TOTALS				3	23	18	18	51	113
Ceramics in the Vicinity of Room 3									
Agua Fria G/R	8	bowl	3431-09	—	—			4	4
Undiff. glaze/red & white	2	stirrup canteen	3431-09	—	—			1	1
Undiff. glaze/white	5	jar/olla	3431-09	—	3			—	3
Undiff. glaze/white	6	bowl	3431-09	—	3			—	3
TOTALS				—	6			5	11

ceramics thus suggests that Room 3 may have been a separate activity area or at least was occupied for a shorter period than the other area. Based on the presence of a possible historic pot, Room 3 may have been occupied, perhaps only briefly, at a later time than Room 2 and the midden.

LITHIC ARTIFACTS

A total of 1409 lithic artifacts was recovered from LA 13076. Including all material taxa, 72% were unutilized flakes and 21% were unutilized small angular debris. Also found were 70 pieces of utilized debitage (5%), one obsidian biface, six basalt cores, one quartzite core, and one quartzite hammerstone. No manos or metates were found at the site.

Material Selection

Seventeen different taxa of materials were recovered from LA 13076. These materials are available locally. The predominant material used was basalt, which made up 94% of the total assemblage (91% was 3701), followed by Pedernal chert/chalcedony (5%), obsidian (2%), and the remaining fraction was comprised of chert, quartzite and andesite (1%). The basalt, especially 3701, was most heavily concentrated within the rooms and features, as well as being concentrated in a few exterior surface grids. The chert, chalcedony and obsidian only occurred in clusters around Room 2 and the midden; obsidian artifacts were lightly concentrated in Room 3. The densities of materials, especially basalt, differed in percentages between levels in different rooms and exterior grids and will be discussed separately.

Manufacture

There is evidence to suggest that primary, secondary and tertiary reduction took place at LA 13076. Although 17 different material taxa were identified, only a few materials are represented by sufficient frequencies of artifacts to suggest systematic reduction activities. In rank order basalt (3701) is the preferred material, followed by Pedernal chert/chalcedony (1215, 1214), basalt (3706, 3050) and obsidian (3523).

On the surface of the midden (Assemblage 3), only basalt were present. Of these, 38% exhibited cortex, suggesting both primary and secondary reduction activities. Out of 34 artifacts, 16 exhibited platforms, 88% of which were single-faceted which is indicative of some kind of core preparation. There was also one basalt core, and

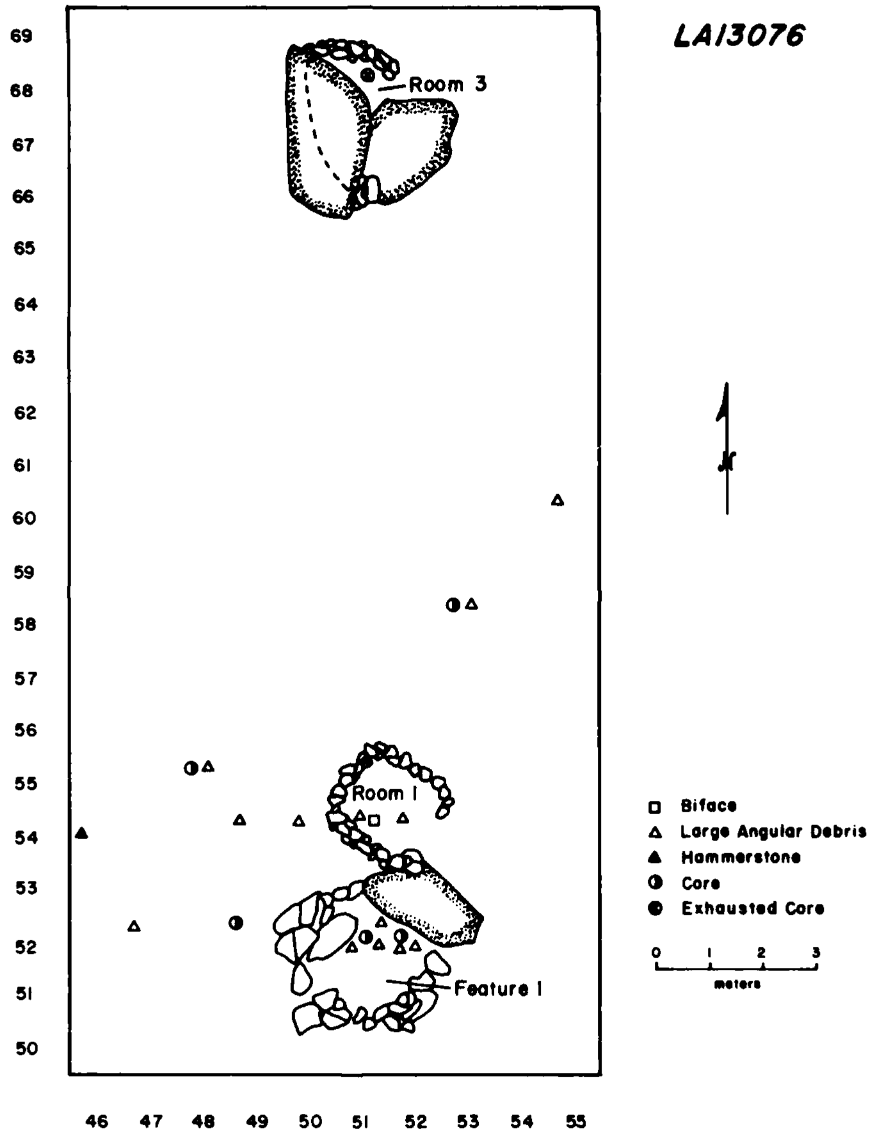

FIG. 8.5 LA 13076, distribution of cores, large angular debris and lithic tools (each symbol represents an artifact)

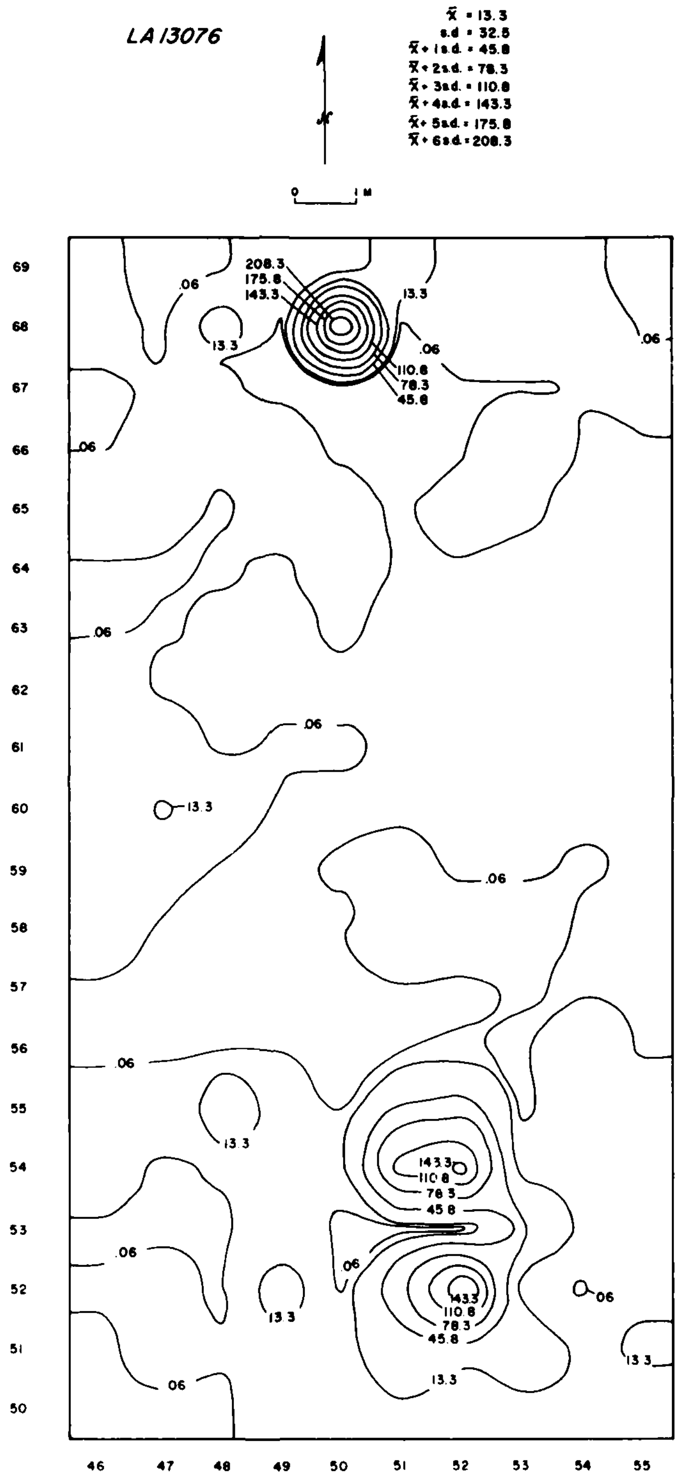

FIG. 8.6 LA 13076, distribution of debitage

although no pieces of large angular debris were found, the evidence still points to primary reduction.

The subsurface level of the midden (Assemblage 4) had more artifacts (284) than the surface. Basalt (3701) made up 92% of the total debitage. Only 23% of the flakes exhibited cortex while over 67% had platforms, of which 91% were single-faceted. This basalt assemblage exhibited more evidence of secondary reduction than the surface finds. Also indicative of secondary reduction is the low percentage of cortical dorsal surface area (13%). One basalt core and four pieces of large angular debris indicated primary reduction. The Pedernal chert/chalcedony assemblage had only 15 pieces of debitage but the amount of cortex and single-faceted platforms suggests secondary reduction activities similar to the basalt. There were no retouch flakes or facially retouched artifacts in either the surface or subsurface levels of the midden. There was also an absence of manos and metates.

Room 2 had a small lithic assemblage on the surface (Assemblage 1). Most of the debitage was unutilized basalt flakes and small angular debris. A small percentage (25%) exhibited cortex, and the majority of the flakes exhibited platforms which were single-faceted (80%). One piece of basalt was classified as large angular debris, but there were no cores present, evidencing more secondary reduction than primary.

The patterning of the lithics in the subsurface level of Room 2 (Assemblage 2) was practically identical to the subsurface level of the midden and suggests a continuity of activities between the two areas. The assemblage was almost totally basalt (91%). There was a corresponding low percentage of cortex (24%). This and the absence of cores and large angular debris indicates only minimal primary reduction activities. Over half (43%) of the debitage had platforms, of which 88% were single-faceted. This is evidence for secondary reduction activities, as well as the fact that 89% of the basalt flakes were small in size, from 10-30 mm in length. There is also some evidence for tertiary reduction of the small obsidian assemblage (7 pieces of debitage). One flake (3523) was retouched, and there was one complete obisidan biface in the subsurface of Room 2. Also, nine pieces of utilized debitage may indicate tool use on the site.

Room 3 is located at some distance (10 meters) from Room 2 and the midden and may represent a separate activity area. The surface level of the room contained only six pieces of basalt and thus has little significance in the makeup of the total assemblage of the room. The first subsurface level contained predominantly basalt (3701), in the form of unutilized flakes (57%) and small angular debris (43%); 62% of the flakes had platforms and the majority (80%) of these were single-faceted. The fact that only 25% of the debitage had cortical platforms is indicative of core preparation with some primary reduction, but the other evidence suggests secondary reduction also. There were no cores present in Room 3.

The second subsurface level (Assemblage 6) has one of the highest counts of basalt for the entire site; 211 pieces out of 223 total for the assemblage were basalt (3701). This group exhibited the least amount of cortex (15%) for the entire site. Platforms were present on 48% of the 3701 flakes, and most (95%) were single-faceted. One exhausted basalt core was also found. The scarcity of cortex as well as the exhausted core are indicative of secondary reduction activities.

Material recovered from the exterior surface grids surrounding all the features were stratified into two assemblages for purposes of analysis. One consisted of surface grids in the vicinity of Room 2 and the midden; the other included surface grids in the vicinity of Room 3. The surface grids surrounding Room 2 and the midden were comparable to the features themselves. Basalt (3701) made up 92% of the assemblage, with 117 cortical flakes (37%). Of the 3701 debitage, 54% had platforms, 87% of which were single-faceted. This suggests again, both primary and secondary reduction with indications of some core preparation. Two basalt cores (3701, 3706) and a quartzite (4000) core were found.

The exterior surface grids surrounding Room 3 (No. 8) had mostly basalt (3701). A large percentage of the 3701 debitage exhibited cortex (56%), indicative of primary reduction. Much of the assemblage (75%) is made up of small flakes (10-40 mm) which may either indicate secondary reduction activities or the reduction of small cores. Two flakes of basalt exhibited retouch platforms, which suggests tertiary manufacture. No bifaces or unifaces were found yet the presence of the retouch platforms indicates that a finished tool was either manufactured or used at the site, but is no longer present.

Tool Use

A total of 70 pieces of debitage (5%) were utilized on LA 13076. There was one biface of obsidian (3523). The predominant material chosen for utilization was basalt (83%). There also seems to be selection for a certain size of basalt material. In the grids surrounding Room 3, most flakes (75%) fell into the smaller categories (from 11 to 40 mm), while all of the pieces selected for use were in the larger size categories (from 40-70 mm). In Room 2 and the midden and the surface grids in the vicinity, the size chosen for utilization basically reflected the size classes in the assemblage. One quartzite core exhibited battering wear on two surfaces. One obsidian biface from Room 2 had two utilized edges. Each edge was unifacially retouched and exhibited unidirectional step fractures.

The utilized pieces were predominantly distributed within the features and the midden. One surface grid (55/48) to the west of Room 2 had eight pieces of utilized basalt. All the utilized flakes occur with densities of unutilized debitage and may suggest trash, but the concentrations with the rooms may reflect in situ activity areas.

FAUNA

There were no bones recovered from LA 13076.

FLOTATION ANALYSIS

Three soil samples were floated, one each from the rooms (2 and 3) and the midden. Both light and heavy flotation materials were analyzed from the midden (Feature 1) with only heavy flotation materials being examined from the rooms. The light flotation sample (100 ml) taken from Feature 1, Stratum 1 (midden) yielded only fecal material. Heavy flotation residue consisted of three 3701 basalt flakes. A single Pedernal chalcedony flake was recovered from the heavy flotation sample taken from Room 2, Stratum 1 (200 ml). The sample (100 ml) from Room 3, Stratum 1 consisted of 45 pieces of charcoal and a single burned bone fragment.

MISCELLANEOUS MATERIALS

A piece of clay was recovered from Room 3, Stratum 1 and a piece of ochre was found in the trash midden, Stratum 1.

SUMMARY

LA 13076 is a single component site, consisting of two noncontiguous rooms and a midden area. There seems to be a definite spatial break between Room 2 and its associated midden and Room 3, which may indicate differences in activities and occupation. It should be noted that Room 3, although excavated with Room 2 and the midden as a part of LA 13076, was also in close proximity to other structures which lay further north and were inundated by Cochiti Reservoir. Thus, the three features of LA 13076 do not necessarily constitute a bounded site. These features may reflect one or two of a series of activity areas in an intensively occupied locality. Definite site boundaries are difficult to draw.

Room 2 and the midden and surface grids surrounding it contain the majority of artifacts, both lithic and ceramic. Ten meters north of this area is Room 3. The two areas share only a single ceramic vessel in common. Room 3 also contained three vessels not present elsewhere on the site, one of which was possibly an historic pot. Though all vessels, excluding that just mentioned, date to early P-IV times, this does not preclude the possibility that the two areas may have been occupied at different times during the P-IV period.

In terms of structure and patterning in the lithic assemblages, the two areas look similar. Basalt is the dominant material chosen for both areas. All stages of lithic reduction (primary, secondary and tertiary) are seen on the site. Core preparation is also evidenced by the high percentage of single-faceted platforms. There seems to be evidence for both primary and secondary reduction within the rooms and midden; and evidence for secondary and tertiary reduction in the exterior surface grids surrounding Room 3. Utilized tools were also found primarily within the features, suggesting that activities tended to be performed within these confines.

In conclusion, the spatial break between Room 2 and the midden, and Room 3; and the low number of ceramic vessels shared in common between the two areas, suggests that the areas may have been occupied at slightly different times during the early P-IV phase, or that they represent two contemporaneous activity areas. The patterning of the lithics gives no clear-cut indication that the two areas were functionally different from each other. Instead, the evidence shows that a variety of similar reduction activities and utilization took place throughout the whole site, and though the two areas might not have been exactly contemporaneous, they show a similar pattern of activities.

Chapter 9

LA 13084

Rosalind Hunter-Anderson and Jeanne A. Schutt

INTRODUCTION

LA 13084 was a Pueblo IV period site (A.D. 1350-1400) which consisted of three spatially discrete provenіences and five noncontiguous masonry structures. The site was located on the east side of the Rio Grande at an elevation of 5380 feet. The structures were scattered on or near the upper crest of a boulder field. A small series of agricultural terraces, which were associated with Provenience 2, were situated on a bench between the boulder field and the talus slope of the canyon. Another more extensive terrace system, designated on survey as LA 13080, was situated to the south of LA 13084.

The site was located in the Upper Sonoran Arid vegetative community (Drager and Loose 1977: Fig. II.2.1). Specific vegetation varied with the location of each structure. Generally, juniper, snakeweed, and various grama grasses were found in the catchment of the boulder field. Mock orange, gooseberry, and fender bush occurred intermittently within the boulder field.

EXCAVATION APPROACH

The first stage of excavation involved superimposing a 1 x 1 meter grid system over the entire site. The grid system was oriented with its long axis running east/west 83 m; its short axis extended north/south for 58 m. Within this system, three proveniences were designated (see Fig. 9.1). Provenience 1 contained a surface-collected area surrounding Room 1 and excavated grids within the room. Room 1 was completely excavated. Provenience 2 consisted of a large surface-collected area surrounding three structures, Rooms 2-4, and excavated and surface-collected grids within the rooms; Room 3 was completely excavated, while Rooms 2 and 4 were sampled. Provenience 3 included a surface-collected area around Room 5 and excavation and surface-collected grids within the room.

Excavation proceeded initially by documenting variability in surface materials and mapping. Subsurface excavations were undertaken to determine the nature of the deposition in the rooms and to ascertain the constructional detail of the features.

PROVENIENCE 1

Provenience 1 was located at the extreme northwest end of the site. It consisted of a freestanding masonry structure (Room 1) and lithics and ceramics which were scattered over a 9 x 6 meter area. The room was situated on the highest point in the boulder field and overlooked portions of White Rock Canyon. Several petroglyphs occurred on the rocks in and near Room 1. The petroglyph forms included spirals, a scorpion, and geometric designs. Forty-eight grids in and around Room 1 were surface-collected. Although the room was completely excavated, excavation in the exterior grids was not possible in the surrounding boulder field (see Plates 9.1 and 9.2). Within the room, excavation proceeded in arbitrary 10 cm units with all materials being processed through ¼ inch wire mesh.

ARCHITECTURE

ROOM 1

Shape: Oval structure which was built into a boulder field (see Fig. 9.2).

Orientation: The long axis of the room was oriented true north.

Condition: Although all walls are standing, rubble indicates partial wall collapse.

Interior Room Dimensions

	Length	Width	Height
North Wall	1.80 m	0.40 m	1.40 m
South Wall	2.00 m	0.40 m	1.10 m
East Wall	2.50 m	0.45 m	1.40 m
West Wall	2.55 m	0.45 m	1.50 m

Interior Floor Space: 4.75 m^2

Walls: The west wall was primarily composed of natural elements in the boulder field. The north, south and west walls were of similar construction and are described together below.

Type of Elements: Local basalt clasts and boulders.

Size of Elements: Elements ranged in size from 20 cm x 12 cm x 8 cm to 80 cm x 45 cm x 40 cm.

Placement and Construction of Elements: Wall elements were placed at varying angles. Clasts and boulders were dry laid and overlapping. Generally, wall construction included the use of boulders already in place. Elements were then piled between and against these boulders forming the north, south and east walls.

Shaping of Elements: Unmodified.

Wall Facing: Placement of elements resulted in walls with uneven interior surfaces.

Chinking: Wall chinking was composed of small tabular pieces of basalt not common to the boulder field.

Mortar: No evidence of mortar was recovered.

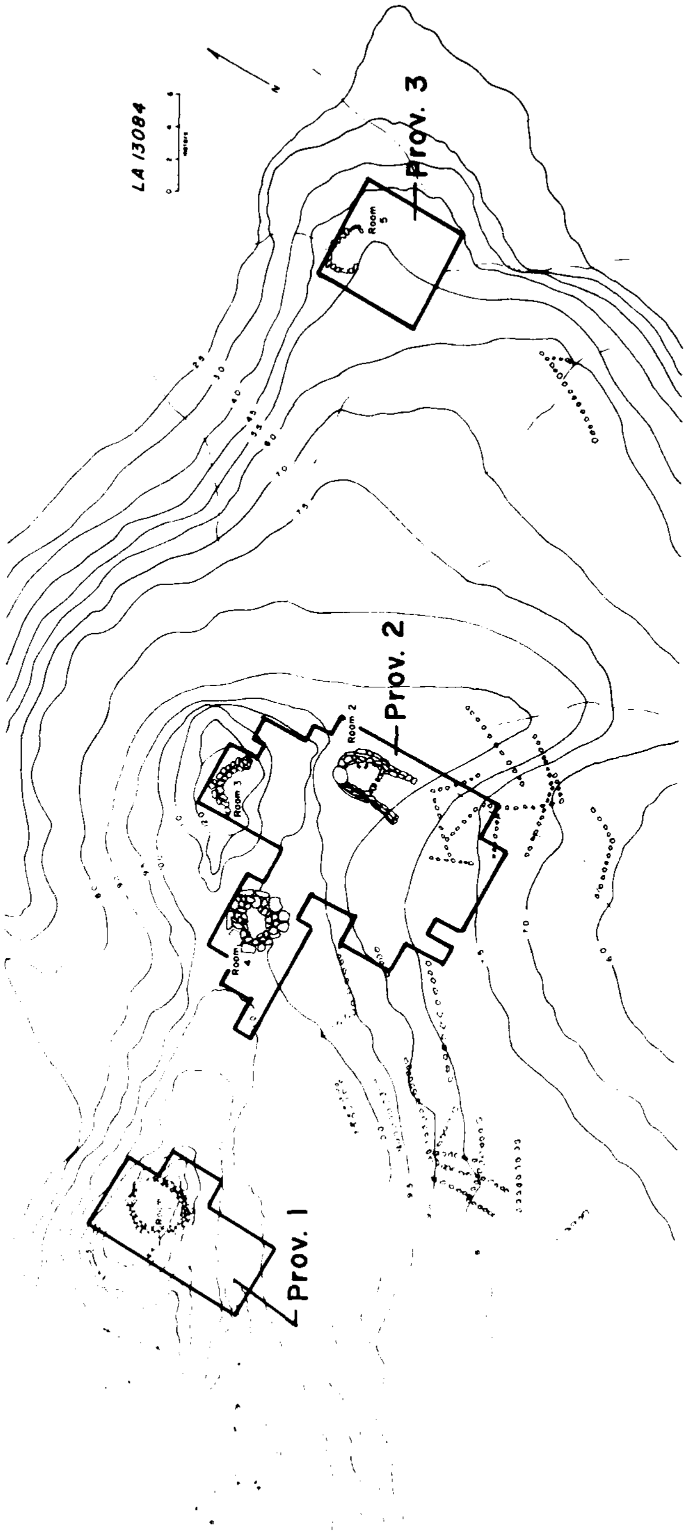

FIG. 9.1 LA 13084 Site Map, illustrating local topographic relief.

PLATE 9.1 LA 13084, Room 1 in the foreground overlooking the canyon. Note the spiral petroglyphs on the boulders.

PLATE 9.2 LA 13084 with the east wall of Room 1 in foreground. Note the extent of the boulder field.

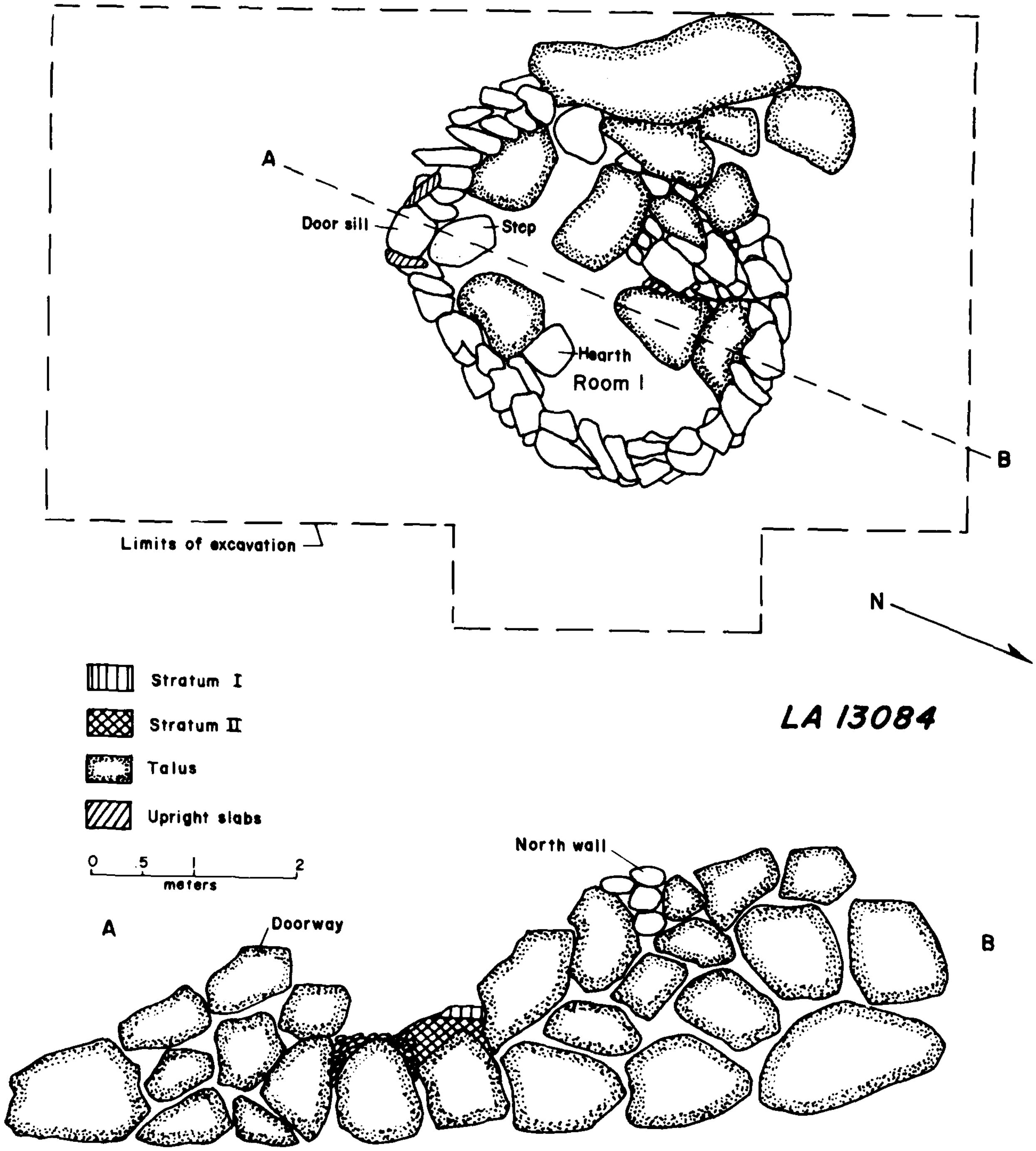

FIG. 9.2 LA 13084 Room 1, plan view and cross section

Corners: All corners were round and interlocking.

Plaster: The walls were not plastered.

Entrances: An entrance 51 cm wide was found in the south wall of Room 1. The doorway was located 40 cm from the southwest corner of the room. This corner was located at a point where the east wall met an upright boulder that framed the eastern portion of the doorway. Two large boulders framed the doorway, and a smaller boulder measuring 48 cm x 40 cm x 60 cm served as a door sill. From the door sill there was a 34 cm step down onto a boulder inside the room. From this point there was a 40 cm step down to the gravel fill in the bottom of the southern portion of the room.

Floors: The occupation surface in Room 1 sloped up 20 cm from the gravel fill in the southern portion of the room to the sand fill found in the northern half of the room. It appeared that both sand and small fragments of basalt were imported to construct usable living surfaces in the room. The average size of the basalt fragments used to fill crevices between large boulders and which formed a flat surface in the southern portion of the room, was 9 cm x 6 cm x 5 cm. In the northern portion of the room between 10 cm and 40 cm of sand fill was used to create a usable flat occupation surface (levels B-E). These levels were sterile of cultural material. Level A (0-10 cm) represents the cultural occupation in Room 1.

Roofing: No evidence of roofing was found.

Interior Features

Hearth: An irregular shaped hearth was found against a large boulder in Room 1. It was a burned area found at floor level; several interspersed rocks were found at the uppermost level. The hearth area was located along the eastern wall and measured 50 cm east-west by 29 cm north-south. The hearth fill was between 25 cm and 28 cm deep and was composed of burned pebbles, a few pieces of firecracked rock and dark charcoal stained sand. No large pieces of charcoal were found in the hearth. These elements ranged in size from 10 cm x 6 cm x 6 cm to 20 cm x 8 cm x 8 cm. The hearth elements weighed 20.5 kilos. The total volume of the hearth fill was 5.5 liters (see Fig. 9.3).

Room Fill: The fill in Room 1 consisted of small basalt fragments in the southern portion of the room and sand in the northern portion. The flat surface created by the small basalt fragments was approximately 20 cm lower than the surface leveled with sand. In the northern portion of the room, all cultural material was recovered from the first 10 cm of light brown sand fill (level A). Below this was between 10 cm and 40 cm of sterile, more compact sand. The fill at level E (40-50 cm) consisted of coarse grey sand mixed with fragments of basalt. This sand appears to have been imported to fill in crevices between large boulders, thus, creating a flat living surface.

Rubble: Due to the location of the structure, in a boulder field, it was not possible to distinguish exterior wall rubble

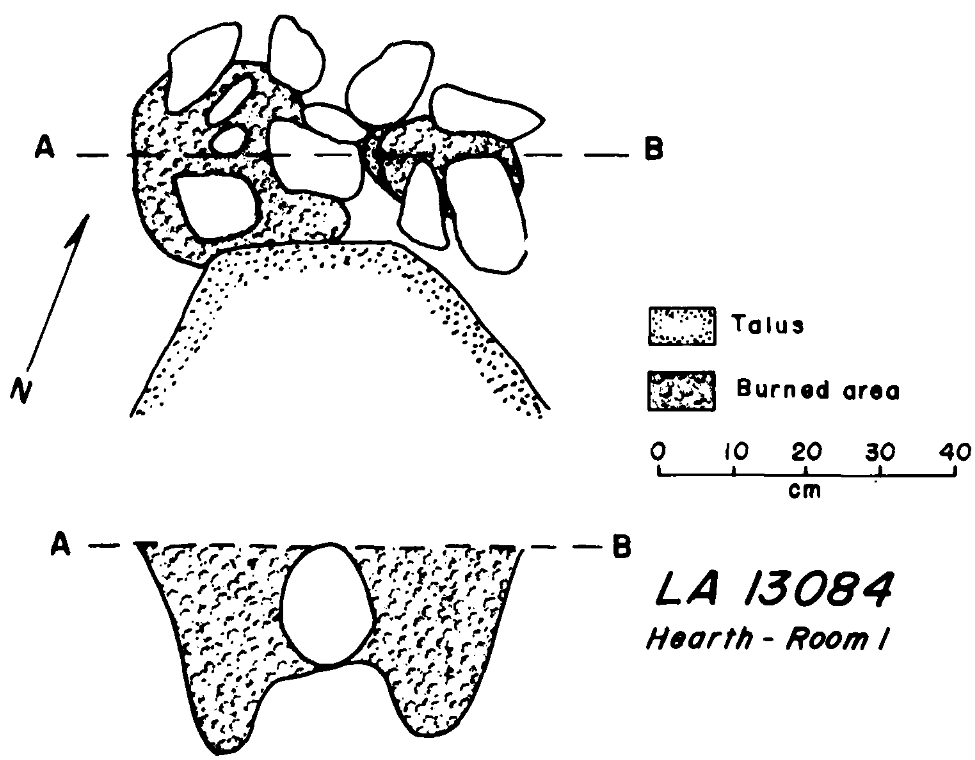

FIG. 9.3 LA 13084, Room 1 hearth, plan view and cross section

TABLE 9.1

LA 13084 – Ceramic Assemblage Summary

DISTRIBUTION: Ceramic Type	Vessel No.	Vessel Form	Temper	Provenience (see below)				
				Room 1		Exterior Grids		
Provenience 1				Surf.	Level A	Surf.	Subsurf.	Total
San Clemente G-P	6	bowl	3431-53	1	2	–	–	3
Undiff. glaze-polychrome	3	jar/olla	3431-09	6	1	–	–	7
Undiff. glaze-polychrome	8	closed	3431-52	1	2	–	–	3
TOTALS				8	5	0	0	13
				Room 2		Exterior Grids		
Provenience 2				Surf.	Str. 1	Surf.	Subsurf.	Total
Abiquiu B/G	2	bowl	3863-10	–	1	–	–	1
Bisquitware, undiff.	1	carin. jar	3862-09	–	2	4	5	11
Agua Fria G/R	5	bowl	3431-53	–	1	2	–	3
San Clemente G-P	6	bowl	3431-53	–	–	4	–	4
Undiff. glaze-polychrome	7	bowl	3270-51	–	–	1	–	1
Undiff. glaze-polychrome	3	jar/olla	3431-09	–	2	10	–	12
TOTALS				0	6	21	5	32
				Room 5		Exterior Grids		
Provenience 3				Surf.	Level A	Surf.	Subsurf.	Total
Undiff. glaze/red	4	jar	3710-02	–	4	–	–	4

from the natural basalt of the boulder field. Interior rubble totaled 2.184 m^3.

Exterior Fill: There was no exterior fill. All cultural materials were recovered in the surface collection.

Exterior Features: No exterior features were found.

ARTIFACTUAL ASSEMBLAGES

CERAMIC ARTIFACTS

Forty-nine sherds from a minimum of eight different vessels were recovered from LA 13084 with a bowl to jar ratio of 1:1. Of these, 13 sherds representing a minimum of three different P-IV vessels were recovered from Provenience 1. These included a San Clemente G-P bowl and two undifferentiated glaze polychrome ollas/jars. All of the sherds were recovered from the room with eight from the surface and the remaining five sherds from the first 10 cm of fill.

LITHIC ARTIFACTS

In Provenience 1, 1136 pieces of debitage were recovered. Seven cores and 12 pieces of large angular debris were also recovered. The majority of large angular debris and cores was found inside Room 1. The large number of lithic artifacts from Room 1 is outstandingly high and may relate to a nonutilization function to which the room may have been put. It will be remembered that many petroglyphs were located in and around the structure.

Two lithic assemblages (1 and 2) were defined for this provenience. Assemblage 1 included all surface materials from inside and outside Room 1; the vast majority was recovered from the interior of the room. Assemblage 2 included all subsurface materials from the room.

Material Selection

Of the 1136 pieces of debitage recovered, the majority in each assemblage was manufactured from 3701 basalt (ca. 95%). The remainder is comprised of Pedernal chert/chalcedony (Assemblages 1 and 2) and obsidian (Assemblage 2).All cores and large angular debris were of 3701 basalt.

Manufacture

Freehand technique was used exclusively in both assemblages; similar proportions of freehand debitage and small angular debris were observed, ca. 75% and 25%, respectively, in each. Cortex was more common in the surface assemblage (30%); in Assemblage 2, 19% was cortical. Nonwaterworn cortex was prevalent in both assemblages.

More platforms were observed in Assemblage 1 (39%) than in Assemblage 2 (28%), and more platforms had cortex in the former assemblage, 7% (compared with 3%) in Assemblage 2. One of the two pieces of obsidian debitage from Assemblage 2 was a resharpening flake, perhaps indicating usage of an obsidian biface within the room.

For the basalt debitage, Assemblage 2 had the lower proportion of cortical flakes (18%) while Assemblage 1 had 30%. Thus, even though basalt was the preferred material in both assemblages, it was treated differently. Another contrast within the basalt debitage was that the number of flakes with platforms was greater in Assemblage 1 (51%) whereas in Assemblage 2 it was 38%. In general, it would seem that the surface assemblage (1) reflected more primary reduction than the subsurface assemblage (2).

Tool Use

Twelve percent of the debitage in Assemblage 1 was utilized and 7% was utilized in Assemblage 2. Only basalt was utilized in Assemblage 1, while basalt and obsidian were utilized in Assemblage 2. In neither assemblage was there any utilization of Pedernal chert/chalcedony debitage.

Comments

An interesting pattern of surface/subsurface variability was noted in the course of analysis, which may be due to natural processes or to human activity. Twelve percent of the surface material was utilized versus 7% of the subsurface material. Other differences between surface and subsurface collections include: vertical size sorting with the larger material from the surface; a difference in amount of cortical debris, 30% of surface material vs. 19% of subsurface material; and a difference in platforms, 39% surface versus 28% subsurface.

A possible interpretation of these patterns is that a continuous use of the structure occurred over a considerable amount of time which involved a cumulative process of reduction in the size of lithic materials. This process became truncated and so resulted in the larger pieces being near the surface. This interpretation may account for the greater cortical coverage in surface pieces and the size difference between surface and subsurface, but does not account for a higher rate of utilization on the surface. Another possibility is that natural processes of weathering account for a higher utilization rate on the surface, while other differences may be due to human activity differences, either a truncated cumulative process or very different activities carried out over time.

The same pattern of a higher utilization ratio for artifacts from surface collections versus the room interior subsurface collection was observed at LA 13049. It was suggested in the report on that site that differential weathering may have been responsible for the difference in utilization. A comparison was made of other surface materials not adjacent to the room in question on LA 13084, and these exhibited higher utilization ratios than the subsurface material from inside the room.

FAUNA

A woodrat femur was recovered from the first 10 cm of the fill in Room 1.

FLOTATION ANALYSIS

Two heavy flotation samples were analyzed. One 450 ml sample, which was taken from Room 1, level A, yielded 17 flakes. The second sample (1000 ml) derived from the hearth in Room 1, consisted of 93 3701 basalt flakes.

MISCELLANEOUS MATERIALS

Five pieces of ochre were recovered from Room 1, three pieces from level A and two from level B.

PROVENIENCE 2

Provenience 2 consisted of a cluster of three noncontiguous structural features located in the central portion of the site, approximately 20 meters east of Provenience 1. Room 2 was one of the rooms in a two-room structure. Room 3 was located on the edge of the boulder field four meters north of Room 2. Room 4 was two meters west of Room 3. Surface collections, totaling 190 m^2, were made in the vicinity of the structures and in a portion of the boulder field to the south. Excavation was confined to the structures and two contiguous grids south of Room 2 (within the wing walls). Exterior excavation was not possible in the boulder field itself. Fill was excavated in 10 cm arbitrary units and processed through ¼ inch wire mesh.

ARCHITECTURE

ROOM 2

Shape: Room 2 (the northernmost room in a possible two-room structure) was roughly rectangular and adjoined an open-ended room to the south (see Fig. 9.4).

Orientation: The long axis of the room was oriented parallel to true north.

Condition: The walls of Room 2 were standing, but in general they had slumped toward the interior and exterior of the room.

Interior Room Dimensions

	Length	Width	Height
North Wall	1.25 m	0.60 m	1.15 m
South Wall	1.65 m	0.25 m	0.75 m
East Wall	1.65 m	0.75 m	0.66 m
West Wall	1.50 m	0.75 m	1.08 m

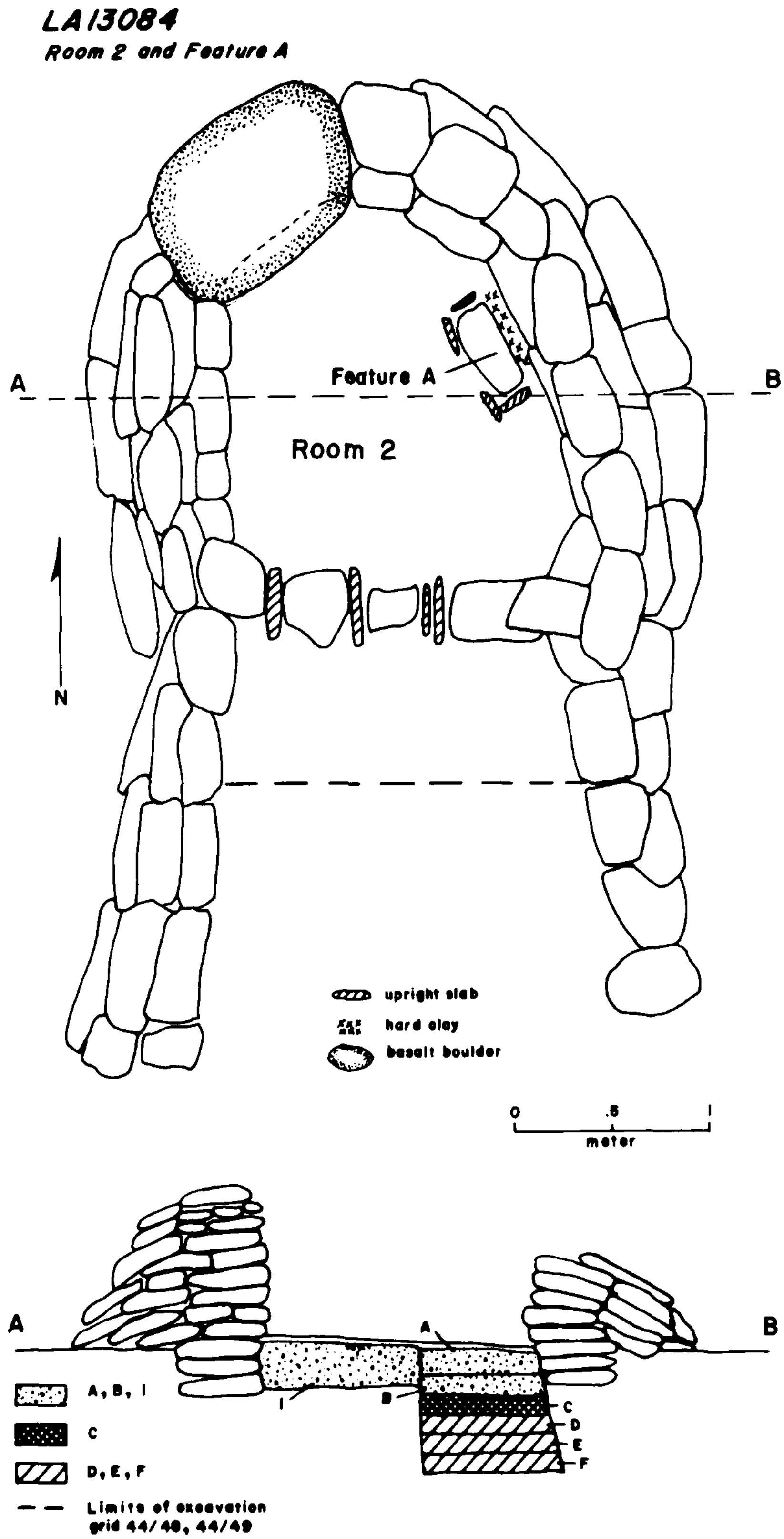

FIG. 9.4 LA 13084 Room 2, plan view and cross section

Interior Floor Space: ca. 2.3 m^2 within the room; ca. 3.4 m^2 within the wing walls south of the room.

Walls: All walls were of similar construction and will be described together below. Two wing walls extended from the southeast and southwest corners of the room, directly south. There was no indication that a southern wall enclosed this area forming a second contiguous room.

Type of Elements: Local basalt clasts and slabs.

Size of Elements: The average size of elements in the south and east walls was 40 cm x 30 cm. Elements in the north and west walls were generally larger. These elements ranged in size from 30 cm x 25 cm up to 50 cm x 40 cm. The largest element, a boulder in the north wall, measured 1.20 m x 1.06 m x 0.70 m.

Placement and Construction of Elements: There was no difference in construction noted between basal, middle, and upper wall elements. Wall slump made it difficult to determine exactly the number of elements used in constructing the width of the walls, but it appeared that the walls were originally between one and two elements wide. Wall elements were placed horizontally in an overlapping fashion. The long axes of wall elements were generally parallel to the long axes of the walls. Wall footings began approximately 5 cm above the occupation surface.

Shape of Elements: Unmodified.

Wall Facing: The flat surfaces of elements were placed at varying angles and did not face the interior or exterior of the walls.

Chinking: No chinking was present.

Mortar: Although evidence of mortar was not found on the walls, level B of the room fill appeared to be mortar wash.

Corners: The west wall abutted a large boulder in the north wall, forming the northwest corner of the room. All other corners were round and interlocking. The two walls extending south of the room from the east and west walls appeared to have been constructed at the same time as Room 2. These walls are interlocked with the southeast and southwest corners of the room.

Plaster: No evidence of wall plastering was found.

Entrances: A doorway was found in the western portion of the south wall of Room 2. The opening was 35 cm wide, and 20 cm high; it was located approximately 75 cm from the east wall. A flat slab measuring 20 cm x 15 cm x 5 cm formed the sill and was placed on the original ground surface. The doorway was framed on the east with two vertical upright slabs that measured 20 cm x 20 cm x 5 cm and 20 cm x 15 cm x 6 cm. A final vertical slab was placed on the west side of the two vertically laid elements. This slab measured 30 cm x 20 cm x 5 cm.

Floors: It appears that Room 2 was partially excavated into the original ground surface. Wall footings began 5 cm above the apparent occupation surface. It appeared that the walls were built on the original ground surface. Room fill indicates that a single occupation occurred at hearth level. Although a small amount of cultural material was recovered from levels below the hearth, rodent action was noted inside the room.

Roofing: No evidence of roofing was found.

Interior Features:

Hearth: A slab-lined hearth was found against the east wall, approximately 1.0 m from the southeast corner of Room 2. The majority of the feature was in grid 46/49. This rectangular feature was 56 cm long, 27 cm wide and 19 cm deep. The feature was located in the lower half of level B and upper portion of level C. The east wall formed the back of the hearth. Four upright slabs enclosed the feature on the north, south and part of its western side. The slab to the north measured 22 cm x 19 cm x 3 cm. The slab to the south measured 24 cm x 19 cm x 3 cm. The two slabs to the west measured approximately 18 cm x 19 cm x 3 cm. The fill inside the feature consisted of 2-3 cm of burned clay and pumice (possible mortar) with 16-17 cm of ash below it. A phosphorous content analysis revealed that the two soil samples taken from this area were high in phosphorous and this confirms that the hearth was probably used for cooking. Lithics were the only cultural material recovered from the hearth. It appears that the hearth elements were partially excavated into the floor or occupation surface.

Ash Lens: Ten centimeters to the west of the hearth was a small ashy area which averaged 6.5 cm x 4.5 cm in area and 1.0 cm in depth. This lens may represent wash from the hearth rather than a distinct feature.

Room Fill: The room was generally excavated in arbitrary 10 cm levels (A-F) to determine natural strata. The uppermost fill consisted of 2-3 cm of loose windblown sand which was deposited on a compact tan sand mixed with pumice and wall rubble. Below this fill was a layer of hard-packed clay to a depth of approximately 20 cm mixed with pumice. This lens appeared to be mortar wash from the walls and was deposited on top of the ash which filled the hearth, indicating that it occurred after the occupation associated with the hearth. The slab-lined hearth was located in the lower half of level B and the upper portion of level C (20-30 cm). The presence of this mortar-like material around the hearth elements suggests that the hearth elements were partially set into the occupation surface (level C). Level C was a loose brown fill. Levels D, E and F were composed of a loose yellow-brown silt-like fill. The majority of cultural materials were recovered from levels A and B. A few lithics were found below the hearth level, but may not indicate an earlier occupation.

Rubble: A total of 0.45 m^3 of exterior wall rubble was recovered. Interior wall rubble totaled 0.14 m^3.

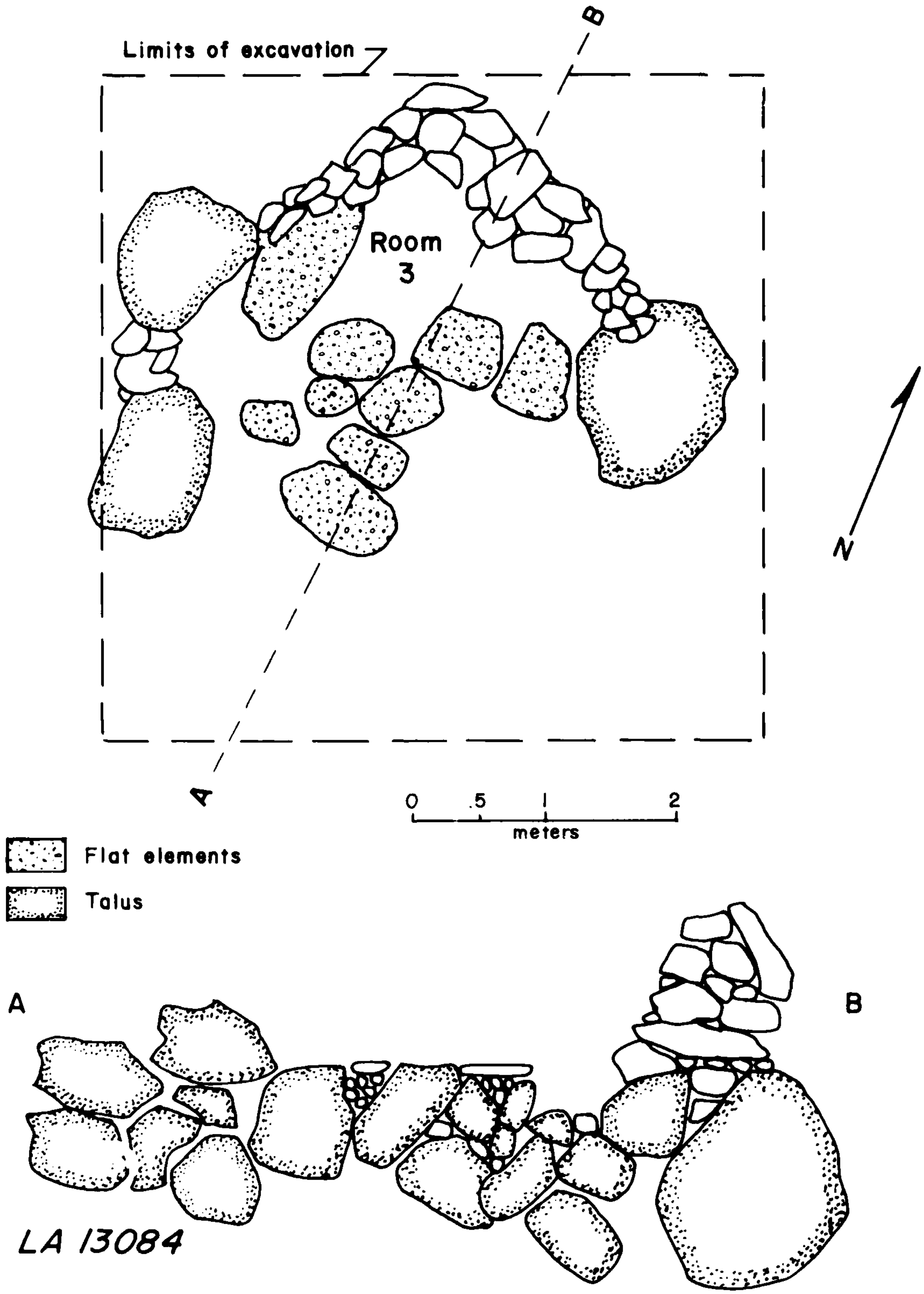

FIG. 9.5 LA 13084 Room 3, plan view and cross section

Exterior Fill: Two grids (44/48, 44/49), which were contiguous and south of Room 2, were excavated in four arbitrary 10 cm levels. Level A consisted of light brown sandy soil. Level B became more orange and was mixed with many small pieces of pumice. Levels C and D contained a yellow sand and clay that was sterile of cultural material.

Exterior Features: The east and west walls of Room 2 extended approximately 1.7 m further south to form a winged enclosure outside the entrance. The interior dimensions of this area were rectangular in shape measuring 1.7 m x 2.0 m. For construction details, see description under Room 2.

ROOM 3

Shape: This room was formed by the intersection at a right angle of two basalt walls, which resulted in an L-shaped configuration. The shape of the room was rectilinear at the northeast corner and open to the south (see Fig. 9.5).

Orientation: The longest wall was oriented 50^0 east of true north.

Condition: The room appeared to be undisturbed. The walls were largely intact.

Interior Room Dimensions

	Length	Width	Height
North Wall	2.70 m	0.80 m	0.95 m
South Wall	N/A	N/A	N/A
East Wall	N/A	N/A	N/A
West Wall	3.50 m	0.30 m	0.50 m

Interior Floor Space: ca. 4.7 m^2

Walls: The south and east walls were of similar construction and are described together below. There were no other walls present.

Type of Elements: Local basalt clasts and boulders.

Size of Elements: Existing elements in the boulder field were incorporated into wall construction. They ranged in size from 1.10 m x 0.90 m x 0.45 m to 1.10 m x 1.00 m x 0.90 m. Other wall elements ranged in size from 20 cm x 10 cm x 7 cm to 60 cm x 30 cm x 30 cm.

Placement and Construction of Elements: Wall construction was fairly haphazard. Elements were piled to the height of the existing boulders used in the construction of the walls. Elements were dry laid in an overlapping fashion and placed both horizontally and vertically. The long axes of the elements were at varying angles to the long axes of the walls. Walls were generally one element wide. Construction of the walls in Rooms 1 and 3 were similar.

Shaping of Elements: Unmodified.

Wall Facing: Elements were not placed with their flat surfaces facing the interior or exterior of the structure.

Chinking: No chinking was found in the walls.

Mortar: No evidence of mortar was recovered.

Corners: The intersection of the walls forming the northwest corner of the room was round and interlocking.

Plaster: Evidence of wall plastering was lacking.

Entrances: A doorway could not be found.

Floors: An apparent floor was found 90 cm below the top of the wall in the northeast corner of the structure. Since the room sits on a talus slope where there are a large number of surface and subsurface rocks, it is difficult to determine the slope of this floor. It was constructed by filling crevices between existing flat-surfaced boulders with small rock and sand, and then placing basalt slabs on top, forming a relative flat floor surface. In one area, against the north wall, the flat slab was lacking, but small rocks were still used to fill a large crevice.

Roofing: Evidence of roofing was not found.

Interior Features: No interior features were found.

Room Fill: The structure was on a boulder field. No fill accumulation had occurred. All cultural materials were recovered from the surface collection.

Rubble: Room 3 interior rubble totaled 0.54 m^3. It was not possible to distinguish exterior rubble from the natural elements of the boulder field.

Exterior Fill: There was no exterior fill. All cultural materials were recovered in the surface collection.

Exterior Features: No exterior features were found.

ROOM 4

Shape: Irregular, a scooped-out area within the talus/boulder field (see Fig. 9.6).

Orientation: The long axis of the cleared area was oriented 55^0 west of true north.

Condition: The condition was poor. It is possible that its construction was never very distinct from its surroundings.

Interior Dimensions

	Length	Width	Height
North Wall	1.80 m	N/A	N/A
South Wall	1.40 m	N/A	N/A
East Wall	1.30 m	N/A	N/A
West Wall	1.00 m	N/A	N/A

Interior Floor Space: ca. 1.8 m^2.

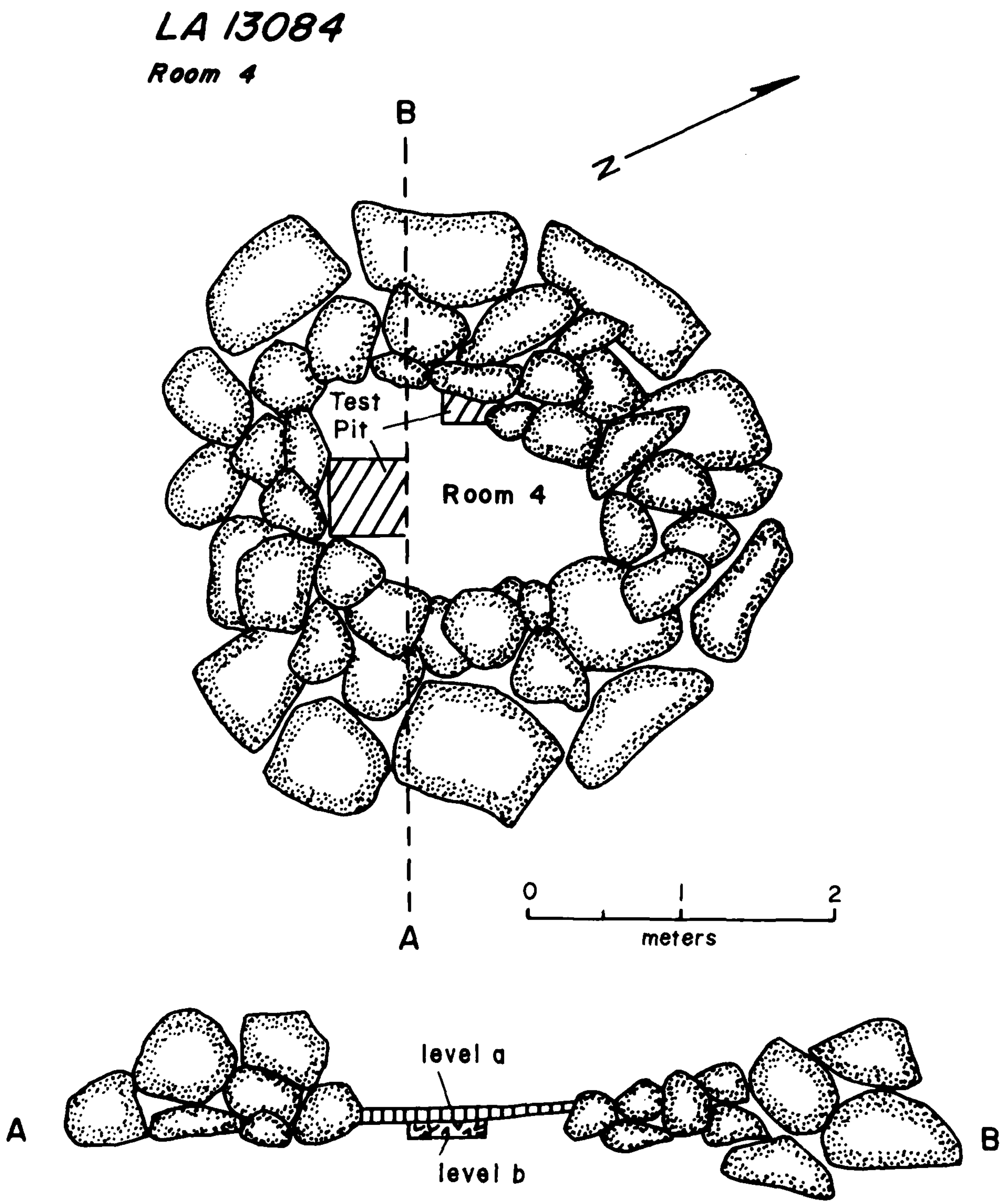

FIG. 9.6 LA 13084 Room 4, plan view and cross section

Walls: No apparent wall construction existed; the room was formed by clearing away naturally occurring basalt clast and boulders which were part of the talus slope.

Entrances: No entrance was located.

Floors: A hardpacked surface was encountered at the base of level A. It was not level and may or may not have represented a floor or occupation surface.

Roofing: No evidence of roofing was found.

Interior Features

Burned Area: A circular burned area was found in the southwest quadrant of grid 51/38, in the center of the room. The feature was located in level B. It was 16 cm in diameter, 6 cm deep and filled with dark brown ash soil. No cultural materials were found associated with this feature.

Room Fill: Level A was composed of light brown windblown sand for the first centimeter, after which a dark brown hard caliche soil was encountered to a depth of 6-10 cm. Level B varied from a light tan, gravelly soil to a rich brown sandy humus (averaging 10 cm in depth). Level C was a brownish-orange clayey soil. Cultural materials were recovered exclusively from level A.

Exterior Fill: No exterior excavations were possible due to the presence of boulders.

Exterior Features: No exterior features were found.

ARTIFACTUAL ASSEMBLAGES

CERAMIC ARTIFACTS

A minimum of six vessels was represented on Provenience 2, all associated with Room 2, with the exception of one sherd which was found near Room 3. All the sherds (30) were located inside (5 sherds) or near (mainly to the southeast of) Room 2. The ceramic assemblage from Provenience 2 was by far the greatest concentration of ceramics on the site. No sherds were found in either Room 3 or 4. Ceramic types included an Agua Fria G/R bowl (3 sherds); one San Clemente G-P bowl (4 sherds); two undifferentiated glaze polychrome vessels (12 sherds, 1 jar/olla and 1 bowl); one Abiquiu B/G bowl (1 sherd) and one undifferentiated bisquitware carinated jar (11 sherds). All ceramic materials found in the site date to the P-IV period, ca. A.D. 1350-1400. Vessel 7, one of the undifferentiated glaze polychrome vessels, with hornblende latite temper, may date to A.D. 1450-1525.

LITHIC ARTIFACTS

A total of 777 pieces of debitage was recovered from Provenience 2. This figure is a combination of all surface materials and the subsurface materials in and adjacent to Rooms 2-4. Six cores and 18 pieces of large angular debris were also recovered, primarily from in and around Room 2. Of the three rooms in this provenience, Room 4 yielded the largest number of subsurface items of debitage (91); Room 2 yielded 65, and Room 3, one.

Seven lithic assemblages were designated with Provenience 2, as follows: Assemblage 3, Room 2, Stratum 1 (levels A, B); Assemblage 4, Room 2, level C; Assemblage 5, Room 2, levels D, E, F; Assemblage 6, grids enclosed by walls south of Room 2, levels A and B; Assemblage 7, Room 3 surface; Assemblage 8, Room 4, level A; Assemblage 9 exterior surface grids.

Material Selection

Of the 777 items of debitage recovered, 614 were recovered from surface grids (Assemblage 9). With the exception of two pieces of obsidian, the surficial material was manufactured from 3701 basalt. Of the remaining 163 subsurface items, 162 were basalt and one was obsidian. Cortex was present on about one-quarter of all the artifacts, and one exhibited waterworn cortex. The cores were 3701 basalt; most of the large angular debris was 3701 basalt, with one item of 3050 basalt. All assemblages except 8 and 9 contained only basalt.

Manufacture

Freehand technique was predominant in the combined assemblages from Provenience 2. Rooms 2 and 4 subsurface had ca. 20% small angular debris, slightly more than Assemblage 9. All other assemblages had none. Cortical platforms were present on ca. 5% of the flakes; most platforms were single-faceted. No retouched platforms were observed. These percentages do not significantly vary between artifacts recovered from inside or outside the structures, nor between surface and subsurface materials.

Rooms 2 and 4 yielded sufficiently large numbers of artifacts to permit some comparisons. For example, subsurface material from Room 2 tended to have a higher percentage of flakes with dorsal cortex only (25%), as opposed to subsurface material from Room 4 (9%). A correspondingly higher percentage of cortex on platforms (10%) was observed in Room 4, as opposed to 8% in Room 2. Room 2 also had 35% of its cortical debitage classified as small angular debris, while Room 4 had no cortical small angular debris. These figures seem to indicate that Room 2 had more primary reduction activity than Room 4. The presence of two basalt cores in and near Room 2 as opposed to one core in Room 4, tends to corroborate this interpretation. It will be recalled that Room 2 was part of a possible two-room structure, while Room 4 is an open-ended, arc-shaped alignment of rocks. This architectural difference may reflect a functional difference in the two locations which the lithic artifacts corroborate to some extent. Another aspect in which these two collections differ is in the length of whole flakes. The flakes in the assemblage from Room 2 tend to be somewhat smaller than those from Room 4, and both of these assemblages' flakes, in turn, are somewhat smaller than surface materials taken from Rooms 2-4. The assemblages from Room 4 and the combined surface materials from Room 2-4 are the most similar. Both of the spatial contexts for these two assemblages are open ones, as opposed to Room 2, which is a spatially closed architectural unit, and also contained a hearth.

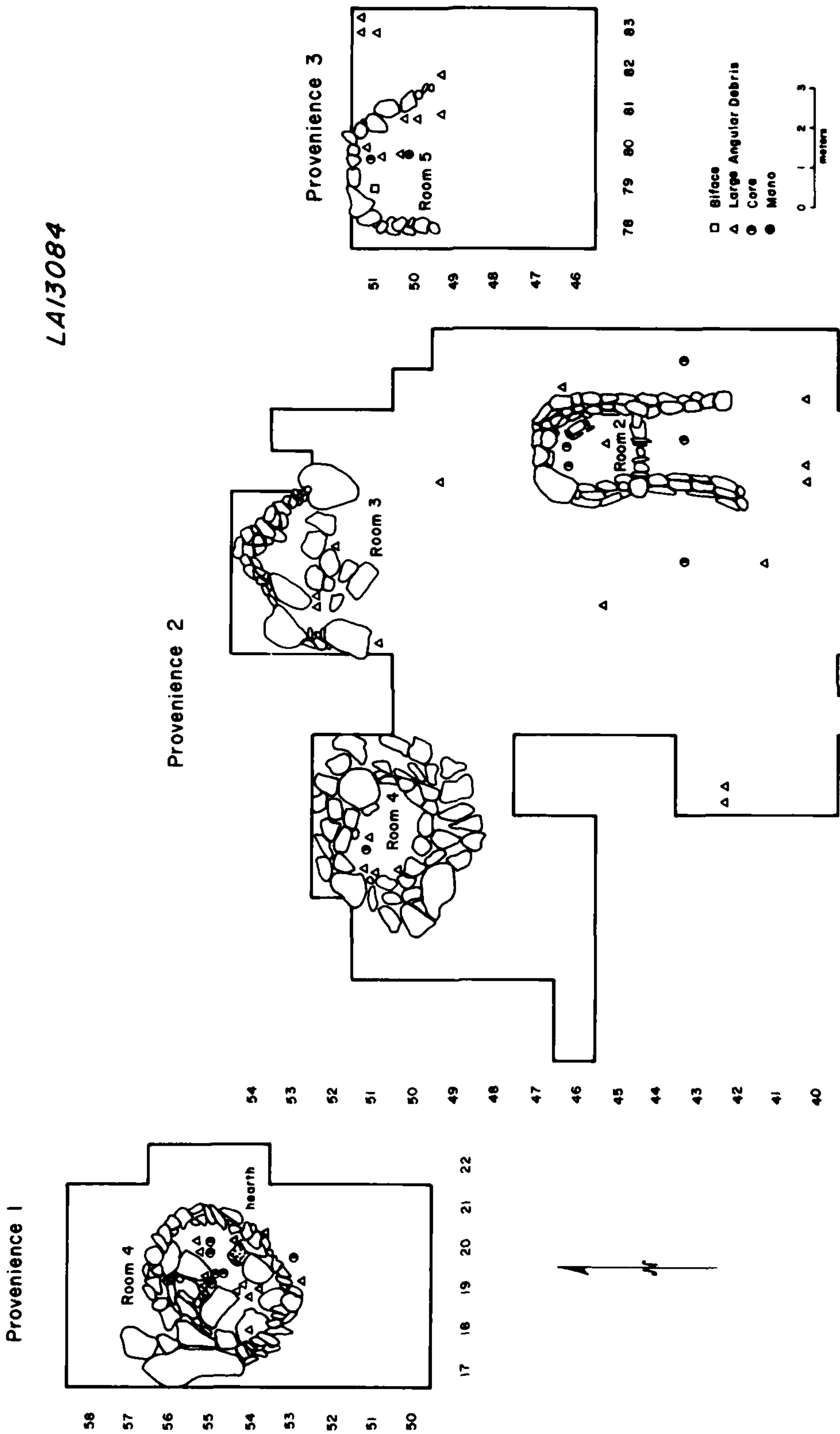

FIG. 9.7 LA 13084, distribution of cores, large angular debris, and lithic tools (each symbol represents an artifact)

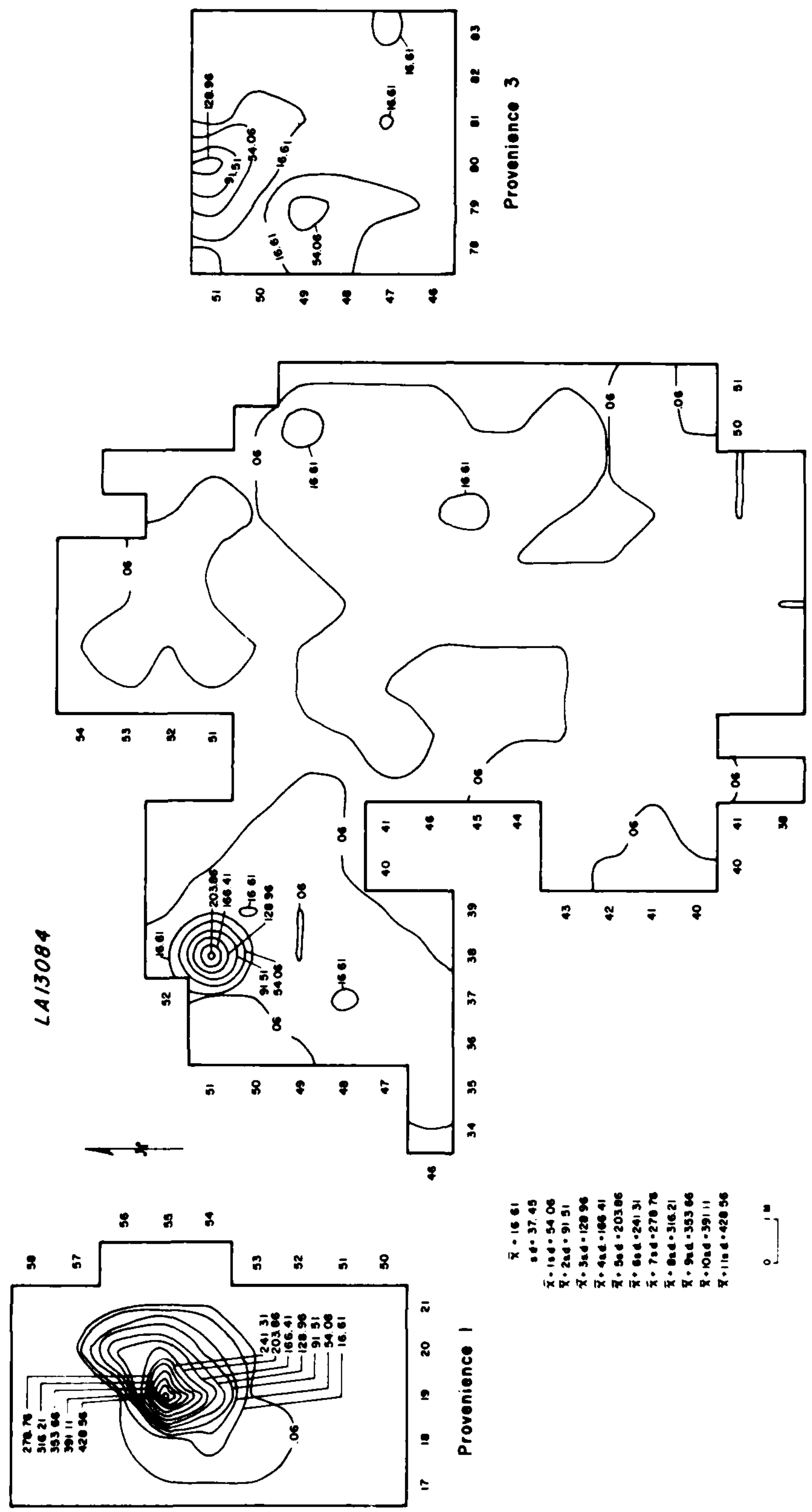

FIG. 9.8 LA 13084, distribution of debitage

When surficial assemblages inside versus outside of Rooms 2 and 3 are compared (Room 4 had no surficial artifacts), it would appear that reduction activity within the structures was secondary, and that reduction activity outside the structures tended to be both primary and secondary.

Patterning observed in the subsurface assemblage from Room 2 (above) indicates nonprimary reduction activity for this structure prior to the deposition of the surface assemblage. We have no surficial artifacts to compare with subsurface ones in Room 4, nor any subsurface material from Room 3 to compare with surface material from that structure. Suffice it to say the three structures comprising Provenience 2 are different in architectural details and in artifact content, and that Room 2 would seem to be the most consistently used of the three. Perhaps not surprisingly, it is also the most substantial, as far as labor investment in building and maintaining it is concerned.

Tool Use

It was noted previously in the discussion of Provenience 1 that utilization ratios seemed to be greater in surface material than in subsurface, in that provenience and in another site, LA 13049. We compared, where possible, the surface and subsurface assemblages in Provenience 2 and found that the surface materials from more open settings, that is, from Room 3, which had essentially one L-shaped north wall, and from areas exterior to Rooms 2-4, had utilization ratios (number of utilized debitage flakes to total debitage) of .2:1 and .03:1, respectively. In the surface material from Room 2, no utilized debitage was recovered, a pattern repeated in subsurface material from this structure. We may have evidence here of a tendency for utilization to occur on materials which are more subject to weathering — which in this case were open, unprotected settings. On the other hand, we may have a situation in which differential tool use activities occurred.

FAUNA

One lizard occipital fragment was recovered from the upper fill (level B) of Room 2. An unidentified bone fragment was also recovered from the surface of grid 43/47.

FLOTATION ANALYSIS

Two heavy flotation samples from the slab-lined hearth in Room 2, level B, were analyzed. A 1000 ml sample yielded two pieces of bone (one burned), and two pieces of charcoal. A second 500 ml sample from the hearth contained 34 pieces of charcoal.

MISCELLANEOUS MATERIALS

A piece of burned clay was recovered from the hearth in Room 2.

PROVENIENCE 3

Provenience 3 was located at the edge of the boulder field some 26 meters east of Provenience 2. It consisted of a semicircular alignment of stacked rocks (Room 5) on the boulder field crest. Some lithics and ceramics were scattered in a catchment nearby. A 6 x 6 meter grid system was superimposed over the room and artifact scatter. All of the grids were surface-collected. The room was completely excavated as were three grids adjacent to the south end of the structure. All fill was excavated in 10 cm arbitrary levels and was processed through ¼ inch wire mesh.

ARCHITECTURE

ROOM 5

Shape: U-shaped or semicircular surface structure (see Fig. 9.9).

Orientation: The long axis of the structure was oriented 90^{0} west of true north. The open end of the structure faced to the south.

Condition: The condition of this structure was fair to poor. The part of the wall which remains intact is in fair condition; however, the room is located on a talus slope, and there are many rocks both on the surface and below surface, which make it difficult to determine the end points of the wall and the occupational surface.

Interior Room Dimensions

	Length	Width	Height
North Wall	1.89 m	0.30 m	0.54 m
South Wall	N/A	N/A	N/A
East Wall	2.00 m	0.40 m	0.40 m
West Wall	2.45 m	0.50 m	0.50 m

Interior Floor Space: 4.2 m^2

Walls: Room 5 was a three-sided structure. The north, east and west walls were of similar construction and are described together below.

Type of Elements: Local basalt clasts.

Size of Elements: The upper wall elements ranged in size from 45 cm x 35 cm to 50 cm x 40 cm. Lower wall elements were generally smaller and varied in size from 20 cm x 30 cm to 30 cm x 35 cm.

Placement and Construction of Elements: Slightly smaller wall elements formed the basal portion of the walls. Otherwise, the walls were constructed the same. Elements were dry laid horizontal with their long axes pointed at varying angles to the long axis of the walls. The walls were between one and two elements wide with elements placed in an overlapping fashion.

Shape of Elements: Unmodified.

Wall Facing: Elements were not placed with flat surfaces toward the interior or exterior of the walls.

Chinking: Wall chinking was not used.

Mortar: No evidence of mortar was recovered.

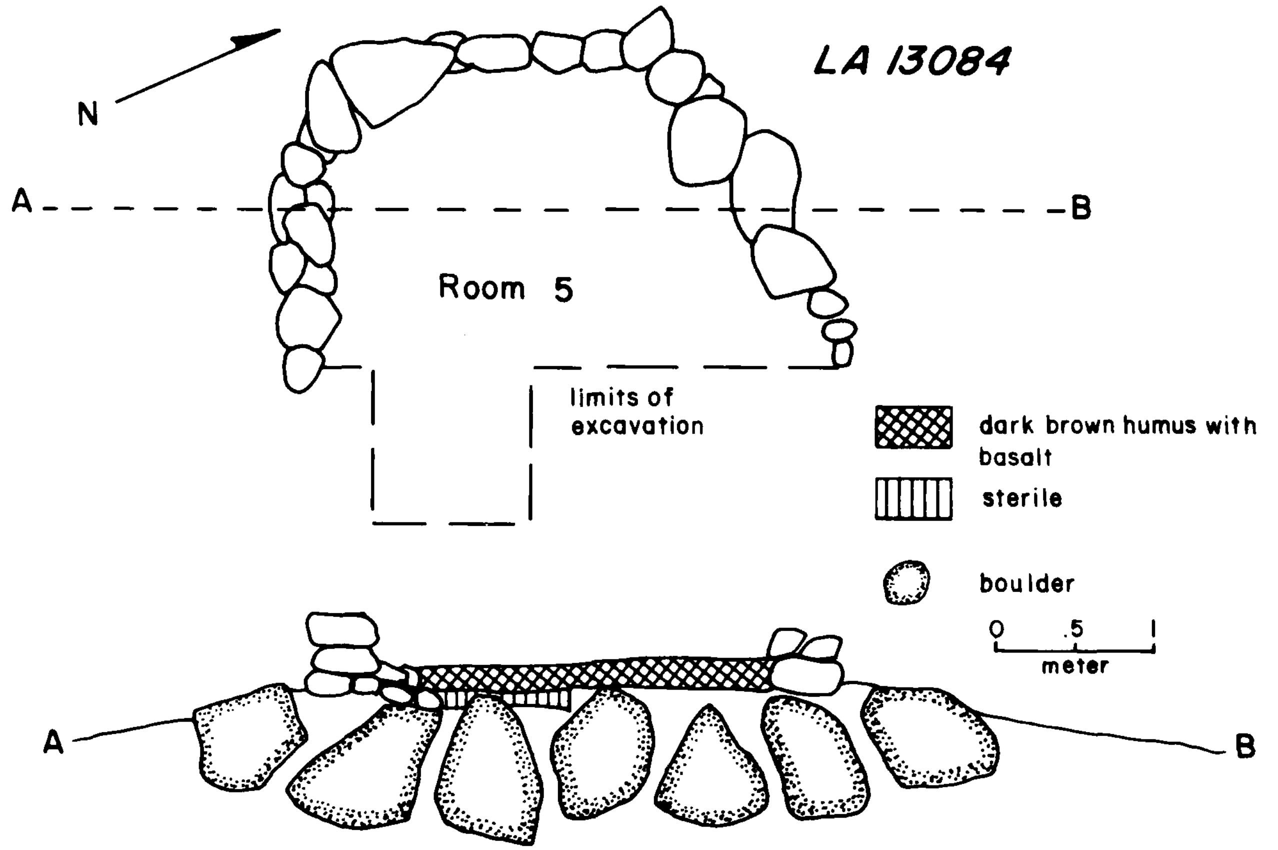

FIG. 9.9 LA 13084, Room 5 plan view and cross section

Corners: The northeast and northwest corners were rounded and interlocking.

Plaster: No evidence of plaster was found.

Entrances: There was no evidence of a formal entrance found, although the structure was open to the south.

Floors: A formal floor could not be found. The apparent occupation surface was at the base of 20 cm of room fill, or at the base of level B.

Roofing: No evidence of roofing was found.

Interior Features: None.

Room Fill: Three arbitrary 10 cm levels were defined. Levels A and B of Room 5 consisted of dark brown humus mixed with small pieces of angular basalt. Talus substrate was encountered in level C, which proved sterile of cultural materials.

Rubble: Many rocks were present within the room, but were difficult to distinguish from naturally occurring pieces. No estimate of volume was obtained.

Exterior Fill: The exterior of the room was not excavated.

Exterior Features: No exterior features were found.

ARTIFACTUAL ASSEMBLAGES

CERAMIC ARTIFACTS

Four red (glaze) body sherds were recovered from the fill in Room 5; three in the first 10 cm in the northern part of this arc-shaped structure, and one from the second 10 cm level. They all came from the same P-IV period vessel (a jar or olla).

LITHIC ARTIFACTS

A total of 681 items of debitage were recovered from this provenience. About half were found on the surface and half below the surface. One large piece of notched basalt, one core, and nine items of large angular debris were also recovered. Two assemblages were defined; Assemblage 10 included subsurface materials found within Room 5 (levels

A and B) and Assemblage 11 encompassed all surface grids in the provenience.

Material Selection

The overwhelming majority of flakes from Provenience 3, both inside and outside Room 5, were of 3701 basalt (99%). Other material taxa minimally represented were Pedernal chert/chalcedony (2 flakes), metarhyolite (1 flake), quartzite (2 flakes) and other (1 flake). The percentage of flakes with cortex varied from 49% in subsurface material to 57% in surface material. Of the flakes with cortex, roughly half had waterworn cortex and half had non-waterworn cortex, in both surface and subsurface assemblages. The core and seven items of large angular debris were 3701 basalt; two pieces of large angular debris and one biface were 3050 basalt.

Manufacture

Freehand technique was used exclusively in the Provenience 3 lithics. Very little small angular debris was present (2% subsurface and 6% surface). Roughly one-third of the lithics had platforms, and of these, 24% of the subsurface material was cortical; 45% of the surface material had cortical platforms. Of the flakes with platforms, 76% of those from subsurface excavation were single-faceted and 54% of the surface material with platforms had single-faceted platforms, indicating a core preparation technique.

The rather large percentage of cortical platforms may indicate primary reduction at this location. Further evidence for this interpretation is that over half of the small angular debris present was cortical (in both surface and subsurface material). Waterworn basalt, which tends to be tabular, may account for the relatively high percentage of cortical platforms.

Some difference in the length of whole flakes exists between surface and subsurface assemblages; nearly three-quarters of the surface material is 30 mm or less in length, while only two-thirds of the subsurface material is 30 mm or less. This is a reversal over the tendency for surface materials to be somewhat larger than subsurface materials in Room 1, Provenience 1.

Tool Use

No resharpening flakes were found at Provenience 3. The one large piece of notched basalt had no wear. The debitage utilization ratio for the surface material was .12:1, while for subsurface material it was .03:1. This pattern was noted at Room 1 and in other sites investigated, and has been suggested to represent a possible differential weathering process.

One fragment of a mano occurred at this site. It was made of fine-grained sandstone (2010). The outline shape was indeterminant but the cross section was generally planar. The number of grinding surfaces could not be determined. It occurred within Room 5 in a subsurface level.

FAUNA

No faunal remains were recovered from Provenience 3.

FLOTATION ANALYSIS

Both light and heavy flotation samples were analyzed. The light flotation samples were restricted to two samples from grid 51/80 in Room 5. The first sample, 200 ml, from level A contained a *Chenopodium* sp. seed, an *Amaranthus* sp. seed, and twig fragments from *Juniperus* sp. Although not counted, the presence of fecal material was noted. The second sample from Room 5, level B (600 ml), yielded two *Juniperus* sp. seeds in addition to fecal material (10-25%) and insect parts (1-10%). The heavy flotation residue from the level A sample yielded one small piece of plastic, two 3701 basalt flakes, two pieces of charcoal and four unidentified organic fragments. The heavy flotation residue from the level B sample contained seven 3701 basalt flakes, eight seed fragments, three pieces of charcoal, and one unidentified organic fragment.

SUMMARY

LA 13084 contained five separate structures; one was a possible two-room structure. Of the other four structures, two were open at one end, and two were closed, with circular shaped forms. All were constructed of locally occurring basalt clasts and boulders.

The lithic assemblages from this provenience were almost exclusively from glassy (3701) basalts, and unutilized debitage made up the principal portion of all assemblages. The freehand flaking technique predominated, and varying proportions of the assemblages were cortical, contained cortical platforms and small angular debris, indicating the differences in the stages of lithic reduction represented at the various locales within the site. In general, surface and subsurface assemblages were similar, but with respect to utilization ratios, subsurface material and material from enclosed structures showed lower utilization ratios than did surface material and material from open structures.

The ceramics on the site indicate a Pueblo IV date (ca. A.D. 1350-1400). Most of the ceramic material was recovered from in and around Room 2 (Provenience 2). A set of possible agricultural terraces was observed to the south of Provenience 1 and Provenience 2. Room 1 (Provenience 1) contained and was surrounded by several petroglyphs.

The faunal assemblage of LA 13084 consists of three bones. A minimum of two individuals are represented (one woodrat and one lizard). The type of individuals represented suggests that little or no meat consumption or processing occurred at LA 13084, though one value from the phosphorous analysis taken from the hearth in Room 2 suggests that it might have possibly been used for cooking of animals.

Chapter 10
LA 13086

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INTRODUCTION

LA 13086 was a multicomponent Anasazi P-III/P-IV site consisting of three noncontiguous masonry structures with a total of five rooms. It was located in White Rock Canyon on the east side of the Rio Grande between the mouths of Capulin and Medio Canyons. It was situated in a sediment filled basin created by large rock slides from the canyon wall. The site was located in the Upper Sonoran Juniper vegetative community (Drager and Loose 1977: Fig. II.2.1) with juniper trees, snakeweed, rabbitbrush, cholla and horseweed being common vegetation on and around the site. The junipers clustered on the rocky slope and talus base with sparse isolated trees intermixed with the luxuriant horseweed which dominated the open areas of the basin.

Three spatially discrete proveniences were defined, each corresponding to the noncontiguous masonry features (see Fig. 10.1). Provenience 1 consisted of an isolated masonry structure and a light artifactual scatter. A few diagnostic P-III and P-IV sherds were recovered from subsurface contexts, although well defined occupation dates could not be assigned. Provenience 2 consisted of a single block of three masonry rooms and a dense scatter of artifactual debris. Rio Grande Glaze Groups A and C were prominantly represented, suggesting a long-term, although intermittent, occupation during the P-IV period. Provenience 3 consisted of a single masonry room and a very light artifactual scatter. Ceramic materials and a single archeomagnetic date of A.D. 1175 ± 20 suggest a major occupation during the P-III period, although a few glazeware sherds were recovered in a subsurface context.

Numerous petroglyphs and a set of check dams and agricultural terraces were noted in the vicinity of the structures. Although the agricultural facilities were not investigated during the excavation phase, a series of soil tests were conducted by Stephen Fosberg and John Husler who documented chemical variability for sample plots within the basin. The results of these tests are presented in Fosberg and Husler (1979).

EXCAVATION APPROACH

An extensive surface collection was made in the vicinity of each of the proveniences. A total of 468 m^2 was collected with 1 x 1 meter horizontal control. One meter test pits were sunk into each room and into the immediate exterior of the rooms to determine natural stratigraphy. The tests were most extensive in Provenience 2. Two long trenches of contiguous grid units were excavated to the south and east of the Provenience 2 roomblock to determine horizontal extent of dense artifactual debris. Portions of two external grids were tested in both Proveniences 1 and 3.

All soil was screened through ¼ inch mesh, and some floor fill strata from Room 4 were additionally screened through 1/8 inch mesh. Flotation samples were taken from each stratum of each grid, with the exception of the long exploratory test trenches away from the roomblock of Provenience 2, where the samples were taken from every other grid.

Architecture

Provenience 1 included Room 1 and a collection area of 36 m^2 surrounding the room.

ROOM 1

Shape: Room 1 was a freestanding subrectangular masonry room.

Orientation: Its long axis was oriented 75° east of true north.

Condition: The room was greatly reduced, and was generally only one element high with the exception of portions of the north and west walls. Rubble had fallen throughout the interior and exterior of the room. There was no evidence of vandalism or rodent disturbance.

Rubble Dimensions: 2.70 m x 2.00 m.

Interior Room Dimensions

	Length	Width	Height
North Wall	1.90 m	0.26 m	0.56 m
South Wall	1.90 m	0.27 m	0.23 m
East Wall	1.20 m	0.21 m	0.25 m
West Wall	1.30 m	0.36 m	0.41 m

Interior Floor Space: 2.4 m^2

Walls: All of the walls were of similar construction and are described together below.

Type of Elements: The walls were constructed of local basalt clasts and incorporated two boulders as basal elements in the northeast and southeast corners.

Size of Elements: Boulders mark the southeast and northeast corners and are 60 cm and 45 cm high. Few elements were found in structure; they averaged 11-25 cm x 20 cm to 41-48 cm x 46 cm.

Placement and Construction of Elements: Basal elements were placed vertically and horizontally, at varying angles to the long axis of the wall. Only parts of the north and west walls had elements above the

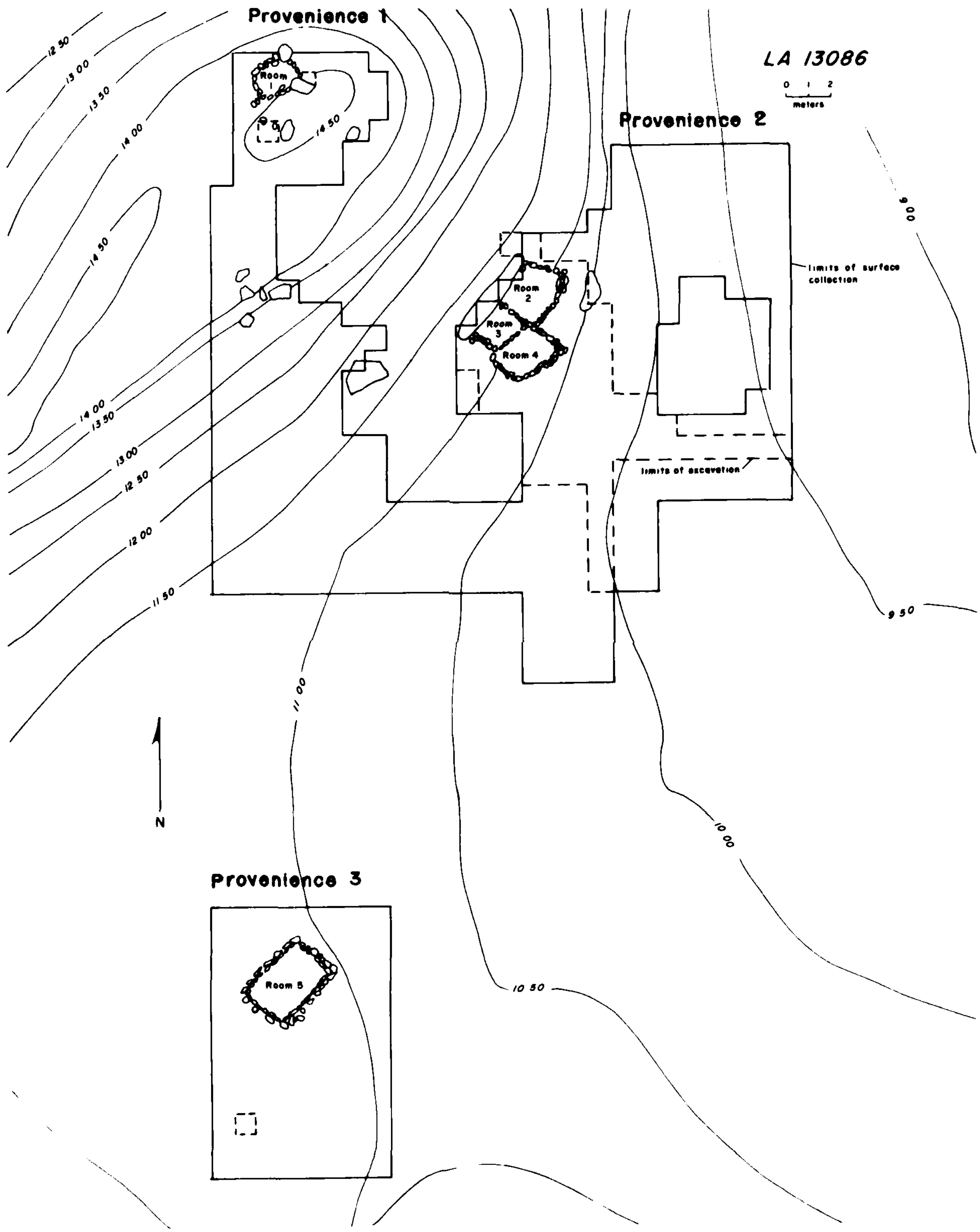

FIG. 10.1 LA 13086 Site Map, illustrating local topographic relief, site boundaries and excavation units.

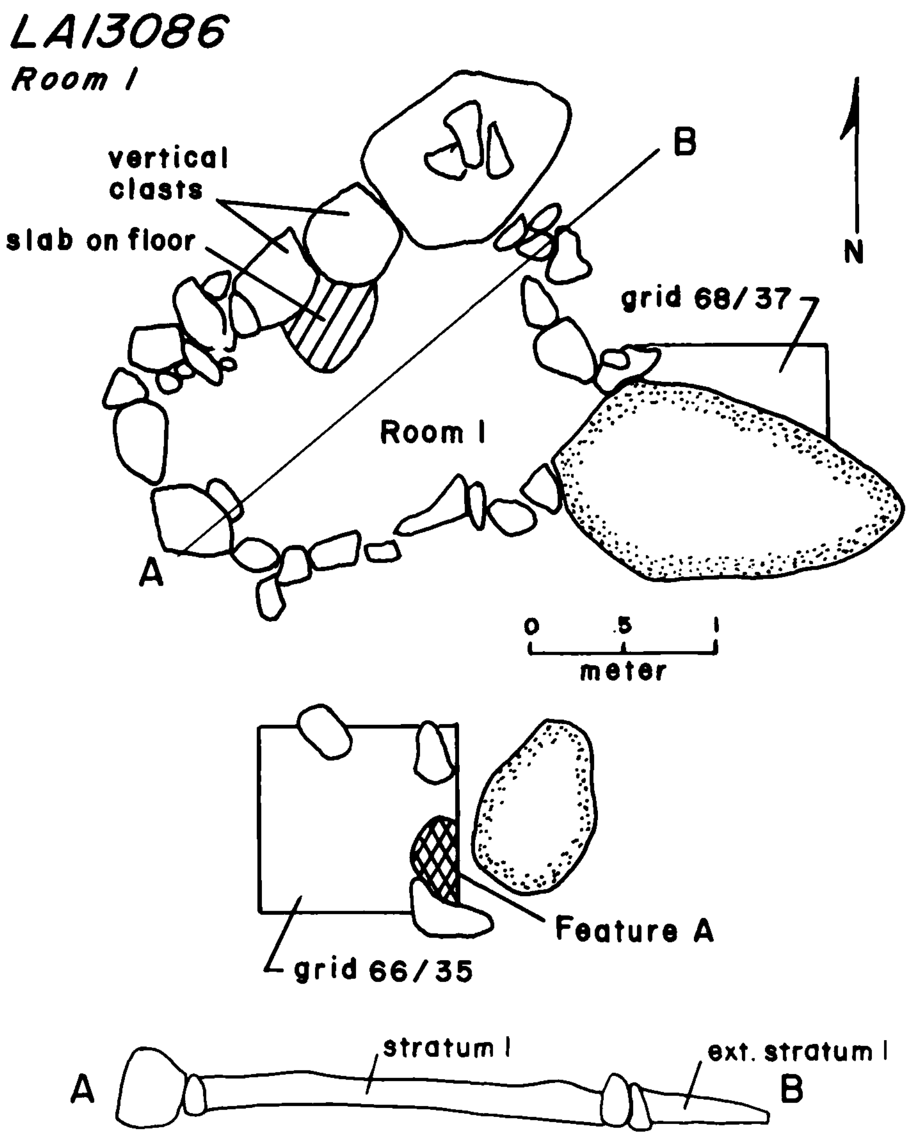

FIG. 10.2 LA 13086, Room 1, plan view and cross section.

base, including several elements on top of the northeast boulder. Those elements were stacked, rather than coursed, both overlapping and side by side.

Shaping of Elements: Unmodified.

Wall Facing: There was no evidence of wall facing.

Chinking: There were small basalt clasts, 4-10 cm in size, present among the interior rubble. These may have been chinking elements, but few of these were found in situ in the wall.

Mortar: No evidence of mortar was recovered.

Corners: Only the northwest and southwest corners were round and interlocking; on the east, the walls abutted the boulders.

Plaster: There was no evidence of plaster.

Entrances: There was a lack of strong evidence for the presence of a complete wall on the east, implying the possibility of an opening there. There may have been a gap ca. 52 cm wide, but preservation was not sufficient to determine this positively.

Floors: Although a prepared or hardpacked surface was lacking, a distinct change in the soil and artifactual content at the base of the wall elements may have reflected the presence of an occupation surface.

Roofing: No indication of roofing was present.

Interior Features: No interior features were present.

Room Fill: The uppermost room fill consisted of a layer of sand 3-5 cm thick, anchored by rubble, low grasses, and juniper needles. Below that was a dark brown soil (Stratum 1) consisting of mixed sand, clay, and occasional pumice deposits. This fill was 20 cm thick, terminating at the level of the base of the walls where there was a change to the reddish tan clay. Artifactual density diminished drastically in the lower 8 cm of the dark fill, and the clay below was sterile. There was no stratigraphic evidence of a sequence of occupations.

Rubble: A total of 0.451 m^3 of interior rubble was removed, stacked and measured. Since external trenching or excavation around the walls was not carried out, exterior rubble was not measured.

Exterior Fill: Only two exterior tests were made in Provenience 1. The north half of grid 68/37, adjacent to the east side of Room 1 on the north side of the boulder incorporated into the southeast corner of the room, was taken down through 20 cm of dark brown fill to the reddish-tan sterile clay. Artifacts were present only in the upper 10 cm of this test. No features were uncovered in this test.

Another external test was made south of Room 1, in grid 66/35. This was taken down ca. 20 cm to the sterile reddish-tan clay. Fill was similar to grid 68/37, intermixed with wall rubble, which did not extend down into the sterile clay. The majority of the artifactual material was found in the upper 5 cm of fill.

Exterior Features

Hearth (Feature A): In the southeast corner of grid 66/35 was a deposit of fine, grey, ashy soil and a concentration of fire-reddened or firecracked rocks. The ash occurred in the upper 7 cm of fill of Stratum 1, just below the surface blow sand. The shape of the feature was irregular and ambiguous; the ash was mixed with both the tan surface sand and the dark brown soil of Stratum 1. It measured ca. 30 cm x 50 cm, and was 7 cm deep. The stain abutted a boulder at the east edge of grid 66/35, and the boulder was fire-reddened at that point. Nine other small basalt clasts, averaging less than 10 cm, were intermixed with the ash stain and were also fire-reddened. They were not structurally arranged. Only grey ash stain was present in the soil. There was no charcoal present (it appears that this was a hearth or fire very near the present surface). No pit or lens profile was visible.

Provenience 2

Provenience 2 included a block of three rooms, a dense scatter of artifactual debris, and several petroglyphs. The densest area of artifactual material was southeast of Room 4, on the gentle slope in front of the roomblock, covering an area ca. 9 meters in diameter. Petroglyphs were pecked into an outcrop or boulder two meters north of Room 4 and two meters east of Room 3.

The interiors of the rooms were completely excavated, and large areas around the outside of the roomblock were excavated on the north, east, and south. On the west was the dominant outcrop, with a steep slope rising west of that, toward Provenience 1. Two extensive trenches to the east and south, at right angles to one another, were used to determine the horizontal extent of the artifactual deposit below the roomblock. The strata of the area defined were then stripped off with shovels and run through ¼ inch screen.

Roomblock Description: The roomblock was built against the east side of a large upright boulder which formed the back wall of two of the rooms.

Shape: The roomblock was L-shaped, with Rooms 2 and 3 abutting the boulder and Room 4 adjoining on the east side of the southern Room 3.

Orientation: The axis of the abutted boulder face was oriented 35° east of true north, and Room 4 projected almost perpendicularly to that axis from Room 3, with an inclination of 45°. The roomblock measured 5.3 m x 3.6 m.

ROOM 2

Shape: Room 2 was a quadrangular masonry room. It abutted the outcrop on the west, and was the northernmost room of the block (see Fig. 10.3).

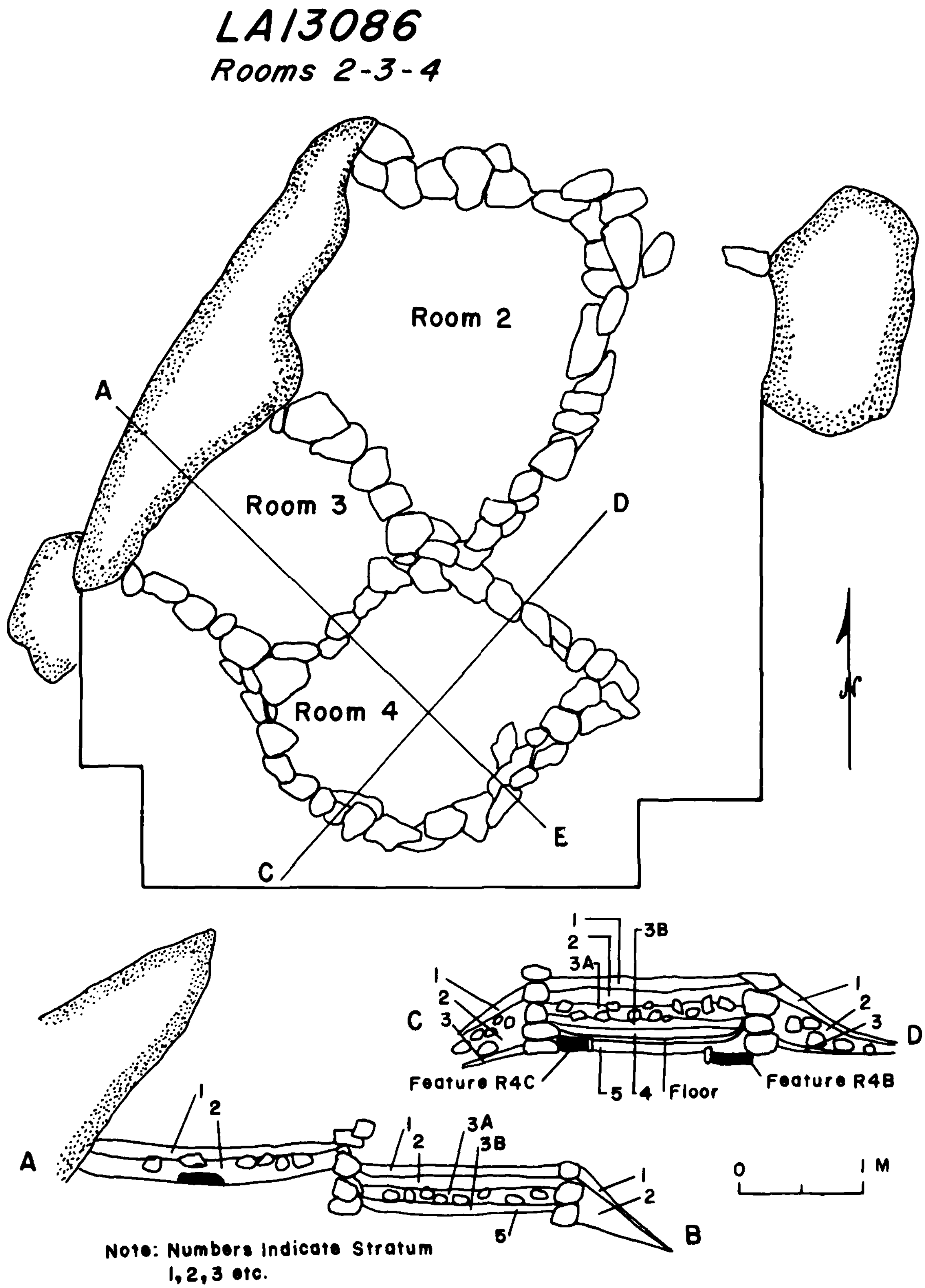

FIG. 10.3 LA 13086, Rooms 2, 3 and 4, plan view and cross sections

Orientation: The long axis was oriented 45^0 east of true north.

Condition: This room was partially reduced, with walls standing up to 80 cm high, and was filled with rubble. A juniper was growing up through the middle of the north wall, displacing several large elements. Juniper roots were present through much of the room interior.

Interior Dimensions

	Length	Width	Height
North Wall	1.80 m	0.60 m	0.60 m
South Wall	2.00 m	0.55 m	0.45 m
East Wall	2.40 m	0.45 m	0.50 m
West Wall	1.85 m	N/A	1.25 m

Interior Floor Space: 4.0 m^2

Walls: Room 2 consists of three walls of stacked basalt clasts and one wall formed by the basalt outcrop. The south wall was shared as the north wall of Rooms 3 and 4, and was of slightly different construction. The east and north walls appeared to have been built as a single unit, with a curving northeast corner.

Type of Elements: They were built of unmodified local basalt clasts.

Size of Elements: The elements ranged in size from 25 cm x 25 cm to 74 cm x 40 cm. Notably, many of the elements tended toward the larger end of the range.

Placement and Construction of Elements: The elements were laid horizontally, with larger elements parallel to the long axis of the wall. They were stacked, rather than coursed, due to the extreme variability of the element sizes. The walls were generally only one element thick, and were standing two elements high.

Shaping of Elements: Unmodified.

Wall Facing: The elements were not arranged to present a smooth or flat face to the interior or exterior.

Chinking: Some chinking between large elements with small basalt clasts was noted.

Mortar: Some evidence of mortar was present among the lower elements.

Plaster: No plaster was present on the walls, although some of the interior fill did appear to be a washed-down plaster.

Corners: The north and east walls had a round, interlocking corner, indicating that they were built at the same time. The north wall abuts the basalt outcrop on the west. The east wall abuts the south wall, suggesting that Room 2 was built after Rooms 3 and 4, and was added to the exterior of them.

Entrance: No evidence of an entrance or doorway through the walls of Room 2 was present on either the interior or exterior of the roomblock.

Floor: No prepared or used floor was evident inside Room 2. Interior fill continued down to sterile clay at the base of the walls, with no hardpacked surface noted.

Roofing: No evidence of roofing was present.

Interior Features: No interior features were present.

Room Fill: Three strata were recognized in Room 2. Stratum 1 consisted of loose juniper droppings and wall rubble. It covered the entire room and ranged from 4-9 cm in thickness. Stratum 2 consisted of loose, soft, light brown soil intermixed with considerable wall fall. The soil had a high humic content and many small roots through it. This stratum ranged from 10-20 cm in thickness. Stratum 3 consisted of a hardpacked brown soil mixed with a high pumice granule content. Large juniper roots and wall fall also characterized the fill of this stratum. No concentrations of charcoal or ash were present, but some charcoal flecks were noted. Thickness ranged from 10-20 cm. No floor was found. The room was excavated to the base of the walls, where there was a radical change in soil to an orange, sterile clay.

ROOM 3

Shape: Quadrangular.

Orientation: It abutted the outcrop on the west, Room 2 on the north, and Room 4 on the east. The long axis oriented 46^0 east of true north (see Fig. 10.3).

Condition: This room was partially reduced, with walls standing up to 65 cm, and was filled with rubble. A large juniper was growing immediately outside the south wall, with roots extending through and under the wall into the Room 3 interior.

Interior Room Dimensions

	Length	Width	Height
North Wall	1.70 m	0.50 m	0.43 m
South Wall	1.35 m	0.35 m	0.65 m
East Wall	1.70 m	0.35 m	0.52 m
West Wall	1.58 m	N/A	N/A

Interior Floor Space: ca. 2.5 m^2

Walls. Room 3 consisted of one wall formed by the face of the outcrop and three masonry walls. These latter were of similar construction and will be discussed together below.

Type of Elements: The masonry walls were constructed of unshaped local basalt clasts.

Size of Elements: Wall elements ranged in size from 15 cm x 20 cm to 30 cm x 70 cm.

Placement and Construction of Elements: They were laid horizontally, parallel to the long axes of the walls,

PLATE 10.1 LA 13086, Provenience 2, Rooms 2, 3 and 4, looking northwest

both side by side and overlapping. Evidence of pumice tempered adobe mortar between the elements is present. Three to four vertical courses remained standing, one element wide.

Shaping of Elements: Unshaped.

Wall Facing: The masonry was not faced, nor placed to present a flat surface to the interior.

Chinking: No chinking was apparent.

Mortar: Pumice tempered adobe was present between wall elements.

Plaster: Some very fragmentary areas of wall plaster were preserved, but much of the interior fill appeared to consist of plaster wash.

Corners: The north and south walls abutted the outcrop to the west, and the eastern corners were interlocking.

Entrances: No entrance was present.

Floors: The floor was a well prepared adobe surface. It had been leveled above ground surface by putting in fill. The floor was very slightly basin-shaped in that the center was a couple of centimeters below the edges. The floor also curved up at the wall bases to become wall plaster.

Roofing: Roofing was not evident.

Interior Features: No interior features were present in this room.

Room Fill: Two strata were present in Room 3. Stratum 1 consisted of the same loose juniper needles and humus as was present in adjoining Room 2. It ranged from 1-10 cm in thickness and contained very little cultural material. Stratum 2 consisted of brown sandy soil, mixed with wall fall rubble and large and small juniper roots. Near the base of Stratum 2 were occasional clumps or lenses of the pumice-rich adobe, presumably wash from wall plaster and mortar. These did not constitute definitive strata, being discontinuous deposits. They did, however, occur in immediate contact with the floor below, perhaps indicating the first postoccupational deposition. Stratum 2 ranged in thickness from 20-30 cm, and at its base was defined by the prepared floor surface. The majority of the ceramic and lithic materials from Room 3 occurred in this stratum, though there were no definitive floor contact artifactual associations.

ROOM 4

Shape: Room 4 was a quadrangular masonry room in the southeast corner of the Provenience 2 roomblock. It abutted Room 3 on the west, sharing a common wall, and one wall of Room 2 abutted Room 4 on the north, for a short distance (see Figure 10.3).

Orientation: The long axis oriented 45^{0} east of true north.

Condition: Room 4 was partially reduced, with masonry walls standing up to 72 cm high. Rubble was quite dense both inside and outside the room. Unfortunately, the east wall was unintentionally removed when the rubble was pulled.

Interior Room Dimensions

	Length	Width	Height
North Wall	2.10 m	0.35 m	0.45 m
South Wall	2.20 m	0.30 m	0.50 m
East Wall	2.10 m	0.20 m	0.50 m
West Wall	1.90 m	0.30 m	0.75 m

Interior Floor Space: ca. 4.0 m^2

Walls: Because of the sequence of construction, the walls of Room 4 were not the same and are described separately. The location and construction details of the east wall were not available.

West Wall

Type of Elements: The west wall was made of unshaped local basalt clasts, probably wet laid horizontally, one element thick and parallel to the wall axis. The west wall was standing three to five elements high in fairly even courses.

Size of Elements: The elements ranged from 20 cm x 20 cm to 30 cm x 55 cm, and averaged 30 cm x 30 cm.

Placement and Construction: The west wall was shared with Room 3, and was in fact originally constructed as the east wall of Room 3.

Shaping of Elements: Unshaped.

Wall Facing: The wall was not faced or chinked on either side.

North and South Walls

Type of Elements: Elements were mostly unmodified local basalt clasts, but also included several fragments of vesicular basalt metates and manos.

Size of Elements: The vertical elements ranged up to 35 cm x 50 cm and were interspersed between coursed segments of the walls. The horizontal elements ranged from 20 cm x 20 cm to 35 cm x 35 cm. They were one element thick, and were laid at varying angles to the wall axis.

Placement and Construction: The north and south walls abutted the west wall, and were apparently constructed after Room 3 was completed. These walls were characterized by mixed construction techniques, including both horizontal courses and large vertical elements.

Shaping of Elements: Unmodified.

Wall Facing: The walls were not faced.

Chinking: There was no evidence of chinking.

Mortar: Clear evidence of mortar was lacking.

Plaster: There was definite evidence of wall plaster extending up the wall interiors from the floor plaster. It consisted of pumice tempered adobe mud and was 1.5 cm thick. The wall/floor interface was smooth with the plaster continuing up from the floor, up the walls. No plaster was preserved on the wall exteriors.

Entrances: No entrances were evident, interior or exterior.

Floor: A very well preserved floor was found in Room 4. It was constructed of pumice tempered adobe, apparently the same as the wall plaster, ca. 1.5 cm to 2 cm thick. The floor was leveled by bringing in fill, which contained much artifactual material. The floor was very well smoothed and the edges curved up to merge with the wall plaster. The eastern third of the floor was eroded away.

Roofing: No roofing material was evident.

Interior Features: Several interior features were present in various strata of Room 4. These included an above-floor hearth, a burned area, and two subfloor hearths.

Hearth 1 (Feature R4A): Feature R4A was a hearth located near the southwest corner of Room 4. This was a slab-lined feature built against a large upright slab wall element of the south wall. It was contained within Stratum 4A, below the adobe wall plaster wash and above the fill above the prepared floor, such that it was not vertically associated with the floor. Feature R4A was roughly rectangular, measuring 27 cm x 20 cm. It was constructed of ten upright, thin, unshaped basalt slabs, ranging from 10 cm x 15 cm to 15 cm x 20 cm. Contained within the elements was a very dark fill, including chunks of charcoal. Some of this fill had spilled out into the room interior, creating a thin lens, 5 cm to 7 cm thick, of ash and charcoal extending ca. 70 cm around the hearth. Within this lens was a rather distinctive assemblage of basalt debitage, stratigraphically discrete from the lithic materials above and below Stratum 4A. The lens of Stratum 4A did not extend across the whole floor on the interior of Room 4, but was confined to the area around Feature R4A.

Hearth 2 (Feature R4B): Feature R4B was a subfloor hearth built against the north wall of Room 4. It was rectangular in shape, with the room wall forming the north long wall of the hearth. The rest of the perimeter of the feature was confined by a combination of adobe plaster and basalt slabs, including one basalt mano fragment. The floor of the feature was flat and smoothed, made of the same fired adobe that formed part of the walls. The interior of the feature measured 58 cm x 38 cm, and it was 8 cm deep. Fill consisted of light grey ash, which was partially disturbed by the presence of several juniper roots. This hearth appeared to have been placed through the prepared floor at the base of Stratum 4B, excavated down into the subfloor fill of Stratum 5. A few sherds were found in the ash fill.

Hearth 3 (Feature R4C): Feature R4C was another subfloor hearth against the south wall of Room 4. It was similar in construction to R4B. The hearth was rectangular. It was built against the wall elements of the south wall, and enclosed on the north, east and west by thin basalt slabs and adobe. The bottom of it was fired adobe. The hearth was filled with grey ash. This feature was not as well preserved as R4B. It was located in the part of the room where the floor surface was not preserved, so that its association with the floor level was somewhat ambiguous, though at least one slab was standing up to the level of the floor. Additionally, many of the slabs containing the fill had fallen, and the ash had spilled out into the surrounding floor fill. The hearth measured approximately 30 cm x 30 cm, and was 15 cm deep.

Burned Area (Feature R4D): Feature R4D was a burned, blackened area in the center of the floor, at the base of Stratum 4B. It measured 40 cm x 41 cm, and was roughly circular. There was a dark charcoal and ash deposit on top of the burned area, in direct contact with the floor. It was circular, 20 cm in diameter and ca. 1 cm thick. A flotation sample was taken from this deposit. On top of the burned area of floor was the intact base of a blackened utility ceramic vessel. Sherds of the upper portion of this vessel were scattered around the base and the stain, in direct contact with the floor.

Room Fill: Seven distinct stratigraphic units were present in Room 4, although each stratum did not extend continuously across the whole room.

Stratum 1 consisted of juniper needles and large rubble blocks. The juniper material covered only the north and west grid units in the room and ranged from 0 cm to 13 cm thickness. Only a few pieces of lithic debitage were found when this was screened through ¼ inch mesh.

Stratum 2 consisted of loose, medium brown, friable soil, also with considerable quantity of wall rubble. It ranged in thickness from 1 cm to 24 cm, averaging ca. 8 cm. This loose sandy fill occurred all the way across the room, and contained moderate amounts of ceramic and lithic artifacts.

Stratum 3A was composed of large quantities of wall rubble in a matrix of hard, pumice filled, clayey yellow brown soil. This matrix would appear to be plaster washed down from the walls, filled with large clasts from the walls having fallen in. This stratum ranged from 2 cm to 15 cm in thickness, averaging ca. 9 cm. In the center of the room, this stratum ended abruptly.

Stratum 3B was composed of the same hard fill as that in Stratum 3A, but the wall rubble elements were not present. These units were separated stratigraphically to provide a possible chronological determination of the wall collapse event. The contents of Stratum 3B probably were deposited shortly after the abandonment of the structure, in the early phases of wall decomposition. This stratum ranged from 2 cm to 14 cm in thickness, averaging ca. 8 cm. In the center of the room, this stratum ended abruptly.

Stratum 4A does not exist as a discernible unit in all of the grid squares in Room 4. It was located in the southwest corner of the room and is directly associated with Feature R4A. The fill consists of greyish brown soil filled with ash and charcoal flecks and chunks which were spilled or spread out into the room interior, forming a thin lens, 5 cm to 7 cm thick, extending to ca. 70 cm around the hearth. This stratum is underlain by the same soil as was under Stratum 3B in the rest of the room. It appears obvious that this stratum and feature represent a short episode of occupation after the major occupation, but shortly prior to the decomposition and fall of the walls.

Stratum 4B was composed of soft, friable, mixed and mottled dark brown and greyish brown soils, and was basally defined by a well-prepared adobe floor. This floor surface curved upward at its margins to form wall plaster. Stratum 4B ranged in thickness from 4 cm to 14 cm, and averaged ca. 10 cm thick. This stratum was screened through ¼ inch and 1/8 inch screen. Stratum 4B was very rich in artifactual debris, containing ceramic and lithic debris, several small worked pieces of turquoise, as well as two almost intact ceramic vessels: an Espinoso G/P bowl (Vessel No. 2) and a Blind Indented Corrugated jar (Vessel No. 58). This stratum include artifacts in situ on the floor and presumably represented the major occupation of Room 4.

Stratum 5 was directly underneath the floor that constituted the base of Stratum 4B. It consisted of soft, friable, brown soil with flecks of charcoal and ash. It ranged from 4 cm to 10 cm in thickness, averaging ca. 6 cm, and was underlain by a hard, sterile, clayey soil. Features R4B and R4C, which are associated with the prepared floor of Stratum 4B, are intrusive into Stratum 5 but their contents were distinct from the fill of that stratum.

Stratum 5 is open to several alternative interpretations for its deposition. It could represent extramural occupation fill outside of Room 3. It is clear from the abutment sequence that Room 4 was added later to the walls of Room 3, which has interlocking corners. Ceramic vessels found in the fill of Stratum 5 include a single Cieneguilla G/Y bowl, a Jemez B/W bowl, and four Blind Indented Corrugated jars. Only the Cieneguilla G/Y bowl may predate the predominantly Glaze C occupation indicated by the vessels on the floor in Room 4. Alternatively, the fill could have been purposely brought in to level the floor during construction of Room 4, which would tend to indicate that the room was built before Glaze C times, and included first a Glaze A occupation, followed by a Glaze C occupation.

Exterior Features: Rooms 2, 3, and 4 were considered together for exterior features and computation of rubble since they were a single roomblock and individual room rubble was not distinguishable.

No constructed exterior features were discovered in the excavation of 53 m^2 in front of the roomblock, primarily to the south and east. However, a dense concentration of ceramic and lithic debris was present in the form of a trash midden, located ca. 4 m southeast of the front of Room 4. This midden was ca. 30 cm deep, but the assemblages from various strata used in excavation did not indicate distinct, separate episodes of occupation and deposition; the trash was homogeneous in content.

Rubble: A total of 5.77 m^3 of rubble was present from Rooms 2, 3, and 4. Interior rubble totaled 3.13 m^3.

Provenience 3

A one meter test pit initiated excavation, to locate the walls and to determine the stratigraphic sequence present inside the room. It was determined that the fill was homogeneous all the way down to the floor, averaging 38 cm in depth. Excavation was concentrated on the room interior, and only in a single one meter grid in the northeast corner of the room was there excavation outside of the room, primarily to obtain details of wall construction. The interior fill was removed with trowels and screened through ¼ inch mesh.

ROOM 5

Shape: Room 5 was a rectangular surface structure located ca. 35 m southwest of the Provenience 2 roomblock (see Fig. 10.4).

Orientation: The long axis of the room was oriented to 41^{0} east of true north. There were no adjoining rooms.

Condition: Room 5 was substantially reduced, with a single element wide alignment of large basalt clasts indicating the wall locations. Minimal rubble was present, particularly when compared to the standing walls and abundant rubble present in Provenience 2.

Interior Dimensions

	Length	Width	Height
North Wall	2.49 m	0.77 m	0.42 m
South Wall	2.36 m	0.50 m	0.38 m
East Wall	3.23 m	0.70 m	0.36 m
West Wall	3.12 m	0.48 m	0.38 m

Interior Floor Space: 7.7 m^2

Walls

Types of Elements: The walls of Room 5 consisted of a rectangular alignment of large, subangular, local basalt clasts.

Size of Elements: The elements ranged in size from 20 cm x 12 cm x 9 cm to 38 cm x 15 cm x 20 cm.

Placement and Construction: Stones were unmodified. There were no substantial amounts of masonry rubble present, suggesting that the large stones served as footings for a defunct adobe wall.

Shaping of Elements: Subangular.

Wall Facing: Inside of the large clasts, the walls were lined with upright basalt slabs, ranging in size from 10 cm x 20 cm to 20 cm x 35 cm, and 3 cm to 5 cm thick. These vertical slabs formed the surface for the wall plaster.

Mortar and Chinking: Evidence of either mortar or chinking was lacking.

Corners: All corners appeared to be interlocking with a single clast element forming the joint at both the northwest and southeast corners. A single construction event is indicated for Room 5. The corners of the room were neatly rounded through use of the plaster, even where there were gaps or right angle abutments of the facing slabs. This was in contrast to the intersection of the wall and floor plasters, wherein there was a distinct angle instead of a gradual curve.

Plaster: The plaster consisted of a 2 cm to 3 cm thick layer of adobe over the upright slabs.

Entrance: None was evident, either as gaps in the aligned clasts or in the wall plaster, at floor level.

Floor: The floor was a prepared, flat surface. It was made of hard, solid adobe plaster, 2 cm thick. The floor was well preserved in the southern portion of the room but was only intermittently preserved in the northern portion.

Roofing: No indications of roofing materials or construction were present.

Interior Features: Four interior features were present. These were R5A, an ash deposit; R5B, a bin; R5C, a hearth; and R5D, a subfloor bin.

Hearth (Feature R5C): Feature R5C was a large, deep hearth located in the center of the room. It was roughly circular, and bowl-shaped in cross section. The diameter at the top was ca. 47 cm, and at the bottom it was ca. 33 cm. The hearth was 30 cm deep. It was constructed of adobe over thin basalt slabs lining a subfloor pit. There was a raised adobe rim or collar around the top of the hearth pit about 2 cm above the level of the floor, about 6 cm wide. This rim, like the interior of the hearth, was very heavily fire-reddened, which permitted sufficient samples for archaeomagnetic analysis to be taken. The hearth was filled with a homogeneous deposit of sandy ash.

Ash Deposit (Feature R5A): Feature R5A was a dense concentration of ash lying directly on top of the floor, under the sandy fill of Stratum 1. This deposit of ash measured 50 cm x 55 cm, and was of fairly uniform thickness, 4 cm to 6 cm. No containing elements or formalized construction were evident. Feature R5A was located in the center of the north half of the room,

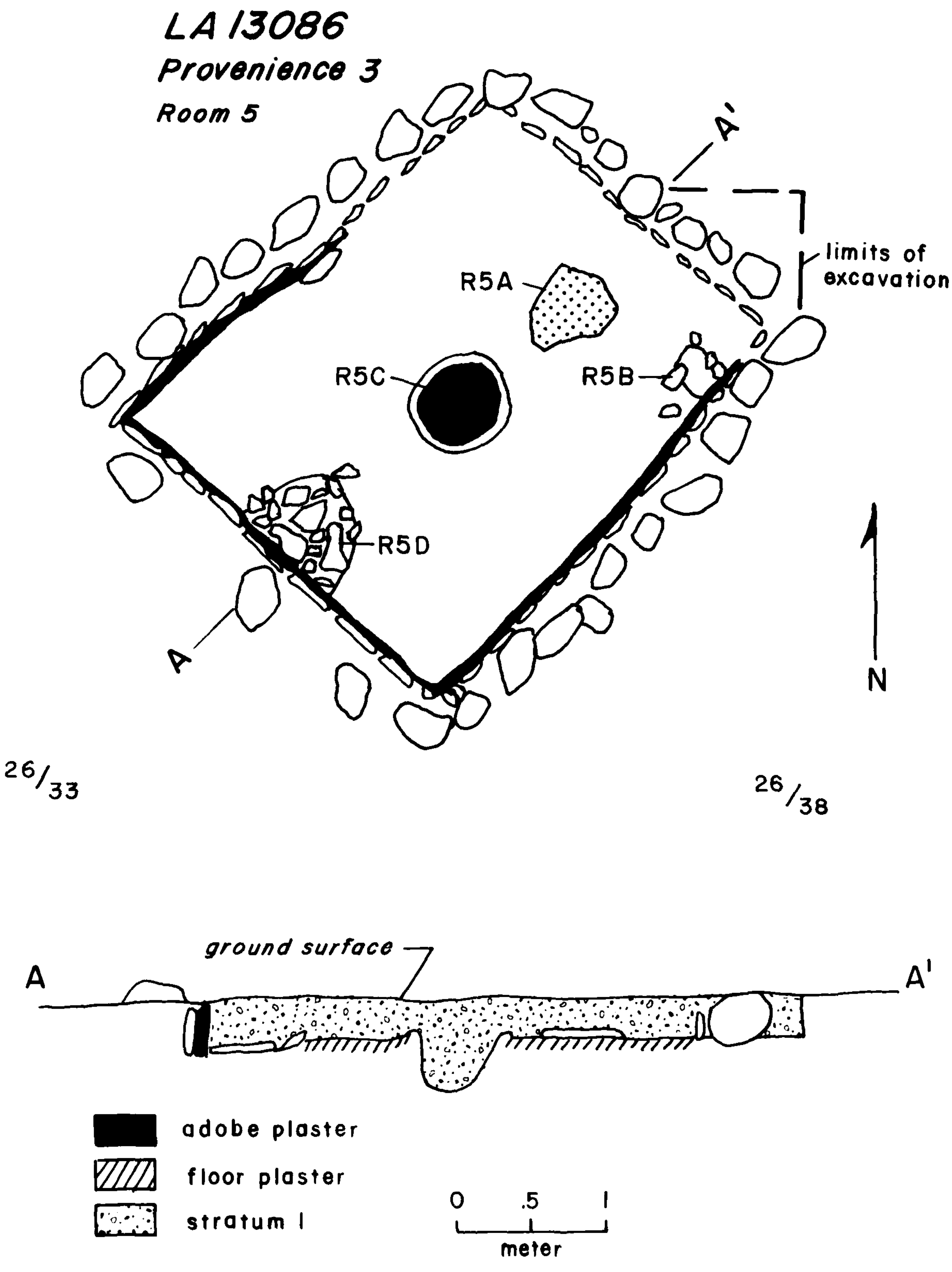

FIG. 10.4 LA 13086, Room 5 plan view and cross section

ca. 30 cm from the central hearth (Feature R5C). No artifacts were directly associated with this feature. The phosphorous content analysis showed this area to have average values and thus it could not be defined as a cooking hearth.

Bin (Feature R5B): Feature R5B was a bin built against the east wall, near the northeast corner. It was constructed of thin unshaped local basalt slabs, arranged to form a rectangular, box-like enclosure measuring 42 cm x 30 cm. Upright slabs formed the sides, the wall formed the back, and horizontal slabs formed the floor. Curiously, the floor of this feature was ca. 10 cm above the prepared adobe floor of the room. The space between was filled with similar soft brown friable soil as was the inside of the bin. Associated with the bin were several sherds of one vessel, a hammerstone and a burnt corn cob fragment.

Subfloor Bin (Feature R5D): Feature R5D was a subfloor feature located against the center of the south wall. This feature was constructed of thin local basalt slabs, enclosing a rectangular space, ca. 55 cm x 36 cm, abutting the south wall. It was recessed ca. 8 cm below the floor. The adobe floor did not extend under this feature. The slabs lined the bottom and sides of the feature. There are some indications of possible adobe plaster covering some of the upright and bottom slabs. Fill inside the feature was the same as the Stratum 1 of the general room fill. Associated artifacts included corrugated sherds, black-on-white sherds, and a large chunk of pumice. No ash or charcoal was present in this feature.

Exterior Features: No exterior excavation was conducted, except for limited testing to determine wall construction.

Rubble: A total of 1.64 m^3 of rubble was present.

ARTIFACTUAL ASSEMBLAGES

CERAMIC ARTIFACTS

Minimum no. of vessels: 82
Total no. of sherds analyzed: 842
Average no. of decorated sherds per vessel: 7.52
Average no. of utility sherds per vessel: 16.75
Average no. of plainware sherds per vessel: 2.5

	Painted Wares			Utility		Plain	
Components	Bowls	Jars	Canteen	Bowls	Jars	Bowls	Jars
Pueblo III	8	–	–	–	5	–	–
Pueblo IV	35	13	1	–	18	1	1

In a total of 842 sherds examined, a minimum of 82 vessels was identified. A large number of very small sherd fragments (1106) were examined but they were not included in the formal analysis summarized here. After a certain point in the analysis, using a method of cumulative curve (ogive), it became apparent that no new information (that is, additional minimum vessels) was being obtained (see Appendix I, Vessels 94-99). Although the inclusion of these small fragments in the analysis would have increased the average number of sherds per vessel, it would have provided no other new information.

Ceramic data followed much the same pattern as that of other prehistoric sites in White Rock Canyon with a small Pueblo III assemblage, mainly Santa Fe B/W with associated indented corrugated wares, and a larger Pueblo IV collection of Rio Grande glazes, dating mainly between A.D. 1300 and 1500 (see Table 10.1).

The bowl-jar ratios of the later occupation shows slightly more jars than bowls. Both decorated and utility jars have been included in figuring bowl-jar ratios, as it seemed probable that the function of all jars might be the same. Decorated jars are not common in the Pueblo III assemblage, but the number of utility jars appears to make up for the deficiency. Among the glazes of the Pueblo IV period, decorated jars are more common. The bowl-jar ratios are 1.6:1 and 1.1:1, respectively for P-III and P-IV.

The majority of the glazewares fall into the late Glaze A yellow group, which indicates a late 14th century occupation, probably continuing into the 15th century, with Espinoso Glaze Polychrome (G-P) vessels being common. Only one of the later vessels was identified, a Puaray G-P bowl, which may post-date the major occupation. Most of the vessels (33) were tempered with basalt scoria, indicating local manufacture. Three vessels of Cieneguilla G/Y were probably manufactured in the Galisteo Basin at San Marcos Pueblo (LA 98) and others from the Tonque area, including Tonque Pueblo (LA 240) among others. With one or two possible exceptions, all of the 18 utility vessels were of local manufacture in White Rock Canyon, the Pajarito Plateau, or Mesa Negra.

Two unusual vessels were noted in the P-IV or early to middle Glaze A group. One of these was a locally made stirrup-handled canteen, a form which is rare in the Rio Grande glazes, but relatively common in the Cochiti area and at White Rock Canyon-Pajarito sites.

The second vessel is an unusual Glaze A red (San Clemente G-P?) bowl, with local scoria temper (3431), which has an exterior white matte paint design over a red slip, forming a negative design in a band around the bowl exterior. No similar design treatment has been reported at sites in the Rio Grande. White matte paint does occur on vessels in Group A glazes, especially in the upper Middle Rio Grande villages, but no negative design is known.

Provenience 1

Provenience 1 included Room 1 and a surface collection area of 36 m^2. Seven sherds representing a minimum of three vessels were recovered from this provenience. Five of the sherds were from a Prieta Smeared Indented jar/olla, dating to the P-III period. They were found in Stratum 1 within the room and on the subsurface outside the room. A San Clemente G-P body sherd dating to the P-IV period, and one sherd from a Corrugated Blind Indented jar were recovered. On the basis of the majority of sherds in this provenience, Room 1 has been tentatively assigned to the P-III period but such a designation is ambiguous.

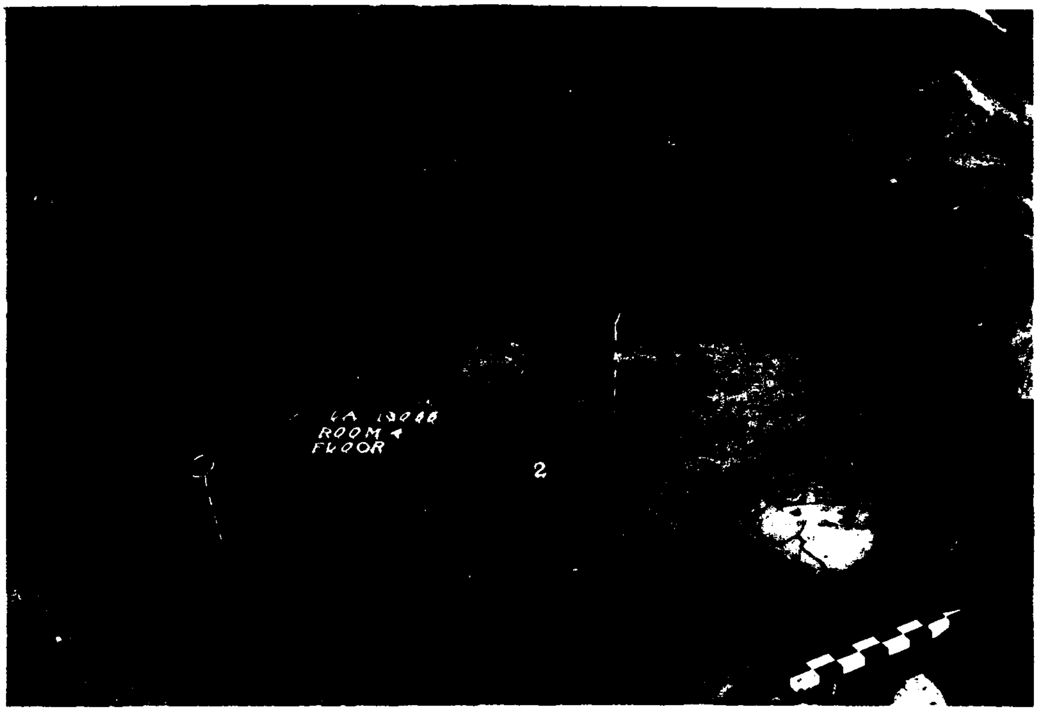

PLATE 10.2 LA 13086, Room 4. Note vessels on floor.

Provenience 2

Provenience 2 consisted of the three-room cluster (Rooms 2-4), a dense scatter of artifactual debris, and several petroglyphs. Seventy-four square meters were excavated and an additional 164 m^2 to the north, east and south of the room cluster were surface collected. A total of 176 sherds representing a minimum of 41 vessels were located within the three-room cluster. In the grids outside the rooms, 540 sherds representing a minimum of 70 vessels were observed. Of these, 98 sherds were from the surface (see Table 10.3).

The majority of painted sherds dated to the P-IV period; only five of 55 minimum painted vessels in Provenience 2 dated to the P-III period. With one exception, the P-III vessels were distributed outside the room cluster.

The P-IV painted sherds suggested a lengthy occupation (ca. A.D. 1375-1500). Differences and distribution of these wares could not be distinguished; they occurred inside and outside the room cluster in all levels. From the fact that P-III painted sherds occurred outside the room cluster and the tendency for the P-IV sherds to occur both inside and outside, we may tentatively infer that the P-III occupation, if there was one at this provenience, was not centered around the room cluster, while the P-IV occupation definitely did include this architectural feature. Also contributing to the pattern of P-III sherd distribution may have been a clearing out of the room cluster area during construction, which resulted in a relocation of the P-III ceramics to the area outside the structures.

Provenience 3

Provenience 3 was a rectangular surface structure which was excavated, and 73 m^2 surrounding the room which were surface collected. In addition, a one meter square test pit was excavated in the southern portion of the collection area.

From Room 5, three sherds were recovered from the surface and 100 from Level 1. Two sherds were recovered outside the room, all from the surface. Inside Room 5 a minimum of 15 vessels were represented; outside, a minimum of two vessels were represented. Inside the room, painted wares dated to both P-III and P-IV, but the majority were referable to P-III. P-III materials were associated with the subfloor bin (Feature 5D), while one P-IV sherd (a red glaze body sherd) along with P-III ceramics, was associated with the deep hearth (Feature 5C). An archeomagnetic sample from this hearth yielded a date of A.D. 1175 ± 20. Associated with Feature 5B, a bin, were four sherds of a Santa Fe B/W (P-III) bowl.

On the basis of the association of P-III sherds and the archeomagnetic date with the hearth and bins within Room 5, as well as the fact that a majority of sherds at the provenience were datable to the P-III period, an initial P-III occupation is assigned to this structure. A secondary use of Provenience 3 during the P-IV period is indicated, although the internal features of Room 5 do not seem to have served any function at this later date.

TABLE 10.1

LA 13086 – Ceramic Assemblage

Ceramic Type	Vessel No.	Form	Temper	No. Sherds
P-III (ca. A.D. 1175–1300)				
Santa Fe B/W	46	hemis. bowl	3862-11	8
Santa Fe B/W	49	hemis. bowl	2015-64	3
Santa Fe B/W	50	hemis. bowl	2015-75	10
Santa Fe B/W	51	undiff. bowl	3862-10	3
Santa Fe B/W	52	undiff. bowl	3655-52	1
Santa Fe B/W	53	undiff. bowl	3863-51	1
Santa Fe B/W	56	undiff. bowl	3862-10	2
Santa Fe B/W	48	hemis. bowl	3025-10	7
Prieta Smeared Indented	61	jar/olla	2471-64	15
Prieta Smeared Indented	62	jar/olla	2475-54	41
Prieta Smeared Indented	63	jar/olla	2475-54	10
Corrugated Clapboard	64	jar/olla	2475-54	6
Washboard Corr. undiff.	65	jar/olla	2475-54	4
P-IV (ca. A.D. 1325–1500)				
Abiquiu B/G	55	bowl, undiff.	3863-51	1
Agua Fria G/R	24	hemis. bowl	3431-52	1
Agua Fria G/R	25	hemis. bowl	3431-52	2
Agua Fria G/R	26	hemis. bowl	3431-52	3
San Clemente G-P	1	hemis. bowl	3431-53	10
San Clemente G-P	10	jar/olla	3431-53	32
San Clemente G-P	14	jar/olla	3431-52	4
San Clemente G-P	28	hemis. bowl	3431-53	1
San Clemente G-P	29	hemis. bowl	3431-52	1
San Clemente G-P	45	bowl, undiff.	3431-52	14
Cieneguilla G-P	8	jar/olla	3431-52	19
Cieneguilla G/Y	15	jar/olla	3431-53	14
Cieneguilla G/Y	16	hemis. bowl	3025-52	6
Cieneguilla G/Y	18	hemis. bowl	3260-52	7
Cieneguilla G/Y	19	hemis. bowl	3260-52	1
Cieneguilla G-P	20	hemis. bowl	3260-52	17
Cieneguilla G/Y	31	hemis. bowl	3431-52	2
Cieneguilla G-P	33	hemis. bowl	3431-52	4
Cieneguilla G-P	34	hemis. bowl	3431-54	4
Cieneguilla G/Y	36	hemis. bowl	3431-53	1
Cieneguilla G-P	37	hemis. bowl	3431-53	8
Largo G/Y	21	hemis. bowl	3266-51	9
Espinoso G-P	2	hemis. bowl	3025-51	7
Espinoso G-P	17	hemis. bowl	3025-52	32
Espinoso G-P	22	hemis. bowl	3270-51	8
Espinoso G-P	23	hemis. bowl	3270-51	6
Espinoso G-P	32	hemis. bowl	3431-52	3
Espinoso G-P	41	hemis. bowl	3431-52	5
Espinoso G-P	42	hemis. bowl	3431-52	4
Espinoso G-P	43	hemis. bowl	3431-52	5
Puaray G-P (early)	44	hemis. bowl	3431-52	1
undiff. glaze/red	3	jar/olla	3431-02	5
undiff. glaze/red	6	jar/olla	3406-53	30
undiff. glaze/red	12	jar/olla	3431-52	14
undiff. glaze/red	27	hemis. bowl	3431-52	1
undiff. glaze/yellow + red	82	hemis. bowl	3431-53	6
undiff. glaze/red + white	38	hemis. bowl	3431-52	1
undiff. glaze/red + white	40	bowl, undiff.	3430-54	4

TABLE 10.1 (Continued)

Ceramic Type	Vessel No.	Form	Temper	No. Sherds
P-IV (Continued)				
undiff. glaze-polychrome	4	jar/olla	3431-02	11
undiff. glaze-polychrome	5	jar/olla	3405-52	17
undiff. glaze-polychrome	7	jar/olla	3270-51	4
undiff. glaze-polychrome	11	jar/olla	3431-54	23
undiff. glaze-polychrome	13	stirrup canteen	3431-52	6
undiff. glaze-polychrome	30	hemis. bowl	3431-52	1
undiff. glaze-polychrome	39	hemis. bowl	3431-52	2
undiff. glaze/yellow	35	bowl, undiff.	3431-52	1
undiff. glaze/white	9	jar/olla	3431-53	2
Jemez B/W	47	hemis. bowl	3655-53	33
Biscuitware, undiff.	54	jar/olla	3863-51	1
Blind Indented Corrugated	58	jar/olla	3811-54	19
Blind Indented Corrugated	59	jar/olla	2475-54	40
Blind Indented Corrugated (micaceous)	60	jar/olla	4560-11	8
Blind Indented Corrugated	67	jar/olla	3811-54	61
Blind Indented Corrugated	68	jar/olla	3821-53	46
Blind Indented Corrugated	69	jar/olla	3821-53	6
Blind Indented Corrugated	70	jar/olla	3821-53	30
Blind Indented Corrugated	71	jar/olla	3821-54	13
Blind Indented Corrugated	72	jar/olla	3821-54	6
Blind Indented Corrugated	73	jar/olla	3821-54	35
Blind Indented Corrugated	74	jar/olla	3430-64	9
Blind Indented Corrugated	75	jar/olla	3811-10	8
Blind Indented Corrugated	76	jar/olla	3821-53	1
Blind Indented Corrugated	77	jar/olla	3811-54	4
Blind Indented Corrugated (micaceous)	78	jar/olla	4560-11	15
Blind Indented Corrugated	79	jar/olla	4560-63	4
Blind Indented Corrugated (micaceous)	80	jar/olla	4560-11	8
Smeared Indented Corrugated (micaceous)	81	jar/olla	3110-10	8
Nondated				
Plain, polished, undiff.	57	bowl, undiff.	3710-53	2
Plain, unpolished, undiff.	66	jar/olla	3655-54	3
duplicates	94-99	(see Appendix I)		122

TABLE 10.2

Distribution of Pueblo III Ceramic Vessels

	Santa Fe B/W								Prieta Smeared			Corrugated		
Vessel #	46	49	50	51	52	53	56	48	61	62	63	64	65	Total
Provenience 1														
Room 1, surface	—	—	—	—	—	—	—	—	—	—	—	—	—	0
Room 1, subsurface	—	—	—	—	—	—	—	—	—	2	—	—	—	2
Ext. grids, surface	—	—	—	—	—	—	—	—	—	3	—	—	—	3
Provenience 2														
Rms. 2-4, all levels	—	—	—	—	—	—	—	—	—	1	—	—	—	1
Ext. grids, surface	—	—	—	—	1	—	—	—	—	1	—	—	—	2
Ext. grids, subsurf.	—	—	1	1	—	1	1	—	—	4	—	1	—	9
Provenience 3														
Room 5, surface	—	—	—	—	—	—	—	—	—	2	—	—	—	2
Room 5, subsurf.	8	3	9	2	—	—	1	7	15	27	10	5	3	90
Ext. grids, surface	—	—	—	—	—	—	—	—	—	1	—	—	1	2

TABLE 10.3

Distribution of Pueblo IV Ceramic Vessels

	Agua Fria			San Clemente G-P						Cieneguilla G/Y or G-P											Largo G/Y
Location	24	25	26	1	10	14	28	29	45	8	15	16	18	19	20	31	33	34	36	37	21
Provenience 1																					
Room 1, surface	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Room 1, subsurface	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ext. grids, surface	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ext. grids, subsurface	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Provenience 2																					
Room 2, levels 1 & 2	—	—	—	—	1	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—
Room 2, level 3	—	—	1	—	3	—	—	—	—	1	—	1	—	—	2	—	—	1	—	—	1
Room 3, all levels	—	—	—	1	—	—	1	—	—	—	1	—	—	—	1	—	—	—	—	—	1
Room 4, levels 1 to 3B	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1
Room 4, levels 4, 4A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—
Room 4, level 4B	—	—	—	—	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—
Room 4, level 5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—
Ext. grids, surface	—	—	—	3	6	1	—	—	7	4	1	1	4	1	4	1	—	—	—	3	2
Ext. grids, level 1	—	—	—	1	1	1	—	1	—	5	2	—	2	—	1	—	1	—	—	—	—
Ext. grids, level 2	1	1	1	5	16	—	—	—	6	6	5	2	—	—	5	1	1	2	—	2	3
Ext. grids, level 2A	—	1	—	—	1	2	—	—	—	1	5	—	1	—	1	—	—	—	—	—	1
Ext. grids, level 2B	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	1	—	—
Ext. grids, level 3	—	—	—	—	2	—	—	—	—	—	—	1	—	—	—	—	2	1	—	2	—
Ext. grids, level 4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ext. grids, level 5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Provenience 3																					
Room 5, surface	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Room 5, subsurface	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
Ext. grids, surface	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ext. grids, subsurface	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

TABLE 10.3 (Continued)

Location	Espinoso G-P								Puaray G-P	Undiff. G/R			G/R+W		Undiff. Glaze Polychrome									Undiff. G/Y
	2	17	22	23	32	41	42	43	44	6	12	27	38	40	4	5	82	7	11	13	30	39	3	35
Provenience 1																								
Room 1, surface	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Room 1, subsurface	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ext. grids, surface	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—
Ext. grids, subsurface	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Provenience 2																								
Room 2, levels 1 & 2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	2	—
Room 2, level 3	—	4	3	—	—	1	—	—	—	—	—	—	—	1	1	—	1	—	3	—	—	—	—	—
Room 3, all levels	—	2	1	1	1	—	1	1	—	—	1	—	—	—	—	4	—	—	1	—	—	—	—	—
Room 4, levels 1 to 3B	—	2	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—	—
Room 4, levels 4, 4A	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Room 4, level 4B	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Room 4, level 5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ext. grids, surface	—	15	—	1	—	—	—	1	—	6	—	1	—	—	—	2	—	—	5	—	—	—	—	—
Ext. grids, level 1	—	2	1	—	—	—	2	—	—	1	2	—	1	—	—	—	2	—	2	2	—	—	—	—
Ext. grids, level 2	—	4	1	1	2	3	—	2	—	10	7	—	—	—	9	1	1	1	6	3	—	1	3	—
Ext. grids, level 2A	—	2	1	1	—	—	—	—	—	11	1	—	—	—	—	9	2	1	4	1	—	—	—	1
Ext. grids, level 2B	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—
Ext. grids, level 3	—	1	—	—	—	1	1	1	1	—	1	—	—	3	—	—	—	—	1	—	1	—	—	—
Ext. grids, level 4	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ext. grids, level 5	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Provenience 3																								
Room 5, surface	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Room 5, subsurface	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—
Ext. grids, surface	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ext. grids, subsurface	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

TABLE 10.3 (Continued)

Distribution of Pueblo IV Ceramic Vessels

Location	Undiff. G/W	Jemez B/W	Abiquiu B/G	Biscuitware	Undiff. Plain Poly.		Corrugated Blind Indented																	
	9	47	55	54	57	66	58	59	60	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81
Provenience 1																								
Room 1, surface	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Room 1, subsurface	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ext. grids, surface	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—
Ext. grids, subsurface	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Provenience 2																								
Room 2, levels 1 & 2	—	1	—	1	—	—	—	—	—	—	4	—	—	—	—	1	—	—	—	—	—	—	—	—
Room 2, level 3	—	2	—	—	—	—	—	—	—	3	4	—	1	—	—	—	—	—	—	—	—	—	—	—
Room 3, all levels	—	2	—	—	—	—	—	—	1	1	2	—	3	1	—	1	—	1	—	—	—	—	—	—
Room 4, levels 1 to 3B	—	2	—	—	—	—	—	—	—	19	1	—	2	1	1	1	—	1	—	4	1	—	—	1
Room 4, levels 4, 4A	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	1	—	—	—	—	—	—	—	—
Room 4, level 4B	—	—	—	—	—	—	19	—	—	10	1	1	1	1	—	3	—	—	—	—	—	—	—	—
Room 4, level 5	—	1	—	—	—	—	—	—	—	—	—	2	1	—	—	1	—	—	—	—	1	—	—	—
Ext. grids, surface	2	7	—	—	2	—	—	—	1	1	2	—	2	—	—	4	—	—	—	—	—	—	—	—
Ext. grids, level 1	—	6	—	—	—	—	—	—	1	3	4	—	2	—	—	4	—	—	—	—	2	—	—	—
Ext. grids, level 2	—	9	—	—	—	—	—	—	2	16	16	2	14	1	3	12	5	5	—	—	8	1	6	6
Ext. grids, level 2A	—	1	—	—	—	3	—	—	2	5	8	—	3	1	1	4	2	1	1	—	1	1	1	—
Ext. grids, level 2B	—	—	—	—	—	—	—	—	—	2	2	—	—	—	—	1	—	—	—	—	—	—	—	—
Ext. grids, level 3	—	1	—	—	—	—	—	—	—	1	1	—	—	—	—	1	1	—	—	—	—	2	1	1
Ext. grids, level 4	—	1	—	—	—	—	—	40	1	—	1	—	1	—	—	—	1	—	—	—	2	—	—	—
Ext. grids, level 5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Provenience 3																								
Room 5, surface	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Room 5, subsurface	—	—	—	—	—	—	—	—	—	—	—	—	—	8	—	—	—	—	—	—	—	—	—	—
Ext. grids, surface	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Ext. grids, subsurface	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

LITHIC ARTIFACTS

A total of 4118 lithic artifacts was recovered from LA 13086. The vast majority (3324 or 81%) was items of unutilized debitage, manufactured from glassy basalt (3701). Fifteen cores, 40 items of large angular debris, seven hammerstones, five bifaces and one double-grooved sandstone rock were recovered. The cores were all of basalt, mainly 3701; the hammerstones were of quartzite and granite (taxa 4000 and 3300); the large angular debris was mainly glassy basalt with one item each of Pedernal chalcedony and quartzite. Four bifaces were of obsidian, mainly taxon 3520, from the Jemez area, and one was from silicified wood.

Provenience 1

Debitage from Provenience 1 totaled 338 items. These were divided into five assemblages as follows: Assemblage 1, surface materials exterior to Room 1; Assemblage 2, Room 1, surface; Assemblage 3, Room 1 Stratum 1; Assemblage 4, one grid south of Room 1, Levels 0 and 1, including the shallow hearth; Assemblage 5, two grids east of Room 1, Levels 0 and 1.

Material Selection

Basalt (4 taxa, mainly 3701) was predominant in the assemblages, with small quantities of chert and granite occasionally present (less than 4%). The nearly exclusive presence of basalt contrasts with Proveniences 2 and 3, as will be seen below.

Manufacture

All flakes for which detachment technique could be detected exhibited a freehand technique. The percentage of small angular debris present varied from 9% on the surface outside the room, 0% from the surface inside the room, to 16% from the first subsurface level inside the room. The excavated exterior grids to the east and south of the room each yielded 19% small angular debris, similar to Room 1, Stratum 1. The percentage of debitage exhibiting cortex varied from 42% on the exterior surface (Assemblage 1) to 26% in the excavated exterior grids (Assemblages 4 and 5).

The frequency of cortical platforms was similar in all assemblages, roughly 9% in each. The percentage of single-faceted platforms in each assemblage ranged from 20% in exterior surface materials to 42% in Room 1, Stratum 1. From these figures it is clear that a prepared core technique was periodically used at the provenience. We have evidence in all assemblages for primary reduction as well as later stages in the reduction process.

Tool Use

With respect to utilization of debitage, only the surface materials from outside the room (Assemblage 1) exhibited any noticeable utilization (roughly 10%). In the assemblages from inside the room, the surface contained no utilized pieces, and the subsurface contained one utilized piece out of 191 items of debitage. The utilized material was all 3701 basalt. It is possible that this material in the unprotected surface area outside the room was more susceptible to weathering processes than other areas on the provenience, which would tend to increase appearance of utilization.

Provenience 2

Debitage from Provenience 2 totaled 3515. Room 2 had 236; Room 3 had 112 items; Room 4 had only 270. It may be remembered that Room 3 contained no interior features and, although a floor was present, no artifacts were observed in contact with it.

The other two rooms present in this provenience were larger than Room 3; Room 2 contained no floor nor interior features, while Room 4 had a floor and three hearths and a burned area. There, an in situ utility pot base was found in floor contact on top of the burned area, as well as numerous lithic materials, mainly 3701 basalt flakes. Three items of large angular debris, a hammerstone, and a core were located in Strata 3 and 4. The lithic materials from Room 4 were mainly unutilized debitage (73%) and unutilized small angular debris (21%) formed the next largest category.

The lithic materials from Room 2 were relatively numerous (see above). They consisted primarily of unutilized debitage (95%). Nearly 20% of the debitage was unutilized small angular debris. The remainder was utilized debitage (3%) and unutilized and utilized retouched debitage (2%). One core and two items of large angular debris were located in Stratum 3, which may represent a previous exterior occupation surface before this room was added to Room 3.

Surface collection from the area to the southwest of the room cluster yielded 199 items of debitage. A majority (87%) was unutilized flake debitage and small angular debris. The assemblage from the midden area to the east and south of the room cluster included surface and subsurface materials. From the surface, 838 items of debitage and two bifaces were recovered. Subsurface debitage totaled 1860 items. The predominant artifact categories were unutilized flakes and small angular debris; slightly more small angular debris occurred in the subsurface assemblage. Hammerstones, large angular debris and cores were concentrated in the midden area, in all levels.

Material Selection

As indicated above, glassy basalt was the most frequent material type in the assemblages from the Provenience 2 room cluster; it comprised roughly 90% of the assemblage from each room. The other two material types present in all rooms were obsidian and Pedernal chert/chalcedony. The percentage of obsidian was highest in Room 3 (6%). Rooms 2 and 4 had 4% and 13%, respectively. Pedernal chert/chalcedony was highest in Room 4, with 7%; Rooms 2 and 3 had 3% and 4%, respectively. The highest variety of material types came from Room 2, where seven material types were represented; Room 3 had three material types, and Room 4 had four.

The main occupation level of Room 4, including the floor, contained a single taxon of obsidian (3520) and

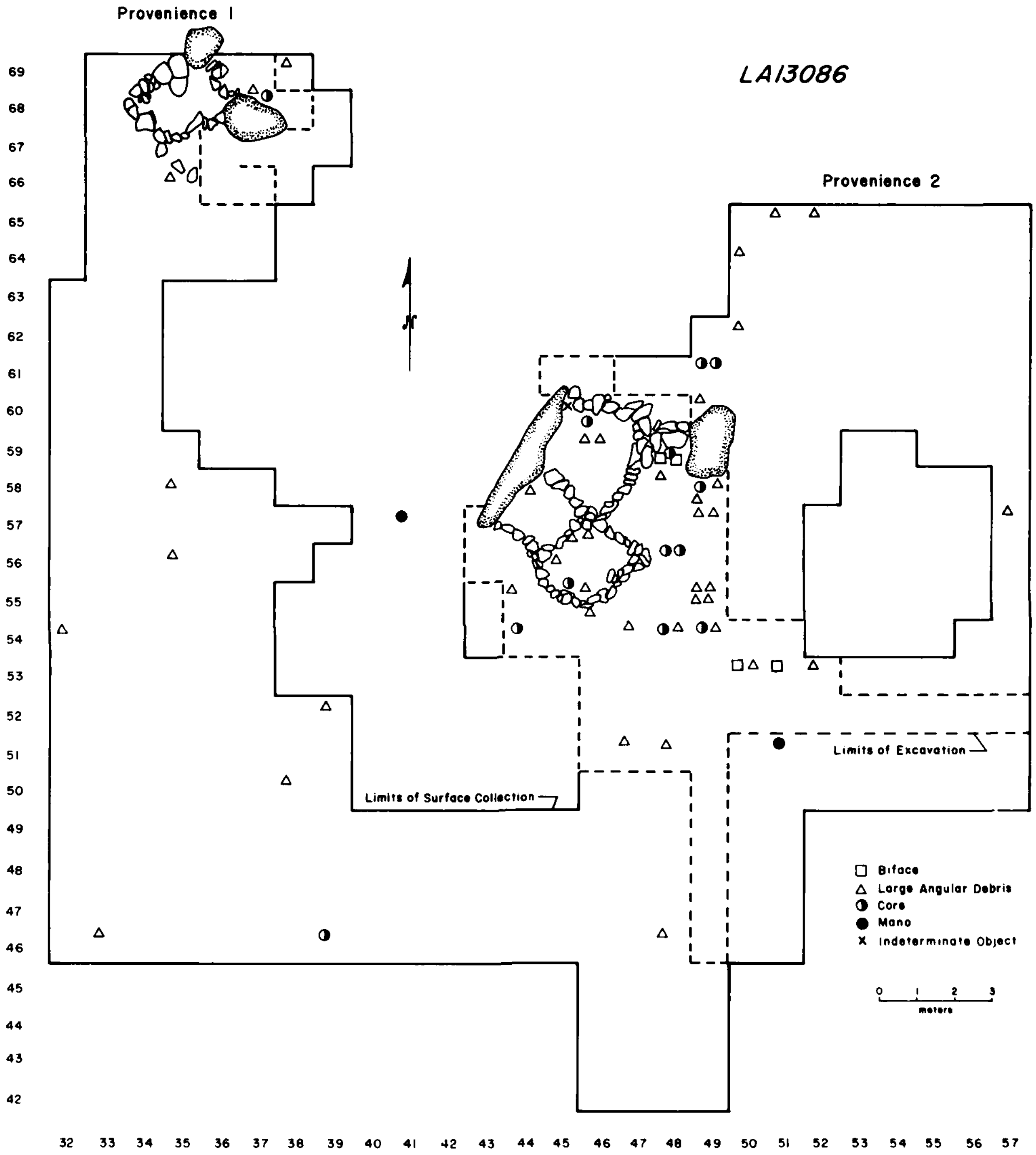

FIG. 10.5 LA 13086, Proveniences 1 and 2, distribution of cores, large angular debris, and lithic tools (each symbol represents an artifact)

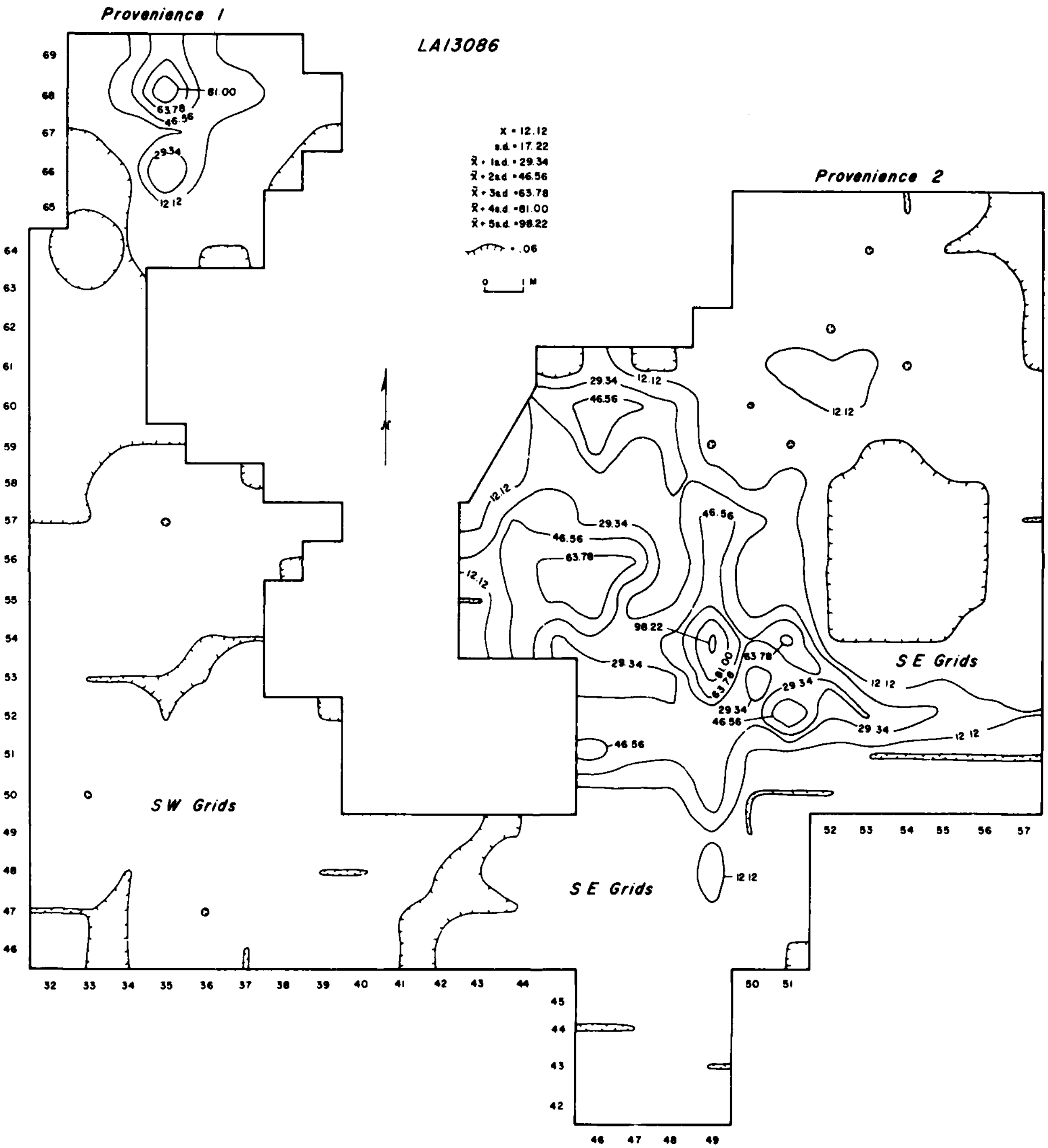

FIG. 10.6 LA 13086, Pro' niences 1 and 2, distribution of debitage

two taxa each of basalt (3701, 3050) and Pedernal chert/chalcedony (1214, 1215); Stratum 5, the level underlying the floor, contained the same three major material types, but with an additional taxon of obsidian (3525) and a different taxon of Pedernal chert/chalcedony (1050). A distinct assemblage was found associated with Feature 4A, a hearth which was constructed after the main occupation and located above the floor. It consisted of only two material types, glassy basalt (3701) and Pedernal chert/chalcedony (1053, 1215). The basalt was predominant (93%), a higher proportion of that taxon than found in any other assemblage in the room.

In Assemblage 7 (from outside the room cluster) basalt was again the most frequent material type; in the southwest surface assemblage (No. 8) roughly 86% was manufactured from glassy basalt (3701). The southwest assemblage contained representatives of seven material types, while the larger southeast assemblage (No. 7) contained representatives of eight. These assemblages had in common obsidian, glassy basalt, Pedernal and non-Pedernal cherts and chalcedonies.

Manufacture

The assemblages from Room 2 (Assemblages 9 and 10) contained debitage exhibiting an exclusive use of the freehand rather than bipolar detachment technique; ca. 20% was small angular debris and 80% was freehand debitage. Platforms were present on almost half Assemblage 10 and over one-third of Assemblage 9. In both, about 30% had cortical platforms; somewhat more single-faceted platforms occurred in Assemblage 10 (70%) than in Assemblage 9 (58%). Retouching (ca. 5% in each assemblage) was evident only on the basalt (taxon 3701) flakes. Stratum 3 contained the majority of debitage, 186; Strata 1 and 2 combined contained 50.

Assemblage 9 exhibited slightly more cortical debitage (42%) than Assemblage 10 (32%). Cortical placement was predominantly on the dorsal surface only of flakes, though small amounts were present also on platforms, on the platform and dorsal surface, and on small angular debris. From these observations, the use of prepared core technique is indicated. Just outside the east wall of Room 2 were found two bifaces on 3520 obsidian; this taxon was found within the fill of Room 2 were found two bifaces of 3520 obsidian; this taxon was found within the fill of Room 2 in the form of flakes with platforms in all cases, of which two-thirds exhibited cortex, and one-third were single-faceted. Since this material relates to primary reduction contexts, the final stages of manufacture of the bifaces probably took place outside Room 2 rather than in it. The lithic assemblages from Room 3 contained somewhat less small angular debris than the Room 2 assemblages. The proportion of flakes with platforms was similar to Stratum 3 in Room 2, roughly 48%, and the incidence of cortex on platforms was also similar, ca. 24%. The incidence of single-faceted platforms was about the same, while the incidence of retouch platforms was less.

As in Room 2, cortex in Room 3 was generally non-waterworn. Only three material categories were present; absent were the stream cobbles of quartzite and silicified wood which contributed to a slightly higher percentage of waterworn cortex in Room 2 Cortical placement was mainly on dorsal surfaces only; small amounts were present on the platforms and dorsal surfaces, representing a small increase over those in the Room 2 assemblage. As will be seen below, the stratigraphy in Room 4 brought out some interesting contrasts with the assemblages from the fill in Rooms 2 and 3.

Lithics from the Room 4 fill in the upper three strata (above the main occupation) resemble those from Rooms 2 and 3 except that there is somewhat more small angular debris (18%) as opposed to flakes with freehand technique detachment (82%), making this assemblage most like Room 2.

The lithics from Stratum 4 (Assemblages 13 and 14), the main occupation, included artifacts found on and just above the floor. The debitage was decidely less cortical (24%) than that from fill above and from Rooms 2 and 3. It also had a higher proportion of small angular debris (20%) than those assemblages. Debitage from these assemblages had a similar proportion of flakes with platforms (52%) to that in previous assemblages discussed but a higher proportion of single-faceted platforms, 85%; 2% of the platforms were retouched, which is also the highest of any of the assemblages considered so far in the provenience. Cortex was generally not waterworn. Cortical placement was more evenly divided between the platform and the dorsal surface only than in the fill assemblage from Room 4 and from Rooms 2 and 3; 6% of the assemblage had cortex on the platform and 16% had it on the dorsal surface. No cortex was present on both the platform and dorsal surfaces of flakes and 3% was cortical small angular debris.

In the assemblage (No. 13) directly associated with Feature 4A (above the floor, but localized near the hearth), cortex was present on a relatively large number of the flakes (44%). This high proportion of cortical flakes is approached only in the surface assemblage outside of Room 1 (discussed earlier), which also was composed of over 93% (3701 basalt) and was 40% cortical. In Assemblage 13 small angular debris was 11%, the lowest percentage of any assemblage in the provenience except that from Room 3, which had 9% small angular debris. Assemblage 13 had 89% of its flakes exhibiting freehand flaking technique.

With regard to platform variability, 89% of Assemblage 13 exhibited single-faceted platforms; 11% exhibited cortical platforms; and no retouch or resharpening platforms were noted. The incidence of discernible platforms and of single-faceted platforms seems to be related to the proportion of 3701 glassy basalt in an assemblage. In those in which this material taxon is the only basalt (for example, Room 1 surface, the Feature 4A assemblage, and others not discussed here such as specific grids at the site), the proportion of the assemblage with platforms is at least 47% and the incidence of single-faceted platforms is at least 86%. This regularity may be explained as a function of the fracturing properties of 3701 basalt, which may have permitted more consistent manufacturing techniques than other materials.

Cortical placement in the Feature 4A assemblage was as follows: 37% had dorsal cortex only; 7% had cortex on the platform only. Cortical small angular debris was absent; as was cortex on both the platform and dorsal surfaces. The lack of cortex on small angular debris and on platform and dorsal surfaces may indicate that primary reduction had not occurred at this location; rather, the hearth area may have been the setting for secondary and tertiary reduction of raw material.

The lowest level in Room 4 yielded 40 pieces of debitage (Assemblage 15) which was characterized by the highest percentage of small angular debris of any so far discussed (38%). Although obsidian was present, none occurred in that form; almost half the basalt (3701 and 3050) occurred as small angular debris and the single item of Pedernal chert did as well. As a function of the large proportion of small angular debris, 63% of the assemblage had platforms; 6% had cortex on the platform, and 94% were single-faceted. None were retouched or resharpened. Only 25% of the assemblage exhibited cortex. With respect to cortical placement, when it did occur, it was mainly on dorsal surfaces (only 18%) with some incidence of cortex on platforms and dorsal surfaces (3%), and 5% on small angular debris.

It was suggested in the architecture section that Stratum 5 in Room 4 may represent either (1) a nonenclosed occupation surface prior to the construction of the room, correlated in time with the use of Room 3; or (2) fill brought in to level the floor of Room 4 as it was being built, which might indicate that Room 4 was initially built before Glaze C times, since Stratum 5 contained pottery dating to Glaze A. The assemblage from the lowest level in Room 3 contains the same three material types as the subfloor assemblage from Room 4, in roughly the same proportions. Although tenuous, this is some evidence for a temporal relationship between the initial use of Room 3 and a then outside occupation surface now surrounded by the walls of Room 4. When material types present from grids surrounding the room cluster and from the midden area were compared, it was noted that the grids exhibited a larger range of material types than the room assemblages. This would tend to argue against the second interpretation of the subfloor assemblage from Room 5 because if fill were imported from the surrounding area, it should reflect the variety of material types present. The restricted number of material types present in the Room 5 subfloor assemblage would seem to indicate that their derivation was from in situ activities rather than from importation of soil and debris from elsewhere on the site.

Tool Use

Three shaped manos occurred in this provenience. All were rectangular in plan view and each exhibited two grinding surfaces. Two pieces represented the distal ends of the manos and were made of tuff (3821). One was subtriangular in cross section while the other was a wedge. One of the manos was whole and made of basalt (3430), and it was also a wedge in cross section. Also recovered was an artifact which had obviously been deliberately modified, but was of unknown function. It was an unshaped tabular piece of light colored fine-grained basalt (3401) which exhibited smoothing on one surface with striations parallel to the long axis of the object. The surface was also burned.

One of the shaped manos was found in Room 4, another was found just outside the west wall of Room 3, and the third was in an outlying exterior surface grid. The piece of ground stone of indeterminant function was found in Room 2.

Tool utilization within Room 2 was relatively low in all levels. In the level with the most artifacts, Stratum 2, only 2% of the debitage was utilized. The majority of utilized debitage was 3701 basalt.

Utilization in Room 3 also tended to be low. In the level with the most artifacts, Stratum 2, 4% of the debitage was utilized. In the two levels above there were no utilized flakes. Again, utilization of glassy basalt flakes contributed most to the utilization percentage.

Utilization in Room 4 was more variable. In Stratum 1 there were no utilized flakes, while in Stratum 2 the utilization was 11%. In Stratum 5, utilization was moderate, 5%. In Stratum 3A there were no utilized flakes, while in level 3B the utilization was 3%. It will be remembered that level 3B was suggested to have been deposited shortly after the abandonment of the structure, in the early stages of wall decomposition. The assemblage from this level was removed with trowels and screened through ¼ and 1/8 inch mesh (see Table 10.4 for 1/8 inch material summary). Level 4A was only associated with Feature 4A, a hearth thought to have been used after the major occupation, but shortly before the decomposition of the walls. The utilization in this level was relatively high, 7%; the assemblage was over 90% glassy basalt, and all utilization was on basalt flakes. The floor surface and ca. 10 cm above it constituted level 4B, which was also screened through ¼ and 1/8 inch mesh. No utilization occurred on flakes in this assemblage, which was 87% 3701 basalt.

In contrast to the tendency for debitage to be unutilized within the rooms in Provenience 2, outside the room cluster utilization was higher on the surface, although low to moderate, subsurface. In the grids surrounding the rooms, in level 1 the utilization was 7%; in level 2 it was 5%; and in level 3 there were no utilized flakes. In the area, which was surface collected to the southwest of the room cluster, the utilization was 13%, and in the midden area to the southeast of the rooms, the utilization was 11%. Generally speaking, the larger the assemblage and the larger the proportion of 3701 basalt present, the higher the utilization tended to be. The larger assemblages with high utilization tended to be surficial; in the large subsurface assemblage from the midden area to the southeast of the room cluster, the utilization was only 3%, as opposed to the higher ratio for surface materials from the same general area. The proportion of 3701 basalt was similar to that in the surficial assemblages, however.

It is not clear whether these regularities may be due to differential treatment of raw materials such as glassy basalt, in contrast with Pedernal chert/chalcedony, or to an external factor, such as weathering. The high utilization percentage in the Room 4 Feature 4A assemblage (associated with

TABLE 10.4

LA 13086 – Lithics from 1/8 inch Screen Sample

Grid/Feature	Level	No. of Artifacts	Material	Platforms* S.F.	Ctx.	Ret.	None	Wear Patterns
OBSIDIAN								
56/47 Room 4	3B	1	3523	1	–	–	–	–
BASALT								
55/46 Room 4	3A	4	3701	1	–	–	3	–
	3B	2	3701	–	–	–	2	–
	4B	6	3701	–	–	–	6	–
	5	9	3701	–	–	–	9	–
	5	4	3050	–	–	–	4	–
56/44 Room 4	4B	4	3701	–	–	–	4	–
	4B	4	3050	–	–	–	4	–
56/45 Room 4	4A	5	3701	–	–	–	5	–
	4A	3	3050	–	–	–	3	–
	4B	11	3701	–	–	–	11	–
	4B	13	3050	–	–	–	13	–
56/46 Room 4	3B	14	3701	–	–	–	14	–
	3B	3	3050	–	–	–	3	–
	4B	15	3701	–	–	–	15	–
	4B	2	3050	–	–	–	2	–
	5	13	3701	1	–	–	12	–
	5	7	3050	–	–	–	7	–
56/47 Room 4	3B	8	3701	–	–	–	8	–
	3B	2	3050	–	–	–	2	–
	4B	1	3701	–	–	–	1	–
	5	2	3701	–	–	–	2	–
55/45 Room 4	3B	6	3701	–	–	–	6	–
	3B	3	3050	–	–	–	3	–
	4B	1	3701	–	–	–	1	–
55/46 Room 4	3B	1	3701	–	–	–	1	–
	3B	1	3050	–	–	–	1	–
	4B	5	3701	–	–	–	5	–
57/45 Room 4	4	5	3701	–	–	–	5	–
57/46	3B	1	3701	–	–	–	1	–
	4	6	3701	–	–	–	6	–
CHERT/CHALCEDONY								
56/45 Room 4	3B	1	1501	–	–	–	1	–
	4A	1	1501	–	–	–	1	–
	4B	1	1215	–	–	–	1	–
56/46 Room 4	3B	2	1215	–	–	–	2	–
57/46 Room 4	4	1	1650	–	–	–	1	–

* S.F. = single-faceted
Ctx. = cortex
Ret. = retouch/sharpening

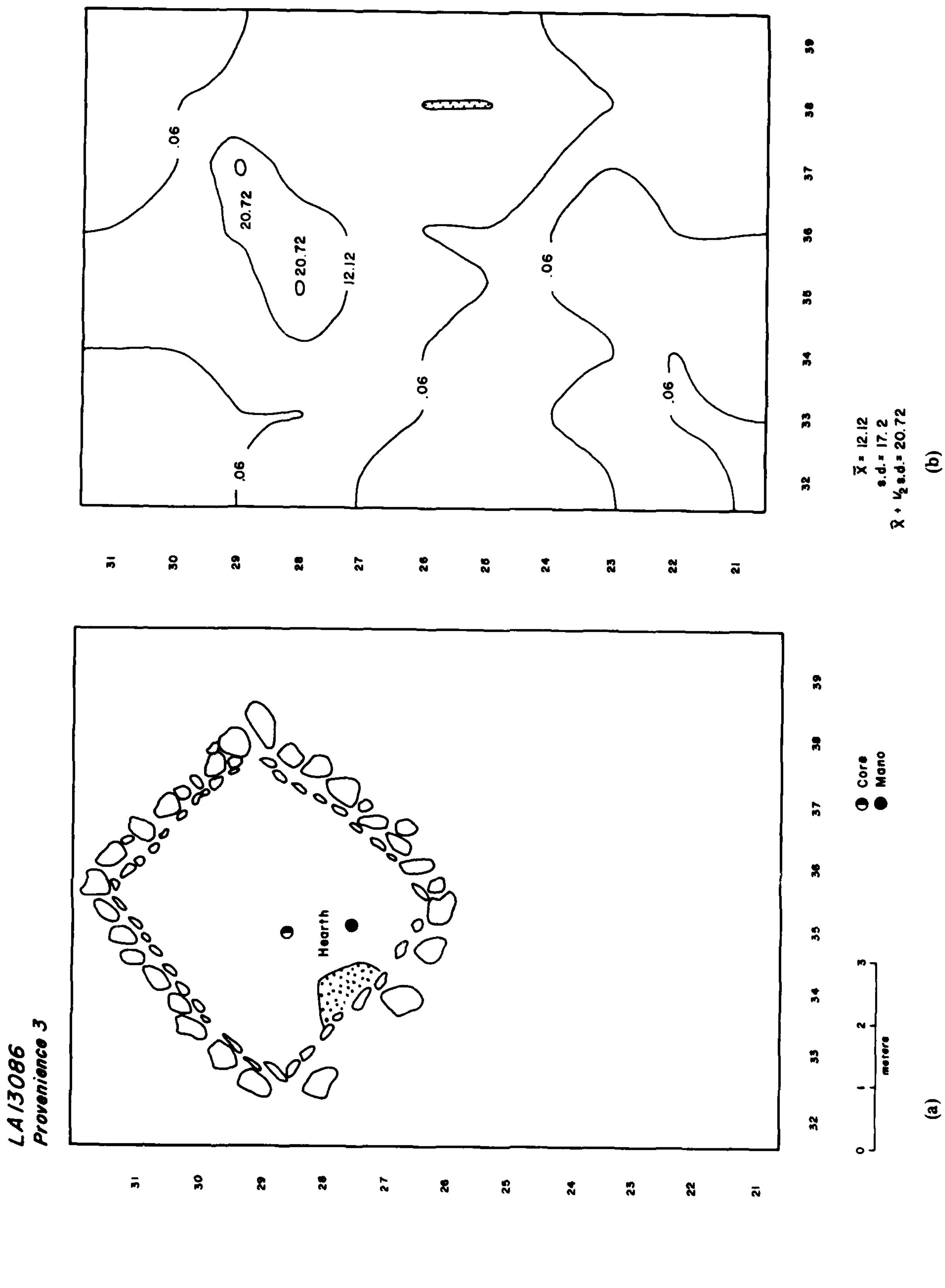

FIG. 10.7 LA 13086, Provenience 3, distribution of lithic artifacts:
(a) cores, large angular debris, and lithic tools (each symbol represents an artifact); (b) debitage isopleths

a hearth) was practically all 3701 basalt (93%) although assemblage size was small; in the surficial exterior assemblages which had high utilization percentages, the proportion of 3701 basalt was 83% and 89% respectively, and assemblage size was 199 and 856. In the subsurface exterior assemblage (from the midden area) the proportion of 3701 basalt was 86% and its size was 1889.

Provenience 3

Lithic materials from Provenience 3 include those located within Room 5, a surface collected area surrounding the structure, and a 1 m^2 test pit in the area south of the structure. The initial occupation of Room 5 may have been contemporary with that of Room 1; the majority of ceramic sherds dated to the Pueblo III period and all interior features were associated with pottery from that period.

The test pit yielded only 10 artifacts, all of 3701 basalt; seven (70%) were unutilized flakes, two (20%) were small angular debris, and one (10%) was a utilized, retouched flake. In the surface collection area, 54 lithic artifacts were located; the majority was unutilized flakes (72%) and the remainder was unutilized small angular debris (22%); utilized debitage (4%), and one projectile point.

A total of 126 items of debitage, one core, one hammerstone, and one unshaped mano were found within Room 5. The latter item was associated with Feature 5B, a bin built against the east wall, and a burned corn cob fragment. In the surface assemblage (25 items), 84% were unutilized flakes and 16% were unutilized small angular debris. In the subsurface assemblage (103 items) 77% were unutilized flakes, 14% unutilized small angular debris, and 5% utilized debitage.

Material Selection

In the exterior surface collection (53 pieces of debitage), 81% of the debitage was 3701 basalt and 4% 3050 basalt; Pedernal chert/chalcedony (13%) and quartzite (2%) made up the remainder. In the test pit, 3701 basalt was the only taxon present.

Within Room 5 on the surface 3701 basalt again predominated (84%). In the interior subsurface assemblage, the greatest variety of material taxa occurred. Present were obsidian (1%), basalt (85% total, 74% 3701), Pedernal chert/chalcedony (9%), non-Pedernal chert (3%), quartzite (2%), and granite (1%).

Manufacture

In the exterior surface assemblage, as in other assemblages at LA 13086, freehand flaking technique was used throughout. Nearly half the debitage (49%) exhibited platforms; 31% of the platforms were cortical; 69% were single-faceted. No retouch or resharpening platforms were present. In the test pits similar proportions of freehand debitage and small angular debris occurred; 80% and 20%, respectively. Sixty percent of the assemblage had platforms, although none was cortical; 83% were single-faceted and 17% were retouched.

The test pit assemblage was more cortical (50%) than the exterior surface assemblage (34%), perhaps as a function of the exclusive presence of 3701 basalt in the former; this material taxon occurs with cortex as a frequent attribute in assemblages at this site.

The use of prepared core technique is evident in both exterior assemblages, and there is some indication that the exterior surface was the location of primary reduction contexts while the test pit area contained evidence of secondary and tertiary stages of reduction, although it should be remembered that the assemblage size was quite small, only 10 flakes.

Within the Room 5 surface assemblage, freehand debitage made up 84% of the assemblage followed by small angular debris (16%). Platforms were present on 56% of the flakes, of which 21% were cortical and 79% were single-faceted. Cortex was present on 32% of the debitage. Cortical placement was mainly on the dorsal surface only (16%); 8% of the cortical flakes were on platforms, 4% were on both platform and dorsal surface; 4% of the small angular debris was cortical.

The Room 5 subsurface assemblage exhibited 85% freehand flakes and 15% small angular debris, which is comparable to the surface assemblage from this room. The proportion of platforms and their characteristics are also comparable, although there was one instance of a retouch platform on an item of 3701 basalt. Possibly due to the greater material variety in this assemblage, the percentage of cortical debitage was slightly higher (36%).

Tool Use

Utilization varied from 10% in the test pit and 0% in Room 5 surface assemblages (both numerically small) to 4% of the utilized debitage in the exterior surface assemblage and 5% in the Room 5 subsurface assemblage. In the latter, utilization occurred on obsidian (3528), basalt (3701) and Pedernal chert/chalcedony (1050 and 1215). In the surface assemblage, utilization occurred only on 3701 basalt. In keeping with a generalization made with respect to Provenience 2 assemblages, utilization tends to be low in smaller assemblages and increases in larger ones. Here the slight increase in the subsurface assemblage seems to be related to the material variety rather than the proportion of 3701 basalt present, which is not as high as many other assemblages at the site.

FAUNA

Thirty-one bones were recovered from LA 13086. No bones were recovered from Provenience 1. Twenty-five bones were recovered from Provenience 2 with a majority from the fill in Room 4: Room 4, Stratum 2 (1 bone); Room 4, Stratum 5 (12 bones); and Room 4, Feature R4B (a hearth), 5 bones. Seven bones were recovered from the trash area in Provenience 2. The remaining six bones were recovered from Room 5 in Provenience 3.

The remains were very fragmentary with no more than five bones per individual. With the exception of one medium-large mammal, only small and medium-sized fauna were represented, including a cottontail rabbit, a jackrabbit, a gopher and a woodrat. Two turkey bones were also recovered but both had been modified and used as tools (see below).

Bone Tools

Three bones were recovered: (1) a turkey tarsometatarsus (Room 4, Feature R4B, Stratum 4) with rounding on the projection and polish and striations extending down the shaft of the fragment (Class 1b). Schutt (1977:103) suggests this class tool may have been used as a needle; (2) a turkey longbone fragment (Room 4, Feature R4B, Stratum 4) with polished interior and exterior surfaces. What produced this wear is unknown. It is possible, however, that this may be a fragment of a larger implement; and (3) a jackrabbit humerus fragment (grid 56/47) with a polished and rounded projection and a longitudinal groove which runs from the projection to the opposite end of the fragment. The groove is polished both within and along its edges. Lewis Binford (personal communication) suggests that this tool may have been used as a punch, because of its similarity to a modern canvas punch.

FLOTATION ANALYSIS

No flotation samples from Provenience 1 were analyzed. In Provenience 2, analysis of flotation samples was restricted to Rooms 2 and 4 in the roomblock and to an exterior grid unit. Only the heavy flotation residue was examined for the samples taken from the roomblock. A 500 ml sample from Room 2, Stratum 3, contained two 3701 flakes and three pieces of charcoal. A 1000 ml sample from Room 4, Stratum 3B, yielded four 3701 basalt flakes and four pieces of charcoal. A 1000 ml sample from Room 4, Stratum 4B, contained one 3701 basalt flake, two bone fragments, and six pieces of charcoal. Samples from two of the hearths in Room 4 were also examined. A 1000 ml sample from Feature R4A contained two 3701 basalt flakes, one burned bone fragment, 11 pieces of charcoal, one piece of bark, two insect casings, and three insect or seed fragments. A 1500 ml sample from Feature R4B, Stratum 5, contained only 20 pieces of burned bone.

In Provenience 3, four samples from Room 5 were examined for flotation residue. Three separate samples from the adobe-rimmed hearth (Feature R5C) were analyzed. Although the size of the samples ranged from 30 ml to 1005 ml, the light flotation residue from each was similar. Neither plant seeds nor parts were recovered. Miscellaneous insect parts, cocoons, feces and one fragment of a gray snail were the only items recovered. The heavy flotation residue from a 965 ml sample from Feature R5C contained 42 pieces of bone (6 burned) and two 3701 basalt flakes. A 475 ml sample from Feature R5D, a subfloor bin, produced miscellaneous fecal material in the light flotation residue with one 3701 basalt flake and one piece of charcoal in the heavy flotation residue. A final 1000 ml sample from Feature R5A, an ash deposit on the floor of Room 5, contained three pieces of burned bone and one piece of charcoal.

SUMMARY

LA 13086 was a relatively complex site for this area, with multiple occupations during the Pueblo III and Pueblo IV periods. The architecture indicates accretional building took place within Pueblo IV in Provenience 2, the cluster of three rooms in the center of the site. Construction sequence indicated that Room 3 was built prior to Room 2. No interior features were present in Room 2; however, some charcoal and charcoal-stained soil was observed in Stratum 2, associated with a burned corn cob and an adobe floor surface. Evidence of wall plastering was found in the fill. These observations make an assignment of the initial function of Room 3 as a storage facility feasible. It is possible that Room 2 was added when either an additional storage room was needed, or when Room 3 was abandoned and a larger storage room was needed. Two outlying structures, Rooms 1 and 5, were located to the north and south, respectively, of Provenience 2. They were initially occupied during Pueblo III. Room fill in each indicates secondary Pueblo IV deposition, although the interior features present in Room 5 seem not to have functioned during this later period. A midden area exists to the southeast of the room cluster; the fill was homogeneous so that no clear sequence of occupations could be discerned.

Artifacts were most numerous in subsurface assemblages within rooms and in the midden area; 3701 basalt was predominant in all assemblages. A relatively large amount of pottery was recovered, most dating to the Pueblo IV period. Bowl:jar ratios changed from nearly equal to fewer bowls than jars from Pueblo III to Pueblo IV. The abandonment of Room 5, which contained storage bins dated to Pueblo III, and of Room 1, which may not have been more than a shelter, and the construction of a three-room cluster, seem to indicate a change in living patterns at the site. If Rooms 2 and 3 were primarily storage facilities, a large increase in storage area per unit living space may have taken place over time. The midden did not contain any evidence of a period of abandonment of the site, so a relatively continuous use is possible.

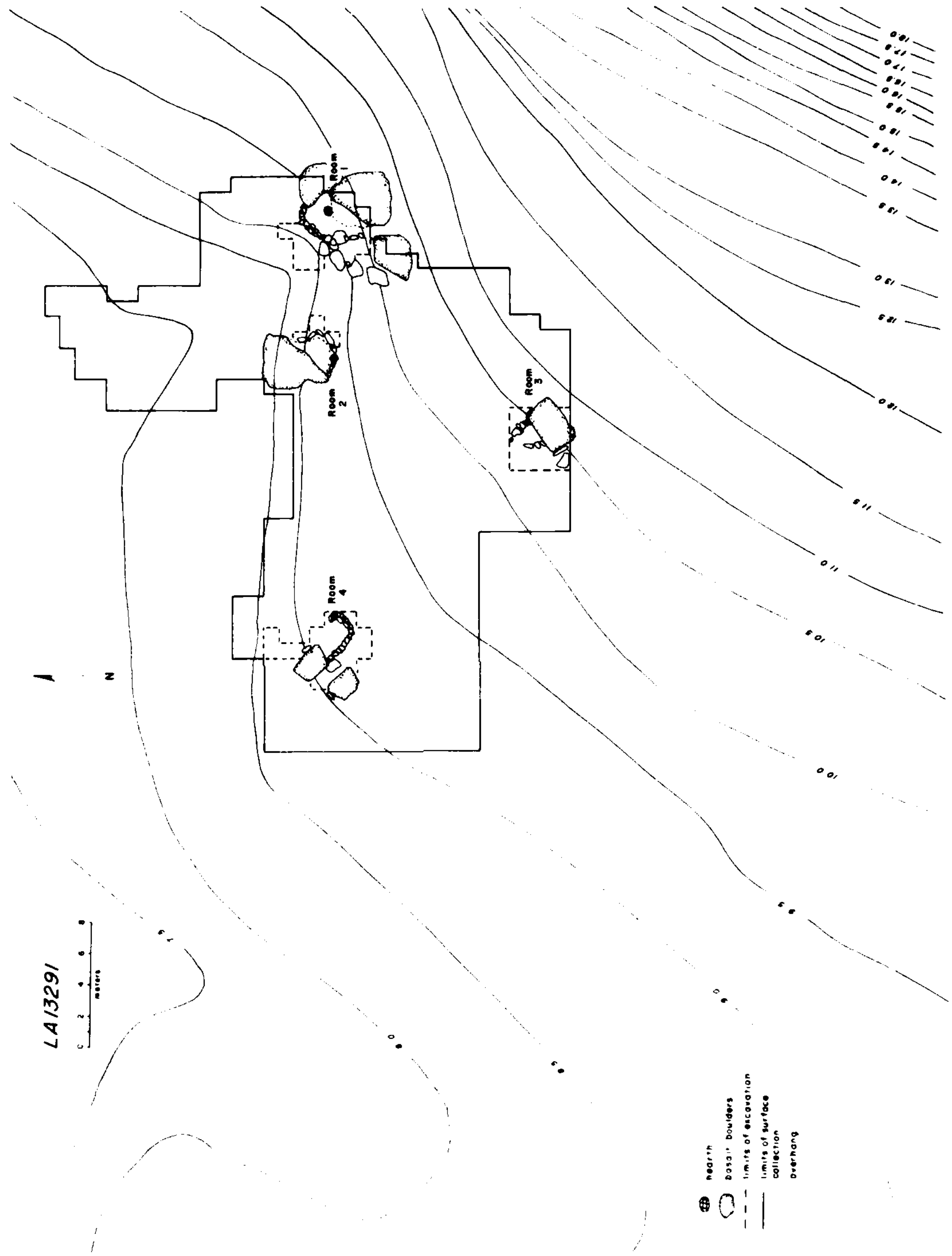

FIG. 11.1 LA 13291 Site Map, illustrating local topographic relief, site boundaries, and excavation units.

Chapter 11
LA 13291

Jeanne A. Schutt

INTRODUCTION

LA 13291, a 19th century site, was composed of four noncontiguous rooms and a system of agricultural terraces. The site was located on a long bench at the base of a talus outcrop on the east side of the Rio Grande in White Rock Canyon. LA 13291 was situated in the Upper Sonoran Arid vegetative community (Drager and Loose 1977: Fig.II.2.1) at an elevation of 5340 feet. Dominant vegetation in the vicinity of the site included heavy concentrations of cholla, especially in the terraces, juniper trees, yellow rabbitbrush, grama grass, snakeweed, and prickly pear cactus. A few pinyon pine were also present.

EXCAVATION APPROACH

Once the heavy brush was cleared, 632 m^2 were gridded in 1 x 1 meter units, which were then surface collected. All room interiors and grids contiguous to the rooms were excavated (see Fig. 11.1). Excavation proceeded generally in arbitrary units to sterile although, when possible, natural stratigraphic units were employed. All fill was minimally sifted through ¼ inch wire mesh, with all of the fill in Room 1 and three of the grids in Room 4 being additionally processed through 1/8 inch wire mesh.

ARCHITECTURE

ROOM 1

Shape: Rectangular surface structure (see Fig. 11.2).

Orientation: The long axis of the structure was parallel to true north.

Condition: Although the room walls were standing, they were extremely unstable, with elements periodically falling into the room. Deposition may have been disturbed by two wash areas which passed through this structure, one from the talus slope to the south, and a second from the east.

Interior Room Dimensions

	Length	Width	Height
North Wall	0.90 m	0.45 m	0.60 m
South Wall	2.00 m	0.40 m	0.35 m
East Wall	N/A	N/A	N/A
West Wall	2.50 m	0.50 m	0.80 m

Interior Floor Space: 5.0 m^2

Walls: The north, south and east walls were of similar construction and are described together below. A large boulder formed the west wall.

Type of Elements: Local basalt clasts and boulders.

Size of Elements: Elements ranged in size from 60 cm x 45 cm x 25 cm to 25 cm x 15 cm x 9 cm. Mean element size was 40 cm x 30 cm x 20 cm. The majority of larger elements were used in construction of the lower portion of the walls.

Placement and Construction of Elements: The wall elements were overlapping and horizontally laid. The long axes of the elements were se at varying angles to the long axis of the walls. The walls were one element wide and dry laid.

Shaping of Elements: Unmodified.

Wall Facing: Interior and exterior wall surfaces were irregular.

Chinking: Chinking was not present.

Mortar: Mortar was not present.

Corners: The north and south walls abutted boulders to the east, forming the northeast and southeast corners. The northwest and southwest corners were round and interlocking.

Plaster: No evidence of plaster was noted.

Entrances: Good evidence for an entrance was not present.

Floors: Room 1 was built on a hardpacked surface (top of level G). Although a prepared floor was not found, it appears that the initial occupation of the room occurred on this surface which sloped down from the southern wall, 50 cm to the base of the north wall. Evidence of actual living surfaces representing later occupations could not be identified, although sparse amounts of cultural debris were recovered from levels D, E, and F. Their presence, in conjunction with the fact that the walls were constructed upon the hardpacked surface, may be interpreted as evidence of repeated, short-term occupations of the room. Large quantities of bone, lithic and ceramic artifacts were found in level C, which suggests more extended occupations of the room occurred during the deposition of this level (a gravel matrix which was washed into the room from the slope above and to the south). The most extensive occupation of the room occurred after the gravels washed in and is indicated by the large amount of cultural material recovered from levels A and B, and by the presence of two features found at the base of level B, a hearth and a large ash dump area.

Roofing: No evidence of roofing was found.

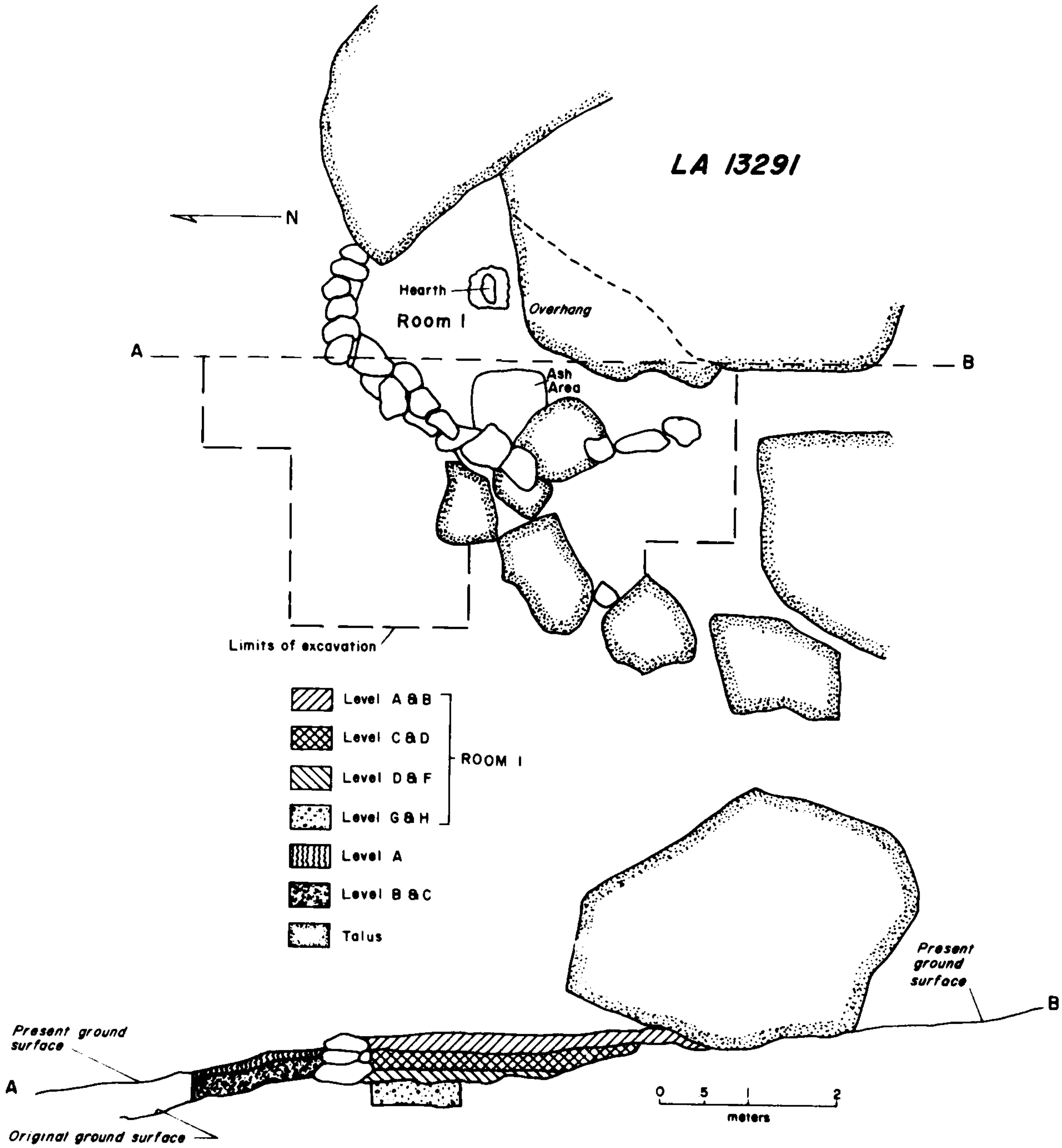

FIG. 11.2 LA 13291 Room 1 plan view and cross section

Interior Features

Ash Area: A square ash area (Feature A) was located 1.4 meters south of the north wall. The feature measured 90 cm north-south and 80 cm east-west, and was located 10 cm below ground surface. The fill was between 12 cm and 19 cm deep and composed of gray ash. Several pieces of charcoal were also present. This feature may be an ash dump area from Feature B, a burned area located 70 cm to the east.

Burned Hearth Area: A circular burned area (Feature B) was found in level C, approximately 1 meter south of the north wall. The fire pit measured 20 cm north-south by 33 cm east-west. A 10 cm hard baked surface extended around this pit. This surface may represent the floor and appears to have been baked by the heat radiated from the fire pit. The fill was composed of dark charcoal stained soil with pieces of charcoal intermixed, and was 5 cm deep. Cultural materials recovered from this feature included ceramics, lithics and bone.

Room Fill: Although the fill of the room was excavated in 10 cm arbitrary levels, four natural strata were defined. Stratum 1 (levels A and B) consisted on 20 cm of sandy humus and represent the first natural stratum in the room. Stratum 2 (levels C and D) consisted of a gravel matrix washed in from the south. Level E and a small portion of F make up the third stratum, a light brown sand that was deposited on the original ground surface. This latter included part of levels F, G and H, a hardpacked sterile surface.

Rubble: A total of 2.03 m^3 of interior rubble and 0.14 m^3 of exterior rubble was recovered from Room 1.

Exterior Fill: All exterior grids north and west and Room 1 were excavated in to arbitrary levels, A and B. Level A (0-10 cm) was composed of a loose silt gravel with large rocks intermixed. Level B (10-20 cm) was a more compact soil mixed with larger rocks. Cultural material was found in level A. Level B was sterile of cultural material. A third level, C (20-30 cm) was excavated and also proved sterile.

Exterior Features: Three exterior ash filled features were located against and outside the south wall of Room 1.

Ash Lens 1 (Feature C): This oval ash lens was located against the south wall of Room 1. The long axis of the feature was perpendicular to the wall and measured 28 cm across. The fill was composed of gray ash stained soil and probably represents washed ash from Feature E. No cultural materials were recovered.

Ash Lens 2 (Feature D): A second ash lens was located 35 cm south of the south wall at approximately the same level as Feature C. The feature measured 24 cm x 20 cm and was roughly 5 cm deep. This basin shaped feature was filled with ash and dark brown soil. Cultural material recovered included one flake, a sherd and a single piece of bone.

Ash Lens 3 (Feature E): A third ash lens was identified against the central portion of the south wall of Room 1. The long axis of the feature was approximately 30 cm in length and was oriented along a north-south axis. The feature measured 20 cm across and was filled with between 1 and 5 cm of ash stained sand. One flake was recovered from the feature.

ROOM 2

Shape: Triangular surface structure (see Fig. 11.3).

Orientation: The long axis of the room was 52° west of true north.

Condition: A great deal of rodent action was indicated. A large packrat nest was removed from Room 2 prior to excavation. Although basal wall elements were intact, upper elements had fallen inside and outside the room.

Interior Room Dimensions:

	Length	Width	Height
North Wall	Boulder	Boulder	Boulder
South Wall	3.20 m	0.43 m	0.89 m
East Wall	1.85 m	0.36 m	0.68 m
West Wall	Boulder	Boulder	Boulder

Interior Floor Space: 3.7 m^2

Walls: The south and east walls were of similar construction and are described together below. A large boulder served as the north and west walls.

Type of Elements: Local basalt boulders, slabs and clasts.

Size of Elements: The south and east walls were primarily consturcted of upright elements ranging in size from 1.30 m x 0.64 m x 0.28 m to 0.70 m x 0.60 m x 0.50 m. Elements in the western portion of the south wall were smaller: 0.50 m x 0.32 m x 0.12 m to 0.18 m x 0.30 m x 0.20 m.

Placement and Construction of Elements: The large upright basal elements were placed side by side. These elements were generally large enough to meet the overhang above the room. Spaces between these elements were filled with smaller elements. The western portion of the south wall was constructed of smaller elements that were overlapping and horizontally laid. Although few upper elements were in place, those present suggest that upper elements were stacked horizontally and overlapping. The long axis of elements was placed at varying angles to the long axes of the walls. All elements were dry laid.

Shaping of Elements: Unmodified.

Wall Facing: Upright elements were placed with their flat surfaces facing the interior and exterior of the room. Horizontally laid elements were not placed to form flat surfaces on the interior or exterior of the walls.

Chinking: Chinking was not present.

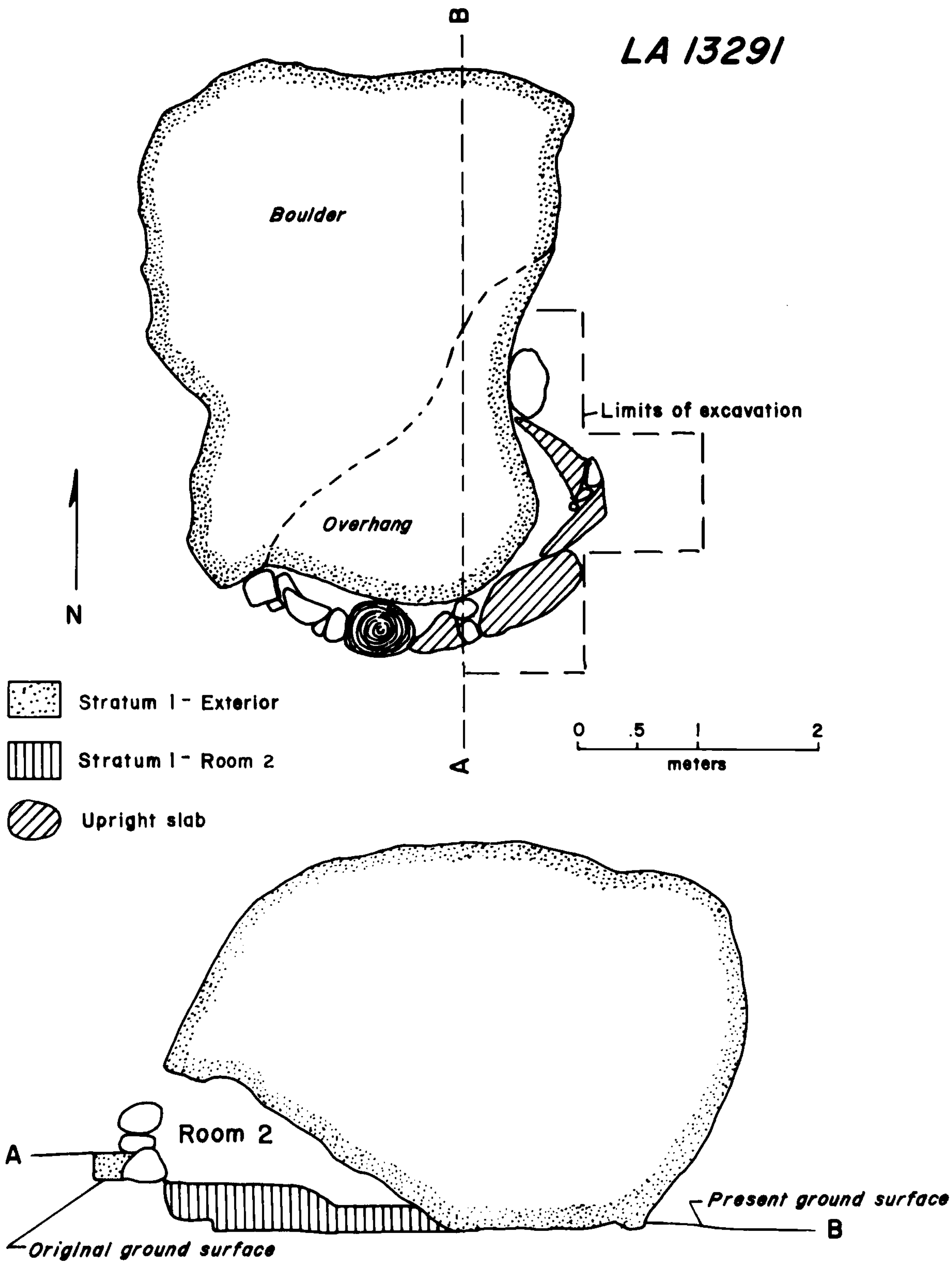

FIG. 11.3 LA 13291 Room 2 plan view and cross section

PLATE 11.1 LA 13291, Room 2, looking northwest

Mortar: Mortar was not present.

Corners: The southeast corner was formed by two upright slabs abutting each other. The south and east walls abut a large boulder (the north and west wall), forming the northeast and southwest corners.

Plaster: No evidence of plaster was found on the walls.

Entrances: No formal entrance could be defined.

Floor: Although a floor was not found, a burned area (and presumed occupation level) was located 10 cm below the present ground surface. Cultural materials were recovered below this level, but rodent disturbance makes it impossible to ascertain whether those artifacts represent another earlier occupation. The fill above the burned area began at the base of the wall elements, suggesting that the room was partially excavated into the original ground surface.

Roofing: An overhang served as a roof in Room 2. No other evidence of roofing was found.

Interior Features:

Burned Area: A circular burned area was located near the east wall at a depth of 10 cm (bottom of level A). The feature measured 66 cm east-west and 60 cm north-south and was approximately 33 cm deep. The fill was comprised of a dark brown humus soil with charcoal flecks intermixed. The soil became more compact and darker near the bottom. Cultural materials recovered from the feature included lithics, burned bone and ceramics. This feature provides the only evidence of an undisturbed occupation level.

Room Fill: The room was excavated in arbitrary 10 cm levels. Due to extreme rodent activity, it is difficult to correlate some of the levels. Levels in grids located in the northern portion of Room 2, did not correspond to other levels in the room. Their association to other strata could not be determined. The levels in all other interior grids were the same. Level A (0-10 cm) and B (10-20 cm) together consisted of a brown orange soil with humus and large quartz cobbles. Charcoal was present. Level C (20-30 cm) was an orange soil with medium to large gravel and no cobbles. Level D (30-40 cm) was an orange brown soil with small gravel. Cultural materials were recovered from all levels, but do not necessarily indicate more than a single occupation. Rodent action may account for the presence of cultural material below the burned area. For this reason, materials from all levels were grouped into a single analytical unit, Stratum 1 (see Fig. 11.3).

Rubble: A total of 12 m^3 of interior and exterior rubble was present.

Exterior Fill: Grids excavated on the exterior portion of Room 2 were excavated in two arbitrary 10 cm levels. Both levels were composed of a brown compact soil with large quantities of gravel. Cultural materials were recovered from the upper 10 cm. The lower level was sterile.

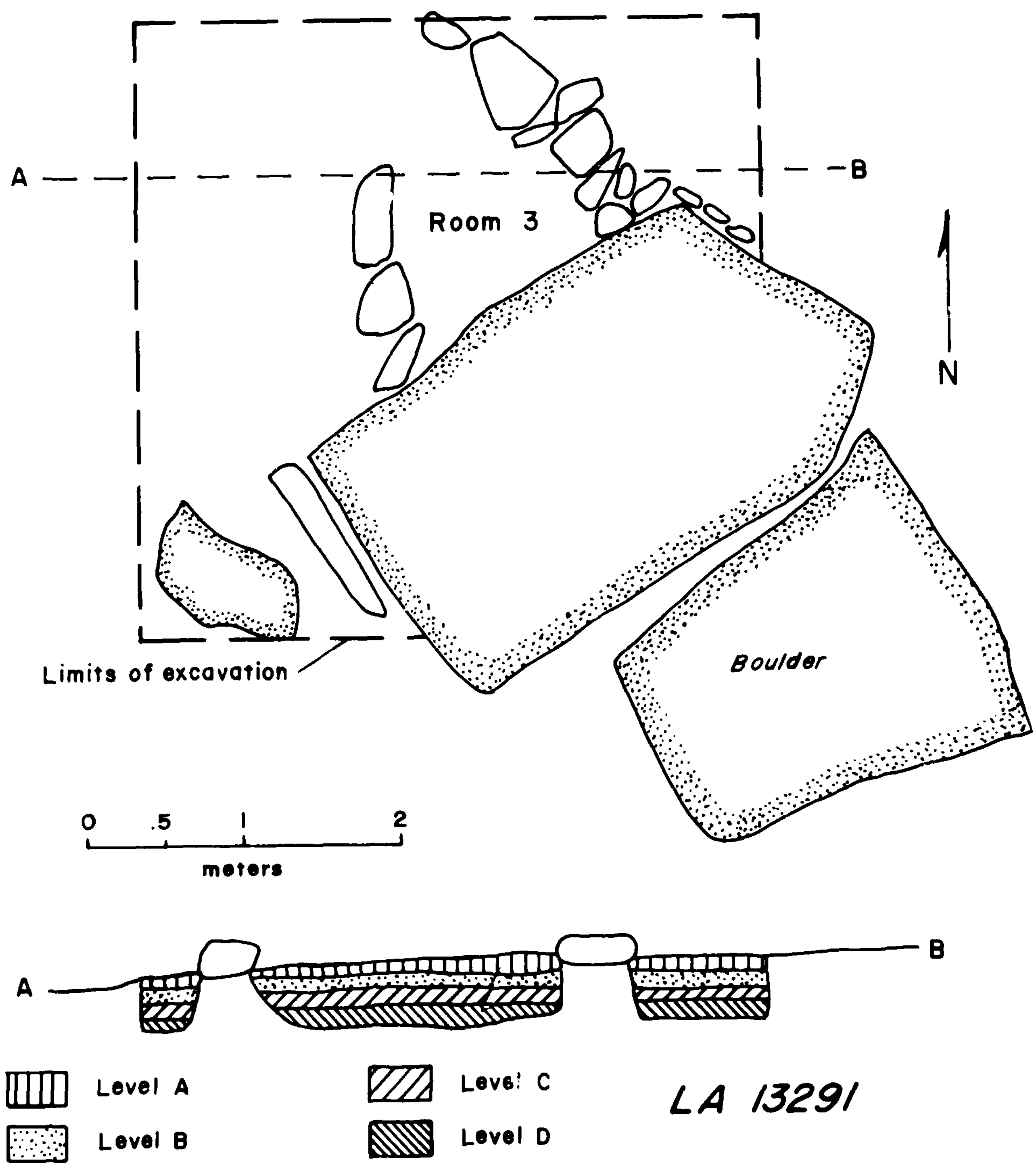

FIG. 11.4 LA 13291 Room 3 plan view and cross section

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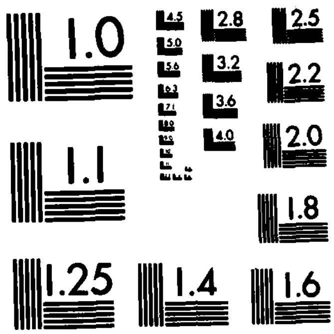

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

Exterior Features: No exterior features were located.

ROOM 3

Shape: U-shaped surface structure (see Fig. 11.4).

Orientation: The long axis of the room was 22° west of true north.

Condition: Very few wall elements were present.

Interior Wall Dimensions:

	Length	Width	Height
North Wall	N/A	N/A	N/A
South Wall	Boulder	Boulder	Boulder
East Wall	1.90 m	0.75 m	0.35 m
West Wall	1.25 m	0.40 m	0.28 m

Interior Floor Space: ca. 2.4 m^2

Walls: The south wall was a boulder. The east and west walls were of similar construction and are described together below.

Type of Elements: Local basalt clasts and boulders.

Size of Elements: Wall elements ranged in size from 68 cm x 42 cm x 54 cm to 40 cm x 20 cm x 20 cm.

Placement and Construction of Elements: Walls were one element wide and one element high. The clasts and boulders were placed side by side and in several instances did not touch each other. Elements were dry laid and placed at varying angles to the long axes of the walls. Construction suggests use of the structure for something other than human habitation.

Shaping of Elements: Unmodified.

Wall Facing: Elements were not placed with their flat surface toward the interior or exterior of the walls.

Chinking: No chinking materials were present.

Mortar: No mortar was present.

Corners: The east and west walls abutted a large boulder forming the south wall.

Plaster: The walls were not plastered.

Entrance: Room 3 did not have a north wall. This opening may have been used as an entrance. It measured 70 cm across.

Floors: The structure did not show any evidence of a floor.

Roofing: No evidence of roofing was found.

Interior Features: There were no interior features.

Room Fill: Room 3 was excavated in arbitrary 10 cm levels to a depth of 40 cm. Soils in the upper 20 cm (levels A and B) consisted of a dark brown humus with gravel intermixed. All cultural material was recovered from these levels. The lower levels (C and D) consisted of a white silt substrate.

Rubble: A total of 0.07 m^3 of rubble was recovered from the interior of Room 3. Exterior rubble totaled 0.142 m^3.

Exterior Fill: The exterior fill was the same as that found inside Room 3.

Exterior Features: No exterior features were found.

ROOM 4

Shape: L-shaped surface structure (see Fig. 11.5).

Orientation: The long axis of the structure was 27° west of true north.

Condition: It appears that the structure had only two walls, with the wall to the south abutting a large boulder to the west. Cultural material has eroded downslope, to the open side of the structure, or to the north.

Interior Room Dimensions:

	Length	Width	Height
North Wall	N/A	N/A	N/A
South Wall	2.70 m	0.40 m	0.65 m
East Wall	1.20 m	0.40 m	0.65 m
West Wall	Boulder	Boulder	Boulder

Interior Floor Space: 3.2 m^2

Walls: The two walls present, to the south and east, were of similar construction and are described together below.

Type of Elements: Local basalt clasts.

Size of Elements: Elements ranged in size from 50 cm x 30 cm x 10 cm to 30 cm x 20 cm x 10 cm.

Placement and Construction of Elements: Placement of basal, middle, and upper wall elements was similar. The walls were generally one element wide with clasts placed horizontally and overlapping. The majority of wall elements were placed with their long axes perpendicular to the long axis of the wall. Wall elements were dry laid.

Shaping of Elements: Unmodified.

Wall Facing: There was no attempt made to place elements with this flat surface to the interior or exterior of the room.

Chinking: No evidence of chinking was found.

Mortar: No mortar was present.

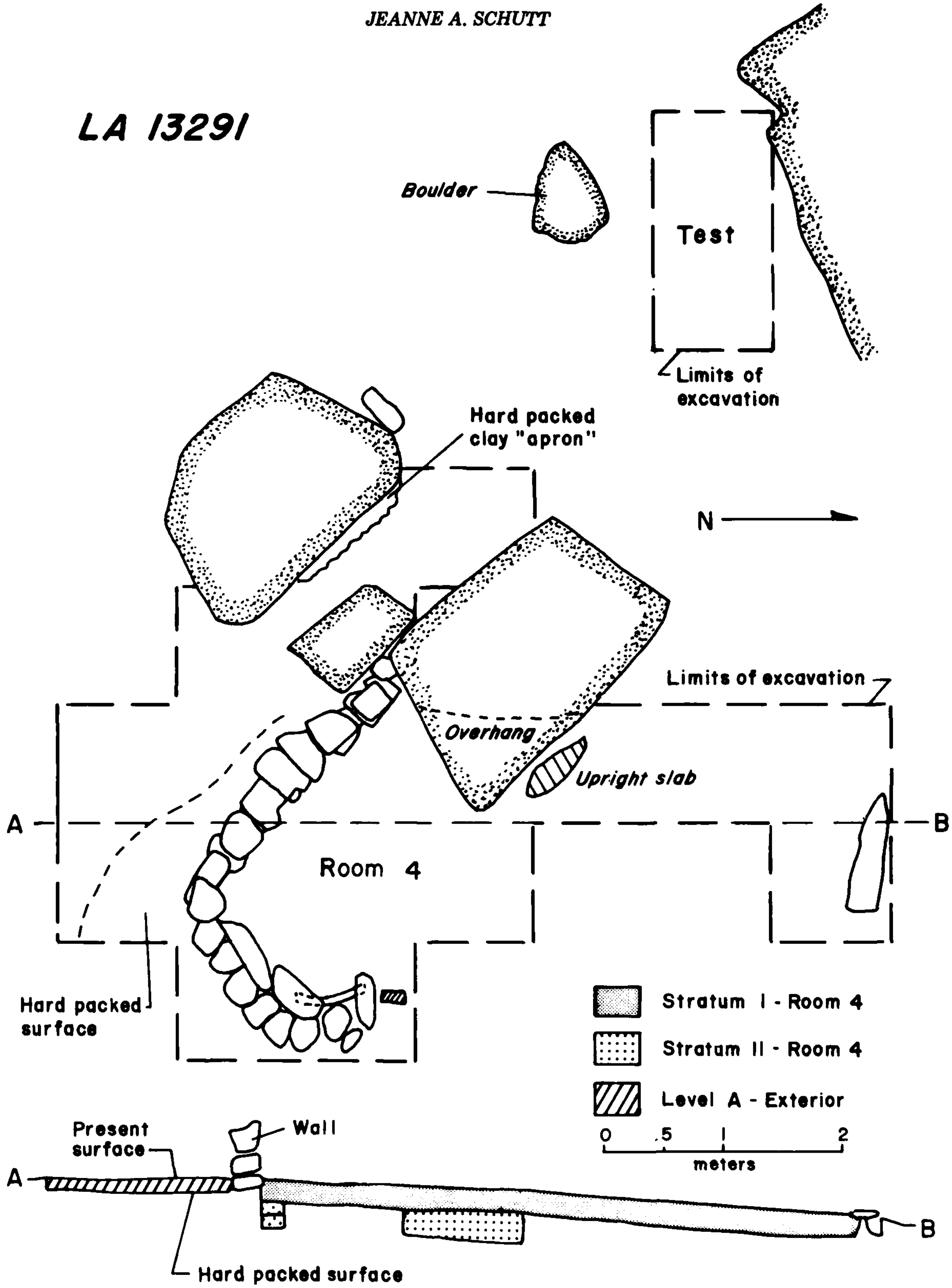

FIG. 11.5 LA 13291 Room 4 plan view and cross section

PLATE 11.2 LA 13291, Room 4, looking southwest

Corners: The southwest corner abuts a large boulder to the west. The southeast corner was rounded and interlocking.

Plaster: Walls were not plastered.

Entrance: There was no evidence indicating the presence of a formal doorway.

Floors: Evidence of a prepared floor or occupation surface was lacking.

Roofing: No evidence of roofing was recovered.

Interior Features: There were no interior features found.

Room Fill: Although the room was excavated in arbitrary 10 cm levels, the upper 20 cm of fill represented a single unit, Stratum 1, and consisted of compact reddish-brown sand. Two grids were excavated 20 cm below this stratum (levels C and D) and proved sterile of cultural material (Stratum 2). Cultural material removed from Room 4 included bone, lithics and ceramics.

Rubble: A total of 0.156 m^3 of rubble were recovered from the room interior. Exterior rubble consisted of 0.36 m^3 of rubble.

Exterior Fill: Grids outside Room 4 were excavated in one unit, Stratum 1. To the south of Room 4 this unit consisted of one 10 cm level (A). To the north, it consisted of 20 cm of fill. Exterior fill consisted of a compact reddish-brown sand.

Exterior Features:

Occupation Surface: A possible exterior occupation surface was found in three grids outside of the south wall of Room 4. It was represented by a fairly flat, hardpacked surface at the base of level A. Small flecks of charcoal were present on this surface.

ARTIFACTUAL ASSEMBLAGES

The artifactual materials recovered from LA 13291 were separated into eleven analytical units. Materials recovered from Room 1 were divided into three assemblages: (1) materials in levels A, B and C or the upper fill which represents the second occupation of the room; (2) materials associated with Feature A (hearth); and (3) levels C, D, E and F or lower fill which represent the first occupation. Natural stratigraphy and the distribution of lithics and ceramics were the basis for this separation. Materials from Rooms 2, 3, and 4 (Assemblages 5, 6, and 8, respectively) were discussed as single units because fill in these rooms consisted of either a single stratum or post-depositional action disturbed the stratigraphic context of artifactual materials. Materials recovered from excavated grids contiguous to each room were also discussed separately (Room 1—Assemblage 4; Room 2—none; Room 3—Assemblage 7; Room 4—Assemblage 9). Surface artifacts were divided into two analytical units: surface materials around Room 1 and in the area north of Room 1 (Assemblage 10); and all other surface materials (Assemblage 11). This distinction was made to analyze a heavy concentration of artifactual materials found around and north of Room 1.

CERAMIC ARTIFACTS

Minimum no. of vessels: 43
Total no. of sherds: 195
Average no. of decorated sherds per vessel: 5.95
Average no. of plain/utility sherds per vessel: 3.64

	Painted		Plain/utility/redware			China
Components	Bowls	Jars	Bowls	Jars	Other	Other
P-IV	6	5	1	1	—	N/A
Historic	4	4	4	15	1	2

A total of 195 sherds, representing 43 vessels were recovered from LA 13291 (see Table 11.1). The majority of ceramic artifacts, 172 sherds, date to the Historic period, ca. A.D. 1850-1900. A minimum of 30 different vessels are represented. The late occupation date for the site is based in part on the presence of two porcelain sherds. One of these sherds (from vessel no. 32) is a lavender-on-white print ironstone which is estimated to date between A.D. 1880-1900 (C.T. Snow, personal communication); the other sherd is from a yellow ironstone mixing bowl (vessel no. 9), also post 1880. The remaining Historic period ceramics are similar to those associated with the 19th century

TABLE 11.1
LA 13291 – Ceramic Assemblage

Ceramic Type	Vessel No.	Form	Temper	No. Sherds
PREHISTORIC WARES				
Agua Fria G/R	17	jar/olla	3431-53	3
Cieneguilla G-P	28	jar/olla	3260-53	4
Espinoso G-P	15	hemis. bowl	3431-53	1
undiff. glaze/red	16	jar/olla	3431-52	4
undiff. glaze/red	29	bowl, undiff.	3431-52	1
undiff. glaze/red	36	bowl, undiff.	3431-52	1
undiff. glaze/yellow	31	closed form, undiff.	3431-52	1
undiff. glaze/yellow	34	hemis. bowl	3655-53	1
undiff. glaze/yellow	35	jar/olla	3025-09	1
undiff. glaze/polychrome	18	hemis. bowl	3431-53	3
undiff. glaze/white	30	bowl, undiff.	3431-52	1
Corrugated Blind Indented	3	jar/olla	3430-09	1
Corrugated Smeared Indented	7	closed form, undiff.	2475-54	1
HISTORIC WARES				
Powhoge Polychrome	4	bowl, undiff.	3655-09	3
Powhoge Polychrome	5	jar/olla	3655-52	34
Powhoge Polychrome	12	jar/olla	3266-09	15
Powhoge Polychrome	25	hemis. bowl	3655-52	4
Powhoge Polychrome	26	hemis. bowl	3655-52	9
Kapo Black	20	closed form, undiff.	3655-53	13
Kapo Black	33	hemis. bowl	3655-53	2
Puname Polychrome	10	jar/olla	2040-09	3
Puname Polychrome	11	jar/olla	3400-09	7
Puname Polychrome	14	bowl, flanged	3400-09	17
Redware, pol. and slipped	6	bowl, undiff.	3430-09	3
Redware, pol. and slipped	8	closed form, undiff.	3400-09	4
Redware, pol. and slipped	13	closed form, undiff.	3266-00	2
Redware, pol. and slipped	37	bowl, undiff.	2471-53	1
Carnue Plain	1	jar/olla	2085-54	4
Carnue Plain	2	jar/olla	2475-54	1
Carnue Plain	19	closed form, undiff.	3101-54	2
Carnue Plain	22	jar/olla	2471-54	1
Carnue Plain (brickware)	23	jar/olla	2053-09	1
Carnue Plain (brickware)	24	jar/olla	2053-09	1
Carnue Plain	38	jar/olla	2471-54	6
Carnue Plain	39	jar/olla	2471-53	12
Carnue Plain	40	jar/olla	2042-09	6
Carnue Plain	41	jar/olla	2475-53	1
Carnue Plain	42	jar/olla	2471-54	3
Plain Pol.	21	bowl, undiff.	3655-53	2
Plain buff, pol.	27	undiff.	2042-09	11
Plain buff, pol.	43	closed form, undiff.	3655-53	1
China, undiff.	9	undiff.	2040-09	1
China, undiff.	32	undiff.	undiff.	1

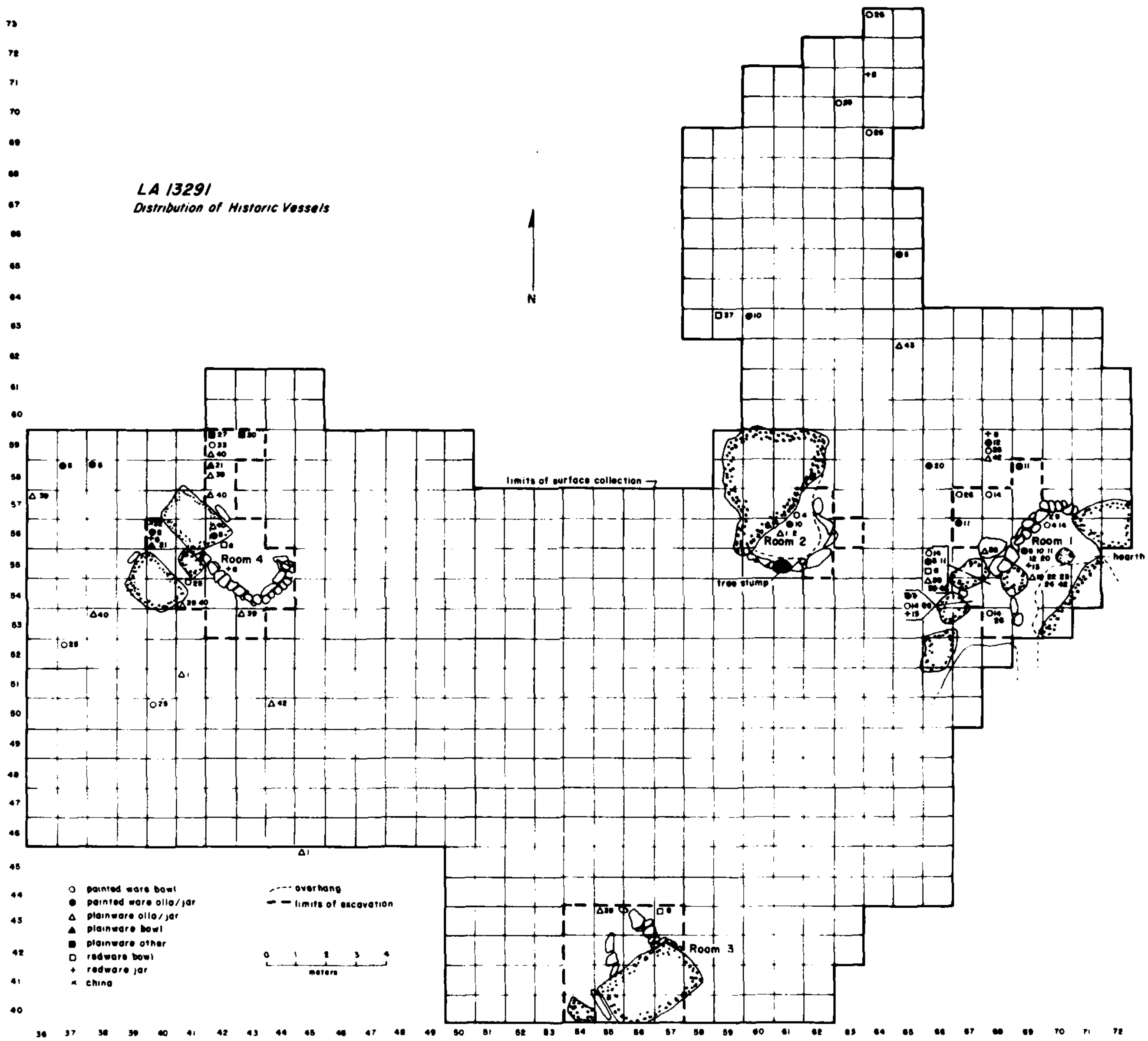

FIG. 11.6 LA 13291 Distribution of Historic vessels

TABLE 11.2

LA 13291 – Distribution of Ceramic Vessels by Provenience

	PREHISTORIC CERAMIC ASSEMBLAGE																							
	Painted Wares											Util.		Powhoge					Kapo		Puname		
Provenience	17	28	15	16	29	36	31	34	35	18	30	3	7	4	5	12	25	26	20	33	10	11	14
Room 1 surface	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–
level A	1	–	1	–	1	–	–	–	–	1	–	–	–	–	–	1	–	–	2	–	–	1	4
level B	2	–	–	1	–	–	–	–	–	–	–	–	–	–	–	9	–	–	2	–	1	1	6
level C	–	–	–	–	–	–	–	–	–	–	–	–	–	2	–	4	–	–	–	–	–	–	–
levels D & E	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
level F	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Room 2 surface	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
level A	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
level B	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	1	–	–
Room 3 surface	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
levels A-D	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Room 4 surface	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
strat. 1	–	–	–	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–
strat. 2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Feature B	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1
Exterior grids																							
surface	–	2	–	–	–	1	–	1	1	–	–	–	–	–	1	1	2	5	2	–	1	1	1
subsurface	–	2	–	3	–	–	1	–	–	1	1	–	–	1	31	–	2	4	7	2	–	4	5
TOTALS	3	4	1	4	1	1	1	1	1	2	1	1	1	3	34	15	4	9	13	2	3	7	17

occupation of Kuapa (LA 3444) and LA 3452. Occupation of both of these sites have been dated to the second half of the 19th century. These dates are based on the presence of local pumice temper in the carbon painted wares, black rimmed pottery and the presence of Kapo Black (which resembles ironstone) (Warren, personal communication).

A total of 23 P-IV sherds were also recovered from the site and represent a minimum of 13 vessels. However, the small number of sherds per vessel and the presence of P-IV sherds in the same stratigraphic context as historic sherds may indicate that the prehistoric ceramics were collected by the historic occupants of the site rather than representing a separate, earlier occupation.

Fifteen sherds were modified by the historic residents at LA 13291. Sherds from four historic vessels exhibited evidence of use. Seven of the worked sherds had curved edges, six had straight edges, and one had a drill hole.

In general, tempering materials were local. Three Powhoge Polychrome bowls and two jars were probably produced in the canyon since they contained crystal pumice temper. Two Puname Polychrome jars and one bowl were also probably manufactured locally. Two were tempered with fine-grained, crystalline basalt (3400). These mineral painted polychrome vessels were in the tradition of vessels manufactured at Zia Pueblo (LA 96). Of nine Carnue Plain vessels, most contained local volcanic sandstone temper and at least two brickware vessels were also present. The latter utility type is not common in the Upper or Middle Rio Grande, and was named by Toulouse (1949), at Abo Mission.

Of thirty historic vessels represented on the site, portions of thirteen were found in the fill of Room 1 (see Fig. 11.6). These vessel types included two Powhoge Polychrome vessels, two Puname Polychrome vessels, an undifferentiated redware, and six Carnue Plain vessels. Forty of 41 sherds were found in the upper fill and appear to be associated with the later occupation of that room. Vessel 19 was represented by two sherds; one occurred in the upper fill of Room 1 and the other occurred in the lower fill. The presence of this single sherd in the lower fill may indicate post-depositional disturbance or that this sherd is not part of vessel 19. The minimum number of vessels found on a site is, in fact, an estimate. Two similar sherds may belong to two different vessels (see Warren, Chapter 2).

Seven prehistoric sherds representing five vessels were also recovered from the upper fill of Room 1. These vessels include one Agua Fria G/R vessel, one Espinoso G-P, two undifferentiated glaze-on-red vessels, and one undifferentiated glaze-polychrome vessel. The small number of sherds per vessel may indicate that prehistoric sherds were col-

HISTORIC CERAMIC ASSEMBLAGE																				
Redwares				Carnue Plain											Plainwares			China		Prov.
6	8	13	37	1	2	19	22	23	24	38	39	40	41	42	21	27	43	9	32	Totals
–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	3
–	–	–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	14
–	–	–	–	–	–	–	–	1	1	–	–	–	–	1	–	–	–	–	–	25
–	–	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	8
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0
–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	1
–	–	–	–	1	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0
–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0
1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0
–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1
–	2	–	1	2	–	–	–	–	–	–	1	2	–	2	1	8	1	–	–	39
2	1	1	–	–	–	–	–	–	–	6	11	4	1	–	1	3	–	–	1	95
3	4	3	1	4	1	2	1	1	1	6	12	6	1	3	2	11	1	1	1	194

lected by the historic occupants of the site (see above).

A total of 26 sherds were recovered from the excavation in and around Room 4. These sherds represent 11 vessels which include the following types: 1-Powhoge Polychrome; 2-Kapo Black; 2-undifferentiated redwares; 2-Carnue Plain vessels; 2-plainware; and a single piece of undifferentiated China. Portions of four of these vessels were recovered from excavations in and around Room 1. Ceramic types and the distribution of vessels indicate that Rooms 1 and 4 were occupied contemporaneously, between A.D. 1850 and 1900. Four prehistoric sherds were recovered from excavated grids outside Room 4. It appears that these sherds do not represent a prehistoric occupation of Room 4.

Few sherds were recovered from excavations in and around Rooms 2 and 3. One sherd representing a single vessel (Puname Polychrome) was found in the fill of Room 2. Another sherd from what is probably the same vessel was found in the upper fill of Room 1. No sherds were recovered from excavated grids outside this room. Although few ceramics were recovered from Room 2, making a positive date of occupation difficult, faunal remains are similar to those found in Room 1 (see Faunal section) and thus may indicate contemporaneity.

Two sherds representing a single vessel (39) were found in the excavated area outside Room 3. These sherds belong to a Carnue Plain jar or olla and six sherds that appear to belong to the same vessel were recovered from the excavated area outside Room 1. No prehistoric sherds were found in the subsurface fill in and around Room 3. The small number of ceramics in and around Room 3 make it difficult to date the room. The lack of interior features (hearths), poor wall construction and low density of artifactual materials may indicate that this room was not used as a living structure.

LITHIC ARTIFACTS

A total of 981 lithic artifacts was recovered from LA 13291. Of 912 pieces of debitage (flakes and small angular debris), 622 were recovered from subsurface excavations. Other lithic artifacts included seven bifaces, 11 cores, 44 pieces of large angular debris, two hammerstones, three manos, one abrader, and one indeterminant piece of ground stone.

The majority of flakes and small angular debris was recovered from the subsurface areas in and around Room 1 (465 items) and the surface of the site (290 items). Debitage recovered from the subsurface areas in and around Rooms 2, 3 and 4 totaled only 157 artifacts.

Based upon differences in horizontal and vertical provenience, eleven analytical units (or assemblages) were defined for the materials recovered from LA 13291. These units were defined in the introduction to this section (see above).

Material Selection

The largest number of lithic artifacts were manufactured from raw materials in two major categories, basalt and Pedernal chert/chalcedony. A total of 431 artifacts were manufactured from basalt, 383 of which were glassy basalt (3701). The Pedernal chert/chalcedony category was represented by 318 artifacts and included eight material taxa. Forty-four of 45 quartzite artifacts were manufactured from a single material taxon (4000). Sixteen non-Pedernal chert artifacts were also recovered from the site and were manufactured from eight material taxa. Other material categories represented by less than ten artifacts included granite (2 taxa), andesite (1 taxon), jasperoid (2 taxa), chalcedony (1 taxon), silicified wood (1 taxon), and phyllite (1 taxon). All lithic materials recovered from the site are locally available in the Pajarito Plateau/White Rock Canyon areas.

Manufacture

Room 1 (Assemblages 1-3):

The lithic assemblage recovered from Room 1 was divided into two analytical units representing two probable occupations. The largest number of lithic artifacts were recovered from the top three levels in the room.

Room 1 Upper Fill (Assemblages 1 and 2):

A total of 276 pieces of debitage (flakes and small angular debris) were recovered from the upper fill (Assemblage 1). Four facially retouched tools, a single exhausted core (1051), three 3701 basalt cores, five pieces of large angular debris (3701, 1215, 3035), and ground stone (1 mano, 1 indeterminant) were also recovered from the upper fill in Room 1.

Three material categories were represented by approximately the same frequencies of debitage: basalt (88); obsidian (86); and Pedernal chert/chalcedony (86). Reduction of these various materials appears to be different and thus each will be discussed separately below.

The basalt recovered from the upper fill suggests that both primary and secondary stages of reduction occurred. The majority of the basalt flakes and small angular debris recovered (83 of 88 artifacts) were manufactured from a glassy basalt 3701 taxon. Thirty percent of the basalt assemblage exhibited cortex. Platforms were found on 56% of the flakes and 78% of these were single-faceted which indicates an emphasis on core preparation. The ratio of cortical to noncortical flakes and small angular debris appears to be typical of primary and secondary reduction for this material. Three pieces of basalt large angular debris were found on the surface inside Room 1.

Unlike the basalt assemblage, the obsidian materials indicated emphasis on secondary stages of reduction. Only 12% of the debitage exhibited cortex. Platforms were present on 41% of the flakes and of these, 97% were single-faceted. A single flake with a cortical platform was recovered. Sixty of 86 flakes and pieces of small angular debris fell into the 11-20 mm size classification. The larger number of noncortical flakes and small angular debris, the high percentage of single-faceted platforms, and the size of the flakes suggest that secondary reduction of obsidian occurred in the second occupation of Room 1.

The largest number of obsidian flakes and small angular debris (67 of 86 artifacts) belonged to the 3520 material taxon. Three 3520 obsidian facially retouched artifacts (2 unifaces, 1 biface) were also recovered from the upper fill in Room 1. The lack of retouch or resharpening flakes indicates that these tools were not manufactured in Room 1.

The Pedernal chert/chalcedony assemblage indicated emphasis on primary reduction. Fifty percent of the flakes and small angular debris exhibited cortex. Sixty percent of the flakes recovered had platforms and only 63% were single-faceted. The high percentage of cortical platforms (37%) and the high ratio of cortical to noncortical flakes and small angular debris suggest that although primary and secondary stages of reduction occurred, emphasis was placed on primary reduction. Evidence of tertiary stages of reduction are lacking. Two Pedernal chalcedony pieces of large angular debris were found on the surface inside Room 1.

The other material categories represented in the upper fill of Room 1 included quartzite (13), chert (2) and jasperoid (1). Although low counts of debitage are present and make speculation on reduction strategies difficult, certain conclusions are indicated. A single chert (1070) uniface was recovered from the upper fill in Room 1. The lack of chert debitage and small angular debris and the lack of flakes with retouched platforms indicates that this tool was not manufactured in Room 1.

Fifty flakes and pieces of small angular debris were recovered from a hearth located in the upper fill of Room 1 (Assemblage 2). The majority of these artifacts belonged to the obsidian material classification. None exhibited cortex which further supports an interpretation that secondary reduction of obsidian occurred in Room 1. Thirteen flakes and pieces of small angular debris were Pedernal chert/chalcedony. Thirty-one percent exhibited cortex. Again, this assemblage indicates a reduction strategy similar to that seen in the rest of the upper fill of Room 1 with primary and secondary stages being represented. The final four pieces of debitage recovered from the hearth belong to the 3701 basalt material taxon. This population of flakes is too small for further speculation.

Room 1 Lower Fill (Assemblage 3):

The lithic assemblage recovered from the lower fill in Room 1 was small; only 26 flakes and pieces of small angular debris and one piece of 3701 large angular debris were found. No other lithic artifacts were recovered. Nineteen basalt artifacts, seven Pedernal chert/chalcedony artifacts, and a single obsidian flake were represented. Low counts in the latter two material categories make speculation on reduction difficult. Debitage belonging to the basalt material category indicate that both primary and secondary reduction occurred with 39% of the assemblage exhibiting cortex. Fifty-seven percent of the flakes had platforms and 63% of these were single-faceted. The lack of retouch platforms indicates that tertiary stages of manufacture did not occur during the first occupation of Room 1.

It appears that the longest occupation of Room 1 is associated with the upper fill or the second occupation. Although lithics were recovered from the lower fill, the small amount suggests an occupation of much shorter duration. The low counts of ceramics and faunal remains and the lack of hearth features also support this interpretation. The lithic assemblage recovered from the upper fill of Room 1 suggests that each of the various material categories reflected different stages of reduction. Apparently the primary reduction of obsidian did not occur in Room 1. The assemblage indicates a heavy emphasis on secondary reduction. Both basalt and Pedernal chert/chalcedony assemblages suggest primary and secondary reduction although the Pedernal chert/chalcedony assemblage indicates a slightly greater emphasis on decortication. It does not appear that any facially retouched artifacts were manufactured in Room 1.

Grids in Vicinity of Room 1 (Assemblage 4):

A total of 113 flakes and pieces of small angular debris were recovered from the excavated grids around Room 1 (see Fig. 11.7). The majority of these artifacts belonged to two material categories: basalt (53); and Pedernal chert/chalcedony (42). Other material categories represented included chert (7), obsidian (4), quartzite (2), jasperoid (2), chalcedony (1), andesite (1) and phyllite (1).

All of the basalt recovered from this area belonged to the 3701 material taxon. Twenty-eight percent of the debitage exhibited cortex. Platforms were present on 61% of the flakes, and 73% of these were single-faceted. As in Room 1, the ratio of cortical to noncortical flakes and small angular debris indicate both primary and secondary reduction of basalt. There was no evidence of tertiary stages of manufacture in this area.

The Pedernal chert/chalcedony material classification was represented by 42 pieces of debitage. Fifty-two percent had cortical surfaces. Platforms were found on 58% of the flakes, and 74% of these were single-faceted. The ratio of debitage with cortex suggests that although emphasis was placed on primary reduction, secondary stages of reduction did occur. The high frequency of single-faceted platforms (74%) in conjunction with a relatively high percent of cortical flakes may indicate time investment in core preparation.

Other material categories were represented by too few lithics to speculate on stages of reduction. The obsidian material category included only four pieces of debitage, indicating that the reduction of obsidian did not occur in the subsurface areas around Room 1.

Room 2 (Assemblage 5):

Very few lithic artifacts were recovered from Room 2. Flakes and small angular debris totaled 20. Eleven pieces of basalt were recovered; 10 of these were 3701 basalt. Twenty percent of the 3701 basalt had cortex. Four flakes had platforms and all were single-faceted. Seven pieces of Pedernal chert/chalcedony debitage were also recovered. A single piece of 1214 large angular debris was recovered from the surface inside Room 2. One chert and one quartzite flake were also found in the fill of Room 2. An additional quartzite piece of large angular debris was recovered from the surface inside Room 2. The low frequency of artifacts in any one material group make further speculation on reduction or manufacture difficult. Artifacts manufactured from obsidian were lacking. No lithic artifacts were recovered from the excavation of grids outside and contiguous to Room 2.

Room 3 (Assemblage 6):

Room 3 also had low counts of lithic artifacts with only 29 pieces of debitage (flakes and small angular debris). As in Room 2, basalt artifacts were greatest in number. Fourteen pieces of basalt debitage were found and 10 of these were 3701 basalt. Forty-three percent of the basalt had cortex. Six flakes had platforms and all of these were single-faceted. The low frequency of artifacts in any one material category makes further speculation difficult.

The lack of features, small amount of cultural debris and the architectural construction may indicate that Room 3 may have served as a storage unit.

Grids in Vicinity of Room 3 (Assemblage 7):

Very little cultural material was recovered from the excavation of grids outside Room 3. Fifteen pieces of debitage were found. Twelve were basalt artifacts. Nine of these represented the 3701 basalt material taxon. A single basalt (3701) core and a single Pedernal chalcedony (1215) piece of large angular debris were recovered from the surface outside Room 3.

Room 4 (Assemblage 8):

Twenty lithic artifacts were recovered from the fill inside Room 4. Of 19 flakes and pieces of small angular debris, 11 were basalt. Ten of the basalt artifacts belonged to the 3701 material taxon. Fifty-five percent of the basalt debitage had cortex. The Pedernal chert/chalcedony category was represented by five flakes and small angular debris. Two quartzite pieces of small angular debris and a single obsidian flake were also

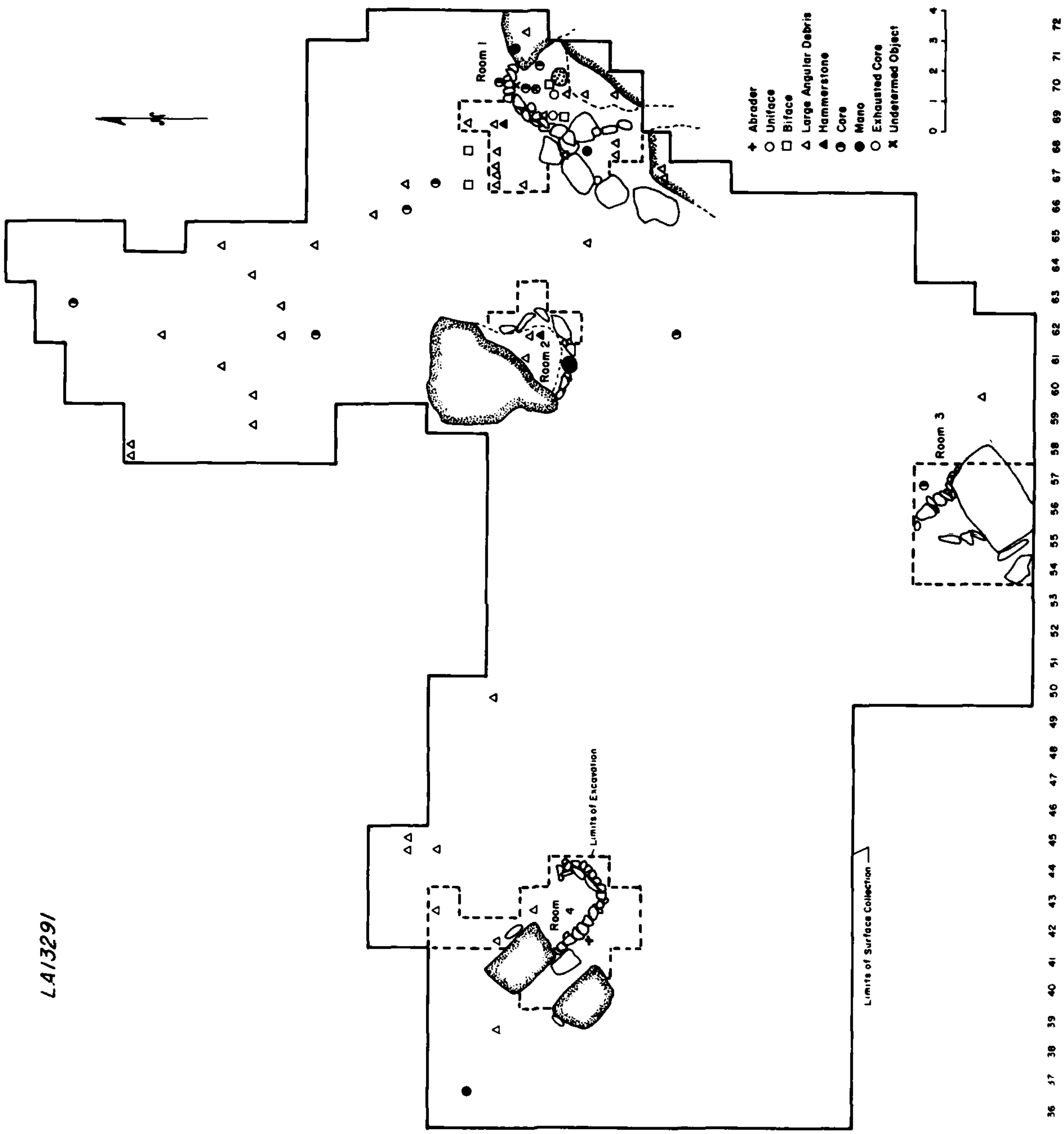

FIG. 11.7 LA 13291, distribution of cores, large angular debris, and lithic tools (each symbol represents an artifact)

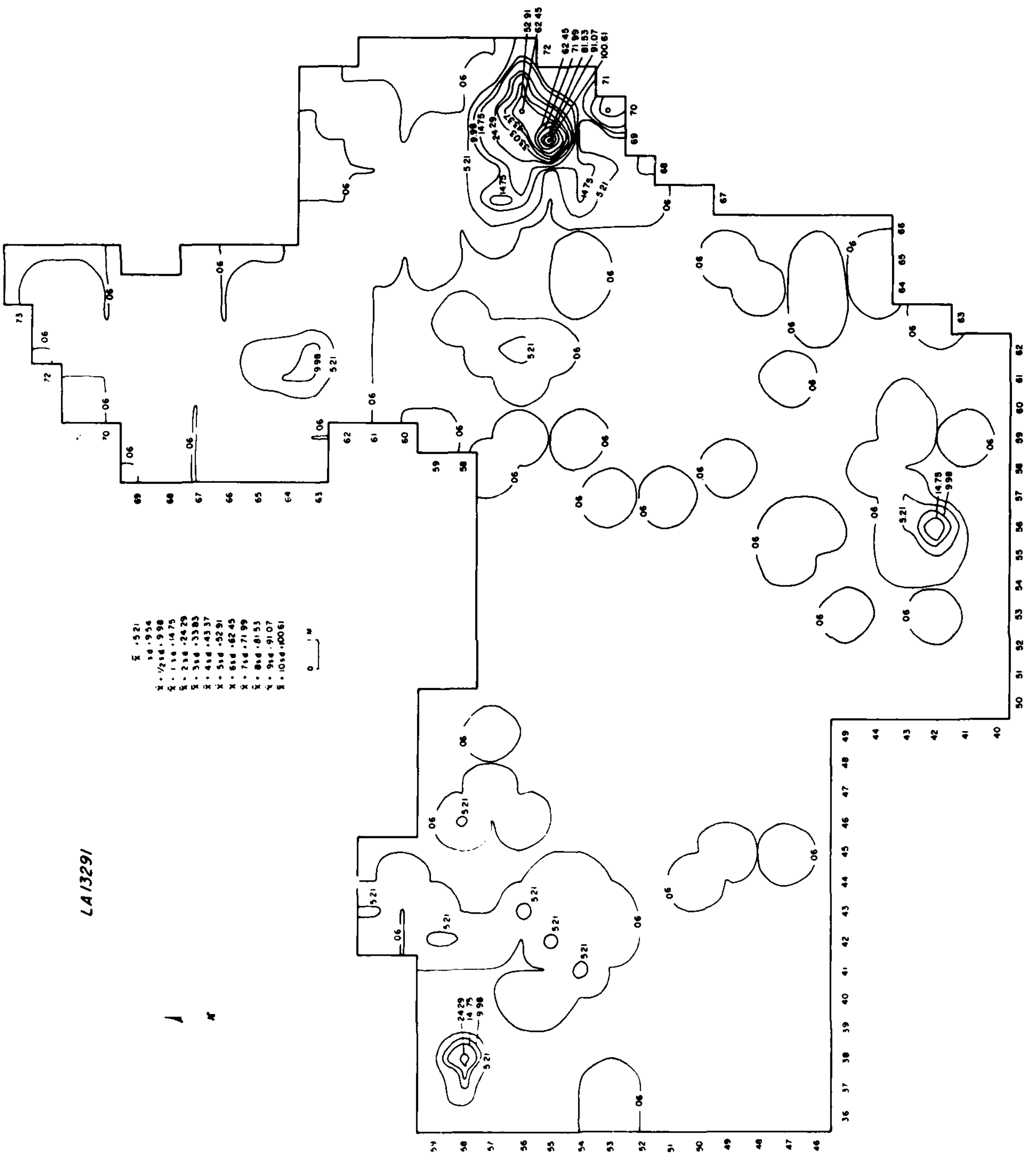

FIG. 11.8 LA 13291, distribution of debitage

recovered. One piece of quartzite large angular debris was also present. The low frequency of lithic artifacts makes further speculation difficult.

Grids in Vicinity of Room 4 (Assemblage 9):

Seventy-four pieces of debitage (flakes and small angular debris) were recovered from the excavation of grids outside Room 4. The largest number of these were basalt (46) and 44 of these were 3701 basalt. Cortex was found on 46% of the basalt. Platforms were found on 55% of the basalt flakes and 70% of these were single-faceted. The number of cortical flakes and small angular debris suggests a slight emphasis on primary reduction yet evidence of secondary reduction is present. Seventeen Pedernal chert/chalcedony flakes and pieces of small angular debris were recovered. Sixty-five percent of these exhibited cortex. The high proportion of cortex suggests that emphasis was placed on primary reduction. Platforms were present on 71% of the flakes and 60% were single-faceted. Evidence of tertiary stages of manufacture was lacking. Other material categories had too few artifacts for further speculation on reduction strategies. Two pieces of 1215 large angular debris were recovered.

Surface (Assemblages 10 and 11):

The surface collection from LA 13291 was separated into two assemblages on the basis of a high density area north and downslope from Room 1. A total of 251 lithic artifacts were recovered from this 164 m^2 high density area (Assemblage 10), representing an artifact density of 1.56 artifacts per m^2. The lithic assemblage recovered from the rest of the surface (Assemblage 11) included only 76 artifacts.

Assemblage 10:

Material categories represented in the lithic concentration for debitage included the following: basalt (95), Pedernal chert/chalcedony (92), obsidian (21), chert (4), quartzite (8), silicified wood (1) and granite (1). Generally, the entire assemblage suggests a great time investment in decortication or primary reduction although secondary stages of reduction are also indicated. The lowest ratio of cortical to noncortical debitage in all material categories was 49% (basalt). This suggests an emphasis on primary reduction. In the Pedernal chert/chalcedony assemblage, 71% of the flakes and small angular debris exhibited cortex. In Room 1 cortex was found on 50% of the Pedernal chert/chalcedony assemblage. The presence of cortex on 71% of an assemblage suggests a very heavy emphasis on decortication of Pedernal materials. A single flake (1050) with a retouched platform was also recovered, indicating that a facially retouched artifact was manufactured at the site.

The obsidian assemblage also suggests emphasis on primary reduction. Fifty-two percent of the flakes and small angular debris exhibited cortex. The lack of cortical debitage in Room 1 and the relatively large amount in the lithic concentration may indicate that primary reduction occurred in the area outside Room 1 and secondary reduction of these materials occurred in the upper fill of Room 1.

Other lithic artifacts recovered from the lithic concentration included three bifaces, 21 pieces of large angular debris, and five cores. All artifacts were manufactured from material taxa that were represented in the flakes and small angular debris collected in the area.

Although it appears that wash action may have affected the spatial location of lithics in this area, the difference between assemblages inside Room 1 and in the lithic concentration indicate that the assemblage was not washed out of Room 1. The various assemblages in each material category suggest use of the area for primary reduction or decortication.

Assemblage 11:

The remaining surface areas on the site had very low lithic artifact densities. Lithics included 68 pieces of debitage (flakes and small angular debris), one basalt core and six pieces of large angular debris. Three material categories were represented in the debitage and small angular debris: basalt (45); Pedernal chert/chalcedony (19), and obsidian (4). The basalt and Pedernal assemblages indicate primary and secondary stages of reduction. Thirty-six percent of the basalt exhibited cortex; 42% of the Pedernal assemblage exhibited cortex. It appears that some time investment was placed in core preparation of basalt. Sixty-eight percent of the flakes had platforms and 82% of these were single-faceted. Unlike the assemblage recovered from the lithic concentration, the other surface lithics on the site indicate both primary and secondary stages of reduction. However, the low density of lithics suggests that a less intense lithic processing was carried out on this portion of the site.

1/8 Inch Screen Sample:

All soil excavated from Room 1, the exterior of Room 1, and three grids in Room 4 were screened through 1/8 inch mesh screen which provided additional information concerning reduction activities performed in each room. A total of 209 pieces of debitage (flakes and small angular debris) were recovered, 198 from Room 1, eight from the exterior of Room 1, and three from Room 4. Two of the flakes in Room 1 exhibited wear, two platforms exhibited cortex, one platform was unidirectionally retouched. Thirty-five platforms were single-faceted and 158 pieces of debitage did not have platforms. The high number of small flakes with either single-faceted platforms or no platforms at all may indicate that this debitage is largely a result of shatter from the reduction process (see Table 11.3).

Tool Use

Utilized lithic materials recovered from LA 13291 included two hammerstones, three manos, one abrader,

TABLE 11.3

LA 13291 – Lithics Recovered from 1/8 Inch Screen

Grid/Feature	Level	No. of Artifacts	Material	Platforms S.F.	Platforms Ctx.	Platforms Ret.	Platforms None	Wear Patterns
OBSIDIAN								
Room 1: Interior								
53/70	A	27	3520	4	—	—	23	1
		1	3523	—	—	—	1	
55/69	A	14	3520	3	—	—	11	1
	C	12	3520	3	—	—	9	
		2	3523	1	—	—	1	
55/69:RIA	B	12	3520	4	—	—	8	
	C	12	3520	4	—	—	8	
55/70	B	9	3520	—	—	—	9	
		1	3523	—	—	—	1	
56/69	B	5	3520	—	—	—	5	
56/70	B	17	3520	4	—	—	13	
56/71	B	3	3520	—	—	—	3	
57/71	B	1	3520	—	—	1	—	
TOTAL		116						
BASALT								
Room 1: Interior								
53/70	A	1	3701	—	—	—	1	
	B	5	3701	—	—	—	5	
55/69	C	1	3050	—	—	—	1	
55/69:RIA	C	1	3701	—	—	—	1	
		1	3050	—	—	—	1	
55/70	B	1	3701	—	—	—	1	
56/70	C	3	3701	—	—	—	3	
56/71	B	1	3701	—	1	—	—	
		1	3050	—	—	—	1	
57/70	B	2	3701	—	—	—	2	
	C	1	3701	—	—	—	1	
57/71	B	1	3701	—	—	—	1	
TOTAL		19						
Room 1: Exterior								
57/68	A	2	3701	—	—	—	2	
57/69	A	2	3701	—	—	—	2	
53/68	A	2	3701	—	—	—	2	
TOTAL		6						
Basalt (Continued)								
Room 4:								
55/43	B	1	3701	—	—	—	1	
PEDERNAL CHERT/CHALCEDONY								
Room 1: Interior								
53/70	A	1	1050	—	—	—	1	
		2	1052	—	—	—	2	
		5	1215	1	—	—	4	
	B	5	1215	2	—	—	3	
55/69	A	1	1052	1	—	—	—	
		3	1215	1	—	—	2	
	C	1	1050	—	—	—	1	
		3	1215	—	—	—	3	
55/69:RIA	C	1	1050	—	—	—	1	
		4	1214	—	—	—	4	
		1	1215	1	—	—	—	
55/70	B	1	1214	—	—	—	1	
		4	1215	1	—	—	3	
		1	1091	1	—	—	—	
56/69	B	3	1215	2	—	—	1	
56/70	B	7	1214	—	—	—	7	
		12	1215	2	—	—	10	
	C	2	1215	—	—	—	2	
56/71	B	1	1215	—	—	—	1	
	C	2	1215	—	—	—	2	
57/71	C	2	1215	—	—	—	2	
		1	1053	—	1	—	—	
TOTAL		63						
Room 1: Exterior								
57/68	A	1	1052	—	—	—	1	
53/68	A	1	1215	—	—	—	1	
TOTAL		2						
Room 4:								
55/43	B	1	1051	—	—	—	1	
		1	1091	—	—	—	1	
TOTAL		2						

seven unifaces/bifaces, one core, and 111 pieces of debitage (flakes and small angular debris). None of the pieces of large angular debris had been used as tools. Twelve percent of the debitage, however, showed signs of utilization. No area on the site indicated that it was specifically a use activity area. The highest percent of utilized debitage occurred in the surface lithic concentration to the north of Room 1 (17%), the hearth in Room 1 (16%), and in Room 4 (11%). Percentages of utilized debitage and small angular debris in all other areas ranged from 0% to 12%.

Three material categories were primarily selected for use tasks: obsidian (44), Pedernal chert/chalcedony (35), and basalt (32). A single chert (1072) piece of small angular debris was also utilized. The two hammerstones found on the site were recovered from the surface in Room 2 (material 3030) and grid 57/69 (material 4000). Each artifact had a single battering locus, one on a ridge, the other on a convex surface.

Two shaped manos, one unshaped mano fragment, an abrader, and an object of unknown purpose were found at this site. One of the shaped manos was found in a subsurface grid exterior to Room 1, while the other was within the room. Both were rectangular in shape. One, a distal fragment, was made of sandstone (2050); the other was a complete basalt (3430) mano. Each had two possible grinding surfaces. An unshaped mano, made of basalt (3430) was found in a grid square adjacent to Room 4. No milling slabs were found with these manos. A complete felsophyre (3030) abrader was also discovered just south of Room 4. It was elongate-oval in shape and irregular in cross section. An indeterminant object made of basalt (3400) was also found at LA 13291, in the upper fill of Room 1. It was rectangular in shape and unmodified except for a high polish covering the entire rock. One end exhibited large (2-4 mm) flake scars that were also slightly polished. Small striations perpendicular to the long axis occurred on both surfaces. On one surface there was a square facet (50 mm x 50 mm) in the center of the surface. Though pecking is evident over the entire object, it was most concentrated on the square facet.

Of seven facially retouched tools recovered from the site, five showed evidence of use. Four of the utilized tools were recovered from the upper fill of Room 1. One obsidian biface had two utilized edges with unidirectional step fracturing; obsidian uniface had one straight edge with unidirectional rounding and striations perpendicular to the edge margin (probably a scraper); and a chert uniface had four utilized edges. Three of these edges exhibited step fractures and unidirectional rounding, and the fourth edge had step fractures with no rounding. The three edges were probably used in some sort of scraping task. One quartzite biface, recovered from the surface of the lithic concentration had two edges which exhibited crushing.

MISCELLANEOUS MATERIALS

Two modified pieces of wood were recovered. One of the tools, recovered from the upper fill in Room 1 (grid 56/71, level A), measured 113 mm x 13 mm x 10 mm. It appears to have been whittled. Although the tip of the object was broken, rounding and polish extended down the shaft of the whittled portion of the tool, suggesting that it had been used through soft, pliable material. One area on the tool exhibited transverse action against the grain of the wood. The unwhittled portion of the tool was smooth, which may be a result of holding the tool.

The second wooden tool, which measured 59 mm x 6 mm x 5 mm, was whittled into an object with two pointed ends. Both tips of the artifact exhibited rounding wear which extended down the shaft of the tool 12 mm and 9 mm, respectively, from the tips. Polish was also noted on the shaft of the tool. The central portion of the tool exhibited some rounding and polish.

A small fragment of copper was recovered from the upper 10 cm of fill in grid 56/69, near Room 2. It was irregular in shape, measuring 11 mm x 10 mm x 0.5 mm (L x W x T).

FLOTATION ANALYSIS

A series of flotation samples from Rooms 1 and 2 and associated interior and/or exterior features were examined. In general, the light flotation materials were coarse with the exception of samples from the interior fill of Room 1 and the hearth in Room 2. Heavy flotation residue varied in quantity from sample to sample although similar classes of items (bone fragments, charcoal, flakes) were recovered. Because of the volume of material monitored, the flotation residue is summarized in tabular form below.

Room 1, Level B (upper fill) (1100 ml)

Light Residue: *Portulaca* sp. (109 seeds); *Amaranthus* sp. (34 seeds); *Chenopodium berlandieri* (14 seeds); *Chenopodium incanum* (11 seeds); Cheno-Ams (5 seeds); *Euphorbia glyptosperma* (3 seeds); *Juniperus* sp. (twig fragments); unknown cf. *Rhus trilobata* (1 seed); unknown (1 seed).

Heavy Residue: 15 bone fragments (2 burned); six pieces of charcoal; four seed shell fragments; four flakes.

Room 1, Feature A (ash lens), Level B

Light Residue (1000 ml): *Juniperus* sp. (1 seed, twig fragments); unknown (7 seeds, 1 seed husk).

Heavy Residue (sample no. 1—1000 ml): 11 bone fragments (3 burned); 30 pieces of charcoal; two 3520 obsidian flakes; and one piece of plastic.

Heavy Residue (sample no. 2—1000 ml): 40 bone fragments (13 unburned); nine flakes, 3520 obsidian (7 flakes), 3701 basalt (1) and 1215 Pedernal chalcedony (1); three seed fragments and 50 pieces of charcoal.

Room 1, Feature A (ash lens), Level C

Light Residue (1100 ml): *Juniperus* sp. (twig fragments).

Heavy Residue (2100 ml): 20 bone fragments (3 burned); 15 obsidian 3520 flakes; 50 pieces of charcoal; and one seed fragment.

Room 1, Feature B (hearth), Level C

Light Residue (1000 ml): No seeds recovered although miscellaneous fecal materials were noted.

Heavy Residue (1000 ml): 10 pieces of charcoal.

Heavy Residue (900 ml): No materials were recovered.

Feature C (exterior ash lens) (1200 ml)

Light Residue: No seeds were recovered although insect parts and fecal material were noted.

Heavy Residue: 35 bone fragments (15 burned); 13 pieces of charcoal, and two flakes were recovered.

Feature D (exterior ash lens) (500 ml)

Light Residue: No seeds were recovered; fecal materials were present.

Heavy Residue: 17 bones fragments (5 burned); 10 pieces of charcoal; and one rodent tooth were recovered.

Feature E (exterior ash lens) (1300 ml)

Light Residue: *Juniperus* sp. (twig fragments); *Chenopodium fremontii* (3 seeds); *Chenopodium* sp. (1 seed); *Euphorbia glyptosperma* (2 seeds); *Portulaca* sp. (1 seed); unknown (2 seeds).

Heavy Residue: Six bone fragments; 20 pieces of charcoal; nine unidentified seed fragments; and one insect skeleton.

Room 2, Feature A (hearth) (300 ml)

Light Residue: *Juniperus* sp. (2 seeds, twig fragments); *Amaranthus* sp. (4 seeds); *Portulaca* sp. (2 seeds); *Euphorbia glyptosperma* (1 seed); *Opuntia* sp. (prickly pear type) (2 seeds); Cheno-Ams (3 seeds); unknown seeds of three different types.

Heavy Residue: Five bone fragments (3 burned); 13 pieces of charcoal; five seed husk fragments; and three insect fragments.

FAUNA *(prepared by Martha R. Binford)*

Distribution

The faunal assemblage at LA 13291 consists of 765 bones: Room 1 (629), Room 2 (33), Room 3 (2), Room 4 (2), and ten exterior grids (99). The entire faunal assemblage is summarized in Appendix X.

First Occupation: Room 1, Lower Fill

The lower fill of Room 1 contained four bones. Two large mammal rib fragments and one Artiodactyla long bone fragment were recovered from level D; one woodrat femur was recovered from level E. No faunal remains were recovered from level F of Room 1.

Second Occupation: Room 1, Upper Fill

Faunal remains recovered from the upper fill of Room 1 include 625 bones: level A contained 174 bones; level B contained 266 bones; and level C contained 24 bones. The hearth contained 118 bones from level B and 43 bones from level C.

The majority of bones (507 or 81%) from the upper fill of Room 1 are from only four faunal taxa: Artiodactyla (110 bones), sheep/goat (69), large mammal (176) and medium-large mammal (152). The assemblage contained 30% skull fragments, 28% unidentified fragments, 23% longbone fragments, 9% rib fragments, 5% vertebrae fragments, 4% front leg fragments, and 1% or less for each pelvis, back leg and scapulae.

Exterior Fill around Room 1

The exterior fill around Room 1 contained 95 bones: 15 Artiodactyla, one large Artiodactyla, two small Artiodactyla, 11 bos/bison, 17 sheep/goat, one mammal unidentified, 25 large mammal, 19 medium-large mammal, one medium mammal, two miscellaneous, and one bird. The faunal assemblage outside of Room 1 is similar to the assemblage within the room. Skull fragments are the most numerous (46%) with longbone fragments and unidentified fragments next in quantity. In the exterior fill, however, vertebrae make up only 1% of the assemblage.

Room 2

Thirty-three bones were recovered from Room 2. The kinds of animals represented are similar to those found in Room 1, with the exception of bison and medium mammals which are absent.

Room 3

Room 3 contained only two bones: one sheep/goat navicular cuboid fragment and one sheep/goat metatarsal were recovered.

Exterior Fill around Room 3

One unidentified fragment was recovered from the exterior fill around Room 3.

Room 4

Two bones were recovered from Room 4; one Artiodactyla tooth and a perching or song bird unidentified fragment.

Exterior around Room 4

Three bones were recovered from the grids around Room 4: one bison phalanx, one sheep/goat molar and one medium-large mammal vertebra fragment.

Minimum Number of Individuals

A minimum of 19 individuals are represented by the faunal remains at LA 13291. They include one gopher (1 bone), one rock squirrel (2), three woodrats (4), one beaver (1), three deer (4), two bison (16), two cottontail rabbits (8), four sheep/goat (89), one bird (2), one spade foot toad (1).

The remaining 637 bones are from the following categories and do not affect the minimum number of individuals: large Artiodactyla (1), Artiodactyla (119), medium Artiodactyla (3), small Artiodactyla (9), Cervid (5), mammal unidentified (36), large mammal (219), medium-large mammal (177), medium mammal (10), small-medium mammal (22), small mammal (2), small vertebrate (1), Passiformes (1), Rodentia (3), miscellaneous (29).

Butchering Strategy

The faunal remains at LA 13291 suggest that butchering and consumption occurred at the site for sheep or goat and some other large mammal categories. All parts (vertebra, pelvis, skull, front leg, back leg, ribs, scapula) are represented for sheep or goat with the exception of scapula. Like LA 10114, no recognizable sheep or goat scapula were recovered from LA 13291. The presence of all other parts, however, including high frequencies of some lower utility parts such as skulls, suggests that butchering and consumption of sheep or goats occurred at the site.

Although pelvis and scapula are underrepresented at both LA 10114 and LA 13291, it is impossible to be sure why this occurs. It should be noted, however, that the majority of LA 13291 was surface collected only, and we cannot be certain that we have the whole site. Without that confidence, we cannot adequately explain any underrepresentation of parts.

Food Processing

LA 13291 has a very high percentage (31%) of skull fragments, indicating the processing of skulls for the brain and meat available from them. The majority of skull fragments were recovered from Room 1 and surrounding grids, suggesting that although skulls may have been processed in another area, they were probably cracked and consumed in and around Room 1.

Long bone fragments are a good indication of marrow cracking. LA 13291 contained 25% long bone fragments, most of them from the Room 1 area. Marrow cracking probably occurred in and around Room 1.

Unidentified fragments were also recovered primarily from this area. They comprise 23% of the faunal assemblage (174 bones). Large numbers of unidentified fragments are produced when smashing articulator ends when rendering bone grease or making some types of soup. It is impossible that grease rendering and/or soup making occurred at LA 13291, but the number of fragments suggests it was not a major activity. Large numbers of unidentified fragments might also be produced from cracking skulls. This could also expalin the fairly high percentage of unidentified fragments.

Cut Marks

Only six bones recovered from LA 13291 exhibited cut marks. Three of the cuts were produced by a metal implement. Only one of the six bones was recovered from an area away from Room 1. Three bones were recovered from the upper fill of Room 1 and two bones were recovered from the upper fill of a surrounding grid. One bone with cut marks was recovered from an exterior grid near Room 4.

Bone Tools

Seven utilized bones were recovered from LA 13291. The activities suggested by the implements are sewing, hide preparation and skinning (see Schutt 1977:101,103). Two Class 1b tools were recovered from Room 1 (one from level A and one from the hearth level B). A large mammal and a medium-large mammal long bone fragment exhibited rounding on the tip with polish and striations extending down the shaft. One Class 2a sheep/goat femur fragment (Room 1:RIA:level B) exhibited retouch on the concave edge. One Class 3 large mammal long bone fragment was recovered from Room 1, level B, and exhibited polish and rounding on the edge margin. One Class 4 unidentified long bone fragment was recovered from the hearth (Feature R1A, level B); it exhibited high polish on the interior surface with slight polish on the exterior surface. One Class 7 Artiodactyla ulna fragment was recovered from level B of Room 1 and exhibited polish on the shaft. There was one isolated occurrence that did not fit into the classifications. This mammal, unidentified fragment exhibited polish on both fracture surfaces with unidirectional striations on one of these fracture surfaces. This is the only utilized bone from outside Room 1, it was recovered from Room 2, level A.

Faunal Summary

The faunal remains at LA 13291 indicate that the inhabitants during the second occupation engaged in raising domesticated sheep or goats and procuring nondomestic species such as white tail deer, elk, bos or bison, and various small mammals. The assemblage suggests that sheep or goats were butchered and consumed at the site. Evidence such as skull and long bone fragments in high percentages suggests that consumption of brains and marrow occurred in addition to muscle tissue. The possibility of grease rendering and/or soup making is not ruled out although evidence for these activities is limited.

Room 1 and its surrounding area contained the largest number of bones and the most evidence for food processing on the site, suggesting activities involving faunal resources, were more intense in this area.

Three metal cut marks indicate that metal was utilized, as well as bone and stone tools. The bone tools indicate additional activities (sewing, skinning and hide preparation) at LA 13291.

The first occupation included only 4 bones, making it difficult to generalize about subsistence activities of the first inhabitants of Room 1.

SUMMARY

LA 13291 is a Historic site that was occupied between

A.D. 1850 and 1900. It consisted of four noncontiguous masonry structures, one of which was probably a storage unit, and a high density lithic concentration. One of the rooms (Room 1) was occupied for a short period of time, abandoned and then reoccupied. It was not possible to date the first occupation with ceramics, but the second occupation appeared to be of much greater duration and dated between A.D. 1850 and 1900. Historic ceramics recovered from Room 4 indicated that this room was also occupied between A.D. 1850 and 1900. Although Room 2 could not be dated independently, its close proximity to Room 1 and the presence of similar faunal remains suggest that it may be contemporaneous with Rooms 1 and 4. The presence of domestic sheep or goat remains minimally indicate that this room was occupied during historic times. The small number of sherds in Room 3 make a positive date difficult. Room 3 was an extremely ephemeral structure, lacking hearth facilities. This evidence and the presence of low densities of artifactual materials suggest that this structure was not used for habitation, and may have been a storage unit.

Although 23 prehistoric sherds representing 13 vessels were recovered from the site, a spatially discrete prehistoric occupation of the site could not be defined. The presence of low frequencies of prehistoric ceramics mixed with high frequencies of historic ceramics in good stratigraphic context may indicate that prehistoric sherds were collected by the historic occupants of LA 13291.

The distribution of lithic materials across the site indicates that the greatest amount of lithic processing occurred in and around Room 1. It appears that the lithic concentration to the north of Room 1 was primarily a decortication area. A large percentage of cortex was found on basalt, Pedernal chert/chalcedony and obsidian materials. In other areas of the site primary and secondary reduction of all materials (except obsidian) was indicated. The obsidian assemblage recovered from Room 1 reflected secondary stages of reduction. Major evidence for primary reduction of obsidian occurred only in the lithic concentration to the north of the room. A single chert flake with a retouch platform was recovered from Room 1 and may indicate the use or manufacture of a facially retouched rool. Although facially retouched artifacts were recovered from the upper fill in Room 1, evidence for the manufacture of those tools in Room 1 is lacking. Limited evidence for final stages of tool manufacture of non-Pedernal chert was found in the lithic concentration. Eleven percent of the total population of debitage and small angular debris was utilized. Obsidian, Pedernal chert/chalcedony and basalt were most frequently selected for use tasks. The distribution of these utilized materials across the site did not indicate specialized tool use activity areas.

Direct evidence of food consumption and procurement suggests that the historic inhabitants of LA 13291 not only produced domesticated foods but also made use of wild plant and animal resources in the area. Seeds from a variety of edible plants were recovered from flotation samples taken from Rooms 1 and 2 and adjacent areas. Kearney and Peebles (1967) suggest that the seeds and greens of many of these plants were used. The faunal assemblage suggests that not only were domestic sheep and/or goats raised and consumed, but several nondomestic species were also used. These included White Tail deer, bos or bison, elk and smaller mammals. The high percentage of long bone shaft fragments and skull fragments indicates that long bones and skulls were extensively processed for their food value. The assemblage also suggests that grease rendering and soup making may have played a limited part in the subsistence activities at the site.

It appears that the majority of the meat and bone processing occurred in and around Room 1. This area contained 720 bones where only 41 were recovered from other areas of the site (33 from Room 2). The faunal assemblage recovered from Room 2 is similar to that found in the upper fill of Room 1 and probably represents portions of many of the same animals.

The majority of individuals represented on the site were butchered and consumed at the site. Cut marks identified on bones indicate that both metal and stone tools were used during the butchering.

Other indirect evidence for food processing and consumption included milling implements and a variety of cooking, serving and storage vessels. Of the four structures found on the site, two lacked hearths and may have been used as storage facilities.

Although there was no direct evidence that domestic sheep or goats were maintained for purposes other than meat production, the bone tools recovered indicate that animal skins were being processed at the site. Skinning, hide preparation and sewing were indicated.

The artifactual assemblages recovered from LA 13291 indicate that a variety of subsistence activities were undertaken at the site. Many of these activities are similar to those seen on other historic sites in the Cochiti Reservoir area (see LA 10114, for example).

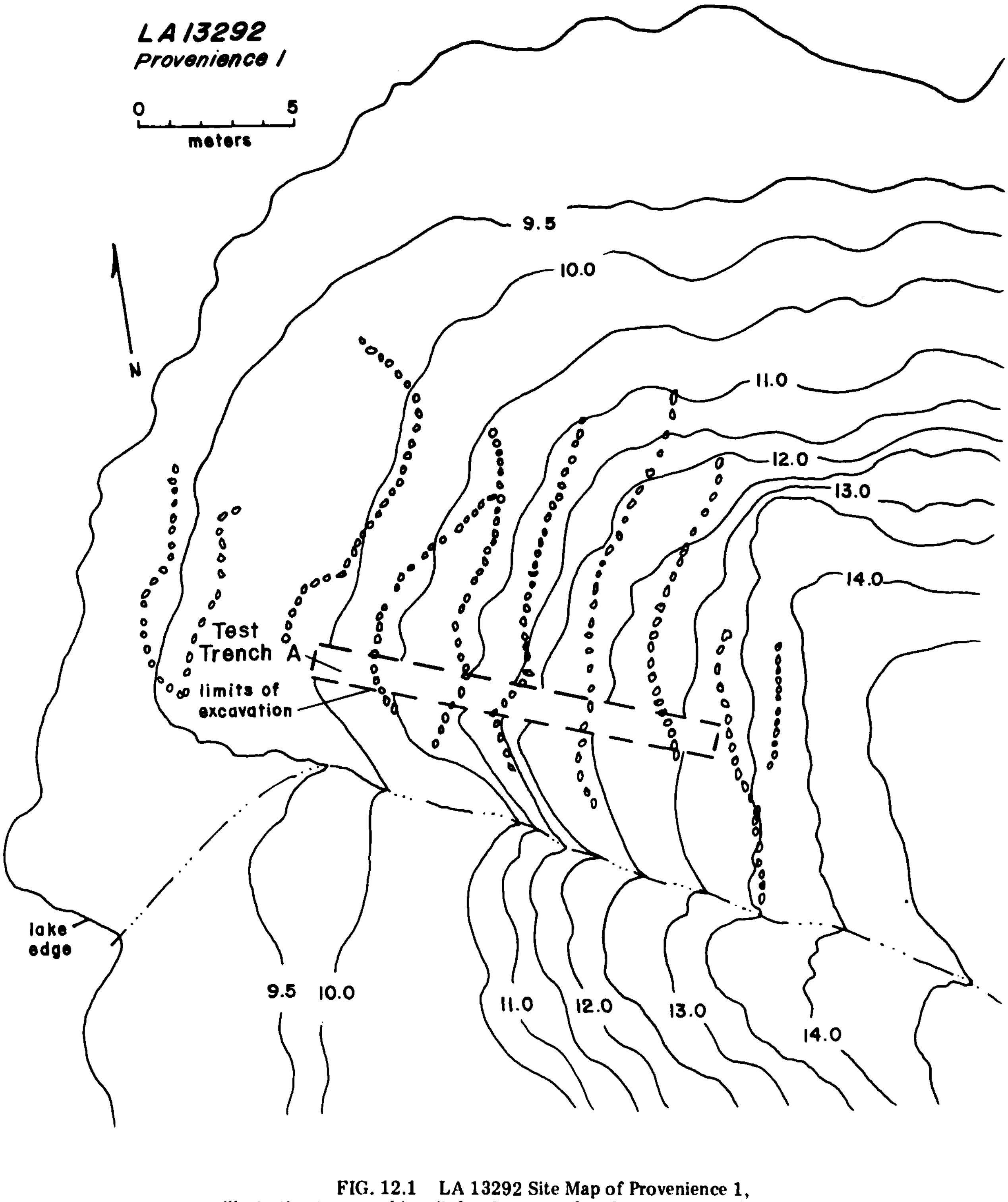

FIG. 12.1 LA 13292 Site Map of Provenience 1, illustrating topographic relief and extent of surface and subsurface collections

Chapter 12

LA 13292 and LA 13293

Beth O'Leary

INTRODUCTION

LA 13292 and LA 13293 consist of a series of prehistoric agricultural terraces. They are located in White Rock Canyon on the east side of the Rio Grande, approximately 400 meters northeast of the mouth of Medio Canyon. They are situated on steep sloping colluvium (7^0 and 17^0, respectively). Sand, stabilized gravels, and basalt clasts make up the substrate. On each site a series of stone alignments were laid perpendicular to the slope of the fan, in effect following its contours. The terracing system was more extensive on LA 13292 than LA 13293. Ceramics suggest a similar period of occupation for both sites, ca. A.D. 1350-1475, during the early Pueblo IV phase.

LA 13292

LA 13292 is located on a colluvial fan which originates beneath a notch cut in the Cerros del Rio mesa top by drainage to the Rio Grande and terminates at the first bench above the river. The site area is confined to the lower portion of the fan, 80 meters east of the river and 47 meters up the talus at an elevation of 5360 feet.

It is situated in the Upper Sonoran Arid vegetative community (Drager and Loose 1977:Fig. II.2.1). Juniper, snakeweed, yucca, prickly pear, and various grama grasses were the dominant vegetation on the bench.

The site consists of two discrete systems of agricultural terraces (Proveniences 1 and 2) which are separated by a deep arroyo. It is probable that this arroyo divided the two areas when the terraces were first constructed.

PROVENIENCE 1

EXCAVATION APPROACH

The provenience (see Fig. 12.1) was surface collected as a unit. In order to understand the nature of the soils, and the variability of the artifactual assemblages on the site, a trench (A) was excavated through a portion of the system. It ran east/west upslope, cross-cutting stone alignments of the terrace system. The trench was approximately one meter wide and 13 meters long. The excavation gave a view of the terraces in profile (see Fig. 12.2). It was dug by natural levels and soil samples were taken.

DESCRIPTION OF TERRACE SYSTEM

A series of ten rock alignments were placed perpendicular to the slope of the talus.

Orientation: The stone rows followed the contours of the fan as it sloped upward.

Slope: The slope of the fan is approximately 7^0.

Number of Terraces: Ten.

Dimensions of Terrace System: The total area covered by the terraces is 21 x 15 meters, or 315 m^2.

Dimensions of Individual Terraces:

Terrace No.	Length	Width
1	8.0 m	1.5 m
2	6.0 m	3.0 m
3	13.0 m	1.5 m
4	9.5 m	2.0 m
5	11.0 m	1.5 m
6	12.0 m	2.0 m
7	14.0 m	2.0 m
8	10.0 m	2.0 m
9	9.0 m	1.0 m
10	4.5 m	N/A

Elements of the Terraces: The terrace was built of elements of the fan including stabilized gravels, subangular basalt scoria, and clastic elements. The size of the elements averaged 30 cm x 30 cm x 20 cm. The rocks were set into the soil in layers up to 30 cm deep.

Fill: Three soils were found. Stratum 1 was topsoil with light gravel and cobbles. Stratum 2 was a humic layer with moderate gravel and cobbles. Stratum 3 was loamy, coarse sand with heavy gravels and cobbles. The terrace structure did not extend beyond the third level.

ARTIFACTUAL ASSEMBLAGES

CERAMIC ARTIFACTS

Seven sherds were recovered from the surface of Provenience 1. Fragments of at least four vessels were represented with the greatest number of sherds (4) from an Agua Fria jar. The other three vessels were represented by one fragment each (a San Clemente G-P jar, an Espinoso G-P bowl, and an undifferentiated glazeware jar), thus yielding a bowl to jar ratio of 1:3. With Glaze A and C group vessels represented, Provenience 1 would have an estimated occupation date between A.D. 1350 and 1475. Tempering materials suggested local manufacture for three of the vessels (scoria), while one was intrusive from the Tonque Pueblo area. The distribution patterns of types and source areas are consistent with other sites in Cochiti Reservoir.

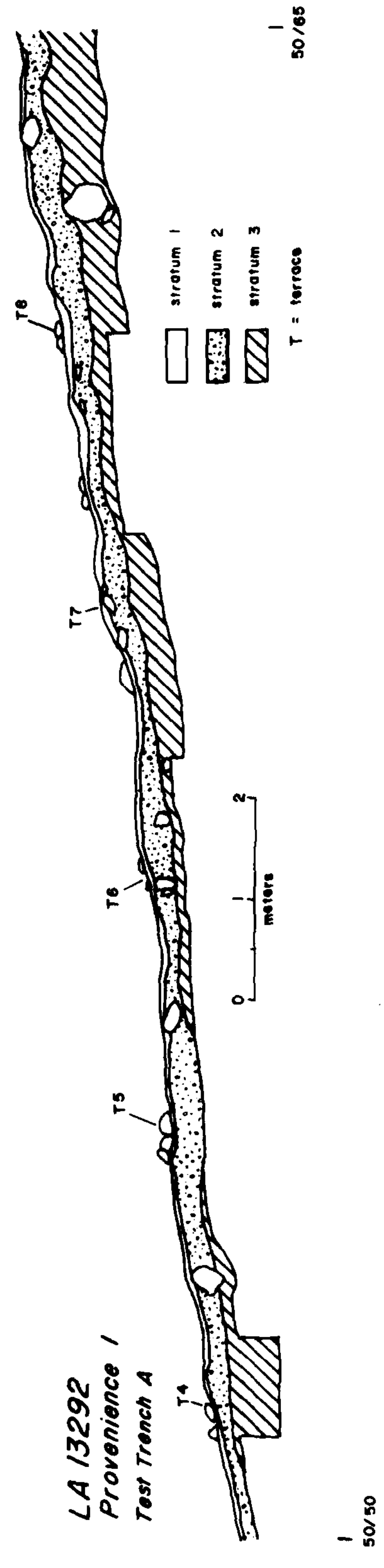

FIG. 12.2 LA 13292 profile map of Provenience 1, Trench A

TABLE 12.1

LA 13292 – Ceramic Assemblage Summary

Minimum no. of vessels: 4
Total no. of sherds: 8
Average no. of decorated sherds per vessel: 2.00

	Painted Wares			Utility/Plain		
Components	Bowls	Jars	Other	Bowls	Jars	Other
P-IV	1	3	–	–	–	–

Ceramic Type	Vessel No.	Form	Temper	No. Sherds
Provenience 1				
Agua Fria G/R	2	jar/olla	3431-11	4
San Clemente G-P	1	jar/olla	3431-11	1
Espinoso G-P	3	hemis. bowl	3431-09	1
Undiff. glaze	4	jar/olla	3270-09	1
Provenience 2				
Agua Fria G/R	2	jar/olla	3431-11	1
			TOTAL	8

LITHIC ARTIFACTS

A total of 217 lithic artifacts were recovered from the surface and subsurface of Trench A. The majority of artifacts from the surface consisted on unutilized flakes (55%) and unutilized small angular debris (19%). Two cores, 15 pieces of large angular debris, two bifaces, and one uniface were also recovered. Manos and metates, as well as hammerstones were absent from the surface layer.

Material Selection

A total of 19 different material taxa was represented from the lithics recovered. Of these, 68% were basalt (5 taxa); 19% Pedernal chert/chalcedony (5 taxa); 6% quartsite (2 taxa); 6% obsidian (5 taxa); and 1% other (2 taxa). With the exception of one 3510 flake, all of the materials are locally available in Cochiti-Jemez area. Basalt was the preferred material.

Manufacture

The debitage was predominantly composed of 3701 basalt flakes (98 items) and small angular debris (29 items), 48% of which exhibited cortical surfaces. The cores recovered from this provenience were also manufactured from basalt (3701) as were 10 pieces of large angular debris (all 3701). These factors taken together suggest that primary reduction activities for basalt were sytematically performed within the provenience. Although the remaining material taxa occurred in significantly lower frequencies (37 items of Pedernal chert/chalcedony, 13 items of quartzite, and 13 items of obsidian), evidence for primary reduction exists for these taxa as well. Cortex was monitored on 62% of the Pedernal chert/chalcedony, 85% of the quartzite and 38% of the obsidian. With the exception of four 1215 (Pedernal chalcedony) and one 4000 piece of large angular debris, no other larger by-products of primary reduction were recovered.

Tool Utilization

One of the two basalt cores exhibited battering on two loci, suggesting its use as a tool. None of the small angular debris exhibited utilization; however, 20% of the debitage flakes had been utilized as tools. Two pieces of large angular debris, one of basalt, had nonbattered wear and one of quartzite had battered wear. Three facially retouched artifacts were recovered. Two bifaces were broken and only the distal portions remained. One basalt biface exhibited bidirectional rounding. The others had no wear. The uniface was complete and did not exhibit wear patterns. The subsurface layer in Trench A contained fewer artifacts (31) with 29% of the assemblage being utilized debitage, mostly basalt (3701). There is a marked difference in the absence of cores, large angular debris and unifaces and bifaces. There were two utilized retouch flakes, one of obsidian and one of basalt, which may indicate that two other finished tools were either manufactured or used at the site but were no longer present.

FAUNA

A total of three bones were recovered from the site, all were on the surface of the trench. All the bones were identified as *Procyon lotor* (racoon). This represents minimally one individual.

FLOTATION ANALYSIS

Three soil samples were taken for flotation from the subsurface levels of Trench A. The plant material that was recovered included twig fragments and two seeds from a juniper (*Juniperus* sp.). Also, one achene from the sunflower family (Compositae) was recovered although this plant material is suspected to be modern. None of these samples yielded any heavy flotation residue.

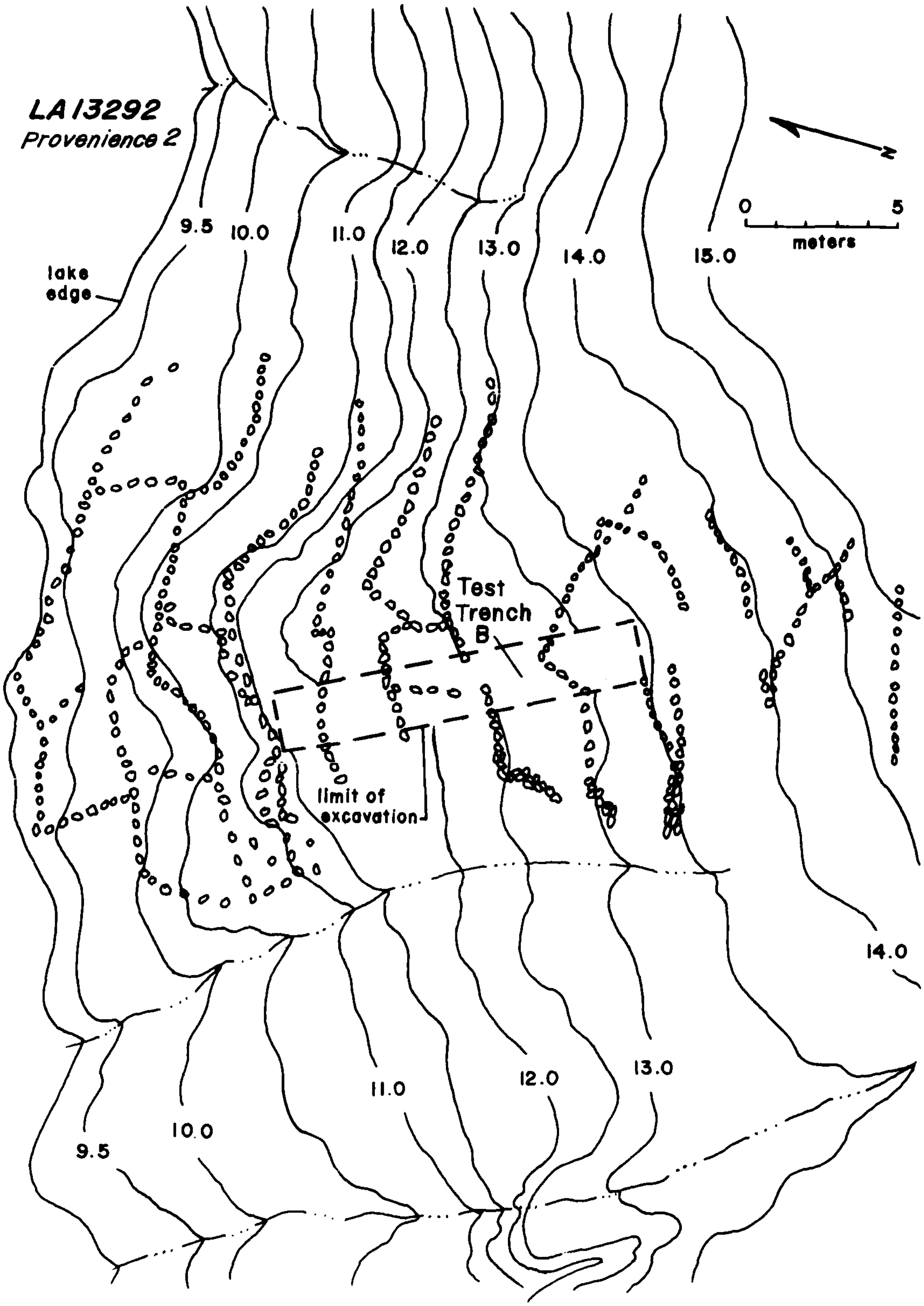

FIG. 12.3 LA 13292 Site Map of Provenience 2, illustrating topographic relief and extent of surface and subsurface collections.

PROVENIENCE 2

EXCAVATION APPROACH

The provenience (see Fig. 12.3) was surface collected as a unit. A trench (B) which was oriented from east to west, cross-cutting the stone alignments, was excavated in order to understand the variability of the soils and artifacts. The one meter wide trench extended for 12 meters. This gave a view of the terrace system in profile (see Fig. 12.4). It was dug by natural strata and soil samples were taken.

DESCRIPTION OF TERRACE SYSTEM

Twelve stone terraces ran roughly parallel to each other up the slope, following the contours of the fan. Bisecting these rows at wide intervals were a series of 10 stone alignments.

Orientation: The majority of stone rows followed the contours of the fan. Bisecting these rows at wide intervals were a series of 10 stone alignments.

Slope: The fan sloped approximately 7^0.

Number of Terraces: 12

Dimensions of Terrace System: The total area covered by the terraces is roughly 20 x 30 meters (600 m^2).

Dimensions of Individual Terraces:

Terrace No.	Length	Width
1	17.0 m	2.5 m
2	20.0 m	2.5 m
3	10.0 m	1.5 m
4	16.0 m	1.5 m
5	12.0 m	2.0 m
6	11.5 m	2.0 m
7	13.0 m	3.5 m
8	13.5 m	2.0 m
9	9.0 m	3.0 m
10	7.0 m	1.0 m
11	6.0 m	3.5 m
12	6.0 m	N/A

Elements of the Terraces: The elements are stabilized gravels, subangular basalt, scoria and clastic elements from the fan. The size of the elements averages 30 cm x 30 cm x 20 cm. The elements were set into the soil, to a depth of 20 cm.

Fill: Two strata were defined. The first consisted of humic soil with moderate gravel and cobble inclusions. The second stratum was a coarse sandy layer with heavy gravels and cobbles. The terraces did not extend beyond the second stratum.

ARTIFACTUAL ASSEMBLAGES

CERAMIC ARTIFACTS

An undifferentiated red glaze body sherd was found in Provenience 2 from Vessel 2 (an Agua Fria G/R jar or olla) which also had pieces in Provenience 1. This may indicate that the two proveniences were used contemporaneously (see Table 12.1).

LITHIC ARTIFACTS

A total of 131 lithic artifacts were recovered from the surface layer of the provenience. Half of the assemblage consisted of unutilized flakes, while 27% was unutilized small angular debris; 16 pieces of large angular debris, three cores, one biface and one uniface were also found. Hammerstones, manos and metates were absent.

Material Selection

A total of 11 different material taxa was represented, with 76% basalt (3 taxa), 7% obsidian (3 taxa), and 18% Pedernal chert/chalcedony (3 taxa). All the materials can be found locally in Cochiti-Jemez area.

Manufacture

The 110 items of debitage were predominantly composed of basalt flakes (63 items) and small angular debris (20 items). Almost half (51%) of the debitage exhibited cortex. One core at this provenience was basalt; one was of Pedernal chert/chalcedony, and one was an obsidian exhausted core. Fourteen pieces of large angular debris were also of basalt. Though the Pedernal chert/ chalcedony assemblage consisted of only twenty pieces of debitage, 60% exhibited cortex. It included a core and a piece of large angular debris. These factors taken together suggest that primary reduction activities for basalt and Pedernal chert/chalcedony were sytematically performed in this provenience. The reduction technique was mostly freehand detachment of debitage.

Tool Utilization

Approximately 10% of the debitage was utilized. Two pieces of large angular debris exhibited some type of nonbattered wear. There was utilization on 6% of the small angular debris. There was also a biface and uniface, both of which did not exhibit wear. There were no manos, metates or hammerstones.

FAUNA

No bones were recovered from Provenience 2.

FLOTATION ANALYSIS

No plant materials, seeds or fruits were recovered from a sample taken from Trench B in Provenience 2.

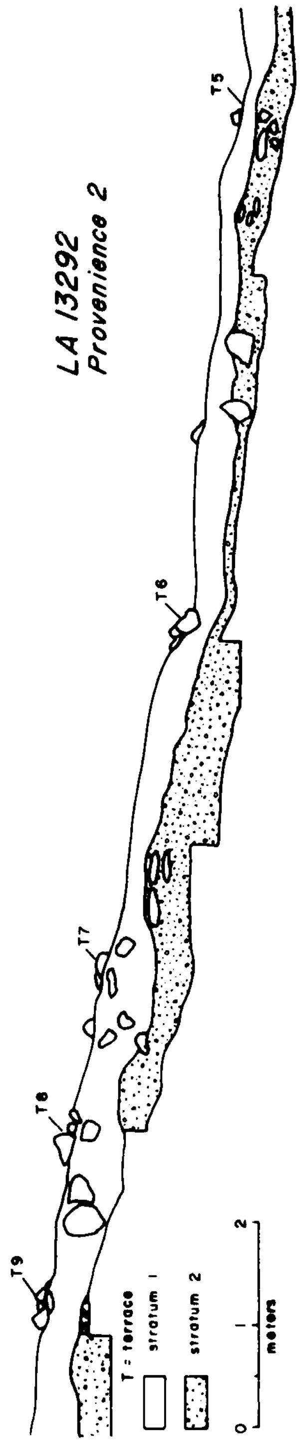

FIG. 12.4 LA 13292 profile map of Provenience 2, Trench B

LA 13293

LA 13293 is located on the east side of the Rio Grande in White Rock Canyon between Medio and Capulin Canyons. The site is on a steep slope about 60 meters south of the Rio Grande at an elevation of 5360 feet.

It is situated in the Upper Sonoran Arid vegetative community (Drager and Loose 1977:Fig. II.2.1). Juniper, snakeweed, yucca, prickly pear, chamize, rabbitbrush, and various grama grasses were the dominant vegetation.

The site consists of one provenience which has two small rectangular alignments of stone just north of a deep arroyo which cuts into the slope of the fan (see Fig. 12.5).

EXCAVATION APPROACH

The area was surface collected as a unit. A trench was excavated through the rectangular alignments, running east to west. The trench was one meter wide and five meters long. It was originally thought that the alignments might have been the walls of a room and not a terrace. The eastern section of the trench was expanded one meter to the south and two rocks were found at the bottom of stratum. One of the rocks was covered with 3 cm of charcoal-stained earth. This was not considered to be conclusive evidence of a hearth and may have represented an isolated feature. The placement of the stones on the fan signified the site as an agricultural terrace.

DESCRIPTION OF TERRACE SYSTEM

A series of three rock alignments were placed perpendicular to the slope of the talus. The western ends of the rows were closed by a double row of stones making roughly rectangular plots.

Orientation: Three stone rows roughly follow the contours of the fan as it slopes upward. They are bisected by double rows of stones at the western and eastern ends.

Slope: The slope of the terrace is very steep, approximately 17^{0}.

Number of Terraces: Three.

Dimensions of Terrace System: The dimensions of the entire terrace is 6 m x 5 m, or 30 m^2.

Dimensions of Individual Terraces:

Terrace No.	Length	Width
1	5.0 m	2.0 m
2	4.0 m	2.0 m
3	3.5 m	N/A

Elements of the Terraces: The individual elements of the terraces are basalt subangular clasts ranging in maximum dimensions from 15-30 cm. They were laid into the soil, up to depths of 20 cm.

Fill: There were two levels of soils. Stratum 1 was a brown sandy soil, and Stratum 2 was a light brown sandy soil containing two rocks, one of which was covered with charcoal-stained earth.

ARTIFACTUAL ASSEMBLAGES

CERAMIC ARTIFACTS

There was a total of 14 sherds from LA 13293 (see Table 12.2), a minimum of seven possible vessels. The ratio of bowls to jars was 4:3. The only datable sherd, a rim sherd, was from a Largo Glaze-on-yellow bowl. It dates to ca. A.D. 1400-1450. Other sherds seem consistent with that date, or are probably earlier in the late 14th century. These include four sherds from three glaze/red ollas, one sherd from a glaze/red bowl, five sherds from a glaze/red and white bowl, one sherd from a glaze/yellow olla, and one sherd from a glaze/yellow bowl. The glaze/yellow olla contained augite latite temper and was probably manufactured at San Marcos Pueblo. All other sherds contained local basalt scoria (3431) temper which is available locally. One sherd was worked; the sherd was rectangular in shape. The low number of sherds, plus the presence of a worked sherd indicates that at least some of the sherds may have been brought into the site as sherds rather than vessels.

TABLE 12.2

LA 13293 – Ceramic Assemblage Summary

Minimum no. of vessels: 7
Total no. of sherds: 14
Average no. of decorated sherds per vessel: 2.00

	Painted Wares			Utility/Plain		
Components	Bowls	Jars	Other	Bowls	Jars	Other
P-IV	3	4	–	–	–	–

Ceramic Type	Vessel No.	Form	Temper	No. of Sherds
Undiff. glaze/red	2	jar/olla	3431-10	1
Undiff. glaze/red	3	jar/olla	3431-10	1
Undiff. glaze/red	5	jar/olla	3431-10	2
Undiff. glaze/red	6	bowl, hemis.	3431-10	1
Largo G/Y	1	bowl, hemis.	3431-09	3
Undiff. glaze/red and white	4	bowl, hemis.	3431-10	5
Undiff. glaze/yellow	7	jar/olla	3260-09	1
			TOTAL	14

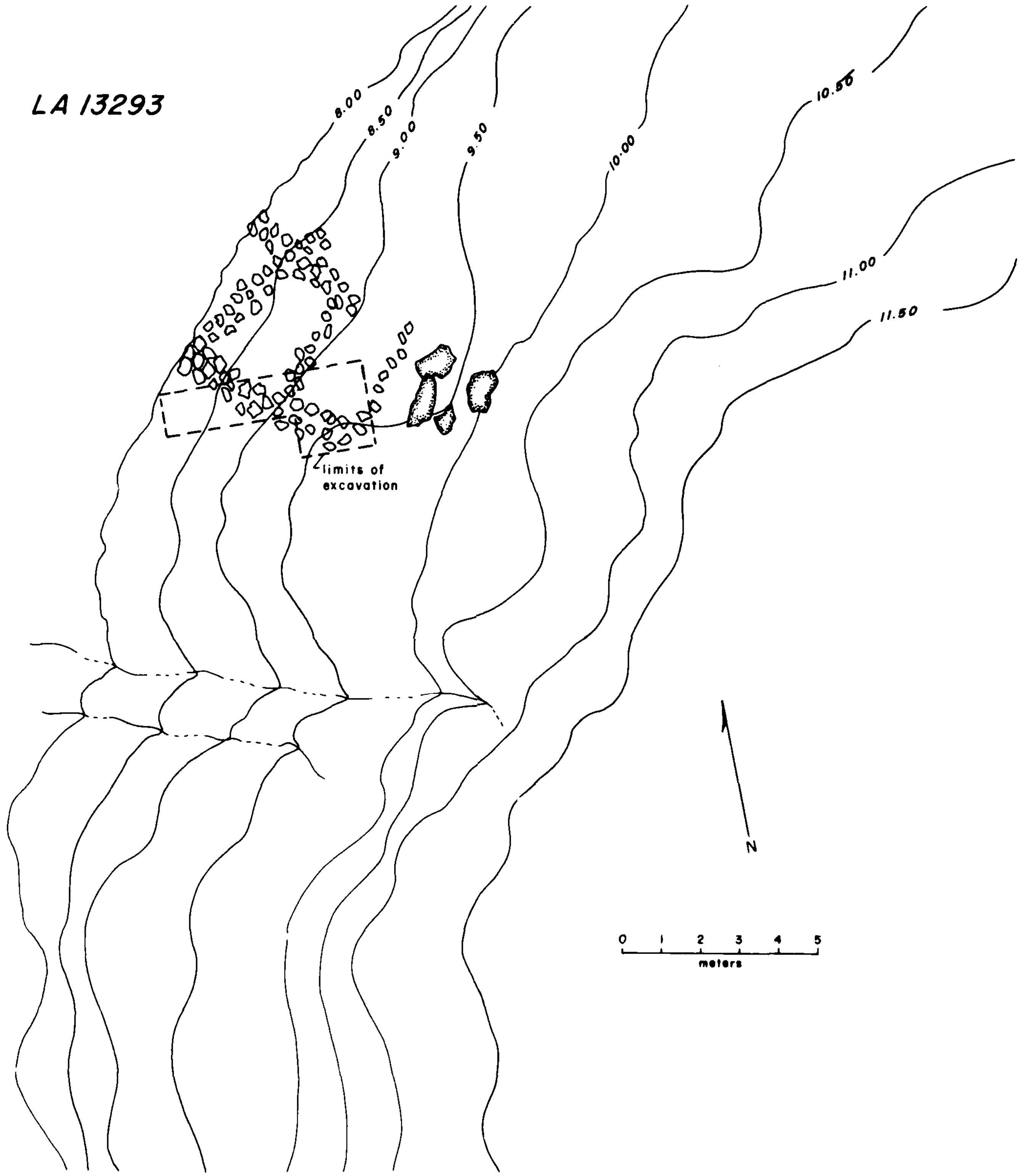

FIG. 12.5 LA 13293 Site Map, illustrating topographic relief and extent of surface and subsurface collections.

LITHIC ARTIFACTS

Eight lithics were recovered from the surface of LA 13293; six (75%) were unutilized debitage flakes. There was one piece of unutilized small angular debris and one piece was unutilized large angular debris. No cores, bifaces or unifaces, hammerstones, manos, or metates were found.

Material Selection

Four different material taxa were represented in the lithic assemblage. Six are pieces of basalt (2 taxa) and two are Pedernal chalcedony.

Manufacture

The debitage was predominantly basalt (71%); four flakes of basalt exhibited cortex and there was one piece of basalt large angular debris. There were no cores present. The chert and chalcedony flakes lacked cortex.

Tool Utilization

Within the whole lithic assemblage, there is no evidence of utilization.

FAUNA

A total of four bones were recovered from the site. Two elements from *Cratogeomys castanops* (Mexican Pocket Gopher) represented one adult. There was one unidentified fragment. One bone from a rabbit (*Sylvilagus* sp.) is minimally one individual.

FLOTATION ANALYSIS

Although three 1000 ml samples were examined, no materials were recovered in the heavy flotation residue.

SUMMARY

Both LA 13292 and 13293 consist of systems of stone alignments which may represent agricultural terraces. The only evidence of agricultural activities is provided by the alignments of these rocks. The small sample of ceramics (8 sherds from LA 13292 and 13 sherds from LA 13293) date the sites to early P-IV times (ca. 1325-1475). Most of the sherds had local tempering material with the exception of one from Tonque Pueblo area and one from the San Marcos area.

The numbers and kinds of lithics present in LA 13292 suggest that primary reduction with some use of tools occurred. In LA 13293, though the assemblage is small, it is fairly certain that initial and secondary reduction activities took place at the site. The scarcity of all classes of artifacts suggests only a very brief and/or infrequent use of the sites.

Chapter 13

LA 13326, LA 13329, LA 13331, LA 13332, and LA 13333

Rosalind Hunter-Anderson

INTRODUCTION

Ten sites (LA 13324, LA 13326, LA 13329, LA 13330, LA 13331, LA 13332 and LA 13333, LA 13334, LA 13335, LA 13336) containing a total of 17 circular depressions, thought to represent Basketmaker period pithouses, were located on survey along the south side of the Santa Fe River. Most were situated on the first terrace at elevations which ranged from 5410 to 5440 ft, with the majority under 5425 ft. Vegetation typically was comprised of grasses with varying proportions of snakeweed: occasional bare patches of ground surface were observed on the terraces. Junipers and yuccas were present on or near some of the pit depressions.

The pit depressions averaged 2.7 m in diameter and were characterized on the surface by the absence of gravels and the presence of aeolian sandy soils, in contrast to their immediate surroundings. On two of the sites, one plainware sherd with lithics (LA 13329) and one glazeware sherd (LA 13330) were recorded on survey; the other sites exhibited no cultural material on the surface. Survey reports for LA 13329 and LA 13326 noted small basalt rock configurations 22 m and 5 m, respectively, from the nearest pit depression, possibly representing surficial storage facilities. On LA 13324 a basalt rubble mound, possibly the remains of a room, was located 4 m south of the other feature on the site, a pit depression.

EXCAVATION APPROACH

Five of these sites were tested (LA 13326, LA 13329, LA 13331, LA 13332, and LA 13333). On four sites, one feature in each was tested for the presence of cultural material. LA 13332 was more intensively investigated; five pit depressions (Features 1-5) were partially excavated (see Table 13.1). Excavation units were 1 x 1 meter grids, which were dug in natural stratigraphic levels where such were discernible. In the absence of natural stratigraphy, arbitrary 10 cm levels were used. All fill was processed through ¼ inch screen mesh.

LA 13326

FEATURES

LA 13326, as described on survey, consisted of two possible pit depressions and an associated surface structure. The larger depression was tested. A test trench (Test Trench 1) 1 x 2 meters oriented north-south toward the center of the pit depression, was excavated to a depth of 34 cm. No cultural materials were encountered. A profile of Test Trench 1 is shown in Fig. 13.1.

LA 13329

FEATURES

On survey, LA 13329 was described as consisting of a pit depression and a possible surficial storage structure. Feature 1, the pit depression, was not tested. Feature 2, designated on survey as a possible storage structure, was excavated. Three wall alignments made up of basalt clasts, averaging 20 cm in length, were exposed, which suggested the three sides of a roughly trapezoidal facility. Within this structure an apparent living surface and a dark brown, clayey lens with pumice was located (see Fig. 13.2). The latter was judged to be an isolated, natural deposition.

CERAMIC ARTIFACTS

Seventeen ceramic sherds were recovered, representing three vessels: an Espinoso G-P; an undifferentiated Glaze-on-white; and an undifferentiated Red-and-white glazeware.

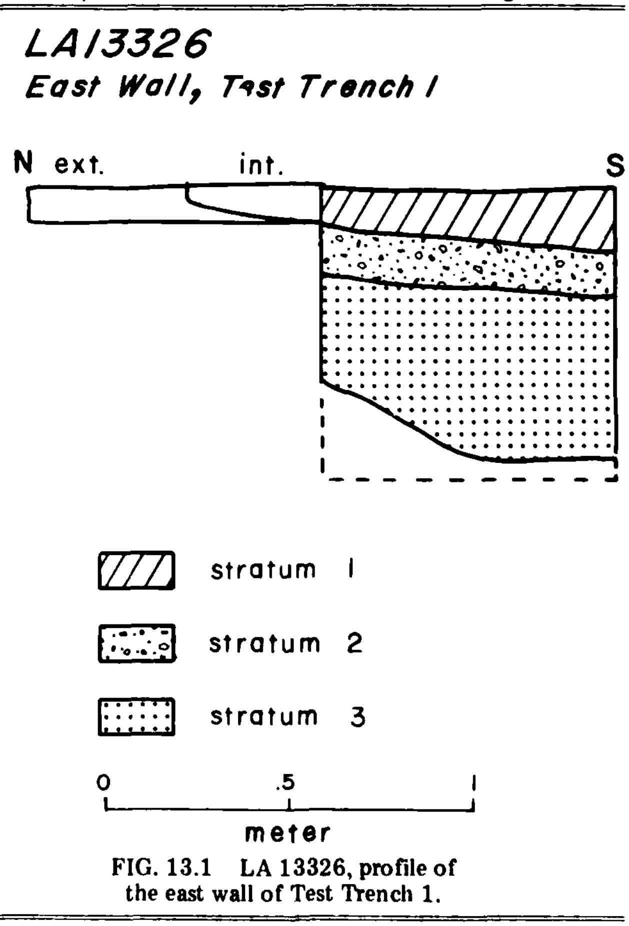

FIG. 13.1 LA 13326, profile of the east wall of Test Trench 1.

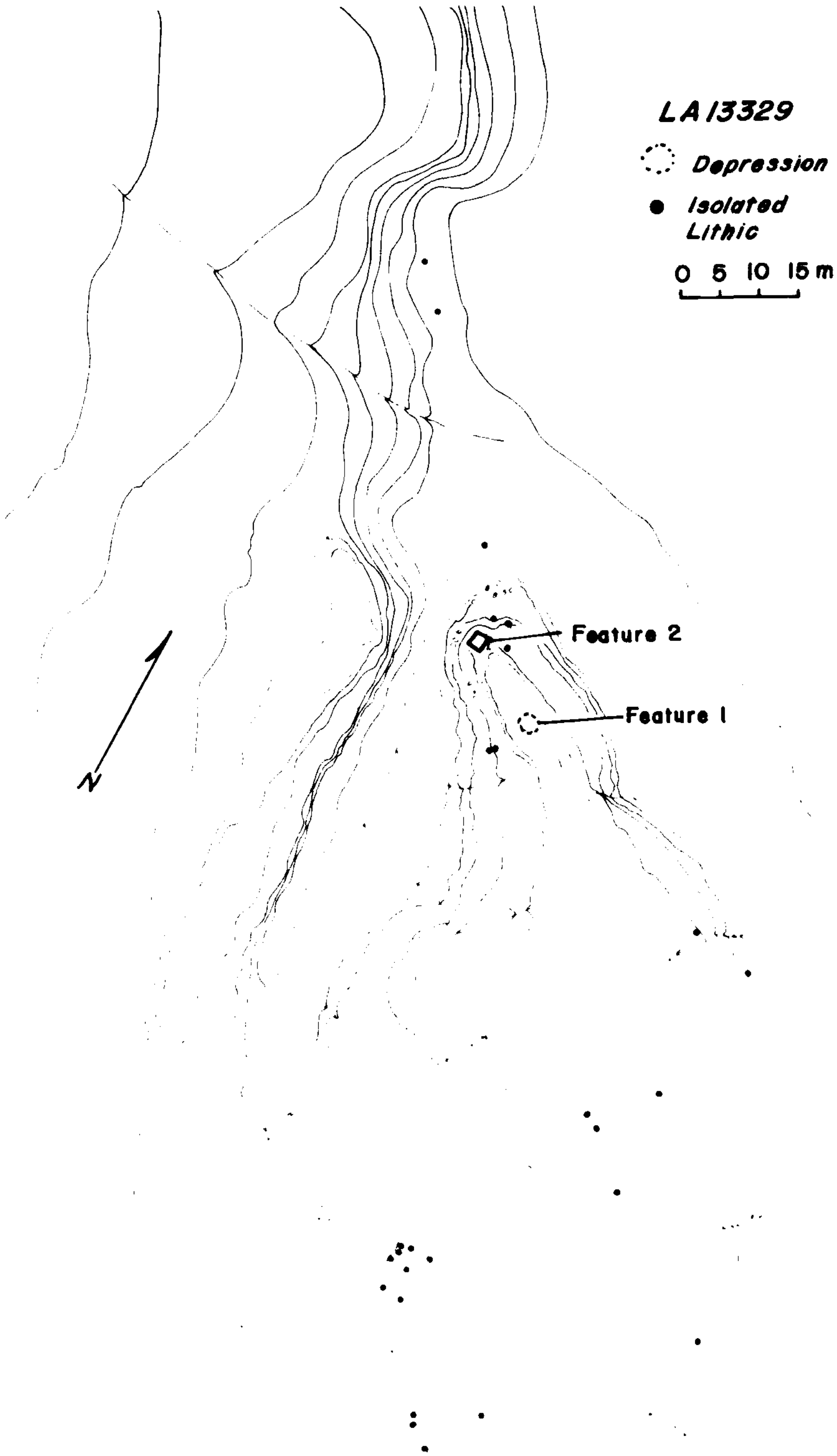

FIG. 13.2 Topographic map of LA 13329

TABLE 13.1

Summary of Ten Pit Depression Sites*

Site No.	No. Depressions	No. Surface Structures	No. Lithics	No. Ceramics
LA 13324	1	1	11	2
LA 13326	2	1	–	–
LA 13329	1	1	–	1
LA 13330	1	–	15	1
LA 13331	2	–	–	–
LA 13332	3	1 (?)	–	–
LA 13333	2	–	–	–
LA 13334	3	–	–	–
LA 13335	1	–	–	–
LA 13336	1	1 (?)	–	–

* Based on survey data

TABLE 13.2

Ceramic Data for LA 13329, LA 13331, and LA 13332

	Minimum Vessels	Total Sherds	Sherds per Vessel			Bowl:Jar Ratios	Estimated Dates (A.D.)
			Decorated	Utility	Plain		
LA 13329							
Pueblo III	–	–	–	–	–	–	–
Pueblo IV	1	17	17	–	–	1:0	1425–1490
Historic	–	–	–	–	–	–	–
LA 13331							
Pueblo III	–	–	–	–	–	–	–
Pueblo IV	3	11	3.6	–	–	1:2	?1325–1400
Historic	–	–	–	–	–	–	–
LA 13332							
Pueblo III	–	–	–	–	–	–	–
Pueblo IV	1	3	3.0	–	–	1:0	1325–1350
Historic	–	–	–	–	–	–	–

Vessel form was only discernible in two cases, as undifferentiated bowls. All sherds date to P-IV or later; an estimated date for the site is between A.D. 1425-1490. Ceramic data for this and other sites in this chapter are presented in Table 13.2.

LITHIC ARTIFACTS

Twenty-nine pieces of debitage, one item of large angular debris, and a milling slab (in 3 pieces) were recovered. Most flakes were broken. Material types were predominantly basalt (3701 and 3400) with obsidian and Pedernal chert/chalcedony present in very small quantities. Striking platforms were apparent in one-third of the flakes and were mainly single-faceted. Twenty-one percent of the debitage was small angular debris; the rest was freehand debitage flakes. Twelve flakes and two pieces of small angular debris showed utilization. Three milling slab fragments were found at this site. These three rectangular pieces fit together and were thus analyzed as a single artifact. In cross section they were concave. A grinding surface was present on each. They were all located within Feature 2, 3 cm below the surface on what may have been a living surface (see Fig. 13.3).

FAUNA

Five pieces of rodent bone were recovered, but since

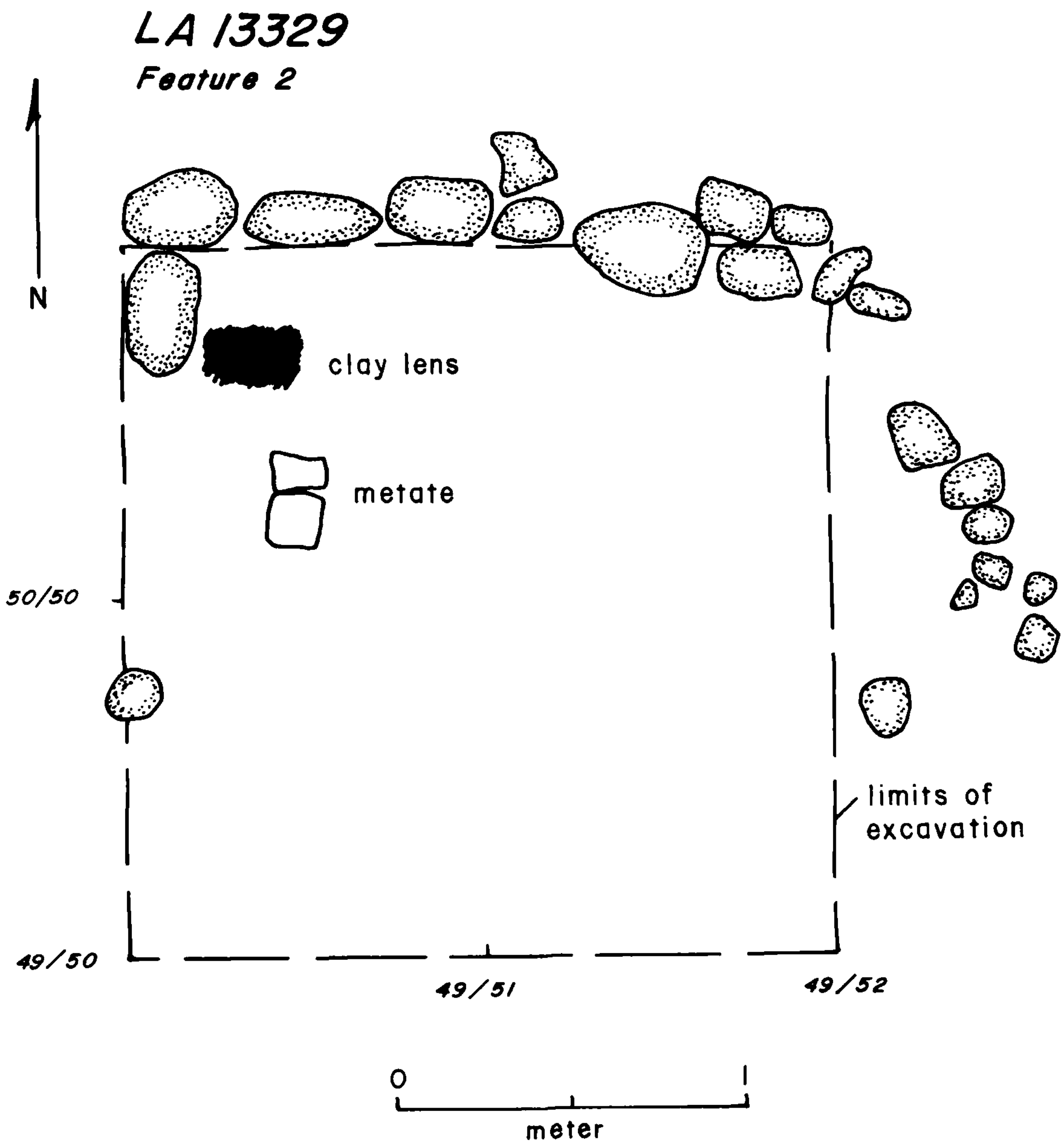

FIG. 13.3 LA 13329, plan view of Feature 2

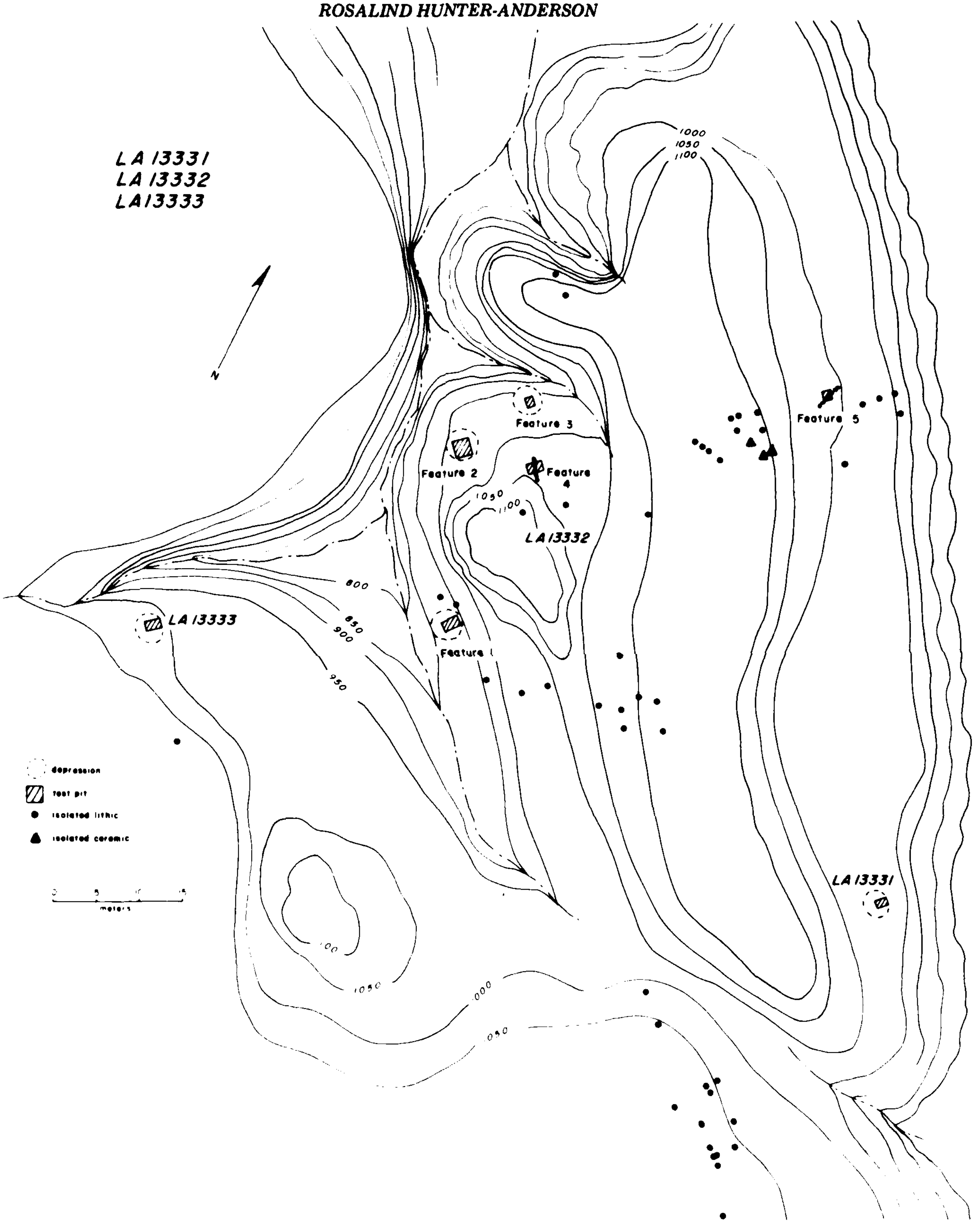

FIG. 13.4 Topographic map of LA 13331, LA 13332, and LA 13333

they were all fresh they could not be considered part of any prehistoric deposition.

LA 13331

FEATURES

LA 13331 consisted of two circular depressions situated five meters apart. One of these pit depressions, designated as Feature 1 on Fig. 13.4, was tested. A test pit, 1.5 m x 1.0 m, oriented northeast-southwest toward the center of the depression, was excavated to a depth of 73 cm. A profile of this trench is shown in Fig. 13.5. Strata 1-4 were delineated; the majority of artifacts came from Stratum 2. Stratum 1 was colluvial silts and sand, and Stratum 2 contained coarse sand, pebbles and cobbles. Stratum 3 was the substrate of the terrace, bedded river sand and gravels.

An adobe feature was found in the northeast end of the trench, possibly a wall, running vertically from the bottom of Stratum 3 for 30 cm up and then diagonally toward the north, varying in thickness from 15 cm to 20 cm.

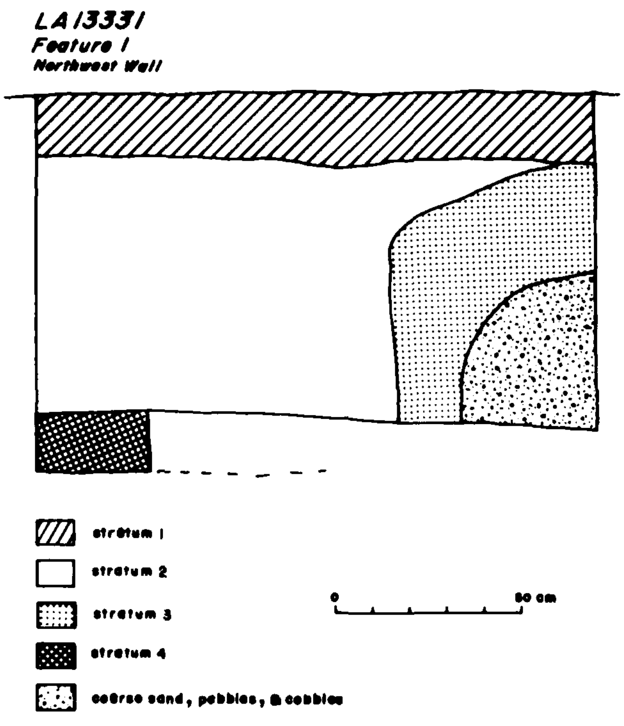

FIG. 13.5 LA 13331, profile of the test pit in Feature 1, facing northwest.

CERAMIC ARTIFACTS

Eleven sherds representing a minimum of four glaze redware vessels were located in Stratum 2. The sherds all date to P-IV or later; an estimate for the date of this site is between A.D. 1325-1400.

Two of the sherds, each from a different vessel, had an abraded side; one also had fine scratches on the interior. These items may have been brought to the site for use there.

LITHIC ARTIFACTS

Two unutilized cortical flakes (1310, 1680) were recovered.

FAUNA

Nineteen pieces of bone were recovered from Stratum 3 and possibly belonged to the same individual, a rodent. It is doubtful if this material was deposited in a human behavioral context.

LA 13332

This site was investigated through the excavation of five noncontiguous areas centered on five separate features (1-5, Fig. 13.4). Two of the features were rock alignments and the other three were pit depressions. Features 3 and 5 yielded artifacts below the surface.

FEATURE 1

This feature was a roughly circular depression. A 1 x 1 meter grid was excavated to 80 cm below the surface. No cultural material was found. Fill was mainly gravels of various sizes, with some sand. Excavation ended in a stratum of unconsolidated stream bed deposits of coarse sand, pebbles and gravels characterized by alternating lenses of these materials.

FEATURE 2

This was another roughly circular depression which yielded no cultural materials. Light brown sandy humus and gravels gave way to a mounded layer of hardpacked sandy soil which was encountered at approximately 30 cm and extended to 50 cm (see Fig. 13.6 for profile).

FEATURE 3

This was the last depression to be investigated on the site. The only cultural material found was one worked ceramic sherd (a plain polished undifferentiated ware) at a depth of ca. 60 cm, and three undifferentiated glaze-on-red sherds on the surface. The ceramics date to the P-IV period. No features were found in the 2 m x 1 m test trench, which was excavated to 70 cm (see Fig. 13.7 for profile).

FEATURE 4

This was a linear arrangement (1.75 m long, running northwest-southeast) of basalt clasts averaging 24.5 cm in length. Two test pits, 1 x 1 meter each, were excavated on either side of the alignment, to a depth of 30 cm. No cultural material or features were defined in either test pit.

FEATURE 5

This was another rock alignment running northeast-southwest for 1.25 m. It was composed primarily of basalt

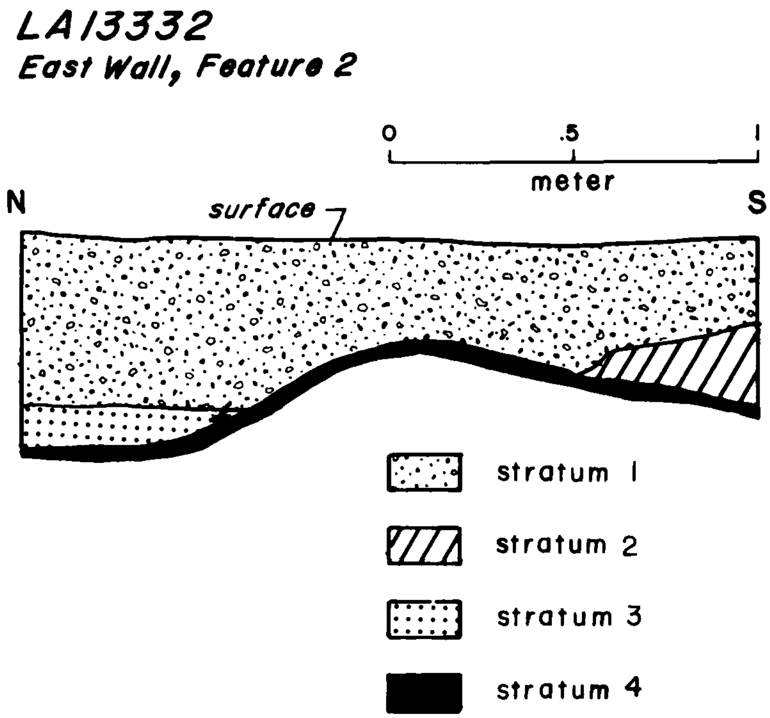

FIG. 13.6 LA 13332, profile of the test pit in Feature 2, facing east.

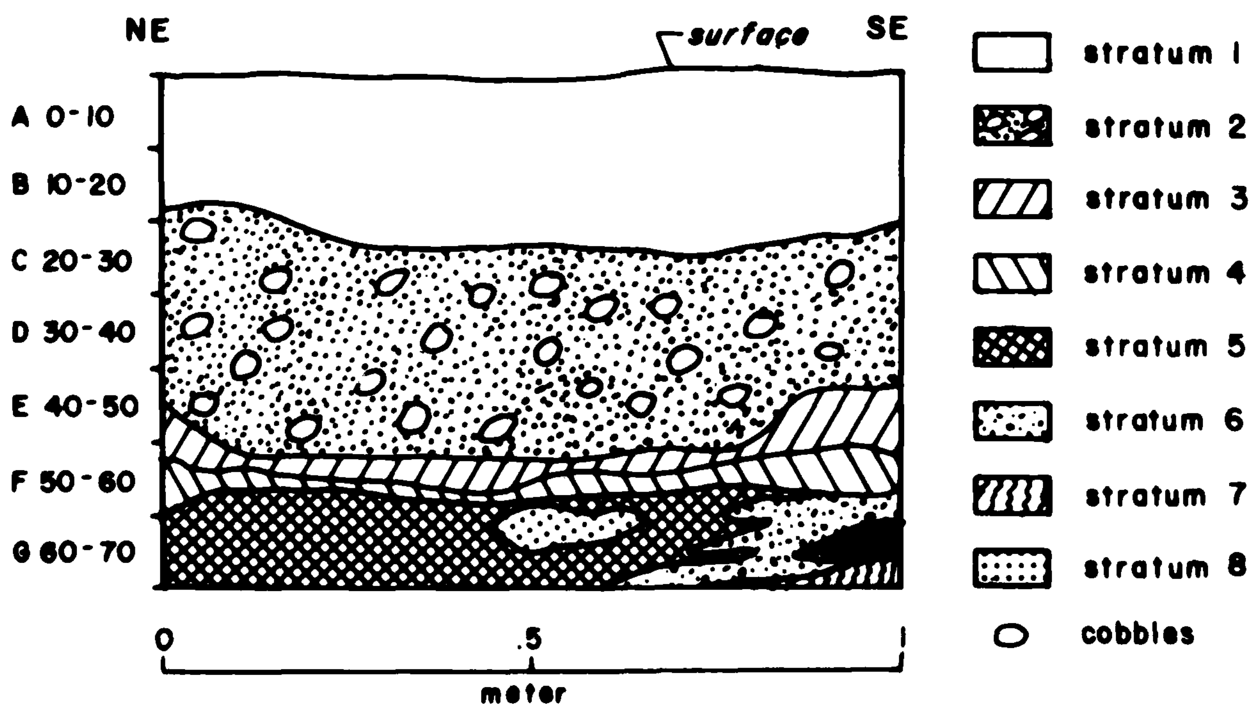

FIG. 13.7 LA 13332, profile of the test pit in Feature 3, facing east.

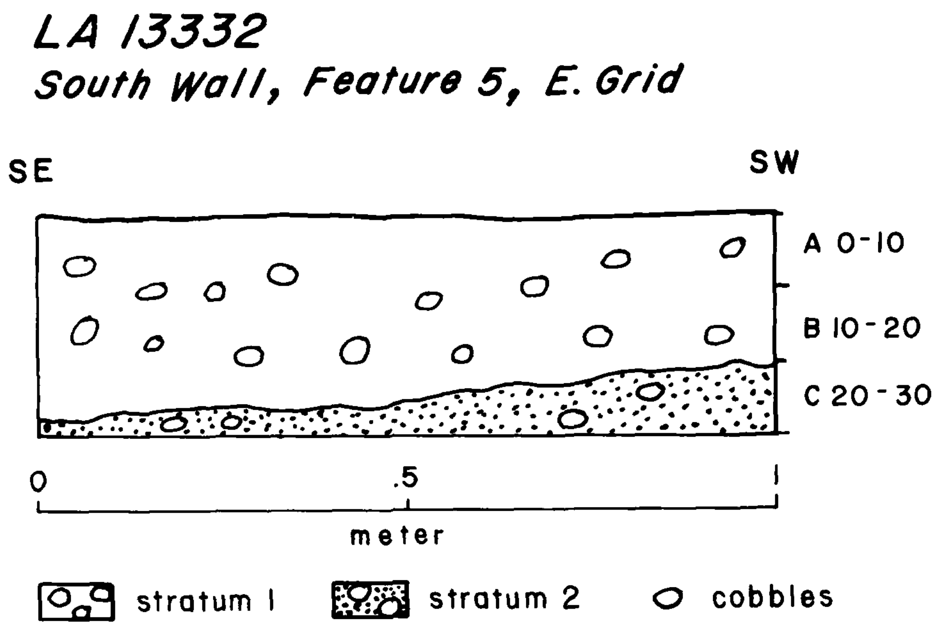

FIG. 13.8 LA 13332, profile of the test pit in Feature 5, facing south.

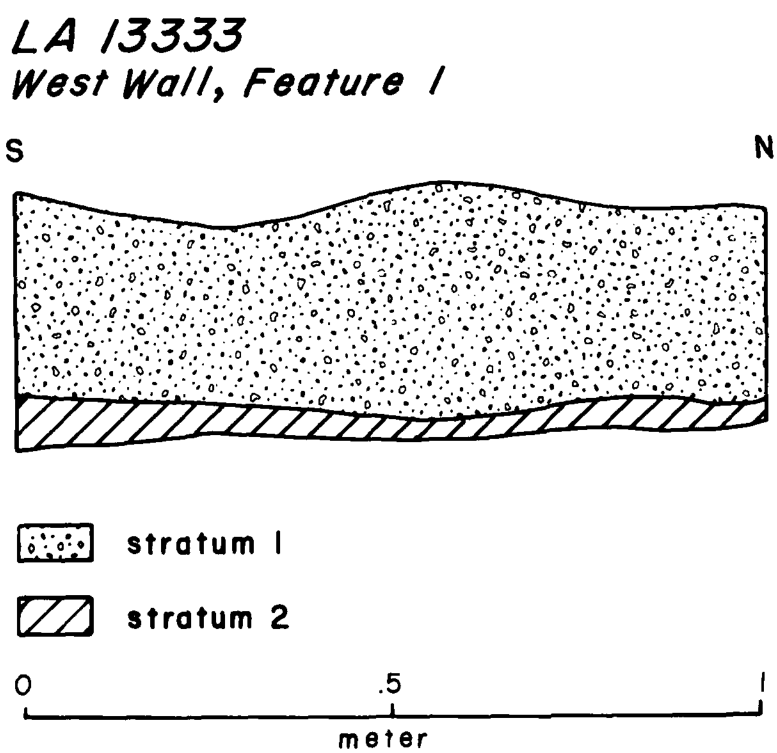

FIG. 13.9 LA 13333, profile of the test pit in Feature 1, facing west.

clasts with a few granite and rhyolitic rocks. The basalts averaged 14.6 cm in length, the granitic and rhyolitic rocks 9.5 cm and 21 cm, respectively. Two test pits on either side to the west and east of the alignment were excavated to a depth of 30 cm. The west grid yielded no artifacts; the east grid yielded a chert core and three chert flakes within the first 2 cm of the surface. Two more flakes were encountered within the next 6 cm. For a profile of the south wall, see Fig. 13.8.

CERAMIC ARTIFACTS

One Glaze-on-red bowl was represented by three sherds. An early Glaze A date (A.D. 1325-1350) is suggested.

LITHIC ARTIFACTS

On the site as a whole, 58 lithics were found, 52 on the surface. Twenty-five percent of the flake debitage exhibited cortex. The small amount of small angular debris (4%) was noncortical.

Material types included basalt (65%), Pedernal chert/ chalcedony (16%), obsidian (16%) and non-Pedernal chert (4%). All but the obsidians could have come from the site substrate. On the flakes where a platform could be discerned (25%), 50% of the platforms were single-faceted, indicating limited core preparation technique.

Within the features, only Feature 5 yielded lithic material below surface; five flakes and a core were encountered. Three of the flakes were of the same material as the core (a chert).

SUMMARY

Features 1-3 were circular pit depressions tested for evidence that they had been used as pithouses during the Basketmaker period. These tests were negative. Feature 3 yielded four ceramic sherds dating to ca. Anasazi P-IV. No lithic materials were encountered below the surface in the test trenches.

Features 4 and 5 were rock alignments which were also tested for evidence of human use. The first was entirely composed of basalt clasts, while the second was a mixture of basalt, granite and rhyolitic rocks. The test grids in Feature 4 contained no artifacts; in Feature 5 the east grid yielded some lithic material (see above).

While the site did not contain pithouses, human activity during the P-IV period is indicated by the presence of ceramics (see above). It is possible that the depressions are examples of Anasazi pitrooms recorded elsewhere in the Cochiti area (see Bussey 1968).

LA 13333

FEATURES

The larger of the two pit depressions (Feature 1) was tested using a 1 x 1 meter grid, excavated to 35 cm below ground surface. Two natural strata were defined. The uppermost 30 cm consisted of a homogenous sandy soil matrix; the lower stratum, averaging 5 cm in thickness, contained soil mixed with gravel. Neither cultural material nor features were found. A profile of the west wall of the test is shown in Fig. 13.9.

SUMMARY OF THE SITES

Five of ten sites located along the south side of the Santa Fe River, between 6 and 7 kilometers from the Rio Grande River, were tested for evidence as to whether they contained pithouses dating to the Basketmaker period. These tests were negative; however, evidence of an Anasazi P-IV or later date for some of the features investigated was obtained. One possible interpretation of these sites is that they reflect a caching strategy used by P-IV or later groups in the area, due to an expansion of the effective environment for horticulture during P-IV. In other words, as the terrain used for farming and wild food collecting came to include less and less optimal areas at greater distances from residential sites, a wider logistics system for producing and transporting food would need to be used. This would involve a caching system since such a strategy would tend to minimize the effects of less predictable food production in parts of the expanded subsistence system.

Chapter 14

LA 13350

Rosalind Hunter-Anderson

INTRODUCTION

LA 13350 is a nonstructural, surficial site of unknown temporal and cultural affiliation. It consists solely of lithic materials distributed as a series of small clusters or concentrations along a gravel terrace overlooking the Canada de Cochiti. It is one of four such sites which were tested during the 1977 season. No features were observed, although similar sites in the vicinity contained hearths (see reports for LA 13352 and LA 13353). At an elevation of 5410 ft, the terrace is 18 meters above the arroyo floor and is cut by short, deep arroyos running north-south. These create a point overlooking the Canada from the south, some three kilometers east of the Rio Grande.

The site is located in the Upper Sonoran Juniper-grassland vegetative community; the terrace is characterized by grasses with occasional clumps of yucca. Junipers occur on nearby slopes. The exposure is open and the slope is flat. Soil structure on the site is fine aeolian sand over gravel.

RECOVERY PROCEDURE

Collection units were seven noncontiguous proveniences (see Fig. 14.1). A grid system 112 x 86 m encompassed all proveniences. Grid units were 1 x 1 m squares. In Provenience 1, 272 contiguous grid units were collected; in Provenience 2, 20 contiguous grid units were collected; in Provenience 3, two noncontiguous units of 2 m^2 each were collected; in Provenience 4, one 2 m^2 unit was collected; in Provenience 5, four contiguous units were collected; in Provenience 6, 12 contiguous grids were collected; and in Provenience 7, two noncontiguous units, one consisting of 3 m^2 and the other 1 m^2, were collected. A total of 318 m^2 were surface collected. No subsurface tests were made.

SITE DESCRIPTION

LA 13350 was described on survey as consisting of a general scatter of lithics on the point overlooking the Canada and more concentrated distributions of lithics away from the terrace edge. Two 1 x 1 meter samples were taken on survey; one from the general scatter near the terrace point, and one from an area 50 m back from the edge. Cherts, chalcedonies and basalts were represented mainly by small to medium-sized (1 cm to 5 cm) unutilized debitage. One core was present in each sample, one of taxon 3701 (basalt), the same material from which the majority of flakes in the sample came, and the other of taxon 1011 (chert), the same material from which almost half the flakes in the sample derived.

For the current investigation, the site was partitioned into seven proveniences. Provenience 1 was the largest in area and yielded the greatest number of artifacts (389). Proveniences 2 through 7 were each smaller, and in turn yielded fewer artifacts (99 for the six proveniences combined, or an average of 17 artifacts per provenience). Artifact density on the site as a whole, based on a combination of the seven proveniences, was 1.5 artifacts per m^2. By comparison, the average density for all proveniences except Provenience 1 was 2.2 artifacts per m^2. This increase in artifact density in Proveniences 2 through 7 may reflect the mitigation strategy of investigating small areas where artifact densities were apparently higher than in other areas on the site. Conversely, the largest provenience, Provenience 1, exhibited a relatively low density, 1.4 artifacts per m^2, as it encompassed many empty grid units, unlike the other proveniences.

ARTIFACTUAL ASSEMBLAGES

LITHIC ARTIFACTS

In light of the mitigation strategy of sampling noncontiguous high artifact density areas on a gravel substrate, where six of the seven samples were derived from very small areas, it was decided to compare these six as a unit with the larger sample from Provenience 1, to see if the combined assemblages could be said to have come from a similar population to the sample from Provenience 1. Most of the artifacts found at LA 13350 (70%) were classified as unutilized flake debitage, as was reflected in the two samples taken previously on survey. Other categories, utilized flake debitage (9%), unutilized small angular debris (17%), large angular debris (4%), and one core (.2%), comprised the remainder of the assemblage observed at the site. The percentages for each set of artifacts are generally similar, although they exhibit some differences.

The assemblage from Provenience 1 differs from the combined assemblage from Proveniences 2 through 7 in exhibiting a larger proportion of unutilized small angular debris (19% as opposed to 9%). Another difference between the two provenience groupings is that the proportion of utilized debitage is higher in the six combined assemblages (12% compared to 9%). The latter regularity was investigated further by observing the occurrence of utilization in high density grids (those with high frequencies of artifacts) in Provenience 1 and among the other proveniences. It was found that utilization occurred more frequently among the cherts/chalcedonies than among the other major material type, basalts. These observations are discussed in more detail below.

Material Selection

Of the 488 artifacts recovered from the site, nearly

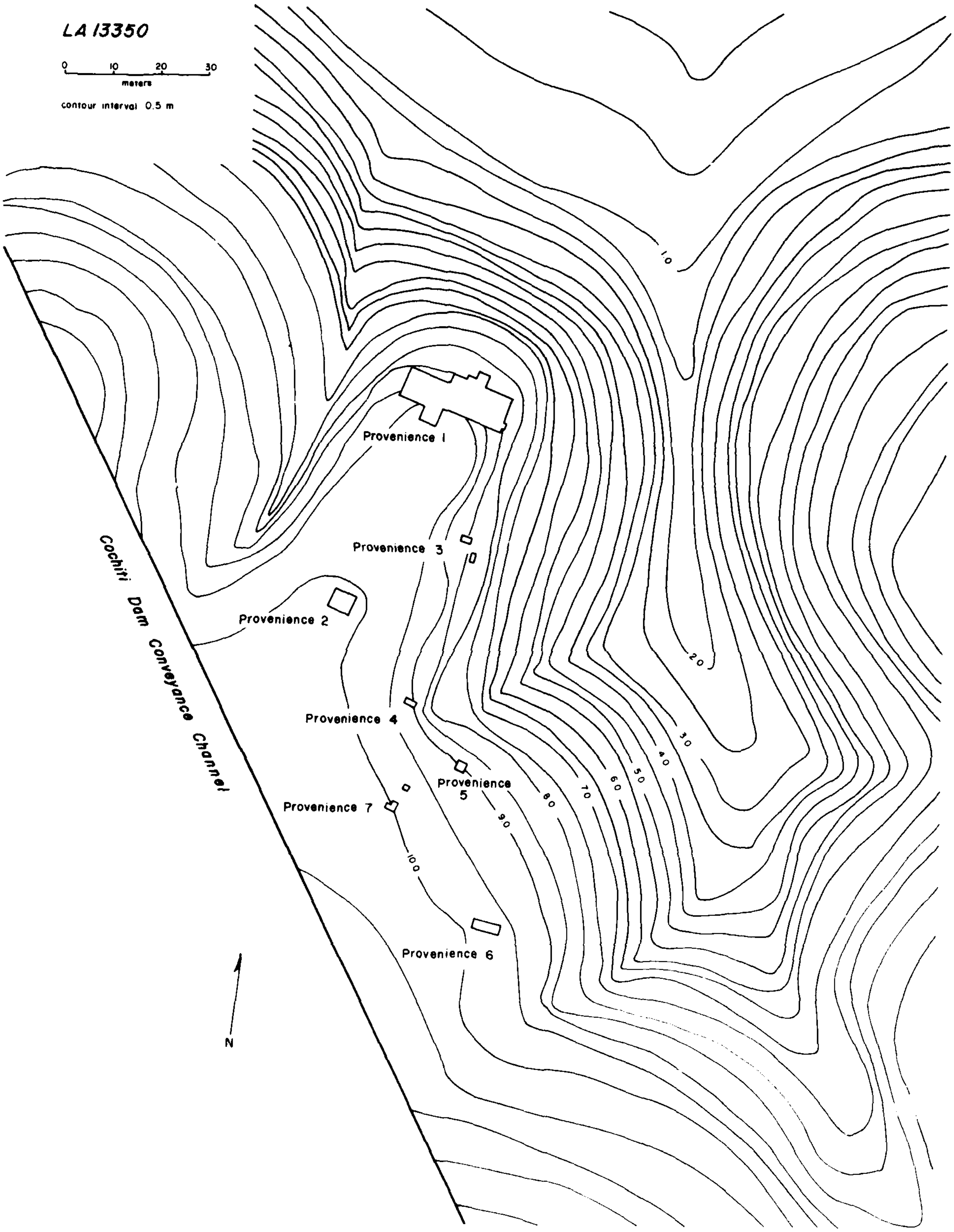

FIG. 14.1 LA 13350 Site Map, illustrating local topographic relief.

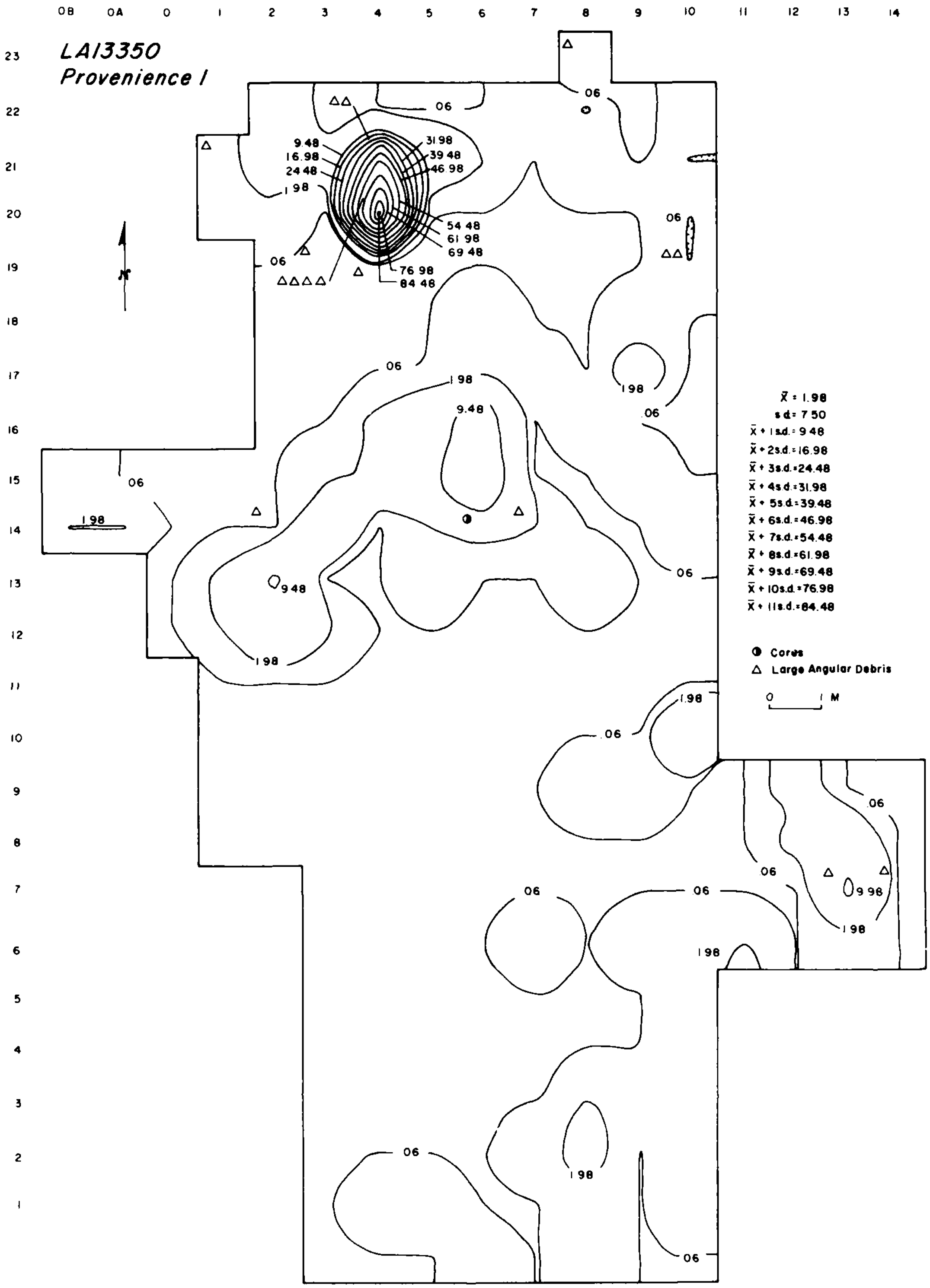

FIG. 14.2 LA 13350, distribution of lithic artifacts (Provenience 1)
Note: each symbol represents an artifact and the isopleths denote unutilized debitage only.

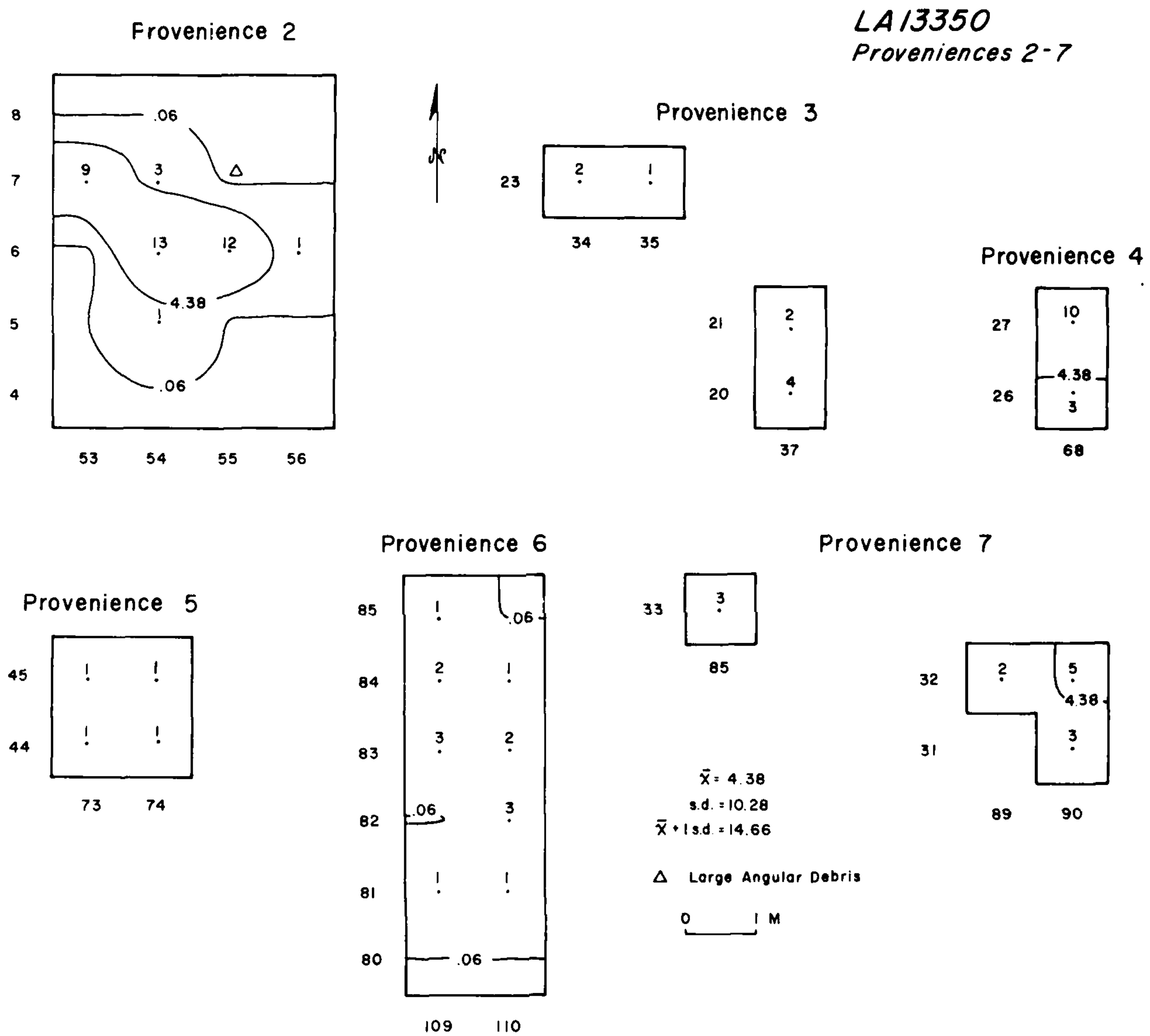

FIG. 14.3 LA 13350, distribution of lithic artifacts (Proveniences 2-7)
(Arabic numbers adjacent to dots represent frequency of unutilized debitage per grid, and the isopleths denote unutilized debitage only)

TABLE 14.1

LA 13350 – Precentages of Material Types for Debitage by Provenience

Material Type	Proveniences 1	2	3	4	5	6	7	Total 1-7
Obsidian	2 1%	— 0%	— 0%	1 8%	— 0%	— 0%	— 0%	3 1%
Basalt	64 17%	37 95%	8 89%	— 0%	4 100%	6 43%	13 100%	134 29%
Pedernal chert/chalcedony	291 78%	2 5%	1 11%	12 92%	— 0%	7 50%	— 0%	316 67%
Other chert	8 2%	— 0%	— 0%	— 0%	— 0%	— 0%	— 0%	8 2%
Quartzite	7 2%	— 0%	— 0%	— 0%	— 0%	— 0%	— 0%	7 1%
Other	— 0%	— 0%	— 0%	— 0%	— 0%	1 7%	— 0%	1 0.2%

TABLE 14.2

LA 13350 – Mean Whole Flake Length Variability by Provenience

	Basalt		Pedernal chert/chalcedony		Other	
	$\bar{x}$ length	freq.	$\bar{x}$ length	freq.	$\bar{x}$ length	freq.
Provenience 1	45.5 mm	22	33.3 mm	107	12.2 mm	27
Provenience 2	63.3 mm	9	20.0 mm	1	—	—
Provenience 3	63.3 mm	3	25.5 mm	1	—	—
Provenience 4	—	—	32.5 mm	4	35.5 mm	1
Provenience 5	55.5 mm	1	—	—	—	—
Provenience 6	55.0 mm	2	43.3 mm	3	—	—
Provenience 7	48.8 mm	8	—	—	—	—

half (68%) were derived from Pedernal cherts and chalcedonies. The next largest material category was basalts, which totaled 28%. Traces of obsidian (less than 1%); non-Pedernal cherts (2%); and quartzites (1%) made up the remainder of the lithic assemblage from LA 13350. All materials are locally available in the Cochiti study area, many possibly from the terrace itself. The proportions of material types (e.g. basalts, cherts, obsidians, etc.) in the assemblage as a whole and in Provenience 1 are quite similar, while proportions of these types in the other proveniences are not (see Table 14.1).

In general, the flake size of Pedernal chert/chalcedony is considerably smaller than basalt flakes. In the local area, cobbles of chert and chalcedony tend to be smaller than basalt clasts, and this may be reflected in the assemblages from LA 13350. As is the case in the proportion of basalts to chalcedony, Provenience 1 and Provenience 6 are similar in the average length of whole flakes of a given material type when compared to the other proveniences. That is, while basalts are longer than chert/chalcedony on all proveniences, in Proveniences 1 and 6 the size difference is less between these material types. Mean whole flake lengths for all proveniences are presented in Table 14.2. As can be seen from this table, not all proveniences had whole flakes of both material types, but the similarity between Proveniences 1 and 6 is evident. The statistical reason that the differences in mean length of whole flakes from Proveniences 1 and 6 are less than in the other proveniences is that the size of basalts is considerably less than, and the size of cherts/chalcedonies is slightly increased over, the average lengths of these materials in other proveniences. It was decided to concentrate on the basalts, since the average lengths of whole flakes of this material category accounted for most of the differences between the two major material types. Data on platform characteristics were sought in an effort to determine if stages in core reduction could be discerned and demonstrated to be different in the proveniences where whole flakes were longer (see Appendix III). Proveniences 1 and 6 exhibited higher percentages of single-faceted platforms, that is, fewer of the flakes with platforms had cortex on the platform, in these proveniences. Also, the percentages of basalt flakes which exhibited platforms were higher in Proveniences 1 and 6. From these data we can infer that the core preparation technique on basalts may be connected with the shorter average length of whole flakes. What this connection may be is unknown.

Manufacture

Only the basalts and Pedernal cherts and chalcedonies occurred in enough frequency to generalize about the stages of reduction which may be discerned in the artifactual materials, and then only in Proveniences 1 and 2. In Provenience 1, Pedernal cherts and chalcedonies make up 78% of the debitage in the assemblage, and basalts 17%. Roughly half of the Pedernal cherts and chalcedonies exhibited cortex, while three-fourths of the basalts did. The frequency of platforms within each of these material types was similar: 41% of the basalts and 44% of the Pedernal cherts and chalcedonies.

Since relatively high proportions of basalts and Pedernal cherts and chalcedonies exhibited cortex, it may be inferred that the first stages of reduction are evident in the Provenience 1 assemblage. The fact that in the basalt category, an extremely high percentage (77%) of flakes have cortex is strong evidence that primary reduction has taken place. While the percentage of cortex is somewhat lower among Pedernal cherts and chalcedonies (49%), this is still indicative of considerable primary reduction of these materials having taken place on the site. In the other six proveniences, percentages of cortical debitage were somewhat higher—basalts had nearly 67% and Pedernal cherts and chalcedonies around 68% dorsal cortex among debitage with cortex present. This would seem to indicate that primary reduction stages occurred in these areas as well.

Tool Utilization

Milling implements, bifaces, and hammerstones were absent at the site. As mentioned above, the percentage of utilized debitage was slightly hgiher in Proveniences 2-7 (12%), but close to normal in the assemblage as a whole (9.4%).

The percentage of utilized debitage in Proveniences 2 through 7 was higher than in Provenience 1. Provenience 2 had no utilized debitage, although it consisted of 39 flakes, the largest among the small proveniences.

On survey, Provenience 2 was thought to represent a single flaking episode, in which several flakes were generated from a core of 3701 basalt. Some support for this idea comes from the fact that of the 39 flakes found, 29 of them are of taxon 3701. The fact that this debitage shows no evidence of utilization may also tend to support the single episode interpretation of Provenience 2.

As noted above, utilization tended to occur more frequently in high density grids and among cherts and chalcedonies rather than basalts. Specifically, it was found that in Provenience 1, the grids with the highest artifact densities exhibited the highest frequencies of utilization, versus grids with few artifacts. These high density grids were composed primarily of cherts and chalcedonies. Among the other six proveniences, utilization was most prevalent in Provenience 6; nearly two-thirds of the grid squares had a utilized flake. Among Proveniences 2 through 7, Provenience 6 was unusual in that it contained fewer basalts than cherts and chalcedonies, making it resemble the Provenience 1 assemblage in proportions of material types represented. Thus, the two proveniences with higher proportions of cherts and chalcedonies are also those with the highest frequencies of utilization, in those grids where artifact frequency is also relatively high. What this regularity might mean with respect to tool manufacturing activities on the site is unknown. Given that primary reduction is in evidence in both major material type categories, predominant utilization on flakes of cherts and chalcedonies as opposed to basalts could indicate differential treatment of flakes from the former type category in the early reduction stages of manufacture or some other activity entirely.

It was suggested above that the higher percentages of utilization which occurred on cherts and chalcedonies may be indicative of an activity entirely independent of those associated with tool manufacture. On the other hand, in light of the fact that two cores were observed on previous survey, one from a basalt and one from a chert, and in view of the absence of large angular debris (debitage weighing over 40g), it may be suggested that core preparation and removal from the site may have been an activity at LA 13350.

SUMMARY

SAMPLING STRATEGY

As indicated in previous sections, there were differences in mean artifact density, whole flake lengths, and prevailing material types among the various proveniences. Some of these variations may be accounted for by criteria used to decide which areas of the site were to be collected. The small proveniences (2 through 7) were investigated only to the areal extent that they exhibited high artifact densities. On the other hand, Provenience 1 was collected over a broad area in which the occurrence of artifacts was not a criterion for extending the area of collection. As a result, Provenience 1 contained several empty grid units while Proveniences 2 through 7 had few, some of them none.

Another consequence of the collection strategy may have been that the proportions of material taxa were different between Provenience 1 and the other six proveniences. Provenience 1 is a large area, with 389 artifacts, while Proveniences 2 through 7 average 17 artifacts apiece. It may be that by virtue of its larger size, Provenience 1 contains a more representative sample of the site's assemblage while Proveniences 2 through 7 are too small to be representative.

The dominant materials at Provenience 1 are Pedernal cherts and chalcedonies, while the dominant materials at Proveniences 2, 3, 4, 5 and 7 are basalts. The fact that basalts occur more frequently in the smaller proveniences may also be due to a higher visibility of basalts on the terrace whose substrate is made up primarily of cherts and chalcedonies.

Whole flake size differences between Provenience 1 and the other six may thus reflect two possible factors: 1) the initial size of nodules being worked; 2) whole flake mean length in the smaller proveniences was greater if these areas were chosen for investigation due to the high visibility of basalts (large and unusual material).

CONCLUSIONS

In view of the absence of any structural features, the apparent surficial nature of the site, the absence of finished tools and the nature of the substrate (a gravel terrace), we can tentatively conclude that LA 13350 was used irregularly, perhaps as a source location for some raw materials (Pedernal cherts and chalcedonies) for making tools and for some initial stages of tool manufacture. Spatial distributions of artifacts at the site also indicate that high densities of cherts and chalcedonies are correlated with relatively high percentages of utilization, which may or may not be an activity set associated with core preparation.

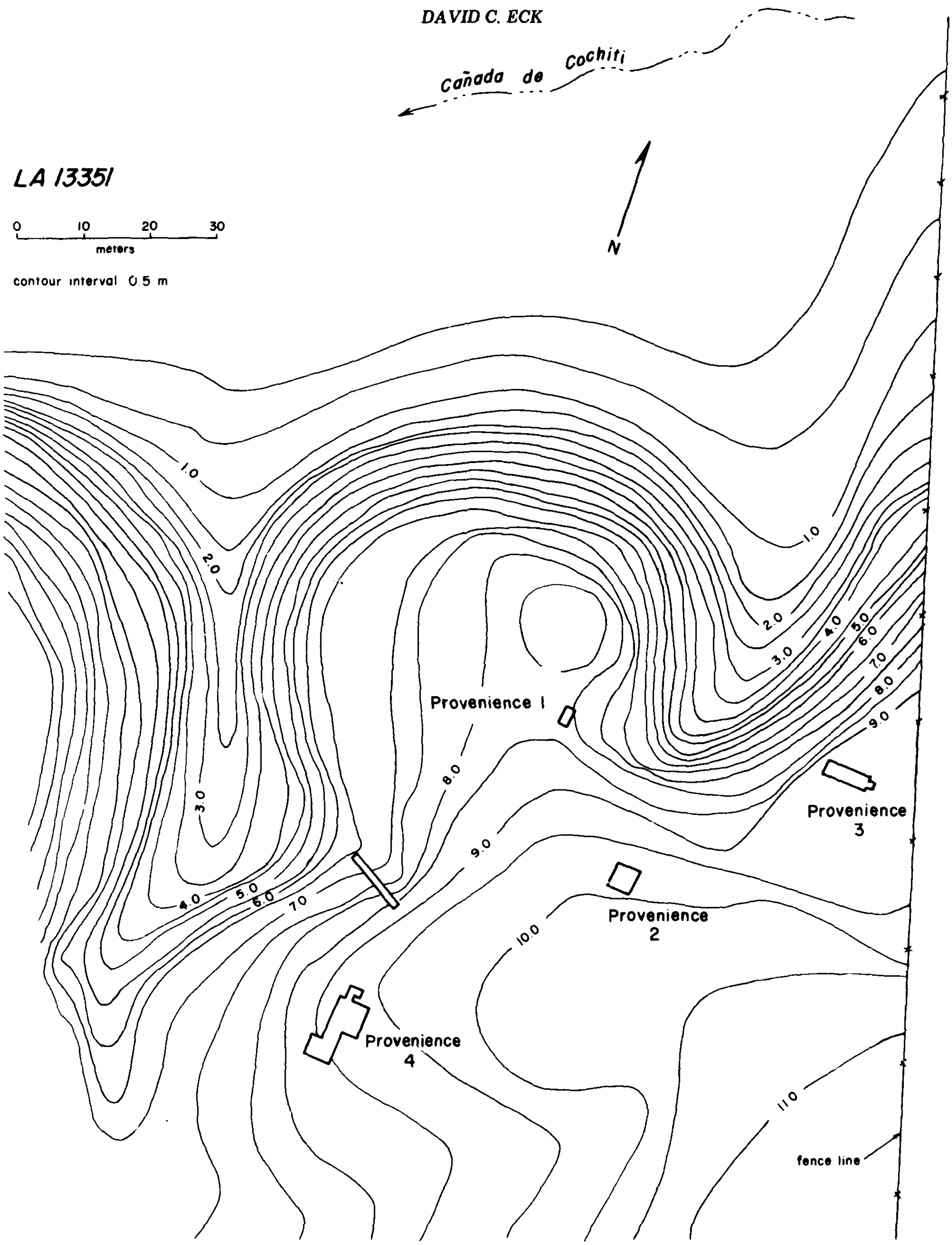

FIG. 15.1 LA 13351 Site Map, illustrating local topographic relief and provenience boundaries

Chapter 15
LA 13351

David C. Eck

INTRODUCTION

LA 13351 is a nonstructural site location, consisting of a dispersed lithic scatter approximately 5000 m^2 in area, which is of unknown temporal or cultural affiliation. The site is located on the south side of the Canada de Cochiti, about three kilometers above its confluence with the Rio Grande and four kilometers west of La Bajada escarpment, at an elevation of 5420 feet.

LA 13351 is situated on a flat-topped gravel terrace, approximately 20 m above the Canada de Cochiti arroyo bottom. The terrace edge drops steeply to the arroyo bottom about 20 m north of the site area and is bounded on the west by an arroyo cutting north to the Canada de Cochiti. To the south and east, the flat terrace top continues unbroken for hundreds of meters.

The site is located in the Upper Sonoran Juniper Grassland vegetative community (Drager and Loose 1977: Fig. II.2.1). Dominant species include grama grass, snakeweed, star and prickly pear cactus, rabbitbrush, juniper, and Apache plume. Juniper occurs primarily on slopes and in the arroyos, while blue rabbitbrush and Apache plume are more common in the Canada de Cochiti arroyo bottom.

SITE DESCRIPTION

LA 13351 was documented as a single provenience lithic site during the survey stage of analysis. At that time it was described as a low density artifactual scatter which extended over a 100 x 50 m area with two small (5 x 5 m) concentrations of lithic debris. No hearths, structures, or other features were observed, and survey monitoring of artifacts was confined to a 5 x 2 m sample in the westernmost concentration. During the present investigation, four spatially discrete concentrations of lithic debris were intensively surface collected by 1 x 1 meter units (see Fig. 15.1). No subsurface tests were undertaken.

The first collection unit (Provenience 1) consisted of a 1 x 1 meter grid system which extended 3 m north-south and 2 m east-west. All six m^2 in the provenience were surface collected.

Provenience 2 was located approximately 30 m to the south-southeast of Provenience 1 and roughly coincides in space with the survey quadrat. The second provenience consists of a 1 x 1 meter grid system which measures 4 m north-south and 4 m east-west. All 16 m^2 were surface collected.

Provenience 3 is a lithic scatter located approximately 50 m east of Provenience 1 and 40 m east-northeast of Provenience 2. A 1 x 1 meter grid system measuring 3 m north-south and 8 m east-west was established, and 22 m^2 were surface collected within the provenience.

Provenience 4 is a relatively large lithic scatter approximately 40 m west-southwest of Provenience 2 and 60 m south of Provenience 1. A 1 x 1 meter grid system measuring 12 m north-south by 7 m east-west was laid out, along with two isolated 1 x 1 meter grid units 7 m south of the main grid system. A total of 46 m^2 was surface collected within Provenience 4.

PROVENIENCE 1

FEATURES

No features were present.

LITHIC ARTIFACTS

A total of 33 lithic artifacts was recovered from five of six grid units in Provenience 1, at a mean frequency of 6.6 artifacts per m^2 for those grids with material present. The majority (82%) of these artifacts were flakes, with small angular debris comprising the remainder (18%).

Pedernal chert/chalcedony comprises 88% of the total assemblage, with one taxon of silicified wood representing 12%. Pedernal material is available locally. The silicified wood may have been imported, although two pieces of silicified wood exhibited waterworn cortical surfaces and thus may have outcropped locally.

Seventeen lithic artifacts (52%) exhibited cortical surfaces; the amount of cortex exhibited on the dorsal surfaces of these artifacts ranged from an estimated 10% of the dorsal surface to 87%, with an average of 29% coverage. No cores or large angular debris were found, nor were any hammerstones recovered. All debitage is freehand, and platforms, when present, are uniformly single-faceted. Since there are no indications of secondary and tertiary reduction, we may infer primary reduction as the only manufacturing strategy represented at this provenience.

None of the flake debitage and small angular debris found within the provenience showed evidence of utilization.

PROVENIENCE 2

FEATURES

No features were present.

LITHIC ARTIFACTS

A total of 30 lithic artifacts was recovered from 11 of the 16 grid units within the provenience, with a mean density of 1.9 artifacts per m^2 for all grid units, or 2.7 artifacts per m^2 for only those grids containing artifactual remains. Of the total, 22 artifacts were pieces of flake debitage, six were pieces of small angular debris, one was a piece of large angular debris, and one was a fragment of a biface.

One taxon of basalt (3701) comprises 75% of the debitage, with five taxa of cherts and chalcedonies contributing the other 25%. All of these materials are available locally. With the exception of a single piece of chert, all cortical surfaces were nonwaterworn.

Thirteen pieces (46%) of material exhibited cortical surfaces, and average coverage of the dorsal surface of the debitage was 28%. Twelve of 21 pieces (57%) of basalt had cortical surfaces, accounting for the majority of cortex present. All debitage is freehand, and there were no cores found. The single piece of large angular debris is of basalt, and was found with the basalt debitage, as was the biface. There were no hammerstones recovered from this provenience. The high proportion of cortical debris would seem to indicate primary reduction, and platforms, when present, are all single-faceted. There are no indications of secondary and tertiary reduction, so we may infer that the biface found in this provenience was manufactured elsewhere.

Twenty-five percent of the flake debitage and small angular debris was utilized, and all utilized pieces were of basalt. The piece of large angular debris did not exhibit signs of use, and the single distal fragment of a biface was the only retouched tool present. Five of the seven utilized pieces of basalt had cortical surfaces.

PROVENIENCE 3

FEATURES

No features were present.

LITHIC ARTIFACTS

A total of 144 lithic artifacts were recovered from 21 of 22 grid units in this provenience, yielding a mean density of 6.6 artifacts per m^2 for all grid units, and 6.9 artifacts per m^2 for grids containing material. One hundred thirty-nine of the artifacts were flake debitage (73%) and small angular debris (27%), with two cores and three pieces of large angular debris completing the total.

One piece of basalt was found (1%), with the bulk of the material comprised of Pedernal chert/chalcedony (98%). One piece of chert was also recovered.

One hundred six pieces of debitage (76%) exhibited cortical surfaces, with an average coverage of the dorsal surface of 47%. Platforms, when present, were cortical (58%) and single-faceted (42%); all debitage was freehand. Two Pedernal chalcedony (1215) cores and three pieces of large angular debris of Pedernal chert/chalcedony (1215, 1050, and 1091) were recovered within the provenience, but again, no hammerstones were recovered. Primary reduction is indicated, although there is no evidence of secondary or tertiary reduction.

Seven percent of the flakes and small angular debris was utilized, and none of the cores or large angular debris exhibited wear. The single pieces of basalt and chert were not utilized; only Pedernal material showed evidence of utilization. Nine of ten utilized artifacts were cortical debris, and seven of these nine had waterworn cortex.

PROVENIENCE 4

FEATURES

No features were present.

LITHIC ARTIFACTS

A total of 89 lithic artifacts was recovered from 29 of 46 grid units within the provenience, with a mean density of 1.93 artifacts per m^2 for all grid units, and 3.09 artifacts per m^2 for those grids with material. Of the total, 75 artifacts were pieces of flake debitage and small angular debris, with one core, one biface, and 12 pieces of large angular debris making up the remainder of the assemblage.

Pedernal chert/chalcedony comprises 56% of the material present with one taxon of basalt contributing 35%. Four taxa of obsidian contribute 8%, and the final 1% is represented by a single taxon of non-Pedernal chert. All materials are available locally.

Seventy pieces (93%) of debitage exhibited cortical surfaces, with an average coverage of 46% on debitage dorsal surfaces. All the obsidian (5 pieces) had nonwaterworn cortex, and only two of 26 pieces of basalt had waterworn cortex. Pedernal material was rather evenly divided between waterworn and nonwaterworn cortex. In general, only primary reduction is indicated for this provenience, and we may infer that the Pedernal chalcedony biface was manufactured elsewhere. One Pedernal core was recovered, along with one chert, seven Pedernal, and four basalt pieces of large angular debris. There were no hammerstones within the provenience.

Twenty percent of all the flakes and small angular debris was utilized. Fifty percent of the obsidian and 31% of the basalt was utilized, contrasting with 10% utilization of Pedernal. The large angular debris and core were not utilized, and the single Pedernal biface was the only retouched tool present; it was round in shape and complete. All of the utilized material had cortical surfaces.

SUMMARY

For the site as a whole, it seems obvious that lithic material utilization and manufacture indicate a very expedient use of available raw materials, with the possible exception of the silicified wood and some of the obsidian. All other materials are available within the general area, although not perhaps at the exact site location. In fact, it seems that the basalt was imported to the location, perhaps from La Bajada Hill, which is only four kilometers away, and provides a source of basalt which would not exhibit waterworn cortex.

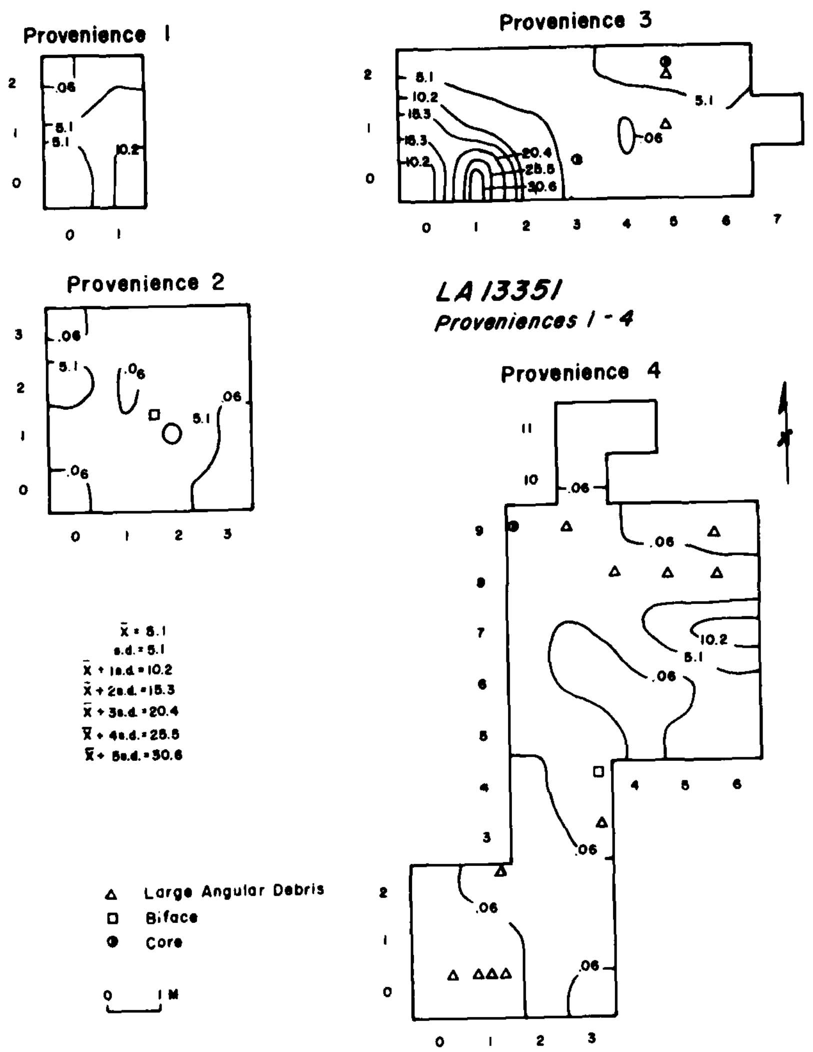

FIG. 15.2 LA 13351, distribution of lithic artifacts (Proveniences 1-4)
Note: each symbol represents an artifact and the isopleths denote unutilized debitage only.

Pedernal materials, on the other hand, may be available from the gravel terrace on which the site is situated, and if so, would likely be waterworn. The fact that the basalt seems to be selected for utilization would also be more understandable if it had been imported for use. The high percentage of cortical debris in the utilized assemblage is perhaps indicative of expedient, low energy investment strategies. The two bifaces found, one fragmentary and the other complete, with no evidence of their having been manufactured on the spot, support this conjecture. One further point might constructively be raised: the marked dichotomy of materials represented in separate proveniences may indicate that there were several time periods/groups/individuals/tasks and conditioning factors operating at this site location.

Chapter 16
LA 13352

Rosalind Hunter-Anderson

INTRODUCTION

LA 13352 was a surficial lithic scatter with an associated hearth (Feature A) located on the southern edge of the second gravel terrace north of the Canada de Cochiti. The absence of both diagnostic artifacts and datable material prohibits the assignment of a date or cultural period to this site. The site is three kilometers east of the Rio Grande, 3.6 kilometers west of La Bajada Hill with an elevation of 5420 feet. The edge of the terrace runs east-west, parallel to the arroyo and is about 6 m above the arroyo bottom. The terrace slopes 3^0 south to the first terrace's arroyo. To the north and east, the land is gently sloping or flat. Small arroyos running south occur to the east and west of the site.

The entire valley sits on the Santa Fe Formation; the soil structure is sand mixed with locally derived cobbles and gravels. These cobbles primarily consist of quartzite and igneous rocks, although small nodules of chalcedony also occur.

The vegetative community is the Upper Sonoran Juniper (Drager and Loose 1977:Fig. II.2.1). Blue grama grass and ring muhley are the most commonly occurring forms of vegetation, although snakeweed, yucca, yellow and blue rabbitbrush, four-wing saltbush, Apache plume and juniper also occur.

EXCAVATION APPROACH

A grid system (17 m x 15 m) was superimposed over the site and within the system 246, 1 x 1 meter grid units were surface collected. An additional area approximately 10 m from each side of the grid was examined and additional lithics were mapped as isolated items (see Fig. 16.1).

Excavation was confined to the hearth and 12 contiguous 1 x 1 meter grids. The grids were excavated in arbitrary 5 cm levels to a maximum depth of 10 cm. The placement of the hearth suggested that the site was largely surficial and the tested grids confirmed this observation.

FEATURES

FEATURE A (Hearth)

Shape: Oval.

Condition: Except for minor slippage, the hearth was still intact.

Type of Elements: Twenty-seven unshaped scoriacious basalt and quartzite elements (7 quartzite, 21 basalt).

Size of Elements: Cobbles ranged in maximum dimensions from 20 cm to 25 cm.

Placement and Construction of Elements: Distributed on the surface of the site, the interior of the hearth was fully enclosed primarily by the larger basaltic elements. The clusters of smaller cobbles were considered hearth elements, although they may have had another purpose (e.g. stone boiling).

Dimensions: The exterior of the hearth was 86 cm x 67 cm along the A/B cross section (see Fig. 16.2). The interior was 30 cm x 28 cm along the same cross section. The interior depth varied from 10 cm to 25 cm.

Fill: The interior hearth fill was identical to the exterior fill, except that cobbles were generally absent. A semiflat elongate quartzite cobble on the interior was arbitrarily chosen as the bottom as it was located well below all of the other cobbles.

Firecracked Rock: Firecracked rock was present in significant quantities in the vicinity of the hearth. For the 12 grids which were excavated, weights of firecracked rock were recorded. Surface material was not separated due to the rocky nature of the fill. Basalt and quartzite were weighed separately. The number of pieces was recorded but all of each gross category was weighed together for each grid. These data are given in Table 16.1.

TABLE 16.1

Weights for Firecracked Rocks

Grid	Level	Basalt No.	Basalt Kg.	Quartzite No.	Quartzite Kg.
54/55*	A				
54/56	A	30	4.75	4	0.75
54/57	A	20	2.75	1	0.10
55/54	A	11	1.75	3	0.75
55/55	A	4	1.00	3	0.50
55/56	A	9	1.25	2	0.25
55/57	A	12	1.25	6	1.25
56/55	A	9	0.75	10	3.50
56/55	Hearth	20	33.40	8	10.25
56/56	A	8	0.75	11	2.00
56/57	A	14	3.00	2	0.25
57/55	A	11	1.20	4	0.25
57/56	A	30	6.75	3	1.75
TOTAL		170	58.60	57	21.60

* Present but not weighed.

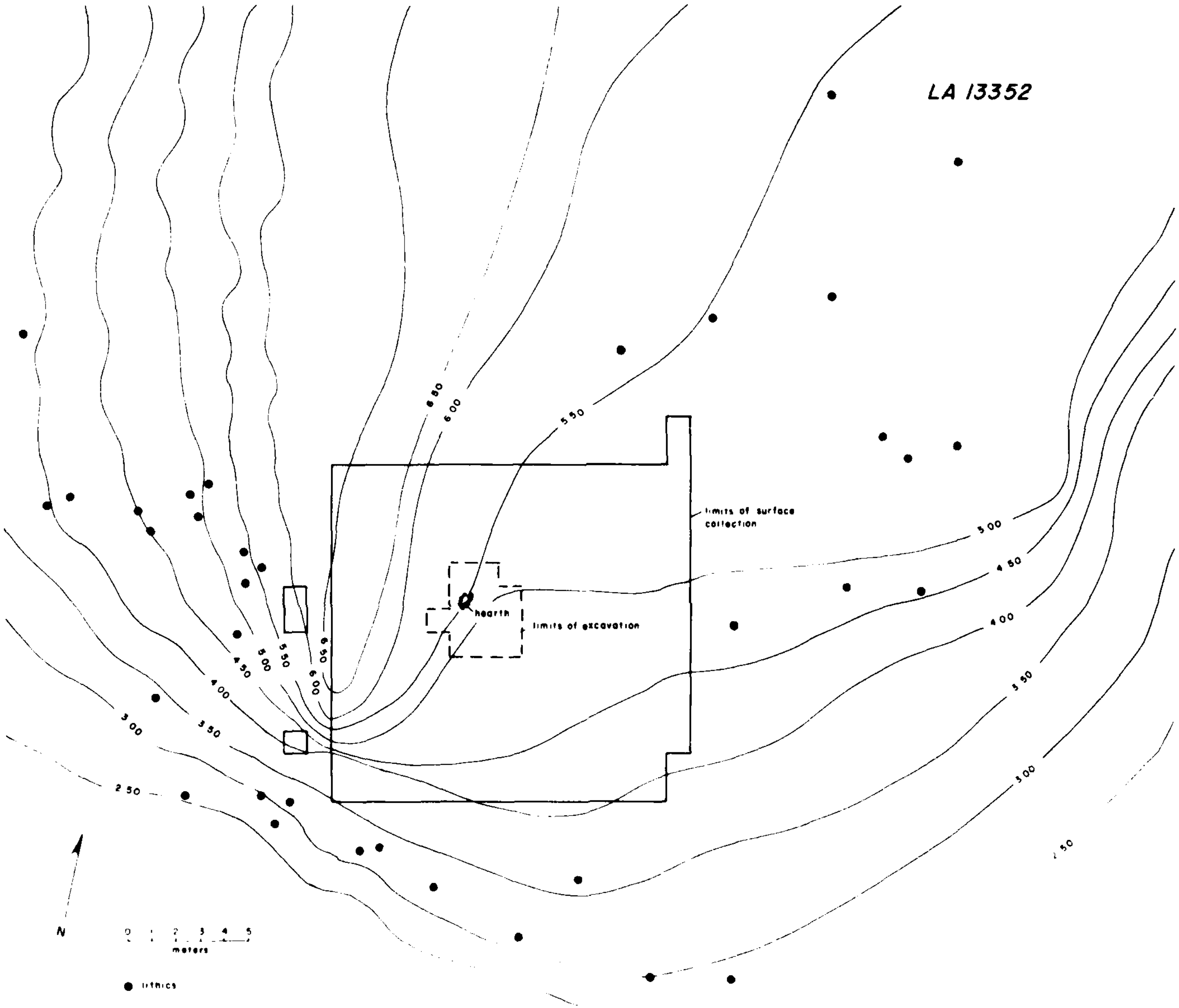

FIG. 16.1 LA 13352 Site Map, illustrating local topographic situation.

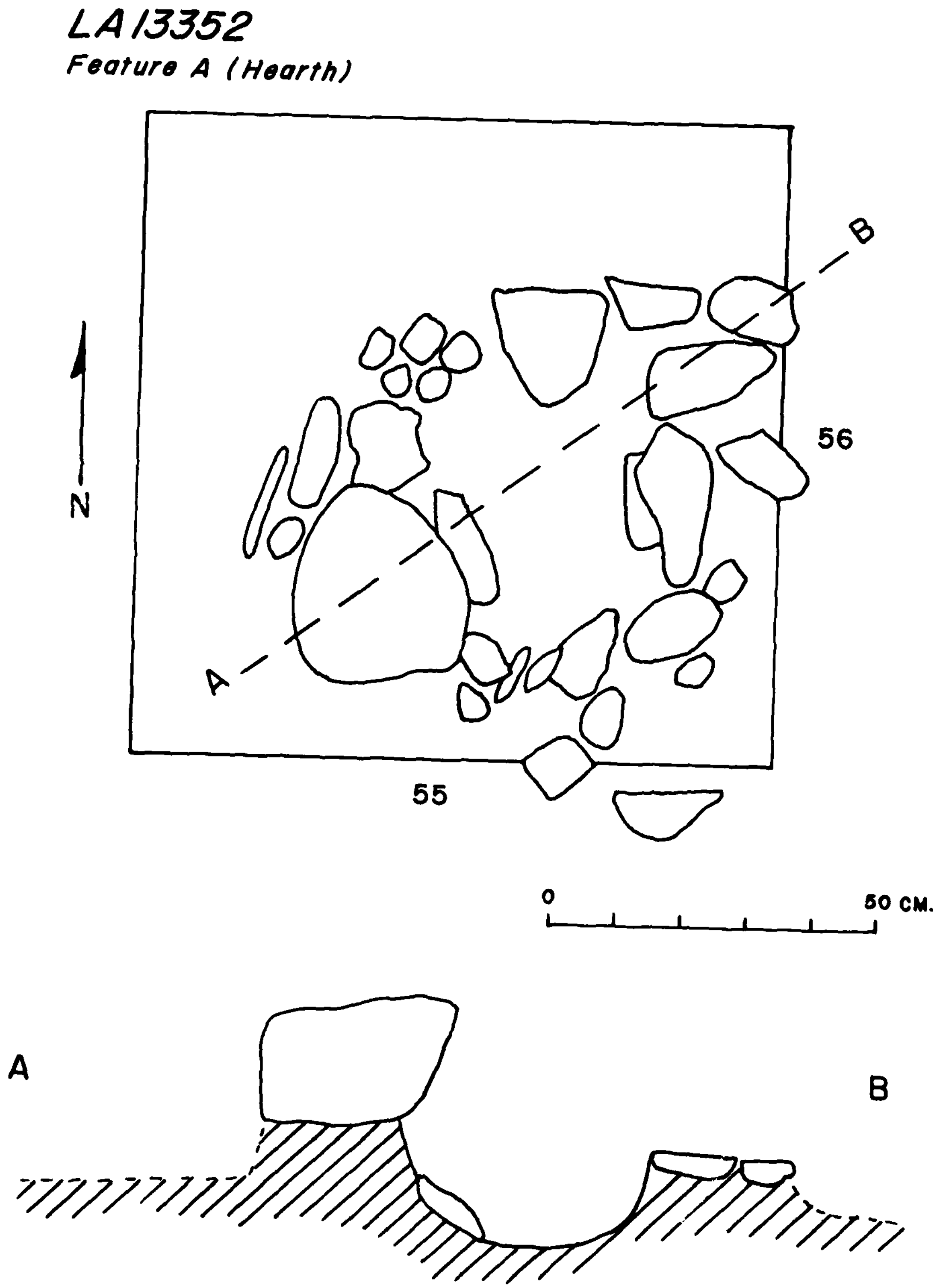

FIG. 16.2 LA 13352, Feature A (plan view and cross section).

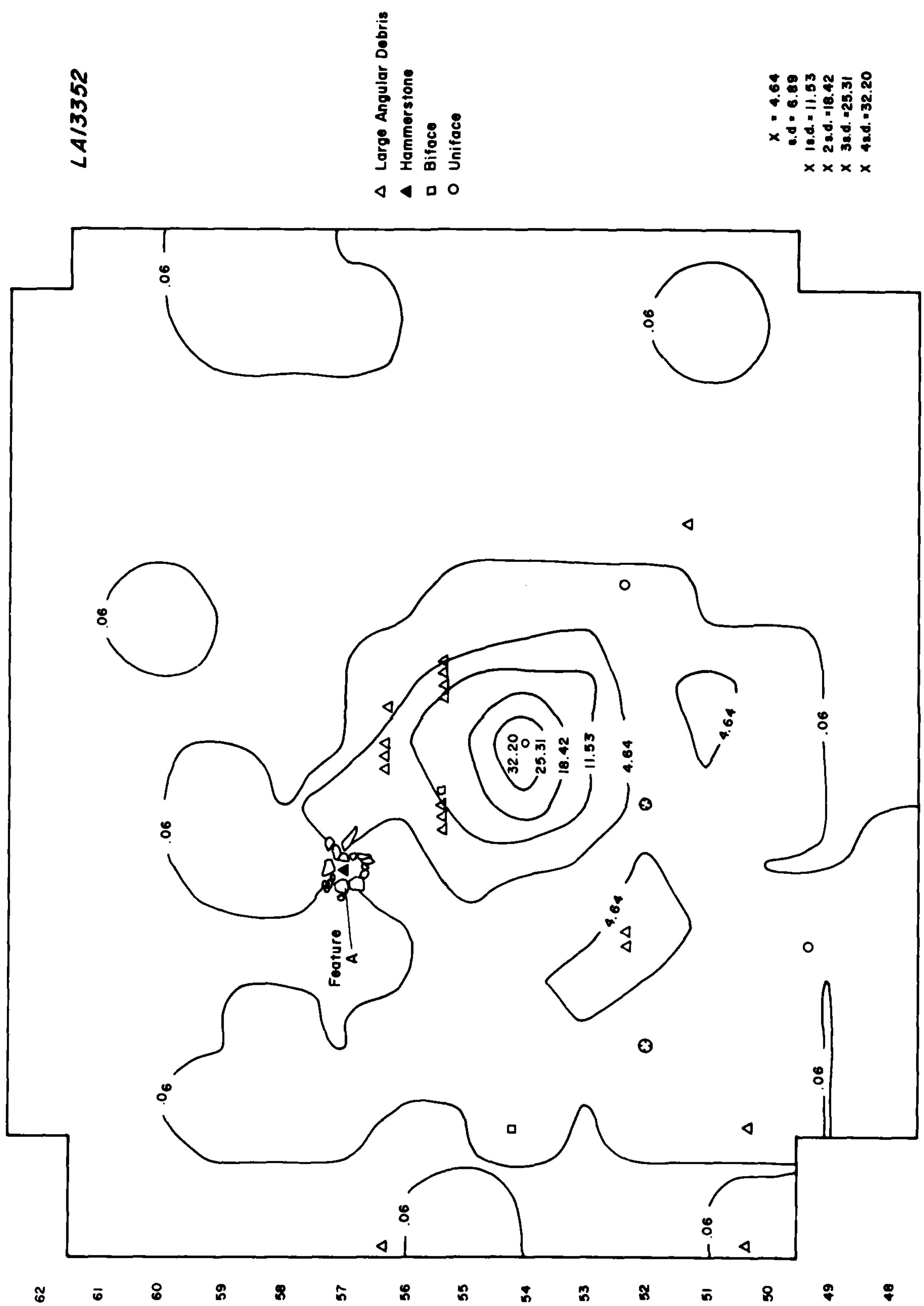

FIG. 16.3 LA 13352, distribution of lithic artifacts
(each symbol represents an artifact and the isopleths represent unutilized debitage)

ARTIFACTUAL ASSEMBLAGES

LITHIC ARTIFACTS

A total of 455 lithic artifacts were recovered; 429 pieces of debitage, two bifaces and two unifaces, one hammerstone, and 21 items of large angular debris were located. Approximately 80% of the debitage was located within the southwest corner of the gridded area and hearth. Relatively high concentrations of material occurred immediately south of the hearth and thinned out to the southwest. To the north and east counts dropped immediately. For purposes of analysis, the materials were separated into two assemblages.

Assemblage 1

The lithics from the gridded area, including both the surface collection and the subsurface excavations in the vicinity of the hearth, were designated Assemblage 1. A majority of these materials was derived from 88 grids immediately south and west of the hearth, the hearth itself, and one grid to the north of the hearth. A total of 371 items of debitage, 17 pieces of large angular debris, one hammerstone, two unifaces, and two bifaces were represented.

Material Selection

Pedernal chert/chalcedony accounted for 53% of the debitage, and basalt accounted for 38%. Ninety-three percent of the basalt was 3701. Quartzite and non-Pedernal chert/chalcedony were present in small quantities. Large angular debris was mainly Pedernal chert/chalcedony with some items of 3701 basalt. The two bifaces were 3701 basalt while the unifaces were Pedernal chert/chalcedony.

Manufacture

Freehand flaking technique was used exclusively. A total of 75% of the debitage was freehand flakes and 25% was small angular debris. A total of approximately 80% of the debitage was cortical, and a relatively even distribution of waterworn (49%) and nonwaterworn (51%) cortex was observed. One-third of the flakes had platforms; 47% of these had cortical platforms and 53% were single-faceted. No platforms were retouched or resharpened. Considering the relatively high percentage of the total assemblage which was cortical, primary reduction seems to have been a characteristic of flaking activities.

Tool Utilization

Approximately 10% of the debitage was utilized. Utilization occurred most frequently in basalt (13%); Pedernal chert/chalcedony (8%) was also frequently utilized. Of the 17 pieces of large angular debris recovered only one exhibited use as a tool. One quartz hammerstone with a convex battering locus was recovered from the hearth. One biface was found just south of the hearth, and a biface and uniface were found southwest of the hearth at 4 and 6 meter intervals, respectively. Another uniface was located 5 m southeast of the hearth. The bifaces were of 3701 basalt and the unifaces were of 1215 and 1091 chalcedony.

Assemblage 2

This assemblage consisted of all scattered lithic finds beyond the boundaries of Assemblage 1 (see Fig. 16.1). It included 58 items of debitage and four pieces of large angular debris.

Material Selection

Nearly 79% of the debitage was Pedernal chert/chalcedony; basalt accounted for 19%; one item of obsidian was also present. All the large angular debris was Pedernal chert/chalcedony.

Manufacture

Roughly one-fourth of the debitage was small angular debris; three-fourths was freehand debitage. The single piece of 1091 chalcedony was the only evidence of a bipolar flaking technique. Eighty-one percent of the debitage had cortex. Platforms were observed on nearly half of the assemblage; two-thirds of the platforms had cortex.

Tool Utilization

Utilized debitage represented 16% of the total in this assemblage, again in keeping with surficial assemblages in the study area. Utilization occurred most frequently in basalt, as was the case in Assemblage 1.

FAUNA

The faunal assemblage at LA 13352 consists of four bones: three from the surface of three grids, and one from level A (0-10 cm) of another grid. All four bones were teeth fragments of a large mammal representing a minimum of one individual. It is difficult to make generalizations about subsistence activities from this sample. However, the small sample size suggests that intensive meat processing and consumption did not occur at LA 13352.

SUMMARY

LA 13352 was a surficial concentration of lithic materials, mainly Pedernal chert/chalcedony and fine-grained basalt, associated with a hearth. In the hearth was found one hammerstone, while outside it and especially to the southwest of this feature, were numerous items of debitage and large angular debris. The large amount of cortical debris, as well as the presence of a hammerstone and large angular debris, indicates that primary reduction took place at the site. The presence of bifaces and unifaces and small angular debris as well as the small size of the debitage of the same materials, indicates that later reduction stages and refinement of finished tools may have taken place as well. Between 10% to 16% of the debitage exhibited use as tools. No date could be assigned to the site.

PLATE 17.1 Overview of site LA 13353, looking north

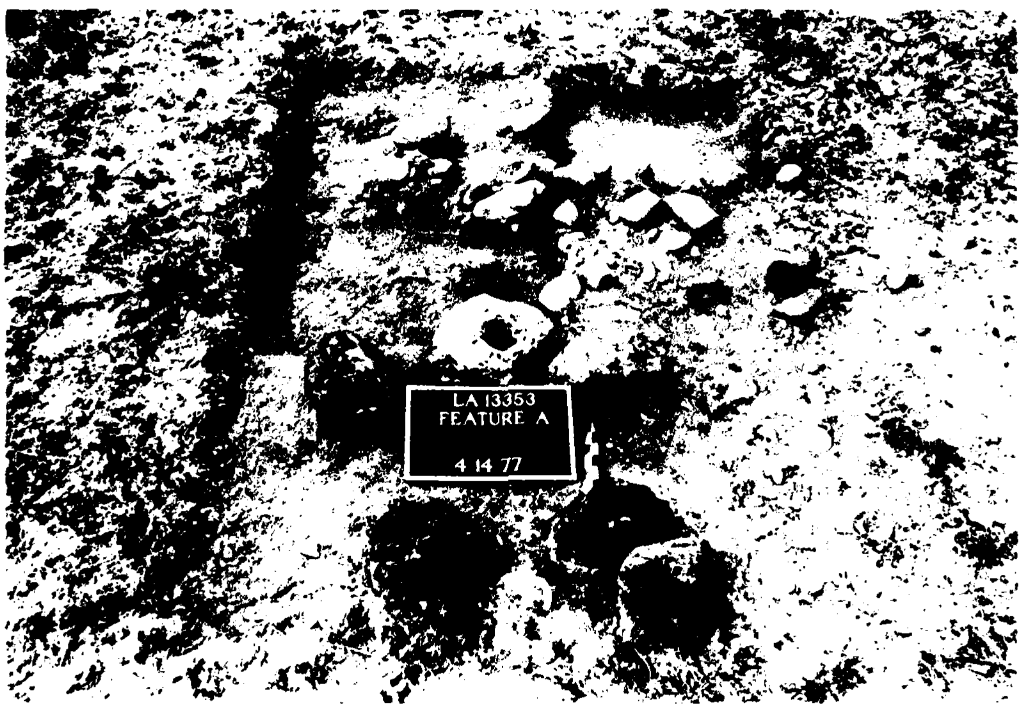

PLATE 17.2 Detail of Feature A (LA 13353), looking north

Chapter 17
LA 13353

Rosalind Hunter-Anderson

INTRODUCTION

LA 13353 is a nonstructural surficial site of unknown temporal and cultural affiliation. It consists of a hearth, a cobble feature, and a lithic scatter. The site is located to the north of Canada de Cochiti arroyo some three kilometers east of the Rio Grande and four kilometers west of La Bajada Hill. It is situated on a gravel terrace edge which forms the west bank of a small arroyo. This arroyo runs south approximately 150 m into the Canada de Cochiti. The edge of the terrace is rounded and slopes to the arroyo bottom. The site probably extended 40 m west of the hearth, but was truncated by the Cochiti Reservoir Conveyance Channel (see Fig. 17.1).

LA 13353 is situated in the Upper Sonoran Juniper Grassland vegetative community (Drager and Loose 1977: Fig. II.2.1). Dominant vegetation near the site included snakeweed, rabbitbrush, juniper, and Apache plume. Saltbush grows along the arroyo near LA 13353. The site elevation is 5430 feet.

EXCAVATION APPROACH

LA 13353 was gridded into 1 x 1 meter squares over an area of 100 x 45 meters in maximum extent. Two major noncontiguous areas were defined: Provenience 1, which was associated with the hearth and cobble feature; and Provenience 2, which was situated 27 m south of Provenience 1 and included an extensive lithic scatter distributed along a gentle slope. All artifacts within these proveniences were surface collected by grid unit. Additional isolated artifacts observed outside the provenience boundaries were plotted individually and collected (these have been included in the Provenience 2 discussion). These artifacts are represented on Fig. 17.1 as isolated grid units. Excavation was confined to the two features and to six grids in and around the features to a maximum depth of 10 cm.

FEATURES

FEATURE A (Hearth)

Shape: Irregular.

Condition: Undisturbed.

Type of Elements: Six large, unshaped, basalt elements.

Size of Elements: Varied from 33 cm long to 40 cm long.

Placement and Construction of Elements: The hearth was open on the east and west. Elements were directly situated on the present ground surface. Light brown sand, heavily mixed with cobbles, occurred around the elements.

Dimensions: On a north-south axis, the hearth measured 1.04 m, and on an east-west axis, it measured 1.20 m. The depth from the original ground surface was 3 cm.

Fill: Light brown sand, heavily mixed with cobbles, occurred around the elements.

Firecracked Rock: Several basalt elements were found in grid 50/52 (the grid which contained the hearth). Surface burns found in the area may have been responsible for these firecracked elements.

FEATURE B (Cobble Cluster)

North and east of Feature A was a cluster of cobbles.

Shape: Irregular with a dominant east-west linear configuration.

Condition: All but a few cobbles were unbroken.

Type of Elements: Six basalt, 20 quartzite.

Placement and Construction of Elements: Most of the cluster aligned on an east-west line approximately one meter north of the hearth. Others were randomly positioned nearby.

Dimensions: Maximum dimensions were 1.4 m north-south and 1.6 m east-west.

Weights: Elements varied in weight from 0.5 kg to 3 kg for the basalt, and from 0.5 kg to 7.5 kg for the quartzite cobbles. Total weight for the six basalt cobbles was 8.75 kg and 57.7 kg for the 20 quartzite cobbles.

ARTIFACTUAL ASSEMBLAGES

LITHIC ARTIFACTS

A total of 1163 items of debitage, three bifaces, four cores, and 83 pieces of large angular debris were found on the site, all either on the surface or within the first 10 cm. Surbsurface materials became scarce just a few meters away from the hearth. The bifaces were located in Provenience 2, as were the cores and most of the large angular debris.

Provenience 1

Materials recovered from the hearth, the cobble feature, and grids associated with these features, yielded 44 items of debitage and three pieces of large angular debris. The large angular debris was either Pedernal and non-Pedernal chert/chalcedony, and all were found on the surface.

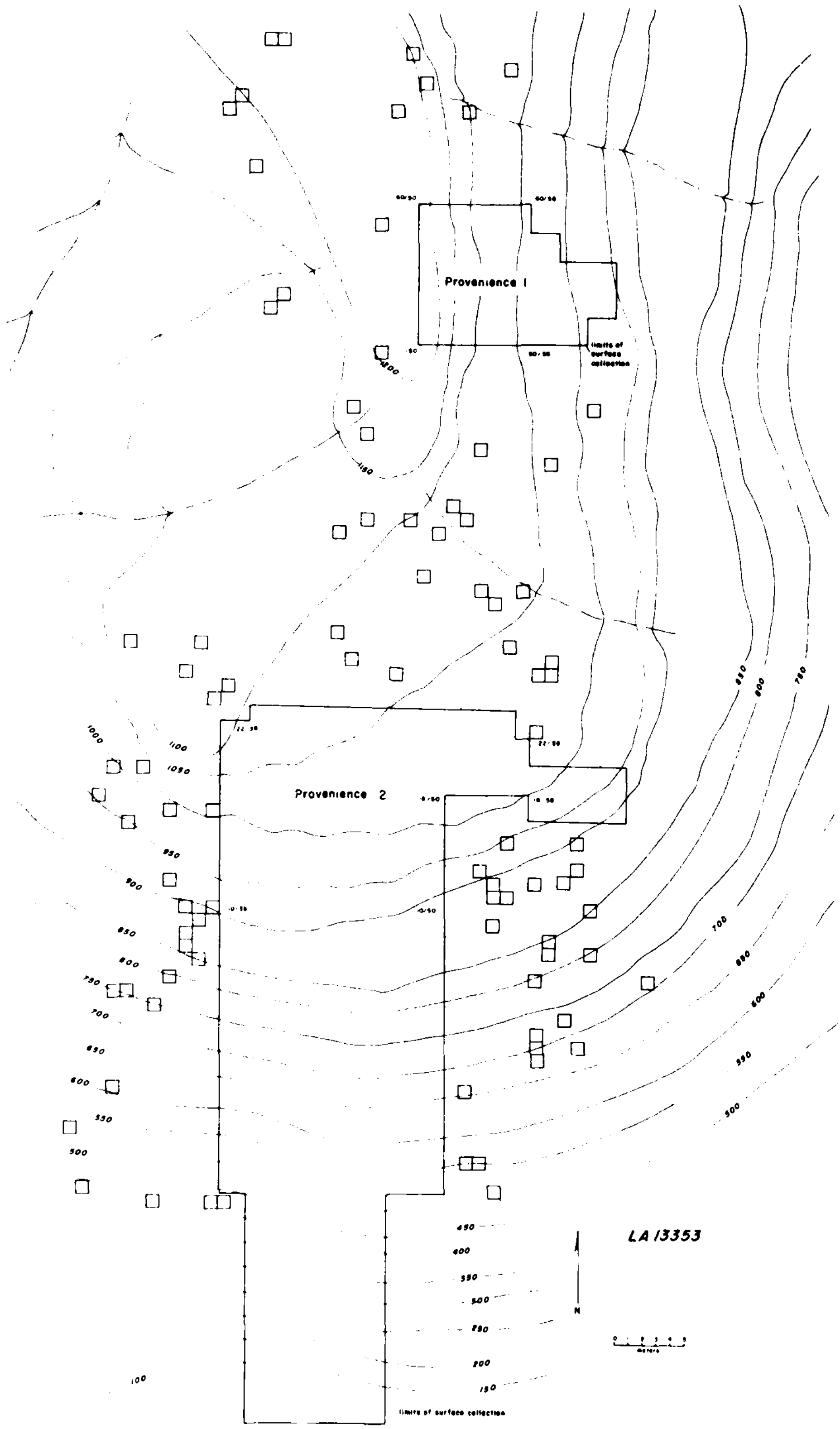

FIG. 17.1 LA 13353 Site Map, illustrating local topographic situation.
(N.B. each grid outside the provenience units represents the locus of an isolated lithic artifact)

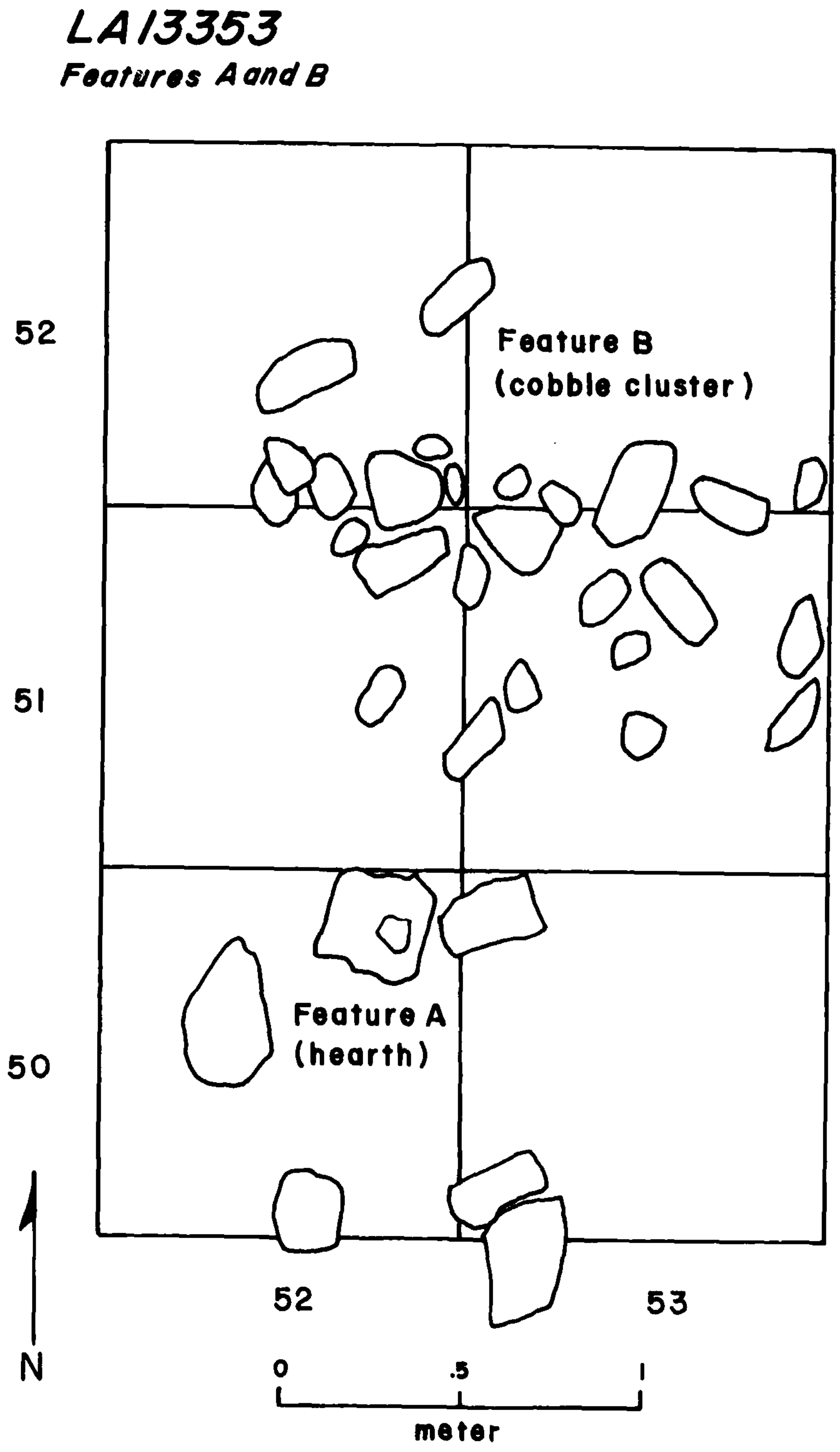

FIG. 17.2 LA 13353 Feature A and Feature B (plan views)

Material Selection

Basalt (3701) made up the majority of debitage (77%). No other basalt was present. Pedernal chert/chalcedony was the next largest group, totaling 18% of the debitage. Traces of non-Pedernal chert and obsidian were found (one item of each). As indicated above, no basalt large angular debris was observed.

Manufacture

Exclusive use of the freehand technique was evident in the debitage. A total of 84% was freehand flake debitage and 16% was small angular debris. A total of 61% of the debitage exhibited platforms; of these 26% had cortex on the platform, and 74% had single-faceted platforms.

A total of 39% of the assemblage had cortex, most of it not waterworn. Over 60% of the flakes had cortex on 51% or more of the dorsal surface. This compares with the overall site tendency for 58% of the lithics to have the majority of the dorsal surface covered with cortex.

Within Provenience 1, the highest density of artifacts occurred on the east side, in a 14 m^2 area. Both major material types, basalt and Pedernal chalcedony, followed this pattern. The large angular debris fell outside this area, just to the west of it.

Tool Use

Utilization occurred in two material types, 3701 basalt and 1091 Pedernal chalcedony, on a total of eleven flakes. In both material types, the vast majority of utilized flakes (82%) were from 31 mm to 50 mm in length. In the debitage as a whole, utilized flakes occur as 25% of the total.

Provenience 2

Provenience 2 contained no features. It yielded 1119 items of debitage, 80 items of large angular debris, four cores and three bifaces.

Material Selection

In contrast to Provenience 1, this provenience contained a larger variety of material types as well as larger numbers of artifacts. Eight major material types occurred, basalt and Pedernal chert/chalcedony nearly equally dominant (48% and 44%, respectively). A total of 4% of the debitage was obsidian (8 taxa), 2% was non-Pedernal chert, 2% was quartzite, and traces of other materials including non-Pedernal chalcedony and silicified wood occurred.

The vast majority of large angular debris was of Pedernal chert/chalcedony; also represented were 3701 basalt and non-Pedernal cherts and chalcedonies. Two material types, basalt and Pedernal chert/chalcedony, were represented in the cores (one item 3701 basalt and three items 1090, 1215 Pedernal chert/chalcedony). The bifaces were of 3530, 3528 obsidian and one of 3701 basalt.

Manufacture

Freehand technique was used exclusively. A total of 78% of the debitage was freehand flakes and 22% was small angular debris. Cortex was present on 63% of the debitage, most of it nonwaterworn. Cortical placement was predominantly on dorsal surfaces only (57%); 14% had cortex on the platform, 10% had cortex on both platform and dorsal surface, and 19% were cortical small angular debris.

Basalt debitage was ubiquitous in Provenience 2, with highest densities in the center and extreme southeastern end. The frequency of basalt flakes showing utilization followed this same spatial distribution. Obsidian was more localized, occurring mainly in the northwestern end and in the center, but not at the extreme southeastern end. Cherts and chalcedonies were widely distributed, with highest densities in the extreme northeastern end and in the center.

The distribution of flakes with cortex followed the general pattern for their material types, as did the distributions of large angular debris. Thus, for basalt, clustering of large angular debris occurred in the center and southeastern end and for chert/chalcedony, large angular debris clustered in the northeastern end but showed no clustering in the center, the distribution of these items being more evenly spread than among debitage of these materials. Bifaces occurred in the northern end of the distribution of lithics, one of the obsidian bifaces within an area of obsidian concentration. The specific taxa involved were not the same as the biface, however. As noted above, the center of the distribution contained a cluster of basalt large angular debris; this same area contained a cluster of obsidian debitage. Also present was a relatively large amount of basalt debitage. We may infer that this area was used for primary reduction of basalt, as well as secondary reduction of obsidian (no cores or large angular debris of obsidian was found at the site).

Tool Use

Utilization occurred in six material types: obsidian, basalt, Pedernal chert/chalcedony, non-Pedernal chert, silicified wood, and quartzite. Among whole flakes, the first five of these materials were present. Basalt (3701) and Pedernal chert/chalcedony were predominant and among these, 52% fell between 21 mm and 50 mm in length. If we include those flakes which were somewhat shorter, between 21 mm and 30 mm, 65% of the total assemblage is included; this means that considerable utilization occurred also on shorter flakes than in Provenience 1. Utilized flakes comprised 15% of the debitage, which is somewhat lower than in Provenience 1, but more in keeping with other large surface assemblages in the area.

FAUNA

One bison hoof was recovered from the surface of Provenience 1 at LA 13353. It is difficult to interpret subsistence strategies from this sample. It is safe to assume, however, that intensive meat processing and consumption did not occur at LA 13353.

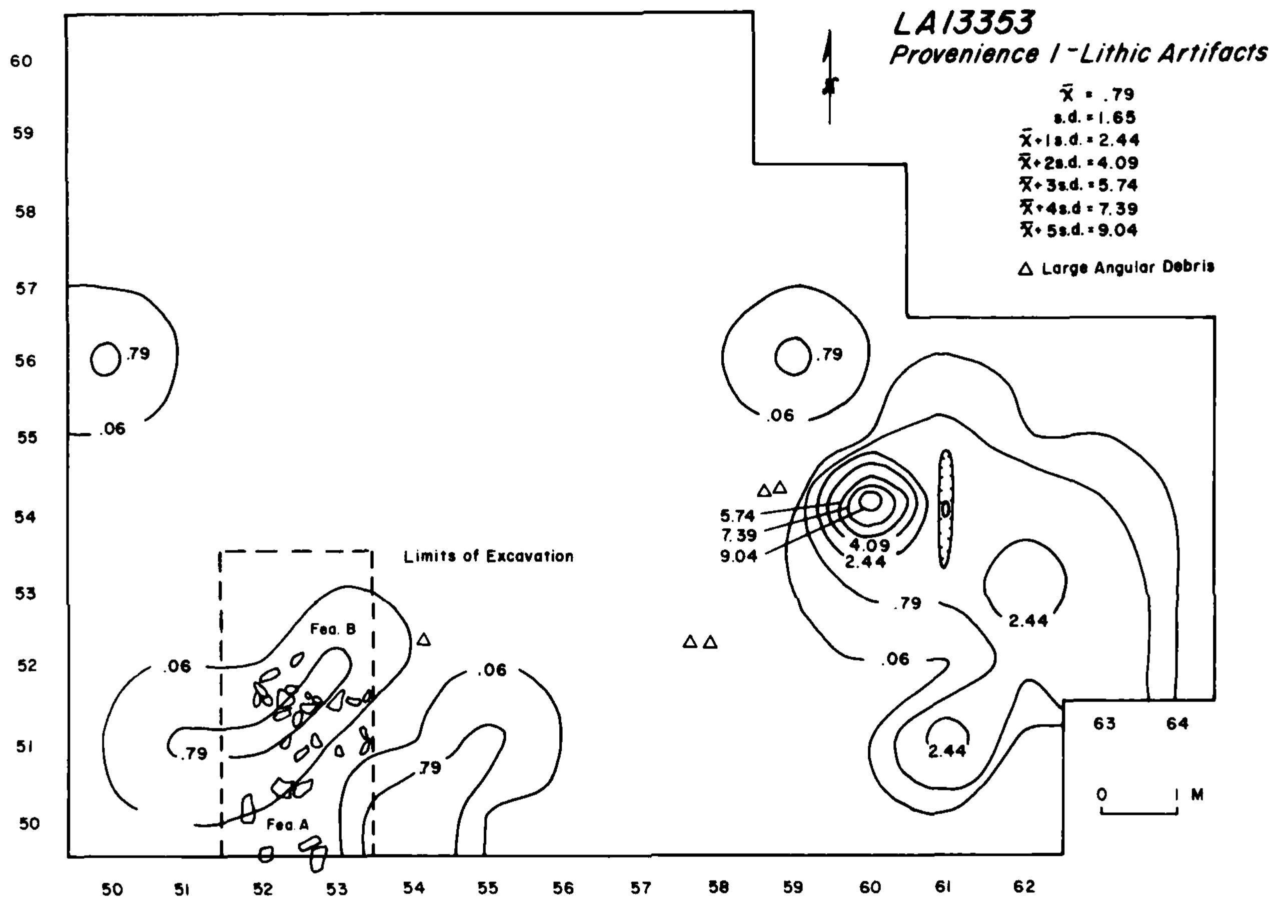

FIG. 17.3 LA 13353, distribution of lithic artifacts (Provenience 1)
Note: each symbol represents an artifact and the isopleths represent unutilized debitage.

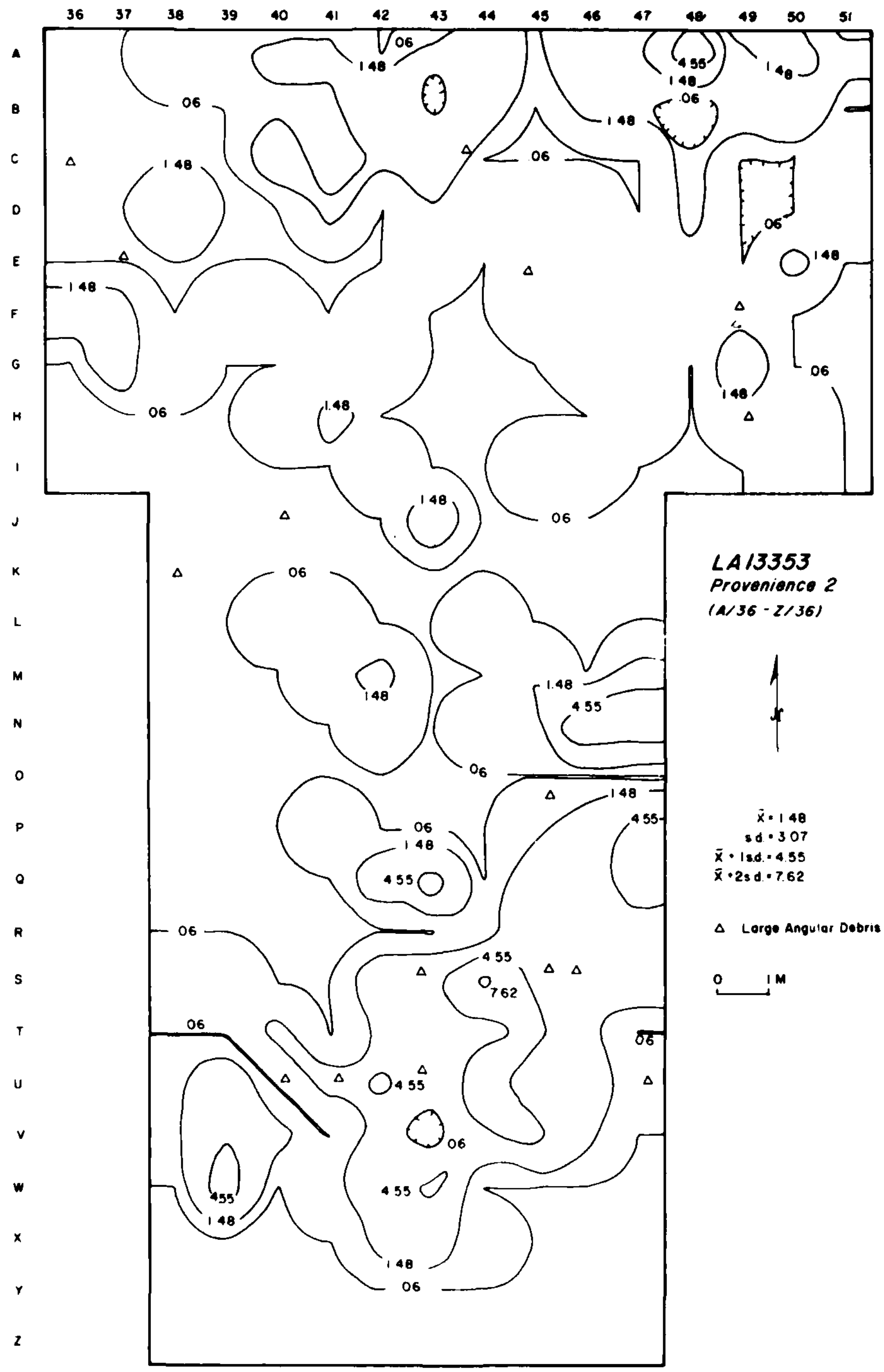

FIG. 17.4 LA 13353, distribution of lithic artifacts (Provenience 2, grids 0/38 to 23/38). Note: each symbol represents an artifact and the isopleths represent unutilized debitage.

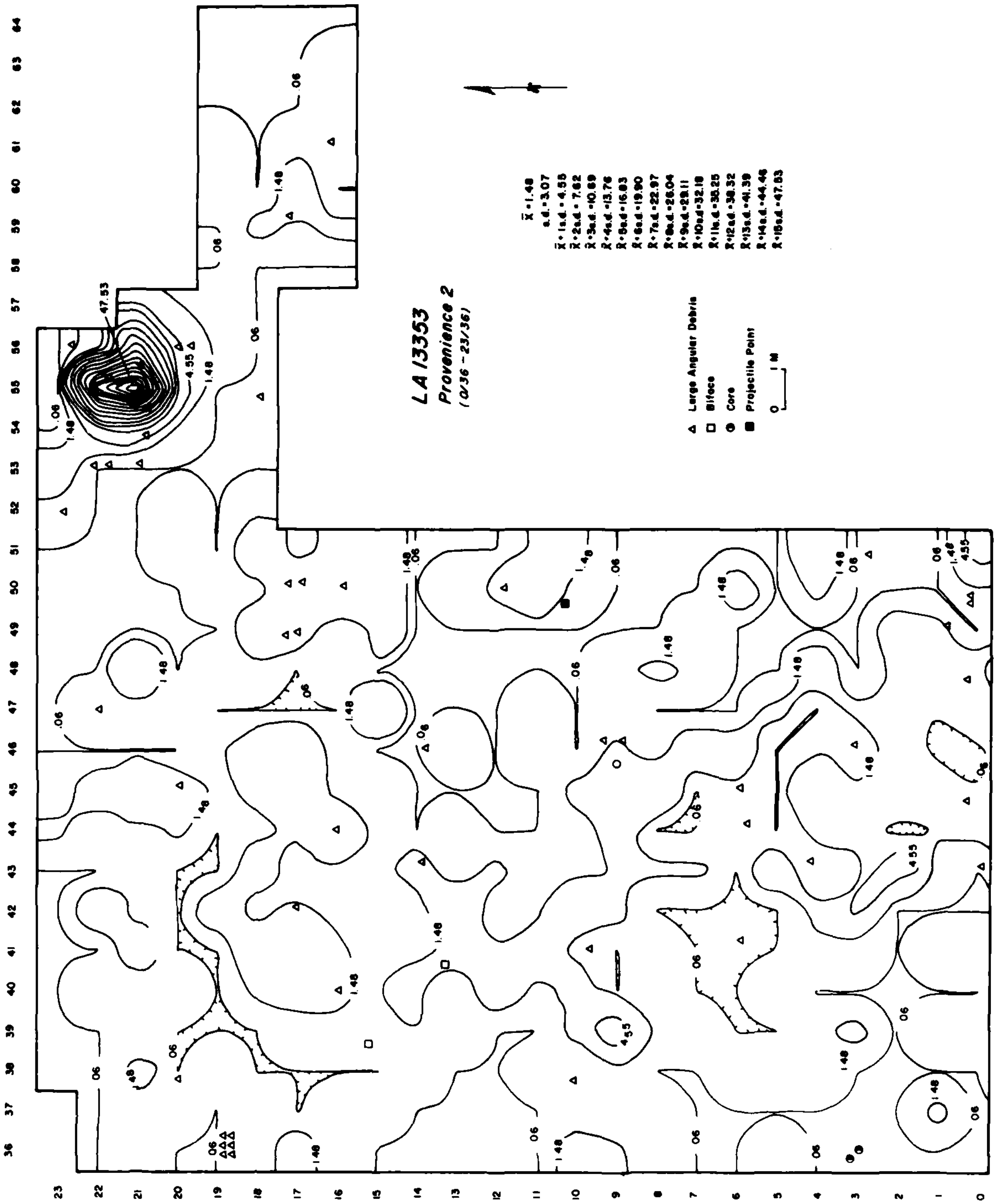

FIG. 17.5 LA 13353, distribution of lithic artifacts (Provenience 2, grids A/38 to Z/38). Note that each symbol represents an artifact and the isopleths represent unutilized debitage.

SUMMARY

LA 13353 was a surficial site containing two features, a hearth and a cobble feature, and an extensive lithic scatter to the south of these features. Differences were observed between Provenience 1, the area near the features, and Provenience 2, the lithic scatter to the south. More variety in material types was present in Provenience 2, while in Provenience 1 only two material types were represented. One area of artifact clustering occurred in Provenience 1, at the eastern end; in Provenience 2, densities differed according to material, with obsidian most localized and basalt most ubiquitous. All stages of manufacture were represented in Provenience 2, with three bifaces, 86 items of large angular debris, and over a thousand pieces of debitage.

PART THREE: APPENDICES

HOW TO USE APPENDICES I–XI

Jan V. Biella and Richard C. Chapman

Summaries of some of the attribute variability monitored for ceramic, lithic, and faunal materials recovered from the sites in the flood pool of Cochiti Reservoir are presented in the following appendices. In this section, pertinent definitions of terms used in the appendices and a brief description of the format for each appendix, including a key to the headings, are presented.

For the most part, the analyses for the different materials follow those developed for the permanent pool mitigation program and the reader is referred to the appropriate methodology chapters in Chapman and Biella (1977a), in particular Chapman and Schutt (1977) and Schutt (1977), for a more thorough discussion of the procedures and rationale for the various analyses.

Only two of the current flood pool analyses differed significantly from the permanent pool analyses—those for ceramic and ground stone artifacts. Although the attributes monitored for the ceramic assemblages are comparable to the preceding season's analysis, the procedures differed, especially in attempting to estimate minimum numbers of vessels represented at each site. The methods and rationale for the current ceramic analysis was presented in Chapter 2 of this volume. The current ground stone analysis was designed and implemented by C. H. Pearsson-Reeves. A summary of procedures and terms used in the analysis was prepared by Ms. Pearrson-Reeves and her summary is presented as an introduction to the ground stone appendix format presented in this section.

ASSEMBLAGE DEFINITIONS

Whenever space permitted, the exact provenience location (i.e., grid unit, feature, and level) is listed for each artifact (see core, large angular debris, hammerstone, facially retouched artifact and ground stone appendices). For the debitage and faunal appendices, items from groups of grids or features are summarized together. These groups have been termed *ASSEMBLAGES*, and basically they reflect different stratigraphic units for each site. The specific rationale for the definition of the different assemblages is presented in the appropriate site report (Chapters 3-17, this volume). The following list specified the provenience (grid, feature, level) units included in each assemblage.

Site No.	Assemblage No.	Provenience Contents
LA 5011	1	Room 1, Stratum 1
	2	all exterior grids (Surface, Strat. 1)
LA 10114	1	Room 1, Stratum 3 (occupation)
	2	Test Area 3, Stratum 1 (postoccupation fill)
LA 10114 (continued)	3	Test Area 3, Stratum 2 (occupation surface)
	4	Room 1, Strata 1,2 (postoccupation)
	5	Test Trench 1, Stratum 1
	6	Test Area 2, Strata 1, 2
	7	all surface materials
LA 13049	1	Room 1, surface
	2	Room 1, levels A, B
	3	Exterior grids adjacent to room (Strata 1, 2)
	4	high density area, surface
	5	all other surface materials
LA 13050	1	Room 1, Strata 1,2 (first occupation)
	2	Room 2, Strat. 1 (second occupation)
	3	Room 2, Strat. 2 (first occupation)
	4	Feature A
	5	exterior occupation surface
	6	exterior subsurface grids (excluding occupation surface, rooms, and test trenches)
	7	Test Trench A, Stratum 1
	8	Test Trench A, Stratum 2
	9	Test Trench B, Stratum 1
	10	Test Trench B, Stratum 2
	11	exterior grids, all other surface materials
LA 13054	1	Room 1, all levels (A-G)
	2	Room 2, Stratum 2
	3	exterior grids, subsurface
	4	exterior grids, high density area, surf.
	5	exterior grids, all other surface
LA 13076	1	Room 2, surface
	2	Room 2, Stratum 1
	3	trash midden (Feature 1), surface
	4	trash midden, Stratum 1
	5	Room 3, surface & Stratum 1 (postoccupation)
	6	Room 3, Strat. 2 (occupation surface)
	7	exterior grids in vicinity of Room 2 (Provenience 1)
	8	exterior grids in vicinity of Room 3 (Provenience 2)
LA 13084	Provenience 1	
	1	Room 1, surface
	2	Room 1, level A
	Provenience 2	
	3	Room 2, upper fill (levels A, B/ Stratum 1)
	4	Room 2, level C
	5	Room 2, lower fill (levels D,E,F)
	6	exterior grids in vicinity of Room 2 (levels A, B)
	7	Room 3, surface
	8	Room 4, level A
	9	exterior grids, surface

Site No.	Assemblage No.	Provenience Contents
LA 13084		Provenience 3
(continued)	10	Room 5, levels A, B
	11	exterior grids, surface
LA 13086		Provenience 1
	1	exterior grids, surface
	2	Room 1, surface
	3	Room 1, Stratum 1
	4	grid 66/35, Stratum 1
	5	grids 68/36 and 68/37, surface, Stratum 1
		Provenience 2
	6	SW grids, surface
	7	E grids, surface (in the vicinity of room complex)
	8	E grids, subsurface (Strata 2A, 2B, 1, 2, 3, 4, 4A)
	9	Room 2, Strata 1,2 (upper fill)
	10	Room 2, Stratum 3 (occupation)
	11	Room 3, Strata 1, 2
	12	Room 4, Strata 1, 2, 3, 3A, 3B (upper fill)
	13	Room 4, Stratum 4A
	14	Room 4, Stratum 4B
	15	Room 4, Stratum 5
		Provenience 3
	16	exterior grids, surface
	17	exterior grids, subsurface
	18	Room 5, surface
	19	Room 5, Stratum 1
LA 13291	1	Room 1, levels A, B, C
	2	Hearth A in Room 1 (levels B, C)
	3	Room 1, levels D, E, F
	4	exterior grids in vicinity of Room 1 (subsurface)
	5	Room 2, levels A, B, C
	6	Room 3, levels B, C
	7	exterior grids in vicinity of Room 3 (subsurface)
	8	Room 4, levels 1, B
	9	exterior grids in vicinity of Room 4 (subsurface)
	10	exterior grids in vicinity of Room 1 (surface)
	11	all other exterior grids (surface)
LA 13292	1	Provenience 1, all levels
	2	Provenience 2, all levels
LA 13293	1	all materials, all levels
LA 13329	1	all materials, all levels
LA 13331	1	Feature 1, Stratum 2
LA 13332	1	all materials, all levels
LA 13350	1	Provenience 1, surface
	2	Provenience 2, surface
	3	Provenience 3, surface
	4	Provenience 4, surface
	5	Provenience 5, surface
	6	Provenience 6, surface
	7	Provenience 7, surface
LA 13351	1	Provenience 1, surface
	2	Provenience 2, surface
	3	Provenience 3, surface
	4	Provenience 4, surface
LA 13352	1	gridded area, all materials
	2	isolated artifacts
LA 13353	1	Provenience 1, all materials
	2	Provenience 2, all materials, including isolated artifacts

APPENDIX I
CERAMIC SUMMARY BY ESTIMATED MINIMUM VESSEL

Data concerning ceramic attribute variability are ordered by site and by vessel number. The headings presented in the appendix are self-explanatory and include: *SHERD DESCRIPTION/TYPE, VESSEL FORM, TEMPER, RIM FORM, INTER.SURF.COLOR* (interior surface color), *EXTER.SURF.COLOR* (exterior surface color), *SURFACE FINISH, SLIP, DESIGN ELEMENTS, SPECIAL FEATURES, UTILIZATION, SOURCE AREA*, and *CULTURAL INFORMATION.* Each of these categories has been discussed in Chapter 2. Because of space limitations, many of the attribute labels have been abbreviated; full descriptive labels are presented in Table 2.4 of Chapter 2.

APPENDIX II
LITHIC ASSEMBLAGE SUMMARY

The frequency and classes of lithic artifacts recovered from each site are presented. The appendix is organized by site number and assemblage number (see above). Because of space considerations, abbreviated headings were employed in the appendix. The following key provides full descriptive headings. The reader is referred to Chapman and Schutt (1977) for a discussion of the various lithic classes summarized in this appendix. Definitions of the various classes have been abstracted from their chapter.

DEBITAGE: Three types of debitage may be distinguished: (1) *freehand flakes* which are fragments of lithic material which exhibit dorsal and ventral surfaces. They have been detached from a core through the application of force from a single direction; (2) *bipolar flakes* are those pieces of debitage which exhibit the presence of a negative bulb of percussion on one or both surfaces of the flake, or the presence of two positive bulbs of percussion on opposite surfaces or at opposite ends of the same surface. Bipolar flakes exhibit crushing on the distal and/or proximal ends of the flake; (3) *small angular debris* is debitage with no definable ventral surface although it does exhibit conchoidal scars indicative of percussion manufacture. Small angular debris has been distinguished from large angular debris on the basis of weight, with small angular debris weighing 40 grams or less. In this appendix, both freehand and bipolar flakes have been lumped.

CORES: Two types of cores were distinguished: (1) *freehand cores,* which are pieces of material which exhibit no bulb of percussion and two or more negative scars at least 2 cm long. The scars must originate from one or more facets of the material; (2) *exhausted cores* are pieces of material which exhibit no bulb of percussion and two or more negative scars of less than 2 cm in length. In this appendix the two types of cores have been lumped.

LARGE ANGULAR DEBRIS: are pieces of material which do not exhibit any bulbs of percussion and which exhibit no more than one negative scar 2 cm or longer in length (originating from an existing surface of the artifact). They weigh more than 40 grams.

HAMMERSTONES: are defined as artifacts which exhibit battering alone or battering in conjunction with negative scars as the only modification on their natural surfaces.

UNIFACES AND BIFACES: are artifacts which exhibit retouch scars extending over one-third or more of one surface (unifaces) or two opposing surfaces (bifaces).

GROUND STONE: Manos, metates, indeterminant ground stone, axes, and mauls are defined in the introduction to the ground stone appendix.

A key to the headings used in Appendix II are presented below:

- *UN.FLK* = unutilized flakes
- *UT.FLK* = utilized flakes
- *UN.SAD* = unutilized small angular debris
- *UT.SAD* = utilized small angular debris
- *UN.RET* = unutilized retouch/resharpening flakes
- *UT.RET* = utilized retouch/resharpening flakes
- *CORES* = cores and exhausted cores
- *L.A.D.* = large angular debris
- *HAMMER* = hammerstones
- *U/BIFC* = unifaces, bifaces, and other facially retouched artifacts
- *MANOS* = shaped and unshaped manos
- *METATE* = metates
- *OTHER* = axes, mauls, indeterminant ground stone, and miscellaneous lithic artifacts

APPENDIX III
DEBITAGE REDUCTION VARIABILITY

Data concerning attributes of flake debitage and small angular debris which are informative about stages of reduction (see Chapman and Schutt 1977) are summarized below. The appendix is organized by site and assemblage number (see above). The data analysis form used for debitage artifacts is presented as Fig. I.1. The first three columns refer to types of debitage.

- *FREE* = freehand debitage (flakes produced through freehand detachment of flakes from cores)
- *BIP* = bipolar debitage (flakes produced through bipolar manufacture)
- *SAD* = small angular debris

The next five columns under the *PLATFORMS* heading include:

- # = total number of flakes with platforms
- *CTX* = flakes with cortical platforms
- *SF* = flakes with single-faceted platforms
- *RT* = flakes with retouched platforms
- *RS* = flakes with resharpening platforms

The next three columns under the *CORTEX* heading include:

- # = total number of debitage exhibiting cortex
- *WW* = waterworn cortex
- *OT* = nonwaterworn cortex

The next four columns under the *CORTEX PLACEMENT* heading include:

- *PLT* = cortex on platform only
- *DRS* = cortex on dorsal surface only
- *P+D* = cortex on platform and dorsal surface
- *SAD* = cortical small angular debris

APPENDIX IV
DEBITAGE WEAR PATTERN VARIABILITY

This appendix presents information concerning both *macroscopic* attributes pertinent to identifying stone tool usage (including kinds of retouch modification of edges, edge outline shape, lateral and transverse edge sinuosity, and edge angle), and information concerning *microscopic* attributes of edge usages (including placement and kind of dominant microfracture scars, kind of edge abrasion, polish, and striations). All pieces of debitage were examined microscopically for evidence of usage. Stereomicroscopes with zoom lens capability from 20X to 140X were used in this identification with ca. 40X to 100X being employed for documentation of specific wear pattern attribute variability.

Data in the appendix are ordered serially by LA site number, generic material type, and four-digit codes within each material type. All data are presented as frequency counts. Explanation of the headings used in the appendix are discussed below.

- *AR#* = number of debitage (flakes and small angular debris) exhibiting evidence of retouching and/or wear patterns
- *#ED* = number of retouched and/or utilized edges occurring upon those artifacts

The upper heading *RETOUCH* refers to the kind of marginal retouch characterizing a retouched or utilized edge. Subheadings under *RETOUCH* include:

- *UNR* = retouched
- *UND* = unidirectionally retouched
- *BID* = bidirectionally retouched

The upper heading *OUTLINE* refers to the planar overall outline shape of the retouched and/or utilized edges. Subheadings under *OUTLINE* include:

- *CNC* = concave
- *STR* = straight
- *CNV* = convex
- *C-C* = concave-convex
- *PRJ* = projection

The upper heading *SINSTY* refers to the sinuosity or serratedness of the edge, as an attribute independent of

PROJECT ______

ANALYST ______

DATE ______

DEBITAGE ANALYSIS FORM (1/77)
OFFICE OF CONTRACT ARCHEOLOGY
UNIVERSITY OF NEW MEXICO

SITE NO. ______

PAGE __ OF __

Group	Subgroup	Field	Columns
Specimen Number		LA No.	1 2 3 4 5
		Grid No.	6 7 8 9
		F/P/R No.	10 11 12
		Level	13 14
		Artifact	15 16 17
Material			18 19 20 21
Dimensions		Length	22 23 24
		Width	25 26 27
Type		Angular	28
		Bipolar	29
Cortex	Kind	Waterworn	30
		Other	31
	Placement	Platform	32
		Dorsal	33
		Platform& Dorsal	34
		Portion of Flake	35
Platforms	Kind	Facet	36
		Retouch	37
	Retouch	Unidirectional	38
		Bidirectional	39
		Observed Wear	40
		Grinding	41
		Edge No.	42
Edge Retouch		Unretouched	43
		Unidirectional Dorsal	44
		Unidirectional Ventral	45
		Bidirectional	46
Edge Outline		Concave	47
		Straight	48
		Convex	49
		Concave-Convex	50
		Projection	51
Sinuosity		Lateral Sinuosity	52
		Transverse Sinuosity	53
		Wear Patterns Present	54
Scar Patterns		Present	55
	Placement	Dorsal	56
		Ventral	57
		Dorsal & Ventral	58
			59 60 61 62 63
Edge Rounding		Rounding Present	64
			65 66 67 68
Other Wear		Rotary Wear	69
		Polish	70
	Striae	Perpendicular	71
		Parallel	72
Backing		Natural Backing	73
		Retouch Backing	74
Edge Angle			75 76 77
			78
Code			79 80

FIG. 1.1 Cochiti Reservoir Debitage Data Analysis Form

overall outline shape. Subheadings under *SINSTY* include:

- *LAT* = lateral sinuosity, defined as an edge margin which has essentially a serrate outline in plan view
- *TRN* = transverse sinuosity, defined as an edge margin which, when viewed from a *frontal* rather than plan view position, exhibits a sinuous outline (see Chapman and Schutt 1977:87)

The upper heading *PLCMNT* refers to the *dominant* occurrence of usage produced microscarring in terms of one or both surfaces adjoining the utilized edge margin. Subheadings under *PLCMNT* include:

- *UND* = microscarring occurring predominantly upon only one surface
- *BID* = microscarring occurring in relatively equal amounts on both dorsal and ventral surfaces

The upper heading *SCAR TYPE* refers to the relatively more dominant kinds of microscars observed to occur on particular edges. The reader is referred to Chapman and Schutt (1977:89-92) for more extensive definitions of these types of scars. Subheadings under *SCAR TYPE* include:

- *D.F.* = diagonal feathered scars or those feathered scars which are oriented with their long axes at an angle greater than ca. 15^0 off perpendicular to the edge margin from which they originate
- *P.S.* = perpendicular step fractures or step fracture scars which are oriented with their long axes nearly perpendicular to the edge margin from which they originate
- *D.S.* = diagonal step fractures or step fracture scars which are oriented with their long axes at an angle greater than ca. 15^0 off perpendicular to the edge margin from which they originate
- *CRS* = crescentic scars (Chapman and Schutt 1977:90)
- *NBL* = nibbling (Chapman and Schutt 1977:90)

The upper heading *EDGE ROUNDING* refers to the gross cross section morphology of utilized edges independent of microscarring produced through abrasion of edge margins. Subheadings under *EDGE ROUNDING* include:

- *BVL* = beveled edges in which abrasion has resulted in a flat rather than rounded surface that angles downward from the edge margin toward one adjacent flake surface
- *FLT* = flat edges in which the edge margin itself has been abraded to a flat surface

The upper heading *OTHER WEAR* refers to kinds of wear patterns which may occur in conjunction with previously defined types of microscarring and rounding or may occur as the only evidence of utilization. Subheadings under *OTHER WEAR* include:

- *ROT* = rotary usage of a projection
- *POL* = polish
- *STR* = striations

The upper heading *BCK* refers to evidence of backing or dulling of an edge margin opposite an utilized edge through grinding or retouching.

The upper heading *MEAN*< refers to the mean or average edge angle (in degrees) derived from the population of all utilized and/or retouched edges for the material taxon.

The upper heading *S.D.*< refers to the standard deviation (in degrees) for that same population.

APPENDIX V
CORES AND EXHAUSTED CORES

Two types of cores were identified, freehand cores and exhausted cores. These two types have been defined above in the introduction to Appendix II. In this appendix, all of the freehand cores are listed by site and by material variability (including four-digit code) first, and then all of the exhausted cores are listed, following the same format. Maximum and minimum dimensions of artifacts and platforms are entered as millimeters. Weight is in grams. The core/hammerstone/large angular debris data form is presented as Fig. I.2.

- *GRID/FPR* = grid (first two digits are the northing coordinate and the latter two are easting—refer to any of the site maps as examples), *FPR* refers to Features or Proveniences or Rooms (e.g., R1 = Room 1; P1 = Provenience 1, etc.)
- *LEVEL* = level or stratum
- *ART #* = artifact number
- *MATERIAL* = four-digit code
- *DIMENSIONS* = as above with *MAX* = maximum, *MIN* minimum; *WGHT* = weight
- *PLAT #* = platform number

The next four columns refer to the heading *TYPE PLATFORM* and include:

- *CTX* = cortical platform
- *FCT* = single-faceted platform
- *MFCT* = multifaceted platform

The next two columns refer to the size of the platform.

- *PLAT* > = platform angle which is the angle between the striking platform and the negative scar of debitage removed from that platform. This was measured for each scar 2 cm or greater in length.

Two kinds of utilization *BATTERING* and *OTHER* (nonbattering were monitored by presence (1) or absence (0). The locus of the wear was numbered and the location of wear was recorded as:

- *AO* = all over the core
- *RI* = ridge

CORE/LARGE ANGULAR DEBRIS/HAMMERSTONE/CHOPPER FORM (1/77)
OFFICE OF CONTRACT ARCHEOLOGY
UNIVERSITY OF NEW MEXICO

PROJECT ______ SITE NO. ______
ANALYST ______ PAGE __ OF __
DATE ______

Specimen Number					Material	Dimensions			Platform										Location					Edge Angle		Code
LA No.	Grid No.	F/P/R No.	Level	Artifact		Max.	Min.	Weight	Platform No.	Cortex	Single Facet	Multiple Facets	Dimensions Max.	Dimensions Min.	Platform Angle	Battered Wear	Other Wear	Locus No.	All Over	Ridge	Convex	Flat	Edge			
1-5	6-9	10-12	13-14	15-17	18-21	22-25	26-28	29-31	32	33	34	35	36-38	39-40	41-42	43	44	45	46	47	48	49	50	51-53	54-78	79-80

FIG. I.2 Cochiti Reservoir Core/Hammerstone/Large Angular Debris Data Analysis Form

CX = convex
FL = flat
EG = edge

APPENDIX VI
LARGE ANGULAR DEBRIS

This appendix is organized by artifact within general material categories by site location. Provenience information follows the same format as that discussed in Appendix V. The headings and entries are self-explanatory.

APPENDIX VII
HAMMERSTONES

The hammerstone appendix is organized by artifact within site location within general material categories. Provenience information follows the same format as that discussed in Appendix V. The remaining headings and entries are self-explanatory.

APPENDIX VIII
FACIALLY RETOUCHED ARTIFACTS

This appendix documents attribute variability recorded for unifacially and bifacially manufactured artifacts. This appendix is organized by site, type of retouching and artifact within the site. Headings and descriptive entries which have been described above or are self-explanatory will not be defined. Those headings which might be confused are identified below.

UNDET = undetermined (in all variable classes, if attributes could not be determined)

Three entries are listed under the heading *PORTION:*

PROFRAG = proximal fragment
DISTFRAG = distal fragment
COMPLET = complete

Four entries under the heading *RETOUCH* which refers to the type of retouching that occurred on a utilized edge were:

BIDIREC = bidirectional retouch
UNIDORS = unidirectional dorsal (side 1)
UNIVENT = unidirectional ventral (side 2)
UNRETCH = unretouched

The entries under *ED SHAPE* refer to the utilized edge outline. Only one heading is not self-explanatory:

CONCAVX = concave/convex

Entries under the heading *SINUOST* refer to the sinuosity of the utilized edge and include:

LATSINU = lateral sinuosity
TRNSINU = transverse sinuosity

The heading *EDGE* > refers to the angle produced by the intersection of dorsal and ventral surfaces at a utilized edge margin.

Five entries are listed under *WEARTYPE:*

BID.RND = bidirectional rounding
UNI.RND = unidirectional rounding
UNI.STEP = unidirectional step fracture
UNI.RND.STRIAE = unidirectional rounding with perpendicular step fracture
UNI.STEPUNIRND = unidirectional step fracture and rounding

APPENDIX IX
PECKED AND GROUND STONE ARTIFACTS

INTRODUCTION *(prepared by C. H. Pearrson-Reeves)*

The procedures for the analysis of pecked and ground stone artifacts recovered during the 1976-1977 field seasons in Cochiti Reservoir are outlined below. The analysis was intended to satisfy two major objectives: (1) to examine pecked and ground stone attribute variability in an objective form (either nominal or interval) which was independent of inferred function; and (2) to collect data potentially informative about the behavior of human populations in the study area, including information relevant to the selection of raw materials, techniques of tool manufacture, and specification of the manner in which the tools were used.

DESCRIPTION OF ATTRIBUTES

Several terms used in the analysis occur frequently and are defined below. Each term is defined with respect to an idealized rectangular solid.

An *end* is defined as the lateral exterior portion(s) or side of the solid which is perpendicular to the longitudinal axis of the solid.

An *edge* is defined as the lateral exterior portion(s) or side of the solid which runs parallel to the longitudinal axis of the solid.

Lateral sides must exhibit either shaping or portions of the natural (cortical) surface in order to be considered an edge or an end.

MATERIAL

The materials from which artifacts were manufactured were described with respect to a four-digit code (see Warren 1977).

PORTION

The portion of the object available for study was monitored. Categories included:

1. *Complete:* all edges, ends, and surfaces must be present;
2. *End fragment:* one complete or nearly complete end must be present with at least one edge; the length of the end should be longer than the length of the longest edge;
3. *Midsection:* two parallel edges must be present;
4. *Fragment, undifferentiated:* edges or ends may or may not be present.

DIMENSIONS

Maximum length, maximum width, and minimum and maximum thickness were monitored for the object as a whole. Linear measurements were always taken with respect to the long axis of the object. Maximum length was measured parallel to the longitudinal axis; maximum width was measured along the same plane at a right angle to the length; maximum and minimum thickness were measured at a right angle to both the length and width. Measurement of minimum thickness presented a problem in that objects which were rounded or lenticular in cross section or which had opposing planes that met at a point, yielded a minimum thickness of *zero*. For these specimens, the minimum thickness was not measured (although a *zero* is printed in the appendix). All linear measurements were in millimeters.

WEIGHT

Weight of the entire object was measured in grams.

SHAPE

Three outline shapes were monitored: plan view, longitudinal cross section, and transverse cross section. Plan view shapes are illustrated in Fig. I.3 and include rectangular, ovoid, irregular, elongate oval, triangular, and indeterminant. Longitudinal and transverse cross sections are also illustrated and include lenticular-ovoid, plano-convex, concave, wedge, planar, plano-concave, and irregular.

SHAPING

For purposes of this analysis, shaping was used exclusively to indicate observable, unnatural alteration of the object. A variety of techniques which occur independently of the inferred function of the object may result in shaping.

UTILIZATION

Each distinct area (or surface) which exhibited observable use or wear was assigned a locus number. For each locus the following information, when applicable, was recorded:

1. *Placement:* the location of the utilized portion of the artifact. Categories included edge, end, and planar surface;
2. *Curvature: shape* of the utilized surface. Four categories were used: convex, concave, planar-convex, and planar.
3. *Kind or type of use:* variability in the kinds of observed wear were divided into two *classes:* striations and other wear.

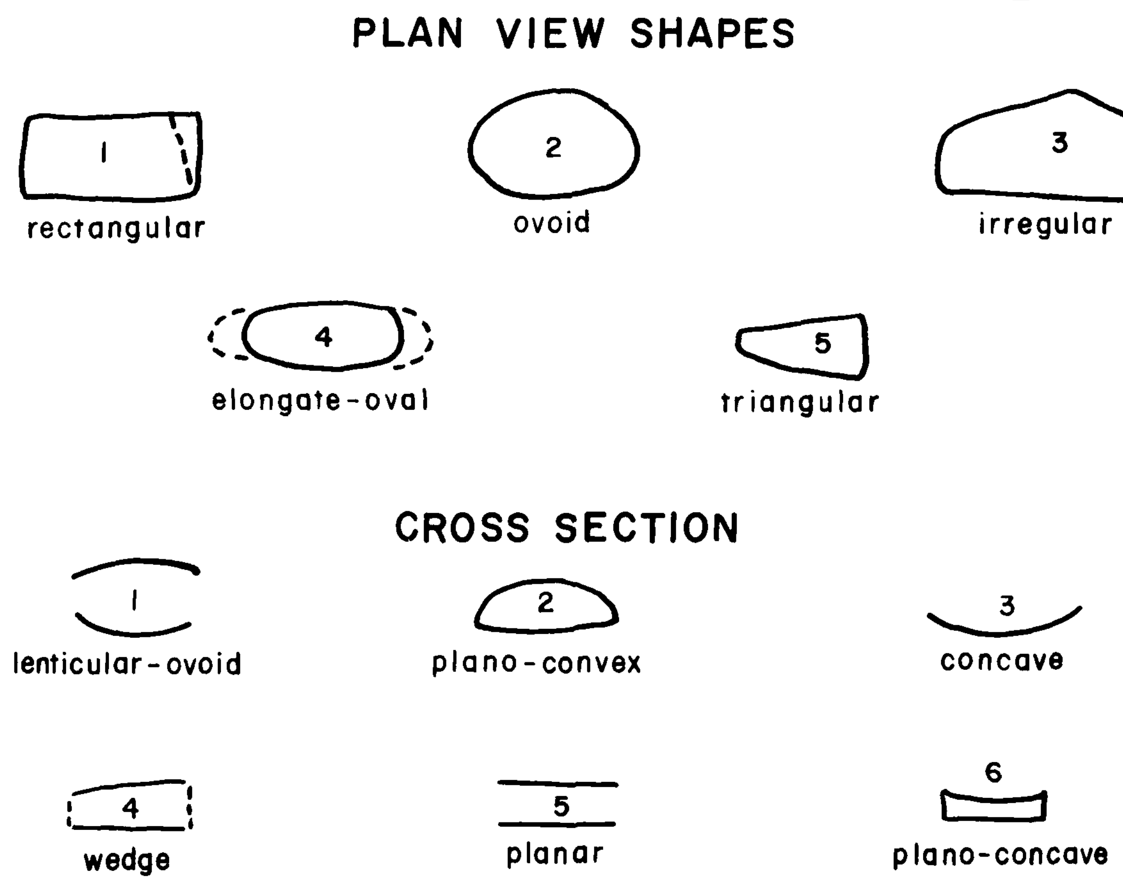

FIG. I.3 Plan view and cross section outline shapes used in the Cochiti Reservoir Ground Stone Analysis

a. *Striations:* the presence of striations indicate the direction in which force was applied when the artifact was used. Four categories were used:
   (1) parallel to the long axis
   (2) perpendicular to the long axis
   (3) both parallel and perpendicular
   (4) rotary

b. *Other Wear:*
   (1) *pecking/battering* is the result of some form of controlled percussion which produces a *pocked* effect rather than a negative scar, or is the result of an object being used as a hammerstone;
   (2) *grinding* is the result of some form of abrasion by a roughened tool which *sands* the surface and leaves a flat surface; striations are generally not visible;
   (3) *pecking and grinding,* as above;
   (4) *polishing* results in a smooth, glassy surface with no apparent striations visible;
   (5) *flake scars* (negative conchoidal scars) are the result of alteration by percussion.

4. *Percent surface utilized:* a gross estimation of the area covered by a utilized surface with respect to the area available for that particular surface was estimated. Five categories were defined: (0-25%, 26-50%, 51-75%, 76-99% and 100%).
5. *Dimensions:* maximum length, maximum width, maximum and minimum depth (if present) were recorded for the utilized surface.

ARTIFACT CLASSES

Subsequent to the analysis, six classes of artifacts were distinguished. Criteria for inclusion into each category are discussed below.

Class I: Shaped Manos (5)

Although all five specimens shared a number of similar attributes, the single criterion for inclusion into this category was deliberate shaping. Four were manufactured from igneous material, one from sandstone. All were rectangular in plan view; three were slightly wedge-shaped and the remaining two were ovoid in cross section. Striations, when present, were perpendicular to the long axis.

Class II: Unshaped Manos (11)

This was the largest category of ground stone artifacts. The single criterion for inclusion into this category was absence of any deliberate shaping in conjunction with plano to convex cross sections on the milling or utilized surfaces. The unshaped cobbles were generally waterworn igneous rocks. They generally exhibited ovoid plan views.

Only four of the eleven specimens were complete. It would appear, however, that the remaining fragments were of a configuration which was similar to the complete specimens. In cross section the entire specimen is either lenticular-ovoid or plano-convex.

Class III: Milling Slabs (9)

All of the milling slabs were unshaped and exhibited plano-concave cross sections. Milling slabs were significantly larger than all other artifact classes. Eight were basaltic and one was a granitic gneiss. With the exception of one specimen from LA 13329, all of the milled areas covered considerably less than 50% of the available surface area. With the exception of one specimen from LA 13050, all of the slabs exhibited only one milling surface.

Three of the specimens (one from LA 13054; two from LA 13049) were large boulders. The two from LA 13049 were characterized by naturally occurring shallow, *circular* basins which were utilized. Of the nine, six appeared to be complete.

Class IV: Axe/Maul (1)

One specimen, recovered from LA 13050, was tentatively placed into this category. The object was an elongate-oval waterworn cobble of igneous material that had a naturally occurring plano-convex transverse cross section. It was rounded on the proximal end and pointed on the distal end. Approximately in the middle of the long axis two opposed notches occurred which appeared to be man-made. The distal end exhibited some battering.

Class V: Abraders (4)

The classification of these objects was highly problematical. All were unshaped, waterworn igneous cobbles which exhibited surface irregularities not found on the unshaped manos. They were elongate ovals; one was more ovoid. Utilized areas were often restricted to natural concavities on the surface of the cobble. Each of the specimens exhibited two or more small areas of intense smoothness with no apparent striations. Rubbing or *smoothing* rather than milling appears to be the function performed. Each artifact was recovered from a different site.

Class VI: Indeterminant Objects (2)

Two objects were recovered that, although they were obviously deliberately modified, no other functional information was discerned.

The first object, from the interior of Room 4 at LA 13086, was an unshaped tabular piece of light colored basalt that exhibited smoothing on one side with striations parallel to the long axis. This surface was burned.

The second specimen was a dark fine-grained basalt, tabular in shape, that was unshaped except for a high, lustrous polish covering the entire rock. One end exhibited large (2-4 mm) flake scars that were also slightly polished. Small striae occurred on both surfaces, generally oriented perpendicular to the long axis. On one surface is one squarish facet 50 mm x 50 mm, occurring roughly in the center of the surface plane. Pecking was evident to some degree over the entire object, but it was concentrated in this one area.

APPENDIX FORMAT

Attribute variability monitored for pecked and ground stone artifacts was organized by site and artifact class (see Mashburn in Introduction to Appendix X). Because of space considerations, abbreviations have been employed. For those headings which are not self-explanatory, the following key is provided:

MATER = material (listed as a four-digit code)

The heading *PORT* or portion refers to the portion of the artifact which was recovered. Entries under *PORT* include:

COMPL = complete
FRAGU = undifferentiated fragment
MIDSC = midsection

The entries under the heading *DIMENSIONS (OBJECT)* are in millimeters and are otherwise self-explanatory.

The heading *SHAPE* refers to the plan view shape of the artifact. Entries include:

RECT = rectangular
TRIAN = triangular
OVOID = ovoid
ELONG = elongate-oval
IRREG = irregular
INDET = indeterminant

The headings *LXSEC* and *TXSEC* refer to longitudinal and transverse cross section, respectively. Descriptive entries include:

LENTO = lenticular-ovoid
PLCVX = plano-convex
PLANR = planar
PLCON = plano-concave
WEDGE = wedge

Illustrations for the shape and cross sections are presented in Figure I.3.

The heading *LOC #* refers to the area(s) which exhibited observable use or wear. Each unique area was given a locus number. The use or wear for each locus was then monitored. *PLACE* refers to the location of the locus and *CURV* refers to the shape of the utilized locus.

Two categories of use were monitored: *STRIA* or striations, and *WEAR* other wear. Entries under striations include:

PARAL = parallel to long axis
PERPN = perpendicular to long axis
PA/PE = parallel and perpendicular
ROTAR = rotary

Entries under other wear include:

PECKG = pecking or battering
SMOOT = smoothing
GRSRF = grinding surface, indeterminant wear
GRIND = grinding
FLAKG = flaking

The heading *%AREA* refers to the estimated percentage of area used to that available for use (see Introduction to Appendix X).

The entries under *DIMENSIONS (SURFACE)* are in millimeters.

APPENDIX X
FAUNAL ELEMENT SUMMARY

Data presented in this appendix are organized by site and by assemblage within each site (see above for discussion of assemblage units). The headings and entries are self-explanatory.

APPENDIX XI
MEAT PACKAGE SUMMARY

Data presented in this appendix are organized by site and by assemblage. For each species or taxonomic category low and high muscle masses are counted. This procedure is discussed in detail in Schutt (1977). With the exception of *LB FRAG* which refers to long bone fragments, the headings and entries are self-explanatory.

APPENDIX I — CERAMIC VESSEL SUMMARY

```
SITE NUMBER:              5011
VESSEL NUMBER:              21

SHERD DESCRIPTION/TYPE               # SHERDS
 PLAIN POL. UNDIFF.                      1
VESSEL FORM:              JAR OR OLLA
TEMPER:                   3854-00 VITRIC TUFF, WHITE+MICA (NAMBE)
EXTER. SURF. COLOR:       TAN
SURFACE FINISH:           POLISHED BOTH SIDES
SLIP :                    SLIPPED INT & EXT
SOURCE AREAS:             PAJARITO PLATEAU (SOUTHERN)
```

```
SITE NUMBER:              5011
VESSEL NUMBER:               1

SHERD DESCRIPTION/TYPE               # SHERDS
 G/TAN + RED MATTE                       1
VESSEL FORM:              BOWL, UNDIFF
TEMPER:                   3270-00 HORNBLENDE LATITE ESPINASO
INTER. SURF. COLOR:       TAN
EXTER. SURF. COLOR:       TAN
SLIP :                    SLIPPED INT & EXT
UTILIZATION:              WORKED EDGES, CURVED
SOURCE AREAS:             TONQUE BASIN
```

```
SITE NUMBER:              5011
VESSEL NUMBER:               2

SHERD DESCRIPTION/TYPE               # SHERDS
 ESPINOSO G-P                            2
 G/PINK BODY SHERD                       2
VESSEL FORM:              BOWL, UNDIFF
TEMPER:                   3270-00 HORNBLENDE LATITE ESPINASO
RIM FORM:                 EVERTED (GLAZE C)
INTER. SURF. COLOR:       PINK
EXTER. SURF. COLOR:       PINK
SLIP :                    SLIPPED INT & EXT
UTILIZATION:              WORKED EDGES, CURVED
SOURCE AREAS:             TONQUE BASIN
```

```
SITE NUMBER:              5011
VESSEL NUMBER:               3

SHERD DESCRIPTION/TYPE               # SHERDS
 G/PINK + RED MATTE                      6
VESSEL FORM:              BOWL, UNDIFF
TEMPER:                   3270-11 HORNBLENDE LATITE ESPINASO
INTER. SURF. COLOR:       PINK
EXTER. SURF. COLOR:       PINK
SLIP :                    SLIPPED INT & EXT
UTILIZATION:              WORKED EDGES, CURVED
SOURCE AREAS:             TONQUE BASIN
```

```
SITE NUMBER:              5011
VESSEL NUMBER:               4

SHERD DESCRIPTION/TYPE               # SHERDS
 CIENEGUILLA G-P                         1
 G/W BODY SHERD                          2
VESSEL FORM:              BOWL, UNDIFF
TEMPER:                   3431-00 BASALT, SCORIACIOUS (COCHITI)
RIM FORM:                 VERTICAL DIRECT SQUARED
INTER. SURF. COLOR:       WHITE
EXTER. SURF. COLOR:       PINK
SLIP :                    SLIPPED INT & EXT
UTILIZATION:              WORKED EDGES, CURVED
SOURCE AREAS:             WHITE ROCK CANYON
```

```
SITE NUMBER:              5011
VESSEL NUMBER:               5

SHERD DESCRIPTION/TYPE               # SHERDS
 G/W BODY SHERD                          1
VESSEL FORM:              BOWL, UNDIFF
TEMPER:                   3863-00 VITRIC TUFF (BLACK SHARD)
INTER. SURF. COLOR:       WHITE
EXTER. SURF. COLOR:       WHITE
SLIP :                    SLIPPED INT & EXT
UTILIZATION:              WORKED EDGES, CURVED
SOURCE AREAS:             WHITE ROCK CANYON
```

```
SITE NUMBER:              5011
VESSEL NUMBER:               6

SHERD DESCRIPTION/TYPE               # SHERDS
 G/R BODY SHERD                          1
VESSEL FORM:              CLOSED FORM, UNDIFF
TEMPER:                   3710-00 ANDESITE VITROPHYRE
EXTER. SURF. COLOR:       RED
SLIP :                    SLIPPED EXTERIOR (JARS)
UTILIZATION:              WORKED EDGES, CURVED
SOURCE AREAS:             PAJARITO PLATEAU (SOUTHERN)
```

```
SITE NUMBER:              5011
VESSEL NUMBER:               7

SHERD DESCRIPTION/TYPE               # SHERDS
 RED (GLAZE) BODY SHERD                  1
VESSEL FORM:              CLOSED FORM, UNDIFF
TEMPER:                   3405-00 BASALT, FINELY XL
EXTER. SURF. COLOR:       RED
SLIP :                    SLIPPED EXTERIOR (JARS)
SOURCE AREAS:             SANTO DOMINGO VALLEY
```

```
SITE NUMBER:              5011
VESSEL NUMBER:               8

SHERD DESCRIPTION/TYPE               # SHERDS
 G/R & WHITE BODY SHERD                  1
VESSEL FORM:              CLOSED FORM, UNDIFF
TEMPER:                   3270-00 HORNBLENDE LATITE ESPINASO
EXTER. SURF. COLOR:       WHITE+RED
SLIP :                    SLIPPED EXTERIOR (JARS)
SOURCE AREAS:             TONQUE BASIN
```

```
SITE NUMBER:              5011
VESSEL NUMBER:               9

SHERD DESCRIPTION/TYPE               # SHERDS
 RED (GLAZE) BODY SHERD                  2
VESSEL FORM:              CLOSED FORM, UNDIFF
TEMPER:                   3431-00 BASALT, SCORIACIOUS (COCHITI)
EXTER. SURF. COLOR:       RED
SLIP :                    SLIPPED EXTERIOR (JARS)
SOURCE AREAS:             WHITE ROCK CANYON
```

```
SITE NUMBER:              5011
VESSEL NUMBER:              10

SHERD DESCRIPTION/TYPE               # SHERDS
 UNDIFF. G/W                             1
VESSEL FORM:              BOWL, UNDIFF
TEMPER:                   3555-12 PUMICE, CRYSTAL (JEMEZ)
INTER. SURF. COLOR:       WHITE
EXTER. SURF. COLOR:       LIGHT GRAY
SURFACE FINISH:           UNPOL EXT, POL INT
SLIP :                    SLIPPED INSIDE
SOURCE AREAS:             PAJARITO PLATEAU (SOUTHERN)
```

```
SITE NUMBER:              5011
VESSEL NUMBER:              11

SHERD DESCRIPTION/TYPE               # SHERDS
 PINK (GLAZE) BODY SHERD                 6
VESSEL FORM:              CANTEEN, STIRRUP
TEMPER:                   3270-00 HORNBLENDE LATITE ESPINASO
EXTER. SURF. COLOR:       PINK
SLIP :                    SLIPPED EXTERIOR (JARS)
UTILIZATION:              WORKED EDGES, STRAIGHT
SOURCE AREAS:             TONQUE BASIN
```

```
SITE NUMBER:              5011
VESSEL NUMBER:              12
```

```
SITE NUMBER:              5011
VESSEL NUMBER:              13
```

(vessel 12, con't)

```
SHERD DESCRIPTION/TYPE              # SHERDS
 G/W BODY SHERD                        13
 G/W & RED MATTE                        6
 RED (GLAZE) BODY SHERD                20
 WHITE (GLAZE) BODY SHERD               6
 CIENEGUILLA G-P                        3
 G/R BODY SHERD                         1
VESSEL FORM:           JAR OR OLLA
TEMPER:                3431-00 BASALT, SCORIACIOUS (COCHITI)
RIM FORM:              DIRECT VERTICAL (JAR)
EXTER. SURF. COLOR:    WHITE
                       RED (SILVER MICA)
                       WHITE+RED
SLIP :                 SLIPPED EXTERIOR (JARS)
SOURCE AREAS:          WHITE ROCK CANYON
--------------------------------------------------------------
SITE NUMBER:           5011
VESSEL NUMBER:           14

SHERD DESCRIPTION/TYPE              # SHERDS
 CORR SMEARED, INDENTED                 9
VESSEL FORM:           CLOSED FORM, UNDIFF
TEMPER:                3655-11 PUMICE, CRYSTAL (JEMEZ)
SOURCE AREAS:          PAJARITO PLATEAU (SOUTHERN)
--------------------------------------------------------------
SITE NUMBER:           5011
VESSEL NUMBER:           16

SHERD DESCRIPTION/TYPE              # SHERDS
 CORR, IND, OBLIQUE, UNDIFF.            5
VESSEL FORM:           CLOSED FORM, UNDIFF
TEMPER:                3811-00 RHYOLITE TUFF
SOURCE AREAS:          PAJARITO PLATEAU (SOUTHERN)
--------------------------------------------------------------
SITE NUMBER:           5011
VESSEL NUMBER:           18

SHERD DESCRIPTION/TYPE              # SHERDS
 CORR, PATTERNED, UNDIFF.               8
VESSEL FORM:           CLOSED FORM, UNDIFF
TEMPER:                3431-00 BASALT, SCORIACIOUS (COCHITI)
SOURCE AREAS:          PAJARITO PLATEAU (SOUTHERN)
--------------------------------------------------------------
SITE NUMBER:           5011
VESSEL NUMBER:           20

SHERD DESCRIPTION/TYPE              # SHERDS
 CORR, BLIND INDENTED                   2
VESSEL FORM:           CLOSED FORM, UNDIFF
TEMPER:                3852-00 LITHIC TUFF, UNDIFF.
SOURCE AREAS:          PAJARITO PLATEAU (SOUTHERN)
--------------------------------------------------------------
SITE NUMBER:           10114
VESSEL NUMBER:            1

SHERD DESCRIPTION/TYPE              # SHERDS
 REDWARE, POL, SLIPPED, UNDIFF          5
VESSEL FORM:           JAR OR OLLA
TEMPER:                3400-00 BASALT, FINELY CRYST.
SOURCE AREAS:          SANTO DOMINGO VALLEY
--------------------------------------------------------------
SITE NUMBER:           10114
VESSEL NUMBER:            3

SHERD DESCRIPTION/TYPE              # SHERDS
 PUNAME POLYCHROME HIST.                2
VESSEL FORM:           JAR OR OLLA
TEMPER:                3400-00 BASALT, FINELY CRYST.
DESIGN ELEMENTS:       RAINBIRDS, UNDIFF
                       EYES
UTILIZATION:           PEAR SHAPED WORK SHERD
SOURCE AREAS:          SANTO DOMINGO VALLEY
--------------------------------------------------------------
```

(vessel 13, con't)

```
SHERD DESCRIPTION/TYPE              # SHERDS
 SANTA FE B/W                           1
VESSEL FORM:           CLOSED FORM, UNDIFF
TEMPER:                2015-00 SANDSTONE, VERY FINE GR
EXTER. SURF. COLOR:    LIGHT GRAY
SLIP :                 UNDIFF.
SOURCE AREAS:          RIO GRANDE MIDDLE
--------------------------------------------------------------
SITE NUMBER:           5011
VESSEL NUMBER:           15

SHERD DESCRIPTION/TYPE              # SHERDS
 CORR, BLIND INDENTED                   1
VESSEL FORM:           CLOSED FORM, UNDIFF
TEMPER:                3811-00 RHYOLITE TUFF
SOURCE AREAS:          PAJARITO PLATEAU (SOUTHERN)
--------------------------------------------------------------
SITE NUMBER:           5011
VESSEL NUMBER:           17

SHERD DESCRIPTION/TYPE              # SHERDS
 CORR, BLIND IND POL, INT.              3
 CORR SMEARED, INDENTED                 1
VESSEL FORM:           CLOSED FORM, UNDIFF
TEMPER:                3811-00 RHYOLITE TUFF
UTILIZATION:           WORKED EDGES, CURVED
SOURCE AREAS:          PAJARITO PLATEAU (SOUTHERN)
--------------------------------------------------------------
SITE NUMBER:           5011
VESSEL NUMBER:           19

SHERD DESCRIPTION/TYPE              # SHERDS
 CORR SMEARED, INDENTED                24
VESSEL FORM:           CLOSED FORM, UNDIFF
TEMPER:                3852-10 LITHIC TUFF, UNDIFF.
RIM FORM:              DIRECT VERTICAL (JAR)
SOURCE AREAS:          PAJARITO PLATEAU (SOUTHERN)
--------------------------------------------------------------
SITE NUMBER:           5011
VESSEL NUMBER:           98

SHERD DESCRIPTION/TYPE              # SHERDS
 UNDIFF. C/W                            1
VESSEL FORM:           UNDIFF.
TEMPER:                3655-12 PUMICE, CRYSTAL (JEMEZ)
INTER. SURF. COLOR:    WHITE
EXTER. SURF. COLOR:    UNDIFF.
SURFACE FINISH:        UNDIFF.
SLIP :                 SLIPPED INSIDE
SOURCE AREAS:          PAJARITO PLATEAU (SOUTHERN)
--------------------------------------------------------------
SITE NUMBER:           10114
VESSEL NUMBER:            2

SHERD DESCRIPTION/TYPE              # SHERDS
 PUNAME POLYCHROME HIST.                1
VESSEL FORM:           JAR OR OLLA
TEMPER:                3400-00 BASALT, FINELY CRYST.
DESIGN ELEMENTS:       SOLID ELEMENTS
SOURCE AREAS:          SANTO DOMINGO VALLEY
--------------------------------------------------------------
SITE NUMBER:           10114
VESSEL NUMBER:            4

SHERD DESCRIPTION/TYPE              # SHERDS
 PUNAME POLYCHROME HIST.                2
VESSEL FORM:           JAR OR OLLA
TEMPER:                3400-00 BASALT, FINELY CRYST.
DESIGN ELEMENTS:       LINES MEDIUM (2-4MM)
UTILIZATION:           WORKED EDGES, CURVED
SOURCE AREAS:          SANTO DOMINGO VALLEY
--------------------------------------------------------------
```

SITE NUMBER: 10114
VESSEL NUMBER: 5

SHERD DESCRIPTION/TYPE # SHERDS
UNDIFF. BLACK/CREAM HIST. 16
OGAPOGE POLYCHROME 9
VESSEL FORM: BOWL, UNDIFF
TEMPER: 3655-00 PUMICE, CRYSTAL (JEMEZ)
RIM FORM: VERT. DIRECT ROUNDED
VERTICAL UND.
INTER. SURF. COLOR: TAN
SURFACE FINISH: POLISHED BOTH SIDES
DESIGN ELEMENTS: TYPE CODE NOT FOUND: 106
SOURCE AREAS: PAJARITO PLATEAU (SOUTHERN)

SITE NUMBER: 10114
VESSEL NUMBER: 6

SHERD DESCRIPTION/TYPE # SHERDS
OGAPOGE POLYCHROME 4
UNDIFF. BLACK/CREAM HIST. 21
VESSEL FORM: BOWL, HEMISPHERICAL
TEMPER: 3655-00 PUMICE, CRYSTAL (JEMEZ)
RIM FORM: VERT. DIRECT ROUNDED
VERTICAL UND.
INTER. SURF. COLOR: CREAM
EXTER. SURF. COLOR: UNDIFF.
SURFACE FINISH: POLISHED BOTH SIDES
SLIP : SLIPPED INT. EXT BELOW RIM
DESIGN ELEMENTS: PARALLEL LINES ENCIRCLING RIM
SPECIAL FEATURES: RED PAINTED RIM (SOLID)
SOURCE AREAS: PAJARITO PLATEAU (SOUTHERN)

SITE NUMBER: 10114
VESSEL NUMBER: 7

SHERD DESCRIPTION/TYPE # SHERDS
UNDIFF. BLACK/CREAM HIST. 8
VESSEL FORM: BOWL, UNDIFF
TEMPER: 3655-00 PUMICE, CRYSTAL (JEMEZ)
INTER. SURF. COLOR: CREAM
EXTER. SURF. COLOR: UNDIFF.
SURFACE FINISH: POLISHED BOTH SIDES
SLIP : SLIPPED INSIDE
DESIGN ELEMENTS: UNDIFF.
SOURCE AREAS: PAJARITO PLATEAU (SOUTHERN)

SITE NUMBER: 10114
VESSEL NUMBER: 8

SHERD DESCRIPTION/TYPE # SHERDS
OGAPOGE POLYCHROME 1
VESSEL FORM: JAR OR OLLA
TEMPER: 3655-00 PUMICE, CRYSTAL (JEMEZ)
RIM FORM: EVERTED, UNDIFF.
INTER. SURF. COLOR: RED
EXTER. SURF. COLOR: UNDIFF.
SURFACE FINISH: POLISHED BOTH SIDES
SLIP : SLIPPED EXT & INT NECK
DESIGN ELEMENTS: PARALLEL LINES ENCIRCLING RIM
SPECIAL FEATURES: RED PAINTED RIM (SOLID)
SOURCE AREAS: PAJARITO PLATEAU (SOUTHERN)

SITE NUMBER: 10114
VESSEL NUMBER: 9

SHERD DESCRIPTION/TYPE # SHERDS
UNDIFF. BLACK/CREAM HIST. 2
OGAPOGE POLYCHROME 1
REDWARE, POL. SLIPPED, UNDIFF 1
VESSEL FORM: CLOSED FORM, UNDIFF
TEMPER: 3655-00 PUMICE, CRYSTAL (JEMEZ)
RIM FORM: UNDIFF.
INTER. SURF. COLOR: TAN
EXTER. SURF. COLOR: CREAM
SURFACE FINISH: UNPOL. INT, POL EXT
SLIP : SLIPPED EXTERIOR (JARS)
DESIGN ELEMENTS: LINES MEDIUM (2-4MM)
SOURCE AREAS: PAJARITO PLATEAU (SOUTHERN)

SITE NUMBER: 10114
VESSEL NUMBER: 10

SHERD DESCRIPTION/TYPE # SHERDS
PLAIN, UNPOL, UNDIFF 5
UNDIFF. BLACK/CREAM HIST. 1
VESSEL FORM: CLOSED FORM, UNDIFF
JAR OR OLLA
TEMPER: 3655-00 PUMICE, CRYSTAL (JEMEZ)
RIM FORM: VERT. DIRECT ROUNDED
INTER. SURF. COLOR: TAN
RED
EXTER. SURF. COLOR: TAN
WHITE
SURFACE FINISH: UNPOL. INT, POL EXT
POLISHED BOTH SIDES
SLIP : UNDIFF.
SLIPPED EXT & INT NECK

SITE NUMBER: 10114
VESSEL NUMBER: 11

SHERD DESCRIPTION/TYPE # SHERDS
KAPO BLACK 1
TYPE CODE NOT FOUND: 999 1
VESSEL FORM: UNDIFF.
TEMPER: 3655-00 PUMICE, CRYSTAL (JEMEZ)
RIM FORM: VERT. DIRECT ROUNDED
INTER. SURF. COLOR: DARK GRAY
EXTER. SURF. COLOR: DARK GRAY
SURFACE FINISH: POL, SMUDGED BOTH SIDES
SLIP : UNDIFF.

SITE NUMBER: 10114
VESSEL NUMBER: 12

SHERD DESCRIPTION/TYPE # SHERDS
KAPO BLACK 4
VESSEL FORM: UNDIFF.
TEMPER: 3655-00 PUMICE, CRYSTAL (JEMEZ)
RIM FORM: EVERTED, UNDIFF.
INTER. SURF. COLOR: DARK GRAY
EXTER. SURF. COLOR: DARK GRAY
SURFACE FINISH: POL, SMUDGED BOTH SIDES
SLIP : UNDIFF.

SITE NUMBER: 10114
VESSEL NUMBER: 13

SHERD DESCRIPTION/TYPE # SHERDS
PLAIN, UNPOL, MICACEOUS, UNDIFF 1
VESSEL FORM: UNDIFF.
TEMPER: 3655-00 PUMICE, CRYSTAL (JEMEZ)
INTER. SURF. COLOR: TAN
EXTER. SURF. COLOR: WHITE
SURFACE FINISH: POLISHED BOTH SIDES
SLIP : SLIPPED EXTERIOR (JARS)

SITE NUMBER: 10114
VESSEL NUMBER: 14

SHERD DESCRIPTION/TYPE # SHERDS
PLAIN POL, UNDIFF. 1
VESSEL FORM: UNDIFF.
TEMPER: 3862-00 VITRIC TUFF, WHITE
INTER. SURF. COLOR: TAN
EXTER. SURF. COLOR: TAN
SURFACE FINISH: UNPOL. INT, POL EXT
SLIP : UNDIFF.
SOURCE AREAS: UPPER RIO GRANDE

SITE NUMBER: 10114
VESSEL NUMBER: 15

SITE NUMBER: 10114
VESSEL NUMBER: 16

```
(vessel 15, con't)

SHERD DESCRIPTION/TYPE              # SHERDS
 GUAPOGE POLYCHROME                     1
VESSEL FORM:           BOWL, "SOUP PLATE"
TEMPER:                3862-00 VITRIC TUFF, WHITE
RIM FORM:              EVERTED, FLARED (BOWL)
INTER. SURF. COLOR:    CREAM
EXTER. SURF. COLOR:    TAN
SURFACE FINISH:        UNPOLISHED INTE AND EXT
SLIP :                 SLIPPED INSIDE
DESIGN ELEMENTS:       SAWTEETH
SPECIAL FEATURES:      "AIYO LINE"
SOURCE AREAS:          UPPER RIO GRANDE
------------------------------------------------
SITE NUMBER:           10114
VESSEL NUMBER:            17

SHERD DESCRIPTION/TYPE              # SHERDS
 PLAIN, UNPOL, MICACEOUS                16
VESSEL FORM:           JAR OR OLLA
TEMPER:                4560-00 SCHIST, QTZ MUSCOVITE
RIM FORM:              EVERTED, UNDIFF.
INTER. SURF. COLOR:    DARK GRAY
EXTER. SURF. COLOR:    DARK GRAY
SURFACE FINISH:        TYPE CODE NOT FOUND: 06
SOURCE AREAS:          UPPER RIO GRANDE
------------------------------------------------
SITE NUMBER:           10114
VESSEL NUMBER:            19

SHERD DESCRIPTION/TYPE              # SHERDS
 CARNUE PLAIN                           91
VESSEL FORM:           JAR OR OLLA
TEMPER:                2041-00 SANDSTONE FINE GRAINED
RIM FORM:              EVERTED, UNDIFF.
INTER. SURF. COLOR:    DARK GRAY
EXTER. SURF. COLOR:    DARK GRAY
SURFACE FINISH:        UNPOL EXT, POL INT
------------------------------------------------
SITE NUMBER:           10114
VESSEL NUMBER:            21

SHERD DESCRIPTION/TYPE              # SHERDS
 CARNUE PLAIN                           25
VESSEL FORM:           JAR OR OLLA
TEMPER:                2472-00 VOLCANIC SANDSTONE
INTER. SURF. COLOR:    RED BROWN
EXTER. SURF. COLOR:    RED BROWN
SURFACE FINISH:        UNPOL EXT, POL INT
UTILIZATION:           SURFACE SOOTED
------------------------------------------------
SITE NUMBER:           10114
VESSEL NUMBER:            23

SHERD DESCRIPTION/TYPE              # SHERDS
 CARNUE PLAIN                            6
VESSEL FORM:           JAR OR OLLA
TEMPER:                2085-10 SANDSTONE, COARSE GR, FELD.
INTER. SURF. COLOR:    TAN
EXTER. SURF. COLOR:    TAN
SURFACE FINISH:        STONE STROKED INT, SCRAPED EXT
UTILIZATION:           SURFACE SOOTED
------------------------------------------------
SITE NUMBER:           10114
VESSEL NUMBER:            25

SHERD DESCRIPTION/TYPE              # SHERDS
 CORR, BLIND INDENTED                    4
VESSEL FORM:           JAR OR OLLA
TEMPER:                3816-00 WELDED TUFF
INTER. SURF. COLOR:    DARK GRAY
EXTER. SURF. COLOR:    DARK GRAY
SURFACE FINISH:        UNPOL EXT, POL INT
------------------------------------------------
SITE NUMBER:           10114
VESSEL NUMBER:            27

SHERD DESCRIPTION/TYPE              # SHERDS
 SANTA FE B/W                            2
VESSEL FORM:           BOWL, UNDIFF
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(vessel 16, con't)

SHERD DESCRIPTION/TYPE              # SHERDS
 PLAIN, UNPOL, MICA SLIPPED              1
VESSEL FORM:           JAR OR OLLA
TEMPER:                2470-00 VOLCANIC SANDSTONE, UNDIFF.
INTER. SURF. COLOR:    BLACK
EXTER. SURF. COLOR:    RED BROWN
SURFACE FINISH:        POLISHED, SMUDGED INT, MICA SLIP EXT
SLIP :                 SLIPPED EXTERIOR (JARS)
SOURCE AREAS:          PAJARITO PLATEAU (SOUTHERN)
------------------------------------------------
SITE NUMBER:           10114
VESSEL NUMBER:            18

SHERD DESCRIPTION/TYPE              # SHERDS
 CARNUE PLAIN                            3
VESSEL FORM:           JAR OR OLLA
TEMPER:                2041-00 SANDSTONE FINE GRAINED
RIM FORM:              EVERTED, UNDIFF.
EXTER. SURF. COLOR:    DARK GRAY
SURFACE FINISH:        UNPOL EXT, POL INT
------------------------------------------------
SITE NUMBER:           10114
VESSEL NUMBER:            20

SHERD DESCRIPTION/TYPE              # SHERDS
 CARNUE PLAIN                           47
VESSEL FORM:           JAR OR OLLA
TEMPER:                2471-00 VOLCANIC SANDSTONE
RIM FORM:              EVERTED, FLARED,ROLLED RIM (JAR)
INTER. SURF. COLOR:    TAN
EXTER. SURF. COLOR:    TAN
SURFACE FINISH:        UNPOL EXT, POL INT
UTILIZATION:           SURFACE SOOTED
------------------------------------------------
SITE NUMBER:           10114
VESSEL NUMBER:            22

SHERD DESCRIPTION/TYPE              # SHERDS
 CARNUE PLAIN                           54
VESSEL FORM:           JAR OR OLLA
TEMPER:                2085-10 SANDSTONE, COARSE GR, FELD.
RIM FORM:              EVERTED, FLARED,ROLLED RIM (JAR)
INTER. SURF. COLOR:    TAN
EXTER. SURF. COLOR:    TAN
SURFACE FINISH:        STONE STROKED INT, SCRAPED EXT
UTILIZATION:           SURFACE SOOTED
------------------------------------------------
SITE NUMBER:           10114
VESSEL NUMBER:            24

SHERD DESCRIPTION/TYPE              # SHERDS
 CARNUE PLAIN                            1
VESSEL FORM:           JAR OR OLLA
TEMPER:                3816-00 WELDED TUFF
INTER. SURF. COLOR:    DARK GRAY
EXTER. SURF. COLOR:    TAN
SURFACE FINISH:        UNPOL EXT, POL INT
------------------------------------------------
SITE NUMBER:           10114
VESSEL NUMBER:            26

SHERD DESCRIPTION/TYPE              # SHERDS
 CORR, BLIND INDENTED                    1
VESSEL FORM:           JAR OR OLLA
TEMPER:                3821-00 ANDESITE TUFF
INTER. SURF. COLOR:    DARK GRAY
EXTER. SURF. COLOR:    DARK GRAY
SURFACE FINISH:        UNDIFF.
------------------------------------------------
SITE NUMBER:           10114
VESSEL NUMBER:            28

SHERD DESCRIPTION/TYPE              # SHERDS
 SANTA FE B/W                            2
VESSEL FORM:           BOWL, HEMISPHERICAL
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(vessel 27, con't)

```
TEMPER:                 2015-00 SANDSTONE, VERY FINE GR
INTER. SURF. COLOR:     LIGHT GRAY
EXTER. SURF. COLOR:     LIGHT GRAY
SURFACE FINISH:         POLISHED BOTH SIDES
--------------------------------------------------------------
SITE NUMBER:            10114
VESSEL NUMBER:             29

SHERD DESCRIPTION/TYPE                  # SHERDS
 SANTA FE B/W                               1
VESSEL FORM:            BOWL, UNDIFF
TEMPER:                 3863-00 VITRIC TUFF (BLACK SHARD)
INTER. SURF. COLOR:     CREAM
EXTER. SURF. COLOR:     CREAM
SURFACE FINISH:         SCORED INT JAR
--------------------------------------------------------------
SITE NUMBER:            10114
VESSEL NUMBER:             31

SHERD DESCRIPTION/TYPE                  # SHERDS
 PLAIN POL, UNDIFF.                         1
VESSEL FORM:            UNDIFF.
TEMPER:                 3655-12 PUMICE, CRYSTAL (JEMEZ)
INTER. SURF. COLOR:     UNDIFF.
EXTER. SURF. COLOR:     RED BROWN
SURFACE FINISH:         POLISHED BOTH SIDES
--------------------------------------------------------------
SITE NUMBER:            10114
VESSEL NUMBER:             33

SHERD DESCRIPTION/TYPE                  # SHERDS
 CORR, BLIND INDENTED                      13
VESSEL FORM:            JAR OR OLLA
TEMPER:                 3655-11 PUMICE, CRYSTAL (JEMEZ)
RIM FORM:               UNDIFF.
INTER. SURF. COLOR:     DARK GRAY
EXTER. SURF. COLOR:     DARK GRAY
SURFACE FINISH:         TYPE CODE NOT FOUND: 36
--------------------------------------------------------------
SITE NUMBER:            10114
VESSEL NUMBER:             35

SHERD DESCRIPTION/TYPE                  # SHERDS
 G/Y BODY SHERD                             2
VESSEL FORM:            CLOSED FORM, UNDIFF
TEMPER:                 3431-00 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR:     TAN
EXTER. SURF. COLOR:     CREAM
SURFACE FINISH:         POLISHED BOTH SIDES
--------------------------------------------------------------
SITE NUMBER:            10114
VESSEL NUMBER:             37

SHERD DESCRIPTION/TYPE                  # SHERDS
 G/R & WHITE & RED MATTE                    3
VESSEL FORM:            BOWL, UNDIFF
TEMPER:                 3266-09 HORNBLENDE LATITE, UNDIF.
INTER. SURF. COLOR:     CREAM
EXTER. SURF. COLOR:     WHITE+RED
SLIP :                  SLIPPED INT & EXT
--------------------------------------------------------------
SITE NUMBER:            10114
VESSEL NUMBER:             99

SHERD DESCRIPTION/TYPE                  # SHERDS
 PLAIN, UNPOL, UNDIFF                       1
VESSEL FORM:            CLOSED FORM, UNDIFF
TEMPER:                 3655-00 PUMICE, CRYSTAL (JEMEZ)
INTER. SURF. COLOR:     TAN
EXTER. SURF. COLOR:     TAN
SURFACE FINISH:         UNDIFF.
SLIP :                  UNDIFF.
```

(vessel 28, con't)

```
TEMPER:                 3863-00 VITRIC TUFF (BLACK SHARD)
INTER. SURF. COLOR:     CREAM
EXTER. SURF. COLOR:     CREAM
SURFACE FINISH:         POLISHED BOTH SIDES
--------------------------------------------------------------
SITE NUMBER:            10114
VESSEL NUMBER:             30

SHERD DESCRIPTION/TYPE                  # SHERDS
 UNDIFF. C/W                                2
VESSEL FORM:            CLOSED FORM, UNDIFF
TEMPER:                 3655-12 PUMICE, CRYSTAL (JEMEZ)
INTER. SURF. COLOR:     TAN
EXTER. SURF. COLOR:     LIGHT GRAY
SURFACE FINISH:         POLISHED BOTH SIDES
--------------------------------------------------------------
SITE NUMBER:            10114
VESSEL NUMBER:             32

SHERD DESCRIPTION/TYPE                  # SHERDS
 CORR, IND (2-5 MM) (TUSAYAN)               2
VESSEL FORM:            JAR OR OLLA
TEMPER:                 3655-11 PUMICE, CRYSTAL (JEMEZ)
INTER. SURF. COLOR:     DARK GRAY
EXTER. SURF. COLOR:     DARK GRAY
SURFACE FINISH:         UNPOLISHED INTERIOR
--------------------------------------------------------------
SITE NUMBER:            10114
VESSEL NUMBER:             34

SHERD DESCRIPTION/TYPE                  # SHERDS
 RED (GLAZE) BODY SHERD                     2
VESSEL FORM:            CLOSED FORM, UNDIFF
TEMPER:                 3431-00 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR:     TAN
EXTER. SURF. COLOR:     RED
SURFACE FINISH:         POLISHED BOTH SIDES
--------------------------------------------------------------
SITE NUMBER:            10114
VESSEL NUMBER:             36

SHERD DESCRIPTION/TYPE                  # SHERDS
 PLAIN POL, UNDIFF.                         9
 UNDIFF. RED/BRN HIST.                      1
VESSEL FORM:            UNDIFF.
                        BOWL, UNDIFF
TEMPER:                 3655-00 PUMICE, CRYSTAL (JEMEZ)
                        3655-12 PUMICE, CRYSTAL (JEMEZ)
INTER. SURF. COLOR:     UNDIFF.
                        RED BROWN
EXTER. SURF. COLOR:     RED
                        TAN
SURFACE FINISH:         UNPOL. INT. POL EXT
                        POLISHED BOTH SIDES
SLIP :                  UNDIFF.
                        SLIPPED INT. EXT BELOW RIM
SOURCE AREAS:           PAJARITO PLATEAU (SOUTHERN)
--------------------------------------------------------------
SITE NUMBER:            10114
VESSEL NUMBER:             38

SHERD DESCRIPTION/TYPE                  # SHERDS
 G/Y BODY SHERD                             1
VESSEL FORM:            BOWL, UNDIFF
TEMPER:                 3655-09 PUMICE, CRYSTAL (JEMEZ)
INTER. SURF. COLOR:     CREAM
EXTER. SURF. COLOR:     CREAM
SLIP :                  SLIPPED INT & EXT
--------------------------------------------------------------
SITE NUMBER:            13049
VESSEL NUMBER:              1

SHERD DESCRIPTION/TYPE                  # SHERDS
 RED (GLAZE) BODY SHERD                     1
 G-P UNDIFF                                 1
VESSEL FORM:            BOWL, UNDIFF
TEMPER:                 3430-62 BASALT, SCORIACEOUS
INTER. SURF. COLOR:     RED (SILVER MICA)
EXTER. SURF. COLOR:     RED (SILVER MICA)
SLIP :                  SLIPPED INT & EXT
PAINT TYPE:             GLAZE, FRAMING WHITE MATTE
```

(LA 13049-vessel 1, con't)

```
WALL THICKNESS (MM):  4
----------------------------------------------------------------
SITE NUMBER:           13049
VESSEL NUMBER:             2

SHERD DESCRIPTION/TYPE              # SHERDS
 G/R BODY SHERD                         1
 RED & WHITE (GLAZE) SHERD              2
 G/R & WHITE BODY SHERD                 2
VESSEL FORM:           BOWL, UNDIFF
TEMPER:                3431-52 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR:    WHITE+RED
EXTER. SURF. COLOR:    RED
SLIP :                 SLIPPED INT & EXT
PAINT TYPE:            GLAZE, BLACK
----------------------------------------------------------------
SITE NUMBER:           13049
VESSEL NUMBER:             3

SHERD DESCRIPTION/TYPE              # SHERDS
 SANTA FE B/W                           2
VESSEL FORM:           BOWL, UNDIFF
TEMPER:                3862-11 VITRIC TUFF, WHITE
INTER. SURF. COLOR:    WHITE
EXTER. SURF. COLOR:    TAN
SURFACE FINISH:        UNPOL EXT, POL INT
SLIP :                 SLIPPED INSIDE
----------------------------------------------------------------
SITE NUMBER:           13049
VESSEL NUMBER:             4

SHERD DESCRIPTION/TYPE              # SHERDS
 UNDIFF, UNSLIPPED                      1
VESSEL FORM:           BOWL, UNDIFF
TEMPER:                3655-11 PUMICE, CRYSTAL (JEMEZ)
INTER. SURF. COLOR:    CREAM
EXTER. SURF. COLOR:    CREAM
SURFACE FINISH:        UNPOL EXT, POL INT
SLIP :                 UNSLIPPED
WALL THICKNESS (MM):  5
----------------------------------------------------------------
SITE NUMBER:           13049
VESSEL NUMBER:             5

SHERD DESCRIPTION/TYPE              # SHERDS
 SANTA FE B/W                           1
VESSEL FORM:           BOWL, UNDIFF
TEMPER:                3655-12 PUMICE, CRYSTAL (JEMEZ)
RIM FORM:              VERTICAL DIRECT TAPERED
INTER. SURF. COLOR:    WHITE
EXTER. SURF. COLOR:    WHITE
SURFACE FINISH:        UNPOL EXT, POL INT
SLIP :                 SLIPPED INSIDE
WALL THICKNESS (MM):  6
----------------------------------------------------------------
SITE NUMBER:           13049
VESSEL NUMBER:             6

SHERD DESCRIPTION/TYPE              # SHERDS
 G/R BODY SHERD                         3
 RED (GLAZE) BODY SHERD                 1
VESSEL FORM:           BOWL, UNDIFF
TEMPER:                3405-51 BASALT, FINELY XL
INTER. SURF. COLOR:    TAN
EXTER. SURF. COLOR:    TAN
SURFACE FINISH:        UNPOL, INT, POL EXT
SLIP :                 SLIPPED INT & EXT
----------------------------------------------------------------
SITE NUMBER:           13049
VESSEL NUMBER:             7

SHERD DESCRIPTION/TYPE              # SHERDS
 RED & WHITE (GLAZE) SHERD              4
 G/R BODY SHERD                         1
 SAN CLEMENTE G-P                       1
VESSEL FORM:           JAR OR OLLA
TEMPER:                3406-52 BASALT, FINELY CRYST.
RIM FORM:              DIRECT VERTICAL (JAR)
INTER. SURF. COLOR:    CREAM
EXTER. SURF. COLOR:    RED (SILVER MICA)
SLIP :                 SLIPPED INT & EXT
----------------------------------------------------------------
SITE NUMBER:           13049
VESSEL NUMBER:             8

SHERD DESCRIPTION/TYPE              # SHERDS
 RED (GLAZE) BODY SHERD                27
VESSEL FORM:           JAR OR OLLA
TEMPER:                3430-52 BASALT, SCORIACEOUS
INTER. SURF. COLOR:    TAN
EXTER. SURF. COLOR:    RED (SILVER MICA)
SLIP :                 SLIPPED EXTERIOR (JARS)
----------------------------------------------------------------
SITE NUMBER:           13049
VESSEL NUMBER:             9

SHERD DESCRIPTION/TYPE              # SHERDS
 CIENEGUILLA G/Y                        2
VESSEL FORM:           JAR OR OLLA
TEMPER:                3025-52 INTERMED. IGNEOUS
RIM FORM:              DIRECT VERTICAL (JAR)
INTER. SURF. COLOR:    CREAM
EXTER. SURF. COLOR:    WHITE
SLIP :                 SLIPPED EXT & INT NECK
PAINT TYPE:            GLAZE BROWN
WALL THICKNESS (MM):  5
----------------------------------------------------------------
SITE NUMBER:           13049
VESSEL NUMBER:            10

SHERD DESCRIPTION/TYPE              # SHERDS
 CORR. BLIND INDENTED                  10
VESSEL FORM:           JAR OR OLLA
TEMPER:                3811-10 RHYOLITE TUFF
INTER. SURF. COLOR:    BROWN
EXTER. SURF. COLOR:    BROWN
SURFACE FINISH:        UNPOLISHED INTE AND EXT
----------------------------------------------------------------
SITE NUMBER:           13049
VESSEL NUMBER:            11

SHERD DESCRIPTION/TYPE              # SHERDS
 CORR SMEARED, INDENTED                 4
VESSEL FORM:           JAR OR OLLA
TEMPER:                2475-54 VOLCANIC SAND
INTER. SURF. COLOR:    BROWN
EXTER. SURF. COLOR:    BROWN
SURFACE FINISH:        UNPOLISHED INTE AND EXT
WALL THICKNESS (MM):  4
----------------------------------------------------------------
SITE NUMBER:           13049
VESSEL NUMBER:            12

SHERD DESCRIPTION/TYPE              # SHERDS
 CORR. BLIND INDENTED                   1
VESSEL FORM:           JAR OR OLLA
TEMPER:                3243-65 DIORITE, UNDIFF.
INTER. SURF. COLOR:    DARK GRAY
EXTER. SURF. COLOR:    DARK GRAY
SURFACE FINISH:        UNPOLISHED INTE AND EXT
WALL THICKNESS (MM):  6
----------------------------------------------------------------
SITE NUMBER:           13049
VESSEL NUMBER:            13

SHERD DESCRIPTION/TYPE              # SHERDS
 CORR. BLIND INDENTED                   8
VESSEL FORM:           JAR OR OLLA
TEMPER:                3821-53 ANDESITE TUFF
RIM FORM:              UNDIFF.
INTER. SURF. COLOR:    BROWN
EXTER. SURF. COLOR:    BROWN
SURFACE FINISH:        UNPOLISHED INTE AND EXT
----------------------------------------------------------------
```

```
SITE NUMBER:            13049
VESSEL NUMBER:             14

SHERD DESCRIPTION/TYPE                # SHERDS
 CORR. BLIND INDENTED, MICACEOUS         2
VESSEL FORM:            JAR OR OLLA
TEMPER:                 4560-54 SCHIST, QTZ MUSCOVITE
INTER. SURF. COLOR:     BROWN
EXTER. SURF. COLOR:     BROWN
SURFACE FINISH:         UNPOLISHED INTE AND EXT
----------------------------------------------------------------
SITE NUMBER:            13049
VESSEL NUMBER:             15

SHERD DESCRIPTION/TYPE                # SHERDS
 PLAIN POL. WW SLIP                      1
VESSEL FORM:            CERAMIC PIPE
TEMPER:                 3852-53 LITHIC TUFF, UNDIFF.
INTER. SURF. COLOR:     BROWN
EXTER. SURF. COLOR:     BROWN
SURFACE FINISH:         POLISHED BOTH SIDES
SLIP :                  SLIPPED EXTERIOR (JARS)
----------------------------------------------------------------
SITE NUMBER:            13050
VESSEL NUMBER:              1

SHERD DESCRIPTION/TYPE                # SHERDS
 CORR. BLIND INDENTED                   29
VESSEL FORM:            JAR OR OLLA
TEMPER:                 2475-54 VOLCANIC SAND
RIM FORM:               EVERTED, FLARED (JAR)
INTER. SURF. COLOR:     DARK GRAY
EXTER. SURF. COLOR:     DARK GRAY
SURFACE FINISH:         UNPOLISHED INTE AND EXT
WALL THICKNESS (MM):    7
----------------------------------------------------------------
SITE NUMBER:            13050
VESSEL NUMBER:              2

SHERD DESCRIPTION/TYPE                # SHERDS
 CORR. BLIND INDENTED                   34
VESSEL FORM:            JAR OR OLLA
TEMPER:                 2475-54 VOLCANIC SAND
RIM FORM:               EVERTED, FLARED (JAR)
INTER. SURF. COLOR:     DARK GRAY
EXTER. SURF. COLOR:     BROWN
SURFACE FINISH:         UNPOLISHED INTE AND EXT
----------------------------------------------------------------
SITE NUMBER:            13050
VESSEL NUMBER:              3

SHERD DESCRIPTION/TYPE                # SHERDS
 CORR. BLIND INDENTED                   36
VESSEL FORM:            JAR OR OLLA
TEMPER:                 3655-10 PUMICE, CRYSTAL (JEMEZ)
RIM FORM:               EVERTED, FLARED (JAR)
INTER. SURF. COLOR:     DARK GRAY
EXTER. SURF. COLOR:     DARK GRAY
SURFACE FINISH:         UNPOLISHED INTE AND EXT
----------------------------------------------------------------
SITE NUMBER:            13050
VESSEL NUMBER:              4

SHERD DESCRIPTION/TYPE                # SHERDS
 CORR. BLIND INDENTED                    1
VESSEL FORM:            JAR OR OLLA
TEMPER:                 3655-10 PUMICE, CRYSTAL (JEMEZ)
RIM FORM:               EVERTED, FLARED,ROLLED RIM (JAR)
INTER. SURF. COLOR:     TAN
EXTER. SURF. COLOR:     TAN
SURFACE FINISH:         UNPOLISHED INTE AND EXT
WALL THICKNESS (MM):    4
----------------------------------------------------------------
SITE NUMBER:            13050
VESSEL NUMBER:              5

SHERD DESCRIPTION/TYPE                # SHERDS
 G/R & WHITE BODY SHERD                  1
VESSEL FORM:            BOWL, UNDIFF
TEMPER:                 3266-52 HORNBLENDE LATITE, UNDIF.
INTER. SURF. COLOR:     RED
EXTER. SURF. COLOR:     CREAM
SLIP :                  SLIPPED INT & EXT
PAINT TYPE:             GLAZE, BLACK
WALL THICKNESS (MM):    5
----------------------------------------------------------------
SITE NUMBER:            13050
VESSEL NUMBER:              6

SHERD DESCRIPTION/TYPE                # SHERDS
 G/R BODY SHERD                          8
 RED (GLAZE) BODY SHERD                  1
VESSEL FORM:            BOWL, UNDIFF
TEMPER:                 3431-02 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR:     RED (SILVER MICA)
EXTER. SURF. COLOR:     RED (SILVER MICA)
SLIP :                  SLIPPED INT & EXT
PAINT TYPE:             GLAZE, BLACK
----------------------------------------------------------------
SITE NUMBER:            13050
VESSEL NUMBER:              7

SHERD DESCRIPTION/TYPE                # SHERDS
 RED & WHITE (GLAZE) SHERD               5
VESSEL FORM:            JAR OR OLLA
TEMPER:                 3431-53 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR:     CREAM
EXTER. SURF. COLOR:     RED (SILVER MICA)
SLIP :                  SLIPPED INT & EXT
PAINT TYPE:             GLAZE, BLACK
----------------------------------------------------------------
SITE NUMBER:            13050
VESSEL NUMBER:              8

SHERD DESCRIPTION/TYPE                # SHERDS
 G/R BODY SHERD                          1
VESSEL FORM:            BOWL, UNDIFF
TEMPER:                 2140-52 MESAVERDE SS
INTER. SURF. COLOR:     RED BROWN
EXTER. SURF. COLOR:     RED BROWN
SLIP :                  SLIPPED INT & EXT
PAINT TYPE:             GLAZE BROWN
WALL THICKNESS (MM):    6
----------------------------------------------------------------
SITE NUMBER:            13050
VESSEL NUMBER:              9

SHERD DESCRIPTION/TYPE                # SHERDS
 SAN LAZARO G-P                          6
 PINK (GLAZE) BODY SHERD                25
 G/PINK BODY SHERD                      13
 G/TAN + RED MATTE                      10
VESSEL FORM:            BOWL, UNDIFF
TEMPER:                 3271-51 HORNBLENDE LATITE ESPINASO
RIM FORM:               EVERTED (GLAZE C)
INTER. SURF. COLOR:     ORANGE
EXTER. SURF. COLOR:     ORANGE
SLIP :                  SLIPPED INT & EXT
PAINT TYPE:             GLAZE, BLACK
WALL THICKNESS (MM):    4
----------------------------------------------------------------
SITE NUMBER:            13050
VESSEL NUMBER:             10

SHERD DESCRIPTION/TYPE                # SHERDS
 G-P RED-PINK SURFACES                   2
VESSEL FORM:            JAR OR OLLA
TEMPER:                 3266-51 HORNBLENDE LATITE, UNDIF.
RIM FORM:               EVERTED (GLAZE C)
INTER. SURF. COLOR:     TAN
EXTER. SURF. COLOR:     RED
SLIP :                  SLIPPED INT & EXT
PAINT TYPE:             GLAZE, BLACK
----------------------------------------------------------------
SITE NUMBER:            13050

SITE NUMBER:            13050
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VESSEL NUMBER:            11

SHERD DESCRIPTION/TYPE                 # SHERDS
 G/R BODY SHERD                           7
VESSEL FORM:              JAR OR OLLA
TEMPER:                   3431-53 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR:       TAN
EXTER. SURF. COLOR:       RED
SLIP :                    SLIPPED INT & EXT
PAINT TYPE:               GLAZE, BLACK
WALL THICKNESS (MM):      5
-----------------------------------------------------------------
VESSEL NUMBER:            12

SHERD DESCRIPTION/TYPE                 # SHERDS
 BANDELIER B/W                            4
VESSEL FORM:              BOWL, UNDIFF
TEMPER:                   3862-52 VITRIC TUFF, WHITE
INTER. SURF. COLOR:       LIGHT GRAY
EXTER. SURF. COLOR:       LIGHT GRAY
SLIP :                    SLIPPED INT & EXT
-----------------------------------------------------------------
SITE NUMBER:              13050
VESSEL NUMBER:            13

SHERD DESCRIPTION/TYPE                 # SHERDS
 RED (GLAZE) BODY SHERD                   1
 AGUA FRIA G/R                            1
VESSEL FORM:              BOWL, UNDIFF
TEMPER:                   3266-52 HORNBLENDE LATITE, UNDIF.
RIM FORM:                 VERTICAL DIRECT SQUARED
INTER. SURF. COLOR:       RED (SILVER MICA)
EXTER. SURF. COLOR:       RED (SILVER MICA)
SLIP :                    SLIPPED INT & EXT
PAINT TYPE:               GLAZE, BLACK
-----------------------------------------------------------------
SITE NUMBER:              13050
VESSEL NUMBER:            14

SHERD DESCRIPTION/TYPE                 # SHERDS
 CIENEGUILLA G/Y                          1
VESSEL FORM:              BOWL, UNDIFF
TEMPER:                   3406-52 BASALT, FINELY CRYST.
RIM FORM:                 VERTICAL DIRECT SQUARED
INTER. SURF. COLOR:       CREAM
EXTER. SURF. COLOR:       CREAM
SLIP :                    SLIPPED INT & EXT
PAINT TYPE:               GLAZE BROWN
WALL THICKNESS (MM):      5
-----------------------------------------------------------------
SITE NUMBER:              13050
VESSEL NUMBER:            15

SHERD DESCRIPTION/TYPE                 # SHERDS
 PLAIN POL. UNDIFF.                       2
VESSEL FORM:              JAR OR OLLA
TEMPER:                   2475-54 VOLCANIC SAND
RIM FORM:                 DIRECT VERTICAL (JAR)
INTER. SURF. COLOR:       DARK GRAY
EXTER. SURF. COLOR:       DARK GRAY
SURFACE FINISH:           UNPOLISHED INTE AND EXT
-----------------------------------------------------------------
SITE NUMBER:              13050
VESSEL NUMBER:            16

SHERD DESCRIPTION/TYPE                 # SHERDS
 UNDIFF. SLIPPED C/W                      7
VESSEL FORM:              BOWL, UNDIFF
TEMPER:                   3864-52 VITRIC TUFF, WHITE+MICA (NAMBE)
INTER. SURF. COLOR:       CREAM
EXTER. SURF. COLOR:       LIGHT GRAY
SURFACE FINISH:           POLISHED BOTH SIDES
SLIP :                    SLIPPED INSIDE
WALL THICKNESS (MM):      5
-----------------------------------------------------------------
SITE NUMBER:              13050
VESSEL NUMBER:            17

SHERD DESCRIPTION/TYPE                 # SHERDS
 CORR. BLIND INDENTED                     7
VESSEL FORM:              JAR OR OLLA
TEMPER:                   3710-54 ANDESITE VITROPHYRE
INTER. SURF. COLOR:       DARK GRAY
EXTER. SURF. COLOR:       RED BROWN
SURFACE FINISH:           UNPOLISHED INTE AND EXT
-----------------------------------------------------------------
SITE NUMBER:              13050
VESSEL NUMBER:            18

SHERD DESCRIPTION/TYPE                 # SHERDS
 RED (GLAZE) BODY SHERD                   6
VESSEL FORM:              JAR OR OLLA
TEMPER:                   3431-52 BASALT, SCORIACIOUS (COCHITI)
RIM FORM:                 DIRECT VERTICAL (JAR)
INTER. SURF. COLOR:       TAN
EXTER. SURF. COLOR:       RED (SILVER MICA)
-----------------------------------------------------------------
SITE NUMBER:              13050
VESSEL NUMBER:            19

SHERD DESCRIPTION/TYPE                 # SHERDS
 CIENEGUILLA G/Y                          3
 G/W BODY SHERD                           9
 WHITE (GLAZE) BODY SHERD                 4
VESSEL FORM:              BOWL, UNDIFF
TEMPER:                   3525-52 INTERMED. IGNEOUS
RIM FORM:                 VERTICAL DIRECT SQUARED
INTER. SURF. COLOR:       WHITE
EXTER. SURF. COLOR:       LIGHT GRAY
WALL THICKNESS (MM):      4
-----------------------------------------------------------------
SITE NUMBER:              13050
VESSEL NUMBER:            20

SHERD DESCRIPTION/TYPE                 # SHERDS
 G-P RED, YELLOW SURFACE                  4
VESSEL FORM:              JAR OR OLLA
TEMPER:                   3431-02 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR:       TAN
EXTER. SURF. COLOR:       WHITE+RED
PAINT TYPE:               GLAZE, BLACK
WALL THICKNESS (MM):      5
-----------------------------------------------------------------
SITE NUMBER:              13050
VESSEL NUMBER:            21

SHERD DESCRIPTION/TYPE                 # SHERDS
 CORR. BLIND INDENTED                     1
VESSEL FORM:              JAR OR OLLA
TEMPER:                   3655-54 PUMICE, CRYSTAL (JEMEZ)
INTER. SURF. COLOR:       LIGHT GRAY
EXTER. SURF. COLOR:       LIGHT GRAY
SURFACE FINISH:           UNPOLISHED INTE AND EXT
WALL THICKNESS (MM):      2
-----------------------------------------------------------------
SITE NUMBER:              13050
VESSEL NUMBER:            22

SHERD DESCRIPTION/TYPE                 # SHERDS
 CORR. BLIND INDENTED                     6
VESSEL FORM:              JAR OR OLLA
TEMPER:                   2475-03 VOLCANIC SAND
INTER. SURF. COLOR:       DARK GRAY
EXTER. SURF. COLOR:       BROWN
SURFACE FINISH:           UNPOL EXT, POL INT
-----------------------------------------------------------------
SITE NUMBER:              13050
VESSEL NUMBER:            23

SHERD DESCRIPTION/TYPE                 # SHERDS
 RED (GLAZE) BODY SHERD                   1
VESSEL FORM:              BOWL, UNDIFF
-----------------------------------------------------------------
SITE NUMBER:              13050
VESSEL NUMBER:            24

SHERD DESCRIPTION/TYPE                 # SHERDS
 CIENEGUILLA G-P                          2
 G/W BODY SHERD                           2
```

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(vessel 23, con't)
TEMPER:                 3431-53 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR:     RED
EXTER. SURF. COLOR:     RED
SLIP :                  UNSLIPPED
WALL THICKNESS (MM):    5
--------------------------------------------------------------
SITE NUMBER:            13050
VESSEL NUMBER:          25

SHERD DESCRIPTION/TYPE             # SHERDS
 G/R BODY SHERD                        1
VESSEL FORM:            BOWL, UNDIFF
TEMPER:                 TYPE CODE NOT FOUND: 3029
INTER. SURF. COLOR:     UNDIFF.
EXTER. SURF. COLOR:     RED
SLIP :                  UNSLIPPED
PAINT TYP :             GLAZE, BLACK
WALL THICKNESS (MM):    1
--------------------------------------------------------------
SITE NUMBER:            13054
VESSEL NUMBER:          2

SHERD DESCRIPTION/TYPE             # SHERDS
 RED (GLAZE) BODY SHERD                4
 RED & WHITE (GLAZE) SHERD             1
 G/W BODY SHERD                        1
VESSEL FORM:            CLOSED FORM, UNDIFF
TEMPER:                 3431-00 BASALT, SCORIACIOUS (COCHITI)
EXTER. SURF. COLOR:     RED
SLIP :                  UNDIFF.
SOURCE AREAS:           WHITE ROCK CANYON
--------------------------------------------------------------
SITE NUMBER:            13054
VESSEL NUMBER:          4

SHERD DESCRIPTION/TYPE             # SHERDS
 RED (GLAZE) BODY SHERD                5
VESSEL FORM:            CLOSED FORM, UNDIFF
TEMPER:                 3406-00 BASALT, FINELY CRYST.
EXTER. SURF. COLOR:     RED (SILVER MICA)
SLIP :                  SLIPPED EXTERIOR (JARS)
UTILIZATION:            WORKED EDGES, CURVED
SOURCE AREAS:           WHITE ROCK CANYON
--------------------------------------------------------------
SITE NUMBER:            13054
VESSEL NUMBER:          6

SHERD DESCRIPTION/TYPE             # SHERDS
 G/W BODY SHERD                        2
VESSEL FORM:            CLOSED FORM, UNDIFF
TEMPER:                 3431-00 BASALT, SCORIACIOUS (COCHITI)
EXTER. SURF. COLOR:     WHITE
SLIP :                  SLIPPED EXTERIOR (JARS)
SOURCE AREAS:           WHITE ROCK CANYON
--------------------------------------------------------------
SITE NUMBER:            13054
VESSEL NUMBER:          8

SHERD DESCRIPTION/TYPE             # SHERDS
 ABIQUIU B/W                           5
VESSEL FORM:            BOWL, UNDIFF
TEMPER:                 3862-12 VITRIC TUFF, WHITE
RIM FORM:               EVERTED, UNDIFF.
INTER. SURF. COLOR:     LIGHT GRAY
EXTER. SURF. COLOR:     LIGHT GRAY
SURFACE FINISH:         POLISHED IN., SCORED EXT (BOWL)
SOURCE AREAS:           PAJARITO PLATEAU (NORTHERN)
--------------------------------------------------------------
SITE NUMBER:            13054
VESSEL NUMBER:          10

SHERD DESCRIPTION/TYPE             # SHERDS
 CORR, BLIND INDENTED                 59
VESSEL FORM:            JAR OR OLLA
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(vessel 24, con't)
VESSEL FORM:            BOWL, UNDIFF
TEMPER:                 3431-53 BASALT, SCORIACIOUS (COCHITI)
RIM FORM:               VERT. DIRECT ROUNDED
INTER. SURF. COLOR:     WHITE
EXTER. SURF. COLOR:     WHITE
SLIP :                  SLIPPED INT & EXT
PAINT TYPE:             GLAZE, BLACK
WALL THICKNESS (MM):    6
--------------------------------------------------------------
SITE NUMBER:            13054
VESSEL NUMBER:          1

SHERD DESCRIPTION/TYPE             # SHERDS
 G/R BODY SHERD                        2
 RED (GLAZE) BODY SHERD                2
VESSEL FORM:            CLOSED FORM, UNDIFF
TEMPER:                 3431-00 BASALT, SCORIACIOUS (COCHITI)
EXTER. SURF. COLOR:     RED (SILVER MICA)
SLIP :                  SLIPPED EXTERIOR (JARS)
SOURCE AREAS:           WHITE ROCK CANYON
--------------------------------------------------------------
SITE NUMBER:            13054
VESSEL NUMBER:          3

SHERD DESCRIPTION/TYPE             # SHERDS
 G/Y BODY SHERD                        2
 RED & WHITE (GLAZE) SHERD             1
 YELLOW (GLAZE) BODY SHERD            37
VESSEL FORM:            JAR, CARINATED
                        CLOSED FORM, UNDIFF
TEMPER:                 3431-00 BASALT, SCORIACIOUS (COCHITI)
EXTER. SURF. COLOR:     CREAM
                        WHITE+RED
SLIP :                  SLIPPED EXTERIOR (JARS)
                        TYPE CODE NOT FOUND: 30
SOURCE AREAS:           WHITE ROCK CANYON
--------------------------------------------------------------
SITE NUMBER:            13054
VESSEL NUMBER:          5

SHERD DESCRIPTION/TYPE             # SHERDS
 RED (GLAZE) BODY SHERD                2
VESSEL FORM:            CLOSED FORM, UNDIFF
TEMPER:                 3270-00 HORNBLENDE LATITE ESPINASO
EXTER. SURF. COLOR:     RED
SLIP :                  SLIPPED EXTERIOR (JARS)
SOURCE AREAS:           TONQUE BASIN
--------------------------------------------------------------
SITE NUMBER:            13054
VESSEL NUMBER:          7

SHERD DESCRIPTION/TYPE             # SHERDS
 SANTA FE B/W                          5
VESSEL FORM:            JAR OR OLLA
TEMPER:                 3862-11 VITRIC TUFF, WHITE
EXTER. SURF. COLOR:     LIGHT GRAY
SURFACE FINISH:         POLISHED BOTH SIDES
SLIP :                  UNDIFF.
UTILIZATION:            WORKED EDGES, STRAIGHT
SOURCE AREAS:           PAJARITO PLATEAU (SOUTHERN)
--------------------------------------------------------------
SITE NUMBER:            13054
VESSEL NUMBER:          9

SHERD DESCRIPTION/TYPE             # SHERDS
 PLAIN, UNPOL. OUT, POL. IN           32
VESSEL FORM:            JAR OR OLLA
TEMPER:                 2471-09 VOLCANIC SANDSTONE
INTER. SURF. COLOR:     BROWN
EXTER. SURF. COLOR:     BROWN
SURFACE FINISH:         UNPOL EXT, POL INT
UTILIZATION:            CLAY BODY CARBONIZED
SOURCE AREAS:           PAJARITO PLATEAU (SOUTHERN)
--------------------------------------------------------------
SITE NUMBER:            13054
VESSEL NUMBER:          11

SHERD DESCRIPTION/TYPE             # SHERDS
 PLAIN, UNPOL, UNDIFF                 10
VESSEL FORM:            JAR OR OLLA
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(vessel 10, con't)

```
TEMPER:                 3821-10 ANDESITE TUFF
RIM FORM:               EVERTED, FLARED (JAR)
INTER. SURF. COLOR:     BROWN
EXTER. SURF. COLOR:     BROWN
SURFACE FINISH:         UNPOLISHED INTE AND EXT
SOURCE AREAS:           PAJARITO PLATEAU (SOUTHERN)
--------------------------------------------------------
SITE NUMBER:            13054
VESSEL NUMBER:             12

SHERD DESCRIPTION/TYPE                 # SHERDS
 CORR. IND (5 MM+) (TJSAYAN)                1
VESSEL FORM:            JAR OR OLLA
TEMPER:                 2475-09 VOLCANIC SAND
INTER. SURF. COLOR:     LIGHT GRAY
EXTER. SURF. COLOR:     LIGHT GRAY
SURFACE FINISH:    *    UNPOLISHED INTERIOR
SOURCE AREAS:           PAJARITO PLATEAU (SOUTHERN)
--------------------------------------------------------
SITE NUMBER:            13054
VESSEL NUMBER:             14

SHERD DESCRIPTION/TYPE                 # SHERDS
 AGUA FRIA G/R                              1
 RED (GLAZE) BODY SHERD                     4
 G/R BODY SHERD                             1
VESSEL FORM:            BOWL, HEMISPHERICAL
TEMPER:                 3436-09 BASALT, FINELY CRYST.
RIM FORM:               VERT. DIRECT ROUNDED
INTER. SURF. COLOR:     RED (SILVER MICA)
EXTER. SURF. COLOR:     RED (SILVER MICA)
SLIP :                  SLIPPED INT & EXT
SOURCE AREAS:           WHITE ROCK CANYON
--------------------------------------------------------
SITE NUMBER:            13054
VESSEL NUMBER:             16

SHERD DESCRIPTION/TYPE                 # SHERDS
 RED (GLAZE) BODY SHERD                     1
VESSEL FORM:            UNDIFF.
TEMPER:                 3430-09 BASALT, SCORIACEOUS
EXTER. SURF. COLOR:     RED
SLIP :                  UNDIFF.
SOURCE AREAS:           WHITE ROCK CANYON
--------------------------------------------------------
SITE NUMBER:            13054
VESSEL NUMBER:             18

SHERD DESCRIPTION/TYPE                 # SHERDS
 WHITE (GLAZE) BODY SHERD                   2
VESSEL FORM:            MINIATURE UNDIF
TEMPER:                 3025-09 INTERMED. IGNEOUS
INTER. SURF. COLOR:     RED
EXTER. SURF. COLOR:     WHITE
SLIP :                  SLIPPED EXTERIOR (JARS)
SOURCE AREAS:           UNDIFF.
--------------------------------------------------------
SITE NUMBER:            13076
VESSEL NUMBER:              2

SHERD DESCRIPTION/TYPE                 # SHERDS
 G/W BODY SHERD                             1
 WHITE (GLAZE) BODY SHERD                   2
 RED (GLAZE) BODY SHERD                     1
 RED & WHITE (GLAZE) SHERD                  1
VESSEL FORM:            CANTEEN, STIRRUP
TEMPER:                 3431-09 BASALT, SCORIACIOUS (COCHITI)
EXTER. SURF. COLOR:     BROWN
                        RED (SILVER MICA)
                        WHITE+RED
SURFACE FINISH:         POLISHED BOTH SIDES
SLIP :                  SLIPPED EXTERIOR (JARS)
WALL THICKNESS (MM):    3
--------------------------------------------------------
SITE NUMBER:            13076
VESSEL NUMBER:              4
```

(vessel 11, con't)

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TEMPER:                 3821-10 ANDESITE TUFF
INTER. SURF. COLOR:     BROWN
EXTER. SURF. COLOR:     BROWN
SURFACE FINISH:         UNPOLISHED INTE AND EXT
UTILIZATION:            CLAY BODY CARBONIZED
SOURCE AREAS:           PAJARITO PLATEAU (SOUTHERN)
--------------------------------------------------------
SITE NUMBER:            13054
VESSEL NUMBER:             13

SHERD DESCRIPTION/TYPE                 # SHERDS
 CURR. BLIND INDENTED, MICACEOUS           13
VESSEL FORM:            JAR OR OLLA
TEMPER:                 4560-11 SCHIST, QTZ MUSCOVITE
RIM FORM:               EVERTED, UNDIFF.
INTER. SURF. COLOR:     DARK GRAY
EXTER. SURF. COLOR:     DARK GRAY
SURFACE FINISH:         UNPOLISHED INTE AND EXT
SOURCE AREAS:           UNDIFF.
--------------------------------------------------------
SITE NUMBER:            13054
VESSEL NUMBER:             15

SHERD DESCRIPTION/TYPE                 # SHERDS
 G/R BODY SHERD                             1
VESSEL FORM:            BOWL, HEMISPHERICAL
TEMPER:                 3430-02 BASALT, SCORIACEOUS
INTER. SURF. COLOR:     RED
EXTER. SURF. COLOR:     RED
SLIP :                  UNSLIPPED
SOURCE AREAS:           WHITE ROCK CANYON
--------------------------------------------------------
SITE NUMBER:            13054
VESSEL NUMBER:             17

SHERD DESCRIPTION/TYPE                 # SHERDS
 AGUA FRIA G/R                              1
 G/R BODY SHERD                             4
VESSEL FORM:            BOWL, HEMISPHERICAL
TEMPER:                 3263-09 AUGITE LATITE
RIM FORM:               VERTICAL DIRECT BEVELED IN
INTER. SURF. COLOR:     RED
EXTER. SURF. COLOR:     RED
SLIP :                  SLIPPED INT & EXT
SOURCE AREAS:           SANTO DOMINGO VALLEY
--------------------------------------------------------
SITE NUMBER:            13076
VESSEL NUMBER:              1

SHERD DESCRIPTION/TYPE                 # SHERDS
 BANDELIER B/W                             10
VESSEL FORM:            BOWL, HEMISPHERICAL
TEMPER:                 3655-11 PUMICE, CRYSTAL (JEMEZ)
RIM FORM:               RECURVED
INTER. SURF. COLOR:     WHITE
EXTER. SURF. COLOR:     WHITE
SURFACE FINISH:         POLISHED BOTH SIDES
SLIP :                  SLIPPED INT & EXT
--------------------------------------------------------
SITE NUMBER:            13076
VESSEL NUMBER:              3

SHERD DESCRIPTION/TYPE                 # SHERDS
 G-P RED, YELLOW SURFACE                   38
VESSEL FORM:            JAR OR OLLA
TEMPER:                 3260-09 AUGITE LATITE (RED INCL)
INTER. SURF. COLOR:     TAN
EXTER. SURF. COLOR:     CREAM
SURFACE FINISH:         POLISHED BOTH SIDES
SLIP :                  SLIPPED INT & EXT
--------------------------------------------------------
SITE NUMBER:            13076
VESSEL NUMBER:              5
```

(vessel 4, con't)

SHERD DESCRIPTION/TYPE # SHERDS
RED (GLAZE) BODY SHERD 9
VESSEL FORM: JAR OR OLLA
TEMPER: 3431-39 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR: TAN
EXTER. SURF. COLOR: RED (SILVER MICA)
SURFACE FINISH: POLISHED BOTH SIDES
SLIP : SLIPPED EXTERIOR (JARS)

SITE NUMBER: 13076
VESSEL NUMBER: 6

SHERD DESCRIPTION/TYPE # SHERDS
WHITE (GLAZE) BODY SHERD 3
VESSEL FORM: BOWL, UNDIFF
TEMPER: 3431-39 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR: CREAM
EXTER. SURF. COLOR: CREAM
SURFACE FINISH: UNPOLISHED INTE AND EXT
SLIP : SLIPPED INT & EXT

SITE NUMBER: 13076
VESSEL NUMBER: 8

SHERD DESCRIPTION/TYPE # SHERDS
AGUA FRIA G/R 6
VESSEL FORM: BOWL, UNDIFF
TEMPER: 3431-39 BASALT, SCORIACIOUS (COCHITI)
RIM FORM: VERT. DIRECT BEVELED OUT
INTER. SURF. COLOR: RED (SILVER MICA)
EXTER. SURF. COLOR: RED (SILVER MICA)
SURFACE FINISH: POLISHED BOTH SIDES
SLIP : SLIPPED INT & EXT
WALL THICKNESS (MM): 5

SITE NUMBER: 13076
VESSEL NUMBER: 10

SHERD DESCRIPTION/TYPE # SHERDS
WHITE (GLAZE) BODY SHERD 1
VESSEL FORM: BOWL, UNDIFF
TEMPER: 3270-09 HORNBLENDE LATITE ESPINASO
INTER. SURF. COLOR: WHITE
SURFACE FINISH: TYPE CODE NOT FOUND: 50
SLIP : SLIPPED INT & EXT
WALL THICKNESS (MM): 5

SITE NUMBER: 13076
VESSEL NUMBER: 12

SHERD DESCRIPTION/TYPE # SHERDS
PLAIN POL. UNDIFF. 1
VESSEL FORM: JAR OR OLLA
TEMPER: 3811-54 RHYOLITE TUFF
INTER. SURF. COLOR: DARK GRAY
EXTER. SURF. COLOR: DARK GRAY
SURFACE FINISH: UNPOLISHED INTE AND EXT
WALL THICKNESS (MM): 6

SITE NUMBER: 13076
VESSEL NUMBER: 14

SHERD DESCRIPTION/TYPE # SHERDS
CORR. BLIND INDENTED 1
VESSEL FORM: JAR OR OLLA
TEMPER: TYPE CODE NOT FOUND: 4610
INTER. SURF. COLOR: BROWN
EXTER. SURF. COLOR: BROWN
SURFACE FINISH: UNPOLISHED INTE AND EXT
WALL THICKNESS (MM): 4

SITE NUMBER: 13084
VESSEL NUMBER: 1

SHERD DESCRIPTION/TYPE # SHERDS
BISCUITWARE, UNDIFF 11
VESSEL FORM: JAR, CARINATED
TEMPER: 3862-09 VITRIC TUFF, WHITE
RIM FORM: DIRECT VERTICAL (JAR)

(vessel 5, con't)

SHERD DESCRIPTION/TYPE # SHERDS
G/W BODY SHERD 3
VESSEL FORM: JAR OR OLLA
TEMPER: 3431-09 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR: TAN
EXTER. SURF. COLOR: WHITE
SURFACE FINISH: POLISHED BOTH SIDES
SLIP : SLIPPED EXTERIOR (JARS)
PAINT TYPE: GLAZE, BLACK

SITE NUMBER: 13076
VESSEL NUMBER: 7

SHERD DESCRIPTION/TYPE # SHERDS
PLAIN, UNPOL, UNDIFF 1
VESSEL FORM: BOWL, UNDIFF
TEMPER: 2343-63 SANDSTONE FINE GRAINED
INTER. SURF. COLOR: TAN
EXTER. SURF. COLOR: TAN
SURFACE FINISH: UNPOLISHED INTE AND EXT
SLIP : UNSLIPPED
WALL THICKNESS (MM): 7

SITE NUMBER: 13076
VESSEL NUMBER: 9

SHERD DESCRIPTION/TYPE # SHERDS
CIENEGUILLA G/Y 4
VESSEL FORM: BOWL, UNDIFF
TEMPER: 3260-09 AUGITE LATITE (RED INCL)
RIM FORM: VERTICAL DIRECT SQUARED
INTER. SURF. COLOR: CREAM
EXTER. SURF. COLOR: CREAM
SURFACE FINISH: POLISHED BOTH SIDES
SLIP : SLIPPED INT & EXT
PAINT TYPE: GLAZE, UNDIFF.

SITE NUMBER: 13076
VESSEL NUMBER: 11

SHERD DESCRIPTION/TYPE # SHERDS
CORR. BLIND INDENTED 1
VESSEL FORM: JAR OR OLLA
TEMPER: 3811-54 RHYOLITE TUFF
INTER. SURF. COLOR: BROWN
EXTER. SURF. COLOR: BROWN
SURFACE FINISH: UNPOLISHED INTE AND EXT
WALL THICKNESS (MM): 5

SITE NUMBER: 13076
VESSEL NUMBER: 13

SHERD DESCRIPTION/TYPE # SHERDS
CORR. BLIND INDENTED 25
VESSEL FORM: JAR OR OLLA
TEMPER: 3811-54 RHYOLITE TUFF
RIM FORM: EVERTED, FLARED (JAR)
INTER. SURF. COLOR: BROWN
EXTER. SURF. COLOR: BROWN
SURFACE FINISH: UNPOLISHED INTE AND EXT
WALL THICKNESS (MM): 5

SITE NUMBER: 13076
VESSEL NUMBER: 15

SHERD DESCRIPTION/TYPE # SHERDS
CORR. BLIND INDENTED 16
VESSEL FORM: JAR OR OLLA
TEMPER: 3710-09 ANDESITE VITROPHYRE
RIM FORM: EVERTED, FLARED (JAR)
INTER. SURF. COLOR: BROWN
EXTER. SURF. COLOR: BROWN
SURFACE FINISH: UNPOLISHED INTE AND EXT

SITE NUMBER: 13084
VESSEL NUMBER: 2

SHERD DESCRIPTION/TYPE # SHERDS
ABIQUIU B/W 1
VESSEL FORM: BOWL, UNDIFF
TEMPER: 3863-10 VITRIC TUFF (BLACK SHARD)
INTER. SURF. COLOR: WHITE

(vessel 1, con't)

INTER. SURF. COLOR: TAN
EXTER. SURF. COLOR: CREAM
SURFACE FINISH: POLISHED BOTH SIDES
SLIP : SLIPPED EXT & INT NECK

SITE NUMBER: 13084
VESSEL NUMBER: 3

SHERD DESCRIPTION/TYPE # SHERDS
RED (GLAZE) BODY SHERD 6
G-P RED, YELLOW SURFACE 4
G/W BODY SHERD 9
VESSEL FORM: JAR OR OLLA
TEMPER: 3431-[illegible] BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR: TAN
EXTER. SURF. COLOR: RED (SILVER MICA)
SURFACE FINISH: UNPOL. INT, POL EXT
SLIP : SLIPPED EXTERIOR (JARS)

SITE NUMBER: 13084
VESSEL NUMBER: 5

SHERD DESCRIPTION/TYPE # SHERDS
G/R BODY SHERD 1
RED (GLAZE) BODY SHERD 1
AGUA FRIA G/R 1
VESSEL FORM: BOWL, UNDIFF
TEMPER: 3431-53 BASALT, SCORIACIOUS (COCHITI)
RIM FORM: VERTICAL DIRECT BEVELED IN
INTER. SURF. COLOR: RED
EXTER. SURF. COLOR: RED (SILVER MICA)
SURFACE FINISH: POLISHED BOTH SIDES
SLIP : SLIPPED INT & EXT

SITE NUMBER: 13084
VESSEL NUMBER: 7

SHERD DESCRIPTION/TYPE # SHERDS
G-P UNDIFF 1
VESSEL FORM: BOWL, UNDIFF
TEMPER: 3270-51 HORNBLENDE LATITE ESPINASO
INTER. SURF. COLOR: WHITE
EXTER. SURF. COLOR: PINK
SURFACE FINISH: POLISHED BOTH SIDES
SLIP : SLIPPED INT & EXT
UTILIZATION: WORKED EDGES, CURVED
WALL THICKNESS (MM): 5

SITE NUMBER: 13086
VESSEL NUMBER: 1

SHERD DESCRIPTION/TYPE # SHERDS
SAN CLEMENTE G-P 19
VESSEL FORM: BOWL, HEMISPHERICAL
TEMPER: 3431-53 BASALT, SCORIACIOUS (COCHITI)
RIM FORM: VERTICAL DIRECT SQUARED
INTER. SURF. COLOR: WHITE
EXTER. SURF. COLOR: RED
SLIP : SLIPPED INT & EXT
PAINT TYPE: GLAZE, BLACK
DESIGN ELEMENTS: STEPS, FRETS
WALL THICKNESS (MM): 5
VESSEL DIMEN. (CM): 17

SITE NUMBER: 13086
VESSEL NUMBER: 3

SHERD DESCRIPTION/TYPE # SHERDS
RED (GLAZE) BODY SHERD 5
VESSEL FORM: CLOSED FORM, UNDIFF
TEMPER: 3431-02 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR: UNDIFF.
EXTER. SURF. COLOR: RED (SILVER MICA)
SLIP : UNSLIPPED

SITE NUMBER: 13086
VESSEL NUMBER: 5

SHERD DESCRIPTION/TYPE # SHERDS
G-P RED-PINK SURFACES 16
G/PINK BODY SHERD 1
VESSEL FORM: JAR OR OLLA

(vessel 2, con't)

EXTER. SURF. COLOR: TAN
SURFACE FINISH: UNPOL EXT, POL INT
SLIP : SLIPPED INSIDE
DESIGN ELEMENTS: SOLID ELEMENTS

SITE NUMBER: 13084
VESSEL NUMBER: 4

SHERD DESCRIPTION/TYPE # SHERDS
RED (GLAZE) BODY SHERD 4
VESSEL FORM: JAR OR OLLA
TEMPER: 3710-02 ANDESITE VITROPHYRE
INTER. SURF. COLOR: ORANGE
EXTER. SURF. COLOR: RED (SILVER MICA)
SURFACE FINISH: POLISHED BOTH SIDES
SLIP : SLIPPED EXTERIOR (JARS)

SITE NUMBER: 13084
VESSEL NUMBER: 6

SHERD DESCRIPTION/TYPE # SHERDS
G/R & WHITE BODY SHERD 5
SAN CLEMENTE G-P 2
VESSEL FORM: BOWL, UNDIFF
TEMPER: 3431-53 BASALT, SCORIACIOUS (COCHITI)
RIM FORM: VERT. DIRECT ROUNDED
INTER. SURF. COLOR: WHITE
EXTER. SURF. COLOR: RED (SILVER MICA)
SURFACE FINISH: POLISHED BOTH SIDES
SLIP : SLIPPED INT & EXT
WALL THICKNESS (MM): 7

SITE NUMBER: 13084
VESSEL NUMBER: 8

SHERD DESCRIPTION/TYPE # SHERDS
G-P RED, YELLOW SURFACE 3
VESSEL FORM: CLOSED FORM, UNDIFF
TEMPER: 3431-52 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR: TAN
EXTER. SURF. COLOR: WHITE+RED
SURFACE FINISH: POLISHED BOTH SIDES
SLIP : SLIPPED INT & EXT
UTILIZATION: WORKED EDGES, UNDIFF
WALL THICKNESS (MM): 4

SITE NUMBER: 13086
VESSEL NUMBER: 2

SHERD DESCRIPTION/TYPE # SHERDS
ESPINOSO G-P 7
VESSEL FORM: BOWL, HEMISPHERICAL
TEMPER: 3025-51 INTERMED. IGNEOUS
RIM FORM: VERTICAL DIRECT BEVELED IN
INTER. SURF. COLOR: WHITE
EXTER. SURF. COLOR: PINK+RED
SLIP : SLIPPED INT & EXT
PAINT TYPE: GLAZE, FRAMING RED MATTE

SITE NUMBER: 13086
VESSEL NUMBER: 4

SHERD DESCRIPTION/TYPE # SHERDS
G-P UNDIFF 11
VESSEL FORM: CLOSED FORM, UNDIFF
TEMPER: 3431-02 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR: UNDIFF.
EXTER. SURF. COLOR: RED (SILVER MICA)
SLIP : SLIPPED EXTERIOR (JARS)

SITE NUMBER: 13086
VESSEL NUMBER: 6

SHERD DESCRIPTION/TYPE # SHERDS
G/R BODY SHERD 30
VESSEL FORM: JAR OR OLLA
TEMPER: 3406-53 BASALT, FINELY CRYST.

(vessel 5, con't)

TEMPER: 3405-52 BASALT. FINELY XL
INTER. SURF. COLOR: UNDIFF.
EXTER. SURF. COLOR: PINK+RED
SLIP : SLIPPED EXTERIOR (JARS)
PAINT TYPE: GLAZE. FRAMING RED MATTE

SITE NUMBER: 13086
VESSEL NUMBER: 7

SHERD DESCRIPTION/TYPE — # SHERDS
RED (GLAZE) BODY SHERD — 2
G-P UNDIFF — 2
VESSEL FORM: JAR OR OLLA
TEMPER: 3270-51 HORNBLENDE LATITE ESPINASO
RIM FORM: EVERTED (GLAZE C)
INTER. SURF. COLOR: TAN
UNDIFF.
EXTER. SURF. COLOR: RED
WHITE
SLIP : SLIPPED EXTERIOR (JARS)
PAINT TYPE: UNDIFF.
UTILIZATION: WORKED RECTANGLE

SITE NUMBER: 13086
VESSEL NUMBER: 9

SHERD DESCRIPTION/TYPE — # SHERDS
G/W BODY SHERD — 2
VESSEL FORM: CLOSED FORM. UNDIFF
TEMPER: 3431-53 BASALT. SCORIACIOUS (COCHITI)
INTER. SURF. COLOR: TAN
EXTER. SURF. COLOR: WHITE
SLIP : SLIPPED EXTERIOR (JARS)
PAINT TYPE: GLAZE BROWN

SITE NUMBER: 13086
VESSEL NUMBER: 11

SHERD DESCRIPTION/TYPE — # SHERDS
G-P RED. YELLOW SURFACE — 23
VESSEL FORM: JAR OR OLLA
TEMPER: 3431-54 BASALT. SCORIACIOUS (COCHITI)
RIM FORM: VERTICAL DIRECT SQUARED
INTER. SURF. COLOR: UNDIFF.
EXTER. SURF. COLOR: CREAM+RED
SLIP : SLIPPED EXT & INT NECK
PAINT TYPE: GLAZE. BLACK

SITE NUMBER: 13086
VESSEL NUMBER: 13

SHERD DESCRIPTION/TYPE — # SHERDS
G-P RED. YELLOW SURFACE — 6
VESSEL FORM: CANTEEN. STIRRUP
TEMPER: 3431-52 BASALT. SCORIACIOUS (COCHITI)
INTER. SURF. COLOR: UNDIFF.
EXTER. SURF. COLOR: CREAM+RED
SLIP : SLIPPED EXTERIOR (JARS)
PAINT TYPE: GLAZE. BLACK

SITE NUMBER: 13086
VESSEL NUMBER: 15

SHERD DESCRIPTION/TYPE — # SHERDS
CIENEGUILLA G/Y — 14
VESSEL FORM: JAR OR OLLA
TEMPER: 3431-53 BASALT. SCORIACIOUS (COCHITI)
RIM FORM: VERT. DIRECT ROUNDED
INTER. SURF. COLOR: RED (S LVER MICA)
EXTER. SURF. COLOR: PINK
SLIP : SLIPPED EXTERIOR (JARS)

(vessel 6, con't)

3405-53 BASALT. FINELY XL
INTER. SURF. COLOR: RED
EXTER. SURF. COLOR: RED
SLIP : SLIPPED EXTERIOR (JARS)
PAINT TYPE: GLAZE. BLACK

SITE NUMBER: 13086
VESSEL NUMBER: 8

SHERD DESCRIPTION/TYPE — # SHERDS
G/Y BODY SHERD — 15
CIENEGUILLA G-P — 4
VESSEL FORM: JAR OR OLLA
TEMPER: 3431-52 BASALT. SCORIACIOUS (COCHITI)
RIM FORM: DIRECT VERTICAL (JAR)
INTER. SURF. COLOR: RED
UNDIFF.
EXTER. SURF. COLOR: TAN
BUFF+RED
SLIP : SLIPPED EXT & INT NECK
PAINT TYPE: GLAZE BROWN

SITE NUMBER: 13086
VESSEL NUMBER: 10

SHERD DESCRIPTION/TYPE — # SHERDS
G-P RED-PINK SURFACES — 5
G/R BODY SHERD — 1
SAN CLEMENTE G-P — 1
RED (GLAZE) BODY SHERD — 25
VESSEL FORM: JAR OR OLLA
TEMPER: 3431-53 BASALT. SCORIACIOUS (COCHITI)
RIM FORM: DIRECT VERTICAL (JAR)
INTER. SURF. COLOR: UNDIFF.
RED (SILVER MICA)
EXTER. SURF. COLOR: CREAM
RED (SILVER MICA)
SLIP : SLIPPED EXTERIOR (JARS)
SLIPPED EXT & INT NECK
PAINT TYPE: GLAZE BROWN

SITE NUMBER: 13086
VESSEL NUMBER: 12

SHERD DESCRIPTION/TYPE — # SHERDS
RED (GLAZE) BODY SHERD — 14
VESSEL FORM: JAR OR OLLA
TEMPER: 3431-52 BASALT. SCORIACIOUS (COCHITI)
RIM FORM: VERTICAL DIRECT SQUARED
INTER. SURF. COLOR: UNDIFF.
EXTER. SURF. COLOR: RED
SLIP : SLIPPED EXTERIOR (JARS)
WALL THICKNESS (MM): 6

SITE NUMBER: 13086
VESSEL NUMBER: 14

SHERD DESCRIPTION/TYPE — # SHERDS
SAN CLEMENTE G-P — 1
G-P RED. YELLOW SURFACE — 3
VESSEL FORM: JAR OR OLLA
TEMPER: 3431-52 BASALT. SCORIACIOUS (COCHITI)
3431-53 BASALT. SCORIACIOUS (COCHITI)
RIM FORM: VERTICAL DIRECT SQUARED
INTER. SURF. COLOR: UNDIFF.
EXTER. SURF. COLOR: CREAM+RED
SLIP : SLIPPED EXTERIOR (JARS)
PAINT TYPE: GLAZE. BLACK
WALL THICKNESS (MM): 5

SITE NUMBER: 13086
VESSEL NUMBER: 16

SHERD DESCRIPTION/TYPE — # SHERDS
CIENEGUILLA G/Y — 6
VESSEL FORM: BOWL. HEMISPHERICAL
TEMPER: 3025-52 INTERMED. IGNEOUS
RIM FORM: VERT. DIRECT ROUNDED
INTER. SURF. COLOR: LIGHT GRAY
EXTER. SURF. COLOR: CREAM
SLIP : SLIPPED INT & EXT

(vessel 15, con't)

PAINT TYPE:	GLAZE, BLACK

SITE NUMBER:	13086	
VESSEL NUMBER:	17	
SHERD DESCRIPTION/TYPE		# SHERDS
ESPINOSO G-P		32
VESSEL FORM:	BOWL, HEMISPHERICAL	
TEMPER:	3025-52 INTERMED. IGNEOUS	
RIM FORM:	EVERTED (GLAZE C)	
INTER. SURF. COLOR:	WHITE	
EXTER. SURF. COLOR:	WHITE	
SLIP :	SLIPPED INT & EXT	
PAINT TYPE:	GLAZE BROWN	

SITE NUMBER:	13086	
VESSEL NUMBER:	19	
SHERD DESCRIPTION/TYPE		# SHERDS
CIENEGUILLA G/Y		1
VESSEL FORM:	BOWL, HEMISPHERICAL	
TEMPER:	3260-52 AUGITE LATITE (RED INCL)	
RIM FORM:	VERTICAL DIRECT SQUARED	
INTER. SURF. COLOR:	CREAM	
EXTER. SURF. COLOR:	CREAM	
SLIP :	SLIPPED INT & EXT	
PAINT TYPE:	GLAZE, BLACK	
WALL THICKNESS (MM):	6	

SITE NUMBER:	13086	
VESSEL NUMBER:	21	
SHERD DESCRIPTION/TYPE		# SHERDS
LARGO G/Y		9
VESSEL FORM:	BOWL, HEMISPHERICAL	
TEMPER:	3266-51 HORNBLENDE LATITE, UNDIF.	
RIM FORM:	DIRECT EXPANDED	
INTER. SURF. COLOR:	WHITE	
EXTER. SURF. COLOR:	WHITE	
SLIP :	SLIPPED INT & EXT	
PAINT TYPE:	GLAZE, BLACK	
UTILIZATION:	WORKED EDGES, CURVED	

SITE NUMBER:	13086	
VESSEL NUMBER:	23	
SHERD DESCRIPTION/TYPE		# SHERDS
G/PINK BODY SHERD		1
ESPINOSO G-P		1
PINK (GLAZE) BODY SHERD		4
VESSEL FORM:	BOWL, HEMISPHERICAL	
TEMPER:	3270-51 HORNBLENDE LATITE ESPINASO	
RIM FORM:	EVERTED (GLAZE C)	
INTER. SURF. COLOR:	PINK	
EXTER. SURF. COLOR:	PINK	
SLIP :	SLIPPED INT & EXT	
PAINT TYPE:	GLAZE, BLACK	

SITE NUMBER:	13086	
VESSEL NUMBER:	25	
SHERD DESCRIPTION/TYPE		# SHERDS
AGUA FRIA G/R		2
VESSEL FORM:	BOWL, HEMISPHERICAL	
TEMPER:	3431-52 BASALT, SCORIACIOUS (COCHITI)	
RIM FORM:	VERTICAL DIRECT SQUARED	
INTER. SURF. COLOR:	RED (SILVER MICA)	
EXTER. SURF. COLOR:	RED (SILVER MICA)	
SLIP :	UNSLIPPED	
PAINT TYPE:	GLAZE, BLACK	

SITE NUMBER:	13086	
VESSEL NUMBER:	27	
SHERD DESCRIPTION/TYPE		# SHERDS
G/R BODY SHERD		1
VESSEL FORM:	BOWL, HEMISPHERICAL	
TEMPER:	3431-52 BASALT, SCORIACIOUS (COCHITI)	

(vessel 16, con't)

PAINT TYPE:	GLAZE BROWN
SOURCE AREAS:	PAJARITO PLATEAU (SOUTHERN)
WALL THICKNESS (MM):	5

SITE NUMBER:	13086	
VESSEL NUMBER:	18	
SHERD DESCRIPTION/TYPE		# SHERDS
CIENEGUILLA G/Y		7
VESSEL FORM:	BOWL, HEMISPHERICAL	
TEMPER:	3260-52 AUGITE LATITE (RED INCL)	
RIM FORM:	VERT. DIRECT ROUNDED	
INTER. SURF. COLOR:	LIGHT GRAY	
EXTER. SURF. COLOR:	LIGHT GRAY	
SLIP :	SLIPPED INT & EXT	
PAINT TYPE:	GLAZE BROWN	

SITE NUMBER:	13086	
VESSEL NUMBER:	20	
SHERD DESCRIPTION/TYPE		# SHERDS
CIENEGUILLA G-P		3
G/Y BODY SHERD		11
YELLOW (GLAZE) BODY SHERD		3
VESSEL FORM:	BOWL, HEMISPHERICAL	
TEMPER:	3260-52 AUGITE LATITE (RED INCL)	
RIM FORM:	VERT. DIRECT ROUNDED	
INTER. SURF. COLOR:	CREAM	
EXTER. SURF. COLOR:	CREAM	
SLIP :	SLIPPED INT & EXT	
PAINT TYPE:	GLAZE, BLACK	

SITE NUMBER:	13086	
VESSEL NUMBER:	22	
SHERD DESCRIPTION/TYPE		# SHERDS
G-P UNDIFF		5
ESPINOSO G-P		1
WHITE (GLAZE) BODY SHERD		2
VESSEL FORM:	BOWL, HEMISPHERICAL	
TEMPER:	3270-51 HORNBLENDE LATITE ESPINASO	
RIM FORM:	EVERTED (GLAZE C)	
INTER. SURF. COLOR:	WHITE	
EXTER. SURF. COLOR:	WHITE	
SLIP :	SLIPPED INT & EXT	
PAINT TYPE:	GLAZE BROWN	

SITE NUMBER:	13086	
VESSEL NUMBER:	24	
SHERD DESCRIPTION/TYPE		# SHERDS
AGUA FRIA G/R		1
VESSEL FORM:	BOWL, HEMISPHERICAL	
TEMPER:	3431-52 BASALT, SCORIACIOUS (COCHITI)	
RIM FORM:	VERTICAL DIRECT SQUARED	
INTER. SURF. COLOR:	RED (SILVER MICA)	
EXTER. SURF. COLOR:	RED (SILVER MICA)	
SLIP :	SLIPPED INT & EXT	
PAINT TYPE:	GLAZE, BLACK	
WALL THICKNESS (MM):	4	

SITE NUMBER:	13086	
VESSEL NUMBER:	26	
SHERD DESCRIPTION/TYPE		# SHERDS
AGUA FRIA G/R		3
VESSEL FORM:	BOWL, HEMISPHERICAL	
TEMPER:	3431-52 BASALT, SCORIACIOUS (COCHITI)	
RIM FORM:	VERTICAL DIRECT SQUARED	
INTER. SURF. COLOR:	RED	
EXTER. SURF. COLOR:	RED (SILVER MICA)	
SLIP :	SLIPPED EXTERIOR (JARS)	
PAINT TYPE:	GLAZE, BLACK	

SITE NUMBER:	13086	
VESSEL NUMBER:	28	
SHERD DESCRIPTION/TYPE		# SHERDS
SAN CLEMENTE G-P		1
VESSEL FORM:	BOWL, HEMISPHERICAL	
TEMPER:	3431-53 BASALT, SCORIACIOUS (COCHITI)	

(vessel 27, con't)
INTER. SURF. COLOR: RED
EXTER. SURF. COLOR: RED
SLIP : UNSLIPPED
PAINT TYPE: GLAZE, BLACK
WALL THICKNESS (MM): 4

SITE NUMBER: 13086
VESSEL NUMBER: 29

SHERD DESCRIPTION/TYPE # SHERDS
SAN CLEMENTE G-P 1
VESSEL FORM: BOWL, HEMISPHERICAL
TEMPER: 3431-52 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR: RED
EXTER. SURF. COLOR: CREAM
SLIP : SLIPPED INT & EXT
PAINT TYPE: GLAZE, BLACK
WALL THICKNESS (MM): 5

SITE NUMBER: 13086
VESSEL NUMBER: 31

SHERD DESCRIPTION/TYPE # SHERDS
CIENEGUILLA G/Y 2
VESSEL FORM: BOWL, HEMISPHERICAL
TEMPER: 3431-52 BASALT, SCORIACIOUS (COCHITI)
RIM FORM: VERTICAL DIRECT SQUARED
INTER. SURF. COLOR: WHITE
EXTER. SURF. COLOR: WHITE
SLIP : SLIPPED INT & EXT
PAINT TYPE: GLAZE BROWN

SITE NUMBER: 13086
VESSEL NUMBER: 33

SHERD DESCRIPTION/TYPE # SHERDS
CIENEGUILLA G-P 4
VESSEL FORM: BOWL, HEMISPHERICAL
TEMPER: 3431-52 BASALT, SCORIACIOUS (COCHITI)
RIM FORM: VERTICAL DIRECT SQUARED
INTER. SURF. COLOR: LIGHT GRAY
EXTER. SURF. COLOR: LIGHT GRAY
SLIP : SLIPPED INT & EXT
PAINT TYPE: GLAZE BROWN
WALL THICKNESS (MM): 5
VESSEL DIMEN. (CM): 24

SITE NUMBER: 13086
VESSEL NUMBER: 35

SHERD DESCRIPTION/TYPE # SHERDS
YELLOW (GLAZE) BODY SHERD 1
VESSEL FORM: BOWL, UNDIFF
TEMPER: 3431-52 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR: CREAM
EXTER. SURF. COLOR: CREAM
SLIP : SLIPPED INT & EXT
WALL THICKNESS (MM): 4
VESSEL DIMEN. (CM): 8

SITE NUMBER: 13086
VESSEL NUMBER: 37

SHERD DESCRIPTION/TYPE # SHERDS
CIENEGUILLA G-P 8
VESSEL FORM: BOWL, HEMISPHERICAL
TEMPER: 3431-53 BASALT, SCORIACIOUS (COCHITI)
RIM FORM: VERT. DIRECT ROUNDED
INTER. SURF. COLOR: CREAM
EXTER. SURF. COLOR: CREAM
SLIP : SLIPPED INT & EXT
PAINT TYPE: GLAZE, BLACK

SITE NUMBER: 13086
VESSEL NUMBER: 39

SHERD DESCRIPTION/TYPE # SHERDS
G-P UNDIFF 2
VESSEL FORM: BOWL, HEMISPHERICAL

(vessel 28, con't)
RIM FORM: VERTICAL DIRECT SQUARED
INTER. SURF. COLOR: WHITE
EXTER. SURF. COLOR: RED
SLIP : SLIPPED INT & EXT
PAINT TYPE: GLAZE BROWN
WALL THICKNESS (MM): 4

SITE NUMBER: 13086
VESSEL NUMBER: 30

SHERD DESCRIPTION/TYPE # SHERDS
G-P RED, YELLOW SURFACE 1
VESSEL FORM: BOWL, HEMISPHERICAL
TEMPER: 3431-52 BASALT, SCORIACIOUS (COCHITI)
RIM FORM: VERT. DIRECT ROUNDED
INTER. SURF. COLOR: UNDIFF.
EXTER. SURF. COLOR: TAN
SLIP : SLIPPED INT & EXT
PAINT TYPE: GLAZE BROWN
WALL THICKNESS (MM): 6

SITE NUMBER: 13086
VESSEL NUMBER: 32

SHERD DESCRIPTION/TYPE # SHERDS
ESPINOSO G-P 3
VESSEL FORM: BOWL, HEMISPHERICAL
TEMPER: 3431-52 BASALT, SCORIACIOUS (COCHITI)
RIM FORM: VERTICAL DIRECT BEVELED IN
INTER. SURF. COLOR: WHITE
EXTER. SURF. COLOR: DARK GRAY
SLIP : SLIPPED INT & EXT
PAINT TYPE: GLAZE BROWN

SITE NUMBER: 13086
VESSEL NUMBER: 34

SHERD DESCRIPTION/TYPE # SHERDS
CIENEGUILLA G-P 4
VESSEL FORM: BOWL, HEMISPHERICAL
TEMPER: 3431-54 BASALT, SCORIACIOUS (COCHITI)
RIM FORM: VERT. DIRECT ROUNDED
INTER. SURF. COLOR: WHITE
EXTER. SURF. COLOR: WHITE
SLIP : SLIPPED INT & EXT
PAINT TYPE: GLAZE BROWN
WALL THICKNESS (MM): 5
VESSEL DIMEN. (CM): 16

SITE NUMBER: 13086
VESSEL NUMBER: 36

SHERD DESCRIPTION/TYPE # SHERDS
CIENEGUILLA G/Y 1
VESSEL FORM: BOWL, HEMISPHERICAL
TEMPER: 3431-53 BASALT, SCORIACIOUS (COCHITI)
RIM FORM: VERTICAL DIRECT SQUARED
INTER. SURF. COLOR: CREAM
EXTER. SURF. COLOR: CREAM
SLIP : SLIPPED INT & EXT
PAINT TYPE: GLAZE, BLACK
WALL THICKNESS (MM): 5

SITE NUMBER: 13086
VESSEL NUMBER: 38

SHERD DESCRIPTION/TYPE # SHERDS
RED & WHITE (GLAZE) SHERD 1
VESSEL FORM: BOWL, HEMISPHERICAL
TEMPER: 3431-52 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR: WHITE+RED
EXTER. SURF. COLOR: CREAM
SLIP : SLIPPED INT & EXT
WALL THICKNESS (MM): 4

SITE NUMBER: 13086
VESSEL NUMBER: 40

SHERD DESCRIPTION/TYPE # SHERDS
RED & WHITE (GLAZE) SHERD 4
VESSEL FORM: BOWL, UNDIFF

(vessel 39, con't)

```
TEMPER:                     3431-52 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR:         TAN
EXTER. SURF. COLOR:         RED
SLIP :                      SLIPPED INT & EXT
PAINT TYPE:                 GLAZE BROWN
-----------------------------------------------------------------
SITE NUMBER:                13086
VESSEL NUMBER:                 41

SHERD DESCRIPTION/TYPE                 # SHERDS
 G-P UNDIFF                                4
 ESPINOSO G-P                              1
VESSEL FORM:                BOWL, HEMISPHERICAL
TEMPER:                     3431-52 BASALT, SCORIACIOUS (COCHITI)
RIM FORM:                   EVERTED (GLAZE C)
INTER. SURF. COLOR:         PINK
EXTER. SURF. COLOR:         TAN
SLIP :                      SLIPPED INT & EXT
PAINT TYPE:                 GLAZE, BLACK
-----------------------------------------------------------------
SITE NUMBER:                13086
VESSEL NUMBER:                 43

SHERD DESCRIPTION/TYPE                 # SHERDS
 ESPINOSO G-P                              5
VESSEL FORM:                BOWL, HEMISPHERICAL
TEMPER:                     3431-52 BASALT, SCORIACIOUS (COCHITI)
RIM FORM:                   VERTICAL DIRECT BEVELED IN
INTER. SURF. COLOR:         PINK
EXTER. SURF. COLOR:         PINK
SLIP :                      SLIPPED INT & EXT
PAINT TYPE:                 GLAZE BROWN
-----------------------------------------------------------------
SITE NUMBER:                13086
VESSEL NUMBER:                 45

SHERD DESCRIPTION/TYPE                 # SHERDS
 RED & WHITE (GLAZE) SHERD                11
 G-P UNDIFF                                2
 SAN CLEMENTE G-P                          1
VESSEL FORM:                BOWL, UNDIFF
TEMPER:                     3431-52 BASALT, SCORIACIOUS (COCHITI)
RIM FORM:                   VERT. DIRECT ROUNDED
INTER. SURF. COLOR:         WHITE
EXTER. SURF. COLOR:         RED (SILVER MICA)
SLIP :                      SLIPPED INT & EXT
-----------------------------------------------------------------
SITE NUMBER:                13086
VESSEL NUMBER:                 47

SHERD DESCRIPTION/TYPE                 # SHERDS
 JEMEZ B/W                                33
VESSEL FORM:                BOWL, HEMISPHERICAL
TEMPER:                     3655-53 PUMICE, CRYSTAL (JEMEZ)
RIM FORM:                   VERT. DIRECT ROUNDED
INTER. SURF. COLOR:         WHITE
EXTER. SURF. COLOR:         WHITE
SLIP :                      SLIPPED INT & EXT
-----------------------------------------------------------------
SITE NUMBER:                13086
VESSEL NUMBER:                 49

SHERD DESCRIPTION/TYPE                 # SHERDS
 SANTA FE B/W                              3
VESSEL FORM:                BOWL, HEMISPHERICAL
TEMPER:                     2315-64 SANDSTONE, VERY FINE GR
RIM FORM:                   VERTICAL DIRECT TAPERED
INTER. SURF. COLOR:         TAN
EXTER. SURF. COLOR:         TAN
SURFACE FINISH:             UNPOL EXT, POL INT
SLIP :                      SLIPPED INSIDE
DESIGN ELEMENTS:            HATCHURES, UNDIFF
-----------------------------------------------------------------
SITE NUMBER:                13086
VESSEL NUMBER:                 51
```

(vessel 40, con't)

```
TEMPER:                     3430-54 BASALT, SCORIACEOUS
INTER. SURF. COLOR:         CREAM
EXTER. SURF. COLOR:         RED (SILVER MICA)
SLIP :                      SLIPPED INSIDE
-----------------------------------------------------------------
SITE NUMBER:                13086
VESSEL NUMBER:                 42

SHERD DESCRIPTION/TYPE                 # SHERDS
 G-P UNDIFF                                3
 ESPINOSO G-P                              1
VESSEL FORM:                BOWL, HEMISPHERICAL
TEMPER:                     3431-52 BASALT, SCORIACIOUS (COCHITI)
RIM FORM:                   EVERTED (GLAZE C)
INTER. SURF. COLOR:         WHITE
EXTER. SURF. COLOR:         RED (SILVER MICA)
SLIP :                      SLIPPED INT & EXT
PAINT TYPE:                 GLAZE, BLACK
-----------------------------------------------------------------
SITE NUMBER:                13086
VESSEL NUMBER:                 44

SHERD DESCRIPTION/TYPE                 # SHERDS
 PUARAY G-P (EARLY)                        1
VESSEL FORM:                BOWL, HEMISPHERICAL
TEMPER:                     3431-52 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR:         WHITE+RED
SLIP :                      SLIPPED INT & EXT
PAINT TYPE:                 GLAZE BROWN
UTILIZATION:                WORKED RECTANGLE
WALL THICKNESS (MM):        6
-----------------------------------------------------------------
SITE NUMBER:                13086
VESSEL NUMBER:                 46

SHERD DESCRIPTION/TYPE                 # SHERDS
 SANTA FE B/W                              8
VESSEL FORM:                BOWL, HEMISPHERICAL
TEMPER:                     3862-11 VITRIC TUFF, WHITE
RIM FORM:                   VERTICAL DIRECT TAPERED
INTER. SURF. COLOR:         WHITE
EXTER. SURF. COLOR:         LIGHT GRAY
SLIP :                      SLIPPED INSIDE
DESIGN ELEMENTS:            LINES PARALLEL < 2MM
-----------------------------------------------------------------
SITE NUMBER:                13086
VESSEL NUMBER:                 48

SHERD DESCRIPTION/TYPE                 # SHERDS
 UNDIFF. C/W                               5
 SANTA FE B/W                              2
VESSEL FORM:                BOWL, HEMISPHERICAL
TEMPER:                     3025-10 INTERMED. IGNEOUS
RIM FORM:                   VERT. DIRECT ROUNDED
                            VERTICAL DIRECT TAPERED
INTER. SURF. COLOR:         LIGHT GRAY
                            TAN
EXTER. SURF. COLOR:         LIGHT GRAY
                            TAN
SURFACE FINISH:             UNPOL EXT, POL INT
SLIP :                      SLIPPED INSIDE
DESIGN ELEMENTS:            PARALLEL LINES ENCIRCLING RIM
-----------------------------------------------------------------
SITE NUMBER:                13086
VESSEL NUMBER:                 50

SHERD DESCRIPTION/TYPE                 # SHERDS
 SANTA FE B/W                             10
VESSEL FORM:                BOWL, HEMISPHERICAL
TEMPER:                     2015-75 SANDSTONE, VERY FINE GR
RIM FORM:                   VERTICAL DIRECT TAPERED
INTER. SURF. COLOR:         TAN
EXTER. SURF. COLOR:         TAN
SURFACE FINISH:             UNPOL EXT, POL INT
SLIP :                      UNSLIPPED
DESIGN ELEMENTS:            BROAD LINES (4-10 MM-SOSI STYLE)
-----------------------------------------------------------------
SITE NUMBER:                13086
VESSEL NUMBER:                 52
```

```
    (vessel 51, con't)
SHERD DESCRIPTION/TYPE              # SHERDS
 SANTA FE B/W                           3
VESSEL FORM:           BOWL, UNDIFF
TEMPER:                3862-10 VITRIC TUFF, WHITE
INTER. SURF. COLOR:    LIGHT GRAY
EXTER. SURF. COLOR:    LIGHT GRAY
SURFACE FINISH:        UNPOL EXT, POL INT
SLIP :                 UNSLIPPED
-------------------------------------------------------------
SITE NUMBER:           13086
VESSEL NUMBER:            53

SHERD DESCRIPTION/TYPE              # SHERDS
 SANTA FE B/W                           1
VESSEL FORM:           BOWL, UNDIFF
TEMPER:                3863-51 VITRIC TUFF (BLACK SHARD)
INTER. SURF. COLOR:    LIGHT GRAY
EXTER. SURF. COLOR:    TAN
SURFACE FINISH:        UNPOL EXT, POL INT
SLIP :                 SLIPPED INSIDE
DESIGN ELEMENTS:       BROAD LINES (4-10 MM-SOSI STYLE)
WALL THICKNESS (MM):   6
-------------------------------------------------------------
SITE NUMBER:           13086
VESSEL NUMBER:            55

SHERD DESCRIPTION/TYPE              # SHERDS
 ABIQUIU B/W                            1
VESSEL FORM:           BOWL, UNDIFF
TEMPER:                3963-51 VITRIC TUFF (BLACK SHARD)
RIM FORM:              VERT, DIRECT ROUNDED
INTER. SURF. COLOR:    WHITE
EXTER. SURF. COLOR:    LIGHT GRAY
SURFACE FINISH:        UNPOL EXT, POL INT
SLIP :                 SLIPPED INSIDE
DESIGN ELEMENTS:       BROAD LINES (4-10 MM-SOSI STYLE)
WALL THICKNESS (MM):   6
-------------------------------------------------------------
SITE NUMBER:           13086
VESSEL NUMBER:            57

SHERD DESCRIPTION/TYPE              # SHERDS
 PLAIN POL, UNDIFF.                     2
VESSEL FORM:           BOWL, UNDIFF
TEMPER:                3710-53 ANDESITE VITROPHYRE
INTER. SURF. COLOR:    RED BROWN
EXTER. SURF. COLOR:    RED BROWN
SURFACE FINISH:        POLISHED BOTH SIDES
SLIP :                 UNDIFF.
WALL THICKNESS (MM):   7
-------------------------------------------------------------
SITE NUMBER:           13086
VESSEL NUMBER:            59

SHERD DESCRIPTION/TYPE              # SHERDS
 CORR, BLIND INDENTED                  40
VESSEL FORM:           JAR OR OLLA
TEMPER:                2475-54 VOLCANIC SAND
RIM FORM:              EVERTED, FLARED (JAR)
INTER. SURF. COLOR:    DARK GRAY
EXTER. SURF. COLOR:    DARK GRAY
SURFACE FINISH:        UNPOLISHED INTE AND EXT
-------------------------------------------------------------
SITE NUMBER:           13086
VESSEL NUMBER:            61

SHERD DESCRIPTION/TYPE              # SHERDS
 PRIETA SMEARED IND                    15
VESSEL FORM:           JAR OR OLLA
TEMPER:                2471-64 VOLCANIC SANDSTONE
                       2475-54 VOLCANIC SAND
RIM FORM:              EVERTED, FLARED (JAR)
INTER. SURF. COLOR:    DARK GRAY
                       LIGHT GRAY
EXTER. SURF. COLOR:    DARK GRAY
-------------------------------------------------------------
SITE NUMBER:           13086
VESSEL NUMBER:            63
```

```
    (vessel 52, con't)
SHERD DESCRIPTION/TYPE              # SHERDS
 SANTA FE B/W                           1
VESSEL FORM:           BOWL, UNDIFF
TEMPER:                3655-52 PUMICE, CRYSTAL (JEMEZ)
INTER. SURF. COLOR:    LIGHT GRAY
EXTER. SURF. COLOR:    LIGHT GRAY
SURFACE FINISH:        UNPOL EXT, POL INT
SLIP :                 SLIPPED INSIDE
DESIGN ELEMENTS:       CHECKERBOARDS
WALL THICKNESS (MM):   5
-------------------------------------------------------------
SITE NUMBER:           13086
VESSEL NUMBER:            54

SHERD DESCRIPTION/TYPE              # SHERDS
 BISCUITWARE, UNDIFF                    1
VESSEL FORM:           CLOSED FORM, UNDIFF
TEMPER:                3863-51 VITRIC TUFF (BLACK SHARD)
INTER. SURF. COLOR:    TAN
EXTER. SURF. COLOR:    LIGHT GRAY
SURFACE FINISH:        POLISHED BOTH SIDES
SLIP :                 UNDIFF.
WALL THICKNESS (MM):   8
-------------------------------------------------------------
SITE NUMBER:           13086
VESSEL NUMBER:            56

SHERD DESCRIPTION/TYPE              # SHERDS
 SANTA FE B/W                           2
VESSEL FORM:           BOWL, UNDIFF
TEMPER:                3862-10 VITRIC TUFF, WHITE
INTER. SURF. COLOR:    LIGHT GRAY
EXTER. SURF. COLOR:    LIGHT GRAY
SURFACE FINISH:        TYPE CODE NOT FOUND: 20
SLIP :                 UNDIFF.
DESIGN ELEMENTS:       LINES MEDIUM (2-4MM)
WALL THICKNESS (MM):   4
-------------------------------------------------------------
SITE NUMBER:           13086
VESSEL NUMBER:            58

SHERD DESCRIPTION/TYPE              # SHERDS
 CORR, BLIND INDENTED                  19
VESSEL FORM:           JAR OR OLLA
TEMPER:                3811-54 RHYOLITE TUFF
RIM FORM:              EVERTED, FLARED (JAR)
INTER. SURF. COLOR:    DARK GRAY
EXTER. SURF. COLOR:    DARK GRAY
SURFACE FINISH:        UNPOLISHED INTE AND EXT
SLIP :                 SLIPPED EXTERIOR (JARS)
UTILIZATION:           CLAY BODY CARBONIZED
-------------------------------------------------------------
SITE NUMBER:           13086
VESSEL NUMBER:            60

SHERD DESCRIPTION/TYPE              # SHERDS
 CORR, BLIND INDENTED, MICACEOUS        8
VESSEL FORM: *          JAR OR OLLA
TEMPER:                4560-11 SCHIST, QTZ MUSCOVITE
INTER. SURF. COLOR:    BLACK MICACEOUS
EXTER. SURF. COLOR:    BLACK MICACEOUS
SURFACE FINISH:        UNPOLISHED INTE AND EXT
-------------------------------------------------------------
SITE NUMBER:           13086
VESSEL NUMBER:            62

SHERD DESCRIPTION/TYPE              # SHERDS
 PRIETA SMEARED IND                    23
 PLAIN, UNPOL, UNDIFF                  18
VESSEL FORM:           JAR OR OLLA
TEMPER:                2475-54 VOLCANIC SAND
RIM FORM:              EVERTED, FLARED (JAR)
INTER. SURF. COLOR:    LIGHT GRAY
                       DARK GRAY
EXTER. SURF. COLOR:    LIGHT GRAY
                       BROWN
-------------------------------------------------------------
SITE NUMBER:           13086
VESSEL NUMBER:            64
```

```
(vessel 63, con't)
SHERD DESCRIPTION/TYPE                  # SHERDS
 PRIETA SMEARED IND                        10
VESSEL FORM:            JAR OR OLLA
TEMPER:                 2475-54 VOLCANIC SAND
INTER. SURF. COLOR:     DARK GRAY
EXTER. SURF. COLOR:     BROWN
UTILIZATION:            CLAY BODY CARBONIZED
------------------------------------------------------------
SITE NUMBER:            13086
VESSEL NUMBER:             65

SHERD DESCRIPTION/TYPE                  # SHERDS
 WASHBOARD CORR. UNDIFF                     4
VESSEL FORM:            JAR OR OLLA
TEMPER:                 2475-54 VOLCANIC SAND
INTER. SURF. COLOR:     TAN
EXTER. SURF. COLOR:     DARK GRAY
UTILIZATION:            CLAY BODY CARBONIZED
WALL THICKNESS (MM):    5
------------------------------------------------------------
SITE NUMBER:            13086
VESSEL NUMBER:             67

SHERD DESCRIPTION/TYPE                  # SHERDS
 CORR. BLIND INDENTED                      61
VESSEL FORM:            JAR OR OLLA
TEMPER:                 3811-54 RHYOLITE TUFF
RIM FORM:               EVERTED. FLARED.ROLLED RIM (JAR)
INTER. SURF. COLOR:     DARK GRAY
EXTER. SURF. COLOR:     BROWN
SURFACE FINISH:         UNPOL EXT. POL INT
------------------------------------------------------------
SITE NUMBER:            13086
VESSEL NUMBER:             69

SHERD DESCRIPTION/TYPE                  # SHERDS
 CORR. BLIND INDENTED                       6
VESSEL FORM:            JAR OR OLLA
TEMPER:                 3821-53 ANDESITE TUFF
RIM FORM:               DIRECT VERTICAL (JAR)
INTER. SURF. COLOR:     DARK GRAY
EXTER. SURF. COLOR:     DARK GRAY
SURFACE FINISH:         UNPOLISHED INTE AND EXT
------------------------------------------------------------
SITE NUMBER:            13086
VESSEL NUMBER:             71

SHERD DESCRIPTION/TYPE                  # SHERDS
 CORR. BLIND INDENTED                      13
VESSEL FORM:            JAR OR OLLA
TEMPER:                 3821-54 ANDESITE TUFF
RIM FORM:               EVERTED. FLARED.ROLLED RIM (JAR)
INTER. SURF. COLOR:     DARK GRAY
                        BROWN
EXTER. SURF. COLOR:     DARK GRAY
                        BROWN
SURFACE FINISH:         UNPOLISHED INTE AND EXT
UTILIZATION:            SURFACE SOOTED
------------------------------------------------------------
SITE NUMBER:            13086
VESSEL NUMBER:             73

SHERD DESCRIPTION/TYPE                  # SHERDS
 CORR. BLIND INDENTED                      35
VESSEL FORM:            JAR OR OLLA
TEMPER:                 3821-54 ANDESITE TUFF
RIM FORM:               EVERTED. FLARED (JAR)
INTER. SURF. COLOR:     DARK GRAY
                        BROWN
EXTER. SURF. COLOR:     BROWN
SURFACE FINISH:         UNPOLISHED INTE AND EXT
------------------------------------------------------------
SITE NUMBER:            13086
VESSEL NUMBER:             75
```

```
(vessel 64, con't)
SHERD DESCRIPTION/TYPE                  # SHERDS
 CORR. CLAPBOARD (5 MM+)                   [illegible]
VESSEL FORM:            JAR OR OLLA
TEMPER:                 2475-54 VOLCANIC SAND
RIM FORM:               EVERTED. FLARED (JAR)
INTER. SURF. COLOR:     BROWN
EXTER. SURF. COLOR:     BROWN
------------------------------------------------------------
SITE NUMBER:            13086
VESSEL NUMBER:             66

SHERD DESCRIPTION/TYPE                  # SHERDS
 PLAIN. UNPOL. UNDIFF                       3
VESSEL FORM:            JAR OR OLLA
TEMPER:                 3635-54 PUMICE. CRYSTAL (JEMEZ)
                        3811-54 RHYOLITE TUFF
RIM FORM:               EVERTED (GLAZE C)
INTER. SURF. COLOR:     TAN
EXTER. SURF. COLOR:     TAN
WALL THICKNESS (MM):    5
------------------------------------------------------------
SITE NUMBER:            13086
VESSEL NUMBER:             68

SHERD DESCRIPTION/TYPE                  # SHERDS
 CORR. BLIND INDENTED                      46
VESSEL FORM:            JAR OR OLLA
TEMPER:                 3821-53 ANDESITE TUFF
RIM FORM:               EVERTED. FLARED (JAR)
INTER. SURF. COLOR:     DARK GRAY
                        BROWN
EXTER. SURF. COLOR:     BROWN
SURFACE FINISH:         UNPOL EXT. POL INT
------------------------------------------------------------
SITE NUMBER:            13086
VESSEL NUMBER:             70

SHERD DESCRIPTION/TYPE                  # SHERDS
 CORR. BLIND INDENTED                      [illegible]
VESSEL FORM:            JAR OR OLLA
TEMPER:                 3821-53 ANDESITE TUFF
RIM FORM:               EVERTED. FLARED.ROLLED RIM (JAR)
INTER. SURF. COLOR:     DARK GRAY
                        BROWN
EXTER. SURF. COLOR:     DARK GRAY
                        BROWN
SURFACE FINISH:         UNPOLISHED INTE AND EXT
UTILIZATION:            SURFACE SOOTED
WALL THICKNESS (MM):    5
------------------------------------------------------------
SITE NUMBER:            13086
VESSEL NUMBER:             72

SHERD DESCRIPTION/TYPE                  # SHERDS
 CORR. BLIND INDENTED                       6
VESSEL FORM:            JAR OR OLLA
TEMPER:                 3821-54 ANDESITE TUFF
RIM FORM:               VERTICAL DIREC. TAPERED
INTER. SURF. COLOR:     BROWN
                        DARK GRAY
EXTER. SURF. COLOR:     BROWN
                        DARK GRAY
SURFACE FINISH:         UNPOLISHED INTE AND EXT
WALL THICKNESS (MM):    5
------------------------------------------------------------
SITE NUMBER:            13086
VESSEL NUMBER:             74

SHERD DESCRIPTION/TYPE                  # SHERDS
 CORR. BLIND INDENTED                       9
VESSEL FORM:            JAR OR OLLA
TEMPER:                 3433-64 BASALT. SCORIACEOUS
INTER. SURF. COLOR:     DARK GRAY
                        BROWN
EXTER. SURF. COLOR:     BROWN
SURFACE FINISH:         UNPOLISHED INTE AND EXT
------------------------------------------------------------
SITE NUMBER:            13086
VESSEL NUMBER:             76
```

```
(vessel 75, con't)
SHERD DESCRIPTION/TYPE                  # SHERDS
 CORR. BLIND INDENTED                        8
VESSEL FORM:          JAR OR OLLA
TEMPER:               3811-10 RHYOLITE TUFF
RIM FORM:             DIRECT VERTICAL (JAR)
INTER. SURF. COLOR:   DARK GRAY
EXTER. SURF. COLOR:   DARK GRAY
SURFACE FINISH:       UNPOLISHED INTE AND EXT
--------------------------------------------------------
SITE NUMBER:          13086
VESSEL NUMBER:           77

SHERD DESCRIPTION/TYPE                  # SHERDS
 CORR. BLIND INDENTED                        4
VESSEL FORM:          JAR OR OLLA
TEMPER:               3811-54 RHYOLITE TUFF
INTER. SURF. COLOR:   RED BROWN
EXTER. SURF. COLOR:   RED BROWN
SURFACE FINISH:       UNPOLISHED INTE AND EXT
--------------------------------------------------------
SITE NUMBER:          13086
VESSEL NUMBER:           79

SHERD DESCRIPTION/TYPE                  # SHERDS
 CORR. BLIND INDENTED                        4
VESSEL FORM:          JAR OR OLLA
TEMPER:               4560-63 SCHIST. QTZ MUSCOVITE
INTER. SURF. COLOR:   BROWN
EXTER. SURF. COLOR:   BROWN
SURFACE FINISH:       UNPOLISHED INTE AND EXT
--------------------------------------------------------
SITE NUMBER:          13086
VESSEL NUMBER:           81

SHERD DESCRIPTION/TYPE                  # SHERDS
 CORR SMEARED. INDENTED. MICACEOUS           8
VESSEL FORM:          JAR OR OLLA
TEMPER:               3110-10 APLITE. UNDIFF
RIM FORM:             DIRECT VERTICAL (JAR)
INTER. SURF. COLOR:   BLACK MICACEOUS
EXTER. SURF. COLOR:   BLACK MICACEOUS
SURFACE FINISH:       UNPOLISHED INTE AND EXT
UTILIZATION:          SURFACE SOOTED
--------------------------------------------------------
SITE NUMBER:          13086
VESSEL NUMBER:           94

SHERD DESCRIPTION/TYPE                  # SHERDS
 G/W BODY SHERD                             28
 G-P UNDIFF                                  8
VESSEL FORM:          BOWL. UNDIFF
TEMPER:               3431-52 BASALT. SCORIACIOUS (COCHITI)
INTER. SURF. COLOR:   WHITE
EXTER. SURF. COLOR:   RED
SLIP :                SLIPPED INT & EXT
PAINT TYPE:           GLAZE BROWN
WALL THICKNESS (MM):  5
--------------------------------------------------------
SITE NUMBER:          13086
VESSEL NUMBER:           96

SHERD DESCRIPTION/TYPE                  # SHERDS
 WHITE (GLAZE) BODY SHERD                    3
 G/R & WHITE BODY SHERD                      1
 G/W BODY SHERD                             13
VESSEL FORM:          BOWL. HEMISPHERICAL
TEMPER:               3431-52 BASALT. SCORIACIOUS (COCHITI)
INTER. SURF. COLOR:   WHITE
EXTER. SURF. COLOR:   WHITE
SLIP :                SLIPPED INT & EXT
--------------------------------------------------------
SITE NUMBER:          13086
VESSEL NUMBER:           98

SHERD DESCRIPTION/TYPE                  # SHERDS
 RED (GLAZE) BODY SHERD                      5
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(vessel 76, con't)
SHERD DESCRIPTION/TYPE                  # SHERDS
 CORR. BLIND INDENTED                        1
VESSEL FORM:          JAR OR OLLA
TEMPER:               3821-53 ANDESITE TUFF
INTER. SURF. COLOR:   BROWN
EXTER. SURF. COLOR:   BROWN
SURFACE FINISH:       UNPOLISHED INTE AND EXT
WALL THICKNESS (MM):  6
--------------------------------------------------------
SITE NUMBER:          13086
VESSEL NUMBER:           78

SHERD DESCRIPTION/TYPE                  # SHERDS
 CORR. BLIND INDENTED. MICACECUS            15
VESSEL FORM:          JAR OR OLLA
TEMPER:               4560-11 SCHIST. QTZ MUSCOVITE
INTER. SURF. COLOR:   BLACK MICACEOUS
EXTER. SURF. COLOR:   BLACK MICACEOUS
SURFACE FINISH:       UNPOLISHED INTE AND EXT
--------------------------------------------------------
SITE NUMBER:          13086
VESSEL NUMBER:           80

SHERD DESCRIPTION/TYPE                  # SHERDS
 CORR. BLIND INDENTED. MICACECUS             8
VESSEL FORM:          JAR OR OLLA
TEMPER:               4560-11 SCHIST. QTZ MUSCOVITE
RIM FORM:             DIRECT VERTICAL (JAR)
INTER. SURF. COLOR:   BLACK MICACEOUS
EXTER. SURF. COLOR:   BLACK MICACEOUS
SURFACE FINISH:       UNPOLISHED INTE AND EXT
--------------------------------------------------------
SITE NUMBER:          13086
VESSEL NUMBER:           82

SHERD DESCRIPTION/TYPE                  # SHERDS
 G/Y & RED MATTE                             6
VESSEL FORM:          BOWL. HEMISPHERICAL
TEMPER:               3431-53 BASALT. SCORIACIOUS (COCHITI)
INTER. SURF. COLOR:   CREAM
EXTER. SURF. COLOR:   CREAM
SLIP :                SLIPPED INT & EXT
PAINT TYPE:           GLAZE. BLACK
--------------------------------------------------------
SITE NUMBER:          13086
VESSEL NUMBER:           95

SHERD DESCRIPTION/TYPE                  # SHERDS
 YELLOW (GLAZE) BODY SHERD                   9
 G/Y BODY SHERD                              9
 G/Y & RED MATTE                             7
VESSEL FORM:          BOWL. HEMISPHERICAL
TEMPER:               3431-53 BASALT. SCORIACIOUS (COCHITI)
INTER. SURF. COLOR:   CREAM
EXTER. SURF. COLOR:   RED (SILVER MICA)
SLIP :                SLIPPED INT & EXT
--------------------------------------------------------
SITE NUMBER:          13086
VESSEL NUMBER:           97

SHERD DESCRIPTION/TYPE                  # SHERDS
 RED (GLAZE) BODY SHERD                      4
 JEMEZ B/W                                   3
 G/R BODY SHERD                              2
VESSEL FORM:          BOWL. HEMISPHERICAL
TEMPER:               3431-52 BASALT. SCORIACIOUS (COCHITI)
                      3699-53 PUMICE. CRYSTAL (JEMEZ)
RIM FORM:             VERT. DIRECT ROUNDED
INTER. SURF. COLOR:   RED
                      WHITE
EXTER. SURF. COLOR:   RED (SILVER MICA)
                      WHITE
SLIP :                UNDIFF.
                      SLIPPED INT & EXT
--------------------------------------------------------
SITE NUMBER:          13086
VESSEL NUMBER:           99

SHERD DESCRIPTION/TYPE                  # SHERDS
 UNDIFF. GLAZE                              30
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(vessel 98, con't)

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 G/R BODY SHERD                                7
VESSEL FORM:              BOWL, HEMISPHERICAL
TEMPER:                   3431-52 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR: RED (SILVER MICA)
EXTER. SURF. COLOR: RED (SILVER MICA)
SLIP :                    UNDIFF.
PAINT TYPE:               GLAZE, BLACK
----------------------------------------------------------------
SITE NUMBER:              13291
VESSEL NUMBER:                1

SHERD DESCRIPTION/TYPE              # SHERDS
 CARNUE PLAIN                             4
VESSEL FORM:              JAR OR OLLA
TEMPER:                   2085-54 SANDSTONE, COARSE GR, FLLD.
INTER. SURF. COLOR: DARK GRAY
EXTER. SURF. COLOR: TAN
SURFACE FINISH:           UNPOL EXT, POL INT
WALL THICKNESS (MM):  8
----------------------------------------------------------------
SITE NUMBER:              13291
VESSEL NUMBER:                3

SHERD DESCRIPTION/TYPE              # SHERDS
 CORR. BLIND INDENTED                     1
VESSEL FORM:              JAR OR OLLA
TEMPER:                   3430-09 BASALT, SCORIACEOUS
INTER. SURF. COLOR: DARK GRAY
EXTER. SURF. COLOR: BROWN
SURFACE FINISH:           UNPOLISHED INTE AND EXT
WALL THICKNESS (MM):  5
----------------------------------------------------------------
SITE NUMBER:              13291
VESSEL NUMBER:                5

SHERD DESCRIPTION/TYPE              # SHERDS
 POWHOGE POLYCHROME                      34
VESSEL FORM:              JAR OR OLLA
TEMPER:                   3655-52 PUMICE, CRYSTAL (JEMEZ)
RIM FORM:                 VERTICAL EVERTED (JAR)
INTER. SURF. COLOR: TAN
EXTER. SURF. COLOR: CREAM
SLIP :                    SLIPPED EXTERIOR (JARS)
DESIGN ELEMENTS:          SOLID FLOWER MOTIFS
UTILIZATION:              WORKED EDGES, CURVED
----------------------------------------------------------------
SITE NUMBER:              13291
VESSEL NUMBER:                7

SHERD DESCRIPTION/TYPE              # SHERDS
 CORR SMEARED, INDENTED                   1
VESSEL FORM:              CLOSED FORM, UNDIFF
TEMPER:                   2475-54 VOLCANIC SAND
WALL THICKNESS (MM):  4
----------------------------------------------------------------
SITE NUMBER:              13291
VESSEL NUMBER:                9

SHERD DESCRIPTION/TYPE              # SHERDS
 CHINA UNDIFF                             1
VESSEL FORM:              UNDIFF.
TEMPER:                   2040-09 SANDSTONE FINE GRAINED
INTER. SURF. COLOR: YELLOW
EXTER. SURF. COLOR: YELLOW
----------------------------------------------------------------
SITE NUMBER:              13291
VESSEL NUMBER:               11

SHERD DESCRIPTION/TYPE              # SHERDS
 PUNAME POLYCHROME HIST.                  7
VESSEL FORM:              JAR OR OLLA
TEMPER:                   3400-09 BASALT, FINELY CRYST.
```

(vessel 99, con't)

```
 G/R BODY SHERD                                1
VESSEL FORM:              CLOSED FORM, UNDIFF
TEMPER:                   3431-52 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR: RED
EXTER. SURF. COLOR: RED (SILVER MICA)
SLIP :                    SLIPPED EXTERIOR (JARS)
UTILIZATION:              WORKED EDGES, CURVED
----------------------------------------------------------------
SITE NUMBER:              13291
VESSEL NUMBER:                2

SHERD DESCRIPTION/TYPE              # SHERDS
 CARNUE PLAIN                             1
VESSEL FORM:              JAR OR OLLA
TEMPER:                   2475-54 VOLCANIC SAND
INTER. SURF. COLOR: BROWN
EXTER. SURF. COLOR: DARK GRAY
SURFACE FINISH:           UNPOL EXT, POL INT
WALL THICKNESS (MM):  6
----------------------------------------------------------------
SITE NUMBER:              13291
VESSEL NUMBER:                4

SHERD DESCRIPTION/TYPE              # SHERDS
 POWHOGE POLYCHROME                       3
VESSEL FORM:              BOWL, UNDIFF
TEMPER:                   3655-09 PUMICE, CRYSTAL (JEMEZ)
RIM FORM:                 VERTICAL DIRECT SQUARED
INTER. SURF. COLOR: PINK
EXTER. SURF. COLOR: TAN
SLIP :                    SLIPPED INSIDE
DESIGN ELEMENTS:          SOLID FLOWER MOTIFS
----------------------------------------------------------------
SITE NUMBER:              13291
VESSEL NUMBER:                6

SHERD DESCRIPTION/TYPE              # SHERDS
 REDWARE, POL, SLIPPED, UNDIFF            3
VESSEL FORM:              BOWL, UNDIFF
TEMPER:                   3430-09 BASALT, SCORIACEOUS
INTER. SURF. COLOR: LIGHT GRAY
                          RED
EXTER. SURF. COLOR: RED
SURFACE FINISH:           POLISHED BOTH SIDES
SLIP :                    SLIPPED INT & EXT
----------------------------------------------------------------
SITE NUMBER:              13291
VESSEL NUMBER:                8

SHERD DESCRIPTION/TYPE              # SHERDS
 REDWARE, POL, SLIPPED, UNDIFF            4
VESSEL FORM:              CLOSED FORM, UNDIFF
TEMPER:                   3400-09 BASALT, FINELY CRYST.
EXTER. SURF. COLOR: RED
SURFACE FINISH:           UNPOL. INT, POL EXT
SLIP :                    SLIPPED EXTERIOR (JARS)
UTILIZATION:              WORKED EDGES, CURVED
WALL THICKNESS (MM):  5
----------------------------------------------------------------
SITE NUMBER:              13291
VESSEL NUMBER:               10

SHERD DESCRIPTION/TYPE              # SHERDS
 PUNAME POLYCHROME HIST.                  3
VESSEL FORM:              JAR OR OLLA
TEMPER:                   2040-09 SANDSTONE FINE GRAINED
EXTER. SURF. COLOR: CREAM
SURFACE FINISH:           UNPOL. INT, POL EXT
SLIP :                    SLIPPED EXTERIOR (JARS)
PAINT TYPE:               RED+BLACK MINERAL
DESIGN ELEMENTS:          "OPEN SPACE" MOTIFS, UNDIFF.
UTILIZATION:              WORKED EDGES, UNDIFF
WALL THICKNESS (MM):  7
----------------------------------------------------------------
SITE NUMBER:              13291
VESSEL NUMBER:               12

SHERD DESCRIPTION/TYPE              # SHERDS
 POWHOGE POLYCHROME                      15
VESSEL FORM:              JAR OR OLLA
TEMPER:                   3266-09 HORNBLENDE LATITE, UNDIF.
```

(vessel 11, con't)
RIM FORM: DIRECT VERTICAL (JAR)
EXTER. SURF. COLOR: UNDIFF.
SURFACE FINISH: UNPOL. INT. POL EXT
SLIP : SLIPPED EXTERIOR (JARS)
PAINT TYPE: RED MATTE, FRAMED BY BLACK
DESIGN ELEMENTS: LINES MEDIUM (2-4MM)
WALL THICKNESS (MM): 5

(vessel 12, con't)
EXTER. SURF. COLOR: LIGHT GRAY
TAN
RED
CREAM
SURFACE FINISH: UNPOL. INT. POL EXT
SLIP : SLIPPED EXTERIOR (JARS)
PAINT TYPE: CARBON, BLACK
DESIGN ELEMENTS: SOLID ELEMENTS

SITE NUMBER: 13291
VESSEL NUMBER: 13

SHERD DESCRIPTION/TYPE # SHERDS
REDWARE, POL. SLIPPED, UNDIFF 2
VESSEL FORM: CLOSED FORM, UNDIFF
TEMPER: 3266-30 HORNBLENDE LATITE, UNDIF.
EXTER. SURF. COLOR: RED
SURFACE FINISH: UNPOL. INT. POL EXT
SLIP : SLIPPED EXTERIOR (JARS)
WALL THICKNESS (MM): 5

SITE NUMBER: 13291
VESSEL NUMBER: 14

SHERD DESCRIPTION/TYPE # SHERDS
PUNAME POLYCHROME HIST. 17
VESSEL FORM: BOWL, FLANGED
TEMPER: 3433-09 BASALT, FINELY CRYST.
INTER. SURF. COLOR: TAN
EXTER. SURF. COLOR: WHITE+RED
SURFACE FINISH: POLISHED BOTH SIDES
SLIP : SLIPPED EXTERIOR (JARS)
PAINT TYPE: RED+BLACK MINERAL
DESIGN ELEMENTS: "OPEN SPACE" MOTIFS, UNDIFF.

SITE NUMBER: 13291
VESSEL NUMBER: 15

SHERD DESCRIPTION/TYPE # SHERDS
ESPINOSO G-P 1
VESSEL FORM: BOWL, HEMISPHERICAL
TEMPER: 3431-53 BASALT, SCORIACIOUS (COCHITI)
RIM FORM: VERTICAL DIRECT BEVELLED IN
INTER. SURF. COLOR: CREAM
EXTER. SURF. COLOR: CREAM
SURFACE FINISH: POLISHED BOTH SIDES
SLIP : SLIPPED INT & EXT
PAINT TYPE: GLAZE, BLACK
WALL THICKNESS (MM): 5

SITE NUMBER: 13291
VESSEL NUMBER: 16

SHERD DESCRIPTION/TYPE # SHERDS
RED (GLAZE) BODY SHERD 4
VESSEL FORM: JAR OR OLLA
TEMPER: 3431-52 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR: TAN
EXTER. SURF. COLOR: RED (SILVER MICA)
SURFACE FINISH: UNPOL. INT. POL EXT
SLIP : SLIPPED EXTERIOR (JARS)

SITE NUMBER: 13291
VESSEL NUMBER: 17

SHERD DESCRIPTION/TYPE # SHERDS
AGUA FRIA G/R 3
VESSEL FORM: JAR OR OLLA
TEMPER: 3431-53 BASALT, SCORIACIOUS (COCHITI)
RIM FORM: DIRECT VERTICAL (JAR)
INTER. SURF. COLOR: RED
EXTER. SURF. COLOR: RED (SILVER MICA)
SURFACE FINISH: UNPOL. INT. POL EXT
SLIP : SLIPPED EXTERIOR (JARS)

SITE NUMBER: 13291
VESSEL NUMBER: 18

SHERD DESCRIPTION/TYPE # SHERDS
G-P RED, YELLOW SURFACE 3
VESSEL FORM: BOWL, HEMISPHERICAL
TEMPER: 3431-53 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR: CREAM
EXTER. SURF. COLOR: RED
SURFACE FINISH: POLISHED BOTH SIDES
SLIP : SLIPPED INT & EXT

SITE NUMBER: 13291
VESSEL NUMBER: 19

SHERD DESCRIPTION/TYPE # SHERDS
CARNUE PLAIN 2
VESSEL FORM: CLOSED FORM, UNDIFF
TEMPER: 3171-54 RED GRANITE
INTER. SURF. COLOR: BROWN
EXTER. SURF. COLOR: BROWN
SURFACE FINISH: UNPOLISHED INTE AND EXT

SITE NUMBER: 13291
VESSEL NUMBER: 20

SHERD DESCRIPTION/TYPE # SHERDS
KAPO BLACK 13
VESSEL FORM: CLOSED FORM, UNDIFF
TEMPER: 3655-53 PUMICE, CRYSTAL (JEMEZ)
INTER. SURF. COLOR: DARK GRAY
EXTER. SURF. COLOR: BLACK MICACEOUS
SURFACE FINISH: UNPOL. INT. POL EXT
SLIP : SLIPPED EXTERIOR (JARS)
WALL THICKNESS (MM): 7

SITE NUMBER: 13291
VESSEL NUMBER: 21

SHERD DESCRIPTION/TYPE # SHERDS
PLAIN POL. UNDIFF. 2
VESSEL FORM: BOWL, UNDIFF
TEMPER: 3655-53 PUMICE, CRYSTAL (JEMEZ)
INTER. SURF. COLOR: RED
EXTER. SURF. COLOR: WHITE
SURFACE FINISH: POLISHED BOTH SIDES
SLIP : SLIPPED EXTERIOR (JARS)
WALL THICKNESS (MM): 7

SITE NUMBER: 13291
VESSEL NUMBER: 22

SHERD DESCRIPTION/TYPE # SHERDS
CARNUE PLAIN 1
VESSEL FORM: JAR OR OLLA
TEMPER: 2471-54 VOLCANIC SANDSTONE
INTER. SURF. COLOR: DARK GRAY
EXTER. SURF. COLOR: DARK GRAY
SURFACE FINISH: UNPOL EXT, POL INT
WALL THICKNESS (MM): 8

SITE NUMBER: 13291
VESSEL NUMBER: 23

SHERD DESCRIPTION/TYPE # SHERDS
CARNUE PLAIN BRICKWARE 1

SITE NUMBER: 13291
VESSEL NUMBER: 24

SHERD DESCRIPTION/TYPE # SHERDS
CARNUE PLAIN BRICKWARE 1

(vessel 23, con't)

```
VESSEL FORM:             JAR OR OLLA
TEMPER:                  2053-09 SANDSTONE, MED GRAINED
INTER. SURF. COLOR:      BLACK
EXTER. SURF. COLOR:      BROWN
SURFACE FINISH:          POL. SMUDGED INT. UNPOL EXT
WALL THICKNESS (MM): 14
-----------------------------------------------------------
SITE NUMBER:             13291
VESSEL NUMBER:              25

SHERD DESCRIPTION/TYPE              # SHERDS
 POWHOGE POLYCHROME                      4
VESSEL FORM:             BOWL, HEMISPHERICAL
TEMPER:                  3655-52 PUMICE, CRYSTAL (JEMEZ)
RIM FORM:                VERT. DIRECT ROUNDED
INTER. SURF. COLOR:      TAN
EXTER. SURF. COLOR:      WHITE+RED
SURFACE FINISH:          POLISHED BOTH SIDES
SLIP :                   SLIPPED EXTERIOR (JARS)
PAINT TYPE:              CARBON, BLACK
DESIGN ELEMENTS:         SOLID ELEMENTS
-----------------------------------------------------------
SITE NUMBER:             13291
VESSEL NUMBER:              27

SHERD DESCRIPTION/TYPE              # SHERDS
 PLAIN BUFF (TAN BRN) POL UNDIFF        11
VESSEL FORM:             UNDIFF.
TEMPER:                  2042-59 SANDSTONE FINE GRAINED
INTER. SURF. COLOR:      TAN
EXTER. SURF. COLOR:      WHITE
SURFACE FINISH:          UNPOLISHED INTE AND EXT
SLIP :                   SLIPPED EXTERIOR (JARS)
-----------------------------------------------------------
SITE NUMBER:             13291
VESSEL NUMBER:              29

SHERD DESCRIPTION/TYPE              # SHERDS
 RED (GLAZE) BODY SHERD                  1
VESSEL FORM:             BOWL, UNDIFF
TEMPER:                  3431-52 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR:      RED
EXTER. SURF. COLOR:      TAN
SURFACE FINISH:          POLISHED BOTH SIDES
SLIP :                   UNDIFF.
WALL THICKNESS (MM):  6
-----------------------------------------------------------
SITE NUMBER:             13291
VESSEL NUMBER:              31

SHERD DESCRIPTION/TYPE              # SHERDS
 G/Y BODY SHERD                          1
VESSEL FORM:             CLOSED FORM, UNDIFF
TEMPER:                  3431-52 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR:      TAN
EXTER. SURF. COLOR:      WHITE
SURFACE FINISH:          POLISHED BOTH SIDES
SLIP :                   SLIPPED EXTERIOR (JARS)
WALL THICKNESS (MM):  4
-----------------------------------------------------------
SITE NUMBER:             13291
VESSEL NUMBER:              33

SHERD DESCRIPTION/TYPE              # SHERDS
 KAPO BLACK                              2
VESSEL FORM:             BOWL, HEMISPHERICAL
TEMPER:                  3655-53 PUMICE, CRYSTAL (JEMEZ)
RIM FORM:                VERT. DIRECT ROUNDED
INTER. SURF. COLOR:      BLACK
EXTER. SURF. COLOR:      BLACK
SURFACE FINISH:          TYPE CODE NOT FOUND: 21
SLIP :                   SLIPPED INT & EXT
WALL THICKNESS (MM):  7
-----------------------------------------------------------
SITE NUMBER:             13291
VESSEL NUMBER:              35

SHERD DESCRIPTION/TYPE              # SHERDS
```

(vessel 24, con't)

```
VESSEL FORM:             JAR OR OLLA
TEMPER:                  2053-09 SANDSTONE, MED GRAINED
INTER. SURF. COLOR:      DARK GRAY
EXTER. SURF. COLOR:      RED BROWN
SURFACE FINISH:          UNPOL EXT. POL INT
WALL THICKNESS (MM): 10
-----------------------------------------------------------
SITE NUMBER:             13291
VESSEL NUMBER:              26

SHERD DESCRIPTION/TYPE              # SHERDS
 POWHOGE POLYCHROME                      9
VESSEL FORM:             BOWL, HEMISPHERICAL
TEMPER:                  3655-52 PUMICE, CRYSTAL (JEMEZ)
RIM FORM:                VERTICAL DIRECT SQUARED
INTER. SURF. COLOR:      CREAM
EXTER. SURF. COLOR:      TAN
SURFACE FINISH:          POLISHED BOTH SIDES
SLIP :                   SLIPPED INSIDE
PAINT TYPE:              CARBON, BLACK
DESIGN ELEMENTS:         LINES MEDIUM (2-4MM)
SPECIAL FEATURES:        TICKED RIMS
-----------------------------------------------------------
SITE NUMBER:             13291
VESSEL NUMBER:              28

SHERD DESCRIPTION/TYPE              # SHERDS
 CIENEGUILLA G-P                         4
VESSEL FORM:             JAR OR OLLA
TEMPER:                  3260-53 AUGITE LATITE (RED INCL)
RIM FORM:                DIRECT VERTICAL (JAR)
INTER. SURF. COLOR:      CREAM
EXTER. SURF. COLOR:      CREAM
SURFACE FINISH:          POLISHED BOTH SIDES
SLIP :                   SLIPPED EXT & INT NECK
PAINT TYPE:              GLAZE, FRAMING RED MATTE
WALL THICKNESS (MM):  5
-----------------------------------------------------------
SITE NUMBER:             13291
VESSEL NUMBER:              30

SHERD DESCRIPTION/TYPE              # SHERDS
 WHITE (GLAZE) BODY SHERD                1
VESSEL FORM:             BOWL, UNDIFF
TEMPER:                  3431-52 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR:      DARK GRAY
EXTER. SURF. COLOR:      WHITE
SURFACE FINISH:          POLISHED BOTH SIDES
SLIP :                   SLIPPED INT & EXT
WALL THICKNESS (MM):  5
-----------------------------------------------------------
SITE NUMBER:             13291
VESSEL NUMBER:              32

SHERD DESCRIPTION/TYPE              # SHERDS
 CHINA UNDIFF                            1
VESSEL FORM:             UNDIFF.
TEMPER:                  0001-00 UNDIFF.
INTER. SURF. COLOR:      WHITE
EXTER. SURF. COLOR:      WHITE
-----------------------------------------------------------
SITE NUMBER:             13291
VESSEL NUMBER:              34

SHERD DESCRIPTION/TYPE              # SHERDS
 G/Y BODY SHERD                          1
VESSEL FORM:             BOWL, HEMISPHERICAL
TEMPER:                  3655-53 PUMICE, CRYSTAL (JEMEZ)
INTER. SURF. COLOR:      CREAM
EXTER. SURF. COLOR:      CREAM
SURFACE FINISH:          POLISHED BOTH SIDES
SLIP :                   SLIPPED INT & EXT
WALL THICKNESS (MM):  5
-----------------------------------------------------------
SITE NUMBER:             13291
VESSEL NUMBER:              36

SHERD DESCRIPTION/TYPE              # SHERDS
```

AD-A126 805 ARCHEOLOGICAL INVESTIGATIONS IN COCHITI RESERVOIR NEW MEXICO VOLUME 3 1976-1977 FIELD SEASONS(U) NEW MEXICO UUNIV ALBUQUERQUE DEPT OF ANTHROPOLOGY J V BIELLA 1979 4/5

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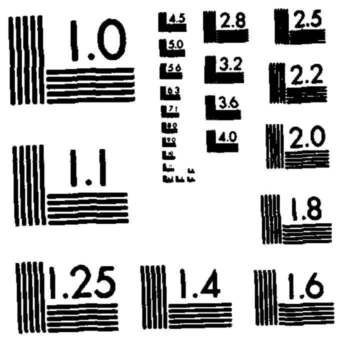

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

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(vessel 35, con't)

 G/Y BODY SHERD                                  1
VESSEL FORM:               JAR OR OLLA
TEMPER:                    3025-09 INTERMED. IGNEOUS
INTER. SURF. COLOR:        TAN
EXTER. SURF. COLOR:        CREAM
SURFACE FINISH:            POLISHED BOTH SIDES
SLIP :                     SLIPPED EXTERIOR (JARS)
WALL THICKNESS (MM):       5
--------------------------------------------------------
SITE NUMBER:               13291
VESSEL NUMBER:                37

SHERD DESCRIPTION/TYPE                 # SHERDS
 REDWARE. POL. SLIPPED. UNDIFF                   1
VESSEL FORM:               BOWL. UNDIFF
TEMPER:                    2471-53 VOLCANIC SANDSTONE
INTER. SURF. COLOR:        RED
EXTER. SURF. COLOR:        RED
SURFACE FINISH:            POLISHED BOTH SIDES
SLIP :                     SLIPPED INT & EXT
WALL THICKNESS (MM):       6
--------------------------------------------------------
SITE NUMBER:               13291
VESSEL NUMBER:                39

SHERD DESCRIPTION/TYPE                 # SHERDS
 CARNUE PLAIN                                   12
VESSEL FORM:               JAR OR OLLA
TEMPER:                    2471-53 VOLCANIC SANDSTONE
INTER. SURF. COLOR:        CREAM
EXTER. SURF. COLOR:        DARK GRAY
SURFACE FINISH:            POL. SMUDGED INT. UNPOL EXT
WALL THICKNESS (MM):       7
--------------------------------------------------------
SITE NUMBER:               13291
VESSEL NUMBER:                41

SHERD DESCRIPTION/TYPE                 # SHERDS
 CARNUE PLAIN                                    1
VESSEL FORM:               JAR OR OLLA
TEMPER:                    2475-53 VOLCANIC SAND
INTER. SURF. COLOR:        BROWN
EXTER. SURF. COLOR:        BROWN
SURFACE FINISH:            UNPOLISHED INTE AND EXT
WALL THICKNESS (MM):       5
--------------------------------------------------------
SITE NUMBER:               13291
VESSEL NUMBER:                43

SHERD DESCRIPTION/TYPE                 # SHERDS
 PLAIN BUFF (TAN BRN) POL UNDIFF                 1
VESSEL FORM:               CLOSED FORM. UNDIFF
TEMPER:                    3655-53 PUMICE. CRYSTAL (JEMEZ)
INTER. SURF. COLOR:        TAN
EXTER. SURF. COLOR:        TAN
SURFACE FINISH:            UNPOLISHED INTE AND EXT
SLIP :                     UNSLIPPED
WALL THICKNESS (MM):       6
--------------------------------------------------------
SITE NUMBER:               13292
VESSEL NUMBER:                 2

SHERD DESCRIPTION/TYPE                 # SHERDS
 RED (GLAZE) BODY SHERD                          3
 G/R BODY SHERD                                  1
 AGUA FRIA G/R                                   1
VESSEL FORM:               JAR OR OLLA
TEMPER:                    3431-11 BASALT. SCORIACIOUS (COCHITI)
RIM FORM:                  DIRECT VERTICAL (JAR)
INTER. SURF. COLOR:        RED (SILVER MICA)
EXTER. SURF. COLOR:        RED (SILVER MICA)
SLIP :                     SLIPPED EXTERIOR (JARS)
SOURCE AREAS:              WHITE ROCK CANYON
--------------------------------------------------------
SITE NUMBER:               13292
VESSEL NUMBER:                 4

SHERD DESCRIPTION/TYPE                 # SHERDS
 PINK (GLAZE) BODY SHERD                         1
VESSEL FORM:               JAR OR OLLA
TEMPER:                    3270-09 HORNBLENDE LATITE ESPINASO
EXTER. SURF. COLOR:        PINK
```

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(vessel 36, con't)

 RED (GLAZE) BODY SHERD                          1
VESSEL FORM:               BOWL. UNDIFF
TEMPER:                    3431-52 BASALT. SCORIACIOUS (COCHITI)
INTER. SURF. COLOR:        RED
EXTER. SURF. COLOR:        RED
SURFACE FINISH:            POLISHED BOTH SIDES
SLIP :                     SLIPPED INT & EXT
WALL THICKNESS (MM):       5
--------------------------------------------------------
SITE NUMBER:               13291
VESSEL NUMBER:                38

SHERD DESCRIPTION/TYPE                 # SHERDS
 CARNUE PLAIN                                    6
VESSEL FORM:               JAR OR OLLA
TEMPER:                    2471-54 VOLCANIC SANDSTONE
RIM FORM:                  RECURVED
INTER. SURF. COLOR:        DARK GRAY
EXTER. SURF. COLOR:        DARK GRAY
SURFACE FINISH:            UNPOL EXT. POL INT
--------------------------------------------------------
SITE NUMBER:               13291
VESSEL NUMBER:                40

SHERD DESCRIPTION/TYPE                 # SHERDS
 CARNUE PLAIN                                    6
VESSEL FORM:               JAR OR OLLA
TEMPER:                    2642-09 SANDSTONE FINE GRAINED
INTER. SURF. COLOR:        RED
EXTER. SURF. COLOR:        RED
SURFACE FINISH:            UNPOL EXT. POL INT
WALL THICKNESS (MM):       8
--------------------------------------------------------
SITE NUMBER:               13291
VESSEL NUMBER:                42

SHERD DESCRIPTION/TYPE                 # SHERDS
 CARNUE PLAIN                                    3
VESSEL FORM:               JAR OR OLLA
TEMPER:                    2471-54 VOLCANIC SANDSTONE
INTER. SURF. COLOR:        DARK GRAY
EXTER. SURF. COLOR:        BROWN
SURFACE FINISH:            UNPOL EXT. POL INT
--------------------------------------------------------
SITE NUMBER:               13292
VESSEL NUMBER:                 1

SHERD DESCRIPTION/TYPE                 # SHERDS
 SAN CLEMENTE G-P                                1
VESSEL FORM:               JAR OR OLLA
TEMPER:                    3431-11 BASALT. SCORIACIOUS (COCHITI)
RIM FORM:                  DIRECT VERTICAL (JAR)
INTER. SURF. COLOR:        RED (SILVER MICA)
EXTER. SURF. COLOR:        RED (SILVER MICA)
SLIP :                     SLIPPED EXT & INT NECK
SOURCE AREAS:              WHITE ROCK CANYON
--------------------------------------------------------
SITE NUMBER:               13292
VESSEL NUMBER:                 3

SHERD DESCRIPTION/TYPE                 # SHERDS
 ESPINOSO G-P                                    1
VESSEL FORM:               BOWL. HEMISPHERICAL
TEMPER:                    3431-09 BASALT. SCORIACIOUS (COCHITI)
RIM FORM:                  VERTICAL DIRECT BEVELED IN
INTER. SURF. COLOR:        CREAM
SLIP :                     SLIPPED INSIDE
SOURCE AREAS:              WHITE ROCK CANYON
--------------------------------------------------------
SITE NUMBER:               13293
VESSEL NUMBER:                 1

SHERD DESCRIPTION/TYPE                 # SHERDS
 LARGO G/Y                                       1
 RED & WHITE (GLAZE) SHERD                       1
 G/Y BODY SHERD                                  1
VESSEL FORM:               BOWL. HEMISPHERICAL
```

(vessel 4, con't)

```
SLIP :                    SLIPPED EXTERIOR (JARS)
SOURCE AREAS:             TONQUE BASIN
----------------------------------------------------------------------
SITE NUMBER:              13293
VESSEL NUMBER:            2

SHERD DESCRIPTION/TYPE              # SHERDS
 G/R BODY SHERD                         1
VESSEL FORM:              CLOSED FORM, UNDIFF
TEMPER:                   3431-10 BASALT, SCORIACIOUS (COCHITI)
EXTER. SURF. COLOR:       RED
SLIP :                    SLIPPED EXTERIOR (JARS)
UTILIZATION:              TYPE CODE NOT FOUND: 05
SOURCE AREAS:             WHITE ROCK CANYON
----------------------------------------------------------------------
SITE NUMBER:              13293
VESSEL NUMBER:            4

SHERD DESCRIPTION/TYPE              # SHERDS
 G/R & WHITE BODY SHERD                 5
VESSEL FORM:              BOWL, HEMISPHERICAL
TEMPER:                   3431-10 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR:       CREAM
EXTER. SURF. COLOR:       RED
SLIP :                    SLIPPED INT & EXT
SOURCE AREAS:             WHITE ROCK CANYON
----------------------------------------------------------------------
SITE NUMBER:              13293
VESSEL NUMBER:            6

SHERD DESCRIPTION/TYPE              # SHERDS
 RED (GLAZE) BODY SHERD                 1
VESSEL FORM:              BOWL, HEMISPHERICAL
TEMPER:                   3431-10 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR:       RED
EXTER. SURF. COLOR:       RED
SLIP :                    SLIPPED INT & EXT
SOURCE AREAS:             WHITE ROCK CANYON
----------------------------------------------------------------------
SITE NUMBER:              13329
VESSEL NUMBER:            1

SHERD DESCRIPTION/TYPE              # SHERDS
 G-P RED-PINK SURFACES                  9
 ESPINOSO G-P                           2
 RED & WHITE (GLAZE) SHERD              6
VESSEL FORM:              BOWL, UNDIFF
TEMPER:                   3272-52 HORNBLENDE LATITE ESPINASO
RIM FORM:                 EVERTED (GLAZE C)
INTER. SURF. COLOR:       WHITE
EXTER. SURF. COLOR:       PINK
SURFACE FINISH:           POLISHED BOTH SIDES
SLIP :                    SLIPPED INT & EXT
PAINT TYPE:               GLAZE, FRAMING RED MATTE
WALL THICKNESS (MM):      5
----------------------------------------------------------------------
SITE NUMBER:              13331
VESSEL NUMBER:            2

SHERD DESCRIPTION/TYPE              # SHERDS
 RED (GLAZE) BODY SHERD                 2
 G/R BODY SHERD                         3
VESSEL FORM:              BOWL, UNDIFF
TEMPER:                   3325-52 INTERMED. IGNEOUS
INTER. SURF. COLOR:       RED
EXTER. SURF. COLOR:       RED
SURFACE FINISH:           POLISHED BOTH SIDES
SLIP :                    UNSLIPPED
PAINT TYPE:               GLAZE, BLACK
----------------------------------------------------------------------
SITE NUMBER:              13332
VESSEL NUMBER:            1

SHERD DESCRIPTION/TYPE              # SHERDS
 G/R BODY SHERD                         2
 RED (GLAZE) BODY SHERD                 1
VESSEL FORM:              BOWL, UNDIFF
TEMPER:                   3325-03 INTERMED. IGNEOUS
```

(vessel 1--LA 13293, con't)

```
TEMPER:                   3431-09 BASALT, SCORIACIOUS (COCHITI)
RIM FORM:                 DIRECT EXPANDED
INTER. SURF. COLOR:       CREAM
EXTER. SURF. COLOR:       CREAM
SLIP :                    SLIPPED INT & EXT
SOURCE AREAS:             WHITE ROCK CANYON
----------------------------------------------------------------------
SITE NUMBER:              13293
VESSEL NUMBER:            3

SHERD DESCRIPTION/TYPE              # SHERDS
 RED (GLAZE) BODY SHERD                 1
VESSEL FORM:              CLOSED FORM, UNDIFF
TEMPER:                   3431-10 BASALT, SCORIACIOUS (COCHITI)
EXTER. SURF. COLOR:       RED
SLIP :                    TYPE CODE NOT FOUND: 42
SOURCE AREAS:             WHITE ROCK CANYON
----------------------------------------------------------------------
SITE NUMBER:              13293
VESSEL NUMBER:            5

SHERD DESCRIPTION/TYPE              # SHERDS
 G/R BODY SHERD                         1
 RED (GLAZE) BODY SHERD                 4
VESSEL FORM:              CLOSED FORM, UNDIFF
TEMPER:                   3431-10 BASALT, SCORIACIOUS (COCHITI)
EXTER. SURF. COLOR:       RED
SLIP :                    UNDIFF.
SOURCE AREAS:             WHITE ROCK CANYON
----------------------------------------------------------------------
SITE NUMBER:              13293
VESSEL NUMBER:            7

SHERD DESCRIPTION/TYPE              # SHERDS
 G/Y BODY SHERD                         1
VESSEL FORM:              CLOSED FORM, UNDIFF
TEMPER:                   3260-09 AUGITE LATITE (RED INCL)
EXTER. SURF. COLOR:       CREAM
SLIP :                    SLIPPED EXTERIOR (JARS)
SOURCE AREAS:             SAN MARCOS PUEBLO
----------------------------------------------------------------------
SITE NUMBER:              13331
VESSEL NUMBER:

SHERD DESCRIPTION/TYPE              # SHERDS
 RED (GLAZE) BODY SHERD                 4
VESSEL FORM:              CLOSED FORM, UNDIFF
TEMPER:                   3431-52 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR:       RED
EXTER. SURF. COLOR:       RED
SURFACE FINISH:           POLISHED BOTH SIDES
SLIP :                    UNSLIPPED
UTILIZATION:              WORKED EDGES, STRAIGHT
----------------------------------------------------------------------
SITE NUMBER:              13331
VESSEL NUMBER:            3

SHERD DESCRIPTION/TYPE              # SHERDS
 RED (GLAZE) BODY SHERD                 2
VESSEL FORM:              CLOSED FORM, UNDIFF
TEMPER:                   3431-53 BASALT, SCORIACIOUS (COCHITI)
INTER. SURF. COLOR:       RED
EXTER. SURF. COLOR:       RED (SILVER MICA)
SURFACE FINISH:           POLISHED BOTH SIDES
SLIP :                    SLIPPED EXTERIOR (JARS)
UTILIZATION:              WORKED EDGES, STRAIGHT
----------------------------------------------------------------------
```

(LA 13332, vessel #1, con't)

INTER. SURF. COLOR:	RED	SLIP :	SLIPPED EXTERIOR (JARS)
EXTER. SURF. COLOR:	RED	PAINT TYPE:	MINERAL RED
SURFACE FINISH:	POLISHED BOTH SIDES		
SLIP :	SLIPPED INT & EXT		
PAINT TYPE:	GLAZE, BLACK		
WALL THICKNESS (MM):	5		

SITE NUMBER: 5011
ASSEMBLAGE NUMBER: 1

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	28	5	2	0	1	0	0	0	0	1	0	0	0	37
BASALT	15	0	1	0	0	0	0	0	0	0	0	0	0	16
PEDERNAL CHERT/CHALC	12	0	0	0	0	0	0	0	0	0	0	0	0	12
CHERT	5	0	0	0	0	0	0	0	0	0	0	0	0	5
CHALCEDONY	1	0	0	0	0	0	0	0	0	0	0	0	0	1
SILICIFIED WOOD	1	0	0	0	0	0	0	0	0	0	0	0	0	1
QUARTZITE	2	0	0	0	0	0	0	0	0	0	0	0	0	2
GRAND TOTALS	64	5	3	0	1	0	0	0	0	1	0	0	0	74

SITE NUMBER: 5011
ASSEMBLAGE NUMBER: 2

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	19	6	2	0	0	0	0	0	0	0	0	0	0	27
BASALT	69	0	1	0	1	0	1	0	0	0	0	0	0	72
PEDERNAL CHERT/CHALC	23	0	4	0	1	0	0	1	0	0	0	0	0	29
CHERT	16	0	0	0	0	0	0	0	0	0	0	0	0	16
SILICIFIED WOOD	1	0	0	0	0	0	0	0	0	1	0	0	0	2
QUARTZITE	1	0	0	0	0	0	0	0	0	0	0	0	0	1
JASPEROID	1	0	0	0	0	0	0	0	0	0	0	0	0	1
METARHYOLITE	1	0	0	0	0	0	0	0	0	0	0	0	0	1
OTHER	1	1	0	0	0	0	0	0	0	0	0	0	0	2
GRAND TOTALS	131	7	7	0	2	0	2	1	0	1	0	0	0	151

SITE NUMBER: 10114
ASSEMBLAGE NUMBER: 1

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	2	0	0	0	0	0	0	0	0	0	0	0	0	2
PEDERNAL CHERT/CHALC	12	4	8	1	1	0	1	0	0	0	0	0	0	27
CHERT	3	0	1	0	0	0	0	0	0	0	0	0	0	4
CHALCEDONY	2	0	0	0	0	0	0	0	0	0	0	0	0	2
QUARTZITE	0	0	1	0	0	0	0	0	0	0	0	0	0	1
JASPEROID	0	0	1	0	0	0	0	0	0	0	0	0	0	1
GRAND TOTALS	19	4	11	1	1	0	1	0	0	0	0	0	0	37

SITE NUMBER: 10114
ASSEMBLAGE NUMBER: 2

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	6	3	0	0	0	0	0	0	0	1	0	0	0	10
BASALT	2	0	1	0	0	0	0	0	0	0	0	0	0	3
PEDERNAL CHERT/CHALC	48	2	32	0	0	0	0	2	0	0	0	0	0	84
CHERT	1	0	12	0	0	0	0	1	0	0	0	0	0	14
CHALCEDONY	2	1	0	0	0	0	0	0	0	0	0	0	0	3
SILICIFIED WOOD	10	1	2	0	0	1	0	0	0	0	0	0	0	14
QUARTZITE	2	1	4	0	0	0	0	1	0	0	0	0	0	8
JASPEROID	2	0	0	0	0	0	0	0	0	0	0	0	0	2
GRAND TOTALS	73	8	51	0	0	1	0	4	0	1	0	0	0	138

SITE NUMBER: 10114
ASSEMBLAGE NUMBER: 3

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	5	0	1	0	0	0	0	0	0	1	0	0	0	7
BASALT	2	0	1	0	0	0	0	0	0	0	0	0	0	3
PEDERNAL CHERT/CHALC	23	1	29	0	0	0	0	1	0	0	0	0	0	54
CHERT	3	0	2	0	0	0	0	0	0	0	0	0	0	5
SILICIFIED WOOD	1	0	1	0	0	0	0	0	0	0	0	0	0	2
QUARTZITE	2	0	1	0	0	0	0	0	1	0	0	0	0	4
JASPEROID	0	0	1	0	0	0	0	0	0	0	0	0	0	1
METARHYOLITE	0	0	0	0	0	0	0	0	0	1	0	0	0	1
GRAND TOTALS	36	1	36	0	0	0	0	1	1	2	0	0	0	77

SITE NUMBER: 10114

ASSEMBLAGE NUMBER: 4

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	4	0	0	0	0	0	0	0	0	0	0	2	0	6
PEDERNAL CHERT/CHALC	16	2	4	1	0	0	0	0	0	0	0	0	0	23
CHERT	3	0	1	0	0	0	0	0	0	0	0	0	0	4
CHALCEDONY	0	0	0	0	0	0	1	0	0	0	0	0	0	1
SILICIFIED WOOD	1	1	0	1	0	0	0	0	0	0	0	0	0	3
QUARTZITE	0	0	0	0	0	0	0	0	1	0	0	0	0	1
GRAND TOTALS	24	3	5	2	0	0	1	0	1	0	0	2	0	38

SITE NUMBER: 10114
ASSEMBLAGE NUMBER: 5

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	6	2	1	0	0	0	0	0	0	0	0	0	0	9
BASALT	15	1	2	0	0	0	0	1	1	1	0	0	0	21
PEDERNAL CHERT/CHALC	7	0	8	0	0	0	0	0	0	0	0	0	0	15
CHERT	3	0	2	0	0	0	0	0	0	0	0	0	0	5
QUARTZITE	1	0	4	0	0	0	1	0	2	0	0	0	0	8
GRAND TOTALS	32	3	17	0	0	0	1	1	3	1	0	0	0	58

SITE NUMBER: 10114
ASSEMBLAGE NUMBER: 6

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	9	4	0	0	0	0	0	0	0	0	0	0	0	13
BASALT	4	1	4	1	0	0	0	2	0	0	0	0	0	12
PEDERNAL CHERT/CHALC	2	0	4	0	0	0	0	0	0	0	0	0	0	6
GRAND TOTALS	15	5	8	1	0	0	0	2	0	0	0	0	0	31

SITE NUMBER: 10114
ASSEMBLAGE NUMBER: 7

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	4	3	1	0	1	1	0	0	0	0	0	0	0	10
BASALT	8	0	0	0	0	0	1	0	0	0	0	0	0	9
PEDERNAL CHERT/CHALC	10	0	1	0	0	0	0	1	0	0	0	0	0	12
QUARTZITE	0	0	0	0	0	0	0	2	0	0	0	0	0	2
GRAND TOTALS	22	3	2	0	1	1	1	3	0	0	0	0	0	33

SITE NUMBER: 10114
ASSEMBLAGE NUMBER: 8

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	0	0	0	0	0	0	1	0	0	0	1	0	0	2
GRAND TOTALS	0	0	0	0	0	0	1	0	0	0	1	0	0	2

SITE NUMBER: 13049
ASSEMBLAGE NUMBER: 1

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	5	7	1	1	1	0	0	0	0	0	0	0	0	15
BASALT	17	0	2	0	0	0	0	0	0	0	0	1	4	24
PEDERNAL CHERT/CHALC	20	3	10	0	0	0	1	0	0	0	0	0	0	34
CHERT	0	0	1	0	0	0	0	0	0	0	0	0	0	1
QUARTZITE	1	0	0	0	0	0	0	0	0	0	0	0	0	1
OTHER	0	0	0	0	0	0	0	1	0	0	0	0	0	1
GRAND TOTALS	43	10	14	1	1	0	1	1	0	0	0	1	4	76

SITE NUMBER: 13049
ASSEMBLAGE NUMBER: 2

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	35	17	13	1	1	0	0	0	0	0	0	0	0	67
BASALT	104	8	33	0	1	0	1	1	0	2	0	0	0	150
PEDERNAL CHERT/CHALC	109	7	43	2	0	0	2	0	0	0	0	0	0	163
CHERT	26	1	16	0	0	0	0	1	0	0	0	0	0	44
QUARTZITE	8	0	4	0	0	0	0	1	1	0	0	0	0	14
GRANITE/ANDESITE	2	0	0	0	0	0	0	0	1	0	0	0	0	3

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
METARHYOLITE	2	1	0	0	0	0	0	0	0	0	0	0	0	3
GRAND TOTALS	286	34	109	3	2	0	3	3	2	2	0	0	0	444

SITE NUMBER: 13049
ASSEMBLAGE NUMBER: 3

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	12	5	2	0	0	0	1	0	0	1	0	0	0	21
BASALT	36	2	8	0	1	0	0	0	0	0	1	0	0	48
PEDERNAL CHERT/CHALC	35	6	21	0	0	0	0	0	0	0	0	0	0	62
CHERT	6	0	5	0	0	0	0	0	0	0	0	0	0	11
QUARTZITE	2	0	0	0	0	0	0	0	1	0	0	0	0	3
METARHYOLITE	2	0	0	0	0	0	0	0	0	0	0	0	0	2
OTHER	0	0	2	0	0	0	0	0	0	0	0	0	0	2
GRAND TOTALS	93	13	38	0	1	0	1	0	1	1	1	0	0	149

SITE NUMBER: 13049
ASSEMBLAGE NUMBER: 4

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	6	8	4	2	0	1	0	0	0	2	0	0	0	23
BASALT	41	7	12	0	0	1	2	0	0	0	0	0	0	63
PEDERNAL CHERT/CHALC	39	2	12	0	0	0	3	0	0	0	0	0	0	55
CHERT	6	1	9	0	0	0	0	0	0	0	0	0	0	16
QUARTZITE	2	0	0	0	0	0	0	0	0	0	0	0	0	2
GRANITE/ANDESITE	0	1	0	0	0	0	0	0	0	0	0	0	0	1
METARHYOLITE	1	0	0	0	0	0	0	0	0	0	0	0	0	1
OTHER	1	0	0	0	0	0	0	0	0	0	0	0	0	1
GRAND TOTALS	95	19	37	2	0	2	5	0	0	2	0	0	0	162

SITE NUMBER: 13049
ASSEMBLAGE NUMBER: 5

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	17	7	2	2	1	1	0	0	0	0	0	0	0	30
BASALT	42	7	15	2	0	0	2	4	0	0	0	2	0	74
PEDERNAL CHERT/CHALC	45	9	22	2	0	0	1	5	0	0	0	0	0	84
CHERT	10	3	8	0	0	0	1	0	0	0	0	0	0	22
CHALCEDONY	1	0	0	0	0	0	0	0	0	0	0	0	0	1
QUARTZITE	1	0	3	1	0	0	1	2	4	0	0	0	0	12
OTHER	0	0	0	0	0	0	0	0	0	0	2	0	0	2
GRAND TOTALS	176	26	50	7	1	1	5	11	4	0	2	2	0	225

SITE NUMBER: 13050
ASSEMBLAGE NUMBER: 1

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	7	1	1	0	0	0	0	0	0	0	0	0	0	9
BASALT	13	1	1	0	0	0	1	0	0	0	0	0	0	16
PEDERNAL CHERT/CHALC	1	0	5	0	0	0	0	1	0	0	0	0	0	17
QUARTZITE	10	0	0	0	0	0	0	1	0	0	0	0	0	1
SANDSTONE	10	0	0	0	0	0	0	0	1	0	0	0	0	1
GRAND TOTALS	31	2	7	0	0	0	1	2	1	0	0	0	0	44

SITE NUMBER: 13050
ASSEMBLAGE NUMBER: 2

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	3	0	0	0	0	0	0	0	0	0	0	0	0	3
PEDERNAL CHERT/CHALC	5	0	0	0	0	0	1	0	0	0	0	0	0	6
QUARTZITE	2	0	0	0	0	0	0	0	0	0	0	0	0	2
GRAND TOTALS	10	0	0	0	0	0	1	0	0	0	0	0	0	11

SITE NUMBER: 13050
ASSEMBLAGE NUMBER: 3

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	4	2	0	0	0	0	0	0	0	0	0	0	0	6
BASALT	14	1	2	0	0	0	0	0	0	0	0	1	0	18
PEDERNAL CHERT/CHALC	20	0	3	1	0	0	0	0	0	0	0	0	0	24

APPENDIX II — LITHIC ARTIFACT ASSEMBLAGE SUMMARY

QUARTZITE	5	0	5	0	0	0	0	0	0	0	0	0	0	10
GRAND TOTALS	43	3	10	1	0	0	0	0	0	0	0	1	0	58

SITE NUMBER: 13050
ASSEMBLAGE NUMBER: 4

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	2	0	0	0	0	0	0	0	0	0	0	0	0	2
GRAND TOTALS	2	0	0	0	0	0	0	0	0	0	0	0	0	2

SITE NUMBER: 13050
ASSEMBLAGE NUMBER: 5

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	4	1	2	0	0	0	1	0	0	0	0	0	0	8
BASALT	10	1	4	0	0	0	0	1	0	0	0	0	0	16
PEDERNAL CHERT/CHALC	8	0	7	0	0	0	0	0	0	0	0	0	0	15
CHERT	2	0	3	0	0	0	0	0	0	0	0	0	0	5
SILICIFIED WOOD	1	0	0	0	0	0	0	0	0	0	0	0	0	1
QUARTZITE	1	0	0	0	0	0	0	0	1	0	0	0	0	2
GRAND TOTALS	26	2	16	0	0	0	1	1	1	0	0	0	0	47

SITE NUMBER: 13050
ASSEMBLAGE NUMBER: 6

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	10	1	0	1	0	0	0	0	0	0	0	0	0	12
BASALT	40	1	13	0	0	0	0	2	0	0	0	2	1	59
PEDERNAL CHERT/CHALC	27	1	28	0	0	0	0	1	0	0	0	0	0	57
CHERT	1	0	4	0	0	0	0	0	0	0	0	0	0	5
QUARTZITE	0	0	3	0	0	0	0	3	0	0	0	0	0	6
GRAND TOTALS	78	3	48	1	0	0	0	6	0	0	0	2	1	139

SITE NUMBER: 13050
ASSEMBLAGE NUMBER: 7

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	18	2	1	0	0	0	0	0	0	0	0	0	0	21
BASALT	28	0	5	0	0	0	0	0	0	0	0	0	0	33
PEDERNAL CHERT/CHALC	5	0	5	0	0	0	0	0	0	0	0	0	0	10
CHERT	0	0	1	0	0	0	0	0	0	0	0	0	0	1
SLATE,SHALE,GREENST.	1	0	0	0	0	0	0	0	0	0	0	0	0	1
GRAND TOTALS	52	2	12	0	0	0	0	0	0	0	0	0	0	66

SITE NUMBER: 13050
ASSEMBLAGE NUMBER: 8

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	6	1	0	0	0	0	0	1	0	0	0	0	0	8
BASALT	14	0	2	0	0	0	0	0	0	0	0	0	0	16
PEDERNAL CHERT/CHALC	4	0	1	0	0	0	0	0	0	0	0	0	0	5
CHERT	0	0	1	0	0	0	0	0	0	0	0	0	0	1
QUARTZITE	3	0	0	0	0	0	0	0	0	0	0	0	0	3
GRAND TOTALS	27	1	4	0	0	0	0	1	0	0	0	0	0	33

SITE NUMBER: 13050
ASSEMBLAGE NUMBER: 9

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	8	2	0	0	0	0	0	0	0	0	0	0	0	10
BASALT	37	0	8	0	0	0	0	1	0	0	0	0	0	46
PEDERNAL CHERT/CHALC	12	0	3	0	0	0	0	2	0	0	0	0	0	17
CHERT	4	0	2	0	0	0	0	0	0	0	0	0	0	6
QUARTZITE	0	0	2	0	0	0	0	0	0	0	0	0	0	2
GRAND TOTALS	61	2	15	0	0	0	0	3	0	0	0	0	0	81

SITE NUMBER: 13050
ASSEMBLAGE NUMBER: 10

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	9	0	0	0	0	0	0	0	0	0	0	0	0	9
BASALT	7	1	0	0	0	0	0	0	0	0	0	0	0	8
PEDERNAL CHERT/CHALC	2	0	0	0	0	0	0	0	0	0	0	0	0	2
GRAND TOTALS	18	1	0	0	0	0	0	0	0	0	0	0	0	19

SITE NUMBER: 13050
ASSEMBLAGE NUMBER: 11

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	7	2	1	0	0	0	0	0	0	0	0	0	0	10
BASALT	5	0	0	0	0	0	0	0	0	0	0	0	0	5
PEDERNAL CHERT/CHALC	9	0	6	0	0	0	0	0	0	0	0	0	0	15
QUARTZITE	1	0	0	0	0	0	0	0	0	0	0	0	0	1
GRANITE/ANDESITE	1	0	0	0	0	0	0	0	0	0	0	0	0	1
GRAND TOTALS	23	2	7	0	0	0	0	0	0	0	0	0	0	32

SITE NUMBER: 13054
ASSEMBLAGE NUMBER: 1

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	27	12	3	0	0	0	0	0	0	2	0	0	0	44
BASALT	26	3	2	0	0	0	1	1	3	0	1	0	0	37
PEDERNAL CHERT/CHALC	72	4	17	1	0	0	0	1	0	1	0	0	0	96
CHERT	5	1	0	0	0	0	0	0	0	0	0	0	0	6
QUARTZITE	4	0	2	0	0	0	0	0	0	0	0	0	0	6
GRAND TOTALS	134	20	24	1	0	0	1	2	3	3	1	0	0	189

SITE NUMBER: 13054
ASSEMBLAGE NUMBER: 2

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	10	0	5	1	0	0	0	0	0	2	0	0	0	18
BASALT	19	1	1	0	0	0	0	0	0	0	2	0	0	23
PEDERNAL CHERT/CHALC	24	4	18	0	0	0	0	2	0	0	0	0	0	48
CHERT	2	0	2	0	0	0	0	0	0	0	0	0	0	4
QUARTZITE	2	0	4	0	0	0	0	3	0	0	0	0	0	9
GRANITE/ANDESITE	1	0	0	0	0	0	0	0	0	0	0	0	0	1
SLATE,SHALE,GREENST	1	0	0	0	0	0	0	0	0	0	0	0	0	1
GRAND TOTALS	59	5	30	1	0	0	0	5	0	2	2	0	0	104

SITE NUMBER: 13054
ASSEMBLAGE NUMBER: 3

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	3	2	0	0	0	0	0	0	0	0	0	0	0	5
BASALT	10	0	5	0	0	0	2	1	0	0	0	0	0	18
PEDERNAL CHERT/CHALC	16	0	9	0	0	0	1	0	0	0	0	0	0	26
CHERT	5	0	0	0	0	0	0	0	0	0	0	0	0	5
QUARTZITE	3	0	1	0	0	0	1	3	0	0	0	0	0	8
JASPEROID	2	0	1	0	0	0	0	0	0	0	0	0	0	3
METARHYOLITE	1	0	0	0	0	0	0	0	0	0	0	0	0	1
GRAND TOTALS	40	2	16	0	0	0	4	4	0	0	0	0	0	66

SITE NUMBER: 13054
ASSEMBLAGE NUMBER: 4

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	1	5	0	0	0	0	0	0	0	0	0	0	0	6
BASALT	13	1	6	0	0	0	0	7	0	0	0	0	2	29
PEDERNAL CHERT/CHALC	202	16	111	0	1	0	0	18	0	0	0	0	0	348
CHERT	10	2	3	0	0	0	0	1	0	0	0	0	0	16
CHALCEDONY	2	0	0	0	0	0	0	0	0	0	0	0	0	2
QUARTZITE	42	0	22	0	0	0	1	10	0	0	0	0	0	75
GRANITE/ANDESITE	3	0	1	0	0	0	0	1	0	0	0	0	0	5
JASPEROID	1	0	1	0	0	0	0	0	0	0	0	0	0	2
METARHYOLITE	0	0	0	0	0	0	0	1	0	0	0	0	0	1
OTHER	1	0	1	0	0	0	0	0	0	0	0	0	0	2
GRAND TOTALS	275	24	145	0	1	0	1	38	0	0	0	0	2	486

SITE NUMBER: 13054
ASSEMBLAGE NUMBER: 5

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	15	27	3	2	0	0	2	0	0	0	0	0	0	49
BASALT	45	6	9	1	0	0	1	5	0	0	1	1	0	69
PEDERNAL CHERT/CHALC	136	13	92	2	1	0	0	14	0	0	0	0	0	258
CHERT	13	2	7	0	0	0	0	3	0	0	0	0	0	25
QUARTZITE	25	1	10	0	0	0	2	5	1	0	0	0	0	44
GRANITE/ANDESITE	0	0	1	0	0	0	0	2	0	0	0	0	0	3
JASPEROID	2	0	0	0	0	0	0	0	0	0	0	0	0	2
METARHYOLITE	2	0	2	0	0	0	0	0	0	0	0	0	0	4
OTHER	0	0	0	0	0	0	0	1	0	0	0	1	0	2
GRAND TOTALS	238	49	124	5	1	0	5	30	1	0	1	2	0	456

SITE NUMBER: 13076
ASSEMBLAGE NUMBER: 1

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	0	1	0	0	0	0	0	0	0	0	0	0	0	1
BASALT	9	2	6	0	0	0	0	1	0	0	0	0	0	18
PEDERNAL CHERT/CHALC	2	0	0	0	0	0	0	0	0	0	0	0	0	2
GRAND TOTALS	11	3	6	0	0	0	0	1	0	0	0	0	0	21

SITE NUMBER: 13076
ASSEMBLAGE NUMBER: 2

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	4	1	1	0	1	0	0	0	0	1	0	0	0	8
BASALT	240	7	89	0	0	0	0	0	0	0	0	0	0	336
PEDERNAL CHERT/CHALC	16	1	5	0	0	0	0	1	0	0	0	0	0	23
QUARTZITE	0	0	1	0	0	0	0	0	0	0	0	0	0	1
GRAND TOTALS	260	9	96	0	1	0	0	1	0	1	0	0	0	368

SITE NUMBER: 13076
ASSEMBLAGE NUMBER: 3

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	26	2	5	1	0	0	1	0	0	0	0	0	0	35
GRAND TOTALS	26	2	5	1	0	0	1	0	0	0	0	0	0	35

SITE NUMBER: 13076
ASSEMBLAGE NUMBER: 4

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	4	1	0	1	0	0	0	0	0	0	0	0	0	6
BASALT	212	5	39	0	0	0	1	4	0	0	0	0	0	261
PEDERNAL CHERT/CHALC	7	2	6	0	0	0	0	1	0	0	0	0	0	16
CHERT	0	0	1	0	0	0	0	0	0	0	0	0	0	1
GRAND TOTALS	223	8	46	1	0	0	1	5	0	0	0	0	0	284

SITE NUMBER: 13076
ASSEMBLAGE NUMBER: 5

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	19	1	14	0	0	0	0	0	0	0	0	0	0	34
PEDERNAL CHERT/CHALC	3	0	0	0	0	0	0	0	0	0	0	0	0	3
GRAND TOTALS	22	1	14	0	0	0	0	0	0	0	0	0	0	37

SITE NUMBER: 13076
ASSEMBLAGE NUMBER: 6

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	1	2	0	0	0	0	0	0	0	0	0	0	0	3
BASALT	157	7	48	1	0	0	1	0	0	0	0	0	0	214
PEDERNAL CHERT/CHALC	6	1	0	0	0	0	0	0	0	0	0	0	0	7
GRAND TOTALS	164	10	48	1	0	0	1	0	0	0	0	0	0	224

SITE NUMBER: 13076
ASSEMBLAGE NUMBER: 7

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	1	1	1	0	0	0	0	0	0	0	0	0	0	3
BASALT	231	26	68	3	0	0	2	5	0	0	0	0	0	335
PEDERNAL CHERT/CHALC	9	0	4	0	0	0	0	0	0	0	0	0	0	13
QUARTZITE	0	0	0	0	0	0	1	0	1	0	0	0	0	2
GRAND TOTALS	241	27	73	3	0	0	3	5	1	0	0	0	0	353

SITE NUMBER: 13076
ASSEMBLAGE NUMBER: 8

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	68	4	9	0	2	0	0	0	0	0	0	0	0	83
PEDERNAL CHERT/CHALC	1	0	0	0	0	0	0	0	0	0	0	0	0	1
QUARTZITE	1	0	0	0	0	0	0	0	0	0	0	0	0	1
ANITE/ANDESITE	0	0	1	0	0	0	0	0	0	0	0	0	0	1
GRAND TOTALS	70	4	10	0	2	0	0	0	0	0	0	0	0	86

SITE NUMBER: 13084
ASSEMBLAGE NUMBER: 1

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	443	75	159	7	0	0	6	11	0	0	0	0	0	701
PEDERNAL CHERT/CHALC	14	0	6	0	0	0	0	0	0	0	0	0	0	20
GRAND TOTALS	457	75	165	7	0	0	6	11	0	0	0	0	0	721

SITE NUMBER: 13084
ASSEMBLAGE NUMBER: 2

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	1	0	0	0	0	1	0	0	0	0	0	0	0	2
BASALT	277	25	119	3	0	0	1	1	0	0	0	0	0	426
PEDERNAL CHERT/CHALC	3	0	3	0	0	0	0	0	0	0	0	0	0	6
GRAND TOTALS	281	25	122	3	0	1	1	1	0	0	0	0	0	434

SITE NUMBER: 13084
ASSEMBLAGE NUMBER: 3

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	37	0	13	0	0	0	2	1	0	0	0	0	0	53
GRAND TOTALS	37	0	13	0	0	0	2	1	0	0	0	0	0	53

SITE NUMBER: 13084
ASSEMBLAGE NUMBER: 4

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	10	0	3	0	0	0	0	0	0	0	0	0	0	13
GRAND TOTALS	10	0	3	0	0	0	0	0	0	0	0	0	0	13

SITE NUMBER: 13084
ASSEMBLAGE NUMBER: 5

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	2	0	0	0	0	0	0	0	0	0	0	0	0	2
GRAND TOTALS	2	0	0	0	0	0	0	0	0	0	0	0	0	2

SITE NUMBER: 13084
ASSEMBLAGE NUMBER: 6

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	6	0	0	0	0	0	0	0	0	0	0	0	0	6
GRAND TOTALS	6	0	0	0	0	0	0	0	0	0	0	0	0	6

SITE NUMBER: 13084

ASSEMBLAGE NUMBER: 7

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	1	0	0	0	0	0	0	2	0	0	0	0	0	3
GRAND TOTALS	1	0	0	0	0	0	0	2	0	0	0	0	0	3

SITE NUMBER: 13084
ASSEMBLAGE NUMBER: 8

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	0	0	1	0	0	0	0	0	0	0	0	0	0	1
BASALT	74	3	13	0	0	0	1	3	0	0	0	0	0	94
GRAND TOTALS	74	3	14	0	0	0	1	3	0	0	0	0	0	95

SITE NUMBER: 13084
ASSEMBLAGE NUMBER: 9

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	2	0	0	0	0	0	0	0	0	0	0	0	0	2
BASALT	486	19	106	1	0	0	3	12	0	0	0	0	0	627
GRAND TOTALS	488	19	106	1	0	0	3	12	0	0	0	0	0	629

SITE NUMBER: 13084
ASSEMBLAGE NUMBER: 10

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	312	11	8	0	0	0	1	0	0	1	0	0	0	333
PEDERNAL CHERT/CHALC	1	0	0	0	0	0	0	0	0	0	0	0	0	1
SANDSTONE	0	0	0	0	0	0	0	0	0	0	1	0	0	1
METARHYOLITE	1	0	0	0	0	0	0	0	0	0	0	0	0	1
GRAND TOTALS	314	11	8	0	0	0	1	0	0	1	1	0	0	336

SITE NUMBER: 13084
ASSEMBLAGE NUMBER: 11

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	288	36	19	0	0	1	0	9	0	0	0	0	0	353
PEDERNAL CHERT/CHALC	0	0	1	0	0	0	0	0	0	0	0	0	0	1
QUARTZITE	2	0	0	0	0	0	0	0	0	0	0	0	0	2
OTHER	1	0	0	0	0	0	0	0	0	0	0	0	0	1
GRAND TOTALS	291	36	20	0	0	1	0	9	0	0	0	0	0	357

SITE NUMBER: 13086
ASSEMBLAGE NUMBER: 1

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	43	6	4	0	0	0	0	1	0	0	0	0	0	54
CHERT	0	0	1	0	0	0	0	0	0	0	0	0	0	1
GRANITE/ANDESITE	1	0	0	0	0	0	0	0	0	0	0	0	0	1
GRAND TOTALS	44	6	5	0	0	0	0	1	0	0	0	0	0	56

SITE NUMBER: 13086
ASSEMBLAGE NUMBER: 2

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	11	0	0	0	0	0	0	0	0	0	0	0	0	11
GRAND TOTALS	11	0	0	0	0	0	0	0	0	0	0	0	0	11

SITE NUMBER: 13086
ASSEMBLAGE NUMBER: 3

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	160	1	30	0	0	0	0	0	0	0	0	0	0	191
GRAND TOTALS	150	1	30	0	0	0	0	0	0	0	0	0	0	191

SITE NUMBER: 13086

APPENDIX II — LITHIC ARTIFACT ASSEMBLAGE SUMMARY

ASSEMBLAGE NUMBER: 4

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	44	0	10	0	0	0	0	1	0	0	0	0	0	55
GRAND TOTALS	44	0	10	0	0	0	0	1	0	0	0	0	0	55

SITE NUMBER: 13086
ASSEMBLAGE NUMBER: 5

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	21	1	4	0	0	0	1	1	0	0	0	0	0	28
GRANITE/ANDESITE	0	0	1	0	0	0	0	0	0	0	0	0	0	1
GRAND TOTALS	21	1	5	0	0	0	1	1	0	0	0	0	0	29

SITE NUMBER: 13086
ASSEMBLAGE NUMBER: 6

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	0	1	0	0	0	0	0	0	0	0	0	0	0	1
BASALT	138	19	31	5	0	0	1	5	0	0	0	0	0	199
PEDERNAL CHERT/CHALC	1	0	0	0	0	0	0	1	0	0	0	0	0	2
CHERT	0	0	1	0	0	0	0	0	0	0	0	0	0	1
CHALCEDONY	1	0	1	0	0	0	0	0	0	0	0	0	0	2
SLATE,SHALE,GREENST.	1	0	0	0	0	0	0	0	0	0	0	0	0	1
GRAND TOTALS	141	20	33	5	0	0	1	6	0	0	0	0	0	206

SITE NUMBER: 13086
ASSEMBLAGE NUMBER: 7

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	12	2	1	1	1	0	0	0	0	1	0	0	0	18
BASALT	528	77	166	7	3	2	3	11	0	0	0	0	0	797
PEDERNAL CHERT/CHALC	15	4	12	0	0	0	0	0	0	0	0	0	0	31
CHERT	1	0	0	0	0	0	0	0	0	0	0	0	0	1
SILICIFIED WOOD	2	1	1	0	0	0	0	0	0	0	0	0	0	4
QUARTZITE	0	0	1	0	0	0	0	0	0	0	0	0	0	1
GRANITE/ANDESITE	0	0	0	0	0	0	0	0	1	0	0	0	0	1
JASPEROID	1	0	0	0	0	0	0	0	0	0	0	0	0	1
OTHER	0	0	0	0	0	0	0	0	0	0	2	0	0	2
GRAND TOTALS	559	84	181	8	4	2	3	11	1	1	2	0	0	856

SITE NUMBER: 13086
ASSEMBLAGE NUMBER: 8

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	23	6	11	2	0	0	0	0	0	3	0	0	0	45
BASALT	1214	41	491	8	2	0	7	14	0	0	2	0	0	1779
PEDERNAL CHERT/CHALC	31	6	13	0	0	0	0	0	0	0	0	0	0	50
CHERT	4	0	1	0	0	0	0	0	0	0	0	0	0	5
SILICIFIED WOOD	0	0	1	0	0	0	0	0	0	0	0	0	0	1
QUARTZITE	3	0	2	0	0	0	0	0	2	0	0	0	0	7
GRANITE/ANDESITE	1	0	0	0	0	0	0	0	1	0	0	0	0	2
GRAND TOTALS	1276	53	519	10	2	0	7	14	3	3	2	0	0	1889

SITE NUMBER: 13086
ASSEMBLAGE NUMBER: 9

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	2	0	1	0	0	0	0	0	0	0	0	0	0	3
BASALT	34	1	5	0	1	0	0	0	0	0	0	0	0	41
PEDERNAL CHERT/CHALC	2	0	2	0	0	0	0	0	0	0	0	0	0	4
SILICIFIED WOOD	1	0	0	0	0	0	0	0	0	0	0	0	0	1
QUARTZITE	1	0	0	0	0	0	0	0	0	0	0	0	0	1
GRAND TOTALS	40	1	8	0	1	0	0	0	0	0	0	0	0	50

SITE NUMBER: 13086
ASSEMBLAGE NUMBER: 10

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	5	0	1	0	0	0	0	0	0	0	0	0	0	6

APPENDIX II — LITHIC ARTIFACT ASSEMBLAGE SUMMARY

BASALT	126	5	35	0	3	1	1	2	0	0	0	0	1	174
PEDERNAL CHERT/CHALC	1	1	1	0	0	0	0	0	0	0	0	0	0	3
CHERT	0	0	1	0	0	0	0	0	0	0	0	0	0	1
QUARTZITE	4	0	1	0	0	0	0	0	0	0	0	0	0	5
JASPEROID	1	0	0	0	0	0	0	0	0	0	0	0	0	1
GRAND TOTALS	137	6	39	0	3	1	1	2	0	0	0	0	1	190

SITE NUMBER: 13086
ASSEMBLAGE NUMBER: 11

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	6	0	0	0	0	1	0	0	0	0	0	0	0	7
BASALT	89	3	9	0	0	0	0	1	0	0	0	0	0	102
PEDERNAL CHERT/CHALC	3	0	1	0	0	0	0	0	0	0	0	0	0	4
QUARTZITE	0	0	0	0	0	0	0	0	1	0	0	0	0	1
GRAND TOTALS	98	3	10	0	0	1	0	1	1	0	0	0	0	114

SITE NUMBER: 13086
ASSEMBLAGE NUMBER: 12

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	2	0	0	1	0	0	0	0	0	0	0	0	0	3
BASALT	85	3	21	0	0	1	0	1	0	0	0	0	0	111
PEDERNAL CHERT/CHALC	12	0	1	0	0	0	0	0	0	0	0	0	0	13
QUARTZITE	0	0	0	0	0	0	0	1	0	0	0	0	0	1
METARHYOLITE	1	0	0	0	0	0	0	0	0	0	0	0	0	1
GRAND TOTALS	100	3	22	1	0	1	0	2	0	0	0	0	0	129

SITE NUMBER: 13086
ASSEMBLAGE NUMBER: 13

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	20	2	3	0	0	0	0	1	0	0	0	0	0	26
PEDERNAL CHERT/CHALC	2	0	0	0	0	0	0	0	0	0	0	0	0	2
GRAND TOTALS	22	2	3	0	0	0	0	1	0	0	0	0	0	28

SITE NUMBER: 13086
ASSEMBLAGE NUMBER: 14

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	1	0	1	0	0	0	0	0	0	0	0	0	0	2
BASALT	52	0	17	0	1	0	1	0	0	0	0	0	0	71
PEDERNAL CHERT/CHALC	4	0	0	0	0	0	0	0	0	0	0	0	0	4
GRANITE/ANDESITE	0	0	0	0	0	0	0	0	1	0	0	0	0	1
GRAND TOTALS	57	0	18	0	1	0	1	0	1	0	0	0	0	78

SITE NUMBER: 13086
ASSEMBLAGE NUMBER: 15

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	3	1	0	0	0	0	0	0	0	0	0	0	0	4
BASALT	20	1	14	0	0	0	0	0	0	0	0	0	0	35
PEDERNAL CHERT/CHALC	0	0	1	0	0	0	0	0	0	0	0	0	0	1
OTHER	0	0	0	0	0	0	0	0	0	0	2	0	0	2
GRAND TOTALS	23	2	15	0	0	0	0	0	0	0	2	0	0	42

SITE NUMBER: 13086
ASSEMBLAGE NUMBER: 16

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	33	2	10	0	0	0	0	0	0	0	0	0	0	45
PEDERNAL CHERT/CHALC	5	0	2	0	0	0	0	0	0	0	0	0	0	7
SILICIFIED WOOD	0	0	0	0	0	0	0	0	0	1	0	0	0	1
QUARTZITE	1	0	0	0	0	0	0	0	0	0	0	0	0	1
GRAND TOTALS	39	2	12	0	0	0	0	0	0	1	0	0	0	54

SITE NUMBER: 13086
ASSEMBLAGE NUMBER: 17

MATERIAL	UN.FLK	JT.FLK	JN.SAD	UT.SAD	JN.RET	JT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	7	0	2	0	0	1	0	0	0	0	0	0	0	10
GRAND TOTALS	7	0	2	0	0	1	0	0	0	0	0	0	0	10

SITE NUMBER: 13086
ASSEMBLAGE NUMBER: 18

MATERIAL	UN.FLK	JT.FLK	JN.SAD	UT.SAD	JN.RET	JT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	18	0	3	0	0	0	0	0	0	0	0	0	0	21
PEDERNAL CHERT/CHALC	3	0	1	0	0	0	0	0	0	0	0	0	0	4
GRAND TOTALS	21	0	4	0	0	0	0	0	0	0	0	0	0	25

SITE NUMBER: 13086
ASSEMBLAGE NUMBER: 19

MATERIAL	UN.FLK	JT.FLK	JN.SAD	UT.SAD	JN.RET	JT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	0	1	0	0	0	0	0	0	0	0	0	0	0	1
BASALT	70	1	14	0	0	1	1	0	0	0	2	0	0	89
PEDERNAL CHERT/CHALC	7	2	0	0	0	0	0	0	0	0	0	0	0	9
CHERT	3	0	0	0	0	0	0	0	0	0	0	0	0	3
QUARTZITE	1	0	0	0	0	0	0	0	1	0	0	0	0	2
GRANITE/ANDESITE	0	0	1	0	0	0	0	0	0	0	0	0	0	1
GRAND TOTALS	81	4	15	0	0	1	1	0	1	0	2	0	0	105

SITE NUMBER: 13291
ASSEMBLAGE NUMBER: 1

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	54	22	8	2	0	0	0	0	0	3	0	0	0	89
BASALT	63	1	23	1	0	0	3	2	0	0	2	0	2	97
PEDERNAL CHERT/CHALC	56	5	22	1	0	0	1	2	0	0	0	0	0	89
CHERT	1	0	0	1	0	0	0	0	0	1	0	0	0	3
QUARTZITE	5	0	8	0	0	0	0	0	0	0	0	0	0	13
JASPEROID	0	0	1	0	0	0	0	0	0	0	0	0	0	1
OTHER	0	0	0	0	0	0	0	1	0	0	0	0	0	1
GRAND TOTALS	179	28	62	5	0	0	4	5	0	4	2	0	2	293

SITE NUMBER: 13291
ASSEMBLAGE NUMBER: 2

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	JN.RET	JT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	21	4	6	2	0	0	0	0	0	0	0	0	0	33
BASALT	2	0	2	0	0	0	0	0	0	0	0	0	0	4
PEDERNAL CHERT/CHALC	5	1	6	1	0	0	0	0	0	0	0	0	0	13
GRAND TOTALS	28	5	14	3	0	0	0	0	0	0	0	0	0	50

SITE NUMBER: 13291
ASSEMBLAGE NUMBER: 3

MATERIAL	UN.FLK	JT.FLK	JN.SAD	UT.SAD	JN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	1	0	0	0	0	0	0	0	0	0	0	0	0	1
BASALT	13	1	4	0	0	0	0	1	0	0	0	0	0	19
PEDERNAL CHERT/CHALC	5	0	1	1	0	0	0	0	0	0	0	0	0	7
GRAND TOTALS	19	1	5	1	0	0	0	1	0	0	0	0	0	27

SITE NUMBER: 13291
ASSEMBLAGE NUMBER: 4

MATERIAL	UN.FLK	JT.FLK	UN.SAD	UT.SAD	JN.RET	JT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	2	1	1	0	0	0	0	0	0	0	0	0	0	4
BASALT	46	3	4	0	0	0	0	3	0	0	0	0	0	56
PEDERNAL CHERT/CHALC	33	7	2	0	0	0	0	3	0	0	0	0	0	45
CHERT	3	0	4	0	0	0	0	0	0	0	0	0	0	7
CHALCEDONY	1	0	0	0	0	0	0	0	0	0	0	0	0	1
QUARTZITE	2	0	0	0	0	0	0	0	1	0	0	0	0	3
GRANITE/ANDESITE	1	0	0	0	0	0	0	0	0	0	0	0	0	1
SANDSTONE	0	0	0	0	0	0	0	0	0	0	2	0	0	2
SLATE,SHALE,GREENST.	1	0	0	0	0	0	0	0	0	0	0	0	0	1
JASPEROID	2	0	0	0	0	0	0	0	0	0	0	0	0	2

GRAND TOTALS	[illegible]1	11	11	0	0	0	0	6	1	0	2	0	0	122

SITE NUMBER: 13291
ASSEMBLAGE NUMBER: 5

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	10	0	1	0	0	0	0	0	1	0	0	0	0	12
PEDERNAL CHERT/CHALC	6	0	1	0	0	0	0	1	0	0	0	0	0	8
CHERT	1	0	0	0	0	0	0	0	0	0	0	0	0	1
QUARTZITE	1	0	0	0	0	0	0	1	0	0	0	0	0	2
GRAND TOTALS	18	0	2	0	0	0	0	2	1	0	0	0	0	23

SITE NUMBER: 13291
ASSEMBLAGE NUMBER: 6

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	1	0	0	0	0	0	0	0	0	0	0	0	0	1
BASALT	8	0	6	0	0	0	0	0	0	0	0	0	0	14
PEDERNAL CHERT/CHALC	6	0	1	1	0	0	0	0	0	0	0	0	0	8
QUARTZITE	1	0	5	0	0	0	0	0	0	0	0	0	0	6
GRAND TOTALS	16	0	12	1	0	0	0	0	0	0	0	0	0	29

SITE NUMBER: 13291
ASSEMBLAGE NUMBER: 7

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	1	0	0	0	0	0	0	0	0	0	0	0	0	1
BASALT	11	0	1	0	0	0	1	0	0	0	0	0	0	13
PEDERNAL CHERT/CHALC	1	0	0	0	0	0	0	0	0	0	0	0	0	1
GRANITE/ANDESITE	0	0	1	0	0	0	0	0	0	0	0	0	0	1
GRAND TOTALS	13	0	2	0	0	0	1	0	0	0	0	0	0	16

SITE NUMBER: 13291
ASSEMBLAGE NUMBER: 8

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	0	1	0	0	0	0	0	0	0	0	0	0	0	1
BASALT	11	0	0	0	0	0	0	0	0	0	0	0	0	11
PEDERNAL CHERT/CHALC	2	1	2	0	0	0	0	0	0	0	0	0	0	5
QUARTZITE	0	0	2	0	0	0	0	1	0	0	0	0	0	3
GRAND TOTALS	13	2	4	0	0	0	0	1	0	0	0	0	0	20

SITE NUMBER: 13291
ASSEMBLAGE NUMBER: 9

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	1	4	1	1	0	0	0	0	0	0	0	0	0	7
BASALT	38	4	4	0	0	0	0	0	0	0	2	0	2	50
PEDERNAL CHERT/CHALC	12	2	3	0	0	0	0	2	0	0	0	0	0	19
CHERT	1	0	0	0	0	0	0	0	0	0	0	0	0	1
QUARTZITE	3	0	0	0	0	0	0	0	0	0	0	0	0	3
GRAND TOTALS	55	10	8	1	0	0	0	2	0	0	2	0	2	80

SITE NUMBER: 13291
ASSEMBLAGE NUMBER: 10

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	14	5	0	2	0	0	0	0	0	1	0	0	0	22
BASALT	63	16	15	1	0	0	4	8	0	0	0	0	0	107
PEDERNAL CHERT/CHALC	58	12	21	0	0	1	1	8	0	1	0	0	0	102
CHERT	4	0	0	0	0	0	0	0	0	0	0	0	0	4
SILICIFIED WOOD	1	0	0	0	0	0	0	0	0	0	0	0	0	1
QUARTZITE	5	0	3	0	0	0	0	4	0	1	0	0	0	13
GRANITE/ANDESITE	0	0	1	0	0	0	0	1	0	0	0	0	0	2
GRAND TOTALS	145	33	40	3	0	1	5	21	0	3	0	0	0	251

SITE NUMBER: 13291
ASSEMBLAGE NUMBER: 11

MATERIAL	UN.FLK	JT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	2	0	2	0	0	0	0	0	0	0	0	0	0	4
BASALT	37	4	3	1	0	0	1	2	0	0	0	0	0	48
PEDERNAL CHERT/CHALC	11	2	6	0	0	0	0	2	0	0	0	0	0	21
QUARTZITE	0	0	0	0	0	0	0	2	0	0	0	0	0	2
GRAND TOTALS	50	6	11	1	0	0	1	6	0	0	0	0	0	75

SITE NUMBER: 13292
ASSEMBLAGE NUMBER: 1

MATERIAL	UN.FLK	JT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	5	4	2	0	1	1	0	0	0	0	0	0	0	13
BASALT	73	23	30	0	5	1	2	10	0	3	0	0	0	147
PEDERNAL CHERT/CHALC	29	1	7	0	0	0	0	4	0	0	0	0	0	41
QUARTZITE	10	1	2	0	0	0	0	1	0	0	0	0	0	14
JASPEROID	1	0	0	0	0	0	0	0	0	0	0	0	0	1
OTHER	1	0	0	0	0	0	0	0	0	0	0	0	0	1
GRAND TOTALS	119	29	41	0	6	2	2	15	0	3	0	0	0	217

SITE NUMBER: 13292
ASSEMBLAGE NUMBER: 2

MATERIAL	UN.FLK	JT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	3	0	4	0	0	0	1	1	0	0	0	0	0	9
BASALT	55	8	18	2	0	0	1	14	0	2	0	0	0	100
PEDERNAL CHERT/CHALC	7	1	12	0	0	0	1	1	0	0	0	0	0	22
GRAND TOTALS	65	9	34	2	0	0	3	16	0	2	0	0	0	131

SITE NUMBER: 13293
ASSEMBLAGE NUMBER: 1

MATERIAL	UN.FLK	JT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	4	0	1	0	0	0	0	1	0	0	0	0	0	6
PEDERNAL CHERT/CHALC	2	0	0	0	0	0	0	0	0	0	0	0	0	2
GRAND TOTALS	6	0	1	0	0	0	0	1	0	0	0	0	0	8

SITE NUMBER: 1332?
ASSEMBLAGE NUMBER: 1

MATERIAL	UN.FLK	JT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	0	0	0	1	0	0	0	0	0	0	0	0	0	1
BASALT	9	12	3	1	0	0	0	0	0	0	0	0	0	25
PEDERNAL CHERT/CHALC	2	0	1	0	0	0	0	0	0	0	0	0	0	3
JASPEROID	0	0	0	0	0	0	0	1	0	0	0	0	0	1
GRAND TOTALS	11	12	4	2	0	0	0	1	0	0	0	0	0	30

SITE NUMBER: 13331
ASSEMBLAGE NUMBER: 1

MATERIAL	UN.FLK	JT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
PEDERNAL CHERT/CHALC	1	0	0	0	0	0	0	0	0	0	0	0	0	1
CHERT	1	0	0	0	0	0	0	0	0	0	0	0	0	1
GRAND TOTALS	2	0	0	0	0	0	0	0	0	0	0	0	0	2

SITE NUMBER: 13332
ASSEMBLAGE NUMBER: 1

MATERIAL	UN.FLK	JT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	4	4	0	0	0	1	0	0	0	0	0	0	0	9
BASALT	11	25	0	0	1	0	0	0	0	0	0	0	0	37
PEDERNAL CHERT/CHALC	6	1	2	0	0	0	0	0	0	0	0	0	0	9
CHERT	1	1	0	0	0	0	0	0	0	0	0	0	0	2
GRAND TOTALS	22	31	2	0	1	1	0	0	0	0	0	0	0	57

SITE NUMBER: 13350
ASSEMBLAGE NUMBER: 1

MATERIAL	UN.FLK	JT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS

OBSIDIAN	1	0	1	0	0	0	0	0	0	0	0	0	0	2
BASALT	48	11	5	0	0	0	0	0	0	0	0	0	0	64
PEDERNAL CHERT/CHALC	206	19	66	0	0	0	1	16	0	0	0	0	0	308
CHERT	6	2	0	0	0	0	0	0	0	0	0	0	0	8
QUARTZITE	5	0	2	0	0	0	0	0	0	0	0	0	0	7
GRAND TOTALS	266	32	74	0	0	0	1	16	0	0	0	0	0	389

SITE NUMBER: 13350
ASSEMBLAGE NUMBER: 2

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	36	0	1	0	0	0	0	0	0	0	0	0	0	37
PEDERNAL CHERT/CHALC	2	0	0	0	0	0	0	1	0	0	0	0	0	3
GRAND TOTALS	38	0	1	0	0	0	0	1	0	0	0	0	0	40

SITE NUMBER: 13350
ASSEMBLAGE NUMBER: 3

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	7	1	0	0	0	0	0	0	0	0	0	0	0	8
PEDERNAL CHERT/CHALC	1	0	0	0	0	0	0	0	0	0	0	0	0	1
GRAND TOTALS	8	1	0	0	0	0	0	0	0	0	0	0	0	9

SITE NUMBER: 13350
ASSEMBLAGE NUMBER: 4

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	0	1	0	0	0	0	0	0	0	0	0	0	0	1
PEDERNAL CHERT/CHALC	10	0	2	0	0	0	0	0	0	0	0	0	0	12
GRAND TOTALS	10	1	2	0	0	0	0	0	0	0	0	0	0	13

SITE NUMBER: 13350
ASSEMBLAGE NUMBER: 5

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	1	2	1	0	0	0	0	1	0	0	0	0	0	5
GRAND TOTALS	1	2	1	0	0	0	0	1	0	0	0	0	0	5

SITE NUMBER: 13350
ASSEMBLAGE NUMBER: 6

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	0	3	3	0	0	0	0	0	0	0	0	0	0	6
PEDERNAL CHERT/CHALC	4	3	0	0	0	0	0	0	0	0	0	0	0	7
SLATE,SHALE,GREENST.	1	0	0	0	0	0	0	0	0	0	0	0	0	1
GRAND TOTALS	5	6	3	0	0	0	0	0	0	0	0	0	0	14

SITE NUMBER: 13350
ASSEMBLAGE NUMBER: 7

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	10	2	1	0	0	0	0	0	0	0	0	0	0	13
GRAND TOTALS	10	2	1	0	0	0	0	0	0	0	0	0	0	13

SITE NUMBER: 13351
ASSEMBLAGE NUMBER: 1

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
PEDERNAL CHERT/CHALC	25	0	4	0	0	0	0	0	0	0	0	0	0	29
SILICIFIED WOOD	2	0	2	0	0	0	0	0	0	0	0	0	0	4
GRAND TOTALS	27	0	6	0	0	0	0	0	0	0	0	0	0	33

SITE NUMBER: 13351
ASSEMBLAGE NUMBER: 2

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS

APPENDIX II — LITHIC ARTIFACT ASSEMBLAGE SUMMARY

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	12	4	2	3	0	0	0	1	0	1	0	0	0	23
PEDERNAL CHERT/CHALC	4	0	1	0	0	0	0	0	0	0	0	0	0	5
CHERT	2	0	0	0	0	0	0	0	0	0	0	0	0	2
GRAND TOTALS	18	4	3	3	0	0	0	1	0	1	0	0	0	30

SITE NUMBER: 13351
ASSEMBLAGE NUMBER: 3

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
BASALT	1	0	0	0	0	0	0	0	0	0	0	0	0	1
PEDERNAL CHERT/CHALC	91	9	36	1	0	0	2	3	0	0	0	0	0	142
CHERT	1	0	0	0	0	0	0	0	0	0	0	0	0	1
GRAND TOTALS	93	9	36	1	0	0	2	3	0	0	0	0	0	144

SITE NUMBER: 13351
ASSEMBLAGE NUMBER: 4

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	2	3	1	0	0	0	0	0	0	0	0	0	0	6
BASALT	13	8	5	0	0	0	0	4	0	0	0	0	0	30
PEDERNAL CHERT/CHALC	23	3	15	1	0	0	1	7	0	1	0	0	0	51
CHERT	1	0	0	0	0	0	0	1	0	0	0	0	0	2
GRAND TOTALS	39	14	21	1	0	0	1	12	0	1	0	0	0	89

SITE NUMBER: 13352
ASSEMBLAGE NUMBER: 1

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	1	0	0	0	0	0	0	0	0	0	0	0	0	1
BASALT	85	16	37	2	0	0	0	6	0	2	0	0	0	148
PEDERNAL CHERT/CHALC	132	15	48	1	0	0	0	10	0	2	0	0	0	208
CHERT	5	2	0	0	0	0	0	0	0	0	0	0	0	7
CHALCEDONY	11	0	0	0	0	0	0	0	0	0	0	0	0	11
QUARTZITE	11	0	4	0	0	0	0	0	1	0	0	0	0	16
GRANITE/ANDESITE	1	0	0	0	0	0	0	0	0	0	0	0	0	1
OTHER	0	0	0	0	0	0	0	1	0	0	0	0	0	1
GRAND TOTALS	2 6	33	89	3	0	0	0	17	1	4	0	0	0	393

SITE NUMBER: 13352
ASSEMBLAGE NUMBER: 2

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	0	1	0	0	0	0	0	0	0	0	0	0	0	1
BASALT	4	6	1	0	0	0	0	0	0	0	0	0	0	11
PEDERNAL CHERT/CHALC	30	1	14	1	0	0	0	4	0	0	0	0	0	50
GRAND TOTALS	34	8	15	1	0	0	0	4	0	0	0	0	0	62

SITE NUMBER: 13353
ASSEMBLAGE NUMBER: 1

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	1	0	0	0	0	0	0	0	0	0	0	0	0	1
BASALT	22	10	2	0	0	0	0	0	0	0	0	0	0	34
PEDERNAL CHERT/CHALC	3	1	4	0	0	0	0	2	0	0	0	0	0	10
CHERT	0	0	1	0	0	0	0	1	0	0	0	0	0	2
GRAND TOTALS	26	11	7	0	0	0	0	3	0	0	0	0	0	47

SITE NUMBER: 13353
ASSEMBLAGE NUMBER: 2

MATERIAL	UN.FLK	UT.FLK	UN.SAD	UT.SAD	UN.RET	UT.RET	CORES	L.A.D.	HAMMER	U/BIFC	MANOS	METATES	OTHER	TOTALS
OBSIDIAN	13	13	13	3	0	1	0	0	0	0	0	0	0	45
BASALT	332	92	116	7	1	0	1	17	0	1	0	0	0	567
PEDERNAL CHERT/CHALC	332	37	92	4	0	0	3	58	0	0	0	0	0	526
CHERT	13	5	4	0	0	0	0	2	0	0	0	0	0	24
CHALCEDONY	7	0	3	0	0	0	0	1	0	0	0	0	0	11
SILICIFIED WOOD	2	2	0	0	0	0	0	0	0	0	0	0	0	4
QUARTZITE	14	1	8	1	0	0	0	1	0	0	0	0	0	25
GRANITE/ANDESITE	0	0	0	0	0	0	0	1	0	0	0	0	0	1
SLATE,SHALE,GREENST.	1	0	0	0	0	0	0	0	0	0	0	0	0	1

JASPEROID	1	0	0	0	0	0	0	0	0	0	0	0	0	1
OTHER	1	0	0	0	0	0	0	0	0	0	0	0	0	1
GRAND TOTALS	716	150	236	15	1	1	4	80	0	3	0	0	0	1206

MATERIAL	TYPE FREE	BIP	SAD	PLATFORMS #	PLATFORMS CTX	SF	RT	RS	CORTEX #	CORTEX WW	OT	CORTEX PLACEMENT PLT	CORTEX PLACEMENT DRS	CORTEX PLACEMENT P+D	SAD	TOTALS
SITE NUMBER: 5011																
ASSEMBLAGE NUMBER: 1																
OBSIDIAN																
3520	33	0	2	23	5	13	0	1	12	11	1	8	3	1	0	35
3525	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
TOTAL	34	0	2	24	9	14	0	1	13	12	1	8	4	1	0	36
BASALT																
3701	5	0	0	5	3	2	0	0	4	2	2	0	1	3	0	5
3730	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
3030	2	0	0	2	0	2	0	0	0	0	0	0	0	0	0	2
3050	7	0	1	4	0	4	0	0	3	3	0	0	3	0	0	8
TOTAL	15	0	1	12	3	9	0	0	7	5	2	0	4	3	0	16
PED.CHRT/C																
1050	1	0	0	0	1	0	0	0	1	1	0	0	0	1	0	1
1051	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
1053	3	0	0	2	0	2	0	0	1	1	0	0	1	0	0	3
1214	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
1215	5	0	0	4	3	1	0	0	3	3	0	3	0	0	0	5
TOTAL	12	0	0	8	4	5	0	0	6	6	0	3	2	1	0	12
CHERT																
1600	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
1650	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
1660	2	0	0	2	1	1	0	0	1	1	0	1	0	0	0	2
TOTAL	5	0	0	4	2	2	0	0	2	2	0	1	0	1	0	5
CHALCEDONY																
1045	1	0	0	1	1	0	0	0	1	1	0	1	0	0	0	1
TOTAL	1	0	0	1	1	0	0	0	1	1	0	1	0	0	0	1
SILC.WOOD																
1110	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
TOTAL	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
QUARTZITE																
4000	2	0	0	2	0	2	0	0	0	0	0	0	0	0	0	2
TOTAL	2	0	0	2	0	2	0	0	0	0	0	0	0	0	0	2
TOTALS	70	0	3	52	20	32	0	1	30	27	3	13	10	7	0	73
SITE NUMBER: 5011																
ASSEMBLAGE NUMBER: 2																
OBSIDIAN																
3520	17	0	2	11	7	4	0	0	11	11	0	5	3	2	1	19
3523	4	0	0	1	1	0	0	0	3	2	1	1	2	0	0	4
3524	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3525	2	0	0	2	0	2	0	0	1	1	0	0	1	0	0	2
TOTAL	24	0	2	14	8	6	0	0	15	14	1	6	6	2	1	26
BASALT																
3701	40	0	0	28	7	20	1	0	18	16	2	3	11	4	0	40
3730	5	0	0	4	0	4	0	0	0	0	0	0	0	0	0	5
3050	23	0	1	13	3	10	0	0	5	4	1	0	2	3	0	24
3400	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
TOTAL	70	0	1	46	10	35	1	0	23	20	3	3	13	7	0	71
PED.CHRT/C																
1050	1	0	1	1	0	1	0	0	1	1	0	0	1	0	0	2
1051	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
1053	5	0	1	3	1	2	0	0	3	3	0	1	1	0	1	6
1091	2	0	0	1	1	0	0	0	1	1	0	1	0	0	0	2
1214	3	0	1	2	0	2	0	0	2	1	1	0	2	0	0	4
1215	12	0	1	8	4	3	1	0	8	8	0	4	3	0	1	13
TOTAL	24	0	4	15	6	8	1	0	16	15	1	6	8	0	2	28
CHERT																
1057	2	0	0	2	0	2	0	0	0	0	0	0	0	0	0	2
1072	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
14C0	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
160C	12	0	0	9	1	8	0	0	3	3	0	0	2	1	0	12
TOTAL	16	0	0	13	2	11	0	0	5	5	0	0	3	2	0	16
SILC.WOOD																
1100	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
TOTAL	1	0	0	1	C	1	0	0	1	1	0	0	1	0	0	1
QUARTZITE																
4000	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
JASPEROID																
1501	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
METARHYOLT																
4375	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTAL	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
OTHER																
3035	2	0	0	2	1	1	0	0	1	1	0	0	0	1	0	2

MATERIAL	TYPE			PLATFORMS					CORTEX			CORTEX PLACEMENT				TOTALS
	FREQ	BIP	SAD	#	CTX	SF	RT	FS	#	WW	OT	PLT	DRS	P+D	SAD	
TOTAL	2	0	0	2	1	1	0	0	1	1	0	0	0	1	0	2
TOTALS	140	0	7	92	27	63	2	0	62	57	5	15	32	12	3	147
SITE NUMBER: 10114																
ASSEMBLAGE NUMBER: 1																
OBSIDIAN																
3520	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
3528	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	2	0	0	2	0	2	0	0	0	0	0	0	0	0	0	2
PEC.CHRT/C																
1050	2	0	0	2	0	2	0	0	0	0	0	0	0	0	0	2
1053	3	0	2	3	0	3	0	0	0	0	0	0	0	0	0	5
1091	3	0	3	1	0	1	0	0	5	3	2	0	3	0	2	6
1214	3	0	0	2	1	0	0	1	2	1	1	0	1	1	0	3
1215	6	0	4	3	1	2	0	0	3	2	1	0	1	1	1	10
TOTAL	17	0	9	11	2	8	0	1	10	6	4	0	5	2	3	26
CHERT																
1057	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1070	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
1600	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1660	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	3	0	1	0	0	0	0	0	1	1	0	0	0	0	1	4
CHALCEDONY																
1212	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
1345	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTAL	2	0	0	0	0	0	0	0	2	2	0	0	2	0	0	2
QUARTZITE																
4000	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
TOTAL	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
JASPEROID																
1501	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTALS	24	0	12	13	2	10	0	1	14	10	4	0	7	2	5	36
SITE NUMBER: 10114																
ASSEMBLAGE NUMBER: 2																
OBSIDIAN																
3520	5	0	0	3	0	3	0	0	0	0	0	0	0	0	0	5
3523	1	0	0	1	0	1	0	0	1	0	1	0	1	0	0	1
3525	2	1	0	2	1	1	0	0	1	1	0	1	0	0	0	3
TOTAL	8	1	0	6	1	5	0	0	2	1	1	1	1	0	0	9
BASALT																
3701	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	2
3050	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
TOTAL	2	0	1	2	0	2	0	0	1	1	0	0	1	0	0	3
PEC.CHRT/C																
1050	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
1051	2	0	1	1	1	0	0	0	2	2	0	1	0	0	1	3
1050	1	0	1	1	1	0	0	0	2	2	0	1	0	0	1	2
1052	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1053	1	0	3	0	0	0	0	0	1	1	0	0	0	0	1	4
1091	7	0	7	5	1	4	0	0	7	4	3	1	2	0	4	14
1215	37	0	19	15	2	13	0	0	23	14	9	2	12	0	9	56
TOTAL	50	0	32	23	5	18	0	0	35	23	12	5	14	0	16	82
CHERT																
1057	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
1073	0	0	6	0	0	0	0	0	1	1	0	0	0	0	1	6
1400	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1600	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
1660	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
1680	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
TOTAL	1	0	12	0	0	0	0	0	4	4	0	0	0	0	4	13
CHALCEDONY																
1212	3	0	0	2	2	0	0	0	3	3	0	0	1	2	0	3
TOTAL	3	0	0	2	2	0	0	0	3	3	0	0	1	2	0	3
SILC.WOOD																
1113	12	0	2	8	0	7	1	0	2	2	0	0	2	0	0	14
TOTAL	12	0	2	8	0	7	1	0	2	2	0	0	2	0	0	14
QUARTZITE																
4000	2	0	4	1	1	0	0	0	5	5	0	0	1	1	3	6
4001	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	3	0	4	2	1	1	0	0	5	5	0	0	1	1	3	7
JASPEROID																
1501	2	0	0	1	0	1	0	0	1	1	0	0	1	0	0	2
TOTAL	2	0	0	1	0	1	0	0	1	1	0	0	1	0	0	2
TOTALS	81	1	51	44	9	34	1	0	53	40	13	6	21	3	23	133

MATERIAL	TYPE FREE	BIP	SAD	PLATFORMS #	PLATFORMS CTX	SF	RT	RS	CORTEX #	CORTEX #W	OT	CORTEX PLACEMENT PLT	CORTEX PLACEMENT DRS	CORTEX PLACEMENT P+D	SAD	TOTALS
SITE NUMBER: 10114																
ASSEMBLAGE NUMBER: 3																
OBSIDIAN																
3520	3	0	0	2	0	2	0	0	0	0	0	0	0	0	0	3
3525	1	0	1	1	0	1	0	0	1	1	0	0	0	0	1	2
3526	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	5	0	1	3	0	3	0	0	1	1	0	0	0	0	1	6
BASALT																
3701	2	0	0	1	0	1	0	0	1	1	0	0	1	0	0	2
3430	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	2	0	1	1	0	1	0	0	1	1	0	0	1	0	0	3
PEC.CHRT/C																
1090	1	0	1	0	0	0	0	0	1	1	0	0	0	0	1	2
1052	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1053	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1091	3	0	6	2	2	0	0	0	7	2	5	2	0	0	5	9
1214	3	0	1	1	0	1	0	0	0	0	0	0	0	0	0	4
1215	15	0	21	8	2	6	0	0	16	10	6	0	7	2	7	36
TOTAL	24	0	29	13	4	9	0	0	24	13	11	2	7	2	13	53
CHERT																
1057	2	0	0	2	0	2	0	0	2	0	2	0	2	0	0	2
1060	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
1660	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1680	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	3	0	2	3	0	3	0	0	3	1	2	0	2	0	1	5
SILC.WOOD																
1140	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	2
TOTAL	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	2
QUARTZITE																
4000	2	0	1	1	0	1	0	0	3	3	0	0	2	0	1	3
TOTAL	2	0	1	1	0	1	0	0	3	3	0	0	2	0	1	3
JASPEROID																
1502	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
TOTAL	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
TOTALS	37	0	36	22	4	18	0	0	33	20	13	2	12	2	17	73
SITE NUMBER: 10114																
ASSEMBLAGE NUMBER: 4																
BASALT																
3701	4	0	0	3	2	1	0	0	2	1	1	2	0	0	0	4
TOTAL	4	0	0	3	2	1	0	0	2	1	1	2	0	0	0	4
PEC.CHRT/C																
1051	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
1052	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
1053	3	0	2	2	0	2	0	0	3	1	2	0	1	0	2	3
1091	6	0	1	4	2	2	0	0	4	4	0	0	2	2	0	7
1214	2	0	1	1	0	1	0	0	0	0	0	0	0	0	0	3
1215	5	0	1	2	0	2	0	0	1	1	1	0	2	0	0	6
TOTAL	18	0	5	9	2	7	0	0	10	8	3	0	7	2	2	23
CHERT																
1057	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
1055	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1680	2	0	0	1	0	1	0	0	1	1	0	0	1	0	0	2
TOTAL	3	0	1	2	0	2	0	0	2	2	0	0	2	0	0	4
SILC.WOOD																
1100	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1113	1	0	1	0	0	0	0	0	1	0	1	0	0	0	1	2
TOTAL	2	0	1	0	0	0	0	0	1	0	1	0	0	0	1	3
TOTALS	27	0	7	14	4	10	0	0	15	11	5	2	9	2	3	34
SITE NUMBER: 10114																
ASSEMBLAGE NUMBER: 5																
OBSIDIAN																
3520	4	0	0	2	0	2	0	0	1	0	1	0	1	0	0	4
3523	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
3525	2	0	1	1	0	1	0	0	1	0	1	0	0	0	1	3
TOTAL	8	0	1	4	0	4	0	0	2	0	2	0	1	0	1	9
BASALT																
3701	13	0	2	7	2	5	0	0	7	7	0	1	4	1	1	13
3706	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
3050	2	0	0	1	1	0	0	0	2	0	2	1	1	0	0	2
TOTAL	16	0	2	8	3	5	0	0	10	8	2	2	6	1	1	13
PEC.CHRT/C																
1050	2	0	0	2	1	1	0	0	1	1	0	1	0	0	0	2
1051	2	0	3	0	0	0	0	0	3	1	2	0	1	0	2	3
1090	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
1053	1	0	0	1	1	0	0	0	1	1	0	1	0	0	0	1
1091	1	0	1	1	0	1	0	0	1	1	0	0	0	0	1	2

MATERIAL	TYPE FREL	BIP	SAD	PLATFORMS #	PLATFORMS CTX	SF	RT	RS	CORTEX #	CORTEX WW	OT	CORTEX PLACEMENT PLT	CORTEX PLACEMENT DRS	CORTEX PLACEMENT P+D	SAD	TOTALS
1215	1	0	3	1	0	1	0	0	3	2	1	0	0	0	3	4
TOTAL	7	0	8	5	2	3	0	0	10	7	3	2	1	0	7	1[illegible]
CHERT																
1072	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
1400	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1600	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	2
1666	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
TOTAL	3	0	2	2	0	2	0	0	2	2	0	0	1	0	1	[illegible]
QUARTZITE																
4000	1	0	2	1	0	1	0	0	3	3	0	0	1	0	2	3
4001	0	0	2	0	0	0	0	0	1	1	0	0	0	0	1	2
TOTAL	1	0	4	1	0	1	0	0	4	4	0	0	1	0	3	[illegible]
TOTALS	35	0	17	20	5	15	0	0	28	21	7	4	10	1	13	52
SITE NUMBER: 10114																
ASSEMBLAGE NUMBER: 6																
OBSIDIAN																
3520	6	0	0	1	0	1	0	0	2	1	1	0	2	0	0	[illegible]
3523	1	0	0	1	1	0	0	0	1	0	1	0	0	1	0	1
3524	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
3525	2	0	0	0	0	0	0	0	1	1	0	0	1	0	0	2
3526	2	0	0	1	1	0	0	0	1	0	1	0	0	1	0	2
TOTAL	13	0	0	4	2	2	0	0	5	2	3	0	3	2	0	1[illegible]
BASALT																
3701	3	0	3	2	1	1	0	0	1	1	0	0	0	1	0	[illegible]
3050	2	0	2	0	0	0	0	0	1	0	1	0	1	0	0	[illegible]
TOTAL	5	0	5	2	1	1	0	0	2	1	1	0	1	1	0	1[illegible]
PEC.CHRT/C																
1051	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1052	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1091	0	0	2	0	0	0	0	0	1	0	1	0	0	0	1	2
1215	2	0	0	1	1	0	0	0	1	0	1	0	0	1	0	2
TOTAL	2	0	4	1	1	0	0	0	2	0	2	0	0	1	1	6
TOTALS	20	0	9	7	4	3	0	0	9	3	6	0	4	4	1	2[illegible]
SITE NUMBER: 10114																
ASSEMBLAGE NUMBER: 7																
OBSIDIAN																
3520	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3523	2	0	1	2	0	0	0	2	0	0	0	0	0	0	0	3
3524	2	0	0	0	0	0	0	0	1	1	0	0	1	0	0	2
3525	3	0	0	1	0	1	0	0	1	0	1	0	1	0	0	3
TOTAL	9	0	1	3	0	1	0	2	2	1	1	0	2	0	0	1[illegible]
BASALT																
3701	7	0	0	6	2	4	0	0	3	3	0	1	1	1	0	7
3730	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	8	0	0	7	2	5	0	0	3	3	0	1	1	1	0	[illegible]
PEC.CHRT/C																
1050	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1053	2	0	0	1	0	1	0	0	1	0	1	0	1	0	0	2
1214	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1215	6	0	1	2	0	2	0	0	5	4	1	0	5	0	0	7
TOTAL	10	0	1	4	0	4	0	0	6	4	2	0	6	0	0	11
TOTALS	27	0	2	14	2	10	0	2	11	8	3	1	9	1	0	2[illegible]
SITE NUMBER: 13049																
ASSEMBLAGE NUMBER: 1																
OBSIDIAN																
3520	9	0	1	6	0	5	1	0	1	1	0	0	1	0	0	1[illegible]
3523	2	0	1	0	0	0	0	0	2	1	1	0	1	0	1	3
3525	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
TOTAL	13	0	2	7	0	6	1	0	3	2	1	0	2	0	1	1[illegible]
BASALT																
3701	13	0	1	9	1	8	0	0	5	3	2	1	4	0	0	1[illegible]
3050	4	0	1	1	0	1	0	0	2	1	1	0	1	0	1	[illegible]
TOTAL	17	0	2	10	1	9	0	0	7	4	3	1	5	0	1	1[illegible]
PEC.CHRT/C																
1050	6	0	2	3	0	3	0	0	2	2	0	0	1	0	1	3
1051	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1053	1	0	1	1	0	1	0	0	1	0	1	0	1	0	0	2
1091	9	0	3	2	0	2	0	0	6	3	3	0	5	0	1	12
1214	2	0	1	1	0	1	0	0	1	1	0	0	1	0	0	3
1215	4	0	3	2	0	2	0	0	2	2	0	0	2	0	0	7
TOTAL	23	0	10	9	0	9	0	0	12	8	4	0	10	0	2	33
CHERT																
1057	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1

MATERIAL	TYPE FREE	BIP	SAD	PLATFORMS #	PLATFORMS CTX	SF	RT	RS	CORTEX #	CORTEX WW	DT	CORTEX PLACEMENT PLT	CORTEX PLACEMENT DRS	CORTEX PLACEMENT P+D	SAD	TOTALS
QUARTZITE																
4001	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTAL	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTALS	54	0	15	26	1	24	1	0	23	15	8	1	18	0	4	[illegible]
SITE NUMBER: 13049																
ASSEMBLAGE NUMBER: 2																
OBSIDIAN																
3520	37	1	8	18	2	16	0	0	14	6	8	1	11	1	1	[illegible]
3523	14	0	6	8	2	5	1	0	7	2	5	1	2	1	3	23
3530	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	52	1	14	27	4	22	1	0	21	8	13	2	13	2	4	67
BASALT																
3701	72	0	20	50	7	42	1	0	23	15	3	6	12	1	4	[illegible]
3730	5	0	1	4	0	4	0	0	1	0	1	0	1	0	0	[illegible]
3050	36	0	12	17	7	10	0	0	18	8	10	3	8	4	3	[illegible]
TOTAL	113	0	33	71	14	56	1	0	42	23	[illegible]	9	21	5	7	[illegible]
PEC.CHRT/C																
1050	17	0	2	11	1	10	0	0	5	4	1	1	3	0	1	[illegible]
1051	10	0	1	4	1	3	0	0	7	5	2	0	5	1	1	11
1090	2	0	3	2	0	2	0	0	2	2	0	0	1	0	1	[illegible]
1052	16	0	1	10	0	10	0	0	3	2	1	0	3	0	0	17
1053	13	0	6	7	2	5	0	0	8	5	3	2	3	0	3	[illegible]
1091	21	0	17	8	4	4	0	0	25	19	6	2	7	2	14	[illegible]
1214	6	0	2	2	0	2	0	0	3	3	0	0	1	0	0	[illegible]
1215	30	0	11	18	3	15	0	0	18	12	6	2	7	1	8	41
1310	1	0	2	1	0	1	0	0	2	2	0	0	0	0	2	3
TOTAL	116	0	45	63	11	52	0	0	73	54	[illegible]	7	32	4	30	161
CHERT																
1057	8	0	10	2	0	2	0	0	2	0	2	0	1	0	1	13
1415	3	0	0	2	0	2	0	0	1	1	0	0	1	0	0	3
1600	9	0	2	5	1	4	0	0	3	3	0	0	2	1	0	11
1651	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
1660	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	[illegible]
1680	3	0	2	1	0	1	0	0	1	1	0	0	0	0	1	[illegible]
2205	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTAL	27	0	16	10	1	9	0	0	9	7	2	0	6	1	2	[illegible]
QUARTZITE																
4000	7	0	3	3	0	3	0	0	9	9	0	0	6	0	3	[illegible]
4001	1	0	1	0	0	0	0	0	1	1	0	0	1	0	0	2
TOTAL	8	0	4	3	0	3	0	0	10	10	0	0	7	0	3	12
GRAN.ANDES																
3000	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
3300	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	2	0	0	1	0	1	0	0	1	1	0	0	1	0	0	2
METARHYOLT																
4375	3	0	0	3	3	0	0	0	3	3	0	3	0	0	0	3
TOTAL	3	0	0	3	3	0	0	0	3	3	0	3	0	0	0	3
TOTALS	321	1	112	178	33	143	2	0	159	106	53	21	80	12	46	434
SITE NUMBER: 13049																
ASSEMBLAGE NUMBER: 3																
OBSIDIAN																
3510	0	0	1	0	0	0	0	0	1	0	1	0	0	0	1	1
3520	7	0	0	4	1	3	0	0	2	1	1	1	1	0	0	7
3523	5	0	1	4	3	1	0	0	3	2	1	1	0	2	0	5
3525	4	0	0	2	0	2	0	0	0	0	0	0	0	0	0	4
3526	1	0	0	1	[illegible]	0	0	0	1	0	1	0	0	1	0	1
TOTAL	17	0	2	11	5	6	0	0	7	3	4	2	1	3	1	[illegible]
BASALT																
3701	30	0	7	10	2	8	0	0	6	2	5	2	3	0	2	37
3730	2	0	0	1	0	0	1	0	2	2	0	0	2	0	0	2
3050	7	0	1	4	3	1	0	0	6	1	5	0	2	3	1	[illegible]
TOTAL	39	0	8	15	5	9	1	0	14	5	[illegible]	2	7	3	3	47
PEC.CHRT/C																
1050	4	0	3	1	0	1	0	0	4	4	0	0	3	0	1	7
1051	2	0	2	1	1	0	0	0	4	3	1	1	1	0	2	4
1090	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
1052	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1053	1	1	0	2	1	1	0	0	1	1	0	0	0	1	0	2
1091	5	0	2	4	1	3	0	0	3	3	0	1	1	0	1	7
1214	8	0	0	6	3	3	0	0	3	2	1	2	0	1	0	[illegible]
1215	17	0	11	7	2	5	0	0	18	7	11	2	5	0	11	23
1310	2	0	2	2	1	1	0	0	3	3	0	0	0	1	2	4
TOTAL	40	1	21	23	9	14	0	0	37	24	13	6	10	3	18	62
CHERT																
1057	3	0	0	1	0	1	0	0	0	0	0	0	0	0	0	3
1415	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1

MATERIAL	TYPE FREE	BIP	SAD	PLATFORMS #	CTX	SF	RT	RS	CORTEX #	WW	OT	CORTEX PLACEMENT PLT	ORS	P+D	SAD	TOTALS
1600	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
1660	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1680	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2205	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
TOTAL	6	0	5	3	0	3	0	0	2	2	0	0	2	0	0	11
QUARTZITE																
4001	2	0	0	1	0	1	0	0	2	2	0	0	2	0	0	2
TOTAL	2	0	0	1	0	1	0	0	2	2	0	0	2	0	0	2
METARHYOLT																
4375	2	0	0	2	2	0	0	0	2	2	0	1	0	1	0	2
TOTAL	2	0	0	2	2	0	0	0	2	2	0	1	0	1	0	2
OTHER																
3150	0	0	2	0	0	0	0	0	2	2	0	0	0	0	2	2
TOTAL	0	0	2	0	0	0	0	0	2	2	0	0	0	0	2	2
TOTALS	106	1	38	55	21	33	1	0	66	40	27	11	22	10	24	143

SITE NUMBER: 13049
ASSEMBLAGE NUMBER: 4

MATERIAL	TYPE FREE	BIP	SAD	PLATFORMS #	CTX	SF	RT	RS	CORTEX #	WW	OT	CORTEX PLACEMENT PLT	ORS	P+D	SAD	TOTALS
OBSIDIAN																
3520	8	0	1	5	1	3	1	0	2	1	1	1	0	0	1	7
3523	5	0	1	1	0	1	0	0	3	1	2	0	2	0	1	5
3525	2	0	3	0	0	0	0	0	1	0	1	0	0	0	1	5
3528	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	15	0	6	6	1	4	1	0	6	2	4	1	2	0	3	21
BASALT																
3701	37	0	10	21	2	18	1	0	11	8	3	2	7	0	2	47
3730	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3050	11	0	2	6	2	4	0	0	6	4	2	1	3	1	1	13
TOTAL	49	0	12	27	4	22	1	0	17	12	5	3	10	1	3	61
PED.CHRT/C																
1050	4	0	1	2	0	2	0	0	1	1	0	0	1	0	0	[illegible]
1051	5	0	1	3	0	3	0	0	1	1	0	0	1	0	0	[illegible]
1090	2	0	2	1	0	1	0	0	2	2	0	0	1	0	1	4
1053	6	0	1	2	0	2	0	0	1	1	0	0	1	0	0	7
1091	3	0	1	1	0	1	0	0	0	0	0	0	0	0	0	4
1214	5	0	3	2	0	2	0	0	1	1	0	0	1	0	0	3
1215	13	0	3	3	1	2	0	0	3	2	1	1	1	0	1	13
1310	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
TOTAL	40	0	12	15	1	14	0	0	9	8	1	1	6	0	2	32
CHERT																
1057	2	0	2	1	1	0	0	0	1	1	0	0	0	1	0	4
1070	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1073	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
1030	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1660	1	0	3	0	0	0	0	0	3	1	2	0	1	0	2	4
1680	1	0	3	0	0	0	0	0	1	1	0	0	0	0	1	4
2205	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	7	0	9	3	1	2	0	0	6	4	2	0	2	1	3	13
QUARTZITE																
4000	2	0	0	0	0	0	0	0	2	2	0	0	2	0	0	2
TOTAL	2	0	0	0	0	0	0	0	2	2	0	0	2	0	0	2
GRAN.ANDES																
3300	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
TOTAL	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
METARHYOLT																
4375	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
TOTAL	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
OTHER																
9999	1	0	0	1	1	0	0	0	1	1	0	1	0	0	0	1
TOTAL	1	0	0	1	1	0	0	0	1	1	0	1	0	0	0	1
TOTALS	116	0	39	54	10	42	2	0	43	31	12	6	22	4	11	153

SITE NUMBER: 13049
ASSEMBLAGE NUMBER: 5

MATERIAL	TYPE FREE	BIP	SAD	PLATFORMS #	CTX	SF	RT	RS	CORTEX #	WW	OT	CORTEX PLACEMENT PLT	ORS	P+D	SAD	TOTALS
OBSIDIAN																
3520	8	0	1	4	0	4	0	0	1	1	0	0	1	0	0	9
3523	12	0	0	5	1	3	1	0	2	2	0	0	1	1	0	12
3525	4	0	2	2	1	0	1	0	2	2	0	1	1	0	0	5
3526	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	2
3530	1	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1
TOTAL	26	0	4	12	2	8	2	0	6	5	1	1	4	1	0	30
BASALT																
3701	37	0	10	23	7	16	0	0	17	10	7	2	5	5	5	47
3730	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
3030	1	0	0	1	1	0	0	0	1	0	1	0	0	1	0	1
3050	10	0	5	8	3	5	0	0	9	5	4	1	5	2	1	13
3740	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
TOTAL	49	0	17	33	11	22	0	0	27	15	12	3	10	8	6	69

APPENDIX III — DEBITAGE REDUCTION SUMMARY

MATERIAL	TYPE FREE	BIF	SAD	PLATFORMS #	PLATFORMS CTX	SF	RT	RS	CORTEX #	CORTEX WW	OT	CORTEX PLACEMENT PLT	CORTEX PLACEMENT DRS	CORTEX PLACEMENT P+D	SAD	TOTALS
PEC.CHRT/C																
1050	5	0	4	2	0	2	0	0	2	2	0	0	2	0	0	9
1051	5	0	3	3	1	2	0	0	3	3	0	1	0	0	2	8
1090	2	0	2	0	0	0	0	0	2	2	0	0	1	0	1	4
1052	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1053	1	0	1	1	0	1	0	0	1	1	0	0	0	0	1	2
1091	5	0	3	4	0	4	0	0	3	3	0	0	1	0	2	8
1214	7	0	3	4	0	4	0	0	3	3	0	0	2	0	1	10
1215	26	0	7	14	4	10	0	0	16	13	3	3	8	1	4	33
1310	2	0	0	2	2	0	0	0	2	2	0	1	0	1	0	2
1340	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTAL	54	0	24	30	7	23	0	0	33	30	3	5	15	2	11	78
CHERT																
1057	3	0	0	3	1	2	0	0	1	1	0	1	0	0	0	3
1070	2	0	1	1	0	1	0	0	1	0	1	0	0	0	1	3
1072	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
1400	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1415	2	0	1	0	0	0	0	0	1	1	0	0	1	0	0	3
1600	2	0	1	2	0	2	0	0	1	0	1	0	0	0	1	3
1620	0	0	1	0	0	0	0	0	1	0	1	0	0	0	1	1
1660	1	0	1	0	0	0	0	0	1	0	1	0	0	0	1	2
1680	1	0	2	1	0	1	0	0	2	2	0	0	0	0	2	3
1430	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	13	0	8	8	1	7	0	0	9	5	4	1	1	0	7	21
CHALCEDONY																
1211	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTAL	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
QUARTZITE																
4000	1	0	4	1	1	0	0	0	3	3	0	1	0	0	2	5
TOTAL	1	0	4	1	1	0	0	0	3	3	0	1	0	0	2	5
TOTALS	144	0	57	84	22	60	2	0	79	59	20	11	31	11	26	201
SITE NUMBER: 13050																
ASSEMBLAGE NUMBER: 1																
OBSIDIAN																
3520	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3523	4	0	0	2	0	2	0	0	0	0	0	0	0	0	0	4
3525	3	0	1	2	0	2	0	0	1	1	0	0	1	0	0	4
TOTAL	8	0	1	4	0	4	0	0	1	1	0	0	1	0	0	9
BASALT																
3701	7	0	0	6	0	6	0	0	1	1	0	0	1	0	0	7
3730	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
3050	5	0	1	5	2	3	0	0	2	0	2	1	0	1	0	6
TOTAL	14	0	1	12	2	10	0	0	3	1	2	1	1	1	0	15
PEC.CHRT/C																
1050	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1051	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
1052	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1091	3	0	1	1	0	1	0	0	1	1	0	0	1	0	0	4
1214	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
1215	5	0	2	4	1	3	0	0	3	2	1	1	1	0	1	7
TOTAL	11	0	5	6	1	5	0	0	5	4	1	1	2	0	2	16
TOTALS	33	0	7	22	3	19	0	0	9	6	3	2	4	1	2	40
SITE NUMBER: 13050																
ASSEMBLAGE NUMBER: 2																
OBSIDIAN																
3520	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3523	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTAL	3	0	0	0	0	0	0	0	1	1	0	0	1	0	0	3
PEC.CHRT/C																
1050	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1214	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
1215	3	0	0	1	1	0	0	0	2	2	0	1	1	0	0	3
TOTAL	5	0	0	3	1	2	0	0	3	3	0	1	2	0	0	5
QUARTZITE																
4000	2	0	0	1	1	0	0	0	1	1	0	1	0	0	0	2
TOTAL	2	0	0	1	1	0	0	0	1	1	0	1	0	0	0	2
TOTALS	10	0	0	4	2	2	0	0	5	5	0	2	3	0	0	10
SITE NUMBER: 13050																
ASSEMBLAGE NUMBER: 3																
OBSIDIAN																
3520	2	0	0	0	0	0	0	0	1	0	1	0	1	0	0	2
3523	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
3524	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3526	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

MATERIAL	TYPE FREQ	BIP	SAD	PLATFORMS #	PLATFORMS CTX	SF	RT	RS	CORTEX #	CORTEX WW	DT	CORTEX PLACEMENT PLT	CORTEX PLACEMENT DRS	CORTEX PLACEMENT P+D	SAD	TOTALS
3528	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	6	0	0	2	0	2	0	0	1	0	1	0	1	0	0	6
BASALT																
3701	8	0	2	3	0	3	0	0	1	1	0	0	1	0	0	10
3050	6	0	0	4	1	3	0	0	3	1	2	1	2	0	0	6
3740	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	15	0	2	7	1	6	0	0	4	2	2	1	3	0	0	17
FED.CHRT/C																
1050	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1051	1	0	2	1	0	1	0	0	1	1	0	0	0	0	1	3
1052	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
1091	4	0	0	3	2	1	0	0	2	0	2	2	0	0	0	4
1214	5	0	0	3	1	2	0	0	1	0	1	0	0	1	0	5
1215	6	0	1	4	1	3	0	0	5	3	2	1	3	0	1	9
TOTAL	20	0	4	11	4	7	0	0	9	4	5	3	3	1	2	24
QUARTZITE																
4000	5	0	5	1	1	0	0	0	8	8	0	1	3	0	4	10
TOTAL	5	0	5	1	1	0	0	0	8	8	0	1	3	0	4	10
TOTALS	46	0	11	21	6	15	0	0	22	14	8	5	10	1	6	57
SITE NUMBER: 13050																
ASSEMBLAGE NUMBER: 4																
BASALT																
3050	2	0	0	2	1	1	0	0	1	1	0	0	0	1	0	2
TOTAL	2	0	0	2	1	1	0	0	1	1	0	0	0	1	0	2
TOTALS	2	0	0	2	1	1	0	0	1	1	0	0	0	1	0	2
SITE NUMBER: 13050																
ASSEMBLAGE NUMBER: 5																
OBSIDIAN																
3520	1	0	2	0	0	0	0	0	1	1	0	0	0	0	1	3
3525	3	0	0	2	1	1	0	0	3	3	0	1	2	0	0	3
3530	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	5	0	2	2	1	1	0	0	4	4	0	1	2	0	1	7
BASALT																
3701	7	0	0	7	1	6	0	0	3	1	2	1	2	0	0	7
3730	2	0	1	1	1	0	0	0	1	1	0	1	0	0	0	3
3050	2	0	3	1	0	1	0	0	1	1	0	0	1	0	0	3
TOTAL	11	0	4	9	2	7	0	0	5	3	2	2	3	0	0	13
PEC.CHPT/C																
1050	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1051	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	2
1091	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1215	7	0	3	5	2	3	0	0	3	2	1	1	0	1	1	10
TOTAL	8	0	7	6	2	4	0	0	3	2	1	1	0	1	1	15
CHERT																
1070	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1650	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
1660	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	2	0	3	1	0	1	0	0	0	0	0	0	0	0	0	5
SILC.WOOD																
1113	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
QUARTZITE																
4000	0	1	0	1	0	1	0	0	1	1	0	0	1	0	0	1
TOTAL	0	1	0	1	0	1	0	0	1	1	0	0	1	0	0	1
TOTALS	27	1	16	20	5	15	0	0	13	10	3	4	6	1	2	44
SITE NUMBER: 13050																
ASSEMBLAGE NUMBER: 6																
OBSIDIAN																
3520	4	0	1	3	1	2	0	[illegible]	3	3	0	1	2	0	0	5
3523	3	0	0	1	0	1	0	[illegible]	2	1	1	0	2	0	0	3
3525	4	0	0	4	2	2	0	0	2	1	1	2	0	0	0	4
TOTAL	11	0	1	8	3	5	0	0	7	5	2	3	4	0	0	12
BASALT																
3701	19	0	2	11	3	8	0	0	4	4	0	1	1	2	0	21
3730	3	0	0	2	1	1	0	0	2	2	0	1	1	0	0	3
3030	0	0	2	0	0	0	0	[illegible]	0	0	0	0	0	0	0	2
3050	19	0	9	15	5	10	0	[illegible]	9	8	1	2	3	3	1	28
TOTAL	41	0	13	28	9	19	0	[illegible]	15	14	1	4	5	5	1	54
FED.CHRT/C																
1050	5	0	11	3	2	1	0	0	6	6	0	2	1	0	3	13
1051	1	0	1	0	0	0	0	0	2	2	0	0	1	0	1	2
1052	4	0	5	2	1	1	0	0	2	2	0	1	1	0	0	9
1053	5	0	1	2	1	1	0	0	1	1	0	1	0	0	0	6
1091	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1

APPENDIX III — DEBITAGE REDUCTION SUMMARY

MATERIAL	TYPE FREE	BIP	SAD	PLATFORMS #	PLATFORMS CTX	SF	RT	RS	CORTEX #	CORTEX WW	DT	CORTEX PLACEMENT PLT	CORTEX PLACEMENT DRS	CORTEX PLACEMENT P+D	SAD	TOTALS
1214	3	0	3	2	0	2	0	0	3	3	0	0	0	0	3	6
1215	10	0	6	8	2	6	0	0	6	5	1	1	2	1	2	16
TOTAL	28	0	28	17	2	11	0	0	21	20	1	3	5	1	10	56
CHERT																
1057	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
1600	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
1660	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1680	0	0	2	0	0	0	0	0	1	1	0	0	0	0	1	2
TOTAL	1	0	4	1	0	1	0	0	3	3	0	0	0	0	3	5
QUARTZITE																
4000	0	0	3	0	0	0	0	0	2	2	0	0	0	0	2	3
TOTAL	0	0	3	0	0	0	0	0	2	2	0	0	0	0	2	3
TOTALS	81	0	49	54	18	36	0	0	48	44	4	12	14	6	16	130
SITE NUMBER: 13050																
ASSEMBLAGE NUMBER: 7																
OBSIDIAN																
3520	9	0	1	4	0	4	0	0	2	0	2	0	1	0	1	10
3523	7	0	0	3	0	3	0	0	0	0	0	0	0	0	0	7
3524	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3530	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
TOTAL	20	0	1	7	0	7	0	0	2	0	2	0	1	0	1	21
BASALT																
3701	20	0	3	13	5	8	0	0	7	6	1	4	2	1	0	23
3050	8	0	2	5	2	3	0	0	3	2	1	1	1	1	0	10
TOTAL	28	0	5	18	7	11	0	0	10	8	[illegible]	5	3	2	0	33
PEC.CHRT/C																
1051	1	0	1	1	1	0	0	0	2	2	0	1	0	0	1	2
1090	1	0	0	1	1	0	0	0	1	1	0	1	0	0	0	1
1052	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
1053	1	0	1	0	0	0	0	0	2	1	1	0	1	0	1	2
1091	1	0	0	1	1	0	0	0	1	0	1	1	0	0	0	1
1214	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1215	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
TOTAL	5	0	5	3	3	0	0	0	7	5	2	3	2	0	2	10
CHERT																
1057	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
S.S.GREENS																
2600	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTALS	54	0	12	29	10	19	0	0	19	13	6	8	6	2	3	66
SITE NUMBER: 13050																
ASSEMBLAGE NUMBER: 8																
OBSIDIAN																
3520	3	0	0	2	0	2	0	0	0	0	0	0	0	0	0	3
3523	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3530	3	0	0	2	0	2	0	0	0	0	0	0	0	0	0	3
TOTAL	7	0	0	4	0	4	0	0	0	0	0	0	0	0	0	7
BASALT																
3701	7	0	2	5	1	4	0	0	3	3	0	1	1	0	1	9
3050	7	0	0	6	1	5	0	0	1	1	0	1	0	0	0	7
TOTAL	14	0	2	11	2	9	0	0	4	4	0	2	1	0	1	16
PEC.CHRT/C																
1214	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1215	3	0	1	1	0	1	0	0	2	0	2	0	1	0	1	4
TOTAL	4	0	1	1	0	1	0	0	2	0	2	0	1	0	1	5
CHERT																
1600	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
QUARTZITE																
4000	3	0	0	3	0	3	0	0	2	2	0	0	2	0	0	3
TOTAL	3	0	0	3	0	3	0	0	2	2	0	0	2	0	0	3
TOTALS	28	0	4	19	2	17	0	0	8	6	2	2	4	0	2	32
SITE NUMBER: 13050																
ASSEMBLAGE NUMBER: 9																
OBSIDIAN																
3520	6	0	0	2	0	2	0	0	1	1	0	0	1	0	0	6
3523	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
3525	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
3526	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
TOTAL	10	0	0	4	0	4	0	0	2	2	0	0	2	0	0	10
BASALT																
3701	27	0	5	20	5	15	0	0	12	10	2	4	3	1	4	32
3730	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

MATERIAL	TYPE FREE	BIP	SAD	PLATFORMS #	PLATFORMS CTX	SF	RT	RS	CORTEX #	CORTEX WW	DT	CORTEX PLACEMENT PLT	CORTEX PLACEMENT DRS	CORTEX PLACEMENT P+D	SAD	TOTALS
3730	1	0	0	1	0	1	0	0	1	0	1	0	1	0	0	1
3050	3	0	0	2	1	1	0	0	2	1	1	1	1	0	0	3
TOTAL	29	0	2	20	7	13	0	0	13	8	5	6	6	1	0	31
PEC.CHRT/C																
1050	1	0	2	0	0	0	0	0	1	1	0	0	0	0	1	3
1051	6	0	1	3	1	2	0	0	3	2	1	1	2	0	0	7
1090	5	0	0	2	1	1	0	0	5	3	2	1	4	0	0	5
1053	3	0	0	0	0	0	0	0	1	1	0	0	1	0	0	3
1091	11	0	2	4	0	4	0	0	10	6	4	0	9	0	1	13
1214	6	0	2	4	0	4	0	0	3	3	0	0	2	0	1	3
1215	44	0	11	26	12	14	0	0	29	15	14	7	11	5	6	53
TOTAL	76	0	18	39	14	25	0	0	52	31	21	9	29	5	9	94
CHERT																
1073	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
1075	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1600	4	0	0	2	0	2	0	0	0	0	0	0	0	0	0	4
TOTAL	6	0	0	2	0	2	0	0	1	1	0	0	1	0	0	6
QUARTZITE																
4000	3	0	2	2	2	0	0	0	3	3	0	1	1	1	0	5
4001	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
TOTAL	4	0	2	3	2	1	0	0	4	4	0	1	2	1	0	6
TOTALS	154	0	25	83	30	53	0	0	86	47	39	20	47	10	9	173
SITE NUMBER: 13054																
ASSEMBLAGE NUMBER: 2																
OBSIDIAN																
3520	4	0	1	2	2	0	0	0	2	2	0	2	0	0	0	5
3523	1	0	2	1	0	1	0	0	2	1	1	0	1	0	1	3
3524	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
3525	4	0	3	1	0	1	0	0	3	3	0	0	1	0	2	7
TOTAL	10	0	6	5	2	3	0	0	8	7	1	2	3	0	3	15
BASALT																
3701	17	0	1	7	0	7	0	0	3	3	0	0	3	0	0	13
3706	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3050	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
TOTAL	20	0	1	7	0	7	0	0	3	3	0	0	3	0	0	21
PEC.CHRT/C																
1050	2	0	1	1	0	1	0	0	0	0	0	0	0	0	0	3
1051	2	0	2	2	1	1	0	0	2	1	1	0	0	0	0	3
1090	4	0	2	2	0	2	0	0	3	3	1	0	1	1	1	5
1052	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2
1053	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
1091	3	0	3	2	1	1	0	0	1	0	1	1	0	0	0	3
1214	1	0	2	0	0	0	0	0	2	2	0	0	1	0	1	3
1215	14	0	5	4	1	3	0	0	10	6	4	0	5	1	4	17
TOTAL	28	0	18	11	3	8	0	0	18	12	6	1	7	2	8	45
CHERT																
1600	2	0	1	1	1	0	0	0	1	1	0	1	0	0	0	3
1680	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
TOTAL	2	0	2	1	1	0	0	0	2	2	0	1	0	0	1	4
QUARTZITE																
4000	2	0	4	1	1	0	0	0	6	6	0	0	1	1	4	6
TOTAL	2	0	4	1	1	0	0	0	6	6	0	0	1	1	4	6
GRAN.ANDES																
3000	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTAL	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
S.S.GREENS																
2250	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTAL	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTALS	64	0	31	25	7	18	0	0	39	32	7	4	16	3	16	95
SITE NUMBER: 13054																
ASSEMBLAGE NUMBER: 3																
OBSIDIAN																
3520	3	0	0	2	0	2	0	0	1	1	0	0	1	0	0	3
3525	2	0	0	2	1	1	0	0	1	1	0	1	0	0	0	2
TOTAL	5	0	0	4	1	3	0	0	2	2	0	1	1	0	0	5
BASALT																
3701	9	0	3	8	0	8	0	0	3	3	0	0	2	0	1	12
3050	1	0	2	1	0	1	0	0	1	1	0	0	1	0	0	3
TOTAL	10	0	5	9	0	9	0	0	4	4	0	0	3	0	1	15
PEC.CHRT/C																
1090	1	0	1	1	1	0	0	0	1	1	0	0	0	1	0	2
1053	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1091	5	0	2	2	1	1	0	0	5	1	4	1	2	0	2	7
1214	1	0	3	0	0	0	0	0	2	1	1	0	0	0	2	4
1215	8	0	3	5	3	2	0	0	7	4	3	2	2	1	2	11
TOTAL	16	0	9	8	5	3	0	0	15	7	8	3	4	2	6	25

MATERIAL	TYPE FREE	BIF	SAD	PLATFORMS #	PLATFORMS CTX	SF	RT	RS	CORTEX #	CORTEX WW	JT	CORTEX PLACEMENT PLT	CORTEX PLACEMENT DRS	CORTEX PLACEMENT P+D	SAD	TOTALS
3050	9	0	3	7	1	6	0	0	4	4	0	1	2	0	1	12
TOTAL	37	0	8	27	6	21	0	0	16	14	2	5	5	1	5	45
PED.CHRT/C																
1050	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1052	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
1053	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
1091	2	0	0	1	0	1	0	0	1	1	0	0	1	0	0	2
1214	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1215	6	0	1	4	1	3	0	0	3	2	1	1	1	0	1	7
TOTAL	12	0	3	7	1	6	0	0	5	4	1	1	3	0	1	15
CHERT																
1057	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1070	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
1415	2	0	1	1	0	1	0	0	1	1	0	0	1	0	0	3
1600	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	4	0	2	2	0	2	0	0	2	2	0	0	2	0	0	6
QUARTZITE																
4000	0	0	2	0	0	0	0	0	2	2	0	0	0	0	2	2
TOTAL	0	0	2	0	0	0	0	0	2	2	0	0	0	0	2	2
TOTALS	63	0	15	40	7	33	0	0	27	24	3	6	12	1	8	78
SITE NUMBER: 13050																
ASSEMBLAGE NUMBER: 10																
OBSIDIAN																
3520	8	0	0	2	0	2	0	0	0	0	0	0	0	0	0	8
3523	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	9	0	0	3	0	3	0	0	0	0	0	0	0	0	0	9
BASALT																
3701	2	0	0	2	1	1	0	0	2	0	2	0	1	1	0	2
3050	6	0	0	3	0	3	0	0	0	0	0	0	0	0	0	6
TOTAL	8	0	0	5	1	4	0	0	2	0	2	0	1	1	0	8
PED.CHRT/C																
1091	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1215	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	2	0	0	2	0	2	0	0	0	0	0	0	0	0	0	2
TOTALS	19	0	0	10	1	9	0	0	2	0	2	0	1	1	0	19
SITE NUMBER: 13050																
ASSEMBLAGE NUMBER: 11																
OBSIDIAN																
3520	2	0	0	1	0	1	0	0	1	0	1	0	1	0	0	2
3523	6	0	0	2	0	2	0	0	2	0	2	0	2	0	0	6
3525	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
3526	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	9	0	1	4	0	4	0	0	4	1	3	0	3	0	1	10
BASALT																
3701	4	0	0	2	1	1	0	0	3	2	1	1	2	0	0	4
3050	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	5	0	0	2	1	1	0	0	3	2	1	1	2	0	0	5
PED.CHRT/C																
1051	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1090	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
1091	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
1214	2	0	0	1	0	1	0	0	1	0	1	0	1	0	0	2
1215	5	0	4	5	1	4	0	0	6	1	5	1	1	0	4	9
TOTAL	9	0	6	7	1	6	0	0	8	2	6	1	2	0	5	15
QUARTZITE																
4000	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTAL	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
GRAN.ANDES																
3300	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
TOTAL	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
TOTALS	25	0	7	14	3	11	0	0	17	7	10	2	8	1	6	32
SITE NUMBER: 13054																
ASSEMBLAGE NUMBER: 1																
OBSIDIAN																
3520	8	0	0	4	2	2	0	0	3	0	3	1	1	1	0	8
3523	13	0	0	9	3	6	0	0	8	1	7	2	5	1	0	13
3524	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3525	13	0	3	5	2	3	0	0	4	2	2	1	2	1	0	16
3526	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3528	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
3530	1	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1
TOTAL	39	0	3	19	7	12	0	0	16	3	13	4	9	3	0	42
BASALT																
3701	25	0	2	17	6	11	0	0	10	7	3	5	4	1	0	27

APPENDIX III — DEBITAGE REDUCTION SUMMARY

MATERIAL	TYPE FREE	BIP	SAD	PLATFORMS #	PLATFORMS CTX	SF	RT	RS	CORTEX #	CORTEX WW	DT	CORTEX PLACEMENT PLT	CORTEX PLACEMENT ORS	CORTEX PLACEMENT P+D	SAD	TOTALS
CHERT																
1057	2	0	0	0	0	0	0	0	2	2	0	0	2	0	0	2
1415	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
1600	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1660	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
TOTAL	5	0	0	3	0	3	0	0	4	4	0	0	4	0	0	5
QUARTZITE																
4000	2	0	1	1	1	0	0	0	3	3	0	1	1	0	1	3
4001	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
TOTAL	3	0	1	2	2	0	0	0	4	4	0	1	1	1	1	4
JASPEROID																
1502	2	0	1	1	0	1	0	0	1	1	0	0	0	0	1	3
TOTAL	2	0	1	1	0	1	0	0	1	1	0	0	0	0	1	3
METARHYOLT																
4375	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTAL	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTALS	42	0	16	27	8	19	0	0	31	23	0	1	14	3	9	33
SITE NUMBER: 13054																
ASSEMBLAGE NUMBER: 4																
OBSIDIAN																
3520	4	0	0	2	1	1	0	0	1	1	0	1	0	0	0	4
3525	2	0	0	2	1	1	0	0	2	2	0	0	1	1	0	2
TOTAL	6	0	0	4	2	2	0	0	3	3	0	1	1	1	0	6
BASALT																
3701	7	0	0	2	0	2	0	0	0	0	0	0	0	0	0	7
3730	3	0	5	2	2	0	0	0	6	5	1	2	1	0	3	8
3050	3	0	1	2	1	1	0	0	3	3	0	0	1	1	1	4
3731	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
TOTAL	14	0	6	7	4	3	0	0	10	9	1	2	2	2	4	20
PED.CHRT/C																
1050	28	0	12	6	1	5	0	0	5	5	0	1	1	0	3	43
1051	12	0	3	7	2	5	0	0	8	8	0	1	3	1	3	15
1050	25	0	13	8	7	1	0	0	26	23	3	3	11	2	8	31
1052	4	0	3	1	0	1	0	0	2	1	1	0	1	0	1	7
1053	3	0	4	1	1	0	0	0	4	1	3	0	1	1	2	7
1091	11	0	2	3	0	3	0	0	6	4	2	0	6	0	0	13
1214	18	0	6	10	5	5	0	0	12	5	7	3	3	2	4	24
1215	118	0	68	59	21	37	1	0	130	91	39	7	63	14	49	183
TOTAL	219	0	111	95	37	57	1	0	193	138	55	17	86	20	70	333
CHERT																
1057	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1070	5	0	0	4	3	1	0	0	4	4	0	1	1	2	0	5
1073	1	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1
1030	1	0	1	1	0	1	0	0	2	1	1	0	1	0	1	2
1415	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
1610	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1660	3	0	0	1	1	0	0	0	2	2	0	1	1	0	0	3
TOTAL	12	0	3	6	4	2	0	0	10	8	2	2	5	2	1	13
CHALCEDONY																
1230	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1233	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
TOTAL	2	0	0	2	1	1	0	0	1	1	0	0	0	1	0	2
QUARTZITE																
4000	37	0	22	21	12	9	0	0	43	41	2	3	16	9	15	59
4001	5	0	0	1	0	1	0	0	4	4	0	0	4	0	0	5
TOTAL	42	0	22	22	12	10	0	0	47	45	2	3	20	9	15	64
GRAN.ANDES																
3101	2	0	1	2	1	1	0	0	3	3	0	0	1	1	1	3
3300	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
TOTAL	3	0	1	3	2	1	0	0	4	4	0	0	1	2	1	4
JASPEROID																
1501	1	0	1	0	0	0	0	0	1	1	0	0	1	0	0	2
TOTAL	1	0	1	0	0	0	0	0	1	1	0	0	1	0	0	2
OTHER																
9999	1	0	1	0	0	0	0	0	1	1	0	0	0	0	1	2
TOTAL	1	0	1	0	0	0	0	0	1	1	0	0	0	0	1	2
TOTALS	300	0	145	139	62	76	1	0	270	210	60	25	116	37	92	443
SITE NUMBER: 13054																
ASSEMBLAGE NUMBER: 5																
OBSIDIAN																
3520	17	0	1	11	1	10	0	0	8	4	4	1	6	0	1	18
3523	6	0	2	6	1	5	0	0	3	2	1	1	1	0	1	8
3525	18	0	2	7	0	7	0	0	4	4	0	0	4	0	0	23
3530	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	42	0	5	25	2	23	0	0	15	10	3	2	11	0	2	47
BASALT																

MATERIAL	TYPE FREE	BIP	SAD	PLATFORMS #	PLATFORMS CTX	SF	RT	RS	CORTEX #	CORTEX WW	OT	CORTEX PLACEMENT PLT	CORTEX PLACEMENT DRS	CORTEX PLACEMENT P+D	SAD	TOTALS
3701	43	0	3	27	4	23	0	0	13	8	5	1	7	3	2	43
3706	1	0	0	1	1	0	0	0	1	1	0	1	0	0	0	1
3730	1	0	4	0	0	0	0	0	1	0	1	0	0	0	1	3
3050	4	0	2	4	2	2	0	0	4	4	0	1	0	1	2	5
3430	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3731	2	0	0	0	0	0	0	0	1	1	0	0	1	0	0	2
TOTAL	51	0	10	32	7	25	0	0	20	14	6	3	8	4	5	61
PEC.CHRT/C																
1050	8	0	2	3	0	3	0	0	0	0	0	0	0	0	0	10
1051	8	0	1	3	0	3	0	0	5	5	0	0	4	0	1	7
1090	5	0	2	5	3	2	0	0	5	4	1	3	1	0	1	7
1052	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
1053	7	0	11	4	1	3	0	0	9	7	2	0	4	1	4	13
1051	17	0	12	9	1	8	0	0	15	9	6	1	6	0	8	20
1214	15	0	7	9	2	6	1	0	8	7	1	1	5	1	1	22
1215	87	0	58	44	12	32	0	0	89	55	34	5	47	7	30	143
1310	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
TOTAL	150	0	94	77	19	57	1	0	132	88	44	10	67	9	46	244
CHERT																
1070	3	0	1	2	2	0	0	0	4	4	0	0	1	2	1	4
1060	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
1030	2	0	0	2	1	1	0	0	1	1	0	0	0	1	0	2
1400	1	0	2	0	0	0	0	0	2	1	1	0	0	0	2	3
1415	2	0	0	1	0	1	0	0	1	1	0	0	1	0	0	2
1600	5	0	3	2	0	2	0	0	3	2	1	0	1	0	2	3
1610	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1680	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	15	0	7	8	3	5	0	0	12	10	2	0	3	3	6	22
QUARTZITE																
4000	25	0	9	15	8	7	0	0	30	30	0	3	14	5	8	34
4001	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
TOTAL	26	0	10	15	8	7	0	0	30	30	0	3	14	5	8	3[illegible]
GRAN.ANDES																
3101	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
JASPERCIO																
1502	2	0	0	2	1	1	0	0	1	0	1	1	0	0	0	2
TOTAL	2	0	0	2	1	1	0	0	1	0	1	1	0	0	0	2
METARHYOLT																
4370	0	0	2	0	0	0	0	0	1	1	0	0	0	0	1	2
4372	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
4375	1	0	0	1	1	0	0	0	1	1	0	1	0	0	0	1
TOTAL	2	0	2	2	1	1	0	0	3	3	0	1	1	0	1	4
TOTALS	288	0	129	161	41	119	1	0	213	155	58	20	104	21	68	417
SITE NUMBER: 13076																
ASSEMBLAGE NUMBER: 1																
OBSIDIAN																
3523	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
BASALT																
3701	10	0	6	4	1	3	0	0	4	0	4	0	2	1	1	16
3706	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	11	0	6	5	1	4	0	0	4	0	4	0	2	1	1	17
PEC.CHRT/C																
1214	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1215	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTAL	2	0	0	0	0	0	0	0	1	1	0	0	1	0	0	2
TOTALS	14	0	6	5	1	4	0	0	5	1	4	0	3	1	1	20
SITE NUMBER: 13076																
ASSEMBLAGE NUMBER: 2																
OBSIDIAN																
3523	6	0	1	6	0	5	1	0	0	0	0	0	0	0	0	7
TOTAL	6	0	1	6	0	5	1	0	0	0	0	0	0	0	0	7
BASALT																
3701	244	0	86	138	14	124	0	0	74	15	59	11	37	3	23	330
3706	1	0	1	1	0	1	0	0	1	0	1	0	1	0	0	2
3050	2	0	2	1	0	1	0	0	1	1	0	0	0	0	1	4
TOTAL	247	0	89	140	14	126	0	0	76	16	60	11	38	3	24	336
PEC.CHRT/C																
1051	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1214	6	0	3	4	2	2	0	0	5	3	2	1	2	1	1	9
1215	10	0	2	6	2	4	0	0	6	4	2	1	3	1	1	12
TOTAL	17	0	5	11	4	7	0	0	11	7	4	2	5	2	2	22
QUARTZITE																
4000	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
TOTAL	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1

MATERIAL	TYPE FREE	BIP	SAD	PLATFORMS #	PLATFORMS CTX	SF	RT	RS	CORTEX #	CORTEX WW	JT	CORTEX PLACEMENT PLT	CORTEX PLACEMENT DRS	CORTEX PLACEMENT P+D	SAD	TOTALS
TOTALS	270	0	96	157	18	130	1	0	88	24	64	13	43	5	27	3[illegible]
SITE NUMBER: 13076																
ASSEMBLAGE NUMBER: 3																
BASALT																
3701	26	0	5	14	2	12	0	0	12	3	9	2	9	0	1	31
3706	2	0	1	2	0	2	0	0	1	0	1	0	1	0	0	3
TOTAL	28	0	6	16	2	14	0	0	13	3	10	2	10	0	1	34
TOTALS	28	0	6	16	2	14	0	0	13	3	10	2	10	0	1	34
SITE NUMBER: 13076																
ASSEMBLAGE NUMBER: 4																
OBSIDIAN																
3520	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
3523	4	0	1	2	0	2	0	0	0	0	0	0	0	0	0	5
TOTAL	5	0	1	3	0	3	0	0	0	0	0	0	0	0	0	6
BASALT																
3701	217	0	39	146	13	133	0	0	60	9	51	10	42	3	6	253
TOTAL	217	0	39	146	13	133	0	0	60	9	51	10	42	3	6	253
PEC.CHRT/C																
1052	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1053	2	0	0	2	1	1	0	0	1	0	1	1	0	0	0	2
1214	3	0	4	1	0	1	0	0	1	1	0	0	0	0	1	7
1215	4	0	1	4	3	1	0	0	4	2	2	3	0	0	1	5
TOTAL	9	0	6	7	4	3	0	0	6	3	3	4	0	0	2	15
CHERT																
1057	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTALS	231	0	47	156	17	139	0	0	66	12	54	14	42	3	8	273
SITE NUMBER: 13076																
ASSEMBLAGE NUMBER: 5																
BASALT																
3701	20	0	14	12	2	10	0	0	9	1	8	2	1	0	6	34
TOTAL	20	0	14	12	2	10	0	0	9	1	8	2	1	0	6	34
PEC.CHRT/C																
1215	3	0	0	3	2	1	0	0	2	0	2	2	0	0	0	3
TOTAL	3	0	0	3	2	1	0	0	2	0	2	2	0	0	0	3
TOTALS	23	0	14	15	4	11	0	0	11	1	10	4	1	0	6	37
SITE NUMBER: 13076																
ASSEMBLAGE NUMBER: 6																
OBSIDIAN																
3520	1	0	0	1	1	0	0	0	1	1	0	1	0	0	0	1
3525	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
3530	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	3	0	0	2	1	1	0	0	1	1	0	1	0	0	0	3
BASALT																
3701	162	0	49	73	4	74	0	0	31	5	26	2	15	2	12	211
3706	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
3050	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	164	0	49	79	4	75	0	0	31	5	26	2	15	2	12	213
PEC.CHRT/C																
1050	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
1051	2	0	0	2	0	2	0	0	0	0	0	0	0	0	0	2
1052	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1091	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1214	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1215	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	7	0	0	6	0	6	0	0	1	1	0	0	1	0	0	7
TOTALS	174	0	49	87	5	82	0	0	33	7	26	3	16	2	12	223
SITE NUMBER: 13076																
ASSEMBLAGE NUMBER: 7																
OBSIDIAN																
3520	1	0	1	1	0	1	0	0	1	0	1	0	1	0	0	2
3523	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	2	0	1	1	0	1	0	0	1	0	1	0	1	0	0	3
BASALT																
3701	249	0	67	135	18	118	0	0	117	10	107	12	67	6	33	316
3706	5	0	4	1	0	1	0	0	5	0	5	0	2	0	3	[illegible]
3050	3	0	0	1	0	1	0	0	3	1	2	0	3	0	0	3
TOTAL	257	0	71	137	18	120	0	0	125	11	114	12	72	6	36	323
PEC.CHRT/C																
1052	1	0	0	1	0	1	0	0	1	0	1	0	1	0	0	1
1053	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1

MATERIAL	TYPE FREE	BIP	SAD	PLATFORMS #	PLATFORMS CTX	SF	RT	RS	CORTEX #	CORTEX WW	DT	CORTEX PLACEMENT PLT	CORTEX PLACEMENT DTS	CORTEX PLACEMENT P+D	SAD	TOTALS
1214	5	0	1	3	0	3	0	0	0	0	0	0	0	0	0	6
1215	3	0	2	3	1	2	0	0	3	1	2	1	0	0	2	5
TOTAL	9	0	4	7	1	6	0	0	4	1	3	1	1	0	2	13
TOTALS	268	0	76	145	15	127	0	0	130	12	113	13	74	6	38	344
SITE NUMBER: 13076																
ASSEMBLAGE NUMBER: 8																
BASALT																
3701	72	0	9	47	14	31	2	0	45	5	40	10	27	4	4	81
3706	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3050	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	74	0	9	48	14	32	2	0	45	5	40	10	27	4	4	83
PEC.CHRT/C																
1215	1	0	0	1	1	0	0	0	1	0	1	0	0	1	0	1
TOTAL	1	0	0	1	1	0	0	0	1	0	1	0	0	1	0	1
QUARTZITE																
4000	1	0	0	1	1	0	0	0	1	0	1	0	0	1	0	1
TOTAL	1	0	0	1	1	0	0	0	1	0	1	0	0	1	0	1
GRAN.ANDES																
3300	0	0	1	0	0	0	0	0	1	0	1	0	0	0	1	1
TOTAL	0	0	1	0	0	0	0	0	1	0	1	0	0	0	1	1
TOTALS	76	0	10	50	16	32	2	0	48	5	43	10	27	6	5	86
SITE NUMBER: 13084																
ASSEMBLAGE NUMBER: 1																
BASALT																
3701	506	0	164	257	46	211	0	0	201	23	178	15	104	31	51	670
3706	9	0	2	7	2	5	0	0	6	0	6	2	3	0	1	11
3050	3	0	0	1	0	1	0	0	0	0	0	0	0	0	0	3
TOTAL	518	0	166	265	48	217	0	0	207	23	184	17	107	31	52	684
PEC.CHRT/C																
1214	14	0	6	8	3	5	0	0	7	4	3	3	3	0	1	20
TOTAL	14	0	6	8	3	5	0	0	7	4	3	3	3	0	1	20
TOTALS	532	0	172	273	51	222	0	0	214	27	187	20	110	31	53	704
SITE NUMBER: 13084																
ASSEMBLAGE NUMBER: 2																
OBSIDIAN																
3520	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
3528	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL	2	0	0	2	0	1	0	1	0	0	0	0	0	0	0	2
BASALT																
3701	298	0	120	114	10	104	0	0	76	4	72	8	37	2	29	418
3706	2	0	1	2	0	2	0	0	0	0	0	0	0	0	0	3
3050	2	0	1	0	0	0	0	0	1	0	1	0	0	0	1	3
TOTAL	302	0	122	116	10	106	0	0	77	4	73	8	37	2	30	424
PEC.CHRT/C																
1214	1	0	1	1	1	0	0	0	2	1	1	1	0	0	1	2
1215	2	0	2	1	1	0	0	0	3	3	0	1	1	0	1	4
TOTAL	3	0	3	2	2	0	0	0	5	4	1	2	1	0	2	6
TOTALS	307	0	125	120	12	107	0	1	82	8	74	10	38	2	32	432
SITE NUMBER: 13084																
ASSEMBLAGE NUMBER: 3																
BASALT																
3701	33	0	12	26	2	24	0	0	15	0	15	1	7	1	6	45
3050	4	0	1	3	0	3	0	0	4	0	4	0	3	0	1	5
TOTAL	37	0	13	29	2	27	0	0	19	0	19	1	10	1	7	50
TOTALS	37	0	13	29	2	27	0	0	19	0	19	1	10	1	7	50
SITE NUMBER: 13084																
ASSEMBLAGE NUMBER: 4																
BASALT																
3701	8	1	3	6	1	5	0	0	4	0	4	0	2	1	1	12
3050	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	9	1	3	7	1	6	0	0	4	0	4	0	2	1	1	13
TOTALS	9	1	3	7	1	6	0	0	4	0	4	0	2	1	1	13
SITE NUMBER: 13084																
ASSEMBLAGE NUMBER: 5																
BASALT																
3701	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
TOTAL	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2

MATERIAL	TYPE FREE	BIP	SAD	PLATFORMS #	CTX	SF	RT	RS	CORTEX #	WW	DT	CORTEX PLACEMENT PLT	DRS	P+D	SAD	TOTALS
TOTALS	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
SITE NUMBER: 13084																
ASSEMBLAGE NUMBER: 6																
BASALT																
3701	6	0	0	3	0	3	0	0	0	0	0	0	0	0	0	6
TOTAL	6	0	0	3	0	3	0	0	0	0	0	0	0	0	0	6
TOTALS	6	0	0	3	0	3	0	0	0	0	0	0	0	0	0	6
SITE NUMBER: 13084																
ASSEMBLAGE NUMBER: 7																
BASALT																
3701	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTAL	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTALS	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
SITE NUMBER: 13084																
ASSEMBLAGE NUMBER: 8																
OBSIDIAN																
3520	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
BASALT																
3701	76	0	13	49	4	45	0	0	11	0	11	4	7	0	0	89
3706	1	0	0	1	1	0	0	0	1	0	1	1	0	0	0	1
TOTAL	77	0	13	50	5	45	0	0	12	0	12	5	7	0	0	90
TOTALS	77	0	14	50	5	45	0	0	12	0	12	5	7	0	0	91
SITE NUMBER: 13084																
ASSEMBLAGE NUMBER: 9																
OBSIDIAN																
3520	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3525	1	0	0	1	1	0	0	0	1	0	1	1	0	0	0	1
TOTAL	2	0	0	1	1	0	0	0	1	0	1	1	0	0	0	2
BASALT																
3701	498	1	104	243	34	209	0	0	211	33	173	20	146	14	31	603
3706	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
3050	5	0	3	2	0	2	0	0	4	0	4	0	3	0	1	8
TOTAL	504	1	107	246	34	212	0	0	215	33	182	20	149	14	32	612
TOTALS	506	1	107	247	35	212	0	0	216	33	183	21	149	14	32	614
SITE NUMBER: 13084																
ASSEMBLAGE NUMBER: 10																
BASALT																
3701	315	0	6	103	23	80	0	0	153	49	104	15	127	8	3	321
3050	8	0	2	3	3	0	0	0	9	8	1	1	4	2	2	10
TOTAL	323	0	8	106	26	80	0	0	162	57	103	16	131	10	5	331
PEC.CHRT/C																
1050	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
METARHYOLT																
4372	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTAL	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTALS	325	0	8	106	26	80	0	0	163	58	103	16	132	10	5	333
SITE NUMBER: 13084																
ASSEMBLAGE NUMBER: 11																
BASALT																
3701	312	0	16	115	51	63	1	0	183	81	102	23	123	23	9	328
3050	13	0	3	4	2	2	0	0	12	8	4	1	7	1	2	16
TOTAL	325	0	19	119	53	65	1	0	195	89	106	27	130	24	11	344
PEC.CHRT/C																
1214	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
TOTAL	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
QUARTZITE																
4000	2	0	0	2	2	0	0	0	2	2	0	0	0	2	0	2
TOTAL	2	0	0	2	2	0	0	0	2	2	0	0	0	2	0	2
OTHER																
3861	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
TOTAL	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
TOTALS	328	0	20	122	55	66	1	0	199	93	106	29	131	26	12	348
SITE NUMBER: 13086																
ASSEMBLAGE NUMBER: 1																
BASALT																

MATERIAL	TYPE FREE	BIP	SAD	PLATFORMS #	PLATFORMS CTX	SF	RT	RS	CORTEX #	CORTEX WW	OT	CORTEX PLACEMENT PLT	CORTEX PLACEMENT DRS	CORTEX PLACEMENT P+D	SAD	TOTAL_3
3701	48	0	3	16	5	11	0	0	21	4	17	1	14	4	2	51
3706	0	0	1	0	0	0	0	0	1	0	1	0	0	0	1	1
3050	1	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1
TOTAL	49	0	4	16	5	11	0	0	23	4	19	1	15	4	3	53
CHERT																
1057	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
GRAN.ANDES																
3300	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTALS	50	0	5	16	5	11	0	0	23	4	19	1	15	4	3	53
SITE NUMBER: 13086																
ASSEMBLAGE NUMBER: 2																
BASALT																
3701	11	0	0	7	1	6	0	0	4	0	4	1	3	0	0	11
TOTAL	11	0	0	7	1	6	0	0	4	0	4	1	3	0	0	11
TOTALS	11	0	0	7	1	6	0	0	4	0	4	1	3	0	0	11
SITE NUMBER: 13086																
ASSEMBLAGE NUMBER: 3																
BASALT																
3701	153	0	29	85	17	68	0	0	59	10	49	12	32	5	10	182
3706	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3050	2	0	1	1	1	0	0	0	3	0	3	1	1	0	1	3
3731	5	0	0	1	1	0	0	0	5	5	0	0	4	1	0	5
TOTAL	161	0	30	87	19	68	0	0	67	15	52	13	37	6	11	191
TOTALS	161	0	30	87	19	68	0	0	67	15	52	13	37	6	11	191
SITE NUMBER: 13086																
ASSEMBLAGE NUMBER: 4																
BASALT																
3701	43	0	9	20	4	16	0	0	13	2	11	4	6	0	3	52
3050	1	0	1	1	0	1	0	0	1	0	1	0	0	0	1	2
TOTAL	44	0	10	21	4	17	0	0	14	2	12	4	6	0	4	54
TOTALS	44	0	10	21	4	17	0	0	14	2	12	4	6	0	4	54
SITE NUMBER: 13086																
ASSEMBLAGE NUMBER: 5																
BASALT																
3701	22	0	4	9	1	8	0	0	6	0	6	0	3	1	2	26
TOTAL	22	0	4	9	1	8	0	0	6	0	6	0	3	1	2	26
GRAN.ANDES																
3300	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
TOTAL	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
TOTALS	22	0	5	9	1	8	0	0	7	1	6	0	3	1	3	27
SITE NUMBER: 13086																
ASSEMBLAGE NUMBER: 6																
OBSIDIAN																
3523	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
TOTAL	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
BASALT																
3701	137	0	29	61	26	35	0	0	92	13	79	17	52	9	14	166
3706	12	0	4	2	0	2	0	0	8	1	7	0	7	0	1	16
3050	8	0	3	2	1	1	0	0	4	0	4	1	2	0	1	11
TOTAL	157	0	36	65	27	38	0	0	104	14	93	18	61	9	16	193
PED.CHRT/C																
1215	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
CHERT																
1070	0	0	1	0	0	0	0	0	1	0	1	0	0	0	1	1
TOTAL	0	0	1	0	0	0	0	0	1	0	1	0	0	0	1	1
CHALCEDONY																
1212	1	0	1	0	0	0	0	0	2	2	0	0	1	0	1	2
TOTAL	1	0	1	0	0	0	0	0	2	2	0	0	1	0	1	2
S.S.GREENS																
2554	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTAL	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTALS	161	0	38	67	28	39	0	0	109	18	91	18	63	10	18	199
SITE NUMBER: 13086																
ASSEMBLAGE NUMBER: 7																
OBSIDIAN																

MATERIAL	TYPE FREE	BIP	SAD	PLATFORMS #	PLATFORMS CTX	SF	RT	RS	CORTEX #	CORTEX WW	OT	CORTEX PLACEMENT PLT	CORTEX PLACEMENT DRS	CORTEX PLACEMENT P+D	SAD	TOTALS
3520	10	0	1	4	0	3	1	0	2	0	2	0	2	0	0	11
3523	1	0	1	0	0	0	0	0	1	0	1	0	1	0	0	2
3524	1	0	0	1	1	0	0	0	1	0	1	1	0	0	0	1
3525	3	0	0	3	0	3	0	0	2	1	1	0	2	0	0	3
TOTAL	15	0	2	8	1	6	1	0	6	1	5	1	5	0	0	17
BASALT																
3701	586	0	159	311	58	249	4	0	261	23	233	40	157	18	46	743
3706	6	0	2	2	0	1	1	0	0	0	0	0	0	0	0	3
3730	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
3050	16	0	12	8	1	7	0	0	8	2	6	1	5	0	2	23
3431	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	610	0	173	321	59	257	5	0	270	26	244	41	163	18	48	783
PEC.CHRT/C																
1050	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1051	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
1090	3	0	1	1	1	0	0	0	2	2	0	0	1	1	0	4
1052	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1053	2	0	2	1	1	0	0	0	1	1	0	0	0	1	0	4
1091	4	0	1	3	2	1	0	0	3	2	1	2	1	0	0	5
1214	2	0	2	1	0	1	0	0	2	0	2	0	1	0	1	4
1215	7	0	4	6	1	5	0	0	7	4	3	1	5	0	1	11
TOTAL	19	0	12	12	5	7	0	0	16	10	6	3	8	2	3	31
CHERT																
1030	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
SILC.WOOD																
1110	2	0	0	2	0	2	0	0	1	1	0	0	1	0	0	2
1112	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
1113	1	0	0	1	1	0	0	0	1	1	0	1	0	0	0	1
TOTAL	3	0	1	3	1	2	0	0	3	3	0	1	1	0	1	4
QUARTZITE																
4000	0	0	1	0	0	0	0	0	1	0	1	0	0	0	1	1
TOTAL	0	0	1	0	0	0	0	0	1	0	1	0	0	0	1	1
JASPEROID																
1501	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTALS	649	0	189	345	66	273	6	0	296	40	236	43	177	20	53	833

SITE NUMBER: 13086
ASSEMBLAGE NUMBER: 8

MATERIAL	TYPE FREE	BIP	SAD	PLATFORMS #	PLATFORMS CTX	SF	RT	RS	CORTEX #	CORTEX WW	OT	CORTEX PLACEMENT PLT	CORTEX PLACEMENT DRS	CORTEX PLACEMENT P+D	SAD	TOTALS
OBSIDIAN																
3520	19	0	5	6	1	5	0	0	8	3	5	1	3	0	4	23
3523	2	0	3	0	0	0	0	0	1	1	0	0	0	0	1	3
3524	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3525	4	0	2	1	0	1	0	0	4	2	2	0	2	0	2	5
3526	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3528	3	0	2	1	0	1	0	0	1	0	1	0	1	0	0	3
TOTAL	29	0	13	8	1	7	0	0	14	6	8	1	6	0	7	42
BASALT																
3701	1173	0	426	551	74	475	2	0	349	35	314	46	165	28	90	1599
3706	3	0	1	2	2	0	0	0	2	1	1	1	0	1	0	4
3730	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
3050	80	0	72	49	20	29	0	0	49	18	31	10	18	10	11	132
TOTAL	1257	0	499	602	96	504	2	0	401	55	346	57	204	39	101	1733
PEC.CHRT/C																
1050	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4
1051	3	0	1	2	0	2	0	0	1	1	0	0	1	0	0	4
1090	3	0	1	2	2	0	0	0	1	1	2	2	0	0	1	4
1052	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
1053	2	0	0	1	1	0	0	0	1	1	0	1	0	0	0	2
1091	6	0	0	6	3	3	0	0	4	3	1	2	1	1	0	6
1214	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
1215	18	0	7	10	5	5	0	0	16	9	7	3	6	2	5	25
1310	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	37	0	13	23	11	12	0	0	25	15	10	8	8	3	6	50
CHERT																
1057	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1600	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
1610	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1660	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
1680	1	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1
TOTAL	4	0	1	1	0	1	0	0	3	2	1	0	2	0	1	5
SILC.WOOD																
1112	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
QUARTZITE																
4000	3	0	2	3	1	2	0	0	4	3	1	1	2	0	1	3
TOTAL	3	0	2	3	1	2	0	0	4	3	1	1	2	0	1	3
GRAN.ANDES																

MATERIAL	TYPE			PLATFORMS					CORTEX			CORTEX PLACEMENT				TOTALS
	FREE	BIP	SAD	#	CTX	SF	RT	RS	#	WW	OT	PLT	DRS	P+D	SAD	
3300	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
TOTAL	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
TOTALS	1331	0	529	638	109	527	2	0	448	82	366	67	223	42	116	1863
SITE NUMBER: 13086																
ASSEMBLAGE NUMBER: 9																
OBSIDIAN																
3520	1	0	0	1	1	0	0	0	1	0	1	1	0	0	0	1
3523	1	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1
3525	0	0	1	0	0	0	0	0	1	0	1	0	0	0	1	1
TOTAL	2	0	1	1	1	0	0	0	3	0	3	1	1	0	1	3
BASALT																
3701	34	0	2	14	3	10	1	0	12	0	12	1	9	2	0	36
3706	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
3050	1	0	3	1	1	0	0	0	3	0	3	0	0	1	2	4
TOTAL	36	0	5	16	4	11	1	0	15	0	13	1	9	3	2	41
PEC.CHRT/C																
1051	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1214	1	0	1	1	1	0	0	0	1	1	0	1	0	0	0	2
1215	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	2	0	2	1	1	0	0	0	1	1	0	1	0	0	0	4
SILC.WOOD																
1110	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTAL	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
QUARTZITE																
4000	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
TOTAL	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
TOTALS	42	0	8	19	7	11	1	0	21	3	13	3	11	4	3	53
SITE NUMBER: 13086																
ASSEMBLAGE NUMBER: 10																
OBSIDIAN																
3520	2	0	0	2	1	1	0	0	1	0	1	1	0	0	0	2
3523	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
3525	2	0	1	2	2	0	0	0	3	0	3	1	0	1	1	3
TOTAL	5	0	1	5	3	2	0	0	4	0	4	2	0	1	1	6
BASALT																
3701	128	0	28	74	15	55	4	0	48	6	42	3	30	7	3	156
3730	1	0	0	1	1	0	0	0	1	1	0	1	0	0	0	1
3050	6	0	7	3	0	3	0	0	2	1	1	0	2	0	0	13
TOTAL	135	0	35	78	16	58	4	0	51	8	43	9	32	7	3	170
PEC.CHRT/C																
1053	1	0	0	1	1	0	0	0	1	0	1	1	0	0	0	1
1051	1	0	0	1	1	0	0	0	1	0	1	1	0	0	0	1
1215	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	2	0	1	2	2	0	0	0	2	0	2	2	0	0	0	3
CHERT																
1600	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL		0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
QUARTZITE																
4000	4	0	1	3	2	1	0	0	3	3	0	2	0	0	1	5
TOTAL	4	0	1	3	2	1	0	0	3	3	0	2	0	0	1	5
JASPERCID																
1501	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTALS	147	0	39	89	23	62	4	0	60	11	49	15	32	8	5	186
SITE NUMBER: 13086																
ASSEMBLAGE NUMBER: 11																
OBSIDIAN																
3520	3	0	0	3	1	2	0	0	2	0	2	0	1	1	0	3
3523	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
3525	2	0	0	0	0	0	0	0	1	1	0	0	1	0	0	2
3528	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	7	0	0	4	1	2	1	0	3	1	2	0	2	1	0	7
BASALT																
3701	90	0	9	46	11	35	0	0	35	2	33	10	19	1	5	99
3050	2	0	0	1	0	1	0	0	1	1	0	0	1	0	0	2
TOTAL	92	0	9	47	11	36	0	0	36	3	33	10	20	1	5	101
PEC.CHRT/C																
1052	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1215	2	0	1	2	1	1	0	0	2	1	1	1	0	0	1	3
TOTAL	3	0	1	3	1	2	0	0	2	1	1	1	0	0	1	4
TOTALS	102	0	10	54	13	40	1	0	41	5	36	11	22	2	6	112
SITE NUMBER: 13086																

MATERIAL	TYPE FREE	BIP	SAD	PLATFORMS #	PLATFORMS CTX	SF	RT	RS	CORTEX #	CORTEX WW	OT	CORTEX PLACEMENT PLT	CORTEX PLACEMENT ORS	CORTEX PLACEMENT P+D	SAD	TOTALS
ASSEMBLAGE NUMBER: 12																
OBSIDIAN																
3520	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
3525	0	0	1	0	0	0	0	0	1	0	1	0	0	0	1	1
3526	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	2	0	1	1	0	1	0	0	2	1	1	0	1	0	1	3
BASALT																
3701	85	0	18	48	8	39	1	0	28	2	26	4	17	4	3	103
3050	4	0	3	2	2	0	0	0	3	1	2	2	1	0	0	7
TOTAL	89	0	21	50	10	39	1	0	31	3	28	6	18	4	3	110
PED.CHRT/C																
1051	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1090	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
1052	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1091	2	0	0	1	1	0	0	0	1	1	0	0	0	1	0	2
1214	4	0	0	3	1	2	0	0	1	0	1	1	0	0	0	4
1215	4	0	0	2	1	1	0	0	4	2	2	0	3	1	0	4
TOTAL	12	0	1	7	3	4	0	0	7	4	3	1	3	2	1	13
METARHYOLT																
4375	1	0	0	1	1	0	0	0	1	1	0	1	0	0	0	1
TOTAL	1	0	0	1	1	0	0	0	1	1	0	1	0	0	0	1
TOTALS	104	0	23	59	14	44	1	0	41	9	32	8	22	6	5	127
SITE NUMBER: 13086																
ASSEMBLAGE NUMBER: 13																
BASALT																
3701	22	0	3	16	2	14	0	0	10	0	10	2	8	0	0	25
TOTAL	22	0	3	16	2	14	0	0	10	0	10	2	8	0	0	25
PED.CHRT/C																
1053	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
1215	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
TOTAL	2	0	0	2	0	2	0	0	2	2	0	0	2	0	0	2
TOTALS	24	0	3	18	2	16	0	0	12	2	10	2	10	0	0	27
SITE NUMBER: 13086																
ASSEMBLAGE NUMBER: 14																
OBSIDIAN																
3520	1	0	1	0	0	0	0	0	1	1	0	0	0	0	1	2
TOTAL	1	0	1	0	0	0	0	0	1	1	0	0	0	0	1	2
BASALT																
3701	51	0	15	33	4	28	1	0	10	1	9	4	5	0	1	66
3050	2	0	2	1	0	1	0	0	1	0	1	0	0	0	1	4
TOTAL	53	0	17	34	4	29	1	0	11	1	10	4	5	0	2	70
PED.CHRT/C																
1214	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
1215	3	0	0	2	0	2	0	0	0	0	0	0	0	0	0	3
TOTAL	4	0	0	2	0	2	0	0	1	1	0	0	1	0	0	4
TOTALS	58	0	18	36	4	31	1	0	13	3	10	4	6	0	3	76
SITE NUMBER: 13086																
ASSEMBLAGE NUMBER: 15																
OBSIDIAN																
3520	3	0	0	3	0	3	0	0	2	2	0	0	2	0	0	3
3525	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	4	0	0	4	0	4	0	0	2	2	0	0	2	0	0	4
BASALT																
3701	20	0	9	12	1	11	0	0	7	0	7	0	4	1	2	29
3050	1	0	5	1	0	1	0	0	1	1	0	0	1	0	0	5
TOTAL	21	0	14	13	1	12	0	0	8	1	7	0	5	1	2	34
PED.CHRT/C																
1050	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTALS	25	0	15	17	1	16	0	0	10	3	7	0	7	1	2	39
SITE NUMBER: 13086																
ASSEMBLAGE NUMBER: 16																
BASALT																
3701	33	0	10	21	7	14	0	0	15	1	14	6	5	1	3	43
3050	2	0	0	2	1	1	0	0	1	0	1	0	0	1	0	2
TOTAL	35	0	10	23	8	15	0	0	16	1	15	6	5	2	3	45
PED.CHRT/C																
1050	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1051	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
1053	1	0	1	0	0	0	0	0	1	1	0	0	0	0	1	2
1215	3	0	0	1	0	1	0	0	0	0	0	0	0	0	0	3
TOTAL	5	0	2	2	0	2	0	0	2	2	0	0	0	0	2	7

MATERIAL	TYPE FREE	BIP	SAD	PLATFORMS #	PLATFORMS CTX	SF	RT	RS	CORTEX #	CORTEX WW	DT	CORTEX PLACEMENT PLT	CORTEX PLACEMENT DRS	CORTEX PLACEMENT P+D	SAD	TOTALS
QUARTZITE																
4001	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTALS	41	0	12	26	8	18	0	0	18	3	13	0	5	2	5	53
SITE NUMBER: 13086																
ASSEMBLAGE NUMBER: 17																
BASALT																
3701	8	0	2	6	0	5	1	0	5	0	5	0	3	0	2	10
TOTAL	8	0	2	6	0	5	1	0	5	0	5	0	3	0	2	10
TOTALS	8	0	2	6	0	5	1	0	5	0	5	0	3	0	2	10
SITE NUMBER: 13086																
ASSEMBLAGE NUMBER: 18																
BASALT																
3701	18	0	3	13	2	11	0	0	7	0	7	1	4	1	1	21
TOTAL	18	0	3	13	2	11	0	0	7	0	7	1	4	1	1	21
PEC.CHRT/C																
1053	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
1215	1	0	0	1	1	0	0	0	1	1	0	1	0	0	0	1
TOTAL	3	0	1	1	1	0	0	0	1	1	0	1	0	0	0	4
TOTALS	21	0	4	14	3	11	0	0	8	1	7	2	4	1	1	25
SITE NUMBER: 13086																
ASSEMBLAGE NUMBER: 19																
OBSIDIAN																
3528	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
BASALT																
3701	68	0	9	43	8	34	1	0	27	3	24	8	16	0	3	77
3050	4	0	5	2	0	2	0	0	3	0	3	0	2	0	1	9
TOTAL	72	0	14	45	8	36	1	0	30	3	27	8	18	0	4	86
PEC.CHRT/C																
1050	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
1053	3	0	0	3	0	3	0	0	1	1	0	0	1	0	0	3
1214	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1215	4	0	0	2	1	1	0	0	1	1	0	1	0	0	0	4
TOTAL	9	0	0	6	1	5	0	0	3	3	0	1	2	0	0	9
CHERT																
1057	3	0	0	0	0	0	0	0	1	1	0	0	1	0	0	3
TOTAL	3	0	0	0	0	0	0	0	1	1	0	0	1	0	0	3
QUARTZITE																
4000	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
TOTAL	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
GRAN.ANDES																
3300	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
TOTAL	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
TOTALS	86	0	15	53	9	43	1	0	36	9	27	9	22	0	5	101
SITE NUMBER: 13291																
ASSEMBLAGE NUMBER: 1																
OBSIDIAN																
3520	60	0	7	23	0	23	0	0	5	4	1	0	5	0	0	67
3523	1	0	0	1	0	1	0	0	1	0	1	0	1	0	0	1
3525	6	0	2	3	0	3	0	0	1	0	1	0	1	0	0	8
3526	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3528	8	0	1	4	1	3	0	0	3	2	1	1	2	0	0	9
TOTAL	76	0	10	31	1	30	0	0	10	6	4	1	9	0	0	86
BASALT																
3701	60	0	23	34	7	27	0	0	23	4	19	5	11	2	5	83
3730	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
3050	3	0	1	1	0	1	0	0	2	1	1	0	2	0	0	4
TOTAL	64	0	24	36	8	28	0	0	26	6	20	5	13	3	5	88
PEC.CHRT/C																
1050	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1051	2	0	1	2	1	1	0	0	3	3	0	1	1	0	1	3
1090	5	0	1	5	1	4	0	0	3	3	0	1	1	0	1	6
1052	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1053	3	0	0	1	1	0	0	0	3	3	0	0	2	1	0	3
1091	2	0	1	1	0	1	0	0	0	0	0	0	0	0	0	3
1214	12	0	2	6	2	4	0	0	8	6	2	2	5	0	1	14
1215	37	0	17	23	9	14	0	0	26	17	9	7	8	2	9	54
TOTAL	63	0	23	38	14	24	0	0	43	32	11	11	17	3	12	86
CHERT																
1072	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
1600	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

MATERIAL	TYPE FREE	BIP	SAD	PLATFORMS #	PLATFORMS CTX	SF	RT	RS	CORTEX #	CORTEX WW	OT	CORTEX PLACEMENT PLT	CORTEX PLACEMENT DRS	CORTEX PLACEMENT P+D	SAD	TOTALS
TOTAL	1	0	1	0	0	0	0	0	1	1	0	0	0	0	1	2
QUARTZITE																
4000	5	0	8	2	1	1	0	0	11	10	1	0	4	1	6	13
TOTAL	5	0	8	2	1	1	0	0	11	10	1	0	4	1	6	13
JASPEROID																
1501	0	0	1	0	0	0	0	0	1	0	1	0	0	0	1	1
TOTAL	0	0	1	0	0	0	0	0	1	0	1	0	0	0	1	1
TOTALS	209	0	67	107	24	83	0	0	92	55	37	17	43	7	25	273
SITE NUMBER: 13291																
ASSEMBLAGE NUMBER: 2																
OBSIDIAN																
3520	25	0	8	8	0	8	0	0	0	0	0	0	0	0	0	33
TOTAL	25	0	8	8	0	8	0	0	0	0	0	0	0	0	0	33
BASALT																
3701	2	0	2	1	1	0	0	0	1	1	0	1	0	0	0	4
TOTAL	2	0	2	1	1	0	0	0	1	1	0	1	0	0	0	4
PED.CHRT/C																
1090	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1053	1	0	1	0	0	0	0	0	1	0	1	0	1	0	0	2
1214	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
1215	5	0	4	2	1	1	0	0	2	2	0	1	1	0	0	9
TOTAL	6	0	7	2	1	1	0	0	4	3	1	1	2	0	1	13
TOTALS	33	0	17	11	2	9	0	0	5	4	1	2	2	0	1	50
SITE NUMBER: 13291																
ASSEMBLAGE NUMBER: 3																
OBSIDIAN																
3520	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
BASALT																
3701	13	0	3	7	2	5	0	0	5	1	4	2	2	0	1	13
3050	1	0	1	1	1	0	0	0	2	2	0	0	0	1	1	2
TOTAL	14	0	4	8	3	5	0	0	7	3	4	2	2	1	2	15
PED.CHRT/C																
1051	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1090	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1215	4	0	1	2	0	2	0	0	2	1	1	0	2	0	0	5
TOTAL	5	0	2	3	0	3	0	0	2	1	1	0	2	0	0	7
TOTALS	20	0	6	11	3	8	0	0	9	4	5	2	4	1	2	26
SITE NUMBER: 13291																
ASSEMBLAGE NUMBER: 4																
OBSIDIAN																
3520	2	0	0	1	0	1	0	0	1	0	1	0	1	0	0	2
3525	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3528	0	0	1	0	0	0	0	0	1	0	1	0	0	0	1	1
TOTAL	3	0	1	1	0	1	0	0	2	0	2	0	1	0	1	4
BASALT																
3701	49	0	4	30	8	22	0	0	15	7	8	6	7	2	0	53
TOTAL	49	0	4	30	8	22	0	0	15	7	8	6	7	2	0	53
PED.CHRT/C																
1051	4	0	1	3	0	3	0	0	3	3	0	0	2	0	1	5
1050	4	0	0	1	0	1	0	0	2	2	0	0	2	0	0	4
1053	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1091	3	0	0	0	0	0	0	0	3	3	0	0	3	0	0	3
1214	6	0	0	4	1	3	0	0	2	2	0	0	1	1	0	6
1215	22	0	1	14	5	9	0	0	12	10	2	4	6	1	1	23
TOTAL	40	0	2	23	6	17	0	0	22	20	2	4	14	2	2	42
CHERT																
1057	1	0	4	0	0	0	0	0	3	3	0	0	0	0	3	5
1070	1	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1
1030	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	3	0	4	1	0	1	0	0	4	3	1	0	1	0	3	7
CHALCEDONY																
1230	1	0	0	1	0	1	0	0	1	0	1	0	1	0	0	1
TOTAL	1	0	0	1	0	1	0	0	1	0	1	0	1	0	0	1
QUARTZITE																
4000	2	0	0	1	1	0	0	0	2	2	0	0	1	1	0	2
TOTAL	2	0	0	1	1	0	0	0	2	2	0	0	1	1	0	2
GRAN.ANDES																
3300	1	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1
TOTAL	1	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1
S.S.GREENS																
4301	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
TOTAL	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
JASPEROID																

MATERIAL	TYPL FREE	BIP	SAD	PLATFORMS #	PLATFORMS CTX	SF	RT	RS	CORTEX #	CORTEX WW	JT	CORTEX PLACEMENT PLT	CORTEX PLACEMENT DRS	CORTEX PLACEMENT P+D	SAD	TOTALS
1502	2	0	0	1	0	1	0	0	2	2	0	0	2	0	0	2
TOTAL	2	0	0	1	0	1	0	0	2	2	0	0	2	0	0	2
TOTALS	102	0	11	59	16	43	0	0	50	35	13	10	28	6	6	113
SITE NUMBER: 13291																
ASSEMBLAGE NUMBER: 5																
BASALT																
3701	9	0	1	4	0	4	0	0	2	0	2	0	2	0	0	10
3730	1	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1
TOTAL	10	0	1	4	0	4	0	0	3	0	3	0	3	0	0	11
PEC.CHRT/C																
1214	1	0	0	1	1	0	0	0	1	1	0	1	0	0	0	1
1215	5	0	1	3	1	2	0	0	5	5	0	0	3	1	1	[illegible]
TOTAL	6	0	1	4	2	2	0	0	6	6	0	1	3	1	1	7
CHERT																
1070	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
TOTAL	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
QUARTZITE																
4000	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
TOTAL	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
TOTALS	18	0	2	10	4	6	0	0	11	8	3	1	6	3	1	20
SITE NUMBER: 13291																
ASSEMBLAGE NUMBER: 6																
OBSIDIAN																
3520	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
BASALT																
3701	7	0	3	5	0	5	0	0	4	0	4	0	3	0	1	10
3730	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
3050	1	0	2	1	0	1	0	0	1	1	0	0	1	0	0	3
TOTAL	8	0	6	6	0	6	0	0	6	2	4	0	4	0	2	14
PEC.CHRT/C																
1050	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1214	2	0	0	1	1	0	0	0	1	1	0	1	0	0	0	2
1215	3	0	2	1	0	1	0	0	1	1	0	0	1	0	0	[illegible]
TOTAL	6	0	2	3	1	2	0	0	2	2	0	1	1	0	0	3
QUARTZITE																
4000	0	0	5	0	0	0	0	0	2	2	0	0	0	0	2	5
4001	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
TOTAL	1	0	5	1	0	1	0	0	3	3	0	0	1	0	2	[illegible]
TOTALS	16	0	13	10	1	9	0	0	11	7	4	1	6	0	4	2[illegible]
SITE NUMBER: 13291																
ASSEMBLAGE NUMBER: 7																
OBSIDIAN																
3528	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
BASALT																
3701	9	0	0	7	1	6	0	0	5	3	2	1	4	0	0	[illegible]
3050	2	0	1	2	1	1	0	0	1	1	0	1	0	0	0	3
TOTAL	11	0	1	9	2	7	0	0	6	4	2	2	4	0	0	12
PEC.CHRT/C																
1053	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
GRAN.ANDES																
3300	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
TOTAL	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
TOTALS	13	0	2	10	2	8	0	0	7	5	2	2	4	0	1	1[illegible]
SITE NUMBER: 13291																
ASSEMBLAGE NUMBER: 8																
OBSIDIAN																
3528	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
BASALT																
3701	10	0	0	3	0	3	0	0	5	1	4	0	5	0	0	10
3730	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTAL	11	0	0	3	0	3	0	0	6	2	4	0	6	0	0	11
PEC.CHRT/C																
1215	3	0	2	2	1	1	0	0	3	2	1	0	1	1	1	5
TOTAL	3	0	2	2	1	1	0	0	3	2	1	0	1	1	1	5
QUARTZITE																
4000	0	0	2	0	0	0	0	0	2	2	0	0	0	0	2	2
TOTAL	0	0	2	0	0	0	0	0	2	2	0	0	0	0	2	2

APPENDIX III — DEBITAGE REDUCTION SUMMARY

MATERIAL	TYPE FREE	BIP	SAD	PLATFORMS #	PLATFORMS CTX	SF	RT	RS	CORTEX #	CORTEX WW	DT	CORTEX PLACEMENT PLT	CORTEX PLACEMENT DRS	CORTEX PLACEMENT P+D	SAD	TOTALS
TOTALS	15	0	4	6	1	5	0	0	11	6	5	0	7	1	3	19
SITE NUMBER: 13291																
ASSEMBLAGE NUMBER: 9																
OBSIDIAN																
3520	2	0	1	1	0	1	0	0	1	0	1	0	1	0	0	3
3523	3	0	1	1	0	1	0	0	1	0	1	0	1	0	0	4
TOTAL	5	0	2	2	0	2	0	0	2	0	2	0	2	0	0	7
BASALT																
3701	40	0	4	22	7	15	0	0	20	6	14	6	10	1	3	44
3730	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3030	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
TOTAL	42	0	4	23	7	16	0	0	21	7	14	6	11	1	3	46
PEC.CHRT/C																
1090	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1091	3	0	0	3	2	1	0	0	3	2	1	1	1	1	0	3
1214	2	0	0	2	0	2	0	0	0	0	0	0	0	0	0	2
1215	8	0	3	5	2	3	0	0	8	5	3	1	3	1	3	11
TOTAL	14	0	3	10	4	6	0	0	11	7	4	2	4	2	3	17
CHERT																
1415	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTAL	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
QUARTZITE																
4000	3	0	0	3	2	1	0	0	3	3	0	1	1	1	0	3
TOTAL	3	0	0	3	2	1	0	0	3	3	0	1	1	1	0	3
TOTALS	65	0	9	38	13	25	0	0	38	18	20	9	19	4	6	74
SITE NUMBER: 13291																
ASSEMBLAGE NUMBER: 10																
OBSIDIAN																
3520	11	0	2	5	2	3	0	0	9	4	5	1	6	1	1	13
3523	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3524	2	0	0	0	0	0	0	0	1	1	0	0	1	0	0	2
3525	3	0	0	2	0	2	0	0	0	0	0	0	0	0	0	3
3526	1	0	0	1	0	1	0	0	1	0	1	0	1	0	0	1
TOTAL	19	0	2	8	2	6	0	0	11	5	6	1	8	1	1	21
BASALT																
3701	67	0	10	39	9	30	0	0	35	10	23	4	25	5	1	77
3730	7	0	4	0	0	0	0	0	7	5	2	0	3	0	4	11
3050	2	0	2	1	0	1	0	0	2	1	1	0	2	0	0	4
3731	3	0	0	2	2	0	0	0	3	3	0	1	1	1	0	3
TOTAL	79	0	16	42	11	31	0	0	47	19	23	5	31	6	5	95
PEC.CHRT/C																
1050	3	0	0	2	0	1	1	0	1	1	0	0	1	0	0	3
1051	2	0	2	0	0	0	0	0	4	4	0	0	2	0	2	4
1090	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
1052	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1091	10	0	0	3	1	2	0	0	5	5	0	0	4	1	0	10
1214	9	0	2	4	3	1	0	0	6	6	0	2	2	1	1	11
1215	45	0	17	21	10	11	0	0	48	43	5	3	26	7	12	62
TOTAL	71	0	21	30	14	15	1	0	65	60	5	5	36	9	15	92
CHERT																
1070	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
1400	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
1600	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1650	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTAL	4	0	0	2	1	1	0	0	3	3	0	0	2	1	0	4
SILC.WOOD																
1110	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
TOTAL	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
QUARTZITE																
4000	5	0	3	3	2	1	0	0	8	8	0	0	3	2	3	8
TOTAL	5	0	3	3	2	1	0	0	8	8	0	0	3	2	3	8
GRAN.ANDES																
3101	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
TOTAL	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
TOTALS	179	0	43	86	30	55	1	0	136	97	39	11	81	19	25	222
SITE NUMBER: 13291																
ASSEMBLAGE NUMBER: 11																
OBSIDIAN																
3525	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
3526	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTAL	2	0	2	0	0	0	0	0	1	1	0	0	1	0	0	4
BASALT																
3701	40	0	4	28	5	23	0	0	16	3	13	3	10	2	1	44
3730	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	41	0	4	28	5	23	0	0	16	3	13	3	10	2	1	45

APPENDIX III — DEBITAGE REDUCTION SUMMARY

MATERIAL	TYPE FREE	BIP	SAD	PLATFORMS #	PLATFORMS CTX	SF	RT	RS	CORTEX #	CORTEX WW	DT	CORTEX PLACEMENT PLT	CORTEX PLACEMENT DRS	CORTEX PLACEMENT P+D	SAD	TOTALS
PED.CHRT/C																
1090	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
1214	2	0	1	1	1	0	0	0	1	1	0	0	0	1	0	3
1215	10	0	5	8	2	6	0	0	6	3	3	1	1	1	3	13
TOTAL	13	0	6	10	4	6	0	0	8	5	3	1	1	3	3	17
TOTALS	56	0	12	38	9	29	0	0	25	9	16	4	12	5	4	63
SITE NUMBER: 13292																
ASSEMBLAGE NUMBER: 1																
OBSIDIAN																
3510	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3520	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
3523	3	0	0	0	0	0	0	0	1	0	1	0	1	0	0	3
3524	2	0	1	1	0	1	0	0	1	0	1	0	1	0	0	3
3525	4	0	1	3	0	2	1	0	3	3	0	0	3	0	0	5
TOTAL	11	0	2	5	0	3	2	0	5	3	2	0	5	0	0	13
BASALT																
3701	98	0	29	51	11	34	6	0	60	39	21	4	39	7	10	127
3706	1	0	1	0	0	0	0	0	1	1	0	0	0	0	1	2
3050	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
3400	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3430	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTAL	102	0	30	52	12	34	6	0	63	42	21	4	40	8	11	132
PED.CHRT/C																
1050	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1090	11	0	1	10	6	4	0	0	8	8	0	6	2	0	0	12
1091	0	0	2	0	0	0	0	0	2	1	1	0	0	0	2	2
1214	3	0	0	2	2	0	0	0	3	3	0	1	1	1	0	3
1215	16	0	3	9	4	5	0	0	10	9	1	4	5	0	1	19
TOTAL	30	0	7	21	12	9	0	0	23	21	2	11	8	1	3	37
QUARTZITE																
4000	10	0	2	8	4	4	0	0	11	11	0	0	5	4	2	12
4001	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	11	0	2	8	4	4	0	0	11	11	0	0	5	4	2	13
JASPEROID																
1501	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTAL	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
OTHER																
3820	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
TOTAL	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
TOTALS	156	0	41	87	29	50	8	0	104	79	23	15	59	14	16	197
SITE NUMBER: 13292																
ASSEMBLAGE NUMBER: 2																
OBSIDIAN																
3523	2	0	3	0	0	0	0	0	5	3	2	0	2	0	3	5
3525	0	0	1	0	0	0	0	0	1	0	1	0	0	0	1	1
3526	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTAL	3	0	4	0	0	0	0	0	7	4	3	0	3	0	4	7
BASALT																
3701	60	0	19	34	7	27	0	0	33	21	12	2	21	5	5	79
3730	0	0	1	0	0	0	0	0	1	0	1	0	0	0	1	1
3050	3	0	0	2	1	1	0	0	3	2	1	0	2	1	0	3
TOTAL	63	0	20	36	8	28	0	0	37	23	14	2	23	6	6	83
PED.CHRT/C																
1050	2	0	8	0	0	0	0	0	8	7	1	0	1	0	7	13
1053	2	0	0	1	1	0	0	0	1	0	1	1	0	0	0	2
1091	2	0	1	2	1	1	0	0	1	1	0	1	0	0	0	3
1214	2	0	1	0	0	0	0	0	1	1	0	0	0	0	1	3
1215	0	0	2	0	0	0	0	0	1	0	1	0	0	0	1	2
TOTAL	8	0	12	3	2	1	0	0	12	9	3	2	1	0	9	23
TOTALS	74	0	36	39	10	29	0	0	56	36	20	4	27	6	19	113
SITE NUMBER: 13293																
ASSEMBLAGE NUMBER: 1																
BASALT																
3701	3	0	0	3	2	1	0	0	3	3	0	2	1	0	0	3
3706	1	0	1	1	1	0	0	0	1	1	0	1	0	0	0	2
TOTAL	4	0	1	4	3	1	0	0	4	4	0	3	1	0	0	5
PED.CHRT/C																
1214	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1215	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
TOTAL	2	0	0	2	0	2	0	0	0	0	0	0	0	0	0	2
TOTALS	6	0	1	6	3	3	0	0	4	4	0	3	1	0	0	7

SITE NUMBER: 13329

MATERIAL	TYPE			PLATFORMS					CORTEX			CORTEX PLACEMENT				TOTALS
	FREE	RIP	SAD	#	CTX	SF	HT	RS	#	WW	OT	PLT	ORS	P+D	SAD	
ASSEMBLAGE NUMBER: 1																
OBSIDIAN																
3520	0	0	1	0	0	0	0	0	1	0	1	0	0	0	1	1
TOTAL	0	0	1	0	0	0	0	0	1	0	1	0	0	0	1	1
BASALT																
3701	19	0	4	9	1	8	0	0	5	4	1	1	3	0	1	23
3400	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
TOTAL	21	0	4	9	1	8	0	0	5	4	1	1	3	0	1	25
PEC.CHRT/C																
1215	2	0	1	1	0	1	0	0	1	1	0	0	0	0	1	3
TOTAL	2	0	1	1	0	1	0	0	1	1	0	0	0	0	1	3
TOTALS	23	0	6	10	1	9	0	0	7	5	2	1	3	0	3	29
SITE NUMBER: 13331																
ASSEMBLAGE NUMBER: 1																
PEC.CHRT/C																
1310	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTAL	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
CHERT																
1680	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
TOTAL	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
TOTALS	2	0	0	1	1	0	0	0	2	2	0	0	1	1	0	2
SITE NUMBER: 13332																
ASSEMBLAGE NUMBER: 1																
OBSIDIAN																
3520	3	0	0	2	0	1	1	0	1	0	1	0	1	0	0	3
3523	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
3525	2	0	0	1	1	0	0	0	2	0	2	1	1	0	0	2
3530	3	0	0	1	0	1	0	0	2	2	0	0	2	0	0	3
TOTAL	9	0	0	4	1	2	1	0	6	3	3	1	5	0	0	9
BASALT																
3701	37	0	0	6	3	2	0	1	4	1	3	2	1	1	0	37
TOTAL	37	0	0	6	3	2	0	1	4	1	3	2	1	1	0	37
PEC.CHRT/C																
1050	4	0	0	2	0	2	0	0	1	1	0	0	1	0	0	4
1051	2	0	0	0	0	0	0	0	2	2	0	0	2	0	0	2
1053	1	0	1	1	1	0	0	0	1	0	1	1	0	0	0	2
1091	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	7	0	2	3	1	2	0	0	4	3	1	1	3	0	0	9
CHERT																
1070	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1073	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
TOTALS	55	0	2	14	5	7	1	1	14	7	7	4	9	1	0	57
SITE NUMBER: 13350																
ASSEMBLAGE NUMBER: 1																
OBSIDIAN																
3520	1	0	1	0	0	0	0	0	2	0	2	0	1	0	1	2
TOTAL	1	0	1	0	0	0	0	0	2	0	2	0	1	0	1	2
BASALT																
3701	58	0	3	24	9	15	0	0	46	4	42	4	34	5	3	61
3730	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
3410	1	0	1	0	0	0	0	0	2	2	0	0	1	0	1	2
TOTAL	59	0	5	24	9	15	0	0	49	7	42	4	35	5	5	64
PEC.CHRT/C																
1050	22	0	11	3	0	3	0	0	6	5	1	0	4	0	2	33
1051	52	0	19	28	4	24	0	0	24	23	1	4	15	0	5	71
1090	28	0	9	13	7	6	0	0	22	21	1	4	9	3	6	37
1052	2	0	0	1	0	1	0	0	1	1	0	0	1	0	0	2
1053	43	0	7	18	8	10	0	0	30	29	1	4	18	4	4	53
1091	7	0	0	2	0	2	0	0	5	3	2	0	5	0	0	7
1214	7	0	1	2	0	2	0	0	4	4	0	0	4	0	0	8
1215	64	0	19	32	10	22	0	0	52	44	8	9	34	1	8	83
TOTAL	225	0	66	99	29	70	0	0	144	130	14	21	90	8	25	291
CHERT																
1072	7	0	0	2	1	1	0	0	6	6	0	1	5	0	0	7
1600	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTAL	8	0	0	2	1	1	0	0	7	7	0	1	6	0	0	8
QUARTZITE																
4000	5	0	2	4	4	0	0	0	6	6	0	1	0	3	2	7
TOTAL	5	0	2	4	4	0	0	0	6	6	0	1	0	3	2	7
TOTALS	298	0	74	129	43	86	0	0	208	150	58	27	132	16	33	372

SITE NUMBER: 13350

MATERIAL	TYPE FREE	BIP	SAD	PLATFORMS #	PLATFORMS CTX	SF	RT	RS	CORTEX #	CORTEX WW	JT	CORTEX PLACEMENT PLT	CORTEX PLACEMENT DRS	CORTEX PLACEMENT P+D	SAD	TOTALS
ASSEMBLAGE NUMBER: 2																
BASALT																
3701	28	0	1	11	8	3	0	0	20	3	17	7	12	1	0	29
3050	8	0	0	0	0	0	0	0	4	1	3	0	4	0	0	3
TOTAL	36	0	1	11	8	3	0	0	24	4	20	7	16	1	0	37
PEC.CHRT/C																
1053	1	0	0	1	1	0	0	0	1	1	0	1	0	0	0	1
1215	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
TOTAL	2	0	0	2	1	1	0	0	2	2	0	1	1	0	0	2
TOTALS	38	0	1	13	9	4	0	0	26	6	20	8	17	1	0	39
SITE NUMBER: 13350																
ASSEMBLAGE NUMBER: 3																
BASALT																
3701	8	0	0	2	1	1	0	0	6	0	6	0	5	1	0	3
TOTAL	8	0	0	2	1	1	0	0	6	0	6	0	5	1	0	3
PEC.CHRT/C																
1215	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
TOTAL	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
TOTALS	9	0	0	3	1	2	0	0	7	1	6	0	6	1	0	9
SITE NUMBER: 13350																
ASSEMBLAGE NUMBER: 4																
OBSIDIAN																
3525	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
TOTAL	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
PEC.CHRT/C																
1051	7	0	1	2	0	2	0	0	5	5	0	0	4	0	1	3
1214	1	0	1	0	0	0	0	0	1	1	0	0	0	0	1	2
1215	2	0	0	0	0	0	0	0	1	1	0	0	1	0	0	2
TOTAL	10	0	2	2	0	2	0	0	7	7	0	0	5	0	2	12
TOTALS	11	0	2	3	0	3	0	0	8	8	0	0	6	0	2	13
SITE NUMBER: 13350																
ASSEMBLAGE NUMBER: 5																
BASALT																
3701	3	0	1	1	0	1	0	0	2	0	2	0	1	0	0	4
TOTAL	3	0	1	1	0	1	0	0	2	0	2	0	1	0	0	4
TOTALS	3	0	1	1	0	1	0	0	2	0	2	0	1	0	0	4
SITE NUMBER: 13350																
ASSEMBLAGE NUMBER: 6																
BASALT																
3701	3	0	3	2	0	2	0	0	3	0	3	0	2	0	1	3
TOTAL	3	0	3	2	0	2	0	0	3	0	3	0	2	0	1	3
PEC.CHRT/C																
1051	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1091	4	0	0	1	1	0	0	0	3	1	2	1	2	0	0	4
1215	2	0	0	2	0	2	0	0	2	0	2	0	2	0	0	2
TOTAL	7	0	0	3	1	2	0	0	5	1	4	1	4	0	0	7
S.S.GREENS																
2550	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTAL	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTALS	11	0	3	5	1	4	0	0	9	2	7	1	7	0	1	14
SITE NUMBER: 13350																
ASSEMBLAGE NUMBER: 7																
BASALT																
3701	12	0	1	8	3	5	0	0	11	0	11	1	8	2	0	13
TOTAL	12	0	1	8	3	5	0	0	11	0	11	1	8	2	0	13
TOTALS	12	0	1	8	3	5	0	0	11	0	11	1	8	2	0	13
SITE NUMBER: 13351																
ASSEMBLAGE NUMBER: 1																
PEC.CHRT/C																
1052	1	0	1	1	0	1	0	0	2	0	2	0	1	0	1	2
1053	4	0	0	1	0	1	0	0	1	0	1	0	1	0	0	4
1091	4	0	0	1	0	1	0	0	2	0	2	0	2	0	0	4
1214	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1215	14	0	3	6	2	4	0	0	9	0	9	1	6	1	1	17
TOTAL	25	0	4	9	2	7	0	0	14	0	14	1	10	1	2	29
SILC.WOOD																
1112	2	0	2	0	0	0	0	0	3	2	1	0	1	0	2	4
TOTAL	2	0	2	0	0	0	0	0	3	2	1	0	1	0	2	4

MATERIAL	TYPE FREF	BIP	SAD	PLATFORMS #	PLATFORMS CTX	SF	RT	RS	CORTEX #	CORTEX WW	DT	CORTEX PLACEMENT PLT	CORTEX PLACEMENT DRS	CORTEX PLACEMENT P+D	SAD	TOTALS
TOTALS	27	0	6	9	2	7	0	0	17	2	13	1	11	1	4	33
SITE NUMBER: 13351																
ASSEMBLAGE NUMBER: 2																
BASALT																
3701	16	0	5	7	0	7	0	0	12	0	12	0	8	0	4	21
TOTAL	16	0	5	7	0	7	0	0	12	0	12	0	8	0	4	21
PED.CHRT/C																
1052	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1053	3	0	0	1	0	1	0	0	0	0	0	0	0	0	0	3
1091	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	4	0	1	2	0	2	0	0	0	0	0	0	0	0	0	5
CHERT																
1057	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
1070	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	2	0	0	0	0	0	0	0	1	1	0	0	1	0	0	2
TOTALS	22	0	6	9	0	9	0	0	13	1	12	0	9	0	4	28
SITE NUMBER: 13351																
ASSEMBLAGE NUMBER: 3																
BASALT																
3701	1	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1
TOTAL	1	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1
PED.CHRT/C																
1050	2	0	1	1	0	1	0	0	2	2	0	0	1	0	1	3
1051	4	0	3	2	2	0	0	0	7	5	2	1	2	1	3	7
1090	10	0	5	4	3	1	0	0	10	9	1	2	3	1	4	13
1091	31	0	7	12	5	3	0	0	30	19	11	8	17	1	4	33
1214	7	0	1	2	1	1	0	0	4	1	3	1	3	0	0	8
1215	46	0	20	26	13	13	0	0	51	38	13	9	24	4	14	66
TOTAL	100	0	37	47	28	19	0	0	104	74	30	21	50	7	26	137
CHERT																
1070	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
TOTAL	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
TOTALS	102	0	37	48	28	20	0	0	106	75	31	21	52	7	26	139
SITE NUMBER: 13351																
ASSEMBLAGE NUMBER: 4																
OBSIDIAN																
3520	1	0	0	1	0	1	0	0	1	0	1	0	1	0	0	1
3525	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3528	1	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1
3530	3	0	0	2	2	0	0	0	3	0	3	2	1	0	0	3
TOTAL	5	0	1	3	2	1	0	0	5	0	5	2	3	0	0	6
BASALT																
3701	21	0	5	12	4	8	0	0	25	2	23	3	16	1	5	26
TOTAL	21	0	5	12	4	8	0	0	25	2	23	3	16	1	5	26
PED.CHRT/C																
1050	1	0	2	0	0	0	0	0	2	1	1	0	1	0	1	3
1051	1	0	1	0	0	0	0	0	2	2	0	0	1	0	1	2
1091	7	0	0	2	1	1	0	0	7	4	3	0	6	1	0	7
1214	2	0	2	1	1	0	0	0	4	2	2	0	1	1	2	4
1215	15	0	11	6	2	4	0	0	24	7	17	0	12	2	10	26
TOTAL	26	0	16	9	4	5	0	0	39	16	23	0	21	4	14	42
CHERT																
1060	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTAL	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTALS	53	0	22	24	10	14	0	0	70	19	51	5	41	5	19	75
SITE NUMBER: 13352																
ASSEMBLAGE NUMBER: 1																
OBSIDIAN																
3525	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
TOTAL	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
BASALT																
3701	92	0	38	33	17	16	0	0	103	22	81	7	60	10	26	130
3730	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3050	8	0	1	2	2	0	0	0	8	1	7	0	6	2	0	9
TOTAL	101	0	39	35	19	16	0	0	111	23	88	7	66	12	26	140
PED.CHRT/C																
1050	6	0	5	4	1	3	0	0	7	4	3	1	3	0	3	11
1051	13	0	2	4	4	0	0	0	13	8	5	3	8	1	1	15
1090	2	0	2	2	1	1	0	0	2	1	1	1	0	0	1	4
1053	4	0	4	1	0	1	0	0	5	2	3	0	3	0	2	8
1091	23	0	6	8	2	6	0	0	18	14	4	1	14	1	2	29
1214	41	0	14	21	10	11	0	0	43	27	16	8	21	2	12	55
1215	58	0	16	34	15	19	0	0	65	44	21	5	35	10	15	74

MATERIAL	TYPE FREE	BIP	SAD	PLATFORMS #	PLATFORMS CTX	SF	HT	RS	CORTEX #	CORTEX WW	OT	CORTEX PLACEMENT PLT	CORTEX PLACEMENT DRS	CORTEX PLACEMENT P+D	SAD	TOTALS
TOTAL	147	0	49	74	33	41	0	0	153	100	53	19	84	14	36	196
CHERT																
1070	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
1060	2	0	0	1	1	0	0	0	2	2	0	0	1	1	0	2
1075	3	0	0	1	0	1	0	0	2	0	2	0	2	0	0	3
1415	1	0	0	1	1	0	0	0	1	1	0	1	0	0	0	1
TOTAL	7	0	0	3	2	1	0	0	6	4	2	1	4	1	0	7
CHALCEDONY																
1212	5	0	0	2	0	2	0	0	5	1	4	0	5	0	0	5
1230	1	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1
1221	5	0	0	2	0	2	0	0	5	4	1	0	5	0	0	5
TOTAL	11	0	0	4	0	4	0	0	11	5	6	0	11	0	0	11
QUARTZITE																
4000	10	0	3	6	4	2	0	0	11	9	2	2	4	2	3	13
4001	1	0	1	0	0	0	0	0	1	1	0	0	1	0	0	2
TOTAL	11	0	4	6	4	2	0	0	12	10	2	2	5	2	3	15
GRAN.ANDES																
3000	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTAL	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
TOTALS	279	0	92	123	58	65	0	0	295	144	131	29	172	29	65	371
SITE NUMBER: 13352																
ASSEMBLAGE NUMBER: 2																
OBSIDIAN																
3525	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
TOTAL	1	0	0	1	1	0	0	0	1	1	0	0	0	1	0	1
BASALT																
3701	9	0	1	5	0	5	0	0	6	0	6	0	6	0	0	10
3050	1	0	0	1	1	0	0	0	1	0	1	1	0	0	0	1
TOTAL	10	0	1	6	1	5	0	0	7	0	7	1	6	0	0	11
PED.CHRT/C																
1050	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
1051	3	0	0	3	2	1	0	0	3	2	1	0	1	2	0	3
1091	4	1	1	4	4	1	0	0	4	2	2	2	2	2	0	5
1214	5	0	4	4	4	0	0	0	7	4	3	1	0	3	3	9
1215	18	0	10	9	7	2	0	0	25	15	10	1	9	6	9	28
TOTAL	31	1	15	21	17	5	0	0	39	23	16	4	12	13	12	46
TOTALS	42	1	16	28	19	10	0	0	47	24	23	5	18	14	12	58
SITE NUMBER: 13353																
ASSEMBLAGE NUMBER: 1																
OBSIDIAN																
3520	1	0	0	1	1	0	0	0	1	0	1	0	0	1	0	1
TOTAL	1	0	0	1	1	0	0	0	1	0	1	0	0	1	0	1
BASALT																
3701	32	0	2	23	5	18	0	0	10	0	10	4	5	1	0	34
TOTAL	32	0	2	23	5	18	0	0	10	0	10	4	5	1	0	34
PED.CHRT/C																
1051	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
1091	2	0	2	1	0	1	0	0	2	0	2	0	2	0	0	4
1215	1	0	2	1	1	0	0	0	3	0	3	0	0	1	2	3
TOTAL	4	0	4	3	1	2	0	0	6	1	5	0	3	1	2	8
CHERT																
1660	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTALS	37	0	7	27	7	20	0	0	17	1	16	4	8	3	2	44
SITE NUMBER: 13353																
ASSEMBLAGE NUMBER: 2																
OBSIDIAN																
3510	1	0	4	1	0	1	0	0	2	0	2	0	1	0	1	5
3520	2	0	1	1	0	1	0	0	1	1	0	0	0	0	1	3
3523	3	0	1	1	0	1	0	0	3	0	3	0	3	0	0	4
3524	2	0	1	1	1	0	0	0	1	0	1	1	0	0	0	3
3525	6	0	6	4	0	4	0	0	5	1	4	0	3	0	2	12
3526	6	0	2	3	2	1	0	0	7	1	6	1	3	1	2	8
3528	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3530	6	0	1	3	1	1	1	0	5	1	4	0	4	1	0	7
TOTAL	27	0	16	14	4	9	1	0	24	4	20	2	14	2	6	43
BASALT																
3700	0	0	1	0	0	0	0	0	1	1	0	0	0	0	1	1
3701	418	0	120	211	83	128	0	1	312	14	298	53	183	30	46	538
3706	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1
3730	2	0	1	1	0	1	0	0	2	2	0	0	1	0	1	3
3050	2	0	1	1	1	0	0	0	1	1	0	1	0	0	0	3
3731	2	0	0	1	0	1	0	0	2	2	0	0	2	0	0	2
TOTAL	425	0	123	215	84	131	0	1	318	20	298	54	186	30	48	548

MATERIAL	TYPE FREF	BIP	SAD	PLATFORMS #	PLATFORMS CTX	SF	RT	RS	CORTEX #	CORTEX WW	JT	CORTEX PLACEMENT PLT	CORTEX PLACEMENT DRS	CORTEX PLACEMENT P+D	SAD	TOTALS
FEC.CHRT/C																
1050	16	0	2	7	1	6	0	0	7	0	7	1	3	0	1	13
1051	31	0	13	23	6	17	0	0	30	7	23	4	13	2	9	44
1090	19	0	9	16	4	12	0	0	18	3	13	2	9	2	5	23
1052	4	0	2	2	0	2	0	0	3	1	2	0	1	0	2	5
1053	48	0	11	22	11	11	0	0	42	13	20	7	24	4	7	59
1091	36	0	6	18	4	14	0	0	32	13	10	1	22	3	6	42
1214	45	0	14	21	7	14	0	0	43	18	23	3	23	4	11	59
1215	168	0	39	114	40	74	0	0	146	41	105	21	78	19	28	237
1310	2	0	0	2	0	2	0	0	1	1	0	0	1	0	0	2
TOTAL	369	0	96	225	73	152	0	0	322	97	225	39	180	34	69	403
CHERT																
1011	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1070	3	0	0	2	0	2	0	0	2	2	0	0	2	0	0	3
1073	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1030	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
1600	5	0	3	3	0	3	0	0	5	5	0	0	3	0	2	8
1660	6	0	1	5	2	3	0	0	4	4	0	1	2	1	0	7
1680	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
TOTAL	18	0	4	12	2	10	0	0	13	13	0	1	9	1	2	22
CHALCEDCNY																
1212	1	0	1	0	0	0	0	0	2	0	2	0	1	0	1	2
1213	1	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1
1221	1	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1
1232	4	0	2	2	1	1	0	0	5	0	5	0	2	1	2	5
TCTAL	7	0	3	3	1	2	0	0	9	2	7	0	5	1	3	13
SILC.WOOD																
1112	4	0	0	1	0	1	0	0	0	0	0	0	0	0	0	4
TCTAL	4	0	0	1	0	1	0	0	0	0	0	0	0	0	0	4
QUARTZITE																
4000	14	0	9	9	2	7	0	0	14	12	2	2	7	0	5	23
4001	1	0	0	1	0	1	0	0	1	0	1	0	1	0	0	1
TOTAL	15	0	9	10	2	8	0	0	15	12	3	2	8	0	5	24
S.S.GREENS																
4301	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
JASPERCID																
1502	1	0	0	1	0	1	0	0	1	0	1	0	1	0	0	1
TOTAL	1	0	0	1	0	1	0	0	1	0	1	0	1	0	0	1
OTHER																
9999	1	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1
TOTAL	1	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1
TOTALS	868	0	251	481	166	314	1	1	703	148	553	98	104	68	133	1119

SITE NUMBER: 5011

MATERIAL	#AR	#ED	RETOUCH UNR	RETOUCH UND	BID	OUTLINE CNC	OUTLINE STR	CNV	C-C	PRJ	SINSTY LAT	SINSTY TRN	PLCMNT UND	PLCMNT BID	SCAR TYPE D.F	SCAR TYPE P.S	SCAR TYPE D.S	CRS	NBL	EDGE ROUNDING BRD	EDGE ROUNDING URD	EDGE ROUNDING BVL	EDGE ROUNDING FLT	OTHER WEAR ROT	OTHER WEAR POL	OTHER WEAR STR	BCK	MEAN<	S.D.<
OBSIDIAN																													
3520	7	12	11	1	0	3	6	2	1	0	0	1	10	1	9	6	1	0	8	1	0	0	0	0	0	2	0	61.0	2.8
3523	1	1	0	1	0	1	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
3525	1	2	2	0	0	1	1	0	0	0	0	0	2	0	2	1	0	0	1	1	0	0	0	0	0	0	0	0.0	0.0
TOTAL	9	15	13	2	0	5	7	2	1	0	0	1	13	1	12	8	1	0	9	2	0	0	0	0	0	2	0		
P.CHRT/CHL																													
1214	1	1	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.0	0.0
TOTAL	1	1	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0		
TOTALS	10	16	14	2	0	6	7	2	1	0	0	1	14	1	12	8	1	0	10	2	0	0	0	0	0	2	0		

SITE NUMBER: 10114

MATERIAL	#AR	#ED	RETOUCH UNR	RETOUCH UND	BID	OUTLINE CNC	OUTLINE STR	CNV	C-C	PRJ	SINSTY LAT	SINSTY TRN	PLCMNT UND	PLCMNT BID	SCAR TYPE D.F	SCAR TYPE P.S	SCAR TYPE D.S	CRS	NBL	EDGE ROUNDING BRD	EDGE ROUNDING URD	EDGE ROUNDING BVL	EDGE ROUNDING FLT	OTHER WEAR ROT	OTHER WEAR POL	OTHER WEAR STR	BCK	MEAN<	S.D.<
OBSIDIAN																													
3520	4	6	4	1	1	1	3	0	2	0	2	3	3	3	0	3	1	4	5	1	1	0	0	0	0	1	0	58.2	5.6
3524	2	3	2	1	0	2	1	0	0	0	0	0	2	1	0	1	1	2	0	0	0	0	0	0	0	0	0	57.2	6.1
3525	3	6	4	2	0	1	2	2	1	0	1	0	5	1	0	4	0	4	2	3	1	0	0	0	0	2	1	62.3	8.3
3526	1	1	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	51.0	9.5
TOTAL	10	16	11	4	1	4	7	2	3	0	3	3	10	6	0	8	2	10	8	4	2	0	1	0	0	3	1		
BASALT																													
3701	2	2	2	0	0	0	1	0	1	0	0	0	0	2	0	1	0	2	1	0	1	0	0	0	1	0	0	41.0	16.9
3706	1	1	1	0	0	0	1	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	1	46.0	0.0
TOTAL	3	3	3	0	0	0	2	0	1	0	0	0	0	3	0	2	0	3	1	0	2	0	0	0	1	0	1		
P.CHRT/CHL																													
1051	2	3	3	0	0	1	2	0	0	0	0	0	3	0	0	3	2	1	1	0	0	0	0	0	0	0	0	0.0	0.0
1090	1	3	2	1	0	0	3	0	0	0	0	0	3	0	0	3	1	3	0	2	0	0	1	0	1	0	0	0.0	0.0
1053	2	5	3	2	0	1	3	1	0	0	0	0	4	1	2	4	1	2	1	1	0	0	2	0	2	0	2	0.0	0.0
1071	2	5	2	3	0	2	2	0	1	0	0	0	4	1	0	5	1	0	1	0	0	0	0	0	0	0	2	0.0	0.0
1214	1	2	0	2	0	2	0	0	0	0	1	0	2	0	0	2	0	1	0	0	0	0	0	0	0	0	1	0.0	0.0
1215	3	4	3	1	0	1	2	1	0	0	0	0	4	0	1	2	0	2	3	0	1	0	0	0	0	0	2	0.0	0.0
TOTAL	11	22	13	9	0	7	12	2	1	0	1	0	20	2	3	19	5	9	6	3	1	0	3	0	3	0	7		
CHALCEDONY																													
1212	1	2	1	1	0	0	1	1	0	0	0	0	1	1	0	1	2	0	0	0	0	0	1	0	0	0	0	0.0	0.0
TOTAL	1	2	1	1	0	0	1	1	0	0	0	0	1	1	0	1	2	0	0	0	0	0	1	0	0	0	0		
SIL.WOOD																													
1113	4	7	2	4	1	2	3	1	1	0	1	0	7	0	1	7	3	4	1	5	2	0	0	0	2	0	2	0.0	0.0
TOTAL	4	7	2	4	1	2	3	1	1	0	1	0	7	0	1	7	3	4	1	5	2	0	0	0	2	0	2		
QUARTZITE																													
4000	1	1	1	0	0	0	1	0	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0.0	0.0
TOTAL	1	1	1	0	0	0	1	0	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0		
TOTALS	30	51	31	18	2	13	26	6	6	0	5	3	38	13	4	38	12	27	16	12	7	0	5	0	6	3	11		

SITE NUMBER: 13049

MATERIAL	#AR	#ED	RETOUCH UNR	RETOUCH UND	BID	OUTLINE CNC	OUTLINE STR	CNV	C-C	PRJ	SINSTY LAT	SINSTY TRN	PLCMNT UND	PLCMNT BID	SCAR TYPE D.F	SCAR TYPE P.S	SCAR TYPE D.S	CRS	NBL	EDGE ROUNDING BRD	EDGE ROUNDING URD	EDGE ROUNDING BVL	EDGE ROUNDING FLT	OTHER WEAR ROT	OTHER WEAR POL	OTHER WEAR STR	BCK	MEAN<	S.D.<
OBSIDIAN																													
3520	27	38	23	11	4	5	14	8	11	0	6	5	22	16	16	22	11	17	18	10	3	0	1	0	0	2	6	89.0	0.0
3523	13	17	12	4	1	3	9	2	3	0	1	1	12	5	7	7	1	12	10	6	0	0	0	0	1	4	5	62.8	13.3
3525	12	18	12	6	0	2	7	5	4	0	2	3	9	9	9	8	4	13	7	2	1	1	2	0	1	0	2	50.3	14.7
3530	1	1	1	0	0	0	1	0	0	0	0	0	1	0	0	1	0	1	1	0	0	0	0	0	0	0	0	61.0	0.0

TOTAL	53	74	48	21	5	10	31	15	18	0	9	9	44	30	32	38	16	43	36	18	4	1	3	0	2	6	13		
BASALT																													
3701	25	40	33	7	0	6	11	6	17	0	7	9	24	15	9	27	6	26	9	20	5	0	1	0	14	0	6	56.2	10.2
3030	1	1	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	0	0	1	0	71.0	0.0
3050	1	1	1	0	0	0	0	1	0	0	0	0	0	1	0	1	0	0	1	0	1	0	0	0	1	1	1	54.0	5.6
TOTAL	27	42	34	8	0	6	11	8	17	0	7	9	25	16	9	28	6	27	10	21	6	0	1	0	15	2	7		
P.CHRT/CHL																													
1050	4	5	5	0	0	1	1	3	0	0	0	0	4	0	2	1	0	3	0	0	2	0	0	0	1	0	0	0.0	0.0
1051	1	1	0	1	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0.0	0.0
1020	2	2	2	0	0	0	1	0	1	0	0	0	1	1	2	1	0	1	1	0	1	0	0	0	0	0	0	0.0	0.0
1052	1	1	1	0	0	0	0	1	0	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0.0	0.0
1053	2	2	2	0	0	0	1	1	0	0	0	1	1	1	0	1	0	2	0	0	0	0	0	0	0	0	1	0.0	0.0
1091	8	13	11	2	0	3	4	3	3	0	2	0	6	7	1	8	2	6	7	1	1	0	0	0	1	1	7	0.0	0.0
1214	3	3	3	0	0	0	2	1	0	0	0	0	3	0	2	2	1	2	1	1	0	0	0	0	0	0	2	0.0	0.0
1215	9	13	10	3	0	3	4	3	3	0	1	0	8	5	4	8	3	6	4	1	0	0	0	0	0	0	3	0.0	0.0
1340	1	1	1	0	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0.0	0.0
TOTAL	31	41	35	6	0	7	15	12	7	0	3	1	26	14	12	23	6	21	13	3	4	0	0	0	2	2	14		
CHERT																													
1070	1	1	0	1	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0.0	0.0
1230	1	2	1	1	0	0	0	1	1	0	0	0	1	1	1	0	1	0	2	1	0	0	0	0	0	0	0	0.0	0.0
1415	1	1	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0.0	0.0
1600	1	1	1	0	0	0	0	0	1	0	0	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0.0	0.0
TOTAL	4	5	3	2	0	1	1	1	2	0	1	0	4	1	1	2	1	2	2	1	1	0	0	0	0	0	1		
QUARTZITE																													
4000	1	1	0	1	0	0	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0.0	0.0
TOTAL	1	1	0	1	0	0	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1		
GRAN/ANDES																													
3300	1	2	1	1	0	1	0	0	1	0	0	1	1	1	1	1	1	1	1	2	0	0	0	0	1	0	2	0.0	0.0
TOTAL	1	2	1	1	0	1	0	0	1	0	0	1	1	1	1	1	1	1	1	2	0	0	0	0	1	0	2		
METARHYOLT																													
4375	1	2	2	0	0	1	0	0	1	0	2	2	1	1	0	1	0	2	0	2	0	0	0	0	2	0	0	0.0	0.0
TOTAL	1	2	2	0	0	1	0	0	1	0	2	2	1	1	0	1	0	2	0	2	0	0	0	0	2	0	0		
TOTALS	118	167	123	39	5	26	58	36	47	0	22	22	102	63	55	94	30	96	62	47	15	1	4	0	22	10	38		

SITE NUMBER: 13050

MATERIAL		RETOUCH			OUTLINE					SINSTY		PLCMNT		SCAR TYPE					EDGE ROUNDING				OTHER WEAR			BCK	MEAN<	S.D.<
	#AR	#ED	UNR	UNI	BID	CNC	STR	CNV	C-C	PRJ	LAT	TRN	UND	BID	D.F	P.S	D.S	CRS	NBL	BRD	URD	BVL	FLT	ROT	POL	STR		
OBSIDIAN																													
3520	4	7	4	2	1	4	1	1	1	0	0	0	6	1	4	4	3	0	4	0	0	0	0	0	0	0	0	60.5	3.5
3523	1	3	2	1	0	2	1	0	0	0	0	0	3	0	3	1	1	0	3	0	0	0	0	0	0	0	0	64.3	15.1
3524	2	5	2	3	0	3	2	0	0	0	0	0	5	0	2	3	0	0	4	1	0	0	0	0	0	0	0	65.0	24.0
3525	2	3	2	1	0	0	2	0	1	0	0	0	3	0	2	1	1	0	3	0	0	0	0	0	0	0	1	50.5	16.2
3526	1	2	1	1	0	0	1	1	0	0	0	0	2	0	2	1	0	0	2	0	0	0	0	0	0	0	0	63.5	13.3
3530	1	1	1	0	0	1	0	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	44.5	3.5
TOTAL	11	21	12	8	1	10	7	2	2	0	0	0	20	1	14	10	5	0	17	1	0	0	0	0	0	0	1		
BASALT																													
3701	4	4	4	0	0	1	3	0	0	0	0	0	3	1	2	2	0	2	4	0	1	0	0	0	0	0	1	0.0	0.0
3050	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0.0	0.0
TOTAL	5	5	5	0	0	2	3	0	0	0	0	0	3	1	2	2	0	2	4	0	2	0	0	0	0	0	1		
P.CHRT/CHL																													
1051	1	2	2	0	0	1	1	0	0	0	0	0	2	0	1	2	0	1	0	0	1	0	0	0	1	0	0	0.0	0.0
1215	1	2	2	0	0	1	1	0	0	0	0	0	2	0	0	2	1	1	1	0	0	0	0	0	0	0	0	0.0	0.0
TOTAL	2	4	4	0	0	2	2	0	0	0	0	0	4	0	1	4	1	2	1	0	1	0	0	0	1	0	0		
TOTALS	18	30	21	8	1	14	12	2	2	0	0	0	27	2	17	16	6	4	22	1	3	0	0	0	1	0	2		

SITE NUMBER: 13054

MATERIAL	#AR	#ED	RETOUCH UNR	RETOUCH UND	BID	OUTLINE CNC	OUTLINE STR	CNV	C-C	PRJ	SINSTY LAT	SINSTY TRN	PLCMNT UND	PLCMNT BID	SCAR TYPE D.F	SCAR TYPE P.S	SCAR TYPE D.S	CRS	NBL	EDGE ROUNDING BRD	EDGE ROUNDING URD	EDGE ROUNDING BVL	EDGE ROUNDING FLT	OTHER WEAR ROT	OTHER WEAR POL	OTHER WEAR STR	BCK	MEAN<	S.D.<
OBSIDIAN																													
3520	18	22	12	10	0	4	8	8	2	0	1	1	13	9	14	15	6	2	20	1	0	0	0	0	0	1	3	62.1	15.4
3523	8	12	8	4	0	1	5	5	1	0	2	0	11	1	8	6	0	0	7	1	0	0	1	0	0	0	0	61.4	14.7
3525	19	28	17	9	2	5	11	9	3	0	2	0	14	14	20	19	5	4	21	0	2	0	2	0	0	0	4	60.8	11.1
3526	1	1	0	0	1	0	0	0	1	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	1	59.4	13.3
TOTAL	46	63	37	23	3	10	24	22	7	0	5	1	39	24	42	41	12	6	48	2	2	0	3	0	0	1	8		
BASALT																													
3701	10	16	13	3	0	7	6	2	1	0	0	0	12	3	6	10	3	2	5	0	5	0	2	0	1	0	3	51.0	0.0
3730	1	1	1	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	1	0	0	0	0	54.5	11.3
TOTAL	11	17	14	3	0	7	6	2	2	0	0	0	13	3	7	10	3	3	5	0	5	0	3	0	1	0	3		
P.CHRT/CHL																													
1050	3	3	3	0	0	1	2	0	0	0	0	0	2	1	3	0	0	2	2	0	0	0	0	0	0	0	1	0.0	0.0
1051	4	7	7	0	0	2	2	3	0	0	0	0	5	2	6	5	2	3	3	0	0	0	0	0	0	0	1	0.0	0.0
1090	2	2	1	1	0	0	1	1	0	0	0	0	2	0	2	1	0	1	2	0	0	0	0	0	0	0	1	0.0	0.0
1052	1	2	2	0	0	0	1	1	0	0	0	0	1	1	1	0	0	1	2	0	0	0	0	0	0	0	0	0.0	0.0
1053	1	2	0	2	0	1	1	0	0	0	0	0	2	0	0	2	0	0	0	0	1	0	1	0	0	2	0	0.0	0.0
1071	7	9	6	3	0	1	3	4	1	0	1	1	7	2	7	7	1	2	7	0	1	0	0	0	0	0	2	0.0	0.0
1214	3	3	3	0	0	0	0	3	0	0	0	0	0	3	2	2	0	2	3	0	1	0	0	0	0	0	2	0.0	0.0
1215	15	21	14	7	0	7	8	4	2	0	0	0	18	3	15	12	2	1	13	0	1	0	0	0	1	0	6	0.0	0.0
TOTAL	36	49	36	13	0	12	18	16	3	0	1	1	37	12	36	29	5	12	32	0	4	0	1	0	1	2	13		
CHERT																													
1070	3	4	3	1	0	1	2	0	1	0	0	0	1	3	2	3	1	1	2	0	0	0	0	0	0	0	1	0.0	0.0
1075	1	1	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0.0	0.0
1415	1	1	0	1	0	0	0	1	0	0	0	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0.0	0.0
TOTAL	5	6	4	2	0	1	2	1	2	0	0	0	3	3	3	4	2	1	3	0	0	0	0	0	0	0	1		
QUARTZITE																													
4000	1	1	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0.0	0.0
TOTAL	1	1	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0		
TOTALS	99	136	92	41	3	30	50	42	14	0	6	2	93	42	88	84	22	23	89	2	11	0	7	0	2	3	25		

SITE NUMBER: 13076

MATERIAL	#AR	#ED	RETOUCH UNR	RETOUCH UND	BID	OUTLINE CNC	OUTLINE STR	CNV	C-C	PRJ	SINSTY LAT	SINSTY TRN	PLCMNT UND	PLCMNT BID	SCAR TYPE D.F	SCAR TYPE P.S	SCAR TYPE D.S	CRS	NBL	EDGE ROUNDING BRD	EDGE ROUNDING URD	EDGE ROUNDING BVL	EDGE ROUNDING FLT	OTHER WEAR ROT	OTHER WEAR POL	OTHER WEAR STR	BCK	MEAN<	S.D.<
OBSIDIAN																													
3523	4	7	5	2	0	1	3	2	1	0	0	0	6	1	6	3	2	1	4	1	0	0	0	0	0	1	1	57.3	13.4
3525	1	2	2	0	0	0	1	0	1	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	62.5	27.5
3530	1	1	0	1	0	0	1	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0.0	0.0
TOTAL	6	10	7	3	0	1	5	2	2	0	0	0	9	1	7	3	2	1	7	1	0	0	0	0	0	1	1		
BASALT																													
3701	52	67	53	14	0	17	22	16	11	1	3	2	43	19	38	35	4	24	12	9	7	1	2	0	8	0	3	0.0	0.0
3706	5	8	7	1	0	0	3	4	1	0	0	0	3	5	7	5	0	4	3	1	2	0	0	0	1	0	0	0.0	0.0
TOTAL	57	75	60	15	0	17	25	20	12	1	3	2	46	24	45	40	4	28	15	10	9	1	2	0	9	0	3		
P.CHRT/CHL																													
1051	1	1	1	0	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
1053	1	1	1	0	0	1	0	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0.0	0.0
1214	1	1	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1	1	0	1	0	0	0	0	0	0	0.0	0.0
TOTAL	3	3	3	0	0	1	1	1	0	0	0	0	2	1	1	1	0	1	2	0	1	0	0	0	0	0	0		
TOTALS	66	89	70	18	0	19	31	23	14	1	3	2	57	26	53	44	6	30	24	11	10	1	2	0	9	1	4		

SITE NUMBER: 13084

MATERIAL	#AR	#ED	RETOUCH UNR	RETOUCH UND	BID	OUTLINE CNC	OUTLINE STR	CNV	C-C	PRJ	SINSTY LAT	SINSTY TRN	PLCMNT UND	PLCMNT BID	SCAR TYPE D.F	SCAR TYPE P.S	SCAR TYPE D.S	CRS	NBL	EDGE ROUNDING BRD	EDGE ROUNDING URD	EDGE ROUNDING BVL	EDGE ROUNDING FLT	OTHER WEAR ROT	OTHER WEAR POL	OTHER WEAR STR	BCK	MEAN<	S.D.<
OBSIDIAN																													
3528	1	3	2	1	0	0	2	1	0	0	1	0	0	3	3	3	2	0	3	1	0	0	1	0	0	0	0	0.0	0.0

TOTAL	1	1	2	1	0	0	2	1	0	0	1	0	0	3	3	3	2	0	1	1	0	0	1	0	0	0	0		
BASALT																													
3701	184	290	231	54	5	71	104	73	42	0	27	12	177	108	100	178	48	137	95	41	49	5	5	0	46	8	45	0.0	0.0
3706	1	1	1	0	0	0	0	1	0	0	0	0	1	0	0	1	1	0	1	0	1	0	0	0	1	0	1	0.0	0.0
TOTAL	185	291	232	54	5	71	104	74	42	0	27	12	178	108	100	197	49	137	96	41	50	5	5	0	47	8	46		
TOTALS	186	294	234	55	5	71	106	75	42	0	28	12	178	111	103	202	51	137	99	42	50	5	6	0	47	8	46		

SITE NUMBER: 13086

MATERIAL	#AR	#ED	RETOUCH UNR	UND	BID	OUTLINE CNC	STR	CNV	C-C	PRJ	SINSTY LAT	TRN	PLCMNT UND	BID	SCAR TYPE D.F	P.S	D.S	CRS	NBL	EDGE ROUNDING BRD	URD	BVL	FLT	OTHER WEAR ROT	PUL	STR	BCK	MEANC	S.D.C
OBSIDIAN																													
3520	2	3	3	0	0	0	1	1	1	0	0	0	3	0	3	1	2	0	3	0	0	0	0	0	0	0	1	60.0	11.5
3523	2	2	2	0	0	0	1	0	1	0	0	0	1	1	2	1	1	1	2	0	0	0	0	0	0	0	0	70.6	16.9
3524	2	3	3	0	0	0	1	1	1	0	0	0	0	3	2	2	1	1	3	0	0	0	0	0	0	0	0	55.6	14.3
3525	3	7	3	4	0	0	4	1	2	0	1	0	5	2	6	5	0	0	7	0	0	0	0	0	0	0	0	39.0	2.9
3528	3	5	3	2	0	1	3	1	0	0	0	0	5	0	4	5	0	0	3	0	0	0	0	0	0	0	0	63.5	3.5
TOTAL	12	20	14	6	0	1	10	4	5	0	1	0	14	6	17	14	4	2	18	0	0	0	0	0	0	0	1		
BASALT																													
3701	150	202	156	42	4	41	70	61	29	1	5	3	139	60	114	149	44	29	94	13	24	0	4	0	25	2	23	63.3	11.9
3706	5	7	4	3	0	3	1	0	2	1	0	0	4	2	4	5	3	1	1	1	0	0	1	0	1	0	0	51.6	9.6
3730	1	1	1	0	0	0	0	1	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	63.0	1.4
3050	2	2	1	1	0	0	0	1	1	0	0	0	2	0	2	0	1	0	1	0	1	0	0	0	0	0	0	57.0	0.0
TOTAL	158	212	162	46	4	44	71	63	32	2	5	3	146	62	121	155	48	30	97	14	25	0	5	0	26	2	23		
P.CHRT/CHL																													
1050	1	3	3	0	0	2	0	1	0	0	1	0	2	1	0	3	0	0	1	0	1	0	0	0	0	0	0	0.0	0.0
1051	1	1	1	0	0	0	1	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0.0	0.0
1090	2	2	2	0	0	0	2	0	0	0	1	0	2	0	2	1	0	0	2	0	0	0	0	0	0	0	1	0.0	0.0
1091	3	4	4	0	0	0	2	1	1	0	0	0	1	3	3	2	0	1	4	0	0	0	0	0	0	0	1	0.0	0.0
1214	1	3	3	0	0	1	1	1	0	0	0	0	2	1	1	3	1	0	1	0	0	0	0	0	0	0	1	0.0	0.0
.215	4	5	3	2	0	2	0	3	0	0	0	0	3	2	3	4	1	1	3	0	0	0	0	0	0	0	1	0.0	0.0
TOTAL	12	18	16	2	0	5	6	6	1	0	2	0	11	7	10	13	2	2	12	0	1	0	0	0	0	0	4		
SIL.WOOD																													
1110	1	1	0	1	0	0	0	1	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	1	0.0	0.0
TOTAL	1	1	0	1	0	0	0	1	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	1		
OTHER																													
9999	1	2	2	0	0	1	1	0	0	0	0	0	1	1	0	2	1	0	1	0	1	0	0	0	1	0	0	0.0	0.0
TOTAL	1	2	2	0	0	1	1	0	0	0	0	0	1	1	0	2	1	0	1	0	1	0	0	0	1	0	0		
TOTALS	184	253	194	55	4	51	88	74	38	2	8	3	172	77	148	185	56	34	128	14	27	0	5	0	27	2	29		

SITE NUMBER: 13291

MATERIAL	#AR	#ED	RETOUCH UNR	UND	BID	OUTLINE CNC	STR	CNV	C-C	PRJ	SINSTY LAT	TRN	PLCMNT UND	BID	SCAR TYPE D.F	P.S	D.S	CRS	NBL	EDGE ROUNDING BRD	URD	BVL	FLT	OTHER WEAR ROT	PUL	STR	BCK	MEANC	S.D.C
OBSIDIAN																													
3520	30	43	31	11	1	8	18	11	6	0	0	2	36	7	37	21	7	2	30	0	3	0	0	0	0	0	3	67.0	19.8
3523	4	10	6	4	0	3	5	1	1	0	0	0	8	2	8	7	2	0	7	0	0	0	1	0	0	0	0	64.2	16.7
3525	2	3	3	0	0	1	0	2	0	0	0	0	3	0	3	1	0	0	3	0	0	0	0	0	0	0	0	73.8	14.9
3528	2	2	2	0	0	0	1	1	0	0	0	0	2	0	1	1	0	0	2	0	0	0	0	0	0	0	0	57.0	0.0
TOTAL	38	58	42	15	1	12	24	15	7	0	0	2	49	9	49	30	9	2	42	0	3	0	1	0	0	0	3		
BASALT																													
3701	32	52	40	11	1	9	13	24	5	1	1	1	30	21	39	29	7	10	23	0	16	1	5	1	10	0	3	87.0	24.0
TOTAL	32	52	40	11	1	9	13	24	5	1	1	1	30	21	39	29	7	10	23	0	16	1	5	1	10	0	3		
P.CHRT/CHL																													
1050	1	2	1	1	0	1	0	1	0	0	1	0	2	0	1	2	0	0	1	0	0	0	0	0	0	0	0	0.0	0.0
1051	1	2	1	1	0	0	0	1	1	0	0	0	2	0	2	1	0	0	2	0	0	0	0	0	0	0	0	0.0	0.0
1090	2	4	2	1	1	0	1	0	3	0	0	0	3	1	1	4	3	0	3	0	1	0	0	0	1	0	0	0.0	0.0
1053	1	1	1	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0.0	0.0

MATERIAL	#AR	#ED	RETOUCH UNR	RETOUCH UND	BID	OUTLINE CNC	OUTLINE STR	CNV	C-C	PRJ	SINSTY LAT	SINSTY TRN	PLCMNT UND	PLCMNT BID	SCAR TYPE D.F	SCAR TYPE P.S	SCAR TYPE D.S	CRS	NBL	EDGE ROUNDING BRD	EDGE ROUNDING URD	EDGE ROUNDING BVL	EDGE ROUNDING FLT	OTHER WEAR ROT	OTHER WEAR POL	OTHER WEAR STR	BCK	MEAN<	S.D.<
1091	4	6	3	3	0	1	1	3	1	0	0	0	6	0	2	5	1	0	3	0	0	0	0	0	0	0	2	0.0	0.0
1214	1	1	1	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0.0	0.0
1215	23	43	20	22	1	22	10	5	6	0	2	1	41	2	16	37	7	0	27	1	2	0	3	0	3	0	11	0.0	0.0
TOTAL	33	52	29	28	2	24	13	11	11	0	3	1	54	5	24	49	11	0	38	1	3	0	3	0	4	0	13		
CHERT																													
1072	1	1	1	0	0	0	1	0	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0.0	0.0
TOTAL	1	1	1	0	0	0	1	0	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0		
TOTALS	104	170	112	54	4	45	51	50	23	1	4	4	134	35	113	109	27	12	104	1	22	1	9	1	14	0	19		

SITE NUMBER: 13292

MATERIAL	#AR	#ED	RETOUCH UNR	RETOUCH UND	BID	OUTLINE CNC	OUTLINE STR	CNV	C-C	PRJ	SINSTY LAT	SINSTY TRN	PLCMNT UND	PLCMNT BID	SCAR TYPE D.F	SCAR TYPE P.S	SCAR TYPE D.S	CRS	NBL	EDGE ROUNDING BRD	EDGE ROUNDING URD	EDGE ROUNDING BVL	EDGE ROUNDING FLT	OTHER WEAR ROT	OTHER WEAR POL	OTHER WEAR STR	BCK	MEAN<	S.D.<
OBSIDIAN																													
3510	1	2	2	0	0	0	0	2	0	0	0	0	2	0	2	2	1	1	2	0	0	0	0	0	0	0	0	68.6	11.7
3520	1	3	2	1	0	1	2	0	0	0	0	0	1	2	3	2	1	0	3	0	0	0	0	0	0	0	1	82.0	5.6
3523	2	3	2	1	0	2	1	0	0	0	0	0	2	1	3	3	0	0	3	0	0	0	0	0	0	0	1	51.5	2.1
3525	1	2	1	1	0	0	2	0	0	0	0	0	2	0	1	2	1	0	2	0	0	0	0	0	0	0	0	78.0	0.0
TOTAL	5	10	7	3	0	3	5	2	0	0	0	0	7	3	9	9	3	1	10	0	0	0	0	0	0	0	2		
BASALT																													
3701	32	54	43	11	4	14	16	13	15	0	0	1	27	31	40	52	11	6	25	14	0	0	3	0	8	0	11	0.0	0.0
TOTAL	32	58	43	11	4	14	16	13	15	0	0	1	27	31	40	52	11	6	25	14	0	0	3	0	8	0	11		
P.CHRT/CHL																													
1090	1	1	1	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0.0	0.0
1091	1	1	1	0	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
TOTAL	2	2	2	0	0	0	1	0	1	0	0	0	2	0	0	2	0	0	1	0	0	0	0	0	0	0	0		
TOTALS	39	70	52	14	4	17	22	15	16	0	0	1	36	34	49	63	14	7	36	14	0	0	3	0	8	0	13		

SITE NUMBER: 13329

MATERIAL	#AR	#ED	RETOUCH UNR	RETOUCH UND	BID	OUTLINE CNC	OUTLINE STR	CNV	C-C	PRJ	SINSTY LAT	SINSTY TRN	PLCMNT UND	PLCMNT BID	SCAR TYPE D.F	SCAR TYPE P.S	SCAR TYPE D.S	CRS	NBL	EDGE ROUNDING BRD	EDGE ROUNDING URD	EDGE ROUNDING BVL	EDGE ROUNDING FLT	OTHER WEAR ROT	OTHER WEAR POL	OTHER WEAR STR	BCK	MEAN<	S.D.<
BASALT																													
3701	11	17	14	4	1	5	5	6	3	0	1	1	10	7	13	16	9	4	3	7	3	2	2	0	13	0	2	0.0	0.0
3400	1	2	1	1	0	0	1	1	0	0	0	0	2	0	2	1	1	0	0	2	0	0	0	0	2	0	0	0.0	0.0
TOTAL	12	21	15	5	1	5	6	7	3	0	1	1	12	7	15	17	10	4	3	9	3	2	2	0	15	0	2		
TOTALS	12	21	15	5	1	5	6	7	3	0	1	1	12	7	15	17	10	4	3	9	3	2	2	0	15	0	2		

SITE NUMBER: 13332

MATERIAL	#AR	#ED	RETOUCH UNR	RETOUCH UND	BID	OUTLINE CNC	OUTLINE STR	CNV	C-C	PRJ	SINSTY LAT	SINSTY TRN	PLCMNT UND	PLCMNT BID	SCAR TYPE D.F	SCAR TYPE P.S	SCAR TYPE D.S	CRS	NBL	EDGE ROUNDING BRD	EDGE ROUNDING URD	EDGE ROUNDING BVL	EDGE ROUNDING FLT	OTHER WEAR ROT	OTHER WEAR POL	OTHER WEAR STR	BCK	MEAN<	S.D.<
BASALT																													
3701	25	36	30	5	1	6	17	8	5	0	0	0	13	23	27	28	6	1	14	3	10	0	1	0	13	0	4	0.0	0.0
TOTAL	25	36	30	5	1	6	17	8	5	0	0	0	13	23	27	28	6	1	14	3	10	0	1	0	13	0	4		
P.CHRT/CHL																													
1050	1	2	2	0	0	0	1	0	1	0	1	0	1	1	2	1	0	0	2	0	0	0	0	0	0	0	0	0.0	0.0
TOTAL	1	2	2	0	0	0	1	0	1	0	1	0	1	1	2	1	0	0	2	0	0	0	0	0	0	0	0		
CHERT																													
1073	1	3	2	1	0	1	1	0	1	0	0	0	3	0	1	2	2	0	2	0	2	0	0	0	0	0	0	0.0	0.0
TOTAL	1	3	2	1	0	1	1	0	1	0	0	0	3	0	1	2	2	0	2	0	2	0	0	0	0	0	0		
TOTALS	27	41	34	6	1	7	19	8	7	0	1	0	17	24	30	31	8	1	18	3	12	0	1	0	13	0	4		

SITE NUMBER: 13350

MATERIAL	RETOUCH	OUTLINE	SINSTY	PLCMNT	SCAR TYPE	EDGE ROUNDING	OTHER WEAR	BCK	MEAN<	S.D.<

	#AR	#ED	UNR	UNI	BID	CNC	STR	CNV	C-C	PRJ	LAT	TRN	UND	BID	D.F	P.S	D.S	CRS	NBL	BRD	URD	BVL	FLT	ROT	POL	STR			
BASALT																													
3701	14	19	11	8	0	4	6	5	4	0	1	0	14	5	15	16	1	0	6	1	6	0	0	0	6	0	4	0.0	0.0
TOTAL	14	19	11	8	0	4	6	5	4	0	1	0	14	5	15	16	1	0	6	1	6	0	0	0	6	0	4		
P.CHRT/CHL																													
1051	4	5	5	0	0	1	2	0	2	0	0	0	3	2	2	3	2	2	4	0	0	0	0	0	0	0	0	0.0	0.0
1333	1	1	1	0	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
1033	6	7	6	1	0	2	0	3	2	0	0	0	5	2	4	4	2	3	5	0	0	0	0	0	0	0	2	0.0	0.0
1321	2	2	2	0	0	0	0	1	1	0	0	0	1	1	2	2	0	0	2	0	0	0	0	0	0	0	0	0.0	0.0
1214	1	1	1	0	0	0	1	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0.0	0.0
1215	5	7	7	0	0	2	3	2	0	0	0	0	5	2	4	4	0	1	5	1	0	0	0	0	0	0	1	0.0	0.0
TOTAL	19	23	22	1	0	5	7	6	5	0	0	0	16	7	14	13	4	6	17	1	0	0	0	0	0	0	3		
CHERT																													
1072	1	1	1	0	0	0	1	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0.0	0.0
TOTAL	1	1	1	0	0	0	1	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0		
TOTALS	34	43	34	9	0	9	14	11	9	0	1	0	30	13	30	30	5	6	24	2	6	0	0	0	6	0	7		

SITE NUMBER: 13550

MATERIAL		RETOUCH			OUTLINE					SINSTY		PLCMNT		SCAR TYPE					EDGE ROUNDING				OTHER WEAR			BCK	MEAN<	S.D.<
	#AR	#ED	UNR	UNI	BID	CNC	STR	CNV	C-C	PRJ	LAT	TRN	UND	BID	D.F	P.S	D.S	CRS	NBL	BRD	URD	BVL	FLT	ROT	POL	STR			
BASALT																													
3701	1	1	0	1	0	1	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0.0	0.0
TOTAL	1	1	0	1	0	1	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0		
P.CHRT/CHL																													
1051	1	2	2	0	0	0	2	0	0	0	0	0	1	1	2	1	1	0	2	0	0	0	0	0	0	0	0	0.0	0.0
1215	1	1	1	0	0	0	1	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0.0	0.0
TOTAL	2	3	3	0	0	0	3	0	0	0	0	0	1	2	3	2	1	0	3	0	0	0	0	0	0	0	0		
TOTALS	3	4	3	1	0	1	3	0	0	0	0	0	2	2	3	3	1	0	4	0	0	0	0	0	0	0	0		

SITE NUMBER: 13350

MATERIAL		RETOUCH			OUTLINE					SINSTY		PLCMNT		SCAR TYPE					EDGE ROUNDING				OTHER WEAR			BCK	MEAN<	S.D.<
	#AR	#ED	UNR	UNI	BID	CNC	STR	CNV	C-C	PRJ	LAT	TRN	UND	BID	D.F	P.S	D.S	CRS	NBL	BRD	URD	BVL	FLT	ROT	POL	STR			
BASALT																													
3701	2	5	3	2	0	2	1	1	1	0	0	0	3	2	4	3	0	1	3	0	1	0	0	0	1	0	0	0.0	0.0
TOTAL	2	5	3	2	0	2	1	1	1	0	0	0	3	2	4	3	0	1	3	0	1	0	0	0	1	0	0		
TOTALS	2	5	3	2	0	2	1	1	1	0	0	0	3	2	4	3	0	1	3	0	1	0	0	0	1	0	0		

SITE NUMBER: 13351

MATERIAL		RETOUCH			OUTLINE					SINSTY		PLCMNT		SCAR TYPE					EDGE ROUNDING				OTHER WEAR			BCK	MEAN<	S.D.<
	#AR	#ED	UNR	UNI	BID	CNC	STR	CNV	C-C	PRJ	LAT	TRN	UND	BID	D.F	P.S	D.S	CRS	NBL	BRD	URD	BVL	FLT	ROT	POL	STR			
BASALT																													
3701	8	14	7	7	0	3	4	2	5	0	3	3	11	2	5	10	4	1	6	0	8	0	0	0	8	0	0	0.0	0.0
TOTAL	8	14	7	7	0	3	4	2	5	0	3	3	11	2	5	10	4	1	6	0	8	0	0	0	8	0	0		
P.CHRT/CHL																													
1321	2	2	2	0	0	0	1	1	0	0	0	0	1	1	1	2	1	0	1	0	0	0	1	0	0	0	1	0.0	0.0
1215	5	6	6	0	0	0	3	2	1	0	0	0	4	2	4	5	2	0	2	0	0	0	0	0	0	0	0	0.0	0.0
TOTAL	7	8	8	0	0	0	4	3	1	0	0	0	5	3	5	7	3	0	3	0	0	0	1	0	0	0	1		
TOTALS	15	22	15	7	0	3	8	5	6	0	3	3	16	5	10	17	7	1	9	0	8	0	1	0	8	0	1		

SITE NUMBER: 13551

MATERIAL		RETOUCH			OUTLINE					SINSTY		PLCMNT		SCAR TYPE					EDGE ROUNDING				OTHER WEAR			BCK	MEAN<	S.D.<
	#AR	#ED	UNR	UNI	BID	CNC	STR	CNV	C-C	PRJ	LAT	TRN	UND	BID	D.F	P.S	D.S	CRS	NBL	BRD	URD	BVL	FLT	ROT	POL	STR			

MATERIAL	#AR	#ED	RETOUCH UNR	RETOUCH UND	BID	OUTLINE CNC	OUTLINE STR	CNV	C-C	PRJ	SINSTY LAT	SINSTY TRN	PLCMNT UND	PLCMNT BID	SCAR TYPE D.F	SCAR TYPE P.S	SCAR TYPE D.S	CRS	NBL	EDGE ROUNDING BRD	EDGE ROUNDING URD	EDGE ROUNDING BVL	EDGE ROUNDING FLT	OTHER WEAR ROT	OTHER WEAR POL	OTHER WEAR STR	BCK	MEANK	S.D.K
P.CHRT/CHL																													
1091	1	1	0	0	1	0	1	0	0	0	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0.0	0.0
TOTAL	1	1	0	0	1	0	1	0	0	0	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0		
TOTALS	1	1	0	0	1	0	1	0	0	0	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0		

SITE NUMBER: 13351

MATERIAL	#AR	#ED	RETOUCH UNR	RETOUCH UND	BID	OUTLINE CNC	OUTLINE STR	CNV	C-C	PRJ	SINSTY LAT	SINSTY TRN	PLCMNT UND	PLCMNT BID	SCAR TYPE D.F	SCAR TYPE P.S	SCAR TYPE D.S	CRS	NBL	EDGE ROUNDING BRD	EDGE ROUNDING URD	EDGE ROUNDING BVL	EDGE ROUNDING FLT	OTHER WEAR ROT	OTHER WEAR POL	OTHER WEAR STR	BCK	MEANK	S.D.K
OBSIDIAN																													
3530	1	2	1	1	0	0	2	0	0	0	0	0	2	0	1	1	1	0	1	0	0	0	0	0	0	0	1	0.0	0.0
TOTAL	1	2	1	1	0	0	2	0	0	0	0	0	2	0	1	1	1	0	1	0	0	0	0	0	0	0	1		
BASALT																													
3701	6	7	4	3	0	3	2	2	0	0	0	0	6	1	5	6	0	0	2	1	1	0	0	0	2	0	2	0.0	0.0
TOTAL	6	7	4	3	0	3	2	2	0	0	0	0	6	1	5	6	0	0	2	1	1	0	0	0	2	0	2		
P.CHRT/CHL																													
1091	1	1	0	1	0	0	0	0	1	0	0	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0.0	0.0
1215	1	1	1	0	0	0	0	1	0	0	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0.0	0.0
TOTAL	2	2	1	1	0	0	0	1	1	0	0	0	1	1	1	2	0	0	2	0	0	0	0	0	0	0	0		
TOTALS	9	11	6	5	0	3	4	3	1	0	0	0	9	2	7	9	1	0	5	1	1	0	0	0	2	0	3		

SITE NUMBER: 13352

MATERIAL	#AR	#ED	RETOUCH UNR	RETOUCH UND	BID	OUTLINE CNC	OUTLINE STR	CNV	C-C	PRJ	SINSTY LAT	SINSTY TRN	PLCMNT UND	PLCMNT BID	SCAR TYPE D.F	SCAR TYPE P.S	SCAR TYPE D.S	CRS	NBL	EDGE ROUNDING BRD	EDGE ROUNDING URD	EDGE ROUNDING BVL	EDGE ROUNDING FLT	OTHER WEAR ROT	OTHER WEAR POL	OTHER WEAR STR	BCK	MEANK	S.D.K
BASALT																													
3701	17	23	16	6	1	4	11	3	4	1	1	1	16	6	13	12	3	3	9	7	5	0	0	0	11	0	2	0.0	0.0
3730	1	1	1	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
3050	1	1	1	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
TOTAL	19	25	18	6	1	4	11	5	4	1	1	1	18	6	14	13	3	3	9	7	5	0	0	0	11	0	2		
P.CHRT/CHL																													
1051	1	1	1	0	0	1	0	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0.0	0.0
1091	6	8	7	1	0	3	5	0	0	0	0	0	4	4	6	2	1	0	6	0	0	0	0	0	0	0	0	0.0	0.0
1214	3	4	4	0	0	0	2	1	1	0	0	0	3	1	4	0	0	0	4	0	0	0	0	0	0	0	0	0.0	0.0
1215	8	8	8	0	0	2	2	3	1	0	0	0	8	0	7	5	0	2	7	0	0	0	0	0	0	0	1	0.0	0.0
TOTAL	18	21	20	1	0	6	9	4	2	0	0	0	15	6	18	8	1	2	18	0	0	0	0	0	0	0	1		
CHERT																													
1060	1	1	1	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0.0	0.0
1075	1	1	1	0	0	1	0	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0.0	0.0
TOTAL	2	2	2	0	0	1	0	1	0	0	0	0	1	1	2	0	0	0	2	0	0	0	0	0	0	0	0		
TOTALS	39	49	40	7	1	11	20	10	6	1	1	1	34	13	34	21	4	5	29	7	5	0	0	0	11	0	3		

SITE NUMBER: 13353

MATERIAL	#AR	#ED	RETOUCH UNR	RETOUCH UND	BID	OUTLINE CNC	OUTLINE STR	CNV	C-C	PRJ	SINSTY LAT	SINSTY TRN	PLCMNT UND	PLCMNT BID	SCAR TYPE D.F	SCAR TYPE P.S	SCAR TYPE D.S	CRS	NBL	EDGE ROUNDING BRD	EDGE ROUNDING URD	EDGE ROUNDING BVL	EDGE ROUNDING FLT	OTHER WEAR ROT	OTHER WEAR POL	OTHER WEAR STR	BCK	MEANK	S.D.K
OBSIDIAN																													
3520	1	2	2	0	0	1	0	1	0	0	0	0	1	1	1	2	0	0	0	0	0	0	1	0	0	0	0	62.5	9.2
3523	2	3	2	1	0	1	0	2	0	0	0	0	1	2	3	3	2	0	2	0	0	0	0	0	0	0	1	65.6	15.3
3524	1	2	1	1	0	0	2	0	0	0	0	0	2	0	1	2	0	0	2	0	0	0	0	0	0	0	1	50.0	5.4
3526	8	13	5	8	0	3	4	3	3	0	1	0	10	3	7	11	2	1	9	0	0	0	0	0	0	0	2	54.0	11.9
3530	1	1	1	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	81.0	12.2
TOTAL	13	21	11	10	0	5	6	7	3	0	1	0	15	6	13	18	4	1	14	0	0	0	1	0	0	0	4		
BASALT																													
3701	92	118	98	18	2	28	41	23	25	1	1	2	63	53	84	72	8	12	61	20	32	0	5	0	51	1	17	53.0	0.0
TOTAL	92	118	98	18	2	28	41	23	25	1	1	2	63	53	84	72	8	12	61	20	32	0	5	0	51	1	17		
P.CHRT/CHL																													
1050	1	2	2	0	0	0	1	1	0	0	0	0	2	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0.0	0.0
1051	1	1	1	0	0	0	1	0	0	0	0	0	1	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0.0	0.0
1090	2	3	3	0	0	0	2	1	0	0	0	0	0	3	3	2	0	0	2	0	0	0	0	0	0	0	1	0.0	0.0
1052	2	4	4	0	0	1	1	0	2	0	0	0	1	3	3	2	0	2	4	0	0	0	0	0	0	0	0	0.0	0.0
1053	6	8	7	1	0	0	3	3	2	0	0	0	3	5	5	8	0	0	3	1	0	0	1	0	0	0	1	0.0	0.0
1071	6	6	6	0	0	0	4	2	0	0	0	0	4	2	4	5	0	0	6	0	0	0	0	0	0	0	1	0.0	0.0
1214	4	4	3	1	0	1	2	0	1	0	0	0	2	2	4	1	0	1	3	0	0	0	0	0	0	0	1	0.0	0.0
1215	14	17	15	2	0	6	4	5	2	0	1	0	10	7	8	10	0	0	16	0	0	0	0	0	0	0	1	0.0	0.0
TOTAL	36	45	41	4	0	8	18	12	7	0	1	0	23	22	27	29	1	4	36	1	0	0	1	0	0	0	5		
CHERT																													
1070	1	2	1	1	0	1	1	0	0	0	0	0	2	0	2	1	0	1	1	0	0	0	0	0	0	0	0	0.0	0.0
1660	3	4	4	0	0	0	2	2	0	0	0	0	1	3	2	1	0	1	4	0	0	0	0	0	0	0	0	0.0	0.0
TOTAL	4	6	5	1	0	1	3	2	0	0	0	0	3	3	4	2	0	2	5	0	0	0	0	0	0	0	0		
SIL.WOOD																													
1112	1	1	1	0	0	0	0	1	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
TOTAL	1	1	1	0	0	0	0	1	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0		
QUARTZITE																													
4000	1	1	1	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0.0	0.0
TOTAL	1	1	1	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0		
TOTALS	147	192	157	33	2	42	68	46	35	1	3	2	106	84	130	122	13	19	117	21	32	0	7	0	51	1	26		

SITE NUMBER: 5011
MATERIAL TYPE: BASALT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	DIMENSIONS WGHT	PLAT #	TYPE PLATFORM CTX	TYPE PLATFORM FCT	TYPE PLATFORM MFCT	SIZE MAX	SIZE MIN	PLAT <	UTILIZATION BATTER	UTILIZATION OTHER	LOC #	LOCATION AD	LOCATION RI	LOCATION CX	LOCATION FL	LOCATION EG	EDGE <
5045	0	2	3400	75	50	168	1	1	0	0	75	43	80	0	0		0	0	0	0	0	
													75	0	0		0	0	0	0	0	
													83	0	0		0	0	0	0	0	

SITE NUMBER: 10114
MATERIAL TYPE: BASALT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	DIMENSIONS WGHT	PLAT #	TYPE PLATFORM CTX	TYPE PLATFORM FCT	TYPE PLATFORM MFCT	SIZE MAX	SIZE MIN	PLAT <	UTILIZATION BATTER	UTILIZATION OTHER	LOC #	LOCATION AD	LOCATION RI	LOCATION CX	LOCATION FL	LOCATION EG	EDGE <
2737 C	0	8	3701	82	79	230	1	0	0	1	76	68	75	0	0		0	0	0	0	0	
							2	0	0	1	66	36	70	0	0		0	0	0	0	0	
3254	0	21	3701	99	83	423	1	0	0	1	83	72	90	0	0		0	0	0	0	0	
													92	0	0		0	0	0	0	0	

MATERIAL TYPE: PED.CHRT/C

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	DIMENSIONS WGHT	PLAT #	TYPE PLATFORM CTX	TYPE PLATFORM FCT	TYPE PLATFORM MFCT	SIZE MAX	SIZE MIN	PLAT <	UTILIZATION BATTER	UTILIZATION OTHER	LOC #	LOCATION AD	LOCATION RI	LOCATION CX	LOCATION FL	LOCATION EG	EDGE <
4150	3	155	1215	88	74	286	1	1	0	0	85	74	75	0	0		0	0	0	0	0	
													80	0	0		0	0	0	0	0	

MATERIAL TYPE: CHALCEDONY

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	DIMENSIONS WGHT	PLAT #	TYPE PLATFORM CTX	TYPE PLATFORM FCT	TYPE PLATFORM MFCT	SIZE MAX	SIZE MIN	PLAT <	UTILIZATION BATTER	UTILIZATION OTHER	LOC #	LOCATION AD	LOCATION RI	LOCATION CX	LOCATION FL	LOCATION EG	EDGE <
4251R1	2	414	1212	28	27	8	1	1	0	0	30	19	55	0	0	1	0	0	0	0	2	25
							2	0	0	1	27	15	99	0	0		0	0	0	0	0	

MATERIAL TYPE: OTHER

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	DIMENSIONS WGHT	PLAT #	TYPE PLATFORM CTX	TYPE PLATFORM FCT	TYPE PLATFORM MFCT	SIZE MAX	SIZE MIN	PLAT <	UTILIZATION BATTER	UTILIZATION OTHER	LOC #	LOCATION AD	LOCATION RI	LOCATION CX	LOCATION FL	LOCATION EG	EDGE <
3645	1	31	4000	81	81	439	1	0	0	1	80	58	70	0	0		0	0	0	0	0	
							2	0	0	1	78	42	80	0	0		0	0	0	0	0	

SITE NUMBER: 13049
MATERIAL TYPE: BASALT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	DIMENSIONS WGHT	PLAT #	TYPE PLATFORM CTX	TYPE PLATFORM FCT	TYPE PLATFORM MFCT	SIZE MAX	SIZE MIN	PLAT <	UTILIZATION BATTER	UTILIZATION OTHER	LOC #	LOCATION AD	LOCATION RI	LOCATION CX	LOCATION FL	LOCATION EG	EDGE <
4350	0	43	3701	63	37	119	1	0	0	1	56	42	74	0	0		0	0	0	0	0	
													84	0	0		0	0	0	0	0	
							2	0	1	0	43	30	99	0	0		0	0	0	0	0	
4446R1	0	112	3701	86	40	282	1	1	0	0	86	40	62	0	0		0	0	0	0	0	
													67	0	0		0	0	0	0	0	
													70	0	0		0	0	0	0	0	
													63	0	0		0	0	0	0	0	
4449	0	147	3701	90	72	411	1	0	1	0	88	82	86	0	0		0	0	0	0	0	
													63	0	0		0	0	0	0	0	
4942	0	970	3701	51	42	65	1	0	0	1	50	23	84	0	0		0	0	0	0	0	
													84	0	0		0	0	0	0	0	
							2	0	0	1	51	41	87	0	0		0	0	0	0	0	
5242	0	209	3701	67	42	185	1	0	0	1	36	27	88	0	0		0	0	0	0	0	
							2	1	0	0	49	26	107	0	0		0	0	0	0	0	

MATERIAL TYPE: PED.CHRT/C

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	DIMENSIONS WGHT	PLAT #	TYPE PLATFORM CTX	TYPE PLATFORM FCT	TYPE PLATFORM MFCT	SIZE MAX	SIZE MIN	PLAT <	UTILIZATION BATTER	UTILIZATION OTHER	LOC #	LOCATION AD	LOCATION RI	LOCATION CX	LOCATION FL	LOCATION EG	EDGE <
4544R1	0	178	1215	69	45	60	1	0	0	1	69	45	50	0	0		0	0	0	0	0	
													60	0	0		0	0	0	0	0	
4645R1	0	531	1215	37	29	20	1	0	1	0	22	21	55	0	0		0	0	0	0	0	
							2	0	1	0	24	24	63	0	0		0	0	0	0	0	
4943	0	984	1053	45	29	21	1	0	1	0	39	17	79	0	0		0	0	0	0	0	
													75	0	0		0	0	0	0	0	
													64	0	0		0	0	0	0	0	
							2	1	0	0	10	8	82	0	0		0	0	0	0	0	
							3	0	1	0	14	10	111	0	0		0	0	0	0	0	
							4	0	1	0	12	4	75	0	0		0	0	0	0	0	

MATERIAL TYPE: CHERT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	DIMENSIONS WGHT	PLAT #	TYPE PLATFORM CTX	TYPE PLATFORM FCT	TYPE PLATFORM MFCT	SIZE MAX	SIZE MIN	PLAT <	UTILIZATION BATTER	UTILIZATION OTHER	LOC #	LOCATION AD	LOCATION RI	LOCATION CX	LOCATION FL	LOCATION EG	EDGE <
4948	0	008	2205	60	47	106	1	1	0	0	45	33	53	0	0		0	0	0	0	0	
							2	1	0	0	52	23	72	0	0		0	0	0	0	0	

MATERIAL TYPE: OTHER

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	DIMENSIONS WGHT	PLAT #	TYPE PLATFORM CTX	TYPE PLATFORM FCT	TYPE PLATFORM MFCT	SIZE MAX	SIZE MIN	PLAT <	UTILIZATION BATTER	UTILIZATION OTHER	LOC #	LOCATION AD	LOCATION RI	LOCATION CX	LOCATION FL	LOCATION EG	EDGE <
4847	0	931	4000	175	122	3035	1	0	1	0	117	88	75	0	0		0	0	0	0	0	
							2	1	0	0	56	32	95	0	0		0	0	0	0	0	
							3	1	0	0	60	55	100	0	0		0	0	0	0	0	

SITE NUMBER: 13050
MATERIAL TYPE: OBSIDIAN

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	DIMENSIONS WGHT	PLAT #	TYPE PLATFORM CTX	TYPE PLATFORM FCT	TYPE PLATFORM MFCT	SIZE MAX	SIZE MIN	PLAT <	UTILIZATION BATTER	UTILIZATION OTHER	LOC #	LOCATION AD	LOCATION RI	LOCATION CX	LOCATION FL	LOCATION EG	EDGE <
4454	1	9	3526	32	21	7	1	0	1	0	12	10	82	0	0		0	0	0	0	0	

													PLAT <	UTILIZATION BATTER	UTILIZATION OTHER	LOC #	AO	RI	CX	FL	EG	EDGE <
													100	0	0	1	0	0	0	0	1	64

MATERIAL TYPE: BASALT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	DIMENSIONS WGHT	PLAT #	TYPE PLATFORM CTX	TYPE PLATFORM FCT	TYPE PLATFORM MFCT	SIZE MAX	SIZE MIN	PLAT <	UTILIZATION BATTER	UTILIZATION OTHER	LOC #	LOCATION AO	LOCATION RI	LOCATION CX	LOCATION FL	LOCATION EG	EDGE <
4955R1	1	384	3050	74	69	354	1	1	0	0	63	59	100	0	0		0	0	0	0	0	
													105	0	0		0	0	0	0	0	
													95	0	0		0	0	0	0	0	
							2	1	0	0	69	59	82	0	0		0	0	0	0	0	
													115	0	0		0	0	0	0	0	

MATERIAL TYPE: PED.CHRT/C

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	DIMENSIONS WGHT	PLAT #	TYPE PLATFORM CTX	TYPE PLATFORM FCT	TYPE PLATFORM MFCT	SIZE MAX	SIZE MIN	PLAT <	UTILIZATION BATTER	UTILIZATION OTHER	LOC #	LOCATION AO	LOCATION RI	LOCATION CX	LOCATION FL	LOCATION EG	EDGE <
465492	1	121	1215	135	100	1882	1	0	0	1	108	36	90	0	0		0	0	0	0	0	
													83	0	0		0	0	0	0	0	
													85	0	0		0	0	0	0	0	
													110	0	0		0	0	0	0	0	
							2	0	0	1	106	79	83	0	0		0	0	0	0	0	
													95	0	0		0	0	0	0	0	

SITE NUMBER: 13054
MATERIAL TYPE: OBSIDIAN

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	DIMENSIONS WGHT	PLAT #	TYPE PLATFORM CTX	TYPE PLATFORM FCT	TYPE PLATFORM MFCT	SIZE MAX	SIZE MIN	PLAT <	UTILIZATION BATTER	UTILIZATION OTHER	LOC #	LOCATION AO	LOCATION RI	LOCATION CX	LOCATION FL	LOCATION EG	EDGE <
5255	0	495	3525	41	33	22	1	0	1	0	37	15	79	0	0		0	0	0	0	0	
													78	0	0		0	0	0	0	0	
							2	1	0	0	36	15	65	0	0		0	0	0	0	0	
5652	0	905	3528	25	22	10	1	0	1	0	25	18	75	0	0		0	0	0	0	0	
													85	0	0	1	0	0	0	0	1	80
							2	1	0	0	24	14	80	0	0		0	0	0	0	0	

MATERIAL TYPE: BASALT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	DIMENSIONS WGHT	PLAT #	TYPE PLATFORM CTX	TYPE PLATFORM FCT	TYPE PLATFORM MFCT	SIZE MAX	SIZE MIN	PLAT <	UTILIZATION BATTER	UTILIZATION OTHER	LOC #	LOCATION AO	LOCATION RI	LOCATION CX	LOCATION FL	LOCATION EG	EDGE <
4856	1	357	3701	79	66	176	1	1	0	0	64	34	95	0	0		0	0	0	0	0	
													80	0	0		0	0	0	0	0	
5052	0	220	3400	93	88	811	1	1	0	0	88	84	115	0	0		0	0	0	0	0	
													110	0	0		0	0	0	0	0	
5153	1	370	3731	94	54	366	1	0	1	0	52	41	118	0	0		0	0	0	0	0	
							2	0	1	0	42	36	91	0	0		0	0	0	0	0	
535231	0	571	3701	107	86	334	1	1	0	0	107	86	76	0	0		0	0	0	0	0	
													63	0	0		0	0	0	0	0	
													66	0	0		0	0	0	0	0	
													55	0	0		0	0	0	0	0	
													67	0	0		0	0	0	0	0	

MATERIAL TYPE: PED.CHRT/C

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	DIMENSIONS WGHT	PLAT #	TYPE PLATFORM CTX	TYPE PLATFORM FCT	TYPE PLATFORM MFCT	SIZE MAX	SIZE MIN	PLAT <	UTILIZATION BATTER	UTILIZATION OTHER	LOC #	LOCATION AO	LOCATION RI	LOCATION CX	LOCATION FL	LOCATION EG	EDGE <
4953	1	366	1215	47	43	50	1	1	0	0	20	15	80	0	0		0	0	0	0	0	
							2	0	1	0	25	20	70	0	0		0	0	0	0	0	

MATERIAL TYPE: OTHER

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	DIMENSIONS WGHT	PLAT #	TYPE PLATFORM CTX	TYPE PLATFORM FCT	TYPE PLATFORM MFCT	SIZE MAX	SIZE MIN	PLAT <	UTILIZATION BATTER	UTILIZATION OTHER	LOC #	LOCATION AO	LOCATION RI	LOCATION CX	LOCATION FL	LOCATION EG	EDGE <
5251	1	427	4000	118	116	896	1	1	0	0	50	41	83	0	0		0	0	0	0	0	
							2	0	1	0	111	110	96	0	0		0	0	0	0	0	
5653	0	908	4000	150	110	1221	1	1	0	0	150	110	105	0	0		0	0	0	0	0	
													80	0	0		0	0	0	0	0	
													80	0	0		0	0	0	0	0	
													85	0	0		0	0	0	0	0	
													105	0	0		0	0	0	0	0	
6649	0	610	4000	83	68	218	1	1	0	0	83	68	75	0	0		0	0	0	0	0	
													75	0	0		0	0	0	0	0	
6848	0	666	4000	113	96	948	1	1	0	0	113	60	70	0	0		0	0	0	0	0	
							2	1	0	0	98	119	92	0	0		0	0	0	0	0	

SITE NUMBER: 13076
MATERIAL TYPE: BASALT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	DIMENSIONS WGHT	PLAT #	TYPE PLATFORM CTX	TYPE PLATFORM FCT	TYPE PLATFORM MFCT	SIZE MAX	SIZE MIN	PLAT <	UTILIZATION BATTER	UTILIZATION OTHER	LOC #	LOCATION AO	LOCATION RI	LOCATION CX	LOCATION FL	LOCATION EG	EDGE <
5249	0	200	3701	40	29	26	1	1	0	0	35	20	78	0	0		0	0	0	0	0	
													73	0	0		0	0	0	0	0	
5251 A	1	256	3701	60	57	139	1	0	0	1	58	57	90	0	0		0	0	0	0	0	
													90	0	0		0	0	0	0	0	
							2	0	1	0	51	32	110	0	0		0	0	0	0	0	
5252 A	0	285	3701	75	55	134	1	0	1	0	75	55	64	0	0		0	0	0	0	0	
													55	0	0		0	0	0	0	0	
													70	0	0		0	0	0	0	0	
													35	0	0		0	0	0	0	0	
													87	0	0		0	0	0	0	0	
													71	0	0		0	0	0	0	0	
5548	0	842	3706	109	74	298	1	.	0	0	42	30	71	0	0		0	0	0	0	0	
													73	0	0		0	0	0	0	0	
													79	0	0		0	0	0	0	0	

MATERIAL TYPE: OTHER

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	DIMENSIONS WGHT	PLAT #	TYPE PLATFORM CTX	TYPE PLATFORM FCT	TYPE PLATFORM MFCT	SIZE MAX	SIZE MIN	PLAT <	UTILIZATION BATTER	UTILIZATION OTHER	LOC #	LOCATION AO	LOCATION RI	LOCATION CX	LOCATION FL	LOCATION EG	EDGE <
5853	0	027	4000	148	76	514	1	1	0	0	148	76	77	0	0		0	0	0	0	0	
													67	0	0	1	0	1	0	0	0	
													72	0	0	2	0	0	0	1	0	
							2	1	0	0	25	21	82	0	0		0	0	0	0	0	

SITE NUMBER: 13084
MATERIAL TYPE: BASALT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	DIMENSIONS WGHT	PLAT #	TYPE PLATFORM CTX	TYPE PLATFORM FCT	TYPE PLATFORM MFCT	SIZE MAX	SIZE MIN	PLAT <	UTILIZATION BATTER	UTILIZATION OTHER	LOC #	LOCATION AO	LOCATION RI	LOCATION CX	LOCATION FL	LOCATION EG	EDGE <
4346	0	676	3701	87	58	339	1	0	1	0	79	48	90	0	0		0	0	0	0	0	
													80	0	0		0	0	0	0	0	
							2	1	0	0	61	26	130	0	0		0	0	0	0	0	
4349	0	268	3701	135	125	893	1	0	1	0	19	13	107	0	0		0	0	0	0	0	
							2	1	0	0	45	21	105	0	0		0	0	0	0	0	
							3	0	1	0	89	65	94	0	0		0	0	0	0	0	
4351	0	281	3701	90	88	314	1	0	1	0	44	25	121	0	0		0	0	0	0	0	
							2	0	1	0	52	36	83	0	0		0	0	0	0	0	
							3	0	1	0	24	18	90	0	0		0	0	0	0	0	
464832	1	366	3701	78	67	130	1	0	0	1	76	67	75	0	0		0	0	0	0	0	
													75	0	0		0	0	0	0	0	
													70	0	0		0	0	0	0	0	
464932	0	379	3701	81	74	207	1	0	0	1	79	71	75	0	0		0	0	0	0	0	
							2	0	0	1	81	70	72	0	0		0	0	0	0	0	
													75	0	0		0	0	0	0	0	
513944	0	241	3701	105	73	445	1	0	0	1	56	40	110	0	0		0	0	0	0	0	
							2	1	0	0	104	37	190	0	0		0	0	0	0	0	
													110	0	0		0	0	0	0	0	
518035	0	436	3701	73	44	130	1	0	0	1	76	44	85	0	0		0	0	0	0	0	
													80	0	0		0	0	0	0	0	
5320	0	563	3701	91	85	579	1	0	0	1	64	63	80	0	0		0	0	0	0	0	
													63	0	0		0	0	0	0	0	
													79	0	0		0	0	0	0	0	
5519	0	844	3701	114	80	212	1	1	0	0	113	57	90	0	0		0	0	0	0	0	
							2	1	0	0	113	57	82	0	0		0	0	0	0	0	
5519	0	845	3701	72	62	156	1	0	1	0	43	23	91	0	0	1	0	0	0	0	2	96
							2	0	1	0	61	60	75	0	0		0	0	0	0	0	
5519	0	851	3701	70	45	54	0	0	0	0	0	0	0	0	0		0	0	0	0	0	
5519	0	939	3701	141	108	491	1	0	1	0	141	108	72	0	0		0	0	0	0	0	
													93	0	0	1	0	0	0	0	2	62
5520	0	317	3701	112	110	1082	1	0	1	0	74	52	109	0	0		0	0	0	0	0	
													109	0	0		0	0	0	0	0	
552081	0	618	3701	69	48	99	1	0	0	1	30	30	122	0	0		0	0	0	0	0	
													122	0	0		0	0	0	0	0	
							2	0	0	0	48	42	81	0	0		0	0	0	0	0	

SITE NUMBER: 13086
MATERIAL TYPE: BASALT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	DIMENSIONS WGHT	PLAT #	TYPE PLATFORM CTX	TYPE PLATFORM FCT	TYPE PLATFORM MFCT	SIZE MAX	SIZE MIN	PLAT <	UTILIZATION BATTER	UTILIZATION OTHER	LOC #	LOCATION AO	LOCATION RI	LOCATION CX	LOCATION FL	LOCATION EG	EDGE <
283585	1	115	3701	89	82	437	1	1	0	0	59	48	65	0	0		0	0	0	0	0	
													70	0	0		0	0	0	0	0	
							2	0	1	0	75	55	70	0	0		0	0	0	0	0	
4639	0	216	3701	96	86	457	1	1	0	0	50	20	90	0	0		0	0	0	0	0	
							2	0	0	0	96	86	75	0	0		0	0	0	0	0	
													70	0	0		0	0	0	0	0	
													70	0	0		0	0	0	0	0	
													60	0	0		0	0	0	0	0	
5444	2	674	3701	65	38	94	1	0	1	0	65	38	60	0	0		0	0	0	0	0	
													40	0	0	1	0	0	0	0	2	80
5448	2	391	3701	83	65	261	1	0	0	1	85	57	77	1	0		0	0	0	0	0	
							2	0	1	0	78	56	67	0	0		0	0	0	0	0	
							3	0	0	1	79	75	135	0	0		0	0	0	0	0	
							4	1	0	0	46	43	122	0	0		0	0	0	0	0	
5449	2	477	3050	140	125	1309	1	0	1	0	130	123	74	0	0		0	0	0	0	0	
													73	0	0		0	0	0	0	0	
													76	0	0		0	0	0	0	0	
													75	0	0		0	0	0	0	0	
564584	40	070	3701	68	40	115	1	1	0	0	40	40	50	0	0		0	0	0	0	0	
													65	0	0		0	0	0	0	0	
							2	0	1	0	40	28	60	0	0		0	0	0	0	0	
													60	0	0		0	0	0	0	0	
5648	0	251	3711	100	63	252	1	1	0	0	95	58	78	0	0		0	0	0	0	0	
													70	0	0		0	0	0	0	0	
5648	2	253	3701	66	33	83	1	0	0	1	65	23	75	0	0		0	0	0	0	0	
							2	0	1	0	60	27	85	0	0		0	0	0	0	0	
													85	0	0		0	0	0	0	0	
5849	2	132	3701	61	36	39	1	0	1	0	61	36	68	0	0		0	0	0	0	0	
													66	0	0		0	0	0	0	0	
													110	0	0		0	0	0	0	0	
													80	1	0		0	0	0	0	0	

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	PLAT #	TYPE PLATFORM CTX	FCT	MFCT	SIZE MAX	MIN	PLAT <	UTILIZATION BATTER	OTHER	LOC #	LOCATION AO	RI	CX	FL	EG	EDGE <
													85	1	0	1	0	0	0	0	1	40
5948	2	294	3701	45	40	53	1	0	1	0	45	40	65	0	0		0	0	0	0	0	
													55	0	0		0	0	0	0	0	
604632	3	466	3731	61	50	130	1	0	1	0	26	12	93	0	0		0	0	0	0	0	
							2	0	1	0	20	10	126	0	0		0	0	0	0	0	
							3	0	1	0	21	12	103	0	0		0	0	0	0	0	
6149	0	626	3701	84	69	346	1	0	1	0	84	47	80	0	0		0	0	0	0	0	
							2	0	1	0	52	45	72	0	0		0	0	0	0	0	
6149	0	627	3701	73	45	128	1	1	0	0	50	39	84	0	0		0	0	0	0	0	
													99	0	0		0	0	0	0	0	
6837	0	024	3701	63	60	101	1	0	0	1	63	53	74	0	0		0	0	0	0	0	
													50	0	0	1	0	0	0	0	2	96

SITE NUMBER: 13291
MATERIAL TYPE: BASALT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	PLAT #	TYPE PLATFORM CTX	FCT	MFCT	SIZE MAX	MIN	PLAT <	UTILIZATION BATTER	OTHER	LOC #	LOCATION AO	RI	CX	FL	EG	EDGE <
4357	0	52	3701	78	68	299	1	0	0	1	80	58	93	0	0		0	0	0	0	0	
													72	0	0		0	0	0	0	0	
													75	0	0		0	0	0	0	0	
													95	0	0		0	0	0	0	0	
5162	0	88	3701	85	54	153	1	1	0	0	70	11	83	0	0		0	0	0	0	0	
													117	0	0		0	0	0	0	0	
5670	0	765	3701	56	39	52	1	0	1	0	38	10	78	0	0		0	0	0	0	0	
							2	0	1	0	45	22	68	0	0		0	0	0	0	0	
													74	0	0		0	0	0	0	0	
567031	0	747	3701	61	55	79	1	1	0	0	30	25	65	0	0		0	0	0	0	0	
							2	0	1	0	36	24	69	0	0		0	0	0	0	0	
567131	0	787	3701	65	52	171	1	1	0	0	53	38	74	0	0		0	0	0	0	0	
							2	0	1	0	58	25	92	0	0		0	0	0	0	0	
567231	0	826	3701	72	51	173	1	1	0	0	34	22	109	0	0		0	0	0	0	0	
													87	0	0		0	0	0	0	0	
5066	0	054	3701	124	94	759	1	0	0	1	122	8	90	0	0		0	0	0	0	0	
													95	0	0		0	0	0	0	0	
													90	0	0		0	0	0	0	0	
6362	0	105	3701	77	70	187	1	1	0	0	76	35	71	0	0		0	0	0	0	0	
													80	0	0		0	0	0	0	0	
7163	0	255	3701	79	79	225	1	1	0	0	29	18	64	0	0		0	0	0	0	0	
							2	0	1	0	58	43	63	0	0		0	0	0	0	0	

MATERIAL TYPE: PED.CHRT/C

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	PLAT #	TYPE PLATFORM CTX	FCT	MFCT	SIZE MAX	MIN	PLAT <	UTILIZATION BATTER	OTHER	LOC #	LOCATION AO	RI	CX	FL	EG	EDGE <
5967	0	041	1215	40	22	36	1	1	0	0	24	18	118	0	0		0	0	0	0	0	
													118	0	0		0	0	0	0	0	

SITE NUMBER: 13292
MATERIAL TYPE: BASALT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	PLAT #	TYPE PLATFORM CTX	FCT	MFCT	SIZE MAX	MIN	PLAT <	UTILIZATION BATTER	OTHER	LOC #	LOCATION AO	RI	CX	FL	EG	EDGE <
A	0	125	3701	109	73	377	1	1	0	0	48	42	73	0	0		0	0	0	0	0	
													82	0	0		0	0	0	0	0	
A	0	373	3701	100	62	277	1	1	0	0	73	27	76	1	0	1	0	0	0	0	1	76
													64	1	0	2	0	0	0	0	1	75
B	0	368	3701	88	39	121	1	0	1	0	41	34	100	0	0		0	0	0	0	0	
													90	0	0		0	0	0	0	0	
4956 A	0	147	3701	190	120	1975	1	1	0	0	190	120	90	0	0		0	0	0	0	0	
													80	0	0		0	0	0	0	0	
													90	0	0		0	0	0	0	0	
													80	0	0	1	0	0	0	0	1	75
							2	0	0	1	150	40	85	0	0		0	0	0	0	0	

MATERIAL TYPE: PED.CHRT/C

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	PLAT #	TYPE PLATFORM CTX	FCT	MFCT	SIZE MAX	MIN	PLAT <	UTILIZATION BATTER	OTHER	LOC #	LOCATION AO	RI	CX	FL	EG	EDGE <
B	0	321	1070	50	42	64	1	1	0	0	30	16	78	0	0		0	0	0	0	0	
							2	0	0	1	47	43	55	0	0		0	0	0	0	0	

SITE NUMBER: 13350
MATERIAL TYPE: PED.CHRT/C

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	PLAT #	TYPE PLATFORM CTX	FCT	MFCT	SIZE MAX	MIN	PLAT <	UTILIZATION BATTER	OTHER	LOC #	LOCATION AO	RI	CX	FL	EG	EDGE <
1406P1	0	108	1215	60	46	71	1	1	0	0	60	29	82	0	0		0	0	0	0	0	
							2	0	1	0	55	44	90	0	0		0	0	0	0	0	

SITE NUMBER: 13351
MATERIAL TYPE: PED.CHRT/C

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	PLAT #	TYPE PLATFORM CTX	FCT	MFCT	SIZE MAX	MIN	PLAT <	UTILIZATION BATTER	OTHER	LOC #	LOCATION AO	RI	CX	FL	EG	EDGE <
0003P3	0	115	1215	75	61	226	1	1	0	0	73	60	77	0	0		0	0	0	0	0	
							2	0	1	0	64	63	72	0	0		0	0	0	0	0	
0206P3	0	214	1215	45	41	53	1	1	0	0	36	32	117	0	0		0	0	0	0	0	
							2	1	0	0	31	26	99	0	0		0	0	0	0	0	
0802P4	0	279	1053	66	43	128	1	0	1	0	37	33	105	0	0		0	0	0	0	0	

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	PLAT #	TYPE CTX	PLATFORM FCT	MFCT	SIZE MAX	MIN	PLAT <	UTILIZATION BATTER	OTHER	LOC #	LOCATION AO	RI	CX	FL	EG	EDGE <
							2	0	1	0	54	23	95	0	0		0	0	0	0	0	
							3	1	0	0	60	37	89	0	0		0	0	0	0	0	

SITE NUMBER: 13353
MATERIAL TYPE: BASALT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	PLAT #	TYPE CTX	PLATFORM FCT	MFCT	SIZE MAX	MIN	PLAT <	UTILIZATION BATTER	OTHER	LOC #	LOCATION AO	RI	CX	FL	EG	EDGE <
2155P2	0	991	3701	83	63	173	1	0	1	0	65	60	138	0	0		0	0	0	0	0	
							2	0	1	0	65	60	145	0	0		0	0	0	0	0	

MATERIAL TYPE: PED.CHRT/C

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	PLAT #	TYPE CTX	PLATFORM FCT	MFCT	SIZE MAX	MIN	PLAT <	UTILIZATION BATTER	OTHER	LOC #	LOCATION AO	RI	CX	FL	EG	EDGE <
0336P3	0	436	1090	67	51	122	1	1	0	0	14	12	88	0	0		0	0	0	0	0	
							2	0	1	0	51	34	103	0	0		0	0	0	0	0	
							3	1	0	0	38	29	100	0	0		0	0	0	0	0	
0336P3	0	437	1090	71	53	166	1	0	1	0	74	43	90	0	0		0	0	0	0	0	
							2	1	0	0	72	28	83	0	0		0	0	0	0	0	
1046P2	0	608	1215	62	44	100	1	0	0	1	17	7	119	0	0		0	0	0	0	0	
													88	0	0		0	0	0	0	0	
													92	0	0		0	0	0	0	0	

* *

EXHAUSTED CORES

SITE NUMBER: 5011
MATERIAL TYPE: OBSIDIAN

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	PLAT #	TYPE CTX	PLATFORM FCT	MFCT	SIZE MAX	MIN	PLAT <	UTILIZATION BATTER	OTHER	LOC #	LOCATION AO	RI	CX	FL	EG	EDGE <
5247	1	78	3523	56	37	36	1	1	0	0	56	37	73	0	0		0	0	0	0	0	
													68	0	0		0	0	0	0	0	
													75	0	0		0	0	0	0	0	

SITE NUMBER: 13049
MATERIAL TYPE: OBSIDIAN

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	PLAT #	TYPE CTX	PLATFORM FCT	MFCT	SIZE MAX	MIN	PLAT <	UTILIZATION BATTER	OTHER	LOC #	LOCATION AO	RI	CX	FL	EG	EDGE <
4544	1	191	3528	21	17	3	1	0	0	1	18	12	73	0	0		0	0	0	0	0	
													67	0	0		0	0	0	0	0	
													69	0	0		0	0	0	0	0	
													64	0	1		0	0	0	0	0	

MATERIAL TYPE: PED.CHRT/C

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	PLAT #	TYPE CTX	PLATFORM FCT	MFCT	SIZE MAX	MIN	PLAT <	UTILIZATION BATTER	OTHER	LOC #	LOCATION AO	RI	CX	FL	EG	EDGE <
4646	0	598	1215	32	21	8	1	0	1	0	34	13	79	0	0		0	0	0	0	0	
													73	0	0		0	0	0	0	0	
4944	0	994	1215	35	29	24	1	0	1	0	32	13	75	0	0		0	0	0	0	0	
													70	0	0		0	0	0	0	0	

SITE NUMBER: 13076
MATERIAL TYPE: BASALT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	PLAT #	TYPE CTX	PLATFORM FCT	MFCT	SIZE MAX	MIN	PLAT <	UTILIZATION BATTER	OTHER	LOC #	LOCATION AO	RI	CX	FL	EG	EDGE <
6851P3	2	233	3701	64	52	64	1	0	0	1	52	52	80	0	0		0	0	0	0	0	
													74	0	0		0	0	0	0	0	
													69	0	0		0	0	0	0	0	
													77	0	0		0	0	0	0	0	
							2	0	1	0	26	24	61	0	0		0	0	0	0	0	

SITE NUMBER: 13291
MATERIAL TYPE: PED.CHRT/C

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	PLAT #	TYPE CTX	PLATFORM FCT	MFCT	SIZE MAX	MIN	PLAT <	UTILIZATION BATTER	OTHER	LOC #	LOCATION AO	RI	CX	FL	EG	EDGE <
5670R1	0	679	1051	38	31	20	1	0	1	0	33	33	70	0	0	1	0	0	0	0	2	93
													79	0	0	2	0	0	0	0	2	93
													87	0	0		0	0	0	0	0	
													89	0	0		0	0	0	0	0	

SITE NUMBER: 13292
MATERIAL TYPE: OBSIDIAN

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	PLAT #	TYPE CTX	PLATFORM FCT	MFCT	SIZE MAX	MIN	PLAT <	UTILIZATION BATTER	OTHER	LOC #	LOCATION AO	RI	CX	FL	EG	EDGE <
8	0	292	3523	16	13	3	1	0	1	0	16	14	69	0	0		0	0	0	0	0	
													76	0	0		0	0	0	0	0	

SITE NUMBER: 5011
MATERIAL TYPE: PED.CHRT/C

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
5548	1	264	1215	46	39	50			0	0	C	0	0	0

SITE NUMBER: 10114
MATERIAL TYPE: BASALT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
3646	1	32	3050	119	76	404			0	0	C	0	0	0
3653	2	94	3050	86	49	67			0	0	0	0	0	0
3653	2	96	3050	84	58	131			0	0	0	0	0	0

MATERIAL TYPE: PED.CHRT/C

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
3759	0	119	1215	81	49	92			0	0	0	0	0	0
4349	1	203	1091	72	51	177			0	0	0	0	0	0
4449	2	267	1215	77	43	86			0	0	0	0	0	0
4451	1	320	1215	55	34	66			0	0	0	0	0	0

MATERIAL TYPE: CHERT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
4551	1	393	1073	100	80	293			0	0	0	0	0	0

MATERIAL TYPE: OTHER

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
2940	0	10	4000	58	50	111			0	0	0	0	0	0
3558	0	25	4001	138	87	972	85		0	0	0	0	1	0
3949	1	124	4000	100	91	516			0	0	0	0	0	0

SITE NUMBER: 13049
MATERIAL TYPE: BASALT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
4047	0	13	3050	100	87	273	70		0	0	0	0	0	1
4548	0	398	3701	72	61	90	55		0	0	0	0	0	1
4646R1	0	604	3050	63	62	273			0	0	0	0	0	0
4340	0	847	3701	66	50	88	70		0	0	0	0	0	1
4847	0	930	3701	86	68	191	79		0	0	0	0	0	1

MATERIAL TYPE: PED.CHRT/C

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
3748	0	10	1215	70	28	40	65		0	0	0	0	0	1
4245	0	19	1214	58	57	105			1	0	0	0	1	0
4550	0	401	1215	53	37	43			0	0	0	0	0	0
4643	0	427	1091	46	38	75			0	0	0	0	0	0
4839	0	846	1215	111	57	228			0	0	0	0	0	0

MATERIAL TYPE: CHERT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
4445R1	0	951	1680	72	31	81			0	0	0	0	0	0

MATERIAL TYPE: OTHER

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
4544	0	173	4000	127	91	971			1	0	0	0	1	0
									0	1	0	0	1	0
4544R1	0	248	4000	113	106	259			0	0	0	0	0	0
4646	0	581	5701	80	50	67	68	UN	0	0	0	0	0	0
4948	0	007	4000	60	57	144			0	1	0	0	1	0

SITE NUMBER: 13050
MATERIAL TYPE: OBSIDIAN

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
5455	2	595	3523	52	32	75			0	0	C	0	0	0

MATERIAL TYPE: BASALT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
4455	1	21	3730	75	45	101			0	0	0	0	0	0
4553	1	27	3701	82	54	75			0	0	0	0	0	0
4850	1	268	3730	64	38	87			0	0	0	0	0	0
5054	1	415	3050	57	40	68			0	0	0	0	0	0

MATERIAL TYPE: PED.CHRT/C

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
4755	0	216	1215	75	68	300			0	0	0	0	0	0
4850	1	270	1215	58	55	50			0	0	0	0	0	0
4852	1	318	1214	58	57	60			0	0	0	0	0	0
4955R1	1	402	1215	44	22	42			0	0	0	0	0	0

MATERIAL TYPE: OTHER

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
4955R1	1	400	4000	66	59	339			0	0	0	0	0	0
5054	1	405	4000	69	59	135			0	0	0	0	0	0
5054	1	411	4000	96	62	427			0	0	0	0	0	0
5054	1	412	4000	55	48	134			0	0	0	0	0	0

SITE NUMBER: 13054
MATERIAL TYPE: BASALT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
3646	0	6	3706	138	81	363			0	0	0	0	0	0
4547	0	56	3050	52	40	58			0	0	0	0	0	0
4953	1	364	3050	64	55	77			0	0	0	0	0	0
5255	0	496	3701	60	41	45			0	0	0	0	0	0
5353R1	0	628	3701	61	51	72			2	0	0	0	0	1
5551	0	883	3701	150	100	497			1	0	0	0	1	0
5853	0	988	3050	68	57	156			0	0	0	0	0	0
6050	0	070	3730	67	38	57			0	0	0	0	0	0
6249	0	238	3730	46	28	57			0	0	0	0	0	0
6448	0	422	3701	104	41	114			0	0	0	0	0	0
6451	0	485	3731	62	40	117			0	0	0	0	0	0
6649	0	608	3701	91	51	132			0	0	0	0	0	0
6750	0	647	3701	81	21	96			0	0	0	0	0	0
6750	0	648	3050	61	43	185			0	0	0	0	0	0

MATERIAL TYPE: PED.CHRT/C

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
4950	0	125	1053	57	44	73			0	0	0	0	0	0
4954R2	1	142	1050	63	50	65			0	0	0	0	0	0
5049	0	198	1053	65	51	121			0	0	0	0	0	0
5051	0	206	1215	114	64	305			0	0	0	0	0	0
5054R2	1	249	1215	57	49	125			0	0	0	0	0	0
5056	0	318	1215	53	43	45			0	0	0	0	0	0
5150	0	682	1214	68	47	108			0	0	0	0	0	0
5250	0	425	1215	73	70	154			0	0	0	0	0	0
5259	0	504	1215	54	42	129			0	0	0	0	0	0
5353R1	0	659	1215	50	45	62			0	0	0	0	0	0
5356	0	722	1215	41	37	43			0	0	0	0	0	0
5543	0	827	1215	61	53	118			0	0	0	0	0	0
5949	0	007	1091	79	62	253			0	0	0	0	0	0
6055	0	098	1050	68	50	145			0	0	0	0	0	0
6144	0	103	1053	47	38	47			0	0	0	0	0	0
6146	0	121	1215	74	56	154			0	0	0	0	0	0
6146	0	126	1215	57	45	87			0	0	0	0	0	0
6249	0	235	1215	55	52	175			0	0	0	0	0	0
6249	0	236	1215	58	31	74			0	0	0	0	0	0
6249	0	237	1215	52	39	129			0	0	0	0	0	0
6250	0	275	1215	53	43	129			0	0	0	0	0	0
6447	0	412	1215	72	42	66			0	0	0	0	0	0
6448	0	428	1215	68	50	97			0	0	0	0	0	0
6448	0	442	1215	53	48	68			0	0	0	0	0	0
6448	0	444	1215	77	57	195			0	0	0	0	0	0
6451	0	486	1215	72	55	229			0	0	0	0	0	0
6452	0	505	1215	54	42	74			0	0	0	0	0	0
6540	0	517	1215	47	38	53			0	0	0	0	0	0
6548	0	541	1215	53	41	43			0	0	0	0	0	0
6549	0	549	1215	60	38	86			0	0	0	0	0	0
6550	0	557	1215	61	41	94			0	0	0	0	0	0
6552	0	571	1215	66	59	248			0	0	0	0	0	0
6650	0	618	1215	45	37	63			0	0	0	0	0	0
6748	0	636	1215	90	71	548			0	0	0	0	0	0
6750	0	649	1215	65	65	442			0	1	0	0	1	0

MATERIAL TYPE: CHERT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
5051	0	205	1070	73	54	141	73		0	0	0	0	0	1
5753	0	936	1600	65	36	46			0	0	0	0	0	0
6044	0	067	1070	63	39	105			0	0	0	0	0	0
6451	0	504	1055	60	52	140			0	0	0	0	0	0

MATERIAL TYPE: OTHER

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
4946	0	117	3300	101	97	316			0	0	0	0	0	0
4954R2	1	141	4000	*67	32	69			0	0	0	0	0	0
4954R2	1	143	4000	53	31	70			0	0	0	0	0	0
4954R2	1	149	4000	55	38	56			0	0	0	0	0	0
5056	0	319	3300	70	40	80			0	0	0	0	0	0
5143	0	331	4000	43	39	40			0	0	0	0	0	0
5151	0	345	4000	74	38	183			0	0	0	0	0	0
5151	1	348	4000	65	38	59			0	0	0	0	0	0

5448	0	927	1418	96	44	420			0	0	0	0	0	0
5451	1	738	4000	61	57	243			0	0	0	0	0	0
5451	1	739	4000	140	77	854			0	0	0	0	0	0
5846	0	954	4000	55	39	52			0	0	0	0	0	0
5848	0	956	4000	180	150	2875			0	0	0	0	0	0
5848	0	960	4001	47	38	53			0	0	0	0	0	0
5949	0	962	4000	118	94	1225			0	0	0	0	0	0
5849	0	963	4000	71	63	198			0	0	0	0	0	0
5948	0	005	4000	81	56	190			0	0	0	0	0	0
6239	0	180	4001	47	30	46			0	0	0	0	0	0
6249	0	234	4000	77	75	526			0	0	0	0	0	0
6250	0	276	4000	110	110	1009			0	0	0	0	0	0
6253	0	277	4000	129	70	861			0	0	0	0	0	0
6449	0	449	4000	60	35	56			0	0	0	0	0	0
6449	0	450	3101	55	42	63			0	0	0	0	0	0
6451	0	488	4000	66	37	131			0	0	0	0	0	0
6548	0	539	4370	65	40	125			0	0	0	0	0	0
6552	0	565	4000	58	33	127			0	0	0	0	0	0

SITE NUMBER: 13076
MATERIAL TYPE: BASALT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
5247	0	186	3050	151	123	691			0	0	0	0	0	0
5251 A	1	215	3701	67	46	56			0	0	0	0	0	0
5251 A	1	257	3701	62	50	57			0	0	0	0	0	0
5251 A	1	275	3701	102	87	279			0	0	0	0	0	0
5252 A	1	296	3701	94	40	79			0	0	0	0	0	0
5449	0	535	3050	68	47	42	69	UN	0	0	0	0	0	0
5450	0	538	3701	50	50	46			0	0	0	0	0	0
5452R2	0	665	3701	105	90	386			0	0	0	0	0	0
5548	0	844	3701	73	29	52			0	0	0	0	0	0
5853	0	028	3701	80	33	56			0	0	0	0	0	0
6055	0	064	3706	97	71	225			0	0	0	0	0	0

MATERIAL TYPE: PED.CHRT/C

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
5152 A	1	127	1215	55	42	77			0	0	0	0	0	0
5451R2	1	664	1051	86	63	270			0	0	0	0	0	0

SITE NUMBER: 13084
MATERIAL TYPE: BASALT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
4048	0	81	3050	82	58	215			0	0	0	0	0	0
4048	0	82	3701	55	53	103			0	0	0	0	0	0
4050	0	94	3701	79	26	69			0	0	0	0	0	0
4146	0	189	3701	51	42	89			0	0	0	0	0	0
4240	0	213	3701	56	35	48			0	0	0	0	0	0
4240	0	216	3701	77	36	120			0	0	0	0	0	0
4246	0	240	3701	80	57	121			2	0	0	0	0	1
4545	0	286	3701	59	48	48			0	0	0	0	0	0
4549R2	0	313	3701	67	47	136			0	0	0	0	0	0
4650	0	393	3701	70	39	45			0	0	0	0	0	0
4948	0	713	3701	113	96	949			0	0	0	0	0	0
4981	0	870	3701	85	44	85			0	0	0	0	0	0
4982	0	884	3701	86	57	164			0	0	0	0	0	0
5038	0	888	3701	97	38	173			0	0	0	0	0	0
5081	0	972	3701	62	50	100			0	0	0	0	0	0
5081	0	973	3701	67	58	133			0	0	0	0	0	0
5138R4	0	185	3701	115	90	230			0	0	0	0	0	0
5138R4	0	186	3701	90	25	45			0	0	0	0	0	0
5139R4	0	242	3701	68	26	43			0	0	0	0	0	0
5144	0	259	3701	77	65	233			0	0	0	0	0	0
5180	0	537	3050	148	119	1422			0	0	0	0	0	0
5180	0	540	3701	78	56	93			0	0	0	0	0	0
5183	0	544	3701	70	50	152			0	0	0	0	0	0
5183	0	545	3701	63	53	135			0	0	0	0	0	0
5183	0	548	3050	62	45	62			0	0	0	0	0	0
5245R3	0	552	3701	65	50	213			0	0	0	0	0	0
5245R3	0	553	3701	54	22	67			0	0	0	0	0	0
5246R3	0	554	3706	77	69	412			0	0	0	0	0	0
5319	0	562	3701	89	50	173	68	UN	0	0	0	0	0	0
5418	0	569	3701	108	86	395	83		0	0	0	0	0	1
5419	0	594	3701	82	82	355			0	0	0	0	0	0
5419	0	595	3701	90	52	226			0	0	0	0	0	0
5419	0	596	3701	70	52	207			0	0	0	0	0	0
5419	0	598	3701	53	47	103	79		0	0	0	0	0	1
5420	0	797	3701	75	66	144	84		0	0	0	0	0	1
5420	0	801	3701	77	45	78	61	UN	0	0	0	0	0	0
							91		0	0	0	0	0	1
5519	0	846	3701	90	53	77	77		0	0	0	0	0	1

GRID/FPR	LEVEL	ART #	MATERIAL	MAX	MIN	WGHT	EDGE <	RETOUCH	RIDGE	CNVX	FLAT	ENTIRE	BATTER	OTHER
5519	0	944	3701	61	59	113			0	0	0	0	0	0
5520	0	347	3701	64	39	50			0	0	0	0	0	0
5520R1	0	619	3701	97	70	414			0	0	0	0	0	0

SITE NUMBER: 13086
MATERIAL TYPE: BASALT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
4633	0	210	3701	100	45	173	73		0	0	0	0	1	0
4648	0	222	3701	65	65	107	35		0	0	0	0	1	0
							45		0	0	0	0	1	0
5147	0	560	3701	72	45	67			0	0	0	0	0	0
5148	20	505	3701	53	32	48	73		0	0	0	0	1	0
5239	0	472	3701	86	53	78	59		0	0	0	0	1	0
5350	1	523	3701	63	62	78			0	0	0	0	0	0
5352	1	565	3050	118	102	446			0	0	0	0	0	0
5432	0	372	3706	112	83	343			0	0	0	0	0	0
5447	3	825	3706	58	47	73			0	0	0	0	0	0
5448	0	384	3701	67	47	55			0	0	0	0	0	0
5449	2	478	3701	70	52	68	37		0	0	0	0	1	0
5544	2	579	3701	61	52	57			0	0	0	0	0	0
5546	2	763	3701	71	68	223			0	0	0	0	0	0
5549	0	805	3701	66	33	57			0	0	0	0	0	0
5549	2	782	3701	62	30	41			0	0	0	0	0	0
5549	2	802	3701	91	77	396			0	0	0	0	0	0
5549	2	820	3701	59	49	70			0	0	0	0	0	0
5635	0	928	3701	75	57	99			0	0	0	0	0	0
5545R4	40	067	3701	64	61	102			0	0	0	0	0	0
5746R4	3	900	3701	66	47	83			0	0	0	0	0	0
5749	2	896	3701	70	46	146			0	0	0	0	0	0
5749	2	899	3701	60	58	93	80		0	0	0	0	1	0
5757	0	998	3701	109	104	277	70		0	0	0	0	1	0
5935	0	C05	3701	102	55	123			0	0	0	0	0	0
5844P3	1	017	3701	58	57	110			0	0	0	0	0	0
5848	2	102	3701	57	56	49	66		0	0	0	0	1	0
5849	0	129	3701	50	48	79			0	0	0	0	0	0
5849	2	130	3701	58	37	53			0	0	0	0	0	0
6046R2	3	415	3701	45	34	76			0	0	0	0	0	0
6046R2	3	463	3701	66	42	69	51		0	0	0	0	1	0
6149	0	628	3701	69	39	66	53	UN	0	0	0	0	0	0
6250	0	598	3701	79	44	124			0	0	0	0	0	0
6450	0	741	3701	61	46	98			0	0	0	0	0	0
6551	0	774	3701	74	55	98			0	0	0	0	0	0
6552	0	792	3701	54	47	39			0	0	0	0	0	0
6635	1	805	3701	80	33	61			0	0	0	0	0	0
6837	1	032	3701	67	53	155			0	0	0	0	0	0
6938	0	127	3701	59	40	98			0	0	0	0	0	0

MATERIAL TYPE: PED.CHRT/C

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
5038	0	415	1215	96	62	158			0	0	0	0	0	0

MATERIAL TYPE: OTHER

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
5746R4	3	807	4000	163	77	59			0	0	0	0	0	0

SITE NUMBER: 13291
MATERIAL TYPE: BASALT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
5267	0	89	3701	92	42	81			0	0	0	0	0	0
5267	0	90	3701	65	23	53			0	0	0	0	0	0
5368	0	102	3701	90	80	315			0	0	0	0	0	0
5465	0	167	3701	65	56	101			0	0	0	0	0	0
5568	1	223	3701	54	48	48			0	0	0	0	0	0
5570R1	0	451	3701	57	35	55			0	0	0	0	0	0
5669R1	0	639	3701	88	81	349			0	0	0	0	0	0
5672R1	0	827	3701	58	39	62			0	0	0	0	0	0
5739	0	837	3701	89	46	65			0	0	0	0	0	0
5768	0	884	3050	81	60	242			0	0	0	0	0	0
5869	0	020	3701	79	70	100			0	0	0	0	0	0
6045	0	052	3701	87	69	167			0	0	0	0	0	0
6365	0	121	3701	57	51	80			0	0	0	0	0	0
6560	0	175	3050	62	44	130			0	0	0	0	0	0
6958	0	233	3701	53	48	94			0	0	0	0	0	0
6958	0	234	3701	106	61	91			0	0	0	0	0	0

MATERIAL TYPE: PED.CHRT/C

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
4160	0	4	1215	92	65	176			0	0	0	0	0	0
5368	0	103	1215	53	39	48			0	0	0	0	0	0
5370R1	0	108	1215	73	48	240			0	0	0	0	0	0

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
5569R1	0	227	1215	43	38	69			0	0	0	0	0	0
5661R2	0	537	1214	66	43	81			0	0	0	0	0	0
5667	0	583	1215	78	47	71			0	0	0	0	0	0
5742	1	853	1215	39	37	54			0	0	0	0	0	0
5750	0	851	1215	61	44	85			0	0	0	0	0	0
5767	0	877	1215	67	46	141			0	0	0	0	0	0
5767	0	633	1215	57	48	73			0	0	0	0	0	0
5767	0	634	1215	66	40	110			0	0	0	0	0	0
5769	0	916	1215	98	93	465			0	0	0	0	0	0
5943	1	031	1215	60	43	153			0	0	0	0	0	0
6067	0	056	1215	[illegible]	66	132			0	0	0	0	0	0
6166	0	071	1215	96	69	269			0	0	0	0	0	0
6462	0	161	1215	110	96	1135			0	0	0	0	0	0
6463	0	162	1215	44	34	42			0	0	0	0	0	0
6862	0	230	1051	52	51	123			0	0	0	0	0	0

MATERIAL TYPE: OTHER

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
5470R1	1	631	3035	90	73	284			0	0	0	0	0	0
5643R4	1	524	4000	99	79	407			0	0	0	0	0	0
5662R2	0	552	4000	118	84	817			0	0	0	0	0	0
5569R1	0	578	3000	62	46	65			0	0	0	0	0	0
5945	0	036	4000	87	54	517			0	0	0	0	0	0
6045	0	053	4000	77	70	144			0	0	0	0	0	0
6559	0	172	4000	101	59	459			0	0	0	0	0	0
6564	0	194	4000	69	52	160			0	0	0	0	0	0
6661	0	198	4000	62	56	192			0	0	0	0	0	0
6665	0	211	4000	117	93	592			0	0	0	0	0	0

SITE NUMBER: 13292
MATERIAL TYPE: OBSIDIAN

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
B	0	292	3523	17	14	3			0	0	0	0	0	0

MATERIAL TYPE: BASALT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
A	0	39	3701	123	83	512			0	0	0	0	0	0
									0	0	0	0	0	0
A	0	40	3701	95	62	197			0	0	0	0	0	0
									0	0	0	0	0	0
A	0	49	3701	77	53	138			0	0	0	0	0	0
									0	0	0	0	0	0
A	0	124	3701	85	83	162			0	0	0	0	0	0
A	0	151	3701	94	33	220			0	0	0	0	0	0
A	0	157	3701	72	22	190			0	0	0	0	0	0
A	0	189	3701	86	51	151			0	0	0	0	0	0
A	0	194	3701	53	47	88	48		0	0	0	0	0	1
A	0	197	3701	71	52	96			0	0	0	0	0	0
A	0	214	3701	62	46	54			0	0	0	0	0	0
B	0	236	3701	105	55	105			0	0	0	0	0	0
B	0	239	3701	86	62	59			0	0	0	0	0	0
B	0	242	3701	66	45	54			0	0	0	0	0	0
B	0	243	3701	72	44	55			0	0	0	0	0	0
B	0	249	3701	75	40	48			0	0	0	0	0	0
B	0	251	3701	71	58	120			0	0	0	0	0	0
B	0	255	3701	76	41	120			0	0	0	0	0	0
B	0	262	3701	100	56	178	37		0	0	0	0	0	1
B	0	264	3701	95	75	279			0	0	0	0	0	0
B	0	267	3701	106	47	163	56		0	0	0	0	0	1
B	0	313	3701	53	39	48			0	0	0	0	0	0
B	0	347	3701	52	48	83			0	0	0	0	0	0
B	0	365	3701	90	56	163			0	0	0	0	0	0
B	0	367	3701	84	53	202			0	0	0	0	0	0

MATERIAL TYPE: PED.CHRT/C

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
A	0	54	1215	87	61	159			0	0	0	0	0	0
A	0	56	1215	82	80	361			0	0	0	0	0	0
A	0	123	1215	70	33	130			0	0	0	0	0	0
A	0	184	1215	55	48	107			0	0	0	0	0	0
B	0	319	1215	135	115	850			0	0	0	0	0	0

MATERIAL TYPE: OTHER

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
A	0	116	4000	104	63	310			0	1	0	0	1	0

SITE NUMBER: 13293
MATERIAL TYPE: BASALT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
B	0	6	3706	91	73	209			0	0	0	0	0	0

SITE NUMBER: 13329
MATERIAL TYPE: OTHER

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
L16	0	19	1501	114	60	436			0	0	0	0	0	0

SITE NUMBER: 13350
MATERIAL TYPE: BASALT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
4574P5	0	469	3701	73	52	110			0	0	0	0	0	0

MATERIAL TYPE: PED.CHRT/C

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
0713P1	0	35	1090	51	41	56			0	0	0	0	0	0
0714P1	0	46	1215	69	57	154			0	0	0	0	0	0
0755P2	0	440	1051	58	57	87			0	0	0	0	0	0
1402P1	0	96	1053	57	44	92			0	0	0	0	0	0
1407P1	0	116	1051	58	36	52			0	0	0	0	0	0
1903P1	0	192	1215	97	85	350			0	0	0	0	0	0
1904P1	0	194	1215	73	55	120			0	0	0	0	0	0
1710P1	0	195	1053	52	54	55			0	0	0	0	0	0
1910P1	0	196	1053	55	46	66			0	0	0	0	0	0
2004P1	0	201	1215	64	45	109			0	0	0	0	0	0
2004P1	0	203	1215	55	52	92			0	0	0	0	0	0
2004P1	0	204	1215	55	51	81			0	0	0	0	0	0
2004P1	0	207	1215	42	39	40			0	0	0	0	0	0
2101P1	0	297	1090	78	65	269			0	0	0	0	0	0
2104P1	0	307	1051	61	50	56			0	0	0	0	0	0
2104P1	0	308	1051	72	54	151			0	0	0	0	0	0
2309P1	0	395	1053	50	38	74			0	0	0	0	0	0

SITE NUMBER: 13351
MATERIAL TYPE: BASALT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
0001P4	0	198	3701	85	73	159			0	0	0	0	0	0
0001P4	0	204	3701	69	64	136			0	0	0	0	0	0
0201P4	0	206	3730	62	32	53			0	0	0	0	0	0
0303P2	0	61	3701	48	44	42	27	UN	0	0	0	0	0	0
0806P4	1	289	3701	64	40	67			0	0	0	0	0	0

MATERIAL TYPE: PED.CHRT/C

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
0000P3	0	69	1050	74	48	158			0	0	0	0	0	0
0000P4	0	194	1215	45	30	62			0	0	0	0	0	0
0001P4	0	196	1091	72	60	148			0	0	0	0	0	0
0105P3	0	164	1215	54	43	60			0	0	0	0	0	0
0205P3	0	208	1091	80	38	76			0	0	0	0	0	0
0506P4	0	234	1215	57	57	93			0	0	0	0	0	0
0506P4	0	237	1215	45	40	56			0	0	0	0	0	0
0704P4	0	248	1090	70	50	172			0	0	0	0	0	0
0705P4	0	259	1215	62	49	154			0	0	0	0	0	0
0706P4	0	266	1215	58	54	168			0	0	0	0	0	0

MATERIAL TYPE: CHERT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
0803P4	0	281	1600	55	34	58			0	0	0	0	0	0

SITE NUMBER: 13352
MATERIAL TYPE: BASALT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
5555	0	274	3701	67	47	78			0	0	0	0	0	0
5555	0	277	3701	76	55	73			0	0	0	0	0	0
5557	0	341	3701	60	58	67			0	0	0	0	0	0
5557	0	343	3701	61	53	93			0	0	0	0	0	0
5656	0	384	3701	69	57	88			0	0	0	0	0	0
5656	0	386	3701	68	34	46	34	UN	0	0	0	0	0	0

MATERIAL TYPE: PED.CHRT/C

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
L13	0	440	1215	55	41	69			0	0	0	0	0	0
L14	0	443	1215	53	33	55			0	0	0	0	0	0
L21	0	454	1214	81	62	192			0	0	0	0	0	0
L27	0	460	1215	62	50	95			0	0	0	0	0	0
5048	0	10	1215	73	41	95			0	0	0	0	0	0
5050	0	12	1215	66	55	118			0	0	0	0	0	0
5160	0	70	1214	60	51	64			0	0	0	0	0	0
5253	0	92	1090	59	49	54			0	0	0	0	0	0
5555	0	291	1214	46	40	44			0	0	0	0	0	0
5557	0	348	1214	50	44	48			0	0	0	0	0	0

GRID/FPR	LEVEL	ART #	MATERIAL	MAX	MIN	WGHT	EDGE <	RETOUCH	RIDGE	CNVX	FLAT	ENTIRE	BATTER	OTHER
5557	0	350	1051	65	56	94			0	0	0	0	0	0
5648	0	362	1215	50	42	43			0	0	0	0	0	0
5656	0	381	1214	75	50	86			0	0	0	0	0	0
5657	0	390	1091	50	50	142			0	0	0	0	0	0

MATERIAL TYPE: OTHER

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
5253	0	91	1014	51	35	63			0	0	0	0	0	0

SITE NUMBER: 13353
MATERIAL TYPE: BASALT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
L 7	0	178	3701	70	60	196			0	0	0	0	0	0
L18	0	195	3701	75	56	106			0	0	0	0	0	0
L18	0	201	3701	117	76	312			0	0	0	0	0	0
L51	0	259	3701	94	84	329			0	0	0	0	0	0
0S43P4	0	119	3701	75	39	112			0	0	0	0	0	0
0S46P4	0	142	3701	76	64	111	75		0	0	0	0	1	0
0U40P4	0	54	3701	76	60	169			0	0	0	0	0	0
0U47P4	0	77	3701	101	56	217			0	0	0	0	0	0
0043P3	0	368	3701	91	47	97			0	0	0	0	0	0
0048P3	0	382	3701	65	59	83			0	0	0	0	0	0
0347P3	0	454	3701	60	43	70			0	0	0	0	0	0
0443P3	0	466	3701	48	45	47			0	0	0	0	0	0
0646P3	0	513	3706	72	57	103			0	0	0	0	0	0
1041P3	0	596	3701	78	62	118			0	0	0	0	0	0
1750P2	0	789	3701	75	48	98			0	0	0	0	0	0
1759P2	0	791	3701	95	64	222			0	0	0	0	0	0
1936P2	0	849	3701	53	47	42	70	UN	0	0	0	0	0	0
2038P2	0	884	3701	110	74	401			0	0	0	0	0	0

MATERIAL TYPE: PED.CHRT/C

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
L 3	0	171	1091	73	61	201			0	0	0	0	0	0
L30	0	222	1215	65	56	112			0	0	0	0	0	0
L30	0	223	1215	55	54	121			0	0	0	0	0	0
L40	0	224	1215	63	37	53			0	0	0	0	0	0
L48	0	511	1215	55	37	62			0	0	0	0	0	0
L67	0	304	1053	61	42	55			0	0	0	0	0	0
0C38P3	0	283	1215	112	85	646			0	0	0	0	0	0
0C44P3	0	298	1090	63	41	74			0	0	0	0	0	0
0E39P3	0	264	1214	76	36	99			0	0	0	0	0	0
0E45P3	0	263	1053	49	37	49			0	0	0	0	0	0
0F49P3	0	255	1053	65	42	74			0	0	0	0	0	0
0F49P3	0	256	1053	50	45	62			0	0	0	0	0	0
0H49P3	0	234	1051	62	52	138			0	0	0	0	0	0
0J40P3	0	220	1215	52	48	97			0	0	0	0	0	0
0K38P4	0	216	1051	64	62	125			0	0	0	0	0	0
0S45P4	0	134	1215	81	67	362			0	0	0	0	0	0
0U41P4	0	56	1215	65	40	72			0	0	0	0	0	0
0045P3	0	373	1091	59	38	42			0	0	0	0	0	0
0050P3	0	385	1090	52	26	48			0	0	0	0	0	0
0050P3	0	386	1215	43	41	65			0	0	0	0	0	0
0149P3	0	414	1215	52	37	40			0	0	0	0	0	0
0351P3	0	458	1215	56	52	76			0	0	0	0	0	0
0641P3	0	501	1091	128	93	684			0	0	0	0	0	0
0643P3	0	504	1091	68	53	99			0	0	0	0	0	0
0946P3	0	578	1090	44	42	81			0	0	0	0	0	0
0946P3	0	581	1090	58	31	50			0	0	0	0	0	0
1038P3	0	589	1215	54	45	76			0	0	0	0	0	0
1250P2	0	649	1215	47	35	43			0	0	0	0	0	0
1443P2	0	688	1091	56	55	74			0	0	0	0	0	0
1446P2	0	692	1215	45	44	57			0	0	0	0	0	0
1640P2	0	722	1090	57	48	78			0	0	0	0	0	0
1644P2	0	730	1215	60	35	59			0	0	0	0	0	0
1650P2	0	738	1051	73	63	222			0	0	0	0	0	0
1661P2	0	748	1050	49	38	77			0	0	0	0	0	0
1742P2	0	766	1215	67	40	62			0	0	0	0	0	0
1749P2	0	780	1050	60	42	79			0	0	0	0	0	0
1749P2	0	781	1214	64	33	68			0	0	0	0	0	0
1750P2	0	784	1214	48	45	46			0	0	0	0	0	0
1855P2	0	837	1215	64	42	75			0	0	0	0	0	0
2045P2	0	896	1050	67	56	178			0	0	0	0	0	0
2056P2	0	910	1215	72	48	121			0	0	0	0	0	0
2056P2	0	911	1215	79	68	202			0	0	0	0	0	0
2153P2	0	937	1091	72	40	88			0	0	0	0	0	0
2154P2	0	938	1091	46	29	49			0	0	0	0	0	0
2155P2	0	948	1215	98	68	374			0	0	0	0	0	0
2155P2	0	980	1091	53	53	95			0	0	0	0	0	0
2155P2	0	996	1215	81	60	127			0	0	0	0	0	0
2155P2	0	999	1215	58	47	63			0	0	0	0	0	0

2156P2	0	005	1214	75	38	86			0	0	0	0	0	0
2247P2	0	043	1053	60	56	69			0	0	0	0	0	0
2253P2	0	046	1215	66	52	111			0	0	0	0	0	0
2255P2	0	054	1051	59	53	88			0	0	0	0	0	0
5258P1	0	127	1680	89	55	210			0	0	0	0	0	0
2255P2	0	076	1051	60	44	68			0	0	0	0	0	0
2255P2	0	077	1051	43	34	46			0	0	0	0	0	0
2255P2	0	093	1214	50	38	59			0	0	0	0	0	0
2255P2	0	101	1053	50	47	69			0	0	0	0	0	0
2352P2	0	110	1090	69	58	133			0	0	0	0	0	0
2356P2	0	112	1215	62	42	142			0	0	0	0	0	0
5254P1	0	126	1215	60	49	106			0	0	0	0	0	0
5459P1	0	142	1091	48	45	54			0	0	0	0	0	0
5459P1	0	143	1091	45	35	49			0	0	0	0	0	0

MATERIAL TYPE: CHERT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
2253P2	0	046	1215	66	52	111			0	0	0	0	0	0
2255P2	0	054	1051	59	53	88			0	0	0	0	0	0
5258P1	0	127	1680	89	55	210			0	0	0	0	0	0

MATERIAL TYPE: CHALCEDONY

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
L65	0	277	1230	71	67	93			0	0	0	0	0	0

MATERIAL TYPE: OTHER

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	MIN	WGHT	SHAPE OF UTILIZED SURFACE EDGE <	RETOUCH	RIDGE	CNVX	FLAT	TYPE OF WEAR ENTIRE	BATTER	OTHER
L88	0	305	3300	54	31	58			0	0	0	0	0	0
2050P2	0	899	4000	58	56	110			0	0	0	0	0	0

SITE NUMBER: 5011

SITE NUMBER: 10114
MATERIAL TYPE: BASALT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	WGHT	BATTER LOCUS #	SHAPE OF ENTIRE	BATTERED SURFACE RIDGE	CONVEX	FLAT	EDGE
3646	1	46	3050	105	70	422	1	0	0	1	0	0

MATERIAL TYPE: OTHER

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	WGHT	BATTER LOCUS #	SHAPE OF ENTIRE	BATTERED SURFACE RIDGE	CONVEX	FLAT	EDGE
3646	1	45	4000	89	67	339	1	0	0	1	0	0
3647	1	47	4000	51	45	63	1	0	1	0	0	0
4252R1	2	188	4000	113	103	994	1	0	1	0	0	0
4450	2	281	4000	120	91	698	1	0	0	1	0	0

SITE NUMBER: 13049
MATERIAL TYPE: OTHER

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	WGHT	BATTER LOCUS #	SHAPE OF ENTIRE	BATTERED SURFACE RIDGE	CONVEX	FLAT	EDGE
4445	1	106	4000	116	68	612	1	0	0	1	0	0
4544	0	174	4000	102	80	622	1	0	0	1	0	0
4544	0	175	4000	128	113	1173	1	0	1	0	0	0
							2	0	1	0	0	0
							3	0	0	1	0	0
4643	0	429	4000	77	66	344	1	0	1	0	0	0
							2	0	1	0	0	0
4643	0	430	4000	122	78	494	1	0	1	0	0	0
4744R1	0	706	3000	91	77	422	1	0	0	1	0	0
4744R1	0	721	4000	55	46	96	1	0	1	0	0	0
							2	0	0	1	0	0

SITE NUMBER: 13050
MATERIAL TYPE: OTHER

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	WGHT	BATTER LOCUS #	SHAPE OF ENTIRE	BATTERED SURFACE RIDGE	CONVEX	FLAT	EDGE
4454	1	15	4000	73	68	221	1	0	0	1	0	0
4856R1	1	352	2200	98	87	737	1	0	0	1	0	0

SITE NUMBER: 13054
MATERIAL TYPE: BASALT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	WGHT	BATTER LOCUS #	SHAPE OF ENTIRE	BATTERED SURFACE RIDGE	CONVEX	FLAT	EDGE
5352R1	0	552	3030	106	61	363	1	0	0	1	0	0
							2	0	0	1	0	0
5352R1	0	553	3030	93	50	223	1	0	1	0	0	0
5453R1	0	803	3030	52	29	62	1	0	0	1	0	0
							2	0	0	1	0	0

MATERIAL TYPE: OTHER

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	WGHT	BATTER LOCUS #	SHAPE OF ENTIRE	BATTERED SURFACE RIDGE	CONVEX	FLAT	EDGE
5638	0	857	4000	111	87	587	1	0	0	1	0	0
							2	0	0	1	0	0
							3	0	1	0	0	0

SITE NUMBER: 13076
MATERIAL TYPE: OTHER

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	WGHT	BATTER LOCUS #	SHAPE OF ENTIRE	BATTERED SURFACE RIDGE	CONVEX	FLAT	EDGE
5446	0	530	4000	170	160	1640	1	0	1	0	0	0

SITE NUMBER: 13086
MATERIAL TYPE: OTHER

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	WGHT	BATTER LOCUS #	SHAPE OF ENTIRE	BATTERED SURFACE RIDGE	CONVEX	FLAT	EDGE
2837R58	1	475	4000	111	78	671	1	0	1	0	0	0
5249	20	658	4000	114	103	696	1	0	1	0	0	0
							2	0	1	0	0	0
5544	2	645	4000	125	85	363	1	0	1	0	0	0
5646R4	40	223	3300	208	110	1067	1	0	1	0	0	0
							2	0	0	0	0	1
5648	0	248	3300	266	75	2001	1	0	1	0	0	0
5649	2	323	3300	109	99	478	1	0	0	0	0	1
5745R3	2	447	4000	124	116	645	1	0	1	0	0	0
							2	0	1	0	0	0

SITE NUMBER: 13291
MATERIAL TYPE: BASALT

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	WGHT	BATTER LOCUS #	SHAPE OF ENTIRE	BATTERED SURFACE RIDGE	CONVEX	FLAT	EDGE
5662R2	0	551	3030	71	71	325	1	0	1	0	0	0

MATERIAL TYPE: OTHER

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	WGHT	BATTER LOCUS #	SHAPE OF BATTERED SURFACE ENTIRE	RIDGE	CONVEX	FLAT	EDGE
5769	0	923	4000	99	81	631	1	0	0	1	0	0

SITE NUMBER: 13352
MATERIAL TYPE: OTHER

GRID/FPR	LEVEL	ART #	MATERIAL	DIMENSIONS MAX	DIMENSIONS MIN	WGHT	BATTER LOCUS #	SHAPE OF BATTERED SURFACE ENTIRE	RIDGE	CONVEX	FLAT	EDGE
5655 A	0	365	4001	85	78	404	1	0	0	1	0	0

FIELD/CAT	LEVEL	ART#	MATR	PORTION	SHAPE	NOTCH	STEMS	BASE	LGTH	WDTH	THCK	EDGE#	RETOUCH	EDSHAPE	SINUOSI	EDGE_S	WEARTYPE
SITE NUMBER: 5011																	
ARTIFACT CLASS: UNIFACE																	
5345	R1	1	156 3523	COMPLET	OTHER	NOTAPPL	NCTAPPL	NOTAPPL	40	30	15						
ARTIFACT CLASS: BIFACE																	
5247		1	83 1110	PROFRAG	TRIANG	SIDE	FLARED	CONCAVE	13	10	3	1	BIDIREC	CONVEX	--	34	BID.RND
												2	BIDIREC	CONVEX	--	44	BID.RND
SITE NUMBER: 10114																	
ARTIFACT CLASS: UNIFACE																	
4053		1	136 4370	COMPLET	TRIANG	NOTAPPL	NCTAPPL	NOTAPPL	114	93	8						
4450		2	283 3520	COMPLET		NOTAPPL	NCTAPPL	NOTAPPL	45	28	10	1	UNRETCH	CONCAVE	--	65	UNIFEATH
ARTIFACT CLASS: BIFACE																	
3647		1	60 3701	DISFRAG	UNDET	UNDET	UNDET	UNDET	40	33	8	1	BIDIREC	CONVEX	LATSINU	44	BID.RND
												2	BIDIREC	CONVEX	LATSINU	39	BID.RND
4649		1	411 3520	DISFRAG	UNDET	UNDET	UNDET	UNDET	28	16	5						
SITE NUMBER: 13042																	
ARTIFACT CLASS: UNIFACE																	
5242		0	1213 3520	COMPLET	OTHER	NOTAPPL	NCTAPPL	NCTAPPL	19	17	5						
ARTIFACT CLASS: BIFACE																	
4445		1	110 3520	MIDSECT	UNDET	UNDET	UNDET	UNDET	9	15	3						
4547	R1	A	387 3701	COMPLET	TRIANG	NOTAPPL	NCTAPPL	NOTAPPL	32	21	6						
4665	R1	A	493 3701	COMPLET		NOTAPPL	NCTAPPL	NOTAPPL	78	50	23						
5242		0	1208 3520	MIDSECT	UNDET	SIDE	UNDET	UNDET	16	11	4	1	BIDIREC	STRAIT	--	30	BID.RND
												2	BIDIREC	STRAIT	--	52	BID.RND
SITE NUMBER: 13054																	
ARTIFACT CLASS: UNIFACE																	
5353	R1	A	584 1050	COMPLET		NOTAPPL	NCTAPPL	NOTAPPL	36	31	13						
ARTIFACT CLASS: BIFACE																	
5053	R24	1	232 3524	PROFRAG	ROUND	NOTAPPL	NOTAPPL	NOTAPPL	30	19	6						
5054	R2	1	247 3523	PROFRAG	OVATE	NOTAPPL	NOTAPPL	NOTAPPL	25	9	6						
5253	R1	E	486 3520	COMPLET	OVATE	NOTAPPL	NOTAPPL	NOTAPPL	26	6	5						
5452	R1	D	768 3520	PROFRAG	TRIANG	SIDE	FLARED	STRAIT	11	10	4						
SITE NUMBER: 13079																	
5451	F2	1	653 3523	COMPLET	TRIANG	NOTAPPL	NCTAPPL	NOTAPPL	28	17	8	1	UNIDORS	CONCAVX	--	64	UNISTEP
												2	UNIVENT	CONVEX	--	72	UNISTEP
SITE NUMBER: 13084																	
ARTIFACT CLASS: OTHER (NOTCHED ARTIFACT)																	
5179	R5	A	1296 3050	COMPLET	OTHER	SIDE	NCTAPPL	NOTAPPL	250	145	32						
SITE NUMBER: 13086																	
ARTIFACT CLASS: BIFACE																	
2638		0	46 1112	PROFRAG	TRIANG	SIDE	FLARED	CONCAVE	16	10	2						
5350		1	4522 3530	DISFRAG	UNDET	UNDET	UNDET	UNDET	11	17	5	1	BIDIREC	PROJECT	--	--	BID.RND
												2	BIDIREC	CONVEX	--	76	UNI.RND
5351		0	2325 3520	UNDET	UNDET	UNDET	UNDET	UNDET	12	9	3						
5948		2	3296 3520	COMPLET	RECTANG	NOTAPPL	NOTAPPL	NOTAPPL	29	27	8						
5949		3	3306 3520	COMPLET	TRIANG	CORNER	FLARED	CONVEX	29	19	5						
SITE NUMBER: 13291																	
ARTIFACT CLASS: UNIFACE																	
5569	R1	C	327 3520	UNDET	UNDET	NOTAPPL	NCTAPPL	NOTAPPL	20	18	7	1	UNIDORS	STRAIT	--	89	UNI.RND.STRIAE
5569	R1	C	330 3520	COMPLET	OVATE	CORNER	STRAIT	STRAIT	22	15	3	1	BIDIREC	STRAIT	--	70	BID.RND
												2	UNIDORS	STRAIT	--	57	UNI.RND
												3	BIDIREC	CONVEX	--	70	UNI.RND
5570	R1	B	456 1070	COMPLET	RECTANG	NOTAPPL	NCTAPPL	NOTAPPL	25	28	13	1	UNIDORS	CONCAVE	--	92	UNISTEP.UNIRND
												2	UNIDORS	CONCAVE	--	102	UNISTEP.UNIRND
												3	UNRETCH	CONCAVE	--	95	UNISTEP.UNIRND
												4	UNRETCH	CONCAVE	--	84	UNISTEP
ARTIFACT CLASS: BIFACE																	
5670	R1	B	684 3520	COMPLET		NOTAPPL	NCTAPPL	NOTAPPL	26	22	11	1	UNIDORS	CONCAVE	--	88	UNISTEP
												2	UNRETCH	STRAIT	--	82	UNISTEP
5867		0	1011 1215	COMPLET	ROUND	NOTAPPL	NOTAPPL	NOTAPPL	40	28	13						
5868		0	1265 3520	COMPLET	TRIANG	CORNER	FLARED	STRAIT	26	25	5						
6361		0	1104 4000	COMPLET	ROUND	SIDE	NOTAPPL	NOTAPPL	88	55	24	1	BIDIREC	CONCAVE	--	94	CRUSHING
												2	BIDIREC	CONCAVE	--	108	CRUSHING
SITE NUMBER: 13292																	

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      ARTIFACT CLASS: UNIFACE
        A        0   51 3706 COMPLET OVATE    NOTAPPL NOTAPPL NOTAPPL  107   54   18
        B        0  305 3701 COMPLET TRIANG   NOTAPPL NOTAPPL NOTAPPL  130   83   28
      ARTIFACT CLASS: BIFACE
        A        0  199 3701 DISFRAG ROUND    UNDET   UNDET   UNDET     61   43   11
        A        0  205 3701 DISFRAG ROUND    UNDET   UNDET   UNDET     42   45    9    1 BIDIREC CONVEX  TRNSINU      53 BID.RND
        3        0  265 3701 COMPLET ROUND    NOTAPPL NOTAPPL NOTAPPL  118   72   15

SITE NUMBER: 13351
CAT#/FEA_LEVEL_ART#_MATR_PORTION_SHAPE___NOTCH___STEMS___BASE____LGTH_WDTH_THCK_EDGE#_RETOUCH_EDSHAPE_SINUOSI__EDGE_<_WEARTYPE
0102 P2          1   45 3701 DISFRAG UNDET    UNDET   UNDET   UNDET     44   48   13
0303 P4          0  226 1091 COMPLET ROUND    NOTAPPL NOTAPPL NOTAPPL   59   40   23

SITE NUMBER: 13352
CAT#/FEA_LEVEL_ART#_MATR_PORTION_SHAPE___NOTCH___STEMS___BASE____LGTH_WDTH_THCK_EDGE#_RETOUCH_EDSHAPE_SINUOSI__EDGE_<_WEARTYPE
      ARTIFACT CLASS: UNIFACE
4953             0    9 1215 COMPLET RECTANG  NOTAPPL NOTAPPL NOTAPPL   33   28   14
5259             0  107 1091 COMPLET TRIANG   NOTAPPL NOTAPPL NOTAPPL   13   11    6
      ARTIFACT CLASS: BIFACE
5451             0  170 3701 PROFRAG UNDET    NOTAPPL NOTAPPL NOTAPPL   36   55   19
5555             0  283 3701 COMPLET RECTANG  NOTAPPL NOTAPPL NOTAPPL   59   53   20

SITE NUMBER: 13353
CAT#/FEA_LEVEL_ART#_MATR_PORTION_SHAPE___NOTCH___STEMS___BASE____LGTH_WDTH_THCK_EDGE#_RETOUCH_EDSHAPE_SINUOSI__EDGE_<_WEARTYPE
1050 P2          0  611 3530 PROFRAG ROUND    NOTAPPL NOTAPPL NOTAPPL   21   16    5
1341 P2          0  658 3701 COMPLET RECTANG  NOTAPPL NOTAPPL NOTAPPL   49   45   10
1539 P2          0  695 3528 COMPLET TRIANG   NOTAPPL NOTAPPL NOTAPPL   25   15    7
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SITE NUMBER: 10114

GRID	FEAT	LEVEL	ART#	MATER	PORT	DIMENSIONS (OBJECT) LGTH	WDTH	THICK	SHAPE	LXSEC	TXSEC	LOC#	UTILIZATION PLACE	CURV	STRIA	WEAR	%AREA	DIMENSIONS (SURFACE) LGTH	WDTH	DEPTH
ARTIFACT CLASS: SHAPED MANO																				
2457	C	0	1	3430	COMPL	204	110	0- 76	IRREG	PLANR	WEDGE	1	PLANR	PLANR	PERPN	GRIND	76-99	170	60	--
ARTIFACT CLASS: METATE																				
4351	R1	2	4	3050	FRAGJ	206	141	0-105	RECT	PLANR	WEDGE	1	PLANR	PLANR	PARAL	GRIND	100	195	13	--

SITE NUMBER: 13049

GRID	FEAT	LEVEL	ART#	MATER	PORT	DIMENSIONS (OBJECT) LGTH	WDTH	THICK	SHAPE	LXSEC	TXSEC	LOC#	UTILIZATION PLACE	CURV	STRIA	WEAR	%AREA	DIMENSIONS (SURFACE) LGTH	WDTH	DEPTH
3449		0	1	3050	FRAGU	295	260	0- 90	IRREG	CONCA	PLANR	1	EDGE	CONCA	PA/PE	GRIND	51-75	220	180	75- 90
4247		0	2	3050	FRAGU	210	165	0- 70	INDET	CONCA	CONCA	1	--	CONCA	--	GRIND	76-99	130	115	--
4645		0	11	3050	COMPL	540	330	0-250	LENTO	IRREG	IRREG	1	PLANR	CONCA	--	GRIND	26-50	170	180	--
ARTIFACT CLASS: UNSHAPED MANO																				
4347		0	4	2950	FRAGU	97	90	0- 43	INDET	LENTO	LENTO	1	--	--	--	GRSRF	--	--	--	--
												2	--	--	--	GRSRF	--	--	--	--
4445		1	5	3430	FRAGU	94	72	0- 42	INDET	LENTO	LENTO	1	--	--	--	GRSRF	--	--	--	--
ARTIFACT CLASS: ABRADER																				
4445		0	5	3430	COMPL	148	75	0- 44	ELONG	PLCON	IRREG	1	PLANR	CONVX	PERPN	SMOOT	51-75	60	60	--
												2	PLANR	CONVX	PERPN	SMOOT	26-50	50	50	--
												3	EDGE	CONVX	PERPN	SMOOT	26-50	60	30	--
												4	END	CONVX	PERPN	SMOOT	26-50	40	20	--

SITE NUMBER: 13050

GRID	FEAT	LEVEL	ART#	MATER	PORT	DIMENSIONS (OBJECT) LGTH	WDTH	THICK	SHAPE	LXSEC	TXSEC	LOC#	UTILIZATION PLACE	CURV	STRIA	WEAR	%AREA	DIMENSIONS (SURFACE) LGTH	WDTH	DEPTH
ARTIFACT CLASS: METATE																				
4752		1	2	3430	COMPL	330	260	0-120	RECT	PLCON	PLCON	1	PLANR	CONCA	--	GRIND	76-99	260	185	--
												2	PLANR	CONCA	--	GRIND	26-50	170	100	--
4755	R2	2	4	3430	COMPL	310	190	23- 40	IRREG	CONCA	CONCA	1	PLANR	CONCA	--	GRIND	26-50	80	170	--
ARTIFACT CLASS: AX/MAUL																				
4756		1	10	3430	COMPL	172	82	0- 50	TRIAN	PLCVX	PLCVX	1	END	--	--	PECKG	100	--	--	--

SITE NUMBER: 13054

GRID	FEAT	LEVEL	ART#	MATER	PORT	DIMENSIONS (OBJECT) LGTH	WDTH	THICK	SHAPE	LXSEC	TXSEC	LOC#	UTILIZATION PLACE	CURV	STRIA	WEAR	%AREA	DIMENSIONS (SURFACE) LGTH	WDTH	DEPTH
ARTIFACT CLASS: METATE																				
4747		0	2	3401	COMPL	460	330	0- 80	IRREG	PLANR	PLANR	1	PLANR	PLCVX	--	GRIND	0-25	230	60	--
5652		0	17	3821	COMPL	320	220	0- 55	RECT	CONCA	CONCA	1	--	PLCVX	--	GRIND	51-75	240	90	--
ARTIFACT CLASS: UNSHAPED MANO																				
4342		0	1	3430	COMPL	170	101	0- 38	ELONG	LENTO	PLCVX	1	PLANR	PLCVX	PERPN	GRIND	76-99	170	95	--
5053	R2	1	11	3430	MIDSC	104	40	0- 29	INDET	LENTO	LENTO	1	--	--	--	GRSRF	--	--	--	--
												2	--	--	--	GRSRF	--	--	--	--
5253	R1	8	16	3030	COMPL	105	78	0- 18	RECT	LENTO	LENTO	1	--	PLANR	PERPN	GRIND	100	100	77	--
ARTIFACT CLASS: ABRADER																				
6150		0	146	3430	COMPL	142	78	0- 46	TRIAN	IRREG	IRREG	1	EDGE	CONCA	--	SMOOT	26-50	50	30	--
												2	"	PLANR	--	SMOOT	76-99	100	50	--

SITE NUMBER: 13084

GRID	FEAT	LEVEL	ART#	MATER	PORT	DIMENSIONS (OBJECT) LGTH	WDTH	THICK	SHAPE	LXSEC	TXSEC	LOC#	UTILIZATION PLACE	CURV	STRIA	WEAR	%AREA	DIMENSIONS (SURFACE) LGTH	WDTH	DEPTH
ARTIFACT CLASS: UNSHAPED MANO																				
5080	R5	2	1	2910	FRAGJ	122	64	0- 57	MIDSC	PLANR	PLANR									

SITE NUMBER: 13086

GRID	FEAT	LEVEL	ART#	MATER	PORT	DIMENSIONS (OBJECT) LGTH	WDTH	THICK	SHAPE	LXSEC	TXSEC	LOC#	UTILIZATION PLACE	CURV	STRIA	WEAR	%AREA	DIMENSIONS (SURFACE) LGTH	WDTH	DEPTH
ARTIFACT CLASS: SHAPED MANO																				
5151		0	2	3821	FRAGJ	127	106	18- 28	RECT	LENTO	LENTO	1	PLANR	CONVX	PERPN	GRIND	100	115	110	--
												2	PLANR	CONVX	PERPN	GRIND	100	124	103	--
5546	R4	5	6	3821	FRAGJ	137	120	17- 48	RECT	PLANR	WEDGE	1	PLANR	PLCVX	--	GRIND	100	123	114	--
												2	PLANR	PLCVX	--	GRIND	100	122	105	--
5742		2	7	3430	COMPL	154	110	33- 72	RECT	PLANR	WEDGE	1	PLANR	PLCVX	PERPN	GRIND	100	150	100	--
												2	PLANR	PLCVX	PERPN	GRIND	100	135	100	--
ARTIFACT CLASS: UNSHAPED MANO																				
2735	R5	1	1	3430	FRAGU	77	65	0- 26	INDET	LENTO	LENTO	1	--	--	--	GRSRF	--	--	--	--
												2	--	--	--	GRSRF	--	--	--	--
ARTIFACT CLASS: INDETERMINATE GROUND STONE																				
6045	R2	3	9	3401	COMPL	187	107	0- 38	IRREG	PLANR	PLANR	1	PLANR	PLANR	--	SMOOT	26-50	80	95	--

SITE NUMBER: 13291

GRID	FEAT	LEVEL	ART#	MATER	PORT	DIMENSIONS (OBJECT) LGTH	WDTH	THICK	SHAPE	LXSEC	TXSEC	LOC#	UTILIZATION PLACE	CURV	STRIA	WEAR	%AREA	DIMENSIONS (SURFACE) LGTH	WDTH	DEPTH
ARTIFACT CLASS: SHAPED MANO																				
5468		1	2	2050	FRAGJ	126	114	13- 25	RECT	PLANR	PLCVX	1	PLANR	CONVX	PERPN	GRIND	100	115	113	--
												2	PLANR	PLCVX	PERPN	GRIND	100	125	105	--
5771	P1	8	7	3430	COMPL	257	118	7- 28	RECT	PLCVX	WEDGE	1	PLANR	PLCVX	PERPN	GRIND	100	245	115	--
												2	PLANR	PLCVX	PERPN	GRIND	100	255	110	--

ARTIFACT CLASS: UNSHAPED MANO

GRID	FEAT	LEVEL	ART#	MATER	PORT	LGTH	WDTH	THICK	SHAPE	LXSEC	TXSEC	LOC#	PLACE	CURV	SIDIA	WEAR	%AREA	LGTH	WDTH	DEPTH
5837		A	8	3430	FRAGU	60	53	0- 15	INDET	LENTO	LENTO	1	--	--	--	GRSRF	--	--	--	--
												2	--	--	--	GRSRF	--	--	--	--
ARTIFACT CLASS: ABRADER																				
5442		A	1	3030	COMPL	139	74	0- 52	ELONG	PLCVX	IRREG	1	PLANR	CONCA	--	SMOOT	26-50	50	40	--
												2	EDGE	PLANR	--	SMOOT	100	40	30	--
ARTIFACT CLASS: INDETERMINATE GROUND STONE																				
5770	R1	A	4	3400	COMPL	238	129	0- 45	RECT	IRREG	WEDGE	1	PLANR	CONCA	--	PECKG	0-25	120	40	--
												2	END	--	--	FLAKG	100	90	15	--

SITE NUMBER: 13329

GRID	FEAT	LEVEL	ART#	MATER	PORT	DIMENSIONS (OBJECT) LGTH	WDTH	THICK	SHAPE	LXSEC	TXSEC	LOC#	UTILIZATION PLACE	CURV	SIDIA	WEAR	%AREA	DIMENSIONS (SURFACE) LGTH	WDTH	DEPTH
ARTIFACT CLASS: METATE																				
5050	R2	B	1	0	FRAGU	245	210	40- 60	RECT	CONCA	CONCA	1	PLANR	CONCA	PERPN	GRIND	76-99	210	190	--
5050	R2	B	2	0	FRAGU	245	210	40- 60	RECT	CONCA	CONCA	1	PLANR	CONCA	PERPN	GRIND	76-99	210	190	--
5050	R2	C	3	0	FRAGU	245	210	40- 60	RECT	CONCA	CONCA	1	PLANR	CONCA	PERPN	GRIND	76-99	210	190	--

APPENDIX X — FAUNAL ELEMENT SUMMARY

SITE NUMBER: 5011
ASSEMBLAGE NUMBER: 1

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
WOODRAT	HUMERUS	NO PROXIMAL EPIPHYSIS	RIGHT	NEARLY ADULT	--	1
WOODRAT	FEMUR	NO DISTAL EPIPHYSIS	LEFT	NEARLY ADULT	--	1
MAMMALS, UNIDENTIFIED	UNIDENTIFIED	FRAGMENT	--	--	--	1
LARGE MAMMAL	VERTEBRA	NEURAL ARCH FRAGMENT	--	--	--	1
LARGE MAMMAL	VERTEBRA	NEURAL SPINE FRAGMENT	--	--	--	1
LARGE MAMMAL	LONG BONE	FRAGMENT	--	--	--	1
LARGE MAMMAL	LONG BONE	SHAFT FRAGMENT	--	--	--	3
LARGE MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	2
MEDIUM-LARGE MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	1
SMALL, NEOTOMA SIZED, MAMMAL	LUMBAR	CENTRUM	--	IMMATURE/YOUNG	--	1
					TOTAL	13

SITE NUMBER: 5011
ASSEMBLAGE NUMBER: 2

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
LARGE MAMMAL	LONG BONE	SHAFT FRAGMENT	--	--	--	1
LARGE MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	1
MEDIUM MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	1
					TOTAL	3

SITE NUMBER: 10114
ASSEMBLAGE NUMBER: 1

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
ARTIODACTYLA	TOOTH, UNIDENTIFIED	FRAGMENT	--	--	--	3
ARTIODACTYLA	STERNAL RIBS	SHAFT FRAGMENT	--	--	--	1
DEER	AXIS	COMPLETE	--	--	--	1
DEER	CERVICAL	COMPLETE	--	--	--	1
MEDIUM ARTIODACTYLA	VERTEBRA	FRAGMENT	--	--	--	1
MEDIUM ARTIODACTYLA	LONG BONE	FRAGMENT	--	--	--	1
SHEEP/GOAT	DENTARY	AREA OF P4	--	IMMATURE/YOUNG	--	1
SHEEP/GOAT	ANTLER OR HORN	FRAGMENT	--	--	--	1
SHEEP/GOAT	CHEEKTOOTH	UNERUPTED FRAGMENT, ANTERIOR E	--	--	--	1
SHEEP/GOAT	VERTEBRA	--	--	NEARLY ADULT	--	2
SHEEP/GOAT	METAPODIAL	PROXIMAL FRAGMENT	--	--	--	1
SHEEP/GOAT	NAVIC. CUBOID	--	RIGHT	ADULT	--	1
SHEEP/GOAT	STERNAL RIBS	--	--	IMMATURE/YOUNG	--	1
SHEEP/GOAT	ILIUM	--	--	VERY YOUNG	--	1
SHEEP/GOAT	FEMUR	DISTAL EPIPHYSIS	LEFT	--	--	1
SHEEP/GOAT	TIBIA	DISTAL END	RIGHT	ADULT	--	1
SHEEP/GOAT	ASTRALAGUS	--	RIGHT	ADULT	--	1
SHEEP/GOAT	CALCANEUS	--	RIGHT	ADULT	--	1
SHEEP/GOAT	METATARSALS	PROXIMAL FRAGMENT	--	--	--	1
SHEEP/GOAT	ITAR	--	RIGHT	ADULT	--	1
MAMMALS, UNIDENTIFIED	LONG BONE	SHAFT FRAGMENT	--	--	--	1
LARGE MAMMAL	FRONTAL	FRAGMENT	--	--	--	1
LARGE MAMMAL	HUMERUS	SHAFT FRAGMENT	--	--	--	1
LARGE MAMMAL	LONG BONE	SHAFT FRAGMENT	--	--	--	1
MEDIUM-LARGE MAMMAL	SKULL	FRAGMENT	--	--	--	2
MEDIUM-LARGE MAMMAL	MAXILLA	CENTRAL PALATAL AREA	--	--	--	1
MEDIUM-LARGE MAMMAL	VERTEBRA	--	--	--	--	1
MEDIUM-LARGE MAMMAL	VERTEBRA	NEURAL ARCH	--	IMMATURE/YOUNG	--	1
MEDIUM-LARGE MAMMAL	VERTEBRA	PROCESS	--	--	--	1
MEDIUM-LARGE MAMMAL	VERTEBRA	ZYGOPOPHYSIS	--	--	--	1
MEDIUM-LARGE MAMMAL	VERTEBRA	FRAGMENT OF PROCESS	--	--	--	1
MEDIUM-LARGE MAMMAL	LUMBAR	FRAGMENT OF PROCESS	--	--	--	1
MEDIUM-LARGE MAMMAL	THORACIC	CENTRUM	--	--	--	1
MEDIUM-LARGE MAMMAL	SCAPULA	FRAGMENT	--	--	--	1
MEDIUM-LARGE MAMMAL	PHALANGES	--	--	--	--	1
MEDIUM-LARGE MAMMAL	STERNAL RIBS	FRAGMENT	--	--	--	9
MEDIUM-LARGE MAMMAL	TIBIA	SHAFT FRAGMENT	--	--	--	1
MEDIUM-LARGE MAMMAL	LONG BONE	FRAGMENT	--	--	--	26
MEDIUM-LARGE MAMMAL	LONG BONE	SHAFT FRAGMENT	--	--	--	31
MEDIUM-LARGE MAMMAL	UNIDENTIFIED	--	--	--	--	1
MEDIUM-LARGE MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	15

MEDIUM-LARGE MAMMAL	UNIDENTIFIED	SHAFT FRAGMENT	--	--	--	1
MEDIUM MAMMAL	ULNA	PROXIMAL END WITH EPIPHYSIS	--	--	--	1
MEDIUM MAMMAL	STERNAL RIBS	FRAGMENT	--	--	--	3
MEDIUM MAMMAL	STERNAL RIBS	SHAFT	--	--	--	1
MEDIUM MAMMAL	STERNAL RIBS	SHAFT FRAGMENT	--	--	--	1
MEDIUM MAMMAL	STERNAL RIBS	3/4 SHAFT	--	--	--	1
MEDIUM MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	8
MEDIUM MAMMAL	UNIDENTIFIED	PROXIMAL FRAGMENT	--	--	--	2
SMALL-MEDIUM MAMMAL	VERTEBRA	FRAGMENT	--	--	--	1
SMALL-MEDIUM MAMMAL	STERNAL RIBS	FRAGMENT	--	--	--	1
SMALL-MEDIUM MAMMAL	LONG BONE	FRAGMENT	--	--	--	3
SMALL-MEDIUM MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	1
MISC. INCLUDES BUFA	UNIDENTIFIED	FRAGMENT	--	--	--	19
MEDIUM BIRD	STERNAL RIBS	PROCESS	--	--	--	1
RAVEN	RADIUS	PROXIMAL 1/3	RIGHT	ADULT	--	1
					TOTAL	167

SITE NUMBER: 10114
ASSEMBLAGE NUMBER: 2

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
ARTIODACTYLA	FRONTAL	FRAGMENT	--	VERY YOUNG	--	1
ARTIODACTYLA	TOOTH,UNIDENTIFIED	FRAGMENT	--	--	--	5
ARTIODACTYLA	RADIUS	SHAFT FRAGMENT	--	--	--	2
ARTIODACTYLA	ILIUM	FRAGMENT	--	--	--	1
ARTIODACTYLA	ILIUM	SHAFT FRAGMENT	RIGHT	--	--	1
ARTIODACTYLA	ACETABULUM	FRAGMENT	--	--	--	1
ARTIODACTYLA	ACETABULUM	FRAGMENT	LEFT	--	--	1
ARTIODACTYLA	PUBIS	FRAGMENT	LEFT	--	--	1
ARTIODACTYLA	LONG BONE	SHAFT FRAGMENT	--	--	--	2
DEER	CHEEKTOOTH	FRAGMENT	--	--	--	1
DEER	PREMOLAR	FRAGMENT	--	--	--	1
DEER	PREMOLAR	FRAGMENT	RIGHT	--	--	1
MEDIUM ARTIODACTYLA	FEMUR	SHAFT FRAGMENT	--	--	--	1
MEDIUM ARTIODACTYLA	LONG BONE	FRAGMENT	--	--	--	1
SMALL ARTIODACTYLA	RADIUS	SHAFT FRAGMENT	--	--	--	1
SMALL ARTIODACTYLA	METAPODIAL	NO PROXIMAL EPIPHYSIS	--	--	--	1
SMALL ARTIODACTYLA	STERNAL RIBS	SHAFT FRAGMENT	--	--	--	1
SMALL ARTIODACTYLA	LONG BONE	FRAGMENT	--	--	--	1
SMALL ARTIODACTYLA	LONG BONE	SHAFT FRAGMENT	--	--	--	5
SHEEP/GOAT	MAXILLA	FRAGMENT OF PROCESS	--	--	--	1
SHEEP/GOAT	ANTLER OR HORN	FRAGMENT	--	--	--	3
SHEEP/GOAT	ANTLER OR HORN	NO PROXIMAL EPIPHYSIS	--	--	--	1
SHEEP/GOAT	CHEEKTOOTH	FRAGMENT	--	ADULT	--	1
SHEEP/GOAT	PHALANGES	PROXIMAL END WITH EPIPHYSIS	--	--	--	1
LARGE MAMMAL	STERNAL RIBS	FRAGMENT	--	--	--	1
LARGE MAMMAL	STERNAL RIBS	SHAFT FRAGMENT	--	--	--	2
LARGE MAMMAL	LONG BONE	FRAGMENT	--	--	--	2
LARGE MAMMAL	LONG BONE	SHAFT FRAGMENT	--	--	--	9
LARGE MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	1
MEDIUM-LARGE MAMMAL	DENTARY	FRAGMENT	--	--	--	1
MEDIUM-LARGE MAMMAL	VERTEBRA	FRAGMENT	--	--	--	1
MEDIUM-LARGE MAMMAL	STERNAL RIBS	SHAFT FRAGMENT	--	--	--	5
MEDIUM-LARGE MAMMAL	LONG BONE	FRAGMENT	--	--	--	7
MEDIUM-LARGE MAMMAL	LONG BONE	SHAFT FRAGMENT	--	--	--	18
MEDIUM-LARGE MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	15
MEDIUM MAMMAL	VERTEBRA	FRAGMENT	--	--	--	1
MEDIUM MAMMAL	PHALANGES	DISTAL END	--	--	--	1
MEDIUM MAMMAL	STERNAL RIBS	FRAGMENT	--	--	--	1
MEDIUM MAMMAL	STERNAL RIBS	SHAFT	--	--	--	1
MEDIUM MAMMAL	INNOMINATE	FRAGMENT	--	--	--	1
MEDIUM MAMMAL	LONG BONE	FRAGMENT	--	--	--	1
MEDIUM MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	2
SMALL-MEDIUM MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	2
MISC. INCLUDES BUFA	UNIDENTIFIED	FRAGMENT	--	--	--	7
MOURNING DOVE	HUMERUS	PROXIMAL FRAGMENT	RIGHT	--	--	1
BIRDS	UNIDENTIFIED	--	--	--	--	1
RAVEN	METACARPALS	--	RIGHT	--	--	1
					TOTAL	118

SITE NUMBER: 10114
ASSEMBLAGE NUMBER: 3

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
MOUSE	MAXILLA	FRAGMENT	--	--	--	1
ARTIODACTYLA	--	FRAGMENT	RIGHT	--	--	1

ARTIODACTYLA	VERTEBRA	NEURAL SPINE FRAGMENT	--	--	--	1
ARTIODACTYLA	THORACIC	NEURAL SPINE FRAGMENT	--	--	--	1
ARTIODACTYLA	STERNAL RIBS	FRAGMENT	--	--	--	1
ARTIODACTYLA	LONG BONE	SHAFT FRAGMENT	--	--	--	2
DEER	ANTLER OR HORN	FRAGMENT	--	--	--	1
DEER	PREMOLAR	--	--	--	--	1
SMALL ARTIODACTYLA	TIBIA	SHAFT FRAGMENT	--	--	--	1
SMALL ARTIODACTYLA	LONG BONE	SHAFT FRAGMENT	--	--	--	3
SHEEP/GOAT	ANTLER OR HORN	FRAGMENT	--	--	--	2
SHEEP/GOAT	ANTLER OR HORN	PROXIMAL FRAGMENT	--	--	--	2
SHEEP/GOAT	ULNA	SHAFT FRAGMENT	LEFT	IMMATURE/YOUNG	--	1
SHEEP/GOAT	METACARPALS	PROXIMAL FRAGMENT	LEFT	--	--	1
SHEEP/GOAT	METACARPALS	NO PROXIMAL EPIPHYSIS	LEFT	IMMATURE/YOUNG	--	1
SHEEP/GOAT	METACARPALS	DISTAL END	--	IMMATURE/YOUNG	--	1
SHEEP/GOAT	PHALANGES	--	--	--	--	1
SHEEP/GOAT	PHALANGES	--	--	IMMATURE/YOUNG	--	1
SHEEP/GOAT	PHALANGES	DISTAL END	--	--	--	2
SHEEP/GOAT	PHALANGES	PROXIMAL 3/4	--	--	--	1
SHEEP/GOAT	METAPODIAL	DISTAL END	--	--	--	1
SHEEP/GOAT	ILIUM	BASE OF ILEUM	RIGHT	--	--	1
SHEEP/GOAT	PATELLA	--	--	IMMATURE/YOUNG	--	1
DOG	INCISOR, UNIDENTIFIED	--	--	--	--	1
DOG	TALINOID	FRAGMENT	--	--	--	1
MAMMALS, UNIDENTIFIED	STERNAL RIBS	FRAGMENT	--	--	--	1
LARGE MAMMAL	TIBIA	SHAFT FRAGMENT	--	--	--	1
LARGE MAMMAL	LONG BONE	FRAGMENT	--	--	--	4
LARGE MAMMAL	LONG BONE	SHAFT FRAGMENT	--	--	--	15
LARGE MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	2
MEDIUM-LARGE MAMMAL	SKULL	FRAGMENT	--	--	--	1
MEDIUM-LARGE MAMMAL	ANTLER OR HORN	--	--	--	--	1
MEDIUM-LARGE MAMMAL	SCAPULA	FRAGMENT	--	--	--	1
MEDIUM-LARGE MAMMAL	METAPODIAL	PROXIMAL FRAGMENT	--	--	--	1
MEDIUM-LARGE MAMMAL	STERNAL RIBS	FRAGMENT	--	--	--	2
MEDIUM-LARGE MAMMAL	STERNAL RIBS	SHAFT FRAGMENT	--	--	--	5
MEDIUM-LARGE MAMMAL	LONG BONE	FRAGMENT	--	--	--	25
MEDIUM-LARGE MAMMAL	LONG BONE	SHAFT FRAGMENT	--	--	--	19
MEDIUM-LARGE MAMMAL	UNIDENTIFIED	--	--	--	--	2
MEDIUM-LARGE MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	30
MEDIUM MAMMAL	DENTARY	FRAGMENT	--	--	--	1
MEDIUM MAMMAL	INCISOR, UNIDENTIFIED	--	--	--	--	1
MEDIUM MAMMAL	SCAPULA	FRAGMENT	--	--	--	1
MEDIUM MAMMAL	STERNAL RIBS	FRAGMENT	--	--	--	3
MEDIUM MAMMAL	STERNAL RIBS	SHAFT FRAGMENT	--	--	--	4
MEDIUM MAMMAL	LONG BONE	FRAGMENT	--	--	--	3
MEDIUM MAMMAL	LONG BONE	SHAFT FRAGMENT	--	--	--	1
MEDIUM MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	5
SMALL-MEDIUM MAMMAL	STERNAL RIBS	--	--	--	--	1
SMALL-MEDIUM MAMMAL	STERNAL RIBS	FRAGMENT	--	--	--	1
SMALL-MEDIUM MAMMAL	STERNAL RIBS	SHAFT FRAGMENT	--	--	--	1
SMALL-MEDIUM MAMMAL	STERNAL RIBS	SHAFT FRAGMENT	--	IMMATURE/YOUNG	--	1
MISC. INCLUDES BUFA	UNIDENTIFIED	FRAGMENT	--	--	--	3
BIRDS	UNIDENTIFIED	FRAGMENT	--	--	--	1
					TOTAL	168

SITE NUMBER: 10114
ASSEMBLAGE NUMBER: •

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
ARTIODACTYLA	ZYGOMATIC PROCESS	FRAGMENT	RIGHT	VERY YOUNG	--	1
ARTIODACTYLA	INNOMINATE	FRAGMENT	--	--	--	1
MEDIUM ARTIODACTYLA	TOOTH, UNIDENTIFIED	FRAGMENT	--	--	--	4
JACKRABBIT	TIBIA	DISTAL END	--	IMMATURE/YOUNG	--	1
SHEEP/GOAT	ZYGOMATIC PROCESS	ANTERIOR SECTION	LEFT	--	--	1
SHEEP/GOAT	VERTEBRA	EPIPHYSIS	--	--	--	1
LARGE MAMMAL	LONG BONE	SHAFT FRAGMENT	--	--	--	3
LARGE MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	2
MEDIUM-LARGE MAMMAL	SKULL	FRAGMENT	--	--	--	4
MEDIUM-LARGE MAMMAL	TOOTH, UNIDENTIFIED	FRAGMENT	--	--	--	1
MEDIUM-LARGE MAMMAL	ANTLER OR HORN	FRAGMENT	--	--	--	1
MEDIUM-LARGE MAMMAL	VERTEBRA	CENTRUM	--	--	--	1
MEDIUM-LARGE MAMMAL	VERTEBRA	PROCESS	LEFT	--	--	1
MEDIUM-LARGE MAMMAL	METAPODIAL	PROXIMAL FRAGMENT	--	--	--	1
MEDIUM-LARGE MAMMAL	STERNAL RIBS	FRAGMENT	--	--	--	6
MEDIUM-LARGE MAMMAL	STERNAL RIBS	SHAFT	--	--	--	1
MEDIUM-LARGE MAMMAL	LONG BONE	FRAGMENT	--	--	--	14
MEDIUM-LARGE MAMMAL	LONG BONE	SHAFT FRAGMENT	--	--	--	8
MEDIUM-LARGE MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	44
MEDIUM MAMMAL	SCAPULA	NECK FRAGMENT	--	--	--	1
MEDIUM MAMMAL	PHALANGES	PROXIMAL FRAGMENT	--	--	--	1

MEDIUM MAMMAL	STERNAL RIBS	--	--	--	--	1
MEDIUM MAMMAL	STERNAL RIBS	FRAGMENT	--	--	--	2
MEDIUM MAMMAL	STERNAL RIBS	SHAFT	--	--	--	1
MEDIUM MAMMAL	LONG BONE	FRAGMENT	--	--	--	3
MEDIUM MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	14
SMALL-MEDIUM MAMMAL	STERNAL RIBS	SHAFT	--	VERY YOUNG	--	1
SMALL-MEDIUM MAMMAL	LONG BONE	FRAGMENT	--	--	--	2
SMALL-MEDIUM MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	4
SMALL MAMMAL	STERNAL RIBS	SHAFT	--	--	--	2
MISC. INCLUDES BUFA	UNIDENTIFIED	FRAGMENT	--	--	--	2
					TOTAL	130

SITE NUMBER: 10114
ASSEMBLAGE NUMBER: 5

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
GOPHER	DENTARY	--	RIGHT	--	--	1
GOPHER	FEMUR	SHAFT	LEFT	IMMATURE/YOUNG	--	1
COTTONTAIL	DENTARY	FRAGMENT	RIGHT	--	--	1
LARGE MAMMAL	SKULL	FRAGMENT	--	--	--	1
LARGE MAMMAL	LONG BONE	FRAGMENT	--	--	--	1
MEDIUM-LARGE MAMMAL	STERNAL RIBS	FRAGMENT	--	--	--	1
MEDIUM-LARGE MAMMAL	LONG BONE	FRAGMENT	--	--	--	1
MEDIUM-LARGE MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	1
SMALL-MEDIUM MAMMAL	VERTEBRA	FRAGMENT	--	--	--	1
SMALL-MEDIUM MAMMAL	STERNAL RIBS	FRAGMENT	--	--	--	1
					TOTAL	10

SITE NUMBER: 10114
ASSEMBLAGE NUMBER: 6

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
ARTIODACTYLA	VERTEBRA	FRAGMENT	--	--	--	1
ARTIODACTYLA	METAPODIAL	PROXIMAL FRAGMENT	--	--	--	1
ARTIODACTYLA	METAPODIAL	PROXIMAL END WITH EPIPHYSIS	--	--	--	1
ARTIODACTYLA	LONG BONE	FRAGMENT	--	--	--	1
SHEEP/GOAT	MAXILLA	PORTION NEAR M3	--	--	--	1
MAMMALS, UNIDENTIFIED	UNIDENTIFIED	FRAGMENT	--	--	--	3
MEDIUM-LARGE MAMMAL	SCAPULA	FRAGMENT	--	--	--	1
MEDIUM-LARGE MAMMAL	METAPODIAL	FRAGMENT	--	--	--	1
MEDIUM-LARGE MAMMAL	LONG BONE	FRAGMENT	--	--	--	5
MEDIUM-LARGE MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	17
MISC. INCLUDES BUFA	FEMUR	DISTAL END	--	--	--	1
MISC. INCLUDES BUFA	UNIDENTIFIED	FRAGMENT	--	--	--	1
					TOTAL	34

SITE NUMBER: 10114
ASSEMBLAGE NUMBER: 7

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
MEDIUM-LARGE MAMMAL	SCAPULA	FRAGMENT	--	--	--	1
MEDIUM-LARGE MAMMAL	LONG BONE	FRAGMENT	--	--	--	1
					TOTAL	2

SITE NUMBER: 13049
ASSEMBLAGE NUMBER: 2

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
ARTIODACTYLA	LONG BONE	SHAFT	--	--	--	1
					TOTAL	1

SITE NUMBER: 13049
ASSEMBLAGE NUMBER: 3

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
SMALL MAMMAL	INNOMINATE	FRAGMENT	--	--	--	1
					TOTAL	1

APPENDIX X — FAUNAL ELEMENT SUMMARY

SITE NUMBER: 13050
ASSEMBLAGE NUMBER: 1

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
WOODRAT	FEMUR	EPIPHYSIS	RIGHT	--	--	1
LARGE MAMMAL	FEMUR	COMPLETE	RIGHT	NEARLY ADULT	--	1
					TOTAL	2

SITE NUMBER: 13050
ASSEMBLAGE NUMBER: 2

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
TURKEY	METATARSALS	DISTAL END	--	--	--	1
					TOTAL	1

SITE NUMBER: 13050
ASSEMBLAGE NUMBER: 3

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
LAND SNAIL	SHELL	FRAGMENT	--	--	--	1
					TOTAL	1

SITE NUMBER: 13050
ASSEMBLAGE NUMBER: 6

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
GRASSHOPPER MOUSE	DENTARY	--	--	IMMATURE/YOUNG	--	2
SMALL MAMMAL	HUMERUS	--	--	--	--	1
					TOTAL	3

SITE NUMBER: 13050
ASSEMBLAGE NUMBER: 7

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
GOPHER	DENTARY	--	RIGHT	IMMATURE/YOUNG	--	1
SMALL MAMMAL	LONG BONE	FRAGMENT	--	--	--	2
SMALL MAMMAL	UNIDENTIFIED	--	--	--	--	1
					TOTAL	4

SITE NUMBER: 13050
ASSEMBLAGE NUMBER: 9

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
TESTUDINATA	SCUTI	--	--	--	--	3
					TOTAL	3

SITE NUMBER: 13054
ASSEMBLAGE NUMBER: 1

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
ABERTS SQUIRREL	INNOMINATE	FRAGMENT	RIGHT	ADULT	--	1
MAMMALS, UNIDENTIFIED	UNIDENTIFIED	FRAGMENT	--	--	--	1
LARGE MAMMAL	METAPODIAL	SHAFT FRAGMENT	--	--	--	1
LARGE MAMMAL	LONG BONE	SHAFT FRAGMENT	--	--	--	10
MEDIUM-LARGE MAMMAL	LONG BONE	SHAFT FRAGMENT	--	--	--	2
SMALL MAMMAL	UNIDENTIFIED	SHAFT FRAGMENT	--	--	--	1
SMALL, NEOTOMA SIZED, MAMMAL	MANDIBLE	NO PROXIMAL EPIPHYSIS	LEFT	--	--	1
TURKEY	METATARSALS	SHAFT FRAGMENT	LEFT	ADULT	MALE	1
					TOTAL	18

SITE NUMBER: 13054

ASSEMBLAGE NUMBER: 3

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
GOPHER	HUMERUS	NO PROXIMAL EPIPHYSIS	LEFT	NEARLY ADULT	--	1
ROCK SQUIRREL	DENTARY	FRAGMENT	RIGHT	ADULT	--	1
ABERTS SQUIRREL	TIBIA	SHAFT	LEFT	--	--	1
MAMMALS, UNIDENTIFIED	UNIDENTIFIED	FRAGMENT	--	--	--	1
MEDIUM MAMMAL	LONG BONE	SHAFT FRAGMENT	--	--	--	1
					TOTAL	5

SITE NUMBER: 13084
ASSEMBLAGE NUMBER: 2

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
WOODRAT	FEMUR	NO DISTAL EPIPHYSIS	LEFT	--	--	1
					TOTAL	1

SITE NUMBER: 13084
ASSEMBLAGE NUMBER: 3

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
SCELOPORUS	OCCIPITAL	--	--	--	--	1
					TOTAL	1

SITE NUMBER: 13084
ASSEMBLAGE NUMBER: 9

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
MISC. INCLUDES BUFA	UNIDENTIFIED	FRAGMENT	--	--	--	1
					TOTAL	1

SITE NUMBER: 13086
ASSEMBLAGE NUMBER: 8

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
GOPHER	HUMERUS	DISTAL END	--	--	--	1
JACKRABBIT	HUMERUS	FRAGMENT	--	--	--	1
MEDIUM-LARGE MAMMAL	LONG BONE	FRAGMENT	--	--	--	3
MEDIUM-LARGE MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	1
SMALL-MEDIUM MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	1
					TOTAL	7

SITE NUMBER: 13086
ASSEMBLAGE NUMBER: 12

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
COTTONTAIL	TIBIA	FRAGMENT	--	--	--	1
					TOTAL	1

SITE NUMBER: 13086
ASSEMBLAGE NUMBER: 14

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
SMALL MAMMAL	LONG BONE	FRAGMENT	--	--	--	1
TURKEY	METATARSALS	FRAGMENT	--	--	--	1
TURKEY	LONG BONE	FRAGMENT	--	--	--	1
JAY	MANDIBLE	SPLENIAL	--	--	--	1
JAY	QUADRATE	--	RIGHT	--	--	1
					TOTAL	5

SITE NUMBER: 13086

ASSEMBLAGE NUMBER: 15

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
WOODRAT	HUMERUS	DISTAL EPIPHYSIS	--	--	--	1
WOODRAT	TIBIA	NO PROXIMAL EPIPHYSIS	--	--	--	1
WOODRAT	TIBIA	DISTAL END	--	--	--	1
WOODRAT	CALCANEUS	--	--	--	--	1
WOODRAT	METAPODIAL	--	--	--	--	1
SMALL-MEDIUM MAMMAL	LONG BONE	FRAGMENT	--	--	--	1
SMALL MAMMAL	LONG BONE	FRAGMENT	--	--	--	1
MISC. INCLUDES BUFA	UNIDENTIFIED	FRAGMENT	--	--	--	1
VERTEBRATE	LONG BONE	--	--	--	--	1
EUMACES OBSOL.	TOOTH,UNIDENTIFIED	--	LEFT	--	--	1
EUMACES OBSOL.	OCCIPITAL	--	--	--	--	1
EUMACES OBSOL.	PARIETAL	--	--	--	--	1
					TOTAL	12

SITE NUMBER: 13086
ASSEMBLAGE NUMBER: 19

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
SMALL-MEDIUM MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	3
					TOTAL	3

SITE NUMBER: 13291
ASSEMBLAGE NUMBER: 1

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
RODENTIA, UNIDENTIFIED	DENTARY	FRAGMENT	LEFT	--	--	1
RODENTIA, UNIDENTIFIED	INCISOR, UNIDENTIFIED	FRAGMENT	--	--	--	2
GOPHER	FEMUR	FRAGMENT	LEFT	IMMATURE/YOUNG	--	1
WOODRAT	DENTARY	ANTERIOR SECTION	RIGHT	VERY YOUNG	--	1
WOODRAT	MOLAR, UNIDENTIFIED	--	RIGHT	VERY YOUNG	--	1
ARTIODACTYLA	CRANIA	FRAGMENT	--	--	--	1
ARTIODACTYLA	CRANIA	FRAGMENT	--	VERY YOUNG	--	1
ARTIODACTYLA	TOOTH,UNIDENTIFIED	FRAGMENT	--	--	--	11
ARTIODACTYLA	TOOTH,UNIDENTIFIED	FRAGMENT	--	VERY YOUNG	--	1
ARTIODACTYLA	INCISOR, INCISIFORMES	--	LEFT	--	--	2
ARTIODACTYLA	DENTARY	--	--	--	--	1
ARTIODACTYLA	DENTARY	FRAGMENT	--	--	--	1
ARTIODACTYLA	DENTARY	FRAGMENT	--	VERY YOUNG	--	1
ARTIODACTYLA	DENTARY	FRAGMENT	LEFT	VERY YOUNG	--	1
ARTIODACTYLA	DENTARY	FRAGMENT	RIGHT	--	--	1
ARTIODACTYLA	DENTARY	CORONOID PROCESS	LEFT	VERY YOUNG	--	1
ARTIODACTYLA	INCISOR, UNIDENTIFIED	--	--	--	--	1
ARTIODACTYLA	INCISOR, UNIDENTIFIED	--	--	OLD	--	1
ARTIODACTYLA	INCISOR, UNIDENTIFIED	FRAGMENT	--	--	--	1
ARTIODACTYLA	CHEEKTOOTH	FRAGMENT	--	--	--	17
ARTIODACTYLA	CHEEKTOOTH	FRAGMENT	--	ADULT	--	1
ARTIODACTYLA	PARIETAL	FRAGMENT	LEFT	IMMATURE/YOUNG	--	1
ARTIODACTYLA	PREMAXILLA	--	--	--	--	2
ARTIODACTYLA	HYOID	FRAGMENT	--	--	--	1
ARTIODACTYLA	VERTEBRA	ZYGOPOPHYSIS	--	--	--	1
ARTIODACTYLA	VERTEBRA	ZYGOPOPHYSIS	--	ADULT	--	2
ARTIODACTYLA	VERTEBRA	ZYGOPOPHYSIS	RIGHT	--	--	1
ARTIODACTYLA	VERTEBRA	ZYGOPOPHYSIS	RIGHT	ADULT	--	1
ARTIODACTYLA	THORACIC	NEURAL SPINE FRAGMENT	--	--	--	1
ARTIODACTYLA	AUD. BULLA	--	RIGHT	--	--	1
ARTIODACTYLA	AUD. BULLA	FRAGMENT	LEFT	IMMATURE/YOUNG	--	1
ARTIODACTYLA	LACRIMAL	FRAGMENT	--	IMMATURE/YOUNG	--	1
ARTIODACTYLA	ULNA	DISTAL END	--	IMMATURE/YOUNG	--	1
ARTIODACTYLA	PHALANGES	PROXIMAL 1/3	--	--	--	1
ARTIODACTYLA	STERNAL RIBS	FRAGMENT	--	--	--	1
ARTIODACTYLA	JUGAL	POSTERIOR-VENTRAL FRAGMENT	RIGHT	IMMATURE/YOUNG	--	1
ARTIODACTYLA	ILIUM	SHAFT	LEFT	VERY YOUNG	--	1
ARTIODACTYLA	ILIUM	POSTERIOR 1/4 FRAGMENT	LEFT	IMMATURE/YOUNG	--	1
ARTIODACTYLA	ILIUM	POSTERIOR 1/4 FRAGMENT	RIGHT	VERY YOUNG	--	1
ARTIODACTYLA	TIBIA	FRAGMENT	--	--	--	1
ARTIODACTYLA	LONG BONE	FRAGMENT	--	--	--	6
ARTIODACTYLA	UNIDENTIFIED	FRAGMENT	--	--	--	1
DEER	DP3	--	LEFT	VERY YOUNG	--	1
DEER	DP3	--	RIGHT	IMMATURE/YOUNG	--	1
MEDIUM ARTIODACTYLA	JUGAL	POSTERIOR 1/4 FRAGMENT	LEFT	IMMATURE/YOUNG	--	1
SMALL ARTIODACTYLA	INCISOR, UNIDENTIFIED	--	LEFT	ADULT	--	1
SMALL ARTIODACTYLA	INCISOR, UNIDENTIFIED	--	RIGHT	--	--	1
SMALL ARTIODACTYLA	CHEEKTOOTH	FRAGMENT	--	--	--	1

APPENDIX X — FAUNAL ELEMENT SUMMARY

SMALL ARTIODACTYLA	CHEEKTOOTH	FRAGMENT	RIGHT	ADULT	--	1
SMALL ARTIODACTYLA	HUMERUS	SHAFT FRAGMENT	--	--	--	1
SMALL ARTIODACTYLA	STERNAL RIBS	FRAGMENT	--	--	--	1
CERVID	ANTLER OR HORN	FRAGMENT	--	--	--	1
CERVID	ANTLER OR HORN	SHAFT FRAGMENT	--	--	--	2
CERVID	ANTLER OR HORN	SHAFT FRAGMENT	--	ADULT	FEMALE	1
CERVID	CHEEKTOOTH	FRAGMENT	--	--	--	1
COTTONTAIL	DENTARY	FRAGMENT	--	--	--	1
COTTONTAIL	DENTARY	FRAGMENT	RIGHT	--	--	1
COTTONTAIL	SQUAMOSAL	ZYGOMATIC PROCESS	LEFT	ADULT	--	1
COTTONTAIL	INNER EAR	FRAGMENT	LEFT	--	--	1
COTTONTAIL	HUMERUS	DISTAL END	RIGHT	ADULT	--	1
COTTONTAIL	PHALANGES	--	--	IMMATURE/YOUNG	--	1
COTTONTAIL	INNOMINATE	--	--	--	--	1
SHEEP/GOAT	MAXILLA	--	RIGHT	IMMATURE/YOUNG	--	1
SHEEP/GOAT	INCISOR, INCISIFORMES	--	--	IMMATURE/YOUNG	--	1
SHEEP/GOAT	DENTARY	--	LEFT	OLD	--	1
SHEEP/GOAT	DENTARY	PROXIMAL FRAGMENT	LEFT	ADULT	--	1
SHEEP/GOAT	INCISOR, UNIDENTIFIED	COMPLETE	LEFT	--	--	1
SHEEP/GOAT	MOLAR, UPPER	--	RIGHT	--	--	1
SHEEP/GOAT	MOLAR, LOWER	--	--	ADULT	--	1
SHEEP/GOAT	MOLAR, UNIDENTIFIED	FRAGMENT	RIGHT	ADULT	--	1
SHEEP/GOAT	ANTLER OR HORN	FRAGMENT	--	--	--	2
SHEEP/GOAT	ZYGOMATIC PROCESS	--	RIGHT	ADULT	--	1
SHEEP/GOAT	CHEEKTOOTH	FRAGMENT	--	--	--	8
SHEEP/GOAT	CHEEKTOOTH	FRAGMENT	--	ADULT	--	1
SHEEP/GOAT	PREMOLAR	--	LEFT	ADULT	--	1
SHEEP/GOAT	VERTEBRA	FRAGMENT	--	--	--	1
SHEEP/GOAT	AUD. BULLA	POSTERIOR 1/4 FRAGMENT	LEFT	--	--	1
SHEEP/GOAT	PALATAL	ANTERIOR SECTION	RIGHT	NEARLY ADULT	--	1
SHEEP/GOAT	HUMERUS	DIAPHYSIS	LEFT	VERY YOUNG	--	1
SHEEP/GOAT	RADIUS	SHAFT FRAGMENT	RIGHT	ADULT	--	1
SHEEP/GOAT	RADIUS	DISTAL 1/4 OR 1/3	RIGHT	ADULT	--	1
SHEEP/GOAT	METACARPALS	--	RIGHT	ADULT	--	1
SHEEP/GOAT	PHALANGES	--	--	ADULT	--	1
SHEEP/GOAT	PHALANGES	--	RIGHT	ADULT	--	4
SHEEP/GOAT	NAVIC. CUBOID	--	RIGHT	ADULT	--	1
SHEEP/GOAT	NAVICULA/SCAPHOID	--	RIGHT	ADULT	--	1
SHEEP/GOAT	UNCIFORM	--	RIGHT	ADULT	--	1
SHEEP/GOAT	CUNIFORM	--	RIGHT	ADULT	--	1
SHEEP/GOAT	LUNAR	--	RIGHT	ADULT	--	1
SHEEP/GOAT	PISIFORM	--	RIGHT	ADULT	--	1
SHEEP/GOAT	SESAMOID	--	RIGHT	ADULT	--	2
SHEEP/GOAT	STERNAL RIBS	SHAFT FRAGMENT	--	--	--	1
SHEEP/GOAT	INNOMINATE	POSTERIOR 1/4 FRAGMENT	RIGHT	ADULT	--	1
SHEEP/GOAT	FEMUR	NO DISTAL EPIPHYSIS	RIGHT	ADULT	--	1
SHEEP/GOAT	PEDIAL	COMPLETE	--	--	--	1
MAMMALS, UNIDENTIFIED	SKULL	FRAGMENT	--	--	--	2
MAMMALS, UNIDENTIFIED	CRANIA	FRAGMENT	--	--	--	1
MAMMALS, UNIDENTIFIED	TOOTH,UNIDENTIFIED	FRAGMENT	--	--	--	1
MAMMALS, UNIDENTIFIED	VERTEBRA	FRAGMENT	--	--	--	1
MAMMALS, UNIDENTIFIED	VERTEBRA	FRAGMENT OF PROCESS	--	IMMATURE/YOUNG	--	1
MAMMALS, UNIDENTIFIED	VERTEBRA	DISTAL 1/4 OR 1/3	--	--	--	1
MAMMALS, UNIDENTIFIED	PETROSAL	FRAGMENT	--	--	--	1
MAMMALS, UNIDENTIFIED	LONG BONE	FRAGMENT	--	--	--	7
MAMMALS, UNIDENTIFIED	LONG BONE	SHAFT FRAGMENT	--	--	--	3
MAMMALS, UNIDENTIFIED	UNIDENTIFIED	--	--	--	--	3
MAMMALS, UNIDENTIFIED	UNIDENTIFIED	FRAGMENT	--	--	--	9
MAMMALS, UNIDENTIFIED	UNIDENTIFIED	FRAGMENT	--	VERY YOUNG	--	1
LARGE MAMMAL	SKULL	FRAGMENT	--	--	--	2
LARGE MAMMAL	SKULL	FRAGMENT	--	IMMATURE/YOUNG	--	1
LARGE MAMMAL	CRANIA	FRAGMENT	--	--	--	2
LARGE MAMMAL	CRANIA	FRAGMENT	--	IMMATURE/YOUNG	--	1
LARGE MAMMAL	TOOTH,UNIDENTIFIED	FRAGMENT	--	--	--	1
LARGE MAMMAL	DENTARY	FRAGMENT	--	--	--	4
LARGE MAMMAL	DENTARY	FRAGMENT	--	VERY YOUNG	--	1
LARGE MAMMAL	VERTEBRA	FRAGMENT	--	ADULT	--	1
LARGE MAMMAL	VERTEBRA	CENTRUM	--	ADULT	--	1
LARGE MAMMAL	VERTEBRA	PROCESS	--	--	--	1
LARGE MAMMAL	VERTEBRA	ZYGOPOPHYSIS	--	ADULT	--	1
LARGE MAMMAL	PETROSAL	COMPLETE	--	--	--	1
LARGE MAMMAL	PALATAL	FRAGMENT	--	--	--	1
LARGE MAMMAL	SCAPULA	FRAGMENT	--	--	--	1
LARGE MAMMAL	STERNAL RIBS	FRAGMENT	--	--	--	4
LARGE MAMMAL	STERNAL RIBS	SHAFT FRAGMENT	--	--	--	16
LARGE MAMMAL	STERNAL RIBS	SHAFT FRAGMENT	--	IMMATURE/YOUNG	--	1
LARGE MAMMAL	FLAT BONE	FRAGMENT	--	--	--	3
LARGE MAMMAL	LONG BONE	FRAGMENT	--	--	--	3
LARGE MAMMAL	LONG BONE	SHAFT FRAGMENT	--	--	--	52
LARGE MAMMAL	LONG BONE	SHAFT FRAGMENT	--	IMMATURE/YOUNG	--	1
LARGE MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	37
MEDIUM-LARGE MAMMAL	SKULL	FRAGMENT	--	--	--	6

MEDIUM-LARGE MAMMAL	SKULL	FRAGMENT	--	IMMATURE/YOUNG	--	3
MEDIUM-LARGE MAMMAL	CRANIA	FRAGMENT	--	IMMATURE/YOUNG	--	3
MEDIUM-LARGE MAMMAL	CRANIA	FRAGMENT	--	VERY YOUNG	--	1
MEDIUM-LARGE MAMMAL	TOOTH,UNIDENTIFIED	FRAGMENT	--	--	--	2
MEDIUM-LARGE MAMMAL	DENTARY	FRAGMENT	--	--	--	1
MEDIUM-LARGE MAMMAL	PARIETAL	FRAGMENT	--	IMMATURE/YOUNG	--	1
MEDIUM-LARGE MAMMAL	HYOID	FRAGMENT	--	--	--	2
MEDIUM-LARGE MAMMAL	VERTEBRA	FRAGMENT	--	VERY YOUNG	--	1
MEDIUM-LARGE MAMMAL	VERTEBRA	CENTRUM	--	--	--	1
MEDIUM-LARGE MAMMAL	VERTEBRA	EPIPHYSIS	--	IMMATURE/YOUNG	--	1
MEDIUM-LARGE MAMMAL	VERTEBRA	FRAGMENT OF PROCESS	--	--	--	2
MEDIUM-LARGE MAMMAL	THORACIC	NEURAL ARCH	--	IMMATURE/YOUNG	--	1
MEDIUM-LARGE MAMMAL	STERNAL RIBS	FRAGMENT	--	--	--	4
MEDIUM-LARGE MAMMAL	STERNAL RIBS	SHAFT FRAGMENT	--	--	--	4
MEDIUM-LARGE MAMMAL	STERNAL RIBS	SHAFT FRAGMENT	--	VERY YOUNG	--	2
MEDIUM-LARGE MAMMAL	LONG BONE	--	--	--	--	2
MEDIUM-LARGE MAMMAL	LONG BONE	FRAGMENT	--	--	--	3
MEDIUM-LARGE MAMMAL	LONG BONE	SHAFT FRAGMENT	--	--	--	14
MEDIUM-LARGE MAMMAL	LONG BONE	CONDYLE FRAGMENT	--	--	--	1
MEDIUM-LARGE MAMMAL	UNIDENTIFIED	--	--	--	--	17
MEDIUM-LARGE MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	28
MEDIUM-LARGE MAMMAL	UNIDENTIFIED	FRAGMENT	--	IMMATURE/YOUNG	--	5
MEDIUM MAMMAL	VERTEBRA	FRAGMENT	--	--	--	1
MEDIUM MAMMAL	STERNAL RIBS	FRAGMENT	--	--	--	2
MEDIUM MAMMAL	STERNAL RIBS	SHAFT FRAGMENT	--	--	--	1
MEDIUM MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	3
MEDIUM MAMMAL	UNIDENTIFIED	FRAGMENT	--	IMMATURE/YOUNG	--	1
SMALL-MEDIUM MAMMAL	SCAPULA	FRAGMENT	--	--	--	1
SMALL-MEDIUM MAMMAL	STERNAL RIBS	--	--	--	--	2
SMALL-MEDIUM MAMMAL	STERNAL RIBS	FRAGMENT	--	--	--	3
SMALL-MEDIUM MAMMAL	STERNAL RIBS	PROXIMAL FRAGMENT	--	IMMATURE/YOUNG	--	1
SMALL-MEDIUM MAMMAL	LONG BONE	FRAGMENT	--	--	--	2
SMALL-MEDIUM MAMMAL	LONG BONE	SHAFT FRAGMENT	--	--	--	1
SMALL-MEDIUM MAMMAL	UNIDENTIFIED	--	--	--	--	2
SMALL-MEDIUM MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	6
SMALL MAMMAL	LONG BONE	SHAFT FRAGMENT	--	--	--	1
SMALL VERTEBRATE	METACARPALS	--	--	ADULT	--	1
MISC. INCLUDES BUFA	LONG BONE	SHAFT FRAGMENT	--	--	--	1
MISC. INCLUDES BUFA	UNIDENTIFIED	--	--	--	--	11
MISC. INCLUDES BUFA	UNIDENTIFIED	FRAGMENT	--	--	--	6
MISC. INCLUDES BUFA	UNIDENTIFIED	FRAGMENT	--	IMMATURE/YOUNG	--	1
BIRDS	LONG BONE	SHAFT FRAGMENT	--	--	--	1
ANEURAN SCAPHIOPUS	FEMUR	SHAFT	--	--	--	1
					TOTAL	464

SITE NUMBER: 13291
ASSEMBLAGE NUMBER: 2

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
ARTIODACTYLA	SKULL	FRAGMENT	--	--	--	1
ARTIODACTYLA	MAXILLA	FRAGMENT	--	IMMATURE/YOUNG	--	1
ARTIODACTYLA	TOOTH,UNIDENTIFIED	FRAGMENT	--	--	--	3
ARTIODACTYLA	DENTARY	FRAGMENT	--	--	--	1
ARTIODACTYLA	DENTARY	FRAGMENT	LEFT	ADULT	--	1
ARTIODACTYLA	DENTARY	POSTERIOR-VENTRAL FRAGMENT	RIGHT	VERY YOUNG	--	1
ARTIODACTYLA	ANTLER OR HORN	FRAGMENT	--	--	--	1
ARTIODACTYLA	CHEEKTOOTH	FRAGMENT	--	--	--	4
ARTIODACTYLA	HYOID	FRAGMENT	--	--	--	1
ARTIODACTYLA	BASISPHENOID	FRAGMENT	--	IMMATURE/YOUNG	--	3
ARTIODACTYLA	HUMERUS	SHAFT FRAGMENT	--	--	--	1
ARTIODACTYLA	STERNAL RIBS	FRAGMENT	--	--	--	2
ARTIODACTYLA	METAPODIAL	SHAFT FRAGMENT	--	--	--	1
ARTIODACTYLA	LONG BONE	FRAGMENT	--	--	--	7
ARTIODACTYLA	LONG BONE	SHAFT FRAGMENT	--	--	--	1
ARTIODACTYLA	LONG BONE	EPIPHYSIS	--	--	--	1
DEER	ANTLER OR HORN	FRAGMENT	--	--	--	1
MEDIUM ARTIODACTYLA	CHEEKTOOTH	FRAGMENT	--	--	--	1
SMALL ARTIODACTYLA	CERVICAL	NEURAL ARCH FRAGMENT	LEFT	ADULT	--	1
BOS/BISON	CHEEKTOOTH	FRAGMENT	--	IMMATURE/YOUNG	--	1
BOS/BISON	PREMOLAR	--	LEFT	ADULT	--	1
BOS/BISON	HUMERUS	SHAFT	LEFT	IMMATURE/YOUNG	--	1
BOS/BISON	HUMERUS	SHAFT FRAGMENT	LEFT	IMMATURE/YOUNG	--	1
COTTONTAIL	PODIAL	--	--	--	--	1
SHEEP/GOAT	DENTARY	FRAGMENT	--	--	--	2
SHEEP/GOAT	DENTARY	FRAGMENT	--	IMMATURE/YOUNG	--	1
SHEEP/GOAT	DENTARY	FRAGMENT	LEFT	--	--	1
SHEEP/GOAT	MOLAR, UPPER	FRAGMENT	LEFT	ADULT	--	1
SHEEP/GOAT	ANTLER OR HORN	FRAGMENT	LEFT	ADULT	--	1
SHEEP/GOAT	ZYGOMATIC PROCESS	ANTERIOR SECTION	RIGHT	ADULT	--	1

SHEEP/GOAT	CHEEKTOOTH	FRAGMENT	--	--	--	5
SHEEP/GOAT	OCCIPITAL	COMPLETE	--	IMMATURE/YOUNG	--	1
SHEEP/GOAT	VERTEBRA	EPIPHYSIS	--	--	--	1
SHEEP/GOAT	LUMBAR	--	--	IMMATURE/YOUNG	--	1
SHEEP/GOAT	THORACIC	FRAGMENT	--	--	--	1
SHEEP/GOAT	ULNA	DISTAL END	--	--	--	1
SHEEP/GOAT	JUGAL	--	LEFT	IMMATURE/YOUNG	--	1
SHEEP/GOAT	JUGAL	POSTERIOR 1/4 FRAGMENT	LEFT	VERY YOUNG	--	1
SHEEP/GOAT	JUGAL	POSTERIOR 1/4 FRAGMENT	RIGHT	ADULT	--	1
SHEEP/GOAT	TURBINATE	FRAGMENT	--	--	--	1
SHEEP/GOAT	FEMUR	SHAFT FRAGMENT	LEFT	--	--	1
MAMMALS, UNIDENTIFIED	NASAL	FRAGMENT	--	--	--	1
MAMMALS, UNIDENTIFIED	VERTEBRA	ZYGOPOPHYSIS	--	--	--	1
MAMMALS, UNIDENTIFIED	UNIDENTIFIED	FRAGMENT	--	--	--	1
LARGE MAMMAL	SKULL	FRAGMENT	--	--	--	1
LARGE MAMMAL	CRANIA	FRAGMENT	--	--	--	3
LARGE MAMMAL	CRANIA	FRAGMENT	--	IMMATURE/YOUNG	--	1
LARGE MAMMAL	HYOID	FRAGMENT	--	--	--	1
LARGE MAMMAL	SCAPULA	DISTAL END	--	IMMATURE/YOUNG	--	1
LARGE MAMMAL	STERNAL RIBS	SHAFT FRAGMENT	--	--	--	3
LARGE MAMMAL	LONG BONE	SHAFT FRAGMENT	--	--	--	22
LARGE MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	7
LARGE MAMMAL	UNIDENTIFIED	SHAFT FRAGMENT	--	--	--	1
MEDIUM-LARGE MAMMAL	SKULL	FRAGMENT	--	--	--	12
MEDIUM-LARGE MAMMAL	SKULL	FRAGMENT	--	IMMATURE/YOUNG	--	3
MEDIUM-LARGE MAMMAL	CRANIA	FRAGMENT	--	IMMATURE/YOUNG	--	3
MEDIUM-LARGE MAMMAL	FRONTAL	FRAGMENT	RIGHT	IMMATURE/YOUNG	--	1
MEDIUM-LARGE MAMMAL	OCCIPITAL	FRAGMENT	RIGHT	IMMATURE/YOUNG	--	1
MEDIUM-LARGE MAMMAL	HYOID	--	--	--	--	1
MEDIUM-LARGE MAMMAL	VERTEBRA	--	--	--	--	1
MEDIUM-LARGE MAMMAL	THORACIC	1/2 THORACIC ARCH	--	--	--	1
MEDIUM-LARGE MAMMAL	STERNAL RIBS	--	--	--	--	1
MEDIUM-LARGE MAMMAL	STERNAL RIBS	SHAFT FRAGMENT	--	IMMATURE/YOUNG	--	1
MEDIUM-LARGE MAMMAL	LONG BONE	FRAGMENT	--	--	--	4
MEDIUM-LARGE MAMMAL	LONG BONE	PROXIMAL FRAGMENT	--	IMMATURE/YOUNG	--	1
MEDIUM-LARGE MAMMAL	LONG BONE	SHAFT FRAGMENT	--	--	--	2
MEDIUM-LARGE MAMMAL	LONG BONE	SHAFT FRAGMENT	--	IMMATURE/YOUNG	--	2
MEDIUM-LARGE MAMMAL	UNIDENTIFIED	--	--	--	--	8
MEDIUM-LARGE MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	4
MEDIUM-LARGE MAMMAL	UNIDENTIFIED	FRAGMENT	--	IMMATURE/YOUNG	--	1
MEDIUM MAMMAL	STERNAL RIBS	FRAGMENT	--	--	--	1
SMALL-MEDIUM MAMMAL	STERNAL RIBS	--	--	--	--	1
SMALL-MEDIUM MAMMAL	STERNAL RIBS	FRAGMENT	--	--	--	1
SMALL-MEDIUM MAMMAL	STERNAL RIBS	SHAFT FRAGMENT	--	IMMATURE/YOUNG	--	1
SMALL-MEDIUM MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	1
MISC. INCLUDES BUFA	LONG BONE	SHAFT FRAGMENT	--	--	--	1
MISC. INCLUDES BUFA	UNIDENTIFIED	--	--	--	--	5
					TOTAL	161

SITE NUMBER: 13291
ASSEMBLAGE NUMBER: 3

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
WOODRAT	FEMUR	FRAGMENT	RIGHT	IMMATURE/YOUNG	--	1
ARTIODACTYLA	LONG BONE	FRAGMENT	--	--	--	1
LARGE MAMMAL	STERNAL RIBS	FRAGMENT	--	--	--	1
LARGE MAMMAL	STERNAL RIBS	PROXIMAL FRAGMENT	--	--	--	1
					TOTAL	4

SITE NUMBER: 13291
ASSEMBLAGE NUMBER: 4

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
ARTIODACTYLA	TOOTH, UNIDENTIFIED	FRAGMENT	--	--	--	7
ARTIODACTYLA	--	--	RIGHT	--	--	1
ARTIODACTYLA	DENTARY	FRAGMENT	--	--	--	1
ARTIODACTYLA	CHEEKTOOTH	FRAGMENT	--	--	--	5
ARTIODACTYLA	NASAL	--	RIGHT	IMMATURE/YOUNG	--	1
SMALL ARTIODACTYLA	METAPODIAL	SHAFT FRAGMENT	--	--	--	1
SMALL ARTIODACTYLA	NAVIC. CUBOID	FRAGMENT	RIGHT	ADULT	--	1
LARGE ARTIODACTYLA	LONG BONE	FRAGMENT	--	--	--	1
BOS/BISON	CHEEKTOOTH	FRAGMENT	--	--	--	9
BOS/BISON	RADIUS	PROXIMAL FRAGMENT	RIGHT	--	--	1
BOS/BISON	PUBIS	FRAGMENT	LEFT	ADULT	--	1
SHEEP/GOAT	MAXILLA	FRAGMENT	LEFT	ADULT	--	1
SHEEP/GOAT	MAXILLA	FRAGMENT	LEFT	IMMATURE/YOUNG	--	1

SHEEP/GOAT	MAXILLA	FRAGMENT	RIGHT	ADULT	--	2
SHEEP/GOAT	MAXILLA	ANTERIOR SECTION	RIGHT	ADULT	--	1
SHEEP/GOAT	DENTARY	FRAGMENT	LEFT	ADULT	--	1
SHEEP/GOAT	DENTARY	FRAGMENT	RIGHT	ADULT	--	1
SHEEP/GOAT	MOLAR, UNIDENTIFIED	FRAGMENT	--	--	--	1
SHEEP/GOAT	CHEEKTOOTH	FRAGMENT	--	--	--	4
SHEEP/GOAT	PREMOLAR	--	LEFT	ADULT	--	1
SHEEP/GOAT	PREMOLAR	FRAGMENT	LEFT	ADULT	--	1
SHEEP/GOAT	HUMERUS	SHAFT FRAGMENT	--	--	--	1
SHEEP/GOAT	RADIUS	PROXIMAL FRAGMENT	--	ADULT	--	1
SHEEP/GOAT	RADIUS	SHAFT FRAGMENT	RIGHT	ADULT	--	1
MAMMALS, UNIDENTIFIED	UNIDENTIFIED	FRAGMENT	--	--	--	1
LARGE MAMMAL	SKULL	FRAGMENT	--	--	--	1
LARGE MAMMAL	SKULL	FRAGMENT	--	IMMATURE/YOUNG	--	1
LARGE MAMMAL	MAXILLA	FRAGMENT	RIGHT	IMMATURE/YOUNG	--	1
LARGE MAMMAL	STERNAL RIBS	SHAFT FRAGMENT	--	--	--	1
LARGE MAMMAL	FLAT BONE	FRAGMENT	--	--	--	1
LARGE MAMMAL	ISCHIUM	FRAGMENT	--	--	--	1
LARGE MAMMAL	LONG BONE	FRAGMENT	--	--	--	2
LARGE MAMMAL	LONG BONE	SHAFT FRAGMENT	--	--	--	13
LARGE MAMMAL	LONG BONE	SHAFT FRAGMENT	--	ADULT	--	1
LARGE MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	3
MEDIUM-LARGE MAMMAL	SKULL	FRAGMENT	--	--	--	2
MEDIUM-LARGE MAMMAL	DENTARY	FRAGMENT	--	--	--	1
MEDIUM-LARGE MAMMAL	VERTEBRA	CENTRUM	--	--	--	1
MEDIUM-LARGE MAMMAL	STERNAL RIBS	FRAGMENT	--	--	--	2
MEDIUM-LARGE MAMMAL	STERNAL RIBS	SHAFT FRAGMENT	--	--	--	1
MEDIUM-LARGE MAMMAL	STERNAL RIBS	DISTAL END	--	IMMATURE/YOUNG	--	1
MEDIUM-LARGE MAMMAL	LONG BONE	FRAGMENT	--	--	--	2
MEDIUM-LARGE MAMMAL	LONG BONE	SHAFT FRAGMENT	--	--	--	5
MEDIUM-LARGE MAMMAL	UNIDENTIFIED	--	--	--	--	2
MEDIUM-LARGE MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	2
MEDIUM MAMMAL	LONG BONE	FRAGMENT	--	--	--	1
MISC. INCLUDES BUFA	UNIDENTIFIED	--	--	--	--	2
BIRDS	LONG BONE	FRAGMENT	--	--	--	1
					TOTAL	95

SITE NUMBER: 13291
ASSEMBLAGE NUMBER: 5

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
ROCK SQUIRREL	DENTARY	FRAGMENT	LEFT	ADULT	--	2
WOODRAT	SKULL	--	--	ADULT	--	1
BEAVER	INNOMINATE	CENTRAL 2/3	RIGHT	ADULT	--	1
ARTIODACTYLA	METAPODIAL	SHAFT FRAGMENT	--	--	--	1
DEER	METATARSALS	PROXIMAL 3/4	LEFT	ADULT	--	1
MEDIUM ARTIODACTYLA	METAPODIAL	SHAFT FRAGMENT	--	--	--	1
SHEEP/GOAT	METACARPALS	FRAGMENT	RIGHT	ADULT	--	1
SHEEP/GOAT	TIBIA	DISTAL 1/4 OR 1/3	LEFT	ADULT	--	1
MAMMALS, UNIDENTIFIED	UNIDENTIFIED	--	--	--	--	1
LARGE MAMMAL	TIBIA	SHAFT FRAGMENT	--	--	--	1
LARGE MAMMAL	LONG BONE	SHAFT FRAGMENT	--	--	--	15
MEDIUM-LARGE MAMMAL	STERNAL RIBS	SHAFT FRAGMENT	--	--	--	1
MEDIUM-LARGE MAMMAL	LONG BONE	SHAFT FRAGMENT	--	--	--	3
MEDIUM-LARGE MAMMAL	UNIDENTIFIED	FRAGMENT	--	--	--	1
SMALL MAMMAL	STERNAL RIBS	FRAGMENT	--	--	--	1
MISC. INCLUDES BUFA	UNIDENTIFIED	FRAGMENT	--	--	--	1
					TOTAL	33

SITE NUMBER: 13291
ASSEMBLAGE NUMBER: 6

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
SHEEP/GOAT	NAVIC. CUBOID	FRAGMENT	RIGHT	NEARLY ADULT	--	1
SHEEP/GOAT	METATARSALS	PROXIMAL 3/4	RIGHT	--	--	1
					TOTAL	2

SITE NUMBER: 13291
ASSEMBLAGE NUMBER: 7

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
MISC. INCLUDES BUFA	UNIDENTIFIED	--	--	--	--	1
					TOTAL	1

SITE NUMBER: 13291
ASSEMBLAGE NUMBER: 8

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
ARTIODACTYLA	TOOTH,UNIDENTIFIED	FRAGMENT	--	--	--	1
PASSIFORMES	UNIDENTIFIED	--	--	--	--	1
					TOTAL	2

SITE NUMBER: 13291
ASSEMBLAGE NUMBER: 9

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
BOS/BISON	PHALANGES	FRAGMENT	--	ADULT	--	1
SHEEP/GOAT	MOLAR, UNIDENTIFIED	COMPLETE	RIGHT	ADULT	--	1
MEDIUM-LARGE MAMMAL	VERTEBRA	FRAGMENT	--	--	--	1
					TOTAL	3

SITE NUMBER: 13292
ASSEMBLAGE NUMBER: 1

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
RACCOON	HUMERUS	DISTAL 1/4 OR 1/3	RIGHT	ADULT	--	1
RACCOON	RADIUS	PROXIMAL FRAGMENT	RIGHT	ADULT	--	1
RACCOON	ULNA	PROXIMAL FRAGMENT	RIGHT	ADULT	--	1
					TOTAL	3

SITE NUMBER: 13293
ASSEMBLAGE NUMBER: 1

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
GOPHER	FEMUR	--	RIGHT	ADULT	--	1
GOPHER	TIBIA	FRAGMENT	RIGHT	ADULT	--	1
COTTONTAIL	TIBIA	SHAFT	RIGHT	--	--	1
MISC. INCLUDES BUFA	UNIDENTIFIED	FRAGMENT	--	--	--	1
					TOTAL	4

SITE NUMBER: 13352
ASSEMBLAGE NUMBER: 1

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
LARGE MAMMAL	TOOTH,UNIDENTIFIED	FRAGMENT	--	--	--	4
					TOTAL	4

SITE NUMBER: 13353
ASSEMBLAGE NUMBER: 1

SPECIES	ELEMENT	PORTION	SIDE	AGE	SEX	# BONES
BOS/BISON	HOOF	--	--	--	--	1
					TOTAL	1

SITE NUMBER: 5011
ASSEMBLAGE NUMBER: 1

		LOW MUSCLE MASS				HIGH MUSCLE MASS				
SPECIES	AGE	VERTEBRAE	PELVIS	SKULL	L.LEG	RIBS	SCAPULA	U.LEG	MISC.	LB.FRAG
WOODRAT	NEARLY ADULT	0	0	0	0	0	0	2	0	0
MAMMALS, UNIDENTIFIED	--	0	0	0	0	0	0	0	1	0
LARGE MAMMAL	--	2	0	0	0	0	0	0	2	4
MEDIUM-LARGE MAMMAL	--	0	0	0	0	0	0	0	1	0
SMALL, NEOTOMA SIZED, MAMMAL	IMMATURE/YOUNG	1	0	0	0	0	0	0	0	0

SITE NUMBER: 5011
ASSEMBLAGE NUMBER: 2

		LOW MUSCLE MASS				HIGH MUSCLE MASS				
SPECIES	AGE	VERTEBRAE	PELVIS	SKULL	L.LEG	RIBS	SCAPULA	U.LEG	MISC.	LB.FRAG
LARGE MAMMAL	--	0	0	0	0	0	0	0	1	1
MEDIUM MAMMAL	--	0	0	0	0	0	0	0	1	0

SITE NUMBER: 10114
ASSEMBLAGE NUMBER: 1

		LOW MUSCLE MASS				HIGH MUSCLE MASS				
SPECIES	AGE	VERTEBRAE	PELVIS	SKULL	L.LEG	RIBS	SCAPULA	U.LEG	MISC.	LB.FRAG
ARTIODACTYLA	--	0	0	3	0	1	0	0	0	0
DEER	--	2	0	0	0	0	0	0	0	0
MEDIUM ARTIODACTYLA	--	1	0	0	0	0	0	0	0	1
SHEEP/GOAT	--	0	0	2	2	0	0	1	0	0
SHEEP/GOAT	ADULT	0	0	0	5	0	0	0	0	0
SHEEP/GOAT	NEARLY ADULT	2	0	0	0	0	0	0	0	0
SHEEP/GOAT	IMMATURE/YOUNG	0	0	1	0	1	0	0	0	0
SHEEP/GOAT	VERY YOUNG	0	1	0	0	0	0	0	0	0
MAMMALS, UNIDENTIFIED	--	0	0	0	0	0	0	0	0	1
LARGE MAMMAL	--	0	0	1	0	0	0	1	0	1
MEDIUM-LARGE MAMMAL	--	0	0	3	2	9	1	0	17	57
MEDIUM-LARGE MAMMAL	IMMATURE/YOUNG	1	0	0	0	0	0	0	0	0
MEDIUM MAMMAL	--	0	0	0	1	6	0	0	10	0
SMALL-MEDIUM MAMMAL	--	1	0	0	0	1	0	0	1	3
MISC. INCLUDES BUFA	--	0	0	0	0	0	0	0	19	0
MEDIUM BIRD	--	0	0	0	0	1	0	0	0	0
RAVEN	ADULT	0	0	0	1	0	0	0	0	0

SITE NUMBER: 10114
ASSEMBLAGE NUMBER: 2

		LOW MUSCLE MASS				HIGH MUSCLE MASS				
SPECIES	AGE	VERTEBRAE	PELVIS	SKULL	L.LEG	RIBS	SCAPULA	U.LEG	MISC.	LB.FRAG
ARTIODACTYLA	--	0	5	5	2	0	0	0	0	2
ARTIODACTYLA	VERY YOUNG	0	0	1	0	0	0	0	0	0
DEER	--	0	0	3	0	0	0	0	0	0
MEDIUM ARTIODACTYLA	--	0	0	0	0	0	0	1	0	1
SMALL ARTIODACTYLA	--	0	0	0	2	1	0	0	0	6
SHEEP/GOAT	--	0	0	5	1	0	0	0	0	0
SHEEP/GOAT	ADULT	0	0	1	0	0	0	0	0	0
LARGE MAMMAL	--	0	0	0	0	3	0	0	1	11
MEDIUM-LARGE MAMMAL	--	1	0	1	0	5	0	0	15	25
MEDIUM MAMMAL	--	1	1	0	1	2	0	0	2	1
SMALL-MEDIUM MAMMAL	--	0	0	0	0	0	0	0	2	0
MISC. INCLUDES BUFA	--	0	0	0	0	0	0	0	7	0
MOURNING DOVE	--	0	0	0	0	0	0	1	0	0
BIRDS	--	0	0	0	0	0	0	0	1	0
RAVEN	--	0	0	0	1	0	0	0	0	0

SITE NUMBER: 10114
ASSEMBLAGE NUMBER: 3

SPECIES	AGE	LOW MUSCLE MASS VERTEBRAE	PELVIS	SKULL	L.LEG	HIGH MUSCLE MASS RIBS	SCAPULA	U.LEG	MISC.	LB.FRAG
MOOSE	--	0	0	1	0	0	0	0	0	0
ARTIODACTYLA	--	2	0	1	0	1	0	0	0	2
DEER	--	0	0	2	0	0	0	0	0	0
SMALL ARTIODACTYLA	--	0	0	0	1	0	0	0	0	3
SHEEP/GOAT	--	0	1	4	6	0	0	0	0	0
SHEEP/GOAT	IMMATURE/YOUNG	0	0	0	5	0	0	0	0	0
DOG	--	0	0	1	1	0	0	0	0	0
MAMMALS, UNIDENTIFIED	--	0	0	0	0	1	0	0	0	0
LARGE MAMMAL	--	0	0	0	1	0	0	0	2	19
MEDIUM-LARGE MAMMAL	--	0	0	2	1	7	1	0	32	44
MEDIUM MAMMAL	--	0	0	2	0	7	1	0	5	4
SMALL-MEDIUM MAMMAL	--	0	0	0	0	3	0	0	0	0
SMALL-MEDIUM MAMMAL	IMMATURE/YOUNG	0	0	0	0	1	0	0	0	0
MISC. INCLUDES BUFA	--	0	0	0	0	0	0	0	3	0
BIRDS	--	0	0	0	0	0	0	0	1	0

SITE NUMBER: 10114
ASSEMBLAGE NUMBER: 4

SPECIES	AGE	LOW MUSCLE MASS VERTEBRAE	PELVIS	SKULL	L.LEG	HIGH MUSCLE MASS RIBS	SCAPULA	U.LEG	MISC.	LB.FRAG
ARTIODACTYLA	--	0	1	0	0	0	0	0	0	0
ARTIODACTYLA	VERY YOUNG	0	0	1	0	0	0	0	0	0
MEDIUM ARTIODACTYLA	--	0	0	4	0	0	0	0	0	0
JACKRABBIT	IMMATURE/YOUNG	0	0	0	1	0	0	0	0	0
SHEEP/GOAT	--	1	0	1	0	0	0	0	0	0
LARGE MAMMAL	--	0	0	0	0	0	0	0	2	3
MEDIUM-LARGE MAMMAL	--	2	0	6	1	7	0	0	44	22
MEDIUM MAMMAL	--	0	0	0	1	4	1	0	14	3
SMALL-MEDIUM MAMMEL	--	0	0	0	0	0	0	0	4	2
SMALL-MEDIUM MAMMAL	VERY YOUNG	0	0	0	0	1	0	0	0	0
SMALL MAMMAL	--	0	0	0	0	2	0	0	0	0
MISC. INCLUDES BUFA	--	0	0	0	0	0	0	0	2	0

SITE NUMBER: 10114
ASSEMBLAGE NUMBER: 5

SPECIES	AGE	LOW MUSCLE MASS VERTEBRAE	PELVIS	SKULL	L.LEG	HIGH MUSCLE MASS RIBS	SCAPULA	U.LEG	MISC.	LB.FRAG
GOPHER	--	0	0	1	0	0	0	0	0	0
GOPHER	IMMATURE/YOUNG	0	0	0	0	0	0	1	0	0
COTTONTAIL	--	0	0	1	0	0	0	0	0	0
LARGE MAMMAL	--	0	0	1	0	0	0	0	0	1
MEDIUM-LARGE MAMMAL	--	0	0	0	0	1	0	0	1	1
SMALL-MEDIUM MAMMAL	--	1	0	0	0	1	0	0	0	0

SITE NUMBER: 10114
ASSEMBLAGE NUMBER: 6

SPECIES	AGE	LOW MUSCLE MASS VERTEBRAE	PELVIS	SKULL	L.LEG	HIGH MUSCLE MASS RIBS	SCAPULA	U.LEG	MISC.	LB.FRAG
ARTIODACTYLA	--	1	0	0	2	0	0	0	0	1
SHEEP/GOAT	--	0	0	1	0	0	0	0	0	0
MAMMALS, UNIDENTIFIED	--	0	0	0	0	0	0	0	3	0
MEDIUM-LARGE MAMMAL	--	0	0	0	1	0	1	0	17	5
MISC. INCLUDES BUFA	--	0	0	0	0	0	0	1	1	0

SITE NUMBER: 10114
ASSEMBLAGE NUMBER: 7

SPECIES	AGE	LOW MUSCLE MASS VERTEBRAE	PELVIS	SKULL	L.LEG	HIGH MUSCLE MASS RIBS	SCAPULA	U.LEG	MISC.	LB.FRAG
MEDIUM-LARGE MAMMAL	--	0	0	0	0	0	1	0	0	1

SITE NUMBER: 13049

Site number	Assemblage number	Species	Age	Low muscle mass: Vertebrae	Low muscle mass: Pelvis	Skull	L.Leg	High muscle mass: Ribs	High muscle mass: Scapula	U.Leg	Misc.	LB.Frag
	2	ARTIODACTYLA	--	0	0	0	0	0	0	0	0	1
13049	3	SMALL MAMMAL	--	0	1	0	0	0	0	0	0	0
13050	1	WOODRAT	--	0	0	0	0	0	0	1	0	0
		LARGE MAMMAL	NEARLY ADULT	0	0	0	0	0	0	1	0	0
13050	2	TURKEY	--	0	0	0	1	0	0	0	0	0
13050	3	LAND SNAIL	--	0	0	0	0	0	0	0	1	0
13050	6	GRASSHOPPER MOUSE	IMMATURE/YOUNG	0	0	2	0	0	0	0	0	0
		SMALL MAMMAL	--	0	0	0	0	0	0	1	0	0
13050	7	GOPHER	IMMATURE/YOUNG	0	0	1	0	0	0	0	0	0
		SMALL MAMMAL	--	0	0	0	0	0	0	0	1	2
13050	9	TESTUDINATA	--	0	0	0	0	0	0	0	3	0

APPENDIX XI — MEAT PACKAGE SUMMARY

SITE NUMBER: 13054
ASSEMBLAGE NUMBER: 1

SPECIES	AGE	LOW MUSCLE MASS VERTEBRAE	LOW MUSCLE MASS PELVIS	SKULL	L.LEG	HIGH MUSCLE MASS RIBS	HIGH MUSCLE MASS SCAPULA	U.LEG	MISC.	LB.FRAG
ABERTS SQUIRREL	ADULT	0	1	0	0	0	0	0	0	0
MAMMALS, UNIDENTIFIED	--	0	0	0	0	0	0	0	1	0
LARGE MAMMAL	--	0	0	0	1	0	0	0	0	10
MEDIUM-LARGE MAMMAL	--	0	0	0	0	0	0	0	0	2
SMALL MAMMAL	--	0	0	0	0	0	0	0	1	0
SMALL, NEOTOMA SIZED, MAMMAL	--	0	0	1	0	0	0	0	0	0
TURKEY	ADULT	0	0	0	1	0	0	0	0	0

SITE NUMBER: 13054
ASSEMBLAGE NUMBER: 7

SPECIES	AGE	LOW MUSCLE MASS VERTEBRAE	LOW MUSCLE MASS PELVIS	SKULL	L.LEG	HIGH MUSCLE MASS RIBS	HIGH MUSCLE MASS SCAPULA	U.LEG	MISC.	LB.FRAG
GOPHER	NEARLY ADULT	0	0	0	0	0	0	1	0	0
ROCK SQUIRREL	ADULT	0	0	1	0	0	0	0	0	0
ABERTS SQUIRREL	--	0	0	0	1	0	0	0	0	0
MAMMALS, UNIDENTIFIED	--	0	0	0	0	0	0	0	1	0
MEDIUM MAMMAL	--	0	0	0	0	0	0	0	0	1

SITE NUMBER: 13084
ASSEMBLAGE NUMBER: 2

SPECIES	AGE	LOW MUSCLE MASS VERTEBRAE	LOW MUSCLE MASS PELVIS	SKULL	L.LEG	HIGH MUSCLE MASS RIBS	HIGH MUSCLE MASS SCAPULA	U.LEG	MISC.	LB.FRAG
WOODRAT	--	0	0	0	0	0	0	1	0	0

SITE NUMBER: 13084
ASSEMBLAGE NUMBER: 3

SPECIES	AGE	LOW MUSCLE MASS VERTEBRAE	LOW MUSCLE MASS PELVIS	SKULL	L.LEG	HIGH MUSCLE MASS RIBS	HIGH MUSCLE MASS SCAPULA	U.LEG	MISC.	LB.FRAG
SCELOPORUS	--	0	0	1	0	0	0	0	0	0

SITE NUMBER: 13084
ASSEMBLAGE NUMBER: 9

SPECIES	AGE	LOW MUSCLE MASS VERTEBRAE	LOW MUSCLE MASS PELVIS	SKULL	L.LEG	HIGH MUSCLE MASS RIBS	HIGH MUSCLE MASS SCAPULA	U.LEG	MISC.	LB.FRAG
MISC. INCLUDES PUFA	--	0	0	0	0	0	0	0	1	0

SITE NUMBER: 13086
ASSEMBLAGE NUMBER: 8

SPECIES	AGE	LOW MUSCLE MASS VERTEBRAE	LOW MUSCLE MASS PELVIS	SKULL	L.LEG	HIGH MUSCLE MASS RIBS	HIGH MUSCLE MASS SCAPULA	U.LEG	MISC.	LB.FRAG
GOPHER	--	0	0	0	0	0	0	1	0	0
JACKRABBIT	--	0	0	0	0	0	0	1	0	0
MEDIUM-LARGE MAMMAL	--	0	0	0	0	0	0	0	1	3
SMALL-MEDIUM MAMMAL	--	0	0	0	0	0	0	0	1	0

SITE NUMBER: 13086
ASSEMBLAGE NUMBER: 12

SPECIES	AGE	LOW MUSCLE MASS VERTEBRAE	LOW MUSCLE MASS PELVIS	SKULL	L.LEG	HIGH MUSCLE MASS RIBS	HIGH MUSCLE MASS SCAPULA	U.LEG	MISC.	LB.FRAG
COTTONTAIL	--	0	0	0	1	0	0	0	0	0

SITE NUMBER: 13086
ASSEMBLAGE NUMBER: 14

		LOW MUSCLE MASS				HIGH MUSCLE MASS				
SPECIES	AGE	VERTEBRAE	PELVIS	SKULL	L.LEG	RIBS	SCAPULA	U.LEG	MISC.	LB.FRAG
SMALL MAMMAL	--	0	0	0	0	0	0	0	0	1
TURKEY	--	0	0	0	1	0	0	0	0	1
JAY	--	0	0	1	0	0	0	0	1	0

SITE NUMBER: 13086
ASSEMBLAGE NUMBER: 15

		LOW MUSCLE MASS				HIGH MUSCLE MASS				
SPECIES	AGE	VERTEBRAE	PELVIS	SKULL	L.LEG	RIBS	SCAPULA	U.LEG	MISC.	LB.FRAG
WOODRAT	--	0	0	0	4	0	0	1	0	0
SMALL-MEDIUM MAMMAL	--	0	0	0	0	0	0	0	0	1
SMALL MAMMAL	--	0	0	0	0	0	0	0	0	1
MISC. INCLUDES BUFA	--	0	0	0	0	0	0	0	1	0
VERTEBRATE	--	0	0	0	0	0	0	0	0	1
EUMACES OBSOL.	--	0	0	0	0	0	0	0	0	0

SITE NUMBER: 13086
ASSEMBLAGE NUMBER: 19

		LOW MUSCLE MASS				HIGH MUSCLE MASS				
SPECIES	AGE	VERTEBRAE	PELVIS	SKULL	L.LEG	RIBS	SCAPULA	U.LEG	MISC.	LB.FRAG
SMALL-MEDIUM MAMMAL	--	0	0	0	0	0	0	0	3	0

SITE NUMBER: 13291
ASSEMBLAGE NUMBER: 1

		LOW MUSCLE MASS				HIGH MUSCLE MASS				
SPECIES	AGE	VERTEBRAE	PELVIS	SKULL	L.LEG	RIBS	SCAPULA	U.LEG	MISC.	LB.FRAG
RODENTIA, UNIDENTIFIED	--	0	0	3	0	0	0	0	0	0
GOPHER	IMMATURE/YOUNG	0	0	0	0	0	0	1	0	0
WOODRAT	VERY YOUNG	0	0	2	0	0	0	0	0	0
ARTIODACTYLA	--	3	0	40	2	1	0	0	1	6
ARTIODACTYLA	ADULT	3	0	1	0	0	0	0	0	0
ARTIODACTYLA	IMMATURE/YOUNG	0	1	3	1	0	0	0	1	0
ARTIODACTYLA	VERY YOUNG	0	2	3	0	0	0	0	0	0
ARTIODACTYLA	OLD	0	0	1	0	0	0	0	0	0
DEER	IMMATURE/YOUNG	0	0	0	0	0	0	0	1	0
DEER	VERY YOUNG	0	0	0	0	0	0	0	1	0
MEDIUM ARTIODACTYLA	IMMATURE/YOUNG	0	0	0	0	0	0	0	1	0
SMALL ARTIODACTYLA	--	0	0	2	0	1	0	1	0	0
SMALL ARTIODACTYLA	ADULT	0	0	2	0	0	0	0	0	0
CERVID	--	0	0	4	0	0	0	0	0	0
CERVID	ADULT	0	0	1	0	0	0	0	0	0
COTTONTAIL	--	0	1	3	0	0	0	0	0	0
COTTONTAIL	ADULT	0	0	1	0	0	0	1	0	0
COTTONTAIL	IMMATURE/YOUNG	0	0	0	1	0	0	0	0	0
SHEEP/GOAT	--	1	0	13	1	1	0	0	0	0
SHEEP/GOAT	ADULT	0	1	6	16	0	0	1	0	0
SHEEP/GOAT	NEARLY ADULT	0	0	1	0	0	0	0	0	0
SHEEP/GOAT	IMMATURE/YOUNG	0	0	2	0	0	0	0	0	0
SHEEP/GOAT	VERY YOUNG	0	0	0	0	0	0	1	0	0
SHEEP/GOAT	OLD	0	0	1	0	0	0	0	0	0
MAMMALS, UNIDENTIFIED	--	2	0	5	0	0	0	0	12	10
MAMMALS, UNIDENTIFIED	IMMATURE/YOUNG	1	0	0	0	0	0	0	0	0
MAMMALS, UNIDENTIFIED	VERY YOUNG	0	0	0	0	0	0	0	1	0
LARGE MAMMAL	--	1	0	11	0	20	1	0	40	55
LARGE MAMMAL	ADULT	3	0	0	0	0	0	0	0	0
LARGE MAMMAL	IMMATURE/YOUNG	0	0	2	0	1	0	0	0	1
LARGE MAMMAL	VERY YOUNG	0	0	1	0	0	0	0	0	0
MEDIUM-LARGE MAMMAL	--	3	0	11	0	8	0	0	45	20
MEDIUM-LARGE MAMMAL	IMMATURE/YOUNG	2	0	7	0	0	0	0	5	0
MEDIUM-LARGE MAMMAL	VERY YOUNG	1	0	1	0	2	0	0	0	0
MEDIUM MAMMAL	--	1	0	0	0	3	0	0	3	0
MEDIUM MAMMAL	IMMATURE/YOUNG	0	0	0	0	0	0	0	1	0
SMALL-MEDIUM MAMMAL	--	0	0	0	0	5	1	0	8	3
SMALL-MEDIUM MAMMAL	IMMATURE/YOUNG	0	0	0	0	1	0	0	0	0
SMALL MAMMAL	--	0	0	0	0	0	0	0	0	1
SMALL VERTEBRATE	ADULT	0	0	0	1	0	0	0	0	0

MISC. INCLUDES BUFA	--	0	0	0	0	0	0	0	17	1
MISC. INCLUDES BUFA	IMMATURE/YOUNG	0	0	0	0	0	0	0	1	0
BIRDS	--	0	0	0	0	0	0	0	0	1
ANURAN SCAPHIOPUS	--	0	0	0	0	0	0	1	0	0

SITE NUMBER: 13291
ASSEMBLAGE NUMBER: 2

		LOW MUSCLE MASS				HIGH MUSCLE MASS				
SPECIES	AGE	VERTEBRAE	PELVIS	SKULL	L.LEG	RIBS	SCAPULA	U.LEG	MISC.	LB.FRAG
ARTIODACTYLA	--	0	0	11	1	2	0	1	0	9
ARTIODACTYLA	ADULT	0	0	1	0	0	0	0	0	0
ARTIODACTYLA	IMMATURE/YOUNG	0	0	4	0	0	0	0	0	0
ARTIODACTYLA	VERY YOUNG	0	0	1	0	0	0	0	0	0
DEER	--	0	0	1	0	0	0	0	0	0
MEDIUM ARTIODACTYLA	--	0	0	1	0	0	0	0	0	0
SMALL ARTIODACTYLA	ADULT	1	0	0	0	0	0	0	0	0
BOS/BISON	ADULT	0	0	1	0	0	0	0	0	0
BOS/BISON	IMMATURE/YOUNG	0	0	1	0	0	0	2	0	0
COTTONTAIL	--	0	0	0	1	0	0	0	0	0
SHEEP/GOAT	--	2	0	0	1	0	0	1	1	0
SHEEP/GOAT	ADULT	0	0	3	0	0	0	0	1	0
SHEEP/GOAT	IMMATURE/YOUNG	1	0	2	0	0	0	0	1	0
SHEEP/GOAT	VERY YOUNG	0	0	0	0	0	0	0	1	0
MAMMALS, UNIDENTIFIED	--	1	0	1	0	0	0	0	1	0
LARGE MAMMAL	--	0	0	5	0	3	0	0	8	22
LARGE MAMMAL	IMMATURE/YOUNG	0	0	1	0	0	1	0	0	0
MEDIUM-LARGE MAMMAL	--	2	0	13	0	1	0	0	12	6
MEDIUM-LARGE MAMMAL	IMMATURE/YOUNG	0	0	8	0	1	0	0	1	3
MEDIUM MAMMAL	--	0	0	0	0	1	0	0	0	0
SMALL-MEDIUM MAMMAL	--	0	0	0	0	2	0	0	1	0
SMALL-MEDIUM MAMMAL	IMMATURE/YOUNG	0	0	0	0	1	0	0	0	0
MISC. INCLUDES BUFA	--	0	0	0	0	0	0	0	5	1

SITE NUMBER: 13291
ASSEMBLAGE NUMBER: 3

		LOW MUSCLE MASS				HIGH MUSCLE MASS				
SPECIES	AGE	VERTEBRAE	PELVIS	SKULL	L.LEG	RIBS	SCAPULA	U.LEG	MISC.	LB.FRAG
WOODRAT	IMMATURE/YOUNG	0	0	0	0	0	0	1	0	0
ARTIODACTYLA	--	0	0	0	0	0	0	0	0	1
LARGE MAMMAL	--	0	0	0	0	2	0	0	0	0

SITE NUMBER: 13291
ASSEMBLAGE NUMBER: 4

		LOW MUSCLE MASS				HIGH MUSCLE MASS				
SPECIES	AGE	VERTEBRAE	PELVIS	SKULL	L.LEG	RIBS	SCAPULA	U.LEG	MISC.	LB.FRAG
ARTIODACTYLA	--	0	0	14	0	0	0	0	0	0
ARTIODACTYLA	IMMATURE/YOUNG	0	0	1	0	0	0	0	0	0
SMALL ARTIODACTYL	--	0	0	0	1	0	0	0	0	0
SMALL ARTIODACTYLA	ADULT	0	0	0	1	0	0	0	0	0
LARGE ARTIODACTYLA	--	0	0	0	0	0	0	0	0	1
BOS/BISON	--	0	0	9	1	0	0	0	0	0
BOS/BISON	ADULT	0	1	0	0	0	0	0	0	0
SHEEP/GOAT	--	0	0	5	0	0	0	1	0	0
SHEEP/GOAT	ADULT	0	0	8	2	0	0	0	0	0
SHEEP/GOAT	IMMATURE/YOUNG	0	0	1	0	0	0	0	0	0
MAMMALS, UNIDENTIFIED	--	0	0	0	0	0	0	0	1	0
LARGE MAMMAL	--	0	1	1	0	1	0	0	4	15
LARGE MAMMAL	ADULT	0	0	0	0	0	0	0	0	1
LARGE MAMMAL	IMMATURE/YOUNG	0	0	2	0	0	0	0	0	0
MEDIUM-LARGE MAMMAL	--	1	0	3	0	3	0	0	4	7
MEDIUM-LARGE MAMMAL	IMMATURE/YOUNG	0	0	0	0	1	0	0	0	0
MEDIUM MAMMAL	--	0	0	0	0	0	0	0	0	1
MISC. INCLUDES BUFA	--	0	0	0	0	0	0	0	2	0
BIRDS	--	0	0	0	0	0	0	0	0	1

SITE NUMBER: 13291
ASSEMBLAGE NUMBER: 5

SPECIES	AGE	LOW MUSCLE MASS VERTEBRAE	PELVIS	SKULL	L.LEG	HIGH MUSCLE MASS RIBS	SCAPULA	U.LEG	MISC.	LB.FRAG
ROCK SQUIRREL	ADULT	0	0	2	0	0	0	0	0	0
WOODRAT	ADULT	0	0	1	0	0	0	0	0	0
BEAVER	ADULT	0	1	0	0	0	0	0	0	0
ARTIODACTYLA	--	0	0	0	1	0	0	0	0	0
DEER	ADULT	0	0	0	1	0	0	0	0	0
MEDIUM ARTIODACTYLA	--	0	0	0	1	0	0	0	0	0
SHEEP/GOAT	ADULT	0	0	0	2	0	0	0	0	0
MAMMALS, UNIDENTIFIED	--	0	0	0	0	0	0	0	1	0
LARGE MAMMAL	--	0	0	0	1	0	0	0	0	15
MEDIUM-LARGE MAMMAL	--	0	0	0	0	1	0	0	1	3
SMALL MAMMAL	--	0	0	0	0	1	0	0	0	0
MISC. INCLUDES BUFA	--	0	0	0	0	0	0	0	1	0

SITE NUMBER: 13291
ASSEMBLAGE NUMBER: 6

SPECIES	AGE	LOW MUSCLE MASS VERTEBRAE	PELVIS	SKULL	L.LEG	HIGH MUSCLE MASS RIBS	SCAPULA	U.LEG	MISC.	LB.FRAG
SHEEP/GOAT	--	0	0	0	1	0	0	0	0	0
SHEEP/GOAT	NEARLY ADULT	0	0	0	1	0	0	0	0	0

SITE NUMBER: 13291
ASSEMBLAGE NUMBER: 7

SPECIES	AGE	LOW MUSCLE MASS VERTEBRAE	PELVIS	SKULL	L.LEG	HIGH MUSCLE MASS RIBS	SCAPULA	U.LEG	MISC.	LB.FRAG
MISC. INCLUDES BUFA	--	0	0	0	0	0	0	0	1	0

SITE NUMBER: 13291
ASSEMBLAGE NUMBER: 8

SPECIES	AGE	LOW MUSCLE MASS VERTEBRAE	PELVIS	SKULL	L.LEG	HIGH MUSCLE MASS RIBS	SCAPULA	U.LEG	MISC.	LB.FRAG
ARTIODACTYLA	--	0	0	1	0	0	0	0	0	0
PASSIFORMES	--	0	0	0	0	0	0	0	1	0

SITE NUMBER: 13291
ASSEMBLAGE NUMBER: 9

SPECIES	AGE	LOW MUSCLE MASS VERTEBRAE	PELVIS	SKULL	L.LEG	HIGH MUSCLE MASS RIBS	SCAPULA	U.LEG	MISC.	LB.FRAG
BOS/BISON	ADULT	0	0	0	1	0	0	0	0	0
SHEEP/GOAT	ADULT	0	0	1	0	0	0	0	0	0
MEDIUM-LARGE MAMMAL	--	1	0	0	0	0	0	0	0	0

SITE NUMBER: 13292
ASSEMBLAGE NUMBER: 1

SPECIES	AGE	LOW MUSCLE MASS VERTEBRAE	PELVIS	SKULL	L.LEG	HIGH MUSCLE MASS RIBS	SCAPULA	U.LEG	MISC.	LB.FRAG
RACCOON	ADULT	0	0	0	2	0	0	1	0	0

SITE NUMBER. 13293
ASSEMBLAGE NUMBER: 1

SPECIES	AGE	LOW MUSCLE MASS VERTEBRAE	PELVIS	SKULL	L.LEG	HIGH MUSCLE MASS RIBS	SCAPULA	U.LEG	MISC.	LB.FRAG
GOPHER	ADULT	0	0	0	1	0	0	1	0	0
COTTONTAIL	--	0	0	0	1	0	0	0	0	0
MISC. INCLUDES BUFA	--	0	0	0	0	0	0	0	1	0

SITE NUMBER: 13352
ASSEMBLAGE NUMBER: 1

		LOW MUSCLE MASS				HIGH MUSCLE MASS				
SPECIES	AGE	VERTEBRAE	PELVIS	SKULL	L.LEG	RIBS	SCAPULA	U.LEG	MISC.	LB.FRAG
LARGE MAMMAL	--	0	0	4	0	0	0	0	0	0

SITE NUMBER: 13353
ASSEMBLAGE NUMBER: 1

		LOW MUSCLE MASS				HIGH MUSCLE MASS				
SPECIES	AGE	VERTEBRAE	PELVIS	SKULL	L.LEG	RIBS	SCAPULA	U.LEG	MISC.	LB.FRAG
BOS/BISON	--	0	0	0	1	0	0	0	0	0

OBSIDIAN HYDRATION DATA

(prepared by Fred Trembour)

LA No.	Provenience	Depth below Surface	Artifact No.	Material Taxon	Edge	Hydration um	Hydration $(um)^2$	Remarks
5011	Surface	0 cm	1	3523	right	5.29	28.0	
	Room 1, Strat 1	0-30 cm	57	3520	left	2.55	6.50	right edge ca. 40 *um* hydration; geol. surface
			58	3520	left	2.79	7.78	
			102	3520	right	8.01	64.1	
					bottom	2.74	7.51	
			107	3520	left	2.69	7.22	
			110	3520	left	3.30	10.9	
			138	3520				
			149	3520	left	5.96	35.5	
					right	2.02	4.08	
			153	3520				
			170	3520				
10114	Surface	0 cm	19	3523	right	5.53	30.6	
			20	3524	right	7.63	58.3	
			22	3510	right	6.25	39.1	
			23	3520	right	7.47	55.9	
			120	3525	right	9.74	94.8	
			121	3523	right	5.00	25.0	
	Room 1, Strat 3	26-39 cm	135	3520	left	1.81	3.28	
			174	3528	left	5.91	34.9	
13050	Surface	0 cm	3		right	2.26	5.11	left edge ca. 55 *um* hydration; geol. surface
			26		left	7.63	58.3	case of flake reuse, or older facet of geol.
					right	2.61	6.80	origin?
			634		right	5.19	26.9	
	Room 1, Strat 1	0-40 cm	340	3520	left	4.95	24.5	
			390	3525	right	6.57	43.2	
			392	3523	right	6.70	44.9	difference in hydr. depth between two edges;
					left	1.99	3.98	a reused flake?
			393	3525	right	2.05	4.20	
			394	3525	left	4.95	24.5	
			403	3523	right	3.22	10.4	
	Room 1, Strat 2	0-40 cm	431	3523	right	6.04	36.5	
	Room 2, Strat 1	0-20 cm	126	3520	left	7.63	58.3	anomaly: right edge nil hydration
	Room 2, Strat 2	20-45 cm	176	3520	right	5.82	33.9	
			177	3520	right	3.01	9.04	marked difference in hydration depths on this
					left	8.06	65.0	flake; due to reuse?
			186	3500	left & right	4.65	21.7	differing hydration among flake facets
					bottom	8.99	80.8	
			194	3523	right	6.01	36.1	hydrations on three facets agree
			196	3526	left	2.63	6.93	

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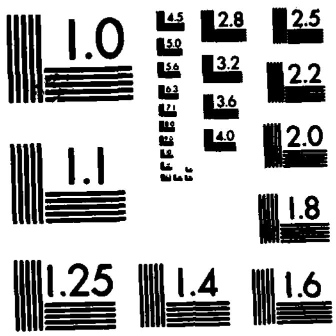


MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

Obsidian Hydration Data (Continued)

LA No.	Provenience	Depth below Surface	Artifact No.	Material Taxon	Edge	Hydration um	Hydration $(um)^2$	Remarks
13050 (cont)	51/54: Strat 2	40-80 cm	452	3500	left	2.45	6.00	
13054	Room 1: Level A	0-10 cm	598	3525		NIL or UNDETECTED		very dark obsidian
			770	3520	right	4.15	17.2	
	Room 1: Level D	30-40 cm	562	3523	left	5.56	30.9	
			563	3520	left	5.08	25.8	
				3520	right	2.02	4.08	
			566	3523	left	5.88	34.6	
			767	3528	left	1.81	3.28	
	Room 1: Level E	40-50 cm	623	3525	left	1.91	3.67	
	Room 1: Level F	50-60 cm	707	3525	right	2.29	5.24	
	Room 1: Level G	60-70 cm	809	3520	right	3.54	12.5	
	Room 2, Strat 1	0-10 cm	130	3520	left	4.71	22.2	the single-faceted side of flake
					right	7.74	59.9	the multifaceted side of flake
			134	3520	right	3.11	9.67	left edge of ca. 20 um hydr.; geol. surf.? this facet rectangular and slightly concave
			159	3520	right	8.56	73.4	
			246	3525	right	4.31	18.6	
			255	3523	right	2.42	5.86	very dark obsidian
			257	3525	left	4.26	18.1	
			258	3525	left	4.79	22.9	right edge ca. 52 um hydr., concave facet
			263	3525	left	4.55	20.7	
					right	2.05	8.62	this side of flake with I.D. mark
			408	3525	top	4.31	18.6	
13076	Surface	0 cm	824	3520	left	3.72	13.9	
			997	3520	left	2.79	7.80	
	Room 2, Strat 1	0-20-30 cm	655	3523		NIL or UNDETECTED		very little light transmission by sect.
			656	3523		NIL or UNDETECTED		very little light transmission by sect.
			657	3523	left	1.89	3.57	
			807	3523	right	1.86	3.46	
	52/52 Feature: Strat 1	0-23 cm	442	3523	left	1.65	2.72	
			444	3523	right	2.95	8.70	
			445	3520	left	2.61	6.81	
			446	3523	left	2.10	4.41	right edge ca. 21.5 um hydr.; geol. surf.
13084	Room 1:Level A	0-10 cm	2111	3520	right	4.28	18.3	
	Room 4:Level A	0-10 cm	1240	3520	left	1.97	3.88	
13086	Exterior Surface	0 cm	632	3520	left	3.83	14.7	
			2175	3523	left	2.53	6.39	
			2351	3525	right	3.17	10.0	
	Room 2, Strat 3	14-24 cm to 29-49 cm	3059	3525	right	2.50	6.25	left edge ca. 50 um hydration; geol. surf.

Obsidian Hydration Data (Continued)

LA No.	Provenience	Depth below Surface	Artifact No.	Material Taxon	Edge	Hydration um	Hydration $(um)^2$	Remarks
			3061	3525	left	5.19	26.9	This dorsal facet borders a cortex patch
					right	2.63	6.92	
			3258	3520	left	2.55	6.50	
			3410	3523	right	4.02	16.2	
			3411	3520	left	2.07	4.31	
	Room 3, Strat 2	1-21 cm to 10-40 cm	1394	3520	left	3.11	9.67	
			1412	3528	right	5.08	25.8	
			1457	3520	right	2.05	4.20	left edge ca. 40 um hydration; geol. surface
			3038	3525	left	7.63	58.3	
	Room 4, Strat 4B	10-20 cm to 73-83 cm	708	3520	left	2.23	4.99	
			1141	3520	left	2.18	4.75	
	Room 4: Strat 5		1163	3520	right	2.21	4.88	left edge ca. 23 um hydration; geol. surface
			1168	3520	right	2.95	8.70	left edge ca. 44 um hydration; geol. surface
			1246	3525	left	3.72	13.9	
	Room 5, Strat 1	0-4 cm	4476	3528	left	5.11	26.1	
13291	Room 1:Level A	0-10 cm	651	3520	left	1.76	3.08	
			781	3520	right	1.94	3.76	
			783	3525	left	8.70	75.7	anomaly; rt. edge nil hydration
	Room 1: Level B	10-20 cm	676	3520	left	2.05	4.20	
	Room 1: Level E	40-50 cm	431	3520	right	1.94	3.76	
13350	Surface	0 cm	1	3520	left	3.03	9.18	
			2	3520	left	4.39	19.3	
13351	Surface	0 cm	224	3528	right	6.04	36.5	
			278	3525	left	7.00	49.0	
			282	3530	left	2.61	6.80	
			293	3520	right	4.79	22.9	
			294	3530	left	2.39	5.73	
			301	3523	left	6.52	42.5	
					right	16.2	261.0	a dorsal flake facet; cultural?
			302	3523	right	7.13	50.8	
			303	3523	right	8.94	79.9	
					left	2.39	5.73	
13352	Surface	0 cm	90	3525	NIL or UNDETECTED			
			474	3525	left	6.33	40.1	
13353	Surface	0 cm	34	3525	right	4.97	24.7	
			241	3510	right	5.85	34.2	
			426	3510	left	5.35	28.6	
			430	3510	left	8.41	70.7	right edge nil hydration (or undetected?)
			473	3530	right	10.64	113.0	another very deep hydration rind

Obsidian Hydration Data (Continued)

LA No.	Provenience	Depth below Surface	Artifact No.	Material Taxon	Edge	Hydration um	Hydration $(um)^2$	Remarks
13353 (cont)	Surface (cont)	0 cm (cont)	702	3530	left	11.62	135.0	widely differing hydration depths on facets of same flake
					right	7.21	52.0	
			704	3530	left	11.30	128.0	
			726	3524	right	5.43	29.4	
					left	2.90	8.41	
			735	3524	left	5.67	32.1	anomaly; right edge nil hydration
			770	3510	left	7.05	49.7	
			804	3530	left	5.72	32.7	
			1132	3500	left	7.15	51.2	right edge ca. 26 um hydration; geol. surface

Appendix XIII
PHOSPHORUS CONTENT ANALYSIS

Prepared by Alf Sjoberg

During the processing I made some observations of importance. Most samples contained little or no clay particles, but dominant material was silica. It is known that the fixation of phosphorus is dependent upon the particle size: the smaller the size, the higher the fixation, and consequently, also a higher analysis value. This is exemplified by sample number 611, which was one of the few with a normal clay content and a value over 1000 ppm. The soil formation rate in the area is very low as is seen by the nearly total lack of clay particles in the samples. This difference in particle size between the samples must be taken into consideration, but the difference in particle size cannot be the only reason for the variance between the samples.

The concentration in the laboratory tabulation has been calculated from two absorbance values, A_1 and A_2, because by this mean it is possible to double check and correct mistakes made by the human eye. Generally, a reading difference between A_1 and A_2 of .005 or more will mean a slight difference, but this difference is very seldom of importance.

I. CHEMICAL PROCEDURE

One-half gram of dried and ground soil was put in a digestion tube, to which were added 2 ml of $HClO_4$ and HNO_3, respectively. The sample was then digested in a heating block (the digestion apparatus is the same as in Blanchar, Rehm and Caldwell 1965). The temperature was held at 125°C until the HNO_3 was boiled off, after which it was raised to 225°C and held for one hour (Ahler 1973: 122). After digestion the volume in each tube was raised to 50 ml with H_2O, stirred, and left to rest for at least twelve hours. A stock solution was made of the following ingredients: 9.0 g $(NH_4)_6Mo_7O_{24} \cdot 4H_2O$; 0.2 g $K(SbO)C_4H_6O_6 \cdot \frac{1}{2}H_2O$; 65 ml H_2SO_4, and H_2O to a volume of 1000 ml (this solution is a modification of the one described by Murphy and Riley 1962). A primary standard solution was made by dissolving 4.387 g KH_2PO_4 in H_2O raised to 1000 ml with H_2O and from this solution, with a concentration of 1000 ppm P, working standards for the standard calculation curve were made ranging from blank to 6 ppm P in the following way: 40 ml $HClO_4$ to each standard raised to 1000 ml with H_2O. Five milliliters of a color developing solution, consisting of 1.0 g Ascorbic Acid and 100 ml stock solution raised to 500 ml with H_2O, was added to each 1 ml sample, absorbance and transmittance being read on a Spectronic 20 colorimeter at 740 nm after one hour. The concentration of P was calculated from the standard curve, and this result was multiplied by 100 for actual amounts of P in the soil.

II. LABORATORY REPORT

(All samples were diluted 1:5 before reading)

Sn	An	Site	Location	A_1	T	A_2	ppm P_1	ppm P_2
607	007	LA 5011	54/44.R1.1	.079	83.4	.079	425	same
608	008	LA 5011	53/45.R1A.1	.146	71.5	.146	775	same
609	009	LA 10114	41/52.R1.7	.208	62.1	.207	1125	same
610	010	LA 10114	41/52.R1.4	.209	62.0	.208	1125	same
611	011	LA 10114	42/52.R1A.4	.565	27.4	.563	3050	same
612	012	LA 13050	55/55.3	.052	88.9	.052	275	same
613	013	LA 13050	52/55.1	.063	86.7	.062	350	same
614	014	LA 13050	46/54.R2.2	.025	94.6	.025	125	same
615	015	LA 13050	47/55.R2A.1	.162	79.1	.162	550	same
616	016	LA 13054	53/54.R1A.1	.132	74.8	.127	700	680
617	017	LA 13054	50/55.R2A.1	.123	75.4	.123	675	same
618	018	LA 13054	50/53.R2B.5	.288	51.7	.287	1550	same
619	019	LA 13054	53/53.R1.C	.118	76.3	.118	625	same
620	020	LA 13054	99/99.iB.1	.124	75.2	.124	675	same
621	021	LA 13054	99/99.iA.A	.157	69.9	.156	850	same
622	022	LA 13076	52/51.i1.1	.083	82.8	.082	450	same
623	023	LA 13084	42/49.R2A.5	.144	71.7	.145	775	same
624	024	LA 13084	42/49.R2A.6	.410	38.9	.411	2200	same
625	025	LA 13084	42/49.R2A.10	.227	59.3	.227	1225	same
626	026	LA 13086	29/36.R5A.8	.175	66.7	.176	950	same
627	027	LA 13086	28/37.R5.1	.102	79.0	.103	550	same
628	028	LA 13086	57/44.R3.4	.099	79.7	.099	525	same
629	029	LA 13292	49/58.A.1	.022	95.3	.021	100	same
630	030	LA 13292	49/58.A.2	.038	91.9	.037	200	same
631	031	LA 13292	49/58.A.3	.048	89.8	.047	250	same

LEGEND:

Sn = sample number
An = analysis number
A_1 = absorbance read on colorimeter
T = transmittance read on colorimeter
A_2 = absorbance calculated using the formula $A = 2 - \log \% T$
ppm P_1 = parts per million of phosphorus using A_1
ppm P_2 = parts per million of phosphorus using A_2

III. INTERPRETATION

A difference in phosphorus content between samples of less than 3-400 ppm cannot be considered as significant.

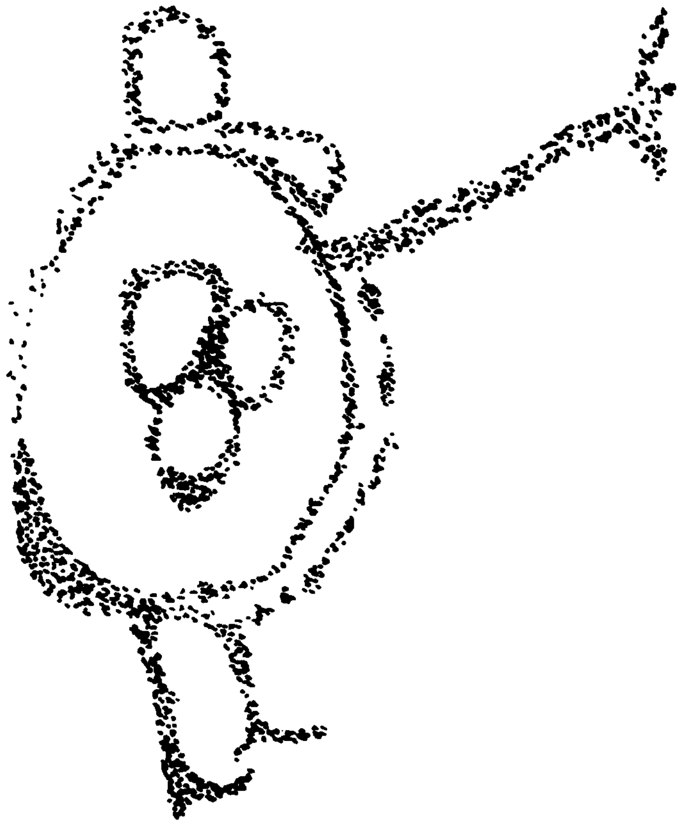
If the values from the samples 629-631 represent the natural phosphorus content of this area, the samples with a concentration of higher than 500 ppm P, can be considered significant if samples are individually studied.

The dominant part of determined amount of phosphorus is in the form of calcium phosphate, formed by the deposition of products with high organic content or by activities involving such products. Thus, for example, food producing activities involving animal products will be reflected by very high values compared to a diet based upon vegetable content (see also, Sjoberg 1976).

Due to the small number of samples, the results are only indicative of possible conditions at these sites.

Site	Sn	ppm P	
LA 5011	607 608	425 775	The difference between the two is not large enough to be definitely significant. The function of the hearth is most likely not one involving cooking, but used for heating purposes only. The floor sample P content is surprisingly low.
LA 10114	609 610 611	1125 1125 3050	It is certain that the hearth has been used as cooking facility involving processing of animal products. It is likely that bone calcium produced the outstanding value. If the two samples of ashy fill come from close to the hearth they might consist of wash from the hearth itself.
LA 13050	612 613 614 615	275 350 125 550	It is nearly impossible to tell anything about the samples from this site. An occupation surface with such low values is rare, and a floor contact sample with 125 ppm P is extreme — disturbances? I would not suggest the function as hearth for the feature. The burning of wood, even for a very small period of time, will in most cases give a much higher P content.
LA 13054	616 617 618 619 620 621	700 675 1550 625 675 850	The value of 1550 ppm for the hearth fill is significant for a hearth used in food producing activities. The burned area or the ashy dump might be one continuous area.
LA 13076	622	450	The value is too low for a *good midden area*. Something is wrong, if comparing with the other sites.
LA 13084	623 624 625	775 2200 1225	If the three samples represent a column from the hearth, and the difference in distance between the samples is greater than .1 m, the samples might be taken as evidence for a change in diet or use of that specific structure. The numbers 624 and 625 are both possible cooking hearth values.
LA 13086	626 627 628	950 550 525	The values are average and do not point in any direction.

PART FOUR: REFERENCES CITED



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