# FINAL REPORT

# SURVEYING AND TEST EXCAVATIONS IN NORTHERN NICARAGUA

SUBMITTED BY LARAINE FLETCHER

GRANT NO. 4700-92

FEBRUARY 1994

TABLE OF CONTENTS

# LIST OF FIGURES

# FINAL REPORT OF
# SURVEYING AND TEST EXCAVATIONS IN
# NORTHERN NICARAGUA

Grant No. 4700-92

## INTRODUCTION

This report presents the results of archaeological fieldwork in northern Nicaragua undertaken during February-July 1992, December 28 1992-January 17, 1993 and June-August 1993. A preliminary report was submitted from Managua in June 1993 along with the final budget report. The work was carried out by Laraine Fletcher of Adelphi University, New York and Ronaldo Salgado and Edgar Espinoza of the Museo Nacional de Nicaragua. Acknowledgement is made to James Gann of New York for producing many of the maps and figures in this report.

As outlined in the preliminary report, the final selection of the area in the north to be surveyed was determined chiefly by our considerations of the political situation at the time. The area selected forms part of the drainage system of the River Coco and is located the northwest and southwest of the city of Somoto, in the department of Madriz (Figures 1, 2, 3 and 4). It includes approximately 17 km. of the River Coco and its primary and secondary tributaries. In our survey area they include the Rivers Wali and Inali and the main streams or quebradas (Aguas Calientes, La Sucia, Copales, Susuba, Somoto, Portillo de Cortes, San Jose and El Cachinfluinal).

## SURVEY DATA AND SETTLEMENT PATTERNS

Since we had two archaeologists for the surveying the method used was to cover 100% of the terrain by following the River Coco drainage systems. With the exception of one hilltop site located at 830m. above sea level, all other sites were located below the 800m. contour line. Most areas above 800m. were also either covered in thorny growth, distant from available water sources and did not present conditions suitable for human habitation during precolumbian times. Selected zones in hilly areas were surveyed when necessary to verify local informants information, which usually related to alleged petroglyphs. The zones surveyed are shaded in the three maps included in this report and cover an area of approximately 55 square kilometers (Figures 5, 6 and 7).

A total of fifty-nine sites were located (Figure 8 and Appendix A for complete location and description of sites). The majority of these appear to represent habitational sites; the general nature of the surface artifactual remains, fragments of grinding stones (manos, metates, mortars and pestles), utilitarian ceramic sherds and lithic debitage are suggestive of a domestic function. Two petroglyph sites were located, although their possible associations with habitational sites were not clarified at this time. In addition, two hilltop sites were recorded.

Three sites were mapped (El Pochote, Cacauli and La Colama III) using the Brunton compass and fiber-glass tape (Figures 9, 10 and 11). A number of sites with significant numbers of mounds could not be mapped due to the thick cover of thorny brambles. A

systematic collection of surface material was conducted at all sites. All collected material is stored at the Museum's facility at the Huellas de Acahualinca, where the analysis was carried out by Fletcher, Espinoza and Salgado. A sample of sherds has been sent to Ron Bishop for neutron activation analysis and we are awaiting the results. In addition a sample of obsidian will be submitted to Fred Lange for subsequent chemical analysis for provenience.

## SETTLEMENT PATTERN DATA

There is much variation among the sites, some of which have no visible mounds while others with visible mounds varying in number from one to as many as 128. The degree of preservation is also variable. There has been much destruction of sites due to agricultural activities of the local farmers as well as the indiscriminate looting of sites by both locals as well as outsiders. We noted with despair that several of what had probably been some of the largest sites had recent constructions directly overlying the prehispanic remains. This was especially noted at the Unidad de Produccion Cooperativa Jose Benito Jimenez (Site III -31) and at the recently established settlement of Hermanos Martinez (Site III-32).

In general the probable habitational mounds are slight elevations ranging from .05cm to ca. 20cm., circular to ovaloid in shape. When located in contemporary fields, their outlines have been blurred by the scattering of the rubble fill due to the

passing of oxen, and in some cases tractors. We have established an initial classification of sites based on number of visible mounds, approximate extension of the site, heterogeneity of size and height of mounds, density of surface remains (although this criterion is qualified since some of the largest sites have little on the surface when the land has not been farmed) and presence/absence of nucleation - evidence of plazas.

Leaving aside for the moment the problem of contemporaneity of the sites and their chronology, it is obvious that the site locations also exhibit the familiar liner- stream pattern characteristic of river basins not only in other areas in Nicaragua but in the prehistory of Central American and Mesoamerica as well (Lange and Norr 1986, Flannery 1976 and Dixon 1989). The primary and secondary tributary streams are choice locations for small sites, probable hamlets and small villages of sedentary agriculturalists comprised of lineage segments, while the larger areas of alluvial pockets on the second or third terraces of the River Coco were prime areas for larger, nucleated settlements, possibly representing local or regional centers.

Of the fifty-nine sites recorded (Figures 12, 13 14 and 15), only two are of petroglyphs, with no obvious associations with mounds. Only two hilltop sites were recorded. The remaining sites all exhibited characteristics of habitation sites, most notedly by their location and the presence of remains of grinding stones (manos, metates, mortars and pestles) with much stylistic variation, as well as utilitarian ceramics. Fragments of wattle

nd daub (bajareque) were also recovered during the test pitting. However, the sites also display a great amount of heterogeneity in terms of the number, size, height and form of the visible mounds as well as site size.

Two problems encountered during the surveying which need attention in the future are here mentioned. Firstly, although the ceramic analysis by Espinoza has not yet been received at this time, it appears that no preceramic sites were found and to date no site earlier that ca. 300 a.d. has been registered. It is suggested that at a future date selected zones be systematically tested with shovel tests in order to determine the presence or absence of buried sites which left no surface remains. Secondly, the determination of site size is approximate in most cases. Almost all the sites have been impacted to some degree and it is difficult to know the number of mounds or the extension of the site with accuracy. It is safe to say that in all likelihood all the sites recorded had more mounds than were visible and we have generally underestimated their size in all cases.

**CLASSIFICATION OF SITES**

Based on the initial analysis of the surface collections as well as the material from the stratigraphic test pits, it appears that the largest sites, at least, were coeval. They all exhibit evidence of one newly defined diagnostic ceramic type, Cacauli Rojo sobre Naranjo, dated by cross-dating to the Bagaces Period of 300-800 a.d. (formerly Middle Polychrome) with well known diagnostics types such as the Ulua polychromes, especially the Babilonia type

which has been found in the same stratigraphic level.

In order to better understand the possible relationships among the sites, we established the following site classification hierarchy, which concurs with other typologies for the ordering or ranking of archaeological sites: 1. HAMLET (ALDEA OR CACERIO), which is generally less than 1 ha. in size, has fewer than ten mounds and sparse surface material; 2. TOWN (PUEBLO), more than 1 ha. in extension with more than 10 mounds which are homogeneous in size with a moderate amount of surface cultural material; 3. NUCLEATED TOWN (PUEBLO NUCLEADO), generally measures more than 5 ha., with heterogeneity in the size, area and height of the mounds and generally a dense amount of surface cultural material as well as a central area marked by a plaza zone; 4. REGIONAL CENTER (CENTRO REGIONAL) which measures more than 10 ha. with great heterogeneity in the size, shape and height of mounds with more than one plaza area and generally a dense amount of surface debris; 6. PETROGLYPH SITE (PETROGLIFOS),with no associated mounds. To date no evidence for ball courts has been found in the surveyed zone, nor habitation units of the plazuela or patio group so common in the Maya zone, although with more complete mapping at the larger sites it will be possible to document the presence or absence of such a pattern.

In sum, there are 27 cases of Type 1 (Hamlet), ten cases of Type 2 (Town), fifteen cases of Type 3 (Nucleated Town), three cases of Type 4 (Regional Center), two cases of Type 5 (Petroglyphs) and two unclassified sites due to the amount of

destruction (Figures 16, 17 and 18).

In addition to their common geographical location and altitude (generally between 400-800m. above sea level) several sites did share the presence of a central plaza zone, which is surrounded by the largest and tallest mounds. This is evident in sites III-27 (Cacauli 1), III-28 (Cacauli 2), III-35 (El Fraile), and Site III-57 (Las Tapias). Sites which we assume had more than one plaza zone and which were probable regional centers but where this was impossible to detect due to the extent of the destruction include are III-18 (Guiliguisca), III-31 (UPE), and Site III-32 (Hermanos Martinez).

The two hilltop sites are of interest (Site III-19, Guiliguisca and Site III -51 El Jinote 2). Site III-51 especially should be mapped. The mounds are some of the best preserved we had located, and there appears to have been only minimal looting. Fifty mounds were counted, some with well-defined rectangular basal platforms evident. A linear pattern was observed of contiguous mounds, almost street-like, in addition to another pattern whereby flat areas were expanded and leveled and gave the appearance of small terraced areas, artificially modified to support platform mounds, which were distributed about the summit area. A plaza or central zone was also noted as well as what appeared to have been a walkway or entrance to the site.

The site of Las Tapias (III-57), with 128 mounds registered and more most likely destroyed by the extensive cultivation of the zone, is one of the probable regional centers. Located near prime

agricultural lands, the site is situated on high ground (the second terrace) overlooking the River Coco. A well-defined central plaza is surrounded by the largest and highest mounds, from 3--4m. in height. One pattern noted is the sharing of a single basal platform by from two to three mounds as well as closely spaced, fairly contiguous mounds which do not share basal platforms. Mounds varied in the amount of destruction and circular, oval and rectangular shapes were noted.

El Fraile (Site III-35) was also classified as a regional center. It is located on an extensive zone of flat land at the western sector of the surveyed zone near the Yari River. Eighty-four mounds were recorded, many well preserved since the owner of the site has not cultivated the land recently. However, a thick growth of high grass and thorny bushes made visibility difficult Despite the vegetation cover, a clearly defined plaza zone was seen, again surrounded by the highest and largest mounds, which also were ca. 3-4m. in height.

Based on the initial control over the chronology established by the ceramic analysis done by Espinoza we have stated that these large sites appear to have been coeval. In addition to noting the linear-stream pattern we note a similarity to the pattern found in the Comayagua Valley demonstrated by the work of Dixon (1989) and with the distribution of sites along the length of the Sulaco River in Honduras as demonstrated by Hasemann (Hasemann 1937:98). Hasemann found a distribution pattern which displayed almost the equidistant spacing among the regional centers, where these centers

occupy the large pockets of alluvial soil along the river. To date in the zone surveyed which extends along the length of the River Coco and particularly along the adjacent land to one of its major tributaries, the Quebrada Somoto, we have found a similar pattern to obtain. The proposed Regional Centers of Las Tapias, El Fraile and Guiliguisca form a triangle, with each site almost an equal distance from the other. Also, these three sites occupy strategic positions, each one situated at an entry point to the basin, with mountainous zones to the south, west and east. Thus, their occupants could have been able to monitor and/or control comings and goings of groups; key access points to dominate in economic, political or military matters.

Thus, the primary and secondary tributary watercourses were choice sites for smaller settlements, the probable hamlets and small villages of sedentary agriculturalists comprised of lineage segments, while the larger areas of alluvial pockets of with expanses of fertile soil on the second and third terraces of the River Coco were prime areas for the larger, nucleated settlements which probably represent local or regional centers. This ranking or hierarchical pattern could be interpreted as the type of settlement of emerging or established elites who were controlling, via marriage alliances and well-solidified trading relationships, the lesser ranking sites in their respective territories.

CERAMIC ANALYSIS

The ceramic analysis was carried out by Edgar Espinoza, the ceramicist at the Museo Nacional de Nicaragua. His data base consists of the entire surface collection from the survey done in 1992 from 59 sites, as well as the material recovered from stratigraphic contexts during the limited excavations during Dec.-Jan 1992-93 at the sites of Guiliguisca (N-MZ III-18) and Cacauli 1 (N-MZ III-27). The time constraints were such that more extensive excavations could not be undertaken at that time, since Fletcher had to return to New York for the beginning of the spring semester on January 18.

The material recovered during the excavations came from the four test pits measuring 1m. x 1m. placed at the site of Cacauli 1 (III-27), one of the sites with large mounds still obvious and a moderate amount of cultural material on the surface including obvious diagnostic sherds, many particularly of the type named for the site, Cacauli rojo sobre naranja. Although the site has been greatly destroyed over the years (Appendix 1 for site description), informants in the valley mentioned farmers finding burials in some of the larger mounds and they mentioned the abundance of "figuras" they had picked up in their fields over the years. This site is included in the register of sites of the Museo Nacional de Nicaragua and surface collections had been made before, although they were not located by us in the museum's warehouse. Test pits one and four were placed in a small area between fields and some 20 meters to the east of the area of visible, large mounds, a zone

which was not usually cultivated as it served as a boundary marker between two properties. We hoped that there would have been less destruction. Two more test pits were placed to the south and west in an area between some of the smaller mounds and south of the large mounds that formed the central plaza zone. A total of 1,819 sherds were recovered from these four excavations and a sketch map was made of that area of the site with the test pits located.

At site III-18 (Guiliguisca) three more 1m. x 1m. test pits were placed. The first test pit was placed on the north side of the Panamerican highway, away from the center of the site, since there was a fair amount of surface material and it was away from the area of major looting and destruction. However, it proved to be fairly sterile and we returned to the south side of the road and the zone of major concentration of mounds and surface material. Again, this site was selected because of the extreme variety of diagnostic ceramic types on the surface as well as the quantity. We placed the second test pit in a cultivated field approximately 60m. to the east of the larger mounds. This was an area of smaller mounds with surface material indicative of residential dwellings. At the bottom of level 4 in test pit 2 we began uncovering about a third of a fairly intact ceramic plate with hollow tripod supports, which was in the next stratum and was embedded in the north wall. At this point we decided to expand the test pit one meter to the north to be able to better recover this vessel. It was later reconstructed and is seen in Figure 21 of this report as an example of the type defined as Las Segovias naranja. This expanded

excavation provided us with the major portion of the sherds recovered in the excavations (almost 6,000 sherds), although most of them were greatly eroded. Unfortunately, while we did uncover some bits of charcoal, the sample was not large enough to be dated. It was in this excavation that the obsidian prismatic blade was uncovered at a depth of .70cm.

For this report however, the analysis done by Espinoza which I have translated and taken from only includes the material from the surveying. Although I have made additional comments based on my work with Espinoza during the summer of 1993 in Managua and our joint examination of the excavated material, his report to me, which is to include a modal analysis, has been delayed. Nonetheless, the overall comments based on our finds will only be supported by the additional statistical analysis he will present and the more in-depth comparative analysis with ceramic types of Honduras, El Salvador and the Gran Nicoya.

In addition, Espinoza was also able to use the surface material collected from thirty-one sites during the 1990-1991 field seasons in the area directly to the southeast, on the other side of the Volcan de Somoto, near the community of Pueblo Nuevo. A total of 13,233 sherds represent the collection from the ninety sites with an additional 7,976 from the excavations. However, since the majority of the ceramic material was eroded, the number of sherds that were used for a type-variety analysis was much reduced. As mentioned, that report is due shortly.

For this analysis the Munsell soil color charts were used as

well as a binocular microscope (6X, 16X and 40X). All work was carried out in the laboratory of the Museo Nacional de Nicaragua, Department of Archaeology at Acahualinca, Managua.

## CERAMIC TYPES DEFINED FOR THE PROJECT AREA

**TYPE: ROCINANTE COMUN**

All unslipped, crudely burnished utilitarian sherds are in this category (Figure 19). Paste texture is generally brittle while its color varies from cafe-color to almost black. Three decorative styles are used: 1) finger-stamping around the rim; 2) Incised and 3) Modeled with ribbon-like bands in zoomorphic forms. These were subsequently defined by Espinoza, based on an enlarged sample from the excavations as 1. Modo inciso; 2. Modo modelado en cordon and 3. Modo decoracion pastillage.

This type is found at all the sites and is the most frequent ceramic type in the zone.

**TYPE: LAS SEGOVIAS NARANJA**

This type is based on a sample of the survey of 406 rim sherds, 857 body sherds, 38 handles, 176 supports, 11 base sherds 4 vertederas, 1 polisher and 1 spindle whorl (Figure 20).

The surface is highly smoothed, often well burnished and covered with a thick orange slip (5YR 7/8, 2.5YR 6/8 and 2.5YR 5/8). Three types of paste texture have been defined for this type: an untempered, fine and compact paste; a hard paste with temper; a

excavation provided us with the major portion of the sherds recovered in the excavations (almost 6,000 sherds), although most of them were greatly eroded. Unfortunately, while we did uncover some bits of charcoal, the sample was not large enough to be dated. It was in this excavation that the obsidian prismatic blade was uncovered at a depth of .70cm.

For this report however, the analysis done by Espinoza which I have translated and taken from only includes the material from the surveying. Although I have made additional comments based on my work with Espinoza during the summer of 1993 in Managua and our joint examination of the excavated material, his report to me, which is to include a modal analysis, has been delayed. Nonetheless, the overall comments based on our finds will only be supported by the additional statistical analysis he will present and the more in-depth comparative analysis with ceramic types of Honduras, El Salvador and the Gran Nicoya.

In addition, Espinoza was also able to use the surface material collected from thirty-one sites during the 1990-1991 field seasons in the area directly to the southeast, on the other side of the Volcan de Somoto, near the community of Pueblo Nuevo. A total of 13,233 sherds represent the collection from the ninety sites with an additional 7,976 from the excavations. However, since the majority of the ceramic material was eroded, the number of sherds that were used for a type-variety analysis was much reduced. As mentioned, that report is due shortly.

For this analysis the Munsell soil color charts were used as

well as a binocular microscope (6X, 16X and 40X). All work was carried out in the laboratory of the Museo Nacional de Nicaragua, Department of Archaeology at Acahualinca, Managua.

## CERAMIC TYPES DEFINED FOR THE PROJECT AREA

### TYPE: ROCINANTE COMUN

All unslipped, crudely burnished utilitarian sherds are in this category (Figure 19). Paste texture is generally brittle while its color varies from cafe-color to almost black. Three decorative styles are used: 1) finger-stamping around the rim; 2) Incised and 3) Modeled with ribbon-like bands in zoomorphic forms. These were subsequently defined by Espinoza, based on an enlarged sample from the excavations as 1. Modo inciso; 2. Modo modelado en cordon and 3. Modo decoracion pastillage.

This type is found at all the sites and is the most frequent ceramic type in the zone.

### TYPE: LAS SEGOVIAS NARANJA

This type is based on a sample of the survey of 406 rim sherds, 857 body sherds, 38 handles, 176 supports, 11 base sherds 4 vertederas, 1 polisher and 1 spindle whorl (Figure 20).

The surface is highly smoothed, often well burnished and covered with a thick orange slip (5YR 7/8, 2.5YR 6/8 and 2.5YR 5/8). Three types of paste texture have been defined for this type: an untempered, fine and compact paste; a hard paste with temper; a

porous paste with small holes from the burning of vegetal matter. Color varies from black to red (5YR 7/8, 10R 5/8 and 2.5YR 5/8). A good portion of the sample shows the cores and lateral sections to be black . Decoration is sparse: in some examples incised decoration in a hanging triangle motif on the rim is present; a modeled design of cordones is less frequent with zoomorphic modeling on handles.

The usual forms are plates of simple and composite form, hemispheric bowls, globular vases; the supports include solid conical forms as well as hollow, cylindrical and globular forms with zoomorphic and anthropomorphic representations. An example from the excavations at Site III-18 (Guiliguisca) is seen in Figure 21. In addition, based on the larger sample from the excavations Espinoza defined two varieties of the Las Segovias naranja: 1. Variedad Negativo and 2. Variedad naranja sobre el borde.

This type is also found at all sites and appears to be a common, utilitarian ware and represents, with Rocinante comun, another of the most frequent ceramic types in the zone.

**TYPE: CONDEGA ENGOBE ROJO**

The type was defined with a sample from the survey of 146 rim sherds, 487 body sherds, 3 handles, 7 supports and 1 vertedera (Figure 22). The main characteristics of this type are the red slip (10YR 5/8, 7.5R 3/8, 2.5YR 4/8 and 2.5YR 3/6) and the absence of any kind of decoration. The surface is poorly finished .There is great variation in the texture and coloration; a large amount of

temper is present. The most frequent forms are globular vases, with both outward and inward turning rims. Bowls are plain or emispherical. The varied supports observed included: solid to hollow conical shaped supports; hollow rectangular supports. The andles are uniformly rectangular. This type did not exhibit any type of decorative motif.

**YPE: CACAULI ROJO SOBRE NARANJA**

The type was defined on the basis of the survey sample of 63 im sherds, 145 body sherds, 12 supports, 3 handles and 1 vertedera (Figures 23 and 24). The main characteristics of this type nclude the red paint (10YR 5/8) decoration over the orange slip 2.5YR 6/8), a highly smoothed and polished surface and very compact paste with some inclusion of quartz or pumice particulates. hen dropped on each other a bell-like or metallic sound is roduced, unlike any other of the types in the collection and very istinctive. The color varies from completely black to cinnamon ed (10R 5/8). A large portion of the sample exhibited clear red w ls with black cores.

The most common forms are shallow dishes with outward turning rims, some with composite silhouette, handles with batrachian orms, globular, conical and zoomorphic supports. Straight walled ases with high necks are also present.

The most common decorations are the red paint over the orange lip in the following motifs: pyramid outlines on the rims of plates, bowls and vases, solar motifs are usually at the

midsection, a stepped fret pattern outlined by small dots as well as fine wavy lines hanging from bands in the midsections and painted supports in order to emphasize the modeled zoomorphic and anthropomorphic representations. In some cases red bands covered the rims.

This type is found in 17 of the sites in Zone III and 16 of the sites in Zone IV as well as in stratigraphic test pits. Identical sherds have been found in stratigraphic context in the one site in the Lake Managua basin, where they are in association with types pertaining to the Ometepe period of the Gran Nicoya, which allows us to infer a later date than had been previously assigned to sites in our region. As pointed out by our colleague Silvia Salgado, this type also has similarities to some of the Honduran polychromes, especially Cancique policromo. This is discussed in greater depth in another section of this report.

**TYPE: EL FRAILE NEGRO SOBRE ROJO**

This type was defined with a sample of five rim sherds, 14 body sherds and one support (Figures 25 and 26). The paste is very compact, and a reddish coloration (2.5Y 6/8) and reddish yellow (5YR 6/8); some specimens show a black core. Temper particulates are sparse with some white temper noted, possibly pumice and quartz. All surfaces were smoothed, but with little care: numbers of irregularities were present. The surface is covered with a red slip (2.5YR 4/8 to 2.5YR 5/8) and the decoration is in black paint. The principal decorative motifs are geometric patterns filled with

dots around the exterior lines. Wavy lines were painted on the rims, alternating with black lines on the lip of the rims. Panels of black lines back to back with vertical lines was another design element of this type.

The typical forms include plates with everted rims and thinned lips; plates with straight walls, lips slightly outward turned and rounded lips; short necked globular vases with restricted opening and straight walled vases with rims slightly inward and bevelled on the interior.

This type has not been found in Zone IV and is found in three large sites in Zone III (III-14 Apatule, III-27 Cacauli 1 and III-35 El Fraile).

TYPE: LAS TAPIAS TRICROMO

This type is defined based on a sample of 12 rim sherds, 30 body sherds and one complete vase from Site III-57, Las Tapias (Figure 26A).

The paste is very compact with very little temper; color varies from completely black to red (10YR 5/8) and black zones are quite common. The surface finish is carefully polished and covered with an orange slip (5YR 7/8). The design elements were done with black and red paint (10YR 5/8).

The most common forms include simple plates, plates with zoomorphic handles, simple bowls with rounded lips and vases with wall turning outward slightly and of a false composite profile. The plates were decorated on their interior with geometric design

motifs consisting of black vertical and horizontal lines placed next to each other. This design varied with red lines alternating with black ones or all in red also. The exterior walls were not decorated. The almost complete vase from Site III-57 had a red band around the rim, below which are found the principal motifs consisting in geometric linear designs in black with red fill-in, alternating with four wavy red lines. The base was covered with red paint.

This type is present in Zone III at many of the larger sites (III-11, III-14, III-21, III-26, III-27, III-35, III-48 and III-57. It was also found in Zone IV at sites IV-4, IV-7 and IV-2.

**TYPE: SAN ANTONIO NEGATIVO**

This type is defined on the basis of 8 rim sherds and three body sherds (Figure 26b). However, seventy more sherds of this type were recovered during the excavations,(specifically 68 of these from test pits 2 and 2A at the site of Guiliguisca) and their analysis will be included in the Espinoza report which is pending. The paste is very compact with little temper added; all the sherds exhibit black coloration. The surface is well polished with an slip ranging from orange (7.5YR 7/8) to a clearer to almost white slip. The negative decoration was carried out in a clearer orange than that of the base.

The forms include simple bowls and plates with outward turning rims. Due to the size of the rim sherds from the first sample (the surveying) it was not possible to measure diameters. The

decorative motifs were badly eroded and we were not able to see the patterns clearly. However, it was observed that the wavy lines start at the rims. Some incised pattern noted in the sample was restricted to the rims. This type is found in both zones IV and III.

**TYPE: GUILIGUISCA INCISO**

This type was defined with a sample from the survey of 34 rim sherds, 150 body sherds and 31 handles (Figures 27 and 28). It is characterized by the presence of incising done when the material was still in a plastic state. The paste texture is coarse and a light coffee color (5YR 6/4) with zones of black in the core. Abundant temper of various sizes of quartz, pumice and sand characterizes Guiliguisca inciso.

The incising was usually done with a two-pointed instrument. This decoration is limited to the neck and midsections of the pieces. The most common patterns are double points that vary between 5mm -10mm long and 3mm wide and often up to 3mm deep. From these points hang vertical, wavy double lines in the midsections of the vessel. Handles are decorated with double points along their length. There is also some applique decoration consisting of zoomorphic figures.

The most common forms include: a. long necked globular vases. The rims can be straight, outward turning and the lips rounded or flat; globular vases with rectangular handles. This type has been found in thirty of the fifty-nine sites in Zone III and presents

similarities to Mansique Inciso of the Los Naranjos site in Honduras.

TYPE: MOTUSE ESTRIADO

This type is defined by the sample from the survey of one rim sherd and 62 body sherds (Figure 29). In most cases the paste is porous and is breaks easily, although there are some examples of a hard paste. The abundant temper, principally quartz and pumice, gives the paste a coarse look. Coloration is a very dark grey (N3/), followed by clear tones.

All examples were poorly finished on the exterior and no slip was used. Surfaces were finished with a tool which leaves a multiple brush pattern. The single rim sherd belongs to vasa with a rounded rim; the body sherds suggest hemispheric bowls. The only decoration consists of the striations done by the multiple brush tool while the clay is still in a plastic state.

This type has not been found in Zone IV, but is present in 17 of the sites in Zone III. The use of the multiple brush tool for the surface finish possibly has some affinities with Sacasa Estriado from the Rivas zone.

TYPE: LOS CANALES ORDINARIO

This type is defined by four rim sherds, seventy body sherds and two base sherds. The paste is coarse with abundant temper, including quartz, feldspar and pumice with heterogeneous sizes ranging from very tiny to more than 3mm. Coloration is black with

clear side walls (5YR 7/8).

The light coffee colored surface (5YR 6/8) is poorly finished, with many firing spots apparent. It was possible to define a single form from our sample: a vessel with straight walls, thickened rims on the exterior and measuring more than 40cms. No decoration was discerned. This type is not present in Zone IV and present in a localized area in Zone III at sites III-4, III-5 and III-9. This type is defined chiefly based on its outstanding characteristic of very thick walls and abundant temper, being very different from the utilitarian type defined as Rocinante comun.

ADDITIONAL TYPES:

In addition to the already mentioned and illustrated ceramic types newly defined for the northern Nicaragua zone, Espinoza has to date also identified Three additional types which are not fully described in this report. These include and Las lajas lineas onduladas and Apatule impreso , which are defined based upon samples from the excavations and a ceramic type which shows the use of the wheel and thus possibly represents sites with a colonial component. The sherds which show possible use of the wheel occur only in Zone III, at three localized sites (III-1, III-5 and III-7 and then again at Site III-34, a very disturbed site near the banks of the Rio Coco to the north of Somoto). The type Apatule Impreso was defined on the basis of 14 body sherds from the site of Guiliguisca (III-18) only. The complete descriptions are forthcoming in the final ceramic analysis by Edgar Espinoza, which

will combine the date from the surveying and the excavations. Similarly, the type Las Lajas lineas onduladas was also defined from the same text pits 2 and 2A at the site of Guiliguisca and found stratigraphically in the same levels (from 3-6 or 20cm. to 60cm.). This type was defined on the basis of thirty-one rim sherds and one handle all form the same vessel and will also be more fully described by Espinoza. The final description of the sherds corresponding to Ulua polychrome will also be presented in the final ceramic analysis report.

LITHICS

To date little has been done on the lithics except for a count and preliminary classification of the material from the surface collection. Dominique Rigat is interested in helping with the lithic analysis in the future if funding is available. A sample of obsidian (flakes, blades and nodules) was taken out of Nicaragua and will be submitted to Fred Lange in order to be included in a larger sample for chemical analysis to determine provenience.

The lithics collection consists of 3,375 artifacts: 1,753 from the surface collected during the surveying and 1,625 artifacts from the test pits. The majority of all the lithic material consists of obsidian flakes, with fine-grained basalt, chert, jasper, chalcedony and opal flakes also characteristic of the collection of flakes. The only complete artifacts from the excavations consist of three crudely worked fine-grained basalt (?) celts found in association with a very destroyed burial that was not dug due to

time constraints. From the surface collection there are a total of 180 bifaces of which 50 are complete. Of these 148 are percussion made and remaining 32 are of polished stone. Most of these bifacially worked artifacts are fine-grained basalt, although a few are worked in chert (light and dark), jasper and chalcedony.

Among the few complete lithic artifacts are seven small obsidian flaked points. Two fragments of obsidian prismatic blades, measuring lengthwise respectively .03cm and .065cm. were found at Site III-18 during the excavations. Although the sites exhibited great variety in terms of density of obsidian debitage, the flakes are generally small, ranging between 1.5cm - 3.cm. In addition, a great many of them have contain part of the cortex. The obsidian nodules found are also relatively small, ranging from approximately 3 cm. to 5 cm. and very few exhausted cores have been found. Very few prismatic blades are present, although as pointed out, one was found during the January excavations in stratigraphic context. According to both Rigat and Lange (personal communications), these characteristics of the obsidian artifacts conform to other areas in Nicaragua: obsidian nodules of sufficient size for the efficient production of the diagnostic Mesoamerican prismatic blade are not found in the area.

An obsidian source has been reported near El Espino, close to the Honduran border but our surveying activities were curtailed by early rains before we could confirm its presence. The El Guinope site in Honduras is another possible source for the obsidian utilized in northern Nicaragua. Fred Lange has offered to include

some of our obsidian in a sample to be submitted for chemical analysis in order to determine possible provenience.

The rest of the surface collection of lithic material includes sixteen possible scrapers, one possible awl, nine preforms, six retouched flakes, two bark beaters, the above-mentioned bifaces (points and celts), as well as the fragments of a wide variety of grinding stones. The ninety-four examples of grinding stones consisted of fragments or almost complete metates, manos and morteros, the majority of vesicular basalt. The metates were tentatively classified into categories based on the presence or absence of supports, form (round or flat back trough metates or round or flat back metates with a flat grinding surface, presence or absence of rim and decoration. The manos were classified as either rectanguloid, oval or circular. There was one bell-shaped pestle or pounding stone. A more complete analysis, including measurements and examination for the presence of wear patterns needs to be completed. This was begun by arq.Ronaldo Salgado.

## FINAL COMMENTS AND COMPARATIVE DATA

Based on our work thus far we have noted the marked absence in our northern area of many of the ceramic types from the Gran Nicoya typologies. We have just a few sherds which have been identified as ceramic types of the Gran Nicoya group: a few identified as Vallejo (Ometepe Period 1350-1520 d.c.) are all from the surface collection, and the Vallejo vase exhibited in the museum in Somoto has no provenience. Some sherds with white slip (Copales White

Slip in our classification) possibly belong to the Papagayo type, corresponding chronologically to the Sapoa and Ometepe periods, 800-1350 and 1350-1520 d.c. respectively.

Without doubt, in order to understand the cultural development in northern Nicaragua the prehistory of El Salvador and Honduras must be taken into account, as well as the interactions with groups to the south and southeast. In our zone there is a definite presence of ceramic types similar to those which have been well defined from Honduran and Salvadoran sites. The presence of sherds identified as Ulua Polychrome is definite is confirmed, one example is of the subclass Cyrano, diagnostic of Lake Yojoa, as well as two pieces found by a farmer during the 1991 survey: one similar to the familiar Ulua marble vases with zoomorphic handles, the other similar to the Ulua etapa negra style. The almost complete shallow dish found again in the 1991 survey in a road cut at ca. .80cm. depth (Figure 30) is similar to pieces of the Mellizo subclass of Ulua polychromes, and similar to one cylindrical vase in the Peabody Collection from Lake Yojoa, although the our example lacks the band below the rim of the false glyphs called "bean heads" (Joyce 1993:70-71). Additional sherds both from the surveying and the text excavations are similar to Ulua types (Figure 31) and a photographic record was made of two complete Ulua cylindrical vases found in the fields by a farmer in Pueblo Nuevo in Zone III of the northern area. One is similar to the Black stage Ulua Polychromes or etapa negra style, which Joyce states "provide the best basis for relating Ulua Polychrome production to Classic Maya

polychrome groups (1993:86). The other resembles the marble vases with zoomorphic handles or lugs also typical of the Ulua style. Additionally, a complete tripod cylindrical vase photographed during the 1991 season and allegedly found in the environs of Pueblo Nuevo and acquired by a Dr. Flores of that community might belong to the Arrodillarse subclass tripod cylinder since it has the bands of "crew cut" false glyphs on alternating light and dark squares below the rim and above the base as illustrated by Joyce (1993:72) for a vase from Lake Yojoa.

Additionally, we have found a small number of sherds of the diagnostic Delirio Red on White for the Lepa phase (625-1000 a.d.) and associated with the El Salvadoran site of Quelepa. According to Rosemary Joyce (1986:313)"the same trade ceramic was found in a Terminal Classic context at Seibal (Sabloff 1975) and along with other Quelepa ceramics in Terminal Classic contexts in the Valle of Ulua. This distribution implies the existence of a network of communication through the southern highlands at this crucial late period." We also have a number of sherds of the Tenampua class Ulua Polychromes (Figure 32), diagnostic of the site of that name in the valley of Comayagua, Honduras. Apart from these ceramic evidence, examining the figures in the 1957 report by Doris Stone (1957:Figures 46,49 and 50) there is marked resemblance among various diagnostic type from the Las Vegas site of the Valley of Comayagua, among those Bold Geometric, including the lugs or handles of monkey heads and other types of red on orange slip that show some similarities with the prevalent type from northern

Nicaragua, Cacauli rojo sobre naranjo.

Comparing notes with colleague Silvia Salgado, who is working in the area of Granada, Nicaragua, she has identified a strong presence of Tenampua and Delirio Red on White, in addition to other ceramic evidence in iconography and form suggesting a Honduran origin. This is in addition to obsidian identified to be from newly located Guinope source (Salgado, personal communication). With these new data we have strong evidence for the existence of the interaction network defined by Joyce as the Copador-Yojoa-Comayagua network, which extended toward the south and the polities of Lower Central America (Joyce 1993:88).

We also recovered sherds related to the Usulutan tradition both during the surveying and the test excavations. Aware of the dating problems with Usulutan Negative Resist, we have also submitted some of these samples for neutron activation to Ron Bishop. The sherds resemble the Muerdalo Orange and Bolo Orange types of Los Naranjos and of the El Cajon region of Honduras during the Yunque Tardia phase (0-400 a.d.) and the Sulaco Temprano phase (400-600 a.d.) (Hirth and Lara Pinto 1991:213). It is hoped that the analysis by Bishop with help determine whether they are imported or of local production.

As mentioned earlier in this report the type defined as Cacauli Rojo sobre Naranja appears to share similar design motifs as well of a red paint on orange slipped vessels with Canique Bicromo and Cancique Polychrome, types found in the Lake Yojoa and El Cajon regions during the Sulaco Temprano, Medio and Tardio

phases with range from 400-1000 a.d.. Cacauli rojo sobre naranja is found in abundance at almost all the large sites in northern Nicaragua and has also been found in the Rio Viejo survey zone (Espinoza, personal communication) and in the Granada area in the excavations conducted by Salgado (Salgado, personal communication). It is hoped that more extensive excavations in one of the larger sites around Somoto in the near future will help clarify the nature of what seem to be very complex interaction spheres.

Some tentative observations can also be made in reference to the areas to the south of our zone, the Lake Managua basin, as well as the area of Chontales to the southeast. Cultural interaction with people inhabiting the Lake Managua basin area, especially in the zone directly contiguous to our area which forms part of the Rio Viejo drainage system, is reflected in the presence of ceramic types from the north, albeit in relatively small numbers. Comparative work also needs to be done with the data from Salgado's 1993 excavations to determine the nature of the Honduran-Salvador-northern Nicaraguan connections through time.

Comparing our ceramic and lithic types with the material from the Chontales region provided by Rigat and Rivas, we note a marked absence of shared ceramic types and a differential use of obsidian between the two areas. O the fine paste orange slipped type so abundant in our zone. In addition, an almost total absence of obsidian debitage as well as tools of this material, coupled with a strong emphasis on the use of chert as the preferred lithic material further demarcates the Chontales from the northern

cultures.

Although the results first batch of fifteen sherds from the Zone IV survey area (the south and east of Zone III on the other side of the Volcan de Somoto) which had been sent for analysis by Ron Bishop at Smithsonian Lab have shown that to date all sherds fall outside the previously defined categories in his data bank we expect that new tests now being run with an the enlarged sample from Zone III surveying and test excavations will provide different results. As mentioned, an additional forty-nine sherds have been submitted from the expanded collection and the results from these new tests, in conjunction with tests being run on an ample sample from the excavations from Silvia Salgado, may help answer questions which relate to the nature of the relationship between the Nicaraguan sites and those in El Salvador and Honduras. The results should be forthcoming shortly (Ron Bishop, personal communication).

As mentioned in the preliminary report, participation in the Conference at Cuajiniquil, Costa Rica at the end of May 1933 and arranged by Fred Lange gave us an opportunity to compare data with other archaeologists working to the south of our project area. The aim of the conference was a re-examination of the concept of the Gran Nicoya and its continued validity as a sub-area. Specifically, we were able to systematically compare notes not only the archaeologists working in Nicaragua (Rigat and Rivas in the basin of Lake Managua, Rigat and Espinoza in the Chontales and Silvia Salgado, working in the area of Granada ) as well as with

the scholars working in Costa Rican. In addition, we participated in the elaboration of a revised periodization, with the new names and dates being used in this report.

I would like very much to continue work in northern Nicaragua in the future. One of the priorities is the need to expand excavations at one of the large sites, either Guiliguisca or Las Tapias, for example, to improve the chronological control. We all hope that the situation in Nicaragua improves so that the danger of working in the field in that zone is reduced or eliminated. I had hoped to included the results of the ceramic analysis of the material from the excavations in this final report, but due to a delay on the work in Managua, that has not been possible.

## APPENDIX A

SITE DESCRIPTION:

This section includes a brief description of the 59 sites located during the surveying carried out by Fletcher and Salgado.

RI NM III-1 Sitio Colama 1
Map: Somoto 2856 II Scale 1:50,000
86 38' 08" 13 26' 22"
Alt.: 700m.
Size: ca. 2 ha.
Owners: Cooperativa Olaf Palme
Access: From Somoto, west on the Panamerican Highway to km. 224 to the entrance to El Limon and then south ca. 4 km.
Location: The site is located ca. 100m. to the west of the Cooperativa Olaf Palme and ca. 70m. to the south of the Quebrada Sucia.

Located on a natural rise, near the banks of the Quebrada Sucia, which is situated ca. 70m. to the north. Located in a small valley, the land is flat with good soils for agricultural production. The owners are members of the agricultural cooperative Olaf Palme. No mounds were visible, there was a light scattering of artifactual material (sherds and flakes of obsidian). A collection of surface material was made in an area ca. 15m. x 15m.

RI NM III -2 Sitio Colama 2
Map: Somoto 2856 II Scale 1:50,000
86 38' 30" 13 26' 27"
Alt.: 700m.
Size: ca. 4ha.
Owners: Cooperativa Olaf Palme de Colama
Access: The same directions as Colama 1
Location: The site is located ca. 400m. to the west of Site III-1 in the same fields and is also ca. 100m. to the south of the Quebrada Sucia.

The site is situated in a small east-west oriented valley, with low hills to the north and south. The community of Zapotillo is located ca. 200m. to the west and the site is situated on the banks of the Quebrada Sucia.

Sixteen circular mounds are visible in a cluster, although they have been significantly destroyed by cultivation activities. The average height of the mounds is between .20. - .50 cm. Due to the intensive agricultural activities in the zone the likely is

great that there were greater numbers of mounds at this site which have been totally destroyed. The surface scatter is light, with few decorated sherds apparent and very little lithics. A surface collection was made in an area of 20m. x 20m. which included fragments of metates of vesicular basalt.

Approximately 200m. to the south, at the foot of a small hill we noted a grouping of large boulders with depressions for grinding made which measured from .25cm. by .75cm. in diameter and from ca. .25cm. to .50cm. in depth.

Region I NM III-3 Sitio- Colama 3
Map: Somoto 2856 II Scale 1:50,000
86 37' 50" 13 25' 45"
Alt.: 740m.
Size: ca. 8ha.
Access: Cra. At km. 224 on the Panamerican Highway at the entrance to El Limon, then south ca. 4km.
Location: Upon arriving at the Olaf Palme Cooperative, ca. 600m. to the south, south-east of the main structure, climbing toward the hilltop.

The site is located at the foot of a hill on level ground. Although rocky soils predominate the area is still cultivated and the remains of henequen are seen about the area. The site is located between the Quebrada Sucia and another smaller quebrada. Nineteen mounds were counted, some quite destroyed by agricultural activities as well as the feeder road which was built over at least three other mounds. According to the informants at the Colama Cooperative, the priest from Somoto also carried out excavations here and remains of his trenches was obvious in at least two mounds. In general the mounds are circular or oval in shape and it was difficult to discern any formal arrangement or groupings due to their state of destruction. The average height was approximately .20cm, although some were barely visible as a scattering of small stones, the rubble fill which had been dispersed by the years of cultivation of the field. It was noted that the site continued toward the west in a zone of zacate and sherds and obsidian flakes were found, although in reduced quantities, in the fields to the north of the site as well. There was a regular amount of cultural debris on the surface (sherds, lithics and fragments of manos and metates) and a collection was made in an area ca. 15m. x 15m. on one of the main mounds where the highest concentration of diagnostic material was to be found. The presence of large handles from utilitarian ware with very coarse paste was noted.

A map was made of the site using the Brunton compass, although surely many mounds had been completely eradicated and a complete map would necessitate test pitting to locate the now invisible mounds to the north and west. To the northwest of datum point A we found the two looted mounds and ca. 10-15m. to the north of these mounds a possible terrace or artificial platform was found on the west side of a natural mound. Frm this site a view of the entire valley is possible, including Sites Colama 1 and Colama 2. W e

returned to Somoto via San Lucas in order to reconnoiter the back roads.

RI NM III-4 Sitio Los Canales 1
Map: Somoto 2856 II Scale 1:50,000
86 37' 48" 13 20' 21"
Alt.: 700m.
Size: ca. 1/2ha.
Access: The entrance is at the 224 km. on the Panamerican Highway, west of Somoto.
Location: The site is located ca. 150m. east of the Quebrada Sucia and ca. 400m. southeast of Loma El Fraile.

This is a small site and somewhat suspicious in terms of the nature of the cultural material on the surface. It is situated on a small, natural rise with a very light scattering of very eroded ceramic material of extremely coarse paste. The Quebrada Sucia is located 150m. to the west. A collection was made in an area of 10m. x 10m. Nearby we found a bifacially worked point of fine grain basalt.

RI NM III-5 Sitio Valle los Canales 2
Map: Somoto 2856 II Scale 1:50,000
86 37' 35" 13 25' 52"
Alt.: 700m.
Size: 1 ha.
Owners: Leonida Vásquez of the community of Valle los Canales
Access: West of Somoto to km. 224 on the Panamerican Highway to the entrance to El Limon and then south on the road to Colama.
Location: The site is located ca. 1/2 km. to the southeast of Colama on the way toward the community of Los Canales on the south side of the road just after passing the Quebrada Sucia.

We observed four mounds, round to oval in shape and very poorly preserved on hilly terrain at the banks of the Quebrada Sucia. Due to sparse amount of surface material a collection was ade over the entire site. The sherds, badly eroded, were from utilitarian ware, thick walled, with very coarse paste, large handles and perhaps with signs of use of the wheel in manufacture. This is to be determined by the ceramicist and the site could be one with a colonial component. The scattering of lithics was also very light, with only two obsidian flakes, two bifacially worked points of jasper and one fine grain basalt biface found.

RI NM III-6 Sitio Valle Los Canales 3
Map: Somoto 2856 II Scale 1:50,000
86 37' 13" 13 25' 29"
Alt.: 700m.
Size: ca. 4 ha.
Owners: Anastasio Osorio of Somoto

Access: From the community of San Lucas, ca. 1/2 km. on the road which leads out to the northwest.
Location: The site is located ca. 700m. to the southeast of the junction of the roads of Valle Los Canales toward La Manzana and the road of Valle Los Canales toward San Lucas. It is found on both the north and south sides of the road and the Loma El Higa is directly located to the south of the site.

The site is situated on level ground ca. 400m. to the north-northeast of the Quebrada Sucia. Twenty-three mounds, circular and oval in shape, are clearly visible, with the largest ones forming a central zone. According to the local informant, Porfirio Carrazo Gomez), the priest from Somoto had excavated at this site several years ago and had carried away many "figuras". The same informant noted that years ago many sherds which had been found in the fields had been taken by local people, many of which had been lost.

A collection of surface material was made in an area 15m. x 15m. on one mound to the south of the road and a second collection was made on the north side in an area ca. 15m. x 15m. In addition to sherds we found small nodules of obsidian, fragments of manos and metates, jasper and obsidian flakes, several bifaces of fine grain basalt and one celt of fine grain basalt.

RI NM III-7 Sitio El Higo
Map: Somoto 2856 II Scale 1:50,000
86 37' 20" 13 26' 00"
Alt.: 750m.
Size: ca. 4 ha.
Owners: Victor Lira y Santiago Pérez López Vásquez
and the Familia Gerónimo Gutiérrez of the community of San Lucas
Access: From the La Colama-San Lucas road ca. 1 km. to the northwest of San Lucas.
Location: The site is located along the Quebrada Sucia on the east bank for approximately 1/2 km. with a northwest-southeast orientation and is ca. 1/2 km. to the northwest of San Lucas (Loma El Higo to the west and the Volcan de Somoto to the east).

Continuing with the surveying we realized that the sites we had named El Higo 1 and El Higo 2 were, in reality, part of a single zone of cultural material dispersed along the length of the Quebrada Sucia for about 1/2 km and formed one site. In the area of the highest concentration of surface material we made a collection in a zone 15m. x 15m. of mostly eroded sherds, obsidian flakes and fragments of manos and metates. Only three small mounds built on natural elevations were visible , the others most likely destroyed over the years by cultivation activities. The area is slightly hilly, in the southeast of the Valle Los Canales, where the Quebrada Sucia narrows and passes ca. 50m. from the site. At the time of the survey a local farmer was making postholes for a new fence and we noted sherds at a depth of .25cm.

RI NM III-8 Sitio La Vuelta
Map: Somoto 2856 II Scale 1:50,000
86 37' 20" 13 26' 00"
Alt.: 700m.
Size: 1/2 ha.
Access: West from Somoto on the Panamerican Highway to km. 224, at the entrance to El Limon. Take the road toward the communities of El Alto and Los Canales.
Location: The site is located ca. 1 km. to the south-southwest of Loma El Alto, on the west side of the road (and north of Valle Los Canales).

It is a small site located on level ground with the Quebrada Sucia ca. 1/2km. to the south. No mounds were visible and there was a very light scattering of artifactual material: a collection was made of the few eroded sherds of utilitarian ware, a single small obsidian projectile point (dart) while no fragments of grinding stones were found.

RI NM III-9 Sitio Santa Rosa 1
Map: Somoto 2856 II Scale 1:50,000
86 36' 41" 13 26'"
Alt.: 720m.
Size: 1/2 ha.
Access: The road that leads south from Somoto toward the communities of Apatule and Los Canales.
Location: The site is located ca. 100m. to the north-northeast of the confluence of the Quebradas Susuba and Unile.

The site is different from the others we have encountered so far in that although the surface material was also light, there were no sherds and a collection was made which consisted of obsidian flakes. Fragments of grinding stones were not encountered. The surface collection was made over the entire site. Mounds were not visible.

RI NM III-10 Sitio Santa Rosa 2
Map: Somoto 2856 II Scale 1:50,000
86 36' 52" 13 26' 35"
Alt.: 720m.
Size: 2 ha
Access: West of Somoto to km. 224 on the Panamerican Highway and on the road to the community of El Alto.
Location: The site is located ca. 200m. to the north of the confluence of the Quebradas Susuba and Unile, on the west side of the Quebrada Susuba. Loma El alto is directly to the west.

As with Site Santo Rosa 1, the surface scatter was very light, but this time sherds were found with the small amounts of obsidian

flakes, four fragments of fine grain basalt bifaces and again, no remains of grinding stones. Mounds were not visible. A surface collection was made in an areas of ca. 1 ha. Both sites seem to have been small, located near the banks of the quebrada. Today the area is cultivated.

RI NM III-11 Sitio San Lucas
Map: Somoto 2856 II Scale 1:50,000
86 36'43" 13 25'03"
Alt.: 730m.
Size: ca. 5 ha.
Access: From the road leading south from Somoto toward San Lucas.
Location: The site is located ca. 100m. west of the road to San Lucas and ca. 200m. south of the cemetery ( and ca. 250m. north of the community of San Lucas).

The site is located in the southernmost part of the Los Canales valley in level ground suitable for agriculture. We counted 46 mounds, some better preserved than others, but almost all quite destroyed by the farming activities. Stones had been removed by local farmers for fence construction, although the site does not seem to have been looted. The largest visible mound, between .50-80 cm. in height and circular, seems to have been in a central position. The Quebrada Sucia passes to the west of the site.

The presence of several polychrome sherds was noted, fragments of grinding stones (manos and metates) and one fragment of a metate with supports. A surface collection was made in an area 10m. x 10m. on the largest mound where the highest concentration and variation was to be found.

RI NM III-12 Sitio Santa Isabel 1
Map: Somoto 2856 II Scale 1:50,000
86 35'43" 13 26'43"
Alt.: 760m.
Size: 3-4 ha.
Owners: Lucio Gutiérrez Hernández, of the community Santa Isabel
Access: From the road leading south out of Somoto toward Valle Santa Isabel.
Location: The site is located ca. 300m. south of the community Valle Santa Isabel and ca. 100m. southwest of the second confluence of the Quebrada Copales.

The site is located on a small level zone almost at the banks of the Quebrada Cop[ales, near one of the confluences with other smaller streams. Eight badly eroded mounds are visible, surrounded by hells, between the two southwest branches of the Quebrada Copales (also called Quebrada Santa Rosa). The site appears to extend toward to south, but no additional mounds were visible. and the surface material became less. A collection was made in an area of ca. 1 ha. due to the light scattering with no obvious

concentrations.

RI NM III-13 Sitio Santa Isabel 2
Map: Somoto 2856 II Scale 1:50,000
86 35'33" 13 26'38"
Alt.: 760m.
Size: 1/4 ha.
Access: The road leading south from Somoto toward Valle Santa Isabel.
Location: The site is located ca. 400m. to the southwest of the first confluence of the Quebrada de Agua with the Quebrada Los Copales (or Santa Isabel).

It is a small site located on a smallish, natural elevation ca. 200m. to the southeast of Site III-12. There is a light scattering of poorly made, thick-walled utilitarian-type potsherds and little lithic debitage. A collection was made in an area of 10m. x 10m .

R-I NM III-14 Sitio Apatule 1
Map Somoto 2856 II Scale 1:50,000
86 36'20" 13 27'08"
Alt. 700m.
Size: ca. 7-8 ha
Owner: Dionisia González
Access: The road south from Somoto toward San Lucas; the first turnoff to the west toward the community of Apatule (near the cemetery).
Location: The site is situated on a broad, ample terrace-like area near the Quebrada Copales. Only eight mounds were visible, circular and oval in shape, although badly destroyed by farming. Two of the largest seemed to be in a central area, although the overall layout of the site was difficult to ascertain. As in most cases so far, the destruction of the mounds has been almost complete, with the scattering of the rubble fill in roughly circular to ovoid zones showing only the slightest elevation, ca. .05-.10cm. in most cases. The owners of the site noted that over the years many fragments of ceramic figurines and zoomorphic supports had been found in the fields, most all lost also over the years. Despite the picking up of surface sherds by locals, the site does not appear to have been looted and presents a good opportunity for future excavations. A surface collection was made in an area of 20m. x 20m. on one of the larger mounds where there was the highest concentration of artifactual material.

R-I NM III-15 Sitio Apatule 2.
Map Somoto 2856 II Scale 1:50,000
86 36'30" 13 27'11"
Size: ca. 10 ha.
Alt. 700m.

Owner: Cristino Rivas from the community of Apatule
Access: The same as for Site III-14
Location: The site is an extension of Site III-14, and is located directly opposite the latter on the other side of the quebrada, again on ample, flat land adjacent to the water source. Twenty-seven mounds were visible; other most likely destroyed by the tractors according to Mr. Rivas, a local farmer. As with other sites located in the zone, there appeared to be two larger mounds which occupy a central position, surrounded by the lower and generally smaller mounds. There was a regular amount of surface material which included the habitational debris of grinding stone fragments, small obsidian nodules, jasper and obsidian flakes, and bifacially worked fine grain basalt. Collections were made in two areas: one on the largest mound in an area ca. 10m. x 10m. and another in the southern section on a mound where a number of diagnostic sherds were found.

R-I NM III-16 Sitio Los Copales
Map Somoto 2856 II Scale 1:50,000
86 36'52" 13 27'45"
Alt. 700m.
Size: ca. 1ha.
Owner: Máximo Díaz of Los Copales
Access: West from Somoto on the Panamerican Highway to km. 220 on the road toward the community of Los Copales.
Location: The site is located at the intersection of the Quebrada Copales and the road which begins at km. 220 of the PanAm Highway, at the side of the road and the quebrada.

The site is located on a small flat area at the bank of the Quebrada Los Copales. It has been totally destroyed and today is used as a baseball field for the community. Sherds and lithic matter are found scattered about the field and upon inspecting an area used to extract clay for brick manufacture we noted sherds at a depth of ca. .35cm. Additionally sherds were seen eroding out from a cut near the quebrada.

R-I NM III-17 Sitio El Alto
Map: Somoto 2856 II Scale 1:50,000
86 37'18" 13 27'01"
Alt. ca. 700m.
Size: ca. 3 ha.
Access: The entrance is via the road which goes to Susuba and begins at km. 220 on the Panamerican Highway .
Location: The site is located ca. 300m. west of Loma Conejo (between Loma Conejo and Loma Cayanpan to the southeast) and ca. 250m. to the northeast of Quebrada Susuba.

It is a site which seems to be along a stretch of the quebrada, with no visible mounds and no concentrations of cultural material. The surface scatter of sherds and lithics is light over approximately 2-3 ha. We made a collection in an area of 5m.x 5m. in a zone of lithics (obsidian flakes) and another collecting from

the entire 200-300m. north-south oriented zone of the site.

R-I NM III-18 Sitio Guiliguisca
Map: Somoto 2856 II Scale 1:50,000
86 38'01" 13 27'52"
Alt. 660m.
Size: ca.a 14 ha.
Owners: Familia Pineda of Somoto
Access: At km. 224 (El Limon on the map) of the Panamerican Highway, west of Somoto
Location: The site is located on the east side of Cerro Guiliguisca on a large, flat expanse of land approximately 150m. to the east of the Quebrada Susuba and extends across the Panamerican Highway to continue north.

This is the same site reported by Okamura and Salgado in 1988 as Site Santa Rosa. Located at the foothill of the large and imposing hill known as Guiliguisca, as it extends across the highway north the site approaches the confluence of two large quebradas, the Susuba and Aguas Calientes. The Quebrada Aguas Calientes had water at the time of our survey, significant in that there has been a two year drought and most of the major and minor watercourses are dry. Fourty eight mounds were counted south of the highway and another eight north of the road, although many more have been destroyed by farming and building activities of the owners over the years. At least one of the larger mounds in which appears to have been the center of the site had an obvious looter's hole, later verified as the work of the priest from Somoto by the owners. The five largest mounds are about 3-4m. in height, rectangular to oval in shape and seem to form a plaza-like space. There is a moderate surface scattering of ceramic material, with many diagnostics, especially white-slipped sherds and numerous polychromes, as well as concentrations of obsidian flakes in a zone to the south of the largest mounds. Numerous fragments of manos and metates were seen in the fields as well as in the stone walls enclosing the fields. Jasper and basalt bifaces were also observed on the surface. It is here we returned to place test pits in January of 1994.

Across the highway at the north of the site we also located grinding pits or morteros in the large rocks at the very edge of the quebrada.

Neighbors on the north of the highway allowed us to photograph a small biface of reddish chert and a small incensario of the Potosi type.

R-I NM III-19 Sitio Cima Guiliguisca
Map: Somoto 2856 II Scale 1:50,000
86 38'18" 13 27'26"
Alt. 842m.

Size: ca. 2 ha. along the length of the hilltop
Access: The entrance is at km. 226 on the Panamerican Highway
Location: The site is situated at the top of the Cerro Guiliguisca, especially on the northeast side.

This is the first hilltop site registered thus far. There are moderate quantities of ceramic and lithic scatter along the length of the eastern side of the crest, as well as a number of fragments of manos and metates of different types. Four mounds were counted, although there could have been more. One, larger than the rest was 15m. long and 3m. wide. Although the ceramics seemed to be utilitarian, and the evidence of grinding stones suggests residential use, the nearest water source at present is the Quebrada La Sierpe at the base of the mound, slightly less than 1km. distant. A topographic map should be made of this site with test excavations to further explore its possible functions as well as chronological placement. An extraordinary view is to be had for the summit, advantageous for monitoring movements in all directions.

R.I. NM III-20 Sitio La Manzana
Map: Somoto 2856 II Scale 1:50,000
86 38'55" 13 25'17"
alt. 760m.
Size: 2 ha.
Access: West from Somoto to km. 224 on the Panamerican Highway and then the road to the south, passing through the communities of Los Canales and La Cruz.
Location: The site is located on a small level plain near the west bank of the Inali River, with the mounds situated at the foot of Fila La Pita (almost facing the beginning of the entrance to the community of Fila La Pita).

Fourteen mounds were counted, all very destroyed by farming activities in the area. We first located what seems to be a lithic workshop area, on a natural terrace ca. 10m. higher than the level of the site and 75m. north of the zone of mounds. The suggested workshop zone consists entirely of yellow mustard colored jasper flakes of various sizes. No finished artifacts were found, although one flake appeared to be worked.

The surface scatter of sherds and lithics was light in the zone of the mounds, although several grinding stone fragments were observed. Collections were made in two areas: an area ca.15m. x 15m. on one mound and the second in an area 10m. x 10m. at the locus of the lithic concentration.

Returning to the vehicle we noted what appear to have been agricultural terraces running for ca. 50m. along the east side of the Inali River at the point where the river intersects with the road which runs from Los Canales, passing through the community of

La Cruz.

R-I NM III-21 Sitio El Pochote 1
Map: Somoto 2856 II Scale 1:50,000
86 39'39" 13 27'53"
Alt. 620m.
Size: ca. 12 ha.
Owners: Amando Herrera and Joaquin Martínez, both from Somoto
Access: At km. 227.5 on the Panamerican Highway west of Somoto
Location: The site is located between the Inali River and another unnamed Quebrada and extends toward the Panamerican.

This extensive site is situated on a level expanse of land, ca. 75m. to the south of the Inali River, which is here oriented in a east-west direction. a quebrada is located to the west. A total of thirty-two mounds, circular to oval in form, were visible, with twenty-four of these located in a central position vis-a-vis the river and the Panamerican highway. Closer to the Inali River, near its confluence with the River Coco, we counted four mounds; an additional four were recorded closer to the highway. Although the integrity of the site has been destroyed by farming activities, we mapped what appeared to by the central area, with the larger mounds forming a plaza. The surface material was lightly scattered about the site, with some areas of concentration. Surface collections were made in two areas: the zone of four mounds near the quebrada and on one of the mounds in the group of twenty-four in a zone ca. 10m. x 10m.

R-I NM III-22 Sitio El Pochote 2
Map: Somoto 2856 II Scale 1:50,000
86 39'16" 13 28'06"
Alt. 620m.
Size: 2 ha.
Access: The entrance is from the Panamerican Highway, km. 227.
Location: The site is located on the west side of the Quebrada Aguas Calientes, ca. 1/2 km. to the north of the Panamerican Highway at the entrance to the community of El Pochote. Loma La Chata is to the north.

The site is located on flat ground near the banks of the Quebrada Aguas Calientes, ca. 1 km. to the southeast of the confluence of this quebrada with the River Coco. No mounds were visible and there was a very light scatter of surface debris. A collection was made in an area ca. 40m. x 40m. Most sherds were eroded.

R-I NM III-23 Sitio La Peña
Map: Somoto 2856 II Scale 1:50,000
86 38'07" 13 28'55"
Alt. 670m.

Owner: Trino Muñoz
Access: Km. 223.5 off the Panamerican Highway, west of Somoto
Location: The site is located at the point where the Quebrada Susuba crosses the Panamerican Highway to join the Quebrada Aguas Calientes and ca. 400m. to the north of the road, in a zone of outcropping rocks.

This site had been documented by Okamura and Salgado in 1988. The petroglphs are located at the base of the rock outcrops, which for a north-south oriented low ridge and facing an expanse of level cropland. The petroglyphs are in two distinct zone. To the north, at the entrance to a small cave-like enclosure or shelter a monkey-human figure is found while two more, badly eroded are to be located deeper into the shelter. The shelter is small, about 3m. wide and 3m. deep and ca. 1m. in height and within the area another petroglyph in the shape of a bird(?), was documented. Just to the north of the shelter the badly destroyed remains of other carvings could barely be discerned under the lichen and cracks in the rocks.

Ca. 50m. to the south, along the same extension of boulders another series of petroglyphs were located. Two stylized monkey figures were recorded, one larger than the other and ca. 1m. to the north another set of badly destroyed petroglyphs were also recorded; again one seemed to have a monkey-like shape. A photographic record was made of all petroglyphs.

R-I NM III-24 Sitio El Aguacate
Map: Somoto 2856 II Scale: 1:50,000
86 37'31" 13 29'01"
Alt. 680m.
Size: 2 ha.
Access: Ca. km. 223 on the Panamerican Highway, west of Somoto.
Location: The site is located 150m. north of the Panamerican Highway at the banks of the Quebrada Aguas Calientes and on both sides of the road that leads north towards the community of El Aguacate.

This is a small site at the banks of the Quebrada Aguas Calientes in an area of slightly rolling terrain. No mounds were visible and there was a light scatter of eroded sherds and only a few obsidian flakes. A fragment of a mano was recorded.

R-I NM III-25 Sitio El Varillal
Map: Somoto 2856 II Scale 1:50,000
86 41'43" 13 25'26"
Alt. 720m.
Size: Not determined
Access: West of Somoto to km. 230 on the Panamerican Highway, from the community of La Playa.
Location: The site is located 1/4km. to the northwest of the La

Ceiba bridge; the entrance is at the community of La Playa, on the road that leads to Miguilse and is located in front of a settlement of war veterans, between the road and the quebrada.

The site is near a the Quebrada El Varillal and the Tapacali River. Because of heavy thorny vegetation cover it was difficult to estimate the size and only ten mounds of circular and oval shapes were visible. There was negligible surface material and no collection was possible.

R-I NM III-26 Sitio La Jabilla
Map: Somoto 2856 II Scale 1:50,000
86 34'45" 13 27'50"
Alt 720m.
Size: ca. 2 ha.
Access: The road which leads south from Somoto toward the community of El Erial.
Location: Almost at the junction of the road leading out of Somoto toward El Erial with another smaller road that joins with the former and then continues on to the community of San Lucas. The site is on the west side of the large Quebrada Somoto.

Although recent construction of a hacienda over a large portion of the site has greatly destroyed its integrity, we noted twenty-one mounds, with four larger and between cal. 2-3 m. in height. Mounds were rectangular, circular and oval in shape. The presence of a looter's trench was noted in one of the larger mounds. A regular amount of surface material was present, sherds and obsidian flakes, and in a road cut cultural material was recorded at a depth of 1 meter. A collection was made on and around one mound in an area of ca. 15m. x 15m.

R-I NM III-27 Sitio Cacaulí I
Map: Macuelizo 2856 I Scale 1:50,000
86 35'04" 13 30'05"
Alt. 660m.
Size: 4 ha.
Owners: Ernesto Mendoza y Teofilo Jiménez
Access: The entrance is from the Panamerican Highway at km. 217 on the road which goes south toward Valle Cacauli.
Location: The site is located on both sides of the road, ca. 1/2km. north of the Panamerican Highway and ca. 200m. east of the quebrada Somoto.

This site is already known and registered at the Museo Nacional de Nicaragua. It has been greatly destroyed by looting over the years, as well as the farming activities, including the use of tractors. We counted ca. 25 visible mounds and a map was made of the site using the Brunton compass. The larger mounds, which appear to have been part of a central area, were ca. 2-3

Map: Macuelizo 2856 I Scale 1:50,000
86 35'04" 13 30'05"
Alt. 660m.
Size: 4 ha.
Owners: Ernesto Mendoza y Teofilo Jiménez
Access: The entrance is from the Panamerican Highway at km. 217 on the road which goes south toward Valle Cacauli.
Location: The site is located on both sides of the road, ca. 1/2km. north of the Panamerican Highway and ca. 200m. east of the quebrada Somoto.

This site is already known and registered at the Museo Nacional de Nicaragua. It has been greatly destroyed by looting over the years, as well as the farming activities, including the use of tractors. We counted ca. 25 visible mounds and a map was made of the site using the Brunton compass. The larger mounds, which appear to have been part of a central area, were ca. 2-3 meters in height. A plaza area was defined by several of these larger mounds. There was fairly heavy concentration of ceramic material on the surface, despite the fact that according the local informants many people have come to collect ceramics from the site. One farmer mentioned a burial that was found in one of the mounds, and that many complete ceramic pieces had been taken.

We made one collection in the area of one mound 20m. x 20m. and a second non-random collection of selected diagnostic sherds as well as the small collection of the Mendoza family which was donated to the museum.

R.I. NM III-28 Sitio Cacaulí 2
Map: 2856 I Macuelizo Scale 1:50,000
86 35'13" 13 30'02"
alt. 660m.
Size: 5 ha
Owner: Benito Jiménez of Valle Cacaulí
Access: Km. 217 of the Panamerican Highway at the Esso Station; the road which leads to Valle Cacauli. hacia Valle Cacaulí.
Location: In the community of Valle Cacauli, from the junction of the two roads that come in from the Panamerican highway (ca. 2.25 km. to the north), on the north side of the road. The mounds can be seen from the road).

The site is located in an area of partial thorny brush as well as cultivated fields on level and slightly rolling ground ca. 350m. from the two quebradas (the Quebrada Somoto and another unnamed watercourse). Forty-one mounds were counted, in various stages of destruction. Some were barely visible and so noted in the map that was made. The probability is high that more are located in the zone of brambles which was only partially surveyed. Some of the largest and best preserved mounds, which range in height from ca. 2-3 meters, form a central plaza, which measures more than 50m.

north-south by ca. 30m. east-west. Eight rectangular to oval shaped mounds form the plaza, which is surrounded by the smaller mounds. There was a paucity of cultural material on the surface and a small collection was made throughout the site. A fragment of a small decorated stone mortar and a metate piece were also collected.

R.I. NM III-29 Sitio Cacaulí Río Abajo
Map: 2856 I Macuelizo Scale 1:50,000
86 35'38" 13 30'42"
Alt.: 640m
Size: 1/4 ha.
Access: The entrance is from the Panamerican Highway at km. 217.25 west of Somoto on the road that leads to Valle Cacauli and ca. 2 1/2 km. to the north, on the east side of the road.
Location: ca. 200m. to the east of the road that passes on the east side of Cerro Cuma and ca,. 300m. to the south of the confluence of the Quebrada Somoto with another smaller quebrada which joins the former from the east.

This is a small site located on rolling land near the banks of the Quebrada Somoto and ca. 200m. to the east of the road. It is situated upon a small, natural elevation and there is very little surface cultural material. Sherds are scattered in a south-west orientation, following the course of the water. The area is used for cultivation, which accounts for the destruction of the probable mounds. Contiguous to the slight concentration of material at within the site's boundaries we noted an even sparser scattering of obsidian flakes, sherds and an occasional fine-grain basalt biface, again following the orientation of the watercourse.

R.I NM III-30 Cooperativa Juan Carlos Espinoza
Map: 2856 I Macuelizo Scale 1:50,000
86 38'08" 13 31'00"
Alt.: 600m.
Size: Not possible to determine
Owners: Cooperativa Juan Carlos Espinoza
Access: From the community of Hermanos Martínez
Location: The site is located ca. 700m. to the northeast of the community of Hermanos Martinez, on the north side of the River Coco and ca. 700m. to the west of the River Yari, ca. 100m. to the west of the large tobacco drying barn.

Located on a small terrace of slightly rolling terrain above the north side of the River Coco, there are very slight vestiges of cultural material on the surface. A few eroded sherds and no lithic material were noted and a collection was made in an area of 5m. x 5m.

RI NM III-31 Sitio UPE 1
Map: Macuelizo 2856 I Scale 1:50,000
86 37'43" 13 31'08"
Alt. 600m.
Size: ca. 3ha.
Owners: Cooperativa José Benito Jiménez (tobacco cooperative)
Access: From Somoto take the road to Hermanos Martinez (5km.).
Location: The site is located exactly in the center of the Cooperative Jose Benito Jimenez, on the north side of the River Coco.

The site is situated on the north side of the River Coco on extensive flat land. The recently established cooperative was built over what appears to have been the center of the site, thereby contributing to its destruction along with the cultivation of its main crop, tobacco. Twenty to twenty-five mounds were visible, either oval or circular in shape, but very little surface material was found. The visible mounds varied in form, area and height, with several ca. 2m. high and there appeared to be a central plaza zone surrounded by the largest mounds.

A collection was made in the cultivated fields to the west of the large mounds in an area ca. 20m. x 20m. A second collection was made in the fields in order to obtain as many diagnostics as possible from this extensive but badly damaged site. The site exhibited moderate amounts of ceramic material and a slight scattering of lithic material.

RI NM III-32 Sitio Hermanos Martínez 1
Map: Macuelizo 2856 I Scale 1:50,000
86 37'40" 13 00'41"
Alt: 600m.
Size: ca. 2 ha.
Access: From Somoto the road to the community of Hemanos Martínez (ca. 5km.)
Location: The site is located in the southwest sector of the modern community of Hermanos Martinez. Hermanos Martínez.

The modern community of Hermanos Martinez was built directly over the prehispanic site and the only vestiges of cultural material are found in the south and southwest sectors. This community was established a few years ago because of the necessity to relocate farmers in the northern war zone to safer quarters. The settlement does not appear on the 1984 aerial photographs of the zone. The destruction of what had probably been a large site is almost total, since most of the original building stones of the mounds were reused by the new settlers. Here too the priest of Somoto was implicated in looting activities. It should be noted that the priest's entire collection was donated to the local branch of the Museo Regional of Somoto. However, at present, due to extreme financial difficulties, the museum is closed and the

collection is being temporarily stored by the city officials at the town hall.

Surface remains were negligible and no collection could be made. The site's location duplicates a pattern we have found with regularity: the first river terrace is reserved for cultivation (at present and most likely during precolumbian times as well) and the site is situated on higher ground, on the second terrace, overlooking the river and protected from any inundations during periods of heavy rainfall.

RI NM III-33 Sitio Las Lajas
Map: Macuelizo 2856 I Scale 1:50,000
86 38'18" 13 31'31"
Alt: 620m.
Size: ca. 1/4 ha.
Access: The entrance is from the Panamerican Highway at km. 218 on the road situated between the hospital and the cemetery.
Location: The site is located ca. 1km. to the northwest of the Cooperative Jose Benito Escobar and 200m. to the south of the intersection of the road with the River Yari and ca. 12km. to the northwest of Somoto.

Las Lajas is a small site with no visible mounds located on a small area of generally flat land ca. 50m. to the east of the River Yari. There was only a slight scattering surface material, with no noticeable concentrations and a collection was made in an area of 15m. x 15m.

RI NM III-34 Sitio El Naranjo
Map: Macuelizo 2856 I Scale 1:50,000
86 38' 30" 13 30' 03"
Alt.: 600m.
Size: ca. 3 ha.
Owners: S. Moncada
Access: Km. 218 on the Panamerican Highway on the road between the hospital and the cemetery.
Location: The site is located on the north side of the road which comes from Hermanos Martinez, just before the turn to the north towards Las Lajas and ca. 9 km. northwest of Somoto. The site continues to the southwest of the road.

This site was first recorded by Salgado and Okamura in 1988. It is situated on high ground, ca. 100m. south of the banks of the River Coco on slightly rolling ground. Thirty-one mounds were counted, varying in shape from circular to oval; some contiguous mounds now almost touching due to dispersal of fill material with the years. However, as with so many sites, the overall pattern of the site was impossible to determine due to destruction by road and residential construction as well as farming activities. Remains of

mounds were also noted on the southwest side of the road.

A collection was made of surface material in an area ca. 10m. x 10m. on and adjacent to one of the mounds. There was only a moderate amount of cultural material on the surface: very eroded sherds, fragments of a mano and mortar as well as obsidian and jasper flakes.

RI NM III-35 Sitio El Fraile 1
Map: Macuelizo 2856 I Scale 1:50,000
86 41'50" 13 31'34"
Alt.: 700m.
Size: ca. 5ha.
Owners: Porfirio Moncada of Somoto
Access: An easy entrance on the same road which leads to Site III-33.
Location: The site is located an extensive river terrace ca. 400km. north of the settlement of El Fraile and ca. 300m. west of the River Yari. It is ca. 15km. northwest of Somoto.

The site is located on an elevated terrace ca. 20m. northwest of the River Yari, with the quebrada Presa to the north. Eighty-four mounds were recorded, some well preserved since the land has not been actively cultivated by the owner. However, some of the larger mounds show signs of looting. Although an accurate count of the mounds was hampered by dense, thorny vegetation, at least one large plaza area was obvious, surrounded by the larger mounds on all sides. These central mounds measured from 2-3m. in height and were surrounded, as the usual pattern at the large sites, by smaller mounds in all directions. An additional three low mounds were located at a distance from the main group, in lower ground closer to the river's banks.

Due to the very small amount of surface material a collection was made in all areas of the site . The sherds were very eroded, with little diagnostic material; a small number of obsidian flakes, fragments of a mortar, a metate support and a mano fragment were also collected. At a later date a photographic record was made of additional material from this site collected by a local informant of Somoto, Daniel Gradiz.

RI NM III-36 Sitio El Fraile 2
Map: Macuelizo 2856 I Scale 1:50,000
86 41'41" 13 31'16"
Alt.: 700m.
Size: ca. 1/4 ha.
Access: Easy access on the same road that leads to Site III-35.
Location: The site is located on a small level plain ca. 50m. south of the River Yari, coming from the Hacienda El Fraile, at the foot of the El Fraile Hill and ca. 13km. northwest of Somoto.

A small site with no visible mounds, it is situated on a small stretch of level, high ground on the south side, near the banks of the River Yari. A few eroded sherds, some obsidian flakes as well as obsidian nodules were found. A surface collection was made over the entire site as the scatter was light and no concentrations of material were apparent.

NM III-37 Sitio El Tamarindo 1
Map: Macuelizo 2856 I Scale 1:50,000
86 42'23" 13 31'40"
Alt.: 780m.
Size: ca. 1ha.(?) difficult to determine
Access: The same access as to Sitio III/36.
Location: The site is situated on a promontory and due to dense overgrowth it was difficult to accurately count mounds or to ascertain the overall of distribution. Fifty-five mounds were recorded, with much variation in size and height; there appeared to be three or four centrally placed mounds but the majority were low, ca. .50cm. in height and closely spaced. This may have been a response to the somewhat restricted space available on this high ground. The River Yari is located ca. 300m. to the south. There was very little cultural material on the surface and the site did not appear to have been looted. A collection was made over the entire site.

RI NM III-38 Sitio Las Pintadas
Map: Macuelizo 2856 I Scale 1:50,000
38 40'25" 13 31'16"
Alt.: 780m.
Size: not determined
Access: Km. 218 from the Panamerican Highway, continuing on the road that leads out of the settlement of Valle El Tamarindo toward the west-southwest in the direction of Los Caracoles.
Location: The site is located in the community of El Tamarindo, at the foot of the Cerro Colorado, on the north-northwest side, near the Quebrada Las Pintadas and at the side of the road mentioned for access to the site.

The petroglyph is carved on a rock measuring 2.90m. long with an average height of 1.45m. Although a good portion of the petroglyph has been damaged by the growth of lichens, a monkey and a wavy line which extends the length of the rock outcrop could be seen, while on the west side of the monkey carving the remainder of the glyphs could not be discerned. Several spirals were noted near the tail of the monkey. A photographic record was made but no sample was collected since there were no surface materials apparent. The site is situated nearby to the Quebrada Las Pintadas but not other remains were discovered. It is located ca. 1/2km. to the southwest of Site III-37, El Tamarindo 1.

RI NM III-39 Sitio El Tamarindo 2
Map: Macuelizo 2856 I Scale 1:50,000
86 43'11" 13 31'28"
Alt.: 800m.
Size: Not possible to define
Access: Km. 218 of the Panamerican Highway,the same as for Site III-38. However, nearing the site becomes difficult: however, arrival in the dry season is possible on the road which leads west from Valle El Tamarindo in the direction of Las Pintadas.
Location: The site is located in the same community of El Tamarindo, on level ground ca. 400m. north of Site III-38 and ca. 100m. northwest of the road. The Quebrada Las Pintadas is located ca. 200m. to the south.

Situated between two small watercourses (quebradas) on level ground surrounded by low hills, this site was covered by dense thorny brush and was not easily surveyed. According to local informants with us that day (Arnulfo Gradiz and Daniel Gradiz of Somoto), year by year the mounds, once so visible, have been systematically destroyed. The site's limits were not determined and since there was only the barest of scatter of surface material a collection was made over the entire zone - mostly eroded sherds and obsidian flakes.

RI NM III-40 Sitio El Tamarindo 3
Map: Macuelizo 2856 I Scale 1:50,000
86 42'47" 13 31'31"
Alt.: 760m.
Size: ca. 1/2 ha.
Access: Same as access to Site III-39, from Valle El Tamarindo.
Location: The site is located on the southeast side of the road that comes from Valle El Tamarindo, ca. 250m. northwest of the confluence of the River Yari with the Quebrada Las Pintadas.

A small site with no visible mounds, it is situated on the north side of the River Yari, ca. 250m. northwest of the confluence of the river with the Quebrada Las Pintadas and to the north of the ridge of the Cerro Colorado. There was very little surface material at the site, on gently rolling terrain surrounded by low hills. A collection was made in the fields in an area 10m. x 10.

RI NM III-41 Sitio La Presa 1
Map: Macuelizo 2856 I Scale 1:50,000
86 41'52" 13 32'03"
Alt.: 700m.
Size: ca. 1/2 ha.
Owners: Cooperativa Constantino Maldonado Lobo
Access: The same as for Site III-39; the entrance is by the road

which goes from Las Lajas toward El Fraile.
Location: The site is located near the banks of an unnamed quebrada, at the foot of the Cerro Lugar Portilla los Platanares, ca. 800m. southwest of the small settlement of El Cairo. and ca. 600m. north of Site III-35 (El Fraile 1).

The site is located between two water sources, the quebrada La Presa and another unnamed quebrada which run at the foot of the Cerro Lugar Portillo Los Plantanares. Thirteen badly destroyed mounds were recorded in cultivated fields, of which two were noticeably larger and circular in form. Continuing our surveying, the vestiges of additional mounds were observed in the plowed fields adjacent to this site, but it was not possible to determine the number. Very little surface material was present and a collection was made around on two of the larger mounds and a second sample was taken from the fields in an area of 10m. x 10m.

RI NM III-42 Sitio La Presa 2
Map: Macuelizo 2856 I Scale 1:50,000
86 41'23" 13 32'05"
Alt.: 680m.
Size: ca. 1/4 ha.
Access: The entrance is the same as Site III-41 and then continuing on the road which leads from Las Lajas toward El Fraile, ca. 1km. west of the settlement of El Iguaje.
Location: The site is located between the Quebrada La Presa and an unnamed smaller quebrada to the north, ca.1km. west of El Iguaje and ca. 250m. north of the road.

A small site with no visible mounds, it is situated between two watercourses, the Quebrada La Presa 150m. to the south and the other ca. 150m. to the north. It is a zone of level ground in an area where five quebradas come together and join with the River Yari. Little surface material was evident and a collection was made in an area ca. 20m. x 20m.: the sherds were badly eroded and there was little lithic material.

RI NM III-43 Motuse 1
Map: Macuelizo 2856 I Scale 1:50,000
86 39'08" 13 31'34"
Alt.: 620m.
Size: ca. 1-4 ha.
Owners: Celio Santeliz Gradiz
Access: The entrance again from km. 218 on the Panamerican Highway and from the community of Motuse, heading out on the road to the northwest.
Location: The site is located ca. 12km. northwest of Somoto and near the banks of the River Yari, ca. 300m. southeast from where the road from Motuse crosses the river.

in an area ca. 40m. x 10m. since no concentrations were apparent. Eroded sherds, a fragment of a fine-grain basalt celt and the fragment a chalcedony biface were collected.

RI NM III-46 Hermanos Martínez 2
Map: Macuelizo 2856 I Scale 1:50,000
86 37'17" 13 31'31"
Alt.: 600m.
Size: 1/4ha.
Owners: Cooperativa Hermanos Martinéz
Access: Km. 218 on the Panamerican Highway and from the community of Hermanos Martinez the road which heads north toward El Higo.
Location: The site is located ca. 100m. south of the River Coco on the east side of the road which come from El Higo at the point here where the river bends.

This small site is located near the southern banks of the River Coco on a small elevated stretch of level ground. No mounds were visible, surface scatter was very light and a collection was made in an area of 5m. x 5m. In addition to eroded sherds we collected two fragments of fine-grain basalt bifaces and several obsidian flakes.

RI NM III-47 Sitio Paso Lajas Amarillas
Map: Macuelizo 2856 I Scale 1:50,000
86 36'53" 13 31'58"
Alt.: 600m.
Size: 1 ha.
Owners: Pedro Ochoa of Somoto
Access: The entrance is from the Panamerican Highway on the road adjacent to the Esso station of Somoto which heads to Valle Cacauli and continues toward the settlement of Paso Lajas Amarillas.
Location: The site is located on both sides of the road that goes from the settlement of San Luis to Las Lajas, between the quebrada San Jose and another small watercourse to the west ca. 350m. and north of the River Coco. The greatest concentration of surface material appears to be south of the road.

The site is located on a small area of flat, high ground ca. 350m. north of the River Coco between two quebradas. Thirteen grouped mounds are visible in the fields: although badly destroyed by farming activities circular and oval shapes were noted. It is likely that the site had been larger but it was impossible to determine the number of mounds due to the overall destruction of the site over the years. Collections were made in two 10m. x 10m. areas on and around two of the mounds. The site continues on the north side of the road, with a scattering of sherds and lithic debris, although the major concentrations appear to be south of the road.

RI NM III-48 Sitio San Luis 1
Map: Macuelizo 2856 I Scale 1:50,000
86 36'34" 13 32'14"
Alt.: 600m.
Size: ca. 3 ha.
Owners: Cooperativa Juan Carlos Espinoza of San Luis
Access: The entrance is the same as Site III-47.
Location: The site is located on the north side, ca. 300m. of the River Coco and is on the lands of the Cooperative Juan Carlos Espinoza in San Luis. It is on both sides of the road which leads to the small community of El Cairo and southeast of the road to El Limon.

The site is situated 300m. from the River Coco on its north side, close to an extensive flat plain. The amount of destruction has been great since the land had been used for years as a cattle ranch. The former owners were Pastor and Amelia Lobo of Ocotal, large landowners in this northern region prior to Sandinista land reforms converted the ranch to a cooperative. Large concentrations of ceramic material was seen almost pulverized by the cattle and later tractor use.

Seventeen mounds were recorded, although no overall distribution pattern was evident. The construction of farm-related structures and obvious earth-moving activities had greatly impacted the site. A collection was made on one mound in an area ca. 10m. x 10m and a second collection made over the entire site.

RI NM III-49 Sitio San Luis 2
Map: Macuelizo 2856 I Scale 1:50,000
86 37'04" 13 32'37"
Alt.: 620m.
Size: 2 ha.
Access: The same as Site III-47, the road to Valle Cacauli, then the road from San Luis which goes to El Cairo.
Location: The site is located ca. 7 km. north of Somoto and ca. 1/4km. to the northwest of the Hacienda San Luis near the banks of the Quebrada San Jose.

The site is located on flat ground east of the Quebrada San Jose and ca. 1/2km. north of the River Coco on good agricultural land. No mounds were visible. There were no apparent concentrations of the cultural material which was lightly dispersed over a large zone. We made a collection in an area ca. 30m. x 30m.: the sherds were badly eroded with few diagnostics, obsidian flakes and one celt of fine-grain basalt.

RI NM III-50 Sitio El Jiñote 1
Map: Macuelizo 2856 I Scale 1:50,000

86 35'50" 13 33'14"
Alt.: 600m.
Size: Not able to define
Owner: Rosa Cruz Espinoza of Las Limas
Access: The entrance if from the Panamerican Highway on the road adjacent to the Esso station and then by the road which heads in the direction of El Limon (on the west side of the Loma El Cabullal).
Location: The site is located ca. 1/2km. north of the settlement of El Limon at the foot of Loma El Jinote (northwest side) and ca. 100m. west of Quebrada La Ceiba.

The site is situated at the foot of the Loma El Jinote on a small area of elevated land overlooking lower terrain near the Quebrada La Ceiba. The vegetation cover made survey difficult and little cultural material was seen on the surface: no mounds were visible. A collection was made at the edge of an erosion cut in an area ca. 10m. x 10m. where the usual eroded sherds and small amount of obsidian flakes were found. The site's limits were not defined.

RI NM III-51 Sitio El Jiñote 2
Map: Macuelizo 2856 I Scale 1:50,000
Alt.: 660-680m.
Size: ca. 1 ha.
Owners: Rosa Cruz Espinoza
Access: The same as Site III-50 and also by the road out El Limon (north-northeast) on the west side of the Loma El Cabullal.
Location: The site is located on the top of Loma El Jinote, predominantly on the south and southeast sides.

The site is located at the summit of the El Jinote hill, with the Quebrada La Ceiba ca. 200m. to the north. There appears to be a modification of the hill so that an entrance-like platform, narrowing as it ascends the hill, leads one up to the summit. Approaching the summit it turns slightly to the right and seems to circle the area of mounds. There are approximately fifty mounds visible, many well preserved since only two mounds showed signs of looting. It appears as if modifications were made to the many naturally flat terrace-like areas around the summit to support basal platforms. Many, perhaps due to lack of space, were contiguous, with lane-like linear areas defined by these mounds. A central plaza zone was noted, this surrounded by mounds.

There was, however, very little surface material and a small collection was possible in the area around a looter's hole.

RI NM III-52 Sitio El Limón
Map: Macuelizo 2856 I Scale 1:50,000
Alt.: 600m.

Size: ca. 1 ha.
Owners: José Nieves Castillo, El Limón
Access: The same as Site III-50 and the road out of Valle Cacauli headed for Il Limon (ca. 4 1/2 km. north of Valle Cacauli).
Location: The site is located in agricultural fields directly behind the structures of the settlement of El Limon ca. 200m. north of the River Coco.

The site is located on flat ground ca. 200m. north of the banks of the River Coco. No mounds were visible but a concentration of obsidian flakes ca. 10m. x 10m. was noted, surrounded by lightly scatter sherds. The residential structures of the present owners had been built over part of the site and flakes and sherds were observed in the road which passes by their small ranch. A small shoe-shaped ceramic pot recovered during post-hole making was donated by the ranch owners and photographs were taken of a metate without supports which they had also found in their fields.

RI NM III-53 Sitio Las Limas 1
Map: Macuelizo 2856 I Scale 1:50,000
Alt.: 600m.
Size: 2 ha.
Owners: Doña Rosa Amelia Cruz
Access: The same as Site III-50 and by the road from San Luis to the east to the hacienda of Las Limas.
Location: The site is located on both sides of the road at the foot of the Cerro Cabullal (northeast side) ca. 300m. west of the River Coco and ca. 8km. north of Somoto.

The site is located between the quebrada La Ceiba and the River Coco on high slightly undulating ground. Mounds were not observed, but cultural material was scattered about the 2 ha. area with no obvious concentrations. Ten fine-grain basalt bifaces were found (six complete), two celts of fine-grain basalt and numerous fragments of grinding stones. The surface sherds were mainly utilitarian with few decorated pieces. Closer to the river banks the prehispanic material was mixed with more recent debris such as glass and roof tiles.

RI NM III-54 Sitio Las Limas 2
Map: Macuelizo 2856 I Scale 1:50,000
Alt.: 600m.
Size: 1 ha.
Owners: Rosa Amelia Cruz Espinoza
Access: The same as Site III-50 and ca. 5 km. north of Valle Cacauli from the road out of that community headed for El Limon.
Location: The site is located ca. 250m. south-southwest of the confluence of the Quebrada La Ceiba and the River Coco on the property of the Hacienda Las Limas.

This small site is situated on level and slightly rolling ground ca. 250m. south-southwest of the confluence of the quebrada La Ceiba with the River Coco. Eleven poorly preserved mounds were recorded. The small amount of surface sherds were badly eroded, little lithic debris was seen and a collection was made in an area ca. 20m. x 20m. in the mound zone. Again, the presence of recent contemporary debris (particularly roof tiles) indicates modern use of the site. The residential and ancillary buildings of the Las Limas ranch have also been built over part of the site.

RI NM III-55 Sitio Las Limas 3
Map: Macuelizo 2856 I Scale 1:50,000
Alt.: 580m.
Size: ca. 1 ha.
Access: The same as Site III-50 and ca. 5 km. north of Valle Cacauli from the road out of that community headed for El Limon.
Location: The site is located ca. 600m. north of Loma Quisutite at a bend in the River Coco.

Situated on high, hilly ground at a bend in the River Coco and facing the ranch buildings of Las Limas Hacienda were the vestiges of very badly conserved mounds (erosion had destroyed most of the site) amidst thick, thorny vegetation. The few surface sherds were very eroded and little else was apparent except for the usual light scattering of obsidian flakes. A collection was made in an area 10m. x 10m.

RI NM III-56 Sitio La Llorona
Map: Macuelizo 2856 I Scale 1:50,000
Alt.: 680m.
Size: ca. 1/2 ha.
Access: Km. 214.75 on the Panamerican Highway on the road heading toward Rodeo Grande.
Location: The site is between the road to Rodeo Grande and the small quebrada west of Cerro El Coyolito, ca. 1/4km. north of the Panamerican Highway.

This small site situated at the banks of an unnamed quebrada at a place known as El Chinchal has no visible mounds and very light surface scatter of eroded sherds, obsidian flakes, one small obsidian point and several fragments of fine-grain basalt bifaces. A collection was made in an area 20m. x 20m.

RI NM III-57 Sitio Las Tapias
Map: Macuelizo 2856 I Scale: 1:50,000
Alt.: 580m.
Size: ca. 5-7 ha.
Owners: Cooperativa José Benito Jiménez
Access: Km. 214.75 on the Panamerican Highway on the road which

goes from the community of las Mercedes toward Rodeo Grande and arrives at the Curtiembre (ca. 6km. north of the PanAm highway). Location: The site is located on a terrace on the north side of the River Coco where the river bends, in front of a place known as El Curtiembre and southwest ca. 500m. from Cerro Las Tapias.

One hundred twenty-eight mounds were recorded at this large and impressive site. Surely many more have been destroyed by the farming activities over the years. It is situated on an ample expanse of level ground at a bend in the River Coco the site occupies both the first and second river terraces. Although there was heavy vegetation in some areas of the site obscuring the overall settlement pattern, there were other zones freer of growth and a number of mound forms were recorded. A well defined plaza zone surrounded on all sides by mounds to 3m. high was noted. Fairly well preserved rectangular platform mounds could be seen; other mounds were circular and oval - showing the signs of erosion and destruction. The mounds in the first terrace were uniformly lower, some barely .20cm., their fill spread out by the passing of oxen teams preparing the land for planting. One pattern noted that was observed at one other site is two or three mounds sharing one basal platform. Destruction of the site was variable, with some obvious looters' holes in some of the centrally located mounds. According to Juan Martinez, the informant who is owner of the Las Tapias ranch, over the years many complete ceramic vessels have been taken from this site.

A collection was made on the second terrace on and around one of the larger mounds of the central area; a second collection was made in the zone of lower mounds on the first terrace. However, as with the large site III-35 (El Fraile), there was only a moderate to small amount of cultural material on the surface. A member family of the cooperative which owns the property, residing in the settlement of Las Brisas donated a polychrome vase (Figure 26a) which was subsequently classified as Las Tapias Tricromo.

RI NM III-58 Sitio El Guayabo
Map: Somoto 2856 II Scale: 1:50,000
Alt.: 620m.
Size: Not possible to determine
Owners: Gradiz Family of Somoto
Access: Km. 227 west of Somoto at the entrance to the road to Valle El Guayabo.
Location: The site is located on an high ground, the second terrace, on the south side of the River Coco and ca. 500m. north-northeast of Loma El Jicaral.

The almost totally destroyed site was made known to us by the informant, Daniel Gradiz, a resident of Somoto and the most active

member of a small group of people who had been trying to form a local chapter of amateur archaeologists, with support and assistance from the Museo Nacional de Nicaragua.

The site is on Gradiz family property and Daniel allowed us to photograph his small collection of lithics and sherds he has picked up in the fields over the years. According to Daniel, numerous mounds had been visible years ago, but the use of a tractor for many years has obliterated their remains. There was negligible cultural material on the surface and a small collection was made through the fields.

RI NM III-59 Sitio Pochote 3
Map: Somoto 2856 II Scale: 1:50,000
Alt.: 620m.
Size: ca. 2 ha.(difficult to determine with accuracy)
Owners: Domingo Ortez of El Pochote
Access: Km. 225 on the Panamerican Highway at the entrance to the hacienda El Pochote
Location: The site is located on high ground with both flat and hilly areas, between the Quebrada Aguas Calientes and the River Inali, ca. 100m. southeast of the River Coco.

On level and hilly ground high above and overlooking the River Coco we counted, with difficulty due to the thick bush, between twenty and twenty five mounds. There was little material on the surface . The site probably extended to the more level ground, presently the site of Mr. Ortez's ranch of El Pochote. According to the owner, he has incorporated many stones with petroglyphs into his fencing making and mending over the years. He also mentioned the frequent figurines and animal heads he and his children used to pick up in the fields, but all had gotten lost. One whitish-green carved cylinder bead (jadeite? albite?) found in the fields directly across the River Coco by the informant was donated to the museum.

FIGURES

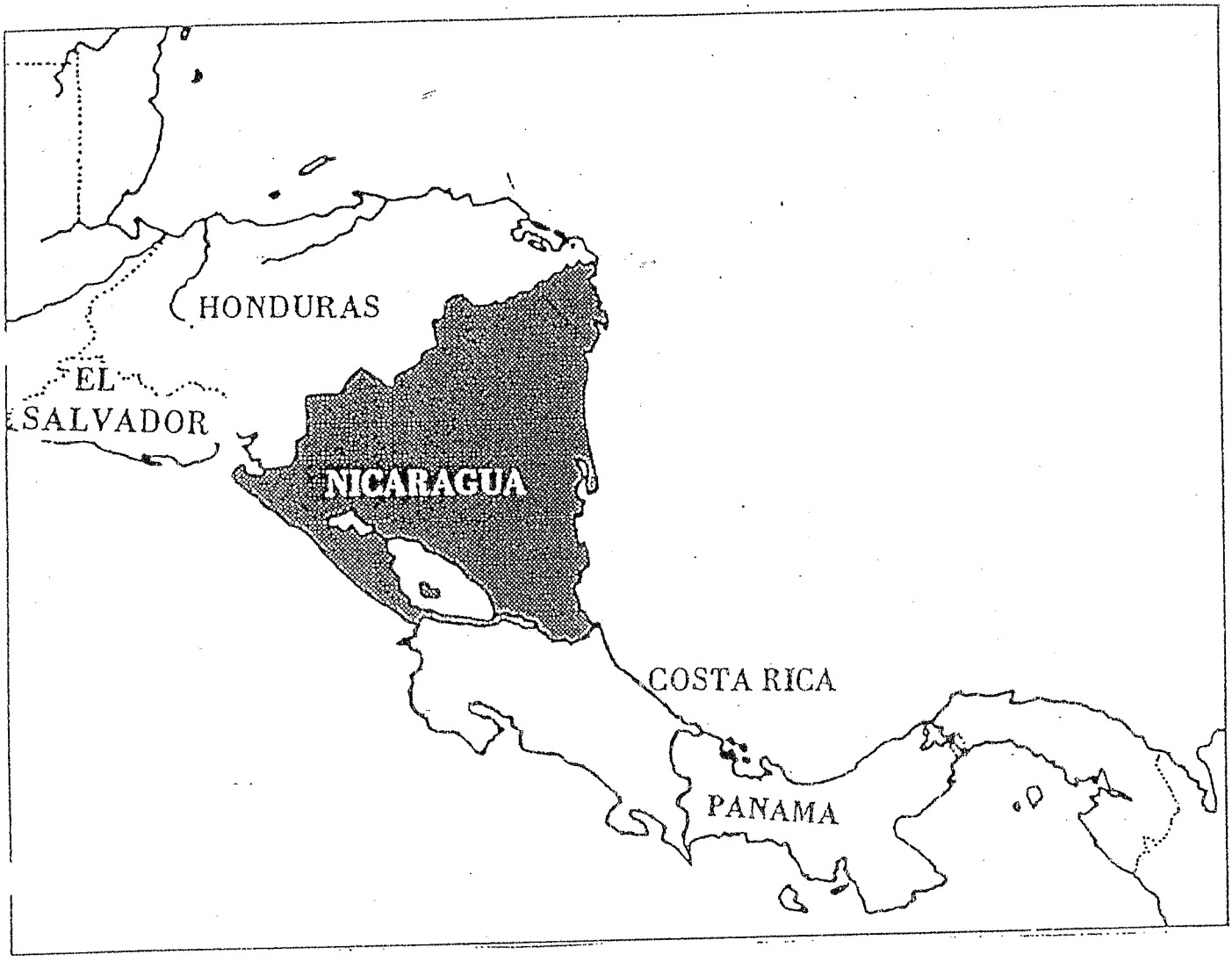


Figure 1: Map of Central America

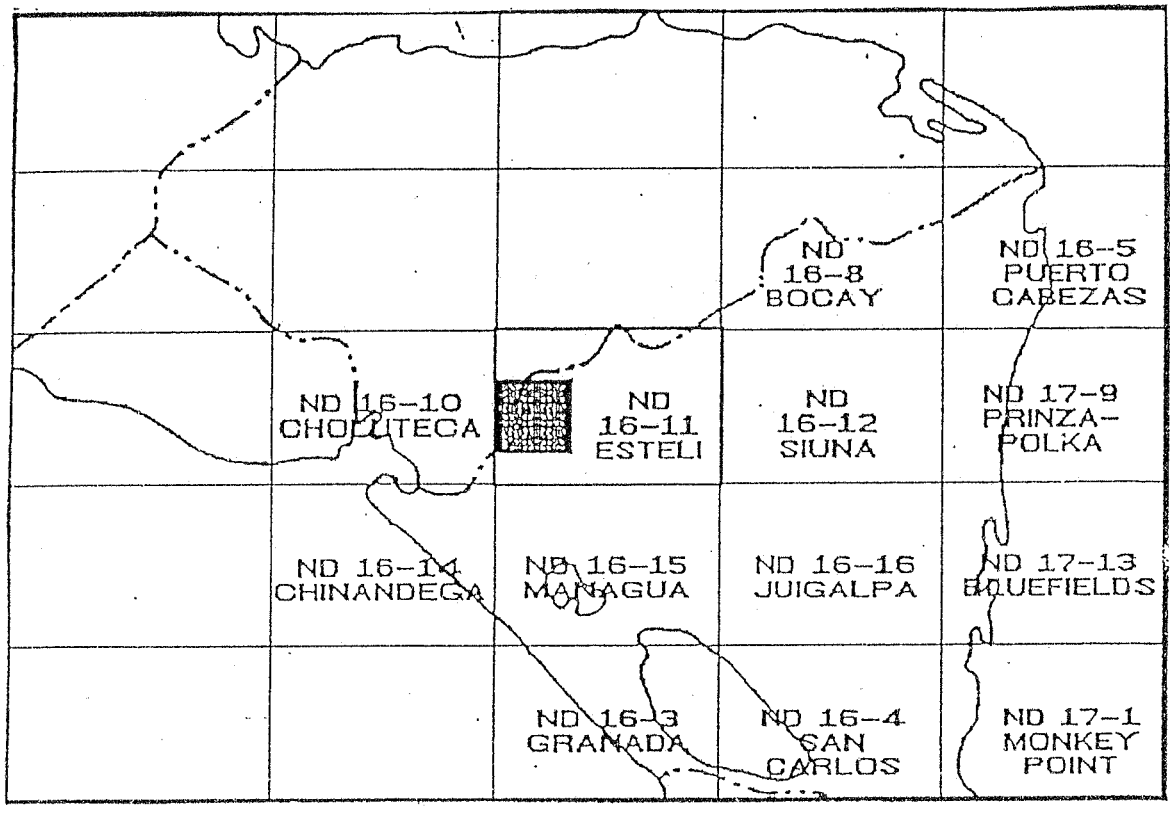


Figure 2: Location of the project area

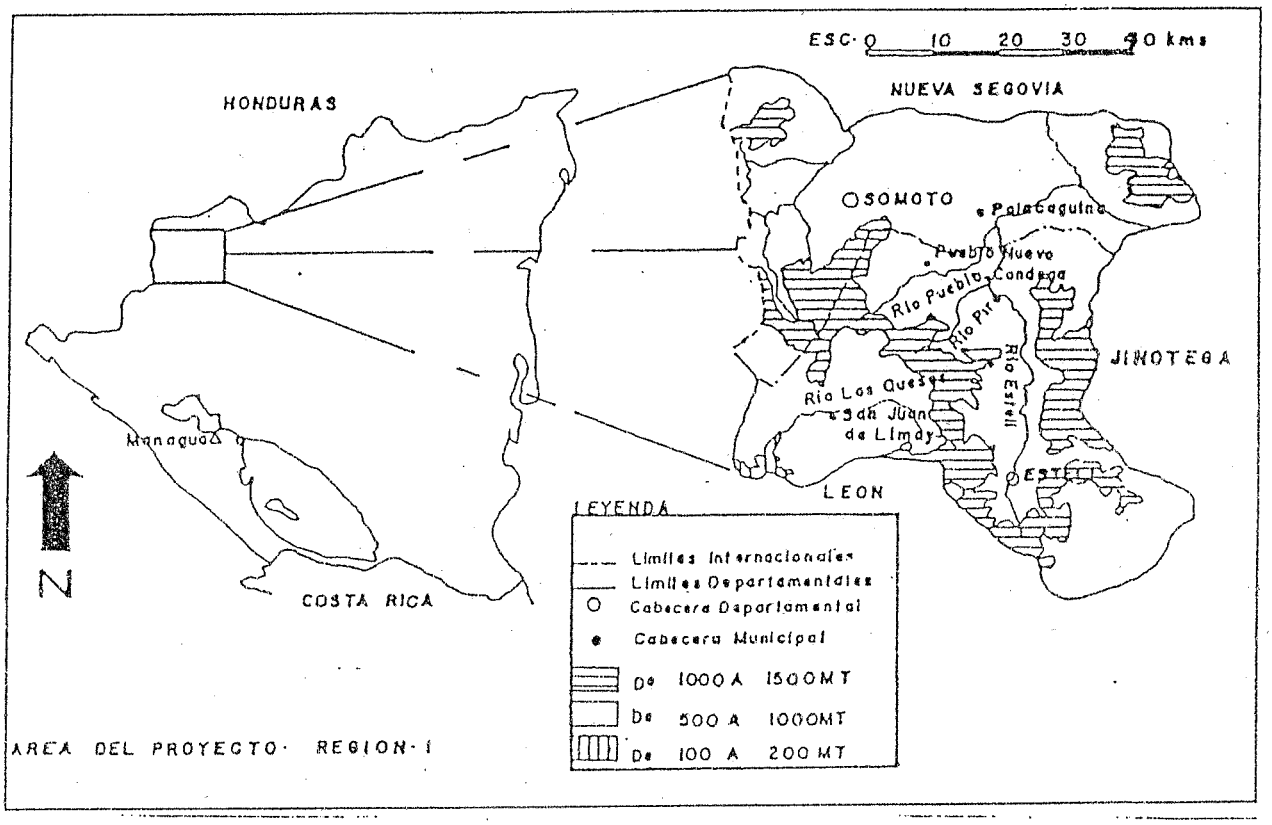


Figure 3: Location of project area

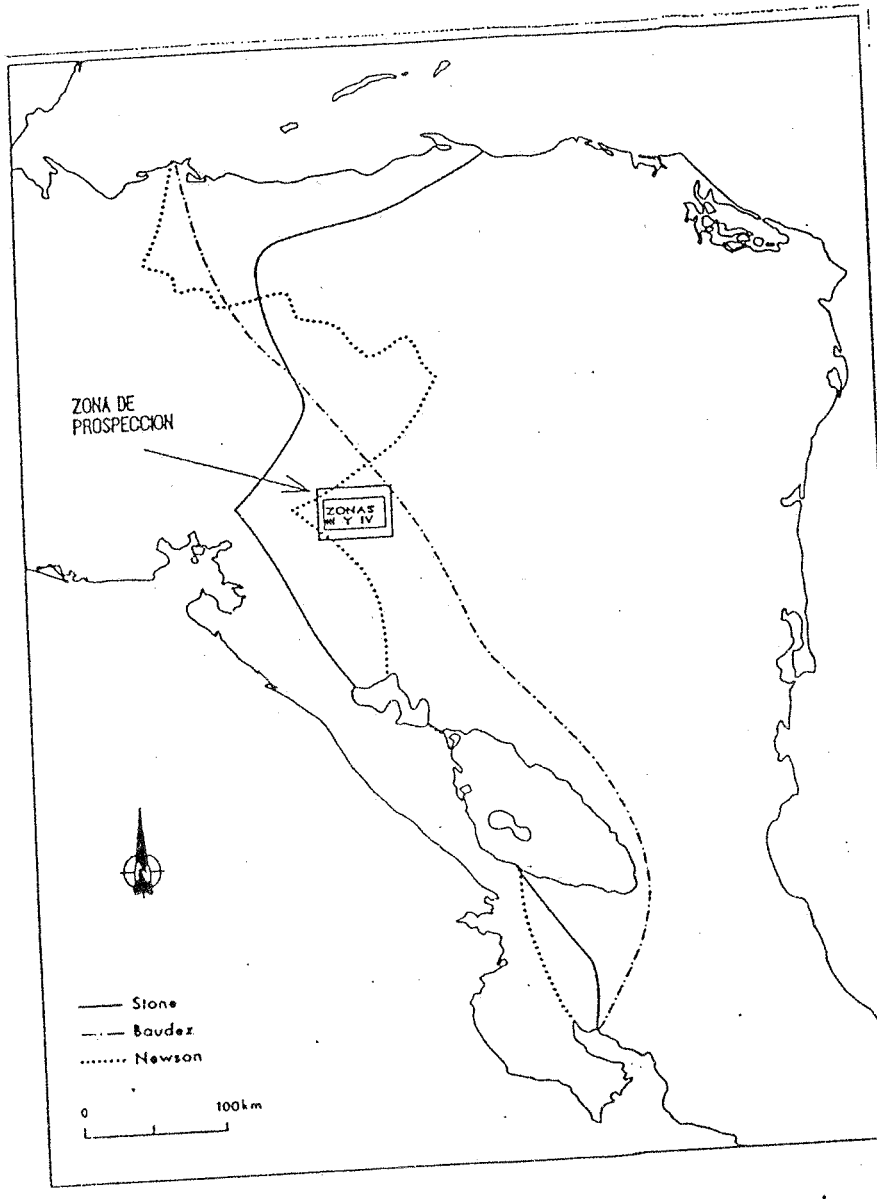


Figure 4: Approximate boundaries of Mesoamerica with project area inserted (adapted from Newson 1987:25)

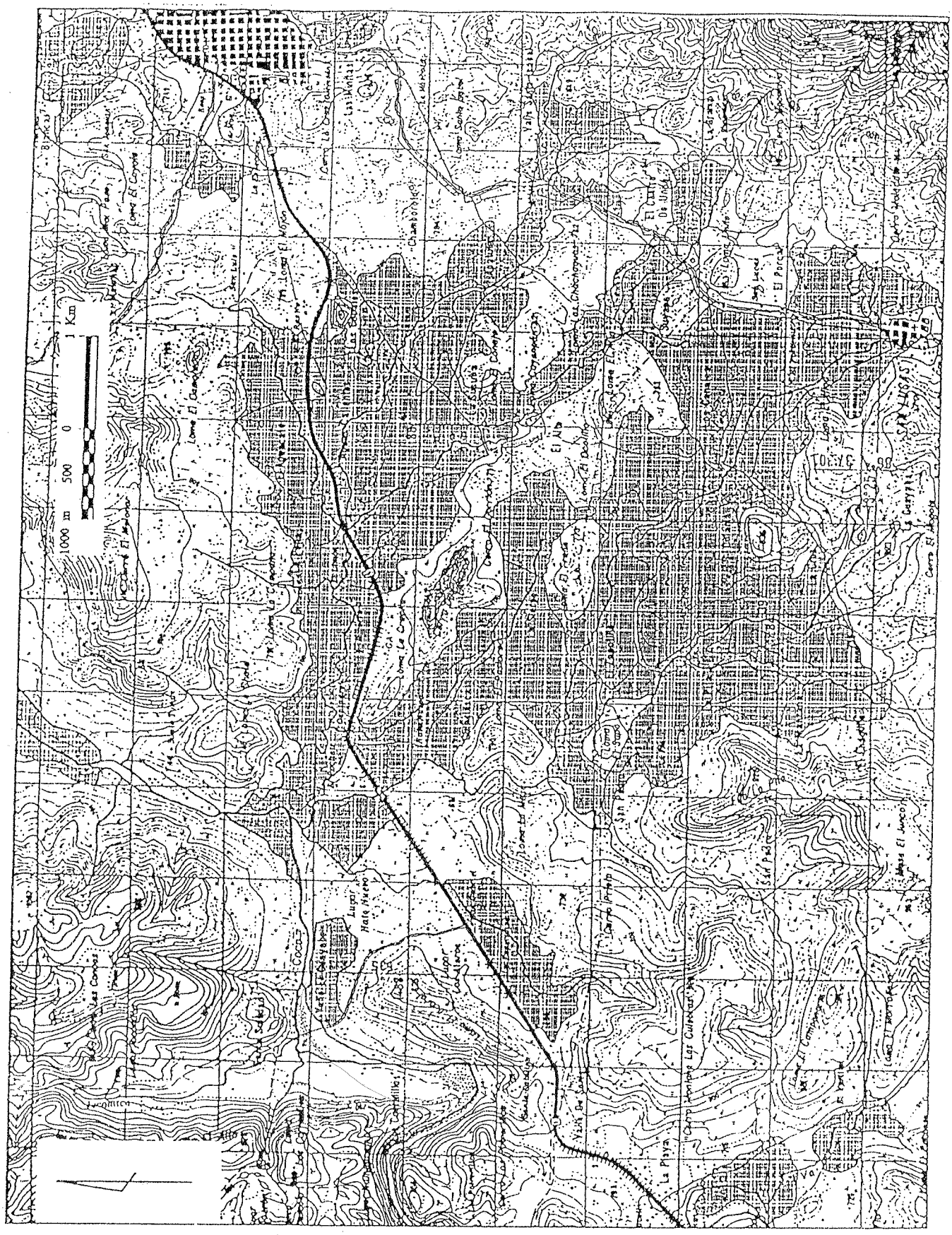


Figure 5: South survey zone

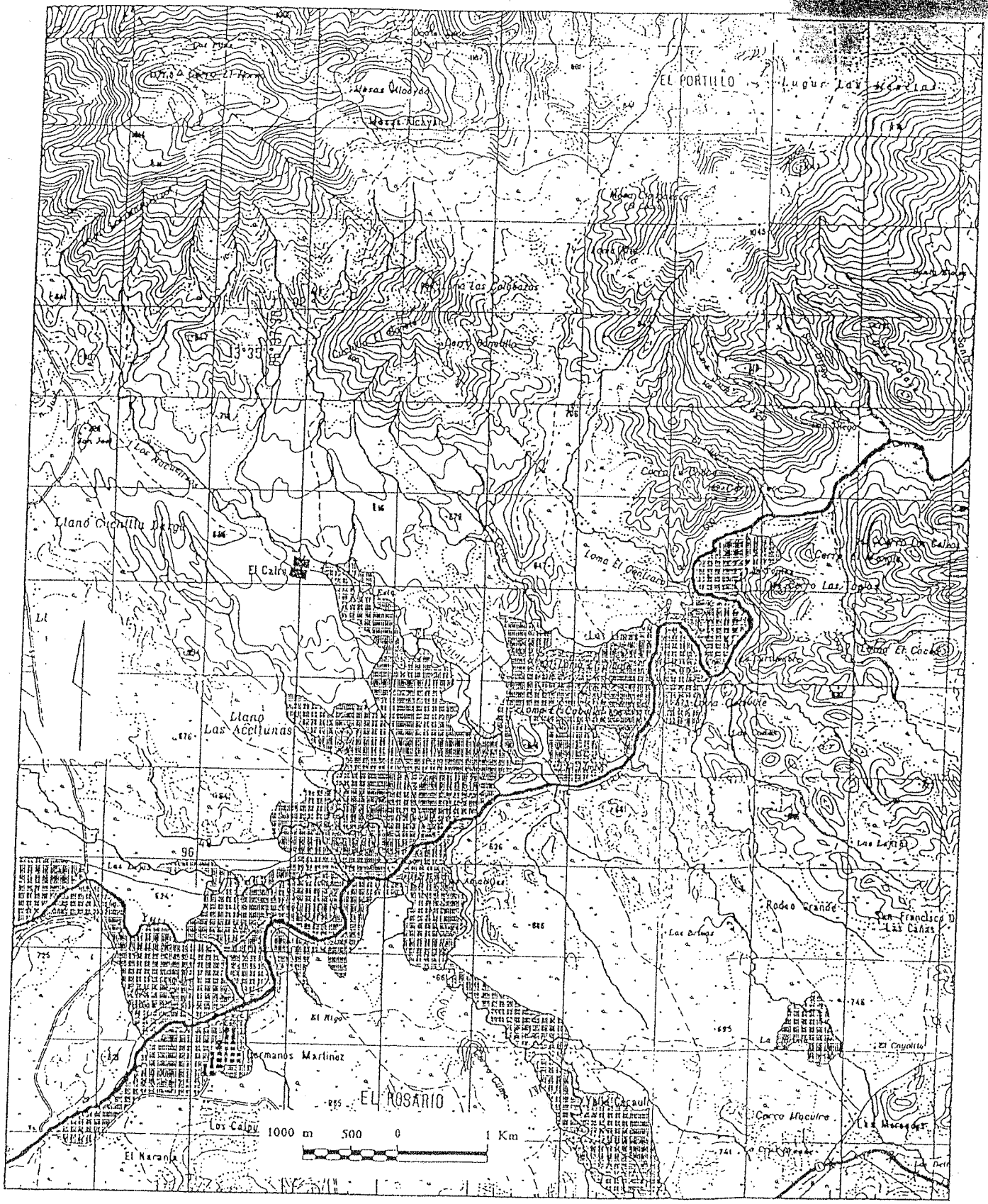


Figure 6: North survey zone

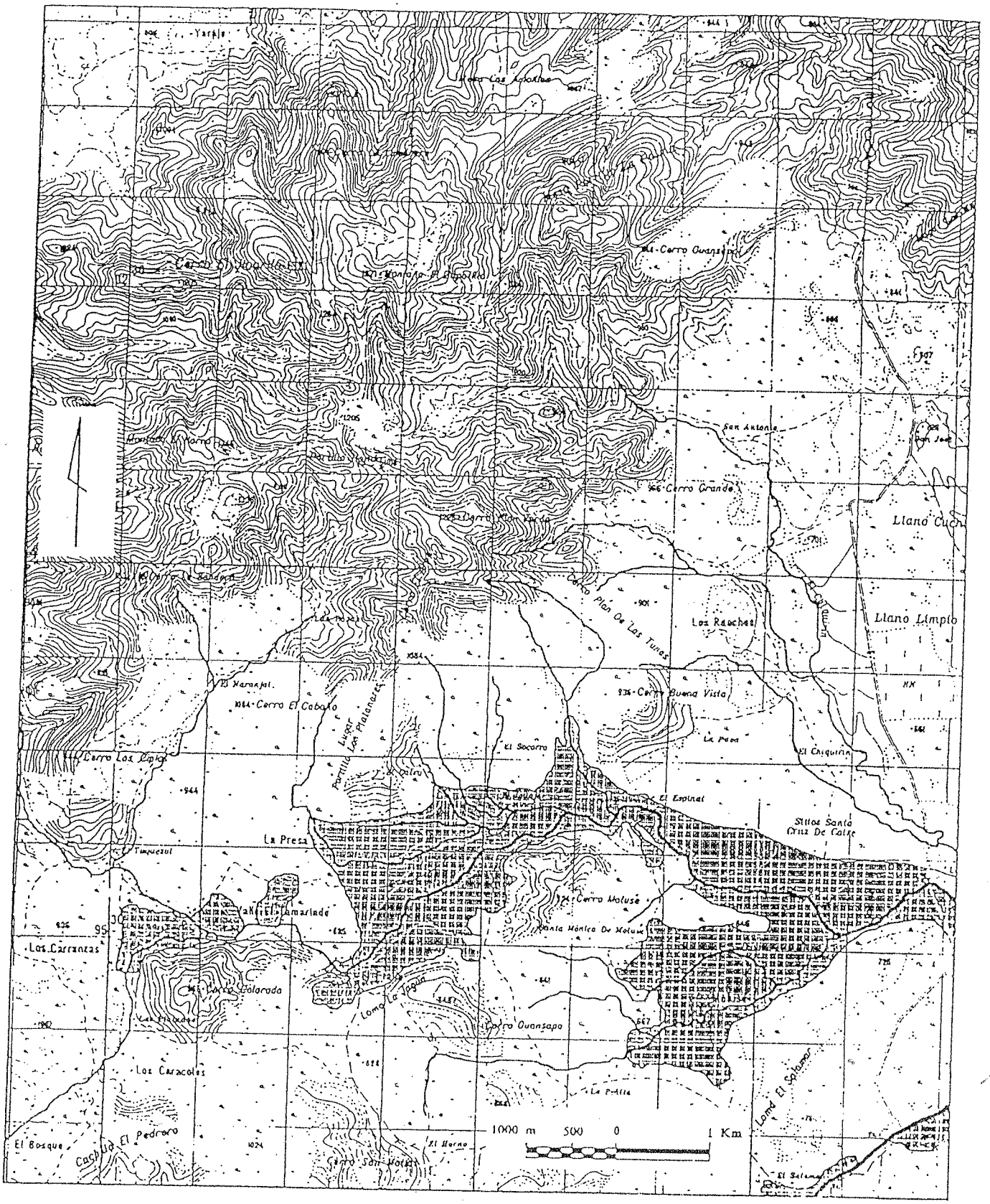


Figure 7: Northwest survey zone

Figure 8:. List of sites

LISTA DE SITIOS

CODIGO

R-I = Región Una
N = Nicaragua
MZ = Departamento de Madriz
III = Zona
1 = Número de Sitio

| Codigo | Nombre del Sitio |
|---|---|
| R-I NMZ III-1 | Colama I |
| R-I NMZ III-2 | Colama 2 |
| R-I NMZ III-3 | Colama 3 |
| R-I NMZ III-4 | Los Canales 1 |
| R-I NMZ III-5 | Los Canales 2 |
| R-I NMZ III-6 | Los Canales 3 |
| R-I NMZ III-7 | Loma El Higo |
| R-I NMZ III-8 | La Vuelta |
| R-I NMZ III-9 | Santa Rosa 1 |
| R-I NMZ III-10 | Santa Rosa 2 |
| R-I NMZ III-11 | San Lucas |
| R-I NMZ III-12 | Santa Isabel 1 |
| R-I NMZ III-13 | Santa Isabel 2 |
| R-I NMZ III-14 | Apatule 1 |
| R-I NMZ III-15 | Apatule 2 |
| R-I NMZ III-16 | Los Copales |
| R-I NMZ III-17 | El Alto |
| R-I NMZ III-18 | Guiliguisca |
| R-I NMZ III-19 | Cima Guiliguisca |
| R-I NMZ III-20 | La Manzana |
| R-I NMZ III-21 | El Pochote 1 |
| R-I NMZ III-22 | El Pochote 2 |
| R-I NMZ III-23 | La Peña |
| R-I NMZ III-24 | El Aguacate |
| R-I NMZ III-25 | El Varillal |
| R-I NMZ III-26 | La Jabilla |
| R-I NMZ III-27 | Cacaulí 1 |
| R-I NMZ III-28 | Cacaulí 2 |
| R-I NMZ III-29 | Cacaulí Río Abajo |
| R-I NMZ III-30 | Cooperativa Juan Carlos Espinoza |
| R-I NMZ III-31 | UPE 1-(Cooperativa José Benito Jiménez) |
| R-I NMZ III-32 | Hermanos Martínez 1 |
| R-I NMZ III-33 | Las Lajas |
| R-I NMZ III-34 | El Naranjo |
| R-I NMZ III-35 | El Fraile 1 |
| R-I NMZ III-36 | El Fraile 2 |
| R-I NMZ III-37 | El Tamarindo 1 |
| R-I NMZ III-38 | Las Pintadas |
| R-I NMZ III-39 | El Tamarindo 2 |
| R-I NMZ III-40 | El Tamarindo 3 |
| R-I NMZ III-41 | La Presa 1 |
| R-I NMZ III-42 | La Presa 2 |
| R-I NMZ III-43 | Motuse 1 |
| R-I NMZ III-44 | El Salamar |
| R-I NMZ III-45 | UPE 2 |
| R-I NMZ III-46 | Hermanos Martínez 2 |
| R-I NMZ III-47 | Paso Lajas Amarillas |
| R-I NMZ III-48 | San Luis 1 |
| R-I NMZ III-49 | San Luis 2 |
| R-I NMZ III-50 | El Jiñote 1 |
| R-I NMZ III-51 | El Jiñote 2 |
| R-I NMZ III-52 | El Limón |
| R-I NMZ III-53 | Las Limas 1 |
| R-I NMZ III-54 | Las Limas 2 |
| R-I NMZ III-55 | Las Limas 3 |
| R-I NMZ III-56 | La Llorona |
| R-I NMZ III-57 | Las Tapias |
| R-I NMZ III-58 | El Guayabo |
| R-I NMZ III-59 | El Pochote 3 |

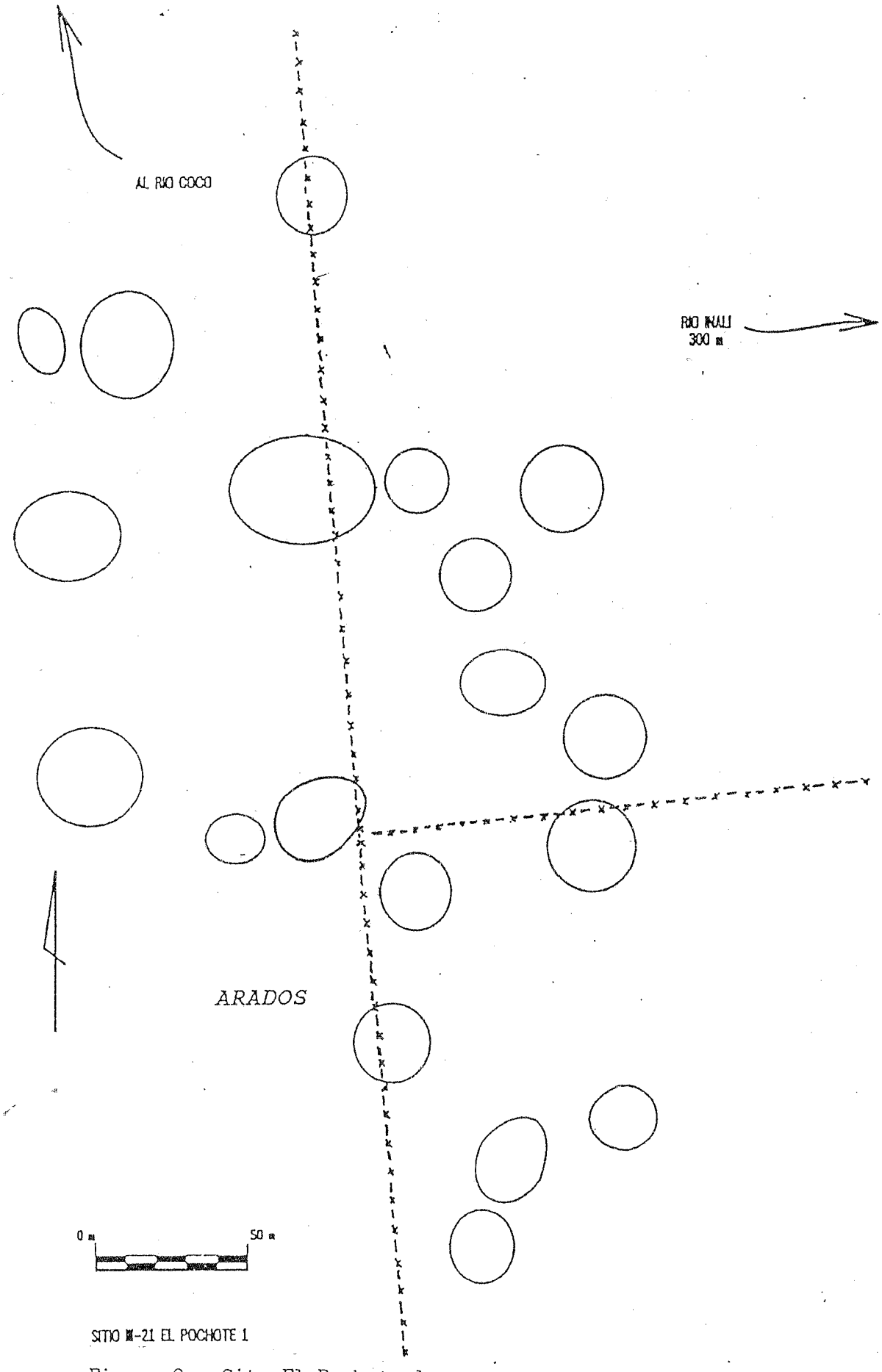


Figure 9: Site El Pochote 1

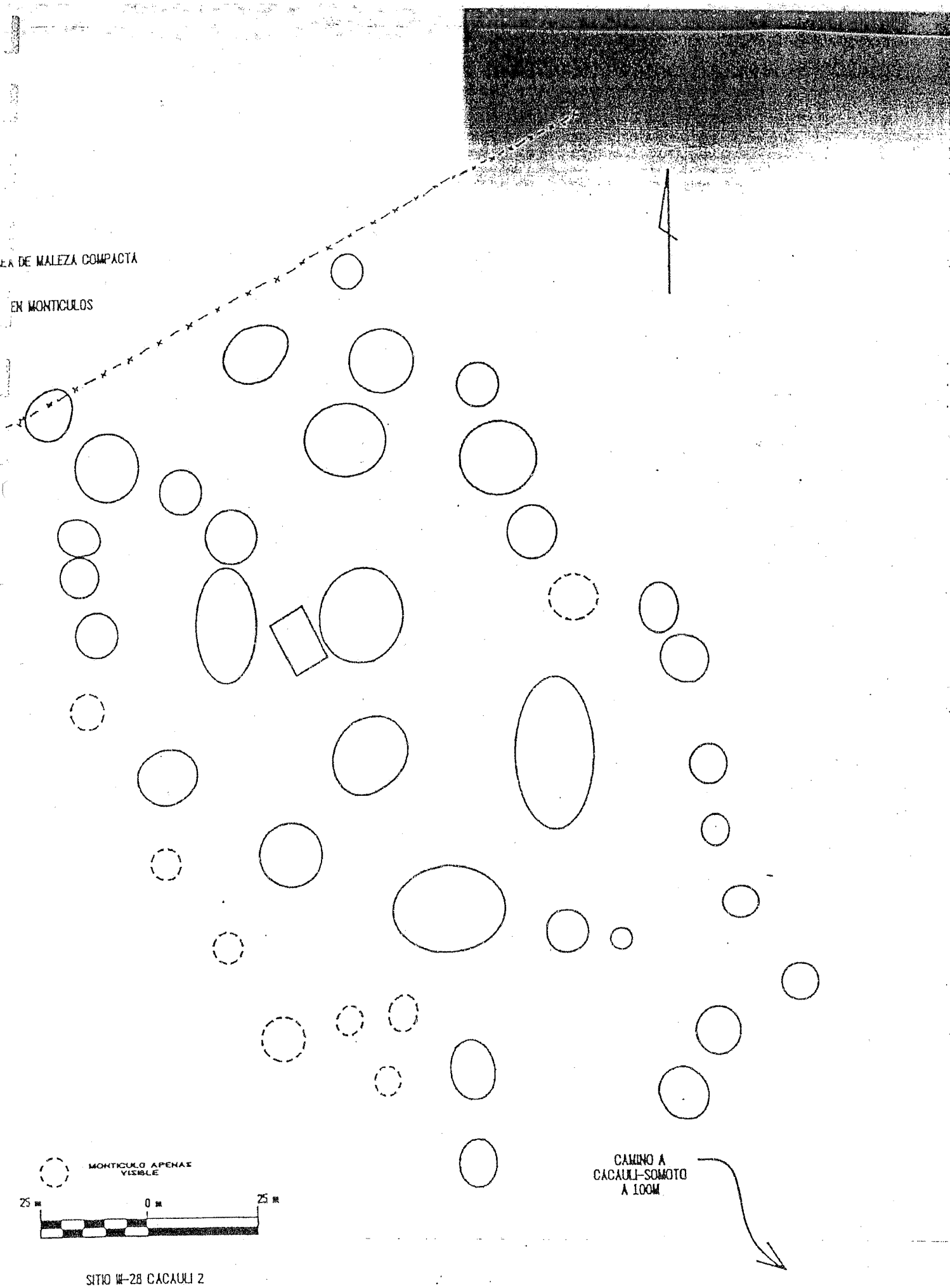


Figure 10: Site Cacauli 2

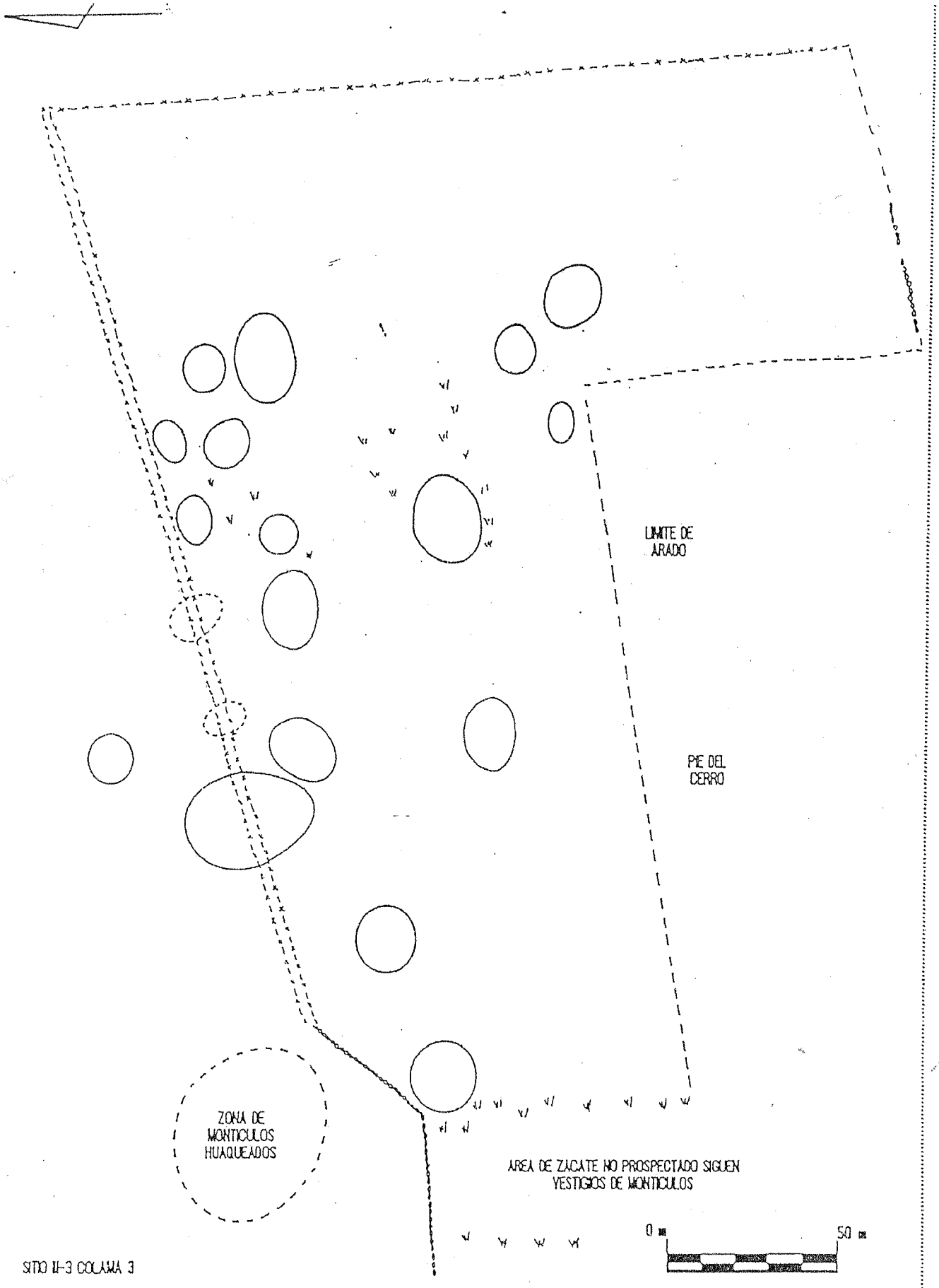


Figure 11: Site Colama 3

## CLASIFICACION PRELIMINAR DE SITIOS

0 = Destruído

1 = Aldea 

2 = Pueblo 

3 = Pueblo Nucleado 

4 = Centro Regional 

5 = Petroglifos 

| Código | Nombre del Sitio | Clasificación | Número de Montículos Visibles |
|---|---|---|---|
| III-16 | Los Copales | 0 | 0 |
| III-58 | Valle El Guayabo | 0 | 0 |
| III-1 | Colama 1 | 1 | 0 |
| III-4 | Los Canales 1 | 1 | 0 |
| III-5 | Los Canales 2 | 1 | 4 |
| III-7 | El Higo | 1 | 3 |
| III-8 | La Vuelta | 1 | 0 |
| III-9 | Santa Rosa 1 | 1 | 0 |
| III-10 | Santa Rosa 2 | 1 | 0 |
| III-13 | Santa Isabel 2 | 1 | 8 |
| III-22 | El Pochote | 1 | 0 |
| III-24 | El Aguacate | 1 | 0 |
| III-29 | Cacaulí Río Abajo | 1 | 1 |
| III-30 | Coop. J.C. Espinoza | 1 | 0 |
| III-33 | Las Lajas | 1 | 0 |
| III-36 | El Fraile 2 | 1 | 0 |
| III-39 | El Tamarindo 2 | 1 | 0 |
| III-40 | El Tamarindo 3 | 1 | 0 |
| III-42 | La Presa 2 | 1 | 0 |
| III-43 | Motuse | 1 | 0 |
| III-44 | El Salamar | 1 | 0 |
| III-45 | UPE 2 | 1 | 0 |
| III-46 | Hnos. Martínez 2 | 1 | 0 |
| III-49 | San Luis 2 | 1 | 0 |
| III-50 | El Jiñote 1 | 1 | 0 |
| III-52 | El Limón | 1 | 0 |
| III-55 | Las Limas 3 | 1 | 0 |
| III-56 | La Llorona | 1 | 0 |
| III-17 | El Alto | 1 | 0 |
| III-41 | La Presa 1 | 2 | 13 |
| III-2 | Colama 2 | 2 | 16 |

Figure 12: Classification of sites

| Código | Nombre del Sitio | Clasificación | Número de Montículos Visibles |
|---|---|---|---|
| III-12 | Santa Isabel 1 | 2 | 8 |
| III-19 | Guiliguisca Cima | 2 | 3* |
| III-20 | La Manzana | 2 | 14 |
| III-25 | El Varillal | 2 | 10 |
| III-47 | Paso Lajas Amarillas | 2 | 13 |
| III-48 | San Luis 1 | 2 | 17 |
| III-53 | Las Limas 1 | 2 | 0* |
| III-54 | Las Limas 2 | 2 | 11 |
| III-3 | Colama 3 | 3 | 19 |
| III-6 | Los Canales 3 | 3 | 23 |
| III-11 | San Lucas | 3 | 46 |
| III-14 | Apatule 1 | 3 | 8* |
| III-15 | Apatule 2 | 3 | 27 |
| III-21 | El Pochote 1 | 3 | 23 |
| III-26 | La Jabilla | 3 | 21 |
| III-27 | Cacaulí 1 | 3 | 25 |
| III-28 | Cacaulí 2 | 3 | 42 |
| III-31 | UPE 1 | 3 | 25 |
| III-32 | Hns. Martínez | 3 | 0* |
| III-34 | El Naranjo | 3 | 31 |
| III-37 | El Tamarindo | 3 | 53 |
| III-41 | El Jiñote 2 | 3 | 50 |
| III-59 | El Pochote 3 | 3 | 25 |
| III-18 | Guiliguisca | 4 | 48* |
| III-35 | El Fraile 1 | 4 | 84 |
| III-57 | Las Tapias | 4 | 128 |
| III-23 | La Peña | 5 | 0 |
| III-38 | Las Pintadas | 5 | 0 |

Figura Clasificación de sitios
* Estos son sitios con destrucción extensiva de montículos

Figure 12: Classification of sites

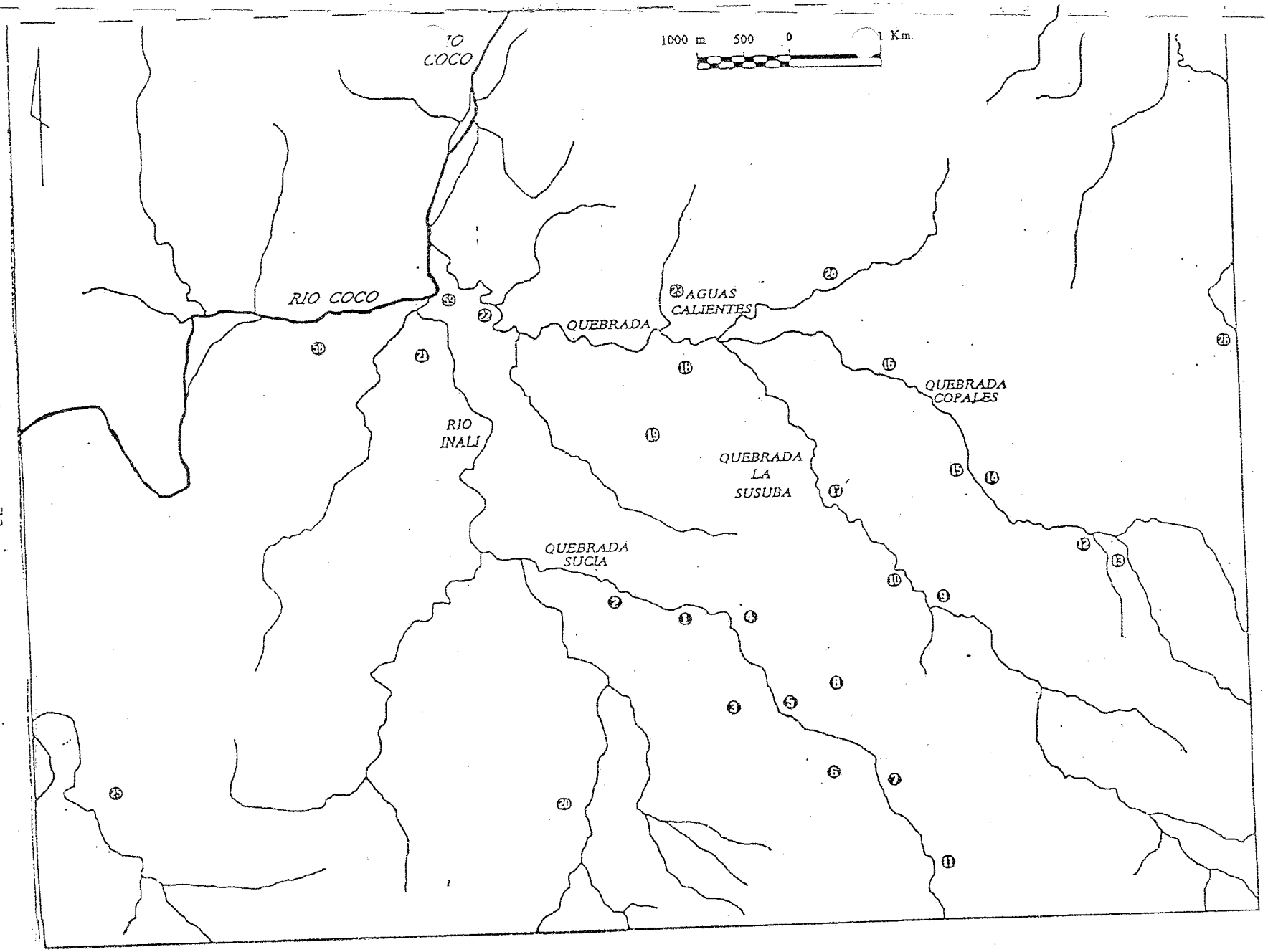


Figure 13: Location of sites - south area

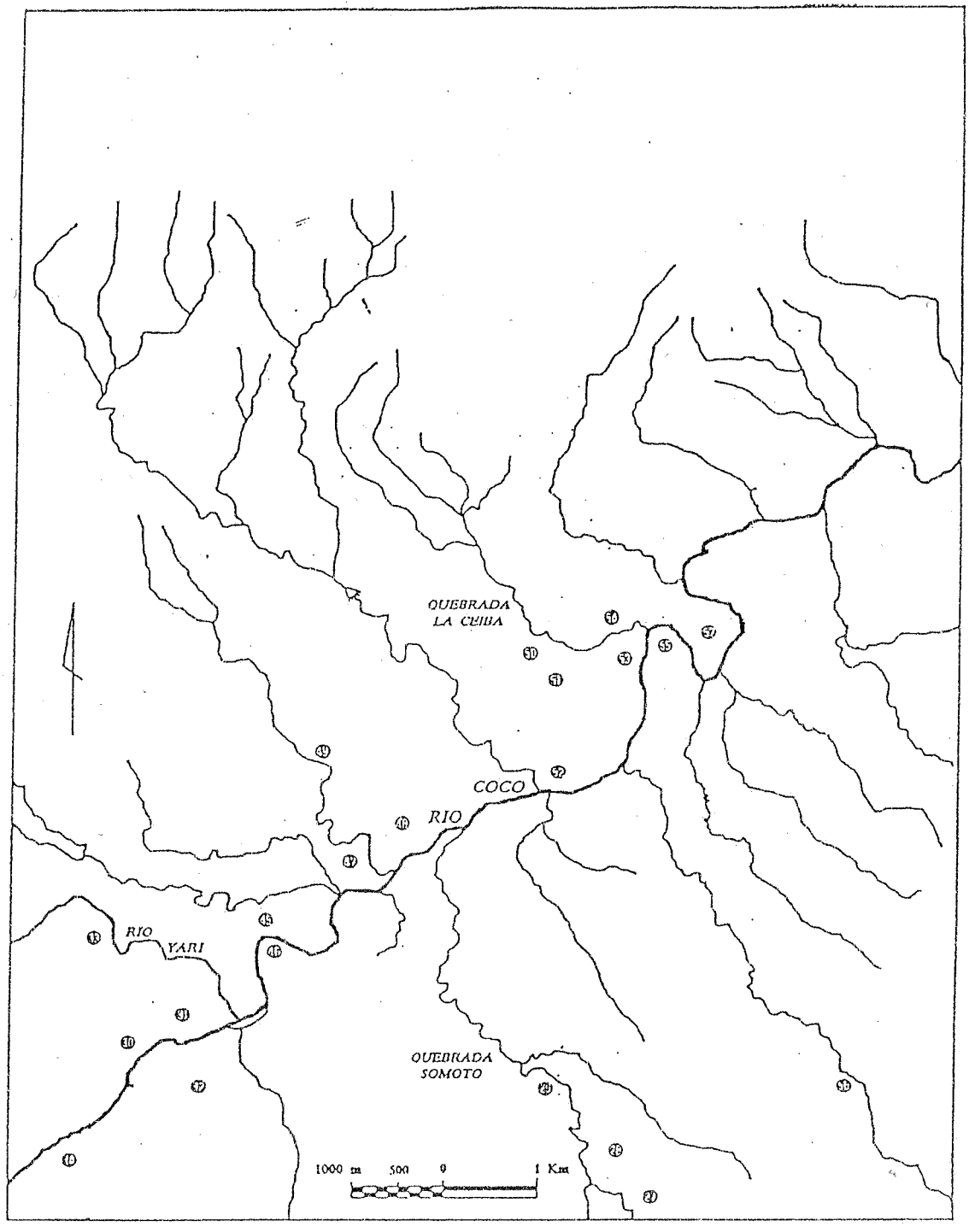


Figure 14: Location of sites - Northeast area

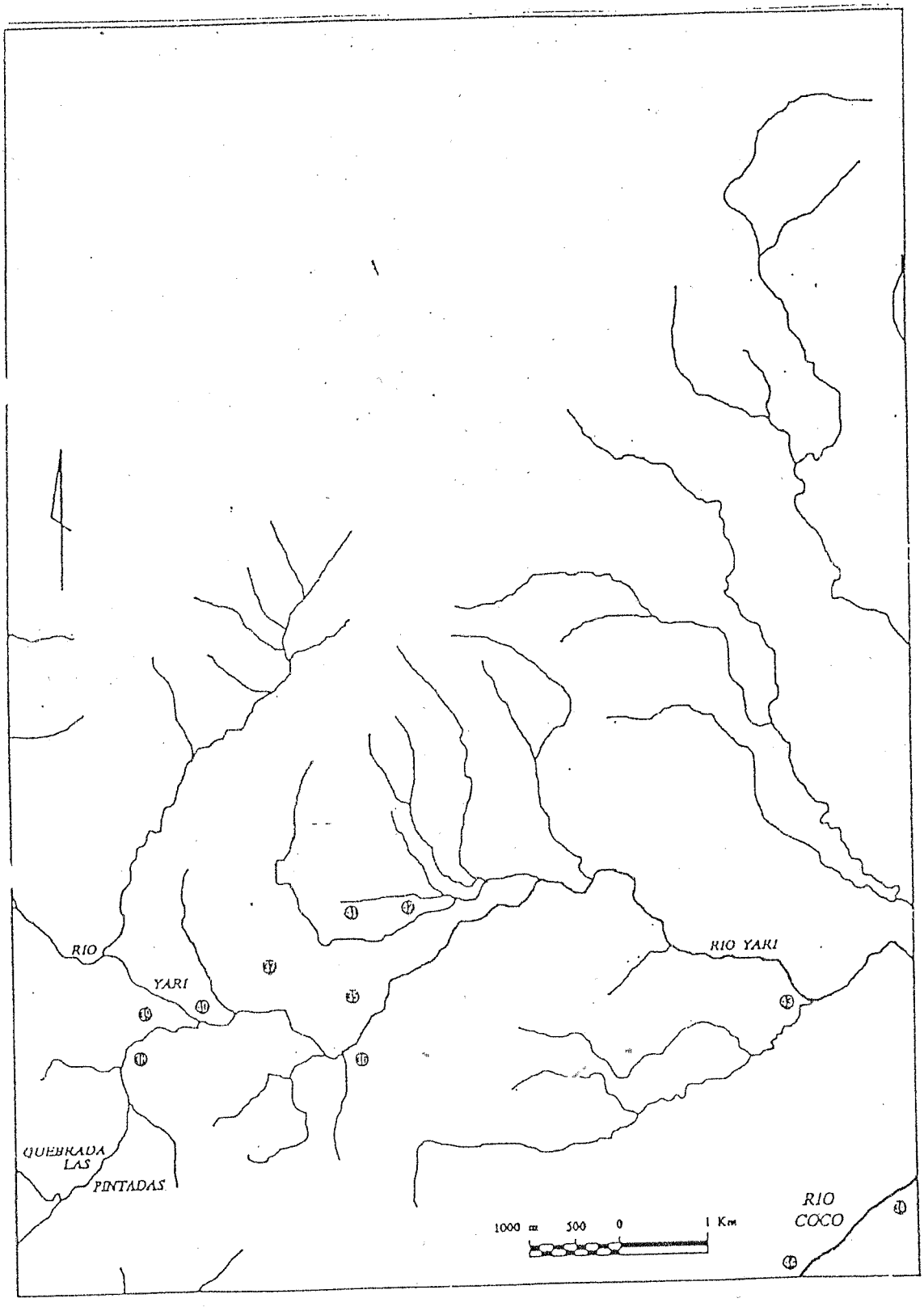


Figure 15: Location of sites - west area

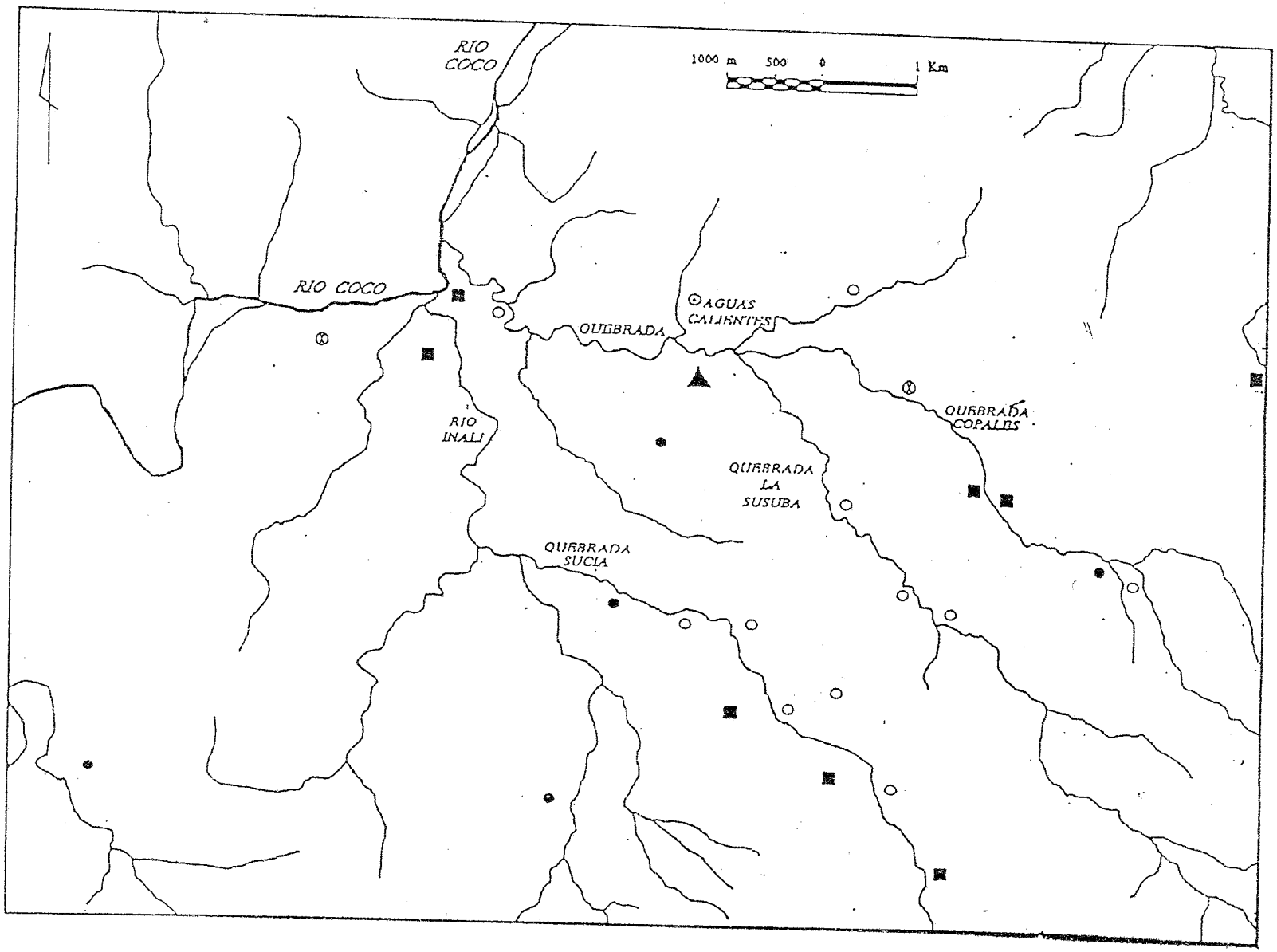


Figure 16: Classification of sites - south area

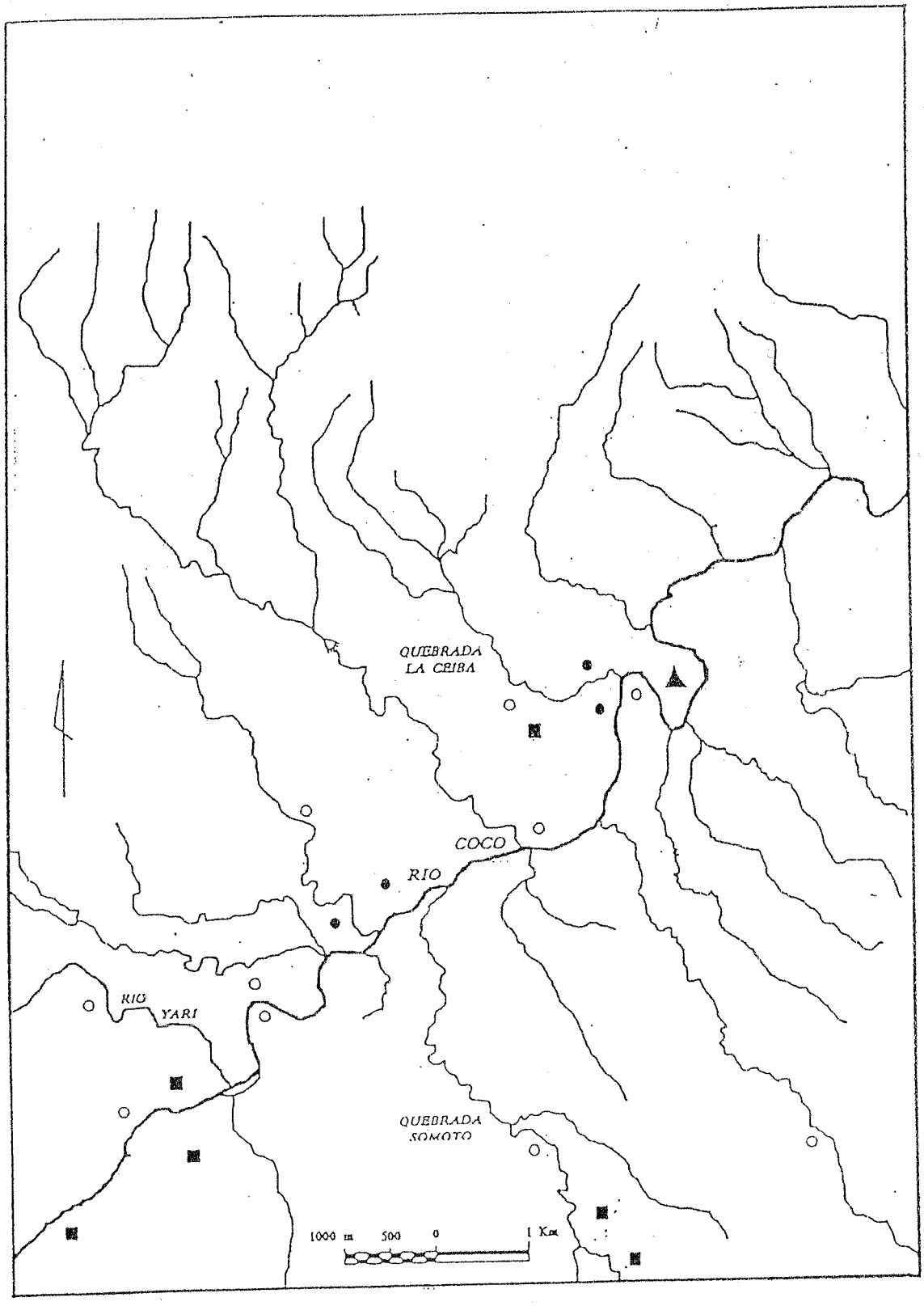


Figure 17: Classification of sites - northeast area

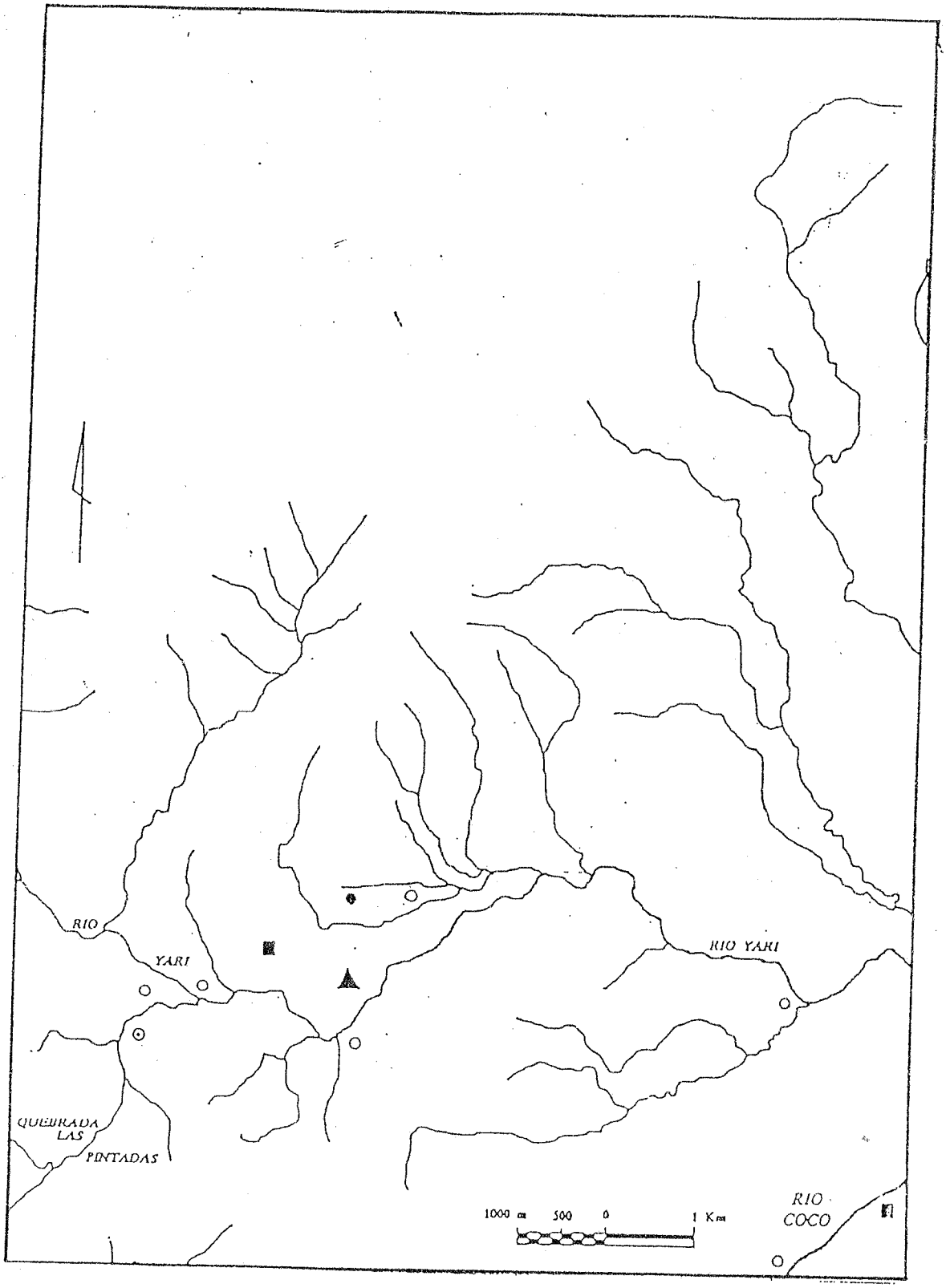


Figure 18: Classification of sites - west area

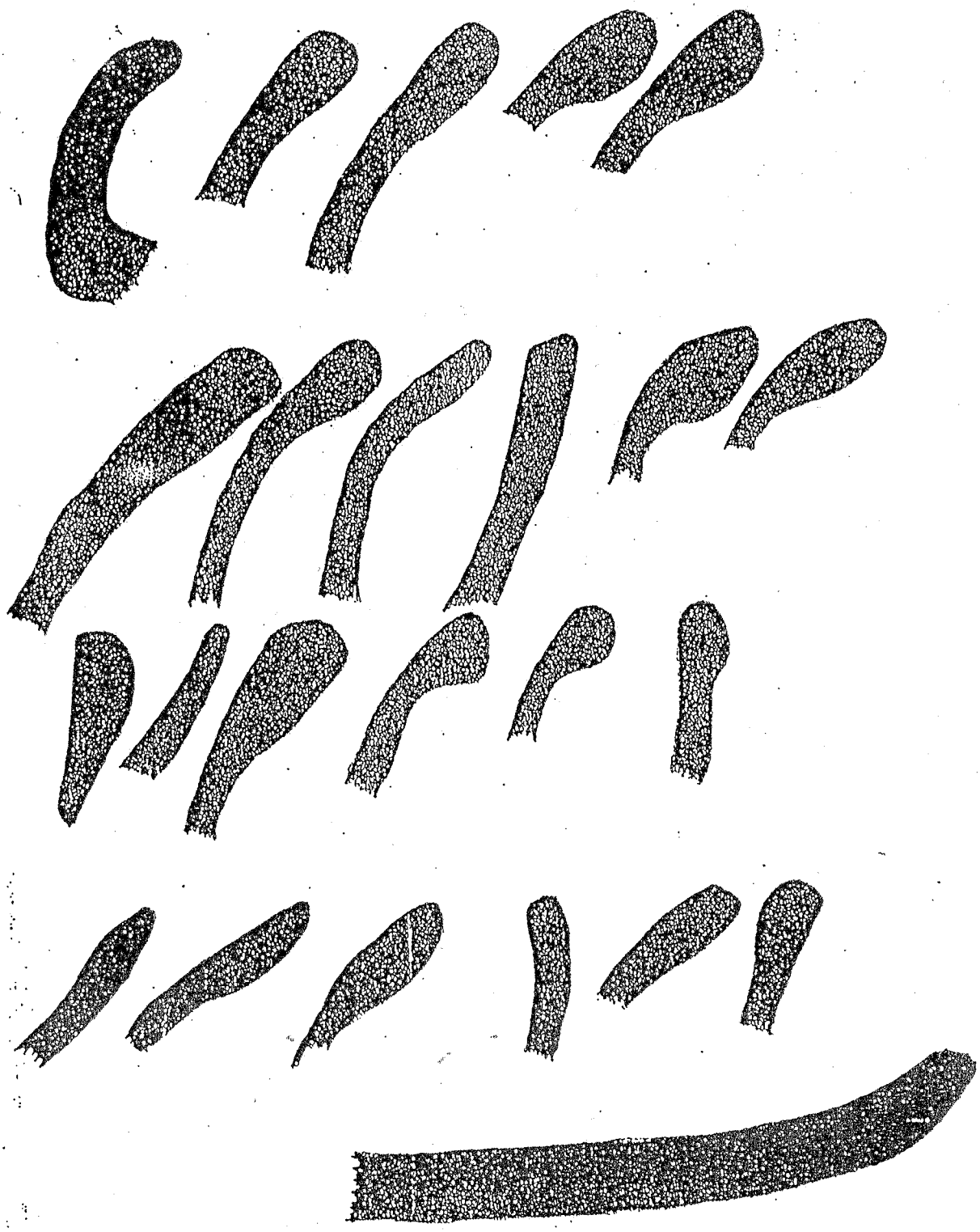

Figure 19: Rocinante comun

Figure 20: Las Segovias naranja ceramic type

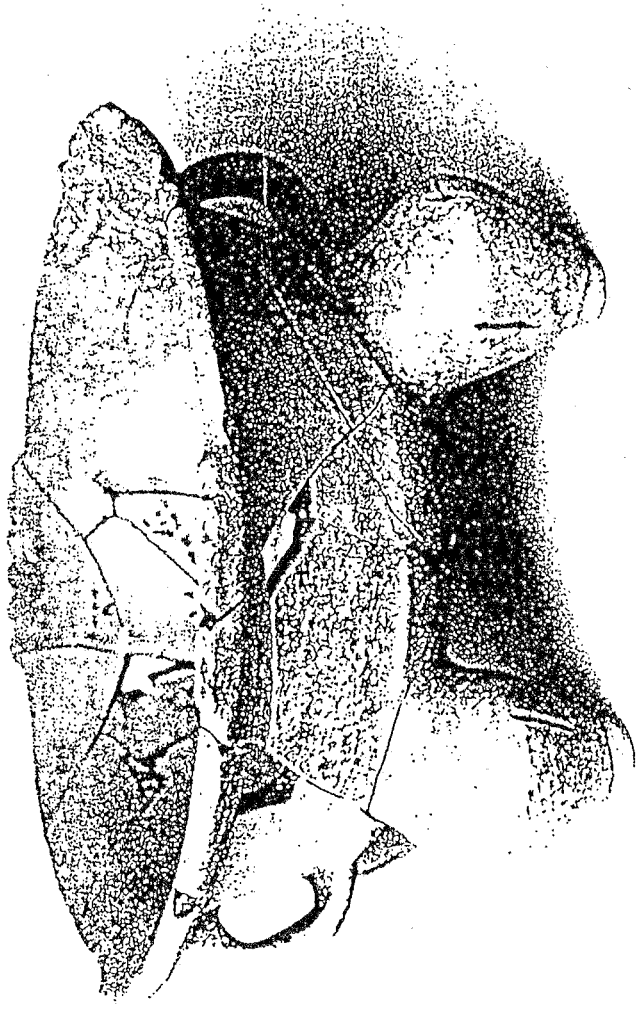

Figure 21: Las Segovias ceramic type from III-18 Guiliguisca

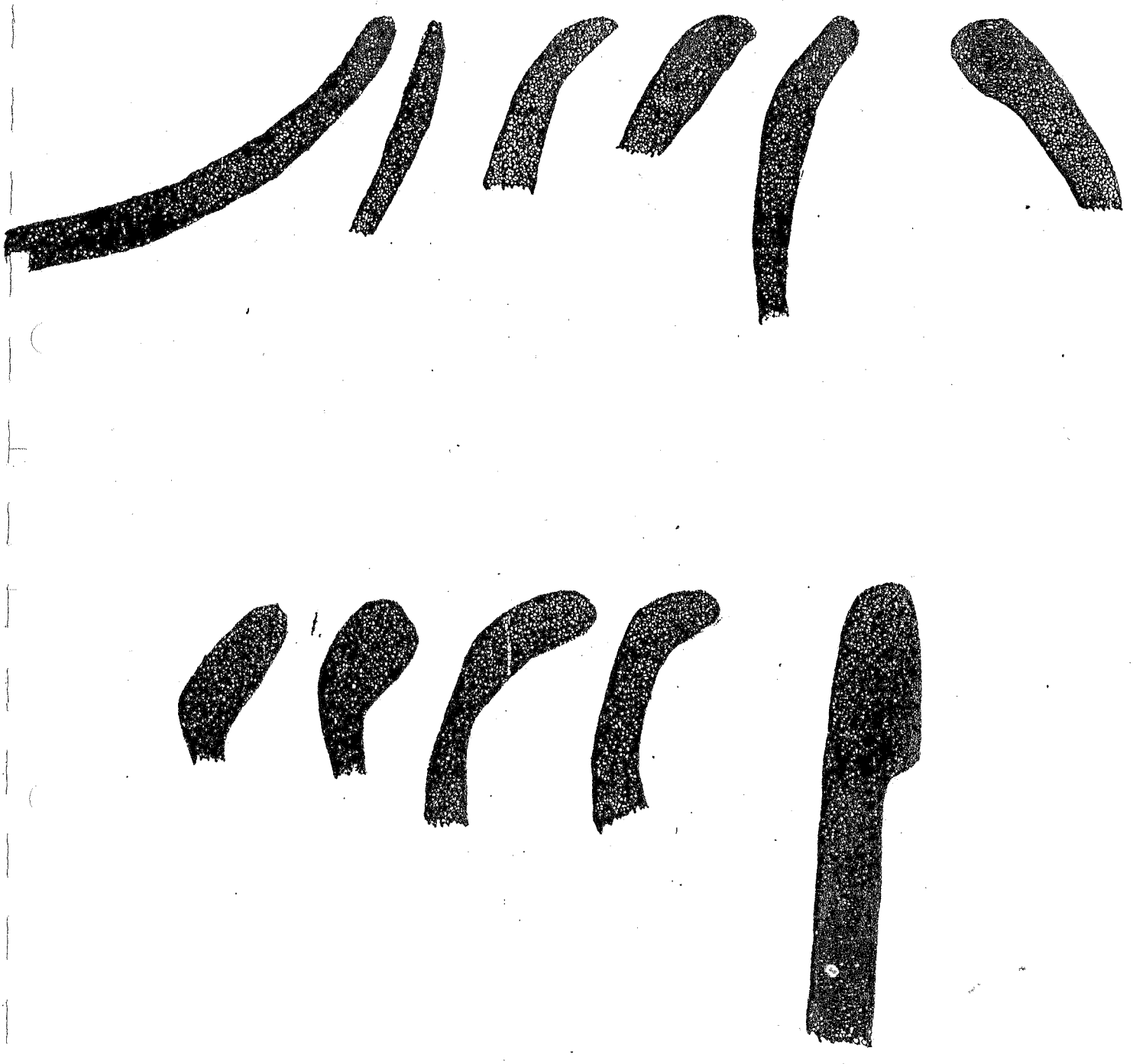

Figure 22: Condega engobe rojo ceramic type

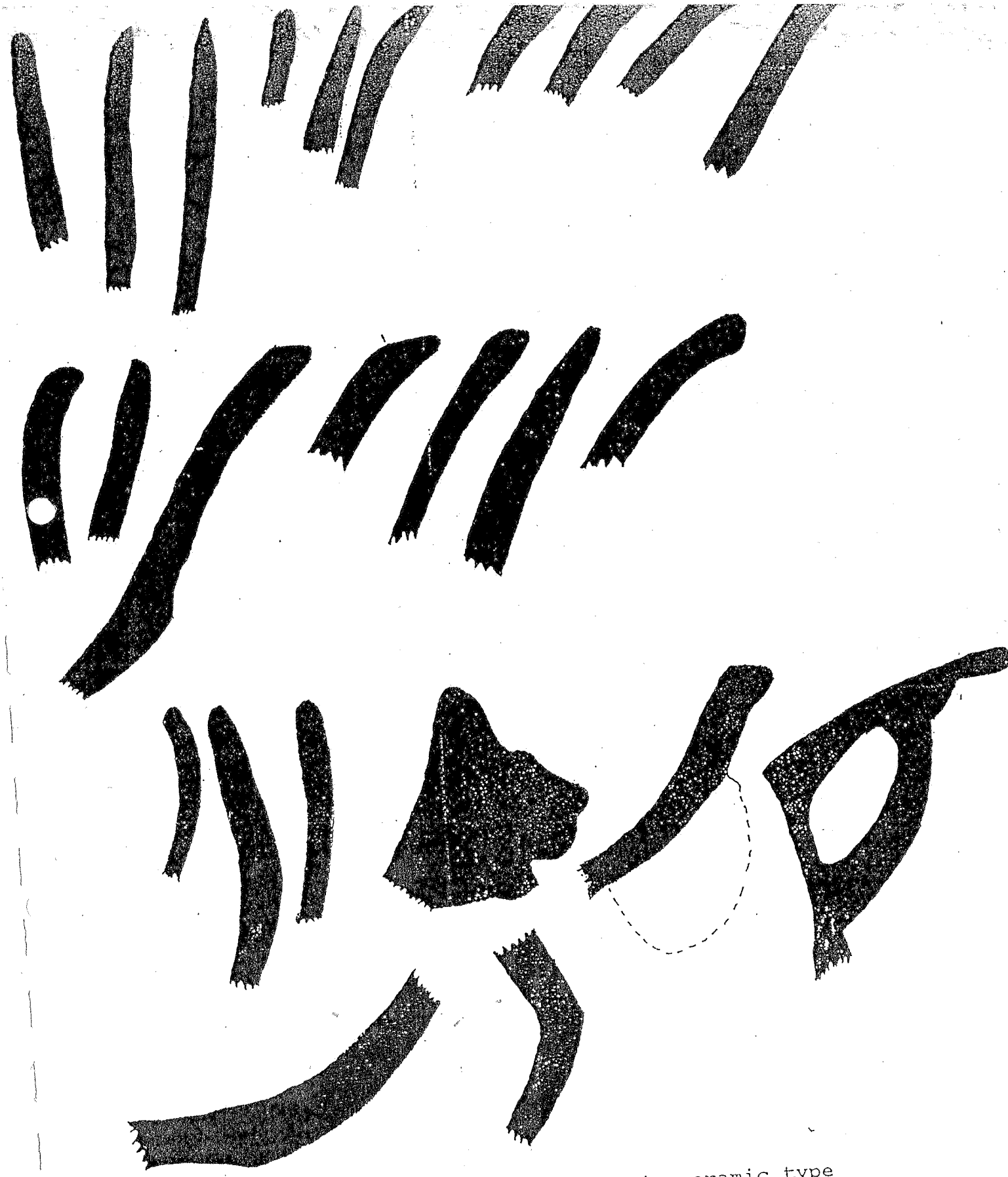

Figure 23: Cacauli rojo sobre naranja ceramic type

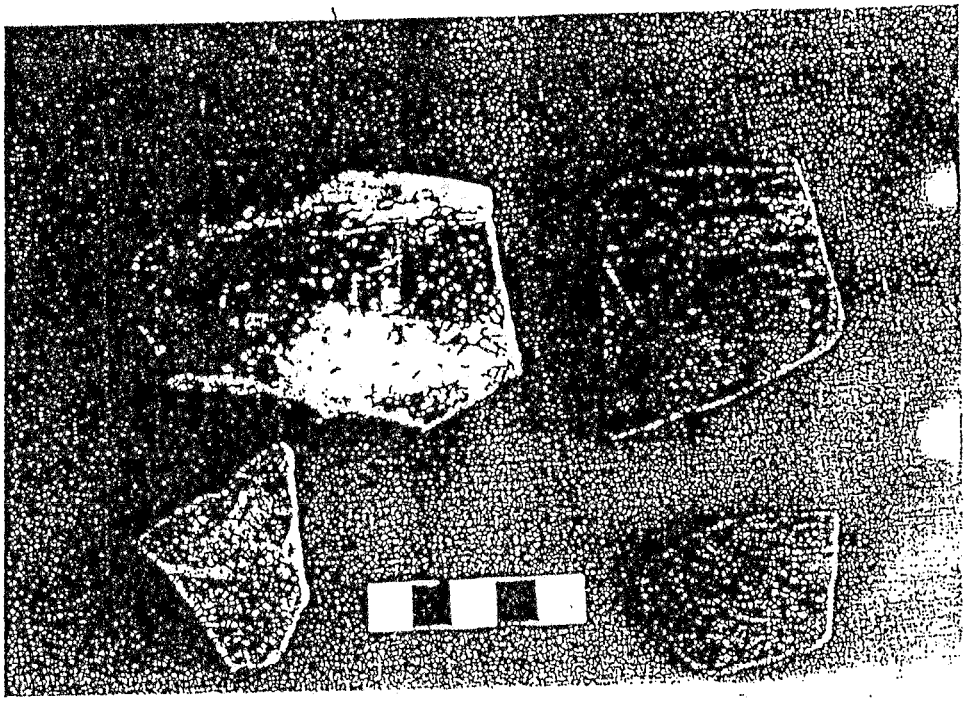

Figure 25: El Fraile negro sobre rojo ceramic type

Figure 26: El Fraile negro sobre rojo ceramic type

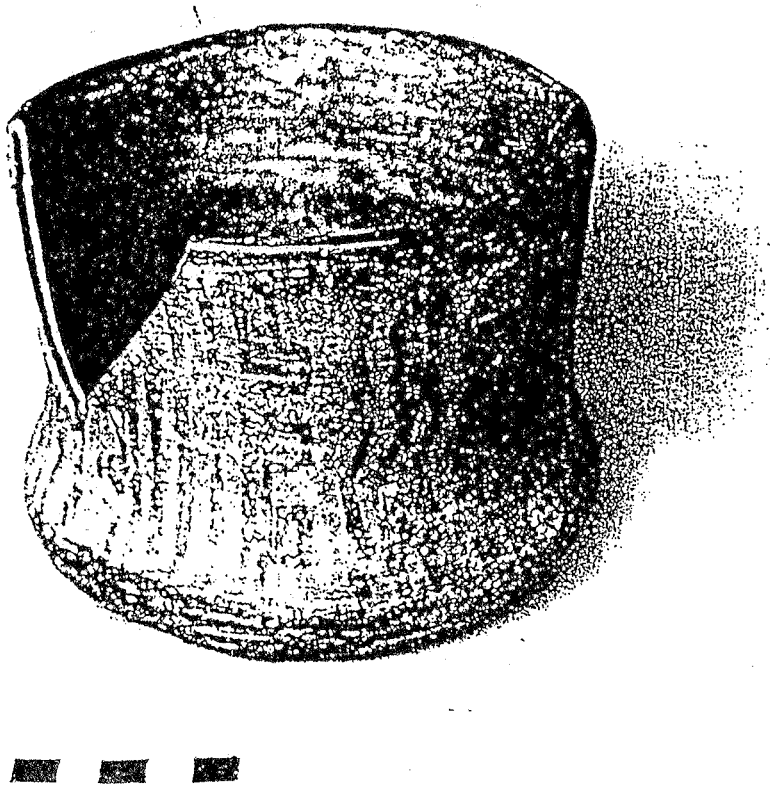

Figure 26a: Las Tapias Trichrome - donated piece from Site III-57 (Las Tapias)

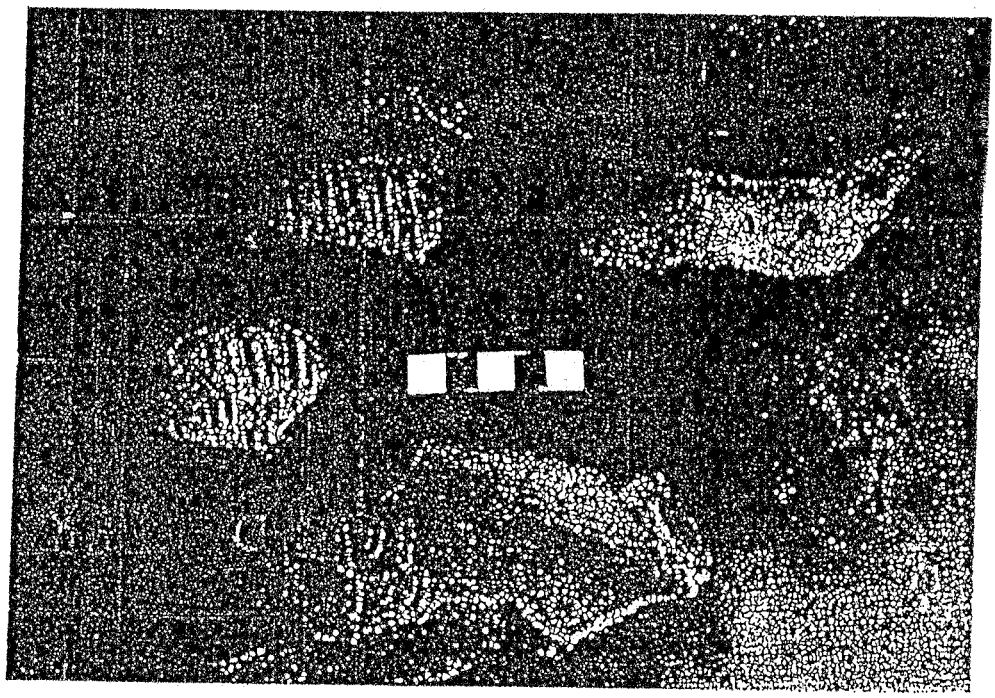

Figure 28: Guiliguisca inciso ceramic type

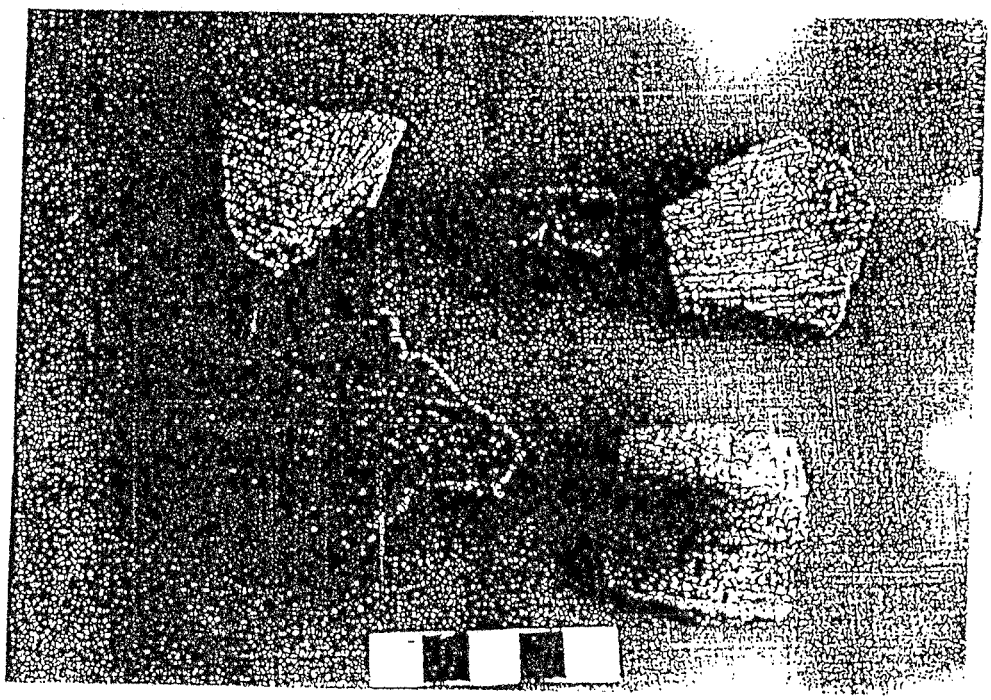

Figure 29: Motuse estriado ceramic type

Figure 30: Ulua style recovered from road cut in Pueblo Nuevo

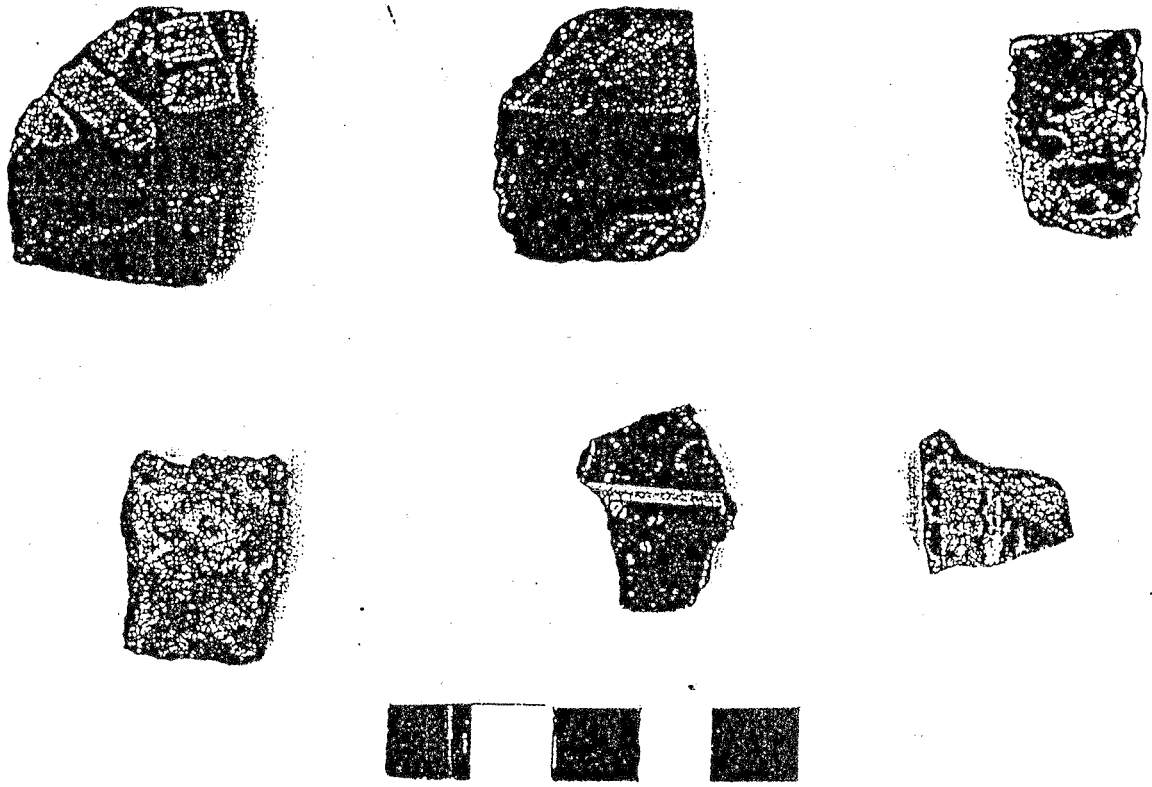

Figure 31: Ulua ceramic types