Chapter 7

Aboriginal Ceramics

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Analysis of the aboriginal ceramics recovered at Guadalupe Bay during the 1992 data-recovery project was an extremely laborious and time-consuming endeavor. Included in the analysis were all sherds recovered as field specimens, all sherds captured in the 1/4-in screens, and all sherds collected from the site's surface. Unfortunately, time and monetary constraints did not allow for analysis of ceramics captured in the 1/8-in screens or recovered as elements within the heavy-fraction flotation samples. The flotation samples were carefully scanned, however, in an effort to identify diagnostic artifacts that might be present. This resulted in the discovery of only one additional rim sherd worthy of inclusion. Regardless, 42,712 individual sherds were examined, of which 41,946 came from the various excavation units and 766 came from the eroding bankline. This is, by far, the largest collection of aboriginal ceramics ever analyzed from a site on the central Texas coast. In fact, it may be the largest sample of ceramics analyzed from a single site anywhere in Texas outside the Caddoan culture area.

At this point it should be noted briefly that the current ceramic analysis attempted to build upon previous research in the area, particularly that of Duay and Weinstein (1992) and Duay et al. (1994). Other earlier studies, such as those by Campbell (1952, 1958a, 1962), Suhm and Krieger (1954), Mounger (1959), Suhm and Jelks (1962), Calhoun (1962), Story (1968), Hester and Parker (1970), Hester and Hill (1971), Mallouf et al. (1973), Fritz (1975), Cox and Smith (1988), and Ricklis (1990b), also were used to guide the current research. A summary of the contributions of these studies, plus other archaeological investigations in the region, can be found in S. Black (1989b) and Weinstein (1992, 1994), and will not be repeated here. Rather, details related to each of these individual reports will be discussed as necessary below.

Generally, the present analysis was designed to investigate both chronological and functional questions regarding the Guadalupe Bay ceramic collection (see Chapter 4). The type-variety system of ceramic classification, as devised by Duay and Weinstein (1992) and Duay et al. (1994) for the central Texas coast, was to be the primary method utilized in examining site chronology. Analyses of decorative motifs, rim form, and vessel form also were to be employed if possible. Functional questions were to be addressed through the use of numerous attribute analyses, including such factors as vessel shape, orifice diameter, and vessel wall thickness. As will be seen, each sherd was examined and measured in a myriad of ways, and numerous attributes were recorded. These attributes will be discussed in detail in the following sections.

Analytical Techniques

Analytical techniques employed for this study generally followed those established by Duay and Weinstein (1992) and began with the identification of the various paste characteristics of individual sherds. Identification of a sherd's paste is the critical first step required under the current analysis system, and is necessary before that sherd can be assigned to a ware series, and, subsequently, to a specific type and then to a variety within that series. The following discussion, therefore, represents a modified version

of the sorting criteria employed originally by Duay and Weinstein (1992).

Paste Identification

After a careful review of the previous research concerning central Texas coastal ceramics, particularly those studies by Campbell (1962), Fritz (1975), Hester and Hill (1971), Mallouf et al. (1973), Story (1968), and Suhm and Krieger (1954), it became clear that the presence or absence of sand grains in the paste of a sherd, plus the size of the sand grains, were key sorting criteria. These were recognized as the basic matrix of the sherd, and were referred to as "primary inclusions" in the paste. Duay and Weinstein (1992) initially established three categories of primary inclusions—silty paste, fine sandy paste, and medium to coarse sandy paste. Sherds with silty or fine sandy pastes subsequently were placed in the Rockport ware series, while sherds with medium to coarse sandy pastes were assigned to the Goose Creek ware series.

Unfortunately, Duay and Weinstein (1992) based their earlier analysis on the subjective observation of grain size. According to their methods, if it was possible to see individual sand grains without the aid of magnification, then the grains were classified as medium or coarse in size (Duay, personal communication 1995). If sand grains could not be seen, then the sherd was considered to have either a silty or fine sandy paste, and it was examined further under 10x magnification to determine whether or not sand was present. Clearly, such a subjective approach can be biased by the sharpness of an individual's eye sight, plus that person's conception of what constitutes medium-size sand grains. As to be expected, when actual sherds from the 1989 testing project were reexamined at the beginning of the present study, it was impossible for the current analysts to replicate the earlier findings.

To avoid a similar subjective analysis, each sherd from the 1992 collection was broken along one edge and carefully observed under either a 1.75x magnifying light, a 10x hand lens, or a 10-to-30x binocular microscope. Sand grains then were measured with the aid of a Wentworth scale, and the sherd's paste classified according to three size categories: (1) silty paste (grains <1/16 mm in diameter), (2) very fine (1/16 to 1/8 mm) to fine (1/8 to 1/4 mm) sandy paste, and (3) medium sandy paste (1/4 to 1/2 mm) (Table 7-1). No coarse-size sand grains were observed.

It soon was discovered that almost all sherds fell within the very fine to fine grain-size category, thereby placing most of the collection into what earlier had been assigned to the Rockport series. Although a few sherds with medium-size grains were noted, the majority of material that would have been classified as Goose Creek ware in 1989 became Rockport ware under the present classification scheme. It still was not known, however, whether the paste dichotomy recognized under the present system using the Wentworth scale actually reflected true Rockport and Goose Creek ware categories, or if it simply was the result of the classification criteria utilized. In other words, if one establishes parameters for ware categories prior to analysis, and then places sherds into those categories, how is one to know if those categories represent meaningful groupings?

In order to alleviate this problem, ceramics from other sites along the Texas coast were examined at both CEI and TARL. Collections with unquestionable Goose Creek material included those from Flat Bank Creek (41 FB 99), Mitchell Ridge (41 GV 66), and sites 41 HR 7, 41 HR 61, 41 HR 85, 41 HR 161, and 41 HR 632, all in the upper Texas coastal area. Sites with Rockport ware included Live Oak Point (41 AS 2), Kent-Crane (41 AS 3), and Mustang Lake (41 CL 3). This review confirmed the notion that previously recognized Rockport sherds had silty pastes and/or very fine or fine sandy pastes. Somewhat disheartening, however, was the realization that sherds previously classified as members of the Goose Creek series actually exhibited the full range of sand-size particles, from very fine to coarse. Fortunately, this fact was made less troubling by the recognition that there were significant differences between Goose Creek and Rockport wares other than grain size. All Rockport sherds, for instance, exhibited a very compact, well-consolidated paste, that appeared harder than almost all Goose Creek examples. Goose Creek ware, on the other hand, had a much higher ratio of sand in the paste, making it softer and more friable than Rockport ware. Because of the high sand content, Goose Creek ceramics also had a much sandier surface texture, at times approaching that of fine sandstone. Often, loose particles of sand became dislodged from a Goose Creek sherd if one rubbed it in one's hand. When taken together, all of these factors (quantity and size of sand grains, compactness and hardness of the paste, and general surface finish) provided a relatively clear break between Rockport and Goose Creek wares, a break that was easy to recognize once analysis began in earnest.

Table 7-1. Attributes Recorded During the Analysis of the Aboriginal Ceramics from Guadalupe Bay.

Primary Inclusions
- silt (<1/16 mm)
- very fine (1/16-1/8mm) to fine (1/8-1/4 mm) sand
- medium (1/4-1/2 mm) sand

Secondary Inclusions
- none
- caliche
- bone
- shell
- caliche and bone
- caliche and shell
- caliche, bone, and shell
- shell and bone
- unidentified white inclusions

Decoration and Surface Alteration
- none
- incised
- black painted with gray or white slip
- black painted without slip
- punctated
- brushed
- red filmed
- polychrome painted
- asphaltum black coating
- scoring

Incised Design Elements
- vertical straight lines
- horizontal straight lines
- diagonal straight lines
- curved lines
- perpendicular straight lines
- parallel straight lines
- horizontal zigzag lines
- diagonal overincised lines
- vertical overincised lines
- crosshatched overincised lines
- chevron pattern
- open triangles
- line-filled triangles
- crosshatched lines
- crossed lines
- unknown line orientation

Black Painted Design Elements
- vertical straight lines
- vertical wavy lines
- horizontal straight lines
- horizontal wavy lines
- diagonal straight lines
- pendant loops
- curved lines
- perpendicular lines
- unknown line orientation
- dots
- open circle
- triangle
- random dabbing
- swastika

Body Portion
- body
- rim

Lip Decoration
- painted black lip band
- notched
- incised

Vessel Form
- beaker
- jar
- beaker/jar
- bottle
- simple bowl
- shallow bowl
- globular bowl

Rim Diameter
- rounded off to the nearest cm

Sherd Thickness
- rounded off to the nearest mm

Once the primary paste characteristics of a sherd were identified, and that sherd was assigned to either the Rockport or Goose Creek series, then it became necessary to identify the so-called "secondary inclusions" within that sherd's paste (see Table 7-1). Secondary inclusions were recognized by Duay and Weinstein (1992) as potentially significant tempering agents that could provide important chronological and cultural information. Since it was assumed that the silt and sand within the paste of a sherd represented elements occurring naturally in the clays of the area (see Aten 1983b), then any additional material might represent culturally introduced temper. Duay and Weinstein (1992) searched for, and identified, secondary inclusions by chipping off a small portion of the sherd being analyzed, and examining the exposed interior for the presence of additional material, such as bone, caliche, and shell. This examination occurred with the aid of a 10x binocular microscope and the addition of a small amount of diluted (10 percent) hydrochloric acid to the exposed sherd interior to check for the presence of caliche or organic particles that could not be seen with the microscope. While this technique appeared to be generally reliable, it was decided that more definitive means of identifying secondary inclusions were necessary, particularly since these inclusions would have been subjected to intense heat during the firing of the vessel and they may not have retained the same identifying characteristics that they had prior to firing.

As a test, both archaeological and contemporary samples of each inclusion were examined by applying a drop of a 10-percent solution of hydrochloric acid and observing the reaction. Bone, *Rangia* shell, oyster shell, and what was termed "hard" and "soft" caliche were tested. "Hard" caliche nodules included extremely compact, pebble-like particles that did not dissolve or break apart when scraped with a sharp implement like a dental pick. When these nodules were split in half, however, they normally exhibited concentric growth rings. "Soft" caliche was composed of nodules that approached the consistency of chalk. A thin section of one of these nodules showed no evidence of growth rings or definite structure. It might, in fact, be more proper to refer to soft caliche as microcrystalline limestone, or micrite, rather than caliche (Juan Lorenzo, personal communication 1995). However, since this material often occurred as a coating around the outer edge of a hard caliche nodule, it was decided simply to refer to the two as "hard" and "soft" caliche. It should be noted further that soft caliche can easily be mistaken for grog when included in the paste of a sherd. Application of the acid solution will, however, reveal its true identity.

Two additional sets of contemporary inclusions, bone and shell, then were placed in a pit containing an open fire. One set of inclusions was placed around the margins of the pit, while the other was thrown directly into the hot coals of the fire. The fire was allowed to burn itself out, and then the inclusions were removed and tested with the 10-percent solution of acid. The various reactions of the acid to the contemporary and archaeological samples (both heated and nonheated) are presented in Table 7-2.

Before discussing the results of the test, it is necessary to define the various acid reactions. Six categories were established and are defined as follows: (1) no reaction (no bubbles emitted), (2) slight reaction (bubbles emerge slowly and singularly, discontinuing within a few seconds), (3) mild reaction (bubbles emerge in a slow, steady stream for only a brief moment, usually less than 20 seconds, then dissipate), (4) moderate reaction (bubbles emerge in rapid, multiple streams, forming a small cluster directly above the inclusion, (5) high reaction (an explosion of tiny bubble clusters that pop up, displacing acid droplets, often emitting a hissing sound, (6) totally dissolved reaction (after a high reaction, the inclusion simply disappears).

Bone samples had the widest range of reactions, from none to mild (see Table 7-2). Interestingly, when there was no reaction, the bone often became darker in color while wet from the acid solution, returning to a lighter color when it dried. The heated bone samples (those placed around the margins of the fire pit) produced a slight reaction, while the charred bone samples (those placed in the coals of the fire) and the archaeological samples produced mild reactions. In the latter instance, the acid solution also changed colors, becoming brown after excess acid was wiped off with a paper towel. The samples of shell and soft caliche all had high reactions to the acid, while the hard caliche exhibited the dissolving reaction.

Following results of the reaction test, sherds from the Guadalupe Bay site initially were examined by placing a drop of the 10-percent solution of hydrochloric acid on a fresh break along the sherd's outer edge and then observing the reaction to determine the nature of the secondary inclusions. Eventually, this method was abandoned in favor of submersing

Table 7-2. Reactions of Contemporary and Archaeological Samples of Bone, Shell, and Caliche to the Diluted (10-Percent) Hydrochloric Acid Solution.

	NO REACTION	SLIGHT REACTION	MILD REACTION	MODERATE REACTION	HIGH REACTION	TOTALLY DISSOLVED
Bone	X					
Heated Bone	X	X				
Charred Bone			X			
Archaeological Bone			X			
Shell				X		
Heated Shell					X	
Charred Shell					X	
Archaeological Shell					X	
Hard Caliche					X	X
Heated Hard Caliche					X	X
Charred Hard Caliche					X	X
Archaeological Hard Caliche					X	X
Soft Caliche					X	
Heated Soft Caliche					X	
Charred Soft Caliche					X	
Archaeological Soft Caliche					X	

the entire sherd in the acid solution (still after a piece had been broken off), as the time needed to place an acid drop on each fresh break and then search the remainder of the sherd for additional inclusions proved to be too extensive. Total immersion of the sherd offered a quick and efficient way of identifying visible inclusions, plus finding and identifying minute inclusions that were not visible at first.[1]

The 1989 analysis identified 11 paste categories, or subcategories, based on the presence or absence of secondary inclusions: (1) no visible inclusions, (2) caliche, (3) bone, (4) shell, (5) caliche and bone, (6) caliche and shell, (7) caliche, bone, and shell, (8) shell and bone, (9) organics other than bone and shell, (10) unidentified white inclusions (inclusions that did not react to acid), and (11) other (Duay and Weinstein 1992). In contrast, the current analysis noted only nine paste categories, as previous categories 9 and 11 were not recognized (see Table 7-1).

Generally, bone inclusions ranged from a single speck to a profuse amount. The bone was usually white to gray in color, although occasional shades of brown were noted. It was seldom black. Most often, the white bone inclusions had been pulverized, causing angular particles that were easily visible on the sherd surface and along the break edges. Other sherds contained sparse amounts of bone of varying colors. A few sherds had been fired at a high enough temperature to reduce the bone to an ashy state that was light gray in color. More will be said of this "ashy" bone later in this chapter.

Sherds containing shell were the easiest to visually identify, as the size of the shell particles generally were the largest of all inclusions observed. The amount of shell in the paste exhibited the same broad range as that noted for the bone; that is, from a single speck to a relatively large quantity. Shell particles usually were white in color, but shades of gray also were common. Occasionally, a sherd produced a high reaction to the acid, although no shell inclusions were visible. In these instances, the sherd again was broken, and this eventually exposed the hidden shell particles. Apparently, shell has such a high reaction to acid that even when the particles are buried deep within the

[1] It should be noted that this method requires a well-ventilated work space to avoid inhaling acid fumes. Gloves should also be worn when handling the acid-soaked sherds.

paste, they still emit a significant amount of bubbling effervescence.

The amount of hard caliche present in the sherds from Guadalupe Bay was somewhat higher than the other secondary inclusions. There never were instances where only one or two pieces of caliche were present. Rather, hard caliche ranged from several particles to profuse amounts, and was always white in color. Since hard caliche totally dissolves in the acid solution, careful observation of the sherd prior to submersion was necessary. It was found, however, that if a sherd is dipped in the acid solution and then removed immediately, the dissolving hard caliche can be observed while it disappears.

Soft caliche inclusions were relatively rare at Guadalupe Bay, but, as noted earlier, when present they usually appeared as round nodules that initially might be mistaken for pieces of grog temper. Once subjected to the acid, however, then a very high reaction occurred. Soft caliche ranged in color from white to pale gray, but it often became a bit darker when placed in the acid solution.

A few additional inclusions were noted during the current analysis, usually hematite nodules or bits of asphaltum, but these were not used to form new categories of paste as they were extremely rare. Furthermore, hematite is believed to occur naturally in some of the clays of the area, and, therefore, perhaps should not be considered an intentional tempering agent. Regardless, the presence of these inclusions still was noted on the analysis forms.

Decoration and Surface Alteration

Following identification of the ware of a specific sherd, plus the recognition of any secondary inclusions that might be present, that sherd was searched for any evidence of intentional decoration and/or surface alteration. Basically, seven main decorative groups were recognized over the course of the analysis: (1) incised, (2) black painted on gray or white slip, (3) black painted without a slip, (4) punctated, (5) brushed, (6) red filmed, and (7) polychrome painted (see Table 7-1). These are thought to represent intentional decorative techniques that would have produced recognizable design patterns on the surface of a vessel.

Two surface alterations that are not thought to represent true decoration also were identified. These include black coating and scoring (see Table 7-1). Black asphaltum coating occurs on different ceramic types and varieties, and was not applied as an intentional decoration. Ricklis (1990b) and Duay and Weinstein (1992) considered it to be a mode that cross-cut types and varieties. Usually this coating appears as a thick, sometimes shiny, layer of asphaltum. It primarily occurs as an overall coating on the interior of jars and bottles, and is believed to have acted as a waterproofing agent. It also can be found along the edges of old vessel fragments (now identified as individual sherds) where it probably was applied to help mend or seal cracks in the vessel wall. Because of these probable functional, rather than decorative, uses, black asphaltum coating is not considered a decoration. Black painting, on the other hand, which utilized asphaltum applied in decorative designs, is considered a form of decoration and will be discussed in detail below.

Scoring is another form of surface alteration that probably has functional origins. Calhoun (1962) first discussed this surface alteration and suggested that it was created by scraping the ribbed shell of a marine bivalve (probably a bay scallop or similar creature) across the vessel's surface, thereby producing even, parallel rows of alternating ridges and furrows. Most of the rows appear to have been aligned horizontally around the vessel, although grid and diagonal patterns also occur. Scoring can be found on the exterior surface of sherds, and is assumed in those cases to have been the result of thinning and shaping of the vessel wall. It may also have helped roughen the outer surface of the vessel to make it less slippery and easier to grasp and handle. More often, scoring can be seen on the interior of sherds. In most of these cases, it probably also represents efforts of the potter to thin and shape the vessel wall, although heavy interior scoring on shallow bowls or plates could have been used as a grinding surface upon which plants, seeds, or other items may have been rubbed. Its prevalence on the interior of sherds probably reflects the fact that exterior surfaces were carefully smoothed over following thinning and shaping, thereby removing most scoring marks, whereas the interiors of jars and beakers either could not be smoothed due to the small orifice diameter of the vessel (making it difficult or impossible for the potter to get a hand inside the vessel), or the interior surface did not need to be smoothed for esthetic purposes. In many cases, scoring marks on the interior had subsequently been covered with asphaltum, thus offering evidence of both functional techniques on the same vessel. Interestingly, only one sherd in the entire collection from Guadalupe Bay exhibited scoring on both its interior and exterior surfaces.

Three of the decorative groups (incising, black painting on a gray or white slip, and black painting on an unslipped surface) made up the vast majority of all decorated ceramics recovered at Guadalupe Bay. Following initial sorting into these groups, an alpha-numeric code was developed and each decorated sherd was assigned a letter (or letters) and number (or numbers) representing the type of decoration, its orientation on the vessel, and its width (Table 7-3). For example, a sherd with straight, vertical lines received the letter "A," while a sherd with slightly wavy, vertical lines received the letter "B." If these lines were painted then the qualifier "Asph." was added. If they were incised, then the qualifier "Inc." was added. These letters (plus the qualifier) then were coupled with a number indicating the width of the line. Thus, a sherd classed as "B2, Asph." would exhibit slightly wavy, vertical painted lines that are of medium (between 2 and 4 mm) width. An "A1, Inc." sherd would exhibit straight, vertical incised lines of narrow width (<2 mm).

Rim/Lip Modification

In addition to sorting by paste and surface alteration, sherds were separated into rim and body categories. A base category also would have been used if any base sherds had been positively identified. None was, however, so that category was dropped. Rim sherds were further examined for their shape and any decorative treatments specific to that part of the vessel.

Several types of rims were recognized at Guadalupe Bay. These included (1) rounded, (2) flat, (3) pointed, and (4) beveled.

Three decorative treatments were recognized for vessel lips at Guadalupe Bay: (1) lip banding, (2) lip incising, and (3) lip notching (see Tables 7-1 and 7-3). Lip banding was the most common treatment in the collection and consisted of a painted asphaltum band around the lip of the vessel. This band usually fell into the wide category (>4 mm) and occurred simultaneously on the interior, exterior, and top of the lip. Sometimes the band was a bit more narrow, and/or only occurred on one or two portions of the lip (i.e., the top and exterior, or the top only).

Lip incising was represented by short, multiple lines placed either on the top of flat lips or on the upper few millimeters of pointed lips. Lines on top of flat lips either were oriented perpendicular to the long axis of the rim or were slanted across the top of the lip. Lines on pointed lips were oriented vertically and generally extended up and over the lip, occurring on both the exterior and interior surfaces of the rim.

Lip notching occurred either as shallow V-shaped or square depressions impressed into the top of the rim. Notching varied according to the space between the individual notches, and the width of the notches themselves. These probably are equivalent to what Suhm and Krieger (1954), Suhm and Jelks (1962) and Ricklis (1990b) have identified as "crenelated." No scalloped rims were present in the collection.

Vessel Form and Size

When possible, rim sherds of sufficient size were used to assess vessel form. Knowing the type of vessel utilized presumably can provide information on its function, thereby allowing for inferences to be made about aboriginal activities at Guadalupe Bay. Several classes were recognized, primarily using the excellent set of vessel diagrams illustrated by Phillips (1970), but modified as necessary to fit slight differences in coastal Texas ceramics. Included were: (1) beakers, (2) jars, (3) beakers or jars, (4) bottles, (5) simple bowls, (6), shallow bowls, and (7) globular bowls (see Table 7-1). No plates were recognized, although the presence of a significant number of sherds with interior decoration suggests that plates may have been utilized. On the other hand, it also is possible that all sherds with interior decoration came from shallow bowls, a vessel form that can be documented in the collection.

Rim sherds also were used to estimate the orifice diameter of vessels if the sherd was large enough or curved enough to allow for a reasonable measurement to be obtained (see Table 7-1). Sherds were measured by placing them on a board marked by concentric circles spaced one centimeter apart. It should be emphasized that the overwhelming majority of the sherds were very small and their orifice diameters could not be measured.

Lastly, the wall thickness of every sherd was recorded to the nearest millimeter in an effort to obtain potential chronological and functional information (see Table 7-1). Measurements were taken with a set of calipers. In the past, several investigators have taken great pains to measure the wall thickness of each sherd in their respective collections. Although the extreme range varied slightly from collection to collection, the average thickness remained relatively

Table 7-3. Alpha-Numeric Sorting Codes Utilized in the Analysis of the Decorated Aboriginal Ceramics from Guadalupe Bay.

A Vertical lines, straight
- 1 thin
- 2 medium
- 3 wide

B Vertical lines, slightly wavy
- 1 thin
- 2 medium
- 3 wide

C Vertical lines, highly wavy
- 1 thin
- 2 medium
- 3 wide

D Horizontal lines, straight
- 1 thin
- 2 medium
- 3 wide

E Horizontal lines, slightly wavy
- 1 thin
- 2 medium
- 3 wide

F Horizontal lines, highly wavy
- 1 thin
- 2 medium
- 3 wide

G Diagonal lines, straight
- 1 thin
- 2 medium
- 3 wide

H Unknown line orientation (painted)
- 1 straight, thin
- 2 straight, medium
- 3 straight, wide
- 4 slightly wavy, thin
- 5 slightly wavy, medium
- 6 slightly wavy, wide
- 7 highly wavy, thin
- 8 highly wavy, medium
- 9 highly wavy, wide
- 10 unidentifiable line, thin
- 11 unidentifiable line, medium
- 12 unidentifiable line, wide

I Unidentifiable painted design

J Unclassified brushed

K Perpendicular lines

L Painted dot

M Curved line

N Open circles

O Line-filled triangle

P Parallel lines

Q Crosshatched lines

R Open triangle

S Unclassified incised

T Red filmed

U Unknown line orientation (incised)

V Punctations

W Chevron pattern

X Zigzag lines

Y Random dabbing

Z Swastika pattern

AA Scored lines (scallop impressions)

AB Crossed lines

AC Multiple unidentifiable designs

AOI Vertical overincised lines

GOI Diagonal overincised lines

QOI Crosshatched overincised lines

Lip Modifications

AD Lip banding (painted)
- 1 thin
- 2 medium
- 3 wide

AE Lip incising
- 1 perpendicular lines across flat lip
- 2 vertical lines on pointed lip
- 3 diagonal lines across flat lip

consistent. Suhm and Jelks (1962) summarized most of these data and noted that Goose Creek ware ranged from 2 to 10 mm in thickness with an average of 6□mm. Rockport ware, on the other hand, was somewhat thinner, ranging between 1.5 and 7 mm in thickness with an average of 3□mm.

Color

Color has been the focus of a great deal of attention by previous researchers working along the Texas coast. Core and surface colors have been described in pain-staking detail. As an example, Hester and Parker (1970) established ten groups of bone-tempered ware based solely on exterior surface colors. Although color is easily recognizable, the current authors are of the opinion that it may not yield much information. The final color of fired clay depends on a number of factors, two of which predominate. One concerns the size, amount, and distribution of impurities in the clay. Main impurities are iron and organic material. The second factor concerns the firing process, including time, temperature, and atmosphere during firing (Rice 1987:333-345).

Color development resulting from iron inclusions cannot begin until all of the carbonaceous (organic) materials have been burned out of the clay (Rice 1987:335), and the final color depends upon the state of the iron. Iron in a reduced state (rare) produces grays, blues, greens, or gray-browns. Iron in an oxidized state produces reds and reddish browns. Generally, iron oxides in amounts of one percent will produce a yellow tone, one and one-half percent will cause light browns and oranges, while three percent and higher will produce red tones (Rice 1987:335).

A dark core in a freshly broken cross section of a sherd usually indicates that organic material was present in the raw clay, or carbonaceous material was deposited during firing. If the dark core occurs in the center of the cross section, and both outer surfaces exhibit lighter colors, then this usually indicates that the organic material was present in the raw clay but not completely removed during the firing process (Rice 1987:334). If the dark color occurs near the surface and not in the center, then this is indicative of smudging. Smudging is a technique used during firing in which an open fire is covered with manure or some other material, disabling oxygen from reaching the pots, thereby depositing carbon on the vessel's surface (Rice 1987:335).

When a clay is free of these two classes of impurities, it is white in color. When fired, it produces white and cream colors. Unfortunately, it is nearly impossible to determine if a dark color is due to the presence of iron, organic material, or both. Generally, the natural color of the raw clay has little bearing on the color of the final fired clay product (Rice 1987:333).

Other materials, such as lime, can contribute to the color of fired clay when temperatures around 800° C and above are attained (average firing temperature of prehistoric pottery was 800° to 900° C). Decomposed calcium carbonate (CaCo3) may react with clay to form calcium silicates with pale yellow or white colors. Several other materials, such as manganese, magnetite, titanium, sulfides, sulfates, and chlorides, also have varying influences on the color of fired clays (Rice 1987:336). Their effects have not been observed on Texas pottery, however.

There are other contributing factors responsible for the various colors of ceramics (i.e., cooking residue, fire clouding, placement of the pot during firing, and post-depositional factors). Overall, due to the problems involved in determining which, if any, of the above factors may actually have contributed to the final color of a vessel, recording the colors exhibited by aboriginal ceramics generally provides limited information with little bearing on chronological or cultural questions. Thus, sherd color was not recorded systematically during the present analysis.

Ceramic Classification

Aboriginal ceramics were identified by Michelle Hutchins according to the type-variety system of ceramic classification employed by Duay and Weinstein (1992) for sherds collected from sites along the Victoria Barge Canal in 1989. This system has the flexibility of pinpointing subtle differences in paste and decorative techniques that can then be utilized to recognize fine-scale chronological units and/or culturally meaningful ceramic assemblages. Although others, such as Story (1968), and Hester and Hill (1971), have attempted to examine the local ceramics in a careful and precise manner, their systems have not been adopted, both due to the attributes they chose to examine and the overall complexity of their sorting criteria. The type-variety system builds upon these earlier investigations, but provides a set of sorting criteria and ceramic nomenclature that hopefully will eventually allow for replicability during

future analyses and a simplified system of communication.

The type-variety analysis is primarily a descriptive system that has great utility in organizing and discussing the local prehistoric pottery. Its main virtue derives from the fine-scale chronological and/or regional control that is theoretically obtainable through its use. It does not, however, lend itself to many functional interpretations, other than a few cases where specific types or varieties may be associated with a specialized purpose, such as those types that only are represented by serving plates or bowls (Anna Incised, for instance, in the Lower Mississippi Valley). The type-variety system can, nevertheless, be used in conjunction with other systems, such as those that identify vessel form and size, thereby providing both chronological/spatial and functional information

The type-variety system first was developed by Wheat et al. (1958) for the southwestern United States. Phillips (1958) subsequently modified the system for use in the Southeast, and later (1970) employed it as the backbone of his lower Yazoo Basin research. It has since been used on a regular basis by archaeologists working in the Lower Mississippi Valley and adjacent areas. Aten (1979; 1983b) eventually brought the type-variety system into southeast Texas. Duay and Weinstein (1992:89-95) modified the system for use at sites along the Victoria Barge Canal, and a slightly updated version of their system is utilized for the current study.

The following descriptions provide a brief review of the sorting criteria necessary for recognizing the various types and varieties utilized in the current study. Figure 7-1 offers a dendritic chart that illustrates the step-by-step procedure of ceramic classification, while Table 7-4 provides a list of all types and varieties present at Guadalupe Bay. Lastly, Table 7-5 lists all sherds by major provenience (either sample unit, excavation unit, or surface) recovered during the 1992 investigations.[2]

It should be emphasized, as has been done before (Duay and Weinstein 1992; Duay et al. 1994), that the system employed here is only a first step in sorting the local ceramics into types and varieties. It is expected that subsequent research of large collections, such as that from Guadalupe Bay, will refine or alter these varieties, in some cases eliminating or combining one or more of them into more useful categories. Nevertheless, it is hoped that the use of the type-variety system will continue, and analysis of the ceramics of the region will become an important key in subdividing the Late Prehistoric period along both temporal and spatial lines.

Rockport Series

Ceramics of the Rockport series have long been recognized at sites on the central and south Texas coasts (Campbell 1952, 1958a, 1960, 1962; Suhm and Krieger 1954). As discussed earlier in this chapter, ceramics of the Rockport series exhibit a well-consolidated, silty or fine sandy paste. Ricklis (1990b:121) notes that this clay matrix is indistinguishable from natural clays found in the Beaumont Formation, and suggests that most of the material gathered to produce Rockport ceramics came from this Pleistocene-age feature. Generally, the clay matrix of Rockport ware either contains silt-size particles only or a combination of silt, very fine sand, and/or fine sand (all particles <1/14 mm) (see Table 7-1). Sometimes vessels were fashioned from this clay matrix without the addition of any temper, the naturally occurring silt and sand serving as the only tempering agents. At other times, however, additional particles of bone, shell, or caliche were added, presumably as intentional tempering material. The addition (or lack) of these "secondary inclusions" provides the basis for identifying specific varieties under the present classification scheme.

Prior to the current study, there were three previously recognized ceramic types within the Rockport series: Rockport Plain, Rockport Incised, and Rockport Black-on-gray (Campbell 1952, 1958a, 1962; Duay and Weinstein 1992; Duay et al. 1994; Suhm and Krieger 1954; Suhm and Jelks 1962). The extensive collection from Guadalupe Bay has allowed for the recognition of three new types: Rockport Black, Rockport Red, and Rockport Polychrome. Each of these six types, plus their constituent varieties, are described below. Additions or changes to definitions supplied in Duay and Weinstein (1992) and/or

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[2] Appendix B also provides a detailed breakdown of the ceramics recovered from each excavation unit, by stratum and level. Also included is information on the presence or absence of asphaltum coating on each sherd, plus the specific location of that coating.

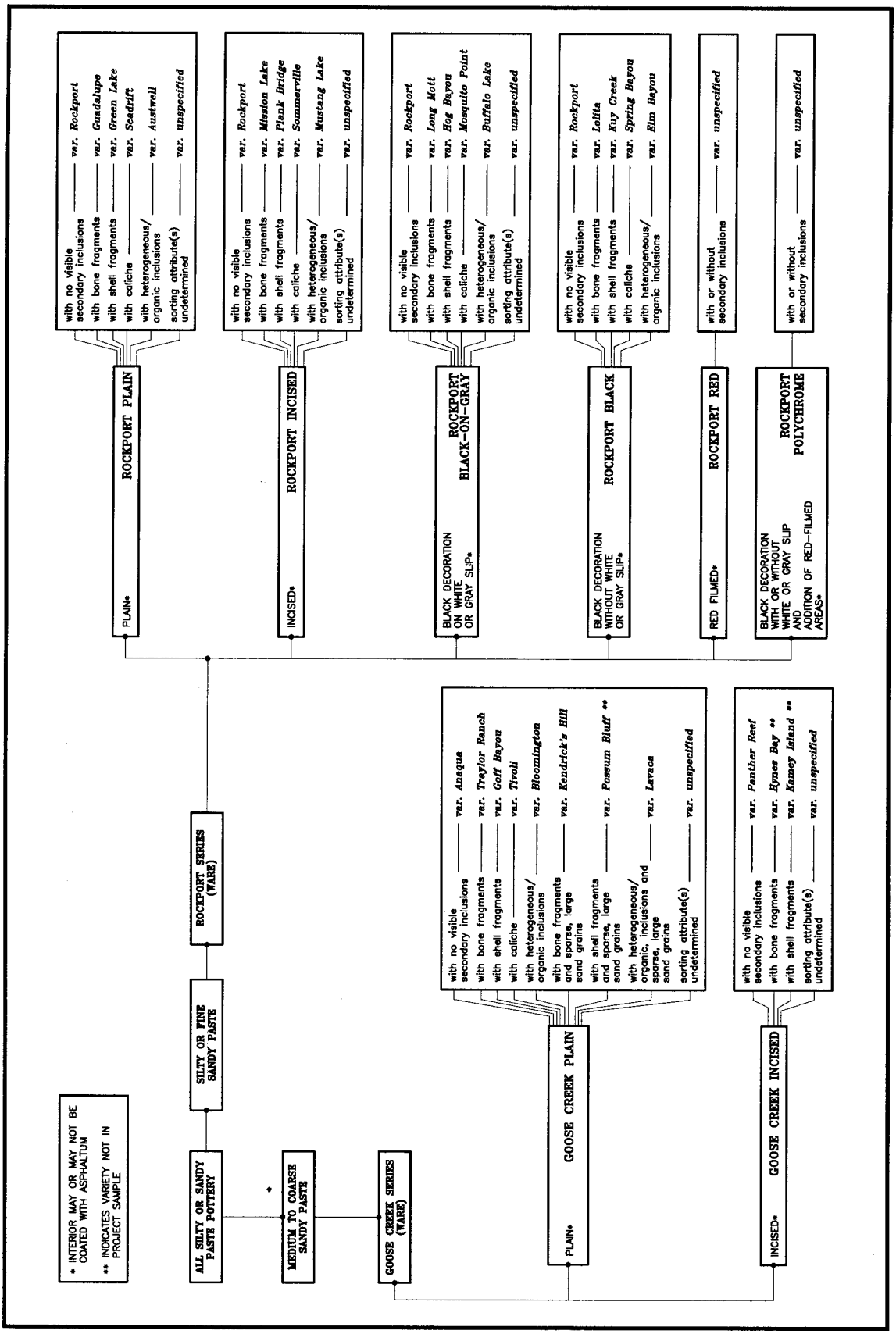

Figure 7-1. Dendritic chart of ceramic sorting procedures used during the current study. (Modified from Duay and Weinstein 1992:Figure 5-1; Duay et al. 1994:Figure 5-1.)

Table 7-4. Ceramic Types and Varieties Recovered at the Guadalupe Bay Site.

ROCKPORT SERIES

Rockport Plain
- *var. Rockport*
- *var. Guadalupe*
- *var. Green Lake*
- *var. Seadrift*
- *var. Austwell*

Rockport Incised
- *var. Rockport*
- *var. Mission Lake*
- *var. Plank Bridge*
- *var. Sommerville*
- *var. Mustang Lake*

Rockport Black-on-gray
- *var. Rockport*
- *var. Long Mott*
- *var. Hog Bayou*
- *var. Mosquito Point*
- *var. Buffalo Lake*

Rockport Black
- *var. Rockport*
- *var. Lolita*
- *var. Kuy Creek*
- *var. Spring Bayou*
- *var. Elm Bayou*

Rockport Red

Rockport Polychrome

GOOSE CREEK SERIES

Goose Creek Plain
- *var. Anaqua*
- *var. Traylor Ranch*
- *var. Goff Bayou*
- *var. Tivoli*
- *var. Bloomington*
- *var. Kendrick's Hill*
- *var. Lavaca*

Goose Creek Incised
- *var. Panther Reef*

Duay et al. (1994) are noted in parentheses in the subsequent headings.

Rockport Plain*, var. Rockport *(n=15,699)

This is the so-called established variety of the type Rockport Plain (see Campbell 1958a:437-438, 1962:331-332; Suhm and Krieger 1954:385), and the general sorting criteria noted by earlier investigators holds true today. It was the most abundant variety found at Guadalupe Bay. Predominantly, the variety consists of vessels with a plain or asphaltum-coated interior and/or exterior, and a silty or fine sandy paste that lacks any visible secondary inclusions. As noted above, the asphaltum present on some of the sherds of this type is the thick, glossy coating that should not be confused with intentional black decoration. It almost certainly was used as a waterproofing agent on the interior of vessels and as a glue or sealant along the margins of cracks both on the interior and exterior of vessels.

Rockport Plain*, var. Guadalupe *(n=8,312)

This is was the second most common variety of Rockport Plain found at Guadalupe Bay. In earlier studies, it had been included in the type description for Rockport ware (see Campbell 1962:331; Suhm

Table 7-5. General Distribution of Aboriginal Ceramic Types and Varieties Recovered During the 1992 Investigations at Guadalupe Bay.

	Sample Units										
	N40W69	N50W79	N51W90	N60W90	N70W100	N70W110	N70W120	N80W120	N80W130	N90W130	N90W140
Rockport Black											
var. Elm Bayou	-	-	2	2	-	1	-	-	-	-	-
var. Kuy Creek	-	-	-	-	-	-	-	2	-	1	-
var. Lolita	-	-	7	3	3	2	3	1	1	-	1
var. Rockport	1	-	3	1	-	1	6	-	-	1	-
var. Spring Bayou	-	-	-	-	-	1	-	-	-	-	-
Rockport Black-on-gray											
var. Buffalo Lake	-	-	42	-	4	6	33	-	2	-	-
var. Hog Bayou	-	1	12	-	2	4	26	2	10	-	5
var. Long Mott	3	2	40	8	3	10	47	9	16	-	11
var. Mosquito Point	-	-	11	-	1	-	14	2	-	-	-
var. Rockport	-	3	16	1	4	7	16	1	3	-	4
Rockport Incised											
var. Mission Lake	-	-	3	-	-	-	5	-	-	-	1
var. Mustang Lake	-	-	-	-	-	8	4	1	-	-	-
var. Plank Bridge	-	-	-	-	1	-	1	-	1	1	-
var. Sommerville	-	-	-	-	-	1	1	1	-	-	-
var. Rockport	-	-	-	-	1	3	2	-	1	-	-
Rockport Plain											
var. Austwell	-	-	34	6	15	25	75	3	33	2	-
var. Green Lake	1	2	18	2	20	29	112	20	97	12	36
var. Guadalupe	8	4	110	14	24	48	216	39	161	27	56
var. Rockport	9	4	65	16	42	44	159	23	41	10	43
var. Seadrift	-	-	31	4	16	14	31	6	10	1	1
Rockport Red											
var. unspecified	-	-	-	-	-	-	1	-	-	-	-
Rockport Polychrome											
var. unspecified	-	-	-	-	-	-	-	-	-	-	-
Goose Creek Incised											
var. Panther Reef	-	-	-	-	-	-	-	-	-	-	-
Goose Creek Plain											
var. Anaqua	-	-	-	-	-	-	-	-	-	-	-
var. Bloomington	-	-	-	-	-	-	-	-	-	-	-
var. Kendrick's Hill	-	-	4	-	-	-	-	-	-	-	-
var. Lavaca	-	-	-	-	-	-	20	-	3	-	-
var. Tivoli	-	-	-	-	-	-	-	-	-	-	-
var. Traylor Ranch	-	-	-	-	-	-	-	-	-	-	-
Unclassified Brushed	-	-	-	-	-	-	-	-	-	-	-
Unclassified Punctated	-	-	-	-	-	-	-	-	-	-	-
TOTAL	**22**	**16**	**398**	**57**	**136**	**204**	**772**	**110**	**379**	**55**	**158**

(continued)

Table 7-5. Continued.

	Sample Units		Sample Unit Totals	Block 1 Units							
	N100W150	N110W150		N58W100	N60W100	N60W102	N62W102	N64W100	N64W102	N66W100	N66W102
Rockport Black											
var. Elm Bayou	-	-	**5**	-	2	2	1	-	1	-	-
var. Kuy Creek	-	-	**3**	-	-	-	-	-	-	-	-
var. Lolita	-	-	**21**	1	-	2	4	2	-	-	-
var. Rockport	-	-	**13**	-	5	-	1	-	-	-	-
var. Spring Bayou	-	-	**1**	-	-	-	-	-	-	-	-
Rockport Black-on-gray											
var. Buffalo Lake	-	-	**87**	5	11	25	22	10	14	9	11
var. Hog Bayou	-	-	**62**	8	2	6	-	3	3	2	-
var. Long Mott	2	-	**151**	8	5	63	19	12	10	2	6
var. Mosquito Point	-	-	**28**	49	38	15	8	1	-	-	2
var. Rockport	2	-	**57**	82	80	78	40	14	4	9	11
Rockport Incised											
var. Mission Lake	1	-	**10**	1	-	1	-	4	-	-	-
var. Mustang Lake	-	-	**13**	2	2	3	1	7	1	2	1
var. Plank Bridge	-	-	**4**	-	-	-	-	-	-	-	-
var. Sommerville	-	-	**3**	1	3	2	3	4	1	-	2
var. Rockport	-	-	**7**	1	2	2	3	5	1	-	2
Rockport Plain											
var. Austwell	-	1	**194**	132	115	231	156	100	118	85	86
var. Green Lake	4	5	**358**	37	29	56	19	9	9	17	13
var. Guadalupe	22	9	**738**	61	25	105	30	10	26	28	45
var. Rockport	10	8	**474**	835	521	1147	629	356	410	232	319
var. Seadrift	-	-	**114**	230	64	52	31	38	13	13	12
Rockport Red											
var. unspecified	-	-	**1**	-	-	4	-	-	-	-	1
Rockport Polychrome											
var. unspecified	-	-	**0**	-	-	-	-	-	-	-	-
Goose Creek Incised											
var. Panther Reef	-	-	**0**	-	-	-	-	-	-	-	-
Goose Creek Plain											
var. Anaqua	-	-	**0**	-	-	-	1	2	-	-	-
var. Bloomington	-	-	**0**	-	-	-	-	-	-	-	-
var. Kendrick's Hill	-	-	**4**	-	-	-	-	-	2	2	-
var. Lavaca	-	-	**23**	-	-	-	-	-	-	-	-
var. Tivoli	-	-	**0**	-	-	-	-	1	-	-	-
var. Traylor Ranch	-	-	**0**	-	-	-	-	1	-	-	-
Unclassified Brushed	-	-	**0**	-	-	-	-	-	-	-	1
Unclassified Punctated	-	-	**0**	-	-	-	1	-	-	-	-
TOTAL	**41**	**23**	**2,371**	**1453**	**904**	**1794**	**969**	**579**	**613**	**401**	**512**

(continued)

Table 7-5. Continued.

	Block 1 Units	Block 1 Totals	Block 2 Units				Block 2 Totals	Block 3 Units			
	N68W100		N54W88	N54W90	N54W92	N54W94		N70W118	N72W118	N72W120	N72W122
Rockport Black											
var. Elm Bayou	-	**6**	-	-	-	-	**0**	3	-	2	2
var. Kuy Creek	-	**0**	-	-	-	-	**0**	-	6	2	2
var. Lolita	-	**9**	2	5	11	5	**23**	17	8	12	12
var. Rockport	-	**6**	3	-	-	3	**6**	10	33	7	13
var. Spring Bayou	-	**0**	-	-	-	-	**0**	4	1	3	-
Rockport Black-on-gray											
var. Buffalo Lake	-	**107**	2	10	17	58	**87**	28	15	62	56
var. Hog Bayou	-	**24**	3	1	12	16	**32**	8	19	33	32
var. Long Mott	37	**162**	16	29	48	77	**170**	48	52	84	97
var. Mosquito Point	-	**113**	2	1	2	7	**12**	27	16	26	25
var. Rockport	4	**322**	17	53	119	29	**218**	105	68	83	126
Rockport Incised											
var. Mission Lake	1	**7**	-	1	1	1	**3**	2	7	6	8
var. Mustang Lake	4	**23**	-	1	4	1	**6**	4	-	5	15
var. Plank Bridge	1	**1**	1	-	3	4	**8**	-	1	1	4
var. Sommerville	2	**18**	-	-	-	1	**1**	6	2	4	1
var. Rockport	1	**17**	2	1	1	4	**8**	8	7	17	6
Rockport Plain											
var. Austwell	110	**1133**	108	150	214	328	**800**	652	297	380	348
var. Green Lake	21	**210**	15	20	89	67	**191**	136	166	250	261
var. Guadalupe	23	**353**	44	82	157	181	**464**	322	247	553	718
var. Rockport	281	**4730**	206	390	882	1011	**2,489**	1042	927	861	809
var. Seadrift	33	**486**	26	15	2	33	**76**	104	315	159	141
Rockport Red											
var. unspecified	-	**5**	1	2	-	-	**3**	3	2	-	-
Rockport Polychrome											
var. unspecified	-	**0**	-	-	-	-	**0**	-	-	1	-
Goose Creek Incised											
var. Panther Reef	-	**0**	-	-	-	-	**0**	-	-	-	-
Goose Creek Plain											
var. Anaqua	-	**3**	-	1	-	-	**1**	-	-	-	-
var. Bloomington	-	**0**	-	-	-	-	**0**	3	4	1	-
var. Kendrick's Hill	-	**4**	2	-	-	1	**3**	2	-	-	-
var. Lavaca	-	**0**	-	-	-	-	**0**	6	-	28	25
var. Tivoli	-	**1**	-	-	-	-	**0**	-	-	-	-
var. Traylor Ranch	-	**1**	-	-	-	5	**5**	8	-	1	-
Unclassified Brushed	-	**1**	-	-	-	-	**0**	-	1	-	-
Unclassified Punctated	-	**1**	-	-	1	-	**1**	-	-	-	-
TOTAL	**518**	**7,743**	**450**	**762**	**1563**	**1832**	**4,607**	**2548**	**2194**	**2581**	**2701**

(continued)

Table 7-5. Concluded.

	Block 3 Units								Block 3 Totals	Surface	Site Totals
	N74W118	N74W120	N74W122	N74W124	N74W126	N76W120	N76W122	N76W126			
Rockport Black											
var. Elm Bayou	1	1	3	2	-	3	1	-	**18**	**1**	**30**
var. Kuy Creek	1	3	2	-	-	1	2	-	**19**	**4**	**26**
var. Lolita	6	2	7	17	8	4	15	8	**116**	**21**	**190**
var. Rockport	9	8	7	5	-	6	8	5	**111**	**11**	**147**
var. Spring Bayou	-	-	-	-	-	-	1	1	**10**	**1**	**12**
Rockport Black-on-gray											
var. Buffalo Lake	62	55	64	52	55	62	93	101	**705**	**13**	**999**
var. Hog Bayou	40	60	178	100	99	50	125	130	**874**	**14**	**1,006**
var. Long Mott	53	156	214	177	129	130	167	269	**1576**	**32**	**2,091**
var. Mosquito Point	12	19	16	11	30	29	37	26	**274**	**4**	**431**
var. Rockport	22	113	98	78	32	36	46	68	**875**	**3**	**1,475**
Rockport Incised											
var. Mission Lake	7	3	14	9	14	8	12	5	**95**	**3**	**118**
var. Mustang Lake	9	3	16	4	6	11	8	7	**88**	**4**	**134**
var. Plank Bridge	6	4	6	2	9	5	15	5	**58**	**5**	**76**
var. Sommerville	-	1	-	-	-	3	3	1	**21**	**0**	**43**
var. Rockport	4	2	5	-	3	2	7	7	**68**	**2**	**102**
Rockport Plain											
var. Austwell	206	327	288	214	150	165	231	162	**3420**	**60**	**5,607**
var. Green Lake	248	215	386	439	349	179	264	247	**3140**	**111**	**4,010**
var. Guadalupe	349	643	753	629	617	431	721	465	**6448**	**309**	**8,312**
var. Rockport	407	650	725	596	368	367	639	486	**7877**	**129**	**15,699**
var. Seadrift	84	69	61	48	71	67	136	47	**1302**	**37**	**2,015**
Rockport Red											
var. unspecified	-	-	3	-	-	1	-	1	**10**	**0**	**19**
Rockport Polychrome											
var. unspecified	-	-	-	-	-	-	1	-	**2**	**0**	**2**
Goose Creek Incised											
var. Panther Reef	-	-	-	-	-	-	-	-	**0**	**1**	**1**
Goose Creek Plain											
var. Anaqua	-	-	-	-	-	-	-	-	**0**	**0**	**4**
var. Bloomington	-	-	-	-	-	-	-	-	**8**	**0**	**8**
var. Kendrick's Hill	-	-	-	-	-	-	-	-	**2**	**0**	**13**
var. Lavaca	4	7	10	-	4	-	4	4	**92**	**0**	**115**
var. Tivoli	-	-	-	-	-	-	-	-	**0**	**0**	**1**
var. Traylor Ranch	-	-	-	-	-	-	-	-	**9**	**0**	**15**
Unclassified Brushed	-	-	-	-	-	-	-	-	**1**	**0**	**2**
Unclassified Punctated	1	-	1	-	-	-	3	1	**6**	**1**	**9**
TOTAL	**1531**	**2341**	**2857**	**2383**	**1944**	**1560**	**2539**	**2046**	**27,225**	**766**	**42,712**

and Krieger 1954:385). It includes vessels or sherds with a plain or asphaltum-coated exterior, either a plain or asphaltum-coated interior, and a silty or fine sandy paste that contains fragments of crushed bone and/or burned bone. The latter presumably was added as a tempering agent.

Interestingly, this was the only Rockport variety to produce the remains of a vessel handle (Figure 7-2). Luckily, the handle fragment also includes a portion of the body of the vessel, and this indicates that it had been attached by extending a clay "rivet" through the vessel wall to anchor the handle to the interior of the container. Such riveted handles are common on Goliad ceramics from Mission Espíritu Santo (Mounger 1959:170-172), and it originally was thought that the handle from Guadalupe Bay might be from a vessel of Goliad Plain that had originated at the mission. However, examination of the handle's paste indicates that it is typical of the Rockport series, and almost certainly is of local manufacture.

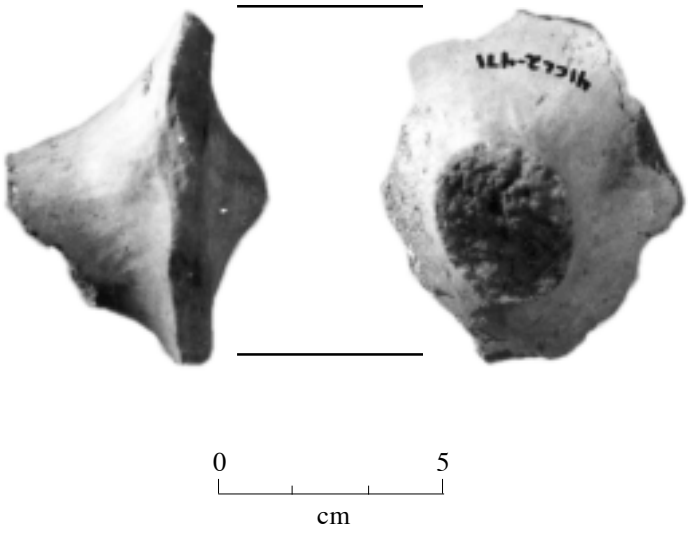

Figure 7-2. Portion of loop handle from a vessel of Rockport Plain, *var. Guadalupe*. Note the bulge on the interior of the sherd produced by the "rivet" used to attach the handle. (See Appendix K for provenience data.)

Although relatively rare, the presence of handles in Rockport assemblages is not unknown, as both Martin (1931:55) and Campbell (1962:332) earlier had noted that some sherds of Rockport Plain contained evidence of loop handles. Considering the extensive quantity of handles found at Espíritu Santo, however, it is likely that similar handles on Rockport ware represent a very late addition to the ceramic industry, and probably are representative of protohistoric and/or historic occupations.[3] Considering the nearby presence of Mission Refugio in the 1790s, plus other evidence of an eighteenth-century occupation at Guadalupe Bay, it may not be too speculative to suggest an association between the handle and this late component. Such an association may be supported further by the fact that the handle came from XU N54W92, one of the units in Block 2 specifically excavated to examine the potential historic occupation noted in that area of the site.

Rockport Plain, var. Green Lake *(n=4,010)*

This variety consists of pottery with a plain or asphaltum-coated exterior or interior, and a silty or fine sandy paste that contains fragments of crushed shell. The shell probably was added as a tempering agent, although Story's (1968) research at the Ingleside Cove site suggests that some shell may simply represent natural inclusions in the clay selected for vessel manufacture.

Rockport Plain, var. Seadrift *(n=2,015)*

Var. Seadrift can be recognized by sherds with a nondecorated exterior, a plain or asphaltum-coated exterior or interior, and a silty or fine sandy paste that contains small pieces of caliche as secondary inclusions. As with the shell inclusions discussed above, these latter items probably served as intentionally added tempering agents.

Rockport Plain, var. Austwell *(n=5,607)*

This variety can be recognized by sherds with a plain or asphaltum-coated exterior or interior surface, and a silty or fine sandy paste that contains a heterogeneous assortment of secondary inclusions. The latter can consist of shell, bone, and caliche; bone and caliche; shell and caliche; or any combination thereof.

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[3] A very recent study by Ricklis (2000:78), received too late for proper citation, discusses 16 loop handle fragments from Mission Rosario that occur on Rockport paste and in an assemblage dating to the late eighteenth and early nineteenth centuries.

Rockport Incised*, var. Rockport *(n=102)

As with Rockport Plain, *var. Rockport*, this variety represents the established variety of the type and includes only those incised designs on sherds with silty or fine sandy paste that lacks any noticeable secondary inclusions. Asphaltum coating may be present on the interior of Rockport Incised sherds, and, in some instances, the asphaltum extends over the lip and down over the upper few centimeters of the exterior rim. Since the decoration usually is located on or just below the rim of the vessel, the asphaltum can cover either a portion of the incised decoration or the entire decoration.

***Rockport Incised,* var. Mission Lake (n=*118*)**

This variety consists of predominantly horizontal lines placed around the exterior, upper portion or rim of a vessel. The vessel may or may not contain asphaltum on its interior and/or lip and exterior rim. Vessel paste consists of a silty or fine sandy matrix that includes crushed and/or burned pieces of bone and represents the incised equivalent of Rockport Plain, *var. Guadalupe*.

Rockport Incised*, var. Plank Bridge *(new variety) (n=76)

This is a new variety recognized in the expanded collection analyzed for the current project. It consists of predominantly horizontal lines placed around the exterior, upper portion or rim of a vessel, although other decorative elements may be added to this basic design. The vessel may or may not contain asphaltum on its interior and/or lip and exterior rim. Vessel paste consists of a silty or fine sandy matrix that includes small pieces of shell presumably added as temper. As such, *Plank Bridge* represents the incised equivalent of Rockport Plain, *var. Green Lake*.

One unique rim sherd of *Plank Bridge* came from the surface of the site and is worthy of further discussion (Figure 7-3). It exhibits four horizontal incised lines running parallel to the lip on the exterior of the sherd, a series of pendant triangles situated below the horizontal lines, a painted black band along the top and outer edge of the lip, and red pigment within the incised lines. A hint of red pigment also is noticeable on the sherd's surface adjacent to several of the incised lines, suggesting that the entire decorative field may once have been covered by red film. The presence of the red pigment and the black band could conceivably place the sherd within the type Rockport Polychrome, to be discussed below. However, it is quite clear that the primary decorative motif was formed by the incised lines, while both the black band and red pigment were secondary decorative elements added to "embellish" the primary decoration. Thus, it is felt that the sherd should more properly be classed as Rockport Incised. More will be said of this sherd later in the discussion on decorative motifs.

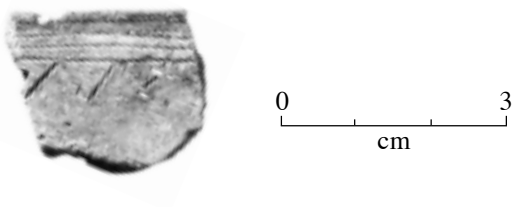

Figure 7-3. Unique sherd of Rockport Incised, *var. Plank Bridge* , with black lip band and red pigment in incised lines. The specimen is an excellent example of the "Bendewald Point motif," as discussed later in this chapter. (See Appendix K for provenience data.)

Rockport Incised*, var. Sommerville *(new variety) (n=43)

This is another new variety recognized during the current project. As with the other varieties of Rockport Incised, *Sommerville* consists of predominantly horizontal lines placed around the exterior, upper portion or rim of a vessel. The vessel may or may not contain asphaltum on its interior and/or lip and exterior rim. Vessel paste consists of a silty or fine sandy matrix that includes small pieces of caliche presumably added as temper. *Sommerville* therefore represents the incised equivalent of Rockport Plain, *var. Seadrift*.

Rockport Incised*, var. Mustang Lake *(n=134)

Mustang Lake is named for the Mustang Lake site (41 CL 3) which has produced a large assemblage of Rockport series ceramics (see Campbell 1960:Figure 2, 1962:Figure 1). Basically, the variety consists primarily of horizontally incised lines placed around the exterior, upper portion or rim of a vessel that may or may not contain asphaltum on its interior, lip, and/or upper exterior rim. The paste

is composed of a silty or fine sandy matrix that contains a heterogeneous mixture of secondary inclusions similar to those found in Rockport Plain, *var. Austwell*. Included in the collection from Guadalupe Bay is the only partially reconstructed vessel discovered during the excavations. It consists of eight incised sherds and nine plain body sherds from Sample Unit N70W110. More will be said of this vessel in a subsequent section on decorative motifs.

***Rockport Black-on-gray*, var. Rockport**
(revised definition) (n=1,475)

This is a modified version of the original type Rockport Black-on-gray (Campbell 1958a:435-437, 1962:332; Suhm and Krieger 1954:382-384). As noted above, the present definition of *var. Rockport* includes all intentionally decorated asphaltum paint or wash applied over a gray or white slip, usually to the outside of a vessel. In rare instances, the decoration may also occur on the interior of shallow bowls and/or plates. When it was uncertain whether the asphaltum was applied intentionally or might actually represent residue from crack mending or simple careless spattering, then the term "Unclassified Black Coated" was used. Where the gray or white slip is present, without any black decoration, the sherd still was classified as Rockport Black-on-gray. Paste consists of a silty or fine sandy matrix that lacks any visible secondary inclusions. As such, the paste is comparable to that noted for Rockport Plain, *var. Rockport*.

It should be noted that the present definition of Rockport Black-on-gray is a slight departure from that offered by Duay and Weinstein (1992) and Duay et al. (1994). Previously, those authors had assigned all painted pottery to the type Rockport Black-on-gray, whether or not a white or gray slip was present. There simply were so few examples of painted designs on nonslipped pottery that it was not considered necessary to set up a new type. However, with analysis of the expanded collection now available, it has become clear that a significant minority of painted designs occurs on nonslipped pottery. To continue to place this material into the black-on-gray category would be misleading. Thus, a new type, Rockport Black, has been established to cover black painting on vessels that lack a gray or white slip.

***Rockport Black-on-gray*, var. Long Mott**
(revised definition) (n=2,091)

In all outward respects this variety matches the definition of the established variety. However, the paste contains crushed and/or burned fragments of bone, and in that regard it is equivalent to Rockport Plain, *var. Guadalupe* and Rockport Incised, *var. Mission Lake*. It was the most common variety of Rockport Black-on-gray found at the Guadalupe Bay site.

***Rockport Black-on-gray,* var. Hog Bayou**
(revised definition) (n=1,006)

Classification is the same as for *vars. Rockport* and *Long Mott*, except that the paste contains pieces of shell, and thus is equivalent to Rockport Plain, *var. Green Lake.*

***Rockport Black-on-gray,* var. Mosquito Point**
(new variety) (n=431)

This is a new variety set up to cover painted pottery on a white or gray slip that occurs on typical Rockport paste that contains bits of caliche. Thus, it is the Rockport Black-on-gray equivalent to Rockport Plain, *var. Seadrift* and Rockport Incised, *var. Plank Bridge*.

***Rockport Black-on-gray*, var. Buffalo Lake**
(revised definition) (n=999)

This variety is externally identical to *vars. Rockport, Long Mott*, *Hog Bayou*, and *Mosquito Point.* However, its paste consists of a mixture of various secondary inclusions, making it equivalent to the paste of Rockport Plain, *var. Austwell* and Rockport Incised, *var. Mustang Lake*.

***Rockport Black,* var. Rockport**
(new type and variety) (n=147)

As alluded to above, Rockport Black has been set up as a new type to cover those vessels painted with asphaltum designs, but which lack any evidence of the gray or white slip typical of Rockport Black-on-gray. There simply were too many sherds within this category to justify their continued placement within the black-on-gray type. Not only would this placement have masked possible chronological and/or spatial differences between the two forms of decoration, but it would continue to force numerous sherds lacking gray slip into a type that specifically mentions the presence of such slip in its name.

Rockport Black, *var. Rockport* is the established variety of this new type. It represents all intentionally decorated asphaltum paint or wash applied over

the original, nonslipped surface of a vessel. In most cases, the decoration was applied to the outside of the vessel, although, in rare instances, the decoration also was placed on the interior of shallow bowls and/or plates. Paste is equivalent to the *Rockport* variety of Rockport Plain.

***Rockport Black,* var. Lolita**
(new type and variety) (n=190)

This variety consists of all asphaltum decoration applied to nonslipped vessels with bone inclusions in their paste. As such, the paste of *var. Lolita* is equivalent to the *Guadalupe* variety of Rockport Plain. It represents the most prevalent variety of Rockport Black.

***Rockport Black,* var. Kuy Creek**
(new type and variety) (n=26)

This variety consists of all asphaltum decoration applied to nonslipped vessels that have shell inclusions in their paste. Thus, the paste of *var. Kuy Creek* is equivalent to the *Green Lake* variety of Rockport Plain.

***Rockport Black,* var. Spring Bayou**
(new type and variety) (n=12)

Spring Bayou consists of all asphaltum decoration applied to nonslipped vessels that have caliche inclusions in their paste. The paste of *Spring Bayou*, therefore, is equivalent to the *Seadrift* variety of Rockport Plain.

***Rockport Black,* var. Elm Bayou**
(new type and variety) (n=30)

As with other varieties of the Rockport Black type, *var. Elm Bayou* includes all asphaltum decoration applied to nonslipped vessels. In this case, the paste contains two or more categories of the various secondary inclusions (bone and shell; caliche and bone; caliche, bone and shell; etc.) making it equivalent to the *Austwell* variety of Rockport Plain.

Rockport Red (new type) (n=19)

This is a relatively rare ceramic type that was represented by 19 sherds in the overall collection from Guadalupe Bay (Figure 7-4, a-c). To the authors' knowledge, this represents the largest collection of red-painted pottery from the central Texas coast, as the only other examples of what appear to be similar painted specimens were reported from the Ingleside Cove site in San Patricio County (Story 1968:19, Figure 25, C). Gatschet (1891:68), however, notes, that red paint sometimes was used to decorate Karankawan pottery, and additional specimens can be expected from sites in the region.

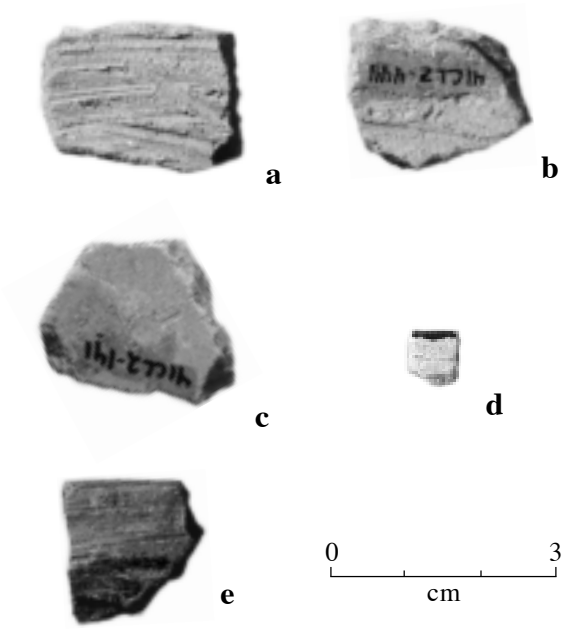

Figure 7-4. Rockport Red and Rockport Polychrome. (a-c) Rockport Red, *var. unspecified* (interior view of sherds); (d-e) Rim sherds of Rockport Polychrome, *var. unspecified*. (See Appendix K for provenience data.)

Basically, Rockport Red includes all vessels with Rockport paste that had a thin red slip applied to their exterior and/or interior surfaces. Unlike Rockport Polychrome, to be discussed next, the red slip on Rockport Red covers all or almost all of a vessel's surface(s). At Guadalupe Bay, nine sherds had red slip on the exterior, three had it on the interior, and two had slip on both the interior and exterior. Five sherds were too small to determine placement of the slip. Only one sherd of Rockport Red was of sufficient size to suggest vessel form; a beaker. However, those five sherds with interior slip probably came from shallow bowls or, less likely, plates.

Because of the scarcity of the type, no varieties have been established for the current study. Rather, all examples, regardless of the presence or absence

of secondary inclusions, are listed as Rockport Red, *var. unspecified*. Nevertheless, for comparative purposes it is worth noting that three of the sherds have paste equivalent to the *Rockport* variety of Rockport Plain, while two have paste equivalent to the *Seadrift* variety. Nine have paste equivalent to the *Guadalupe* variety of Rockport Plain, and three have paste equal to the *Austwell* variety (see Appendix B).

Rockport Polychrome (new type) (n=2)

This is another new type, based on two sherds from Guadalupe Bay (see Figure 7-4, d-e), plus the presence of a few other sherds and at least one whole polychrome vessel from additional sites along the central Texas coast (Calhoun 1964; Campbell 1962:332; Story 1968:18, Figures 20, D, and 23, H; Suhm and Krieger 1954:384, Plate 72, F, L; Suhm and Jelks 1962:131, Plate 66, F, L). Interestingly, two of the additional polychrome sherds are from the Mustang Lake site located on the west side of San Antonio Bay (Suhm and Krieger 1954:384, Plate 72, F, L; Suhm and Jelks 1962:131, Plate 66, F, L).

Rockport Polychrome is represented by Rockport ware vessels with typical asphaltum painted designs to which was added a red wash. On the few examples known, the red wash was applied to a specific area of the vessel, rather than the overall vessel surface. These same examples also indicate that the red and black painted areas had been applied to both slipped and nonslipped surfaces. Because of the extreme rarity of the type, however, no distinction has been made at this time between those sherds with slip and those without. Perhaps with more data, it may be possible to establish two separate types using criteria similar to those employed in separating Rockport Black from Rockport Black-on-gray. Along similar lines, no varieties have been established for the overall type. The present small sample simply does not warrant such fine-scale division at this point.

Regardless of the above, it is worth noting that one of the sherds from Guadalupe Bay exhibited a thin, horizontal, black lip band with a narrow, horizontal, red band located slightly below the lip on the exterior (see Figure 7-4, d). Both bands had been applied over a white slip, on a vessel with paste equivalent to the *Green Lake* variety of Rockport Plain. The other sherd also exhibited black and red horizontal bands, both on the lip and just below the lip, respectively, on the exterior of the vessel (see Figure 7-4, e). The vessel surface had not been slipped prior to painting. Its paste is equivalent to the *Guadalupe* variety of Rockport Plain. Unfortunately, neither sherd was large enough to provide data relative to vessel form.

Rockport Series Ceramics by Analysis Unit

Table 7-6 provides data on the distribution of the various ceramic types and varieties, by analysis unit, at Guadalupe Bay. Although almost every analysis unit contained ceramics, it is reasonable to conclude that those sherds found in the deeper, Archaic-age deposits (AUs 8 through 10 and 12 through 16) represent items that had been displaced downward by bioturbation, had been accidentally mixed during waterscreening in the field (as seems likely for the sherds from AU 13 which all were found among the remains associated with one level from XU N76W122), or had been accidentally included in the soil from a deep level, probably by being dislodged from the upper portion of a unit's wall during digging (as seems almost certain for the one sherd associated with AU 16, the earliest AU at the site). Thus, the following examination of the distribution of Rockport series ceramics will concentrate on those AUs believed associated with the Rockport occupation(s) at the site (AUs 1 through 7).

As can be seen, the greatest quantity of Rockport ceramics (over 14,000 sherds) came from AU 3. This is almost twice as many as AU 5 which had the second greatest quantity (over 7,000 sherds). Additionally, when the roughly 5,000 sherds from AU 6 are added to the totals from AUs 3 and 5, then it is clear that Block 3 produced the majority of the ceramics recovered at Guadalupe Bay. This is only logical, since that area of the site was specifically chosen for excavation because of the tremendous quantity of Rockport-related artifacts recovered in the sample units in that location.

Chronologically, several interesting patterns emerge, despite the fact that much of Stratum 2 appears to have been partly disturbed by recent treefalls and bioturbation. By combining the sherd counts from AUs 2 and 3 (the uppermost levels in Stratum 2 in all three block excavations) and then comparing those counts to combined totals for AUs 4 and 5 (the lower levels in the block excavations), it is possible to recognize subtle, and perhaps meaningful, differences in the percentages for the various types and varieties (Table 7-7). When these counts then are compared against those from AU 6, the slightly deeper, dis-

Table 7-6. Distribution of Aboriginal Ceramic Types and Varieties, by Analysis Unit.

	Analysis Units											
	AU 1		AU 2		AU 3		AU 4		AU 5		AU 6	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Rockport Black												
var. Elm Bayou	5	0.20	3	0.06	8	0.06	4	0.08	5	0.07	4	0.08
var. Kuy Creek	2	0.08	0	0.00	6	0.04	0	0.00	4	0.06	8	0.15
var. Lolita	8	0.32	18	0.33	65	0.46	25	0.49	30	0.42	21	0.41
var. Rockport	12	0.47	7	0.13	70	0.49	7	0.14	21	0.29	16	0.31
var. Spring Bayou	2	0.08	0	0.00	4	0.03	1	0.02	2	0.03	1	0.02
Rockport Black total	**29**	**1.14**	**28**	**0.52**	**153**	**1.08**	**37**	**0.72**	**62**	**0.86**	**50**	**0.97**
Rockport Black-on-gray												
var. Buffalo Lake	32	1.26	100	1.84	300	2.12	122	2.39	228	3.18	174	3.36
var. Hog Bayou	42	1.65	18	0.33	356	2.51	43	0.84	265	3.69	236	4.56
var. Long Mott	129	5.08	123	2.26	753	5.31	173	3.39	480	6.68	309	5.97
var. Mosquito Point	17	0.67	70	1.29	149	1.05	33	0.65	74	1.03	52	1.00
var. Rockport	94	3.70	195	3.59	479	3.38	240	4.70	244	3.40	135	2.61
Rockport Black-on-gray total	**314**	**12.37**	**506**	**9.32**	**2,037**	**14.37**	**611**	**11.96**	**1,291**	**17.98**	**906**	**17.50**
Rockport Incised												
var. Mission Lake	5	0.20	5	0.09	40	0.28	6	0.12	26	0.36	24	0.46
var. Mustang Lake	0	0.00	11	0.20	43	0.30	14	0.27	25	0.35	21	0.41
var. Plank Bridge	6	0.24	1	0.02	23	0.16	4	0.08	21	0.29	12	0.23
var. Sommerville	2	0.08	7	0.13	15	0.11	9	0.18	4	0.06	2	0.04
var. Rockport	4	0.16	13	0.24	43	0.30	8	0.16	7	0.10	18	0.35
Rockport Incised total	**17**	**0.67**	**37**	**0.68**	**164**	**1.16**	**41**	**0.80**	**83**	**1.16**	**77**	**1.49**
Rockport Plain												
var. Austwell	238	9.38	869	16.00	1,621	11.43	815	15.95	973	13.55	699	13.50
var. Green Lake	175	6.90	166	3.06	1,699	11.99	214	4.19	805	11.21	626	12.09
var. Guadalupe	501	19.74	340	6.26	3,335	23.53	480	9.40	1,700	23.67	1,273	24.59
var. Rockport	1,152	45.39	3,205	59.00	4,359	30.75	2,767	54.16	1,929	26.86	1,291	24.94
var. Seadrift	109	4.29	263	4.84	731	5.16	131	2.56	300	4.18	233	4.50
Rockport Plain total	**2,175**	**85.70**	**4,843**	**89.16**	**11,745**	**82.85**	**4,407**	**86.26**	**5,707**	**79.47**	**4,122**	**79.62**
Rockport Red												
var. unspecified	3	0.12	5	0.09	6	0.04	1	0.02	3	0.04	1	0.02
Rockport Red total	**3**	**0.12**	**5**	**0.09**	**6**	**0.04**	**1**	**0.02**	**3**	**0.04**	**1**	**0.02**
Rockport Polychrome												
var. unspecified	0	0.00	0	0.00	1	0.01	0	0.00	0	0.00	1	0.02
Rockport Polychrome total	**0**	**0.00**	**0**	**0.00**	**1**	**0.01**	**0**	**0.00**	**0**	**0.00**	**1**	**0.02**
Goose Creek Incised												
var. Panther Reef	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Goose Creek Incised total	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**
Goose Creek Plain												
var. Anaqua	0	0.00	4	0.07	0	0.00	0	0.00	0	0.00	0	0.00
var. Bloomington	0	0.00	0	0.00	4	0.03	0	0.00	4	0.06	0	0.00
var. Kendrick's Hill	0	0.00	6	0.11	0	0.00	5	0.10	0	0.00	0	0.00
var. Lavaca	0	0.00	0	0.00	62	0.44	0	0.00	30	0.42	15	0.29
var. Tivoli	0	0.00	1	0.02	0	0.00	0	0.00	0	0.00	0	0.00
var. Traylor Ranch	0	0.00	1	0.02	2	0.01	5	0.10	0	0.00	1	0.02
Goose Creek Plain total	**0**	**0.00**	**12**	**0.22**	**68**	**0.48**	**10**	**0.20**	**34**	**0.47**	**16**	**0.31**
Unclassified Brushed	**0**	**0.00**	**1**	**0.02**	**0**	**0.00**	**0**	**0.00**	**1**	**0.01**	**0**	**0.00**
Unclassified Punctated	**0**	**0.00**	**0**	**0.00**	**2**	**0.01**	**2**	**0.04**	**0**	**0.00**	**4**	**0.08**
Site Total	**2,538**	**100.00**	**5,432**	**100.00**	**14,176**	**100.00**	**5,109**	**100.00**	**7,181**	**100.00**	**5,177**	**100.00**

(continued)

Table 7-6. Continued.

	Analysis Units											
	AU 7		AU 8		AU 9		AU 10		AU 11		AU 12	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Rockport Black												
var. Elm Bayou	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
var. Kuy Creek	0	0.00	0	0.00	0	0.00	0	0.00	1	0.38	0	0.00
var. Lolita	0	0.00	0	0.00	0	0.00	1	1.41	0	0.00	0	0.00
var. Rockport	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
var. Spring Bayou	1	0.34	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Rockport Black total	**1**	**0.34**	**0**	**0.00**	**0**	**0.00**	**1**	**1.41**	**1**	**0.38**	**0**	**0.00**
Rockport Black-on-gray												
var. Buffalo Lake	2	0.69	17	1.75	1	0.60	0	0.00	8	3.07	0	0.00
var. Hog Bayou	5	1.72	8	0.82	0	0.00	1	1.41	8	3.07	0	0.00
var. Long Mott	8	2.76	40	4.12	0	0.00	1	1.41	15	5.75	2	16.67
var. Mosquito Point	4	1.38	11	1.13	10	5.99	0	0.00	2	0.77	0	0.00
var. Rockport	2	0.69	46	4.74	16	9.58	2	2.82	6	2.30	0	0.00
Rockport Black-on-gray total	**21**	**7.24**	**122**	**12.58**	**27**	**16.17**	**4**	**5.63**	**39**	**14.94**	**2**	**16.67**
Rockport Incised												
var. Mission Lake	0	0.00	0	0.00	0	0.00	1	1.41	2	0.77	0	0.00
var. Mustang Lake	2	0.69	10	1.03	2	1.20	0	0.00	1	0.38	0	0.00
var. Plank Bridge	0	0.00	1	0.10	0	0.00	1	1.41	0	0.00	0	0.00
var. Sommerville	0	0.00	3	0.31	1	0.60	0	0.00	0	0.00	0	0.00
var. Rockport	0	0.00	3	0.31	0	0.00	0	0.00	1	0.38	0	0.00
Rockport Incised total	**2**	**0.69**	**17**	**1.75**	**3**	**1.80**	**2**	**2.82**	**4**	**1.53**	**0**	**0.00**
Rockport Plain												
var. Austwell	59	20.34	178	18.35	7	4.19	5	7.04	41	15.71	5	41.67
var. Green Lake	42	14.48	34	3.51	8	4.79	12	16.90	47	18.01	2	16.67
var. Guadalupe	71	24.48	46	4.74	5	2.99	7	9.86	77	29.50	2	16.67
var. Rockport	70	24.14	473	48.76	65	38.92	28	39.44	50	19.16	1	8.33
var. Seadrift	16	5.52	100	10.31	52	31.14	12	16.90	1	0.38	0	0.00
Rockport Plain total	**258**	**88.97**	**831**	**85.67**	**137**	**82.04**	**64**	**90.14**	**216**	**82.76**	**10**	**83.33**
Rockport Red												
var. unspecified	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Rockport Red total	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**
Rockport Polychrome												
var. unspecified	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Rockport Polychrome total	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**
Goose Creek Incised												
var. Panther Reef	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Goose Creek Incised total	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**
Goose Creek Plain												
var. Anaqua	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
var. Bloomington	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
var. Kendrick's Hill	2	0.69	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
var. Lavaca	1	0.34	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
var. Tivoli	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
var. Traylor Ranch	5	1.72	0	0.00	0	0.00	0	0.00	1	0.38	0	0.00
Goose Creek Plain total	**8**	**2.76**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**1**	**0.38**	**0**	**0.00**
Unclassified Brushed	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**
Unclassified Punctated	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**
Site Total	**290**	**100.00**	**970**	**100.00**	**167**	**100.00**	**71**	**100.00**	**261**	**100.00**	**12**	**100.00**

(continued)

Table 7-6. Concluded.

	Analysis Units							
	AU 13*		AU 16**		No AU			
	No.	%	No.	%	No.	%	Total	% Total
Rockport Black								
var. Elm Bayou	0	0.00	0	0.00	1	0.08	**30**	**0.07**
var. Kuy Creek	0	0.00	0	0.00	5	0.40	**26**	**0.06**
var. Lolita	0	0.00	0	0.00	22	1.77	**190**	**0.44**
var. Rockport	0	0.00	0	0.00	14	1.12	**147**	**0.34**
var. Spring Bayou	0	0.00	0	0.00	1	0.08	**12**	**0.03**
Rockport Black total	**0**	**0.00**	**0**	**0.00**	**43**	**3.45**	**405**	**0.95**
Rockport Black-on-gray								
var. Buffalo Lake	0	0.00	0	0.00	15	1.20	**999**	**2.34**
var. Hog Bayou	1	1.22	0	0.00	23	1.85	**1,006**	**2.36**
var. Long Mott	7	8.54	0	0.00	51	4.09	**2,091**	**4.90**
var. Mosquito Point	0	0.00	0	0.00	9	0.72	**431**	**1.01**
var. Rockport	1	1.22	0	0.00	15	1.20	**1,475**	**3.45**
Rockport Black-on-gray total	**9**	**10.98**	**0**	**0.00**	**113**	**9.07**	**6,002**	**14.05**
Rockport Incised								
var. Mission Lake	3	3.66	0	0.00	6	0.48	**118**	**0.28**
var. Mustang Lake	0	0.00	0	0.00	5	0.40	**134**	**0.31**
var. Plank Bridge	1	1.22	0	0.00	6	0.48	**76**	**0.18**
var. Sommerville	0	0.00	0	0.00	0	0.00	**43**	**0.10**
var. Rockport	0	0.00	0	0.00	5	0.40	**102**	**0.24**
Rockport Incised total	**4**	**4.88**	**0**	**0.00**	**22**	**1.77**	**473**	**1.11**
Rockport Plain								
var. Austwell	5	6.10	1	100.00	92	7.38	**5,607**	**13.13**
var. Green Lake	4	4.88	0	0.00	176	14.13	**4,010**	**9.39**
var. Guadalupe	15	18.29	0	0.00	460	36.92	**8,312**	**19.46**
var. Rockport	40	48.78	0	0.00	269	21.59	**15,699**	**36.76**
var. Seadrift	5	6.10	0	0.00	62	4.98	**2,015**	**4.72**
Rockport Plain total	**69**	**84.15**	**1**	**100.00**	**1,059**	**84.99**	**35,643**	**83.45**
Rockport Red								
var. unspecified	0	0.00	0	0.00	0	0.00	**19**	**0.04**
Rockport Red total	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**19**	**0.04**
Rockport Polychrome								
var. unspecified	0	0.00	0	0.00	0	0.00	**2**	**0.00**
Rockport Polychrome total	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**2**	**0.00**
Goose Creek Incised								
var. Panther Reef	0	0.00	0	0.00	1	0.08	**1**	**0.00**
Goose Creek Incised total	**0**	**0.00**	**0**	**0.00**	**1**	**0.08**	**1**	**0.00**
Goose Creek Plain								
var. Anaqua	0	0.00	0	0.00	0	0.00	**4**	**0.01**
var. Bloomington	0	0.00	0	0.00	0	0.00	**8**	**0.02**
var. Kendrick's Hill	0	0.00	0	0.00	0	0.00	**13**	**0.03**
var. Lavaca	0	0.00	0	0.00	7	0.56	**115**	**0.27**
var. Tivoli	0	0.00	0	0.00	0	0.00	**1**	**0.00**
var. Traylor Ranch	0	0.00	0	0.00	0	0.00	**15**	**0.04**
Goose Creek Plain total	**0**	**0.00**	**0**	**0.00**	**7**	**0.56**	**156**	**0.37**
Unclassified Brushed	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**2**	**0.00**
Unclassified Punctated	**0**	**0.00**	**0**	**0.00**	**1**	**0.08**	**9**	**0.02**
Site Total	**82**	**100.00**	**1**	**100.00**	**1,246**	**100.00**	**42,712**	**100.00**

* Ceramics in this analysis unit almost certainly mixed accidently during waterscreening —most likely from a single bucket of soil from a level associated either with AU 3, 5, or 6.

** The sherd in this analysis unit clearly is an accidental inclusion. Most likely from either AU 2 or 4.

Table 7-7. Distribution of Aboriginal Ceramic Types and Varieties in those Analysis Units Associated with the Rockport Occupation at Guadalupe Bay. Note that counts for the "Upper" (AUs 2 and 3) and "Lower" (AUs 4 and 5) Rockport Analysis Units have been Combined.

	Analysis Units									
	AUs 2 & 3		AUs 4 & 5		AU 6		AU 7			
	No.	%	No.	%	No.	%	No.	%	Total	% Total
Rockport Black										
var. Elm Bayou	11	0.06	9	0.07	4	0.08	0	0.00	**24**	**0.06**
var. Kuy Creek	6	0.03	4	0.03	8	0.15	0	0.00	**18**	**0.05**
var. Lolita	83	0.42	55	0.45	21	0.41	0	0.00	**159**	**0.43**
var. Rockport	77	0.39	28	0.23	16	0.31	0	0.00	**121**	**0.32**
var. Spring Bayou	4	0.02	3	0.02	1	0.02	1	0.34	**9**	**0.02**
Rockport Black total	**181**	**0.92**	**99**	**0.81**	**50**	**0.97**	**1**	**0.34**	**331**	**0.89**
Rockport Black-on-gray										
var. Buffalo Lake	400	2.04	350	2.85	174	3.36	2	0.69	**926**	**2.48**
var. Hog Bayou	374	1.91	308	2.51	236	4.56	5	1.72	**923**	**2.47**
var. Long Mott	876	4.47	653	5.31	309	5.97	8	2.76	**1,846**	**4.94**
var. Mosquito Point	219	1.12	107	0.87	52	1.00	4	1.38	**382**	**1.02**
var. Rockport	674	3.44	484	3.94	135	2.61	2	0.69	**1,295**	**3.47**
Rockport Black-on-gray total	**2,543**	**12.97**	**1,902**	**15.48**	**906**	**17.50**	**21**	**7.24**	**5,372**	**14.38**
Rockport Incised										
var. Mission Lake	45	0.23	32	0.26	24	0.46	0	0.00	**101**	**0.27**
var. Mustang Lake	54	0.28	39	0.32	21	0.41	2	0.69	**116**	**0.31**
var. Plank Bridge	24	0.12	25	0.20	12	0.23	0	0.00	**61**	**0.16**
var. Sommerville	22	0.11	13	0.11	2	0.04	0	0.00	**37**	**0.10**
var. Rockport	56	0.29	15	0.12	18	0.35	0	0.00	**89**	**0.24**
Rockport Incised total	**201**	**1.03**	**124**	**1.01**	**77**	**1.49**	**2**	**0.69**	**404**	**1.08**
Rockport Plain										
var. Austwell	2,490	12.70	1,788	14.55	699	13.50	59	20.34	**5,036**	**13.48**
var. Green Lake	1,865	9.51	1,019	8.29	626	12.09	42	14.48	**3,552**	**9.51**
var. Guadalupe	3,675	18.74	2,180	17.74	1,273	24.59	71	24.48	**7,199**	**19.27**
var. Rockport	7,564	38.58	4,696	38.21	1,291	24.94	70	24.14	**13,621**	**36.45**
var. Seadrift	994	5.07	431	3.51	233	4.50	16	5.52	**1,674**	**4.48**
Rockport Plain total	**16,588**	**84.60**	**10,114**	**82.29**	**4,122**	**79.62**	**258**	**88.97**	**31,082**	**83.18**
Rockport Red										
var. unspecified	11	0.06	4	0.03	1	0.02	0	0.00	**16**	**0.04**
Rockport Red total	**11**	**0.06**	**4**	**0.03**	**1**	**0.02**	**0**	**0.00**	**16**	**0.04**
Rockport Polychrome										
var. unspecified	1	0.01	0	0.00	1	0.02	0	0.00	**2**	**0.01**
Rockport Polychrome total	**1**	**0.01**	**0**	**0.00**	**1**	**0.02**	**0**	**0.00**	**2**	**0.01**
Goose Creek Plain										
var. Anaqua	4	0.02	0	0.00	0	0.00	0	0.00	**4**	**0.01**
var. Bloomington	4	0.02	4	0.03	0	0.00	0	0.00	**8**	**0.02**
var. Kendrick's Hill	6	0.03	5	0.04	0	0.00	2	0.69	**13**	**0.03**
var. Lavaca	62	0.32	30	0.24	15	0.29	1	0.34	**108**	**0.29**
var. Tivoli	1	0.01	0	0.00	0	0.00	0	0.00	**1**	**0.00**
var. Traylor Ranch	3	0.02	5	0.04	1	0.02	5	1.72	**14**	**0.04**
Goose Creek Plain total	**80**	**0.41**	**44**	**0.36**	**16**	**0.31**	**8**	**2.76**	**148**	**0.40**
Unclassified Brushed	**1**	**0.01**	**1**	**0.01**	**0**	**0.00**	**0**	**0.00**	**2**	**0.01**
Unclassified Punctated	**2**	**0.01**	**2**	**0.02**	**4**	**0.08**	**0**	**0.00**	**8**	**0.02**
Site Total	**19,608**	**100.00**	**12,290**	**100.00**	**5,177**	**100.00**	**290**	**100.00**	**37,365**	**100.00**

crete *Rangia* deposits in Block 3, then additional potentially important patterns can be seen.[3]

For example, Rockport Black, Rockport Black-on-gray, and Rockport Incised all have slightly higher percentages in the deeper, and presumably slightly earlier, deposits related to AU 6, rather than in those deposits associated with AUs 2 through 5 (see Table 7-7). Rockport Black-on-gray is perhaps the best example. Its percentages decrease from 17.5 per cent in AU 6, to 15.5 percent in AUs 4 and 5, to 13.0 percent in AUs 2 and 3. On the other hand, Rockport Plain increases in percentage in the higher, and presumably slightly later, deposits: from 79.6 per cent in AU 6, to 82.3 percent in AUs 4 and 5, to 84.6 percent in AUs 2 and 3 (see Table 7-7). Of particular interest, also, is the rather strong showing of Rockport Red in AUs 2 and 3 (11 sherds for 0.1 percent). All of this suggests that black-painted and incised ceramics, particularly Rockport Black-on-gray, were slightly more popular during the earlier part of the Rockport occupation at Guadalupe Bay, while plain and red-painted ceramics gained in popularity towards the latter part of that occupation. The red-painted sherds, may, in fact, represent very late additions to the assemblage, perhaps reaching their greatest use during protohistoric and/or historic times.

As far as specific varieties are concerned, five stand out for their contrast to the general trends noted in their respective types. These are *vars. Green Lake* and *Guadalupe* of Rockport Plain; *var. Sommerville* of Rockport Incised; and *vars. Rockport* and *Mosquito Point* of Rockport Black-on-gray. Both *Green Lake* and *Guadalupe* have greater percentages associated with the deeper AU 6, while the other plain varieties have greater percentages related to the overlying AUs. Since *Green Lake* and *Guadalupe* contain shell and bone inclusions, respectively, as probable tempering agents, it is possible that a slight trend away from these added materials occurred during the course of the Rockport occupation at Guadalupe Bay. The higher percentages of *Sommerville* and *Mosquito Point* in the upper deposits associated with AUs 2 through 5 may also mark a slight increase in the use of caliche as a tempering agent for Rockport Incised and Rockport Black-on-gray, respectively. The meaning for the greater percentage of Rockport Black-on-gray, *var. Rockport* in the upper AUs, if, in fact, there is a meaning to the increase, is not known. All of the other *Rockport* varieties appear to mirror the general trends expressed by their parent types.

Analysis of the ceramics from the 1989 testing project at Guadalupe Bay (Weinstein and Scott 1992) suggested that sherds with heterogeneous pastes, particularly the *Austwell* variety of Rockport Plain, appeared to have their greatest showings in levels related to Stratum 2, as opposed to the overlying Stratum 1. It even was suggested that *Austwell* may represent a prime marker of the prehistoric occupation, while sherds associated with Stratum 1, particularly the *Green Lake* and *Guadalupe* varieties of Rockport Plain, were possibly related to the latest, historic Live Oak occupation (Weinstein and Scott 1992:158, Table 7-7). The exact reverse of the latter assumption now appears to be true, as just discussed above. Given the much greater sample from the 1992 excavations, it seems reasonable to conclude that the previous inferences were incorrect, and that *Green Lake* and *Guadalupe* may have had their highest popularity early in the Rockport occupation. The data on *var. Austwell*, on the other, tend to support the previous suggestions. Although the variety generally maintains its same frequency in AUs 2 through 6 (between 14.6 and 12.7 percent), it is interesting to note its much higher percentage in AU 7 (20.3 percent). This may be one of the few instances where the AU 7 data actually are providing useful information; information that suggests that relatively large amounts of *var. Austwell* may signal a potentially early Rockport II subphase occupation.

In summary, there does not appear to be a great amount of difference in the vertical distribution of most of the ceramic types and varieties at Guadalupe Bay. This undoubtedly is a reflection of the disturbed nature of Stratum 2 and the relatively short time span involved in the deposition of most of the identifiable Rockport midden deposits (Stratum 2 in all blocks and Strata 3 and 5 in Block 3). Nevertheless, a few trends can be seen. Most decorated types and varieties have their greatest showings in the deeper deposits, suggesting a trend towards the

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[4] Sherds from AU 7 are not used for comparison at this point, since that analysis unit contained such a small ceramic sample. In fact, if it was not for the seemingly consistent radiocarbon dates associated with the Stratum 5 oyster deposit represented by AU 7, one could legitimately question whether the midden was even Rockport in age (see the discussion in Chapter 5).

use of slightly more plainwares in the later portion of the occupation. Rockport Red is the lone exception as far as decorated types are concerned, as it follows the plainware trend and has its greatest showing in the uppermost portion of Stratum 2. This may suggest that the type is very late in the overall Rockport sequence. Lastly, plain sherds with bone and shell in their pastes, and/or a combination of these and other materials, have slightly higher percentages in the deeper, and presumably somewhat earlier, Rockport levels.

Additional Observations on Rockport Series Ceramics

In addition to the information on Rockport ceramics noted above, a few other observations were made during the course of the analysis. Observations such as these may prove useful in future studies. At least, future analysts should be aware of their potential possibilities. Each is discussed briefly below.

*Sherds with White Paste and/or White Slip (***n=*273)**

Although, as reviewed above, sherd color was not systematically examined during the current study, several color tendencies were observed during the analysis and these led to additional research on sherds of the Rockport series. Small percentages of all five varieties of Rockport Black-on-gray, one sherd of Rockport Black, *var. Elm Bayou*, and several sherds of Rockport Plain, *vars. Austwell, Green Lake, Guadalupe,* and *Seadrift*, contained a very light, almost white, paste that was uniformly distributed throughout the interior of each sherd. The Rockport Black-on-gray sherds also exhibited a white outer slip, rather than the gray slip typical of that type.

Initially, it was thought that sherds exhibiting this white paste had been manufactured from a different clay source than the majority of the sherds in the collection, and that they might provide information on trade or the range of travel of the occupants of the site. It also was thought that the white slip appearing on the sherds of Rockport Black-on-gray might have resulted from use of the same clay source as an element of the surface finish. In order to verify these assumptions, four sherds were submitted to the Department of Geology and Geophysics at Louisiana State University (LSU) for X-ray diffraction analysis. Two of the sherds (Rockport Black-on-gray, *var. Buffalo Lake*) contained the white paste, while the other two (Rockport Plain, *var. Rockport*) exhibited typical dark gray to black paste. Specific results of the analysis are presented in Appendix A, prepared by Dr. R. E. Ferrell, Jr.

Basically, the x-ray diffraction indicated that the same clay source was used to manufacture all four sherds. Quartz made up the greatest percent, by weight, of the minerals comprising each sherd's paste, followed by feldspars and illite (mica). Importantly, calcite was found only in the white-paste samples, almost certainly indicating that caliche (most probably of the "soft" variety) had been added to the clay to produce the white color. This also suggests that caliche was utilized in the white slip on the Rockport Black-on-gray specimens. Rather than indicating trade or travel, sherds with white paste appear to be from vessels that were manufactured for a special purpose, possibly as fine-ware serving bowls and/or plates.

Sherds with white paste were present in all analysis units associated with the Rockport occupation at Guadalupe Bay, although they clearly were more prevalent in those AUs from Block 3 (Table 7-8). As can be seen, AUs 3, 5, and 6 provided the bulk of all sherds with white paste (*n*=242; 88.6 percent). If the assumption expressed above is correct, then the area around Block 3 may have served as the locus for special feasts and/or social gatherings that utilized fine-ware serving vessels. The roughly contemporaneous nature of AUs 3, 5, and 6 is borne out by the general lack of any noticeable frequency differences regarding the white-paste sherds from these analysis units (93, 65, and 84 sherds, respectively). About all that can be said is that AU 7, the underlying oyster deposit in Block 3, was practically void of white-paste sherds. Although sample size is probably the main cause for this, the lack of white-paste sherds may indicate that activities associated with AU 7 did not involve feasting or the use of fine-ware vessels. The fact that AU 7 is believed to date to the early part of the Rockport II subphase could further suggest that most of the white-paste sherds probably date to the latter portion of the Rockport□II occupation.

*Sherds with Excessive Bone Temper (***n=*674)**

Besides the identification of sherds with either a white paste or a white slip, several of the sherds classified as Rockport Plain, *vars. Austwell* and *Guadalupe*; Rockport Black-on-gray, *vars. Buffalo Lake* and *Long Mott*; Rockport Black, *var. Lolita*; and Rockport Incised, *vars. Mission Lake* and *Mus-*

Table 7-8. Distribution of Sherds with White Paste, by Analysis Unit.

	Analysis Units																	
	AU 1		AU 2		AU 3		AU 4		AU 5		AU 6		AU 7		AU 10		AU 11			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Total	% Total
Rockport Black																				
var. Elm Bayou	0	0.00	0	0.00	0	0.00	0	0.00	1	1.54	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.37**
Rockport Black total	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**1**	**1.54**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**1**	**0.37**
Rockport Black-on-gray																				
var. Buffalo Lake	0	0.00	2	18.18	20	21.51	0	0.00	20	30.77	19	22.62	1	100.00	0	0.00	0	0.00	**62**	**22.71**
var. Hog Bayou	4	50.00	1	9.09	39	41.94	2	25.00	32	49.23	45	53.57	0	0.00	0	0.00	2	100.00	**125**	**45.79**
var. Long Mott	2	25.00	1	9.09	5	5.38	3	37.50	0	0.00	1	1.19	0	0.00	0	0.00	0	0.00	**12**	**4.40**
var. Mosquito Point	1	12.50	0	0.00	10	10.75	1	12.50	1	1.54	3	3.57	0	0.00	0	0.00	0	0.00	**16**	**5.86**
var. Rockport	0	0.00	3	27.27	0	0.00	2	25.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**5**	**1.83**
Rockport Black-on-gray total	**7**	**87.50**	**7**	**63.64**	**74**	**79.57**	**8**	**100.00**	**53**	**81.54**	**68**	**80.95**	**1**	**100.00**	**0**	**0.00**	**2**	**100.00**	**220**	**80.59**
Rockport Plain																				
var. Austwell	0	0.00	0	0.00	17	18.28	0	0.00	11	16.92	15	17.86	0	0.00	0	0.00	0	0.00	**43**	**15.75**
var. Green Lake	0	0.00	3	27.27	1	1.08	0	0.00	0	0.00	1	1.19	0	0.00	0	0.00	0	0.00	**5**	**1.83**
var. Guadalupe	0	0.00	0	0.00	1	1.08	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.37**
var. Seadrift	1	12.50	1	9.09	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	**3**	**1.10**
Rockport Plain total	**1**	**12.50**	**4**	**36.36**	**19**	**20.43**	**0**	**0.00**	**11**	**16.92**	**16**	**19.05**	**0**	**0.00**	**1**	**100.00**	**0**	**0.00**	**52**	**19.05**
Site Total	**8**	**100.00**	**11**	**100.00**	**93**	**100.00**	**8**	**100.00**	**65**	**100.00**	**84**	**100.00**	**1**	**100.00**	**1**	**100.00**	**2**	**100.00**	**273**	**100.00**

tang Lake, contained relatively extensive amounts of bone in their paste.[5] At first it was thought that these might represent examples of Goliad ware, a ceramic category first reported from Mission Espíritu Santo (Mounger 1959) and believed to have been made by the historic Aranama Indians who resided there during the eighteenth century. If such was the case, then probable contact between these mission Indians and the occupants of the Guadalupe Bay site could be recognized.

After examination of ceramic collections from Mission Espíritu Santo, now curated at TARL, it became clear that the sherds from Guadalupe Bay were not Goliad ware. Although the pastes of the two wares were very similar, the Goliad material was much thicker and typically came from extremely large vessels that often exhibited loop handles, characteristics not associated with the sherds from Guadalupe Bay. Despite this, it still was felt that some type of connection might exist between the two wares, and/or with Leon Plain of the interior regions of south Texas, and that the Guadalupe Bay sherds with heavy bone tempering might represent a local, Rockport series counterpart to either Goliad ware or Leon Plain. If so, then these sherds might have chronological and, perhaps, cultural significance.

Table 7-9 lists those sherds with excessive bone temper in their pastes. Again, the majority came from AUs 3, 5, and 6 in Block 3 (*n*=503; 74.6 percent), with lesser amounts from the other Rockport analysis units (AUs 2, 4, and 7). Those few sherds associated with AUs 8 through 11 represent items that had worked their way downward through bioturbation into these Late Archaic deposits. It is interesting to note, but almost certainly only the result of coincidence, that the counts for AUs 2 and 4 are identical (*n*=57 each), while those for AUs 5 and 6 also are identical (*n*=152 each). Because of this, little chronological interpretation can be gleaned from the sherd counts.

It is possible to recognize one clear association, however, and that is the overwhelming preponderance of Rockport Plain sherds in the sample. Of the total collection of specimens with excessive bone temper, 567 (84.1 percent) were typed as Rockport Plain, either *vars. Austwell* or *Guadalupe.* This is in sharp contrast to those sherds with white paste, where Rockport Black-on-gray dominated, and suggests that heavily bone-tempered vessels were primarily plain and may have served a utilitarian function.

*Sherds with Highly Oxidized Surface and "Ashy" Bone (*n*=289)*

Another observation included sherds with bone inclusions that had been fired at such a high temperature that the surface of the sherds generally exhibited a highly oxidized orange color. In addition, the bone inclusions had been transformed into a powder or ash. This "ashy" bone was identified with the aid of a high-powered microscope by Dr. Ferrell at the Department of Geology and Geophysics at Louisiana State University.

The majority of these sherds were classified as Rockport Black-on-gray, *var. Long Mott*, although some were identified as Rockport Black-on-gray, *var. Buffalo Lake*, Rockport Plain, *var. Guadalupe,* and Rockport Black, *var. Lolita* (Table 7-10). Several of the *Long Mott* specimens also had the white caliche slip applied over the orange surface. All of this suggests a strong relationship with those sherds recognized above for their white paste, and argues that the two groups may have served like purposes.

An orange color similar to that noted in the present sample originally was included as one of the primary sorting criteria for the Goliad types recognized by Mounger (1959:164-169) at Mission Espíritu Santo. Although the orange sherds from Guadalupe Bay do not match true Goliad ware, they may indicate ties to the mission complex at Goliad. Thus, these sherds may also have chronological and/or cultural importance.

Unfortunately, as seen in Table 7-10, the same distribution pattern recognized for the white-paste and heavily bone-tempered sherds generally pertains to the sherds with ashy bone inclusions. The majority again are from Block 3, AUs 3, 5, and 6 (*n*=197; 68.2 percent), although there are a few from the other Rockport AUs, plus several from AUs 8, 11, and 12, the latter clearly in displaced contexts. If these sherds do represent relatively late items similar to the Goliad wares from Mission Espíritu Santo, then their strati-

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[5] Two sherds of Goose Creek Plain, *var. Lavaca* also had excessive amounts of bone in their paste, and they are included in Table 7-9, below. Because of such excessive bone, a close relationship to the Rockport series is suggested.

Table 7-9. Distribution of Sherds with Excessive Bone Temper, by Analysis Unit.

	Analysis Units																							
	AU 1		AU 2		AU 3		AU 4		AU 5		AU 6		AU 7		AU 8		AU 9		AU 10		AU 11		No AU			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Total	% Total
Rockport Black																										
var. Lolita	0	0.00	0	0.00	2	1.01	1	1.75	2	1.32	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**5**	**0.74**
Rockport Black total	**0**	**0.00**	**0**	**0.00**	**2**	**1.01**	**1**	**1.75**	**2**	**1.32**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**5**	**0.74**
Rockport Black-on-gray																										
var. Buffalo Lake	0	0.00	0	0.00	7	3.52	2	3.51	0	0.00	5	3.29	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**14**	**2.07**
var. Long Mott	1	3.85	0	0.00	24	12.06	7	12.28	25	16.45	15	9.87	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	11.11	**73**	**10.78**
Rockport Black-on-gray total	**1**	**3.85**	**0**	**0.00**	**31**	**15.58**	**9**	**15.79**	**25**	**16.45**	**20**	**13.16**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**1**	**11.11**	**87**	**12.85**
Rockport Incised																										
var. Mission Lake	0	0.00	0	0.00	6	3.02	0	0.00	1	0.66	1	0.66	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	11.11	**9**	**1.33**
var. Mustang Lake	0	0.00	0	0.00	3	1.51	0	0.00	1	0.66	0	0.00	0	0.00	1	20.00	0	0.00	0	0.00	0	0.00	0	0.00	**5**	**0.74**
Rockport Incised total	**0**	**0.00**	**0**	**0.00**	**9**	**4.52**	**0**	**0.00**	**2**	**1.32**	**1**	**0.66**	**0**	**0.00**	**1**	**20.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**1**	**11.11**	**14**	**2.07**
Rockport Plain																										
var. Austwell	3	11.54	31	54.39	32	16.08	16	28.07	16	10.53	35	23.03	0	0.00	0	0.00	1	100.00	0	0.00	5	50.00	0	0.00	**139**	**20.53**
var. Guadalupe	22	84.62	26	45.61	123	61.81	31	54.39	107	70.39	96	63.16	5	100.00	4	80.00	0	0.00	4	100.00	5	50.00	7	77.78	**430**	**63.52**
Rockport Plain total	**25**	**96.15**	**57**	**100.00**	**155**	**77.89**	**47**	**82.46**	**123**	**80.92**	**131**	**86.18**	**5**	**100.00**	**4**	**80.00**	**1**	**100.00**	**4**	**100.00**	**10**	**100.00**	**7**	**77.78**	**569**	**84.05**
Goose Creek Plain																										
var. Lavaca	0	0.00	0	0.00	2	1.01	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**0.30**
Goose Creek Plain total	**0**	**0.00**	**0**	**0.00**	**2**	**1.01**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**2**	**0.30**
Site Total	**26**	**100.00**	**57**	**100.00**	**199**	**100.00**	**57**	**100.00**	**152**	**100.00**	**152**	**100.00**	**5**	**100.00**	**5**	**100.00**	**1**	**100.00**	**4**	**100.00**	**10**	**100.00**	**9**	**100.00**	**677**	**100.00**

Table 7-10. Distribution, by Analysis Unit, of Sherds with Highly Oxidized Surfaces and Inclusions of "Ashy" Bone in their Pastes.

	Analysis Units									
	AU 1		AU 2		AU 3		AU 4		AU 5	
	No.	%	No.	%	No.	%	No.	%	No.	%
Rockport Black										
var. Lolita	0	0.00	1	5.00	1	1.11	1	4.35	1	1.92
Rockport Black total	**0**	**0.00**	**1**	**5.00**	**1**	**1.11**	**1**	**4.35**	**1**	**1.92**
Rockport Black-on-gray										
var. Buffalo Lake	0	0.00	1	5.00	4	4.44	1	4.35	1	1.92
var. Long Mott	12	100.00	16	80.00	75	83.33	15	65.22	47	90.38
Rockport Black-on-gray total	**12**	**100.00**	**17**	**85.00**	**79**	**87.78**	**16**	**69.57**	**48**	**92.31**
Rockport Plain										
var. Guadalupe	0	0.00	2	10.00	10	11.11	6	26.09	3	5.77
Rockport Plain total	**0**	**0.00**	**2**	**10.00**	**10**	**11.11**	**6**	**26.09**	**3**	**5.77**
Site Total	**12**	**100.00**	**20**	**100.00**	**90**	**100.00**	**23**	**100.00**	**52**	**100.00**

	Analysis Units											
	AU 6		AU 8		AU 11		AU 12		No AU			
	No.	%	No.	%	No.	%	No.	%	No.	%	Total	% Total
Rockport Black												
var. Lolita	1	1.82	0	0.00	0	0.00	0	0.00	0	0.00	**5**	**1.73**
Rockport Black total	**1**	**1.82**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**5**	**1.73**
Rockport Black-on-gray												
var. Buffalo Lake	4	7.27	0	0.00	0	0.00	0	0.00	0	0.00	**11**	**3.81**
var. Long Mott	46	83.64	29	100.00	6	100.00	1	100.00	0	0.00	**247**	**85.47**
Rockport Black-on-gray total	**50**	**90.91**	**29**	**100.00**	**6**	**100.00**	**1**	**100.00**	**0**	**0.00**	**258**	**89.27**
Rockport Plain												
var. Guadalupe	4	7.27	0	0.00	0	0.00	0	0.00	1	100.00	**26**	**9.00**
Rockport Plain total	**4**	**7.27**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**1**	**100.00**	**26**	**9.00**
Site Total	**55**	**100.00**	**29**	**100.00**	**6**	**100.00**	**1**	**100.00**	**1**	**100.00**	**289**	**100.00**

graphic placement at Guadalupe Bay does not bear this out.

Sherds with Contorted Paste

Thirteen sherds with a highly contorted paste were recovered from the 1-by-1-m sample unit at N80W130. Although these may be nothing more than the aberrant work of a single potter who did not properly wedge the clay prior to vessel manufacture, the paste has an "early" look to it, and is somewhat reminiscent of Tchefuncte ware from the Louisiana coast and Galveston Bay areas. While there is no question that these sherds are part of the Rockport series, their contorted nature may indicate an early effort at pottery manufacture similar to that of the Tchefuncte series. As such, these sherds might represent a very brief and potentially early Rockport occupation at Guadalupe Bay.

Ten of the 13 sherds came from Stratum 3 in the sample unit, and this is believed to be equivalent to Stratum 3 (AU 6) in nearby Block 3. In addition, one sherd came from Stratum 2 (AU 3), while two came from Stratum 4 (AU 7). Although this does not unequivocally point to an early occupation, the majority of the sherds do appear to be related to the deepest ceramic-bearing strata in the unit, suggesting that an early occupation may be present but masked by the overwhelming numbers of typical

Rockport ware associated with AU 3. Interestingly, eleven of the sherds were classified as Rockport Plain, *var. Green Lake*, while the remaining two sherds were identified as Rockport Plain, *var. Austwell.* This is in keeping with the overall ceramic data discussed above, in which *Austwell* and *Green Lake* have their highest percentages in the deeper, presumably slightly earlier, Rockport levels at Guadalupe Bay.

Goose Creek Series

The Goose Creek ceramic series originally was based on collections from sites along the upper Texas coast (Ambler 1967, 1970, 1973; Aten 1967, 1983b; Aten and Bollich 1969; Aten and Chandler 1976; Aten et al. 1976; Shafer 1966; Suhm and Krieger 1954; Suhm and Jelks 1962; Wheat 1953; Worthington 1959). It generally includes all sherds that have a relatively high quantity of fine to coarse sand in a clay matrix. Most authorities (see Aten 1983b:217) believe that the high sand content simply reflects the likelihood that the aboriginal potters were utilizing naturally sandy clays, and not adding sand as a tempering agent. Others (Kelley et al. 1994) have suggested that not all sandy-paste Goose Creek ware was the result of the clay source, but, rather, may include some sand intentionally added to the paste. Whatever the case, the relatively high sand content is one of the key attributes used to sort Goose Creek ware from Rockport. Furthermore, Wheat (1953:189) and Suhm and Krieger (1954:378) noted that the sandiest sherds often had the texture of fine sandpaper, and that the surfaces usually were poorly smoothed and uneven. Aten (1983b:231) noted that Goose Creek ware was represented by poorly sorted sand grains, usually fine to medium in size, in a clay matrix. Because of the excessive quantity of sand in relation to the amount of clay, the paste often is extremely friable. All of these attributes help identify Goose Creek ware and make it possible to sort it from Rockport ware in cases where the two series overlap geographically.

Duay and Weinstein (1992) originally recognized sherds of the Goose Creek series at Guadalupe Bay by the presence of what they identified as medium to coarse sand. As reviewed above, this criterion was applied subjectively, relying upon the ability of the analyst to see sand grains without the aid of a microscope. This procedure was discarded during the present study, and a Wentworth chart of grain sizes was used to measure sand grains. Because of this, many sherds that would have been classified as members of the Goose Creek series in 1989 now have been placed in the Rockport series. In fact, one variety of Goose Creek Plain, *Goff Bayou*, was not even recognized in the present collection, despite the fact that 28 *Goff Bayou* sherds were identified in 1989 (Duay and Weinstein 1992:94). Nevertheless, there still remains a significant quantity of ceramics that meet the present criteria set up to identify Goose Creek ware, particularly when the analyst takes into consideration the quantity of sand in the paste, the friable nature of the sherds, and the overall rough surface finish—qualities that are not to be found in Rockport ware.

In a slight departure from the sorting criteria generally employed by analysts working with ceramic collections from sites on the upper Texas coast, Duay and Weinstein (1992) set up local varieties of Goose Creek types along the same lines they had employed for Rockport types. Thus, the presence or absence of secondary inclusions within the paste of Goose Creek ceramics became the key to varietal identification. This seemed only logical for sites along the central Texas coast, where the Rockport and Goose Creek ceramic traditions appear to merge geographically. Although the current investigators have modified the overall criteria used to identify Goose Creek ware, they still feel that the recognition of secondary inclusions is a viable method of separating varieties of Goose Creek types at sites along the central Texas coast, and this method is continued for the present collection.

In addition to the secondary inclusions, the present sorting criteria for Goose Creek ware includes the presence of asphaltum coating, similar to that noted for Rockport ware. This coating, again, should not be confused with actual asphaltum paint, but instead resulted from waterproofing or crack mending. The idea of applying asphaltum to serve these purposes should come as little surprise when considering Goose Creek ceramics from the central Texas coast. The strong local tradition of asphaltum use on Rockport pottery almost certainly carried over onto vessels with Goose Creek paste. Based on all of the above, therefore, two ceramic types, Goose Creek Plain and Goose Creek Incised, along with their constituent varieties, have been identified at Guadalupe Bay.

Goose Creek Plain, var. Anaqua *(n=4)*

This is the local equivalent of Goose Creek Plain, *var. Goose Creek* (Weinstein et al. 1988), a rede-

fined version of Aten's (1983b) Goose Creek Plain, *var. unspecified*. It is named after the Anaqua site (41 JK 7) at which Story (1968) recognized a sandy-paste ware that she then considered similar to Goose Creek Plain. After reviewing additional reports in the area (Fawcett 1978:203-205; Fritz 1975; Mallouf et al. 1973), plus examining numerous examples from the current project, it now is clear that the paste of this "Goose Creek-like" ware is, in fact, practically identical to that of typical Goose Creek pottery, and thus it should be set up as a local variety.

Basically, Goose Creek Plain, *var. Anaqua* can be recognized by vessels or sherds with plain or asphaltum-coated interiors and/or exteriors, and a high percentage of fine- to coarse-size sand in a relatively soft and friable paste that lacks any evidence of secondary inclusions. As just noted, the potential for asphaltum-coated surfaces reflects the local tradition of waterproofing vessels with asphaltum, and helps to sort *Anaqua* from the established variety of *Goose Creek*.

Goose Creek Plain*, var. Traylor Ranch *(n=15)

This variety is defined by a plain or asphaltum-coated interior or exterior, and a high percentage of fine- to coarse-size sand in a relatively soft and friable paste that contains crushed and/or burned fragments of bone. As such, the variety is the Goose Creek series counterpart to Rockport Plain, *var. Guadalupe*.

As noted above, the inclusion of what probably represents bone temper in the type Goose Creek Plain is a departure from the definition supplied by Aten (1983b). Aten (1983b:244) did not include bone temper in his Goose Creek wares, but rather set up a separate, unnamed descriptive category that subsumed all bone-tempered ceramics. This was done simply because the sample from the upper Texas coast was not particularly large, and there was no need to deal with bone-tempered ceramics in anything other than a superficial fashion. Considering the relative importance of bone tempering in the pastes of ceramics from the current study area, however, it seems only logical to recognize a local bone-tempered variety of Goose Creek pottery. Perhaps with more data, it eventually will be possible to separate the bone-tempered Goose Creek (and possibly the bone-tempered Rockport) into new types. As Aten (1983b:244) suggested and as Hester and Hill (1971) implied, Leon Plain may prove to be the logical choice for the parent type.

Goose Creek Plain*, var. Tivoli *(n=1)

Tivoli consists of a plain or asphaltum-coated exterior, a plain or asphaltum-coated interior, and a high percentage of fine- to coarse-size sand in a relatively soft and friable paste that contains small pieces of caliche as secondary inclusions. As such, it is the Goose Creek series equivalent to Rockport Plain, *var. Seadrift*.

Goose Creek Plain*, var. Bloomington *(n=8)

Outwardly, *Bloomington* has all of the characteristics of *vars. Anaqua, Traylor Ranch*, and *Tivoli*. Internally, however, it is marked by a high percentage of fine- to coarse-size sand in a relatively soft and friable paste that contains a heterogeneous mixture of secondary inclusions. Thus, it is the Goose Creek equivalent to Rockport Plain, *var. Austwell*.

Goose Creek Plain,* var. Kendrick's Hill *(revised definition) (n=13)

This is the first of two varieties that initially were identified at sites along the lower Lavaca River (Weinstein 1994).[6] At that time these varieties were placed in the Rockport series and listed as constituents of the type Rockport Plain (Duay et al. 1994:81). It also was felt that they might have geographical significance, since all examples previously noted had come from the area around Lavaca and Matagorda bays. In fact, Duay et al. (1994:81) noticed that these varieties might be similar to what Calhoun (1962:325) identified years ago as "Rockport ware with a coarse sand temper" from the area around Lavaca Bay. They also indicated that these varieties could possibly equate with a sample of sherds noted by Fritz (1975:100, 104) that could not be classified either as Rockport Plain or Goose Creek Plain during her investigations in the Matagorda Bay region.

The rather nebulous, borderline nature of these sherds clearly is reflected by the fact that Duay et al. (1994:81) first placed them in the Rockport series, while the present investigators have moved them to the Goose Creek series. This latter switch was enacted to account for the relatively large sand grains present in the paste of the sherds, most of which are

[6] Duay et al. (1994:81) actually set up three new varieties, based on their research along the lower Lavaca River. One of these, *var. Possum Bluff*, was not found in the collection from Guadalupe Bay, so it is not discussed in this section.

of medium size, that are not found in Rockport ware. However, these sherds exhibit a well-consolidated paste and have a fine surface finish, both attributes appearing more in line with typical Rockport material. It was these latter attributes, in fact, that swayed Duay et al. toward placing the varieties in the Rockport series. Nevertheless, the present authors feel that the size of the sand grains is sufficiently different from that of all other Rockport varieties to justify the change to the Goose Creek series.

Specifically, *Kendrick's Hill* includes vessels or sherds with a plain or asphaltum-coated exterior, either a plain or asphaltum-coated interior, a silty or fine sandy paste that contains fragments of crushed bone and/or burned bone, along with relatively sparse, medium-size (1/4 to 1/2 mm) sand grains. Both the bone and medium sand grains may have been added as tempering agents. As such, this variety is almost identical to Rockport Plain, *var. Guadalupe*, save for the addition of the medium sand grains.

Goose Creek Plain*, var. Lavaca *(revised definition)* (n=*115)

This variety can be recognized by its similarity to Rockport Plain, *var. Austwell*, except for the addition of the sparse, medium-size sand grains noted above. As such, it is characterized by vessels or sherds with a plain or asphaltum-coated exterior, either a plain or asphaltum-coated interior, a silty or fine sandy matrix that contains a heterogeneous assortment of secondary inclusions (such as shell, bone, caliche, etc., or any combination of these inclusions), and a sparse amount of medium sand grains.

Goose Creek Incised*, var. Panther Reef *(n=1)

This variety is the local equivalent of Goose Creek Incised, *var. Goose Creek* (Aten 1983b; Weinstein et al. 1988), and is identified by incised lines usually, but not always, placed horizontally around the exterior, upper portion of a vessel's rim (Figure 7-5, a). Other motifs, such as line-filled triangles, diamonds,

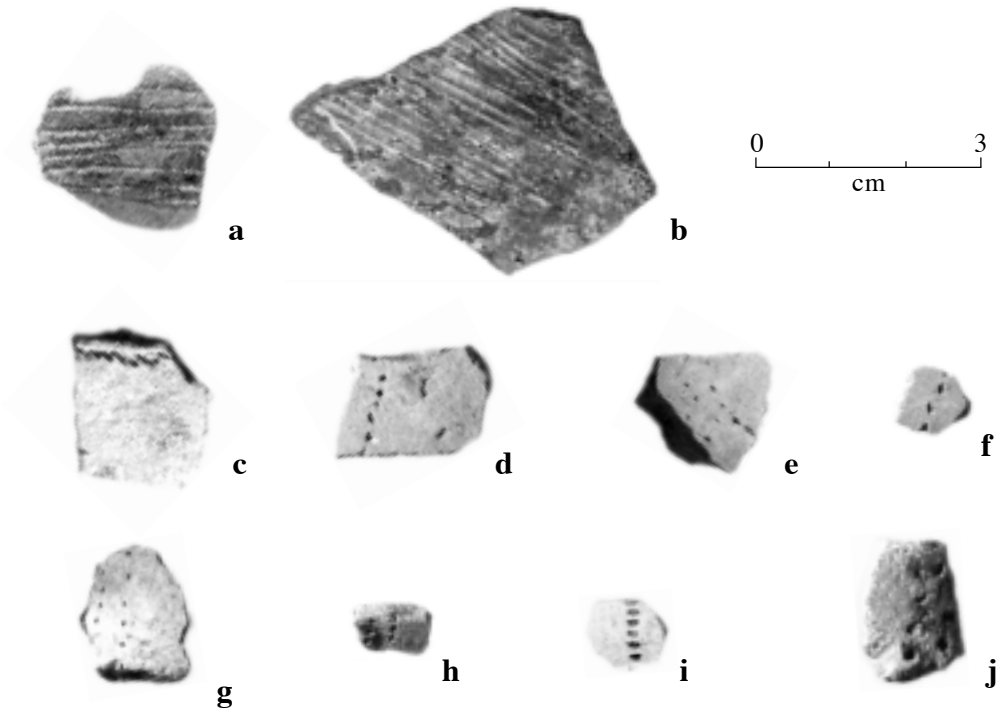

Figure 7-5. Goose Creek Incised, Unclassified Brushed, and Unclassified Punctated. (a) Rim sherd of Goose Creek Incised, *var. Panther Reef*; (b) Unclassified Brushed with *Guadalupe* paste; (c-g) Unclassified Punctated with *Guadalupe* paste; (h-i) Unclassified Punctated with *Rockport* paste; (j) Unclassified Punctated with *Austwell* paste. (See Appendix K for provenience data.)

or diagonal lines, also may occur (see Aten 1983b:Figure 12.2 for examples of other decorative motifs). The exterior and/or interior of the vessel can be either plain or coated with asphaltum, and, as with Rockport Incised, the asphaltum may extend onto and slightly over the lip of the vessel. Paste is equivalent to that for Goose Creek Plain, *var. Anaqua*, and consists of a high percentage of fine- to coarse-size sand in a relatively soft and friable matrix that lacks any signs of secondary inclusions.

Goose Creek Series Ceramics by Analysis Unit

With the revised sorting criteria applied to the 1992 ceramics, there now is an exceedingly smaller percentage of Goose Creek sherds at Guadalupe Bay (157 out of 42,712 sherds; 0.4 percent) than there was in 1989 (155 out of 467 sherds; 33.2 per cent). Although this greatly limits the discussion on distribution of the ware, there are a few patterns that still are noticeable (see Tables 7-6 and 7-7).

Perhaps most striking is the complete lack of any Goose Creek ceramics in Stratum 1. When this is coupled with the strong showing of Goose Creek ware in AU 7 (2.8 percent), then it seems likely that Goose Creek ceramics had their highest popularity during the earliest Rockport occupation at Guadalupe Bay. After that occupation, the percentages drop dramatically, and average between 0.3 percent (AU 6) and 0.4 percent (combined AUs 2 and 3) (see Table 7-7). This is only logical, since it has been theorized that Goose Creek wares represent the earliest ceramics found along the central Texas coast (Weinstein 1992:63-64). Interestingly, the Goose Creek varieties with the greatest percentages in AU 7 are *Kendrick's Hill* and *Traylor Ranch*, both with bone inclusions in their pastes. Again, this suggests that relatively high percentages of sherds with bone in their pastes may signal a slightly earlier Rockport II subphase occupation.

Miscellaneous Ceramics

Several ceramic items fall into categories distinct from the types and varieties discussed above. Included are a few sherds that exhibit decorative treatments other than incising or painting, plus ceramic discs fashioned from former sherds. A clay coil also was present in the collection. Each will be reviewed briefly below.

*Unclassified Brushed (***n=*2)***

Two body sherds exhibiting what appears to be brushing were recovered and identified as "Unclassified Brushed." One came from Block 1, from the upper part of the mixed Stratum 2 *Rangia* and oyster midden (AU 2). The other came from the lower part of Stratum 2 in Block 3 (AU 5) (see Figure 7-5, b). One (the illustrated example) had exterior brushing; the other interior brushing. One (again, the illustrated example) had a bone-tempered paste equal to the *Guadalupe* variety of Rockport Plain, while the other had a heterogeneous paste equivalent to the *Austwell* variety (see Appendix B).

Brushing has been reported on rare occasions from sites along the Texas coast, but these primarily have come from the Galveston Bay area (Weinstein et al. 1988:Figure 4-38, D). A possible brushed specimen from Test Unit N62W100 was recovered at the Guadalupe Bay site during the 1989 testing project (Weinstein 1992:95, Table 7-7). Thus, two of the brushed sherds so far noted from the site have come from the vicinity of Block 1. As with one of the sherds noted above, it had paste equivalent to the *Guadalupe* variety of Rockport Plain.

Unfortunately, considering the scanty data obtained so far, it is difficult to suggest a chronological placement for brushing along the central Texas coast. About all that can be said at present is that the sherds at Guadalupe Bay probably can be related to the middle Rockport subphase occupation (Rockport□II) dating between about A.D. 1300 and 1400.

*Unclassified Punctated (***n=*9)***

Nine sherds, eight body and one rim, contained linear rows of fine exterior punctations without any other form of decoration (see Figure 7-5, c-j). Although these probably represent portions of either Rockport Black or Rockport Incised vessels that included punctations in the areas between the painted or incised bands or lines, it is possible that they are from vessels that only had punctations. Additionally, at least three of the sherds appear to come from the spout portions of bottles, indicating that some bottles may have contained rows of linear punctations on their spouts and wavy, painted lines on their bodies. Since it is not possible at this time to definitely determine the true nature of any of these vessels, all of these sherds simply are identified as "Unclas-

sified Punctated." One came from the surface of the eroding bankline, one from the lower portion of Stratum 2 in Block 1 (AU 4) (see Figure 7-5, h), another from the lower part of Stratum 2 in Block 2 (also AU 4) (see Figure 7-5, i), while the remainder came from Block 3: two from the upper part of Stratum 2 (AU 3) (see Figure 7-5, g and j) and four from the Stratum 3 *Rangia* deposit (AU 6) (see Figure 7-5, c-f). The majority (*n*=6) were on paste equivalent to the *Guadalupe* variety of Rockport Plain, two were on paste equal to the *Rockport* variety, and one was on paste equal to the *Austwell* variety (see Appendix B).

No similar sherds were reported from Guadalupe Bay during the 1989 testing project, although two Unclassified Punctated specimens were recovered from the Kendrick's Hill site (41 JK 35) on the lower Lavaca River during test excavations at that locale in 1992 (Duay et al. 1994:83). Both of the latter consisted of linear rows of punctations reminiscent of the rows that alternate between painted wavy lines on Rockport Black and Rockport Black-on-gray vessels. What made these specimens unique was the fact that both occurred on what then was identified as Goose Creek ware. Since the sorting criteria used to identify Goose Creek paste have now been changed (see above), it is likely that both of these sherds now would be classified as having Rockport paste. If that, in fact, is correct, then they most likely represent parts of Rockport Black vessels.

Although the radiocarbon dates suggest that there is little chronological difference between Strata 2 and 3 in Block 3, both principally dating between ca. A.D. 1300 and 1400, it is interesting to note that six of the nine punctated sherds came either from the lower part of Stratum 2 (AU 4) (*n*=2) or Stratum 3 (AU 6) (*n*=4). This suggests a possible early date for the use of punctations during middle Rockport times.

Ceramic Discs (n=14)

Fourteen ceramic discs or fragments of discs, fashioned from both decorated and plain sherds, were recovered at Guadalupe Bay (Table 7-11, Figure 7-6). All have smooth and nicely rounded edges and range in diameter between 11 and 27 mm, with an average diameter of 19.7 mm. None was perforated. Interestingly, all but three came from excavation units either within Block 3 or immediately adjacent to that block. Although the exact function of these discs is subject to debate, it is clear by their distribution that the area around Block 3 was the main locus of whatever activities once were associated with these artifacts. Perhaps they were used as gaming pieces or were employed in some form of counting.

Ten of the discs were made out of plain sherds (see Figure 7-6, a-j). Of these, four occur on paste equivalent to the *Guadalupe* variety of Rockport Plain, two each are on pastes equal to the *Rockport* and *Austwell* varieties of Rockport Plain, and two have paste equal to the *Green Lake* variety. Four discs were made from portions of Rockport Black-on-gray vessels (see Figure 7-6, k-n): one from a *var. Long Mott* vessel, two from *var. Buffalo Lake* vessels, and one from a *Hog Bayou* vessel.

Ceramic discs of the type recovered at Guadalupe Bay are present in limited numbers at other sites along the central Texas coast. Story (1968:Table 8, Figure 25, G) notes a disc from the Ingleside Cove site, while Ricklis (1990b:173) briefly mentions a disc from adjacent site 41 SP 120. The largest collection of discs comes from the last location of Mission Espíritu Santo near Goliad (Mounger 1959:175). There, 21 discs fashioned out of sherds of Goliad ware were recovered, while two other discs were made from fragments of majolica vessels. Such a large quantity of discs from the mission, including the two fashioned from majolica, indicates that such items were manufactured relatively late in the aboriginal sequence of the region, perhaps with their greatest frequency occurring during the Protohistoric and Historic periods.

The chronological placement of the discs from Guadalupe Bay, on the other hand, suggests that they occur throughout much of the Rockport phase. Most were associated with the Stratum 2 mixed *Rangia* and oyster deposit that has been divided into AUs 2 through 5 (see Table 7-11). As discussed numerous times previously, these analysis units are believed to date primarily between A.D. 1300 and 1400. One disc was associated with AU 6, the Stratum 3 *Rangia* deposit underlying the Stratum 2 deposit in Block 3, while another was located beneath Stratum 3, resting directly on the underlying noncultural colluvium/alluvium of Stratum 6 (AU 1). Since there is virtually no difference in ages between Strata 2 and 3, it is likely that these latter discs also date to middle Rockport (Rockport II) times, ca. A.D. 1300 to 1400. Of course, there is the possibility that some of the discs, particularly those from

Table 7-11. Data on the 14 Ceramic Discs Recovered During the 1992 Investigations at Guadalupe Bay.

Provenience	Analysis Unit	Type	Variety	Diameter	Thickness	Portion	Comments
Sample Units							
N70W100	2	Rockport Plain	*Guadalupe*	27 mm	5 mm	whole disc	None
N80W120	5	Rockport Plain	*Guadalupe*	11 mm	4 mm	whole disc	None
Block 1							
N66W100	2	Rockport Plain	*Rockport*	20 mm	3.5 mm	whole disc	Concave interior
Block 3							
N72W120	6	Rockport Plain	*Rockport*	12 mm	5 mm	fragment	Burnished, concave interior
N74W118	11	Rockport Plain	*Austwell*	17 mm	5 mm	whole disc	None
N74W120	3	Rockport Plain	*Guadalupe*	15 mm	5 mm	fragment	Interior burnished, concave interior
N74W120	5	Rockport Black-on-gray	*Long Mott*	22 mm	5 mm	whole disc	Concave interior, painted interior
N74W122	6	Rockport Plain	*Guadalupe*	27 mm	5 mm	whole disc	Traces of asphaltum coating on exterior
N74W122	3	Rockport Black-on-gray	*Buffalo Lake*	27 mm	3.5 mm	whole disc	Painted interior
N74W124	3	Rockport Plain	*Austwell*	14 mm	5 mm	whole disc	Black-coated exterior
N74W124	5	Rockport Plain	*Green Lake*	19 mm	4 mm	whole disc	Burnished, concave interior
N74W124	5	Rockport Plain	*Green Lake*	25 mm	5 mm	whole disc	Concave interior
N76W126	3	Rockport Black-on-gray	*Hog Bayou*	15 mm	3.5 mm	whole disc	Absence of paint
Surface							
Beach Surface	None	Rockport Black-on-gray	*Buffalo Lake*	25 mm	6 mm	whole disc	Painted on exterior

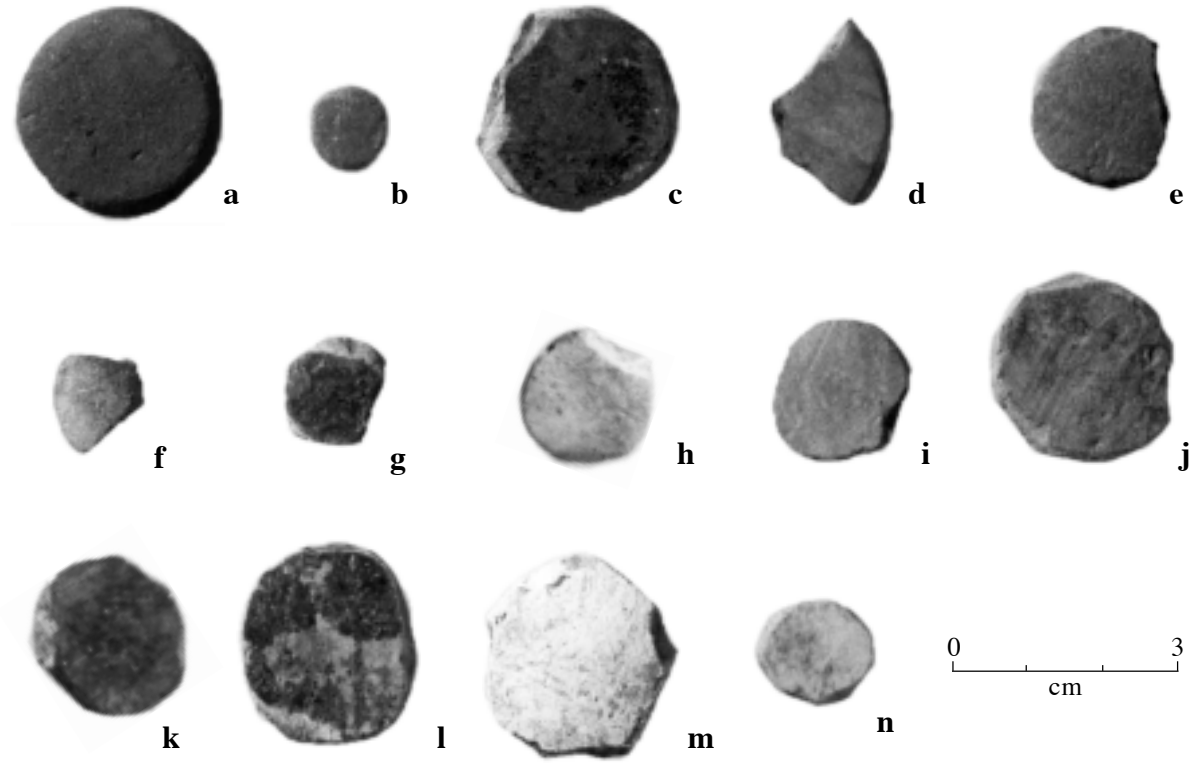

Figure 7-6. Ceramic discs. (a-d) Rockport Plain, *var. Guadalupe*; (e-f) Rockport Plain, *var. Rockport*; (g-h) Rockport Plain, *var. Austwell*; (i-j) Rockport Plain, *var. Green Lake*; (k) Rockport Black-on-gray, *var. Long Mott*; (l-m) Rockport Black-on-gray, *var. Buffalo Lake*; (n) Rockport Black-on-gray, *var. Hog Bayou*. (See Appendix K for provenience data.)

the upper portion of Stratum 2 (AUs 2 and 3) may date to succeeding centuries, possibly during the Rockport III and/or Live Oak phases, but the mixed nature of Stratum 2 makes it impossible to sort these from the others.

Ceramic Coil (n=1)

One fired ceramic coil was recovered from the upper part of Stratum 2 (AU 3) in Block 3 at Guadalupe Bay. It has paste equivalent to the *Seadrift* variety of Rockport Plain, indicating that it probably was to be used in the manufacture of a Rockport ware vessel. Clay coils have been found at several sites along the central Texas coast, indicating that local pottery was made by the coiling method (Calhoun 1962:321-326; Ricklis 1990b:121-122). This is not unusual, as the coiling method was the primary means by which pottery was manufactured throughout the Southeast and along the Texas coast.

Spatial Distribution of Ceramic Types at Guadalupe Bay

One of the main goals of the fieldwork at Guadalupe Bay was to piece plot all artifacts encountered during the excavations so that subsequent spatial analyses could be attempted. It was hoped that relationships might be recognized between certain artifact types and specific areas of the site or that potential small-scale activity loci might be identified around possible hearth locations. In that regard, a review of the ceramic distribution data seems appropriate at this point. Subsequent chapters will examine the distribution of lithic artifacts, modified shell, bone tools, and historic artifacts.

It should be noted at the outset that the piece-plotted data appear to have been affected by several factors that bias some of the results. First, it became apparent during the course of the excavations

that not all people are capable of recognizing individual artifacts at the same level of accuracy, despite their best intentions and the slow, methodical digging procedures employed during the fieldwork. Simply stated, people's eyesight varies, and some folks can find hundreds of minute flakes and tiny sherdlets, while others miss even the largest dart points. Thus, an excavation unit that is dug by a person with excellent eyesight will usually yield a large number of individually piece-plotted field specimens, while an adjacent unit dug by a person with inferior eyesight will most likely yield less field specimens.

A second factor that apparently affected the nature of the piece-plotted data was that of time. As will be seen clearly by the artifact plots presented below, it is obvious that excavation units dug towards the end of the project produced a significantly smaller number of field specimens per unit than those dug earlier during the project. Although excavators were not directed to hasten their digging towards the end of the project by reducing the number of field specimens recorded, there apparently was an unconscious effort to meet the impending deadline by digging quicker and decreasing the effort needed to document piece-plotted items. A quick glance at the piece-plotted remains from Block 3 is a good example of this bias (see Figure 7-9, below). Those units excavated during the initial phases of digging (XUs N70W118, N72W120, N74W118, N74W122, and N76W120) produced much greater quantities of field specimens, and this clearly is reflected in the checker-board pattern of units exhibiting greater concentrations of piece-plotted material. Unfortunately, this factor was not recognized until after all of the field specimens were plotted, long after the fieldwork had ended.

In an effort to combat the biases just discussed, the following distribution plans illustrate both the individually plotted field specimens and the counts for all recovered artifacts, the latter including both field specimens and those artifacts captured in the 1/4-inch screens. Thus, it is easy to compare total artifact yield per excavation unit against the number of field specimens recorded, thereby identifying those units affected by the "eyesight" and "time" biases.

It also should be noted here that the following distribution plans include the locations of "possible hearths." These were identified by examining the weight of burned shell vs. the weight of unburned shell for each level of each unit. Specific details regarding this procedure, plus illustrations of the various isopleths of the burned-shell concentrations resulting from this analysis, are presented in detail later in Chapter 12. For now it is necessary only to realize that these possible hearths represent potential areas of activity in addition to those hearths identified during the actual fieldwork, the latter discussed in Chapter 5 and assigned specific feature numbers.

Figures 7-7 and 7-8 present the distribution of all ceramics associated with AU 2, the upper portion of the Stratum 2 midden in Blocks 1 and 2. As can be seen in Figure 7-7, the biases just discussed do not appear to have affected the recovery of field specimens in Block 1 to any great extent. This almost certainly is because Block 1 was the first of the blocks to be excavated. With the full project time lying ahead, the excavators did not feel pressured to complete the excavations quickly, and maximum effort was devoted to the recovery of field specimens. The only major discrepancy between the number of piece-plotted items (shown to the left of the figure) and total counts (shown to the right) appears in XU N60W102, where there seems to be too few piece-plotted sherds for the total amount (n=491) recovered. Piece-plotted remains in all other units reflect reality reasonably well.

Unfortunately, it is hard to determine what this reality might mean, aside from the obvious fact, noted several times previously, that most artifacts were concentrated in those units situated closest to the canal bankline at the south end of the block. Perhaps it is this factor that is responsible for the greater quantity of painted ceramics (Rockport Black and Rockport Black-on-gray) recovered in the units south of N62. Or, perhaps there are greater numbers of painted sherds in this area because there was a possible hearth present in XU N60W102, and the hearth was the focus of food consumption and/or limited ceremonialism, as opposed to food preparation and storage. As discussed in more detail later in this chapter, this assumes that painted wares were employed primarily as serving vessels and/or ceremonial items, whereas plain and incised vessels were utilized more for food preparation and storage. Interestingly, the distribution of incised ceramics may help support this possibility, as 16 sherds of Rockport Incised came from those units north of N62 while the more prolific units south of N62 yielded only 10 sherds.

The distribution of sherds for that part of AU 2 situated in Block 2 is even more difficult, if not im-

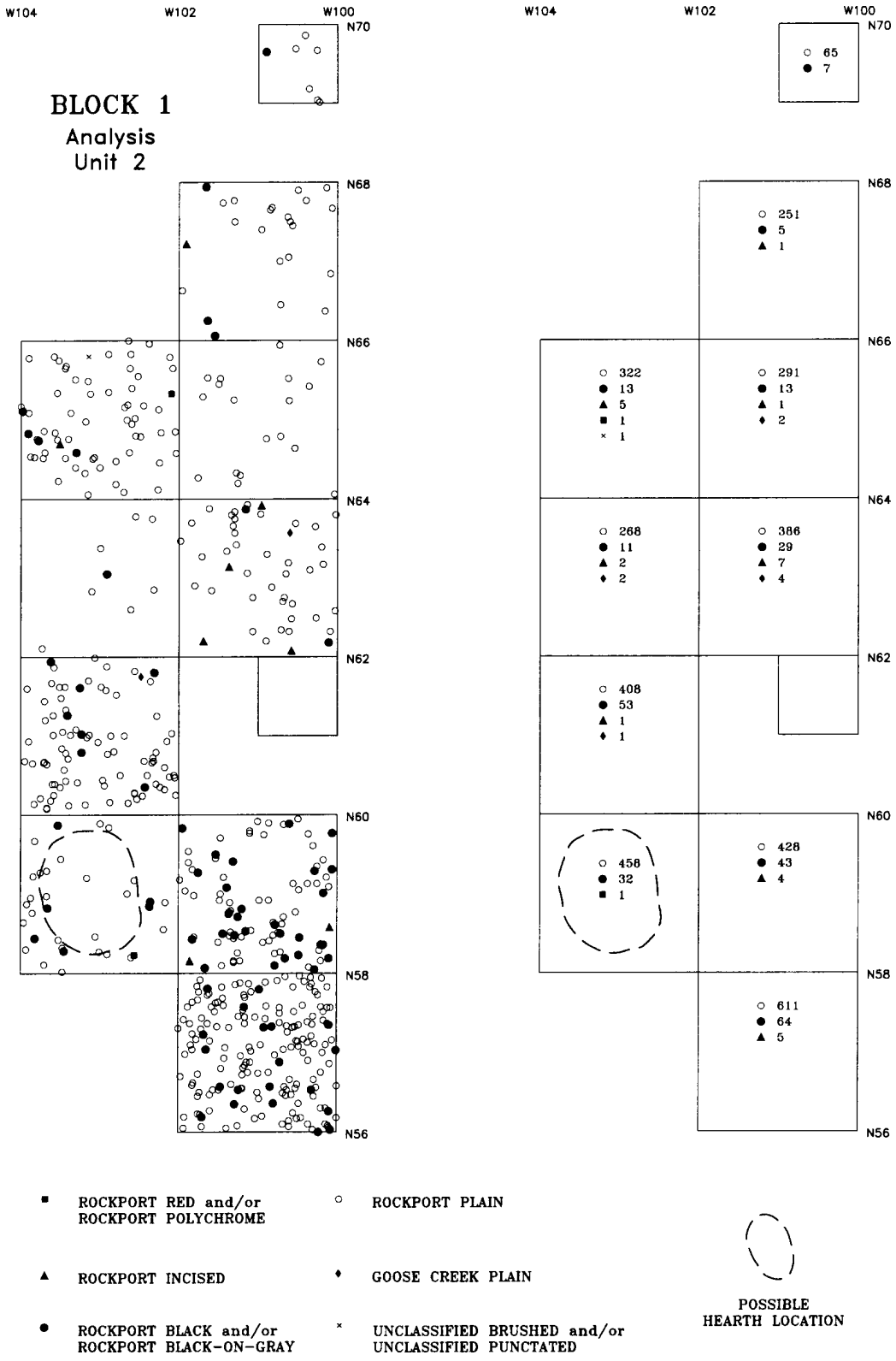

Figure 7-7. Distribution of aboriginal ceramics associated with Analysis Unit 2 in Block 1. Plan view on the left shows distribution of piece-plotted specimens. Plan view on the right shows totals (including piece-plotted items) for individual sample and excavation units.

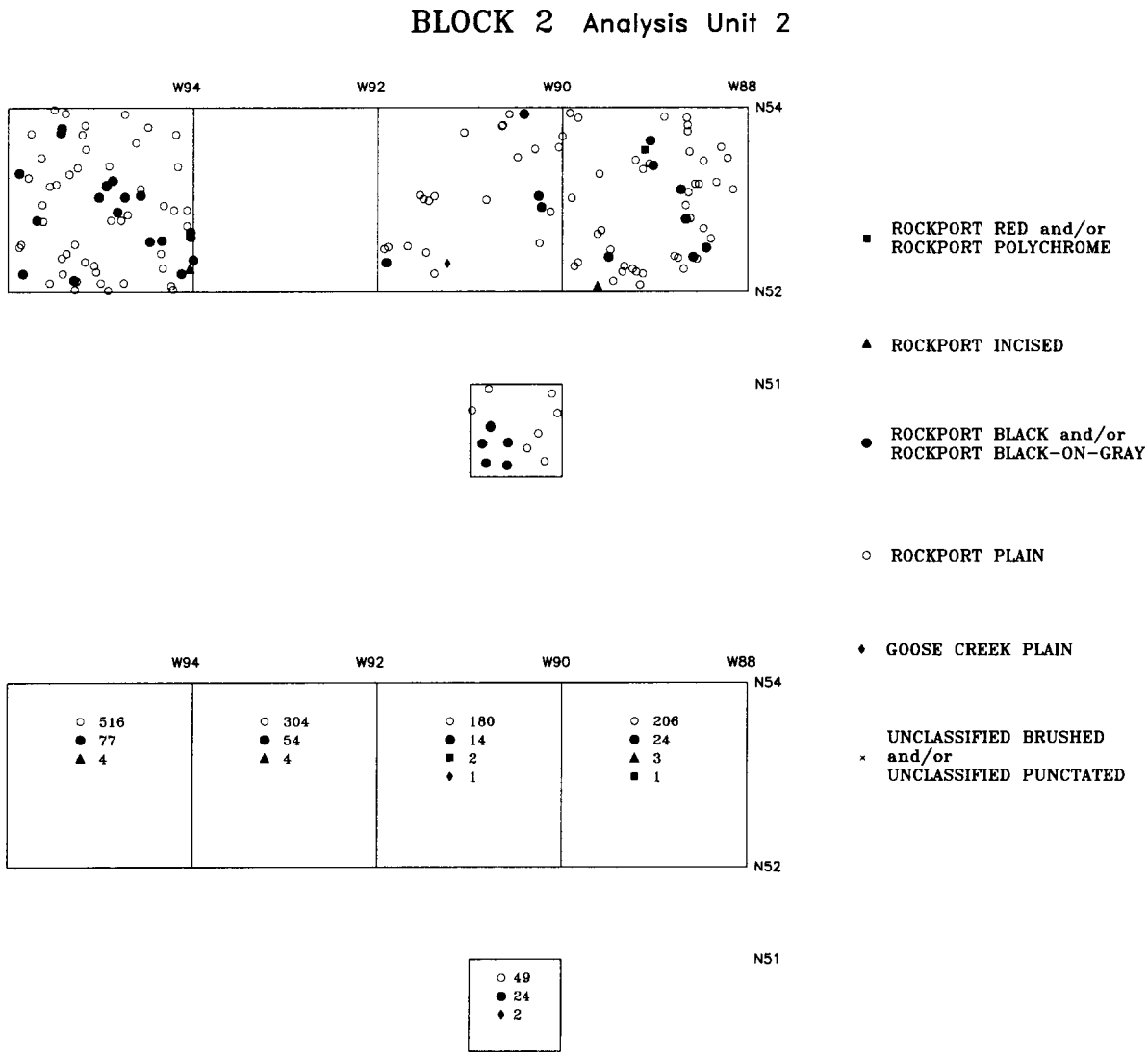

Figure 7-8. Distribution of aboriginal ceramics associated with Analysis Unit 2 in Block 2. Plan view on the top shows distribution of piece-plotted specimens. Plan view on the bottom shows totals (including piece-plotted items) for individual sample and excavation units.

possible, to interpret (see Figure 7-8). One fact that is very clear, however, is that practically no effort was devoted to the recovery of field specimens in XU N54W92. Although this unit yielded a total of 362 sherds, not a single field specimen was recorded. Aside from that, the only other recognizable pattern is the relative abundance of painted sherds in the two westernmost units in the block. Perhaps the same factors responsible for the large amount of painted sherds in the southern portion of Block 1 also contributed to the large number of painted sherds in the western part of Block 2.

In contrast to Blocks 1 and 2, the upper portion of the Rockport midden in Block 3 produced a tremendous quantity of ceramics, and this is reflected in the distribution pattern for AU 3 (Figure 7-9). Unfortunately, as noted above, the units in Block 3 clearly illustrate the discrepancy in effort associated with the collection of field specimens, and one can easily identify those units excavated during the initial phases of digging vs. those excavated towards the end of the project. Nevertheless, it may be possible to recognize a few potentially meaningful patterns. Once again, aside from the obvious fact that

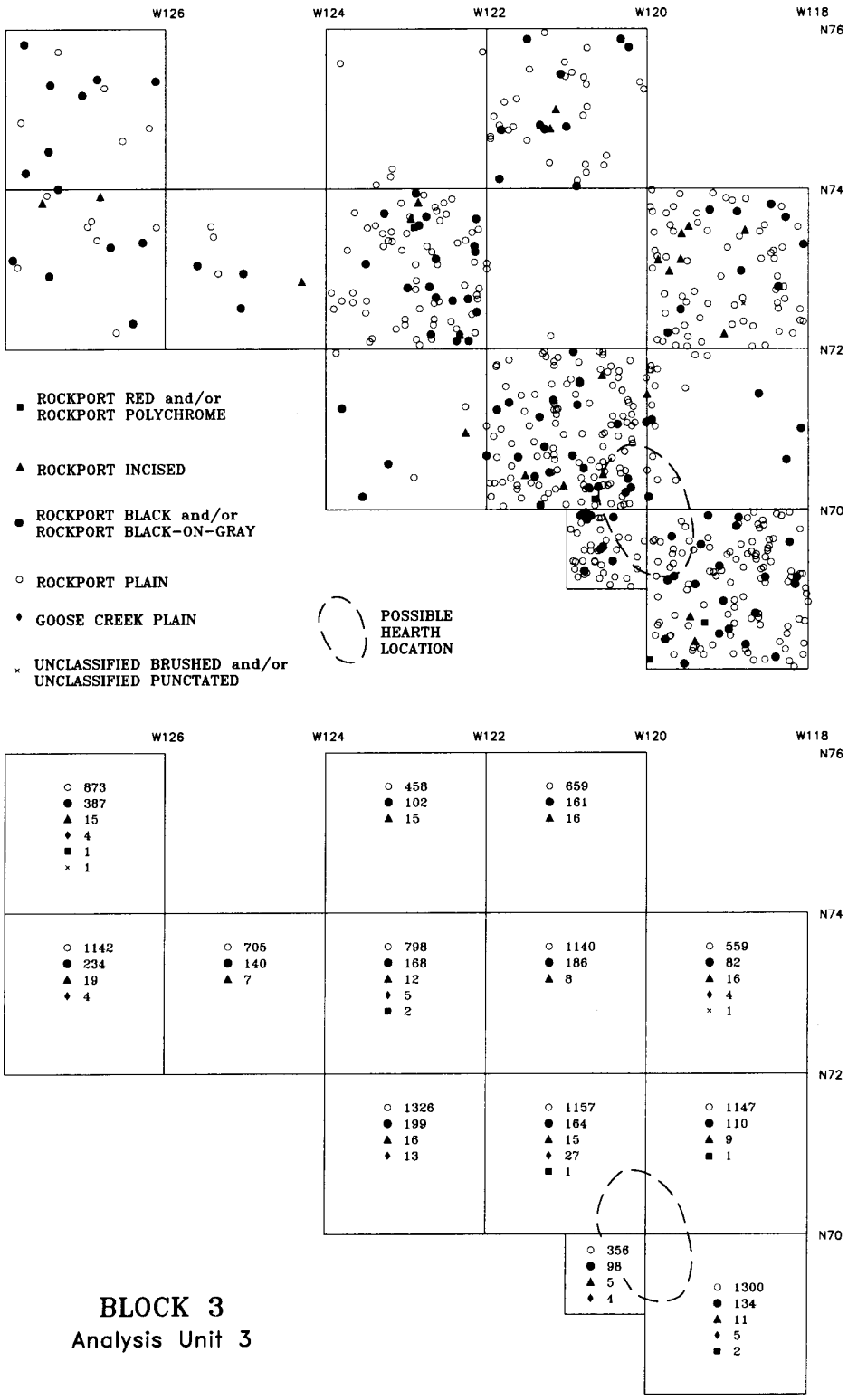

Figure 7-9. Distribution of aboriginal ceramics associated with Analysis Unit 3 in Block 3. Plan view on the top shows distribution of piece-plotted specimens. Plan view on the bottom shows totals (including piece-plotted items) for individual sample and excavation units.

those units nearest to the canal bankline produced the greatest number of sherds, it is interesting to note the presence of the only possible hearth associated with AU 3 in that same ceramically prolific area, roughly at N70W120. Unlike Block 1, however, there does not appear to be any type of association between painted ceramics and the hearth, or any type of negative association between incised sherds and the hearth area. On the contrary, the greatest quantity of painted sherds can be associated with the two westernmost units, N74W126 and N76W126, with 388 and 234 painted sherds, respectively. Perhaps these units are at the edge of an area where food consumption and/or ceremonialism occurred more intensely than in the rest of Block 3. If such was the case, however, then most of that area appears to lie to the west of the block beyond the limits of the excavations. About all that can be said with any degree of certainty is that the upper Rockport midden in Block 3 represents an area where a tremendous amount of ceramics, of all types, was used and discarded.

The distribution of ceramics associated with AU 4 in Block 1 is somewhat different than that for the overlying AU 2, although the lack of piece-plotted items in XU N64W102 is clearly evident (Figure 7-10). The greatest quantity of sherds was recovered from the three western units south of N64, with the largest amount obtained in XU N60W102. This is in contrast to AU 2, where XUs N58W100 and N60W100 were two of the most prolific ceramic-producing units. Apparently, the presence of two possible hearths, one in N64W102 and the other in N60W102, may account for the large number of sherds in that area. Again, the association between at least one of these hearths and large numbers of painted sherds can be postulated, as seen in XU N60W102. Unfortunately, the inverse relationship between this hearth and incised sherds does not appear to be particularly strong, so it may be more reasonable to conclude that none of the potential associations have much meaning.

Interpretation of the ceramic distribution for AU 4 in Block 2 is equally difficult (Figure 7-11). Aside from the obvious fact that very little effort again was devoted to the collection of field specimens in XU N54W92, one can see the relative abundance of painted sherds in contrast to those present in Block 1. This is particularly true for the sample unit at N51W90 where 103 painted sherds were recovered. If a 2-by-2-m unit had been dug in that area, then it is conceivable that over 400 painted sherds might have been collected. Although two possible hearths were noted, and a positive correlation between the quantity of ceramics and the hearths' presence can be recognized, the area encompassed by Block 2 would appear to be too small for such a correlation to have much validity.

The distribution of ceramics related to AU 5 in Block 3, also representing the lower part of the Stratum 2 Rockport deposit, is presented in Figure 7-12. Once more, the effects of the "time" bias are easily recognizable. In addition, it should be remembered that the absence of sherds associated with AU 5 in XU N72W120 simply reflects the fact that Stratum 2 was removed by a single excavation level in that unit. Since there was no lower cut into Stratum 2, there are no AU 5 ceramics. Regardless, as with the overlying distributions of AU 3, there does not appear to be any clear-cut ceramic patterning in AU 5. Although two of the units with possible hearths (XUs N72W122 and N74W120) would, at first glance, seem to contain potentially meaningful quantities of plain and painted sherds, this significance is offset by the presence of even greater numbers of similar sherds in XU N74W124 where no evidence of a hearth was uncovered. Likewise, the overwhelming preponderance of ceramics in N74W124 is in sharp contrast to its two adjacent units (N74W122 and N74W126) that produced greatly reduced totals. About all that probably can be said with any degree of confidence is that Block 3 once again was the locus of intense usage and discard of ceramics during the Rockport II subphase. While there may have been some sort of activity area (or areas) situated around the various hearths in the block, the data are equivocal.

Analysis Unit 6 consisted of four distinct *Rangia* deposits and associated shell and artifact scatters located beneath AU 5 in the eastern part of Block 3 (Figure 7-13). For convenience, the separate shell deposits have been identified as "Shell Pockets" 1 through 4. Because evidence of these deposits was lacking in XUs N74W120, N74W124, N74W126, and N76W126, there are no AU 6 artifacts illustrated on Figure 7-13 for these units. There are, however, three possible hearths and one definite hearth (Feature 2) associated with AU 6. Interestingly, the one definite hearth is located adjacent to Shell Pocket (SP) 3, and not within the pocket itself. This is identical to the situation normally found in hearth/refuse pile couplets farther up the Texas coast, particularly in the Galveston Bay area (see Aten 1983a), and it is highly likely that Feature 2 and the majority of the artifacts recovered in Units N70W118, N72W118,

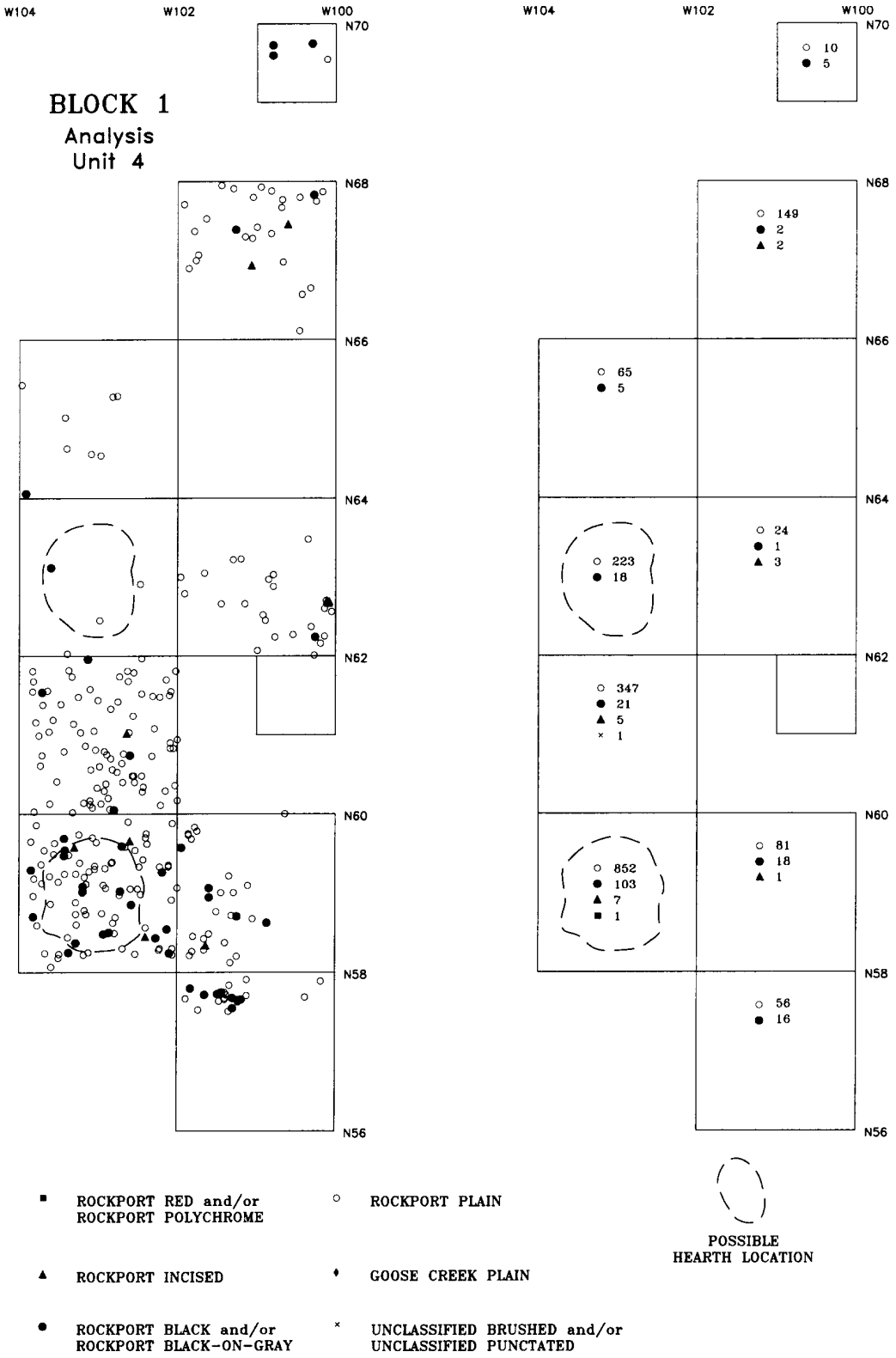

Figure 7-10. Distribution of aboriginal ceramics associated with Analysis Unit 4 in Block 1. Plan view on the left shows distribution of piece-plotted specimens. Plan view on the right shows totals (including piece-plotted items) for individual sample and excavation units.

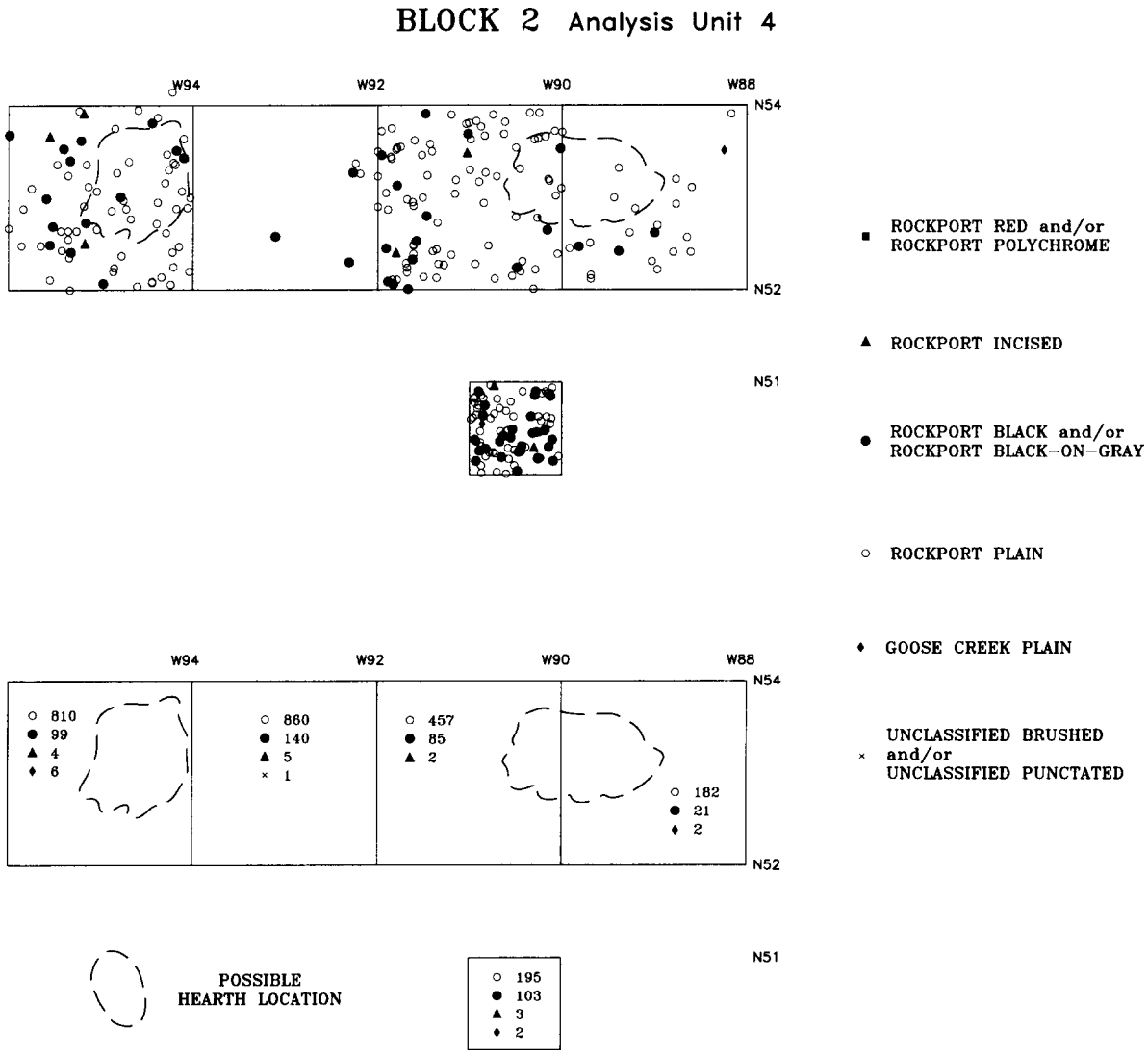

Figure 7-11. Distribution of aboriginal ceramics associated with Analysis Unit 4 in Block 2. Plan view on the top shows distribution of piece-plotted specimens. Plan view on the bottom shows totals (including piece-plotted items) for individual sample and excavation units.

N72W120, and Sample Unit N70W120 are related to activities occurring on and around SP 3. Likewise, it is reasonable to conclude that the artifacts recovered from XUs N74W122 and N76W122 can be related to SP 1, while those in N76W120 and N72W122 can be tied to SPs 2 and 4, respectively.

With that in mind, it is worth noting the preponderance of ceramics, of all types, associated with SP 1. It is also worth noting the relatively high numbers of painted sherds associated with SPs 1, 2, and 3. On the other hand, SP 4 appears to lack such high numbers, but this almost certainly reflects the fact that only a very small portion of the pocket was uncovered in Block 3. Overall, these data may be the clearest expression at Guadalupe Bay of special-activity areas where food consumption and associated trash and shellfish disposal occurred around specific hearth locations. Considering the relatively large quantity of painted ceramics associated with SP 1, it may not be stretching the data too far to further suggest that some form of ceremonial activity requiring the use of finely painted ceramic vessels took place in the north-central portion of Block 3 during the time that the shells and artifacts now identified as AU 6 were laid down.

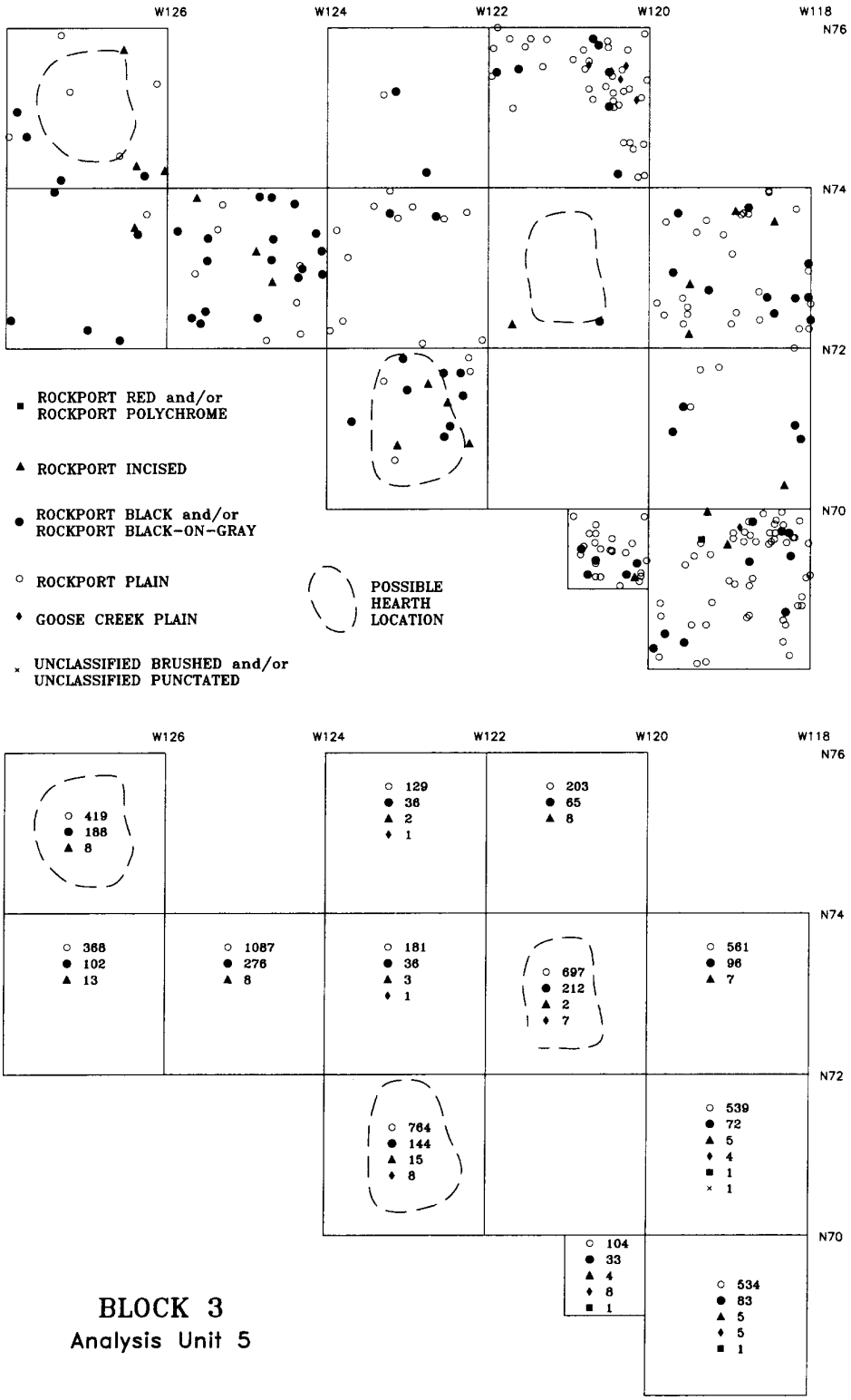

Figure 7-12. Distribution of aboriginal ceramics associated with Analysis Unit 5 in Block 3. Plan view on the top shows distribution of piece-plotted specimens. Plan view on the bottom shows totals (including piece-plotted items) for individual sample and excavation units.

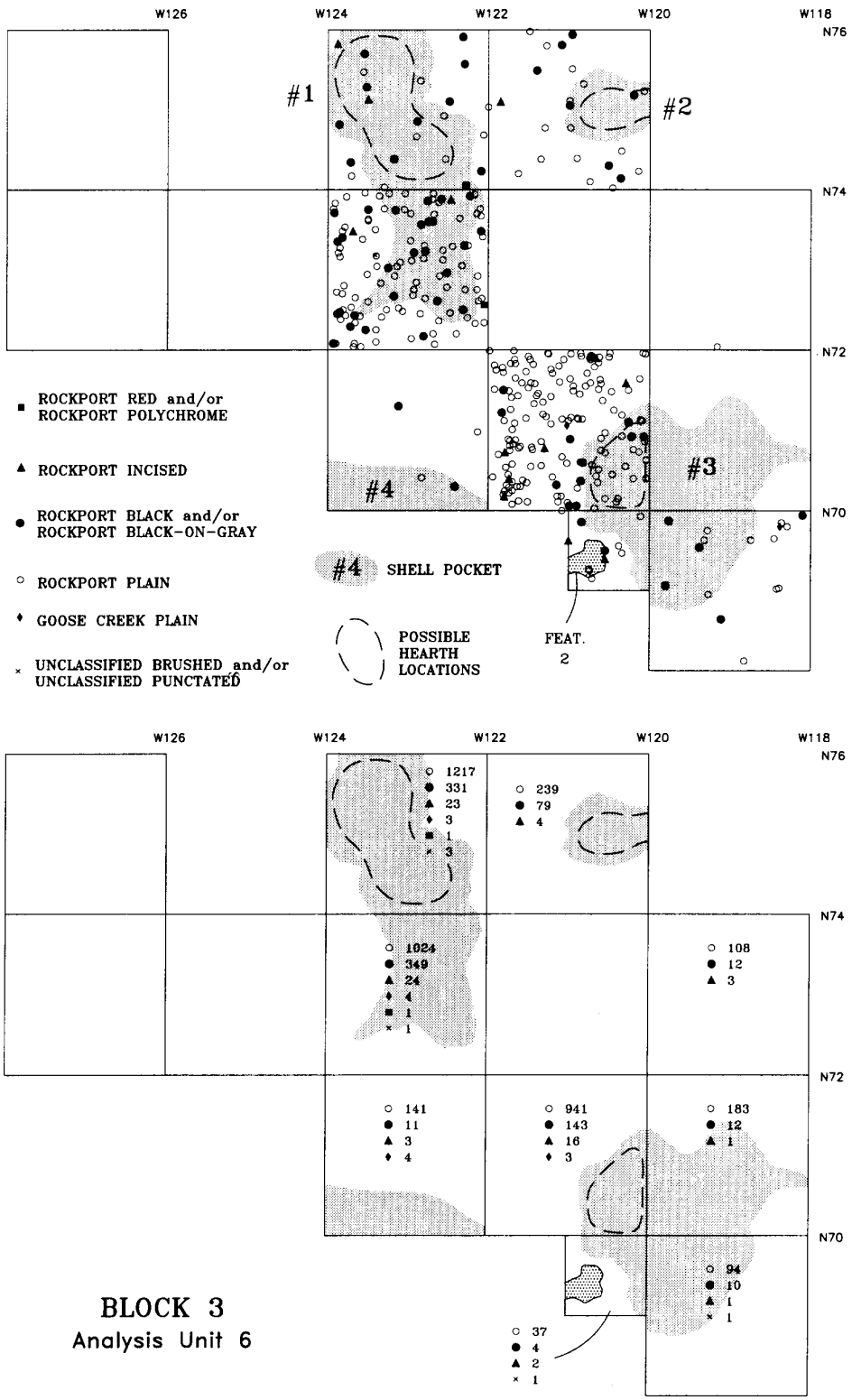

Figure 7-13. Distribution of aboriginal ceramics associated with Analysis Unit 6 in Block 3. Plan view on the top shows distribution of piece-plotted specimens. Plan view on the bottom shows totals (including piece-plotted items) for individual sample and excavation units.

Analysis Unit 7, represented by the oyster deposits of Stratum 5 in Block 3, is tentatively thought to represent the earliest of the Rockport II occupations at Guadalupe Bay. As seen in Figure 7-14, there were two main oyster pockets situated in the southeastern corner of the block, plus the edge of what probably was a third pocket situated in the extreme northwestern corner. Although two hearths (Features 8 and 9) and a possible hearth could be tied to two of the AU 7 oyster deposits, there were very few associated sherds recovered, thus precluding any meaningful attempts at the recognition of ceramic patterns. Nevertheless, the presence of the AU 7 oyster pockets helps support the notion that hearth/refuse pile couplets do exist at Guadalupe Bay and that the patterns recognized for AU 6 probably are legitimate.

Decorative Design Elements and Lip Decoration

As discussed earlier in this chapter, all sherds obtained during the current investigations were examined for the presence of decoration. Generally, these fell into two broad categories: intentionally painted decoration (including Rockport Black-on-gray and Rockport Black), and incised decoration (Rockport and Goose Creek Incised). Two other categories, overall red filming (Rockport Red) and polychrome painting (Rockport Polychrome), were recognized, but these were not subjected to further study as they, respectively, either lacked variation in decorative design or were so limited in number that it would have been meaningless to record their decorative elements.

Design Elements

As noted, decorated sherds initially were separated by type and variety, and then each was given an alpha-numeric code that described the decoration present (see Tables 7-1 and 7-3). Once coded, sherds of the same type and variety then were placed into groups consisting of recurring decorative patterns that were termed "design elements." Incised sherds exhibited 15 design elements: (1) vertical straight lines, (2) horizontal straight lines, (3) diagonal straight lines, (4) curved lines, (5) perpendicular straight lines, (6) parallel straight lines, (7) horizontal zigzag lines, (8) diagonal overincised lines, (9) vertical overincised lines, (10) crosshatched overincised lines, (11) chevron pattern, (12) open triangles, (13) line-filled triangles, (14) crosshatched lines, and (15) crossed lines (see Table 7-1). A sixteenth category, "unknown line orientation," also was set up for those incised lines that could not be placed in one of the primary groups. In most cases, a single design element probably was the only decoration present on a vessel. For instance, a jar might only exhibit a horizontal zigzag line located around its neck just below the rim. In other instances, however, two or more design elements might occur together on the same vessel. For example, horizontal straight lines might be present on the jar's neck just below the rim, while a series of line-filled triangles could occur immediately below the lowest horizontal line. In both of these cases, a higher order of decoration is formed, and referred to later as a "motif." Thus, depending on the situation, a motif may consist of a single design element if that element is the only decoration present on the vessel, or it can consist of multiple design elements if two or more elements coalesce to form the overall decoration.

Painted sherds (both with and without gray slip) exhibited 14 design elements: (1) vertical straight lines, (2) vertical wavy lines, (3) horizontal straight lines, (4) horizontal wavy lines, (5) diagonal straight lines, (6) pendant loops, (7) curved lines, (8) perpendicular lines, (9) lines of unknown orientation, (10) dots, (11) open circles, (12) triangles, (13) random dabbing (splotching that resembles blobs made by dabbing the vessel with asphaltum paint), and (14) swastika (see Table 7-1).

Each of the design elements was subdivided further by the width of the lines forming the element. The widths of dots and dabbed areas also were recorded when appropriate. Lines and/or dots and dabbed areas less than 2 mm across were considered "narrow." Those between 2 and 4 mm were considered "medium," while those greater than 4 mm were "wide."

As with the incised sherds, painted sherds then were grouped according to the various design elements that were present. Sherds with "unidentifiable design elements" also were recorded, but, by virtue of their totally unrecognizable quality, such specimens do not constitute a particularly useful group amenable to future analysis and interpretation. Examples of single design elements include vertical lines, horizontal lines, diagonal lines, curved lines, perpendicular lines, parallel lines, horizontal zig-zag lines, etc. Examples of multiple design elements include horizontal and diagonal lines, vertical lines and dots, vertical and curved lines, horizontal and crosshatched lines, etc.

Tables 7-12 through 7-14 list the various design elements recognized for the excavated examples of

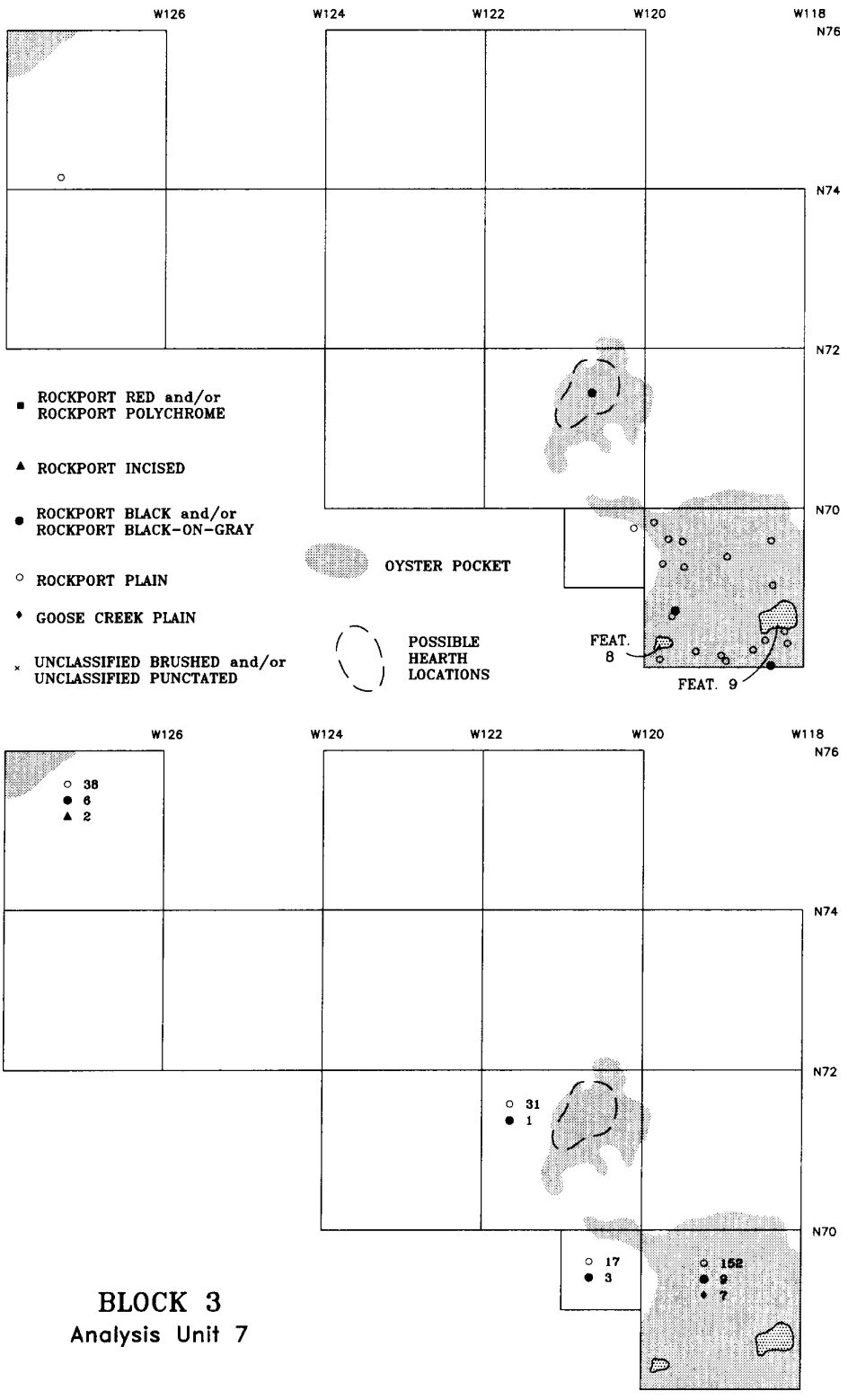

Figure 7-14. Distribution of aboriginal ceramics associated with Analysis Unit 7 in Block 3. Plan view on the top shows distribution of piece-plotted specimens. Plan view on the bottom shows totals (including piece-plotted items) for individual sample and excavation units.

Table 7-12. Design Elements Recorded for Sherds of Rockport Black-on-Gray.

	Rockport Black-on-gray												
	var. Rockport		*var. Long Mott*		*var. Hog Bayou*		*var. Mosquito Point*		*var. Buffalo Lake*				
	No.	(Ext./Int./Both)*	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	**No.**	**(Ext./Int./Both)**	**% Total**
Single Design Elements													
Vertical Lines													
Straight													
narrow	4	(4/0/0)	3	(2/1/0)	0	— —	0	— —	0	— —	**7**	**(6/1/0)**	**0.43**
medium	2	(2/0/0)	1	(1/0/0)	1	(0/0/1)	3	(2/0/1)	1	(1/0/0)	**8**	**(6/0/2)**	**0.49**
wide	3	(2/1/0)	2	(2/0/0)	3	(3/0/0)	4	(4/0/0)	0	— —	**12**	**(11/1/0)**	**0.74**
medium and wide	1	(0/0/1)	0	— —	0	— —	0	— —	0	— —	**1**	**(0/0/1)**	**0.06**
Slightly wavy													
narrow	2	(2/0/0)	1	(1/0/0)	0	— —	0	— —	0	— —	**3**	**(3/0/0)**	**0.19**
medium	5	(5/0/0)	3	(2/1/0)	0	— —	4	(4/0/0)	0	— —	**12**	**(11/1/0)**	**0.74**
wide	2	(2/0/0)	4	(4/0/0)	1	(1/0/0)	0	— —	4	(4/0/0)	**11**	**(11/0/0)**	**0.68**
Highly wavy													
medium	1	(1/0/0)	1	(0/1/0)	0	— —	0	— —	1	(1/0/0)	**3**	**(2/1/0)**	**0.19**
wide	5	(5/0/0)	4	(4/0/0)	2	(1/1/0)	0	— —	5	(5/0/0)	**16**	**(15/1/0)**	**0.99**
medium and wide	0	— —	3	(3/0/0)	0	— —	0	— —	0	— —	**3**	**(3/0/0)**	**0.19**
Straight and Highly wavy													
wide and wide	0	— —	0	— —	0	— —	0	— —	1	(0/1/0)	**1**	**(0/1/0)**	**0.06**
medium and wide	0	— —	1	(1/0/0)	0	— —	0	— —	1	(1/0/0)	**2**	**(2/0/0)**	**0.12**
Diagonal Lines													
Straight													
narrow	0	— —	0	— —	1	(1/0/0)	1	(1/0/0)	0	— —	**2**	**(2/0/0)**	**0.12**
medium	5	(5/0/0)	2	(2/0/0)	0	— —	2	(2/0/0)	1	(1/0/0)	**10**	**(10/0/0)**	**0.62**
wide	5	(4/1/0)	1	(1/0/0)	2	(0/2/0)	0	— —	1	(1/0/0)	**9**	**(6/3/0)**	**0.56**
Pendant Loops													
medium	0	— —	1	(1/0/0)	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.06**
Curved Lines													
narrow	2	(2/0/0)	3	(3/0/0)	2	(2/0/0)	0	— —	0	— —	**7**	**(7/0/0)**	**0.43**
medium	4	(4/0/0)	8	(7/1/0)	4	(4/0/0)	2	(2/0/0)	4	(4/0/0)	**22**	**(21/1/0)**	**1.36**
wide	11	(10/1/0)	27	(26/1/0)	19	(15/4/0)	4	(4/0/0)	17	(16/1/0)	**78**	**(71/7/0)**	**4.81**
narrow and wide	1	(1/0/0)	0	— —	2	(2/0/0)	0	— —	0	— —	**3**	**(3/0/0)**	**0.19**
Perpendicular Lines													
Straight													
narrow	3	(3/0/0)	1	(1/0/0)	0	— —	0	— —	1	(1/0/0)	**5**	**(5/0/0)**	**0.31**
medium	2	(2/0/0)	0	— —	0	— —	0	— —	0	— —	**2**	**(2/0/0)**	**0.12**
wide	2	(2/0/0)	9	(9/0/0)	1	(1/0/0)	1	(0/1/0)	0	— —	**13**	**(12/1/0)**	**0.80**
narrow and wide	0	— —	1	(1/0/0)	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.06**
Parallel Lines													
Straight													
narrow	2	(2/0/0)	0	— —	0	— —	0	— —	0	— —	**2**	**(2/0/0)**	**0.12**
medium	0	— —	0	— —	0	— —	0	— —	1	(1/0/0)	**1**	**(1/0/0)**	**0.06**
wide	0	— —	0	— —	0	— —	2	(1/1/0)	0	— —	**2**	**(1/1/0)**	**0.12**

(continued)

Table 7-12. Continued.

	Rockport Black-on-gray												
	var. Rockport		*var. Long Mott*		*var. Hog Bayou*		*var. Mosquito Point*		*var. Buffalo Lake*				
	No.	(Ext./Int./Both)*	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	**No.**	**(Ext./Int./Both)**	**% Total**
Unknown Line Orientation													
Straight													
narrow	37	(37/0/0)	29	(28/1/0)	15	(14/1/0)	12	(12/0/0)	12	(12/0/0)	**105**	**(103/2/0)**	**6.48**
medium	47	(46/1/0)	48	(48/0/0)	12	(12/0/0)	7	(6/0/1)	15	(15/0/0)	**129**	**(127/1/1)**	**7.96**
wide	45	(44/1/0)	62	(55/6/1)	39	(32/7/0)	18	(16/2/0)	17	(16/1/0)	**181**	**(163/17/1)**	**11.17**
narrow and wide	1	(1/0/0)	0	— —	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.06**
medium and wide	1	(0/0/1)	0	— —	0	— —	2	(2/0/0)	0	— —	**3**	**(2/0/1)**	**0.19**
Slightly wavy													
narrow	10	(10/0/0)	22	(22/0/0)	10	(9/1/0)	2	(2/0/0)	6	(6/0/0)	**50**	**(49/1/0)**	**3.08**
medium	11	(11/0/0)	32	(31/1/0)	9	(9/0/0)	6	(6/0/0)	3	(3/0/0)	**61**	**(60/1/0)**	**3.76**
wide	23	(22/1/0)	48	(46/2/0)	13	(12/1/0)	7	(7/0/0)	18	(18/0/0)	**109**	**(105/4/0)**	**6.72**
narrow and wide	0	— —	1	(1/0/0)	1	(0/0/1)	0	— —	1	(1/0/0)	**3**	**(2/0/1)**	**0.19**
Highly wavy													
narrow	4	(4/0/0)	5	(5/0/0)	1	(1/0/0)	1	(1/0/0)	2	(2/0/0)	**13**	**(13/0/0)**	**0.80**
medium	2	(1/1/0)	3	(3/0/0)	4	(4/0/0)	0	— —	4	(4/0/0)	**13**	**(12/1/0)**	**0.80**
wide	8	(8/0/0)	31	(30/1/0)	12	(12/0/0)	5	(4/1/0)	24	(24/0/0)	**80**	**(78/2/0)**	**4.94**
Straight and Slightly wavy													
narrow and wide	0	— —	0	— —	2	(0/1/1)	0	— —	0	— —	**2**	**(0/1/1)**	**0.12**
wide and medium	0	— —	1	(0/0/1)	0	— —	0	— —	0	— —	**1**	**(0/0/1)**	**0.06**
wide and wide	0	— —	0	— —	1	(1/0/0)	0	— —	0	— —	**1**	**(1/0/0)**	**0.06**
Straight and Highly wavy													
wide and medium	0	— —	0	— —	0	— —	0	— —	1	(1/0/0)	**1**	**(1/0/0)**	**0.06**
Straight and Unid. line													
wide and narrow	0	— —	1	(1/0/0)	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.06**
Slightly wavy and Unid. line													
narrow and narrow	0	— —	0	— —	0	— —	1	(1/0/0)	0	— —	**1**	**(1/0/0)**	**0.06**
Unidentifiable line													
narrow	41	(40/1/0)	47	(46/1/0)	18	(18/0/0)	8	(7/1/0)	5	(5/0/0)	**119**	**(116/3/0)**	**7.34**
medium	43	(40/3/0)	30	(28/2/0)	12	(11/1/0)	5	(5/0/0)	9	(9/0/0)	**99**	**(93/6/0)**	**6.11**
wide	36	(35/1/0)	31	(31/0/0)	21	(17/3/1)	8	(8/0/0)	16	(15/1/0)	**112**	**(106/5/1)**	**6.91**
narrow and medium	0	— —	2	(1/1/0)	0	— —	0	— —	0	— —	**2**	**(1/1/0)**	**0.12**
narrow and wide	0	— —	2	(2/0/0)	1	(1/0/0)	0	— —	1	(1/0/0)	**4**	**(4/0/0)**	**0.25**
Dots													
narrow	3	(3/0/0)	2	(2/0/0)	0		1	(1/0/0)	2	(2/0/0)	**8**	**(8/0/0)**	**0.49**
medium	6	(6/0/0)	5	(5/0/0)	3	(3/0/0/)	1	(1/0/0)	5	(5/0/0)	**20**	**(20/0/0)**	**1.23**
wide	7	(7/0/0)	4	(4/0/0)	3	(2/1/0)	0	— —	6	(5/1/0)	**20**	**(18/2/0)**	**1.23**
narrow and medium	0	— —	0	— —	1	(1/0/0)	0	— —	0	— —	**1**	**(1/0/0)**	**0.06**
Open Circle													
wide	1	(1/0/0)	0	— —	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.06**
Triangle													
Straight lines													
wide	0	— —	0	— —	0	— —	0	— —	1	(0/1/0)	**1**	**(0/1/0)**	**0.06**

(continued)

Table 7-12. Continued.

	Rockport Black-on-gray												
	var. Rockport		*var. Long Mott*		*var. Hog Bayou*		*var. Mosquito Point*		*var. Buffalo Lake*				
	No.	(Ext./Int./Both)*	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	**No.**	**(Ext./Int./Both)**	**% Total**
Dabbing													
narrow	1	(1/0/0)	0	— —	2	(2/0/0)	0	— —	1	(1/0/0)	**4**	**(4/0/0)**	**0.25**
medium	0	— —	4	(3/1/0)	2	(2/0/0)	0	— —	0	— —	**6**	**(5/1/0)**	**0.37**
wide	13	(10/3/0)	36	(33/3/0)	19	(17/1/1)	1	(1/0/0)	17	(17/0/0)	**86**	**(78/7/1)**	**5.31**
medium and wide	0	— —	0	— —	0	— —	0	— —	1	(1/0/0)	**1**	**(1/0/0)**	**0.06**
narrow, medium, and wide	0	— —	0	— —	0	— —	0	— —	2	(2/0/0)	**2**	**(2/0/0)**	**0.12**
Multiple Design Elements													
Vertical Lines and Curved Line													
Highly wavy and Curved													
wide and wide	0	— —	1	(0/0/1)	0	— —	0	— —	0	— —	**1**	**(0/0/1)**	**0.06**
Vertical Lines and Unidentifiable Design													
Slightly wavy and Unid. Design													
medium and wide	0	— —	0	— —	0	— —	1	(0/0/1)	0	— —	**1**	**(0/0/1)**	**0.06**
Curved Line and Unknown Line Orientation													
Curved and Straight													
narrow and narrow	0	— —	1	(1/0/0)	0	— —	0	— —	1	(1/0/0)	**2**	**(2/0/0)**	**0.12**
narrow and wide	1	(0/1/0)	0	— —	0	— —	0	— —	0	— —	**1**	**(0/1/0)**	**0.06**
medium and medium	1	(1/0/0)	0	— —	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.06**
wide and medium	1	(1/0/0)	0	— —	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.06**
Curved, Straight, and Unid. line													
wide, narrow, and narrow	1	(1/0/0)	0	— —	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.06**
Perpendicular Lines and Unknown Line Orientation													
Straight and Straight													
wide and wide	0	— —	1	(1/0/0)	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.06**
Dots and Vertical Line													
Dots and Slightly wavy													
wide and narrow	0	— —	0	— —	0	— —	0	— —	1	(1/0/0)	**1**	**(1/0/0)**	**0.06**
Dots and Unknown Line Orientation													
Dots and Straight													
wide and wide	1	(1/0/0)	0	— —	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.06**
wide and narrow	0	— —	0	— —	1	(0/0/1)	1	(1/0/0)	0	— —	**2**	**(1/0/1)**	**0.12**
Dots and Slightly wavy													
wide and wide	0	— —	0	— —	0	— —	0	— —	1	(0/0/1)	**1**	**(0/0/1)**	**0.06**
Dots and Unidentifiable Design													
narrow and wide	0	— —	1	(0/1/0)	0	— —	0	— —	0	— —	**1**	**(0/1/0)**	**0.06**
wide and wide	1	(0/1/0)	0	— —	0	— —	0	— —	0	— —	**1**	**(0/1/0)**	**0.06**

(continued)

Table 7-12. Concluded.

	Rockport Black-on-gray												
	var. Rockport		*var. Long Mott*		*var. Hog Bayou*		*var. Mosquito Point*		*var. Buffalo Lake*				
	No.	(Ext./Int./Both)*	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	**No.**	**(Ext./Int./Both)**	**% Total**
Dabbing and Unknown Line Orientation													
Dabbing and Straight													
wide and narrow	0	— —	0	— —	0	— —	0	— —	1	(1/0/0)	**1**	**(1/0/0)**	**0.06**
wide and medium	0	— —	0	— —	0	— —	0	— —	1	(1/0/0)	**1**	**(1/0/0)**	**0.06**
wide and wide	0	— —	1	(0/1/0)	0	— —	0	— —	0	— —	**1**	**(0/1/0)**	**0.06**
Dabbing and Slightly wavy													
wide and wide	0	— —	1	(1/0/0)	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.06**
Dabbing and Unid. line													
medium and medium	1	(0/1/0)	0	— —	0	— —	0	— —	0	— —	**1**	**(0/1/0)**	**0.06**
Unknown Line Orientation and Unidentifiable Design													
Straight and Unid. Design													
narrow and narrow	1	(1/0/0)	0	— —	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.06**
wide and medium	0	— —	1	(0/1/0)	0	— —	0	— —	0	— —	**1**	**(0/1/0)**	**0.06**
wide and wide	0	— —	0	— —	1	(1/0/0)	0	— —	0	— —	**1**	**(1/0/0)**	**0.06**
Unidentifable Design													
narrow	12	(12/0/0)	8	(8/0/0)	3	(2/1/0)	7	(7/0/0)	7	(7/0/0)	**37**	**(36/1/0)**	**2.28**
medium	10	(10/0/0)	7	(6/1/0)	3	(3/0/0)	5	(5/0/0)	6	(6/0/0)	**31**	**(30/1/0)**	**1.91**
wide	10	(5/2/3)	13	(12/1/0)	6	(5/1/0)	10	(9/1/0)	10	(8/2/0)	**49**	**(39/7/3)**	**3.02**
narrow and wide	0	— —	1	(0/0/1)	0	— —	0	— —	0	— —	**1**	**(0/0/1)**	**0.06**
medium and wide	0	— —	1	(1/0/0)	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.06**
Total	**442**	**(417/20/5)**	**559**	**(526/29/4)**	**253**	**(221/26/6)**	**132**	**(121/7/4)**	**235**	**(226/8/1)**	**1,621**	**(1,511/90/20)**	**100.00**

* Indicates location of the design on either the exterior, interior, or both the exterior and interior of the sherd.

Table 7-13. Design Elements Recorded for Sherds of Rockport Black.

	Rockport Black												
	var. Rockport		*var. Lolita*		*var. Kuy Bayou*		*var. Spring Bayou*		*var. Elm Bayou*				
	No.	(Ext./Int./Both)*	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	**No.**	**(Ext./Int./Both)**	**% Total**
Single Design Elements													
Vertical Lines													
Straight													
narrow	0	— —	0	— —	0	— —	0	— —	1	(0/1/0)	**1**	**(0/1/0)**	**0.46**
wide	2	(1/1/0)	3	(3/0/0)	0	— —	1	(0/0/1)	0	— —	**6**	**(4/1/1)**	**2.74**
Slightly wavy													
wide	2	(2/0/0)	1	(1/0/0)	0	— —	0	— —	0	— —	**3**	**(3/0/0)**	**1.37**
Highly wavy													
wide	0	— —	1	(1/0/0)	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.46**
Straight and Slightly wavy													
medium and medium	0	— —	0	— —	0	— —	0	— —	1	(1/0/0)	**1**	**(1/0/0)**	**0.46**
Straight and Highly wavy													
wide and wide	0	— —	0	— —	1	(1/0/0)	0	— —	0	— —	**1**	**(1/0/0)**	**0.46**
Horizontal Lines													
Straight													
wide	1	(1/0/0)	1	(0/1/0)	0	— —	0	— —	0	— —	**2**	**(1/1/0)**	**0.91**
Slightly wavy													
wide	1	(1/0/0)	0	— —	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.46**
Diagonal Lines													
Straight													
narrow	1	(1/0/0)	0	— —	0	— —	1	(1/0/0)	0	— —	**2**	**(2/0/0)**	**0.91**
medium	1	(1/0/0)	0	— —	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.46**
medium and wide	0	— —	0	— —	1	(1/0/0)	0	— —	0	— —	**1**	**(1/0/0)**	**0.46**
Curved Lines													
narrow	1	(1/0/0)	1	(0/1/0)	0	— —	0	— —	0	— —	**2**	**(1/1/0)**	**0.91**
medium	1	(1/0/0)	1	(1/0/0)	0	— —	0	— —	0	— —	**2**	**(2/0/0)**	**0.91**
wide	1	(0/1/0)	4	(3/1/0)	1	(1/0/0)	0	— —	1	(1/0/0)	**7**	**(5/2/0)**	**3.20**
Perpendicular Lines													
Straight													
medium	0	— —	1	(1/0/0)	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.46**
wide	0	— —	1	(0/1/0)	0	— —	0	— —	1	(1/0/0)	**2**	**(1/1/0)**	**0.91**
narrow and wide	0	— —	1	(1/0/0)	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.46**
Parallel Lines													
Straight													
narrow	0	— —	1	(1/0/0)	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.46**
medium	1	(1/0/0)	0	— —	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.46**
wide	0	— —	1	(0/1/0)	0	— —	0	— —	0	— —	**1**	**(0/1/0)**	**0.46**

(continued)

Table 7-13. Continued.

	Rockport Black												
	var. Rockport		*var. Lolita*		*var. Kuy Bayou*		*var. Spring Bayou*		*var. Elm Bayou*				
	No.	(Ext./Int./Both)*	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	**No.**	**(Ext./Int./Both)**	**% Total**
Unknown Line Orientation													
Straight													
narrow	2	(2/0/0)	6	(5/1/0)	1	(1/0/0)	0	— —	1	(1/0/0)	**10**	**(9/1/0)**	**4.57**
medium	3	(3/0/0)	7	(6/1/0)	1	(1/0/0)	0	— —	2	(2/0/0)	**13**	**(12/1/0)**	**5.94**
wide	11	(10/1/0)	22	(19/3/0)	1	(1/0/0)	0	— —	3	(3/0/0)	**37**	**(33/4/0)**	**16.89**
narrow and wide	0	— —	0	— —	0	— —	0	— —	1	(1/0/0)	**1**	**(1/0/0)**	**0.46**
medium and wide	0	— —	0	— —	0	— —	0	— —	1	(1/0/0)	**1**	**(1/0/0)**	**0.46**
Slightly wavy													
narrow	2	(2/0/0)	1	(1/0/0)	0	— —	0	— —	0	— —	**3**	**(3/0/0)**	**1.37**
medium	8	(8/0/0)	7	(7/0/0)	0	— —	1	(1/0/0)	1	(1/0/0)	**17**	**(17/0/0)**	**7.76**
wide	1	(0/1/0)	8	(6/2/0)	0	— —	0	— —	0	— —	**9**	**(6/3/0)**	**4.11**
Highly wavy													
narrow	0	— —	1	(1/0/0)	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.46**
medium	0	— —	1	(1/0/0)	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.46**
wide	2	(2/0/0)	12	(12/0/0)	0	— —	0	— —	1	(1/0/0)	**15**	**(15/0/0)**	**6.85**
Straight and Slightly wavy													
wide and wide	0	— —	1	(0/0/1)	1	(0/1/0)	0	— —	0	— —	**2**	**(0/1/1)**	**0.91**
Straight and Unid. line													
wide and narrow	0	— —	0	— —	0	— —	1	(0/0/1)	0	— —	**1**	**(0/0/1)**	**0.46**
Unidentifiable line													
narrow	7	(7/0/0)	3	(3/0/0)	2	(2/0/0)	2	(2/0/0)	0	— —	**14**	**(14/0/0)**	**6.39**
medium	2	(2/0/0)	3	(3/0/0)	0	— —	0	— —	0	— —	**5**	**(5/0/0)**	**2.28**
wide	4	(3/1/0)	7	(7/0/0)	0	— —	1	(0/1/0)	2	(0/2/0)	**14**	**(10/4/0)**	**6.39**
narrow and wide	0	— —	3	(3/0/0)	0	— —	0	— —	0	— —	**3**	**(3/0/0)**	**1.37**
Dots													
narrow	1	(1/0/0)	0	— —	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.46**
medium	1	(1/0/0)	3	(3/0/0)	0	— —	0	— —	0	— —	**4**	**4/0/0)**	**1.83**
wide	1	(1/0/0)	1	(1/0/0)	0	— —	0	— —	0	— —	**2**	**(2/0/0)**	**0.91**
Dabbing													
medium	1	(1/0/0)	0	— —	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.46**
wide	6	(6/0/0)	2	(1/0/1)	1	(0/0/1)	0	— —	2	(1/1/0)	**11**	**(8/1/2)**	**5.02**
medium and wide	0	— —	0	— —	0	— —	0	— —	1	(1/0/0)	**1**	**(1/0/0)**	**0.46**
Swastika													
wide	0	— —	2	(2/0/0)	0	— —	0	— —	0	— —	**2**	**(2/0/0)**	**0.91**
Multiple Design Elements													
Vertical Lines and Dots													
Straight and Dots													
wide and medium	0	— —	0	— —	0	— —	0	— —	1	(1/0/0)	**1**	**(1/0/0)**	**0.46**
Curved Line and Unknown Line Orientation													
Curved and Highly wavy													
wide and wide	0	— —	2	(2/0/0)	0	— —	0	— —	0	— —	**2**	**(2/0/0)**	**0.91**

(continued)

Table 7-13. Concluded.

	Rockport Black												
	var. Rockport		*var. Lolita*		*var. Kuy Bayou*		*var. Spring Bayou*		*var. Elm Bayou*				
	No.	(Ext./Int./Both)*	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	**No.**	**(Ext./Int./Both)**	**% Total**
Perpendicular Lines and Parallel Lines													
Straight and Straight													
wide and wide	0	— —	1	(1/0/0)	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.46**
Unknown Line Orientation and Unidentifiable Design													
Straight and Unid. Design													
wide and wide	0	— —	1	(1/0/0)	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.46**
Unidentifable Design													
medium	2	(2/0/0)	1	(1/0/0)	0	— —	0	— —	1	(1/0/0)	**4**	**(4/0/0)**	**1.83**
wide	2	(1/1/0)	0		0	— —	0	— —	0	— —	**2**	**(1/1/0)**	**0.91**
narrow and wide	0	— —	1	(1/0/0)	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.46**
Total	**68**	**(62/6/0)**	**113**	**(99/12/2)**	**10**	**(8/1/1)**	**7**	**(4/1/2)**	**21**	**(17/4/0)**	**219**	**(190/24/5)**	**100.00**

* Indicates location of the design on the exterior, interior, or both the exterior and interior of the sherd.

Table 7-14. Design Elements Recorded for Sherds of Rockport Incised.

	Rockport Incised												
	var. Rockport		*var. Mission Lake*		*var. Plank Bridge*		*var. Sommerville*		*var. Mustang Lake*				
	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	**No.**	**(Ext./Int./Both)**	**% Total**
Single Design Elements													
Vertical Lines													
Straight (Single line)													
narrow	1	(1/0/0)	0	— —	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.23**
Straight (Multiple lines)													
narrow	3	(3/0/0)	0	— —	0	— —	3	(3/0/0)	0	— —	**6**	**(6/0/0)**	**1.37**
Horizontal Lines													
Straight (Single line)													
narrow	7	(7/0/0)	6	(6/0/0)	3	(3/0/0)	1	(1/0/0)	8	(8/0/0)	**25**	**(25/0/0)**	**5.69**
medium	0	— —	1	(1/0/0)	0	— —	0	— —	1	(1/0/0)	**2**	**(2/0/0)**	**0.46**
Straight (Multiple lines)													
narrow	50	(50/0/0)	58	(58/0/0)	40	(40/0/0)	22	(22/0/0)	67	(67/0/0)a	**237**	**(237/0/0)**	**53.99**
medium	0	— —	1	(1/0/0)	0	— —	0	— —	1	(1/0/0)	**2**	**(2/0/0)**	**0.46**
wide	1	(1/0/0)	1	(1/0/0)	0	— —	0	— —	1	(1/0/0)	**3**	**(3/0/0)**	**0.68**
Diagonal Lines													
Straight (Multiple lines)													
narrow	2	(2/0/0)	1	(1/0/0)	1	(1/0/0)	0	— —	0	— —	**4**	**(4/0/0)**	**0.91**
Curved Lines													
Curved (Single line)													
narrow	0	— —	1	(1/0/0)	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.23**
Perpendicular Lines													
Straight (Single line)													
narrow	0	— —	0	— —	0	— —	1	(1/0/0)	1	(1/0/0)	**2**	**(2/0/0)**	**0.46**
Straight (Multiple lines)													
narrow	1	(1/0/0)	0	— —	0	— —	0	— —	1	(1/0/0)	**2**	**(2/0/0)**	**0.46**
Parallel Lines													
Straight (Two lines)													
narrow	1	(1/0/0)	1	(1/0/0)	0	— —	0	— —	0	— —	**2**	**(2/0/0)**	**0.46**
Straight (More than two lines)													
narrow	1	(1/0/0)	1	(1/0/0)	3	(3/0/0)	2	(2/0/0)	3	(3/0/0)	**10**	**(10/0/0)**	**2.28**
Horizontal Zigzag Lines													
Zigzag (Single line)													
narrow	2	(2/0/0)	9	(9/0/0)	0	— —	0	— —	2	(2/0/0)	**13**	**(13/0/0)**	**2.96**
medium	0	— —	8	(8/0/0)	0	— —	0	— —	0	— —	**8**	**(8/0/0)**	
Chevron Pattern													
narrow	0	— —	0	— —	1	(1/0/0)	0	— —	2	(2/0/0)	**3**	**(3/0/0)**	**0.68**
Open Triangles													
Straight (Single triangle)													
narrow	0	— —	0	— —	0	— —	0	— —	1	(1/0/0)	**1**	**(1/0/0)**	**0.23**
Straight (Multiple triangles)													
narrow	0	— —	0	— —	0	— —	0	— —	3	(3/0/0)a	**3**	**(3/0/0)**	**0.68**

(continued)

Table 7-14. Continued.

	Rockport Incised												
	var. Rockport		*var. Mission Lake*		*var. Plank Bridge*		*var. Sommerville*		*var. Mustang Lake*				
	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	**No.**	**(Ext./Int./Both)**	**% Total**
Line-Filled Triangles													
Straight (Single triangle)													
narrow	0	— —	2	(2/0/0)	3	(3/0/0)	4	(4/0/0)	4	(4/0/0)	**13**	**(13/0/0)**	**2.96**
Straight (Multiple triangles)													
narrow	0	— —	5	(5/0/0)	0	— —	0	— —	1	(1/0/0)	**6**	**(6/0/0)**	**1.37**
Crosshatched Lines													
Straight													
narrow	8	(8/0/0)	1	(1/0/0)	4	(4/0/0)	0	— —	6	(6/0/0)	**19**	**(19/0/0)**	**4.33**
Crossed Lines													
Straight													
narrow	0	— —	1	(1/0/0)	0	— —	0	— —	0	— —	**1**	**(1/0/0)**	**0.23**
Multiple Design Elements													
Vertical Lines, Horizontal Lines, and Diagonal Lines													
Straight (Single line), Straight (Single line), and Straight (Multiple lines)													
narrow and narrow	0	— —	0	— —	1	(1/0/0)	0	— —	0	— —	**1**	**(1/0/0)**	**0.23**
Horizontal Lines and Diagonal Lines													
Straight (Single line) and Straight (Single line)													
narrow and narrow	2	(2/0/0)	1	(1/0/0)	0	— —	0	— —	0	— —	**3**	**(3/0/0)**	**0.68**
Straight (Single line) and Straight (Multiple lines)													
narrow and narrow	0	— —	0	— —	0	— —	0	— —	1	(1/0/0)	**1**	**(1/0/0)**	**0.23**
Straight (Multiple lines) and Straight (Single line)													
narrow and narrow	0	— —	0	— —	1	(1/0/0)	1	(1/0/0)	1	(1/0/0)	**3**	**(3/0/0)**	**0.68**
Straight (Multiple lines) and Straight (Multiple lines)													
narrow and narrow	0	— —	0	— —	3	(3/0/0)	0	— —	2	(2/0/0)	**5**	**(5/0/0)**	**1.14**
Horizontal Lines and Crosshatched Lines													
Straight (Multiple lines) and Straight (Single line)													
narrow and narrow	0	— —	0	— —	1	(1/0/0)	2	(2/0/0)	1	(1/0/0)	**4**	**(4/0/0)**	**0.91**
Horizontal Lines and Crossed Lines													
Straight (Multiple lines) and Straight (Multiple lines)													
narrow and narrow	0	— —	2	(2/0/0)	0	— —	0	— —	0	— —	**2**	**(2/0/0)**	**0.46**

(continued)

Table 7-14. Continued.

	Rockport Incised											
	var. Rockport		*var. Mission Lake*		*var. Plank Bridge*		*var. Sommerville*		*var. Mustang Lake*			
	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	**No.**	**(Ext./Int./Both)**	**% Total**
Horizontal Lines and Open Triangles													
Straight (Single line) and Straight (Multiple triangles) *narrow and narrow*	0	— —	0	— —	0	— —	0	— —	1	(1/0/0)b	**1**	**(1/0/0)**	**0.23**
Straight (Multiple lines) and Straight (Multiple triangles) *narrow and narrow*	0	— —	2	(2/0/0)	0	— —	0	— —	9	(9/0/0)c	**11**	**(11/0/0)**	**2.51**
Horizontal Lines and Line-Filled Triangles													
Straight (Multiple lines) and Straight (Single triangle) *narrow and narrow*	2	(2/0/0)	2	(2/0/0)	0	— —	0	— —	2	(2/0/0)	**6**	**(6/0/0)**	**1.37**
Horizontal Lines with Crosshatched Overincising													
Straight (Multiple lines) and Straight (Multiple lines) *narrow and narrow*	2	(2/0/0)	3	(3/0/0)	2	(2/0/0)	1	(1/0/0)	2	(2/0/0)	**10**	**(10/0/0)**	**2.28**
Horizontal Lines with Vertical Overincising													
Straight (Multiple lines) and Straight (Multiple lines) *narrow and narrow*	0	— —	2	(2/0/0)	4	(4/0/0)	0	— —	4	(4/0/0)	**10**	**(10/0/0)**	**2.28**
Horizontal Lines with Diagonal Overincising													
Straight (Multiple lines) and Straight (Multiple lines) *narrow and narrow*	0	— —	1	(1/0/0)	0	— —	1	(1/0/0)	0	— —	**2**	**(2/0/0)**	**0.46**
Horizontal Lines and Punctations													
Straight (Multiple lines) and Punctations *narrow and narrow*	0	— —	0	— —	0	— —	0	— —	1	(1/0/0)	**1**	**(1/0/0)**	**0.23**
Perpendicular Lines and Parallel Lines													
Straight (Multiple lines) and Straight (Multiple lines) *narrow and narrow*	1	(1/0/0)	0	— —	1	(1/0/0)	1	(1/0/0)	0	— —	**3**	**(3/0/0)**	**0.68**

(continued)

Table 7-14. Concluded.

	Rockport Incised												
	var. Rockport		*var. Mission Lake*		*var. Plank Bridge*		*var. Sommerville*		*var. Mustang Lake*				
	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	No.	(Ext./Int./Both)	**No.**	**(Ext./Int./Both)**	**% Total**
Unidentifable Design													
Unknown Line Orientation													
Straight (Single line)													
narrow	0	——	0	——	0	——	0	——	2	(2/0/0)	**2**	**(2/0/0)**	**0.46**
Straight (Multiple lines)													
narrow	1	(1/0/0)	0	——	0	——	1	(1/0/0)	1	(1/0/0)	**3**	**(3/0/0)**	**0.68**
Unidentified (Single line)													
narrow	2	(2/0/0)	1	(1/0/0)	0	——	0	——	1	(1/0/0)	**4**	**(4/0/0)**	**0.91**
Unidentified (Multiple lines)													
narrow	0	——	0	——	0	——	0	——	2	(2/0/0)	**2**	**(2/0/0)**	**0.46**
Unknown Line Orientation and Punctations													
Unid. (Single line) and Punctation													
narrow and narrow	0	——	1	(1/0/0)	0	——	0	——	0	——	**1**	**(1/0/0)**	**0.23**
Total	**87**	**(90/0/0)**	**112**	**(112/0/0)**	**68**	**(70/0/0)**	**40**	**(39/0/0)**	**132**	**(113/0/0)**	**439**	**(439/0/0)**	**100.00**

a Two sherds are from the partially reconstructed jar found in Sample Unit N70W110.
b From the partially reconstructed jar found in Sample Unit N70W110.
c Five sherds are from the partially reconstructed jar found in Sample Unit N70W110.

Rockport Black-on-gray, Rockport Black, and Rockport Incised, the three types with the greatest number of decorated sherds. The small sample of decorated sherds from the surface collections (*n*=106) are not included on these tables. Since these sherds could not be related to any specific analysis unit within the site, it was felt that they would be of little use in identifying fine-scale chronological, social, and/or functional differences at Guadalupe Bay. However, unique sherds from the surface will be discussed as necessary. Also listed on Tables 7-12 through 7-14 are the various varieties associated with each design element, plus the location of the design element on the vessel (exterior, interior, or both).

Rockport Black-on-gray Design Elements

There were over 1,600 sherds of Rockport Black-on-gray (see Table 7-12). As to be expected in a collection consisting of thousands of small sherds, the greatest quantity included sherds with single design elements that exhibited straight lines of unknown orientation (*n*=419; 25.9 percent). This was followed by painted lines both of unidentifiable type and unknown orientation (*n*=336; 20.7 percent). Sherds with slightly wavy lines of unknown orientation comprised the next most common group (*n*=223; 13.8 percent), followed by sherds with curved lines (*n*=110; 6.8 percent), sherds with highly wavy lines of unknown orientation (*n*=106; 6.6 percent), and those with dabbed designs (*n*=99; 6.1 percent). Of the sherds containing lines of recognizable orientation, those with vertical lines were the most common (*n*=79; 4.9 percent), followed by diagonal lines (*n*=21; 1.3 percent). Sherds with dots (*n*=49; 3.0 percent) also made up a reasonable portion of the sample.

The most common group of sherds exhibiting multiple design elements contained curved lines and lines of unknown orientation (*n*=6; 0.4 percent). This was followed by sherds with dabbing and lines of unknown orientation (*n*=5; 0.3 percent), and those with dots and lines of unknown orientation (*n*=4; 0.3 percent) (see Table 7-12).

Interestingly, of all sherds exhibiting painted lines, 522 contained straight lines, while 258 contained slightly wavy lines, and 133 contained highly wavy lines. Additionally, of those sherds with painted lines, 326 exhibited narrow lines (<2 mm in width), 373 exhibited medium lines (between 2 and 4 mm in width), and 664 contained wide lines (>4 mm in width). This would suggest that the most common from of decoration for Rockport Black-on-gray at the Guadalupe Bay site consisted of relatively straight lines that were greater than 4 mm in width. Slightly wavy lines of medium width appear to represent the next most common form of decoration, followed by highly wavy lines of narrow width. These figures are somewhat misleading, however, if one realizes that many of the straight lines almost certainly represent portions of wavy lines on sherds that were too small for the full extent of the wave to be recognized. They probably are classified as "straight" more by default than by their actual form.

In a similar vein, many of the perpendicular and parallel lines may be nothing more than residue from sloppy painting where asphaltum dripped onto adjacent areas of the vessel. Likewise, some of the lines classified as "parallel" are located next to portions of sherds where asphaltum had been applied as a crack-mending agent. These lines, therefore, may simply represent dribbled asphaltum associated with the mending process, rather than intentionally painted lines. Unfortunately, none of the sherds with parallel or perpendicular lines is large enough to determine the exact nature of the lines.

At this point it may be worth noting a discrepancy between many of the sherds of Rockport Black-on-gray recovered at Guadalupe Bay with similar items reported by Ricklis (1995a:199) from sites he has examined. Ricklis noted that vessels with wavy or squiggled lines (his Rockport Black-on-gray II) did not contain bone temper in their pastes. This was in contrast to other Rockport vessels that often included bone. Such bone-tempered vessels, Ricklis suggested, were used primarily for cooking and the bone was a necessary element added to the paste to reduce "thermal shock" (Ricklis 1995a:199). The lack of bone in the vessels with wavy lines, plus their overall finer finish, suggested that they probably served as serving or storage vessels for water or other liquids. As can be seen by Table 7-12, many of the sherds with wavy or squiggled lines from Guadalupe Bay were classified as Rockport Black-on-gray, *var. Long Mott*, the variety with bone inclusions that presumably had been added as a tempering agent. Although the authors agree with Ricklis that these vessels probably served as fine-ware items with a function or functions different from other Rockport ceramics, the data from Guadalupe Bay suggest that bone served as a common tempering agent for all forms of Rockport vessels.

Rockport Black Design Elements

The data for Rockport Black are similar to that for Rockport Black-on-gray (see Table 7-13). Again, the most common decorative category included sherds with painted straight lines of unknown orientation (*n*=62; 28.3 percent). This also was followed by unidentifiable lines of unknown orientation (*n*=36; 16.4 percent), and slightly wavy lines of unknown orientation (*n*=29; 13.2 percent). Unlike Rockport Black-on-gray, sherds with highly wavy lines of unknown orientation (*n*=17; 7.8 percent) comprised the next most common group, followed by those with dabbing (*n*=13; 5.9 percent), and those with curved lines (*n*=11; 5.0 percent). Rounding out the list were sherds with dots (*n*=7; 3.2 percent), diagonal lines (*n*=4; 1.8 percent), perpendicular lines (*n*=4; 1.83 percent), horizontal lines (*n*=3; 1.4 percent), parallel lines (*n*=3; 1.4 percent), and swastika design (*n*=2; 0.9 percent).

Only five sherds with multiple design elements were noted for Rockport Black. Of these, two sherds exhibited a curved line along with a highly wavy line of unknown orientation. The rest included individual sherds with vertical lines and dots, perpendicular lines and parallel lines, and lines of unknown orientation coupled with an unidentifiable design. Again, it should be recognized that many of the sherds with parallel and/or perpendicular lines may simply represent portions of vessels onto which asphaltum had dribbled due to careless painting or crack mending.

One sherd of particular note exhibited what may be part of a swastika design painted on the interior of a shallow bowl. The uniqueness of the sherd is enhanced further by the fact that the swastika appears to have been formed by negative painting (Figure 7-15).

Ninety of the Rockport Black sherds exhibited straight lines, 36 contained slightly wavy lines, and 21 contained highly wavy lines. Additionally, 37 Rockport Black sherds exhibited narrow lines, 43 exhibited medium lines, and 114 contained wide lines. In both the type and width of the lines, the Rockport Black sample mirrors that of the Rockport Black-on-gray group. Once again, it would appear that the application of relatively straight, wide lines was the most common form of painted decoration. Slightly wavy lines of medium width were the next most common form of decoration, followed by highly wavy lines of narrow width. Again, however, these figures may not reflect the true situation, as many of the straight lines probably are elements of wavy lines that simply were on sherds too small for proper identification.

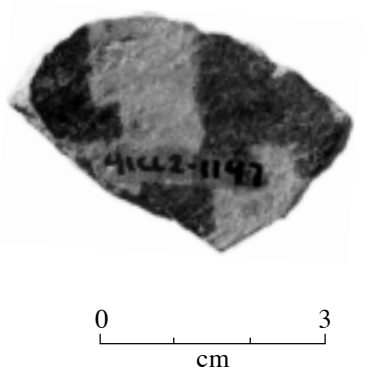

Figure 7-15. Sherd of Rockport Black, *var. Lolita* exhibiting a possible negative-painted swastika design on the interior of a shallow bowl. (See Appendix K for provenience data.)

Regardless, all of this shows the extremely close, and not unexpected, relationship between Rockport Black and Rockport Black-on-gray, at least in terms of the design elements present on the two types. Only horizontal lines and the swastika design occurred on Rockport Black sherds, to the exclusion of Rockport Black-on-gray, while open circles and triangles were present only on sherds of Rockport Black-on-gray. Perhaps most interesting of all, however, was the relatively minor percentage of sherds from both types exhibiting multiple design elements: 24 for Rockport Black-on-gray (1.5 percent) and five for Rockport Black (2.3 percent). This is in contrast to Rockport Incised, to be discussed next, which contained 63 sherds (14.4 percent) exhibiting multiple design elements.

Rockport Incised Design Elements

Single design elements associated with Rockport Incised are quite varied, although one element in particular, that of straight, multiple horizontal lines (*n*=241; 55.0 percent), clearly outnumbers all others (see Table 7-14). This is followed by straight, single horizontal lines (*n*=27; 6.2 percent), single, horizontal zigzag lines (*n*=21; 4.8 percent), cross-hatched lines (*n*=19; 4.3 percent), line-filled triangles (*n*=19; 4.3 percent), and parallel lines of unknown

orientation (*n*=12; 2.7 percent). If one considers the likelihood that many of the 27 single horizontal lines probably are from vessels that actually contained multiple horizontal lines, but are on sherds too small for more than one line to be recognized, then the abundance of the first design element noted above increases even further.

As just discussed, multiple design elements made up over 14 percent of all recognizable incised decoration. This figure may be somewhat lower than reality, since many of the single design elements undoubtedly represent portions of multiple design elements on sherds that simply were too small to contain all of the decorative field. For example, two of the three sherds with multiple, open triangles are part of the partially reconstructed vessel from Sample Unit N70W110. These sherds came from the lowest part of the decorative field and did not contain the associated horizontal lines.

One of the most common multiple design elements consists of horizontal and diagonal lines on the upper part of the vessel just below the lip (*n*=12; 2.7 percent). In most cases the diagonal lines descend downward from the lowest horizontal line, although there are examples where the diagonal lines occur above the horizontal lines. Many of the descending diagonal lines may represent portions of line-filled triangles placed below the horizontal lines; not enough of the decoration was present, however, to unquestionably support this possibility.

Another common group of multiple design elements consists of horizontal lines, almost always placed on the upper portion of the vessel just below the lip, and a multiple set of open triangles placed below the lowest horizontal line (*n*=12; 2.7 percent). This combination of horizontal lines and either incised triangles or triangular punctations is a common decorative motif on ceramics along the Gulf coast and within the Lower Mississippi Valley. It occurs on sherds of Goose Creek and San Jacinto Incised in the Galveston Bay area (Aten 1983b:Figure 12.6; W. Black 1989:16-17; Ricklis 1994a:Figures 7.15, 7.21, 7.22, 7.24) and on Coles Creek Incised on the Louisiana coast and within the Lower Mississippi Valley (Ford 1951; Phillips 1970; Williams and Brain 1983; plus numerous others). Interestingly, 10 of the 12 sherds with this combination of design elements came from the partially reconstructed *Mustang Lake* vessel from Sample Unit N70W110 (see Table 7-14). Because of the small size of one of the latter sherds, it only contained one horizontal line.

Other sherds with multiple design elements include those with horizontal lines and crosshatched overincising (*n*=10; 2.3 percent), horizontal lines and vertical overincising (*n*=10; 2.3 percent), horizontal lines and line-filled triangles (*n*=6; 1.4 percent), horizontal lines and crosshatched lines (*n*=4; 0.9 percent), perpendicular lines and parallel lines (*n*=3; 0.7 percent), and horizontal lines with diagonal overincising (*n*=2; 0.5 percent). The sherds with overincised lines (whether vertical, crosshatched, or diagonal) all form an interesting set of decorative patterns that have been illustrated on several occasions in the past (Campbell 1962:Figure 1, T-U; Suhm and Jelks 1962:Plate 67, I). More will be said of these below.

In the case of sherds with horizontal lines and crosshatched lines, the crosshatched element always occurs below the horizontal element on the exterior portion of the vessel. As with the open triangles and line-filled triangles, such crosshatched lines act as a form of embellishment beneath the horizontal lines and serve to highlight or define the overall decorative field. Ricklis (1994a:192-208) set up similar embellishments as "secondary decorative elements" in his study of the ceramics from the Mitchell Ridge site on Galveston Island.

Lastly in regard to incised sherds, it is worth noting that the vast majority exhibited straight lines. Only one sherd of *var. Mission Lake* contained a curved line (see Table 7-14). It also is worth noting the relative paucity of incised lines with medium or wide widths. Of the 438 sherds of Rockport Incised recovered from the excavations, only 12 (2.7 percent) had lines with widths between 2 and 4 mm, while only three (0.7 percent) had lines with widths greater than 4 mm. Perhaps importantly, of the 12 sherds with medium lines, eight are from sherds with single zigzag lines located immediately below the lip, and most of these probably are from one *Mission Lake* vessel.

Lip Decoration

The excavated sample produced 601 rim sherds that exhibited decoration on the lip or the lip and the very upper portion of the rim. Such decoration occurred in four principal forms: painted black bands, incised lines across a flat lip, incised vertical lines on a pointed lip, and lip notching (see Tables 7-1 and 7-3). By definition, sherds with black banding and no other decoration were classified as either Rockport Black or Rockport Black-on-gray. These

are equivalent to what Ricklis (1990b:616-617) identified as Rockport Black-on-gray I. Such sherds represent the greatest quantity of black-banded rims (*n*=465; see "Carancahua Bay" and "Steamboat Island" motifs, below), and, as such, would appear to be the most common form of decoration for Rockport Black and Rockport Black-on-gray vessels. However, because many of these sherds are relatively small, and painted designs on the body of Rockport vessels are usually limited to narrow vertical lines (most likely wavy), dots, dabs, etc., this number may be somewhat misleading. Many of the rim sherds that exhibit only black banding may, in fact, come from vessels that had some form of body painting. Unfortunately, without either whole vessels or relatively large sherds, it is impossible to determine the exact relationship between banded rims and decorated bodies. If, on the other hand, black-banded sherds also exhibited incised lines, red film, or polychrome decoration, then they were classified as Rockport Incised, Rockport Red, or Rockport Polychrome, respectively.

The other three types of lip decoration are much less numerous. Unlike the banded sherds, these decorations alone did not place the sherd into a specific type. For example, sherds with lines across the lip were not classed as Rockport Incised unless they also exhibited incised decoration elsewhere. As such, these types of decoration are more akin to "modes of decoration" that crosscut type and variety boundaries (see Phillips 1970:28-29 for a discussion on modes). Lip notching is a good case in point, as it was found on most of the common Rockport types: Rockport Black, Rockport Black-on-gray, and Rockport Plain. Ricklis (1990b:616) earlier had classified such notched sherds as the type Rockport Crenelated. Under the current classification system, lip notching is considered a rim mode and not a separate type. Each of the four forms of lip decoration are discussed below.

*Black Banding (***n=*588)**

As can be seen by Table 7-15, black banding occurred on the top of the lip if the vessel had a flat lip (Top), on the exterior or interior portion of the rim just below the lip (usually on vessels with pointed rims) (Ext. or Int.), on the lip and either the exterior or interior portion of the rim (Top/Ext. and Top/Int.), and on the top and both the exterior and interior parts of the rim (All). As with the painted and incised design elements discussed above, the black banding was further sorted by the width of the band: narrow (<2 mm), medium (2 to 4 mm), and wide (>4 mm).

Black banding occurred on 163 sherds of Rockport Black (representing 27.7 percent of the total banded sherds and 27.1 percent of all sherds with lip decoration), 398 sherds of Rockport Black-on-gray (67.7 percent of all banded sherds and 66.2 percent of all sherds with lip decoration), 24 sherds of Rockport Incised (4.1 and 4.0 percent, respectively), two sherds of Rockport Polychrome (0.3 and 0.3 percent, respectively) and one sherd of Rockport Red (0.2 and 0.2 percent), with the greatest quantity (*n*=139; 23.6 percent) associated with Rockport Black-on-gray, *var. Rockport*. Of all banded sherds, the greatest quantity (*n*=368; 62.6 percent) exhibited banding on the top of the lip and both the exterior and interior portions of the rim. Sherds with banding only on the top of the lip (*n*=72; 12.2 percent) and on the top of the lip and either the exterior portion of the rim (*n*=63; 10.7 percent) or the interior portion of the rim (*n*=77; 13.1 percent) were present in relatively moderate amounts. Sherds with banding only on the exterior (*n*=1; 0.2 percent) or interior (*n*=2; 0.3 percent) portions of the rim, without any associated banding on the lip, were rare. The largest number of sherds (*n*=426; 72.5 percent) contained wide bands, followed by sherds with medium bands (*n*=107; 18.2 percent), and sherds with narrow bands (*n*=55; 9.4 percent). Clearly, the most common form of painted bands (*n*=340; 57.8 percent) consisted of those sherds with wide bands and band placement on the top of the lip and both the exterior and interior portions of the rim.

*Incised Lines Across Lip (***n=*11)**

The next most common lip decoration occurred on 11 sherds and consisted of incised lines placed across the top of a flat lip (see Table 7-15). These lines either were positioned perpendicular to the long axis of the lip (*n*=8; 72.7 percent) or were slanted at about a 45-degree angle to the long axis (*n*=3; 27.3 percent). Lip lines occurred on six sherds of Rockport Black (54.6 percent), two sherds of Rockport Black-on-gray (18.2 percent), and three sherds of Rockport Plain (27.3 percent). All incised lines were of the narrow version. Somewhat surprisingly, no incised lips were associated with any of the sherds of Rockport Incised.

*Vertical Incised Lines on Lip (***n=*1)**

Only one rim, a sherd of Rockport Plain, *var. Green Lake*, exhibited short, vertical incised lines

Table 7-15. Lip Decorations Recorded for Rim Sherds from Guadalupe Bay.

	Decorated Lips															
	Black Banded								Incised Lines Across Flat Lip			Incised Vertical Lines on Pointed Lip		Notched Lip		
	Top	Ext.	Int.	Top/Ext.	Top/Int.	Top/?*	All	%	Perp.	Slanted	%	No.	%	No.	%	Total	% Total
Rockport Black																
var. Elm Bayou																
narrow**	2	0	0	0	0	0	0	**0.34**	1[a]	0	**9.09**	0	**0.00**	0	**0.00**	**2**	**0.33**
medium	0	0	0	0	1	0	0	**0.17**	0	0	**0.00**	0	**0.00**	0	**0.00**	**1**	**0.17**
wide	0	0	0	2	1	0	13	**2.72**	0	0	**0.00**	0	**0.00**	0	**0.00**	**16**	**2.66**
var. Kuy Creek																
medium	1	0	0	0	0	0	0	**0.17**	0	0	**0.00**	0	**0.00**	0	**0.00**	**1**	**0.17**
wide	0	0	0	2	2	0	5	**1.53**	0	0	**0.00**	0	**0.00**	0	**0.00**	**9**	**1.50**
var. Lolita																
narrow	7	0	0	3	1	0	0	**1.87**	2[b]	0	**18.18**	0	**0.00**	2	**15.38**	**11**	**1.83**
medium	2	0	0	1	1	0	2	**1.02**	0	0	**0.00**	0	**0.00**	0	**0.00**	**6**	**1.00**
wide	0	0	0	4	2	0	32	**6.46**	0	0	**0.00**	0	**0.00**	0	**0.00**	**38**	**6.32**
var. Rockport																
narrow	6	0	0	2	0	0	0	**1.36**	0	2[c]	**18.18**	0	**0.00**	0	**0.00**	**8**	**1.33**
medium	3	0	0	5	6	0	3	**2.89**	0	0	**0.00**	0	**0.00**	0	**0.00**	**17**	**2.83**
wide	0	0	0	2	7	0	38	**7.99**	0	0	**0.00**	0	**0.00**	0	**0.00**	**47**	**7.82**
var. Spring Bayou																
narrow	1	0	0	1	1	0	0	**0.51**	0	1[d]	**9.09**	0	**0.00**	0	**0.00**	**3**	**0.50**
medium	0	0	0	0	1	0	0	**0.17**	0	0	**0.00**	0	**0.00**	0	**0.00**	**1**	**0.17**
wide	0	0	0	1	0	0	2	**0.51**	0	0	**0.00**	0	**0.00**	0	**0.00**	**3**	**0.50**
Rockport Black total	**22**	**0**	**0**	**23**	**23**	**0**	**95**	**27.72**	**3**	**3**	**54.55**	**0**	**0.00**	**2**	**15.38**	**163**	**27.12**
Rockport Black-on-gray																
var. Buffalo Lake																
narrow	10	0	0	0	0	0	2	**2.04**	2[e]	0	**18.18**	0	**0.00**	0	**0.00**	**12**	**2.00**
medium	1	1	0	1	2	0	1	**1.02**	0	0	**0.00**	0	**0.00**	0	**0.00**	**6**	**1.00**
wide	0	0	0	5	3	0	40	**8.16**	0	0	**0.00**	0	**0.00**	0	**0.00**	**48**	**7.99**
var. Hog Bayou																
narrow	2	0	0	0	0	0	0	**0.34**	0	0	**0.00**	0	**0.00**	0	**0.00**	**2**	**0.33**
medium	3	0	0	2	2	0	5	**2.04**	0	0	**0.00**	0	**0.00**	1	**7.69**	**12**	**2.00**
wide	1	0	0	4	4	0	30	**6.63**	0	0	**0.00**	0	**0.00**	0	**0.00**	**39**	**6.49**
var. Long Mott																
narrow	2	0	0	0	0	0	0	**0.34**	0	0	**0.00**	0	**0.00**	1	**7.69**	**2**	**0.33**
medium	4	0	0	1	7	0	4	**2.72**	0	0	**0.00**	0	**0.00**	0	**0.00**	**16**	**2.66**
wide	1	0	0	4	9	0	66	**13.61**	0	0	**0.00**	0	**0.00**	0	**0.00**	**80**	**13.31**
var. Mosquito Point																
medium	3	0	0	2	0	0	2	**1.19**	0	0	**0.00**	0	**0.00**	0	**0.00**	**7**	**1.16**
wide	1	0	0	4	1	2	27	**5.95**	0	0	**0.00**	0	**0.00**	0	**0.00**	**35**	**5.82**
var. Rockport																
narrow	11	0	1	0	1	1	0	**2.38**	0	0	**0.00**	0	**0.00**	0	**0.00**	**14**	**2.33**
medium	6	0	0	10	9	1	8	**5.78**	0	0	**0.00**	0	**0.00**	0	**0.00**	**34**	**5.66**
wide	1	0	1	5	9	1	74	**15.48**	0	0	**0.00**	0	**0.00**	0	**0.00**	**91**	**15.14**
Rockport Black-on-gray total	**46**	**1**	**2**	**38**	**47**	**5**	**259**	**67.69**	**2**	**0**	**18.18**	**0**	**0.00**	**2**	**15.38**	**398**	**66.22**

(continued)

Table 7-15. Concluded.

	Decorated Lips															
	Black Banded								Incised Lines Across Flat Lip			Incised Vertical Lines on Pointed Lip		Notched Lip		
	Top	Ext.	Int.	Top/Ext.	Top/Int.	Top/?*	All	%	Perp.	Slanted	%	No.	%	No.	%	Total	% Total
Rockport Incised																
var. Mission Lake																
medium	0	0	0	1	0	0	0	**0.17**	0	0	**0.00**	0	**0.00**	0	**0.00**	**1**	**0.17**
wide	0	0	0	1	1	0	6	**1.36**	0	0	**0.00**	0	**0.00**	0	**0.00**	**8**	**1.33**
var. Mustang Lake																
medium	1	0	0	0	0	0	0	**0.17**	0	0	**0.00**	0	**0.00**	0	**0.00**	**1**	**0.17**
wide	0	0	0	0	1	0	4	**0.85**	0	0	**0.00**	0	**0.00**	0	**0.00**	**5**	**0.83**
var. Plank Bridge																
medium	1	0	0	0	0	0	0	**0.17**	0	0	**0.00**	0	**0.00**	0	**0.00**	**1**	**0.17**
wide	0	0	0	0	2	0	1	**0.51**	0	0	**0.00**	0	**0.00**	0	**0.00**	**3**	**0.50**
var. Rockport																
medium	0	0	0	0	1	0	0	**0.17**	0	0	**0.00**	0	**0.00**	0	**0.00**	**1**	**0.17**
wide	0	0	0	0	2	0	2	**0.68**	0	0	**0.00**	0	**0.00**	0	**0.00**	**4**	**0.67**
Rockport Incised total	**2**	**0**	**0**	**2**	**7**	**0**	**13**	**4.08**	**0**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**24**	**3.99**
Rockport Plain																
var. Green Lake																
narrow	0	0	0	0	0	0	0	**0.00**	0	0	**0.00**	1	**100.00**	0	**0.00**	**1**	**0.17**
var. Guadalupe																
narrow	0	0	0	0	0	0	0	**0.00**	2	0	**18.18**	0	**0.00**	2	**15.38**	**4**	**0.67**
medium	0	0	0	0	0	0	0	**0.00**	0	0	**0.00**	0	**0.00**	2	**15.38**	**2**	**0.33**
var. Rockport																
narrow	0	0	0		0	0	0	**0.00**	1	0	**9.09**	0	**0.00**	0	**0.00**	**1**	**0.17**
medium	0	0	0	0	0	0	0	**0.00**	0	0	**0.00**	0	**0.00**	3	**23.08**	**3**	**0.50**
wide	0	0	0	0	0	0	0	**0.00**	0	0	**0.00**	0	**0.00**	2	**15.38**	**2**	**0.33**
Rockport Plain total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0.00**	**3**	**0**	**27.27**	**1**	**100.00**	**9**	**69.23**	**13**	**2.16**
Rockport Polychrome																
var. unspecified																
narrow	1	0	0	0	0	0	0	**0.17**	0	0	**0.00**	0	**0.00**	0	**0.00**	**1**	**0.17**
medium	0	0	0	0	0	0	1	**0.17**	0	0	**0.00**	0	**0.00**	0	**0.00**	**1**	**0.17**
Rockport Polychrome total	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0.34**	**0**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**2**	**0.33**
Rockport Red																
var. unspecified																
medium	1	0	0	0	0	0	0	**0.17**	0	0	**0.00**	0	**0.00**	0	**0.00**	**1**	**0.17**
Rockport Red total	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0.17**	**0**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**1**	**0.17**
Site Total	**72**	**1**	**2**	**63**	**77**	**5**	**368**	**100.00**	**8**	**3**	**100.00**	**1**	**100.00**	**13**	**100.00**	**601**	**100.00**

* Indicates presence of black paint on top of lip, plus either exterior or interior of rim, but unsure of latter placement due to small size of sherd.
** Indicates width of painted bands, incised lines, or notches. Narrow = <2mm. Medium = 2 to 4 mm. Wide = >4 mm.
a Sherd contains asphaltum on top of lip. For that reason it also is listed under black banded. The sherd is counted only once, however, in the total columns at the right of the table.
b One sherd contains asphaltum on top of lip; other contains asphaltum on top and interior of lip. For those reasons they also are listed under black banded. The sherds are counted only once, however, in the total columns to the right.
c One sherd contains asphaltum on top of lip; other contains asphaltum on top and exterior of lip. For those reasons they also are listed under black banded. The sherds are counted only once, however, in the total columns to the right.
d Sherd contains asphaltum on top and interior of lip. For that reason it also is listed under black banded. The sherd is counted only once, however, in the total columns at the right of the table.
e Sherd contains asphaltum on top of lip. For that reason it also is listed under black banded. The sherd is counted only once, however, in the total columns at the right of the table.

on the exterior of a pointed lip (see Table 7-15). Although this represents a unique form of lip treatment, the lack of any comparative specimens limits further discussion at this point.

Lip Notching (n=13)

The final form of lip decoration, that of lip notching, was present on 13 sherds at Guadalupe Bay (see Table 7-15 and Figure 7-16). Included were two sherds of Rockport Black (15.4 percent), two sherds of Rockport Black-on-gray (15.4 percent), and nine sherds of Rockport Plain (69.2 percent). Of the latter, four examples occurred on *var. Guadalupe* and five occurred on *var. Rockport.* Five of the notched lips (38.5 percent) contained notches that were less than 2 mm across, six sherds (46.2 percent) exhibited notches between 2 and 4 mm in width, and two sherds (15.4 percent) had notches that were greater than 4 mm across.

Discussion of Lip Decoration

Overall, it is interesting, but certainly not unusual, to note the strong relationship between banded rim decoration and Rockport Black and Rockport Black-on-gray (561 of 588 sherds; 95.4 percent).[7] Obviously, a painted vessel was likely to receive a painted rim. In contrast, however, was the lack of any relationship between sherds of Rockport Incised and the various incised lip treatments. In fact, as can be seen in Table 7-15, 24 sherds of Rockport Incised had banded rims, but none had any incised lines on the lip. One would have expected incised sherds to have received incised lip decoration, but that apparently did not occur at Guadalupe Bay.

Also interesting is the relatively strong relationship between notched lips and Rockport Plain (9 of 13 sherds; 69.2 percent). Although notching occurs on several ceramic types, it apparently was the preferred form of lip decoration on plain vessels. Likewise, four (33.3 percent) of the 12 sherds with incised lips were classed as Rockport Plain.

In addition to the above, an effort was made to examine the relationships of the different decorated lip forms to the various analysis units identified at Guadalupe Bay. It was hoped that potential chronological data and/or intrasite spatial patterning might be recognized. As such, Tables 7-16 through 7-18 list the three main forms of lip decoration (black banding, incising, and notching) and their associated analysis units.

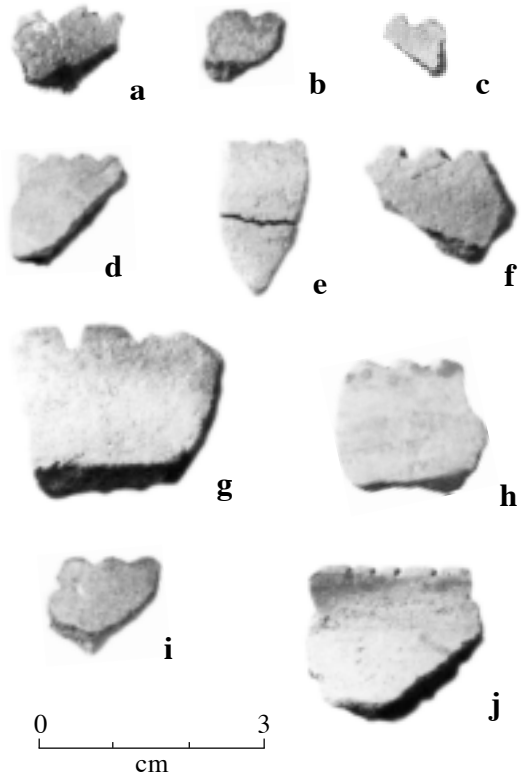

Figure 7-16. Notched lips. (a-d) Notched lips of Rockport Plain, *var. Rockport*; (e-g) Notched lips of Rockport Plain, *var. Guadalupe*; (h) Notched lip of Rockport Plain, *var. Seadrift*; (i-j) Notched lips of Rockport Black, *var. Lolita*. (See Appendix K for provenience data.)

Rims with black banding were found throughout most analysis units (see Table 7-16), although, as noted many times earlier, those found in AUs 8 through 14 clearly were displaced downward by bioturbation or, in the case of AU 13, may have been mixed accidentally during the waterscreening operation. As with the distribution of all previously

[7] Obviously, this strong relationship is heightened by the fact that all banded sherds without associated body decoration also were classed as Rockport Black or Rockport Black-on-gray. However, 96 sherds (17.1 percent) of these two types included both lip banding and body painting, suggesting that the relationship is legitimate.

Table 7-16. Distribution of Sherds with Black Lip Banding, by Analysis Unit.

	Analysis Units													
	AU 1		AU 2		AU 3		AU 4		AU 5		AU 6		AU 8	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Rockport Black														
var. Elm Bayou														
Top	0	0.00	1	1.09	1	0.56	0	0.00	0	0.00	0	0.00	0	0.00
Top/Exterior	0	0.00	0	0.00	1	0.56	0	0.00	0	0.00	1	1.37	0	0.00
Top/Interior	0	0.00	0	0.00	0	0.00	0	0.00	1	1.09	1	1.37	0	0.00
Top/Exterior/Interior	1	2.17	3	3.26	4	2.26	0	0.00	1	1.09	3	4.11	1	6.67
var. Kuy Creek														
Top	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	1.37	0	0.00
Top/Exterior	1	2.17	0	0.00	1	0.56	0	0.00	0	0.00	0	0.00	0	0.00
Top/Interior	0	0.00	0	0.00	1	0.56	0	0.00	0	0.00	1	1.37	0	0.00
Top/Exterior/Interior	2	4.35	0	0.00	3	1.69	0	0.00	0	0.00	0	0.00	0	0.00
var. Lolita														
Top	0	0.00	1	1.09	6	3.39	0	0.00	1	1.09	1	1.37	0	0.00
Top/Exterior	2	4.35	0	0.00	3	1.69	1	1.41	0	0.00	2	2.74	0	0.00
Top/Interior	0	0.00	1	1.09	1	0.56	0	0.00	2	2.17	0	0.00	0	0.00
Top/Exterior/Interior	1	2.17	6	6.52	7	3.95	4	5.63	7	7.61	7	9.59	0	0.00
var. Rockport														
Top	3	6.52	0	0.00	1	0.56	1	1.41	2	2.17	2	2.74	0	0.00
Top/Exterior	0	0.00	0	0.00	5	2.82	1	1.41	3	3.26	0	0.00	0	0.00
Top/Interior	3	6.52	1	1.09	4	2.26	1	1.41	1	1.09	3	4.11	0	0.00
Top/Exterior/Interior	1	2.17	1	1.09	26	14.69	4	5.63	3	3.26	6	8.22	0	0.00
var. Spring Bayou														
Top	0	0.00	1	1.09	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Top/Exterior	0	0.00	0	0.00	0	0.00	0	0.00	1	1.09	1	1.37	0	0.00
Top/Interior	1	2.17	0	0.00	1	0.56	0	0.00	0	0.00	0	0.00	0	0.00
Top/Exterior/Interior	0	0.00	0	0.00	2	1.13	0	0.00	0	0.00	0	0.00	0	0.00
Rockport Black total	**15**	**32.61**	**15**	**16.30**	**67**	**37.85**	**12**	**16.90**	**22**	**23.91**	**29**	**39.73**	**1**	**6.67**
Rockport Black-on-gray														
var. Buffalo Lake														
Top	0	0.00	3	3.26	1	0.56	3	4.23	1	1.09	2	2.74	1	6.67
Exterior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	1.37	0	0.00
Top/Exterior	1	2.17	2	2.17	2	1.13	0	0.00	0	0.00	1	1.37	0	0.00
Top/Interior	0	0.00	1	1.09	0	0.00	0	0.00	2	2.17	2	2.74	0	0.00
Top/Exterior/Interior	3	6.52	8	8.70	12	6.78	10	14.08	6	6.52	4	5.48	0	0.00
var. Hog Bayou														
Top	1	2.17	1	1.09	2	1.13	0	0.00	2	2.17	0	0.00	0	0.00
Top/Exterior	0	0.00	0	0.00	5	2.82	1	1.41	0	0.00	0	0.00	0	0.00
Top/Interior	1	2.17	1	1.09	3	1.69	0	0.00	1	1.09	0	0.00	0	0.00
Top/Exterior/Interior	2	4.35	0	0.00	10	5.65	2	2.82	13	14.13	6	8.22	1	6.67
var. Long Mott														
Top	0	0.00	1	1.09	2	1.13	0	0.00	2	2.17	1	1.37	1	6.67
Top/Exterior	0	0.00	0	0.00	1	0.56	2	2.82	2	2.17	0	0.00	0	0.00
Top/Interior	0	0.00	4	4.35	6	3.39	1	1.41	2	2.17	3	4.11	0	0.00
Top/Exterior/Interior	3	6.52	5	5.43	22	12.43	12	16.90	18	19.57	6	8.22	0	0.00
var. Mosquito Point														
Top	0	0.00	2	2.17	1	0.56	1	1.41	0	0.00	0	0.00	0	0.00
Top/Exterior	0	0.00	0	0.00	2	1.13	1	1.41	1	1.09	1	1.37	1	6.67
Top/Interior	0	0.00	0	0.00	0	0.00	0	0.00	1	1.09	0	0.00	0	0.00
Top/?	0	0.00	0	0.00	2	1.13	0	0.00	0	0.00	0	0.00	0	0.00
Top/Exterior/Interior	1	2.17	4	4.35	9	5.08	2	2.82	5	5.43	4	5.48	1	6.67
var. Rockport														
Top	1	2.17	6	6.52	1	0.56	6	8.45	1	1.09	3	4.11	0	0.00
Interior	1	2.17	1	1.09	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Top/Exterior	3	6.52	7	7.61	2	1.13	2	2.82	0	0.00	0	0.00	1	6.67
Top/Interior	4	8.70	4	4.35	7	3.95	2	2.82	1	1.09	0	0.00	1	6.67
Top/?	0	0.00	0	0.00	1	0.56	1	1.41	0	0.00	1	1.37	0	0.00
Top/Exterior/Interior	8	17.39	25	27.17	8	4.52	12	16.90	8	8.70	5	6.85	7	46.67
Rockport Black-on-gray total	**29**	**63.04**	**75**	**81.52**	**99**	**55.93**	**58**	**81.69**	**66**	**71.74**	**40**	**54.79**	**14**	**93.33**
Rockport Incised														
var. Mission Lake														
Top/Exterior	0	0.00	1	1.09	0	0.00	0	0.00	1	1.09	0	0.00	0	0.00
Top/Interior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	1.37	0	0.00
Top/Exterior/Interior	0	0.00	0	0.00	4	2.26	0	0.00	0	0.00	0	0.00	0	0.00
var. Mustang Lake														
Top	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Top/Interior	0	0.00	0	0.00	0	0.00	0	0.00	1	1.09	0	0.00	0	0.00
Top/Exterior/Interior	0	0.00	1	1.09	2	1.13	1	1.41	0	0.00	0	0.00	0	0.00
var. Plank Bridge														
Top	1	2.17	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Top/Interior	0	0.00	0	0.00	0	0.00	0	0.00	2	2.17	0	0.00	0	0.00
Top/Exterior/Interior	0	0.00	0	0.00	1	0.56	0	0.00	0	0.00	0	0.00	0	0.00
var. Rockport														
Top/Interior	0	0.00	0	0.00	1	0.56	0	0.00	0	0.00	2	2.74	0	0.00
Top/Exterior/Interior	1	2.17	0	0.00	1	0.56	0	0.00	0	0.00	0	0.00	0	0.00
Rockport Incised total	**2**	**4.35**	**2**	**2.17**	**9**	**5.08**	**1**	**1.41**	**4**	**4.35**	**3**	**4.11**	**0**	**0.00**
Rockport Polychrome														
var. unspecified														
Top	0	0.00	0	0.00	1	0.56	0	0.00	0	0.00	0	0.00	0	0.00
Top/Exterior/Interior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	1.37	0	0.00
Rockport Polychrome total	**0**	**0.00**	**0**	**0.00**	**1**	**0.56**	**0**	**0.00**	**0**	**0.00**	**1**	**1.37**	**0**	**0.00**
Rockport Red														
var. unspecified														
Top	0	0.00	0	0.00	1	0.56	0	0.00	0	0.00	0	0.00	0	0.00
Rockport Red total	**0**	**0.00**	**0**	**0.00**	**1**	**0.56**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**
Site Total	**46**	**100.00**	**92**	**100.00**	**177**	**100.00**	**71**	**100.00**	**92**	**100.00**	**73**	**100.00**	**15**	**100.00**

(continued)

Table 7-16. Concluded.

	Analysis Units													
	AU 9		AU 10		AU 11		AU 13		AU 14		No AU			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Total	% Total
Rockport Black														
var. Elm Bayou														
Top	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**0.34**
Top/Exterior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**0.34**
Top/Interior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**0.34**
Top/Exterior/Interior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**13**	**2.21**
var. Kuy Creek														
Top	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.17**
Top/Exterior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**0.34**
Top/Interior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**0.34**
Top/Exterior/Interior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**5**	**0.85**
var. Lolita														
Top	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**9**	**1.53**
Top/Exterior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**8**	**1.36**
Top/Interior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**4**	**0.68**
Top/Exterior/Interior	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	1	14.29	**34**	**5.78**
var. Rockport														
Top	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**9**	**1.53**
Top/Exterior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**9**	**1.53**
Top/Interior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**13**	**2.21**
Top/Exterior/Interior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**41**	**6.97**
var. Spring Bayou														
Top	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.17**
Top/Exterior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**0.34**
Top/Interior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**0.34**
Top/Exterior/Interior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**0.34**
Rockport Black total	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**1**	**100.00**	**1**	**14.29**	**163**	**27.72**
Rockport Black-on-gray														
var. Buffalo Lake														
Top	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**11**	**1.87**
Exterior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.17**
Top/Exterior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**6**	**1.02**
Top/Interior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**5**	**0.85**
Top/Exterior/Interior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**43**	**7.31**
var. Hog Bayou														
Top	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**6**	**1.02**
Top/Exterior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**6**	**1.02**
Top/Interior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**6**	**1.02**
Top/Exterior/Interior	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	0	0.00	**35**	**5.95**
var. Long Mott														
Top	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**7**	**1.19**
Top/Exterior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**5**	**0.85**
Top/Interior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**16**	**2.72**
Top/Exterior/Interior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	4	57.14	**70**	**11.90**
var. Mosquito Point														
Top	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**4**	**0.68**
Top/Exterior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**6**	**1.02**
Top/Interior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.17**
Top/?	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**0.34**
Top/Exterior/Interior	3	27.27	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**29**	**4.93**
var. Rockport														
Top	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**18**	**3.06**
Interior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**0.34**
Top/Exterior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**15**	**2.55**
Top/Interior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**19**	**3.23**
Top/?	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**3**	**0.51**
Top/Exterior/Interior	8	72.73	0	0.00	0	0.00	0	0.00	0	0.00	1	14.29	**82**	**13.95**
Rockport Black-on-gray total	**11**	**100.00**	**0**	**0.00**	**0**	**0.00**	**1**	**100.00**	**0**	**0.00**	**5**	**71.43**	**398**	**67.69**
Rockport Incised														
var. Mission Lake														
Top/Exterior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**0.34**
Top/Interior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.17**
Top/Exterior/Interior	0	0.00	1	100.00	1	100.00	0	0.00	0	0.00	0	0.00	**6**	**1.02**
var. Mustang Lake														
Top	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	14.29	**1**	**0.17**
Top/Interior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.17**
Top/Exterior/Interior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**4**	**0.68**
var. Plank Bridge														
Top	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.17**
Top/Interior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**0.34**
Top/Exterior/Interior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.17**
var. Rockport														
Top/Interior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**3**	**0.51**
Top/Exterior/Interior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**0.34**
Rockport Incised total	**0**	**0.00**	**1**	**100.00**	**1**	**100.00**	**0**	**0.00**	**0**	**0.00**	**1**	**14.29**	**24**	**4.08**
Rockport Polychrome														
var. unspecified														
Top	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.17**
Top/Exterior/Interior	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.17**
Rockport Polychrome total	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**2**	**0.34**
Rockport Red														
var. unspecified														
Top	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.17**
Rockport Red total	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	0.00	**0**	**0.00**	**1**	**0.17**
Site Total	**11**	**100.00**	**1**	**100.00**	**1**	**100.00**	**1**	**100.00**	**1**	**100.00**	**7**	**100.00**	**588**	**100.00**

Table 7-17. Distribution of Sherds with Incised Lips, by Analysis Unit.

	Analysis Units									
	AU 3		AU 4		AU 5		AU 6			
	No.	%	No.	%	No.	%	No.	%	Total	% Total
Rockport Black										
var. Elm Bayou										
Flat lip, perpendicular lines	1	20.00	0	0.00	0	0.00	0	0.00	**1**	**8.33**
var. Lolita										
Flat lip, perpendicular lines	0	0.00	0	0.00	2	100.00	0	0.00	**2**	**16.67**
var. Rockport										
Flat lip, slanted lines	1	20.00	0	0.00	0	0.00	1	100.00	**2**	**16.67**
var. Spring Bayou										
Flat lip, slanted lines	1	20.00	0	0.00	0	0.00	0	0.00	**1**	**8.33**
Rockport Black total	**3**	**60.00**	**0**	**0.00**	**2**	**100.00**	**1**	**100.00**	**6**	**50.00**
Rockport Black-on-gray										
var. Buffalo Lake										
Flat lip, perpendicular lines	0	0.00	2	50.00	0	0.00	0	0.00	**2**	**16.67**
Rockport Black-on-gray total	**0**	**0.00**	**2**	**50.00**	**0**	**0.00**	**0**	**0.00**	**2**	**16.67**
Rockport Plain										
var. Green Lake										
Pointed lip, vertical lines	0	0.00	1	25.00	0	0.00	0	0.00	**1**	**8.33**
var. Guadalupe										
Flat lip, perpendicular lines	2	40.00	0	0.00	0	0.00	0	0.00	**2**	**16.67**
var. Rockport										
Flat lip, perpendicular lines	0	0.00	1	25.00	0	0.00	0	0.00	**1**	**8.33**
Rockport Plain total	**2**	**40.00**	**2**	**50.00**	**0**	**0.00**	**0**	**0.00**	**4**	**33.33**
Site Total	**5**	**100.00**	**4**	**100.00**	**2**	**100.00**	**1**	**100.00**	**12**	**100.00**

discussed ceramics at Guadalupe Bay, the majority of the black banded rims were found in those AUs associated with Block 3 (AUs 3, 5, and 6) (342 sherds; 58.2 percent). The relatively strong showing of banded lips in AU 3 (177 sherds; 30.1 percent), the uppermost portion of the Stratum 2 Rockport component, might, at first, be taken as an indication that lip banding was more common towards the latter portion of that occupation. This is supported somewhat by the total lack of banded lips from AU 7, the Stratum 5 oyster lens in Block 3 believed to be the earliest Rockport deposit uncovered. All of this is offset, however, by the recognition that the combined total for AUs 5 and 6 (n=165; 28.1 percent) is almost exactly the same as the total for AU 3. Not only does this argue against any chronological change in banding frequency, but it supports the notion expressed earlier in Chapters 5 and 6 that much of the material found in the lower part of Stratum 2 in Block 3 (AU 3) may actually represent items that had originally been deposited in Stratum 3 (AU 6), but had been displaced upward by subsequent bioturbation.

Regardless of the above, it also is interesting to note the percentages of each ceramic type across the AUs. For instance, Rockport Black amounted to 16.3 percent of the total black-banded sherds from AU 2 and 16.9 percent of black-banded sherds from AU 4, both in the area of Blocks 1 and 2 (see Table 7-16). On the other hand, Rockport Black made up 37.9, 23.9, and 39.7 percent of the black-banded sherds from AUs 3, 5, and 6, respectively, from Block 3. In contrast, Rockport Black-on-gray sherds with banded lips comprised 81.5 percent of the banded sherds in AU 2 and 82.0 percent in AU 4. In Block 3, banded lips on Rockport Black-on-gray sherds comprised 55.9, 71.7, and 54.8 percent for AUs 3, 5, and 6. These percentages suggest that Rockport Black vessels with banded lips were somewhat more common in Block 3, while similar Rockport Black-on-gray vessels

Table 7-18. Distribution of Sherds with Notched Lips, by Analysis Unit.

	Analysis Units											
	AU 2		AU 3		AU 4		AU 5		AU 6			
	No.	%	No.	%	No.	%	No.	%	No.	%	Total	% Total
Rockport Black												
var. Lolita	0	0.00	2	40.00	0	0.00	0	0.00	0	0.00	**2**	**15.38**
Rockport Black total	**0**	**0.00**	**2**	**40.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**2**	**15.38**
Rockport Black-on-gray												
var. Hog Bayou	0	0.00	1	20.00	0	0.00	0	0.00	0	0.00	**1**	
var. Long Mott	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	**1**	**7.69**
Rockport Black-on-gray total	**0**	**0.00**	**1**	**20.00**	**0**	**0.00**	**0**	**0.00**	**1**	**100.00**	**2**	**15.38**
Rockport Plain												
var. Guadalupe	1	33.33	2	40.00	0	0.00	1	33.33	0	0.00	**4**	**30.77**
var. Rockport	2	66.67	0	0.00	1	100.00	2	66.67	0	0.00	**5**	**38.46**
Rockport Plain total	**3**	**100.00**	**2**	**40.00**	**1**	**100.00**	**3**	**100.00**	**0**	**0.00**	**9**	**69.23**
Site Total	**3**	**100.00**	**5**	**100.00**	**1**	**100.00**	**3**	**100.00**	**1**	**33.33**	**13**	**100.00**

were relatively common in both areas. Although the counts are very low, it also is worth noting that all of the Rockport Polychrome and Rockport Red sherds with banded lips came from Block 3. This is in keeping with the data on those Rockport Black-on-gray sherds with white paste, as discussed above, and supports the idea that the Block 3 area was the locus of finer and more elaborately decorated ceramics than elsewhere across the site.

A few words can be said of the distribution of incised lips across the various AUs (see Table 7-17). Over half (*n*=7; 58.3 percent) were present in the lower levels of the mixed *Rangia* and oyster midden of Stratum 2 (AUs 4 and 5) along with the Stratum 3 *Rangia* deposit in Block 3 (AU 6), and this could indicate a possible early Rockport II subphase association. Although the total frequencies are relatively low, the additional fact that no incised rims were found in either AUs 1 or 2 provides some support for this potential association.

In contrast, notched lips were more common in the upper portion of the Stratum 2 deposit (AUs 2 and 3) (*n*=8; 61.5 percent), with lesser amounts in the lower part of the same deposit (AUs 4 and 5) plus the Stratum 3 *Rangia* midden in Block 3 (AU 6) (*n*=5; 38.5 percent) (see Table 7-18). Again, although the total frequencies are extremely low, this suggests that notched lips may have been more common in the later stages of the Rockport occupation at the site. Together, incised and notched lips may prove useful in the future in separating early and late Rockport components. For now, it can only be suggested that incised lips were more prevalent during early Rockport II times, and that notched lips assumed a similar role later during the Rockport phase.

Decorative Motifs

Once all excavated sherds were sorted by design element(s) and/or lip decoration, it was possible to recognize recurring decorative patterns or motifs that form the highest order of decorative intent on the part of the aboriginal potters at Guadalupe Bay. As noted earlier, such motifs consisted of single design elements if the motif was relatively simple, or multiple design elements if it was slightly more complicated. At present, there are eight motifs recognized for Rockport Incised, seven motifs for Rockport Black, and seven motifs for Rockport Black-on-gray. Each motif will be discussed individually below by type.

Since the current type-variety system of ceramic classification was developed as a means of recognizing the paste characteristics of Rockport ceramics, simply because there were so few decorated sherds available for analysis at the time it was created, it cannot be used for motif classification, although that generally is how the type-variety system is employed elsewhere in the Southeast and Lower Mississippi Valley. For that reason, a slightly modified version of the type-variety system has been employed for motif classification in the present study. Thus, motifs are given names, like varieties, but such names are enclosed in quotation marks and followed by the word "motif," whereas variety names are italicized and preceded by the abbreviation "*var*."[8] Thus, a motif is written as Rockport Incised, "Ayres Point motif," while a variety is written as Rockport Incised, *var. Mustang Lake*. By providing motifs with names, it will be possible in the future to simply incorporate these names into the type-variety system if it later is decided to eliminate the current paste-oriented type-variety system and to establish a more conventional, decoration-oriented type-variety system.

Rockport Incised Motifs

There are eight motifs recognized for Rockport Incised, based on a total of 85 sherds that are sufficiently large enough to allow for motif identification (Table 7-19). Although Rockport Incised sherds made up only a modest portion of the total ceramic assemblage at Guadalupe Bay, a reasonably large number of the specimens were recognizable to motif. Since Rockport Incised designs are almost always confined to the rim and/or upper portion of the vessel, it is possible to find individual rim sherds that contain a major portion of the overall decorative motif. This, in turn, leads to greater certainty on the part of the analyst as to which motif actually is represented. Painted vessels, on the other hand, as discussed earlier, usually employed designs that

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[8] An effort has been made to name motifs after prominent geographical landmarks in and around San Antonio, Lavaca, and Matagorda bays. In order to further clarify the nomenclature, all Rockport Incised motifs have the word "Point" included in their names, while all Rockport Black-on-gray motifs include the word "Island." Likewise, all Rockport Black motifs include the word "Bay."

Table 7-19. Decorative Motifs Recognized on Sherds of Rockport Incised at Guadalupe Bay.

	Rockport Incised											
	var. Rockport		*var. Mission Lake*		*var. Plank Bridge*		*var. Sommerville*		*var. Mustang Lake*			
	Rim	Body	Rim	Body	Rim	Body	Rim	Body	Rim	Body	Total	% Total
Motifs												
"Grassy Point"	0	8	2	6	0	5	0	2	0	5	**28**	**32.94**
"Marsh Point"	2	0	2	0	0	0	0	0	0	0	**4**	**4.71**
"Cox Point"	0	0	7	1	0	0	0	0	0	0	**8**	**9.41**
"Cedar Point"	0	0	1	0	0	1	0	1	3	0	**6**	**7.06**
"Keeran Point"	0	1	1	5	0	5	1	1	1	5	**20**	**23.53**
"Ayres Point"	0	1	0	1	0	0	0	0	1	2	**5**	**5.88**
"Bendewald Point"	0	0	1	1	0	0	0	0	6	4	**12**	**14.12**
"Foster Point"	0	0	0	1	0	0	1	0	0	0	**2**	**2.35**
Total	**2**	**10**	**14**	**15**	**0**	**11**	**2**	**4**	**11**	**16**	**85**	**100.00**

included portions of the lip, neck, and body of the vessel. Although the lip area usually was entirely painted, decoration on the neck and body portions of the vessel often was less inclusive (i.e., individual wavy lines, isolated dots, dabs, etc.), leaving relatively large, intervening, nondecorated areas. Therefore, the chance of finding groups of associated design elements on individual body sherds, even when examining thousands of examples from painted vessels, is extremely small.

Rockport Incised, "Grassy Point motif" (n=*28)*

This is the most common motif recognized on all incised pottery at Guadalupe Bay. It consists simply of a series of narrow, parallel lines incised in a horizontal band around the upper part of the exterior of the vessel (Figures 7-17 and 7-18). The lines were carelessly executed, usually on the vessel when the paste still was relatively wet. Sometimes the lines run together or, on rare occasions, cross or overlap one another. This is not true crosshatching, however, but simply the result of sloppy incising.

There are only two complete rims in the current collection that show the entire decorative field associated with the "Grassy Point motif" (see Figure 7-17, b-c). In both cases, the decoration begins immediately below the lip and extends down the neck of the vessel for a distance of between 1.2 and 1.9 cm. On the same sherds there are four and seven individual lines, respectively. Another 26 sherds lack rims, but include the lower portion of the decorative field. Thus, it is possible to safely classify these as "Grassy Point" specimens. Although not complete, these sherds exhibit between two and eight individual lines. It is possible that many of the other sherds with design elements listed as either single or multiple horizontal lines (see Table 7-14) also are from "Grassy Point" vessels. Since they lack the lower portion of the decorative field, however, such an assumption cannot be known for certain. The sherds could be from "Foster Point," "Bendewald Point," or "Ayres Point" vessels, to be discussed below.

The "Grassy Point motif" occurs on all varieties of Rockport Incised: eight sherds each on *vars. Rockport* and *Mission Lake*, five each on *vars. Plank Bridge* and *Mustang Lake*, and two on *var. Sommerville*. This diversity probably is a reflection of the relative abundance of the motif; since it occurs on more sherds than any other incised motif, it is logical that it would occur on more varieties than any other motif.

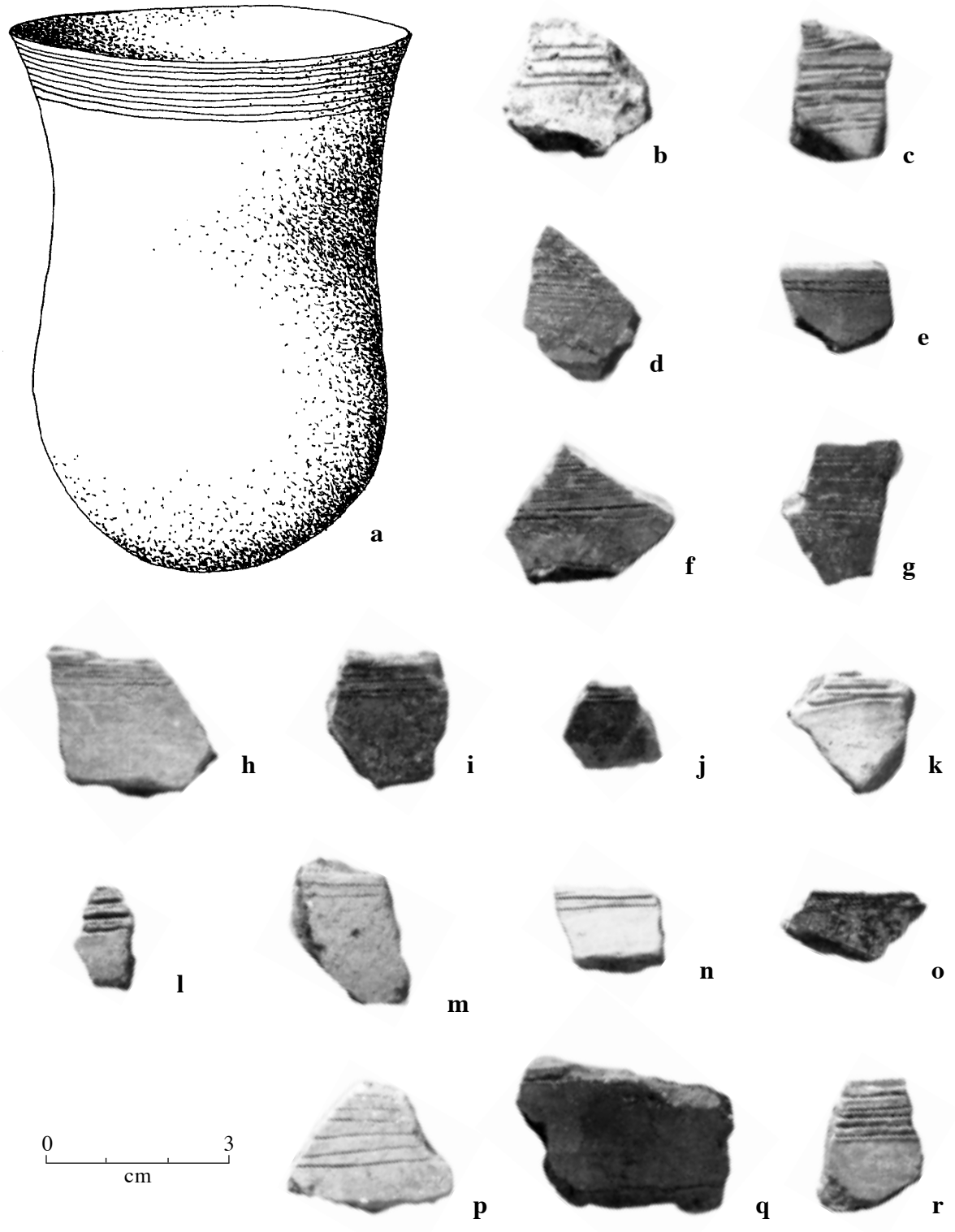

Figure 7-17. Rockport Incised, "Grassy Point motif." (a) Idealized "Grassy Point" vessel; (b-c) Complete "Grassy Point" rim sherds of Rockport Incised, *var. Mustang Lake*; (d-j) Partial "Grassy Point" rim sherds of Rockport Incised, *var. Rockport*; (k-r) Partial "Grassy Point" rim sherds of Rockport Incised, *var. Mission Lake*. (See Appendix K for provenience data.)

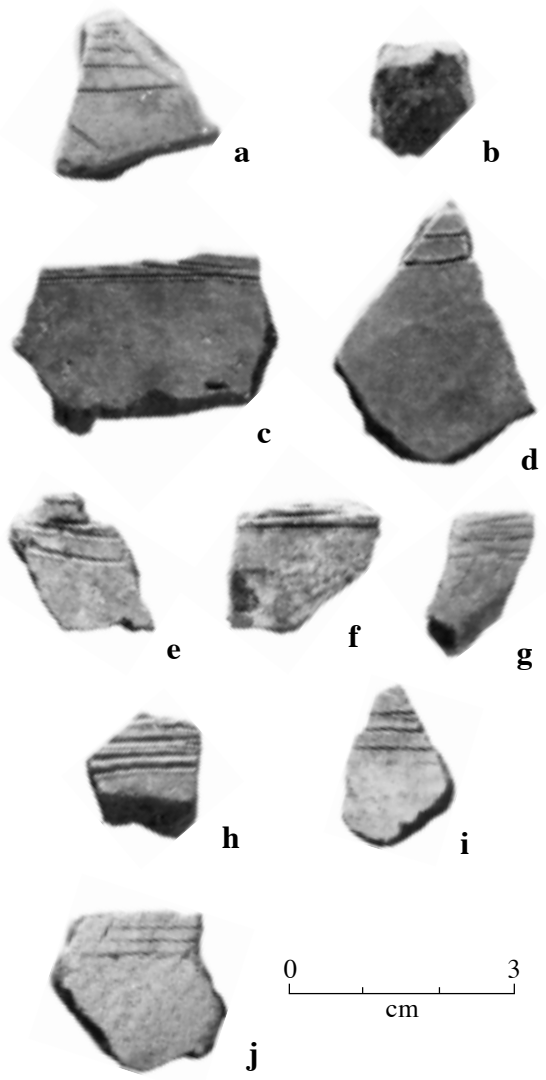

Figure 7-18. Additional sherds with the "Grassy Point motif." (a-e) Partial "Grassy Point" rims of Rockport Incised, *var. Plank Bridge*; (f-h) Partial "Grassy Point" rims of Rockport Incised, *var. Mustang Lake*; (i-j) Partial "Grassy Point" rims of Rockport Incised, *var. Sommerville*. (See Appendix K for provenience data.)

Since the "Grassy Point motif" is represented by a relatively simple design, it is no wonder that similar designs occur across most of the Texas coast and eastward into Louisiana and beyond. Clearly, the most common connection lies with examples of Goose Creek and San Jacinto Incised ceramics from the Galveston Bay area (Aten 1983b:Figures 12.4, 12.6; W. Black 1989:1-7; Ricklis 1994a:Figures 7.13, 7.14, 7.15, 7.20, 7.21) and Coles Creek Incised pottery, particularly the relatively late *Hardy* variety, from the Louisiana coast and Lower Mississippi Valley (Phillips 1970). Along the central Texas coast, the "Grassy Point motif" is known in limited amounts from a few scattered sites (Campbell 1962:332, Figure 1; Suhm and Jelks 1962:133, Plate 67), with Guadalupe Bay providing the largest sample to date. As noted by several previous researchers (Campbell 1962:332; Corbin 1974:45; Ricklis 1990b:614), this motif, along with all other motifs associated with Rockport Incised, is more common in the northern part of the range of Rockport ceramics, thereby strengthening its close ties to Goose Creek and San Jacinto Incised. Corbin (1974:45), in fact, sees the most obvious relationship with Galveston Bay ceramics that date to Aten's (1983b) Old River period, ca. A.D. 1350 to 1700.

Rockport Incised, "Marsh Point motif" (n=4)

This is another motif composed of a relatively simple, single design element. It consists of a series of narrow, parallel lines incised either in a continuous diagonal band around the upper part of the vessel's exterior, or in a series of distinct diagonal sets separated by undecorated areas, also around the upper part of the vessel's exterior (Figure 7-19). In the future, with more specimens available for study, it may be possible to separate these two patterns into different motifs. For now, they are simply listed as "Marsh Point." Generally, the lines of "Marsh Point" were more carefully incised than those of the "Grassy Point motif," apparently at a time when the clay had reached a leather-hard state. As with "Grassy Point," the "Marsh Point motif" begins directly below the lip and extends down the neck of the vessel from that point.

There are four rim sherds that can be confidently assigned to this motif. Only one contains a complete set of four individual lines (see Figure 7-19, c), with the overall set measuring 5 mm across. The rest of the sherds have between three and five lines. Since none of these latter sherds exhibits a complete set of lines, the line totals should be viewed as minimum figures. In addition, none of the sherds showed the full decorative field, so it is impossible to determine exactly how far the overall decoration extends below the lip. Since there are only four "Marsh Point" sherds present in the collection from Guadalupe Bay, they occur on a limited number of varieties: two each on Rockport Incised, *vars. Rockport* and *Mission Lake*.

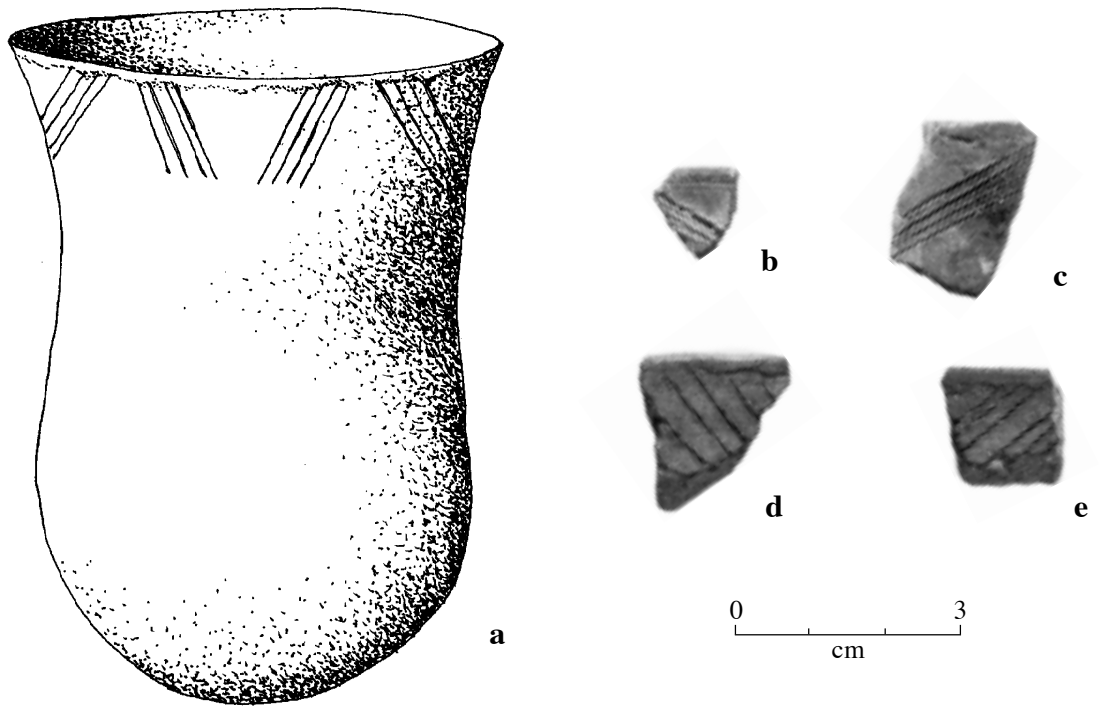

Figure 7-19. Rockport Incised, "Marsh Point motif." (a) Idealized "Marsh Point" vessel; (b-c) "Marsh Point" rims of Rockport Incised, *var. Rockport*; (d-e) "Marsh Point" rims of Rockport Incised, *var. Mission Lake.* (d and e are probably from the same vessel.) (See Appendix K for provenience data.)

Unlike "Grassy Point," the "Marsh Point motif" appears to be less closely tied to motifs in the Galveston Bay area. Although a few similar designs have been illustrated for San Jacinto and Goose Creek Incised (Aten 1983b:Figure 12.6; W. Black 1989b:26), sherds of these types more commonly exhibit vertical, rather than diagonal, incised lines (Aten 1983b:Figure 12.6; W. Black 1989b:25; Ricklis 1994a:Figures 7.16, 7.18, 7.21). Diagonal incised lines actually are more common in sherds of Mazique Incised, especially the *Manchac* variety, from coastal Louisiana and the Lower Mississippi Valley (Phillips 1970). Interestingly, no examples of "Marsh Point" are illustrated in any of the previous studies covering the coastal bend area, although it is likely that at least a few specimens occur at scattered sites in the northern part of the region.

Rockport Incised, "Cox Point motif" (n=8)

The "Cox Point motif" is a relatively common design that has been recognized as an element of Rockport ceramics since the 1930s (Potter 1930:Plate 7; Campbell 1962:332, Figure 1). It consists of a single, horizontal zigzag line that circles the upper part of the vessel's exterior just below the lip (Figure 7-20). Unlike all other Rockport Incised motifs, the line that forms "Cox Point" is relatively wide, and falls in the medium category (between 2 and 4 mm) as defined in the present study. It also is particularly sloppy, and exhibits burred edges formed by incising in a wet paste. These characteristics serve to set the motif off from other horizontal zigzag lines that most likely are elements in more-complicated motifs. All "Cox Point" examples from Guadalupe Bay are unzoned; however, specimens illustrated by other researchers (Potter 1930:Plate 7, 1 and 3) include zoned examples that could eventually be set up as a separate motif.

There are seven rims and one body sherd of "Cox Point" in the current collection. All were classified as Rockport Incised, *var. Mission Lake*. Two of the rims fit together, while three other sherds almost certainly are from the same vessel. Thus, the entire collection most likely represents the remains of only one or two vessels. Regardless, on all rim sherds the highest point (that closest to the lip) on the zig-

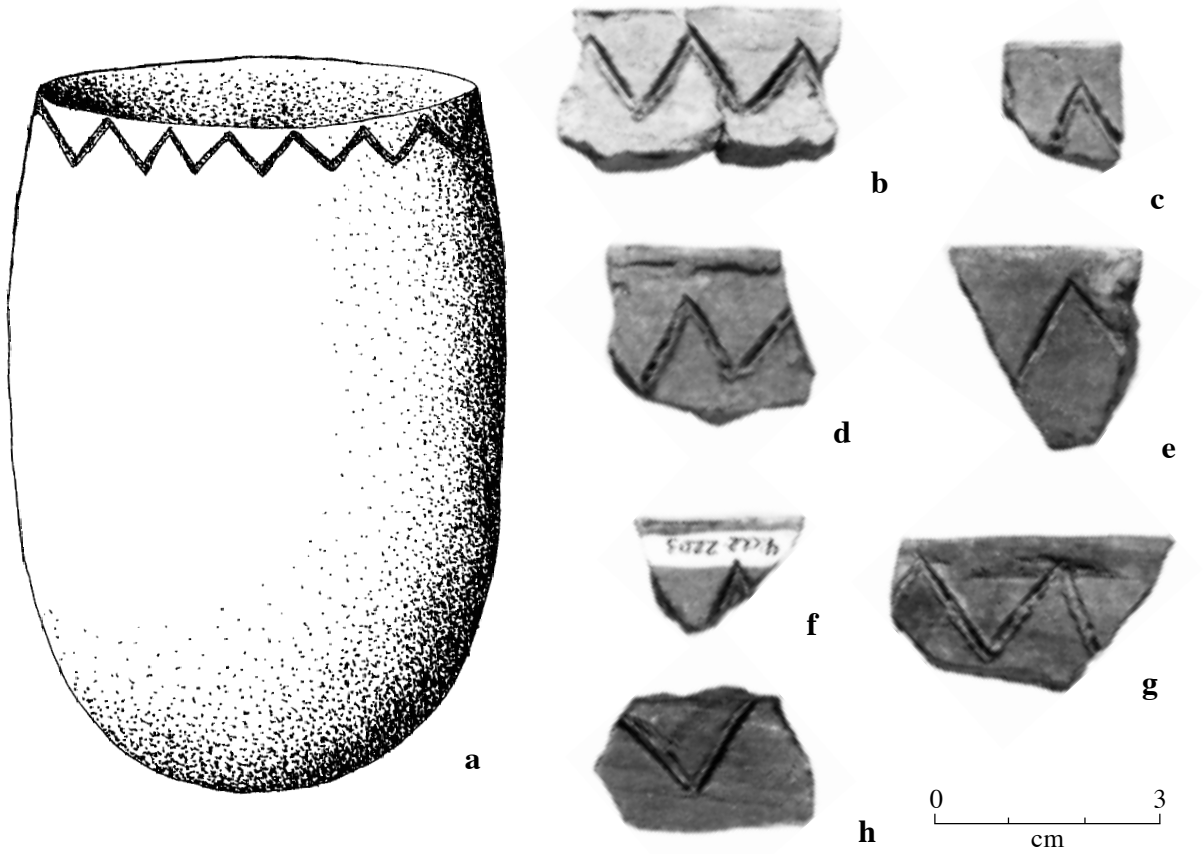

Figure 7-20. Rockport Incised, "Cox Point motif." (a) Idealized "Cox Point" vessel; (b-g) Complete "Cox Point" rim sherds of Rockport Incised, *var. Mission Lake*; (h) Partial "Cox Point" rim of Rockport Incised, *var. Mission Lake.* (b composed of two sherds that fit together; c, e, and g probably from same vessel.) (See Appendix K for provenience data.)

zag line is between 5 and 7 mm from the sherd's lip. Individual zigs (or zags) measure about 15 mm in length, while the entire zigzag pattern has an overall width of between 10 and 15 mm.

As noted, this motif has been recognized as a Rockport design since the first ceramic studies were attempted, and it has been illustrated on several previous occasions (Campbell 1962:Figure 1; Corbin 1974:Figure 14; Potter 1930:Plate 7; Suhm and Jelks 1962:Plate 67). Only a few sherds exhibiting designs similar to the "Cox Point motif" have been reported in the Galveston Bay area (Ricklis 1994a:Table 7.7, Figure 7.21, c), while no counterparts are known from the Louisiana coast or the Lower Mississippi Valley. This suggests that the "Cox Point motif" is principally confined to the central Texas coast, and probably is a true Rockport diagnostic.

Rockport Incised, "Cedar Point motif" (n=6)

This motif is represented by crosshatched lines that occur in a band that circles the upper part of the vessel's exterior (Figure 7-21). At times the crosshatched band is positioned immediately below the lip, while other examples include an obvious non-decorated zone between the top of the band and the vessel's lip. The crosshatched lines are narrow, but somewhat sloppy, suggesting that the clay was relatively wet when the vessel was incised.

There are four examples of "Cedar Point" rims in the present collection (see Figure 7-21, b-d, f). Three have the decorative band beginning immediately below the lip, while one has the band beginning 9 mm below the lip. Three were classified as Rockport Incised, *var. Mustang Lake* and one as *var. Mission Lake*. The other two speci-

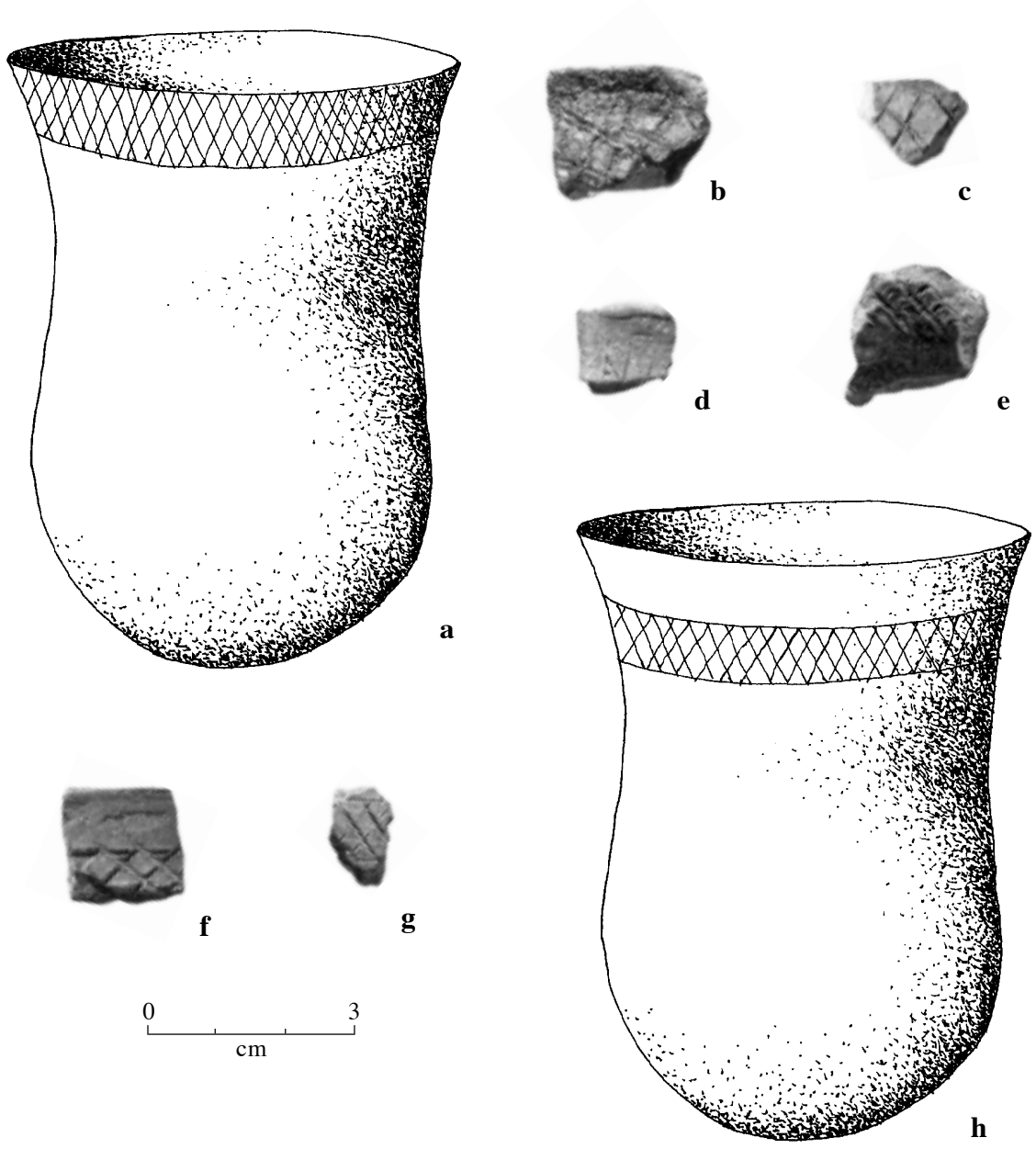

Figure 7-21. Rockport Incised, "Cedar Point motif." (a) Idealized "Cedar Point" vessel with decorative band located immediately below the lip; (b-d) Complete "Cedar Point" rims with decorative band below lip, all Rockport Incised, *var. Mustang Lake*; (e) Partial "Cedar Point" rim of Rockport Incised, *var. Plank Bridge*; (f-g) Partial "Cedar Point" rims with decoration in a band placed several millimeters below the lip (f on *Mission Lake* paste, g on *Sommerville* paste); (h) Idealized "Cedar Point" vessel with decorative band separated from the lip by a nondecorated zone. (See Appendix K for provenience data.)

mens are body sherds that exhibit enough of the decorative field to allow for their identification as "Cedar Point." One is on *Plank Bridge* paste, and the other is on *Sommerville* paste. Additional examples of crosshatching are present in the collection from Guadalupe Bay, but, since none is a rim or contains a large enough area to identify the decorative band, it is impossible to determine if these latter sherds are examples of the "Cedar Point motif" or if they are parts of the crosshatched

element associated with the "Foster Point motif," to be discussed below.

Rare examples of "Cedar Point" have been noted and/or illustrated by past researchers working with Rockport ceramics (Campbell 1962:332, Figure 1; Suhm and Jelks 1962:133). A similar design more commonly occurs on Goose Creek and San Jacinto Incised sherds from the upper Texas coast (W. Black 1989b:23, S-4; Corbin 1974:Figure 14; Ricklis 1994a:Table 7.7, Figures 7.17, 7.19, 7.23) and on sherds of the type Harrison Bayou Incised from the Louisiana coast and Lower Mississippi Valley (Phillips 1970). All of this implies an upper coast "connection" for the motif.

Rockport Incised, "Keeran Point motif" (n=20)

The general decorative idea of the "Keeran Point motif" is similar to that of "Cedar Point," with the important exception that "Keeran Point" exhibits multiple horizontal lines with subsequent overincising. At Guadalupe Bay, "Keeran Point" comes in three basic patterns: horizontal lines with vertical overincised lines (Figure 7-22), horizontal lines with diagonal overincised lines (Figure 7-23), and horizontal lines with crosshatched overincised lines (Figure 7-24). Eventually, these three patterns may be set up as separate motifs. For now, however, it is the technique of overincising that allows them to be grouped together as "Keeran Point." As with "Cedar Point," the "Keeran Point motif" occurs in a band around the upper part of the vessel, sometimes with a non-decorated zone between the band and the lip, sometimes with the motif occurring immediately below the lip.

Of the 20 sherds that comprise this motif at Guadalupe Bay, eight sherds (one rim, seven bodies) exhibit vertical overincised lines, another four sherds (all bodies) contain crosshatched overincised lines, and eight sherds (two rims, six bodies) have diagonal overincised lines. Those with vertical overincised lines were classified as Rockport Incised, *vars. Mission Lake* (*n*=2), *Mustang Lake* (*n*=3), and *Plank Bridge* (*n*=3). The four with crosshatched overincising were identified as Rockport Incised, *vars. Mustang Lake*, *Plank Bridge*, *Sommerville*, and *Rockport*, while those with diagonal overincising were classified as *vars. Mission Lake* (*n*=4), *Mustang Lake* (*n*=2), *Plank Bridge* (*n*=1), and *Sommerville* (*n*=1).

Two of the sherds with vertical overincising fit together and allow for measurements to be recorded regarding placement and width of the decorative field (see Figure 7-22, b). These sherds indicate that the decorated band is 12 mm wide and is positioned 10 mm below the lip of the vessel. In addition, two of the sherds with diagonal overincising exhibit a decorative field that begins immediately below the lip (see Figure 7-23, b-c). Since the lower part of each sherd is missing, however, it is not possible to determine the width of the decorated field. One of the crosshatched overincised sherds has a decorated band that is 14 mm wide, but the rim is missing making it impossible to determine the distance between the top of the band and the lip (see Figure 7-24, b). Interestingly, this latter sherd (one of the *Mustang Lake* specimens) contains red pigment within its incised lines.

Several examples of the "Keeran Point motif" are known from the central Texas coast, having been illustrated in past publications from the region (Campbell 1962:Figure 1; Corbin 1974:Figure 14; Suhm and Jelks 1962:Plate 67). It also is a fairly common motif along the upper Texas coast where it has been recorded on Goose Creek and San Jacinto Incised sherds (Aten 1983b:Figures 12.4, 12.6; W. Black 1989b:10-12, 19, S-3 to S-4; Ricklis 1994a: Figure 7.16). Overincising is relatively rare farther east along the Louisiana coast, although several examples of Plaquemine Brushed, *var. Plaquemine* and Coles Creek Incised, *var. Hardy* are known to exhibit the technique (Phillips 1970; Weinstein and Kelley 1992). This may indicate that the geographical "heartland" of overincising is in the Galveston Bay area.

Rockport Incised, "Ayres Point motif" (n=5)

This is another motif that has been recognized for Rockport Incised sherds for many years (Campbell 1962:332). It is represented by multiple design elements consisting of a band of narrow, horizontally incised lines that circle the upper part of the vessel's exterior immediately below the lip, plus a series of pendant, line-filled triangles located beneath the lowest of the horizontal lines (Figures 7-25 and 7-26). The horizontal incised lines are identical to those noted above for the "Grassy Point motif," while the line-filled triangles exhibit three main patterns: slanted lines, crossed lines, and coalescing lines. At least one other pattern, that of horizontal lines within the triangles, is illustrated by Corbin (1974:Figure 14) but not present at Guadalupe Bay.

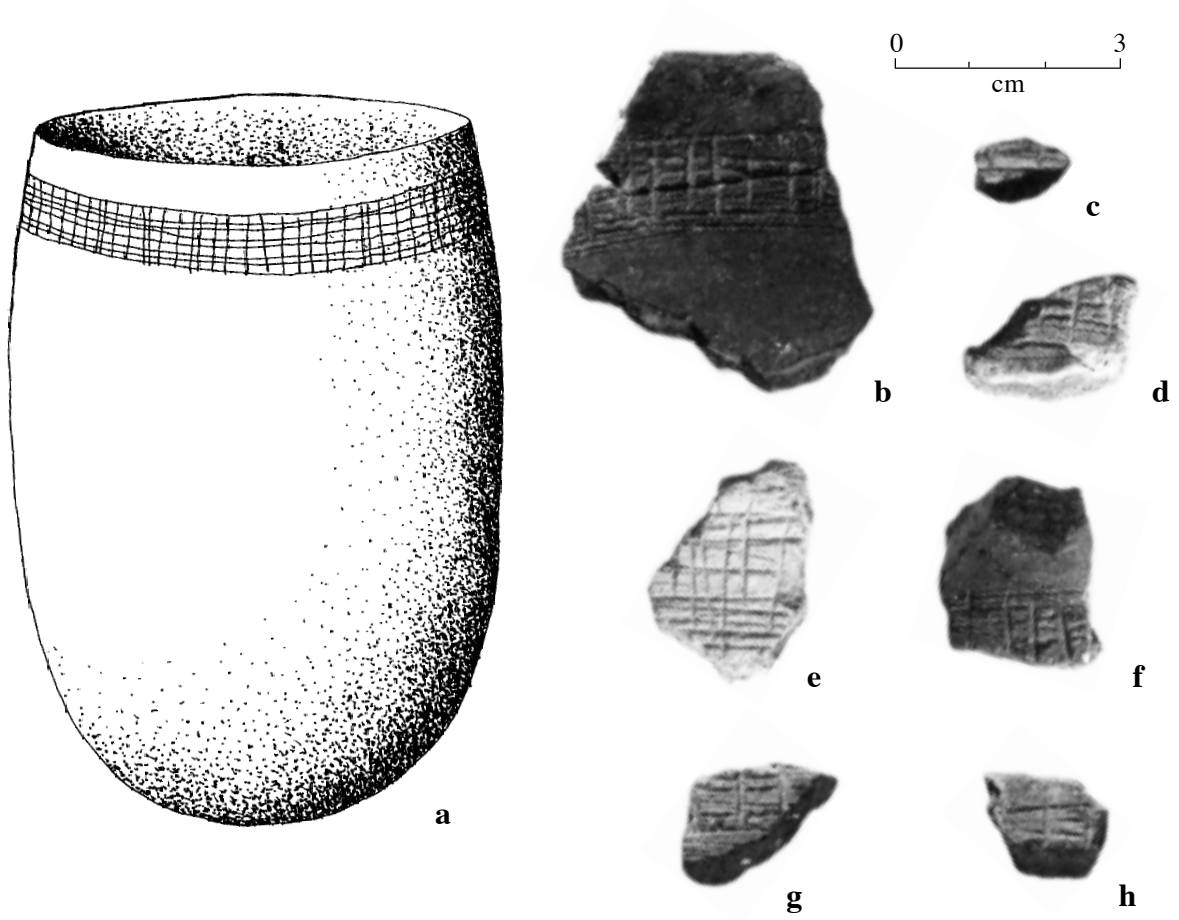

Figure 7-22. Rockport Incised, "Keeran Point motif" with vertical overincising. (a) Idealized "Keeran Point" vessel showing band of horizontal lines with vertical overincised lines; (b) Complete "Keeran Point" rim of Rockport Incised, *var. Mustang Lake*; (c) Partial "Keeran Point" rim on *Mustang Lake* paste; (d-e) Partial "Keeran Point" rims of Rockport Incised, *var. Mission Lake* ; (f-h) Partial "Keeran Point" rims of Rockport Incised, *var. Plank Bridge.* (b composed of two sherds that fit together.) (See Appendix K for provenience data.)

There are four body sherds and one rim in the current sample. Three (all body sherds) are represented by the slanted-line pattern of line-filled triangles, and one each by the crossed and coalescing patterns (the latter represented by the lone rim). Three of the sherds were classified as Rockport Incised, *var. Mustang Lake* (including the coalescing pattern and two of the slanted-line patterns), and one each as *Mission Lake* (the other slanted-line pattern) and *Rockport* (the crossed-line pattern). Only the sherd with the coalescing pattern was complete enough to measure (see Figure 7-26, c). It includes an 8-mm-wide band of three horizontal lines extending downward from the lip, plus one complete triangle that extends downward from the lowest horizontal line for another 13 mm. Although broken, the other four sherds have between three and seven horizontal lines above the triangles.

There are 16 other sherds in the present collection that exhibit portions of line-filled triangles, and these probably represent elements off "Ayres Point" vessels. However, all are from body sherds that lack any of the associated horizontal lines needed for accurate motif assignment. They could, instead, be from vessels that only have line-filled triangles present immediately below the lip. Definite examples of such a motif are missing from Guadalupe Bay, but are known from other sites along the central Texas coast (i.e., Corbin 1974:Figure 14; Suhm and Jelks 1962:Plate 67, D).

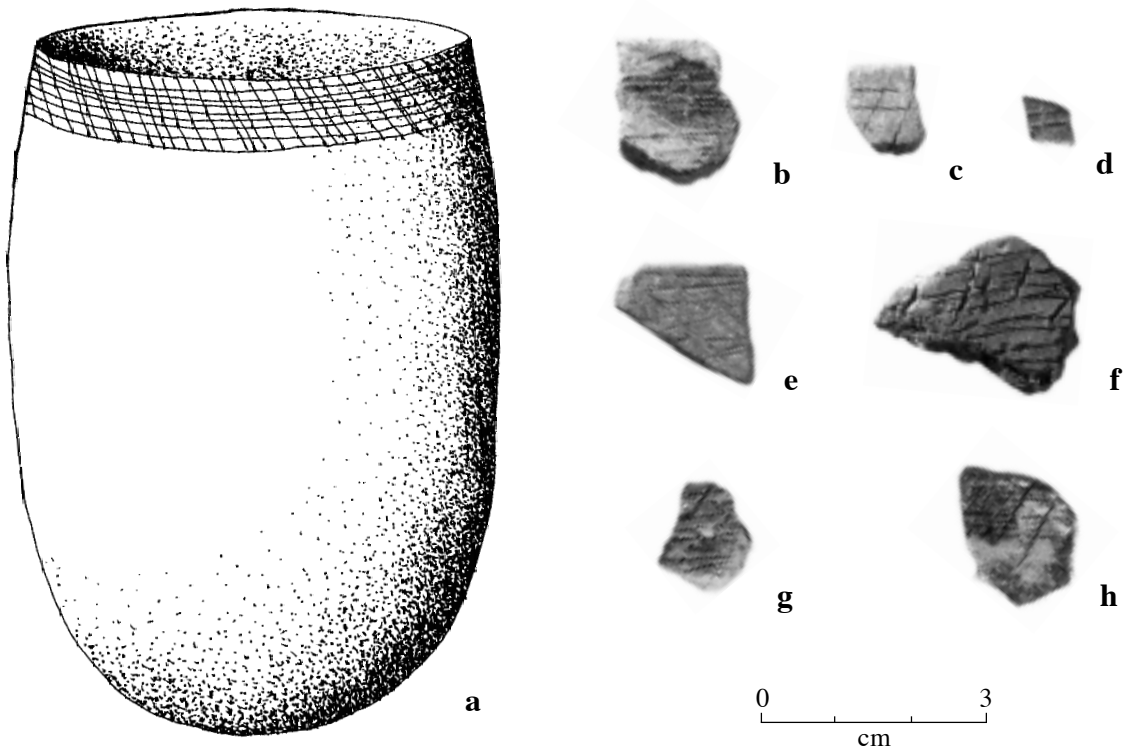

Figure 7-23. Rockport Incised, "Keeran Point motif" with diagonal overincised lines. (a) Idealized "Keeran Point" vessel with horizontal lines overincised by diagonal lines; (b-c) "Keeran Point" rims with lip present, indicating decorative zone begins immediately below lip (b on *Mustang Lake* paste, c on *Sommerville* paste); (d-h) Partial "Keeran Point" rim sherds (d-e on *Mission Lake* paste, f-g on *Mustang Lake* paste, h on *Plank Bridge* paste). (See Appendix K for provenience data.)

As noted above, the "Ayres Point motif" is present in minor amounts at sites yielding Rockport ceramics (Campbell 1962:332, Figure 1; Corbin 1974:Figure 14; Suhm and Jelks 1962:Plate 67, M). It is far more common at sites in the Galveston Bay area where it occurs on sherds of Goose Creek Incised and San Jacinto Incised (W. Black 1989b:15-17; Ricklis 1994a:Table 7.7, Figures 7.13, 7.22, 7.23). It does not appear on sherds farther to the east in Louisiana or within the Lower Mississippi Valley, suggesting that it is principally an upper Texas coast motif.

Rockport Incised, "Bendewald Point motif" (n=12, including one partially reconstructed vessel)

The "Bendewald Point motif" is similar to the "Ayres Point motif" save that the pendant triangles are open rather than filled with incised lines (Figure 7-27). Sometimes there is a single horizontal zoning line present beneath the triangles, and on a few occasions there are single vertical lines within alternating pendant triangles.

There are four sherds plus one partially reconstructed vessel that exhibit the "Bendewald Point motif."[9] Of the sherds, two (one rim and one body sherd) were classified as Rockport Incised, *var. Mission Lake* while the other two (also one rim and one body

[9] Although sherds from the surface collection were not included in the motif analysis, it is worth noting again the unique sherd of Rockport Incised, *var. Plank Bridge* (see Figure 7-3) that exhibits red pigment within, and adjacent to, the incised lines, as it is an excellent example of the "Bendewald Point motif." The sherd contains four close-spaced, horizontal, parallel lines situated immediately below the lip, plus black banding on the top and outer edge of the lip. Overall, the parallel lines extend downward from the lip for a distance of about 5 mm, while the pendant triangles extend another 6 mm below the lowermost line.

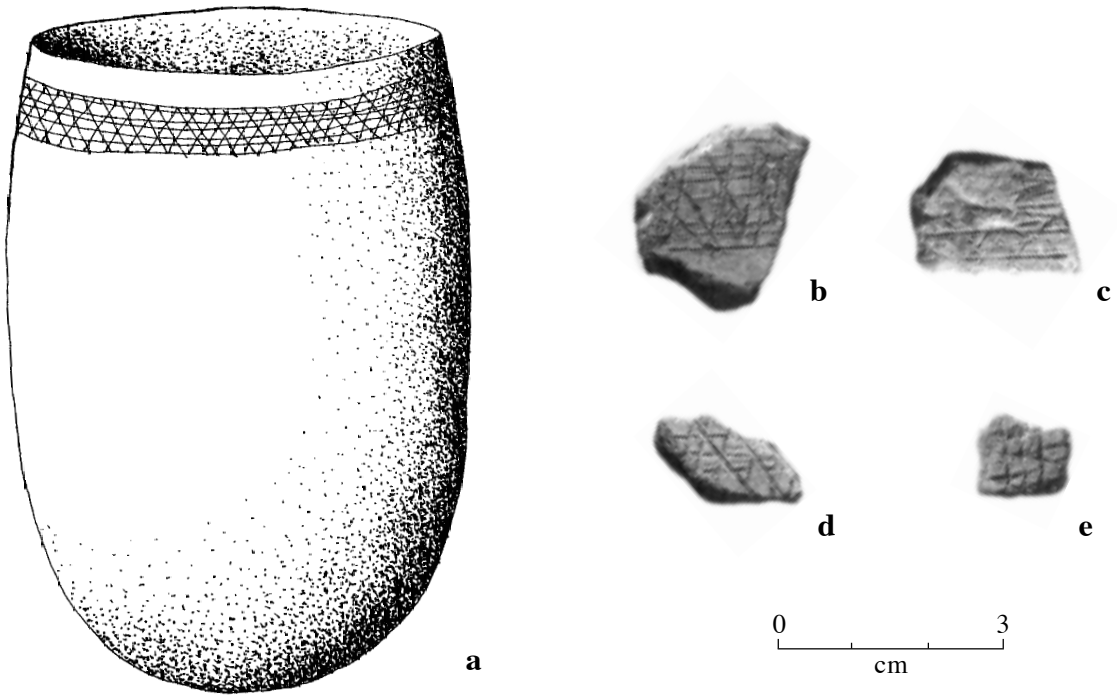

Figure 7-24. Rockport Incised, "Keeran Point motif" with crosshatched overincising. (a) Idealized "Keeran Point" vessel with band of horizontal lines overincised by crosshatched lines; (b-e) Partial "Keeran Point" rims with crosshatched overincising (b on *Mustang Lake* paste with red pigment in lines, c on *Sommerville* paste, d on *Rockport* paste, and e on *Plank Bridge* paste). (See Appendix K for provenience data.)

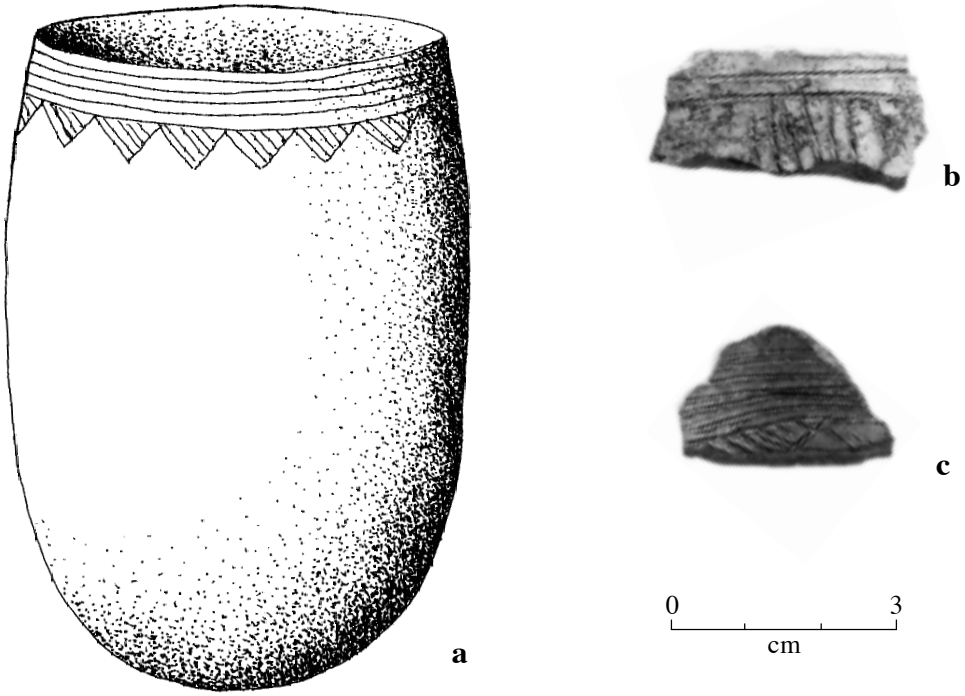

Figure 7-25. Rockport Incised, "Ayres Point motif" with pendant triangles filled with slanted lines. (a) Idealized "Ayres Point" vessel; (b-c) Partial "Ayres Point" rims exhibiting pendant triangles with slanted lines (b on *Mustang Lake* paste and c on *Mission Lake* paste). (See Appendix K for provenience data.)

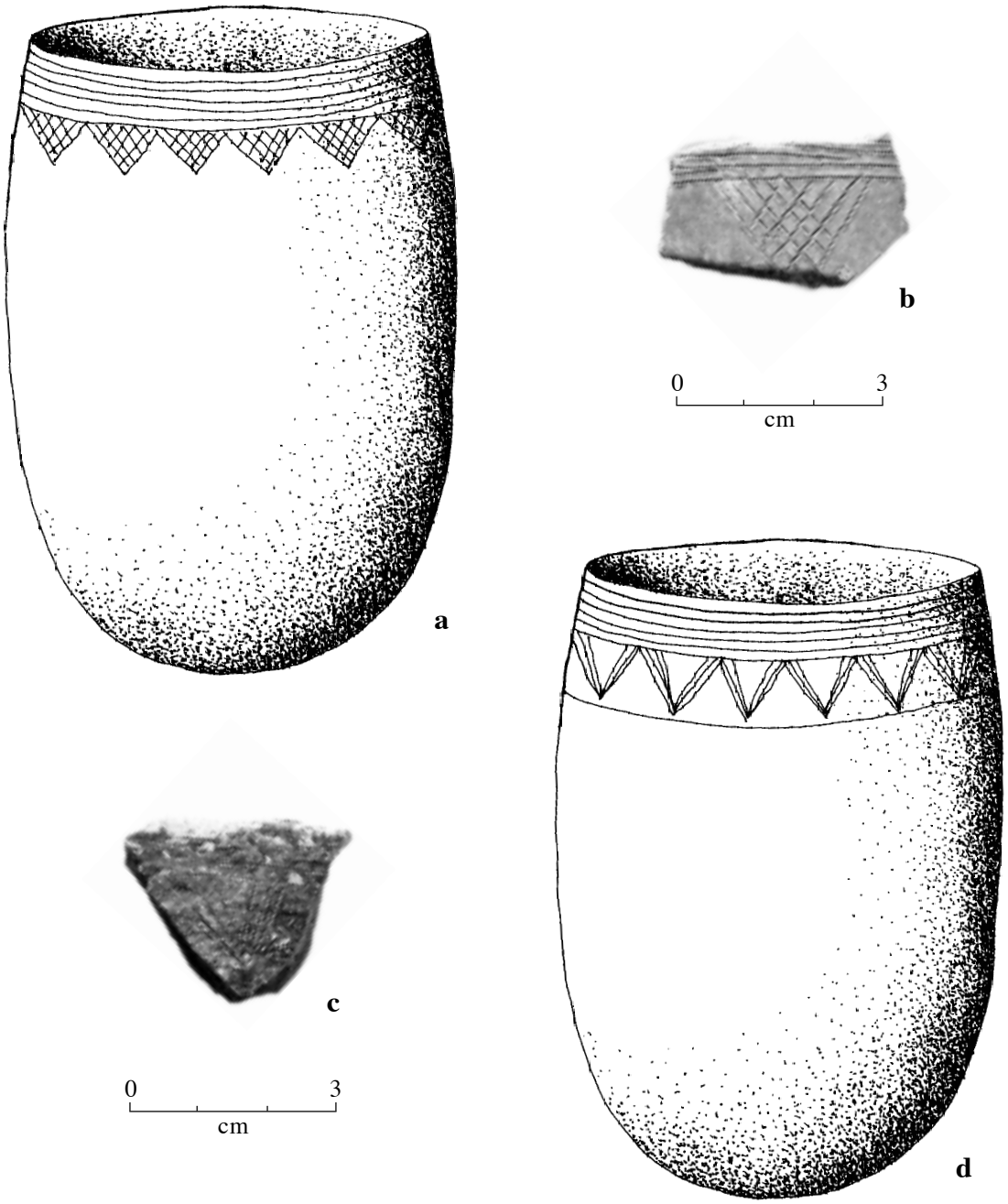

Figure 7-26. Additional examples of Rockport Incised, "Ayres Point motif." (a) Idealized "Ayres Point" vessel with pendant triangles filled with crossed lines; (b) Partial rim of Rockport Incised, *var. Rockport* exhibiting the crossed-line, pendant-triangle version of the "Ayres Point motif;" (c) Complete rim of Rockport Incised, *var. Mustang Lake* with the "Ayres Point motif" and coalescing lines within the pendant triangle; (d) Idealized "Ayres Point" vessel with pendant triangles filled with coalescing lines. (See Appendix K for provenience data.)

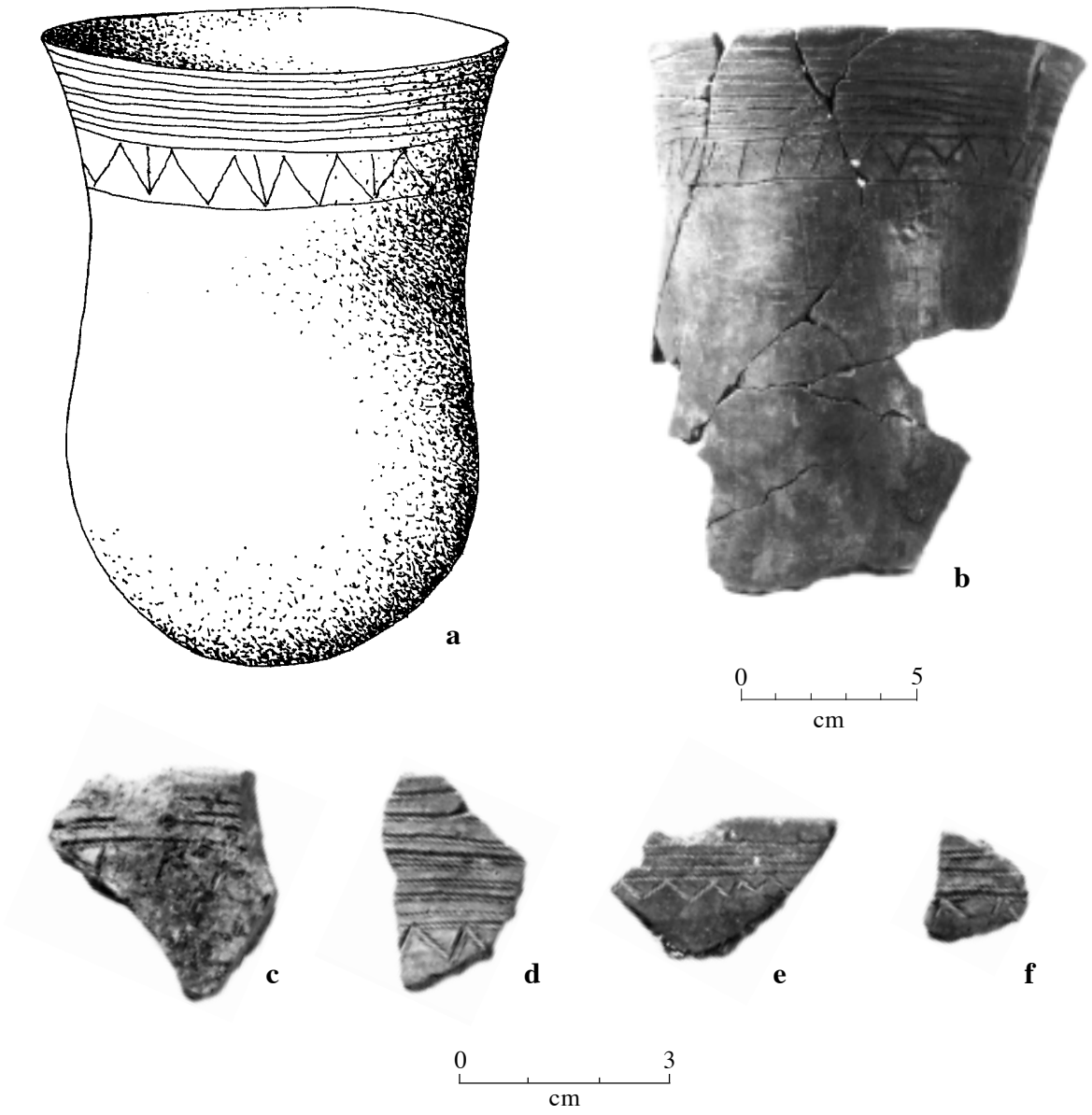

Figure 7-27. Rockport Incised, "Bendewald Point motif." (a) Idealized "Bendewald Point" vessel; (b) Partially reconstructed vessel of Rockport Incised, *var. Mustang Lake* exhibiting the "Bendewald Point motif;" (c-d) Complete "Bendewald Point" rims (c on *Mustang Lake* paste, d on *Mission Lake* paste); (e-f) Partial "Bendewald Point" rims (e on *Mission Lake* paste, f on *Mustang Lake* paste). (See Appendix K for provenience data.)

sherd) were identified as *var. Mustang Lake*. The *Mission Lake* rim contains four horizontal lines that occur in a band that extends from the lip downward for 5 mm (see Figure 7-27, e). Below these lines, the open triangles extend down for another 4 mm. Thus, the entire motif covers only the upper 9 mm of the vessel. The *Mustang Lake* rim also exhibits four horizontal lines in a band extending down from the lip for 7 mm (see Figure 7-27, c). The pendant triangles cover an additional 7 mm, limiting the entire decorative field to the upper 14 mm of the vessel.

The partially reconstructed vessel is the most impressive ceramic item recovered during the excavations at Guadalupe Bay (see Figure 7-27, a-b). It is made up of nine nondecorated body sherds, two

rim sherds exhibiting only horizontal lines, and six sherds with both horizontal lines and the pendant triangles (three of which are rims). All of those with incisions were classified as Rockport Incised, *var. Mustang Lake*, while the nondecorated body sherds originally were classed as Rockport Plain, *var. Austwell*. Taken together, the decorative field is quite broad, and covers the upper 40 mm of the vessel. There are nine horizontal lines that occupy the top 27 mm of the field, plus a zoned area of pendant triangles that extends down from the lowest horizontal line for an additional 13 mm.

As far as the authors can determine, the "Bendewald Point motif" is illustrated in only one other study from the coastal bend region (Ricklis 1995d: Figure 21). However, "Bendewald Point" and/or very similar motifs appear, to a limited extent, on Goose Creek and San Jacinto Incised sherds from the upper Texas coast (Aten 1983b:12.4, 12.6; W. Black 1989:17; Corbin 1974:Figure 14; Ricklis 1994a:Table 7.7, Figures 7.15, 7.21, 7.22). Similar motifs also are common, either as triangular punctations or incised triangles, on several ceramic types typical of the Coles Creek and early Plaquemine cultures in Louisiana and the Lower Mississippi Valley, particularly Coles Creek Incised, Mazique Incised, and Plaquemine Brushed (Belmont n.d.; Phillips 1970; Williams and Brain 1983; see also Ricklis 1994a:Figure 7.24). Considering all of this, it is likely that the Guadalupe Bay site is located either at or very near the southern edge of the overall distribution of the "Bendewald Point motif." The motif's major area of distribution appears to be situated farther up the Texas coast and on into coastal Louisiana.

Rockport Incised, "Foster Point motif" (n=2)

The final motif recognized for Rockport Incised at Guadalupe Bay includes the coupling of multiple horizontal lines with an underlying zone of crosshatched lines, all situated around the upper part of the vessel's exterior (Figure 7-28). In this instance, the horizontal lines are identical to those noted above for the "Grassy Point," "Ayres Point," and "Bendewald Point" motifs. The crosshatched lines apparently serve the same "embellishment" purpose as the pendant triangles recog-

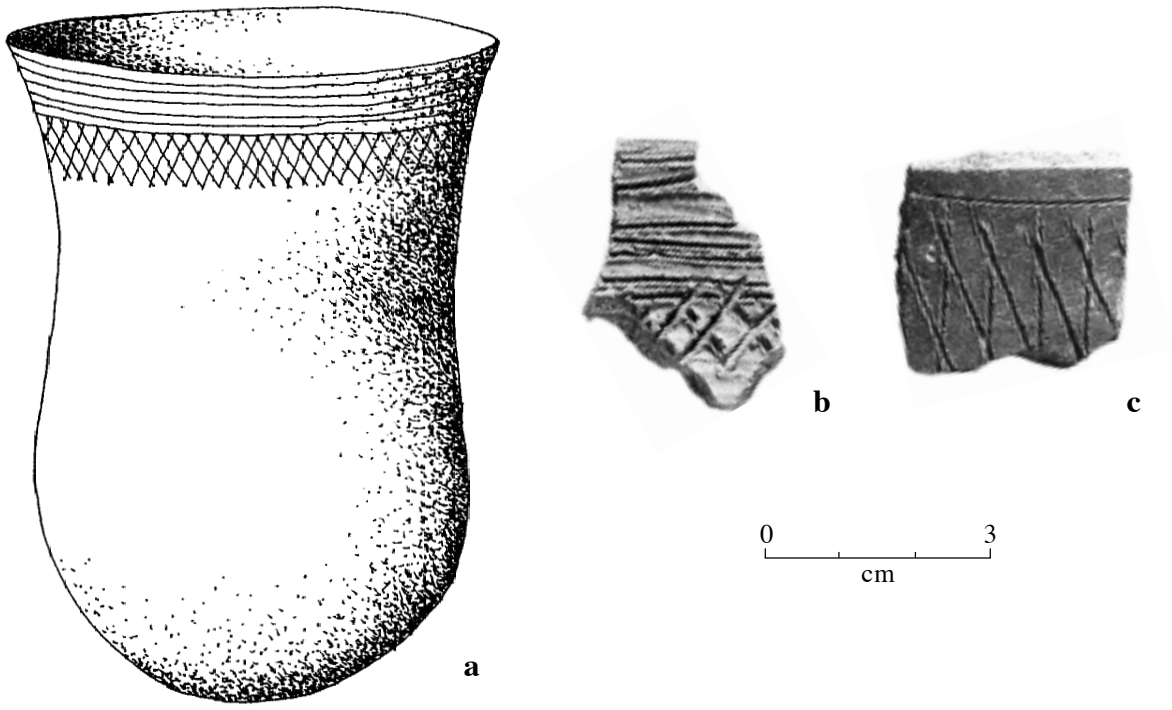

Figure 7-28. Rockport Incised, "Foster Point motif." (a) Idealized "Foster Point" vessel; (b) Complete "Foster Point" rim of Rockport Incised, *var. Sommerville*; (c) Partial "Foster Point" rim of Rockport Incised, *var. Mission Lake*. (See Appendix K for provenience data.)

nized as elements of the "Ayres Point" and "Bendewald Point" motifs.

Although there are many sherds exhibiting crosshatched lines at Guadalupe Bay (see Table 7-14), only two can be confidently assigned to the "Foster Point motif." The remainder are from small sherds that lack the associated horizontal lines, so it is not certain if they are elements of "Foster Point" or "Cedar Point." One of the two sherds is a complete rim classed as Rockport Incised, *var. Sommerville* (see Figure 7-28, b). It exhibits eight narrow, relatively sloppy, horizontal lines that cover the upper 22 mm of the rim. These lines are underlain by equally sloppy crosshatched lines that extend downward for another 10 cm. In addition to the general sloppiness of the decoration, all lines have pronounced areas of "pushed-up" clay or burring along their margins indicating that the paste of the vessel was fairly wet when the incising occurred. The other "Foster Point" specimen is a body sherd classified as Rockport Incised, *var. Mission Lake* (see Figure 7-28, c). It contains two relatively fine, well-made horizontal lines overlying a relatively wide band of crosshatching that is at least 23 mm wide. Although some burring is present along the margins of the lines, all are more carefully incised than those of the other specimen.

The "Foster Point motif" represents one of the earliest designs ever illustrated for Rockport ceramics, having been included by Potter (1930:Plate 7) in his initial study of decorated pottery from the coastal bend area. Somewhat surprisingly, to the authors' knowledge no subsequent publications on the region provide any additional illustrated examples. It also is surprising to find that the motif is not particularly common farther up the coast. Only one example of a similar, but not identical, motif has been illustrated from the Galveston Bay area (W. Black 1989b:13). It also is lacking from the Louisiana coast and Lower Mississippi Valley. This strongly suggests that the motif may have its strongest showing along the central Texas coast, and it may prove to be an excellent marker of Karankawan culture. Its relative scarcity even in this potential heartland may lessen its overall usefulness, however.

Rockport Incised Motifs by Analysis Unit

Table 7-20 lists the various motif sherds of Rockport Incised by analysis unit. As with previous discussions of this sort, it was hoped that examination by analysis unit might help identify chronological and/or intrasite spatial trends that could be meaningful to future studies. Unfortunately, due to the apparent mixed nature of the Stratum 2 midden (AUs 2 through 5) few patterns immediately become obvious. For instance, all motifs that occur in the upper portions of Stratum 2 (AUs 2 and 3) ("Grassy Point," "Marsh Point," "Cox Point," "Cedar Point," and "Keeran Point") also occur in the lower portions of the stratum (AUs 4 and 5), and usually in comparable amounts. Only "Keeran Point" shows a significantly greater amount in AU 3 vs. AU 5 (10 vs. 4 sherds), but this is offset by the presence of an additional four sherds from AU 6, the Stratum 3 *Rangia* midden beneath Stratum 2 in Block 3 (and the possible origin for many of the sherds located in the lower portion of Stratum 2), plus two sherds from AU 7, the apparent Rockport oyster deposit in Block 3.

Despite the above, three motifs ("Ayres Point," "Bendewald Point," and "Foster Point") occur only in the lower portions of Stratum 2 (AUs 4 and 5) and/or the underlying Stratum 3 *Rangia* midden in Block 3 (AU 6). Although the sample size for each of these motifs is relatively small, and includes the eight sherds of "Bendewald Point" from the partially reconstructed vessel found in Sample Unit N70W110, these motifs may represent early Rockport phase designs worthy of future chronological consideration.

Spatially, most of the motif sherds, like most of the other ceramics, were found in the area of Block 3 (AUs 3, 5, 6, and 7), although a small number of motif specimens also came from the area around Blocks 1 and 2 (AUs 2 and 4). The latter included examples of "Grassy Point," "Cedar Point," "Ayres Point," "Bendewald Point," and "Foster Point." Interestingly, of those motifs with relatively large sample sizes, no "Keeran Point" sherds were identified in the area of Blocks 1 and 2. What this means is uncertain, if it means anything at all, but it may point to a link between the "Keeran Point motif" and vessels associated with feasting and/or ceremonies, activities believed to have taken place around Block 3.

Rockport Black Motifs

There are seven motifs recognized for Rockport Black (Table 7-21). Some are similar to those noted below for Rockport Black-on-gray, although there are several differences that may prove meaningful in the future. On the contrary, it may later be found, with greater recognition of motifs from other sites, that there are no differences between the painted wares, and a single set of motif names could be used to cover both Rockport Black and Rockport Black-on-

Table 7-20. Decorative Motifs of Rockport Incised, by Analysis Unit.

Motifs	Analysis Units																				Total	% Total
	AU 2		AU 3		AU 4		AU 5		AU 6		AU 7		AU 8		AU 10		AU 11		No AU			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
"Grassy Point"																						
var. Rockport	0	0.00	4	18.18	0	0.00	1	4.35	3	16.67	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**8**	**9.41**
var. Mission Lake	0	0.00	1	4.55	1	9.09	3	13.04	2	11.11	0	0.00	0	0.00	0	0.00	0	0.00	1	50.00	**8**	**9.41**
var. Plank Bridge	0	0.00	1	4.55	0	0.00	1	4.35	1	5.56	0	0.00	0	0.00	1	100.00	0	0.00	1	50.00	**5**	**5.88**
var. Sommerville	0	0.00	1	4.55	0	0.00	1	4.35	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**2.35**
var. Mustang Lake	3	75.00	1	4.55	0	0.00	1	4.35	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**5**	**5.88**
"Grassy Point" total	**3**	**75.00**	**8**	**36.36**	**1**	**9.09**	**7**	**30.43**	**6**	**33.33**	**0**	**0.00**	**0**	**0.00**	**1**	**100.00**	**0**	**0.00**	**2**	**100.00**	**28**	**32.94**
"Marsh Point"																						
var. Rockport	0	0.00	2	9.09	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**2.35**
var. Mission Lake	0	0.00	0	0.00	0	0.00	2	8.70	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**2.35**
"Marsh Point" total	**0**	**0.00**	**2**	**9.09**	**0**	**0.00**	**2**	**8.70**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**4**	**4.71**
"Cox Point"																						
var. Mission Lake	0	0.00	1	4.55	0	0.00	3	13.04	4	22.22	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**8**	**9.41**
"Cox Point" total	**0**	**0.00**	**1**	**4.55**	**0**	**0.00**	**3**	**13.04**	**4**	**22.22**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**8**	**9.41**
"Cedar Point"																						
var. Mission Lake	0	0.00	0	0.00	0	0.00	0	0.00	1	5.56	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**1.18**
var. Mustang Lake	1	25.00	0	0.00	0	0.00	1	4.35	1	5.56	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**3**	**3.53**
var. Plank Bridge	0	0.00	0	0.00	0	0.00	1	4.35	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**1.18**
var. Sommerville	0	0.00	1	4.55	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**1.18**
"Cedar Point" total	**1**	**25.00**	**1**	**4.55**	**0**	**0.00**	**2**	**8.70**	**2**	**11.11**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**6**	**7.06**
"Keeran Point"																						
var. Rockport	0	0.00	1	4.55	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**1.18**
var. Mission Lake	0	0.00	4	18.18	0	0.00	1	4.35	1	5.56	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**6**	**7.06**
var. Plank Bridge	0	0.00	2	9.09	0	0.00	3	13.04	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**5**	**5.88**
var. Sommerville	0	0.00	2	9.09	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**2.35**
var. Mustang Lake	0	0.00	1	4.55	0	0.00	0	0.00	3	16.67	2	100.00	0	0.00	0	0.00	0	0.00	0	0.00	**6**	**7.06**
"Keeran Point" total	**0**	**0.00**	**10**	**45.45**	**0**	**0.00**	**4**	**17.39**	**4**	**22.22**	**2**	**100.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**20**	**23.53**
"Ayres Point"																						
var. Rockport	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	**1**	**1.18**
var. Mission Lake	0	0.00	0	0.00	0	0.00	1	4.35	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**1.18**
var. Mustang Lake	0	0.00	0	0.00	1	9.09	2	8.70	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**3**	**3.53**
"Ayres Point" total	**0**	**0.00**	**0**	**0.00**	**1**	**9.09**	**3**	**13.04**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**1**	**100.00**	**0**	**0.00**	**5**	**5.88**
"Bendewald Point"																						
var. Mission Lake	0	0.00	0	0.00	0	0.00	1	4.35	1	5.56	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**2.35**
*var. Mustang Lake**	0	0.00	0	0.00	8	72.73	1	4.35	1	5.56	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**10**	**11.76**
"Bendewald Point" total	**0**	**0.00**	**0**	**0.00**	**8**	**72.73**	**2**	**8.70**	**2**	**11.11**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**12**	**14.12**
"Foster Point"																						
var. Mission Lake	0	0.00	0	0.00	1	9.09	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**1.18**
var. Sommerville	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	0	0.00	0	0.00	**1**	**1.18**
"Foster Point" total	**0**	**0.00**	**0**	**0.00**	**1**	**9.09**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**1**	**100.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**2**	**2.35**
Site Total	**4**	**100.00**	**22**	**100.00**	**11**	**100.00**	**23**	**100.00**	**18**	**100.00**	**2**	**100.00**	**1**	**100.00**	**1**	**100.00**	**1**	**100.00**	**2**	**100.00**	**85**	**100.00**

* Sherds from AU 4 are from partially reconstructed jar from Sample Unit N70W110.

Table 7-21. Decorative Motifs Recognized on Sherds of Rockport Black at Guadalupe Bay.

	Rockport Black											
	var. Rockport		*var. Elm Bayou*		*var. Kuy Creek*		*var. Lolita*		*var. Spring Bayou*			
	Rim	Body	Rim	Body	Rim	Body	Rim	Body	Rim	Body	**Total**	**% Total**
Motifs												
"Carancahua Bay"	60	0	17	0	10	0	50	0	6	0	**143**	**92.86**
"Copano Bay"	2	0	0	0	0	0	0	0	0	0	**2**	**1.30**
"Espíritu Santo Bay"	0	0	0	0	0	0	0	0	1	0	**1**	**0.65**
"Pats Bay"	0	0	0	0	0	0	1	0	0	0	**1**	**0.65**
"Aransas Bay"	1	0	0	0	0	0	1	0	0	0	**2**	**1.30**
"Shoalwater Bay"	0	0	0	0	0	0	1	0	0	0	**1**	**0.65**
"Mesquite Bay"	1	0	2	0	1	0	0	0	0	0	**4**	**2.60**
Total	**64**	**0**	**19**	**0**	**11**	**0**	**53**	**0**	**7**	**0**	**154**	**100.00**

gray designs. Until then, however, the motifs of the two types will receive separate names. It also should be noted that several of the motifs are based on small sherds making establishment of the motifs somewhat tentative. It is hoped, however, that future studies either will confirm or reject the legitimacy of these motifs.

It should be reiterated at this point that sherds exhibiting only painted bands around the lip were, by definition, classified either as Rockport Black or Rockport Black-on-gray. As such, these sherds form a large percentage of all decorated designs of these two types. Earlier investigators also had noted the same preponderance of black-banded rims (Campbell 1958a, 1962), and Ricklis (1990b:616-617, Figure 65, 1995a:199, Figure 17) set up banded rims as a separate type that he labeled "Rockport Black-on-gray I." Since only small rim sherds are present in the current collection, as opposed to whole vessels or relatively large rims, it is impossible to determine if the painted band occurs alone, and, thus, is the only decoration on the vessel, or if it actually is associated with other decorative elements. For that reason, the present authors were somewhat hesitant at first to set up black banding as a decorative motif. To have ignored black banding, however, would have eliminated one of the most potentially prominent forms of Rockport decoration from the list of recognized motifs. As past studies (Campbell 1958a, 1962; Potter 1930; Ricklis 1990b, 1995a; Suhm and Krieger 1954; Suhm and Jelks 1962) have shown that vessels with only black banding do, indeed, exist, the decision eventually was made to identify rim sherds with black banding as a specific motif. It should be understood, however, that many of these sherds may actually be from vessels with some form of body decoration. Until a selection of whole vessels or a sample of large-enough sherds is examined, it probably will be impossible to know the percentage of vessels in a Rockport ceramic assemblage that contain only black-banded rims.

Rockport Black, "Carancahua Bay motif" (n=143)

As just discussed, the "Carancahua Bay motif" (along with its sister motif, "Steamboat Island," see below) consists simply of a black rim band that primarily circles the exterior and top portions of a vessel's lip (Figure 7-29). At times the band may also occur on the interior edge of the lip. "Carancahua Bay" apparently represents the most common of all Rockport Black motifs, but, as noted above, that may be more a reflection of sherd size than actual prominence. Sherds exhibiting either the "Carancahua Bay" or

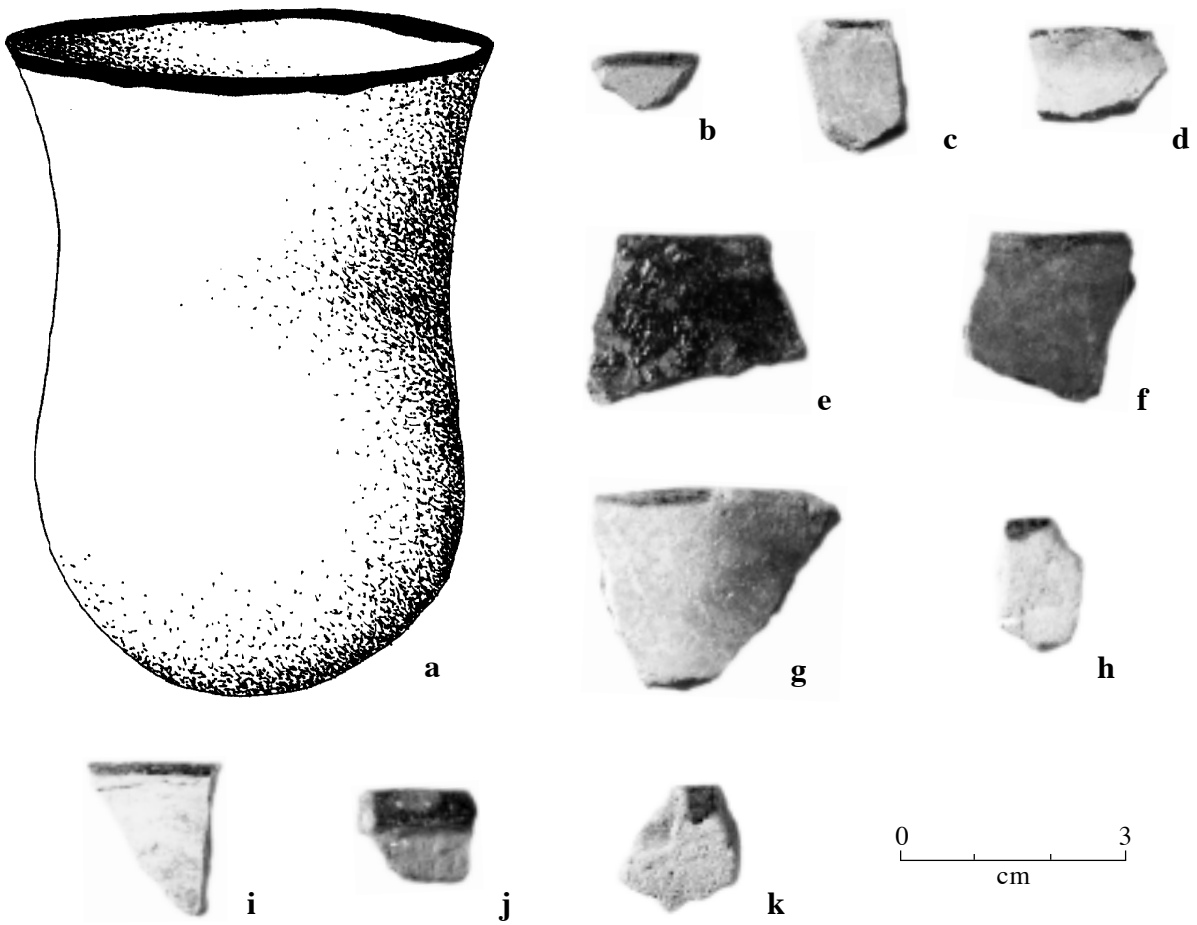

Figure 7-29. Rockport Black, "Carancahua Bay motif." (a) Idealized "Carancahua Bay" vessel; (b-k) Rim sherds exhibiting the "Carancahua Bay motif." (b-c with *Rockport* paste, d-h with *Lolita* paste, i with *Spring Bayou* paste, j with *Kuy Creek* paste, and k with *Elm Bayou* paste.) (See Appendix K for provenience data.)

"Steamboat Island" motifs are reported to make up the bulk of all decorated ceramics from previous Rockport assemblages (Campbell 1958a:435, 1962:332; Suhm and Krieger 1954:384; Suhm and Jelks 1962:131), and, as just noted, Ricklis (1990b:616-617, Figure 65) set up the design as a separate type that he labeled Rockport Black-on-gray I.

There are 143 "Carancahua Bay" rim sherds in the current collection. The majority of these (*n*=117; 81.8 percent) originally were classified as Rockport Black, *vars. Rockport* and *Lolita*, although all other Rockport Black varieties also were included (see Table 7-21). As with all black-banded lip decoration (see Table 7-15), most of the "Carancahua Bay" sherds contained asphaltum on the top, exterior, and interior of the vessel's lip (*n*=81; 56.6 percent), while lesser quantities had asphaltum only on the top of the lip (*n*=25; 17.5 percent), the top and exterior portion of the lip (*n*=20; 14.0 percent), or the top and interior part of the lip (*n*=17; 11.9 percent). Six of the sherds, all with asphaltum paint only on the top of the lip, also had incised lines placed across the lip (three with perpendicular lines and three with slanted lines) Two others, again with paint only on top of the lip, exhibited lip notches (both of the narrow form).

As noted, the "Carancahua Bay motif" has been recognized for years as one of the prime decorative designs associated with Rockport ceramics (Campbell 1958a:435, 1962:332; Suhm and Krieger 1954:384; Suhm and Jelks 1962:131; Ricklis 1990b, 1995a), and it occurs quite commonly on most Rockport sites

along the central Texas coast. It also is worth noting the occurrence of similar lip banding on the rims of several vessels typed by Mounger (1959:168-169, Plates 13, 15, 17, 25) as Goliad Red-on-buff and Goliad Black-on-buff from Mission Espíritu Santo. This indicates that the idea of lip banding lasted into historic times in the region.

Rockport Black, "Copano Bay motif" (n=2, but probably ~70)

"Copano Bay" (along with its sister motif "Matagorda Island") represents one of the most common of all asphaltum-painted motifs found on Rockport ceramics. It is marked by a black lip band that usually covers both the top and exterior edge of the vessel rim, sometimes the interior edge, and from which descend individually painted wavy or squiggled vertical lines on the exterior portion of the vessel (Figure 7-30). Such lines can be either slightly or highly wavy, and be narrow, medium, or wide in width. With more data in the future, it may be possible to identify additional motifs based on the width and "waviness" of the lines. In the past, this motif would have been included in the type "Rockport Black-on-gray II" proposed by Ricklis (1990b:617-619, Figure 65).

Although this motif probably is one of the most common of all motifs present on Rockport Black ceramics, only two rim sherds from Guadalupe Bay could be definitely assigned to the category. Nevertheless, most, if not all, of the other Rockport Black sherds with vertical wavy lines, curved lines, and/or wavy lines of unknown orientation (see Table 7-13) probably are elements of the "Copano Bay motif." However, since these sherds might be from vessels that contain alternating rows of dots and wavy lines (similar to the "Turnstake Island motif" of Rockport Black-on-gray) or other motifs not yet recognized, it is not possible to confidently assign them to "Copano Bay." Likewise, as noted earlier, it is possible that most of the vertical straight lines identified as a single

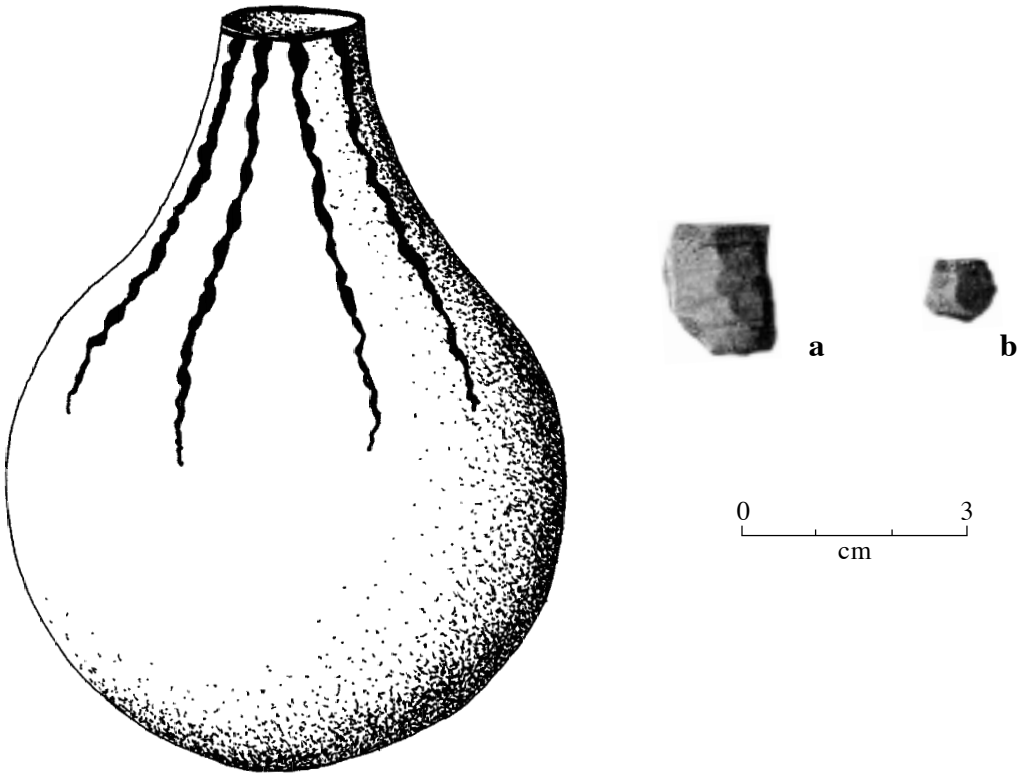

Figure 7-30. Rockport Black, "Copano Bay motif." (a) Idealized "Copano Bay" vessel; (b-c) Rim sherds of Rockport Black, *var. Rockport* with the "Copano Bay motif." (See Appendix K for provenience data.)

design element on Table 7-13 actually represent very small segments of wavy lines that were too short to include a recognizable bend or wave in the line. Thus, if all of these additional design elements are included, then something on the order of about 70 "Copano Bay" sherds may actually be represented in the present collection.

The two definite "Copano Bay" sherds originally were classified as Rockport Black, *var. Rockport*. Both include a wide lip band (greater than 4 mm) on the exterior, interior, and top of a flat lip, coupled with slightly wavy, wide vertical lines.

The "Copano Bay motif" (and/or the "Matagorda Island motif") was one of the earliest of all decorative patterns recognized on Rockport ceramics (Potter 1930:43, Plate 8), and it has consistently remained so throughout the years (Campbell 1958a:435, Figure 5, 1962:332, Figure 1; Ricklis 1990b:617-619; Suhm and Krieger 1954:384, Plate 73; Suhm and Jelks 1962:131, Plate 66). It also is one of the most widespread motifs, occurring on sites throughout all of the central Texas coastal area. Ricklis (1996:30) has suggested that many of the vessels exhibiting this motif might have functioned specifically as containers for water or other liquids, and that the wavy lines symbolically represent the flowing liquid.

Interestingly, Mounger (1959:Plate 23) illustrates several sherds of Goliad Black-on-buff from Mission Espíritu Santo that contain vertical wavy lines reminiscent of the "Copano Bay motif." One of the sherds (in the upper right-hand corner of the plate) appears to be a rim with an associated black band. If the latter is the case, then it can be hypothesized that a motif very much like that of "Copano Bay" still was in vogue at least into the eighteenth century.[10]

Rockport Black, "Espíritu Santo Bay motif" (n=1)

This motif is similar to that of "Copano Bay" save that the lines descending from the vessel rim are straight diagonals rather than vertical squiggles (Figure 7-31). Although only one definite example of this motif is present in the current sample, Campbell (1958a:435, Figure 5, f-g, 1962:332, Figure 1, I, K) notes its occurrence at other sites in the region. For that reason it is considered a viable decorative pattern.

The one sherd of "Espíritu Santo Bay" from the Guadalupe Bay site was classed as Rockport Black, *var. Spring Bayou*. It exhibits a medium-wide band on the top and interior of a rounded lip, with a single, narrow line descending from the band. Aside from the few sherds discussed and illustrated by Campbell, no other examples of this motif are known.

Rockport Black, "Pats Bay motif" (n=1)

The "Pats Bay motif" is almost identical to the "Espíritu Santo motif" except that the lines descending from the vessel rim are vertical rather than diagonal (Figure 7-32). Again, only one definite example of the motif was present at Guadalupe Bay. It consists of a rim sherd of Rockport Black, *var. Lolita* with a round lip and a wide black band on the exterior, interior, and top of the lip. The vertical lines are relatively wide, measuring more than 4 mm across.

Although not common, vertical straight lines are known from other Rockport assemblages from the central Texas coast (Campbell 1958a:435, 1962:332). It may be that these straight lines are nothing more than aberrant versions of wavy vertical lines. If not, however, than they may have some chronological or spatial significance, and, for that reason, future studies should address their possible presence in an assemblage.

It may be worth noting that Mounger (1959:Plate 17) illustrates several examples of Goliad Red-on-buff from Mission Espíritu Santo that exhibit vertical painted lines similar to those of the "Pats Bay motif." Thus, as with the "Copano Bay motif," it may be possible that designs very similar to "Pats Bay" lasted into the Historic period in the region.

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[10] It should be noted, however, that six of the sherds illustrated by Mounger (1959:Plates 21-23), and identified as Goliad Black-on-buff, had been illustrated previously by Suhm and Krieger (1954:Plate 73, A, C, D-E, I, R) as examples of Rockport Black-on-gray. These same sherds subsequently were illustrated by Suhm and Jelks (1962:Plate 66, A, C, D-E, I, R) again as Rockport Black-on-gray. Thus, the uncertain classification of these specimens raises questions about the actual nature of Goliad Black-on-buff and whether it truly represents Aranama Indian ceramics. Perhaps these sherds simply are portions of Rockport trade vessels that were utilized by the Aranama, or perhaps they pertain to a minor prehistoric Karankawan occupation that existed at the site many years prior to its establishment as a Spanish mission.

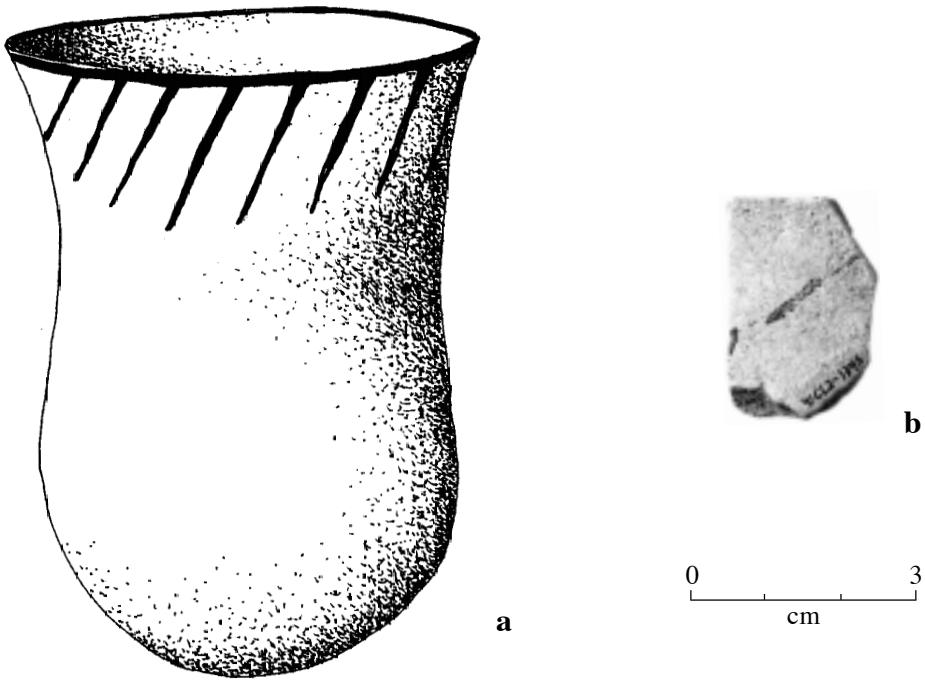

Figure 7-31. Rockport Black, "Espíritu Santo Bay motif." (a) Idealized "Espíritu Santo Bay" vessel; (b) Rim sherd of Rockport Black, *var. Spring Bayou* with the "Espíritu Santo Bay motif." (See Appendix K for provenience data.)

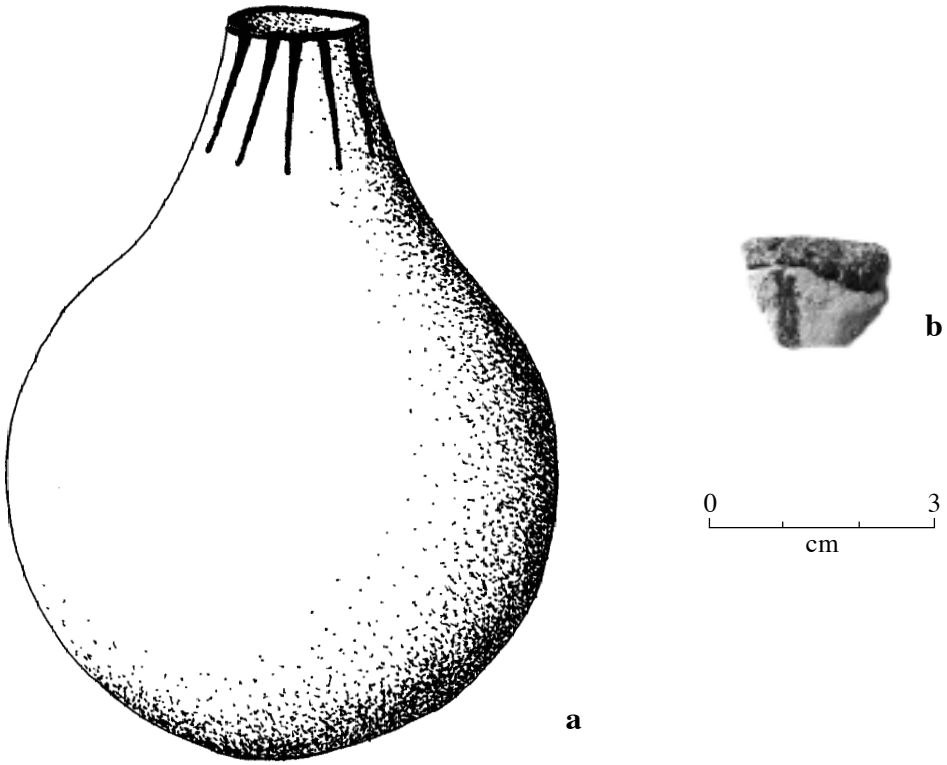

Figure 7-32. Rockport Black, "Pats Bay motif." (a) Idealized "Pats Bay" vessel; (b) Rim sherd of Rockport Black, *var. Lolita* with the "Pats Bay" motif. (See Appendix K for provenience data.)

Rockport Black, "Aransas Bay motif" (n=2)

"Aransas Bay" (and its decorative sister, "Kenyon Island") appears to be a minor, but relatively consistent, motif in Rockport assemblages along the central Texas coast. It consists of a painted black band around the lip coupled with vertical rows of individually painted dots that descend downward from the band on the exterior portion of the vessel (Figure 7-33).

An excellent example of either the "Aransas Bay" or "Kenyon Island" motif, from the Blink Bonnie site near Rockport, is illustrated by Potter (1930:44, Plate 9). Other potential examples are reported by Campbell (1962:332, Figure 1, L), Suhm and Krieger (1954:384), and Suhm and Jelks (1962:131). Previous investigations at Guadalupe Bay (Weinstein and Scott 1972:Figures 7-5 and 7-9) also recovered sherds exhibiting either "Aransas Bay" or "Kenyon Island" motifs.

Two rim sherds of "Aransas Bay" are present in the current collection. Both have wide bands present on the exterior, top, and interior portions of flat lips, with medium-wide dots descending down from the band. One sherd was classed originally as Rockport Black, *var. Lolita*, while the other was identified as Rockport Black, *var. Rockport*.

In addition to sites with Rockport components, designs similar to "Aransas Bay" are shown by Mounger (1959:Plates 13, 25) from Mission Espíritu Santo near Goliad. In those cases, sherds of both Goliad Red-on-buff and Goliad Black-on-buff exhibit rows of individual dots descending from vessel rims. As with the "Copano Bay motif," it may be assumed, therefore, that a decorative design similar to "Aransas Bay" lasted at least until the eighteenth century.

Rockport Black, "Shoalwater Bay motif" (n=1)

This is a rather unique motif represented by a single, wide, horizontal black band that circles the upper part of the *interior* portion of shallow bowls

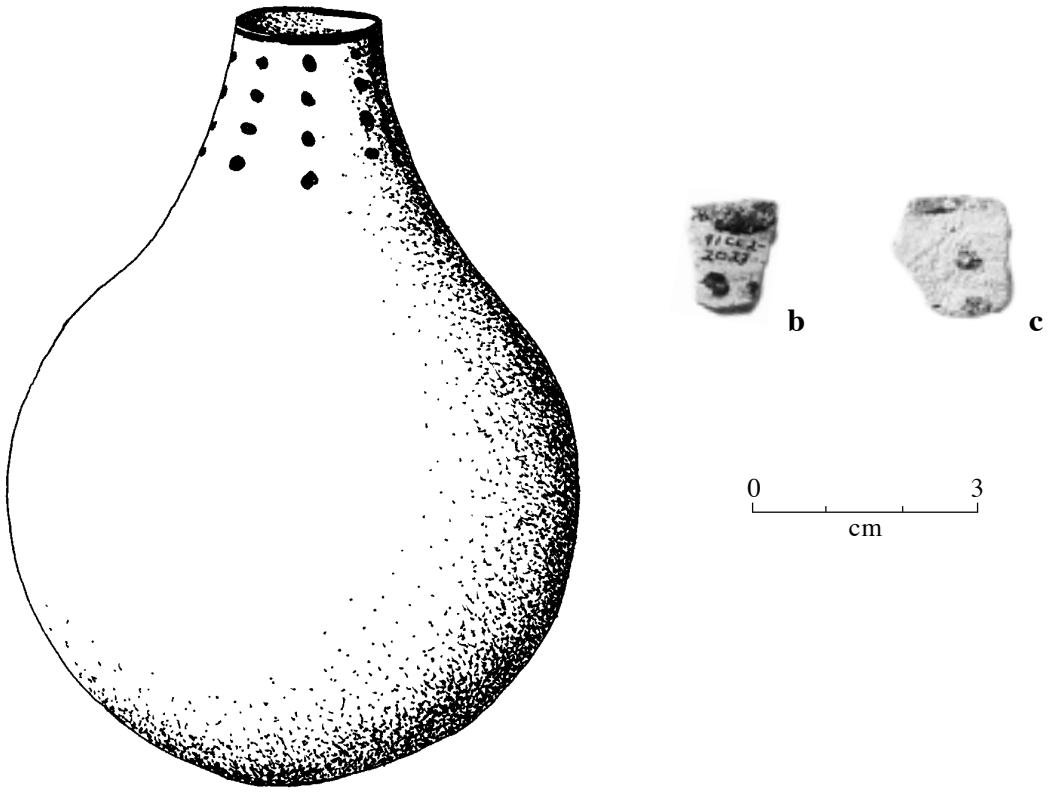

Figure 7-33. Rockport Black, "Aransas Bay motif." (a) Idealized "Aransas Bay" vessel; (b-c) Rim sherds with the "Aransas Bay motif" (b with *Lolita* paste and c with *Rockport* paste). (See Appendix K for provenience data.)

and/or plates (Figure 7-34). The lone example in the current collection occurs on a rim sherd of Rockport Black, *var. Lolita* that also exhibits black coating on its top and interior portions. The black band is 5□mm wide and located 9□mm below the lip.

Similar, though not identical, designs are illustrated by Campbell (1958a) from the Live Oak Point site. One (Campbell 1958a:Figure 5, c) clearly includes a horizontal band on the interior of a shallow bowl or plate, although several vertical wavy lines also are present. Another (Campbell 1958a:Figure 5, u) shows two horizontal bands on what probably is the exterior of the vessel.

Rockport Black, "Mesquite Bay motif" (n=4, but probably 12)

"Mesquite Bay" is a tenuous motif represented by irregular areas of blotchy black painting that Mounger (1959:169) referred to as "uneven dabs" (Figure 7-35). This "dabbing" appears as a number of individual design elements that apparently cover a relatively large area of the exterior of the vessel, as compared to the more carefully applied dots found on Rockport Black and Rockport Black-on-gray. Dabbed rim sherds in the current collection exhibit both plain and banded lips. For now, both lip forms are included in the motif, but it may be prudent in the future to establish separate motifs for those sherds that contain lip banding and those that lack such banding. Whatever the case, it will be necessary for future studies to acquire a greater sample of the "Mesquite Bay motif," particularly on larger sherds, before the validity of this motif can be confirmed.

Previous discussions of Rockport ceramics fail to mention any designs similar to "Mesquite Bay," although sloppily applied asphaltum coatings were noted by Suhm and Krieger (1954:384) and Suhm and Jelks (1962:131). Those authors attributed such uneven applications to crack-mending and/or waterproofing attempts. While this may be the case in most instances, it is possible that some of the sloppy coatings actually represent intentional designs similar to the "Mesquite Bay motif." This is particularly conceivable if one compares the sherds initially illustrated by Suhm and Krieger (1954:Plate 73) and later by Suhm and Jelks (1962:Plate 66) with those shown by Mounger (1959:Plates 21-23). Six of the sherds illustrated by the former authors, and typed as Rockport Black-on-gray, also are illustrated by Mounger and identified as Goliad Black-on-buff. Of these, at least two (Mounger 1959:Plates 21-22; Suhm and Jelks 1962:Plate 66, I, R) could be examples of the random dabbing mentioned by Mounger.

Only four rims in the current sample could be placed in the "Mesquite Bay" category, although it is likely that the other eight sherds with dabbing (see Table 7-13) probably are from "Mesquite Bay" vessels. Two of the four examples of "Mesquite Bay" originally were classified as Rockport Black, *var. Elm Bayou*, while one was identified as Rockport

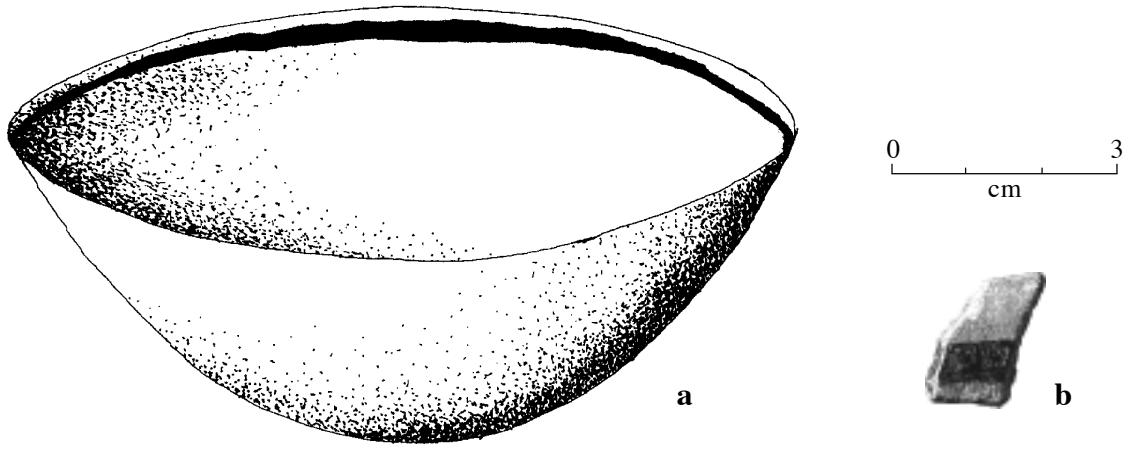

Figure 7-34. Rockport Black, "Shoalwater Bay motif." (a) Idealized "Shoalwater Bay" vessel; (b) Rim sherd of Rockport Black, *var. Lolita* exhibiting the "Shoalwater Bay motif." (See Appendix K for provenience data.)

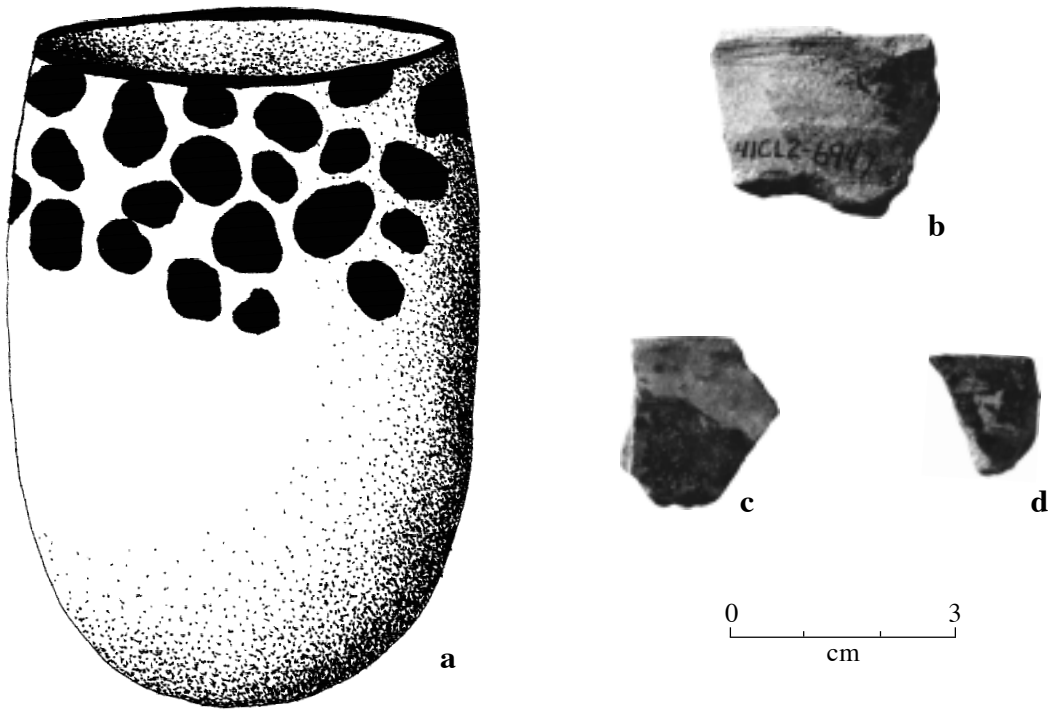

Figure 7-35. Rockport Black, "Mesquite Bay motif." (a) Idealized "Mesquite Bay" vessel; (b-c) Rim sherds with the "Mesquite Bay motif" (b with *Kuy Creek* paste, c with *Rockport* paste, and d with *Elm Bayou* paste). (See Appendix K for provenience data.)

Black, *var. Rockport*, and the other as Rockport Black, *var. Kuy Creek*. Two (one *Elm Bayou* sherd, plus the *Rockport* sherd) have wide dabbing on rims that also contain black banding on the exterior, interior, and top of a round lip, while another (the other *Elm Bayou* sherd) has black banding on the interior and top of a flat lip. The *Kuy Creek* sherd has a round lip, but no black band.

Rockport Black Motifs by Analysis Unit

Once again, the mixed nature of the Stratum 2 deposit makes it difficult to identify any clear-cut chronological trends among the different Rockport Black motifs. Nevertheless, a few observations can be made. First, the most common motif, "Carancahua Bay," has its greatest showing in the upper levels of the site (Table 7-22). The majority of specimens came from the upper portion of Stratum 2 (AUs 2 and 3) (*n*=72; 50.4 percent), with an additional 11 sherds (7.7 percent) from the overlying Stratum 1 colluvium (AU 1). In contrast, only 57 sherds (39.9 percent) came from the lower Rockport deposits, including the Stratum 3 *Rangia* midden (AUs 4, 5, and 6). This may suggest a general increase in popularity for the "Carancahua Bay motif" towards the latter portion of the Rockport phase. Also occurring only in the upper levels of the site were sherds of the "Espíritu Santo Bay" (AU 1) and "Shoalwater Bay" (AU 3) motifs, although the small sample size of each precludes any definitive statements.

Motifs occurring only in the lower Rockport levels include "Copano Bay" (AUs 5 and 6) and "Pats Bay" (AU 6) (see Table 7-22) Again, however, the small sample size of each makes any conclusive remarks impossible. Likewise, any statements regarding the distribution of individual motifs across the site are limited by the small sample sizes for most motifs. Unfortunately, in the one instance where there are enough sherds for potential interpretation, the distribution of sherds of the "Carancahua Bay motif" generally reflects that of the overall ceramic assemblage, with the majority of the specimens (*n*=105; 73.4 percent) coming from the Block 3 area.

Table 7-22. Decorative Motifs of Rockport Black, by Analysis Unit.

Motifs	Analysis Units																	
	AU 1		AU 2		AU 3		AU 4		AU 5		AU 6		AU 8		AU 14		No AU			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Total	% Total
"Carancahua Bay"																				
var. Rockport	4	33.33	2	14.29	31	50.00	5	45.45	7	31.82	11	37.93	0	0.00	0	0.00	0	0.00	**60**	**38.96**
var. Elm Bayou	1	8.33	4	28.57	4	6.45	0	0.00	2	9.09	5	17.24	1	100.00	0	0.00	0	0.00	**17**	**11.04**
var. Kuy Creek	3	25.00	0	0.00	5	8.06	0	0.00	0	0.00	2	6.90	0	0.00	0	0.00	0	0.00	**10**	**6.49**
var. Lolita	3	25.00	7	50.00	15	24.19	5	45.45	9	40.91	9	31.03	0	0.00	1	100.00	1	50.00	**50**	**32.47**
var. Spring Bayou	0	0.00	1	7.14	3	4.84	0	0.00	1	4.55	1	3.45	0	0.00	0	0.00	0	0.00	**6**	**3.90**
"Carancahua Bay" total	**11**	**91.67**	**14**	**100.00**	**58**	**93.55**	**10**	**90.91**	**19**	**86.36**	**28**	**96.55**	**1**	**100.00**	**1**	**100.00**	**1**	**50.00**	**143**	**92.86**
"Copano Bay"																				
var. Rockport	0	0.00	0	0.00	0	0.00	1	9.09	1	4.55	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**1.30**
"Copano Bay" total	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**1**	**9.09**	**1**	**4.55**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**2**	**1.30**
"Espíritu Santo Bay"																				
var. Spring Bayou	1	8.33	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
"Espíritu Santo Bay" total	**1**	**8.33**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**1**	**0.65**
"Pats Bay"																				
var. Lolita	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	3.45	0	0.00	0	0.00	0	0.00	**1**	**0.65**
"Pats Bay" total	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**1**	**3.45**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**1**	**0.65**
"Aransas Bay"																				
var. Rockport	0	0.00	0	0.00	1	1.61	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
var. Lolita	0	0.00	0	0.00	0	0.00	0	0.00	1	4.55	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
"Aransas Bay" total	**0**	**0.00**	**0**	**0.00**	**1**	**1.61**	**0**	**0.00**	**1**	**4.55**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**2**	**1.30**
"Shoalwater Bay"																				
var. Lolita	0	0.00	0	0.00	1	1.61	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
"Shoalwater Bay" total	**0**	**0.00**	**0**	**0.00**	**1**	**1.61**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**1**	**0.65**
"Mesquite Bay"																				
var. Rockport	0	0.00	0	0.00	0	0.00	0	0.00	1	4.55	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
var. Elm Bayou	0	0.00	0	0.00	2	3.23	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**1.30**
var. Kuy Creek	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	50.00	**1**	**0.65**
"Mesquite Bay" total	**0**	**0.00**	**0**	**0.00**	**2**	**3.23**	**0**	**0.00**	**1**	**4.55**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**1**	**50.00**	**4**	**2.60**
Site Total	**12**	**100.00**	**14**	**100.00**	**62**	**100.00**	**11**	**100.00**	**22**	**100.00**	**29**	**100.00**	**1**	**100.00**	**1**	**100.00**	**2**	**100.00**	**154**	**100.00**

Rockport Black-on-gray Motifs

As with Rockport Black, there are seven motifs recognized for Rockport Black-on-gray (Table 7-23). Four are equivalent to motifs found on Rockport Black, but three represent different decorative ideas.

Prior to the individual motif discussions presented below, an explanation should be provided for the lack of a named motif that includes vertical, straight-line painting on the upper, exterior portion of Rockport Black-on-gray vessels; a motif similar to that identified as "Pats Bay" for Rockport Black. Although 28 sherds with vertical straight lines were present in the collection (see Table 7-12), none was of sufficient size, nor did it contain a large-enough rim, for the authors to be certain that a motif equivalent to "Pats Bay" was intended. While it is conceivable that some of these sherds may be from vessels with vertical, straight lines, it is not possible to assign any to a new motif. With more data from other sites and collections, however, recognition of such a motif may be possible.

Rockport Black-on-gray, "Steamboat Island motif" (n=322)

This is the Rockport Black-on-gray equivalent to the "Carancahua Bay motif" of Rockport Black, and most previous statements regarding that motif also pertain to "Steamboat Island." It consists simply of a black rim band that primarily circles the exterior and top portions of a vessel's lip (Figure 7-36). At times the band also occurs on the interior edge of the lip. Because of its relative simplicity, "Steamboat Island" apparently represents the most common of all Rockport motifs (but see the earlier discussion regarding Rockport Black motifs). Accordingly, sherds exhibiting the "Steamboat Island motif" are reported to make up the bulk of all decorated ceramics from previous Rockport assemblages (Campbell 1958a:435, 1962:332; Suhm and Krieger 1954:384; Suhm and Jelks 1962:131). Ricklis (1990b:616-617, Figure 65), therefore, set up the design as a separate type—Rockport Black-on-gray I—to reflect the widespread presence of the motif.

There are 322 sherds of "Steamboat Island" in the current collection from Guadalupe Bay (see Table 7-23). As with the "Carancahua Bay motif," the most common sherds of "Steamboat Island" include those with pastes that lack any secondary inclusions (classed originally as Rockport Black-on-gray, *var. Rockport*) or contain only bone inclusions (*var. Long Mott*). Also in keeping with "Carancahua Bay," the lip banding of "Steamboat Island" most regularly occurred on the top, exterior, and interior portions of the vessel's lip (*n*=202; 62.7 percent).

Table 7-23. Decorative Motifs Recognized on Sherds of Rockport Black-on-Gray at Guadalupe Bay.

	Rockport Black-on-gray											
	var. Rockport		*var. Buffalo Lake*		*var. Hog Bayou*		*var. Long Mott*		*var. Mosquito Point*			
	Rim	Body	Rim	Body	Rim	Body	Rim	Body	Rim	Body	Total	% Total
Motifs												
"Steamboat Island"	120	0	52	0	38	0	75	0	37	0	**322**	**92.80**
"Matagorda Island"	4	0	5	0	2	0	6	0	0	0	**17**	**4.90**
"San José Island"	1	0	0	0	0	0	2	0	0	0	**3**	**0.86**
"Rattlesnake Island"	0	0	0	0	0	0	1	0	0	0	**1**	**0.29**
"Kenyon Island"	0	0	1	0	1	0	0	0	0	0	**2**	**0.58**
"Turnstake Island"	0	0	1	0	0	0	0	0	0	0	**1**	**0.29**
"Long Island"	0	0	0	0	1	0	0	0	0	0	**1**	**0.29**
Total	**125**	**0**	**59**	**0**	**42**	**0**	**84**	**0**	**37**	**0**	**347**	**100.00**

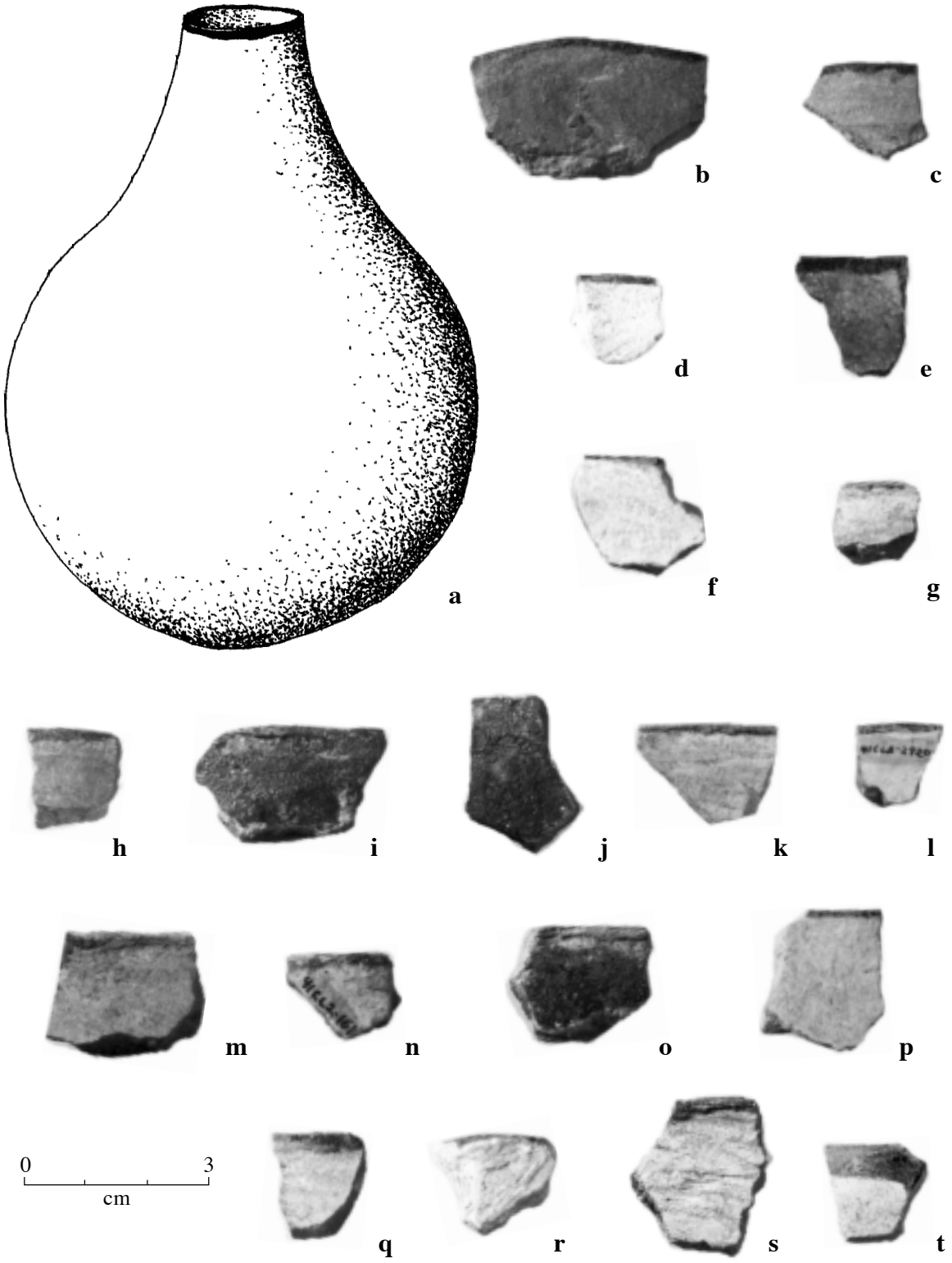

Figure 7-36. Rockport Black-on-gray, "Steamboat Island motif." (a) Idealized "Steamboat Island" vessel; (b-t) Rim sherds exhibiting the "Steamboat Island" motif (b-e with *Rockport* paste, f-h with *Long Mott* paste, i-o with *Buffalo Lake* paste, p-s with *Hog Bayou* paste, and t with *Mosquito Point* paste). (See Appendix K for provenience data.)

This was followed by banding only on the top of the lip (*n*=41; 12.7 percent), on the top and interior of the lip (again *n*=41; 12.7 percent), and the top and exterior of the lip (*n*=32; 9.9 percent). Four sherds also exhibited banding on the top and one side of the lip, but, due to their small size, it was impossible to determine whether the latter placement was on the interior or exterior part of the vessel. One sherd also had banding only on the exterior of the lip, while another sherd only had banding on the interior of the lip.

As noted for "Carancahua Bay," "Steamboat Island" has been recognized for years as one of the principal decorative designs on Rockport ceramics. Of particular interest is the potential association of the motif with relatively late components dating into the Protohistoric and Historic periods, as evidenced by the presence of similar designs on Goliad Red-on-buff and Goliad Black-on-buff vessels from Mission Espíritu Santo at Goliad (Mounger 1959).

Rockport Black-on-gray, "Matagorda Island motif" (n=17, but probably ~480)

This is Rockport Black-on-gray's equivalent to the "Copano Bay motif" of Rockport Black, and virtually all statements concerning the design elements of "Copano Bay" also pertain to "Matagorda Island." It is characterized by a black lip band that usually covers both the top and exterior edge of the vessel rim, sometimes the interior edge, and from which descend individually painted wavy or squiggled vertical lines on the exterior portion of the vessel (Figure 7-37). As with "Copano Bay," such lines can be either slightly or highly wavy, and be narrow, medium, or wide in width. With additional study, differences in line quality and width may allow for the establishment of more motifs.

Since there are many more sherds of Rockport Black-on-gray than Rockport Black in the present collection (and probably in most other collections, as well), there are many more sherds or potential sherds of "Matagorda Island" than there are of "Copano Bay." Seventeen rims can unequivocally be assigned to the motif, while upwards of about 480 additional sherds might also be from portions of "Matagorda Island" vessels. As noted for "Copano Bay," most of the sherds exhibiting curved lines and/or wavy lines of unknown orientation (see Table 7-12) probably are from "Matagorda Island" vessels, while many of the sherds classed as having vertical straight lines could also be representative of the "Matagorda Island motif." In the latter case, the sherds simply are too small for the full extent of the painted line to be visible, making it impossible to identify individual waves or squiggles in the line.

Of the 17 "Matagorda Island" sherds from Guadalupe Bay, four were classed as Rockport Black-on-gray, *var. Rockport*, two as *var. Hog Bayou*, six as *var. Long Mott*, and five as *var. Buffalo Lake*. All have black banding present on the lip, and all but one (one of the *Long Mott* sherds) have banding on the exterior, top, and interior of the lip. The *Long Mott* sherd only has banding on the interior and top of the lip. Eleven of the 16 sherds have rounded lips, while the remaining five have flat lips. Two of the *Buffalo Lake* sherds fit together and have incised, perpendicular lines across a flat lip (see Figure 7-37, q). The sherds are almost evenly divided between those with wide wavy lines, and those with medium wavy lines. None has a narrow wavy line. Likewise, all of the associated bands either are wide (*n*=11) or medium (*n*=6).

Rockport Black-on-gray, "San José Island motif" (n=3, but probably 21)

This is the Rockport Black-on-gray equivalent to the "Espíritu Santo Bay motif" of Rockport Black. It consists of diagonal straight lines descending from the exterior lips of Rockport Black-on-gray vessels that also contain black lip bands (Figure 7-38). Again, all statements regarding previous recognition and distribution of the "Espíritu Santo Bay motif" pertain to this motif.

There are three rims in the current collection that can be classed as "San José Island" without much hesitation. It is likely that additional sherds with diagonal straight lines (see Table 7-12) also are representative of this motif, but, since those sherds either are too small or lack rims, definite motif assignment cannot be made. Of the three rims, two were classed as Rockport Black-on-gray, *var. Long Mott* and one as *var. Rockport*. All have wide lip bands on the exterior, top, and interior portions of the vessels' lips. Two (one *Long Mott* sherd and the *Rockport* sherd) have round lips, and the other (the second *Long Mott* specimen) has a flat lip. Narrow, medium, and wide diagonal lines are included; narrow on one of the *Long Mott* sherds, medium on the other *Long Mott* sherd, and wide on the *Rockport* sherd.

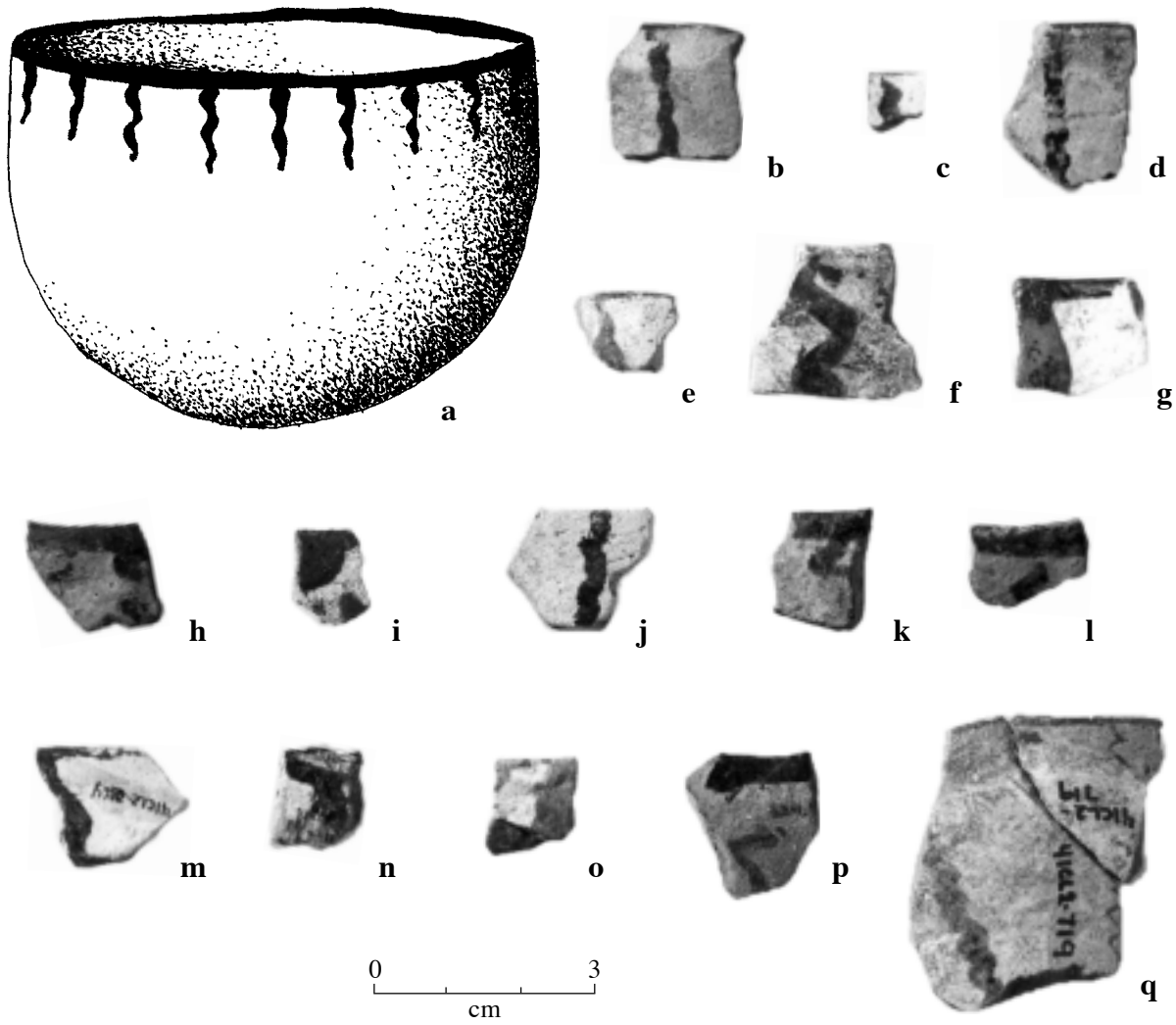

Figure 7-37. Rockport Black-on-gray, "Matagorda Island motif." (a) Idealized "Matagorda Island" vessel; (b-q) Rim sherds exhibiting the "Matagorda Island motif." (a-e with *Rockport* paste, f-g with *Hog Bayou* paste; h-m with *Long Mott* paste, and n-q with *Buffalo Lake* paste.) (See Appendix K for provenience data.)

Rockport Black-on-gray, "Rattlesnake Island motif" (n=1)

This is a rather unique motif recognized only on one sherd classified as Rockport Black-on-gray, *var. Long Mott*. It consists of a series of semicircular-shaped, pendant loops that circle the upper part of the vessel's exterior just below the lip (Figure 7-39). The one example in the current collection also contains a medium-wide black band covering the exterior, interior, and top of a flat lip; the medium-wide loops descend from this band. Other sherds with portions of the motif may lie hidden among those specimens that exhibit only curved lines as their design element (see Table 7-12). As noted above, it is impossible to properly assign these sherds to a motif, since they could also represent segments of wavy lines from either the "Matagorda Island" or "Turnstake Island" motifs. Similarly, it also is possible that a like motif may be present on Rockport Black sherds that exhibit curved lines as single design elements (see Table 7-13). Again, those sherds were too small for definite motif recognition.

It is perhaps significant that this motif is similar, if not identical, to several designs present on

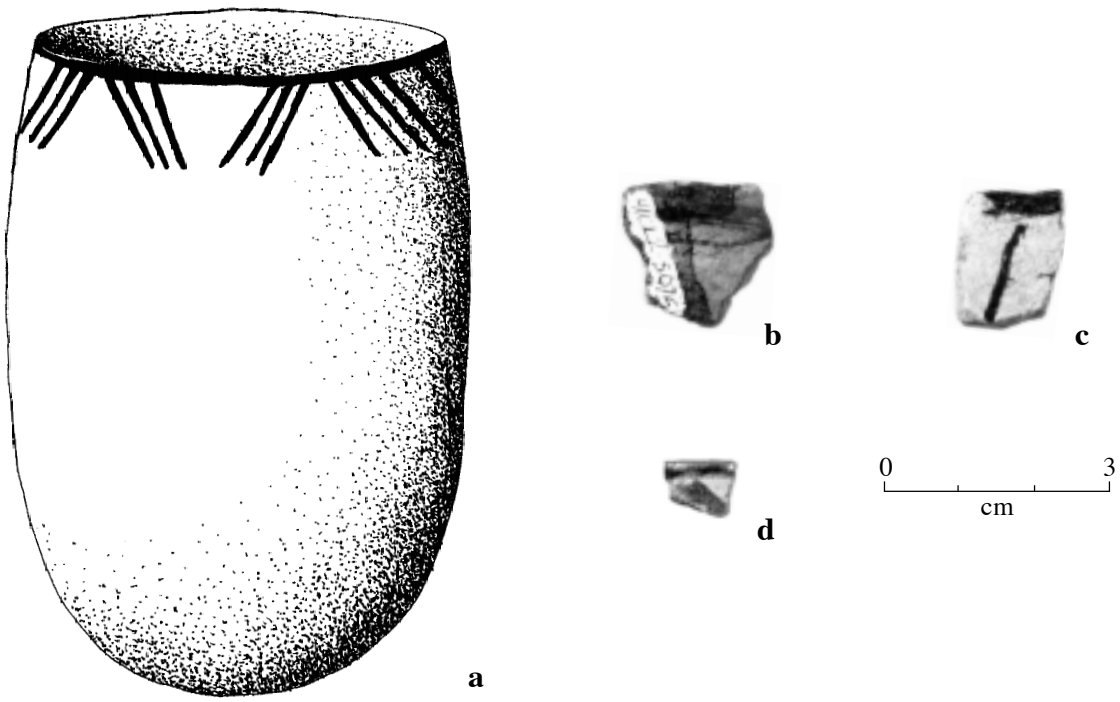

Figure 7-38. Rockport Black-on-gray, "San José Island motif." (a) Idealized "San José Island" vessel; (b-d) Rim sherds exhibiting the "San José Island motif" (b with *Rockport* paste, c-d with *Long Mott* paste). (See Appendix K for provenience data.)

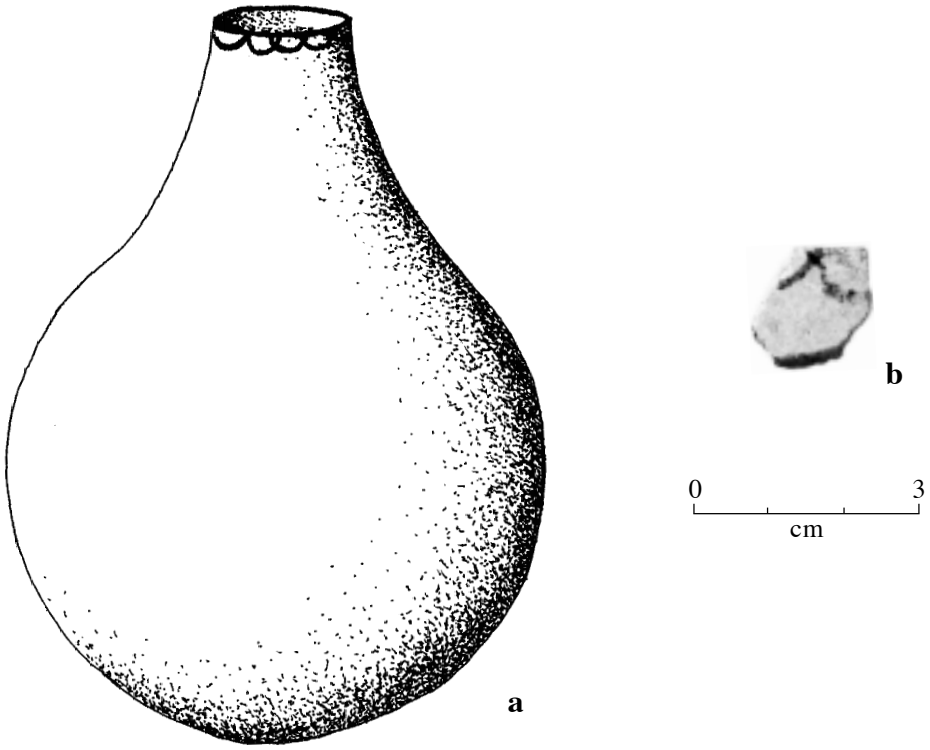

Figure 7-39. Rockport Black-on-gray, "Rattlesnake Island motif." (a) Idealized "Rattlesnake Island" vessel; (b) "Rattlesnake Island" rim sherd with *Long Mott* paste. (See Appendix K for provenience data.)

sherds of Goliad Red-on-buff from Mission Espíritu Santo at Goliad (Mounger 1959:168, Plates 15-18). It also is interesting to note the lack of similar designs on any of the Goliad Black-on-buff sherds from the same site (Mounger 1959). In fact, the present authors cannot find any examples of the "San José Island motif" either discussed or illustrated in any previous study on Rockport ceramics. For these reasons, there may be a relationship between "San José Island" and relatively late protohistoric and/or historic occupations similar to that at Espíritu Santo.

Rockport Black-on-gray, "Kenyon Island motif" (n=2)

This is the Rockport Black-on-gray equivalent of the "Aransas Bay motif" of Rockport Black. As such, it consists of vertical rows of painted dots that descend downward from the lip on the exterior portion of the vessel (Figure 7-40). Both banded and plain lips are present in the current collection. Although grouped under one motif at this time, it may be possible in the future to sort these into two separate motifs once more data are accumulated on chronological and/or geographical differences, if any.

The two sherds from Guadalupe Bay are both rims and were classified as Rockport Black-on-gray, *vars. Hog Bayou* and *Buffalo Lake*. The *Hog Bayou* specimen exhibits both narrow- and medium-sized dots below a round lip that also contains a medium band on its exterior, interior, and top. The *Buffalo Lake* specimen has wide dots below a round lip that lacks any sign of a band. An additional 47 sherds contain isolated dots, and these may also be from "Kenyon Island" vessels. Because of their size and/or lack of a rim, however, it is not possible to confidently sort these to their proper motif. They might, just as likely, represent sherds from "Turnstake Island" vessels, to be discussed next.

Rockport Black-on-gray, "Turnstake Island motif" (n=1)

The "Turnstake Island motif" is similar to the "Kenyon Island motif" save that vertical wavy lines alternate with the rows of vertical dots (Figure 7-41).

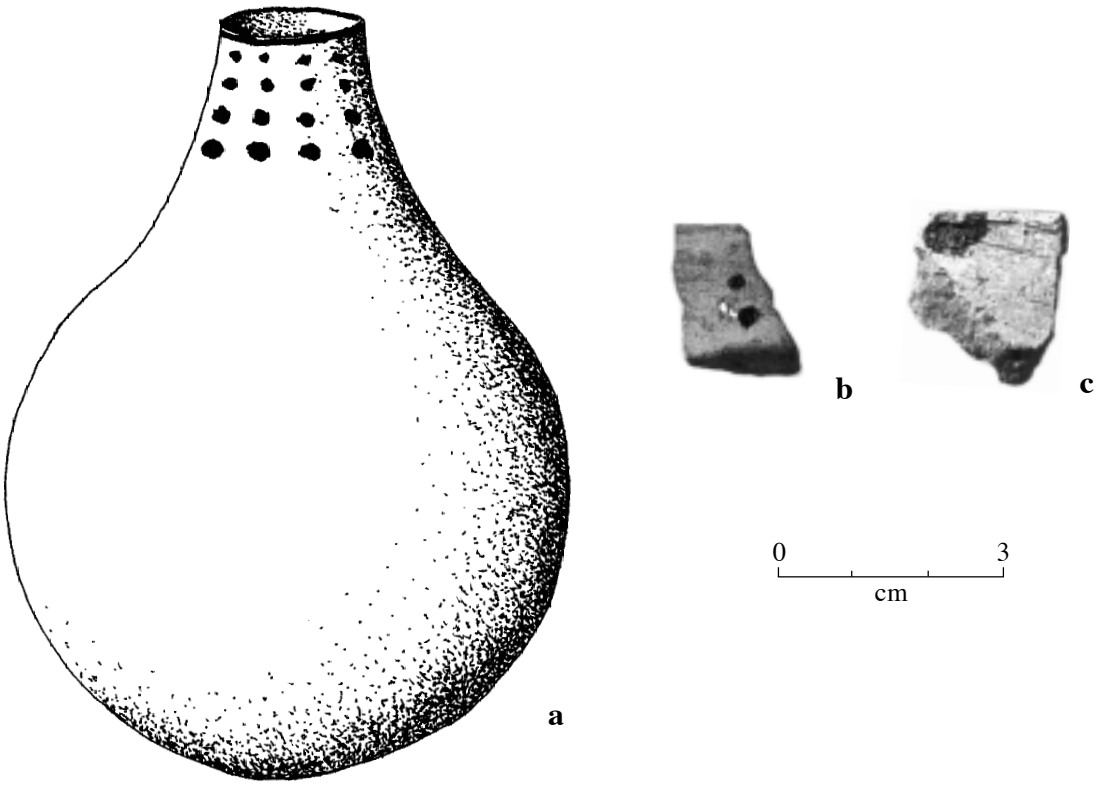

Figure 7-40. Rockport Black-on-gray, "Kenyon Island motif." (a) Idealized "Kenyon Island" vessel; (b-c) Rim sherds with the "Kenyon Island motif" (b with *Hog Bayou* paste, c with *Buffalo Lake* paste). (See Appendix K for provenience data.)

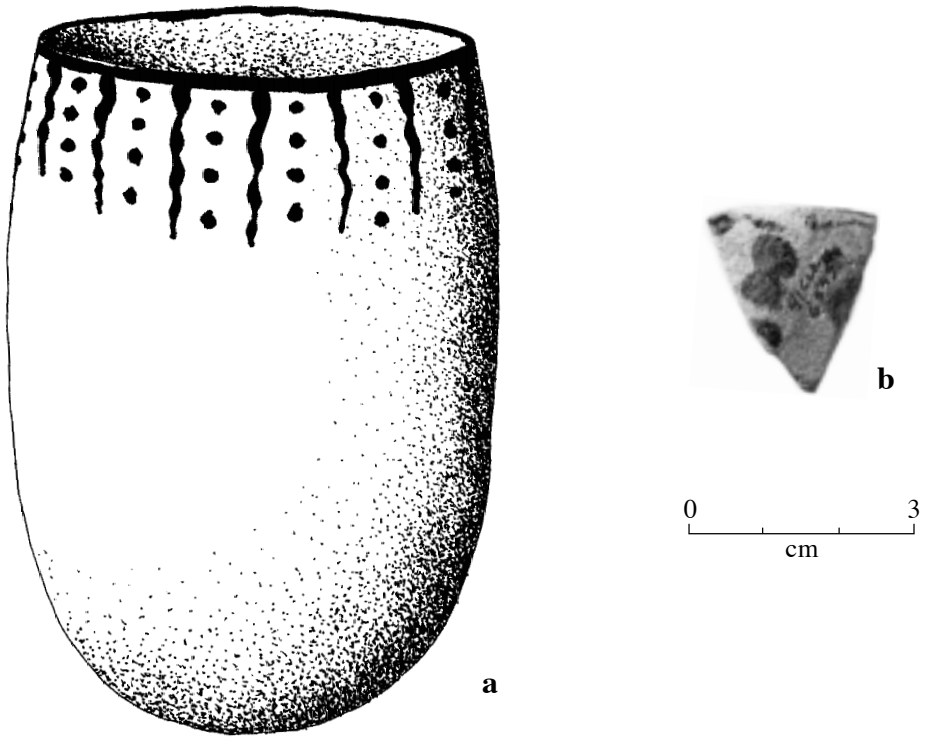

Figure 7-41. Rockport Black-on-gray, "Turnstake Island motif." (a) Idealized "Turnstake Island" vessel; (b) "Turnstake Island" rim sherd with *Buffalo Lake* paste. (See Appendix K for provenience data.)

This decorative idea is similar to several examples illustrated by Potter (1930:Plate 8) in which vertical wavy lines alternate with vertical rows of punctations. However, in the case of "Turnstake Island" all decoration is applied with asphaltum paint. Somewhat surprisingly, no other illustrations or discussions of the motif are provided in any of the previous studies on Rockport ceramics examined by the present authors. At least one sherd of Goliad Red-on-buff from Mission Espíritu Santo has a similar design, although it is difficult to determine if the vertical line is straight or wavy (Mounger 1959:Plate 13).

The one example in the current collection is a rim classified as Rockport Black-on-gray, *var. Buffalo Lake*. It contains wide dots and a narrow wavy line, both descending downward from a round lip that has a wide band on its exterior, top, and interior. As discussed above for "Kenyon Island," it is possible that additional sherds from "Turnstake Island" vessels are present among those specimens that only exhibit painted dots (see Table 7-12). Since many of these sherds may be from "Kenyon Island" vessels, however, they are not assigned to either motif. A stronger case can be made for association of the motif with those sherds that contain dots and lines of unknown orientation (see Table 7-12). Since the orientation of the lines is not known, however, it is impossible to assign the sherds to "Turnstake Island."

Rockport Black-on-gray, "Long Island motif" (n=1)

This unique motif is similar to that of the "Kenyon Island motif," save for one important difference. "Long Island" consists of vertical rows of painted dots that descend downward from the vessel lip on the *interior* of shallow bowls and/or plates (Figure 7-42). The one example in the current collection has wide dots situated below a wide lip band that is present on the exterior, top, and interior of the lip. It originally was classed as Rockport Black-on-gray, *var. Hog Bayou*.

Sherds with designs similar to that of the "Long Island motif" have been noted by Campbell (1958a:437,

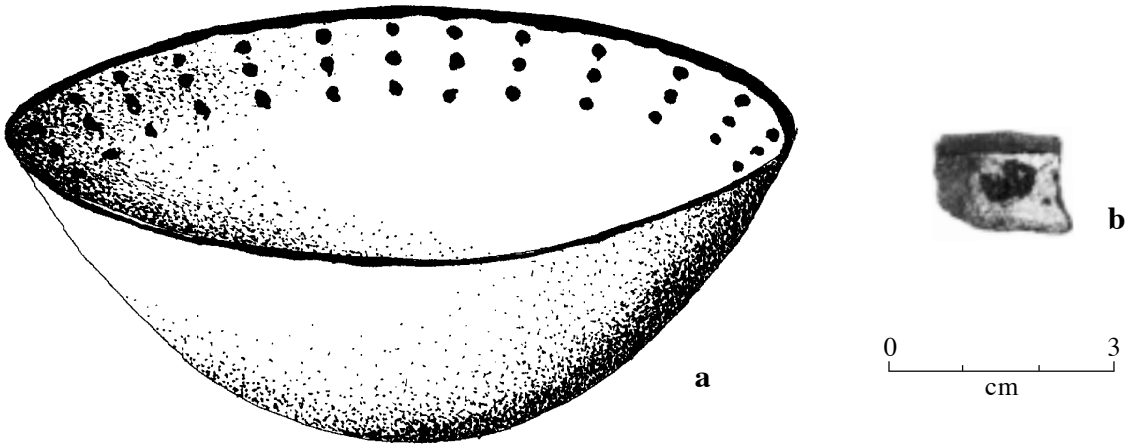

Figure 7-42. Rockport Black-on-gray, "Long Island motif." (a) Idealized "Long Island" vessel; (b) Rim sherd exhibiting the "Long Island motif" with *Hog Bayou* paste. (See Appendix K for provenience data.)

Figure 5, v) from the Live Oak Point site, but no other investigators make mention of comparable sherds. Without additional data from other collections, there is little to add regarding the potential chronological, geographical, and/or cultural usefulness of this motif.

Rockport Black-on-gray Motifs by Analysis Unit

As with Rockport Incised and Rockport Black, an effort was made to examine Rockport Black-on-gray motifs by analysis unit (Table 7-24). The distribution is somewhat similar to that of the various Rockport Black motifs (see Table 7-22), a not unexpected circumstance considering the likeness of the two types. "Steamboat Island" is common in most analysis units, although it has slightly greater numbers in the upper portions of Stratum 2 (AUs 2 and 3) (*n*=141; 43.8 percent) than in the lower portions of Stratum 2 (AUs 4 and 5) and the Stratum 3 *Rangia* deposit in Block 3 (AU 6) (*n*=129; 40.1 percent). If one considers the 25 sherds from AU 1, then additional support for an increase through time is provided. This mirrors quite well the findings of the "Carancahua Bay motif," as discussed earlier. Surprisingly, no sherds of the motif (or any other Black-on-gray motif) came from AU 7, the apparent Rockport oyster deposit in Block 3. This is particularly vexing since minor amounts of the motif (obviously displaced) were found in the Late Archaic oyster midden in Block 1 (AUs 8 and 9). Perhaps lack of the motif in AU 7 is related to the rather limited distribution of that analysis unit across Block 3.

Only the "Turnstake Island motif" occurs in the upper levels of Stratum 2 (AU 3) to the exclusion of the lower Rockport levels. Small sample size, however, mitigates against any chronological statements at this time. In contrast, "Rattlesnake Island" was found only in the lower levels of Stratum 2 (AU 4). Again, small sample size, plus the fact that a similar decorative motif is known from the historic mission of Espíritu Santo at Goliad (as discussed above), precludes any attempt at meaningful chronological interpretation. The lone sherd of "Long Island" also came from a relatively early deposit, in this case the Late Archaic oyster midden of Block 1 (AU 8), but its provenience is undoubtedly the result of post-depositional disturbance.

A few words can be offered regarding the spatial distribution of the various Rockport Black-on-gray motifs across the site. As noted several times previously, the majority of the motifs came from the area around Block 3, along with the majority of recovered ceramics. Only the lone sherds of "Rattlesnake Island" and "Long Island" came from the area around Blocks 1 and 2, rather than Block 3. Although small sample size hinders most interpretations, it is worth noting that the "Rattlesnake Island" sherd specifically came from XU N54W90, one of the Block 2 units initially excavated to examine the potential historic aboriginal component in that area. This provides some support for a possible late date for the motif, although, as just noted above, the sherd was found in the lower portion of the Stratum 2 midden in that area. Overall, however, considering the data from Mission Espíritu Santo, plus the sherd's loca-

Table 7-24. Decorative Motifs of Rockport Black-on-Gray, by Analysis Unit.

Motifs	Analysis Units																				Total	% Total
	AU 1		AU 2		AU 3		AU 4		AU 5		AU 6		AU 8		AU 9		AU 13*		No AU			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
"Steamboat Island"																						
var. Rockport	16	64.00	37	54.41	15	18.07	20	37.04	9	16.07	7	21.21	7	63.64	8	72.73	0	0.00	1	20.00	**120**	**34.58**
var. Buffalo Lake	2	8.00	12	17.65	8	9.64	11	20.37	9	16.07	9	27.27	1	9.09	0	0.00	0	0.00	0	0.00	**52**	**14.99**
var. Hog Bayou	4	16.00	2	2.94	16	19.28	2	3.70	11	19.64	2	6.06	0	0.00	0	0.00	1	3.03	0	0.00	**38**	**10.95**
var. Long Mott	2	8.00	8	11.76	26	31.33	11	20.37	16	28.57	7	21.21	1	9.09	0	0.00	0	0.00	4	80.00	**75**	**21.61**
var. Mosquito Point	1	4.00	5	7.35	12	14.46	4	7.41	6	10.71	5	15.15	1	9.09	3	27.27	0	0.00	0	0.00	**37**	**10.66**
"Steamboat Island" total	**25**	**100.00**	**64**	**94.12**	**77**	**92.77**	**48**	**88.89**	**51**	**91.07**	**30**	**90.91**	**10**	**90.91**	**11**	**100.00**	**1**	**100.00**	**5**	**100.00**	**322**	**92.80**
"Matagorda Island"																						
var. Rockport	0	0.00	2	2.94	2	2.41	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**4**	**1.15**
var. Buffalo Lake	0	0.00	0	0.00	2	2.41	2	3.70	0	0.00	1	3.03	0	0.00	0	0.00	0	0.00	0	0.00	**5**	**1.44**
var. Hog Bayou	0	0.00	0	0.00	0	0.00	1	1.85	1	1.79	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**0.58**
var. Long Mott	0	0.00	0	0.00	0	0.00	2	3.70	3	5.36	1	3.03	0	0.00	0	0.00	0	0.00	0	0.00	**6**	**1.73**
"Matagorda Island" total	**0**	**0.00**	**2**	**2.94**	**4**	**4.82**	**5**	**9.26**	**4**	**7.14**	**2**	**6.06**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**17**	**4.90**
"San Jose Island"																						
var. Rockport	0	0.00	1	1.47	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.29**
var. Long Mott	0	0.00	0	0.00	1	1.20	0	0.00	1	1.79	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**0.58**
"San Jose Island" total	**0**	**0.00**	**1**	**1.47**	**1**	**1.20**	**0**	**0.00**	**1**	**1.79**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**3**	**0.86**
"Rattlesnake Island"																						
var. Long Mott	0	0.00	0	0.00	0	0.00	1	1.85	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.29**
"Rattlesnake Island" total	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**1**	**1.85**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**1**	**0.29**
"Kenyon Island"																						
var. Buffalo Lake	0	0.00	1	1.47	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.29**
var. Hog Bayou	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	3.03	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.29**
"Kenyon Island" total	**0**	**0.00**	**1**	**1.47**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**1**	**3.03**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**2**	**0.58**
"Turnstake Island"																						
var. Buffalo Lake	0	0.00	0	0.00	1	1.20	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.29**
"Turnstake Island" total	**0**	**0.00**	**0**	**0.00**	**1**	**1.20**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**1**	**0.29**
"Long Island"																						
var. Hog Bayou	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	9.09	0	0.00	0	0.00	0	0.00	**1**	**0.29**
"Long Island" total	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**1**	**9.09**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**1**	**0.29**
Site Total	**25**	**100.00**	**68**	**100.00**	**83**	**100.00**	**54**	**100.00**	**56**	**100.00**	**33**	**100.00**	**11**	**100.00**	**11**	**100.00**	**1**	**100.00**	**5**	**100.00**	**347**	**100.00**

* Sherds from this analysis unit almost certainly incorporated by accident during waterscreening in the field.

tion at Guadalupe Bay, it is suggested that the "Rattlesnake Island motif" may prove useful in recognizing historic and/or protohistoric occupations in the region.

Vessel Forms

One hundred and fifty-three rim sherds were large enough to determine vessel form, and these fell into seven main categories: beaker, jar, beaker or jar, bottle, simple bowl, shallow bowl, and globular bowl (Table 7-25). The identification of a specific form generally followed that of Phillips (1970), although the bottle category was added to cover long-necked vessels commonly present in Rockport phase assemblages. Such bottles sometimes have been identified as "ollas" in past studies on Rockport ceramics (Ricklis 1990b:607). Beakers were recognized by sherds with straight sides that lacked evidence of an outflaring (everted) or inflaring (inverted) rim, while sherds with everted rims were identified as jars.[11] These latter specimens usually showed evidence of a slightly constricted neck area that then flared outwards towards the rim. Simple bowls, shallow bowls, and globular bowls were sorted by the degree of rim closure. Shallow bowls are wide-mouth vessels with flaring sides; some extreme examples of which might be classified as plates if enough of the vessel was present. Simple bowls also include wide-mouth vessels, but exhibit sides that are less flared than those of shallow bowls. Globular bowls have a constricted shape with inverted rims and relatively narrow mouths. Such vessels lack any evidence of a neck, however, precluding their classification as bottles.

As can be seen by Table 7-25, beakers far and away outnumbered all other forms combined (*n*=97), representing 63.4 percent of all vessels. The next most common form, that of jars, was represented by 18 rims (11.8 percent), followed by 15 rims from simple bowls (9.8 percent). Ten sherds came from either jars or beakers (6.5 percent), but were too small for proper identification, while eight sherds (5.2 percent) were from shallow bowls and four (2.6 percent) were from bottles. Lastly, one sherd (0.7 percent) came from a globular bowl. Taken together, all jars and beakers (*n*=125) account for 81.7 percent of the assemblage, while all bowls (*n*=24) equal 15.7 percent.

It is instructive to note the association of vessel form with the different types and varieties recognized in the collection. Beakers occurred on all types, with the greatest quantity (40.2 percent) associated with Rockport Plain (see Table 7-25). This was followed by Rockport Black-on-gray (26.8 percent) and Rockport Incised (24.7 percent). Only small percentages of the beakers were associated with Rockport Black (7.2 percent) and Rockport Red (1.0 percent). A slightly different pattern pertains for jars, with Rockport Incised (44.4 percent), Rockport Plain (16.7 percent), and Rockport Black-on-gray (also 22.2), making up the majority.[12] In this instance, though, Rockport Black (16.6 percent) also made up a modest percentage of the total.

Bottles and bowls, on the other hand, exhibit a significantly different pattern. In all cases, Rockport Black-on-gray vessels had the highest percentages of each vessel form: 75.0 percent for bottles, 53.3 percent for simple bowls, 62.5 percent for shallow bowls, and 100 percent for globular bowls. Although the overall number of vessels of each of these forms is relatively small compared to jars and beakers, there is no mistaking the association of painted vessels with bottles and bowls. This association, also recognized by others (Campbell 1958a:435; Ricklis 1995a:199), suggests quite strongly that painted vessels represent a "fine ware" category of ceramics that were used primarily as serving containers. In contrast to this, plain and incised vessels probably were employed mainly as cooking or storage containers.

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[11] A potential problem in vessel identification should be noted at this point. Since most of the sherds were relatively small, even those deemed large enough for use in identifying vessel form, there may be cases where a sherd with straight sides was recorded as having come from a beaker, when, in fact, it could have come from the upper "spout" portion of a wide-mouth bottle. This is particularly true for Rockport Black and Rockport Black-on-gray, where it is known from past studies (Ricklis 1990b, 1995a) that many of the vessels related to these types consisted of bottles or ollas. This problem may also explain the rather limited number of actual bottles (*n*=4) identified in the current sample. These bottles were recognized primarily by their very narrow spouts. If their spouts had been wider, they might have been classed as beakers.

[12] The totals and percentages for Rockport Incised are somewhat inflated, as five of the seven sherds actually represent the remains of the partially reconstructed vessel from Sample Unit N70W110.

Table 7-25. Vessel Forms, by Type and Variety, Recognized for Sherds from Guadalupe Bay.

	Vessel Forms															
	Beaker		Jar		Beaker or Jar		Bottle		Simple Bowl		Shallow Bowl		Globular Bowl			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Total	% Total
Rockport Black																
var. Elm Bayou	4	4.12	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**4**	**2.61**
var. Kuy Creek	0	0.00	1	5.56	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
var. Lolita	2	2.06	0	0.00	0	0.00	0	0.00	0	0.00	1	12.50	0	0.00	**3**	**1.96**
var. Rockport	1	1.03	0	0.00	0	0.00	0	0.00	0	0.00	1	12.50	0	0.00	**2**	**1.31**
var. Spring Bayou	0	0.00	2	11.11	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**1.31**
Rockport Black total	**7**	**7.22**	**3**	**16.67**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**2**	**25.00**	**0**	**0.00**	**12**	**7.84**
Rockport Black-on-gray																
var. Buffalo Lake	6	6.19	1	5.56	1	10.00	2	50.00	4	26.67	1	12.50	0	0.00	**15**	**9.80**
var. Hog Bayou	2	2.06	1	5.56	1	10.00	0	0.00	1	6.67	0	0.00	0	0.00	**5**	**3.27**
var. Long Mott	9	9.28	0	0.00	2	20.00	0	0.00	1	6.67	1	12.50	1	100.00	**14**	**9.15**
var. Mosquito Point	2	2.06	0	0.00	0	0.00	1	25.00	1	6.67	0	0.00	0	0.00	**4**	**2.61**
var. Rockport	7	7.22	2	11.11	3	30.00	0	0.00	1	6.67	3	37.50	0	0.00	**16**	**10.46**
Rockport Black-on-gray total	**26**	**26.80**	**4**	**22.22**	**7**	**70.00**	**3**	**75.00**	**8**	**53.33**	**5**	**62.50**	**1**	**100.00**	**54**	**35.29**
Rockport Incised																
var. Mission Lake	10	10.31	0	0.00	0	0.00	0	0.00	1	6.67	0	0.00	0	0.00	**11**	**7.19**
var. Mustang Lake	8	8.25	7 *	38.89	1	10.00	0	0.00	1	6.67	0	0.00	0	0.00	**17**	**11.11**
var. Plank Bridge	1	1.03	0	0.00	0	0.00	0	0.00	0	0.00	1	12.50	0	0.00	**2**	**1.31**
var. Sommerville	1	1.03	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
var. Rockport	4	4.12	1	5.56	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**5**	**3.27**
Rockport Incised total	**24**	**24.74**	**8**	**44.44**	**1**	**10.00**	**0**	**0.00**	**2**	**13.33**	**1**	**12.50**	**0**	**0.00**	**36**	**23.53**
Rockport Plain																
var. Austwell	8	8.25	1	5.56	1	10.00	0	0.00	2	13.33	0	0.00	0	0.00	**12**	**7.84**
var. Green Lake	9	9.28	0	0.00	0	0.00	0	0.00	1	6.67	0	0.00	0	0.00	**10**	**6.54**
var. Guadalupe	17	17.53	1	5.56	0	0.00	0	0.00	1	6.67	0	0.00	0	0.00	**19**	**12.42**
var. Rockport	4	4.12	0	0.00	0	0.00	1	25.00	0	0.00	0	0.00	0	0.00	**5**	**3.27**
var. Seadrift	1	1.03	1	5.56	1	10.00	0	0.00	1	6.67	0	0.00	0	0.00	**4**	**2.61**
Rockport Plain total	**39**	**40.21**	**3**	**16.67**	**2**	**20.00**	**1**	**25.00**	**5**	**33.33**	**0**	**0.00**	**0**	**0.00**	**50**	**32.68**
Rockport Red																
var. unspecified	1	1.03	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
Rockport Red total	**1**	**1.03**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**1**	**0.65**
Site Total	**97**	**100.00**	**18**	**100.00**	**10**	**100.00**	**4**	**100.00**	**15**	**100.00**	**8**	**100.00**	**1**	**100.00**	**153**	**100.00**

* Five of the jar rims actually are from the partially reconstructed vessel from Sample Unit N70W110.

It should be noted that an additional 144 body sherds contain painted designs on their interiors, while another 11 rim sherds also exhibit interior painting, but all were too small to allow for proper vessel identification. Most, if not all, of these sherds probably are from simple bowls, shallow bowls, or possibly even plates. Twenty-six were classified as Rockport Black, while 129 were identified as Rockport Black-on-gray. Their presence in the overall collection from Guadalupe Bay significantly increases the number of painted vessels probably associated with bowls and/or plates. This further strengthens the likelihood that such painted vessels functioned primarily in a serving capacity.

The association of vessel forms and decorative motifs also was examined in an effort to find potential meaningful relationships and to locate support for the assumptions expressed above. Although the sample is relatively small, amounting to only 65 sherds, a few observations are possible (Table 7-26). First, all incised motifs occur only on beakers or jars, thus supporting the cooking and/or storage function for the majority of these vessels. The painted motifs, on the other hand, occur on all vessel forms, particularly the two black-banded motifs, "Carancahua Bay" and "Steamboat Island." This supports the notion that painted vessels fulfilled several roles, including that of serving vessels.

Past studies of late prehistoric ceramic assemblages in the Southeast and Midwest (Kelley 1994:75; Pauketat 1989; Shapiro 1984) have suggested that the frequency of jars (and/or beakers in the present case) can be used to determine the degree of site permanence. Generally, jars made up a maximum of 28 percent of all vessels at several Mississippi period sites examined by Shapiro (1984:704), between 45 and 91 percent of the total vessels in domestic assemblages at other Mississippi period sites in the American Bottom area studied by Pauketat (1989:Table 3), and 55 percent of the total assemblage at the protohistoric and historic McLelland site in the Caddoan cultural area reported by Kelley (1994:75). This shows a great range of variation from one culture area to another, and indicates that it probably will be necessary to examine a larger sample of ceramics from additional sites along the central Texas coast before any meaningful statements can be offered regarding the relationship of vessel forms and site permanence.

Unfortunately, previous ceramic studies from sites along the central Texas coast have not provided the data necessary for comparative purposes. Ricklis (1990b:602, 606, 610), for example, looked at 464 rim sherds from four sites in the region—Guadalupe Bay (41 CL 2), Live Oak Point (41 AS 2), McGloin Bluff (41 SP 11), and Kirchmeyer (41 NU 11)—in an attempt to refine the existing ceramic typology. He chose to divide his vessels into two broad size categories based on orifice diameter—those with mouths less than 5 cm in diameter, which he termed "small-mouth" vessels, and those with mouths generally greater than 12 cm in diameter, called "wide-mouth" vessels (Ricklis 1990b:610). The former included bottles, while the latter encompassed both jars and bowls. Because of this, one cannot separate cooking and/or storage vessels (jars) from serving vessels (bowls), making it difficult, if not impossible, to compare the data to that from Guadalupe Bay. About all that can be said is that small-mouth vessels (bottles) made up 10.6 percent of the overall vessel assemblage from the four sites (Ricklis 1990b:Table 28). This is slightly greater than the 2.6 percent noted for bottles at Guadalupe Bay, but such a difference does not appear to be particularly significant.

The only other potentially comparable data on vessel form comes from Mission Espíritu Santo at Goliad. Mounger (1959:164-167) was able to reconstruct or partially reconstruct 15 vessels of Goliad Plain, and from these she was able to interpret vessel form. Five were identified as pots (four with handles), one as a shallow bowl, five as simple bowls, one as a globular bowl, and three as globular jars. An additional bottle neck also was noted (Mounger 1959:169), although it did not come from a reconstructed vessel. Aside from the bottle neck, individual rim sherds were not used to identify vessel form. Using these totals, it is possible to determine that vessels classed as either jars or pots made up 50 percent of the collection, bowls comprised 43.8 percent, and the lone bottle neck represented 6.3 percent. Assuming that Mounger's jars and pots are somewhat equivalent to the jar and beaker categories at Guadalupe Bay, then it is clear that there were significantly greater numbers of these forms at the latter site (50 percent at Espíritu Santo and 81.7 percent at Guadalupe Bay). In contrast, bowls made up a greater percentage of the vessels at the mission than they did at Guadalupe Bay (43.8 percent to 15.7 percent). Since the mission ceramics were produced during the eighteenth century by Aranama Indians, as opposed to what probably was the fourteenth century by Karankawan Indians, such dis-

Table 7-26. Vessel Forms, by Decorative Motif, Recognized for Sherds Recovered at Guadalupe Bay.

	Vessel Forms															
	Beaker		Jar		Beaker or Jar		Bottle		Simple Bowl		Shallow Bowl		Globular Bowl			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Total	% Total
Rockport Black																
"Carancahua Bay motif"																
var. Elm Bayou	3	8.82	0	0.00	1	14.29	0	0.00	0	0.00	0	0.00	0	0.00	**4**	**6.15**
var. Lolita	2	5.88	1	8.33	0	0.00	0	0.00	0	0.00	1	20.00	0	0.00	**4**	**6.15**
var. Spring Bayou	0	0.00	1	8.33	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**1.54**
"Espíritu Santo Bay motif"																
var. Spring Bayou	0	0.00	1	8.33	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**1.54**
"Mesquite Bay motif"																
var. Elm Bayou	2	5.88	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**3.08**
Rockport Black total	**7**	**20.59**	**3**	**25.00**	**1**	**14.29**	**0**	**0.00**	**0**	**0.00**	**1**	**20.00**	**0**	**0.00**	**12**	**18.46**
Rockport Black-on-gray																
"Steamboat Island motif"																
var. Buffalo Lake	4	11.76	1	8.33	1	14.29	2	100.00	1	25.00	1	20.00	0	0.00	**10**	**15.38**
var. Hog Bayou	1	2.94	1	8.33	1	14.29	0	0.00	0	0.00	0	0.00	0	0.00	**3**	**4.62**
var. Long Mott	5	14.71	0	0.00	2	28.57	0	0.00	0	0.00	0	0.00	1	100.00	**8**	**12.31**
var. Mosquito Point	2	5.88	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**3.08**
var. Rockport	7	20.59	0	0.00	1	14.29	0	0.00	1	25.00	3	60.00	0	0.00	**12**	**18.46**
"Matagorda Island motif"																
var. Buffalo Lake	0	0.00	0	0.00	0	0.00	0	0.00	2	50.00	0	0.00	0	0.00	**2**	**3.08**
var. Long Mott	1	2.94	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**1.54**
"San José Island motif"																
var. Rockport	0	0.00	0	0.00	1	14.29	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**1.54**
"Turnstake Island motif"																
var. Buffalo Lake	1	2.94	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**1.54**
Rockport Black-on-gray total	**21**	**61.76**	**2**	**16.67**	**6**	**85.71**	**2**	**100.00**	**4**	**100.00**	**4**	**80.00**	**1**	**100.00**	**40**	**61.54**
Rockport Incised																
"Ayres Point motif"																
var. Mustang Lake	1	2.94	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**1.54**
"Cedar Point motif"																
var. Mustang Lake	0	0.00	1	8.33	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**1.54**
"Cox Point motif"																
var. Mission Lake	4	11.76	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**4**	**6.15**
"Bendewald Point motif"																
var. Mustang Lake	0	0.00	6*	50.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**6**	**9.23**
"Keeran Point motif"																
var. Mission Lake	1	2.94	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**1.54**
Rockport Incised total	**6**	**17.65**	**7**	**58.33**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**13**	**20.00**
Site Total	**34**	**100.00**	**12**	**100.00**	**7**	**100.00**	**2**	**100.00**	**4**	**100.00**	**5**	**100.00**	**1**	**100.00**	**65**	**100.00**

* Five of the six sherds are from the partially reconstructed vessel from Sample Unit N70W110.

crepancies in vessel frequencies probably reflect temporal and cultural differences.

Vessel Forms by Analysis Unit

Table 7-27 lists the various vessel forms by analysis unit. A few minor trends can be seen, but it is uncertain whether these trends can be confidently attributed to chronological or functional factors. As can be seen, the majority of vessel rims (*n*=83; 54.3 percent) came from the lower Rockport deposits (AUs 4 through 7), particularly those associated with the Block 3 area) as opposed to only 59 rims (38.6 percent) from the upper Rockport deposits (AUs 2 and 3), again with most associated with Block 3. Thus, the greater counts and percentages of those individual vessel forms associated with the lower Rockport deposits (especially those in Block 3) may simply reflect the greater quantity of overall rims found in those same deposits.

Regardless, 41 beaker rims (42.3 percent of all beakers) came from the upper portion of the Rockport occupation (AUs 2 and 3), while 49 rims (50.5 percent) came from the lower Rockport deposits (AUs 4 through 7), thus indicating a potential minor preference towards the lower deposits. Jars also showed a slightly greater trend towards the deeper Rockport deposits, consisting of three rims (16.7 percent) from AUs 2 and 3 and 11 rims (61.1 percent) from AUs 4 through 7. (Of the latter 11 rims, however, it should be kept in mind that five came from the partially reconstructed vessel found in Sample Unit N70W110.) Beakers or jars also showed a minor tendency towards the deeper deposits, with four rims (40.0 percent) from AU 2 and five rims (50.0 percent) from AUs 4 through 6.

Simple bowls also are represented by a greater number of rims in the deeper Rockport deposits: three (20.0 percent) associated with AU 3, in contrast to the 12 (80.0 percent) found in AUs 4 through 7. Shallow bowls are evenly split, however, between the upper and lower Rockport deposits (four rims from AUs 2 and 3; four rims from AUs 4 through 6). The lone globular bowl rim came from the upper Rockport occupation of AU 3.

Bottle sherds represented the only vessel form to show a potential association with the upper Rockport deposits. Three of the four sherds (75.0 percent) came from AUs 2 and 3, while only one sherd came from AU 6. Unfortunately, small sample size may negate this apparent trend.

Overall, the various associations of the different vessel forms to specific AUs is somewhat equivocal, since those AUs with the majority of any particular vessel form also contained the most ceramics. Only the four bottle sherds exhibit a chronological tendency that is contrary to all others, and suggests a vessel form that developed relatively late during the Rockport phase. As just noted, however, this tendency may simply reflect small sample size.

Vessel Size

Vessel size was determined by measuring the orifice diameter of those rim sherds or joined rim sherds large enough to provide reasonable data. These sherds were placed on a board marked by concentric circles spaced one centimeter apart and the diameter was estimated to the nearest centimeter. As can be seen by Table 7-28, one partial vessel and 116 individual sherds were large enough to supply useful orifice measurements.

Generally, all beakers and jars (including vessels that could not be sorted as either beakers or jars) had orifice diameters that averaged between 17.3 and 17.6 cm, with a range between 8 and 28 cm. As to be expected, bottles had much smaller openings, averaging 5.0 cm, although the overall bottle sample (*n*=2) is exceedingly small. Again as to be expected, simple bowls and shallow bowls had the greatest orifice diameters, averaging 20.8 and 20.9 cm, respectively. This is logical, as bowls most likely represent wide-mouth serving containers.

As with vessel form, the size of a vessel has been used in the past to determine its probable function. Kelley (1994:75-76) reviewed data on vessel size from several studies across the Southeast, particularly those by Hally (1984, 1986), and found that large, wide-mouth jars, with orifices between 40 and 50 cm in diameter, usually were identified as storage containers, while jars with smaller mouths were recognized as cooking vessels. Although no vessels with orifices greater than 30 cm were recovered at Guadalupe Bay, it still was felt that an examination of the size distributions could prove useful. By graphically plotting the size data as a histogram, it was hoped that a more recognizable distribution pattern might emerge. A unimodal distribution might suggest that the vessels served one function, while a multimodal distribution might suggest that two distinct functions were involved. Figure 7-43, therefore, provides the jar/beaker size data. As can be seen, a unimodal pattern is present, indicating

Table 7-27. Vessel Forms by Analysis Unit.

	Analysis Units																					
	AU 1		AU 2		AU 3		AU 4		AU 5		AU 6		AU7		AU 8		AU 9		AU 11		No AU			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Total	% Total
Beaker																								
Rockport Black																								
var. Elm Bayou	0	0.00	0	0.00	2	4.88	0	0.00	1	3.57	1	4.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**4**	**2.61**
var. Lolita	0	0.00	0	0.00	0	0.00	0	0.00	2	7.14	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**1.31**
var. Rockport	0	0.00	0	0.00	0	0.00	1	3.85	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
Rockport Black-on-gray																								
var. Buffalo Lake	0	0.00	1	5.56	4	9.76	1	3.85	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**6**	**3.92**
var. Hog Bayou	0	0.00	0	0.00	0	0.00	0	0.00	1	3.57	1	4.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**1.31**
var. Long Mott	0	0.00	1	5.56	3	7.32	3	11.54	1	3.57	0	0.00	0	0.00	1	100.00	0	0.00	0	0.00	0	0.00	**9**	**5.88**
var. Mosquito Point	0	0.00	0	0.00	1	2.44	1	3.85	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**1.31**
var. Rockport	0	0.00	4	22.22	1	2.44	1	3.85	0	0.00	1	4.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**7**	**4.58**
Rockport Incised																								
var. Mission Lake	0	0.00	0	0.00	5	12.20	1	3.85	0	0.00	3	12.00	0	0.00	0	0.00	0	0.00	1	25.00	0	0.00	**10**	**6.54**
var. Mustang Lake	0	0.00	0	0.00	0	0.00	3	11.54	3	10.71	2	8.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**8**	**5.23**
var. Plank Bridge	0	0.00	0	0.00	0	0.00	0	0.00	1	3.57	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
var. Rockport	0	0.00	2	11.11	1	2.44	0	0.00	2	7.14	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**5**	**3.27**
var. Sommerville	0	0.00	0	0.00	0	0.00	1	3.85	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
Rockport Plain																								
var. Austwell	0	0.00	0	0.00	3	7.32	0	0.00	1	3.57	3	12.00	1	25.00	0	0.00	0	0.00	0	0.00	0	0.00	**8**	**5.23**
var. Green Lake	0	0.00	0	0.00	3	7.32	0	0.00	2	7.14	3	12.00	0	0.00	0	0.00	0	0.00	1	25.00	0	0.00	**9**	**5.88**
var. Guadalupe	1	25.00	0	0.00	8	19.51	1	3.85	3	10.71	1	4.00	1	25.00	0	0.00	0	0.00	1	25.00	0	0.00	**16**	**10.46**
var. Rockport	0	0.00	0	0.00	1	2.44	1	3.85	0	0.00	1	4.00	0	0.00	0	0.00	0	0.00	1	25.00	0	0.00	**4**	**2.61**
var. Seadrift	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	4.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
Rockport Red																								
var. unspecified	0	0.00	0	0.00	1	2.44	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
Beaker total	**1**	**25.00**	**8**	**44.44**	**33**	**80.49**	**14**	**53.85**	**17**	**60.71**	**17**	**68.00**	**2**	**50.00**	**1**	**100.00**	**0**	**0.00**	**4**	**100.00**	**0**	**0.00**	**97**	**63.40**
Jar																								
Rockport Black																								
var. Kuy Creek	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	**1**	**0.65**
var. Spring Bayou	1	25.00	0	0.00	0	0.00	0	0.00	1	3.57	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**1.31**
Rockport Black-on-gray																								
var. Buffalo Lake	0	0.00	1	5.56	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
var. Hog Bayou	1	25.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
var. Rockport	1	25.00	0	0.00	1	2.44	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**1.31**
Rockport Incised																								
var. Mustang Lake	0	0.00	0	0.00	0	0.00	5 *	19.23	1	3.57	1	4.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**7**	**4.58**
var. Rockport	0	0.00	0	0.00	0	0.00	1	3.85	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
Rockport Plain																								
var. Austwell	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	25.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
var. Guadalupe	0	0.00	1	5.56	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
var. Seadrift	0	0.00	0	0.00	0	0.00	1	3.85	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
Jar total	**3**	**75.00**	**2**	**11.11**	**1**	**2.44**	**7**	**26.92**	**2**	**7.14**	**1**	**4.00**	**1**	**25.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**1**	**100.00**	**18**	**11.76**

(continued)

Table 7-27. Continued.

	Analysis Units																							
	AU 1		AU 2		AU 3		AU 4		AU 5		AU 6		AU 7		AU 8		AU 9		AU 11		No AU			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Total	% Total
Beaker or Jar																								
Rockport Black-on-gray																								
var. Buffalo Lake	0	0.00	1	5.56	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
var. Hog Bayou	0	0.00	1	5.56	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
var. Long Mott	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2	8.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**1.31**
var. Rockport	0	0.00	2	11.11	0	0.00	1	3.85	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**3**	**1.96**
Rockport Incised																								
var. Mustang Lake	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	100.00	0	0.00	0	0.00	**1**	**0.65**
Rockport Plain																								
var. Austwell	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	4.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
var. Seadrift	0	0.00	0	0.00	0	0.00	0	0.00	1	3.57	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
Beaker or Jar total	**0**	**0.00**	**4**	**22.22**	**0**	**0.00**	**1**	**3.85**	**1**	**3.57**	**3**	**12.00**	**0**	**0.00**	**0**	**0.00**	**1**	**100.00**	**0**	**0.00**	**0**	**0.00**	**10**	**6.54**
Bottle																								
Rockport Black-on-gray																								
var. Buffalo Lake	0	0.00	1	5.56	0	0.00	0	0.00	0	0.00	1	4.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**1.31**
var. Mosquito Point	0	0.00	1	5.56	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
Rockport Plain																								
var. Rockport	0	0.00	0	0.00	1	2.44	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
Bottle total	**0**	**0.00**	**2**	**11.11**	**1**	**2.44**	**0**	**0.00**	**0**	**0.00**	**1**	**4.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**4**	**2.61**
Simple Bowl																								
Rockport Black-on-gray																								
var. Buffalo Lake	0	0.00	0	0.00	1	2.44	2	7.69	1	3.57	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**4**	**2.61**
var. Hog Bayou	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	4.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
var. Long Mott	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	4.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
var. Mosquito Point	0	0.00	0	0.00	0	0.00	0	0.00	1	3.57	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
var. Rockport	0	0.00	0	0.00	1	2.44	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
Rockport Incised																								
var. Mission Lake	0	0.00	0	0.00	1	2.44	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
var. Mustang Lake	0	0.00	0	0.00	0	0.00	0	0.00	1	3.57	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
Rockport Plain																								
var. Austwell	0	0.00	0	0.00	0	0.00	0	0.00	1	3.57	0	0.00	1	25.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**1.31**
var. Green Lake	0	0.00	0	0.00	0	0.00	0	0.00	1	3.57	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
var. Guadalupe	0	0.00	0	0.00	0	0.00	0	0.00	1	3.57	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
var. Seadrift	0	0.00	0	0.00	0	0.00	0	0.00	1	3.57	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
Simple Bowl total	**0**	**0.00**	**0**	**0.00**	**3**	**7.32**	**2**	**7.69**	**7**	**25.00**	**2**	**8.00**	**1**	**25.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**15**	**9.80**

(continued)

Table 7-27. Concluded.

	Analysis Units																					
	AU 1		AU 2		AU 3		AU 4		AU 5		AU 6		AU 7		AU 8		AU 9		AU 11		No AU			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Total	% Total
Shallow Bowl																								
Rockport Black																								
var. Lolita	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	4.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
var. Rockport	0	0.00	0	0.00	1	2.44	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
Rockport Black-on-gray																								
var. Buffalo Lake	0	0.00	1	5.56	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
var. Long Mott	0	0.00	0	0.00	0	0.00	0	0.00	1	3.57	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
var. Rockport	0	0.00	1	5.56	0	0.00	2	7.69	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**3**	**1.96**
Rockport Incised																								
var. Plank Bridge	0	0.00	0	0.00	1	2.44	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
Shallow Bowl total	**0**	**0.00**	**2**	**11.11**	**2**	**4.88**	**2**	**7.69**	**1**	**3.57**	**1**	**4.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**8**	**5.23**
Globular Bowl																								
Rockport Black-on-gray																								
Long Mott	0	0.00	0	0.00	1	2.44	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**0.65**
Globular Bowl total	**0**	**0.00**	**0**	**0.00**	**1**	**2.44**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**1**	**0.65**
Site Total	**4**	**100.00**	**18**	**100.00**	**41**	**100.00**	**26**	**100.00**	**28**	**100.00**	**25**	**100.00**	**4**	**100.00**	**1**	**100.00**	**1**	**100.00**	**4**	**100.00**	**1**	**100.00**	**153**	**100.00**

* These five sherds are from the partially reconstructed vessel from Sample Unit N70W110.

Table 7-28. Vessel Size, Based on Orifice Diameters, According to Vessel Form and Type and Variety.

	Orifice Diameters (cm)																		
	Beaker			Jar			Beaker or Jar			Bottle			Simple Bowl			Shallow Bowl			
	No.	Range	Avg.	No.	Range	Avg.	No.	Range	Avg.	No.	Range	Avg.	No.	Range	Avg.	No.	Range	Avg.	Total
Rockport Black																			
var. Elm Bayou	2	18 to 20	19.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	**2**
var. Kuy Bayou	0	0	0.0	1	20	20.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	**1**
var. Lolita	2	12 to 15	13.5	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	1	20	20.0	**3**
var. Rockport	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	1	11	11.0	**1**
var. Spring Bayou	0	0	0.0	1	15	15.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	**1**
Rockport Black total	**4**	**12 to 20**	**16.3**	**2**	**15 to 20**	**17.5**	**0**	**0**	**0.0**	**0**	**0**	**0.0**	**0**	**0**	**0.0**	**2**	**11 to 20**	**15.5**	**8**
Rockport Black-on-gray																			
var. Buffalo Lake	6	12 to 22	17.3	1	11	11.0	1	15	15.0	1	8	8.0	3	15 to 22	19.0	1	30	30.0	**13**
var. Hog Bayou	1	20	20.0	1	20	20.0	1	16	16.0	0	0	0.0	1	28	28.0	0	0	0.0	**4**
var. Long Mott	9	12 to 20	15.4	0	0	0.0	0	0	0.0	0	0	0.0	1	26	26.0	1	22	22.0	**11**
var. Mosquito Point	2	11 to 18	14.5	0	0	0.0	0	0	0.0	0	0	0.0	1	22	22.0	0	0	0.0	**3**
var. Rockport	5	11 to 20	16.0	2	8 to 18	13.0	2	18 to 19	18.5	0	0	0.0	1	18	18.0	2	18 to 21	19.5	**12**
Rockport Black-on-gray total	**23**	**11 to 22**	**16.2**	**4**	**8 to 20**	**14.3**	**4**	**15 to 19**	**17.0**	**1**	**8**	**8.0**	**7**	**15 to 28**	**21.6**	**4**	**18 to 30**	**22.8**	**43**
Rockport Incised																			
var. Mission Lake	8	14 to 24	18.5	0	0	0.0	0	0	0.0	0	0	0.0	1	23	23.0	0	0	0.0	**9**
*var. Mustang Lake**	6	15 to 21	15.3	2	14 to 18	16.0	0	0	0.0	0	0	0.0	1	20	20.0	0	0	0.0	**9**
var. Plank Bridge	1	24	24.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	1	24	24.0	**2**
var. Rockport	4	14 to 18	16.5	1	22	22.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	**5**
var. Somerville	1	16	16.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	**1**
Rockport Incised total	**19**	**14 to 24**	**18.1**	**3**	**14 to 22**	**18.0**	**0**	**0**	**0.0**	**0**	**0**	**0.0**	**2**	**20 to 23**	**21.5**	**1**	**24**	**24.0**	**25**
Rockport Plain																			
var. Austwell	8	15 to 23	17.8	1	26	26.0	0	0	0.0	0	0	0.0	2	20 to 22	21.0	0	0	0.0	**11**
var. Green Lake	7	15 to 23	18.4	0	0	0.0	0	0	0.0	0	0	0.0	1	14	14.0	0	0	0.0	**8**
var. Guadalupe	12	12 to 28	18.6	1	12	12.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0	**13**
var. Rockport	4	22 to 26	23.3	0	0	0.0	0	0	0.0	1	2	2.0	0	0	0.0	0	0	0.0	**5**
var. Seadrift	1	16	16.0	1	19	19.0	1	20	20.0	0	0	0.0	1	20	20.0	0	0	0.0	**4**
Rockport Plain total	**32**	**12 to 28**	**17.9**	**3**	**12 to 26**	**19.0**	**1**	**20**	**20.0**	**1**	**2**	**2.0**	**4**	**14 to 22**	**19.0**	**0**	**0**	**0.0**	**41**
Site Total	**78**	**11 to 28**	**17.2**	**12**	**8 to 26**	**16.9**	**5**	**15 to 20**	**17.6**	**2**	**2 to 8**	**5.0**	**13**	**14 to 28**	**20.8**	**7**	**11 to 30**	**20.9**	**117**

* One of the jar "sherds" actually consists of five joined rims from the partially reconstructed vessel from Sample Unit N70W110.

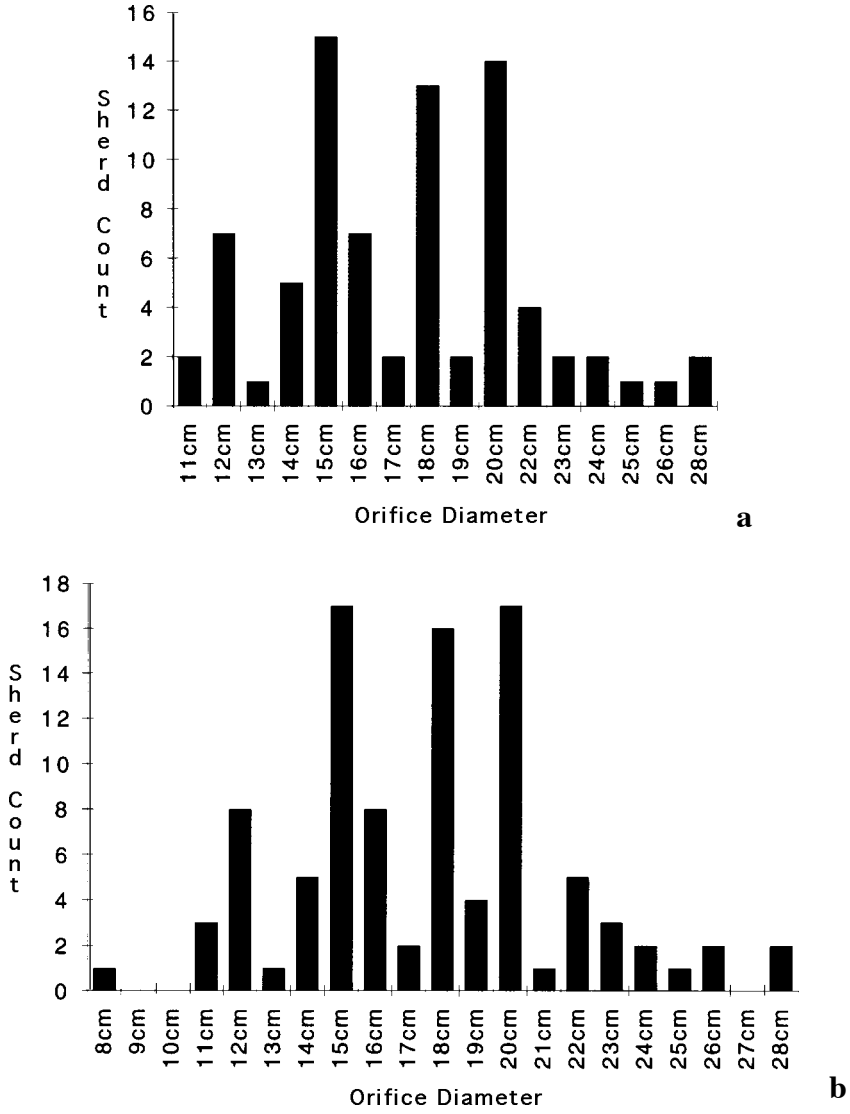

Figure 7-43. Orifice diameters of rim sherds from beakers and jars. (a) Beakers; (b)□Beakers and jars combined.

that jars and beakers were produced in one broad size class with orifice diameters generally ranging from about 12 to 20 cm. Thus, they most likely served one function, that of cooking vessels. Support for this assumption comes from the one partially reconstructed jar of *Mustang Lake* with the "Bendewald Point motif." That vessel contains spots of charred food residue on its outer surface below the decorative field indicating that it was, indeed, used for cooking.

Interestingly, the orifice data agree quite well with that presented recently by Ricklis (2000:100, Figure 59) from Missions Espíritu Santo and Rosario. These latter sites had vessels with diameters generally ranging between 15 and 19 cm. When these data were compared to that for vessels from a small, short-term camp site, the Oak Mott site (16 AS 92), Ricklis (2000:100) found that the camp had much smaller vessels with orifice diameters ranging between 10 and 14 cm. Thus, he suggested that large sites with semi-permanent or permanent occupations (Group I sites) probably had larger vessels that would have been difficult to carry, while smaller, short-term hunting or foraging sites (Group II sites) had smaller vessels that were easier to transport. By inference, then, it can be argued that the Rockport occupations at Guadalupe Bay

were of the semi-permanent or sedentary type, more akin to Group I sites.

Vessel Thickness

As noted earlier, almost every sherd from Guadalupe Bay was measured for thickness. Thus, a few observations concerning vessel thickness may be offered.

Table 7-29 provides a summary of sherd thickness for 152 of the rims identifiable to a specific vessel form.[13] Thickness is in millimeters, with individual sherds ranging between 2 mm (for one of the bottle rims) to 8 mm (for one of the beakers and two of the simple bowls). As can be seen, the vast majority of all vessel sherds fell within the 4- to 6-mm range, with an average for all sherds of 4.8 mm.

Beaker sherds measured between 3 and 8 mm, with an average of 4.8 mm, while jars ranged between 3 and 6 mm, with an average of 4.6 mm. Sherds classed as beakers or jars were most similar to jars, ranging between 4 and 6 mm, with an average of 4.6 mm. This suggests that many of these sherds may actually have come from jars rather than beakers. Simple bowls were the thickest of all vessels, averaging 5.1 mm, with a range of between 3 and 8 mm, while bottles were the thinnest, averaging 4 mm, although one sherd was 7 mm thick. Shallow bowls also had a rather restricted range, between 3 and 6 mm, with a relatively thin average of 4.3 mm. The one globular bowl rim measured 4 mm thick, but, because it is the lone representative of that vessel category, the sample is considered too small for any definitive statements.

Overall, these figures suggest that bottles and shallow bowls were the thinnest vessels produced at Guadalupe Bay, followed by jars, and beakers or jars. Beakers were slightly thicker, while simple bowls were the thickest of all. Of course the total range of averages for each vessel category is not particularly great (only from 4 to 5.1 mm), and probably indicates a relatively uniform manufacturing process that would appear to represent a well-developed ceramic technology.

In addition to the above, it is of interest to note the minor, though perhaps important, difference between the thicknesses noted for painted, incised, and plain vessels. For instance, all painted vessels, whether they be beakers, jars, or bowls, consistently produced relatively thin sherds, while incised and plain vessels yielded somewhat thicker sherds (Table 7-30). As can be seen, Rockport Black-on-gray sherds averaged 4.5 mm (beakers), 3.8 mm (jars), 4.4 mm (beakers or jars), 4.3 mm (bottles), 4.6 mm (simple bowls), and 4.8 mm (shallow bowls), for a combined average of 4.4 mm. Rockport Incised sherds, on the other hand, averaged 5.0 mm (beakers), 5.1 mm (jars), 5.0 mm (beaker or jar), 5.5 mm (simple bowl), and 4.0 mm (shallow bowl), for a combined average of 5.1 mm. Rockport Plain vessels also produced a relatively thick combined average of 5.0 mm.

Given all of this, it would appear that vessel decoration (or the lack thereof) went hand in hand with vessel function, and this association is reflected in vessel thickness. This is in keeping with the notion discussed previously that many, if not most, of the painted vessels were relatively thin, fine-ware items used primarily as serving containers, while the plain and incised vessels were somewhat thicker and served mostly as cooking or, perhaps, storage vessels.

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[13] Although 153 rims actually were identifiable to vessel form, one rim accidentally was omitted from the thickness analysis, resulting in a reduced total of 152 vessel sherds measured for thickness.

Table 7-29. Vessel Thickness, According to Vessel Form and Type and Variety.

	Sherd Thickness (mm)															
	2		3		4		5		6		7		8			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Total	Average
Beaker																
Rockport Black																
var. Elm Bayou	0	0.00	0	0.00	3	5.66	1	1.61	0	0.00	0	0.00	0	0.00	**4**	**4.25**
var. Lolita	0	0.00	0	0.00	1	1.89	0	0.00	1	4.76	0	0.00	0	0.00	**2**	**5.00**
var. Rockport	0	0.00	0	0.00	0	0.00	1	1.61	0	0.00	0	0.00	0	0.00	**1**	**5.00**
Rockport Black-on-gray																
var. Buffalo Lake	0	0.00	0	0.00	3	5.66	1	1.61	1	4.76	1	33.33	0	0.00	**6**	**5.00**
var. Hog Bayou	0	0.00	0	0.00	1	1.89	0	0.00	1	4.76	0	0.00	0	0.00	**2**	**5.00**
var. Long Mott	0	0.00	1	11.11	4	7.55	4	6.45	0	0.00	0	0.00	0	0.00	**9**	**4.33**
var. Mosquito Point	0	0.00	0	0.00	0	0.00	2	3.23	0	0.00	0	0.00	0	0.00	**2**	**5.00**
var. Rockport	0	0.00	2	22.22	4	7.55	1	1.61	0	0.00	0	0.00	0	0.00	**7**	**3.86**
Rockport Incised																
var. Mission Lake	0	0.00	0	0.00	2	3.77	7	11.29	1	4.76	0	0.00	0	0.00	**10**	**4.90**
var. Mustang Lake	0	0.00	0	0.00	1	1.89	3	4.84	3	14.29	0	0.00	0	0.00	**7**	**5.29**
var. Plank Bridge	0	0.00	0	0.00	0	0.00	0	0.00	1	4.76	0	0.00	0	0.00	**1**	**6.00**
var. Rockport	0	0.00	0	0.00	0	0.00	1	1.61	0	0.00	0	0.00	0	0.00	**1**	**5.00**
var. Sommerville	0	0.00	0	0.00	2	3.77	1	1.61	1	4.76	0	0.00	0	0.00	**4**	**4.75**
Rockport Plain																
var. Austwell	0	0.00	0	0.00	1	1.89	6	9.68	1	4.76	0	0.00	0	0.00	**8**	**5.00**
var. Green Lake	0	0.00	0	0.00	3	5.66	5	8.06	1	4.76	0	0.00	0	0.00	**9**	**4.78**
var. Guadalupe	0	0.00	0	0.00	7	13.21	6	9.68	3	14.29	0	0.00	1	33.33	**17**	**4.94**
var. Rockport	0	0.00	0	0.00	1	1.89	2	3.23	0	0.00	1	33.33	0	0.00	**4**	**5.25**
var. Seadrift	0	0.00	0	0.00	0	0.00	0	0.00	1	4.76	0	0.00	0	0.00	**1**	**6.00**
Rockport Red																
var. unspecified	0	0.00	0	0.00	1	1.89	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**4.00**
Beaker total	**0**	**0.00**	**3**	**33.33**	**34**	**64.15**	**41**	**66.13**	**15**	**71.43**	**2**	**66.67**	**1**	**33.33**	**96**	**4.81**
Jar																
Rockport Black																
var. Kuy Creek	0	0.00	0	0.00	0	0.00	1	1.61	0	0.00	0	0.00	0	0.00	**1**	**5.00**
var. Spring Bayou	0	0.00	0	0.00	1	1.89	1	1.61	0	0.00	0	0.00	0	0.00	**2**	**4.50**
Rockport Black-on-gray																
var. Buffalo Lake	0	0.00	0	0.00	0	0.00	1	1.61	0	0.00	0	0.00	0	0.00	**1**	**5.00**
var. Hog Bayou	0	0.00	0	0.00	1	1.89	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**4.00**
var. Rockport	0	0.00	2	22.22	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**3.00**
Rockport Incised																
var. Mustang Lake	0	0.00	0	0.00	0	0.00	5 *	8.06	2	9.52	0	0.00	0	0.00	**7**	**5.29**
var. Rockport	0	0.00	0	0.00	1	1.89	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**4.00**
Rockport Plain																
var. Austwell	0	0.00	0	0.00	0	0.00	1	1.61	0	0.00	0	0.00	0	0.00	**1**	**5.00**
var. Guadalupe	0	0.00	0	0.00	1	1.89	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**4.00**
var. Seadrift	0	0.00	1	11.11	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**3.00**
Jar total	**0**	**0.00**	**3**	**33.33**	**4**	**7.55**	**9**	**14.52**	**2**	**9.52**	**0**	**0.00**	**0**	**0.00**	**18**	**4.56**

(continued)

Table 7-29. Continued.

	Sherd Thickness (mm)															
	2		3		4		5		6		7		8			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Total	Average
Beaker or Jar																
Rockport Black-on-gray																
var. Buffalo Lake	0	0.00	0	0.00	1	1.89	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**4.00**
var. Hog Bayou	0	0.00	0	0.00	0	0.00	1	1.61	0	0.00	0	0.00	0	0.00	**1**	**5.00**
var. Long Mott	0	0.00	0	0.00	2	3.77	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**4.00**
var. Rockport	0	0.00	0	0.00	1	1.89	2	3.23	0	0.00	0	0.00	0	0.00	**3**	**4.67**
Rockport Incised																
var. Mustang Lake	0	0.00	0	0.00	0	0.00	1	1.61	0	0.00	0	0.00	0	0.00	**1**	**5.00**
Rockport Plain																
var. Austwell	0	0.00	0	0.00	1	1.89	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**4.00**
var. Seadrift	0	0.00	0	0.00	0	0.00	0	0.00	1	4.76	0	0.00	0	0.00	**1**	**6.00**
Beaker or Jar total	**0**	**0.00**	**0**	**0.00**	**5**	**9.43**	**4**	**6.45**	**1**	**4.76**	**0**	**0.00**	**0**	**0.00**	**10**	**4.60**
Bottle																
Rockport Black-on-gray																
var. Buffalo Lake	1	100.00	0	0.00	1	1.89	0	0.00	0	0.00	0	0.00	0	0.00	**2**	**3.00**
var. Mosquito Point	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	33.33	0	0.00	**1**	**7.00**
Rockport Plain																
var. Rockport	0	0.00	1	11.11	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**3.00**
Bottle total	**1**	**100.00**	**1**	**11.11**	**1**	**1.89**	**0**	**0.00**	**0**	**0.00**	**1**	**33.33**	**0**	**0.00**	**4**	**4.00**
Simple Bowl																
Rockport Black-on-gray																
var. Buffalo Lake	0	0.00	0	0.00	3	5.66	1	1.61	0	0.00	0	0.00	0	0.00	**4**	**4.25**
var. Hog Bayou	0	0.00	1	11.11	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**3.00**
var. Long Mott	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	33.33	**1**	**8.00**
var. Mosquito Point	0	0.00	0	0.00	0	0.00	1	1.61	0	0.00	0	0.00	0	0.00	**1**	**5.00**
var. Rockport	0	0.00	0	0.00	1	1.89	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**4.00**
Rockport Incised																
var. Mission Lake	0	0.00	0	0.00	0	0.00	1	1.61	0	0.00	0	0.00	0	0.00	**1**	**5.00**
var. Mustang Lake	0	0.00	0	0.00	0	0.00	0	0.00	1	4.76	0	0.00	0	0.00	**1**	**6.00**
Rockport Plain																
var. Austwell	0	0.00	0	0.00	0	0.00	2	3.23	0	0.00	0	0.00	0	0.00	**2**	**5.00**
var. Green Lake	0	0.00	0	0.00	0	0.00	1	1.61	0	0.00	0	0.00	0	0.00	**1**	**5.00**
var. Guadalupe	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	33.33	**1**	**8.00**
var. Seadrift	0	0.00	0	0.00	0	0.00	0	0.00	1	4.76	0	0.00	0	0.00	**1**	**6.00**
Simple Bowl total	**0**	**0.00**	**1**	**11.11**	**4**	**7.55**	**6**	**9.68**	**2**	**9.52**	**0**	**0.00**	**2**	**66.67**	**15**	**5.13**

(continued)

Table 7-29. Concluded.

	Sherd Thickness (mm)															
	2		3		4		5		6		7		8			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Total	Average
Shallow Bowl																
Rockport Black																
var. Lolita	0	0.00	0	0.00	1	1.89	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**4.00**
var. Rockport	0	0.00	1	11.11	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**3.00**
Rockport Black-on-gray																
var. Buffalo Lake	0	0.00	0	0.00	0	0.00	0	0.00	1	4.76	0	0.00	0	0.00	**1**	**6.00**
var. Long Mott	0	0.00	0	0.00	0	0.00	1	1.61	0	0.00	0	0.00	0	0.00	**1**	**5.00**
var. Rockport	0	0.00	0	0.00	2	3.77	1	1.61	0	0.00	0	0.00	0	0.00	**3**	**4.33**
Rockport Incised																
var. Plank Bridge	0	0.00	0	0.00	1	1.89	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**4.00**
Shallow Bowl total	**0**	**0.00**	**1**	**11.11**	**4**	**7.55**	**2**	**3.23**	**1**	**4.76**	**0**	**0.00**	**0**	**0.00**	**8**	**4.38**
Globular Bowl																
Rockport Black-on-gray																
Long Mott	0	0.00	0	0.00	1	1.89	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**4.00**
Globular Bowl total	**0**	**0.00**	**0**	**0.00**	**1**	**1.89**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**1**	**4.00**
Site Total	**1**	**100.00**	**9**	**100.00**	**53**	**100.00**	**62**	**100.00**	**21**	**100.00**	**3**	**100.00**	**3**	**100.00**	**152**	**4.75**

* These five sherds are from the partially reconstructed vessel from Sample Unit N70W110.

Table 7-30. Vessel Thickness, Grouped by Vessel Form and Ceramic Type.

	Sherd Thickness (mm)													
	2		3		4		5		6		7		8			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Total	Average
Beaker																
Rockport Black	0	0.00	0	0.00	4	7.55	2	3.23	1	4.76	0	0.00	0	0.00	**7**	**4.57**
Rockport Black-on-gray	0	0.00	3	33.33	12	22.64	8	12.90	2	9.52	1	33.33	0	0.00	**26**	**4.46**
Rockport Incised	0	0.00	0	0.00	5	9.43	12	19.35	6	28.57	0	0.00	0	0.00	**23**	**5.04**
Rockport Plain	0	0.00	0	0.00	12	19.00	19	30.65	6	28.57	1	33.33	1	33.33	**39**	**4.97**
Rockport Red	0	0.00	0	0.00	1	1.89	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**4.00**
Jar																
Rockport Black	0	0.00	0	0.00	1	1.89	2	3.23	0	0.00	0	0.00	0	0.00	**3**	**4.67**
Rockport Black-on-gray	0	0.00	2	22.22	1	1.89	1	1.61	0	0.00	0	0.00	0	0.00	**4**	**3.75**
Rockport Incised	0	0.00	0	0.00	1	1.89	5 *	8.06	2	9.52	0	0.00	0	0.00	**8**	**5.13**
Rockport Plain	0	0.00	1	11.11	1	1.89	1	1.61	0	0.00	0	0.00	0	0.00	**3**	**4.00**
Beaker or Jar																
Rockport Black-on-gray	0	0.00	0	0.00	4	7.55	3	4.84	0	0.00	0	0.00	0	0.00	**7**	**4.43**
Rockport Incised	0	0.00	0	0.00	0	0.00	1	1.61	0	0.00	0	0.00	0	0.00	**1**	**5.00**
Rockport Plain	0	0.00	0	0.00	1	1.89	0	0.00	1	4.76	0	0.00	0	0.00	**2**	**5.00**
Bottle																
Rockport Black-on-gray	1	100.00	0	0.00	1	1.89	0	0.00	0	0.00	1	33.33	0	0.00	**3**	**4.33**
Rockport Plain	0	0.00	1	11.11	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	**1**	**3.00**
Simple Bowl																
Rockport Black-on-gray	0	0.00	1	11.11	4	7.55	2	3.23	0	0.00	0	0.00	1	33.33	**8**	**4.63**
Rockport Incised	0	0.00	0	0.00	0	0.00	1	1.61	1	4.76	0	0.00	0	0.00	**2**	**5.50**
Rockport Plain	0	0.00	0	0.00	0	0.00	3	4.84	1	4.76	0	0.00	1	33.33	**5**	**5.80**

(continued)

Table 7-30. Concluded.

	Sherd Thickness (mm)															
	2		3		4		5		6		7		8			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Total	Average
Shallow Bowl																
Rockport Black	0	0.00	1	11.11	1	1.89	0	0.00	0	0.00	0	0.00	0	0.00	2	3.50
Rockport Black-on-gray	0	0.00	0	0.00	2	3.77	2	3.23	1	4.76	0	0.00	0	0.00	5	4.80
Rockport Incised	0	0.00	0	0.00	1	1.89	0	0.00	0	0.00	0	0.00	0	0.00	1	4.00
Globular Bowl																
Rockport Black-on-gray	0	0.00	0	0.00	1	1.89	0	0.00	0	0.00	0	0.00	0	0.00	1	4.00
Rockport Black total	**0**	**0.00**	**1**	**11.11**	**6**	**11.32**	**4**	**6.45**	**1**	**4.76**	**0**	**0.00**	**0**	**0.00**	**12**	**4.42**
Rockport Black-on-gray total	**1**	**100.00**	**6**	**66.67**	**25**	**47.17**	**16**	**25.81**	**3**	**14.29**	**2**	**66.67**	**1**	**33.33**	**54**	**4.44**
Rockport Incised total	**0**	**0.00**	**0**	**0.00**	**7**	**13.21**	**19**	**30.65**	**9**	**42.86**	**0**	**0.00**	**0**	**0.00**	**35**	**5.06**
Rockport Plain total	**0**	**0.00**	**2**	**22.22**	**14**	**26.42**	**23**	**37.10**	**8**	**38.10**	**1**	**33.33**	**2**	**66.67**	**50**	**4.96**
Rockport Red total	**0**	**0.00**	**0**	**0.00**	**1**	**1.89**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**0**	**0.00**	**1**	**4.00**
Site Total	**1**	**100.00**	**9**	**100.00**	**53**	**100.00**	**62**	**100.00**	**21**	**100.00**	**3**	**100.00**	**3**	**100.00**	**152**	**4.75**

* These five sherds are from the partially reconstructed vessel from Sample Unit N70W110.